

















# Inform comprehensively Install uncomplicated

Overview of products 2022



## Explanation of symbols

	<u>Group supply</u>		<u>Heat source – air</u>		<u>Manual filling</u>
	<u>Individual supply</u>		<u>Heat source – ground</u>		<u>Automatic filling</u>
	<u>Central supply</u>		<u>Heat source – water</u>		<u>IR radiant heat</u>
	<u>Floorstanding installation</u>		<u>DHW cylinder integrated</u>		<u>Convection</u>
	<u>Oversink installation</u>		<u>Buffer cylinder integrated</u>		<u>Fan</u>
	<u>Undersink installation</u>		<u>Instantaneous water cylinder integrated</u>		<u>Integrated control unit</u>
	<u>Indoor installation</u>		<u>Ventilation heating</u>		<u>Self-limiting</u>
	<u>Outdoor installation</u>		<u>Central ventilation</u>		<u>UV-resistant</u>
	<u>Portable</u>		<u>Decentralised ventilation</u>		<u>Mastic asphalt</u>
	<u>Fully wired</u>		<u>Heat recovery</u>		<u>Infloor installation</u>
	<u>Permanent connection</u>		<u>Moisture recovery</u>		<u>Quiet</u>
	<u>Pressurised / unvented</u>		<u>Dehumidify</u>		<u>Short drying time</u>
	<u>Non-pressurised / vented</u>		<u>Heating</u>		<u>Normal drying time</u>
	<u>Boiling water (approx. 100 °C)</u>		<u>Cooling</u>		
	<u>High temperature (approx. 85 °C)</u>		<u>Heating circuit, thermostatic mixing</u>		
	<u>Average temperature (approx. 60 °C)</u>		<u>Heating circuit, electronic mixing</u>		
	<u>Low temperature (approx. 50 °C)</u>		<u>Electric reheating</u>		
	<u>High flow rate</u>		<u>Domestic hot water</u>		
	<u>Average flow rate</u>		<u>Radiator</u>		<u>New</u>
	<u>Low flow rate</u>		<u>Underfloor heating</u>		<u>Discontinued</u>

## Prices

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This printed version is not intended for consumers. Deliveries are made in accordance with our general terms of delivery and payment. The binding basis for the use and installation of the appliances are the printed documents included with the appliances, as well as the relevant regulations.

The editorial deadline for this printed version was 30/10/2021. The latest technical values can be found on our homepage at [www.stiebel-eltron.com](http://www.stiebel-eltron.com)

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WPL 09 ICS classic compact plus Set	236728	233
WPL 09 IKCS classic compact plus Set	236732	233
WPL 17 ICS classic compact plus Set	236729	233
WPL 17 IKCS classic compact plus Set	236733	233
WPL 19 I Set	235193	235
WPL 24 I Set	235194	235

WPL 19 IK Set	235878	238
WPL 24 IK Set	235879	238

### Air source heat pumps, indoor installation – fixed speed

Fixed speed		
Type	Mat. no.	Page
WPL 13 E	227756	243
WPL 18 E	227757	243
WPL 23 E	227758	243
WPL 23 cool	223402	247
WPL 13 cool	223400	247
WPL 18 cool	223401	247

### Accessories for air source heat pumps installed indoors

Accessories		
Type	Mat. no.	Page
LSWP 315-2 S AWG SR Set	236931	253
ZSA 315	236934	253
AWG 560 V-SR	233838	254
AWG 560 L	231041	254
AWG 600 L	231044	254
AWG 560 H-GL	232956	254
AWG 560 V-GL	232957	254
AWG 560 H-SR	233837	254
LLB AWG 315 L	232341	255
LLB AWG 560 L	232342	255
Schlauchanschlussplatte 560 oval	003478	255
LSWP 560-3 SG	201721	256
LSWP 560-4 S	234647	256
LSWP 560-4 SG	201619	256
PK 10	229286	256
Zubehör WPL 13/18/23 I	074412	257

### Ground source heat pumps – inverter

Inverter		
Type	Mat. no.	Page
HPG-I 04 DS Premium	202622	263
HPG-I 06 DS Premium	202623	263
HPG-I 08 DS Premium	202624	263
HPG-I 12 DS Premium	202625	263
HPG-I 15 DS Premium	202626	263
HPG-I 04 DCS Premium	202632	266
HPG-I 06 DCS Premium	202633	266
HPG-I 08 DCS Premium	202634	266
HPG-I 12 DCS Premium	202635	266
HPG-I 15 DCS Premium	202636	266
HPG-I 04 CS Premium	202627	269
HPG-I 06 CS Premium	202628	269
HPG-I 08 CS Premium	202629	269
HPG-I 12 CS Premium	202630	269
HPG-I 15 CS Premium	202631	269
HPG-I 04 S Premium	202617	274
HPG-I 06 S Premium	202618	274
HPG-I 08 S Premium	202619	274
HPG-I 12 S Premium	202620	274
HPG-I 15 S Premium	202621	274

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### Product range directory

WPE-I 33 H 400 Premium	201412	279
WPE-I 44 H 400 Premium	201413	279
WPE-I 59 H 400 Premium	201414	279
WPE-I 87 H 400 Premium	201415	279

### Ground source heat pumps – fixed speed

Fixed speed		
Type	Mat. no.	Page
WPC 04	232926	287
WPC 05	232927	287
WPC 07	232928	287
WPC 10	232929	287
WPC 13	232930	287
WPC 05 S	232937	288
WPC 07 S	232938	288
WPC 10 S	232939	288
WPC 13 S	232940	288
WPC 04 cool	232931	290
WPC 05 cool	232932	290
WPC 07 cool	232933	290
WPC 10 cool	232934	290
WPC 13 cool	232935	290
WPF 04	232909	293
WPF 05	232910	293
WPF 07	232911	293
WPF 10	232912	293
WPF 13	232913	293
WPF 16	232914	294
WPF 05 S	232922	294
WPF 07 S	232923	294
WPF 10 S	232924	294
WPF 13 S	232925	294
WPF 04 cool	232915	299
WPF 05 cool	232916	299
WPF 07 cool	232917	299
WPF 10 cool	232918	299
WPF 13 cool	232919	299
WPF 16 cool	232920	299
WPF 10 M	185349	304
WPF 13 M	182135	304
WPF 16 M	220894	304
WPF 52	233007	306
WPF 20	233003	306
WPF 27	233004	306
WPF 35	233005	306
WPF 40	233006	306
WPF 66	233008	306
WPF 27 HT	233009	309
WPF 20 Set	185365	312
WPF 23 Set	185366	312
WPF 26 Set	182139	312
WPF 29 Set	220896	312
WPF 32 Set	220897	312

### Accessories for ground source heat pumps

Accessories		
Type	Mat. no.	Page
UPF 30/1-8 E	232532	315
UPF 30/1-12 E	235053	315
UPF 40/1-8 E	227413	315

UPF 50/1-12 E	227414	315
GWS 1	230659	315
GWS 2	230660	315
WPSB 308 E	222375	316
WPSF	233307	316
DWS1 Soledruckwächter	221382	317
MAG 12	235218	317
MAG 18	235219	317
MAG 25	235220	317
MAG 50	235221	317
MEG 30	161696	318
FS-WP 22	233511	318
FS-WP 28	233512	318
MFS-WP 28	235234	319
SDB 40-0.8 G	201713	319
SDB 50-0.8 G	201714	319
EM 33-87	201715	320
EMW 33-87	202062	320
HG Set 33-87	201716	321
FE 33-87	201767	321

### Control units

Controller		
Type	Mat. no.	Page
WPM international	236000	325
WPE	234725	325
Connectivity		
Type	Mat. no.	Page
ISG web	229336	327
Controller accessories		
Type	Mat. no.	Page
FE 7 Fernbedienung	185579	328
FEK2	200168	328
FET	234723	329
TAF PT 5m	235995	329
TAF PT 2m	235996	329
AF PT	235997	330
AVF 6 Anlegefühler	165341	330
TF 6 Tauchfühler	165342	331
WPM-RBS	230381	331

### Hydraulic modules

Mono mode		
Type	Mat. no.	Page
HM	233010	333
HMS	233827	333
HM Trend	232805	334
HMS Trend	233826	334

### Accessories for hydraulic modules

Accessories		
Type	Mat. no.	Page
ASL-HM	232806	337
AS-HM Trend	233750	337

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### Product range directory

#### Integral cylinder

With integral buffer cylinder		
Type	Mat. no.	Page
HSBC 300 cool	203801	339
HSBC 300 L cool	238826	340
HSBC 200	233510	341
HSBC 200 S	234801	341
HSBC 200 L	236684	342
HSBC 180 Plus	202927	343
HSBC 180 S Plus	203082	343
Without integral buffer cylinder		
Type	Mat. no.	Page
HSBB 180 Plus	202926	344
HSBB 180 S Plus	203084	344

#### Accessories for integral cylinders

Accessories		
Type	Mat. no.	Page
HSBC-HKM	234648	347
HSBC 3-HKM	238825	347
CDT 180	204642	347

#### DHW cylinder

DHW cylinder		
Type	Mat. no.	Page
SBB 301 WP	221360	349
SBB 302 WP	221361	349
SBB 401 WP SOL	221362	349
SBB 501 WP SOL	227534	349
SB-VTI 100	200156	349
SB-VTI 150	200157	349
SB-VTI 200	200158	349
SB-VTI 300	200159	349
SB-VTI 400	200160	349
SB-VTI 500	200161	349
SB-VTH 100	200153	350
SB-VTH 120	200154	350
SB-VTH 150	200155	350
STD 315-1 Plus	204784	350
STD 420-1 Plus	204785	350
STD 520-1 Plus	204786	350
SBB 600 WP SOL	235906	351
SBB 800 WP SOL	235907	351
SBB 1000 WP SOL	235908	351
SBB 751	229292	352
SBB 751 SOL	229294	352
SBB 1001	229293	352
SBB 1001 SOL	229295	352

#### Accessories for DHW cylinders

Accessories		
Type	Mat. no.	Page
WRV 32	232628	355
WRV 40	232629	355
WDH 600 SBB	235909	355
WDH 800 SBB	235910	355

WDH 1000 SBB	235911	355
WDH 751 SBB	231923	356
WDH 1001 SBB	231924	356

#### Instantaneous water cylinders

Instantaneous water cylinders		
Type	Mat. no.	Page
SBS 601 W	229980	359
SBS 601 W SOL	229984	359
SBS 801 W	229981	359
SBS 801 W SOL	229985	359
SBS 1501 W	229983	359
SBS 1501 W SOL	229987	359
SBS 1001 W	229982	359
SBS 1001 W SOL	229986	359

#### Accessories for instantaneous water cylinders

Accessories		
Type	Mat. no.	Page
WDH 601 SBS	231925	363
WDH 801 SBS	231926	363
WDH 1001 SBS	231927	363
WDH 1501 SBS	231928	363
ZW 1 1/4	230312	363

#### Buffer cylinder

Buffer cylinder		
Type	Mat. no.	Page
SBP 100	185443	365
SBP 100 classic	235200	366
SBP 200 E	185458	366
SBP 400 E	220824	366
SBP 700 E	185459	366
SBP 700 E SOL	185460	366
STH 210 Plus	203763	367
STH 415 Plus	203764	367
STH 720 Plus	203765	367
STH 720-1 Plus	203766	367
SBPE 400	235199	368
SBP 1000 E	227564	369
SBP 1000 E SOL	227566	369
SBP 1010 E	236569	369
SBP 1500 E	227565	369
SBP 1500 E SOL	227567	369
SBP 1000 E cool	227588	370
SBP 1010 E cool	236570	370
SBP 1500 E cool	227589	370

#### Accessories for buffer cylinders

Accessories		
Type	Mat. no.	Page
WPKI 5	234763	373
BBI 5	234764	373
WPKI 6 Set	234762	374
Anschlusszubehör SBP	003711	374
WPKI - V	074347	375
WPKI-P E	233097	375
WPKI-H E	233098	376

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### Product range directory

WPKI-W E	233099	376
BF 80 Set	231884	377
FG 80/2 Set	231885	377
WDH 1010 SBP	201662	377
WDH 1000 SBP	231929	377
WDH 1500 SBP	231930	377
WDH 1000 cool	231921	378
WDH 1500 cool	231922	378

### Additional accessories

Electric threaded immersion heaters and flanged immersion heaters		
Type	Mat. no.	Page
SBP-HF	074252	381
BGC 6 kW 500 mm ET	003769	381
BGC/45	075115	381
BGC 2/60	232030	381
FCR 21/60	071330	382
FCR 21/120	071331	382
FCR 28/120	071332	382
FCR 28/120 E	000694	382
FCR 28/180	071333	382
FCR 28/180 E	000695	382
FCR 28/270 E	000696	382
FCR 28/270 E Si	075141	382
FCR 28/360 E	001502	382
WPRB Rohrbausatz	074233	383

### Heat pump accessories

DHW heating		
Type	Mat. no.	Page
UPZ	233719	385
Pumpe UP 25-60-180	056899	385
WT 30	071091	386
WT 40	229338	386
Heating system hydraulics		
Type	Mat. no.	Page
UP 25/1-8 PCV	235950	387
UP 25/7.5 PCV	201620	387
UP 30/1-8 PCV	235951	387
UP 40/1-8 E	227422	387
UP 50/1-12 E	227423	387
IF-Modul Stratos Extern Off	235952	388
WPKI-HKM E	233603	388
WPKI-HK E	233602	389
WPKI-HKV 2	221142	389
WPKI-HKV 3	236708	390
HUV 1	227420	390
HUV 2	223391	390
HUV 65	227425	390
HUV 80	227426	390
WPHW 25	221135	391
HZEA	230013	391
HZEN	230031	392
SD 25-2.5 GE	232971	392
SD 32-0.6 G	201710	392
SD 25-1 G	232976	392
SD 25-2 GE	233828	392
SD 32-1 G	232977	393
SD 32-2 GE	233831	393

SD 40-0.8 G	201711	393
SD 25-1 E	232965	393
SD 32-1 E	232968	393
SD 50-1 E	232972	393
Druckschl. 25 x 1000	074415	393
Druckschl. 32x 1000	074414	393
SD 25-1 KE	232974	394
SD 32-1 KE	232975	394
Schlauchverschr.DN25	003713	394
Schlauchverschr.DN32	070692	394
FS-HP Strömungswächter	202779	395

Additional accessories		
Type	Mat. no.	Page
STB-FB	233711	396

### Ventilation with integral heat pump

Room heating, DHW heating and supply/extract air with heat recovery		
Type	Mat. no.	Page
LWZ 8 CS Premium	201290	401

### Accessories for ventilation with integral heat pump

Accessories		
Type	Mat. no.	Page
FES Komfort	227664	407
ISG web	229336	407
AWG 315 L	231039	408
AWG 315 GL	232955	408
AWG 315 SR	233836	408
LLB AWG 315 L	232341	408
LLB AWG 560 L	232342	408
LSWP 315-1.5 SG	201720	409
LSWP 315-4 S	234646	409
LSWP 315-4 SG	201618	409
LWF SK 315 - 0,6	202933	409
LULH 315 o	232675	410
LSK Inverter	227665	410
LWTF Inverter Enthalpie LWZ 5+8	233867	411
ZLWZ Zirku set	233301	411
FMS G2 LWA 100	221398	412
FMS G4-10 ABL Inverter	231330	412
FMK M5-2 ZUL Inverter	231331	413
FMK F7-2 ZUL Inverter	231332	413
ZLWZ Trans	233485	414
RC1 Lüftg. Fernverst.	170328	414
ALD 160	189813	415
Montagerohr ALD	189816	415

### Central ventilation

Supply and extract air with heat recovery, wall mounting		
Type	Mat. no.	Page
LWZ 180	232361	419
LWZ 280	232362	419
LWZ 180 Enthalpie	236646	422
LWZ 280 Enthalpie	236647	422

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### Product range directory

VRC-W 400	203636	425
VRC-W 400 E	203637	425
LWZ 170 E Plus	233850	427
LWZ 370 plus	232033	427
LWZ 70 E	233851	428
<b>Supply and extract air with heat recovery, ceiling mounting</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
LWZ 130	237805	431
LWZ 130 Enthalpie	237806	433

### Accessories for central ventilation

<b>Accessories</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
FMS G4-10 LWZ 100 Bypass	231446	437
FMS G4-10 LWZ 100 ABL	231447	437
FMS G4-10 180	234147	437
FMS G4-10 130/135	238923	438
FMK F5-2 LWZ 100 ZUL	231448	438
FMK M5-2 180	234148	439
FMK M5-2 130/135	238924	439
FMK F7-2 70	227660	440
FMK F7-2 LWZ 100 ZUL	231449	440
FMK F7-2 180	234208	441
FMK F7-2 130/135	238925	441
LWTF 180/280	236420	442
FMS G3-10 70	222446	442
FEB	236039	443
ZLWZ VHR 70 E	236038	443
FEZ	185358	444
ZLWZ 4 S	234866	444
LSK 70 E	227046	445

### Distribution system for integral and central ventilation

<b>LVE onfloor</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
LVE RP 20	231111	451
LVE BF 45	231121	451
LVE BF 90	231122	451
LVE BH 90	231123	452
LVE Ü 180	231120	452
LVE Ü 90	233032	453
LVE ÜB-O	235913	453
LVE ÜB-U	235912	453
LVE RA	231117	454
LVE M	231112	454
LVE YS	239126	454
LVE KF	231113	455
LVE WA 125 O	239124	455
LVE WA 125 U	239690	455
<b>LVS infloor</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
LVS RP 75-50	235059	456
LVS RPAG 75-50	203750	456
LVS RP90 Rohrpaket	223320	456
LVS VTS 6	201456	456
LVS VTS 9	234493	456
ZLVS VTÜ 75-90	234494	457
LVS M 75 Muffen-Set 5 Stk.	224897	457

ZLVS O 75-10 Dichtring (10 Stk.)	236421	458
ZLVS O 90-10	236422	458
LVS DA 75-125-2	236423	458
LVS WA 125-2-75	239125	459
LVS AS 75	223318	459
LVS SVG 160-12	232118	460
LVS SVM 160-8	232117	460
<b>LWF system</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
LWF T 160 - 160	159323	461
LWF M 125	159299	461
LWF N 160	159320	462
LWF RS 160 - 125	159324	462
LWF F 125 - 5	159334	463
LWF F 160 - 5	159332	463
LWF DR 125-1 EPP	239231	463
LWF DR 160-1 EPP	239232	463
LWF DRB 125-45 EPP	239234	464
LWF DRB 125-90 EPP	239233	464
LWF DRB 160-45 EPP	239236	464
LWF DRB 160-90 EPP	239235	464
LWF DRM 125 EPP	239237	464
LWF DRM 160 EPP	239238	464
LWF S 160 - 0,9	159346	465
LWF SK 315 - 0,6	202933	465
LWF SF 315 - 1	170018	466
Lochband 10m	159348	466
LWF KB 10	227948	467
LWF AVM 125	227924	467
LWF ZVM 125	230163	468
KWG 125	239139	468

### Decentralised ventilation in residential buildings

<b>Supply and extract air with heat recovery</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
VLR 70 L Trend EU	203133	475
<b>Extract air without heat recovery</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
LA 60 VE-U	201450	477
LA 60 VE-A	201451	477
LA 70 VE-U	237109	477
LA 70 VE-U 12	237110	477

### Accessories for decentralised ventilation in residential buildings

<b>Accessories</b>		
<b>Type</b>	<b>Mat. no.</b>	<b>Page</b>
LTM decent CO2	237649	481
VLR 70-2 CU	239570	481
VLR 70-4 CU	239571	482
VLR 70-8 CU	239572	482
LTM TL HUMIDITY	237126	482
LTM decent APD BT	237644	483
SP VLR 70 RF COARSE 30 G2-4	239562	483
SP VLR 70 RF COARSE 60 G4-4	239575	484
SP VLR 70 RF EPM10 50 M5-4	239576	484
SP VLR 70 RF EPM1 50 F7-4	239577	485
LA 60 G-U	201448	485
ZLA 60-T	201453	486
ZLA 60-H	201454	486

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### Product range directory

LWF W 100 VA - 60	231104	486
FMS G3-5 LA 60	201455	487
ZLA 70-T	237103	487
ZLA 70-H	237105	487
ZLA 70-T eco15s	237108	487
LA 70 ABG	237111	488
LA 70 KF	237773	488

## Decentralised ventilation in non-residential buildings

Supply and extract air with heat recovery		
Type	Mat. no.	Page
VRL-C 870 G Premium	204132	491
VRL-C 870 G Trend	204133	495
VRL-C 870 D Premium	204134	499
VRL-C 870 D Trend	204135	503
VRL-C 300 G Premium	204140	507
VRL-C 300 G Trend	204141	511
VRL-C 300 D Premium	204142	515
VRL-C 300 D Trend	204143	519

## Accessories for decentralised ventilation in non-residential buildings

Accessories		
Type	Mat. no.	Page
LTM dezent ULB-90	237634	525
LTM dezent 600/800 Z-PSS	237672	525
LTM dezent C-PSS	237673	525
LTM dezent RWA	237674	525
LTM dezent 300 BA VA 320 B	237627	525
LTM dezent 300 BA VA 320 W	237628	525
LTM dezent BA VA 410 B	237629	525
LTM dezent BA VA 410 W	237633	525
ZVRL-C CU	204144	526
LTM dezent BACnet Web - Ethernet	237646	526
LTM dezent LON IF	237647	526
LTM dezent Modbus RS 485 IF	237648	526
LTM dezent CO2	237649	527
LTM dezent VOC	237658	527
LTM dezent 300 FMS M5-10	237652	528
LTM dezent FMS F7-2	237665	528
LTM dezent FMS F9-1	237668	528

## Storage heater

Standard storage heater		
Type	Mat. no.	Page
SHF 2000	200175	533
SHF 3000	200176	533
SHF 4000	200177	533
SHF 5000	200178	533
SHF 6000	200179	533
SHF 7000	200180	533

## Accessories for storage heaters

Control units		
Type	Mat. no.	Page
RTA-S2	231061	535

## Convectors

Wall installation		
Type	Mat. no.	Page
CWM 500 P	200254	539
CWM 750 P	200255	539
CWM 1000 P	200256	539
CWM 1500 P	200257	539
CWM 2000 P	200258	539
CWM 2500 P	200259	539
CWM 3000 P	200260	539
CNS 50 Trend M	203638	541
CNS 100 Trend M	203640	541
CNS 150 Trend M	203641	541
CNS 200 Trend M	203642	541
CNS 250 Trend M	203643	541
CNS 300 Trend M	203644	541
Floorstanding appliances		
Type	Mat. no.	Page
CWM 750 M-F	204452	542
CWM 1000 M-F	204453	542
CWM 1500 M-F	204454	542
CWM 2000 M-F	204455	542
CWM 2500 M-F	204456	542
CWM 3000 M-F	204457	542

## Rapid heater

Rapid heater		
Type	Mat. no.	Page
CK 20 Premium	237835	545
CK 20 trend LCD	236653	546
CK 20 Plus	202127	547
CK 20 Trend	234918	548




















## Hand dryer, warm air

Warm air		
Type	Mat. no.	Page
HTE 4	073007	553
HTE 5	073008	553

## Hand dryer, high speed

High speed		
Type	Mat. no.	Page
Ultronic S	231582	555
Ultronic W	231583	555



<b>Comfort instantaneous water heaters</b>	   	24
<b>Accessories for comfort instantaneous water heaters</b>		38
<b>Compact instantaneous water heaters, 3-phase</b>	    	42
<b>Compact instantaneous water heaters, 1-phase</b>	    	52
<b>Accessories for compact instantaneous water heaters</b>		60
<b>Mini instantaneous water heaters</b>	    	64
<b>Accessories for mini instantaneous water heaters</b>		72

# Comfort instantaneous water heaters

## Application areas



**Rated output: Please note the rated output and fuse protection when selecting an instantaneous water heater**

**Starting flow rate: Please note the starting flow rate of the instantaneous water heater when selecting your fitting**



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	l/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
DHE 18/21/24																																													
DHE 27																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
	l/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0		
PER 18/21/24																																												



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	l/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
DEL 18/21/24 Plus																																													
DEL 27 Plus																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	l/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
PEO 18/21/24																																													
PEO 27																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
DHB-E 11/13 LCD																																													
DHB-E 18 LCD 25A																																													
DHB-E 18/21/24 LCD																																													
DHB-E 27 LCD																																													



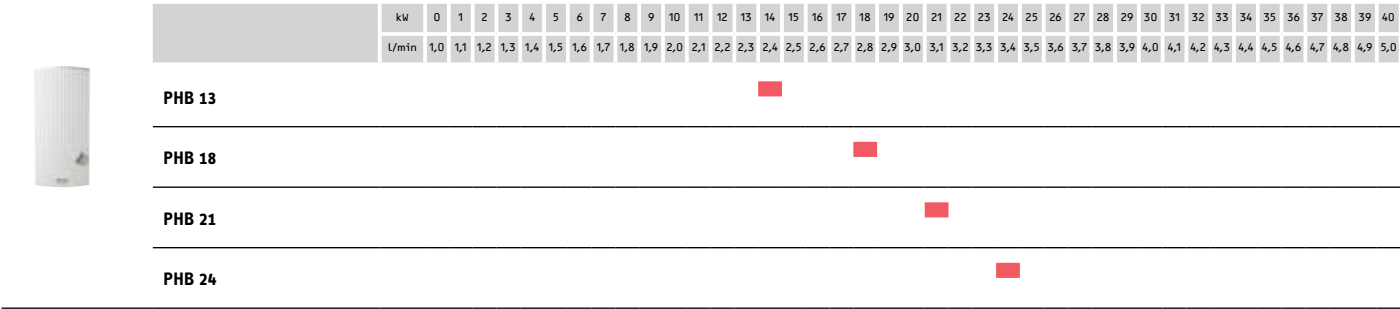
	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	l/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
PEY 18/21/24																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
PEG 13																																													
PEG 18																																													
PEG 21																																													
PEG 24																																													

# Comfort instantaneous water heaters

## Application areas





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# Instantaneous water heater

## Comfort instantaneous water heaters

PER



PER 18/21/24

### Benefits

- › Very high temperature convenience with this fully electronic instantaneous water heater
- › Consistent outlet temperatures regardless of fluctuations in pressure, inlet temperature or voltage
- › Accurate temperature selection and 2-colour backlit, easy-to-read LCD
- › Very high shower convenience thanks to quick-acting control electronics
- › Precise water temperature at maximum flow rate thanks to processor-controlled motorised valve
- › Suitable for reheating water up to 60 °C, e.g. from solar thermal systems
- › Multifunction display with backlighting
- › Display of temperature, flow rate, energy consumption or time
- › Two individually adjustable temperatures can be called up via memory buttons
- › Convenience functions: ECO button, automatic water volume control, shower program
- › Energy saving operation with ECO function
- › Electronic air bubble detection
- › Effective bare wire heating system

**Application** • The fully electronically controlled comfort instantaneous water heater supplies DHW conveniently and energy efficiently to multiple draw-off points, for example the bathroom and the kitchen. • This sealed unvented, pressure-tested appliance can be used with preheated water from a solar thermal system or heat pump and with all commercially available pressure taps.

**Convenience features** • The temperature can be accurately adjusted using the 2-colour backlit digital multifunction display. The temperature, flow rate, energy consumption and time are easy to read. • Two memory keys for custom setting of the preferred temperature. • The ECO button, automatic water volume control and shower program offer additional operating convenience. • Accurate temperature delivery at all times with demand-dependent flow rate thanks to processor-controlled motorised valve. • Wireless remote temperature control allows one-off temperature selection for the next draw-off. • The heat exchanger is made from glass fibre reinforced polyamide.

**Efficiency** • Individually selectable ECO mode for particularly energy efficient operation. • The accurate temperature delivery at all times and precise flow rate further increase the overall efficiency of the instantaneous water heater.

**Installation** • Easy connection to all commercially available sealed unvented taps. • Easy installation thanks to separate mounting plate and quick-release toggle. The installation template is included in the standard delivery. • Easy electrical connection from above or below. • The hood can be removed from the front with no screws. • Undersink installation is possible with the correct accessories.

**Safety** • Rapid bare wire heating system for hard and soft water. • The multi stage safety concept detects air bubbles in the system and automatically deactivates the appliance if the pressure is too high.

		PER 18/21/24
Part number		233990
Specification		
Rated voltage	V	400
Rated voltage 1	V	380
Rated voltage 2	V	400
Rated voltage 3	V	415
Rated output	kW	18/21/24
Rated output 1	kW	16.2/19/21.7
Rated output 2	kW	18/21/24
Rated output 3	kW	19.4/22.6/25.8
Rated current	A	29/31/35
Rated current 1	A	27.6/29.5/33.3
Rated current 2	A	29/31/35
Rated current 3	A	30.1/32.2/36.3
Fuse protection	A	32/32/35
Fuse protection 1	A	32/32/35
Fuse protection 2	A	32/32/35
Fuse protection 3	A	32/32/40
Frequency	Hz	50/60
Frequency 1	Hz	50/60
Frequency 2	Hz	50/60
Frequency 3	Hz	50/-
Phases		3/PE

Continue on next page >

## Instantaneous water heater

### Comfort instantaneous water heaters

		PER 18/21/24
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\Omega \text{ cm}$	1000
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45$ °C and 380 V)	$\Omega \text{ cm}$	1200
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45$ °C and 400 V)	$\Omega \text{ cm}$	1200
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45$ °C and 415 V)	$\Omega \text{ cm}$	1300
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\mu\text{S/cm}$	1000
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45$ °C and 380 V)	$\mu\text{S/cm}$	830
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45$ °C and 400 V)	$\mu\text{S/cm}$	830
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45$ °C and 415 V)	$\mu\text{S/cm}$	770
ON	l/min	>2.5
Temperature setting	°C	30-60
Colour		white
Height	mm	485
Width	mm	226
Depth	mm	93
Weight	kg	3.80
Energy efficiency class		A

# Instantaneous water heater

## Comfort instantaneous water heaters

### PEO



PEO 18/21/24

#### Benefits

- › Electronic instantaneous water heater for optimum temperature convenience
- › Consistent outlet temperatures regardless of fluctuations in pressure, inlet temperature or voltage
- › Temperature selection to the exact degree with easy to read LCD
- › Two-colour backlighting (blue/red)
- › Very high shower convenience thanks to quick-acting control electronics
- › Integral diagnostic system
- › Electronic air bubble detection
- › Effective bare wire heating system
- › Highly flexible installation thanks to selectable appliance output – 18/21/24 kW in a single appliance (Product: 233991)

**Application** • The comfort instantaneous water heater is suitable for DHW supply to multiple draw-off points. • The sealed unvented, pressure-tested appliance can be combined with commercially available pressure taps.

**Convenience features** • The electronic control allows precise temperature selection. • The appliance is equipped with an easy to read, two-colour LCD. The display also acts as visual anti-scalding protection: At temperatures above 43 °C, the colour changes from blue to red.

**Efficiency** • Accurate temperature delivery thanks to the electronic control. • The instantaneous water heater is suitable for preheated water from solar thermal and heat pump systems. **strong>**

**Installation** • Easy installation thanks to separate mounting plate and twist lock. An installation template is included in the standard delivery. • The hood is removed from the front without any screws. • Electrical connection is from above or below via a fixed connection. • Suitable for undersink installation with the appropriate accessories. • Integral diagnostic system.

**Safety** • The bare wire heater is suitable for hard and soft water. • The multi-stage safety concept includes a safety high pressure switch and an electronic air bubble detection system.

		PEO 18/21/24	PEO 27
Part number		233991	233992
Specification			
Rated voltage	V	400	400
Rated voltage 1	V	380	380
Rated voltage 2	V	400	400
Rated voltage 3	V	415	
Rated output	kW	18/21/24	27
Rated output 1	kW	16,2/19/21,7	24,4
Rated output 2	kW	18/21/24	27
Rated output 3	kW	19,4/22,6/25,8	
Rated current	A	29/31/35	39
Rated current 1	A	27,6/29,5/33,3	37.1
Rated current 2	A	29/31/35	39
Rated current 3	A	30,1/32,2/36,3	
Fuse protection	A	32/32/35	40
Fuse protection 1	A	32/32/35	40
Fuse protection 2	A	32/32/35	40
Fuse protection 3	A	32/32/40	
Frequency	Hz	50/60	50/60
Frequency 1	Hz	50/60	50/60
Frequency 2	Hz	50/60	50/60
Frequency 3	Hz	50/-	
Phases		3/PE	3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	Ω cm	900	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	Ω cm	900	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	Ω cm	1000	

Continue on next page >

## Instantaneous water heater

### Comfort instantaneous water heaters

		PEO 18/21/24	PEO 27
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 380 V)	$\Omega \text{ cm}$	1200	1200
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 400 V)	$\Omega \text{ cm}$	1200	1200
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 415 V)	$\Omega \text{ cm}$	1300	
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$ and 380 V)	$\mu\text{S/cm}$	1111	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$ and 400 V)	$\mu\text{S/cm}$	1111	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$ and 415 V)	$\mu\text{S/cm}$	1000	
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 380 V)	$\mu\text{S/cm}$	833	833
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 400 V)	$\mu\text{S/cm}$	833	833
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 415 V)	$\mu\text{S/cm}$	770	
ON	l/min	>2,5	>2.5
IP rating		IP 25	IP 25
Temperature setting	$^\circ\text{C}$	30 - 60	30 - 60
Colour		white	white
Height	mm	485	485
Width	mm	226	226
Depth	mm	93	93
Weight	kg	3.60	3.60
Energy efficiency class		A	A

# Instantaneous water heater

## Comfort instantaneous water heaters

### DHB-E LCD



DHB-E 11/13 LCD

#### Benefits

- › Maximum energy efficiency and accurate temperature delivery with 3i technology and electronic control
- › Temperature shown on the LCD
- › Precise temperature selection via rotary selector
- › Suitable for preheated water from solar thermal systems and heat pumps, up to 55 °C with reheating and up to a maximum of 70 °C without reheating.
- › Greater convenience when installed undersink, since the appliance cover and the programming unit can be turned the other way up
- › Quick installation with PROFI-RAPID
- › High safety level as anti-scalding protection can be permanently activated
- › Wide selection of models
- › Optimum solution for the kitchen sink, with selectable 11 or 13.5 kW output (Product: 236743)
- › Suitable for system with 25 A fuse protection (Product: 236744)
- › Highly flexible installation thanks to selectable appliance output – 18/21/24 kW in a single appliance (Product: 236745)

**Application** • The comfort instantaneous water heater supplies DHW simultaneously to multiple draw-off points, for example the bathroom and the kitchen. • The sealed unvented, pressure-tested appliance can be used with all commercially available pressure taps.

**Convenience features** • The electronically controlled instantaneous water heater ensures accurate temperature delivery up to the maximum output. • The temperature can be variably and digitally adjusted via a rotary selector and displayed on the LCD. • An optional convenient remote control can be added. • To ensure highly convenient undersink installation, both the appliance cover and the programming unit can be turned the other way up.

**Efficiency** • The appliance ensures energy and water savings of up to 30 % through electronic output control with 3i technology. 3 sensors ensure that the selected temperature is accurately delivered up to the output limit. For this, only the amount of energy actually required is expended. There is no need to add cold water at the tap, which leads to very good energy efficiency. • The appliance is suitable for preheated water, for example from solar thermal and heat pump systems.

**Installation** Quick and easy installation with the improved PROFI-RAPID installation system. Straightforward replacement for all standard instantaneous water heaters. For fast wall mounting, the standard delivery includes a universal mounting rail designed to match commonly used fixing points, which in addition compensates for unevenness in the wall and drill hole discrepancies. • Fast, universal water connection thanks to enlarged installation area with pivoting cold water inlet and threaded water fittings. • Twin nipple connections for easy replacement. • Option of surface or flush mounting with 3-way shut-off. The instantaneous water heater can be connected to plastic pipework, in compliance with the manufacturer's instructions. • Electrical connection can be made from above and below; a cable entry gland is provided for the cable.

**Service** • Rapid fault analysis with integral LED diagnostic traffic lights. • The internal assembly can be removed with just one hand movement.

**Safety** • The quick-action bare wire heating system is suitable for hard and soft water. • Electronic safety concept with air bubble detection. • Anti-scalding protection is set by the installer, through permanent limitation of the water outlet temperature.



		DHB-E 11/13 LCD	DHB-E 18 LCD 25A	DHB-E 18/21/24 LCD	DHB-E 27 LCD
Part number		236743	236744	236745	236746
Specification					
Rated voltage	V	400	400	400	400
Rated voltage 1	V	380	380	380	380
Rated voltage 2	V	400	400	400	400
Rated voltage 3	V	415	415	415	
Rated output	kW	11/13.5	18	18/21/24	27
Rated output 1	kW	9.9/12.2	16.2	16.2/19/21.7	24.4
Rated output 2	kW	11/13.5	18	18/21/24	27
Rated output 3	kW	11.8/14.5	19.4	19.4/22.6/25.8	
Rated current	A	17.5/19.5	26	29/31/35	39

Continue on next page >

## Instantaneous water heater

### Comfort instantaneous water heaters

		DHB-E 11/13 LCD	DHB-E 18 LCD 25A	DHB-E 18/21/24 LCD	DHB-E 27 LCD
Rated current 1	A	16.6/18.5	24.7	27.6/29.5/33.3	37.1
Rated current 2	A	17.5/19.5	26	29/31/35	39
Rated current 3	A	18.2/20	27	30.1/32.2/36.3	
Fuse protection	A	20	25	32/32/35	40
Fuse protection 1	A	20	25	32/32/35	40
Fuse protection 2	A	20	25	32/32/35	40
Fuse protection 3	A	20	32	32/32/40	
Frequency	Hz	50/60	50/60	50/60	50/-
Frequency 1	Hz	50/60	50/60	50/60	50/-
Frequency 2	Hz	50/60	50/60	50/60	50/-
Frequency 3	Hz	50/-	50/-	50/-	
Phases		3/PE	3/PE	3/PE	3/PE
Resistivity $\rho_{15} \geq$	$\Omega$ cm	900	900	900	900
Conductivity $\sigma_{15} \leq$	$\mu S/cm$	1111	1111	1111	1111
ON	l/min	>2,5	>2.5	>2.5	>2.5
IP rating		IP 25	IP 25	IP 25	IP 25
Temperature setting	°C	20-60	20-60	20-60	20-60
Colour		white	white	white	white
Height	mm	466	466	466	466
Width	mm	225	225	225	225
Depth	mm	116	116	116	116
Weight	kg	2.80	2.90	2.90	2.90
Energy efficiency class		A	A	A	A
<b>Recommended accessories</b>					
<b>Part number</b>		<b>234478</b>	<b>234478</b>	<b>234478</b>	<b>234478</b>
Type		FFB 4 EU	FFB 4 EU	FFB 4 EU	FFB 4 EU
Description		Wireless remote control for electronic instantaneous water heaters	Wireless remote control for electronic instantaneous water heaters	Wireless remote control for electronic instantaneous water heaters	Wireless remote control for electronic instantaneous water heaters
<b>Part number</b>		<b>238930</b>	<b>238930</b>	<b>238930</b>	<b>238930</b>
Type		FFB 4 Set EU	FFB 4 Set EU	FFB 4 Set EU	FFB 4 Set EU
Description		Wireless remote control for electronic instantaneous water heaters	Wireless remote control for electronic instantaneous water heaters	Wireless remote control for electronic instantaneous water heaters	Wireless remote control for electronic instantaneous water heaters

# Instantaneous water heater

## Comfort instantaneous water heaters

PEY



PEY 18/21/24

### Benefits

- › Accurate temperature delivery up to the output limit with electronic control
- › Consistent outlet temperatures regardless of fluctuations in pressure, inlet temperature or voltage
- › Temperature setting 30-60 °C
- › Highly stable temperatures are ensured by the quick-acting control electronics
- › Electronic air bubble detection
- › Effective bare wire heating system
- › Highly flexible installation thanks to selectable appliance output - 18/21/24 kW in a single appliance (Product: 233993)

**Application** • The electronically controlled comfort instantaneous water heater supplies DHW conveniently and energy efficiently to multiple draw-off points, for example the bathroom and the kitchen. • The sealed unvented, pressure-tested appliance can be connected to all commercially available pressure taps, and can also be used with preheated water from solar thermal systems or heat pumps.

**Convenience features** • Electronically controlled instantaneous water heater with quick-acting control electronics and integral diagnostic system. • Variable temperature selection is possible via a rotary selector with an analogue scale on the appliance.

**Efficiency** • Energy saving operation with accurate temperature delivery.

**Installation** • Easy connection to all commercially available sealed unvented taps. • Easy installation thanks to separate mounting plate and twist lock. The installation template is included in the standard delivery. • The appliance is connected from above or below via a fixed electrical connection. • The hood is removed from the front with no screws. • Undersink installation is possible with suitable accessories.

**Service** • Rapid fault analysis with integral diagnostic system.

**Safety** • Bare wire heating system for hard and soft water. • The multi stage safety concept detects air bubbles in the system and automatically deactivates the appliance if the pressure is too high.

		PEY 18/21/24
Part number		233993
Specification		
Rated voltage	V	400
Rated voltage 1	V	380
Rated voltage 2	V	400
Rated voltage 3	V	415
Rated output	kW	18/21/24
Rated output 1	kW	16.2/19/21.7
Rated output 2	kW	18/21/24
Rated output 3	kW	19.4/22.6/25.8
Rated current	A	29/31/35
Rated current 1	A	27.6/29.5/33.3
Rated current 2	A	29/31/35
Rated current 3	A	30.1/32.2/36.3
Fuse protection	A	32/32/35
Fuse protection 1	A	32/32/35
Fuse protection 2	A	32/32/35
Fuse protection 3	A	32/32/40
Frequency	Hz	50/60
Frequency 1	Hz	50/60
Frequency 2	Hz	50/60
Frequency 3	Hz	50/-
Phases		3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	Ω cm	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	Ω cm	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	Ω cm	1000

Continue on next page >

## Instantaneous water heater

### Comfort instantaneous water heaters

		PEY 18/21/24
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 380 V)	$\Omega \text{ cm}$	1200
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 400 V)	$\Omega \text{ cm}$	1200
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 415 V)	$\Omega \text{ cm}$	1300
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$ and 380 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$ and 400 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25^\circ\text{C}$ and 415 V)	$\mu\text{S/cm}$	1000
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 380 V)	$\mu\text{S/cm}$	833
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 400 V)	$\mu\text{S/cm}$	833
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 45^\circ\text{C}$ and 415 V)	$\mu\text{S/cm}$	770
ON	l/min	>3
Temperature setting	$^\circ\text{C}$	30 - 60
Colour		white
Height	mm	485
Width	mm	226
Depth	mm	93
Weight	kg	3.60
Energy efficiency class		A

# Comfort instantaneous water heaters

## Electronic open-loop control

### PEG



PEG 13

#### Benefits

- › Hot water at the preferred temperature due to electronic control
- › Two fixed temperatures with application symbols
- › Largely consistent outlet temperatures in the event of pressure or supply temperature fluctuations
- › Electronic air bubble detection
- › Effective bare wire heating system

**Application** • The electronically controlled comfort instantaneous water heater supplies DHW energy-efficiently even to multiple draw-off points, for example the bathroom and the kitchen. • The sealed unvented, pressure-tested appliance can be connected to all commercially available pressure taps.

**Convenience features** • Two temperatures are permanently set and indicated by application symbols on the appliance.

**Efficiency** • Energy saving operation even with fluctuating water pressure or inlet temperature. Quick acting control electronics keep the temperature of the DHW largely consistent, which enhances the efficiency of the system.

**Installation** • Easy connection to all commercially available sealed unvented taps. • Easy installation thanks to separate mounting plate with twist lock. The installation template is included in the standard delivery. • The power supply is via a fixed connection from above or below. • The hood can be removed from the front with no screws. • Undersink installation is possible with the correct accessories.

**Service** • Rapid fault analysis with integral diagnostic system.

**Safety** • The bare wire heating system is suitable for hard and soft water. • The multi stage safety concept detects air bubbles in the system and automatically deactivates the appliance if the pressure is too high.

		PEG 13	PEG 18	PEG 21	PEG 24
Part number		233994	233995	233996	233997
Specification					
Rated voltage	V	400	400	400	400
Rated voltage 1	V	380	380	380	380
Rated voltage 2	V	400	400	400	400
Rated output	kW	13.5	18	21	24
Rated output 1	kW	12.2	16.2	19	21.7
Rated output 2	kW	13.5	18	21	24
Rated current	A	19.5	26	31	35
Rated current 1	A	18.5	24.7	29.5	33.3
Rated current 2	A	19.5	26	31	35
Fuse protection	A	20	25	32	35
Fuse protection 1	A	20	25	32	35
Fuse protection 2	A	20	25	32	35
Frequency	Hz	50/60	50/60	50/60	50/60
Frequency 1	Hz	50/60	50/60	50/60	50/60
Frequency 2	Hz	50/60	50/60	50/60	50/60
Phases		3/PE	3/PE	3/PE	3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\Omega$ cm	1100	1100	1100	1100
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\Omega$ cm	1100	1100	1100	1100
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\mu\text{S}/\text{cm}$	900	900	900	900
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\mu\text{S}/\text{cm}$	900	900	900	900
ON	l/min	>3.0	>3.0	>3.0	>3.0
Temperature setting	°C	42 - 55	42 - 55	42 - 55	42 - 55
Colour		white	white	white	white
Height	mm	485	485	485	485
Width	mm	226	226	226	226
Depth	mm	93	93	93	93
Weight	kg	3.60	3.60	3.60	3.60
Energy efficiency class		A	A	A	A

# Comfort instantaneous water heaters

## Electronic open-loop control

### HDB-E Si



HDB-E 12 Si

#### Benefits

- › Good energy efficiency and constant preferred temperature delivery with 2i technology and electronic open-loop control
- › Temperature permanently set to 55 °C
- › Quick installation with PROFI-RAPID
- › Electronic air detection system

**Application** • The comfort instantaneous water heater supplies DHW simultaneously to multiple draw-off points, for example the bathroom and the kitchen. The sealed unvented, pressure-tested appliance can be used with all commercially available pressure taps.

**Convenience features** • The electronically controlled instantaneous water heater supplies DHW at constant preset temperatures ranging from 55 °C to the maximum output.

**Efficiency** • 2i technology with 2 sensors ensures that the preset temperature is reached up to the output limit. For this, only the amount of energy actually required is expended, which leads to higher energy efficiency.

**Installation** • Time saving installation thanks to the PROFI-RAPID installation system. Straightforward replacement for all standard instantaneous water heaters. For simple wall mounting, the standard delivery includes a universal mounting rail designed to match commonly used fixing points, which in addition compensates for unevenness in the wall and drill hole discrepancies. • Quick and universal water connection thanks to freely accessible and generous installation area for threaded water fittings. Twin nipple connections for easy replacement. Option of surface or flush mounting with 3-way shut-off. The instantaneous water heater can be connected to plastic pipework, in compliance with the manufacturer's instructions. • Various flow limiters are included in the standard delivery. • Electrical connection can be made from above and below; a cable entry gland is provided for the cable. Rapid fault analysis with LED diagnostic traffic lights. • The back panel and complete internal assembly can be removed with just one hand movement.

**Safety** • The quick-action bare wire heating system is suitable for hard or soft water. • The multi-stage safety concept comprises a high limit safety cut-out, high pressure switch and electronic air bubble detection system.



		HDB-E 12 Si	HDB-E 18 Si	HDB-E 21 Si	HDB-E 24 Si
Part number		232003	232004	232005	232006
Specification					
Rated voltage	V	400	400	400	400
Rated voltage 1	V	380	380	380	380
Rated voltage 2	V	400	400	400	400
Rated output	kW	10.7	18	21	24
Rated output 1	kW	9.7	16.2	19	21.7
Rated output 2	kW	10.7	18	21	24
Rated current	A	16	26	31	35
Rated current 1	A	14.4	24.7	29.5	33.3
Rated current 2	A	15.5	26	31	35
Fuse protection	A	16	25	32	35
Fuse protection 1	A	16	25	32	35
Fuse protection 2	A	16	25	32	35
Frequency	Hz	50/60	50/60	50/60	50/60
Frequency 1	Hz	50/60	50/60	50/60	50/60
Frequency 2	Hz	50/60	50/60	50/60	50/60
Phases		3/PE	3/PE	3/PE	3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\Omega$ cm	1100	1100	1100	1100
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\mu\text{S}/\text{cm}$	910	910	910	910
ON	l/min	>2.3	>2.3	>2.3	>2.3
Temperature setting	°C	55	55	55	55
Colour		white	white	white	white

Continue on next page >

## Comfort instantaneous water heaters

### Electronic open-loop control

		HDB-E 12 Si	HDB-E 18 Si	HDB-E 21 Si	HDB-E 24 Si
Height	mm	470	470	470	470
Width	mm	225	225	225	225
Depth	mm	117	117	117	117
Weight	kg	3.50	3.60	3.60	3.60
Energy efficiency class		A	A	A	A

# Comfort instantaneous water heaters

## Hydraulic control

### PHB



PHB 13

#### Benefits

- › Constant water temperatures thanks to hydraulic control
- › 4 output stages – 2 manually selectable, 2 hydraulically controlled, depending on flow rate
- › Pressure-controlled safety concept
- › Effective bare wire heating system

**Application** • The comfort instantaneous water heater is hydraulically controlled and supplies multiple draw-off points with DHW. • The sealed unvented, pressure-tested appliance can be connected to all commercially available pressure taps.

**Convenience features** • Hydraulically controlled instantaneous water heater with two automatic and two manual output stages for 1/3, 1/2, 2/3 or 1/1 of the maximum output. • The integral pressure differential switch controls the output depending on the flow rate. • Precise preferred temperature achieved by mixing with cold water at the tap.

**Efficiency** • Energy saving operation thanks to different output stages, regulated according to the flow rate. The appliance achieves efficiency values within the standard range.

**Installation** • Easy connection to all commercially available sealed unvented taps. • Easy installation thanks to separate mounting plate with twist lock. The installation template is included in the standard delivery. • The appliance is connected to the power supply from above or below via a fixed electrical connection. • The hood is removed from the front without any screws. • Undersink installation is possible with suitable accessories.

**Safety** • Rapid bare wire heating system for hard and soft water. • A pressure limiter switches the appliance off automatically.

		PHB 13	PHB 18	PHB 21	PHB 24
Part number		233998	233999	234000	234001
Specification					
Rated voltage	V	400	400	400	400
Rated voltage 1	V	380	380	380	380
Rated voltage 2	V	400	400	400	400
Rated output	kW	13.5	18	21	24
Min. rated output 380 V stage I	kW	4.20	5.70	6.70	7.50
Max. rated output 380 V stage I	kW	9.60	12.90	15.20	17.10
Min. rated output 380 V stage II	kW	6.10	8.30	9.70	11.00
Max. rated output 380 V stage II	kW	12.20	16.30	19.00	21.70
Min. rated output 400 V stage I	kW	4.60	6.30	7.40	8.30
Max. rated output 400 V stage I	kW	10.60	14.30	16.80	19.00
Min. rated output 400 V stage II	kW	6.80	9.20	10.80	12.20
Max. rated output 400 V stage II	kW	13.50	18.00	21.00	24.00
Rated output 1	kW	12.2	16.2	19	21.7
Rated output 2	kW	13.5	18	21	24
Rated current	A	19.5	26	31	35
Rated current 1	A	18,5	24.7	29.5	33.3
Rated current 2	A	19,5	26	31	35
Fuse protection	A	20	25	32	35
Fuse protection 1	A	20	25	32	35
Fuse protection 2	A	20	25	32	35
Frequency	Hz	50/60	50/60	50/60	50/60
Frequency 1	Hz	50/60	50/60	50/60	50/60
Frequency 2	Hz	50/60	50/60	50/60	50/60
Phases		3/PE	3/PE	3/PE	3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\Omega \text{ cm}$	900	900	900	900
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\mu\text{S/cm}$	1111	1111	1111	1111
Max. permissible inlet temperature	°C	25	25	25	25
ON stage I	l/min	2,4	3,0	3,5	4,1
ON 2nd stage	l/min	3,9	4,9	5,6	6,3
IP rating		IP 25	IP 25	IP 25	IP 25

Continue on next page >

Comfort instantaneous water heaters

Hydraulic control

		PHB 13	PHB 18	PHB 21	PHB 24
Colour		white	white	white	white
Height	mm	485	485	485	485
Width	mm	226	226	226	226
Depth	mm	93	93	93	93
Weight	kg	3.60	3.60	3.60	3.60
Energy efficiency class		A	A	A	A

<b>Wireless remote controls</b>	
Accessories	39
<b>Accessories</b>	
Accessories	40

Accessories for comfort instantaneous water heaters

Wireless remote controls

FFB 4



Benefits

- › Additional wireless remote control with large LCD
- › Variable temperature selection from 20 °C to 60 °C
- › FFB 4 EU as second or additional wireless remote control (Product: 234478)
- › FFB 4 Set EU incl. wireless adaptor as basic equipment (Product: 238930)

**Application** • The wireless remote control enables convenient operation of the comfort instantaneous water heater. It can be sited anywhere in a bathroom or kitchen using a wall mounting bracket. Preferred temperatures can be set very easily using the plus or minus buttons or the programmable memory buttons. • The remote control is protected against moisture and can even be used in the shower. It is equipped with a large, easily readable LCD, and the power save mode ensures longer battery life.

FFB 4 EU

		FFB 4 EU	FFB 4 Set EU
Part number		234478	238930
Specification			
IP rating		IP X7	IP X7
Width	mm	65	65
Height	mm	132	132
Depth	mm	18,5	18,5

Battery and wall mounting bracket included in the standard delivery.

Accessories for comfort instantaneous water heaters

Accessories

LR 1-A



LR 1-A

- Benefits**
- › Load shedding relay for priority control
  - › Installed dimension = one horizontal pitch as defined by DIN 43880

Automatic load shedding relay for priority control, e.g. in conjunction with electric storage heaters or to interlock two instantaneous water heaters with each other. The installed dimension corresponds to one horizontal pitch as defined by DIN 43880.

		LR 1-A
Part number		001786
Specification		
Installation type		DIN rail
Breaking capacity	A	1

ZTA 3/4



ZTA 3/4

- Benefits**
- › Protects downstream appliances against high inlet temperatures
  - › Enables the use of hydraulic instantaneous water heaters in shower applications

Thermostatic valve for central premixing. The valve is used with electronic instantaneous water heaters for anti-scalding protection when using preheated water, or with hydraulic instantaneous water heaters for shower applications.

		ZTA 3/4
Part number		073864
Specification		
Max. permissible pressure	MPa	1.00
Water connection		G 3/4 A

# Compact instantaneous water heaters, 3-phase

## Application areas



**Rated output:** Please note the rated output and fuse protection when selecting an instantaneous water heater

**Starting flow rate:** Please note the starting flow rate of the instantaneous water heater when selecting your fitting

2



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0

DCE 11/13 RC

**DCE 11/13 RC**



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0

DCE 11/13

**DCE 11/13**



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9

DCE 11/13 H

**DCE 11/13 H**



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0				
DHF 13 C																																														
DHF 15 C																																														
DHF 18 C																																														
DHF 21 C																																														

**DHF 13 C**

**DHF 15 C**

**DHF 18 C**

**DHF 21 C**

<b>Electronic closed-loop control</b>	
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<b>Hydraulic control</b>	
DHF C	49

# Compact instantaneous water heaters, 3-phase

## Electronic closed-loop control

2

### DCE 11/13 RC



DCE 11/13 RC

#### Benefits

- › Exceptionally slimline, compact design
- › Particularly convenient and energy efficient thanks to electronic output control with 3i technology
- › Standard delivery includes wireless remote control with two temperature memory keys
- › Quick installation with PROFI-RAPID
- › Multi stage electronic safety concept
- › Undersink installation
- › Selectable connected load 11 kW or 13.5 kW

**Application** • The electronically controlled instantaneous water heater takes up very little space in the kitchen due to its compact design. The appliance is uniquely flat thanks to its low installation depth, making it ideal for space saving installation under the kitchen sink. • In commercial settings, it is suitable for cleaning rooms or sanitary facilities with multiple hand washbasins. • International: With high inlet temperatures, also suitable for showers.

**Convenience features** • 3i technology ensures that the preferred temperature is accurately reached up to the output limit. • The bare wire heating system means that the water is heated fast. Electronic control keeps the preferred temperature constant up to the output limit. • The connected load can be selected easily on the device and the preferred temperature is set accurately using the wireless remote control.

**Efficiency** • 3i technology ensures energy and water savings of up to 30 % through electronic output control. 3 sensors ensures that the set temperature is accurately reached up to the output limit. Energy savings are further assured by the appliance only using the amount of energy it actually requires. There is no need to add cold water at the tap, which additionally enhances the overall efficiency of the appliance. • Suitable for operation with preheated water from solar thermal systems or heat pumps. • Water is heated directly at the draw-off point, which prevents thermal losses in the cylinder or pipework.

**Installation** • Quick and easy installation using the improved PROFI-RAPID installation system. • The universal mounting rail compensates for unevenness in the wall and drill hole discrepancies and is designed to match commonly used fixing points. • Straightforward, stable wall mounting: Direct fitting through the appliance back panel makes it easy to compensate for any unevenness in the wall or for drill hole discrepancies. • Fast, universal water connection from above through external 3/8" connections. Can be installed with a non-pressurised or pressure-tested tap and with plastic pipework. • Simple electrical connection, as the power cable is prepared for permanent connection as standard; the cable is included in the standard delivery. Upward cable routing avoids cabling in visible lower areas. • The installer can adjust the output individually. • Fast fault analysis with LED diagnostic traffic lights. • The appliance cover and the internal assembly can be completely removed from the back panel without tools.

**Safety** • The bare wire heating system is suitable for hard and soft water. • The installer can activate anti-scalding protection in order to permanently limit the water outlet temperature. • The multi-stage electronic safety concept comprises a high limit safety cut-out, sensor controlled monitoring of heating element temperature, and air bubble detection.



		DCE 11/13 RC
Part number		230771
Specification		
Rated voltage	V	400
Rated voltage 1	V	380
Rated voltage 2	V	400
Rated voltage 3	V	415
Rated output	kW	11.2/13.5
Rated output 1	kW	10.1/12.2
Rated output 2	kW	11.2/13.5
Rated output 3	kW	12.1/14.5
Rated current	A	18.7/19.5
Rated current 1	A	17.8/18.5
Rated current 2	A	18.7/19.5
Rated current 3	A	19.4/20.2
Fuse protection	A	16/20
Fuse protection 1	A	16/20
Fuse protection 2	A	16/20

Continue on next page >

## Compact instantaneous water heaters, 3-phase

### Electronic closed-loop control

		DCE 11/13 RC
Fuse protection 3	A	20/20
Frequency	Hz	50/60
Frequency 1	Hz	50/60
Frequency 2	Hz	50/60
Frequency 3	Hz	50/-
Phases		3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 380 V)	$\Omega \text{ cm}$	1100
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 400 V)	$\Omega \text{ cm}$	1100
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 415 V)	$\Omega \text{ cm}$	1100
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 380 V)	$\mu\text{S/cm}$	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 400 V)	$\mu\text{S/cm}$	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 415 V)	$\mu\text{S/cm}$	909
ON	l/min	>2.5
IP rating		IP 24
Temperature setting	°C	20-60
Colour		white
Height	mm	293
Width	mm	188
Depth	mm	85
Weight	kg	2.40
Energy efficiency class		A

# Compact instantaneous water heaters, 3-phase

## Electronic closed-loop control

DCE 11/13



DCE 11/13

### Benefits

- › Exceptionally slimline, compact design
- › Particularly convenient and energy efficient thanks to electronic output control with 3i technology
- › Quick installation with PROFI-RAPID
- › Undersink installation
- › Multi stage electronic safety concept
- › Selectable connected load 11 kW or 13.5 kW

**Application** • The electronically controlled instantaneous water heater needs very little space due to its compact design. The appliance is uniquely flat thanks to its low installation depth, making it ideal for space saving installation under a washbasin or kitchen sink. • In commercial settings, it is suitable for cleaning rooms or sanitary facilities with multiple hand washbasins. • International: With high inlet temperatures, also suitable for showers.

**Convenience features** • 3i technology ensures that the preferred temperature is accurately reached up to the output limit. • The bare wire heating system means that the water is heated fast. Electronic control keeps the preferred temperature constant up to the output limit. • The connected load can be easily selected on the appliance and the preferred temperature is variably adjusted via a rotary selector.

**Efficiency** • 3i technology ensures energy and water savings of up to 30 % through electronic output control. 3 sensors ensures that the set temperature is accurately reached up to the output limit. Energy savings are further assured by the appliance only using the amount of energy it actually requires. There is no need to add cold water at the tap, which additionally enhances the overall efficiency of the appliance. • Suitable for operation with preheated water from solar thermal systems or heat pumps. • Water is heated directly at the draw-off point, which prevents thermal losses in the cylinder or pipework.

**Installation** • Quick and easy installation using the improved PROFI-RAPID installation system. • The universal mounting rail compensates for unevenness in the wall and drill hole discrepancies and is designed to match commonly used fixing points. • Straightforward, stable wall mounting: Direct fitting through the appliance back panel makes it easy to compensate for any unevenness in the wall or for drill hole discrepancies. • Fast, universal water connection from above through external 3/8" connections. Can be installed with a non-pressurised or pressure-tested tap and with plastic pipework. • Simple electrical connection, as the power cable is prepared for permanent connection as standard; the cable is included in the standard delivery. Upward cable routing avoids cabling in visible lower areas. • The installer can adjust the output individually. • Fast fault analysis with LED diagnostic traffic lights. • The appliance cover and the internal assembly can be completely removed from the back panel without tools.

**Safety** • The bare wire heating system is suitable for hard and soft water. • The installer can activate anti-scalding protection in order to permanently limit the water outlet temperature. • The multi-stage electronic safety concept comprises a high limit safety cut-out, sensor controlled monitoring of heating element temperature, and air bubble detection.



		DCE 11/13
Part number		230770
Specification		
Rated voltage	V	400
Rated voltage 1	V	380
Rated voltage 2	V	400
Rated voltage 3	V	415
Rated output	kW	11.2/13.5
Rated output 1	kW	10,1/12,2
Rated output 2	kW	11,2/13,5
Rated output 3	kW	12.1/14.5
Rated current	A	18.7/19.5
Rated current 1	A	17,8/18,5
Rated current 2	A	18,7/19,5
Rated current 3	A	19,4/20,2
Fuse protection	A	16/20
Fuse protection 1	A	16/20
Fuse protection 2	A	16/20

Continue on next page >

## Compact instantaneous water heaters, 3-phase

### Electronic closed-loop control

		DCE 11/13
Fuse protection 3	A	20/20
Frequency	Hz	50/60
Frequency 1	Hz	50/60
Frequency 2	Hz	50/60
Frequency 3	Hz	50/-
Phases		3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 380 V)	$\Omega \text{ cm}$	1100
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 400 V)	$\Omega \text{ cm}$	1100
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 415 V)	$\Omega \text{ cm}$	1100
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 380 V)	$\mu\text{S/cm}$	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 400 V)	$\mu\text{S/cm}$	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 415 V)	$\mu\text{S/cm}$	909
ON	l/min	>2,5
IP rating		IP 24
Temperature setting	°C	20 - 60
Colour		white
Height	mm	293
Width	mm	188
Depth	mm	99
Weight	kg	2.10
Energy efficiency class		A

# Compact instantaneous water heaters, 3-phase

## Electronic closed-loop control

DCE 11/13 H



DCE 11/13 H

### Benefits

- › Exceptionally slimline, compact design
- › Particularly convenient and energy efficient thanks to electronic output control with 3i technology
- › Quick installation with PROFI-RAPID
- › Oversink installation
- › Multi stage electronic safety concept
- › With power cable as standard
- › Variable temperature selection via rotary selector

**Application** • The electronically controlled instantaneous water heater needs very little space due to its compact design. Thanks to its exceptionally flat installation depth, this appliance is ideal for space saving oversink installation, especially for the kitchen sink. • In commercial settings, it is suitable for cleaning rooms, e.g. above sinks. • International: Also suitable for showers with high inlet temperatures.

**Convenience features** • 3i technology ensures that the preferred temperature is accurately reached up to the output limit. • The water is heated fast by the bare wire heating system. Electronic control keeps the preferred temperature constant. • The preferred temperature is set manually via a rotary selector.

**Efficiency** • 3i technology ensures energy and water savings of up to 30 % through electronic output control. Three sensors ensure that the set temperature is accurately reached. Energy savings are further assured by the appliance only using the amount of energy it actually requires. There is no need to add cold water at the tap, which additionally enhances the overall efficiency of the appliance. • Suitable for operation with preheated water from solar thermal systems or heat pumps. • The water is heated directly at the draw-off point, thereby avoiding thermal losses in the cylinder and pipework.

**Installation** • Very quick installation using the improved PROFI-RAPID installation system. • Wall unevenness and drill hole discrepancies are compensated for by the universal mounting rail which is also designed to match commonly used fixing points. • Straightforward, stable wall mounting: Direct fitting through the appliance back panel enables easy compensation for wall unevenness and drill hole discrepancies. • Quick, universal water connection from below through external G 1/2 A connections. Installation with a non-pressurised or pressure-tested tap. • Easy electrical connection, as the power cable is prepared for permanent connection as standard; the cable is included in the standard delivery. Upward cable routing avoids cabling in visible lower areas. • The installer can individually adjust the output. • Rapid fault analysis with LED diagnostic traffic lights. • For installation, the appliance cover and internal assembly can be completely removed from the back panel without tools.

**Safety** • The bare wire heating system is suitable for hard and soft water. • The installer can activate anti-scalding protection in order to permanently limit the water outlet temperature. • The multi-stage electronic safety concept comprises a high limit safety cut-out, sensor controlled monitoring of the heating element temperature, and detection of air bubbles in the system.



		DCE 11/13 H
Part number		232792
Specification		
Rated voltage	V	400
Rated voltage 1	V	380
Rated voltage 2	V	400
Rated voltage 3	V	415
Rated output	kW	11.2/13.5
Rated output 1	kW	10.1/12.2
Rated output 2	kW	11.2/13.5
Rated output 3	kW	12.1/14.5
Rated current	A	18.7/19.5
Rated current 1	A	17.8/18.5
Rated current 2	A	18.7/19.5
Rated current 3	A	19.4/20.2
Fuse protection	A	16/20
Fuse protection 1	A	16/20
Fuse protection 2	A	16/20

Continue on next page >

## Compact instantaneous water heaters, 3-phase

### Electronic closed-loop control

		DCE 11/13 H
Fuse protection 3	A	20/20
Frequency	Hz	50/60
Frequency 1	Hz	50/60
Frequency 2	Hz	50/60
Frequency 3	Hz	50/-
Phases		3/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\Omega \text{ cm}$	900
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 380 V)	$\Omega \text{ cm}$	1100
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 400 V)	$\Omega \text{ cm}$	1100
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 415 V)	$\Omega \text{ cm}$	1100
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 380 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 400 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C and 415 V)	$\mu\text{S/cm}$	1111
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 380 V)	$\mu\text{S/cm}$	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 400 V)	$\mu\text{S/cm}$	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 55$ °C and 415 V)	$\mu\text{S/cm}$	909
ON	l/min	>2.5
IP rating		IP 24
Temperature setting	°C	20-60
Colour		white
Height	mm	293
Width	mm	188
Depth	mm	99
Weight	kg	2.20
Energy efficiency class		A

## Compact instantaneous water heaters, 3-phase Hydraulic control

### DHF C



DHF 13 C

#### Benefits

- › Hot water at any time and compact dimensions
- › Long service life thanks to reliable tubular heater system
- › Hydraulically controlled – preferred temperature by adding cold water at the tap
- › Straightforward installation thanks to metal water connections
- › Two output stages adjustable using rotary selector depending on application (hand washbasin or shower)
- › Very safe thanks to high limit safety cut-out
- › High quality – Made in Germany

**Application** • The hydraulically controlled instantaneous water heater supplies DHW to multiple draw-off points.  
• The appliance can be combined with commercially available taps.

**Convenience features** • The tubular heater in a pressure-tested copper cylinder is suitable for use with soft water.  
• The hydraulic control system regulates the electrical output automatically in 2 output stages subject to the flow rate.  
• The output level can be manually locked to full heating output using the output selector.  
• The flow rate control compensates for pressure fluctuations to deliver largely stable temperatures. The flow rate is automatically limited in the winter to ensure an adequate increase in DHW temperature.  
• The preferred temperature is set at the draw-off valve/tap.

**Installation** • Electrical connection in the lower area of the appliance.  
• The threaded water fittings for flush/surface mounting with cold water shut-off are intended for surface mounted taps.  
• The instantaneous water heater is not suitable for plastic DHW pipework.  
• When connecting the appliance to the cold water supply, fit approx. 1 m of metal pipe if the cold water pipework is plastic.

**Safety** • The safety system is equipped with a high limit safety cut-out.

		DHF 13 C	DHF 15 C	DHF 18 C	DHF 21 C
Part number		074301	074302	074303	074304
Specification					
Rated voltage	V	400	400	400	400
Rated output	kW	13.2	15	18	21
Rated current	A	19.5	21.7	26	30.4
Fuse protection	A	20	25	32	32
Frequency	Hz	50/60	50/60	50/60	50/60
Phases		3/PE	3/PE	3/PE	3/PE
Power supply		3/PE	3/PE	3/PE	3/PE
Water connection		G 1/2 A	G 1/2 A	G 1/2 A	G 1/2 A
ON	l/min	>3.0	>3.0	>3.9	>4.4
IP rating		IP 24	IP 24	IP 24	IP 24
Colour		white	white	white	white
Height	mm	370	370	370	370
Width	mm	220	220	220	220
Depth	mm	130	130	130	130
Weight	kg	4.10	4.10	4.10	4.10
Energy efficiency class		B	B	B	B

D = 141 mm above operating button (Product: 074301, 074302, 074303, 074304)



# Compact instantaneous water heaters, 1-phase

## Application areas



**Rated output: Please note the rated output and fuse protection when selecting an instantaneous water heater**

**Starting flow rate: Please note the starting flow rate of the instantaneous water heater when selecting your fitting**



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
DCE-X 6/8 Premium																																													
DCE-X 10/12 Premium																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	l/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
DCE-S 6/8 Plus																																													
DCE-S 10/12 Plus																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
DCE-C 6/8 Trend																																													
DCE-C 10/12 Trend																																													

<b>Full electronic control</b>	
DCE-X Premium	53
<b>Electronic closed-loop control</b>	
DCE-S Plus	55
<b>Electronic open-loop control</b>	
DCE-C Trend	57

# Compact instantaneous water heaters, 1-phase

## Full electronic control

### DCE-X Premium



DCE-X 6/8 Premium

#### Benefits

- › Maximum energy efficiency and accurate temperature delivery at all times thanks to fully electronic output control using 4i technology, in compact design
- › Easy operation via large, backlit multifunction display
- › Energy saving operation with ECO function
- › Fully transparent costs thanks to water and power consumption indicator
- › High quality design | Made in Germany
- › Quick temperature selection with two memory buttons
- › Safe operation thanks to extensive range of convenience and safety functions
- › Quick installation with PROFI-RAPID
- › Selectable output – can be adjusted internally
- › Suitable for preheated water from solar thermal systems and heat pumps, up to 55 °C with reheating and up to a maximum of 70 °C without reheating.
- › Instant hot water thanks to rapid and maintenance-free bare wire heating system

**Application** • The space saving compact instantaneous water heater ensures the supply of DHW to multiple draw-off points – for example shower, kitchen sink, washbasin and hand washbasin. In commercial settings, cleaning rooms or multiple hand washbasins in public sanitary facilities can be supplied. The sealed unvented, pressure-tested appliance can be connected to all commercially available taps.

**Convenience features** • The fully electronically controlled compact instantaneous water heater ensures accurate temperature delivery at all times thanks to the electronic flow rate control. • Variable, digital temperature adjustment in very precise 0.5 °C increments. • The large multifunction display with white backlighting not only shows the set temperature but also provides information on the current power consumption, energy consumption, flow rate and time. Status and service indicators are also displayed. • The instantaneous water heater provides a memory function for 2 programmable preferred temperatures as well as a wide range of comfort functions, including various wellness programs and automated bath filling. • The individually adjustable temperature limiting function can be used for anti-scalding protection and childproofing. • An LED indicator provides information about heating operation. • The key lock protects the appliance against unintentional adjustment.

**Efficiency** • The appliance ensures energy and water savings of up to 30 % thanks to its fully electronic output control with 4i technology. 3 sensors and an additional motorised valve ensure accurate temperature delivery at all times. Only the amount of energy actually required is expended; there is no need to add cold water at the tap. As there are no thermal losses in the cylinder or pipework either, the instantaneous water heater is impressively efficient. Also contributing to this efficiency is the individually selectable ECO mode. • The current water and power consumption can be displayed. • The appliance is suitable for operation with preheated water from solar thermal or heat pump systems.

**Installation** • Quick and easy installation with the PROFI-RAPID installation system. • Straightforward, stable wall mounting: Direct fitting through the appliance back panel enables easy compensation for wall unevenness and drill hole discrepancies. • Fast universal water connection using 1/2" connections. The brass water connections at the bottom enable straightforward surface mounting. Optional accessories are available for flush mounting with non-visible water connections. • Fitting to plastic pipe systems is also possible (follow the manufacturer's instructions). • Easy and flexible electrical connection at the top or bottom when flush mounting and at the bottom or sides when surface mounting. • The appliance cover can be easily opened using a central screw. • The entire inner assembly can be detached from the back panel. • Fast fault analysis with LED diagnostic traffic lights.

**Safety** • The temperature can be individually and permanently limited by the qualified contractor. • The bare wire heating system is suitable for hard and soft water. • Multi stage electronic safety concept with air bubble detection.



		DCE-X 6/8 Premium	DCE-X 10/12 Premium
Part number		238158	238159
Specification			
Rated voltage	V	220	220
Rated voltage 1	V	220	220
Rated voltage 2	V	230	230
Rated voltage 3	V	240	240
Rated output	kW	6.0/8.0	10.0/12.0
Rated output 1	kW	6.0/8.0	10.0/12.0

Continue on next page >

## Compact instantaneous water heaters, 1-phase

### Full electronic control

		DCE-X 6/8 Premium	DCE-X 10/12 Premium
Rated output 2	kW	6.6/8.7	11.0/13.1
Rated output 3	kW	7.2/9.6	12.0/14.3
Rated current	A	27.3/36.4	45.5/54.5
Rated current 1	A	27.3/36.4	45.5/54.5
Rated current 2	A	28.5/38.0	47.8/57.0
Rated current 3	A	30.0/40.0	50.0/59.5
Fuse protection	A	30/40	50/60
Fuse protection 1	A	30/40	50/60
Fuse protection 2	A	30/40	50/60
Fuse protection 3	A	30/40	50/60
Frequency	Hz	50/60	50/60
Frequency 1	Hz	50/60	50/60
Frequency 2	Hz	50/60	50/60
Frequency 3	Hz	50/60	50/60
Phases		1/N/PE	1/N/PE
Resistivity $\rho_{15} \geq$	$\Omega \text{ cm}$	1100	1100
Conductivity $\sigma_{15} \leq$	$\mu\text{S/cm}$	910	910
ON	l/min	1.3	1.3
IP rating		IP 25	IP 25
Temperature setting	$^{\circ}\text{C}$	Off, 20 - 60	Off, 20 - 60
Colour		white	white
Height	mm	372	372
Width	mm	217	217
Depth	mm	109	109
Weight	kg	2.50	2.50
Energy efficiency class		A	A

# Compact instantaneous water heaters, 1-phase

## Electronic closed-loop control

### DCE-S Plus



DCE-S 6/8 Plus

#### Benefits

- › Maximum energy efficiency and accurate temperature delivery with 3i technology and electronic control
- › High quality design | Made in Germany
- › Quick installation with PROFI-RAPID
- › Selectable output – can be adjusted internally
- › Suitable for preheated water from solar thermal systems and heat pumps, up to 55 °C with reheating and up to a maximum of 70 °C without reheating.
- › Variable temperature selection via rotary selector
- › High safety level as anti-scalding protection can be permanently activated
- › Instant hot water thanks to rapid and maintenance-free bare wire heating system

**Application** • The compact instantaneous water heater ensures the supply of DHW to multiple draw-off points – for example shower and kitchen sink or washbasin and hand washbasin. In commercial settings, cleaning rooms or multiple hand washbasins in public sanitary facilities can be supplied. The sealed unvented, pressure-tested appliance can be connected to all commercially available taps.

**Convenience features** • The electronically controlled instantaneous water heater ensures accurate delivery of the preferred temperature up to the maximum output. It can be variably adjusted via a manual rotary selector on the appliance.

**Efficiency** • The 3i technology ensures energy and water savings of up to 30 % through electronic output control. 3 sensors ensure accurate set temperature delivery up to the output limit. • Only the amount of energy actually required is expended, thereby assisting energy efficient operation. • The water is heated in close proximity to the draw-off point, meaning no thermal losses in the cylinder or pipework. • Cold water does not need to be added to achieve the preferred temperature, thereby improving the overall efficiency of the appliance. • The compact instantaneous water heater is suitable for operation with preheated water from solar thermal systems or heat pumps.

**Installation** • Quick and easy installation using the improved PROFI-RAPID installation system. • Straightforward, stable wall mounting: Direct fitting through the appliance back panel makes it easy to compensate for any unevenness in the wall or for drill hole discrepancies. • Fast universal water connection using 1/2" connections. The brass water connections at the bottom enable straightforward surface mounting. Optional accessories are available for flush mounting with non-visible water connections. • Fitting to plastic pipe systems is also possible; follow the manufacturer's instructions when doing so. • Straightforward and flexible electrical connection at the top or bottom when flush mounting and at the bottom or sides when surface mounting. • The appliance cover can be opened easily using a central screw. • The entire inner assembly can be detached from the back panel. • Fast fault analysis with LED diagnostic traffic lights.

**Safety** • The temperature can be individually limited by a qualified contractor. • The bare wire heating system is suitable for hard and soft water. • Multi-stage electronic safety concept with high limit safety cut-out and air bubble detection.



		DCE-S 6/8 Plus	DCE-S 10/12 Plus
Part number		238153	238154
Specification			
Rated voltage	V	220	220
Rated voltage 1	V	220	220
Rated voltage 2	V	230	230
Rated voltage 3	V	240	240
Rated output	kW	6.0/8.0	10.0/12.0
Rated output 1	kW	6.0/8.0	10.0/12.0
Rated output 2	kW	6.6/8.7	11.0/13.1
Rated output 3	kW	7.2/9.6	12.0/14.3
Rated current	A	27.3/36.4	45.5/54.5
Rated current 1	A	27.3/36.4	45.5/54.5
Rated current 2	A	28.5/38.0	47.8/57.0
Rated current 3	A	30.0/40.0	50.0/59.5
Fuse protection	A	30/40	50/60
Fuse protection 1	A	30/40	50/60
Fuse protection 2	A	30/40	50/60

Continue on next page >

## Compact instantaneous water heaters, 1-phase

### Electronic closed-loop control

		DCE-S 6/8 Plus	DCE-S 10/12 Plus
Fuse protection 3	A	30/40	50/60
Frequency	Hz	50/60	50/60
Frequency 1	Hz	50/60	50/60
Frequency 2	Hz	50/60	50/60
Frequency 3	Hz	50/60	50/60
Phases		1/N/PE	1/N/PE
Resistivity $\rho_{15} \geq$	$\Omega \text{ cm}$	1100	1100
Conductivity $\sigma_{15} \leq$	$\mu\text{S/cm}$	910	910
ON	l/min	1.3	1.3
IP rating		IP 25	IP 25
Temperature setting	$^{\circ}\text{C}$	20-60	20-60
Colour		white	white
Height	mm	372	372
Width	mm	217	217
Depth	mm	109	109
Weight	kg	2.50	2.50
Energy efficiency class		A	A

# Compact instantaneous water heaters, 1-phase

## Electronic open-loop control

### DCE-C Trend



DCE-C 6/8 Trend

#### Benefits

- › Good energy efficiency and constant preferred temperature delivery with 2i technology and electronic open-loop control
- › Quick installation with PROFI-RAPID
- › Selectable output – can be adjusted internally
- › High quality design | Made in Germany
- › Suitable for preheated water from solar thermal systems and heat pumps, up to 55 °C with reheating and up to a maximum of 70 °C without reheating.
- › Permanently set DHW temperature – preferred temperature with cold water added at the tap
- › Instant hot water thanks to rapid and maintenance-free bare wire heating system

**Application** • The compact instantaneous water heater reliably supplies DHW to individual or multiple draw-off points – e.g. shower, kitchen sink, washbasin, hand washbasin. In commercial settings, cleaning rooms or multiple hand washbasins in public sanitary facilities can be supplied. The sealed unvented, pressure-tested appliance can be connected to all commercially available taps.

**Convenience features** • The electronically controlled compact instantaneous water heater supplies DHW at a constant, fixed temperature up to the maximum output. • The preferred temperature is achieved by mixing in cold water at the tap.

**Efficiency** • Electronic output control with 2i technology, including 2 sensors which ensure that the preset temperature level is reached up to the output limit. For this, only the amount of energy actually required is expended. The appliance offers impressive energy efficiency, with no thermal losses in the cylinder or the pipework. • The instantaneous water heater is suitable for preheated water from solar thermal and heat pump systems.

**Installation** • Fast wall mounting with the improved PROFI-RAPID installation system. Direct fitting through the appliance back panel enables easy compensation of drill hole discrepancies. • The appliance cover is easy to open thanks to a central screw. • For fast, universal water connection, 1/2" brass water connections are integrated, located at the bottom for installation on finished walls. Installation on unfinished walls for non-visible water connections is possible with optional accessories. • Fitting to plastic pipe systems is also possible; follow the manufacturer's instructions when doing so. • Straightforward and flexible electrical connection at the top or bottom when flush mounting and at the bottom or sides when surface mounting. • Selectable output can be adjusted internally. • LED diagnostic traffic lights are integrated for fast fault analysis. • The internal assembly can be completely removed with no back panel.

**Safety** • The bare wire heating system is suitable for hard and soft water. • Multi stage electronic safety concept with air bubble detection.



		DCE-C 6/8 Trend	DCE-C 10/12 Trend
Part number		238148	238149
Specification			
Rated voltage	V	220	220
Rated voltage 1	V	220	220
Rated voltage 2	V	230	230
Rated voltage 3	V	240	240
Rated output	kW	6.0/8.0	10.0/12.0
Rated output 1	kW	6.0/8.0	10.0/12.0
Rated output 2	kW	6.6/8.7	11.0/13.1
Rated output 3	kW	7.2/9.6	12.0/14.3
Rated current	A	27.3/36.4	45.5/54.5
Rated current 1	A	27.3/36.4	45.5/54.5
Rated current 2	A	28.5/38.0	47.8/57.0
Rated current 3	A	30.4/40.0	50.0/59.5
Fuse protection	A	30/40	50/60
Fuse protection 1	A	30/40	50/60
Fuse protection 2	A	30/40	50/60
Fuse protection 3	A	30/40	50/60
Frequency	Hz	50/60	50/60
Frequency 1	Hz	50/60	50/60

Continue on next page >

## Compact instantaneous water heaters, 1-phase

### Electronic open-loop control

		DCE-C 6/8 Trend	DCE-C 10/12 Trend
Frequency 2	Hz	50/60	50/60
Frequency 3	Hz	50/60	50/60
Phases		1/N/PE	1/N/PE
Resistivity $\rho_{15} \geq$	$\Omega \text{ cm}$	1100	1100
Conductivity $\sigma_{15} \leq$	$\mu\text{S/cm}$	910	910
ON	l/min	1.3	1,3
IP rating		IP 25	IP 25
Temperature setting	$^{\circ}\text{C}$	55	55
Colour		white	white
Height	mm	372	372
Width	mm	217	217
Depth	mm	97	97
Weight	kg	2.50	2.50
Energy efficiency class		A	A



<b>Accessories</b>	
Accessories	61

Accessories for compact instantaneous water heaters

Accessories

LR 1-A



LR 1-A

- Benefits**
- › Load shedding relay for priority control
  - › Installed dimension = one horizontal pitch as defined by DIN 43880

Automatic load shedding relay for priority control, e.g. in conjunction with electric storage heaters or to interlock two instantaneous water heaters with each other. The installed dimension corresponds to one horizontal pitch as defined by DIN 43880.

		LR 1-A
Part number		001786
Specification		
Installation type		DIN rail
Breaking capacity	A	1



# Mini instantaneous water heaters

## Application areas



**Rated output:** Please note the rated output and fuse protection when selecting an instantaneous water heater

**Starting flow rate:** Please note the starting flow rate of the instantaneous water heater when selecting your fitting



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
EIL 3 Premium																																													
EIL 4 Premium																																													
EIL 6 Premium																																													
EIL 7 Premium																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	L/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
EIL 3 Plus																																													
EIL 4 Plus																																													
EIL 6 Plus																																													
EIL 7 Plus																																													



	kW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
	U/min	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0			
EIL 3 Trend																																													
EIL 4 Trend																																													
EIL 6 Trend																																													

<b>Electronic closed-loop control</b>	
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# Mini instantaneous water heaters

## Electronic closed-loop control

### EIL Premium



EIL 3 Premium

#### Benefits

- › Suitable for oversink and undersink installation with a single appliance
- › Can be operated with pressurised and non-pressurised taps
- › Accurate temperature delivery up to the maximum output
- › Internal permanent set temperature for childproofing and anti-scalding protection
- › Special aerator for perfect flow pattern
- › At inlet temperatures > 20 °C, also suitable for showers
- › Mini instantaneous water heater with electronic control for a hand washbasin
- › Maintenance-free bare wire heating system
- › 3.5 kW version with Schuko plug as standard (Product: 200134)

**Application** • The electronically controlled mini instantaneous water heater supplies DHW to one hand washbasin reliably and efficiently. • With higher inlet temperatures, the appliance is also suitable for showers. • The appliance can be used with either a pressure-tested or a non-pressurised tap.

**Convenience features** • The mini instantaneous water heater is equipped with closed-loop control, an outlet temperature sensor and variable flow rate limitation. • Preferred temperatures are accurately delivered up to the maximum output, and the temperature can be internally limited. • The special aerator ensures a perfect water flow pattern and is fitted with an integral flow rate controller. • In the case of high inlet temperatures, anti-scalding protection automatically activates and adjusts the output.

**Efficiency** • The instantaneous water heater heats the water directly at the draw-off point, saving water and energy by preventing thermal losses in the cylinder or pipework. • Electronic output control for energy and water saving operation additionally improves the efficiency of the whole system. • In conjunction with the outlet temperature sensor, the closed-loop control ensures the set temperature is achieved with maximum accuracy. For this, only the amount of energy actually required is expended; there is no need to add cold water at the tap. • The appliance is suitable for use with preheated water from solar thermal systems or heat pumps.

**Installation** • The PROFI-RAPID installation system enables very fast installation. The appliance is secured at two points for mounting, and the back panel serves as a drilling template if required. • Fast, universal water connection with external metal water fittings. • Simple electrical connection with power cable prepared for permanent connection as standard. • Fault analysis with LED diagnostic traffic lights.

**Safety** • The maintenance-free bare wire heating system is suitable for hard and soft water. • The safety system monitors the temperature automatically and switches off the appliance automatically in the event of overpressure.

		EIL 3 Premium	EIL 4 Premium	EIL 6 Premium	EIL 7 Premium
Part number		200134	200135	200136	200137
Specification					
Rated voltage	V	230	230	230	400
Rated voltage 1	V	200	200	200	380
Rated voltage 2	V	220	220	220	400
Rated voltage 3	V	230	230	230	
Rated voltage 4	V	240	240	240	
Rated output	kW	3.53	4.4	5.7	6.5
Rated output 1	kW	2.7	3.3	4.3	5.9
Rated output 2	kW	3.2	4.0	5.2	6.5
Rated output 3	kW	3.53	4.4	5.7	
Rated output 4	kW	3.8	4.8	6.2	
Rated current	A	15.2	19.1	24.7	16.3
Rated current 1	A	13.3	16.7	21.6	15.5
Rated current 2	A	14.5	18.2	23.6	16.3
Rated current 3	A	15.2	19.1	24.7	
Rated current 4	A	15.8	20.0	25.8	
Fuse protection	A	16	20	25	20
Fuse protection 1	A	16	20	25	16
Fuse protection 2	A	16	20	25	20
Fuse protection 3	A	16	20	25	
Fuse protection 4	A	16	20	32	
Frequency	Hz	50/60	50/60	50/60	50/-
Frequency 1	Hz	50/60	50/60	50/60	50/-
Frequency 2	Hz	50/60	50/60	50/60	50/-
Frequency 3	Hz	50/60	50/60	50/60	

Continue on next page >

## Mini instantaneous water heaters

### Electronic closed-loop control

		EIL 3 Premium	EIL 4 Premium	EIL 6 Premium	EIL 7 Premium
Frequency 4	Hz	50/60	50/60	50/60	
Phases		1/N/PE	1/N/PE	1/N/PE	2/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\Omega$ cm	1000	1000	1000	1000
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\mu\text{S}/\text{cm}$	1000	1000	1000	1000
ON	l/min	>1.5	>1.8	>2.2	>2.2
IP rating		IP 25	IP 25	IP 25	IP 25
Temperature setting	°C	30 – 50	30 – 50	30 – 50	30 – 50
Colour		white	white	white	white
Height	mm	143	143	143	143
Width	mm	190	190	190	190
Depth	mm	82	82	82	82
Weight	kg	1.50	1.50	1.50	1.50
Energy efficiency class		A	A	A	A

# Mini instantaneous water heaters

## Hydraulic control, pressure-tested

### EIL Plus



EIL 3 Plus

#### Benefits

- › Mini instantaneous water heater with hydraulic control for a hand washbasin
- › Can be operated with pressurised and non-pressurised taps
- › For undersink installation
- › Special aerator for perfect flow pattern
- › Maintenance-free bare wire heating system
- › 3.5 kW version with Schuko plug as standard (Product: 200138)

**Application** • The hydraulically controlled mini instantaneous water heater supplies DHW reliably and efficiently to one hand washbasin. • The sealed unvented, pressure-tested appliance is suitable for all commercially available pressure taps.

**Convenience features** • The appliance has a flow switch and automatically controls the flow rate. • Preferred temperatures are delivered with near constant accuracy up to the maximum output by mixing at the tap. • The system hydraulically controls the heating output in a single stage, subject to the flow rate. • A special aerator ensures a perfect water flow pattern. • The integral flow controller can be easily fitted in existing taps.

**Efficiency** • The instantaneous water heater heats the water directly at the draw-off point, saving water and energy by preventing thermal losses in the cylinder or pipework.

**Installation** • The PROFI-RAPID installation system enables very fast installation. The appliance is secured at two points, and the back panel serves as a drilling template, if required. • Fast, universal water connection with external metal water fittings. • Simple electrical connection with power cable prepared for permanent connection as standard.

**Safety** • The bare wire heating system is suitable for hard and soft water. • The appliance switches off automatically in the event of overpressure.

		EIL 3 Plus	EIL 4 Plus	EIL 6 Plus	EIL 7 Plus
Part number		200138	200139	200140	200141
Specification					
Rated voltage	V	230	230	230	400
Rated voltage 1	V	200	200	200	380
Rated voltage 2	V	220	220	220	400
Rated voltage 3	V	230	230	230	415
Rated voltage 4	V	240	240	240	
Rated output	kW	3.53	4.4	5.7	6,5
Rated output 1	kW	2.7	3.3	4,3	5,9
Rated output 2	kW	3.2	4.0	5,2	6,5
Rated output 3	kW	3.53	4.4	5,7	7,0
Rated output 4	kW	3.8	4.8	6,2	
Rated current	A	15.2	19.1	24.7	16,3
Rated current 1	A	13.3	16.7	21,6	15,5
Rated current 2	A	14.5	18.2	23,6	16,3
Rated current 3	A	15.2	19.1	24,7	16,9
Rated current 4	A	15.8	20	25,8	
Fuse protection	A	16	20	25	20
Fuse protection 1	A	16	20	25	16
Fuse protection 2	A	16	20	25	20
Fuse protection 3	A	16	20	25	20
Fuse protection 4	A	16	20	32	
Frequency	Hz	50/60	50/60	50/60	50
Frequency 1	Hz	50/60	50/60	50/60	50/60
Frequency 2	Hz	50/60	50/60	50/60	50/60
Frequency 3	Hz	50/60	50/60	50/60	50/-
Frequency 4	Hz	50/60	50/60	50/60	
Phases		1/N/PE	1/N/PE	1/N/PE	2/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	Ω cm	1100	1100	1100	1100

Continue on next page >

## Mini instantaneous water heaters

### Hydraulic control, pressure-tested

		<b>EIL 3 Plus</b>	<b>EIL 4 Plus</b>	<b>EIL 6 Plus</b>	<b>EIL 7 Plus</b>
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} > 25$ °C)	$\Omega \text{ cm}$	1100	1100	1100	1100
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\mu\text{S/cm}$	909	909	909	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} > 25$ °C)	$\mu\text{S/cm}$	909	909	909	909
Water connection		G 3/8 A	G 3/8 A	G 3/8 A	G 3/8 A
ON	l/min	> 1.6	> 2.0	> 2.6	> 2,6
IP rating		IP 25	IP 25	IP 25	IP 25
Colour		white	white	white	white
Height	mm	143	143	143	143
Width	mm	190	190	190	190
Depth	mm	82	82	82	82
Weight	kg	1.40	1.40	1.40	1.40
Energy efficiency class		A	A	A	A

# Mini instantaneous water heaters

## Hydraulic control, non-pressurised

### EIL Trend



EIL 3 Trend

#### Benefits

- › Mini instantaneous water heater with hydraulic control for a hand washbasin
- › Operation with non-pressurised tap
- › Suitable for oversink and undersink installation with a single appliance
- › Special aerator for perfect flow pattern
- › Maintenance-free bare wire heating system
- › 3.5 kW version with Schuko plug as standard (Product: 200142)

**Application** • The hydraulically controlled mini instantaneous water heater supplies DHW to one hand washbasin. • The appliance is for oversink or undersink installation and is suitable for all commercially available non-pressurised taps.

**Convenience features** • The mini instantaneous water heater is equipped with a flow switch and automatic flow rate control. • Preferred temperatures are delivered with near constant accuracy up to the maximum output by mixing in cold water at the tap. • The appliance hydraulically controls the heating output in a single stage, subject to the flow rate. • The standard delivery includes a special aerator for a perfect water flow pattern, with integral flow rate controller.

**Efficiency** • The mini instantaneous water heater heats the water directly at the draw-off point, which saves water and energy by preventing thermal losses in the cylinder or pipework.

**Installation** • The PROFI-RAPID installation system enables very fast installation. The appliance is secured at two points, and the back panel serves as a drilling template, if required. Fast, universal water connection with external metal water fittings. • Simple electrical connection with power cable prepared for permanent connection as standard.

**Safety** • The bare wire heating system is suitable for hard and soft water. • The appliance switches off automatically in the event of overpressure.

		EIL 3 Trend	EIL 4 Trend	EIL 6 Trend
Part number		200142	200143	200144
Specification				
Rated voltage	V	230	230	230
Rated voltage 1	V	200	200	200
Rated voltage 2	V	220	220	220
Rated voltage 3	V	230	230	230
Rated voltage 4	V	240	240	240
Rated output	kW	3,53	4,4	5,7
Rated output 1	kW	2,7	3,3	4,3
Rated output 2	kW	3,2	4,0	5,2
Rated output 3	kW	3,53	4,4	5,7
Rated output 4	kW	3,8	4,8	6,2
Rated current	A	15,2	19,1	24,7
Rated current 1	A	13,3	16,7	21,6
Rated current 2	A	14,5	18,2	23,6
Rated current 3	A	15,2	19,1	24,7
Rated current 4	A	15,8	20	25,8
Fuse protection	A	16	20	25
Fuse protection 1	A	16	20	25
Fuse protection 2	A	16	20	25
Fuse protection 3	A	16	20	25
Fuse protection 4	A	16	20	32
Frequency	Hz	50/60	50/60	50/60
Frequency 1	Hz	50/60	50/60	50/60
Frequency 2	Hz	50/60	50/60	50/60
Frequency 3	Hz	50/60	50/60	50/60
Frequency 4	Hz	50/60	50/60	50/60
Phases		1/N/PE	1/N/PE	1/N/PE
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	Ω cm	1100	1100	1100

Continue on next page >

## Mini instantaneous water heaters

### Hydraulic control, non-pressurised

		EIL 3 Trend	EIL 4 Trend	EIL 6 Trend
Resistivity $\rho_{15} \geq$ (at $\vartheta_{\text{cold}} > 25$ °C)	$\Omega \text{ cm}$	1100	1100	1100
Specific conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} \leq 25$ °C)	$\mu\text{S/cm}$	909	909	909
Conductivity $\sigma_{15} \leq$ (at $\vartheta_{\text{cold}} > 25$ °C)	$\mu\text{S/cm}$	909	909	909
Water connection		G 3/8 A	G 3/8 A	G 3/8 A
ON	l/min	> 1,0	> 1.3	> 2.6
IP rating		IP 25	IP 25	IP 25
Colour		white	white	white
Height	mm	143	143	143
Width	mm	190	190	190
Depth	mm	82	82	82
Weight	kg	1.40	1.40	1.40
Energy efficiency class			A	A

#### EIL Trend + OT



##### Benefits

- › Mini instantaneous water heater for oversink installation including non-pressurised wall mounted tap in one packing unit
- › Mini instantaneous water heater with hydraulic control for a hand washbasin
- › Special aerator for perfect flow pattern
- › Maintenance-free bare wire heating system

DHW set consisting of a hydraulically controlled, non-pressurised mini instantaneous water heater and a twin lever wall mounted tap for energy efficient DHW supply to one hand washbasin.

#### EIL 3 Trend + OT

		EIL 3 Trend + OT	EIL 4 Trend + OT
Part number		200145	201409

Set components		EIL 3 Trend + OT	EIL 4 Trend + OT
1	Type	EIL 3 Trend	EIL 4 Trend
	Pce	1	1
	Page		
2	Type	MAW	MAW
	Pce	1	1
	Page		

Mini instantaneous water heaters  
Hydraulic control, non-pressurised

EIL Trend + UT



- Benefits**
- › Mini instantaneous water heater for undersink installation including non-pressurised twin lever washbasin tap in one packing unit
  - › Mini instantaneous water heater with hydraulic control for a hand washbasin
  - › Special aerator for perfect flow pattern
  - › Maintenance-free bare wire heating system

DHW set consisting of a hydraulically controlled, non-pressurised mini instantaneous water heater and a twin lever tap for energy efficient DHW supply to one hand washbasin.

EIL 3 Trend + UT

		EIL 3 Trend + UT
Part number		200146

Set components		EIL 3 Trend + UT
1	Type	EIL 3 Trend
	Pce	1
	Page	
2	Type	MAZ
	Pce	1
	Page	

<b>Taps, non-pressurised Accessories</b>	73
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Accessories for mini instantaneous water heaters

Taps, non-pressurised

MAW



Benefits

- › Non-pressurised operation with rotary handle, cold left and hot right
- › Oversink installation on a hand washbasin without standby losses
- › Straightforward operation and pivoting spout
- › Special wall mounted tap for direct installation with a mini instantaneous water heater

Wall mounted twin lever tap with special aerator. Suitable for combination with a non-pressurised mini instantaneous water heater for oversink installation.

MAW

		MAW
Part number		185474
Specification		
Version		Twin lever tap
Application		Washbasin
Connection		Connection hoses
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch
Spout reach	mm	160
Flow rate	l/min	3.5

Continue on next page >

Accessories for mini instantaneous water heaters

Taps, non-pressurised

MAZ



MAZ

- Benefits**
- › Ideal for mini instantaneous water heaters with twin lever operation for separate adjustment of hot and cold water
  - › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
  - › Special aerator for perfect flow pattern
- Twin lever tap with special aerator for washbasins. Suitable for combining with a non-pressurised mini instantaneous water heater for undersink installation.

		MAZ
Part number		185475
Specification		
Version		Twin lever tap
Application		Washbasin
Connection		Connection hoses
Installation type		Monobloc mixer tap
Surface		chrome plated
Spout reach	mm	150
Spout height	mm	170
Flow rate	l/min	3.5

MAE



MAE

- Benefits**
- › Mono lever mixer tap for quick adjustment of the preferred temperature
  - › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
  - › Special aerator for perfect flow pattern
  - › Complete with drain set and pull rod
- Mono lever mixer tap with special aerator. Mounted on a washbasin and suitable for combination with a non-pressurised mini instantaneous water heater.

		MAE
Part number		185476

## Accessories for mini instantaneous water heaters

### Taps, non-pressurised

		MAE
<b>Specification</b>		
Version		Mono lever mixer tap
Application		Washbasin
Connection		Connection hoses
Installation type		Monobloc mixer tap
Surface		chrome plated
Spout reach	mm	113
Spout height	mm	43
Flow rate	l/min	3.5

#### WST








#### Benefits

- › Easy operation thanks to temperature default setting on the tap head
- › Easy to clean thanks to high grade chrome surface
- › Straightforward and quick installation thanks to quick-acting fittings

Non-pressurised open mixer tap with two rotary handles for single hole mounting on washbasins. Equipped with pivoting spout, flexible water connection hoses and fitting. Brass casing with chrome plated surface.

WST

		WST
<b>Part number</b>		232620
<b>Specification</b>		
Version		Mixer tap
Application		Washbasin
Connection		Connection hoses
Installation type		Monobloc mixer tap
Surface		chrome plated
Spout reach	mm	150
Spout height	mm	130

Water boilers	    	78
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<b>Oversink</b>	
EBK automatic	79
KBA 5 automatic	80

## Water boilers Oversink

### EBK automatic



EBK 5 G automatic

#### Benefits

- › Automatic shutdown with boiling point detection
- › Stainless steel heating element
- › Exclusive design
- › High grade glass container
- › Large container aperture for easy descaling and cleaning
- › Lever and twin lever fill & drain tap in brass with white casing (Product: 074286)
- › Triple-handle fill & drain tap made from chrome plated brass (Product: 074287)

**Application** • The water boilers supply hot and boiling water in domestic or similar applications.

**Convenience features** • With boiling point detection and automatic shutdown, immediate re-boiling is possible.  
 • Variable temperature selection from 35 °C to boiling point. • A visual display indicates when the appliance is heating up. • The fill & drain tap has an optional throttle adjustment. • The DHW fill level is indicated by the markings on the glass container.

**Installation.** Can be installed on finished walls or connected via a water connection valve. • Standard delivery includes the fill & drain tap with pivoting overflow pipe and a power cable with Schuko plug or a connection cable for fixed connection. • A sufficiently large service aperture is integrated for cleaning and descaling. • The connected load is 2 kW.

**Safety** • The immersion heaters are stainless steel. • The high grade glass container ensures a long service life. • The appliance features an integral high limit safety cut-out and is splashproof to protection rating IP 24.

		EBK 5 G automatic	EBK 5 GA automatic
Part number		074286	074287
Specification			
Connected load	kW	2	2
Rated output 1	kW	2	2
Power supply		1/N/PE	1/N/PE
Rated voltage 1	V	230	230
Frequency	Hz	50	50
Nominal capacity	l	5	5
Tap		Twin lever fill and drain valve	Three lever tap
Type		open	open
Cylinder material		Glass	Glass
Colour		white	white
Temperature selection	°C	100	100
Width	mm	245	245
Depth	mm	242	242
Capacity up to	l	5.0	5.0
Weight	kg	4.10	4.10
Tap surface		plastic-coated	chrome plated

## Water boilers Oversink

### KBA 5 automatic



EBK 5 K automatic

#### Benefits

- › Stainless steel heating element
- › Automatic shutdown with boiling point detection
- › Large container aperture with cap for easy descaling and cleaning
- › Plastic container with white casing (Product: 074288)
- › Lever and twin lever fill & drain tap in brass with white casing (Product: 074288)
- › Triple-handle fill & drain tap made from chrome plated brass (Product: 074289)
- › Plastic container with grey casing (Product: 074289)

**Application** • The water boilers supply boiling water at a draw-off point.

**Convenience features** • With boiling point detection and automatic shutdown, immediate re-boiling is possible. The temperature can be variably selected from 35 °C to boiling point. Heat-up operation is indicated on the display. • The fill & drain tap has an optional throttle adjustment. • The water fill level is indicated by the markings on the container.



























**Installation** • The connected load is 2 kW. • Can be installed on finished walls or connected via a water connection valve. • Standard delivery includes a fill & drain tap with pivoting overflow pipe and a power cable with Schuko plug or a connection cable for fixed connection. • Protection rating IP 24 (splashproof). A sufficiently large container aperture or service aperture allows direct access for cleaning and descaling.

**Safety & quality** • The immersion heater is stainless steel, and the appliance has a built-in high limit safety cut-out.

		EBK 5 K automatic	KBA 5 KA automatic
Part number		074288	074289
Specification			
Connected load	kW	2	2
Power supply		1/N/PE	1/N/PE
Frequency	Hz	50	50
Nominal capacity	l	5	5
Tap		Twin lever tap	Three lever tap
Type		open	open
Cylinder material		Plastic	Plastic
Colour		white	grey
Temperature selection	°C	100	100
Height	mm	295	295
Width	mm	325	325
Depth	mm	197	197
Capacity up to	l	5.0	5,0
Weight	kg	2.90	2.90
Tap surface		plastic-coated	chrome plated



Height to the centre of the water connection (Product: 074288, 074289)



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<b>DHW heat pumps</b>	     	152

Small water heaters, non-pressurised

Application areas

Nominal capacity																							
		L	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	ESH 5 U-N Trend																						
	ESH 10 U-N Trend																						
		L	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	ESH 5 O-N Trend																						
	ESH 10 O-N Trend																						

<b>Undersink</b>	
ESH U-N Trend	85
ESH U-N Trend +A	86
<b>Oversink</b>	
ESH O-N Trend	87
ESH O-N Trend +A	88

# Small water heaters, non-pressurised

## Undersink

### ESH U-N Trend



ESH 5 U-N Trend

#### Benefits

- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
- › Infinitely variable temperature selection
- › High limit safety cut-out resettable by disconnecting the mains plug
- › Connecting cable with Schuko plug
- › Operation with non-pressurised tap

**Application** • The non-pressurised, open vented small water heaters provide an energy saving and efficient supply of warm or hot water to individual draw-off points, for example a washbasin or the kitchen sink. • The appliances are for undersink installation and can be connected to all commercially available non-pressurised taps.

**Convenience features** • Small water heater with energy saving thermostop function. • The preferred temperature can be variably adjusted. • The heat-up phase is visually indicated. • Large quantities of DHW can be drawn off thanks to the special geometry of the heating element.

**Efficiency** • The thermostop function prevents the mixer tap becoming hot, which saves operating energy and increases the efficiency of the appliance.

**Installation** • The PROFI-RAPID installation system enables very fast installation. The universal mounting rail compensates for unevenness in the wall and drill hole discrepancies, and is designed to match commonly used fixing points. • The connection cable is fitted with a Schuko plug as standard. Practical cable storage is provided in the back panel of the appliance to house any excess cable.

**Safety** • Robust copper tubular heater ensures a long service life. • Safe commissioning thanks to resettable high limit safety cut-out.



201391

		ESH 5 U-N Trend	ESH 10 U-N Trend
Part number		201386	201391
Specification			
Rated output 1	kW	2	
Power supply		1/N/PE	1/N/PE
Rated voltage 1	V	230	230
Rated current 1	A	8.7	8.7
Frequency	Hz	50/60	50/60
Energy efficiency class		A	A
Standby energy consumption/ 24 h at 65 °C	kWh	0.27	0.32
Nominal capacity	l	5	10
Mixed water volume 40 °C	l	10	19
Temperature setting range	°C	35 – 85	35 – 85
Version		Small water heater	Small water heater
Type		open	open
Installation type		Undersink	Undersink
With tap		-	-
Colour		white	white
Operation		manual	manual
Temperature limit		•	•
IP rating		IP 24 D	IP 24 D
Height	mm	415	506
Width	mm	252	296
Depth	mm	233	276
Weight	kg	3.10	5.00

Continue on next page >

## Small water heaters, non-pressurised

### Undersink

		ESH 5 U-N Trend	ESH 10 U-N Trend
<b>Recommended accessories</b>			
<b>Part number</b>		<b>232604</b>	<b>232604</b>
Type		WUT	WUT
Description		Twin lever mixer tap, non-pressurised, for the kitchen sink	Twin lever mixer tap, non-pressurised, for the kitchen sink
<b>Part number</b>		<b>232611</b>	<b>232611</b>
Type		MES	MES
Description		Mono lever mixer tap, non-pressurised, for kitchen sink	Mono lever mixer tap, non-pressurised, for kitchen sink
<b>Part number</b>		<b>232620</b>	<b>232620</b>
Type		WST	WST
Description		Twin lever mixer tap, non-pressurised, for washbasins	Twin lever mixer tap, non-pressurised, for washbasins

#### ESH U-N Trend +A



DHW sets consisting of ESH 5 U-N Trend or ESH 10 U-N Trend and a non-pressurised, open vented mono lever mixer tap.

ESH 5 U-N Trend +A

		ESH 5 U-N Trend +A	ESH 10 U-N Trend +A
<b>Part number</b>		<b>201387</b>	<b>201392</b>

<b>Set components</b>		ESH 5 U-N Trend +A	ESH 10 U-N Trend +A
<b>1</b>	Type	ESH 5 U-N Trend	ESH 10 U-N Trend
	Pce	1	1
	Page		

## Small water heaters, non-pressurised

### Oversink

#### ESH O-N Trend



ESH 5 O-N Trend

#### Benefits

- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
- › Infinitely variable temperature selection
- › High limit safety cut-out resettable by disconnecting the mains plug
- › Connecting cable with Schuko plug
- › Operation with non-pressurised tap

**Application** • The non-pressurised, open vented small water heaters are suitable for DHW supply to individual draw-off points, e.g. to a sink in the utility room or kitchen. • The non-pressurised appliance for oversink installation can be combined with a non-pressurised tap.

**Convenience features** • The temperature is variably adjusted via a rotary selector. • The special geometry of the heating element means that large amounts of DHW can be drawn off. • The heat-up phase is visually indicated.

**Installation** • The PROFI-RAPID installation system ensures quick and easy installation. Replacement is straightforward with standard fixing points. Simple wall mounting with the universal mounting rail; an installation template is included in the standard delivery. • Power cable with Schuko plug.

**Safety & quality** • The robust copper tubular heater ensures a long service life. • The resettable high limit safety cut-out ensures safe commissioning.

		ESH 5 O-N Trend	ESH 10 O-N Trend
Part number		201388	201393
<b>Specification</b>			
Rated output 1	kW	2	
Power supply		1/N/PE	1/N/PE
Rated voltage 1	V	230	230
Rated current 1	A	8,7	
Frequency	Hz	50/60	50/60
Energy efficiency class		A	A
Standby energy consumption/ 24 h at 65 °C	kWh	0.27	0.31
Nominal capacity	l	5	10
Mixed water volume 40 °C	l	10	19
Temperature setting range	°C	35 - 85	35 - 85
Version		Small water heater	Small water heater
Type		open	open
Installation type		Oversink	Oversink
With tap		-	-
Colour		white	white
Operation		manual	manual
Temperature limit		•	•
IP rating		IP 24 D	IP 24 D
Height	mm	415	506
Width	mm	252	296
Depth	mm	233	276
Weight	kg	3.10	5.00
<b>Recommended accessories</b>			
Part number		232605	232605
Type		WKM	WKM
Description		Twin lever wall mounted tap, non-pressurised, for oversink installation	Twin lever wall mounted tap, non-pressurised, for oversink installation
Part number		232606	232606
Type		WDM	WDM
Description		Twin lever wall mounted tap, non-pressurised, for installation in shower	Twin lever wall mounted tap, non-pressurised, for installation in shower

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Small water heaters, non-pressurised  
Oversink

		ESH 5 O-N Trend	ESH 10 O-N Trend
Part number		232608	232608
Type		MEK	MEK
Description		Mono lever wall mounted tap, non-pressurised, for over-sink installation	Mono lever wall mounted tap, non-pressurised, for over-sink installation

ESH O-N Trend +A



DHW sets consisting of ESH 5 O-N Trend or ESH 10 O-N Trend with non-pressurised, open vented mono lever mixer tap.

ESH 5 O-N Trend+A

		ESH 5 O-N Trend+A	ESH 10 O-N Trend +A
Part number		201389	201395

Set components		ESH 5 O-N Trend+A	ESH 10 O-N Trend +A
1	Type	ESH 5 O-N Trend	ESH 10 O-N Trend
	Pce	1	1
	Page		

Design and technical features as ESH 5 O-N Trend or ESH 10 O-N Trend with non-pressurised mono lever mixer tap in one complete package.



<b>Taps, undersink</b>	
Accessories	91
<b>Taps, oversink</b>	
Accessories	93

## Accessories for small water heaters, non-pressurised

### Taps, undersink

#### MES



MES

#### Benefits

- › Mono lever mixer tap for the kitchen sink
- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
- › Pivoting spout

Mono lever mixer tap for open vented small water heaters, for installation on a kitchen sink. Robust brass construction with a ceramic control cartridge, pivoting spout and aerator.

		MES
Part number		232611
Specification		
Version		Mono lever mixer tap
Application		Sink
Connection		Connection hoses
Installation type		Monobloc mixer tap
Surface		chrome plated
Spout reach	mm	190
Spout height	mm	190

#### WST



WST

#### Benefits

- › Easy operation thanks to temperature default setting on the tap head
- › Easy to clean thanks to high grade chrome surface
- › Straightforward and quick installation thanks to quick-acting fittings

Non-pressurised open mixer tap with two rotary handles for single hole mounting on washbasins. Equipped with pivoting spout, flexible water connection hoses and fitting. Brass casing with chrome plated surface.

		WST
Part number		232620
Specification		
Version		Mixer tap
Application		Washbasin
Connection		Connection hoses
Installation type		Monobloc mixer tap
Surface		chrome plated
Spout reach	mm	150
Spout height	mm	130

Continue on next page >

Accessories for small water heaters, non-pressurised

Taps, undersink

WUT



- Benefits**
- › Easy operation thanks to temperature default setting on the tap head
  - › Version for the kitchen sink
  - › Pivoting spout
  - › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation

Non-pressurised, open mixer tap with two rotary handles for combining with a low pressure small water heater for the kitchen sink.

WUT

		WUT
Part number		232604
Specification		
Version		Mixer tap
Application		Sink
Connection		Connection hoses
Installation type		Monobloc mixer tap
Surface		chrome plated
Spout reach	mm	200
Spout height	mm	200

## Accessories for small water heaters, non-pressurised

### Taps, oversink

#### MEK



MEK

#### Benefits

- › Mono lever wall mounted tap for direct draw-off
- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
- › Oversink version with pivoting spout

Non-pressurised, chrome plated mono lever wall mounted tap for use above the kitchen sink. Ceramic control cartridge.

		MEK
Part number		232608
Specification		
Version		Mono lever mixer tap
Application		Kitchen
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch
Spout reach	mm	185

#### WKM



WKM

#### Benefits

- › Twin lever wall mounted tap for direct draw-off
- › Oversink version with pivoting spout
- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation

The non-pressurised, open vented, wall mounted tap with two rotary handles is suitable for installation on the wall above the kitchen sink or a utility sink. • The cold water connection is equipped with a non-return valve and butterfly valve. • The tap is part of a complete range in a uniform design

		WKM
Part number		232605
Specification		
Version		Twin lever tap
Application		Kitchen
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch
Spout reach	mm	150

# Accessories for small water heaters, non-pressurised

## Taps, oversink

WDM



WDM





- Benefits**
- › Twin lever wall mounted tap for direct draw-off
  - › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation

Non-pressurised, open vented wall mounted tap with two rotary handles for installation in a shower. Non-return valve and butterfly valve in the cold water connection. The tap is part of a complete range in a uniform design.

		WDM
Part number		232606
Specification		
Version		Twin lever tap
Application		Shower
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch

Small water heaters, pressure-tested

Application areas

	Nominal capacity																			
		L	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	SHU 5 SLi																			
		L	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	SHC 10																			
		L	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	SHC 15 Stiebel																			
		L	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	ESH 10 U-P Plus																			
		L	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	ESH 10 O-P Plus																			

<b>Undersink</b>	
SHU Sli	97
SHC Stiebel	99
ESH U-P Plus	101
<b>Oversink</b>	
ESH O-P Plus	103

## Small water heaters, pressure-tested Undersink

### SHU Sli



SHU 5 SLi

#### Benefits

- › Plug-in unit for electrical connection to any standard socket
- › Quick DHW heating without delay
- › Matching safety assemblies as accessories
- › Low energy losses thanks to high grade thermal insulation

**Application** • The small water heaters supply DHW to multiple draw-off points, e.g. a washbasin in the bathroom or a sink in the kitchen. • The non-pressurised, sealed unvented appliances can be connected to all commercially available non-pressurised taps.

**Convenience features** • The energy saving thermostop function prevents unwanted heating of the mixer tap. • The temperature can be variably adjusted between 35 °C and 85 °C via a rotary selector on the appliance. It can also be limited mechanically in four stages. • The heat-up phase is signalled by an indicator lamp.

**Efficiency** • The water is heated directly at the draw-off point, which prevents thermal losses in the cylinder or pipe-work. • The inner cylinder made from polypropylene, with high grade EPS thermal insulation, ensures low energy losses. • The sensor immersed in the water captures the temperature quickly and precisely.

**Installation** • Quick installation with the improved PROFI-RAPID installation system. • Straightforward replacement for all standard small water heaters. • The universal mounting rail compensates for unevenness in the wall and drill hole discrepancies and is designed to match commonly used fixing points. • Threaded metal water fittings for secure replacement. • Connection cable wired up for Schuko plug or fixed connection. Cable storage is provided in the back panel of the appliance to house any excess power cable.

**Safety** • The appliance is splashproof. • Robust copper tubular heater with low surface load for a long service life. • The resettable high limit safety cut-out ensures safe commissioning of 1 kW and 2 kW appliances. • A mechanical temperature limit can be set in two stages for anti-scalding protection.

		SHU 5 SLi
Part number		222151
Specification		
Rated output 1	kW	1.8
Rated output 2	kW	2.0
Rated output 3	kW	2.2
Power supply		1/N/PE
Rated voltage 1	V	220
Rated voltage 2	V	230
Rated voltage 3	V	240
Rated current 1	A	8.3
Rated current 2	A	8.7
Rated current 3	A	9.1
Fuse protection 2	A	10
Frequency	Hz	50/60
Energy efficiency class		A
Standby energy consumption/ 24 h at 65 °C	kWh	0.29
Nominal capacity	l	5
Mixed water volume 40 °C	l	10
Temperature setting range	°C	35 - 82
Version		Small water heater
Type		closed
Installation type		Undersink
With tap		-
Colour		white
Cable length	m	0.6
Operation		manual
Temperature limit		•
IP rating		IP 24 D
Height	mm	421
Width	mm	263
Depth	mm	230
Weight	kg	5.20

Continue on next page >

Small water heaters, pressure-tested  
Undersink

		SHU 5 SLi
Required accessories		
Part number		070558
Type		WVT-G3/8
Description		Tee
Part number		073499
Type		SVMT
Description		Safety assembly for small water heater, pressure-tested, undersink

## Small water heaters, pressure-tested Undersink

### SHC Stiebel



SHC 10

#### Benefits

- › Supplies multiple draw-off points via a pressurised connection
- › Enamelled pressure-tested steel inner cylinder
- › High energy efficiency thanks to very low standby energy losses
- › Frost protection setting
- › Quick and easy installation

**Application** • The small water heaters supply multiple low DHW-demand draw-off points. • The pressure-tested, sealed unvented appliances can be combined with commercially available pressure taps • They are suitable for undersink installation; they can only be installed with the appropriate safety valve.

**Convenience features** • The small water heaters offer tailored solutions for decentralised group supply. They heat the water directly at the draw-off point, thereby avoiding energy, water and circulation losses caused by long pipe runs. • The temperature is variably adjusted by means of a rotary selector. • The temperature controller uses a sensor installed directly in the water. • Low energy losses thanks to the high grade EPS thermal insulation. • The appliance has two-stage temperature limiting and an automatic frost protection setting. • A visual display indicates when the appliance is heating up.

**Installation** • Quick and easy wall mounting using the PROFI-RAPID installation system. A universal mounting rail is included in the standard delivery as is the installation template. • Secure water connection thanks to metal threaded water fittings. Suitable safety valves available as accessories.

**Safety** • Robust copper tubular heater with low surface load. • The pressure-tested steel inner cylinder is equipped with a protective magnesium anode. • Resettable high limit safety cut-out. • The temperature can be limited mechanically in two stages to provide anti-scalding protection and childproofing. • The appliance is splashproof to protection rating IP 24.

		SHC 10	SHC 15 Stiebel
Part number		233747	234337
Specification			
Rated output 1	kW	1.4	1.4
Rated output 2	kW	1.5	1.5
Rated output 3	kW	1.6	1.6
Power supply		1/N/PE	1/N/PE
Rated voltage 1	V	220	220
Rated voltage 2	V	230	230
Rated voltage 3	V	240	240
Rated current 1	A	6.2	6.2
Rated current 2	A	6.5	6.5
Rated current 3	A	6.8	6.8
Fuse protection 2	A	10	10
Frequency	Hz	50/60	50/60
Energy efficiency class		A	A
Standby energy consumption/ 24 h at 65 °C	kWh	0.48	0.49
Nominal capacity	l	10	15
Mixed water volume 40 °C	l	15,3	23
Mixed water volume 40 °C (15 °C/60 °C)	l	15,3	23
Temperature setting range	°C	30 - 65	30 - 65
Version		Small water heater	Small water heater
Type		closed	closed
Installation type		Undersink	Undersink
With tap		-	-
Inner cylinder material		Steel, enamelled	Steel, enamelled
Colour		white	white
Cable length	m	1	1
Operation		manual	manual
Temperature limit		•	•

Continue on next page >

Small water heaters, pressure-tested  
Undersink

		SHC 10	SHC 15 Stiebel
IP rating		IP 24 D	IP 24 D
Height	mm	430	452
Width	mm	280	320
Depth	mm	270	318
Weight	kg	7.20	9.00
Required accessories			
Part number		073499	073499
Type		SVMT	SVMT
Description		Safety assembly for small water heater, pressure-tested, undersink	Safety assembly for small water heater, pressure-tested, undersink

# Small water heaters, pressure-tested Undersink

## ESH U-P Plus



ESH 10 U-P Plus

### Benefits

- › Supplies multiple draw-off points via a pressurised connection
- › Infinitely variable temperature selection
- › Press the reset button to reset the high limit safety cut-out
- › Connecting cable with Schuko plug
- › Suitable for all standard pressure fittings

**Application** • The pressure-tested, sealed unvented small water heaters are suitable for DHW supply to one or more draw-off points with low DHW demand. The appliances for undersink installation can be combined with all commercially available pressure taps; the appropriate safety assembly is needed for installation.

**Convenience features** • The small water heaters offer a demand-dependent solution for decentralised group supply of warm or hot water at all times. They heat the water directly at the draw-off point; energy, water and DHW circulation losses due to long pipe runs are avoided. High grade thermal insulation additionally reduces energy consumption. • The temperature controller works by means of a temperature sensor immersed directly in the water. • The user can variably adjust the temperature with a rotary selector. • Heat-up signalled by indicator lamp. • The pressure-tested inner cylinder is made from enamelled steel.

**Installation & Service** The PROFI-RAPID installation system makes installation very quick. Easy replacement, as standard fixing points can be used; the universal mounting rail allows quick installation on the wall. • Matching safety valve as an accessory. Power cable with Schuko plug.

**Safety & quality** • The robust copper tubular heater ensures a long service life. • The high limit safety cut-out can be reset after triggering.

		ESH 10 U-P Plus
Part number		201397
Specification		
Rated output 1	kW	1.8
Rated output 2	kW	2.0
Rated output 3	kW	2.2
Power supply		1/N/PE ~ 230 V 50Hz
Rated voltage 1	V	220
Rated voltage 2	V	230
Rated voltage 3	V	240
Rated current 1	A	8.3
Rated current 2	A	8.7
Rated current 3	A	9.1
Fuse protection 2	A	10
Frequency	Hz	50/60
Energy efficiency class		A
Standby energy consumption/ 24 h at 65 °C	kWh	0.36
Nominal capacity	l	10
Mixed water volume 40 °C	l	18
Temperature setting range	°C	35 - 82
Version		Small water heater
Type		closed
Installation type		Undersink
With tap		-
Inner cylinder material		Steel, enamelled
Colour		white
Cable length	m	0.95
Operation		manual
Temperature limit		•
IP rating		IP 24 D
Height	mm	506
Width	mm	296
Depth	mm	276
Weight	kg	8.00

Continue on next page >

Small water heaters, pressure-tested  
Undersink

		ESH 10 U-P Plus
Required accessories		
Part number		070558
Type		WVT-G3/8
Description		Tee
Part number		073499
Type		SVMT
Description		Safety assembly for small water heater, pressure-tested, undersink

# Small water heaters, pressure-tested Oversink

## ESH O-P Plus



ESH 10 O-P Plus

### Benefits

- › Supplies multiple draw-off points via a pressurised connection
- › Infinitely variable temperature selection
- › Connecting cable with Schuko plug
- › Press the reset button to reset the high limit safety cut-out

**Application** • The small water heaters provide an energy saving and efficient supply of warm or hot water to one or more draw-off points with low DHW demand. • The pressure-tested, sealed unvented appliances can be connected to all commercially available pressure taps.

**Convenience features** • Small water heaters for oversink installation, for demand-dependent decentralised group supply of multiple draw-off points. • Fast and accurate temperature capture by the sensor immersed in the water. • The temperature can be variably adjusted using the rotary selector. • The heat-up phase is signalled by an indicator lamp.

**Efficiency** • The appliance heats the water directly at the draw-off point, which saves water and energy by preventing pressure drops. • Low energy losses thanks to the high grade thermal insulation of the pressure-tested enamelled steel inner cylinder.

**Installation** • The PROFI-RAPID installation system enables very fast installation. The universal mounting rail compensates for unevenness in the wall and drill hole discrepancies, and is designed to match commonly used fixing points. • The connecting cable is fitted with a Schuko plug as standard. • Installation only with the appropriate safety assembly. The matching safety valve is available as an accessory.

**Safety** • Robust copper tubular heater ensures a long service life. • Safe commissioning thanks to resettable high limit safety cut-out.

		ESH 10 O-P Plus
Part number		201398
Specification		
Rated output 1	kW	1.8
Rated output 2	kW	2.0
Rated output 3	kW	2.2
Power supply		1/N/PE ~ 230 V 50Hz
Rated voltage 1	V	220
Rated voltage 2	V	230
Rated voltage 3	V	240
Rated current 1	A	8.3
Rated current 2	A	8.7
Rated current 3	A	9.1
Fuse protection 2	A	10
Frequency	Hz	50/60
Energy efficiency class		A
Standby energy consumption/ 24 h at 65 °C	kWh	0.34
Nominal capacity	l	10
Mixed water volume 40 °C	l	18
Temperature setting range	°C	35 - 82
Version		Small water heater
Type		closed
Installation type		Oversink
With tap		-
Inner cylinder material		Steel, enamelled
Colour		white
Cable length	m	0.95
Operation		manual
Temperature limit		•
Temperature selection	°C	35

Continue on next page >

Small water heaters, pressure-tested  
Oversink

		ESH 10 0-P Plus
IP rating		IP 24 D
Height	mm	506
Width	mm	296
Depth	mm	276
Weight	kg	8.00



<b>Accessories</b>	
Accessories	107

# Accessories for small water heaters, pressure-tested

## Accessories

### SVMT



- Benefits**
- › For the connection of pressure taps

• Safety assembly in brass casing with chrome finish for pressure-tested, sealed unvented undersink small water heaters. Standard delivery includes the pressure limiter, a water control valve, and the drain outlet with non-return valve.

SVMT

		SVMT
Part number		073499
Specification		
Max. permissible pressure	MPa	1.00
Safety valve response pressure	MPa	0.70
Pressure reducing valve		•
Drip water connection		•
Installation type		Surface mounted

### WVT



The water distributor in conjunction with the SVMT safety assembly allows connection of a second commercially available pressure tap.

WVT-G3/8

		WVT-G3/8
Part number		070558
Specification		
Water connection		G 3/8 A

# Accessories for small water heaters, pressure-tested

## Accessories

### SRT



**Benefits**  
› The safety assembly is used as fuse protection for sealed unvented DHW cylinders

Safety assembly for installation of sealed unvented wall mounted cylinders and pressurised small water heaters on finished walls. Suitable for horizontal or vertical installation.

SRT 2

		SRT 2
Part number		230764
Specification		
Max. permissible pressure	MPa	0.60
Pressure reducing valve		-
Drip water connection		•
Installation type		Surface mounted
Safety valve	bar	6

### ST GP

**Benefits**  
› The safety valve is used as fuse protection for sealed unvented DHW cylinders

**Application** • Safety valve for wall and floor mounted cylinders.

		Sicherh.Gruppe 1/2"	Sicherh.Gruppe 3/4"
Part number		073945	073946
Specification			
Max. permissible pressure	MPa	0.60	0.60
Water connection		G 1/2	G 3/4



<b>Taps, oversink Accessories</b>	111
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## Accessories for DHW cylinders, non-pressurised

### Taps, oversink

#### MEK



MEK

#### Benefits

- › Mono lever wall mounted tap for direct draw-off
- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
- › Oversink version with pivoting spout

Non-pressurised, chrome plated mono lever wall mounted tap for use above the kitchen sink. Ceramic control cartridge.

		MEK
Part number		232608
Specification		
Version		Mono lever mixer tap
Application		Kitchen
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch
Spout reach	mm	185

#### WKM



WKM

#### Benefits

- › Twin lever wall mounted tap for direct draw-off
- › Oversink version with pivoting spout
- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation

The non-pressurised, open vented, wall mounted tap with two rotary handles is suitable for installation on the wall above the kitchen sink or a utility sink. • The cold water connection is equipped with a non-return valve and butterfly valve. • The tap is part of a complete range in a uniform design

		WKM
Part number		232605
Specification		
Version		Twin lever tap
Application		Kitchen
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch
Spout reach	mm	150

DHW cylinders and DHW heat pumps

Accessories for DHW cylinders, non-pressurised

WDM



WDM




- Benefits**
- › Twin lever wall mounted tap for direct draw-off
  - › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation

Non-pressurised, open vented wall mounted tap with two rotary handles for installation in a shower. Non-return valve and butterfly valve in the cold water connection. The tap is part of a complete range in a uniform design.

		WDM
Part number		232606
Specification		
Version		Twin lever tap
Application		Shower
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch

## Wall mounted cylinder

### Application areas

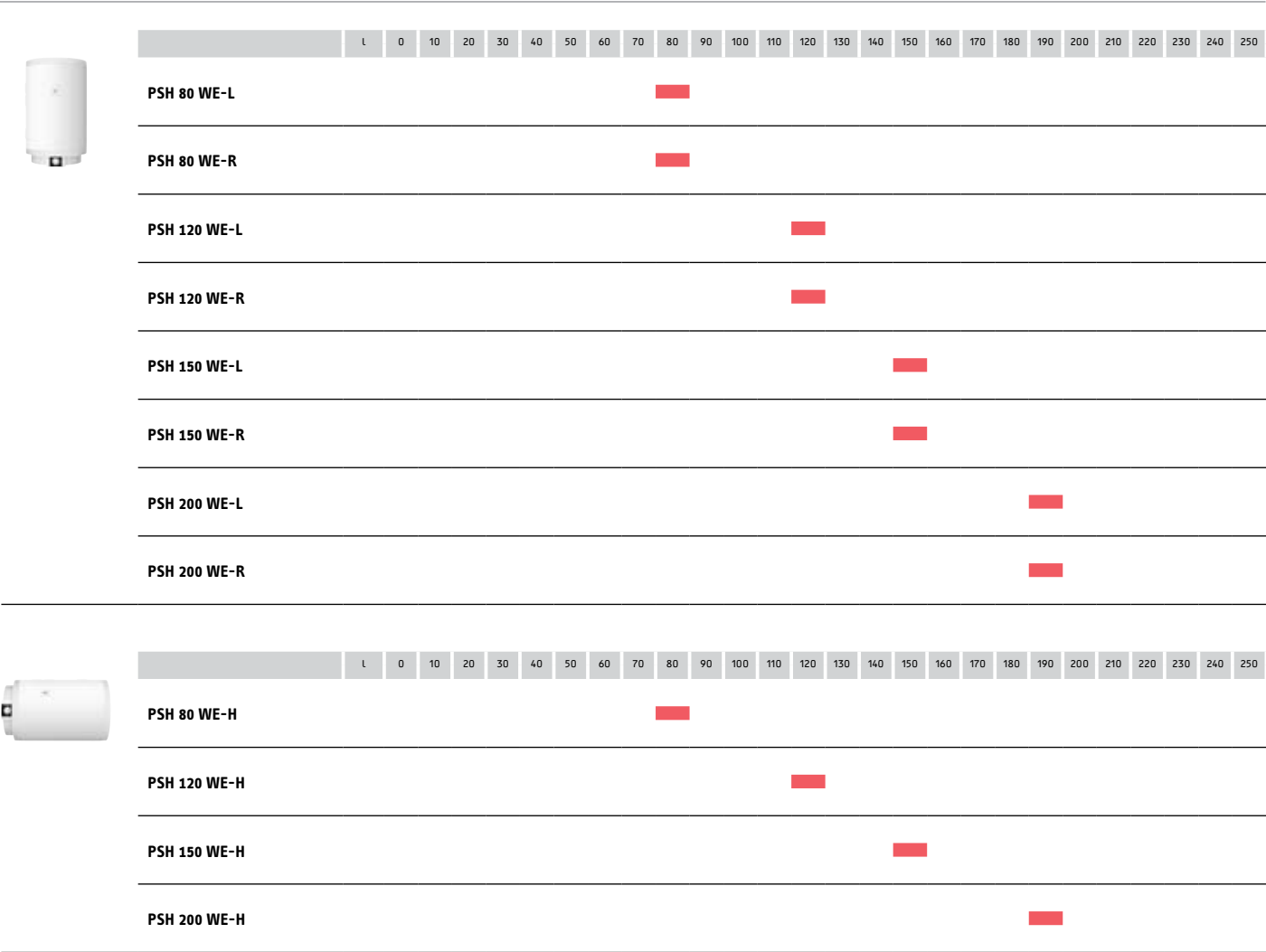
		Nominal capacity																											
		L	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	
	SHZ 30 LCD																												
	SHZ 50 LCD																												
	SHZ 80 LCD																												
	SHZ 100 LCD																												
	SHZ 120 LCD																												
SHZ 150 LCD																													
		L	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	
	SH 30 S electronic																												
	SH 50 S electronic																												
	SH 80 S electronic																												
	SH 100 S electronic																												
	SH 120 S electronic																												
SH 150 S electronic																													
		L	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	
	PSH 30 Universal EL																												
	PSH 50 Universal EL																												
	PSH 80 Universal EL																												
	PSH 100 Universal EL																												
	PSH 120 Universal EL																												
PSH 150 Universal EL																													

Wall mounted cylinder

Application areas



# Wall mounted cylinder Application areas



**Pressure-tested**

SH S electronic	117
PSH Universal EL	119
PSH Classic	120
PSH Trend	121

**With tubular indirect coil**

PSH WE	123
PSH WE-H	124

# DHW cylinders and DHW heat pumps

## Wall mounted cylinder

### SH S electronic



SH 30 S electronic

#### Benefits

- › Variable temperature setting via rotary selector
- › High quality magnesium anode for optimised cylinder protection
- › Electronic heat content indicator via LED in the user interface
- › Hot water round the clock in efficient single circuit operation
- › Very low energy losses thanks to high grade thermal insulation
- › The steel inner cylinder features a special directly applied enamel coating for a long service life
- › Quick and easy installation using mounting bracket and drilling template

**Application** • The wall mounted cylinders supply DHW conveniently and energy efficiently to multiple draw-off points, e.g. individual or group supply to the bathroom and kitchen. • The pressure-tested, sealed unvented appliances can be combined with all commercially available pressure taps. • If only one draw-off point is used, the appliance can also be used with a non-pressurised, open vented connection.

**Convenience features** • The temperature can be variably adjusted and limited in three stages. • The heat-up phase is visually indicated. • Seven LED fields on the user interface indicate the usable heat content.

**Efficiency** • Low energy losses thanks to high grade thermal insulation.

**Installation** • The integral recessed grips facilitate handling of the wall mounted cylinder. • Quick and straightforward replacement of all standard wall mounted cylinders thanks to the well planned design. • The supplied installation template enables easy marking of holes to be drilled and pre-installation of water connections. • The universal wall mounting bracket allows both corner and wall installation. Standard delivery includes mounting bracket caps and spacers for protruding walls. • Selectable connected load with removable strain relief for simplified installation. • The appliance is suitable for installation in systems with plastic, copper or stainless steel pipework. • Large flanged aperture allows effective and convenient descaling. The flanged immersion heater is easy to remove and is fitted with a polarised immersion heater plug. • Corrosion protection is ensured by a signal anode with visible display indicating the consumption level. The anode can be replaced without removing the flange. • The appliance is drained via a drain valve with hose connection. The large flanged aperture enables effective and convenient descaling. • The design allows environmentally responsible sorting and recycling of the individual components.

**Safety** • The universal flanged immersion heater is suitable for single circuit operation. • The steel inner cylinder with special “anticor” directly applied enamel coating on the inside helps to ensure a long service life. • The high grade magnesium anode offers additional corrosion protection. Its consumption is indicated via the user interface. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing. The appliance is hoseproof to protection rating IP 25.

		SH 30 S electronic	SH 50 S electronic	SH 80 S electronic	SH 100 S electronic	SH 120 S electronic	SH 150 S electronic
<b>Part number</b>		<b>073047</b>	<b>073048</b>	<b>073049</b>	<b>073050</b>	<b>073051</b>	<b>073052</b>
<b>Specification</b>							
Connected load ~ 230 V	kW	1-4	1-4	1-4	1-4	1-4	1-4
Connected load ~ 400 V	kW	3-6	3-6	3-6	3-6	3-6	3-6
Power supply		1/N/PE, 2/N/PE, 3/N/PE	1/N/PE, 2/N/PE, 3/N/PE	1/N/PE, 2/N/PE, 3/N/PE	1/N/PE, 2/N/PE, 3/N/PE	1/N/PE, 2/N/PE, 3/N/PE	1/N/PE, 2/N/PE, 3/N/PE
Rated voltage	V	230/400	230/400	230/400	230/400	230/400	230/400
Frequency	Hz	50/-	50/-	50/-	50/-	50/-	50/-
Load profile		S	M	M	L	L	XL
Energy efficiency class		B	C	C	C	C	C
Standby energy consumption/ 24 h at 65 °C	kWh	0.46	0.54	0.67	0.86	0.99	1.10
Nominal capacity	l	30	50	80	100	120	150
Mixed water volume 40 °C	l	50	80	122	133	182	229
Temperature setting range	°C	35-82	35-82	35-82	35-82	35-82	35-82
Max. flow rate	l/min	18	18	18	18	18	18
Colour		white	white	white	white	white	white
IP rating		IP 25	IP 25	IP 25	IP 25	IP 25	IP 25
Height	mm	770	740	1050	1050	1210	1445
Width	mm	410	510	510	510	510	510
Depth	mm	420	510	510	510	510	510
Weight	kg	23.10	28.00	38.00	40.80	45.50	53.30

Continue on next page >

## DHW cylinders and DHW heat pumps

### Wall mounted cylinder

		SH 30 S electronic	SH 50 S electronic	SH 80 S electronic	SH 100 S electronic	SH 120 S electronic	SH 150 S electronic
<b>Required accessories</b>							
Part number		230764	230764	230764	230764	230764	230764
Type		SRT 2	SRT 2	SRT 2	SRT 2	SRT 2	SRT 2
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested
<b>Recommended accessories</b>							
Part number		074143	074143	074143	074143	074143	074143
Type		KV-AB 30/40	KV-AB 30/40	KV-AB 30/40	KV-AB 30/40	KV-AB 30/40	KV-AB 30/40
Description		Cover for safety assemblies	Cover for safety assemblies	Cover for safety assemblies	Cover for safety assemblies	Cover for safety assemblies	Cover for safety assemblies
Part number		232605	232605	232605	232605	232605	232605
Type		WKM	WKM	WKM	WKM	WKM	WKM
Description		Twin lever wall mounted tap, non-pressurised, for oversink installation	Twin lever wall mounted tap, non-pressurised, for oversink installation	Twin lever wall mounted tap, non-pressurised, for oversink installation	Twin lever wall mounted tap, non-pressurised, for oversink installation	Twin lever wall mounted tap, non-pressurised, for oversink installation	Twin lever wall mounted tap, non-pressurised, for oversink installation
Part number		232606	232606	232606	232606	232606	232606
Type		WDM	WDM	WDM	WDM	WDM	WDM
Description		Twin lever wall mounted tap, non-pressurised, for installation in shower	Twin lever wall mounted tap, non-pressurised, for installation in shower	Twin lever wall mounted tap, non-pressurised, for installation in shower	Twin lever wall mounted tap, non-pressurised, for installation in shower	Twin lever wall mounted tap, non-pressurised, for installation in shower	Twin lever wall mounted tap, non-pressurised, for installation in shower
Part number		232607	232607	232607	232607	232607	232607
Type		WBM	WBM	WBM	WBM	WBM	WBM
Description		Twin lever wall mounted tap, non-pressurised, for the bath	Twin lever wall mounted tap, non-pressurised, for the bath	Twin lever wall mounted tap, non-pressurised, for the bath	Twin lever wall mounted tap, non-pressurised, for the bath	Twin lever wall mounted tap, non-pressurised, for the bath	Twin lever wall mounted tap, non-pressurised, for the bath
Part number		232608	232608	232608	232608	232608	232608
Type		MEK	MEK	MEK	MEK	MEK	MEK
Description		Mono lever wall mounted tap, non-pressurised, for oversink installation	Mono lever wall mounted tap, non-pressurised, for oversink installation	Mono lever wall mounted tap, non-pressurised, for oversink installation	Mono lever wall mounted tap, non-pressurised, for oversink installation	Mono lever wall mounted tap, non-pressurised, for oversink installation	Mono lever wall mounted tap, non-pressurised, for oversink installation

# DHW cylinders and DHW heat pumps

## Wall mounted cylinder

### PSH Universal EL



PSH 30 Universal EL

#### Benefits

- › Electronic display and buttons for temperature adjustment accurate to the degree
- › Power saving operation thanks to the three selectable ECO functions
- › High quality magnesium anode for optimised cylinder protection
- › At times of increased DHW demand, a boost function is available
- › Choice of vertical or horizontal installation
- › Repair work simplified by integral fault display
- › Protected ceramic heating element can be replaced without the appliance first having to be drained
- › Suitable for single or dual circuit operation (connected to off-peak economy tariff) and for manual rapid heat-up operation
- › The steel inner cylinder features a special directly applied enamel coating for a long service life
- › Very low energy losses thanks to high grade thermal insulation

**Application** • The sealed unvented, pressure-tested wall mounted cylinders supply DHW simultaneously to multiple draw-off points, e.g. the bathroom and kitchen. • The appliance can be used with all commercially available pressure taps. If only one draw-off point is used, this can be a non-pressurised, open vented connection. • If an off-peak economy tariff connection is available, the appliance may be used with dual circuit operation, otherwise single circuit or manual rapid heat-up operation is also possible.

**Convenience features** • The electronic control unit guarantees accurate temperature setting via the operating buttons. • The LCD indicates the set temperature, status and service, as required. • A maximum temperature limit can be set. • The rapid heat-up button (boost function) provides additional convenience for increased DHW demand.

**Efficiency** • The intelligent ECO Dynamic function adapts automatically to the individual demand, which saves additional energy. • The high grade thermal insulation protects against heat loss. • Reverse control during off-peak economy tariff operation (dual circuit) saves on costs. This is activated via a DIP switch and takes full advantage of the off-peak periods offered by the power supply utility. It also ensures a consistently high level of DHW convenience. • The individual components are designed for environmentally responsible sorting and recycling.

**Installation** • Quick and straightforward installation with the integral wall mounting bracket. • The connected load is selectable. • Straightforward replacement of all standard wall mounted cylinders. • The output and operating mode can be adjusted via 2 triple setting DIP switches. • The ceramic heating element is located inside an enamelled protective pipe and does not come into contact with the DHW. This enables dry replacement of the heating elements. • The cylinder is drained via a valve with hose connection. • The large flanged aperture allows effective and convenient descaling.

**Safety** • High corrosion protection is provided by the magnesium anode and the steel inner cylinder with special "anticor" directly applied enamel coating on the inside. • The anti-scalding protection also acts as childproofing. • The screen locking function prevents the set maximum temperature from being changed. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing. • The appliance is hoseproof.

		PSH 30 Universal EL	PSH 50 Universal EL	PSH 80 Universal EL	PSH 100 Universal EL	PSH 120 Universal EL	PSH 150 Universal EL
Part number		231150	231151	231152	231153	231649	231154
<b>Specification</b>							
Connected load ~ 230 V	kW	2.6	3	3	3	3	3
Power supply		1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE
Rated voltage	V	230	230	230	230	230	230
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Load profile		S	M	M	L	XL	XL
Energy efficiency class		B	B	B	C	C	C
Nominal capacity	l	30	50	80	100	120	150
Temperature setting range	°C	7-85	7-85	7-85	7-85	7-85	7-85
Max. flow rate	l/min	23.5	23.5	23.5	23.5	23.5	23.5
Colour		white	white	white	white	white	white
IP rating		IP 25	IP 25	IP 25	IP 25	IP 25	IP 25
Height	mm	696	951	893	1045	1200	1435
Width	mm	380	380	475	475	475	475
Depth	mm	392	392	492	492	492	492
Weight	kg	22.00	28.00	34.00	38.00	43.00	52.00

# DHW cylinders and DHW heat pumps

## Wall mounted cylinder

### PSH Classic



PSH 50 Classic

#### Benefits

- › Variable temperature setting via rotary selector
- › High quality magnesium anode for optimised cylinder protection
- › Visual monitoring of water temperatures via temperature curve display
- › Hot water round the clock in efficient single circuit operation
- › Low energy losses thanks to high grade thermal insulation
- › Optimised cylinder protection with special CoPro enamel coating
- › Quick and easy installation using the universal wall mounting bracket

**Application** • The wall mounted cylinders in a cylindrical casing supply DHW to multiple draw-off points, e.g. individual or group supply to the bathroom and kitchen. • The pressure-tested, sealed unvented appliances can be used in single circuit operation and combined with commercially available pressure taps.

**Convenience features** • The preferred temperature can be variably adjusted and heat-up operation is visually indicated. • The current water temperature can be conveniently read from the temperature curve display on the front of the appliance.

**Efficiency** • Low energy losses thanks to high grade thermal insulation made from rigid PUR foam. • Design for recycling, for environmentally responsible sorting of the various components.

**Installation** • Straightforward replacement of all standard wall mounted cylinders. The universal wall mounting bracket ensures quick and straightforward installation. • The appliance can be connected to systems with plastic, copper or stainless steel pipework. • The copper flanged immersion heater can be easily removed.

**Safety** • The high grade magnesium anode and the steel inner cylinder with special “anticor” directly applied enamel coating protect the cylinder against corrosion. • The automatic frost protection monitors the water temperature and protects the cylinder against frost. • The wall mounted cylinder is splashproof.

		PSH 50 Classic	PSH 80 Classic	PSH 100 Classic	PSH 120 Classic	PSH 150 Classic	PSH 200 Classic
Part number		235960	235961	235962	235963	235964	235965
Specification							
Connected load ~ 230 V	kW	1.8	1.8	1.8	1.8	1.8	1.8
Power supply		1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE
Rated voltage	V	220-240	220-240	220-240	220-240	220-240	220-240
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Load profile		M	M	L	L	L	XL
Energy efficiency class		C	C	C	C	C	C
Standby energy consumption/ 24 h at 65 °C	kWh	0.96	1.22	1.47	1.73	2.05	2.45
Nominal capacity	l	53	80	100	120	150	192
Mixed water volume 40 °C	l	82	125	168	219	270	347
Temperature setting range	°C	30-70	30-70	30-70	30-70	30-70	30-70
Max. flow rate	l/min	23.5	23.5	23.5	23.5	23.5	23.5
Colour		white	white	white	white	white	white
IP rating		IP 24	IP 24	IP 24	IP 24	IP 24	IP 24
Height	mm	609	810	964	1117	1349	1704
Width	mm	475	475	475	475	475	475
Depth	mm	483	483	483	483	483	483
Weight	kg	19.00	28.00	33.00	39.00	46.00	56.00

# DHW cylinders and DHW heat pumps

## Wall mounted cylinder

### PSH Trend



PSH 30 Trend

#### Benefits

- › Variable temperature setting via rotary selector
- › High quality magnesium anode for optimised cylinder protection
- › Visual monitoring of water temperature via temperature display
- › Optimised cylinder protection with special CoPro enamel coating
- › Durable, low-scaling stainless steel heating element
- › Low energy losses thanks to high grade thermal insulation
- › Easy handling due to distinctive recessed grips on the appliance
- › Easy replacement of old appliances thanks to universal wall mounting

**Application** • The wall mounted cylinders can supply DHW simultaneously to multiple draw-off points, e.g. the bathroom and kitchen. The sealed unvented, pressure-tested appliances offer convenient and energy saving single circuit operation. • The wall mounted cylinders can be used with commercially available pressure taps.

**Convenience features** • The temperature can be variably adjusted. • The heat-up phase is indicated by an LED.

**Efficiency** • The high grade thermal insulation protects against heat loss. • The individual components are designed for environmentally responsible sorting and recycling.

**Installation** • The connected load is selectable. • Rapid and straightforward installation with integral wall mounting bracket. Existing wall mounted cylinders can be easily replaced. Suitable for installation in conjunction with systems with plastic, copper or stainless steel pipework. • The large flanged aperture allows effective and convenient descaling. • The stainless steel flanged immersion heater can be easily replaced.

**Safety** • The magnesium sacrificial anode provides additional corrosion protection. • The steel inner cylinder with special “anticor” directly applied enamel coating on the inside helps to ensure a long service life. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing. • The hoseproof appliance carries the VDE/GS and EMI symbols.

		PSH 30 Trend	PSH 50 Trend	PSH 80 Trend	PSH 100 Trend
Part number		232080	232081	232082	232083
Specification					
Connected load ~ 230 V	kW	2	2	2	2
Power supply		1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz
Rated voltage	V	220-240	220-240	220-240	220-240
Frequency	Hz	50/60	50/60	50/60	50/60
Load profile		S	M	M	L
Energy efficiency class		C	C	C	C
Standby energy consumption/ 24 h at 65 °C	kWh	0.53	0.73	0.79	0.98
Nominal capacity	l	30	50	80	100
Mixed water volume 40 °C	l	52	99	142	186
Temperature setting range	°C	30-75	30-75	30-75	30-75
Max. flow rate	l/min	23.5	23.5	23.5	23.5
Colour		white	white	white	white
IP rating		IP 25	IP 25	IP 25	IP 25
Height	mm	642	897	871	1025
Width	mm	405	405	510	510
Depth	mm	410	410	520	520
Weight	kg	16.40	21.40	28.20	33.60

		PSH 120 Trend	PSH 150 Trend	PSH 200 Trend
Part number		232084	232085	232086
Specification				
Connected load ~ 230 V	kW	2	2	2
Power supply		1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz
Rated voltage	V	220-240	220-240	220-240
Frequency	Hz	50/60	50/60	50/60
Load profile		L	L	XL
Energy efficiency class		C	C	C

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## DHW cylinders and DHW heat pumps

### Wall mounted cylinder

		PSH 120 Trend	PSH 150 Trend	PSH 200 Trend
Standby energy consumption/ 24 h at 65 °C	kWh	1.15	1.33	1.61
Nominal capacity	l	120	150	192
Mixed water volume 40 °C	l	224	288	351
Temperature setting range	°C	30-75	30-75	30-75
Max. flow rate	l/min	23.5	23.5	23.5
Colour		white	white	white
IP rating		IP 25	IP 25	IP 25
Height	mm	1178	1410	1715
Width	mm	510	510	510
Depth	mm	520	520	520
Weight	kg	39.10	46.20	56.30

(Product: 232080, 232081, 232082, 232083, 232084, 232085, 232086)

## Wall mounted cylinder With tubular indirect coil

### PSH WE



PSH 80 WE-L

#### Benefits

- › Variable temperature setting ensures a high level of convenience
- › Visual monitoring of water temperatures via temperature curve display
- › A DHW circulation connection increases DHW convenience in longer pipe networks
- › Durable, low-scaling stainless steel heating element
- › High energy efficiency thanks to very low standby energy losses
- › Personalised DHW convenience thanks to connection for heat exchanger and electric heating element
- › Easy to transport and install with ergonomic recessed grips on the appliance
- › Quick and easy installation using the universal wall mounting bracket

**Application** • The vertical wall mounted combi cylinders supply DHW to multiple draw-off points, e.g. individual and group supply to the bathroom and kitchen. The wall mounted combi cylinders are equipped with a stainless steel electric tubular heater. A tubular indirect coil is also integrated, for example for connecting the wall mounted cylinder to a central heating system. • The pressure-tested, sealed unvented appliance is suitable for all commercially available pressure taps. • It is also suitable for non-pressurised use to supply one draw-off point.

**Convenience features** • The temperature can be variably adjusted and heat-up operation is visually indicated. • The current water temperature can be checked using the temperature curve display.

**Efficiency** • The high grade thermal insulation ensures low energy losses. • Particularly economical operation is possible if the integral cylinder is connected to the heating system via the built-in tubular indirect coil. • Design for recycling allows environmentally responsible sorting of the various components.

**Installation** • Recessed grips on the appliance ensure safe handling. • Straightforward replacement of all standard wall mounted cylinders. The universal wall mounting bracket ensures quick and easy installation. • The integral cylinder can be installed in systems with plastic, copper or stainless steel pipework. • The flanged immersion heater is easy to remove and equipped with a second sensor well for external control of the heat generator. The large flanged aperture enables convenient descaling. • The DHW circulation connection increases DHW convenience in longer pipe networks. • The connection to the tubular indirect coil is on the left or right, depending on the model.

**Safety** • The high grade magnesium anode and the steel inner cylinder with special “anticor” directly applied enamel coating protect against corrosion. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing at low temperatures.

		PSH 80 WE-L	PSH 80 WE-R	PSH 120 WE-L	PSH 120 WE-R
<b>Part number</b>		<b>236230</b>	<b>236231</b>	<b>236232</b>	<b>236233</b>
<b>Specification</b>					
Connected load ~ 230 V	kW	2	2	2	2
Phases		1/N/PE	1/N/PE	1/N/PE	1/N/PE
Rated voltage	V	220-240	220-240	220-240	220-240
Frequency	Hz	50/60	50/60	50/60	50/60
Standby power consumption over 24h at 65 °C	kWh	0.893	0.893	1.19	1.19
Energy efficiency class		B	B	B	B
Nominal capacity	l	79	79	120	120
Mixed water volume 40 °C	l	128	128	209	209
Surface area, heat exchanger	m²	0.60	0.60	0.60	0.60
Temperature setting range	°C	5-80	5-80	5-80	5-80
Min./max. conductivity, DHW	µS/cm	100-1500	100-1500	100-1500	100-1500
Max. flow rate	l/min	23.5	23.5	23.5	23.5
Colour		white	white	white	white
IP rating		IP 25	IP 25	IP 25	IP 25
Height	mm	871	871	1178	1178
Depth	mm	520	520	520	520
Weight, empty	kg	37.20	37.20	48.10	48.10

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## Wall mounted cylinder

### With tubular indirect coil

		PSH 150 WE-L	PSH 150 WE-R	PSH 200 WE-L	PSH 200 WE-R
Part number		236234	236235	236236	236237
Specification					
Connected load ~ 230 V	kW	2	2	2	2
Phases		1/N/PE	1/N/PE	1/N/PE	1/N/PE
Rated voltage	V	220-240	220-240	220-240	220-240
Frequency	Hz	50/60	50/60	50/60	50/60
Standby power consumption over 24h at 65 °C	kWh	1.426	1.426	1.803	1.803
Energy efficiency class		C	C	C	C
Nominal capacity	l	151	151	191	191
Mixed water volume 40 °C	l	278	278	395	395
Surface area, heat exchanger	m²	0.60	0.60	0.60	0.60
Temperature setting range	°C	5-80	5-80	5-80	5-80
Min./max. conductivity, DHW	µS/cm	100-1500	100-1500	100-1500	100-1500
Max. flow rate	l/min	23,5	23.5	23.5	23.5
Colour		white	white	white	white
IP rating		IP 25	IP 25	IP 25	IP 25
Height	mm	1410	1410	1715	1715
Depth	mm	520	520	520	520
Weight, empty	kg	55.20	55.20	65.30	65.30

## Wall mounted cylinder With tubular indirect coil

### PSH WE-H



#### Benefits

- › Variable temperature setting ensures a high level of convenience
- › A DHW circulation connection increases DHW convenience in longer pipe networks
- › Durable, low-scaling stainless steel heating element
- › Personalised DHW convenience thanks to connection for heat exchanger and electric heating element
- › High energy efficiency thanks to very low standby energy losses
- › Visual monitoring of water temperatures via temperature curve display
- › Easy to transport and install with ergonomic recessed grips on the appliance
- › Wall mounting bracket for horizontal installation

PSH 80 WE-H

**Application** • The horizontal wall mounted combi cylinders supply DHW simultaneously to multiple draw-off points – e.g. individual or group supply to the bathroom and kitchen. • The wall mounted combi cylinders are equipped with a stainless steel electric tubular heater. The integral tubular indirect coil allows connection to a central heating system, for example. • The pressure-tested appliance can be combined with all commercially available pressure taps or used for non-pressurised supply to a single draw-off point.

**Convenience features** • The preferred temperature can be variably adjusted and easily checked using the temperature curve display. • A visual display indicates when the appliance is heating up.

**Efficiency** • Low energy losses due to high grade thermal insulation. • The integral cylinder operates extremely economically, because it is connected to the heating system via the integral tubular indirect coil. • Design for recycling, for environmentally responsible sorting of the various components.

**Installation** • Safe handling thanks to integral recessed grips. • Straightforward replacement of all standard wall mounted cylinders. Quick and easy installation using the universal wall mounting bracket. • Suitable for installation in systems with plastic, copper or stainless steel pipework. • The easy to remove flanged immersion heater is equipped with a second sensor well for external control of the heat generator. The large flanged aperture allows effective and convenient descaling. • The DHW circulation connection increases DHW convenience in longer pipe networks.

**Safety** • The high grade magnesium anode and the steel inner cylinder with special “anticor” directly applied enamel coating protect against corrosion for a long service life. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing.

		PSH 80 WE-H	PSH 120 WE-H	PSH 150 WE-H	PSH 200 WE-H
Part number		236238	236239	236240	236241
<b>Specification</b>					
Connected load ~ 230 V	kW	2	2	2	2
Phases		1/N/PE	1/N/PE	1/N/PE	1/N/PE
Rated voltage	V	220-240	220-240	220-240	220-240
Frequency	Hz	50/60	50/60	50/60	50/60
Standby power consumption over 24h at 65 °C	kWh	1.298	1.691	1.973	2.31
Energy efficiency class		C	C	C	C
Nominal capacity	l	79	120	151	191
Mixed water volume 40 °C	l	137	181	270	313
Surface area, heat exchanger	m²	0.60	0.60	0.60	0.60
Temperature setting range	°C	5-80	5-80	5-80	5-80
Min./max. conductivity, DHW	µS/cm	100-1500	100-1500	100-1500	100-1500
Max. flow rate	l/min	23.5	23.5	23.5	23.5
Colour		white	white	white	white
IP rating		IP 25	IP 25	IP 25	IP 25
Width	mm	871	1178	1410	1715
Depth	mm	538	538	538	538
Weight, empty	kg	42.20	54.10	61.20	72.50

<b>Safety assemblies</b>	
Accessories	127
<b>Installation accessories</b>	
Accessories	128
<b>Twin lever taps, non-pressurised</b>	
Accessories	129
<b>Mono lever mixer taps, non-pressurised</b>	
Accessories	131

## Accessories for wall mounted cylinders

### Safety assemblies

#### SRT



SRT 2

#### Benefits

- › The safety assembly is used as fuse protection for sealed unvented DHW cylinders

Safety assembly for installation of sealed unvented wall mounted cylinders and pressurised small water heaters on finished walls. Suitable for horizontal or vertical installation.

		SRT 2
Part number		230764
Specification		
Max. permissible pressure	MPa	0.60
Pressure reducing valve		-
Drip water connection		•
Installation type		Surface mounted
Safety valve	bar	6

#### ST GP

#### Benefits

- › The safety valve is used as fuse protection for sealed unvented DHW cylinders

**Application** • Safety valve for wall and floor mounted cylinders.

		Sicherh.Gruppe 1/2"	Sicherh.Gruppe 3/4"
Part number		073945	073946
Specification			
Max. permissible pressure	MPa	0.60	0.60
Water connection		G 1/2	G 3/4

Accessories for wall mounted cylinders

Installation accessories

KV-AB 30/40



Cover for KV safety assemblies. The front is made from white painted steel, the back grey painted steel. Fastening with two screws.

KV-AB 30/40

		KV-AB 30/40
Part number		074143

## Accessories for wall mounted cylinders

### Twin lever taps, non-pressurised

#### WKM



WKM

#### Benefits

- › Twin lever wall mounted tap for direct draw-off
- › Oversink version with pivoting spout
- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation

The non-pressurised, open vented, wall mounted tap with two rotary handles is suitable for installation on the wall above the kitchen sink or a utility sink. • The cold water connection is equipped with a non-return valve and butterfly valve. • The tap is part of a complete range in a uniform design

		WKM
Part number		232605
Specification		
Version		Twin lever tap
Application		Kitchen
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch
Spout reach	mm	150

#### WDM



WDM

#### Benefits

- › Twin lever wall mounted tap for direct draw-off
- › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation

Non-pressurised, open vented wall mounted tap with two rotary handles for installation in a shower. Non-return valve and butterfly valve in the cold water connection. The tap is part of a complete range in a uniform design.

		WDM
Part number		232606
Specification		
Version		Twin lever tap
Application		Shower
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch

Accessories for wall mounted cylinders

Twin lever taps, non-pressurised

WBM



WBM

- Benefits**
- › Twin lever wall mounted tap for direct draw-off
  - › Non-pressurised operation with rotary handle, cold left and hot right

**Application** • Non-pressurised, open vented wall mounted twin lever tap, chrome plated, for installation on the bath. Non-return valve and butterfly valve in the cold water connection. The tap features a pivoting spout with aerator and a metal shower hose with hand shower. It forms part of a complete range in a uniform design.

		WBM
Part number		232607
Specification		
Version		Twin lever tap
Application		Bathtub/shower
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Spout reach	mm	86

Accessories for wall mounted cylinders

Mono lever mixer taps, non-pressurised

MEK



MEK






- Benefits**
- › Mono lever wall mounted tap for direct draw-off
  - › Rapid supply of domestic hot water with no waiting, thanks to non-pressurised operation
  - › Oversink version with pivoting spout

Non-pressurised, chrome plated mono lever wall mounted tap for use above the kitchen sink. Ceramic control cartridge.

		MEK
Part number		232608
Specification		
Version		Mono lever mixer tap
Application		Kitchen
Connection		Brass tubes
Installation type		Wall mounted mixer tap
Surface		chrome plated
Cold water connection		1/2 inch
Spout reach	mm	185



Floor mounted cylinder  
Application areas

Nominal capacity																								
		L	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
	SHW 200 S																							
	SHW 300 S																							
	SHW 400 S																							
		L	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
	SHW 200 ACE																							
	SHW 300 ACE																							
	SHW 400 ACE																							
		L	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
	SHO AC 600 6/12 kW																							
	SHO AC 600 7,5 kW																							
	SHO AC 1000 9/18 kW																							
SHO AC 1000 12 kW																								
		L	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
	SB 302 S																							
SB 402 S																								
		L	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
	SB 602 AC																							
SB 1002 AC																								

<b>Electric floor mounted cylinders, pressure-tested</b>	
SHW S	135
SHW ACE	137
SHO AC	139
<b>Floor mounted combi cylinders, pressure-tested</b>	
SB S	141
SB AC	142

# Floor mounted cylinder

## Electric floor mounted cylinders, pressure-tested

### SHW S



SHW 200 S

#### Benefits

- › Variable temperature setting via rotary selector
- › Simple maintenance due to signal anode with display element
- › Water temperature monitored by thermometer
- › Improved comfort/convenience with DHW circulation connection
- › Universal flanged immersion heater for single/dual circuit operation with a selectable connected load
- › Extremely economical due to favourable electricity tariffs (optional off-peak tariff connection)
- › Very low energy losses thanks to high grade thermal insulation
- › Complete cylinder casing with plastic jacket, cover and fascia
- › The steel inner cylinder features a special directly applied enamel coating for a long service life
- › Compensation for uneven floors via height-adjustable feet

**Application** • The floor mounted cylinders are suitable for detached houses or apartment buildings with a high DHW demand and a high draw-off rate. Multiple draw-off points can be supplied simultaneously (group supply). • The sealed unvented, pressure-tested appliances can be used with all commercially available pressure taps. • The flanged immersion heater is suitable for single circuit operation or cost efficient dual circuit operation with an off-peak economy tariff connection.

**Convenience features** • The water temperature is variably adjusted and is maintained at the temperature selected on the controller. The maximum temperature limit can be set manually. • A rapid heat-up button provides additional convenience for increased DHW demand. • The individual components are designed for environmentally responsible sorting and recycling.

**Efficiency** • The high grade thermal insulation protects the steel inner cylinder with directly applied foam insulation against heat loss.

**Installation** • Selectable connected load. • The water connection is suitable for pipework made from copper, plastic, stainless steel or zinc-plated steel. • Standard delivery includes a multi-directional stainless steel cold water inlet pipe for easy-to-install cold water connection. • A DHW circulation connection increases DHW convenience in longer pipe networks. • The height-adjustable feet compensate for unevenness in the floor. • The copper flanged immersion heater is easy to replace.

**Safety** • The floor mounted cylinders are splashproof. • The magnesium sacrificial anode with visible replacement signal ensures optimum corrosion protection. • The steel inner cylinder with special "anticor" directly applied enamel coating on the inside helps to ensure a long service life. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing.

		SHW 200 S	SHW 300 S	SHW 400 S
Part number		182120	182121	182122
<b>Specification</b>				
Connected load ~ 230 V	kW	2-4	2-4	2-4
Connected load ~ 400 V	kW	2-6	2-6	2-6
Power supply		1/N/PE, 3/N/PE	1/N/PE, 3/N/PE	1/N/PE, 3/N/PE
Rated voltage	V	230/400	230/400	230/400
Frequency	Hz	50/60	50/60	50/60
Load profile		XL	XL	XL
Energy efficiency class		C	C	C
Standby energy consumption/ 24 h at 65 °C	kWh	1.40	1.80	2.10
Nominal capacity	l	200	300	400
Mixed water volume 40 °C	l	318	447	639
Temperature setting range	°C	35-82	35-82	35-82
Max. flow rate	l/min	30	38	45
Max. permissible pressure	MPa	0.60	0.60	0.60
Flanged immersion heater version		universal	universal	universal
Colour		pure white/basalt grey	pure white/basalt grey	pure white/basalt grey
IP rating		IP 24	IP 24	IP 24
Water connection		G 1 A	G 1 A	G 1 A
Height	mm	1578	1593	1763
Width	mm	630	700	750
Depth	mm	730	815	865
Weight, empty	kg	65	77	90

Continue on next page >

## Floor mounted cylinder

### Electric floor mounted cylinders, pressure-tested

		SHW 200 S	SHW 300 S	SHW 400 S
<b>Required accessories</b>				
<b>Part number</b>		<b>074370</b>	<b>074370</b>	<b>074370</b>
Type		ZH 1	ZH 1	ZH 1
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested
<b>Part number</b>		<b>074371</b>	<b>074371</b>	<b>074371</b>
Type		DMV/ZH 1	DMV/ZH 1	DMV/ZH 1
Description		Pressure reducing valve	Pressure reducing valve	Pressure reducing valve
<b>Part number</b>		<b>074373</b>		
Type		SV 1/2 6 bar		
Description		Safety valve for DHW cylinder		
<b>Part number</b>			<b>074374</b>	<b>074374</b>
Type			SV 3/4 6 bar	SV 3/4 6 bar
Description			Safety valve for DHW cylinder	Safety valve for DHW cylinder
<b>Part number</b>			<b>074375</b>	<b>074375</b>
Type			SV 3/4 10 bar	SV 3/4 10 bar
Description			Safety valve for DHW cylinder	Safety valve for DHW cylinder

# Floor mounted cylinder

## Electric floor mounted cylinders, pressure-tested

### SHW ACE



SHW 200 ACE

#### Benefits

- › Variable temperature setting via rotary selector
- › Simple maintenance due to signal anode with display element
- › Water temperature monitored by thermometer
- › Improved comfort/convenience with DHW circulation connection
- › Efficient single circuit operation with selectable connected load
- › Very low energy losses thanks to high grade thermal insulation
- › Plastic jacket to protect the cylinder
- › The steel inner cylinder features a special directly applied enamel coating for a long service life

**Application** • The floor mounted cylinders supply DHW to detached houses and apartment buildings with high DHW demand and a high draw-off rate. • The sealed unvented, pressure-tested appliances also provide a group supply to multiple draw-off points. They can be used with all commercially available pressure taps, and are suitable for single circuit operation.

**Convenience features** • The temperature is variably selected and maintained at the level set on the controller. • A temperature limit can be set if required.

**Efficiency** • Low heat losses due to high grade thermal insulation in the form of efficient directly applied foam. • Optimised design for recycling, with the ability to separate the various components and reusable materials.

**Installation** • Selectable connected load. • The water connection is suitable for pipework made from copper, plastic, stainless steel or zinc-plated steel. • The integral DHW circulation connection increases DHW convenience in longer pipe networks. • The copper flanged immersion heater is easy to replace. • The floor mounted cylinder is splashproof.

**Safety** • The high grade signal anode with consumption indicator and the steel inner cylinder with special “anticor” directly applied enamel coating ensure comprehensive protection against corrosion for a long service life. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing.

		SHW 200 ACE	SHW 300 ACE	SHW 400 ACE
<b>Part number</b>		<b>070074</b>	<b>070075</b>	<b>070076</b>
<b>Specification</b>				
Connected load ~ 230 V	kW	2-6	2-6	2-6
Connected load ~ 400 V	kW	4-6	4-6	4-6
Power supply		1/N/PE, 3/N/PE	1/N/PE, 3/N/PE	1/N/PE, 3/N/PE
Rated voltage	V	230/400	230/400	230/400
Frequency	Hz	50/60	50/60	50/60
Load profile		XL	XL	XL
Energy efficiency class		C	C	C
Standby energy consumption/ 24 h at 65 °C	kWh	1.90	2.30	2.60
Nominal capacity	l	200	300	400
Mixed water volume 40 °C	l	317	490	618
Temperature setting range	°C	35-82	35-82	35-82
Max. flow rate	l/min	30	38	45
Max. permissible pressure	MPa	0.60	0.60	0.60
Flanged immersion heater version		Single circuit	Single circuit	Single circuit
Colour		white	white	white
Water connection		G 1	G 1	G 1
Height	mm	1578	1593	1763
Width	mm	550	650	700
Depth	mm	690	790	840
Weight, empty	kg	54	67	85

<b>Required accessories</b>				
<b>Part number</b>		<b>074370</b>	<b>074370</b>	<b>074370</b>
Type		ZH 1	ZH 1	ZH 1
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested
<b>Part number</b>		<b>074371</b>	<b>074371</b>	<b>074371</b>
Type		DMV/ZH 1	DMV/ZH 1	DMV/ZH 1
Description		Pressure reducing valve	Pressure reducing valve	Pressure reducing valve

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Floor mounted cylinder

Electric floor mounted cylinders, pressure-tested

		SHW 200 ACE	SHW 300 ACE	SHW 400 ACE
Part number		074373		
Type		SV 1/2 6 bar		
Description		Safety valve for DHW cylinder		
Part number			074374	074374
Type			SV 3/4 6 bar	SV 3/4 6 bar
Description			Safety valve for DHW cylinder	Safety valve for DHW cylinder
Part number			074375	074375
Type			SV 3/4 10 bar	SV 3/4 10 bar
Description			Safety valve for DHW cylinder	Safety valve for DHW cylinder

# Floor mounted cylinder

## Electric floor mounted cylinders, pressure-tested

### SHO AC



SHO AC 600 6/12 kW

#### Benefits

- › Variable temperature setting via rotary selector
- › Simple maintenance due to signal anode with display element
- › Water temperature monitored by thermometer
- › Improved comfort/convenience with DHW circulation connection
- › Flanged immersion heater suitable for single circuit operation or dual circuit/single circuit operation, depending on type
- › Extremely economical due to favourable electricity tariffs (optional off-peak tariff connection)
- › Very low energy losses thanks to high grade thermal insulation
- › The steel inner cylinder features a special directly applied enamel coating for a long service life

**Application** • The floor mounted cylinders have been developed for very high DHW demand and draw-off rate. They are suitable for DHW supply to multiple draw-off points (individual and group supply) in residential, commercial and industrial buildings. • The pressure-tested, sealed unvented appliances can be connected to all commercially available pressure taps. • The flanged immersion heater can be used for single circuit or dual circuit operation, depending on the model.

**Convenience features** • The water temperature is variably adjusted and is maintained at the temperature selected on the controller. The maximum temperature limit can be set manually. • The individual components are designed for environmentally responsible sorting and recycling.

**Installation** • The connected load of these splashproof appliances varies by type. • The water connection is suitable for pipework made from copper, plastic, stainless steel or zinc-plated steel. • The DHW circulation connection increases DHW convenience in longer pipe networks. • Individual radiators can be easily replaced.

**Safety** • The magnesium sacrificial anode with visible replacement signal provides additional corrosion protection. • The steel inner cylinder with special “anticor” directly applied enamel coating on the inside helps to ensure a long service life. • Automatic frost protection monitors the water temperature and prevents the cylinder from freezing.

		SHO AC 600 6/12 kW	SHO AC 600 7,5 kW	SHO AC 1000 9/18 kW	SHO AC 1000 12 kW
Part number		003352	001414	003353	001415
<b>Specification</b>					
Connected load ~ 400 V	kW	6-12	7,5	9/18	12
Power supply		3/N/PE	3/PE	3/N/PE	3/PE
Rated voltage	V	400	400	400	400
Frequency	Hz	50	50/60	50	50
Load profile		XL	XL	XL	XL
Energy efficiency class		C	C	C	C
Standby energy consumption/ 24 h at 65 °C	kWh	2.90	2.90	3.70	3.70
Nominal capacity	l	600	600	1000	1000
Mixed water volume 40 °C	l	1134	835	1829	1533
Temperature setting range	°C	35-85	35-85	35-85	35-85
Max. flow rate	l/min	40	40	45	45
Max. permissible pressure	MPa	0.60	0.60	0.60	0.60
IP rating		IP 24	IP 24	IP 24	IP 24
Water connection		G 2 A / G 1 1/2 A	G 2 A / G 1 1/2 A	G 2 A / G 1 1/2 A	G 2 A / G 1 1/2 A
Height	mm	1685	1685	2525	2525
Width	mm	750	750	750	750
Depth	mm	1000	1000	1000	1000
Weight, empty	kg	161	160	232	230
<b>Required accessories</b>					
Part number		074370	074370	074370	074370
Type		ZH 1	ZH 1	ZH 1	ZH 1
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested
Part number		074371	074371	074371	074371
Type		DMV/ZH 1	DMV/ZH 1	DMV/ZH 1	DMV/ZH 1
Description		Pressure reducing valve	Pressure reducing valve	Pressure reducing valve	Pressure reducing valve

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## Floor mounted cylinder

### Electric floor mounted cylinders, pressure-tested

		SHO AC 600 6/12 kW	SHO AC 600 7,5 kW	SHO AC 1000 9/18 kW	SHO AC 1000 12 kW
<b>Part number</b>		<b>074374</b>	<b>074374</b>	<b>074374</b>	<b>074374</b>
Type		SV 3/4 6 bar	SV 3/4 6 bar	SV 3/4 6 bar	SV 3/4 6 bar
Description		Safety valve for DHW cylinder	Safety valve for DHW cylinder	Safety valve for DHW cylinder	Safety valve for DHW cylinder
<b>Part number</b>		<b>074375</b>	<b>074375</b>	<b>074375</b>	<b>074375</b>
Type		SV 3/4 10 bar	SV 3/4 10 bar	SV 3/4 10 bar	SV 3/4 10 bar
Description		Safety valve for DHW cylinder	Safety valve for DHW cylinder	Safety valve for DHW cylinder	Safety valve for DHW cylinder
<b>Recommended accessories</b>					
<b>Part number</b>		<b>236077</b>	<b>236077</b>		
Type		WDS 600	WDS 600		
Description		Thermal insulation, floor mounted cylinder	Thermal insulation, floor mounted cylinder		
<b>Part number</b>				<b>236078</b>	<b>236078</b>
Type				WDS 1000	WDS 1000
Description				Thermal insulation, floor mounted cylinder	Thermal insulation, floor mounted cylinder

# Floor mounted cylinder

## Floor mounted combi cylinders, pressure-tested

### SB S



SB 302 S

#### Benefits

- › Connection according to individual requirements through the two flanged apertures
- › Simple maintenance due to signal anode with display element
- › Visual monitoring of water temperature via temperature display
- › Complete cylinder casing with plastic jacket, cover and fascia
- › Very low energy losses thanks to high grade thermal insulation
- › The steel inner cylinder features a special directly applied enamel coating for a long service life

**Application** • The floor mounted cylinders supply DHW in detached houses or apartment buildings and in commercial premises with a high DHW demand and a high draw-off rate. Their large nominal capacity and pressure-tested, sealed unvented operation enable them to supply DHW to multiple draw-off points simultaneously.

**Convenience features** • The flanged apertures are equipped with dust caps, and are fitted with either a flanged immersion heater or a blank flange.

**Safety & quality** • The high grade magnesium anode and steel inner cylinder with special “anticor” directly applied enamel coating protect against corrosion and ensure a long service life.

		SB 302 S	SB 402 S
<b>Part number</b>		<b>185354</b>	<b>185355</b>
<b>Specification</b>			
Energy efficiency class		C	C
Nominal capacity	l	300	400
Colour		pure white/basalt grey	pure white/basalt grey
Number of flanged apertures		2	2
Water connection		G 1 A	G 1 A
Height	mm	1585	1755
Width	mm	700	750
Depth	mm	700	750
Immersion depth	mm	530	580
Weight, empty	kg	101	119
Flange diameter	mm	210	210
<b>Required accessories</b>			
<b>Part number</b>		<b>074370</b>	<b>074370</b>
Type		ZH 1	ZH 1
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested
<b>Part number</b>		<b>074371</b>	<b>074371</b>
Type		DMV/ZH 1	DMV/ZH 1
Description		Pressure reducing valve	Pressure reducing valve
<b>Part number</b>		<b>074374</b>	<b>074374</b>
Type		SV 3/4 6 bar	SV 3/4 6 bar
Description		Safety valve for DHW cylinder	Safety valve for DHW cylinder
<b>Part number</b>		<b>074375</b>	<b>074375</b>
Type		SV 3/4 10 bar	SV 3/4 10 bar
Description		Safety valve for DHW cylinder	Safety valve for DHW cylinder
<b>Recommended accessories</b>			
<b>Part number</b>		<b>071330</b>	<b>071330</b>
Type		FCR 21/60	FCR 21/60
Description		Flanged immersion heater	Flanged immersion heater
<b>Part number</b>		<b>071331</b>	<b>071331</b>
Type		FCR 21/120	FCR 21/120
Description		Flanged immersion heater	Flanged immersion heater
<b>Part number</b>		<b>076102</b>	<b>076102</b>
Type		B21	B21
Description		Blank flange, floor mounted cylinder	Blank flange, floor mounted cylinder

## Floor mounted cylinder

### Floor mounted combi cylinders, pressure-tested

#### SB AC



SB 602 AC

#### Benefits

- › Connection according to individual requirements through the two flanged apertures
- › Simple maintenance due to signal anode with display element
- › Very low energy losses thanks to high grade thermal insulation
- › The steel inner cylinder features a special directly applied enamel coating for a long service life
- › Visual monitoring of water temperature via temperature display

**Application** • The floor mounted cylinders are suitable for providing DHW in detached houses or apartment buildings and in commercial premises with a high DHW demand and a high draw-off rate. They can supply DHW to multiple draw-off points simultaneously.

**Convenience features** • The flanged apertures are equipped with dust caps and can be fitted with either a flanged immersion heater or a blank flange.

**Safety** • The high grade magnesium anode and the steel inner cylinder with special “anticor” directly applied enamel coating protect against corrosion and ensure a long service life.

		SB 602 AC	SB 1002 AC
<b>Part number</b>		<b>071554</b>	<b>071282</b>
<b>Specification</b>			
Nominal capacity	l	600	1000
Water connection		G 2 A / G 1 1/2 A	top/bottom: G 2 / G 1 1/2
Height	mm	1685	2525
Width	mm	750	750
Depth	mm	800	800
Weight, empty	kg	154	212
<b>Required accessories</b>			
<b>Part number</b>		<b>074370</b>	<b>074370</b>
Type		ZH 1	ZH 1
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested
<b>Part number</b>		<b>074371</b>	<b>074371</b>
Type		DMV/ZH 1	DMV/ZH 1
Description		Pressure reducing valve	Pressure reducing valve
<b>Part number</b>		<b>074374</b>	<b>074374</b>
Type		SV 3/4 6 bar	SV 3/4 6 bar
Description		Safety valve for DHW cylinder	Safety valve for DHW cylinder
<b>Part number</b>		<b>074375</b>	<b>074375</b>
Type		SV 3/4 10 bar	SV 3/4 10 bar
Description		Safety valve for DHW cylinder	Safety valve for DHW cylinder
<b>Recommended accessories</b>			
<b>Part number</b>		<b>000694</b>	<b>000694</b>
Type		FCR 28/120 E	FCR 28/120 E
Description		Flanged immersion heater	Flanged immersion heater
<b>Part number</b>		<b>000695</b>	<b>000695</b>
Type		FCR 28/180 E	FCR 28/180 E
Description		Flanged immersion heater	Flanged immersion heater
<b>Part number</b>		<b>000696</b>	<b>000696</b>
Type		FCR 28/270 E	FCR 28/270 E
Description		Flanged immersion heater	Flanged immersion heater
<b>Part number</b>		<b>001502</b>	<b>001502</b>
Type		FCR 28/360 E	FCR 28/360 E
Description		Flanged immersion heater	Flanged immersion heater
<b>Part number</b>		<b>071332</b>	<b>071332</b>
Type		FCR 28/120	FCR 28/120
Description		Flanged immersion heater	Flanged immersion heater

Continue on next page >

Floor mounted cylinder  
Floor mounted combi cylinders, pressure-tested

		SB 602 AC	SB 1002 AC
Part number		071333	071333
Type		FCR 28/180	FCR 28/180
Description		Flanged immersion heater	Flanged immersion heater
Part number		076103	076103
Type		B28	B28
Description		Blank flange, floor mounted cylinder	Blank flange, floor mounted cylinder
Part number		236079	
Type		WDS 602	
Description		Thermal insulation, floor mounted cylinder	
Part number			236080
Type			WDS 1002
Description			Thermal insulation, floor mounted cylinder

<b>Electric threaded immersion heaters and flanged immersion heaters</b>	
Accessories	145
<b>Safety assemblies</b>	
Accessories	147
<b>Thermal insulation</b>	
Accessories	149

## Accessories for floor mounted cylinders, pressure-tested

### Electric threaded immersion heaters and flanged immersion heaters

#### FCR



#### Benefits

- › Replaceable copper heating element
- › For matching to individual usage scenarios
- › High DHW convenience thanks to powerful heating elements
- › Variable temperature setting via rotary selector
- › Test techn. Bullets\${att.sf000694.value} \${att.sf000694.name} (Product: 000694)

**Application** • Flanged immersion heaters for horizontal installation in sealed DHW cylinders with flange connector to DIN 4805.

**Convenience features** • Variable temperature selection and temperature limiting possible.

**Safety and quality** • Observe the details supplied by the cylinder manufacturer and DIN 4753 or 4751.

FCR 21/60

		FCR 21/60	FCR 21/120	FCR 28/120	FCR 28/120 E	FCR 28/180
Part number		071330	071331	071332	000694	071333
Specification						
Connected load ~ 230 V	kW	2-4	4			
Connected load ~ 400 V	kW	2-6	8/12	6/12	12	9/18
Power supply		1/N/PE, 3/N/PE	1/N/PE, 2/N/PE, 3/PE	3/PE	3/PE	3/PE
Rated voltage	V	230/400	230/400	400	400	400
Coil voltage	V	230	230	230	400	230
Frequency	Hz	50/60	50/60	50	50	50
Version		Dual/single circuit	Single circuit	Dual/single circuit	Single circuit	Dual/single circuit
Integral contactor		X	-	X	X	X
IP rating		IP 24	IP 24	IP 24	IP 24	IP 24
Immersion depth	mm	400	400	450	325	450
Flange diameter	mm	210	210	280	280	280

		FCR 28/180 E	FCR 28/270 E	FCR 28/270 E Si	FCR 28/360 E
Part number		000695	000696	075141	001502
Specification					
Connected load ~ 400 V	kW	18	27	27	36
Power supply		3/PE	3/PE	3/PE	3/PE
Rated voltage	V	400	400	400	400
Coil voltage	V	400	400		400
Frequency	Hz	50	50	50/60	50/60
Version		Single circuit	Single circuit	Single circuit	Single circuit
Integral contactor		X	X	-	-
IP rating		IP 24	IP 24		IP 24
Immersion depth	mm	325	325	325	450
Flange diameter	mm	280	280	280	280

## Accessories for floor mounted cylinders, pressure-tested

### Electric threaded immersion heaters and flanged immersion heaters

#### BGC



##### Benefits

- › For matching to individual usage scenarios
- › High DHW convenience thanks to powerful heating elements
- › Variable temperature setting via rotary selector

**Application** • Threaded immersion heater for sealed unvented heating systems and DHW heating systems.

**Convenience features** • Variable temperature selection and temperature limiting possible.

**Safety and quality** • Integral temperature controller with high limit safety cut-out.

BGC 6 kW 500 mm ET

		BGC 6 kW 500 mm ET	BGC/45	BGC 2/60
Part number		003769	075115	232030
Specification				
Connected load ~ 230 V	kW	2-5,7	2-5,7	2-5,7
Connected load ~ 400 V	kW	6	6	6
Power supply		1/N/PE, 2/PE, 3/PE	1/N/PE, 2/PE, 3/PE	1/N/PE, 2/PE, 3/PE
Rated voltage	V	230/400	230/400	230/400
Frequency	Hz	50/60	50/60	50/60
Version		Universal flange	Universal flange	Universal flange
IP rating		IP 44	IP 44	IP 44
Immersion depth	mm	500	455	480

#### BG



##### Benefits

- › Ideal for sealing the floor mounted cylinder if not all flanged apertures are used

Blank flange for sealing flanged apertures, enamel coated on the inside.

B21

		B21	B28
Part number		076102	076103
Specification			
Flange diameter	mm	210	280

Gaskets, screws with insulating sleeves and cover with thermal insulation.

Accessories for floor mounted cylinders, pressure-tested

Safety assemblies

ZH1



Benefits

- › Maximum safety evidenced by DVGW certification mark
- › Long service life and reliability thanks to the use of high quality components

**Application** • Safety assembly for pressurised floor mounted electric and combi cylinders. • Standard delivery includes a shut-off valve, non-return valve with test facility, pressure gauge connection, diaphragm safety valve and drain outlet. • A pipe break is integrated into the drain outlet of the safety valve, which prevents the waste water being sucked back. • With its threaded connection, the safety valve can be rotated, repositioned or replaced to match it to different installation situations. • The safety assembly enables angled or straight-through installation in horizontal and vertical pipework. • In vertical pipework, install the safety assembly only in a bottom to top flow direction. A pressure reducing valve can be retrofitted if required.

ZH 1

		ZH 1
Part number		074370
Specification		
Safety valve response pressure	MPa	0.60
Pressure reducing valve		-
Drip water connection		•
Water connection		G 1 A
Installation type		Surface mounted
Safety valve	bar	6

DMV/ZH 1



Benefits

- › Reduced inlet pressure through additional pressure reducing valve

Pressure reducing valve to supplement the safety assembly for pressurised floor mounted electric and combi cylinders.

DMV/ZH 1

		DMV/ZH 1
Part number		074371
Specification		
Pressure reducing valve		•
Pressure reducing valve setting range	MPa	0,15 - 0,60
Water connection		G 1
Installation type		Surface mounted

# Accessories for floor mounted cylinders, pressure-tested

## Safety assemblies

SV



**Benefits**

- › The safety valve is used as fuse protection for sealed unvented DHW cylinders

Diaphragm safety valve with brass casing for pressurised DHW cylinders.

SV 1/2 6 bar

		SV 1/2 6 bar	SV 3/4 6 bar	SV 3/4 10 bar
Part number		074373	074374	074375
Specification				
Safety valve response pressure	MPa	0.60	0.60	1.00
Water connection		G 1/2	G 3/4	G 3/4

## Accessories for floor mounted cylinders, pressure-tested

### Thermal insulation

#### WDS



WDS 600

#### Benefits

- › Two insulation semi-shells to make it easier to match the shape
- › Graphite inserts for best insulation properties
- › Low energy losses thanks to high grade thermal insulation

**Application** • High grade thermal insulation with sections for insulating the bottom and the cover of floor mounted cylinders.

**Convenience features** • Outer jacket in white; cover in black.

**Efficiency** • Good thermal insulation which can be perfectly fitted to the cylinder thanks to the wedge-shaped cut-outs in the side insulation sections.

**Installation** • Zip fasteners to easily secure the thermal insulation.

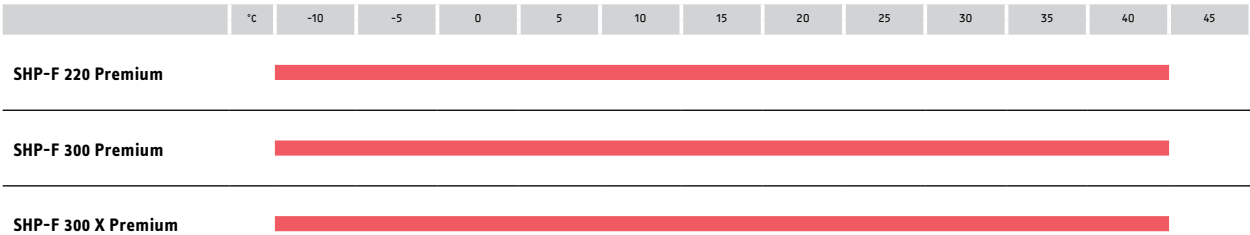
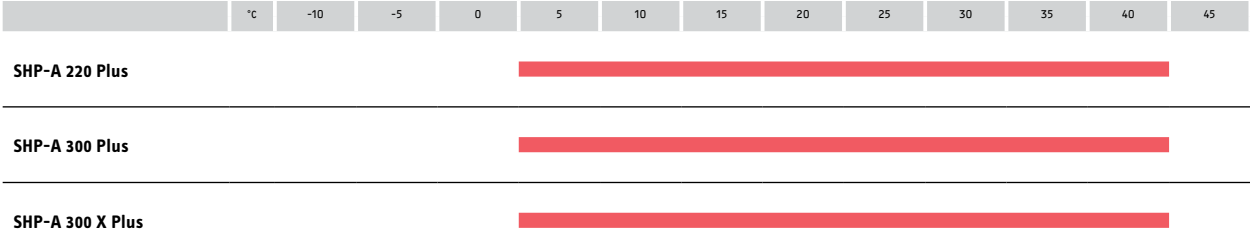
		WDS 600	WDS 602	WDS 1000	WDS 1002
Part number		236077	236079	236078	236080
Specification					
Standby energy consumption/ 24 h at 65 °C	kWh	2.30	2.60	3.20	3.50
Height	mm	1850	1850	2690	2690
Thickness	mm	100	100	100	100



DHW heat pumps  
Application areas



Application limit heat source for heat pump operation



<b>Compact design</b>	
SHP-A 220/300 (X) PLUS	153
SHP-F 220/300 (X) PREMIUM	155

# DHW heat pumps

## Compact design

### SHP-A 220/300 (X) PLUS



SHP-A 220 Plus

#### Benefits

- › Fully wired compact series for recirculation air mode
- › Efficient and hygienic DHW heating and high mixed water volumes due to Max. DHW temperature with heat pump 65 °C
- › Categorised in the highest possible energy efficiency class for water heaters
- › Permanently high efficiency and safety across the entire service life of the appliance, due to spring-loaded rollbond heat exchanger
- › Reduced operating costs via intelligent interface to increase consumption of on-site photovoltaic energy
- › Highly reliable and cost saving due to the impressed current anode integrated as standard
- › Display of the currently available mixed water volume via the LCD
- › Very quiet operation due to sound-insulated compressor and positioning away from the air flow
- › "X" version thanks to additional smooth tube indirect coil can be combined with a solar thermal system or an oil, gas or solid fuel boiler (incl. 2 sensor wells giving a choice of heat generator integration) (Product: 238635)

**Application** • The DHW heat pump for recirculation air mode supplies DHW efficiently to multiple draw-off points. It takes up only minimal space, thanks to its compact design. • It utilises the waste heat from other appliances in the installation room (e.g. freezer, tumble dryer, heating system) to increase the energy efficiency of the whole system.

**Comfort** • A very high degree of DHW convenience is assured due to demanding draw-off profiles. • High temperatures are possible in heat pump-only mode, for efficient and hygienic DHW heating. • User friendly operation thanks to the electronic controller with LCD, which conveniently displays the currently available mixed water volume. • The compressor is sound-insulated from the air stream for very quiet operation. • The integral impressed current anode reduces costs and increases safety. The spring-loaded roll bond heat exchanger ensures maximum safety and efficient operation over the entire service life of the appliance.

**Possible combinations** • The intelligent interface integrated as standard allows communication with suitable photovoltaic systems. This helps to increase on-site consumption of self-generated solar power. • The X version with integral smooth tube indirect coil and 300 litre capacity allows combination with solar thermal systems and oil, gas or solid fuel boilers.

**Efficiency** • The system works highly efficiently, with all appliances in the range rated in what is currently the highest possible energy efficiency class.



238633



		SHP-A 220 Plus	SHP-A 300 Plus	SHP-A 300 X Plus
Part number		238633	238634	238635
Specification				
Energy efficiency class		A+	A+	A+
Energy efficiency class, DHW heating (indoor air), load profile L		A+		
Energy efficiency class, DHW heating (indoor air), load profile XL			A+	A+
Average heating output (A15 / W10-55)	kW	1,6	1,6	1,6
Average heating output (A7 / W10-55)	kW	1,3	1,3	1,3
COP (EN 16147 / A20)		3,55	3,51	3,51
COP (EN 16147 / A7)		2,68	2,79	2,75
Rated heating output Prated (EN 16147 / A20)	kW	1.60	1.52	1.43
Power consumption, standby period (EN 16147 / A20)	kW	0,022	0,024	0,028
Nominal load profile (EN 16147)		L	XL	XL
Nominal DHW temperature (EN 16147)	°C	55	55	55
Maximum available nominal amount of DHW at 40 °C (EN 16147 / A20)	l	278	395	371

Continue on next page >

## DHW heat pumps

### Compact design

		SHP-A 220 Plus	SHP-A 300 Plus	SHP-A 300 X Plus
Heat-up time (EN 16147 / A20)	h	6,06	9,05	9,05
Average sound pressure level at 1 m distance, free field	dB(A)	45	45	45
Sound power level (EN 12102)	dB(A)	60	60	60
Min./max. application limits, heat source for heat pump operation	°C	+6/+42	+6/+42	+6/+42
Min./max. application limits for heat source	°C	+6/+42	+6/+42	+6/+42
Max. DHW temperature with heat pump	°C	65	65	65
Height x diameter	mm	1501 x 690	1905 x 690	1905 x 690
Weight	kg	120	135	156
Power supply		1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz
Auxiliary heater power consumption	kW	1.50	1.50	1.50
Nominal capacity	l	220	302	291
Max. mixed water volume 40 °C	l	330	465	440
Surface area, heat exchanger				1.30

Required accessories				
Part number		074370	074370	074370
Type		ZH 1	ZH 1	ZH 1
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested

Energy efficiency class in accordance with EU Regulation no. 812/2013Nominal data to EN 16147 - A15 = heat source recirculation air / A7 = heat source recirculation airRated data to EN 16147 - heat pump for recirculated airEnergy efficiency class in accordance with EU Regulation no. 812/2013, rating from September 2017. Highest possible energy rating A until September 2017. (Product: 238633)Rated data to EN 16147 - heat pump for recirculated air

Energy efficiency class in accordance with EU Regulation no. 812/2013, rating from September 2017. Highest possible energy rating A until September 2017.Nominal data to EN 16147 - A15 = heat source recirculation air / A7 = heat source recirculation airRated data to EN 16147 - heat pump for recirculated air (Product: 238634)Rated data to EN 16147 - heat pump for recirculated airNominal data to EN 16147 - A15 = heat source recirculation air / A7 = heat source recirculation air (Product: 238635)

# DHW heat pumps

## Compact design

### SHP-F 220/300 (X) PREMIUM



SHP-F 220 Premium

#### Benefits

- › Fully wired compact series for recirculation air operation or air duct/outdoor air operation
- › Hygienic DHW heating and very high mixed water volumes with up to 65 °C in pure heat pump operation
- › Categorised in the highest possible energy efficiency class for water heaters
- › Maximum flexibility regarding positioning and installation in the room, with air routing optionally to the side and/or from above
- › Permanently high efficiency and safety across the entire service life of the appliance, due to spring-loaded rollbond heat exchanger
- › Reduced operating costs via intelligent interface to increase consumption of on-site photovoltaic energy
- › Highly reliable and cost saving due to the impressed current anode integrated as standard
- › Display of the currently available mixed water volume via the LCD
- › Very quiet operation due to sound-insulated compressor and positioning away from the air flow
- › "X" version thanks to additional smooth tube indirect coil can be combined with a solar thermal system or an oil, gas or solid fuel boiler (incl. 2 sensor wells giving a choice of heat generator integration) (Product: 238632)

**Application** • The compact DHW heat pump supplies DHW efficiently to multiple draw-off points. • The appliance is suitable for recirculation air and air duct operation even at low supply air temperatures. • Highly flexible positioning, because the air duct can be connected on the side or at the top (accessory required).

**Convenience features** • The demanding draw-off profiles ensure very high DHW convenience. High temperatures are possible in heat pump-only mode, for efficient and hygienic DHW heating. • High operating convenience. The electronic controller is equipped with an LCD, which displays the currently available mixed water volume. • Quiet operation thanks to compressor being sound-insulated from the air stream. • Reliable and cost saving due to the factory-fitted integral impressed current anode.

**Combination options** • An intelligent interface for communication with suitable photovoltaic systems is integrated as standard and supports increased on-site consumption. • The 300 litre version is also available as a X version with integral smooth tube indirect coil, which allows the appliance to be combined with solar thermal systems and oil, gas or solid fuel boilers.

**Efficiency** • All appliances are noted for their high quality, reliable equipment and for their energy rating in what is currently the highest possible energy efficiency class. The spring-loaded roll bond heat exchanger also plays a role in this, ensuring safety and efficiency over the entire service life of the appliance.



		SHP-F 220 Premium	SHP-F 300 Premium	SHP-F 300 X Premium
Part number		238630	238631	238632
Specification				
Energy efficiency class		A+	A+	A+
Energy efficiency class, DHW heating (outdoor air), load profile L		A+		
Energy efficiency class, DHW heating (outdoor air), load profile XL			A+	A+
Energy efficiency class, DHW heating (indoor air), load profile L		A+		
Energy efficiency class, DHW heating (indoor air), load profile XL			A+	A+
Average heating output (A20 / W10-55)	kW	1,8	1,8	1,8
Average heating output (A7 / W10-55)	kW	1,3	1,3	1,3
COP (EN 16147 / A20)		3,28	3,75	3,75
COP (EN 16147 / A7)		3,07	3,22	2,99
Rated heating output Prated (EN 16147 / A20)	kW	1.51	1.67	1.67
Rated heating output Prated (EN 16147 / A7)	kW	1.08	1.30	1.12
Nominal load profile (EN 16147)		L	XL	XL

Continue on next page >

## DHW heat pumps

### Compact design

		SHP-F 220 Premium	SHP-F 300 Premium	SHP-F 300 X Premium
Nominal DHW temperature (EN 16147)	°C	55	55	55
Maximum available nominal amount of DHW at 40 °C (EN 16147 / A20)	l	284	422	399
Maximum available nominal amount of DHW at 40 °C (EN 16147 / A7)	l	267	422	394
Average indoor sound pressure level at 1 m distance, free field with 4 m air duct	dB(A)	37	37	37
Average indoor sound pressure level at 1 m distance, free field, without air duct	dB(A)	45	45	45
Indoor sound power level with 4 m air duct (EN 12102)	dB(A)	52	52	52
Indoor sound power level without air duct (EN 12102)	dB(A)	60	60	60
Min./max. application limits, heat source for heat pump operation	°C	-8/+42	-8/+42	-8/+42
Min./max. application limits for heat source	°C	-8/+42	-8/+42	-8/+42
Max. DHW temperature with heat pump	°C	65	65	65
Height x diameter	mm	1501 x 690	1905 x 690	1905 x 690
Power supply		1/N/PE ~ 230 V 50Hz	1/N/PE ~ 230 V 50Hz	1/N/PE ~ 230 V 50Hz
Auxiliary heater power consumption	kW	1.50	1.50	1.50
Nominal capacity	l	220	302	291
Max. mixed water volume 40 °C	l	330	465	440
Surface area, heat exchanger				1.30
Available external pressure	Pa	120	120	120
Max. air duct length at 160/200 mm diameter (including 3x 90° bends)	m	20/40	20/40	20/40

Required accessories				
Part number		074370	074370	074370
Type		ZH 1	ZH 1	ZH 1
Description		Safety assembly, pressure-tested	Safety assembly, pressure-tested	Safety assembly, pressure-tested

Recommended accessories				
Part number		159320	159320	159320
Type		LWF N 160	LWF N 160	LWF N 160
Description		Plug-in connector	Plug-in connector	Plug-in connector
Part number		234505	234505	234505
Type		AWG 160 R	AWG 160 R	AWG 160 R
Description		Wall outlet	Wall outlet	Wall outlet
Part number		236899	236899	236899
Type		LUS 221/301	LUS 221/301	LUS 221/301
Description		Air diverter hood set	Air diverter hood set	Air diverter hood set

Energy efficiency class in accordance with EU Regulation no. 812/2013Energy efficiency class in accordance with EU Regulation no. 812/2013, rating from September 2017. Highest possible energy rating A until September 2017.Nominal data to EN 16147 - A15 = heat source, recirculation air / A7 = heat source, outdoor air (indoor installation) (Product: 238630, 238631, 238632)

## DHW heat pump accessories

### Installation accessories

#### ZH1



#### Benefits

- › Maximum safety evidenced by DVGW certification mark
- › Long service life and reliability thanks to the use of high quality components

**Application** • Safety assembly for pressurised floor mounted electric and combi cylinders. • Standard delivery includes a shut-off valve, non-return valve with test facility, pressure gauge connection, diaphragm safety valve and drain outlet. • A pipe break is integrated into the drain outlet of the safety valve, which prevents the waste water being sucked back. • With its threaded connection, the safety valve can be rotated, repositioned or replaced to match it to different installation situations. • The safety assembly enables angled or straight-through installation in horizontal and vertical pipework. • In vertical pipework, install the safety assembly only in a bottom to top flow direction. A pressure reducing valve can be retrofitted if required.

ZH 1

		ZH 1
Part number		074370
Specification		
Safety valve response pressure	MPa	0.60
Pressure reducing valve		-
Drip water connection		•
Water connection		G 1 A
Installation type		Surface mounted
Safety valve	bar	6

#### BGC



#### Benefits

- › For matching to individual usage scenarios
- › High DHW convenience thanks to powerful heating elements
- › Variable temperature setting via rotary selector

**Application** • Threaded immersion heater for sealed unvented heating systems and DHW heating systems.

**Convenience features** • Variable temperature selection and temperature limiting possible.

**Safety and quality** • Integral temperature controller with high limit safety cut-out.

BGC 6 kW 500 mm ET

		BGC 6 kW 500 mm ET	BGC/45	BGC 2/60
Part number		003769	075115	232030
Specification				
Connected load ~ 230 V	kW	2-5,7	2-5,7	2-5,7
Connected load ~ 400 V	kW	6	6	6
Power supply		1/N/PE, 2/PE, 3/PE	1/N/PE, 2/PE, 3/PE	1/N/PE, 2/PE, 3/PE
Rated voltage	V	230/400	230/400	230/400
Frequency	Hz	50/60	50/60	50/60
Version		Universal flange	Universal flange	Universal flange
IP rating		IP 44	IP 44	IP 44
Immersion depth	mm	500	455	480

## DHW heat pump accessories

### Installation accessories

#### AWG



AWG 160 R

#### Benefits

- › Highly convenient thanks to extremely quiet weather grille with very low pressure drop

**Application** • Sound insulating wall outlet made from EPS, for connecting the air duct.

**Convenience features** • The weather grille made from painted sheet steel in silver grey has a drip edge for reliable prevention of run marks on the external wall.

**Installation** • If outdoor air is used as a heat source, no additional thermal insulation measures are needed for the pipe. This allows very straightforward installation with small dimensions.

		AWG 160 R
Part number		234505
Specification		
Max. air flow rate	m <sup>3</sup> /h	350
Width of surround for weather grille	mm	220
Connection diameter	mm	160
Outer pipe diameter	mm	200
Pipe length	mm	545
Weight	kg	0.50
Wall outlet material		EPS (grey)
Weather grille material		Painted sheet steel (silver grey)
Condensation limit at: temperature inside pipe / temperature around the pipe / relative humidity around the pipe		-20 °C / 20 °C / 60 %

#### LUS



#### Benefits

- › Maximum flexibility thanks to horizontal or vertical air routing

Air diverter kit, which can be used to switch the factory-fitted horizontal air routing on Stiebel Eltron DHW heat pumps to vertical. This increases flexibility for installation in the installation room by allowing a choice between vertical or horizontal air routing, depending on the position.

LUS 221/301

		LUS 221/301
Part number		236899
Specification		
Connection		DN 160
Diameter		160 mm



<b>Water filter</b>	162
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**Filter cartridges**

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Sediment 13"	167
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Ultrafiltration 13"	169
SILVER GAC & MINERAL BALLS 13"	170
Stiebel House ACB cartridge	171
Stiebel House PS cartridge	172

4 in 1 filter cartridge

Benefits

- › 4 stages in 1 compact encapsulated filters for easier filter replacement (Product: 203737)
- › Large carbon layers for great tasting filtered water (Product: 203737)
- › Coral sandstone provides a natural source of calcium in filtered water (Product: 203737)
- › Hygienic encapsulated cartridge
- › Easy filter replacement, no tools needed (Product: 203737)
- › Hygienic encapsulated cartridge (Product: 203737)

**Application** • 4-in-1 filter cartridge used with Rain and Rain Plus drinking water filters.

**Convenience features** • This filter medium is made from polypropylene, coconut carbon, bamboo carbon and coral sandstone, and demonstrates an outstanding performance in pre-filter filtration stages. • The large activated carbon volume reduces herbicides, pesticides and turbidity, adsorbs chlorine, VOCs and TTHMs, and is also able to remove heavy metals such as lead and mercury. • “Bamboo and coconut” carbon has excellent absorption properties to reduce unpleasant tastes, odours, herbicides and pesticides, and adsorb chlorine for cleaner and better tasting filtered water. • Coral sandstone slightly improves the pH value of the filtered water.

**Replacement** • “Twist” system; no tools required.

**Safety & Quality** • The filter is encapsulated inside the cartridge which provides protection against contamination from the outside, for example during filter replacement and cleaning.

**Filter** • 4 stages of carefully selected filter media are combined in one single filter cartridge.

1. Granular activated carbon. Improves the taste of filtered drinking water
2. Coral sandstone. Coral sandstone provides a natural source of calcium for the body and slightly improves the pH value of the filtered water for a better taste and health benefit
3. Pre-filter, 10 µm: Removes rust, sand, soil and impurities larger than 5 microns to protect other filtration stages
4. Activated carbon block, 1 µm. Reduces residual chlorine, VOCs, THMs, herbicides & pesticides, unpleasant tastes and odours.

		4 IN 1 CARTRIDGE (EG)
Part number		203737

## Water filter

### Filter cartridges

#### 2 in 1 filter cartridge

##### Benefits

- › 2 stages in 1 cartridge for easier filter replacement (Product: 203738)
- › An ultrafiltration hollow fibre membrane with a pore size down to 0.01 microns provides bacteria-free drinking water instantly, with no electricity required
- › Antibacterial silver ions provide double protection of the water filter
- › Large carbon layers for great tasting filtered water
- › Hygienic encapsulated cartridge
- › Easy filter replacement, no tools needed
- › Ultrafiltration hollow fiber membrane with a pore size down to 0.01 micron provides instant bacteria free drinking water, no electricity needed. (Product: 203738)
- › Antibacterial silver ions for double protection for the water filter (Product: 203738)
- › Large carbon layers for filtered water with good taste (Product: 203738)
- › Hygienic encapsulated cartridge (Product: 203738)
- › Easy filter replacement, no tool needed (Product: 203738)

**Application** • 2-in-1 filter cartridge used with Rain and Rain Plus drinking water filters.

**Convenience features** • 7 stages of filter media are combined in one single filter cartridge. This ensures exceptionally clean and safe filtration performance. • An ultrafiltration hollow fibre membrane with a pore size down to 0.01 microns provides bacteria-free drinking water instantly, with no electricity required. • Silverlite stone increases the safety of the whole filter system. It contains silver ions and several minerals to prevent the growth of bacteria inside the filter system and contamination from outside the filter.

**Replacement** • “Twist” system; no tools required.

**Safety & Quality** • The 7-in-1 filter cartridge is certified as safe for drinking water by NSF International and complies with NSF Standards 42 and 53 for the reduction of unpleasant tastes/odours, chlorine, turbidity, nominal particulate Class I and VOCs.

**Filter** • 2 stages of carefully selected filter media are combined in one single filter cartridge.

1. Antibacterial granular activated carbon. Improves the taste of the water by reducing chlorine, VOCs and TTHMs. Silver ions added to the carbon prevent the growth of filtered bacteria inside the filter.
2. Ultrafiltration membrane, 0.01-0.1 µm. A microporous hollow fibre membrane works as an efficient filter to remove bacteria, some viruses and particles down to 0.01 microns

		EXCHANGE FILTER 2 IN 1 (EG)
Part number		203738

DS sediment GAC cartridge

Benefits

- › Durable PP surface with 5 micron pore size for efficient pre-filter removal functions
- › Carbon powder improves the taste of the water
- › Antibacterial silver ions provide double protection of the water filter
- › Hygienic encapsulated cartridge
- › “Push & click” system for easy filter replacement
- › Durable PP surface with 5 micron pore size for efficient prefilter removal functions (Product: 203740)
- › Carbon powder coated improves the taste of water (Product: 203740)
- › Antibacterial silver ions for double protection for the water filter (Product: 203740)
- › Hygienic encapsulated cartridge (Product: 203740)
- › “Push and Click system” for easy filter replacement (Product: 203740)

**Application** • 2 stages in 1 filter cartridge used with the Nature drinking water filter.

**Convenience features** • This filter medium is made from durable polypropylene and granular carbon powder, and delivers outstanding filtration performance.

**Replacement** • The “push & click” function makes filter replacement as simple as pushing a button and changing the cartridge. • A “click” sound signals that the filter has been inserted properly into the adaptor.

**Safety** • The filter is encapsulated inside the cartridge which provides protection against contamination from the outside, for example during filter replacement and cleaning.

**Filter** • 2 stages of carefully selected filter media are combined in one single filter cartridge.

1. Polypropylene, 5 µm: Reduces silt, rust, sediment and larger particles.
2. Pre-carbon filter: Improves the taste of the water

		DUAL SEDIMENT GAC FILTER CARTRIDGE 8(EG)
Part number		203740

## Water filter

### Filter cartridges

#### ACB WITH AG & HEAVY METAL REMOVAL 8

##### Benefits

- › Large carbon surface area for efficient particle removal
- › Heavy metal removal agents actively reduce heavy metals in the inlet water (Product: 203739)
- › Antibacterial silver ions provide double protection of the water filter
- › Strict quality control in both temperature and material ensures optimum performance of the carbon block
- › Hygienic encapsulated cartridge
- › “Push & click” system for easy filter replacement
- › Large carbon surface for efficient removal functions (Product: 203739)
- › Antibacterial silver ions for double protection for the water filter (Product: 203739)
- › Strict quality control in both temperature and material ensures the best performance of the carbon block (Product: 203739)
- › Hygienic encapsulated cartridge (Product: 203739)
- › “Push and Click system” for easy filter replacement (Product: 203739)

**Application** • Third stage filter cartridge used with Nature drinking water filters.

**Convenience features** • This filter medium is made from coconut shells with the addition of silver ions and anti-heavy metal agents, and delivers outstanding filtration performance. • The activated carbon reduces herbicides, pesticides and turbidity, adsorbs chlorine, VOCs and TTHMs, and is also able to actively remove heavy metals such as lead and mercury.

**Replacement** • The “push & click” function makes filter replacement as simple as pushing a button and changing the cartridge. A “click” sound signals that the filter has been inserted properly into the adaptor.

**Safety** • The filter is encapsulated inside the cartridge which provides protection against contamination from the outside, for example during filter replacement and cleaning.

**Filter** • Activated carbon block with silver ions and heavy metal removal agents, 0.5 µm. • Reduces unpleasant tastes and odours, chlorine, trihalomethanes and VOCs. • Added anti-heavy metal agents boost the reduction of lead, copper, aluminium, selenium, zinc and iron. • Silver ions added to the carbon prevent the growth of bacteria inside the filter.

		ACB W. AG & HEAVY METAL REMOVAL 8" (EG)
Part number		203739

Water filter  
Filter cartridges

Sediment 13"



Sediment Filter 13" (EX)

**Benefits**

- › Durable PP surface with 1 micron pore size for efficient pre-filter removal functions
- › Hygienic encapsulated cartridge
- › "Push & click" system for easy filter replacement
- › Durable PP surface with 1 micron pore size for efficient prefilter removal functions (Product: 230875)
- › Hygienic encapsulated cartridge (Product: 230875)
- › "Push and Click system" for easy filter replacement (Product: 230875)

**Application** • First stage sediment filter cartridge used with Stream and Stream 5S drinking water filters.

**Convenience features** • The filter medium is made from durable polypropylene with a large surface area for outstanding filtration performance.

**Replacement**• The "push & click" function makes filter replacement as simple as pushing a button and changing the cartridge. A "click" sound signals that the filter has been inserted properly into the adaptor.

**Safety & Quality** • The filter is encapsulated inside the cartridge which provides protection against contamination from the outside, for example during filter replacement and cleaning.

**Filter**• Polypropylene, 1 µm. Reduces silt, rust, sediment and larger particles.

		Sediment Filter 13" (EX)
Part number		230875

## Water filter

### Filter cartridges

#### Activated carbon block 13"



Activated carbon block 13" (EX)

#### Benefits

- › Large carbon surface area for efficient particle removal
- › High quality carbon material for better taste and filtration performance (Product: 230877)
- › Strict quality control in both temperature and material ensures optimum performance of the carbon block
- › Hygienic encapsulated cartridge (Product: 230877)
- › "Push & click" system for easy filter replacement
- › Large carbon surface for efficient removal functions (Product: 230877)
- › Strict quality control in both temperature and material ensures the best performance of the carbon block (Product: 230877)
- › "Push and Click system" for easy filter replacement (Product: 230877)

**Application** • Second stage sediment filter cartridge used with Stream and Stream 5S drinking water filters.

**Convenience features** • This filter medium is made from coconut shells and delivers outstanding filtration performance.

• The activated carbon reduces herbicides, pesticides and turbidity, adsorbs chlorine, VOCs and TTHMs, and is also able to remove heavy metals such as lead and mercury.

**Replacement** • The "push & click" function makes filter replacement as simple as pushing a button and changing the cartridge. A "click" sound signals that the filter has been inserted properly into the adaptor.

**Safety & Quality** • The filter is encapsulated inside the cartridge which provides protection against contamination from the outside, for example during filter replacement and cleaning.

**Filter** • Activated carbon block, 0.5 µm. • Reduces unpleasant tastes and odours, chlorine, trihalomethanes, VOCs and heavy metals (lead, copper, aluminium, selenium, zinc, iron).

		Activated carbon block 13" (EX)
Part number		230877

## Water filter Filter cartridges

### Ultrafiltration 13"



Ultrafiltration 13" (EX)

#### Benefits

- › High quality ultrafiltration with hollow fibre membrane for 100 % bacterial removal with no water wastage and no electricity required
- › Hygienic encapsulated cartridge
- › "Push & click" system for easy filter replacement
- › High quality Ultra-filtration from hollow fiber membrane for 100% bacterial removal and no waste water, no electricity needed (Product: 230879)
- › Hygienic encapsulated cartridge (Product: 230879)
- › "Push and Click system" for easy filter replacement (Product: 230879)

**Application** • Third stage filter cartridge used with Stream and Stream 5S drinking water filters.

**Convenience features** • Ultrafiltration (UF) membrane with microporous hollow fiber structure works as an efficient filter to remove 100 % of bacteria, particles down to 0.01 microns and some viruses.

**Replacement** • The "push & click" function makes filter replacement as simple as pushing a button and changing the cartridge. A "click" sound signals that the filter has been inserted properly into the adaptor.

**Safety & Quality** • The filter is encapsulated inside the cartridge which provides protection against contamination from the outside, for example during filter replacement and cleaning.

**Filter** • Ultrafiltration hollow fibre, 0.01 – 0.1 µm. • 100 % bacteria removal. • Removes cysts, bacteria, some viruses and algae.

		Ultrafiltration 13" (EX)
Part number		230879

Replacement cartridge for Stream range

APPLICATION: Third stage filter cartridge used with Stream and Stream 5S drinking water filters.

EQUIPMENT & COMFORT: Ultrafiltration (UF) membrane with micro-porous structure hollow fiber works as an efficient filter to remove 100% bacteria and particles down to 0.01 micron and partly virus.

REPLACEMENT: The "Push & Click" function makes the filter exchange very easy and simple by only pushing the button and changing the filter cartridge. A "Click" sound will signal that the filter is inserted properly into the adapter.

SAFETY & QUALITY: The filter is encapsulated inside the cartridge which offers protection from contaminations from the outside, for example during filter replacement and cleaning.

FILTER: Ultrafiltration hollow fiber, 0.01 – 0.1 µm. 100% bacteria reduction. Removes cysts, bacteria, partly virus and algae. (Product: 230879)

## Water filter

### Filter cartridges

#### SILVER GAC & MINERAL BALLS 13"



SILVER GAC & MINERAL BALLS 13" (EX)

#### Benefits

- › A large volume of high grade carbon powder improves the taste of the water in the last stage
- › Antibacterial silver ions provide double protection of the water filter
- › Hygienic encapsulated cartridge
- › "Push & click" system for easy filter replacement
- › High grade and large quantity carbon powder improves the taste of water in the last stage (Product: 239935, 203745)
- › Antibacterial silver ions for double protection for the water filter (Product: 239935, 203745)
- › Hygienic encapsulated cartridge (Product: 239935, 203745)
- › "Push and Click system" for easy filter replacement (Product: 239935, 203745)

**Application** • Fourth stage filter cartridge used with Stream and Stream 5S drinking water filters.

**Convenience features** • This filter medium is made from coconut shells and delivers outstanding filtration performance.  
 • Antibacterial carbon powder prevents harmful contaminants from entering and keeps the filter cartridge constantly fresh.  
 • Oxidation Reduction Potential (ORP) mineral ceramic balls slightly reduce the ORP value, which antioxidises the water to increase our natural metabolism.

**Replacement** • The "push & click" function makes filter replacement as simple as pushing a button and changing the cartridge. A "click" sound signals that the filter has been inserted properly into the adaptor.

**Safety** • The filter is encapsulated inside the cartridge which provides protection against contamination from the outside, for example during filter replacement and cleaning.

**Filter** • 2 stages of carefully selected filter media are combined in one single filter cartridge.

1. ORP mineral balls. Reduce the ORP content of tap water
2. Post-carbon filter with silver ions. Improves the taste of the water; silver ions added to the carbon prevent the growth of bacteria inside the filter.

		SILVER GAC & MINERAL BALLS 13" (EX)	SILVER GAC & MINERAL BALLS 13" (EG)
Part number		239935	203745

Stiebel House ACB cartridge

Benefits

- › Improves water quality by removing contaminants (Product: 203743)
- › Improves water taste and odour by reducing chlorine, heavy metals and bacteria (Product: 203743)
- › Indirectly improves the water flow as less clogging occurs, therefore less maintenance is needed for sanitary fittings
- › Antibacterial silver ions provide double protection of the water filter (Product: 203743)
- › Suitable for use with various water sources (Product: 203743)
- › Indirectly improves the water flow as less clogging occurs, therefore less maintenance is needed for sanitary fittings. (Product: 203743)
- › Improves water by quality removing contaminants (Product: 239934)
- › Improves water taste & odor by reducing chlorines, heavy metals, bacteria (Product: 239934)
- › Indirectly improves the water flow because of less-clogging and less maintenance needed for sanitary accessories. (Product: 239934)
- › Antibacterial silver ions for double protection for the water filter (Product: 239934)
- › Suitable for use with various water sources (Product: 239934)

**Application** • 3-stage filter cartridge used with the Stiebel House ACB-2.

**Convenience features** • The filter medium is made from coconut shells and silver ions. It improves the water quality and taste by reducing dirt particles, chlorine, heavy metals and some bacteria. • Delivers cleaner and safer drinking water with reduced odours. • Reduces allergies caused by chlorine and its harmful compounds for healthier fresh water usage. • Less clogging of point-of-use filters and sanitary fittings (shower units, tap outlets, etc.). • Indirectly improves the water flow as less clogging occurs, therefore less maintenance is needed for sanitary fittings. • Silverlite stone increases the safety of the whole filter system. It contains silver ions to prevent the growth of bacteria inside the filter system.

**Installation** • The Stiebel House ACB-2 filter cartridge can be changed conveniently using the wrench that was supplied with the original purchase.

**Safety** • The Stiebel House ACB-2 is tested by SGS

**Filter** • 2 stages of carefully selected filter media.

1. Activated carbon block, 5 µm: Reduces dirt particles, chlorine, heavy metals and some bacteria to give clearer, cleaner and safer outlet water.
2. Silverlite stone: Silver ions prevent the growth of bacteria inside the filter system

		Stiebel House ACB cartridge (EG)	Stiebel House ACB cartridge (EX)
Part number		203743	239934

### Stiebel House PS cartridge

#### Benefits

- › Improves water quality by removing contaminants (Product: 203742)
- › Durable and porous pleated filter media (Product: 239933)
- › Indirectly improves the water flow as less clogging occurs, therefore less maintenance is needed for sanitary fittings
- › Reduces limescale deposits with anti-limescale balls, for gleaming sanitary fittings
- › Silverlite stone increases the safety of the whole filter system (Product: 203742)
- › Suitable for use with various water sources
- › Durable and porous pleated filter media (Product: 203742)
- › Indirectly improves the water flow as less clogging occurs, therefore less maintenance is needed for sanitary fittings. (Product: 203742)
- › Reduces limescale deposits with anti-limescale balls, for gleaming sanitary fittings (Product: 203742)
- › Suitable for use with various water sources (Product: 203742)
- › Improves water by quality removing contaminants (Product: 239933)
- › Indirectly improves the water flow because of less-clogging and less maintenance needed for sanitary accessories. (Product: 239933)
- › Reduces limescale deposit with anti-limescale balls for shining sanitary accessories (Product: 239933)
- › Silverlite stone increases the safeness of the whole filter system (Product: 239933)
- › Suitable for use with various water sources (Product: 239933)

**Application** • 3-stage filter cartridge used with the Stiebel House PS-2.

**Convenience features** • The cartridge consists of durable pleated polypropylene with a large surface area, with Silverlite stone and anti-limescale balls for outstanding filtration performance. • Improves the water quality by removing dirt and contaminants (sand, soil, algae, etc.) from the inlet water with extra large, tightly pleated and durable filter media. • Less clogging of point-of-use filters and sanitary fittings (shower units, tap outlets, etc.). • Indirectly improves the water flow as less clogging occurs, therefore less maintenance is needed for sanitary fittings. • The growth of bacteria in the filter system is prevented thanks to silver ions. • Reduces limescale deposits with anti-limescale balls, for gleaming sanitary fittings and kitchenware. • Silverlite stone increases the safety of the whole filter system. It contains silver ions and several minerals to prevent the growth of bacteria inside the filter system and contamination from outside the filter.

**Installation** • The Stiebel House PS-2 filter cartridge can be changed conveniently using the wrench that comes with the original purchase.

















**Safety** • The anti-limescale filter media are certified as safe for drinking water by NSF International with NSF Mark 60 for material safety.

**Filter** • 3 stages of carefully selected filter media.

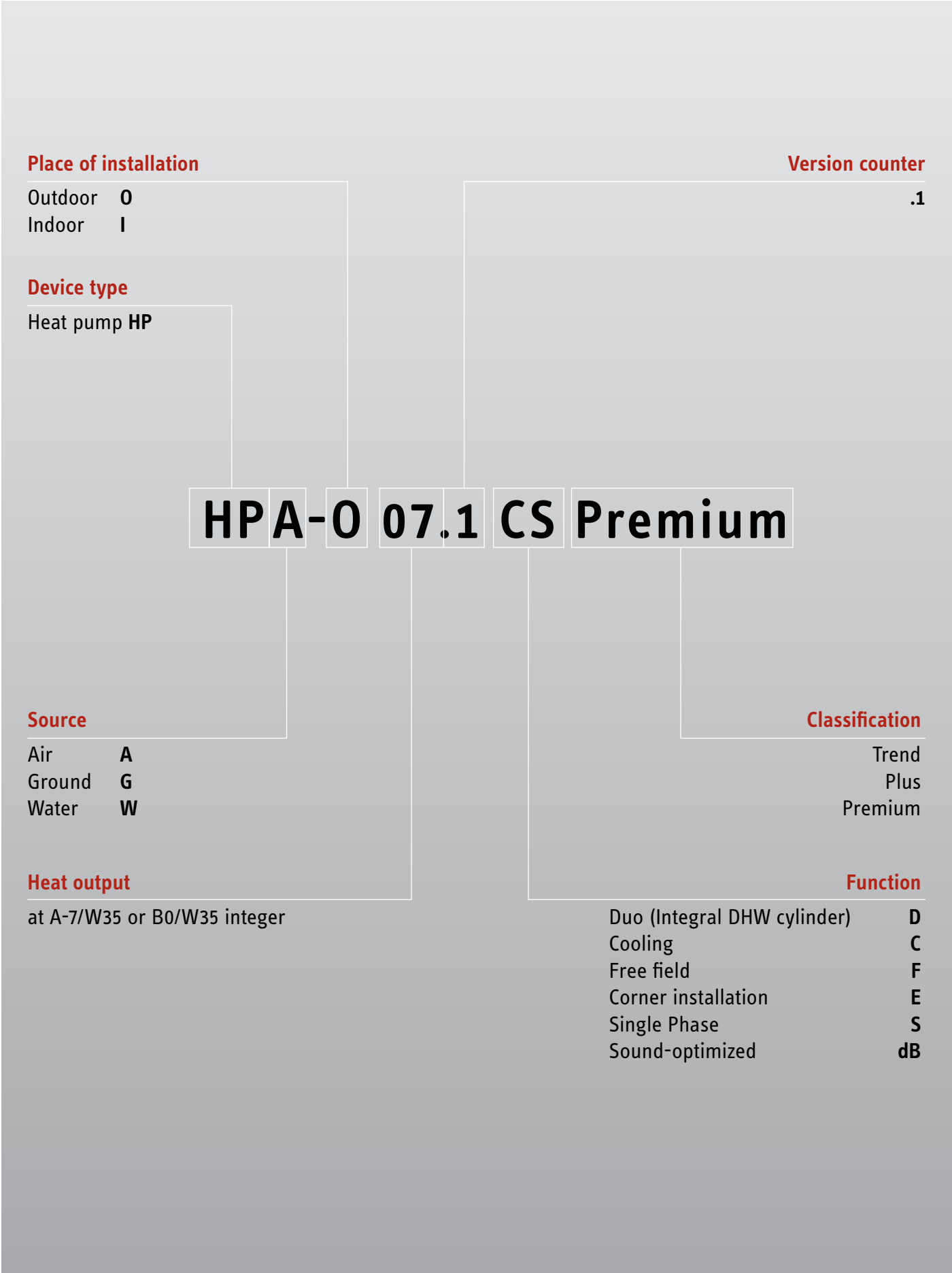
1. Polypropylene pleated sediment, range 1 – 10 µm: Reduces silt, rust, sediment and particles larger than its pore size.
2. Silverlite stone: The insoluble Silverlite stone consists of CaO, SiO<sub>2</sub>, AlO<sub>3</sub>, MgO and MnO, and is coated with silver ions. It has a strong antibacterial effect and prohibits germs from entering the filter media.
3. Anti-limescale balls: Reduce limescale deposits in the inlet water

		Stiebel House PS cartridge (EG)	Stiebel House PS cartridge (EX)
Part number		203742	239933



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## Air source heat pumps, outdoor installation – inverter

### Application areas



**Inverter**

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HPA-O Plus compact Set 1.1	203

# Air source heat pumps, outdoor installation – inverter

## Inverter

### HPA-O CS Premium



HPA-O 05.1 CS Premium

#### Benefits

- › The air source heat pump for heating and cooling is installed outdoors
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Suitable for energy modernisation projects, as the 75 °C flow temperature allows for high DHW temperatures all year round
- › Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- › Futureproof and eco-friendly refrigerant with high efficiency
- › Suitable for installation in walls and ceilings
- › High efficiency and low operating costs all year round, thanks to optimally matched components
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump with output-dependent control and inverter technology is designed as a compact mono block appliance for outdoor installation. It delivers the required heating output, ensures a reliable supply of domestic hot water and can be used for efficient cooling through circuit reversal. • A flow temperature of up to 75 °C is available for heating mode and DHW heating. Protection against legionella is ensured without the need for an electric auxiliary heater. • The heat pump can also be used to heat older buildings via radiators, as a flow temperature of 55 °C can still be achieved, even when there is a heavy frost (-25 °C outside temperature).

**Convenience features** • Very quiet operation due to encapsulated refrigerant circuit and acoustically isolated compressor. Contributing to the low sound power level are the modulating fans and the wide gaps between the evaporator fins which reduce air resistance. • High DHW temperatures are assured without the need for electric backup, even in the winter; this is because the heat pump works with high flow temperatures all year round. • The system can be integrated into a home network and controlled from a mobile device. For this, the on-site heat pump manager is combined with the Internet Service Gateway (ISG). With integral heat and electricity metering via refrigerant circuit data. • Mono energetic operation possible thanks to integral emergency/auxiliary heater. • The enamelled, corrosion-protected metal casing in alpine white is made from hot-dip galvanised, powder coated sheet steel. Fan grille, recessed grips and cover are made from weatherproof and UV-resistant plastic in aluminium white.

**Efficiency** • The refrigerant circuit works with the eco-friendly, futureproof refrigerant R454C. When combined with the optimally matched components, highly efficient operation is possible all year round. This efficiency is helped by demand-dependent defrosting via circuit reversal and the heating of the condensate pan via the refrigerant circuit. • The hydrophilic coating of the fan nozzle prevents ice formation, meaning that an electric heater is not required.

**Installation** • Integral anti-vibration mounts enable the heat pump to be connected directly to the heating system. • Simplified installation thanks to pivoting electrical connection panel. • Quick access to the condensate pan via cleaning aperture on the back of the casing.



		HPA-O 05.1 CS Premium	HPA-O 07.1 CS Premium
Part number		202666	202668
Specification			
Energy efficiency class, heat pump W35		A+++	A+++
Energy efficiency class, heat pump W55		A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+++	A+++
Heating output at A7/W35 (EN 14511)	kW	3.31	3.31
Heating output at A2/W35 (EN 14511)	kW	3.19	4.30
Heating output at A-7/W35 (EN 14511)	kW	4.97	6.87
COP at A7/W35 (EN 14511)		5.42	5.42
COP at A2/W35 (EN 14511)		4.60	4.30

Continue on next page >

## Air source heat pumps, outdoor installation – inverter

### Inverter

		HPA-O 05.1 CS Premium	HPA-O 07.1 CS Premium
COP at A-7/W35 (EN 14511)		3.45	2.93
Max. cooling capacity at A35/W7	kW	4.73	7.30
Cooling capacity at A35/W18 partial load	kW	3.37	4.94
Max. cooling capacity at A35/W18	kW	6.86	10.15
Max. cooling capacity factor at A35/W7		2.86	2.35
Cooling capacity factor at A35/W18 partial load		4.35	4.28
Max. cooling capacity factor at A35/W18		3.84	2.87
SCOP (EN 14825)		4.70	4.88
Sound power level (EN 12102)	dB(A)	48	48
Min./max. application limits for heat source	°C	-25/40	-25/40
Max. application limit on the heating side	°C	75	75
Height	mm	900	900
Width	mm	1270	1270
Depth	mm	593	593
Weight	kg	135	135
Rated voltage, compressor	V	230	230
Rated voltage, emergency/auxiliary heater	V	230	230
Refrigerant		R454C	R454C
<b>Required accessories</b>			
Part number		236000	236000
Type		WPM international	WPM international
Description		Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure
<b>Recommended accessories</b>			
Part number		229336	229336
Type		ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway
Part number		232805	232805
Type		HM Trend	HM Trend
Description		Hydraulic module	Hydraulic module
Part number		232964	232964
Type		SK 1	SK 1
Description		T-support	T-support
Part number		233622	233622
Type		AS-WP 1	AS-WP 1
Description		Hydraulic connection set	Hydraulic connection set
Part number		233623	233623
Type		AS-WP 2	AS-WP 2
Description		Hydraulic connection set	Hydraulic connection set
Part number		233826	233826
Type		HMS Trend	HMS Trend
Description		Hydraulic module	Hydraulic module
Part number		234722	234722
Type		WK 2	WK 2
Description		Wall mounting bracket	Wall mounting bracket
<b>DHW cylinder</b>			
Part number		202926	202926
Type		HSBB 180 Plus	HSBB 180 Plus
Description		Integral cylinder	Integral cylinder

Continue on next page >

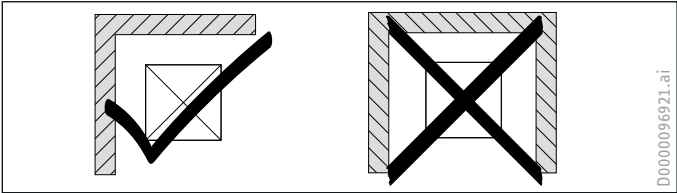
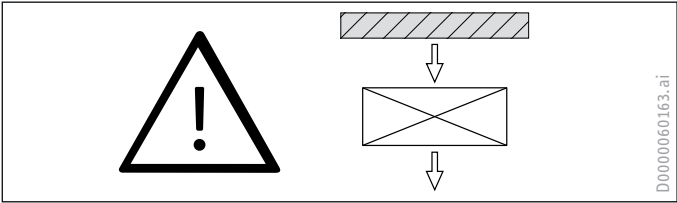
## Air source heat pumps, outdoor installation – inverter

### Inverter

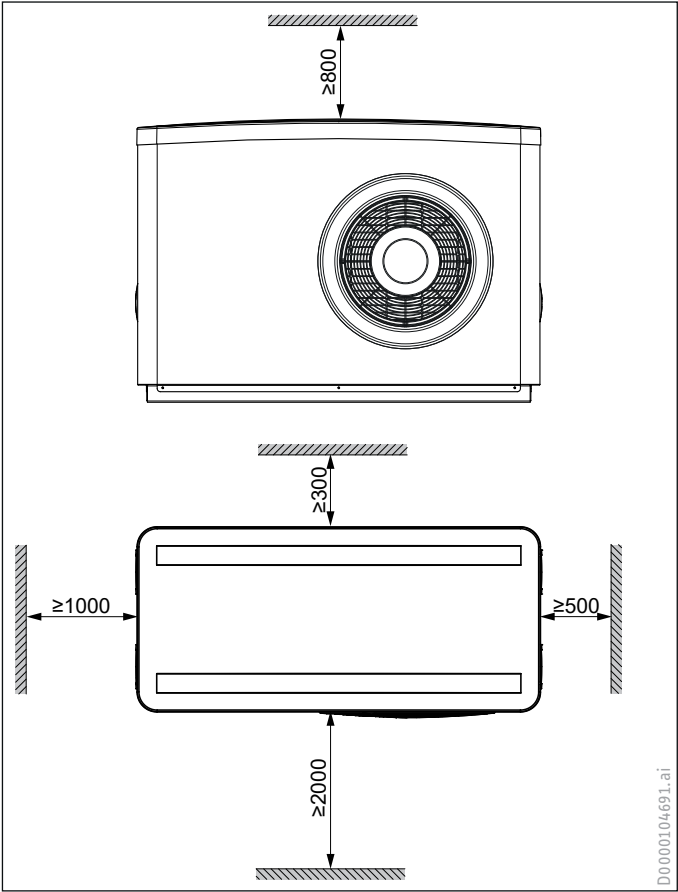
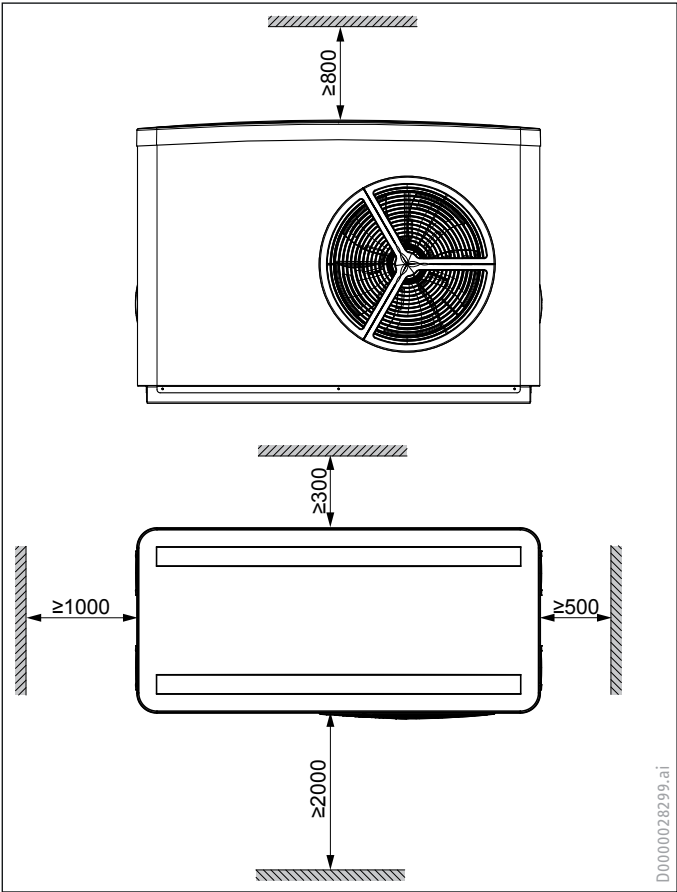
		HPA-O 05.1 CS Premium	HPA-O 07.1 CS Premium
<b>Part number</b>		<b>202927</b>	<b>202927</b>
Type		HSBC 180 Plus	HSBC 180 Plus
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>203082</b>	<b>203082</b>
Type		HSBC 180 S Plus	HSBC 180 S Plus
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>203084</b>	<b>203084</b>
Type		HSBB 180 S Plus	HSBB 180 S Plus
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>203801</b>	<b>203801</b>
Type		HSBC 300 cool	HSBC 300 cool
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229980</b>	<b>229980</b>
Type		SBS 601 W	SBS 601 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>233510</b>	<b>233510</b>
Type		HSBC 200	HSBC 200
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>234801</b>	<b>234801</b>
Type		HSBC 200 S	HSBC 200 S
Description		Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>			
<b>Part number</b>		<b>185458</b>	<b>185458</b>
Type		SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203763</b>	<b>203763</b>
Type		STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203764</b>	<b>203764</b>
Type		STH 415 Plus	STH 415 Plus
Description		Buffer cylinder	Buffer cylinder

Air source heat pumps, outdoor installation – inverter  
Inverter

Installation conditions



Minimum clearance diagram



# Air source heat pumps, outdoor installation – inverter

## Inverter

### HPA-O 7-13 Premium



HPA-O 10 Premium

#### Benefits

- › The air source heat pump for heating is installed outdoors
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Even at low outside temperatures, the enhanced (saturated) vapour injection achieves a high flow temperature
- › Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- › High efficiency and low operating costs all year round, thanks to optimally matched components
- › Low operating costs as mono mode DHW heating is possible
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump with output-dependent control and inverter technology is installed outdoors. The compact mono block design is also suitable for use in modernised older buildings thanks to the demand-dependent high flow temperatures.

**Convenience features** • Very quiet operation due to encapsulated refrigerant circuit and acoustically isolated compressor. Contributing to the low sound power level are the modulating fans and the wide gaps between the evaporator fins which reduce air resistance. The combined enhanced vapour injection/enhanced saturated vapour injection cools the scroll compressor at low outside temperatures, enabling a higher heating output/flow temperature to be achieved. • When combined with the Internet Service Gateway (ISG), the integral heat pump manager enables the system to be controlled in the home network or from a mobile device. With integral heat and electricity metering via refrigerant circuit data. • The emergency/auxiliary heater enables mono energetic operation. The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R410A. • The enamelled, corrosion-protected metal casing in alpine white is made from hot-dip galvanised, powder coated sheet steel. Fan grille, recessed grips and cover are made from weatherproof and UV-resistant plastic in aluminium white.

**Efficiency** • The waste heat from the inverter is used to raise the return temperature. In addition, demand-dependent defrosting by means of circuit reversal and the heating of the condensate pan by the refrigerant circuit increase the overall efficiency of the system. • The hydrophilic coating on the fan nozzle prevents ice from forming, meaning that no electric heating is required. • The hydrophilic coating on the fan nozzle prevents ice from forming, meaning that no electric heating is required.

**Installation** • Integral anti-vibration mounts for direct connection to the heating system. • The pivoting electrical connection panel makes installation easier. The condensate pan is easy to reach through a cleaning aperture on the back of the casing.



		HPA-O 10 Premium	HPA-O 13 Premium	HPA-O 13 S Premium
<b>Part number</b>		<b>238978</b>	<b>238982</b>	<b>238980</b>
<b>Specification</b>				
Energy efficiency class, heat pump W35		A+++	A+++	A++
Energy efficiency class, heat pump W55		A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++	A++
Heating output at A7/W35 (EN 14511)	kW	7.84	7.84	8.00
Heating output at A2/W35 (EN 14511)	kW	8.33	8.33	8.33
Heating output at A-7/W35 (EN 14511)	kW	9.54	12.86	12.86
COP at A7/W35 (EN 14511)		5.09	5.09	4.82
COP at A2/W35 (EN 14511)		4.14	4.14	4.14
COP at A-7/W35 (EN 14511)		3.26	2.93	2.98
SCOP (EN 14825)		4.70	4.63	4.39
Sound power level (EN 12102)	dB(A)	54	54	54

Continue on next page >

## Air source heat pumps, outdoor installation – inverter

### Inverter

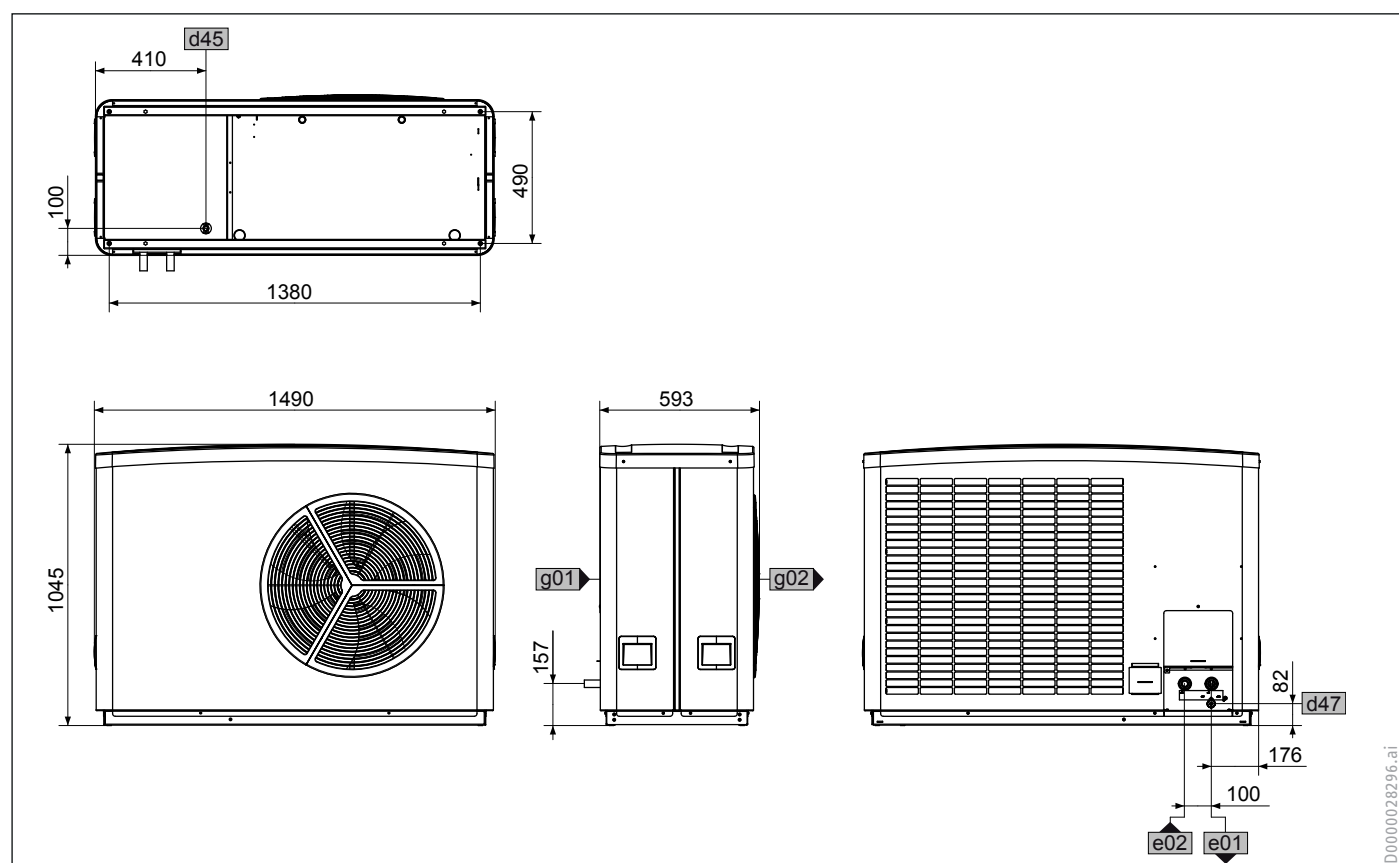
		HPA-O 10 Premium	HPA-O 13 Premium	HPA-O 13 S Premium
Min./max. application limits for heat source	°C	-20 / 40	-20 / 40	-20 / 40
Max. application limit on the heating side	°C	65	65	65
Height	mm	1045	1045	1045
Width	mm	1490	1490	1490
Depth	mm	593	593	593
Weight	kg	175	175	175
Rated voltage, compressor	V	400	400	230
Rated voltage, emergency/auxiliary heater	V	400	400	230
Refrigerant		R410A	R410A	R410A
<b>Required accessories</b>				
<b>Part number</b>		<b>236000</b>	<b>236000</b>	<b>236000</b>
Type		WPM international	WPM international	WPM international
Description		Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure
<b>Recommended accessories</b>				
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>232805</b>	<b>232805</b>	<b>232805</b>
Type		HM Trend	HM Trend	HM Trend
Description		Hydraulic module	Hydraulic module	Hydraulic module
<b>Part number</b>		<b>232964</b>	<b>232964</b>	<b>232964</b>
Type		SK 1	SK 1	SK 1
Description		T-support	T-support	T-support
<b>Part number</b>		<b>233622</b>	<b>233622</b>	<b>233622</b>
Type		AS-WP 1	AS-WP 1	AS-WP 1
Description		Hydraulic connection set	Hydraulic connection set	Hydraulic connection set
<b>Part number</b>		<b>233623</b>	<b>233623</b>	<b>233623</b>
Type		AS-WP 2	AS-WP 2	AS-WP 2
Description		Hydraulic connection set	Hydraulic connection set	Hydraulic connection set
<b>Part number</b>		<b>233826</b>	<b>233826</b>	<b>233826</b>
Type		HMS Trend	HMS Trend	HMS Trend
Description		Hydraulic module	Hydraulic module	Hydraulic module
<b>Part number</b>		<b>234722</b>	<b>234722</b>	<b>234722</b>
Type		WK 2	WK 2	WK 2
Description		Wall mounting bracket	Wall mounting bracket	Wall mounting bracket
<b>DHW cylinder</b>				
<b>Part number</b>		<b>203801</b>	<b>203801</b>	<b>203801</b>
Type		HSBC 300 cool	HSBC 300 cool	HSBC 300 cool
Description		Integral cylinder	Integral cylinder	Integral cylinder
<b>Part number</b>		<b>221360</b>	<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder	DHW cylinder
<b>Part number</b>		<b>221361</b>	<b>221361</b>	<b>221361</b>
Type		SBB 302 WP	SBB 302 WP	SBB 302 WP
Description		DHW cylinder	DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229981</b>	<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>233510</b>	<b>233510</b>	<b>233510</b>
Type		HSBC 200	HSBC 200	HSBC 200
Description		Integral cylinder	Integral cylinder	Integral cylinder

Continue on next page >

## Air source heat pumps, outdoor installation – inverter

### Inverter

		HPA-O 10 Premium	HPA-O 13 Premium	HPA-O 13 S Premium
<b>Part number</b>		<b>234801</b>	<b>234801</b>	<b>234801</b>
Type		HSBC 200 S	HSBC 200 S	HSBC 200 S
Description		Integral cylinder	Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>				
<b>Part number</b>		<b>185458</b>	<b>185458</b>	<b>185458</b>
Type		SBP 200 E	SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203763</b>	<b>203763</b>	<b>203763</b>
Type		STH 210 Plus	STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203764</b>	<b>203764</b>	<b>203764</b>
Type		STH 415 Plus	STH 415 Plus	STH 415 Plus
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>220824</b>	<b>220824</b>	<b>220824</b>
Type		SBP 400 E	SBP 400 E	SBP 400 E
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder

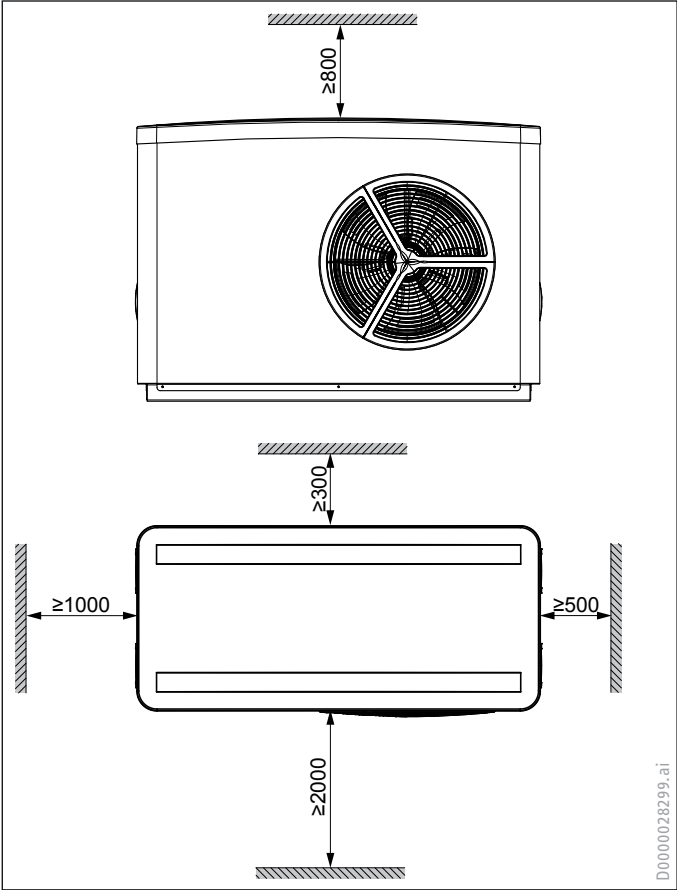


# Air source heat pumps, outdoor installation – inverter

## Inverter

		HPA-O 10 Premium	HPA-O 13 Premium	HPA-O 13 S Premium
d45 Condensate drain Diameter	mm	22	22	22
d47 Drain				
e01 Heating flow Connection type		Plug-in connection	Plug-in connection	Plug-in connection
e01 Heating flow Diameter	mm	28	28	28
e02 Heating return Connection type		Plug-in connection	Plug-in connection	Plug-in connection
e02 Heating return Diameter	mm	28	28	28
g01 Air intake				
g02 Air discharge				

Minimum clearance diagram



# Air source heat pumps, outdoor installation – inverter

## Inverter

### HPA-O 7-13 C Premium



HPA-O 10 C Premium

#### Benefits

- › The air source heat pump for heating and cooling is installed outdoors
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Even at low outside temperatures, the enhanced (saturated) vapour injection achieves a high flow temperature
- › Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- › Improved room climate in summer with active cooling using circuit reversal
- › High efficiency and low operating costs all year round, thanks to optimally matched components
- › Low operating costs as mono mode DHW heating is possible
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump with output-dependent control and inverter technology is designed as a compact mono block appliance for outdoor installation. • It delivers the required heating output, ensures a reliable supply of domestic hot water and can be used for efficient cooling through circuit reversal. • Its high flow temperatures mean that it can be used for heating and DHW in new and modernised buildings.

**Convenience features** • Quiet operation thanks to encapsulated refrigerant circuit and acoustically isolated compressor. Contributing to the low sound power level are the modulating fans and the wide gaps between the evaporator fins, which reduce air resistance. • The combined vapour/enhanced saturated vapour injection cools the scroll compressor at low outside temperatures, achieving maximum flow temperature all year round. • The system can be incorporated into a smart home network and controlled via a mobile device if the on-site heat pump controller is combined with the ISG Internet Service Gateway. • With integral heat and electricity metering via refrigerant circuit data. • The emergency/auxiliary heater enables mono energetic operation. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with eco-friendly, futureproof refrigerant R410A. • The metal casing is corrosion-protected with an alpine white finish and made from hot-dip galvanised, powder coated sheet steel. • Fan grille, recessed grips and cover are made from weatherproof and UV-resistant plastic in aluminium white.

**Efficiency** • The waste heat from the inverter is used for return temperature raising. This increases the energy efficiency of the overall system. This is further aided by on-demand defrosting through circuit reversal and heating of the condensate pan by the refrigerant circuit. • Demand-dependent, energy efficient defrosting through circuit reversal.

**Installation** • The integral anti-vibration mount enables the heat pump to be connected directly to the heating system. • The pivoting electrical connection panel makes installation easier. • The condensate pan is easy to reach through a cleaning aperture on the back of the casing.



		HPA-O 10 C Premium	HPA-O 13 CS Premium	HPA-O 13 C Premium
Part number		238979	238981	238983
<b>Specification</b>				
Energy efficiency class, heat pump W35		A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++	A++
Heating output at A7/W35 (EN 14511)	kW	7.84	8.00	7.84
Heating output at A2/W35 (EN 14511)	kW	8.33	8.33	8.33
Heating output at A-7/W35 (EN 14511)	kW	9.54	12.86	12.86
COP at A7/W35 (EN 14511)		5.09	4.82	5.09
COP at A2/W35 (EN 14511)		4.14	4.14	4.14
COP at A-7/W35 (EN 14511)		3.26	2.98	2.93
Max. cooling capacity at A35/W7	kW	11.49	14.88	14.88
Cooling capacity at A35/W18 partial load	kW	6.76	6.76	6.76

Continue on next page >

## Air source heat pumps, outdoor installation – inverter

### Inverter

		HPA-O 10 C Premium	HPA-O 13 CS Premium	HPA-O 13 C Premium
Max. cooling capacity at A35/W18	kW	15.26	17.06	17.06
Max. cooling capacity factor at A35/W7		2.53	2.38	2.38
Cooling capacity factor at A35/W18 partial load		3.76	3.76	3.76
Max. cooling capacity factor at A35/W18		3.12	2.83	2.83
SCOP (EN 14825)		4.87	4.53	4.76
Sound power level (EN 12102)	dB(A)	54	54	54
Min./max. application limits for heat source	°C	-20 / 40	-20 / 40	-20 / 40
Max. application limit on the heating side	°C	65	65	65
Height	mm	1045	1045	1045
Width	mm	1490	1490	1490
Depth	mm	593	593	593
Weight	kg	175	175	175
Rated voltage, compressor	V	400	230	400
Rated voltage, emergency/auxiliary heater	V	400	230	400
Refrigerant		R410A	R410A	R410A
<b>Required accessories</b>				
<b>Part number</b>		<b>236000</b>	<b>236000</b>	<b>236000</b>
Type		WPM international	WPM international	WPM international
Description		Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure
<b>Recommended accessories</b>				
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>232805</b>	<b>232805</b>	<b>232805</b>
Type		HM Trend	HM Trend	HM Trend
Description		Hydraulic module	Hydraulic module	Hydraulic module
<b>Part number</b>		<b>232964</b>	<b>232964</b>	<b>232964</b>
Type		SK 1	SK 1	SK 1
Description		T-support	T-support	T-support
<b>Part number</b>		<b>233622</b>	<b>233622</b>	<b>233622</b>
Type		AS-WP 1	AS-WP 1	AS-WP 1
Description		Hydraulic connection set	Hydraulic connection set	Hydraulic connection set
<b>Part number</b>		<b>233623</b>	<b>233623</b>	<b>233623</b>
Type		AS-WP 2	AS-WP 2	AS-WP 2
Description		Hydraulic connection set	Hydraulic connection set	Hydraulic connection set
<b>Part number</b>		<b>233826</b>	<b>233826</b>	<b>233826</b>
Type		HMS Trend	HMS Trend	HMS Trend
Description		Hydraulic module	Hydraulic module	Hydraulic module
<b>Part number</b>		<b>234722</b>	<b>234722</b>	<b>234722</b>
Type		WK 2	WK 2	WK 2
Description		Wall mounting bracket	Wall mounting bracket	Wall mounting bracket
<b>DHW cylinder</b>				
<b>Part number</b>		<b>203801</b>	<b>203801</b>	<b>203801</b>
Type		HSBC 300 cool	HSBC 300 cool	HSBC 300 cool
Description		Integral cylinder	Integral cylinder	Integral cylinder
<b>Part number</b>		<b>221360</b>	<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder	DHW cylinder

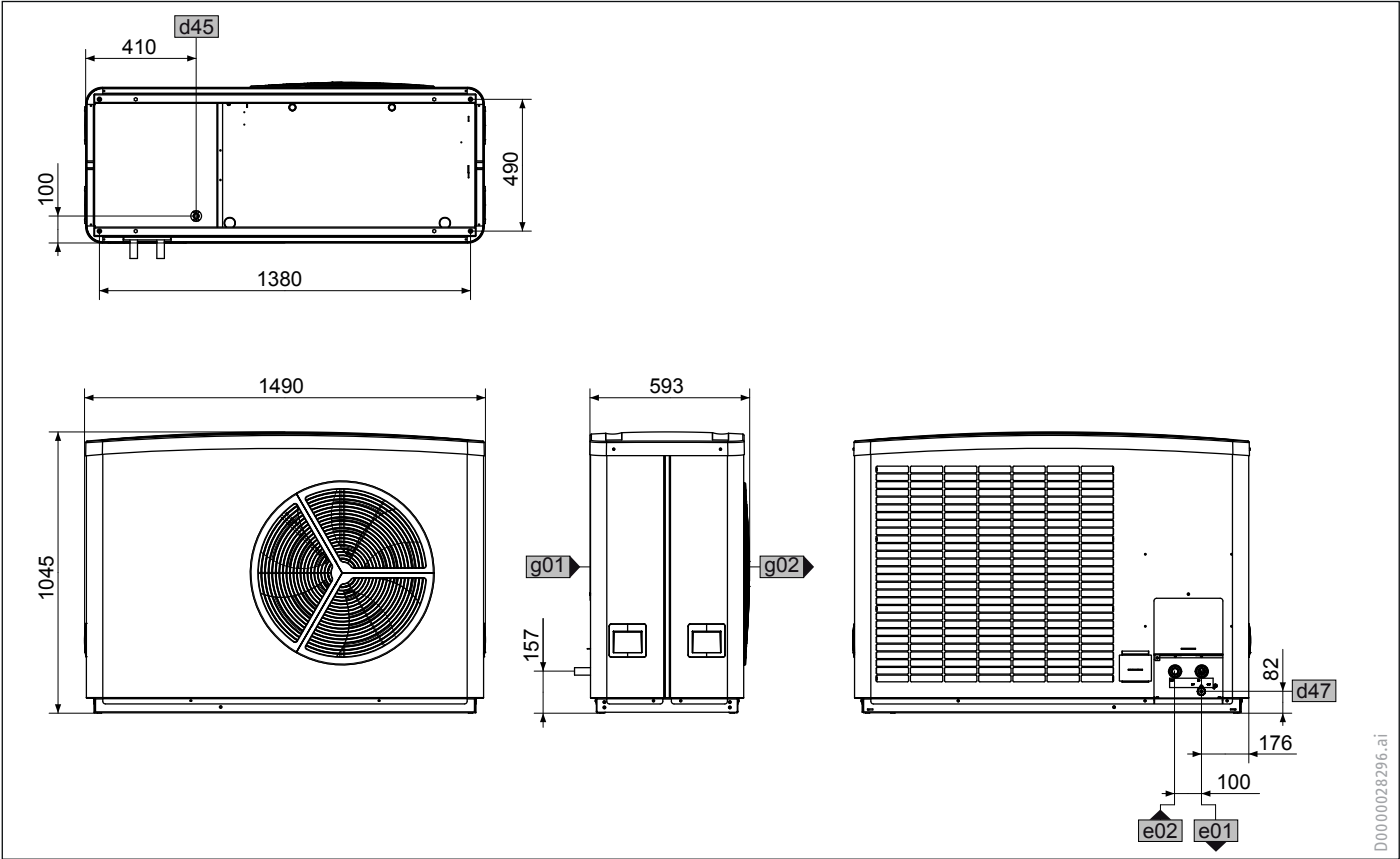
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## Air source heat pumps, outdoor installation – inverter

### Inverter

		HPA-O 10 C Premium	HPA-O 13 CS Premium	HPA-O 13 C Premium
<b>Part number</b>		<b>221361</b>	<b>221361</b>	<b>221361</b>
Type		SBB 302 WP	SBB 302 WP	SBB 302 WP
Description		DHW cylinder	DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229981</b>	<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>233510</b>	<b>233510</b>	<b>233510</b>
Type		HSBC 200	HSBC 200	HSBC 200
Description		Integral cylinder	Integral cylinder	Integral cylinder
<b>Part number</b>		<b>234801</b>	<b>234801</b>	<b>234801</b>
Type		HSBC 200 S	HSBC 200 S	HSBC 200 S
Description		Integral cylinder	Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>				
<b>Part number</b>		<b>185458</b>	<b>185458</b>	<b>185458</b>
Type		SBP 200 E	SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203763</b>	<b>203763</b>	<b>203763</b>
Type		STH 210 Plus	STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203764</b>	<b>203764</b>	<b>203764</b>
Type		STH 415 Plus	STH 415 Plus	STH 415 Plus
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>220824</b>	<b>220824</b>	<b>220824</b>
Type		SBP 400 E	SBP 400 E	SBP 400 E
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder

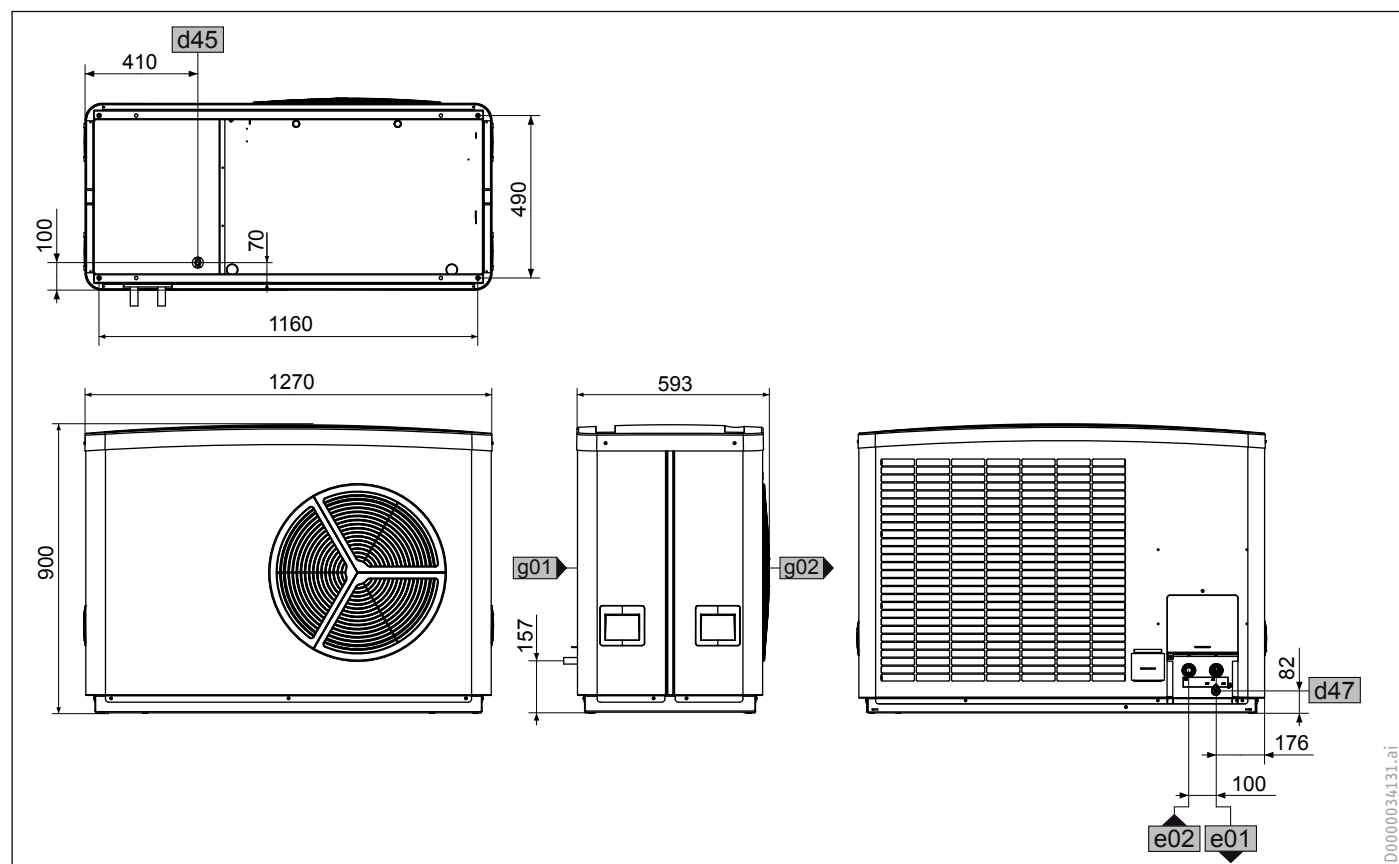
Air source heat pumps, outdoor installation – inverter  
Inverter



## Air source heat pumps, outdoor installation – inverter

### Inverter

HPA-O 10 C Premium  
HPA-O 13 C Premium



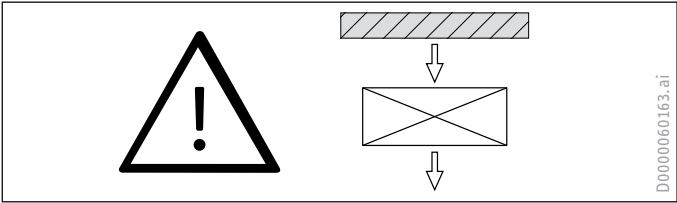
		HPA-O 10 C Premium	HPA-O 13 CS Premium	HPA-O 13 C Premium
d45 Condensate drain Diameter	mm	22	22	22
d47 Drain				
e01 Heating flow Connection type		Plug-in connection	Plug-in connection	Plug-in connection
e01 Heating flow Diameter	mm	28	28	28
e02 Heating return Connection type		Plug-in connection	Plug-in connection	Plug-in connection
e02 Heating return Diameter	mm	28	28	28
g01 Air intake				
g02 Air discharge				

# Air source heat pumps, outdoor installation – inverter

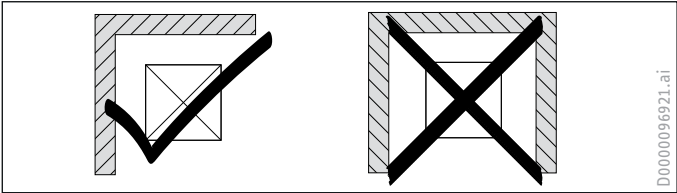
## Inverter

### Installation conditions

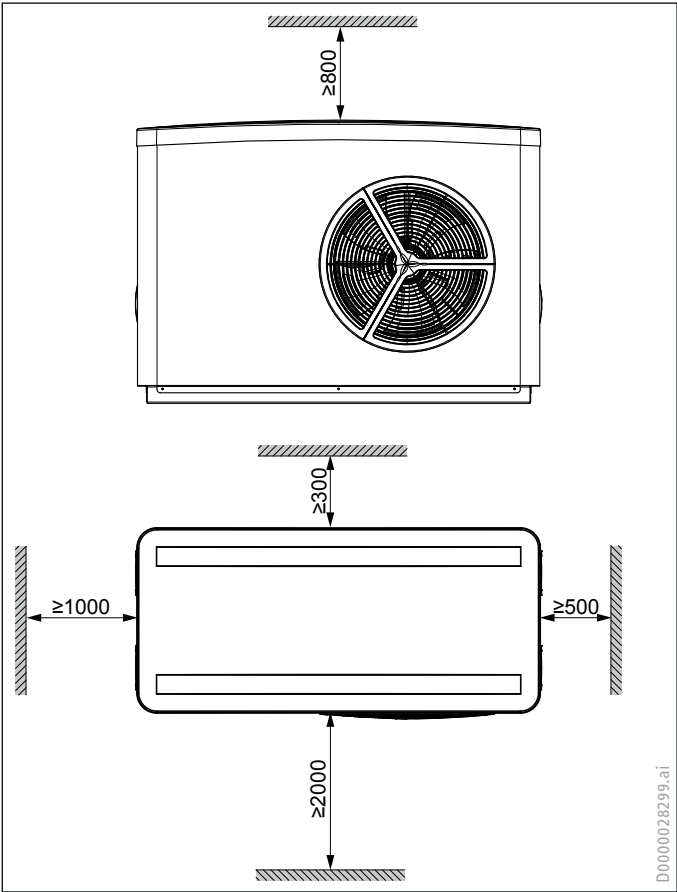
HPA-O 10 C Premium  
HPA-O 13 C Premium



HPA-O 10 C Premium  
HPA-O 13 C Premium



### Minimum clearance diagram



# Air source heat pumps, outdoor installation – inverter

## Inverter

### HPA-O 3-8 Plus



HPA-O 3 CS Plus

#### Benefits

- › The air source heat pump for heating and cooling new-builds is installed outdoors
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Reduced space requirement in installation room thanks to compact outdoor unit combined with various indoor modules
- › Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- › Freezing up of the compressor and blocking of the condensate drain are prevented by means of an 'anti-block condensate' (ABC design)
- › Can be integrated into the home network and operated via a smartphone
- › High DHW convenience with large mixed water volume due to high flow temperature
- › Straightforward hydraulic connection due to integral anti-vibration mounts
- › The air source heat pump is ideally suited to new builds

**Application** • Air source heat pump with output-dependent control and inverter technology. The compact mono block version is installed outdoors. The heat pump can be used in new builds and buildings with low system temperature for heating and DHW operation as well as for efficient cooling. • The heat pump is supplied in a kit with compact and perfectly matched indoor modules to ensure straightforward, space saving installation in the building.

**Convenience features** • Quiet operation thanks to the encapsulated refrigerant circuit and acoustically isolated compressor. With integral heat and electricity metering via refrigerant circuit data.

**Efficiency** • The waste heat from the inverter raises the return temperature which, together with demand-dependent defrosting by circuit reversal, significantly increases the overall efficiency of the system.

**Installation** • Thanks to the integral anti-vibration mounts, the heat pump can be connected directly to the heating system. An extensive range of accessories for effective drainage of condensate is available for both floorstanding and wall mounted installations. The electrical connection panel can be easily reached without having to open the appliance.



		HPA-O 3 CS Plus	HPA-O 4 CS Plus	HPA-O 6 CS Plus	HPA-O 8 CS Plus
Specification					
Energy efficiency class, heat pump W35		A++	A++	A+++	A+++
Energy efficiency class, heat pump W55		A+	A+	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A++	A++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+	A+	A++	A++
Heating output at A7/W35 (EN 14511)	kW	2.73	2.73	4.86	4.86
Heating output at A2/W35 (EN 14511)	kW	2.08	2.58	5.30	5.30
Heating output at A-7/W35 (EN 14511)	kW	3.20	3.96	6.00	7.80
COP at A7/W35 (EN 14511)		4.70	4.70	4.76	4.76
COP at A2/W35 (EN 14511)		3.70	3.64	3.80	3.80
COP at A-7/W35 (EN 14511)		2.81	2.73	2.98	2.91
Max. cooling capacity at A35/W7	kW	2.00	3.00	5.00	6.00
Cooling capacity at A35/W18 partial load	kW	1.50	1.50	2.50	3.00
Max. cooling capacity at A35/W18	kW	2.00	3.00	5.00	6.00
Max. cooling capacity factor at A35/W7		2.15	1.62	1.73	1.73
Cooling capacity factor at A35/W18 partial load		3.56	3.56	3.28	3.28

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## Air source heat pumps, outdoor installation – inverter

### Inverter

		HPA-O 3 CS Plus	HPA-O 4 CS Plus	HPA-O 6 CS Plus	HPA-O 8 CS Plus
Max. cooling capacity factor at A35/W18		3.12	3.12	2.88	2.88
SCOP (EN 14825)		4.23	4.15	4.50	4.50
Sound power level (EN 12102)	dB(A)	52	52	57	57
Min./max. application limits for heat source	°C	-20...40	-20...40	-20...40	-20...40
Max. application limit on the heating side	°C	60	60	60	60
Height	mm	740	740	812	812
Width	mm	1022	1022	1152	1152
Depth	mm	524	524	524	524
Weight	kg	62	62	91	91
Rated voltage, compressor	V	230	230	230	230
Refrigerant		R410A	R410A	R410A	R410A
<b>Recommended accessories</b>					
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>236693</b>	<b>236693</b>	<b>236693</b>	<b>236693</b>
Type		SK 2	SK 2	SK 2	SK 2
Description		T-support	T-support	T-support	T-support
<b>Part number</b>		<b>238686</b>	<b>238686</b>	<b>238686</b>	<b>238686</b>
Type		WK 1.1	WK 1.1	WK 1.1	WK 1.1
Description		Wall mounting bracket	Wall mounting bracket	Wall mounting bracket	Wall mounting bracket

Only available in the set.

The necessary T-support or wall mounting bracket is available as an accessory

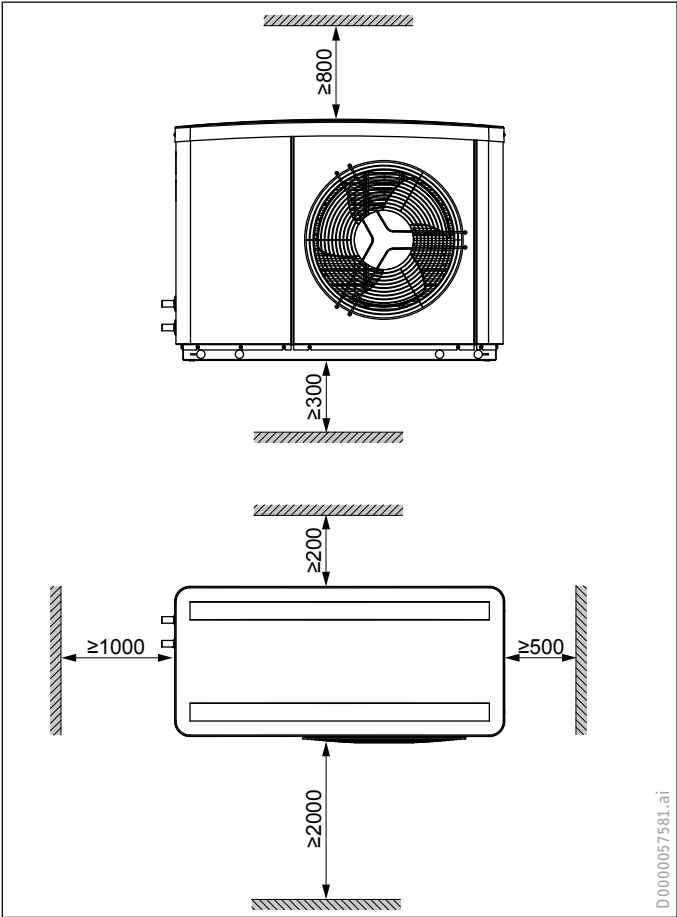
## Inverter



		HPA-O 3 CS Plus	HPA-O 4 CS Plus	HPA-O 6 CS Plus	HPA-O 8 CS Plus
a10 Appliance Height	mm	740	740	812	812
a20 Appliance Width	mm	1,022	1,022	1,152	1,152
b01 Entry electrical cables					
d45 Condensate drain					
e01 Heating flow Diameter	mm	22	22	22	22
e02 Heating return Diameter	mm	22	22	22	22
g01 Air intake					
g02 Air discharge					

Air source heat pumps, outdoor installation – inverter  
Inverter

Minimum clearance diagram



HPA-O CS Plus flex Set



Benefits

- › The air source heat pump is ideally suited to new builds
- › Depending on the cylinder, also suitable for higher DHW demand
- › Can be combined with any cylinder range
- › The mono block heat pump is installed outdoors and its variable speed compressor ensures perfectly matched heating output
- › Hydraulic module with all relevant heating components including heat pump manager for integrating the heat pump and cylinder



HPA-O 3 CS Plus flex Set

**Application** • Mono block heat pump with output-dependent control, in combination with a hydraulic module. • This configuration makes it possible to meet different requirements with regard to DHW convenience, through free combination with DHW cylinders. • The hydraulic connection can be achieved by flexibly adding buffer cylinders. • The following components are already integrated: a highly efficient circulation pump for the heating and DHW sides, electric emergency/auxiliary heater, heating expansion vessel, safety valve, quick-action air vent valve, 3/2-way diverter valve and the heat pump manager for controlling the system.

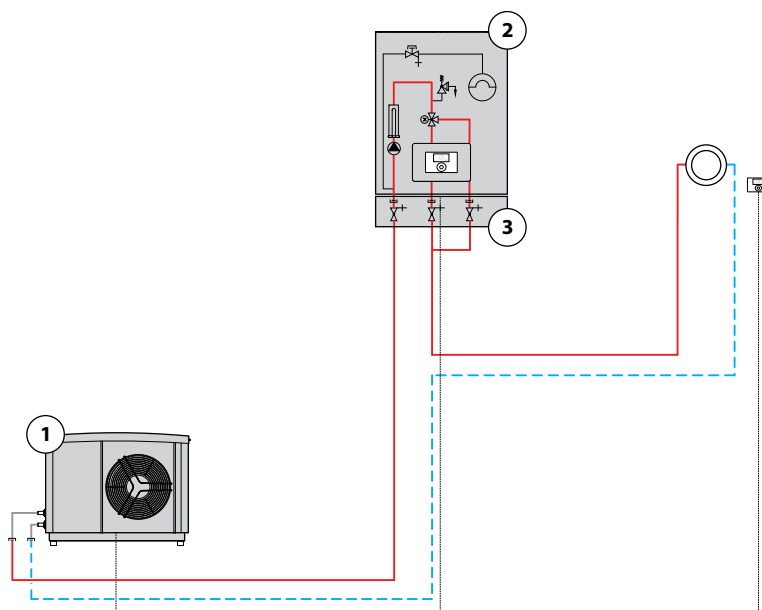
		HPA-O 3 CS Plus flex Set	HPA-O 3 CS Plus flex Set S	HPA-O 4 CS Plus flex Set	HPA-O 4 CS Plus flex Set S
Part number		239051	238988	239052	238989

		HPA-O 6 CS Plus flex Set	HPA-O 6 CS Plus flex Set S	HPA-O 8 CS Plus flex Set	HPA-O 8 CS Plus flex Set S
Part number		239053	238990	239054	238991

## Air source heat pumps, outdoor installation – inverter

### Inverter



Set components		HPA-O 3 CS Plus flex Set	HPA-O 3 CS Plus flex Set S	HPA-O 4 CS Plus flex Set	HPA-O 4 CS Plus flex Set S
1	Type	HPA-O 3 CS Plus	HPA-O 3 CS Plus	HPA-O 4 CS Plus	HPA-O 4 CS Plus
	Pce	1	1	1	1
	Page				
2	Type	HM Trend	HMS Trend	HM Trend	HMS Trend
	Pce	1	1	1	1
	Page				
3	Type	AS-HM Trend	AS-HM Trend	AS-HM Trend	AS-HM Trend
	Pce	1	1	1	1
	Page				
Set components		HPA-O 6 CS Plus flex Set	HPA-O 6 CS Plus flex Set S	HPA-O 8 CS Plus flex Set	HPA-O 8 CS Plus flex Set S
1	Type	HPA-O 6 CS Plus	HPA-O 6 CS Plus	HPA-O 8 CS Plus	HPA-O 8 CS Plus
	Pce	1	1	1	1
	Page				
2	Type	HM Trend	HMS Trend	HM Trend	HMS Trend
	Pce	1	1	1	1
	Page				
3	Type	AS-HM Trend	AS-HM Trend	AS-HM Trend	AS-HM Trend
	Pce	1	1	1	1
	Page				

Further information about the set components can be found under the respective product.

The necessary T-support or wall mounting bracket is available as an accessory. More details regarding set contents can be found under the relevant product

The necessary plinth or wall mounting bracket is available as an accessory (Product: 238988, 238989, 238990, 238991)

# Air source heat pumps, outdoor installation – inverter

## Inverter

### HPA-O Plus compact D Set 1.1



#### Benefits

- › The air source heat pump is ideally suited to new builds
- › Thanks to flow separation, the heating system can be integrated easily and very safely
- › Small footprint as just one indoor and outdoor unit is required
- › The mono block heat pump is installed outdoors and its variable speed compressor ensures perfectly matched heating output
- › DHW cylinder and buffer cylinder with integral hydraulic components including heat pump manager for heat pumps and heating circuit connection in a single casing

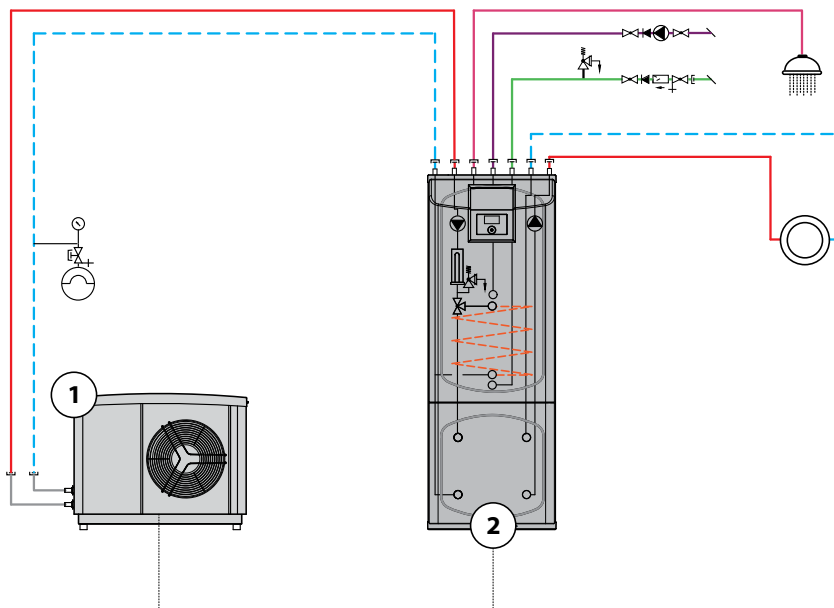
**Application** • The mono block heat pump with output-dependent control has a highly integrated indoor unit to minimise the installation area. • The following components are already integrated: DHW cylinder, parallel buffer cylinder, cylinder charging pump, heating circuit pump, 3/2-way diverter valve, safety valve and electric emergency/auxiliary heater. The heat pump manager, which controls the appliance, is also built in.

HPA-O 3 CS Plus compact D Set 1.1

		HPA-O 3 CS Plus compact D Set 1.1	HPA-O 3 CS Plus compact D Set S 1.1	HPA-O 4 CS Plus compact D Set 1.1	HPA-O 4 CS Plus compact D Set S 1.1
Part number		204282	204277	204274	204278

		HPA-O 6 CS Plus compact D Set 1.1	HPA-O 6 CS Plus compact D Set S 1.1	HPA-O 8 CS Plus compact D Set 1.1	HPA-O 8 CS Plus compact D Set S 1.1
Part number		204275	204279	204276	204280



Set components		HPA-O 3 CS Plus compact D Set 1.1	HPA-O 3 CS Plus compact D Set S 1.1	HPA-O 4 CS Plus compact D Set 1.1	HPA-O 4 CS Plus compact D Set S 1.1
1	Type	HPA-O 3 CS Plus	HPA-O 3 CS Plus	HPA-O 4 CS Plus	HPA-O 4 CS Plus
	Pce	1	1	1	1
	Page				
2	Type	HSBC 180 Plus	HSBC 180 S Plus	HSBC 180 Plus	HSBC 180 S Plus
	Pce	1	1	1	1
	Page				

Set components		HPA-O 6 CS Plus compact D Set 1.1	HPA-O 6 CS Plus compact D Set S 1.1	HPA-O 8 CS Plus compact D Set 1.1	HPA-O 8 CS Plus compact D Set S 1.1
1	Type	HPA-O 6 CS Plus	HPA-O 6 CS Plus	HPA-O 8 CS Plus	HPA-O 8 CS Plus
	Pce	1	1	1	1
	Page				

Continue on next page >

## Air source heat pumps, outdoor installation – inverter Inverter

Set components		HPA-O 6 CS Plus compact D Set 1.1	HPA-O 6 CS Plus compact D Set S 1.1	HPA-O 8 CS Plus compact D Set 1.1	HPA-O 8 CS Plus compact D Set S 1.1
2	Type	HSBC 180 Plus	HSBC 180 S Plus	HSBC 180 Plus	HSBC 180 S Plus
	Pce	1	1	1	1
	Page				

Further information about the set components can be found under the respective product.  
The necessary T-support or wall mounting bracket is available as an accessory.

# Air source heat pumps, outdoor installation – inverter

## Inverter

### WPL 19/24 A



WPL 19 A Set

#### Benefits

- › The air source heat pump for heating older buildings is installed outdoors
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Even at low outside temperatures, the enhanced (saturated) vapour injection achieves a high flow temperature
- › Optimised for replacement of 13/18/23 E air source heat pumps installed outdoors
- › Because of the high flow temperature all year round, also suitable for modernisation projects and for DHW heating
- › Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- › Can be integrated into the home network and operated via a smartphone
- › High efficiency and low operating costs all year round, thanks to optimally matched components
- › Low operating costs as mono mode DHW heating is possible

**Application** • The compact air source heat pump with output-dependent control and inverter technology is installed in outdoor areas and is also suitable for installation in open spaces. • It can be used for modernisation, since it provides a flow temperature of up to 65 °C all year round for heating operation and DHW heating.

**Convenience features** • Very quiet operation due to the encapsulated refrigerant circuit and acoustically isolated compressor. The modulating fan and the wide gaps between the evaporator fins, which create low air resistance, also help to minimise the sound power level. • With integral heat and electricity metering via refrigerant circuit data. • Mono energetic operation possible with emergency/auxiliary heater. • The metal casing is corrosion-protected. It is made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.

**Efficiency** • High flow temperature all year round according to demand, as the combined enhanced vapour injection/enhanced saturated vapour injection cools the scroll compressor at low outside temperatures. This allows operation without an auxiliary heater. • The waste heat from the inverter is used to raise the return temperature. In addition, demand-dependent defrosting by means of circuit reversal and the heating of the condensate pan by the refrigerant circuit increase the overall efficiency of the system.

**Installation** • The heat pump with integral anti-vibration mounts is directly connected to the heating system.



		WPL 19 A Set	WPL 24 A Set
<b>Part number</b>		<b>236412</b>	<b>236413</b>
<b>Specification</b>			
Energy efficiency class, heat pump W35		A+++	A+++
Energy efficiency class, heat pump W55		A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++
Heating output at A7/W35 (EN 14511)	kW	6.70	7.41
Heating output at A2/W35 (EN 14511)	kW	7.41	9.04
Heating output at A-7/W35 (EN 14511)	kW	9.91	13.45
COP at A7/W35 (EN 14511)		4.99	4.72
COP at A2/W35 (EN 14511)		4.12	4.00
COP at A-7/W35 (EN 14511)		3.32	3.00
SCOP (EN 14825)		4.60	4.58
Sound power level (EN 12102)	dB(A)	59	59
Min./max. application limits for heat source	°C	-20/40	-20/40
Max. application limit on the heating side	°C	65	65
Height	mm	1434	1434

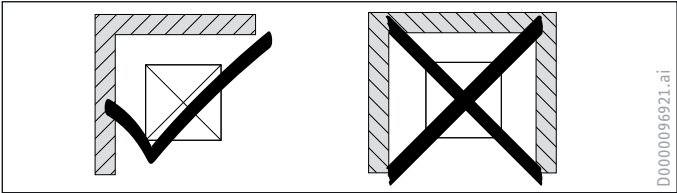
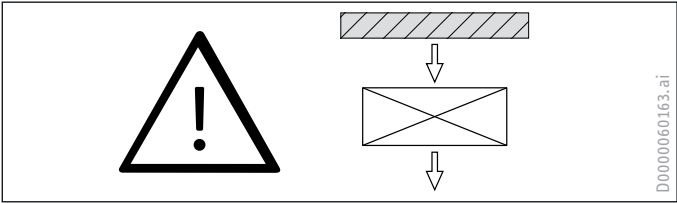
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## Air source heat pumps, outdoor installation – inverter

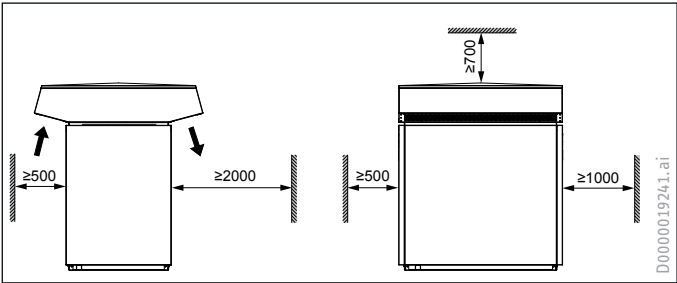
### Inverter

		WPL 19 A Set	WPL 24 A Set
Width	mm	1240	1240
Depth	mm	1280	1280
Weight	kg	279	279
Rated voltage, compressor	V	400	400
Rated voltage, emergency/auxiliary heater	V	400	400
Refrigerant		R410A	R410A
<b>Recommended accessories</b>			
<b>Part number</b>		<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>232805</b>	<b>232805</b>
Type		HM Trend	HM Trend
Description		Hydraulic module	Hydraulic module
<b>Part number</b>		<b>233826</b>	<b>233826</b>
Type		HMS Trend	HMS Trend
Description		Hydraulic module	Hydraulic module
<b>DHW cylinder</b>			
<b>Part number</b>		<b>203801</b>	<b>203801</b>
Type		HSBC 300 cool	HSBC 300 cool
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>233510</b>	<b>233510</b>
Type		HSBC 200	HSBC 200
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>234801</b>	<b>234801</b>
Type		HSBC 200 S	HSBC 200 S
Description		Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>			
<b>Part number</b>		<b>185458</b>	<b>185458</b>
Type		SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203763</b>	<b>203763</b>
Type		STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder

Installation conditions



Minimum clearance diagram



# Air source heat pumps, outdoor installation – inverter

## Inverter

### HPA-O Plus compact Set 1.1



#### Benefits

- › The air source heat pump is ideally suited to new builds
- › Cost optimised solution with all required system components incl. DHW cylinder
- › Small footprint as just one indoor and outdoor unit is required
- › The mono block heat pump is installed outdoors and its variable speed compressor ensures perfectly matched heating output
- › Compact DHW cylinder and buffer cylinder with integral hydraulic components including heat pump manager for heat pumps and heating circuit connection in a single casing

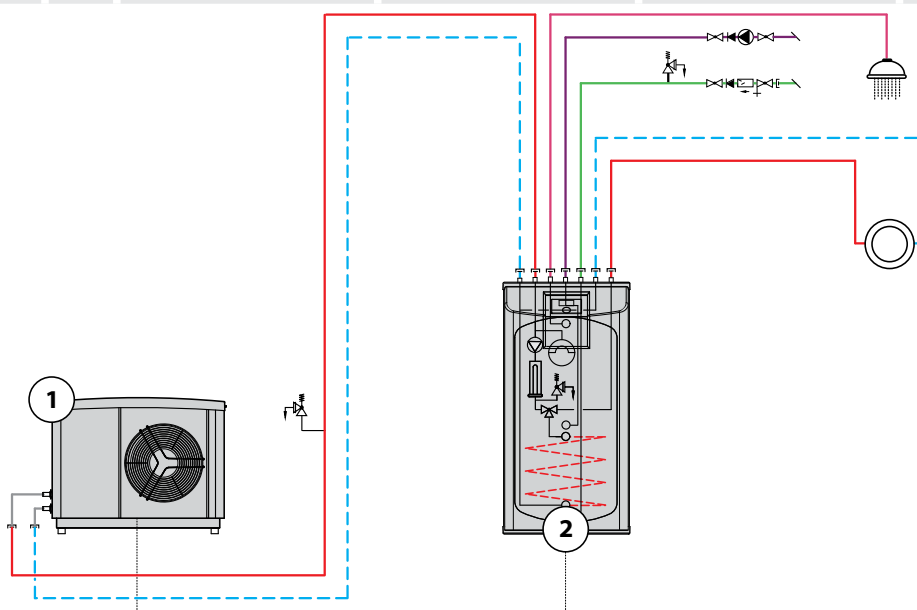
**Application** • The mono block heat pump with output-dependent control is equipped with a DHW cylinder and all hydraulic components for the heating installation. • Standard delivery also includes: circulation pump, 3/2-way diverter valve, safety valve and electric emergency/auxiliary heater. • The integral heat pump manager controls the appliance.

### HPA-O 3 CS Plus compact Set 1.1

		HPA-O 3 CS Plus compact Set 1.1	HPA-O 3 CS Plus compact Set S 1.1	HPA-O 4 CS Plus compact Set 1.1	HPA-O 4 CS Plus compact Set S 1.1
Part number		204267	204271	204268	204281

		HPA-O 6 CS Plus compact Set 1.1	HPA-O 6 CS Plus compact Set S 1.1	HPA-O 8 CS Plus compact Set 1.1	HPA-O 8 CS Plus compact Set S 1.1
Part number		204269	204272	204270	204273



Set components		HPA-O 3 CS Plus compact Set 1.1	HPA-O 3 CS Plus compact Set S 1.1	HPA-O 4 CS Plus compact Set 1.1	HPA-O 4 CS Plus compact Set S 1.1
1	Type	HPA-O 3 CS Plus	HPA-O 3 CS Plus	HPA-O 4 CS Plus	HPA-O 4 CS Plus
	Pce	1	1	1	1
	Page				
2	Type	HSBB 180 Plus	HSBB 180 S Plus	HSBB 180 Plus	HSBB 180 S Plus
	Pce	1	1	1	1
	Page				

Set components		HPA-O 6 CS Plus compact Set 1.1	HPA-O 6 CS Plus compact Set S 1.1	HPA-O 8 CS Plus compact Set 1.1	HPA-O 8 CS Plus compact Set S 1.1
1	Type	HPA-O 6 CS Plus	HPA-O 4 CS Plus	HPA-O 8 CS Plus	HPA-O 8 CS Plus
	Pce	1	1	1	1
	Page				

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Air source heat pumps, outdoor installation – inverter

Inverter

Set components		HPA-O 6 CS Plus compact Set 1.1	HPA-O 6 CS Plus compact Set S 1.1	HPA-O 8 CS Plus compact Set 1.1	HPA-O 8 CS Plus compact Set S 1.1
2	Type	HSBB 180 Plus	HSBB 180 S Plus	HSBB 180 Plus	HSBB 180 S Plus
	Pce	1	1	1	1
	Page				

Further information about the set components can be found under the respective product.  
The necessary T-support or wall mounting bracket is available as an accessory.

## Air source heat pumps, outdoor installation – fixed speed

6

<b>Fixed speed</b>	
WPL 47/57	207
WPL 13-23 E	210
WPL 13-23 cool	214

# Air source heat pumps, outdoor installation – fixed speed

## Fixed speed

WPL 47/57



WPL 47 Set A

### Benefits

- › The air source heat pump for heating is installed outdoors
- › Low installed height
- › With integral heat and electricity meters
- › Electronic expansion valve
- › Suitable for cascade connection with high output demand
- › Suitable for use in residential and commercial buildings due to high output
- › Extremely versatile due to cascade control and dual mode integration
- › High reliability thanks to robust single compressor design

**Application** • The air source heat pump is installed outdoors. Its high output up to 24 kW as a single appliance and up to 144 kW in a cascade makes it suitable for apartment buildings and commercial applications. • The casing design allows flexible installation, even in open spaces.

**Convenience features** • Quiet operation thanks to the encapsulated refrigerant circuit and acoustically isolated compressor. The wide gaps between the evaporator fins create low air resistance and, in combination with the modulating fan, result in a low sound power level. • In combination with the ISG Internet Service Gateway (optional accessory), the heat pump controller (accessory) can be used to control the system via the home network or a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • Fault messages can be processed externally via a 230 V signal. • Can be integrated into a building automation system if required using a software extension. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R407C.

**Efficiency** • Demand-dependent, energy efficient defrosting through circuit reversal. • The condensate pan is heated by the refrigerant circuit to enable efficient defrosting.

**Installation** • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.



		WPL 47 Set A	WPL 57 Set A
Part number		228836	228837
Specification			
Energy efficiency class, heat pump W35		A++	A+
Energy efficiency class, heat pump W55		A+	A+
Energy efficiency class, composite system (heat pump + controller) W35		A++	A+
Energy efficiency class, composite system (heat pump + controller) W55		A+	A+
Heating output at A7/W35 (EN 14511)	kW	26.83	31.01
Heating output at A2/W35 (EN 14511)	kW	24.82	29.81
Heating output at A-7/W35 (EN 14511)	kW	21.68	24.02
COP at A7/W35 (EN 14511)		3.94	3.59
COP at A2/W35 (EN 14511)		3.43	3.30
COP at A-7/W35 (EN 14511)		3.05	2.84
SCOP (EN 14825)		3.85	3.475
Sound power level (EN 12102)	dB(A)	67	69
Min./max. application limits for heat source	°C	-20 / 40	-20 / 40
Max. application limit on the heating side	°C	60	60
Height	mm	1485	1485

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## Air source heat pumps, outdoor installation – fixed speed

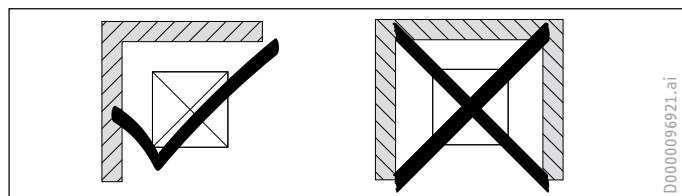
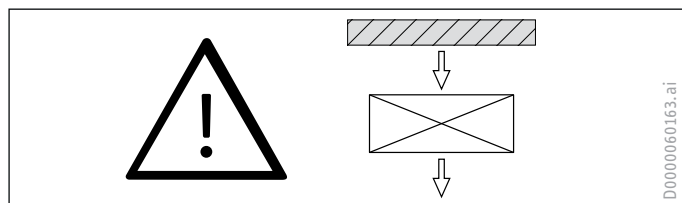
### Fixed speed

		WPL 47 Set A	WPL 57 Set A
Width	mm	1860	1860
Depth	mm	2040	2040
Weight	kg	540	600
Rated voltage, compressor	V	400	400
Rated voltage, emergency/auxiliary heater	V	400	400
Rated voltage, control unit	V	230	230
Refrigerant		R407C	R407C
Colour		white	white
<b>Required accessories</b>			
<b>Part number</b>		<b>236000</b>	<b>236000</b>
Type		WPM international	WPM international
Description		Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure
<b>Recommended accessories</b>			
<b>Part number</b>		<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway
<b>DHW cylinder</b>			
<b>Part number</b>		<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>229982</b>	<b>229982</b>
Type		SBS 1001 W	SBS 1001 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
<b>Buffer cylinder</b>			
<b>Part number</b>		<b>185459</b>	<b>185459</b>
Type		SBP 700 E	SBP 700 E
Description		Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203765</b>	<b>203765</b>
Type		STH 720 Plus	STH 720 Plus
Description		Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>227564</b>	<b>227564</b>
Type		SBP 1000 E	SBP 1000 E
Description		Buffer cylinder	Buffer cylinder

# Air source heat pumps, outdoor installation – fixed speed

## Fixed speed

### Installation conditions



# Air source heat pumps, outdoor installation – fixed speed

## Fixed speed

### WPL 13-23 E



WPL 13 E

#### Benefits

- › Air source heat pump for heating
- › High heating output at low outside temperatures through enhanced vapour injection
- › Higher COP through optimised refrigerant circuit
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump for heating and DHW can be installed either outdoors or indoors as a mono block and has enhanced vapour injection.

**Convenience features** • Quiet operation thanks to twin anti-vibration compressor mounts. • Enhanced vapour injection cools the scroll compressor at low outside temperatures, thereby achieving a higher heating output. • In combination with the ISG Internet Service Gateway, the on-site heat pump controller can be used to control the system in the home network or via a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • An emergency/auxiliary heater enables mono energetic operation. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R407C

**Efficiency** • Time optimised and energy efficient defrosting through circuit reversal with a 4/2-way valve. • For efficient defrosting, the condensate pan is also heated by the refrigerant circuit.

**Installation** • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.



		WPL 13 E	WPL 18 E	WPL 23 E
Part number		227756	227757	227758
<b>Specification</b>				
Energy efficiency class, heat pump W35		A++	A++	A+
Energy efficiency class, heat pump W55		A+	A+	A+
Energy efficiency class, composite system (heat pump + controller) W35		A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W55		A+	A+	A+
Heating output at A7/W35 (EN 14511)	kW	8.93	12.90	16.56
Heating output at A2/W35 (EN 14511)	kW	8.09	11.30	15.73
Heating output at A-7/W35 (EN 14511)	kW	6.77	9.72	13.21
COP at A7/W35 (EN 14511)		4.35	4.46	3.99
COP at A2/W35 (EN 14511)		3.76	3.73	3.62
COP at A-7/W35 (EN 14511)		3.20	3.27	3.14
SCOP (EN 14825)		3.85	4.00	3.775
Sound power level (EN 12102)	dB(A)	64	65	65
Sound power level, outdoor installation (EN 12102)	dB(A)	64	65	65
Min./max. application limits for heat source	°C	-20...40	-20...40	-20...40
Max. application limit on the heating side	°C	60	60	60
Height	mm	1116	1116	1116
Width	mm	784	784	784
Depth	mm	1182	1182	1182

Continue on next page >

## Air source heat pumps, outdoor installation – fixed speed

### Fixed speed

		WPL 13 E	WPL 18 E	WPL 23 E
Weight	kg	205	212	211
Rated voltage, compressor	V	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400
Rated voltage, control unit	V	230	230	230
Refrigerant		R407C	R407C	R407C
Colour		white	white	
<b>Required accessories</b>				
<b>Part number</b>		<b>074412</b>	<b>074412</b>	<b>074412</b>
Type		Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I
Description		Casing components for indoor installation	Casing components for indoor installation	Casing components for indoor installation
<b>Part number</b>		<b>074413</b>	<b>074413</b>	<b>074413</b>
Type		Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A
Description		Casing components for outdoor installation	Casing components for outdoor installation	Casing components for outdoor installation
<b>Part number</b>		<b>201721</b>	<b>201721</b>	<b>201721</b>
Type		LSWP 560-3 SG	LSWP 560-3 SG	LSWP 560-3 SG
Description		Thermally and sound insulated air hose	Thermally and sound insulated air hose	Thermally and sound insulated air hose
<b>Part number</b>		<b>233837</b>	<b>233837</b>	<b>233837</b>
Type		AWG 560 H-SR	AWG 560 H-SR	AWG 560 H-SR
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Recommended accessories</b>				
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>232805</b>	<b>232805</b>	
Type		HM Trend	HM Trend	
Description		Hydraulic module	Hydraulic module	
<b>Part number</b>		<b>233826</b>	<b>233826</b>	
Type		HMS Trend	HMS Trend	
Description		Hydraulic module	Hydraulic module	
<b>DHW cylinder</b>				
<b>Part number</b>		<b>203801</b>	<b>203801</b>	
Type		HSBC 300 cool	HSBC 300 cool	
Description		Integral cylinder	Integral cylinder	
<b>Part number</b>		<b>221360</b>		
Type		SBB 301 WP		
Description		DHW cylinder		
<b>Part number</b>			<b>221361</b>	<b>221361</b>
Type			SBB 302 WP	SBB 302 WP
Description			DHW cylinder	DHW cylinder
<b>Part number</b>				<b>221362</b>
Type				SBB 401 WP SOL
Description				DHW cylinder
<b>Part number</b>		<b>229981</b>	<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>233510</b>	<b>233510</b>	
Type		HSBC 200	HSBC 200	
Description		Integral cylinder	Integral cylinder	
<b>Part number</b>		<b>234801</b>	<b>234801</b>	
Type		HSBC 200 S	HSBC 200 S	
Description		Integral cylinder	Integral cylinder	

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Air source heat pumps, outdoor installation – fixed speed

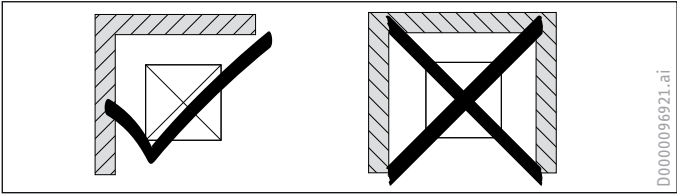
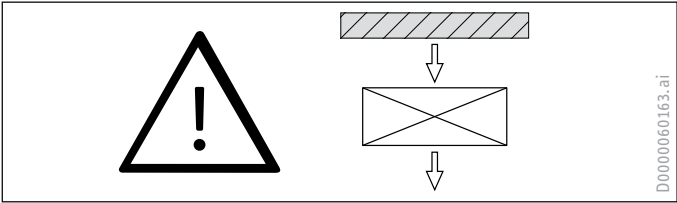
Fixed speed

		WPL 13 E	WPL 18 E	WPL 23 E
Buffer cylinder				
Part number		185458		
Type		SBP 200 E		
Description		Buffer cylinder		
Part number		203763		
Type		STH 210 Plus		
Description		Buffer cylinder		
Part number		203764	203764	203764
Type		STH 415 Plus	STH 415 Plus	STH 415 Plus
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
Part number			220824	220824
Type			SBP 400 E	SBP 400 E
Description			Buffer cylinder	Buffer cylinder

The housing required for indoor or outdoor installation is available as an accessory.

Wall outlets and air hoses for indoor installation must be ordered separately and are available as accessories in various versions.Preliminary specification (Product: 227756, 227758)

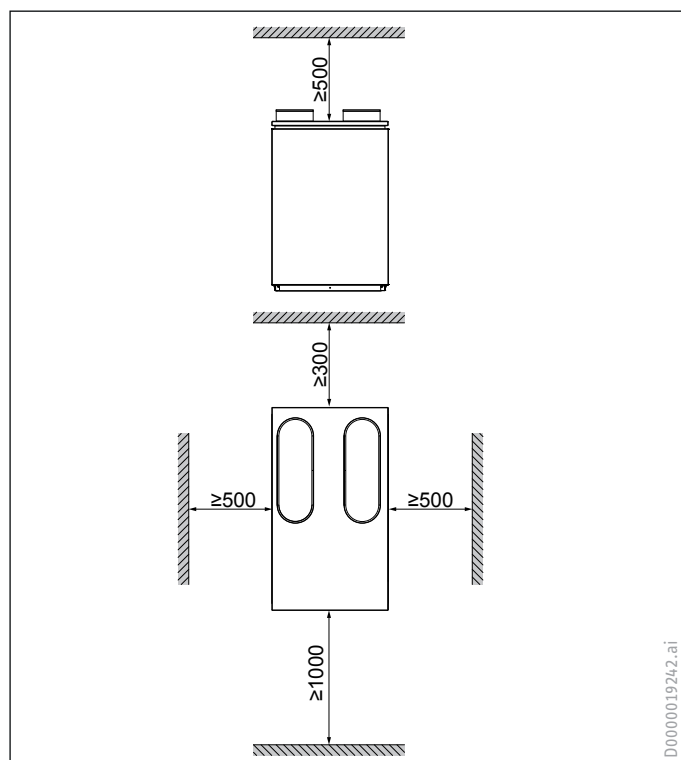
Installation conditions



## Air source heat pumps, outdoor installation – fixed speed

### Fixed speed

Minimum clearance diagram



# Air source heat pumps, outdoor installation – fixed speed

## Fixed speed

### WPL 13-23 cool



WPL 13 cool

#### Benefits

- › Air source heat pump for heating and cooling
- › High heating output at low outside temperatures through enhanced vapour injection
- › Higher COP through optimised refrigerant circuit
- › Active cooling through circuit reversal
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump can be installed either outdoors or indoors as a mono block and has enhanced vapour injection. • It can be used for heating and DHW operation, as well as for efficient cooling through circuit reversal.

**Convenience features** • Quiet operation thanks to twin anti-vibration compressor mounts. • Enhanced vapour injection cools the scroll compressor at low outside temperatures, thereby achieving a higher heating output. • The built-in 4/2-way valve allows the refrigerant circuit to be switched from heating to cooling mode. • In combination with the ISG Internet Service Gateway, the on-site heat pump controller can be used to control the system in the home network or via a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • An emergency/auxiliary heater enables mono energetic operation. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R407C

**Efficiency** • Time optimised and energy efficient defrosting through circuit reversal with a 4/2-way valve. • For efficient defrosting, the condensate pan is also heated by the refrigerant circuit.

**Installation** • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.



Accessories necessarily  
223401, 223402

		WPL 13 cool	WPL 18 cool	WPL 23 cool
Part number		223400	223401	223402
Specification				
Energy efficiency class, heat pump W35		A+	A++	A+
Energy efficiency class, heat pump W55		A+	A+	A+
Energy efficiency class, composite system (heat pump + controller) W35		A++	A++	A+
Energy efficiency class, composite system (heat pump + controller) W55		A+	A++	A+
Heating output at A7/W35 (EN 14511)	kW	9.01	12.30	14.45
Heating output at A2/W35 (EN 14511)	kW	8.10	11.30	14.14
Heating output at A-7/W35 (EN 14511)	kW	6.60	9.72	12.27
COP at A7/W35 (EN 14511)		4.00	4.30	3.52
COP at A2/W35 (EN 14511)		3.40	3.70	3.23
COP at A-7/W35 (EN 14511)		3.00	3.20	2.91
SCOP (EN 14825)		3.75	4.075	3.475
Sound power level (EN 12102)	dB(A)	64	65	65
Sound power level, outdoor installation (EN 12102)	dB(A)	62	65	65
Min./max. application limits for heat source	°C	-20...40	-20...40	-20...40
Max. application limit on the heating side	°C	60	60	60
Height	mm	1116	1116	1116
Width	mm	784	784	784
Depth	mm	1182	1182	1182

Continue on next page >

## Air source heat pumps, outdoor installation – fixed speed

### Fixed speed

		WPL 13 cool	WPL 18 cool	WPL 23 cool
Weight	kg	210	214	220
Rated voltage, compressor	V	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400
Rated voltage, control unit	V	230	230	230
Refrigerant		R407C	R407C	R407C
Colour		white	white	
<b>Required accessories</b>				
<b>Part number</b>		<b>074412</b>	<b>074412</b>	<b>074412</b>
Type		Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I
Description		Casing components for indoor installation	Casing components for indoor installation	Casing components for indoor installation
<b>Part number</b>		<b>074413</b>	<b>074413</b>	<b>074413</b>
Type		Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A
Description		Casing components for outdoor installation	Casing components for outdoor installation	Casing components for outdoor installation
<b>Part number</b>		<b>201721</b>	<b>201721</b>	<b>201721</b>
Type		LSWP 560-3 SG	LSWP 560-3 SG	LSWP 560-3 SG
Description		Thermally and sound insulated air hose	Thermally and sound insulated air hose	Thermally and sound insulated air hose
<b>Part number</b>		<b>233837</b>	<b>233837</b>	<b>233837</b>
Type		AWG 560 H-SR	AWG 560 H-SR	AWG 560 H-SR
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Recommended accessories</b>				
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>232805</b>	<b>232805</b>	
Type		HM Trend	HM Trend	
Description		Hydraulic module	Hydraulic module	
<b>Part number</b>		<b>233826</b>	<b>233826</b>	
Type		HMS Trend	HMS Trend	
Description		Hydraulic module	Hydraulic module	
<b>DHW cylinder</b>				
<b>Part number</b>		<b>221360</b>		
Type		SBB 301 WP		
Description		DHW cylinder		
<b>Part number</b>			<b>221361</b>	<b>221361</b>
Type			SBB 302 WP	SBB 302 WP
Description			DHW cylinder	DHW cylinder
<b>Part number</b>				<b>221362</b>
Type				SBB 401 WP SOL
Description				DHW cylinder
<b>Buffer cylinder</b>				
<b>Part number</b>		<b>185458</b>		
Type		SBP 200 E		
Description		Buffer cylinder		
<b>Part number</b>		<b>203763</b>		
Type		STH 210 Plus		
Description		Buffer cylinder		
<b>Part number</b>			<b>203764</b>	<b>203764</b>
Type			STH 415 Plus	STH 415 Plus
Description			Buffer cylinder	Buffer cylinder

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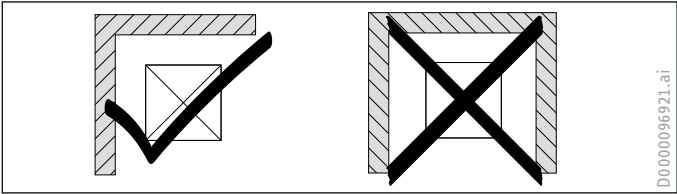
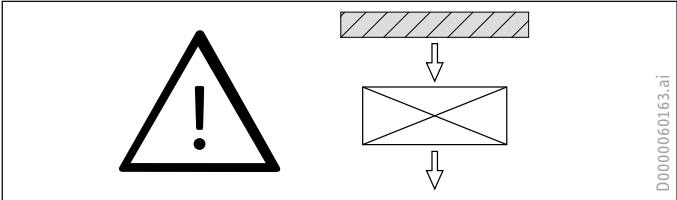
# Air source heat pumps, outdoor installation – fixed speed

## Fixed speed

		WPL 13 cool	WPL 18 cool	WPL 23 cool
Part number			220824	220824
Type			SBP 400 E	SBP 400 E
Description			Buffer cylinder	Buffer cylinder

The housing required for indoor or outdoor installation is available as an accessory.  
 Wall outlets and air hoses for indoor installation must be ordered separately and are available as accessories in various versions.

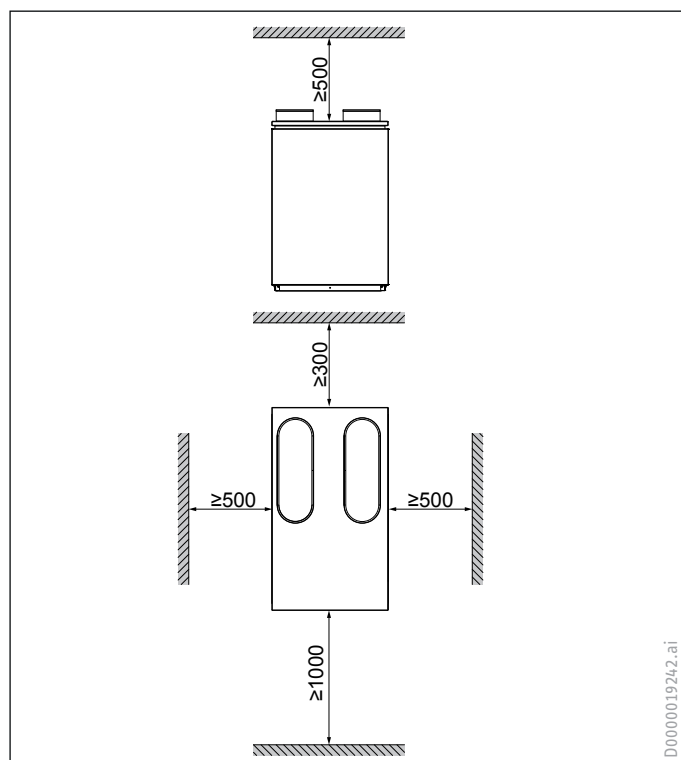
### Installation conditions



## Air source heat pumps, outdoor installation – fixed speed

### Fixed speed

#### Minimum clearance diagram



<b>Installation accessories</b>	
Accessories	219

Accessories for air source heat pumps installed outdoors

Installation accessories

AS WP



Connection set for supply lines from the ground. The white painted cover protects against the elements.

AS-WP 1

		AS-WP 1	AS-WP 2
Part number		233622	233623
Specification			
Connection		32 x 2.9 mm	G 1 1/4

WK



Benefits

› Includes ribbon heater to keep condensate connection free from frost (Product: 234722)

Wall mounting bracket made from corrosion-protected galvanised steel. Including height-adjustable wall rail and an appliance rail for aligning the heat pump.

WK 2

		WK 2
Part number		234722
Specification		
Weight load	kg	175
Heated length	mm	2000
Connecting of connecting cable	mm	2000

# Accessories for air source heat pumps installed outdoors

## Installation accessories

### WK 1.1



Wall mounting bracket made from corrosion-protected galvanised steel. Height-adjustable wall rail, the heat pump can be aligned with the aid of the appliance rail.

WK 1.1

		WK 1.1
Part number		238686
Specification		
Weight load	kg	120

Standard delivery includes: 2 pce, incl. anti-vibration mounts.

### SK 1



Stainless steel, T-shaped support for concreting in, for positioning outdoors.

SK 1

		SK 1
Part number		232964
Specification		
Height	mm	950
Weight load	kg	175
Heated length	mm	1000
Connecting of connecting cable	mm	2000

Standard delivery includes: 2 pce, incl. anti-vibration mounts and self-limiting heating cable.  
An installation aid for a defined clearance dimension.

## Accessories for air source heat pumps installed outdoors

### Installation accessories

#### SK 2



Bracket for installation on a strip foundation, white powder coated.

SK 2

		SK 2
Part number		236693
Specification		
Height	mm	303
Weight load	kg	91

Standard delivery includes: 2 pce, incl. screws for securing the heat pump to the bracket.

#### HZB-1/2



Heating cable to keep the condensate drain of air source heat pumps frost-free. Self-limiting and flexible. Two copper wires serve as the supply cable. The outer jacket is constructed in UV- and moisture-resistant TPE-O.

HZB-1

		HZB-1	HZB-2
Part number		232978	232979
Specification			
Rated output per metre at 10 °C outdoor air temperature	W	10	10
Heated length	mm	1000	2000
Rated voltage	V	230	230
Power supply		1/N/PE	1/N/PE
Min. handling/installation temperature	°C	-45	-45
Max. ambient temperature	°C	65	65
Min. bending radius	cm	2.50	2.50

Accessories for air source heat pumps installed outdoors

Installation accessories

ZVK-WPL A



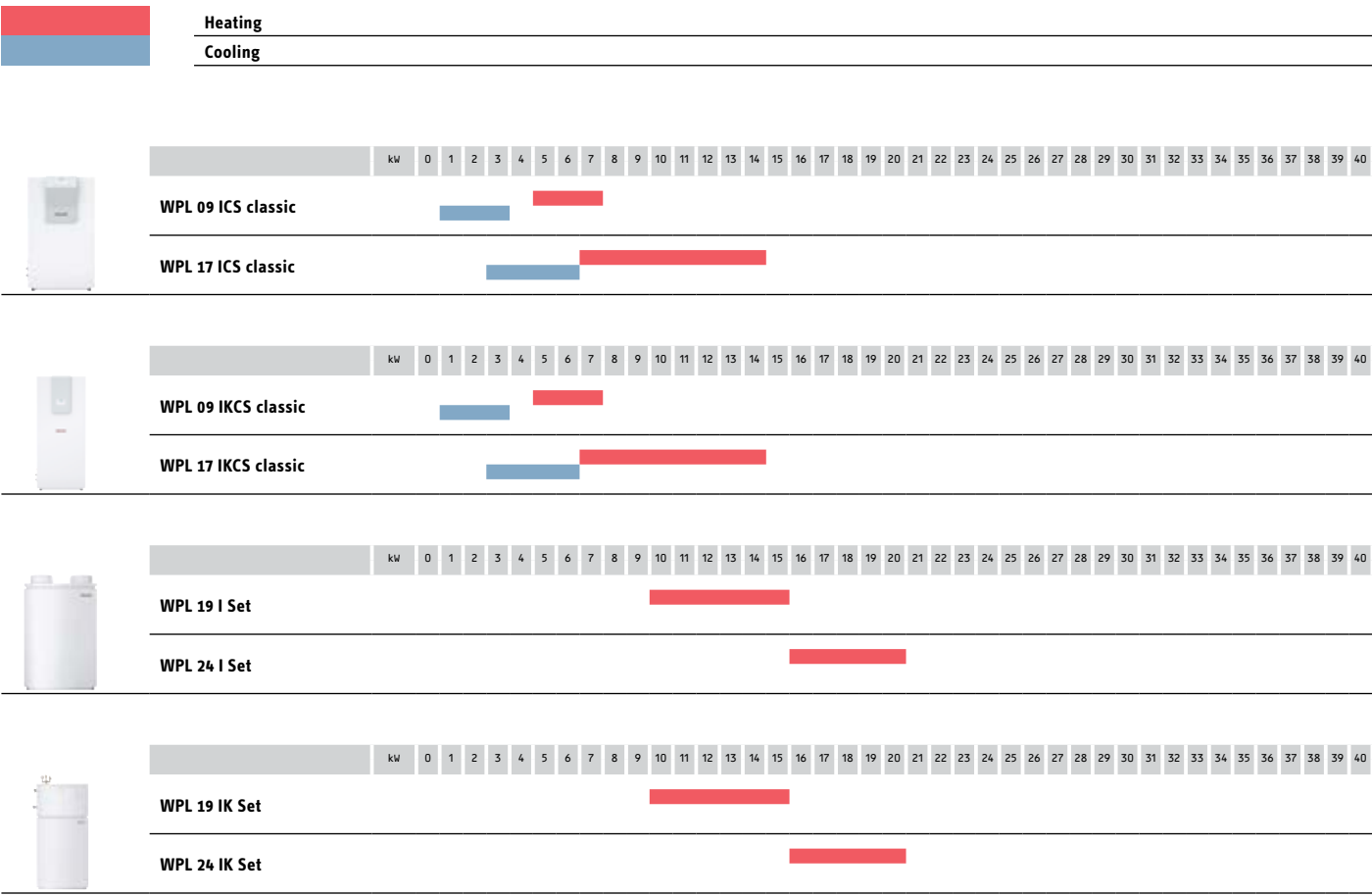
Corrosion-protected sheet metal casing, made from galvanised and powder coated sheet steel, for air source heat pumps installed outdoors.

Zubehör WPL 13/18/23 A

		Zubehör WPL 13/18/23 A
Part number		074413
Specification		
Colour		white

# Air source heat pumps, indoor installation – inverter

## Application areas



**Inverter**

WPL ICS classic	225
WPL IKCS classic	229
WPL ICS/IKCS classic comfort Set	232
WPL ICS/IKCS classic compact plus Set	233
WPL 19/24 I	235
WPL 19/24 IK	238

# Air source heat pumps, indoor installation – inverter

## Inverter

### WPL ICS classic



WPL 09 ICS classic

#### Benefits

- › Heating and cooling of new builds with an air source heat pump installed indoors.
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Suitable for densely built-up areas, as it is installed indoors and so produces virtually no sound emissions outdoors
- › Straightforward connection: air hoses with quick-fit adaptors reduce installation effort
- › Improved room climate in summer with active cooling using circuit reversal
- › Easy and time saving installation with high level of integration
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump with output-dependent control and inverter technology is installed indoors. It can be used for heating and DHW operation, as well as efficient cooling via circuit reversal. Ideal for new builds or buildings with a low system temperature.

**Convenience features** • Very quiet operation due to encapsulated refrigerant circuit and acoustically isolated compressor. Fully automatic, weather-compensated control of the heating system by the integral heat pump manager. In combination with the optional Internet Service Gateway (ISG), the system can be controlled via the home network or a mobile device. With integral heat and electricity metering via refrigerant circuit data. • Automatic control of the integral heating circuit pump subject to the flow and return temperature. • The following components are integrated as standard: the electric emergency/auxiliary heater for mono energetic operation and pasteurisation, the diverter valve for DHW heating and the safety valve with discharge hose. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R410A.

**Efficiency** • The waste heat from the inverter is used to raise the return temperature, which increases the overall efficiency of the system. Demand-dependent, energy efficient defrosting through circuit reversal.

**Installation** • Direct connection to the heating system thanks to the integral anti-vibration mounts. Preassembled flexible air hoses with quick-fit adaptors simplify installation. The air hoses are connected on the top of the appliance. No manual trimming or sealing is necessary.



		WPL 09 ICS classic	WPL 17 ICS classic
Part number		236375	236376
Specification			
Energy efficiency class, heat pump W35		A+++	A++
Energy efficiency class, heat pump W55		A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++
Heating output at A7/W35 (EN 14511)	kW	2.06	4.27
Heating output at A2/W35 (EN 14511)	kW	2.64	5.02
Heating output at A-7/W35 (EN 14511)	kW	4.23	8.02
COP at A7/W35 (EN 14511)		4.68	4.74
COP at A2/W35 (EN 14511)		3.83	3.83
COP at A-7/W35 (EN 14511)		3.16	2.63
Cooling capacity at A35/W18 partial load	kW	1.85	3.60
Max. cooling capacity at A35/W18	kW	3.00	6.00

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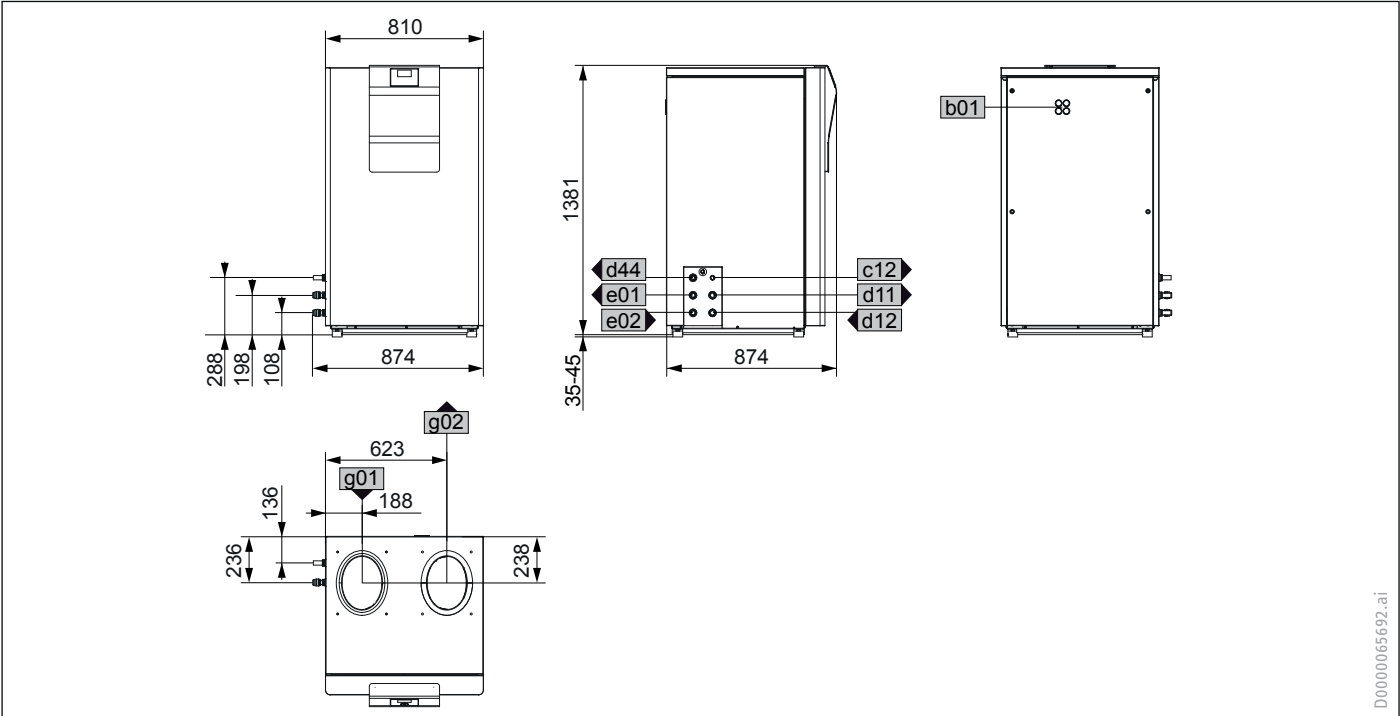
## Air source heat pumps, indoor installation – inverter

### Inverter

		WPL 09 ICS classic	WPL 17 ICS classic
Cooling capacity factor at A35/W18 partial load		3.96	2.78
Max. cooling capacity factor at A35/W18		2.22	1.83
SCOP (EN 14825)		4.525	4.25
Sound power level (EN 12102)	dB(A)	45	51
Min./max. application limits for heat source	°C	-20/35	-20/35
Max. application limit on the heating side	°C	60	60
Height	mm	1381	1381
Width	mm	874	874
Depth	mm	874	874
Weight	kg	173	175
Refrigerant		R410A	R410A
<b>Required accessories</b>			
Part number		<b>236931</b>	<b>236931</b>
Type		LSWP 315-2 S AWG SR Set	LSWP 315-2 S AWG SR Set
Description		Air routing accessories, air intake/air discharge, including wall outlets and air hoses	Air routing accessories, air intake/air discharge, including wall outlets and air hoses
<b>Recommended accessories</b>			
Part number		<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway
<b>DHW cylinder</b>			
Part number		<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder
Part number		<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
Part number		<b>236684</b>	<b>236684</b>
Type		HSBC 200 L	HSBC 200 L
Description		Integral cylinder	Integral cylinder
Part number		<b>238826</b>	<b>238826</b>
Type		HSBC 300 L cool	HSBC 300 L cool
Description		Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>			
Part number		<b>185458</b>	<b>185458</b>
Type		SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder
Part number		<b>203763</b>	<b>203763</b>
Type		STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder

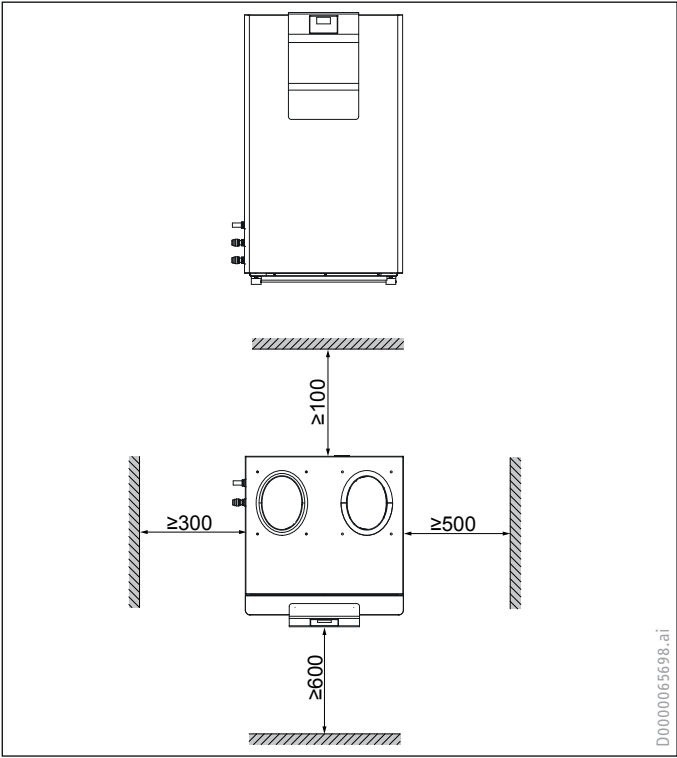
The air routing accessories required for the air intake/air discharge are available in various lengths under accessories.

Air source heat pumps, indoor installation – inverter  
Inverter



		WPL 09 ICS classic	WPL 17 ICS classic
b01 Entry electrical cables			
c12 Safety valve drain Diameter	mm	22	
d44 Outlet condensate drain Diameter	mm	22	22
e01 Heating flow Diameter	mm	22	22
e02 Heating return Diameter	mm	22	22
g01 Air intake Nominal diameter		DN 315	DN 315
g02 Air discharge Nominal diameter		DN 315	DN 315

Minimum clearance diagram



# Air source heat pumps, indoor installation – inverter

## Inverter

### WPL IKCS classic



WPL 09 IKCS classic

#### Benefits

- › Heating and cooling of new builds with an air source heat pump installed indoors.
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Suitable for densely built-up areas, as it is installed indoors and so produces virtually no sound emissions outdoors
- › Straightforward connection: air hoses with quick-fit adaptors reduce installation effort
- › Improved room climate in summer with active cooling using circuit reversal
- › Easy and time saving installation with high level of integration
- › Can be integrated into the home network and operated via a smartphone
- › Optimised air ducts for straightforward corner installation

**Application** • The air source heat pump with output-dependent control and inverter technology is installed indoors. It can be used for heating and DHW operation, as well as efficient cooling via circuit reversal. Ideal for new builds or buildings with a low system temperature. • Maximum flexibility in terms of siting, as the connection for outdoor and exhaust air can be made at the side or back. In addition, this type of air routing ensures lower sound emissions in the outdoor area.

**Convenience features** • Very quiet operation due to encapsulated refrigerant circuit and acoustically isolated compressor. Fully automatic, weather-compensated control of the heating system thanks to integral heat pump manager. In combination with the optional Internet Service Gateway (ISG), the system can be controlled via the home network or a mobile device. With integral heat and electricity metering via refrigerant circuit data. The integral heating circuit pump is controlled automatically subject to the flow and return temperatures. • The standard delivery includes the electric emergency/auxiliary heater for mono energetic operation and pasteurisation, the diverter valve for DHW heating and a safety valve with discharge hose. The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R410A.

**Efficiency** • The waste heat from the inverter is used to raise the return temperature, which increases the overall efficiency of the system. This is further aided by on-demand defrosting through circuit reversal.

**Installation** • The heat pump can be connected directly to the heating system thanks to the integral anti-vibration mounts. Preassembled flexible air hoses with quick-fit adaptor simplify installation. No manual trimming or sealing is necessary.



		WPL 09 IKCS classic	WPL 17 IKCS classic
<b>Part number</b>		<b>236377</b>	<b>236378</b>
<b>Specification</b>			
Energy efficiency class, heat pump W35		A+++	A++
Energy efficiency class, heat pump W55		A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++
Heating output at A7/W35 (EN 14511)	kW	2.06	4.22
Heating output at A2/W35 (EN 14511)	kW	2.62	4.95
Heating output at A-7/W35 (EN 14511)	kW	4.18	7.80
COP at A7/W35 (EN 14511)		4.68	4.60
COP at A2/W35 (EN 14511)		3.76	3.70
COP at A-7/W35 (EN 14511)		3.07	2.58
Cooling capacity at A35/W18 partial load	kW	1.85	3.60
Max. cooling capacity at A35/W18	kW	3.00	6.00

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## Air source heat pumps, indoor installation – inverter

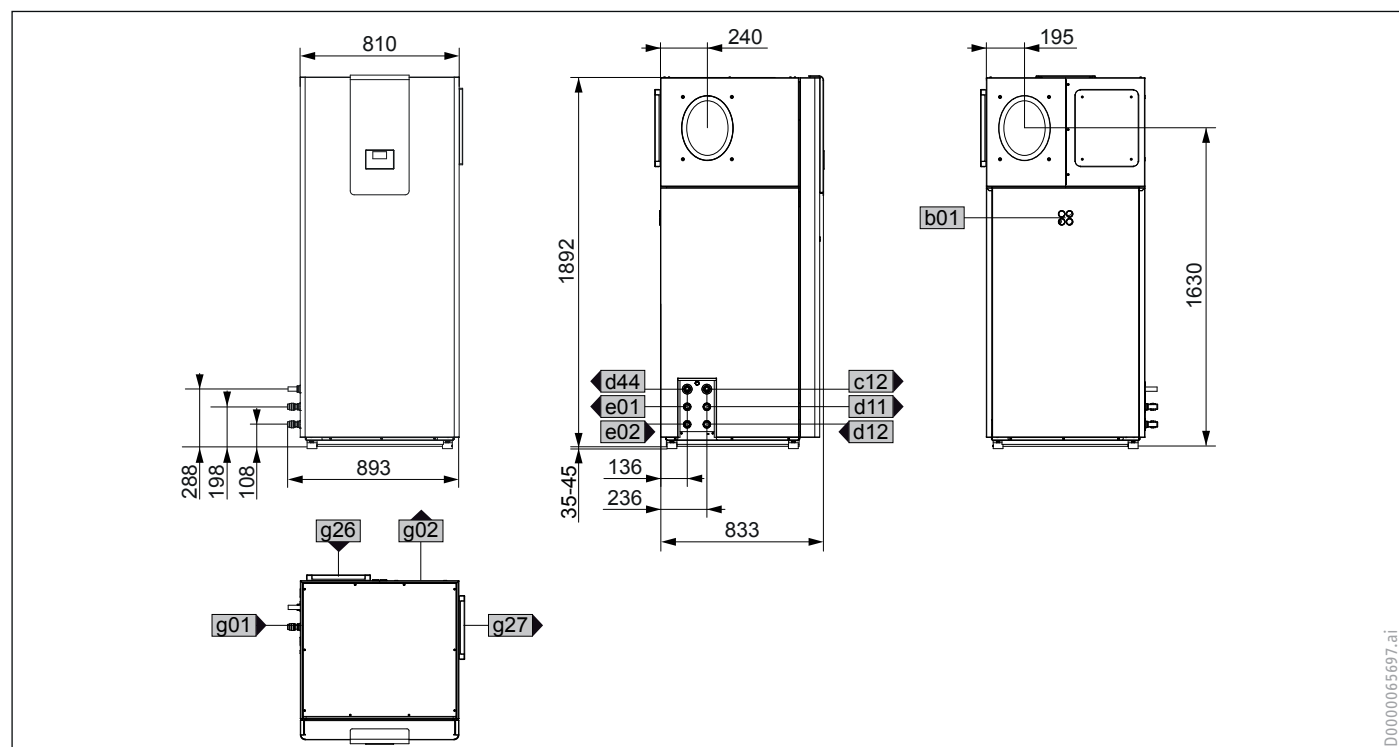
### Inverter

		WPL 09 IKCS classic	WPL 17 IKCS classic
Cooling capacity factor at A35/W18 partial load		3.76	2.58
Max. cooling capacity factor at A35/W18		2.02	1.63
SCOP (EN 14825)		4.45	4.125
Sound power level (EN 12102)	dB(A)	45	50
Min./max. application limits for heat source	°C	-20/35	-20/35
Max. application limit on the heating side	°C	60	60
Height	mm	1892	1892
Width	mm	893	893
Depth	mm	833	833
Weight	kg	219	221
Refrigerant		R410A	R410A
<b>Recommended accessories</b>			
<b>Part number</b>		<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway
<b>DHW cylinder</b>			
<b>Part number</b>		<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>236684</b>	<b>236684</b>
Type		HSBC 200 L	HSBC 200 L
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>238826</b>	<b>238826</b>
Type		HSBC 300 L cool	HSBC 300 L cool
Description		Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>			
<b>Part number</b>		<b>185458</b>	<b>185458</b>
Type		SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203763</b>	<b>203763</b>
Type		STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder

The air routing accessories required for the air intake/air discharge are available in various lengths under accessories.

## Air source heat pumps, indoor installation – inverter

### Inverter

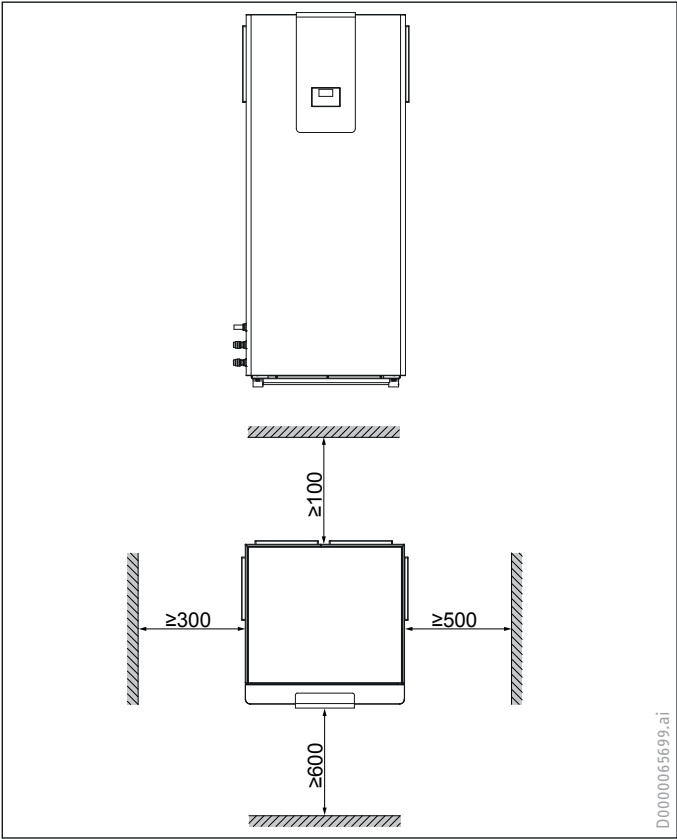


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		WPL 09 IKCS classic	WPL 17 IKCS classic
b01 Entry electrical cables			
c12 Safety valve drain Diameter	mm	22	22
d44 Outlet condensate drain Diameter	mm	22	22
e01 Heating flow Diameter	mm	22	22
e02 Heating return Diameter	mm	22	22
g01 Air intake Nominal diameter		DN 315	DN 315
g02 Air discharge Nominal diameter		DN 315	DN 315
g26 Air intake optional Nominal diameter		DN 315	DN 315
g27 Air discharge optional Nominal diameter		DN 315	DN 315

Air source heat pumps, indoor installation – inverter  
Inverter

Minimum clearance diagram



WPL ICS/IKCS classic comfort Set



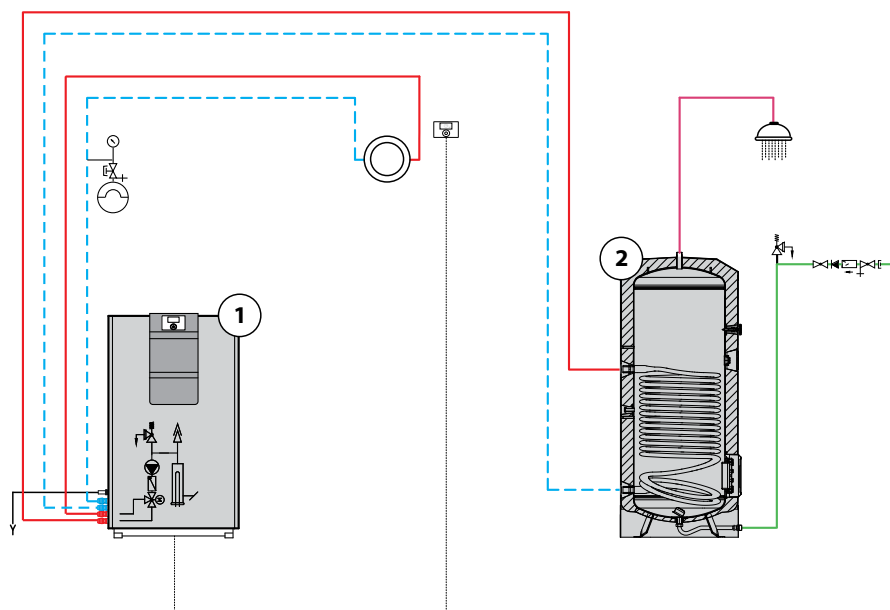
- Benefits**
- › The air source heat pump set is installed indoors and is remarkably quiet in operation
  - › High DHW convenience due to separate DHW cylinder
  - › Heat pump including hydraulic components and heat pump manager pre-installed for direct heating circuit connection with a separate DHW cylinder
  - › Top-mounted casing for excellent noise reduction and space saving corner installation (Product: 236734, 236735)

**Application** • Mono block heat pump with output-dependent control, in combination with a DHW cylinder for increased DHW convenience. • All components are installed indoors, so that only minimal operating noise occurs in the outdoor area. • The following components are already integrated: cylinder charging pump, heating circuit pump, 3/2-way diverter valve, safety valve, electric emergency/auxiliary heater and the heat pump manager for controlling the system.

WPL 09 ICS classic comfort Set

		WPL 09 ICS classic comfort Set	WPL 09 IKCS classic comfort Set	WPL 17 ICS classic comfort Set	WPL 17 IKCS classic comfort Set
Part number		236730	236734	236731	236735

## Air source heat pumps, indoor installation – inverter Inverter



Set components		WPL 09 ICS classic comfort Set	WPL 09 IKCS classic comfort Set	WPL 17 ICS classic comfort Set	WPL 17 IKCS classic comfort Set
1	Type	WPL 09 ICS classic	WPL 09 IKCS classic	WPL 17 ICS classic	WPL 17 IKCS classic
	Pce	1	1	1	1
	Page				
2	Type	SBB 301 WP	SBB 301 WP	SBB 301 WP	SBB 301 WP
	Pce	1	1	1	1
	Page				

Further information about the set components can be found under the respective product.

### WPL ICS/IKCS classic compact plus Set



WPL 09 ICS classic compact plus Set

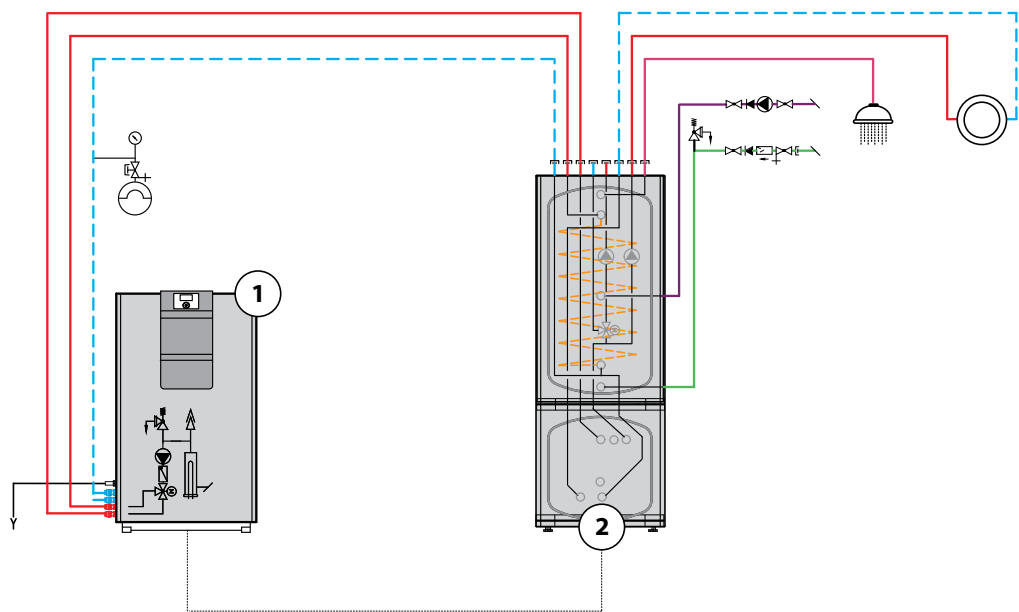
#### Benefits

- › The air source heat pump set is installed indoors and is remarkably quiet in operation
- › Thanks to flow separation, the heating system can be integrated easily and very safely
- › DHW cylinder and buffer cylinder with integral hydraulic components including heat pump manager for heat pumps and heating circuit connection in a single casing
- › Top-mounted casing for excellent noise reduction and space saving corner installation (Product: 236732, 236733)

**Application** • Mono block heat pump with output-dependent control, with highly integrated indoor unit for rapid, space saving installation. • Can be used in a wide range of heat distribution systems, because the heat pump is separated from the heat distribution system by an integral buffer cylinder. • The following components are already integrated: cylinder charging pump, heating circuit pump, 3/2-way diverter valve, safety valve, electric emergency/auxiliary heater and the heat pump manager for controlling the system. The DHW cylinder and parallel buffer cylinder with heating circuit pump form part of the separate integral cylinder.

		WPL 09 ICS classic compact plus Set	WPL 09 IKCS classic compact plus Set	WPL 17 ICS classic compact plus Set	WPL 17 IKCS classic compact plus Set
Part number		236728	236732	236729	236733

Air source heat pumps, indoor installation – inverter  
Inverter



Set components		WPL 09 ICS classic compact plus Set	WPL 09 IKCS classic compact plus Set	WPL 17 ICS classic compact plus Set	WPL 17 IKCS classic compact plus Set
1	Type	WPL 09 ICS classic	WPL 09 IKCS classic	WPL 17 ICS classic	WPL 17 IKCS classic
	Pce	1	1	1	1
	Page				
2	Type	HSBC 200 L	HSBC 200 L	HSBC 200 L	HSBC 200 L
	Pce	1	1	1	1
	Page				

Further information about the set components can be found under the respective product.

# Air source heat pumps, indoor installation – inverter

## Inverter

### WPL 19/24 I



WPL 19 I Set

#### Benefits

- › The air source heat pump is suitable for heating older buildings
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Even at low outside temperatures, the enhanced (saturated) vapour injection achieves a high flow temperature
- › Optimised for replacement of 13/18/23 E air source heat pumps that are installed indoors
- › Because of the high flow temperature all year round, also suitable for modernisation projects and for DHW heating
- › Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- › Can be integrated into the home network and operated via a smartphone
- › Low operating costs as mono mode DHW heating is possible
- › Suitable for densely built-up areas, as it is installed indoors and so produces virtually no sound emissions outdoors

**Application** • The output-controlled air source heat pump with inverter technology is installed indoors and is also suitable for densely built-up areas due to its low noise emissions. It can be used for modernisation, since it provides a flow temperature of up to 65 °C all year round for heating operation and DHW heating.

**Convenience features** • Very quiet operation due to the encapsulated refrigerant circuit and acoustically isolated compressor. The modulating fan and the wide gaps between the evaporator fins, which create low air resistance, also help to minimise the sound power level. • With integral heat and electricity metering via refrigerant circuit data. • Mono energetic operation possible with emergency/auxiliary heater. • The metal casing is corrosion-protected. It is made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.

**Efficiency** • High flow temperature all year round according to demand, as the combined enhanced vapour injection/enhanced saturated vapour injection cools the scroll compressor at low outside temperatures. This allows operation without an auxiliary heater. • The waste heat from the inverter is used to raise the return temperature, which increases the overall efficiency of the system. This is further aided by on-demand defrosting through circuit reversal and heating of the condensate pan by the refrigerant circuit.

**Installation** • The heat pump with integral anti-vibration mounts is directly connected to the heating system.



		WPL 19 I Set	WPL 24 I Set
Part number		235193	235194
Specification			
Energy efficiency class, heat pump W35		A+++	A+++
Energy efficiency class, heat pump W55		A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++
Heating output at A7/W35 (EN 14511)	kW	6.70	7.41
Heating output at A2/W35 (EN 14511)	kW	7.41	9.04
Heating output at A-7/W35 (EN 14511)	kW	9.91	13.45
COP at A7/W35 (EN 14511)		4.99	4.72
COP at A2/W35 (EN 14511)		4.12	4.00
COP at A-7/W35 (EN 14511)		3.32	3.00
SCOP (EN 14825)		4.60	4.575
Sound power level (EN 12102)	dB(A)	54	54
Min./max. application limits for heat source	°C	-20/40	-20/40
Max. application limit on the heating side	°C	65	65
Height	mm	1182	1182

Continue on next page >

## Air source heat pumps, indoor installation – inverter

### Inverter

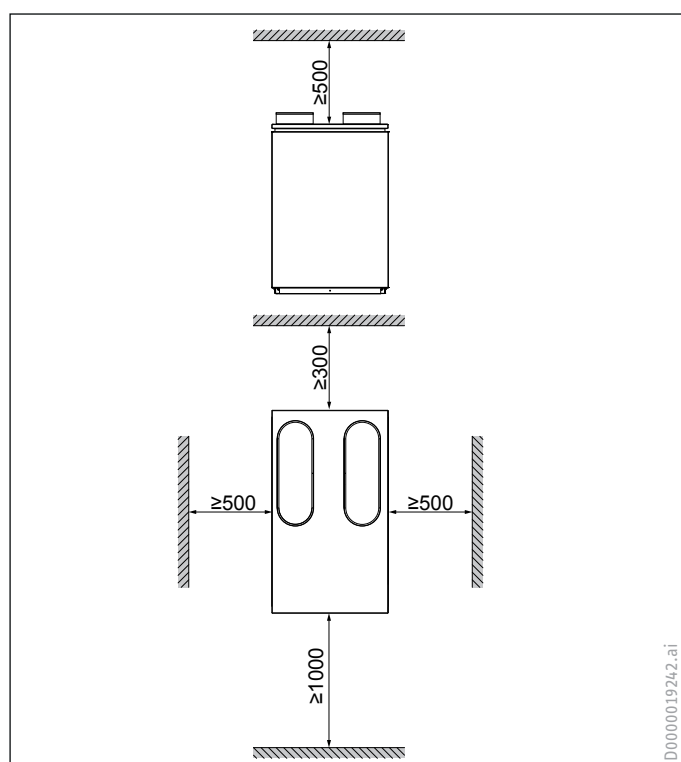
		WPL 19 I Set	WPL 24 I Set
Width	mm	800	800
Depth	mm	1240	1240
Weight	kg	289	289
Weight (standard appliance)	kg	201	201
Refrigerant		R410A	R410A
<b>Required accessories</b>			
<b>Part number</b>		<b>201721</b>	<b>201721</b>
Type		LSWP 560-3 SG	LSWP 560-3 SG
Description		Thermally and sound insulated air hose	Thermally and sound insulated air hose
<b>Part number</b>		<b>233837</b>	<b>233837</b>
Type		AWG 560 H-SR	AWG 560 H-SR
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Recommended accessories</b>			
<b>Part number</b>		<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>231041</b>	<b>231041</b>
Type		AWG 560 L	AWG 560 L
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Part number</b>		<b>232805</b>	<b>232805</b>
Type		HM Trend	HM Trend
Description		Hydraulic module	Hydraulic module
<b>Part number</b>		<b>232956</b>	<b>232956</b>
Type		AWG 560 H-GL	AWG 560 H-GL
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Part number</b>		<b>233826</b>	<b>233826</b>
Type		HMS Trend	HMS Trend
Description		Hydraulic module	Hydraulic module
<b>DHW cylinder</b>			
<b>Part number</b>		<b>203801</b>	<b>203801</b>
Type		HSBC 300 cool	HSBC 300 cool
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>233510</b>	<b>233510</b>
Type		HSBC 200	HSBC 200
Description		Integral cylinder	Integral cylinder
<b>Part number</b>		<b>234801</b>	<b>234801</b>
Type		HSBC 200 S	HSBC 200 S
Description		Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>			
<b>Part number</b>		<b>185458</b>	<b>185458</b>
Type		SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder
<b>Part number</b>		<b>203763</b>	<b>203763</b>
Type		STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder

Wall outlets must be ordered separately and are available as accessories in various versions.

The air hoses required are available as accessories.

Continue on next page >

**Minimum clearance diagram**



# Air source heat pumps, indoor installation – inverter

## Inverter

### WPL 19/24 IK



WPL 19 IK Set

#### Benefits

- › The air source heat pump is suitable for heating older buildings
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Even at low outside temperatures, the enhanced (saturated) vapour injection achieves a high flow temperature
- › Optimised for replacement of 13/18/23 E air source heat pumps that are installed indoors
- › Because of the high flow temperature all year round, also suitable for modernisation projects and for DHW heating
- › Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- › Low operating costs as mono mode DHW heating is possible
- › Can be integrated into the home network and operated via a smartphone
- › Suitable for densely built-up areas, as it is installed indoors and so produces virtually no sound emissions outdoors

**Application** • The output-controlled air source heat pump with inverter technology is installed indoors and is also suitable for densely built-up areas due to its low noise emissions. Can be used for modernisation, since it provides a flow temperature of up to 65 °C all year round for heating operation and DHW heating.

**Convenience features** • Very quiet operation due to the encapsulated refrigerant circuit and acoustically isolated compressor. The modulating fan and the wide gaps between the evaporator fins, which create low air resistance, also help to minimise the sound power level. • With integral heat and electricity metering via refrigerant circuit data. • Mono energetic operation possible with emergency/auxiliary heater. • The metal casing is corrosion-protected. It is made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.

**Efficiency** • High flow temperature all year round according to demand, as the combined enhanced vapour injection/enhanced saturated vapour injection cools the scroll compressor at low outside temperatures. This allows operation without an auxiliary heater. • The waste heat from the inverter is used to raise the return temperature. In addition, the overall efficiency of the system is increased by on-demand defrosting through circuit reversal and heating of the condensate pan by the refrigerant circuit. • The hydrophilic coating on the fan nozzle prevents ice from forming, meaning that no electric heating is required.

**Installation** • The heat pump with integral anti-vibration mounts is directly connected to the heating system. • Quick corner installation thanks to the supplied compact air routing module WPIC with pre-installed air hoses on the air intake and discharge, controller and hydraulic components.



Accessories necessary

		WPL 19 IK Set	WPL 24 IK Set
Part number		235878	235879
Specification			
Energy efficiency class, heat pump W35		A+++	A+++
Energy efficiency class, heat pump W55		A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++
Heating output at A7/W35 (EN 14511)	kW	6.70	7.41
Heating output at A2/W35 (EN 14511)	kW	7.41	9.04
Heating output at A-7/W35 (EN 14511)	kW	9.91	13.45
COP at A7/W35 (EN 14511)		4.99	4.72
COP at A2/W35 (EN 14511)		4.12	4.00
COP at A-7/W35 (EN 14511)		3.32	3.00
SCOP (EN 14825)		4.60	4.575
Sound power level (EN 12102)	dB(A)	52	51

Continue on next page >

## Air source heat pumps, indoor installation – inverter

### Inverter

		WPL 19 IK Set	WPL 24 IK Set
Min./max. application limits for heat source	°C	-20/40	-20/40
Max. application limit on the heating side	°C	65	65
Height	mm	1820	1820
Width	mm	800	800
Depth	mm	1240	1240
Weight	kg	373	373
Weight (standard appliance)	kg	201	201
Weight (compact air routing module)	kg	80	80
Refrigerant		R410A	R410A
<b>Required accessories</b>			
Part number		233837	233837
Type		AWG 560 H-SR	AWG 560 H-SR
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Recommended accessories</b>			
Part number		229336	229336
Type		ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway
Part number		231041	231041
Type		AWG 560 L	AWG 560 L
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated
Part number		232956	232956
Type		AWG 560 H-GL	AWG 560 H-GL
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>DHW cylinder</b>			
Part number		221360	221360
Type		SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder
Part number		229981	229981
Type		SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders
Part number		238826	238826
Type		HSBC 300 L cool	HSBC 300 L cool
Description		Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>			
Part number		185458	185458
Type		SBP 200 E	SBP 200 E
Description		Buffer cylinder	Buffer cylinder
Part number		203763	203763
Type		STH 210 Plus	STH 210 Plus
Description		Buffer cylinder	Buffer cylinder

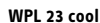
Standard delivery includes: air routing module WPIC

Wall outlets must be ordered separately and are available as accessories in various versions. Wall outlets must be ordered separately and are available as accessories in various versions. (Product: 235878, 235879)



## Application areas

### Cooling



<b>Fixed speed</b>	
WPL 13-23 E	243
WPL 13-23 cool	247

# Air source heat pumps, indoor installation – fixed speed

## Fixed speed

### WPL 13-23 E



WPL 13 E

#### Benefits

- › Air source heat pump for heating
- › High heating output at low outside temperatures through enhanced vapour injection
- › Higher COP through optimised refrigerant circuit
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump for heating and DHW can be installed either outdoors or indoors as a mono block and has enhanced vapour injection.

**Convenience features** • Quiet operation thanks to twin anti-vibration compressor mounts. • Enhanced vapour injection cools the scroll compressor at low outside temperatures, thereby achieving a higher heating output. • In combination with the ISG Internet Service Gateway, the on-site heat pump controller can be used to control the system in the home network or via a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • An emergency/auxiliary heater enables mono energetic operation. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R407C

**Efficiency** • Time optimised and energy efficient defrosting through circuit reversal with a 4/2-way valve. • For efficient defrosting, the condensate pan is also heated by the refrigerant circuit.

**Installation** • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.



		WPL 13 E	WPL 18 E	WPL 23 E
Part number		227756	227757	227758
<b>Specification</b>				
Energy efficiency class, heat pump W35		A++	A++	A+
Energy efficiency class, heat pump W55		A+	A+	A+
Energy efficiency class, composite system (heat pump + controller) W35		A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W55		A+	A+	A+
Heating output at A7/W35 (EN 14511)	kW	8.93	12.90	16.56
Heating output at A2/W35 (EN 14511)	kW	8.09	11.30	15.73
Heating output at A-7/W35 (EN 14511)	kW	6.77	9.72	13.21
COP at A7/W35 (EN 14511)		4.35	4.46	3.99
COP at A2/W35 (EN 14511)		3.76	3.73	3.62
COP at A-7/W35 (EN 14511)		3.20	3.27	3.14
SCOP (EN 14825)		3.85	4.00	3.775
Sound power level (EN 12102)	dB(A)	64	65	65
Sound power level, outdoor installation (EN 12102)	dB(A)	64	65	65
Min./max. application limits for heat source	°C	-20...40	-20...40	-20...40
Max. application limit on the heating side	°C	60	60	60
Height	mm	1116	1116	1116
Width	mm	784	784	784
Depth	mm	1182	1182	1182

Continue on next page >

## Air source heat pumps, indoor installation – fixed speed

### Fixed speed

		WPL 13 E	WPL 18 E	WPL 23 E
Weight	kg	205	212	211
Rated voltage, compressor	V	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400
Rated voltage, control unit	V	230	230	230
Refrigerant		R407C	R407C	R407C
Colour		white	white	
<b>Required accessories</b>				
<b>Part number</b>		<b>074412</b>	<b>074412</b>	<b>074412</b>
Type		Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I
Description		Casing components for indoor installation	Casing components for indoor installation	Casing components for indoor installation
<b>Part number</b>		<b>074413</b>	<b>074413</b>	<b>074413</b>
Type		Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A
Description		Casing components for outdoor installation	Casing components for outdoor installation	Casing components for outdoor installation
<b>Part number</b>		<b>201721</b>	<b>201721</b>	<b>201721</b>
Type		LSWP 560-3 SG	LSWP 560-3 SG	LSWP 560-3 SG
Description		Thermally and sound insulated air hose	Thermally and sound insulated air hose	Thermally and sound insulated air hose
<b>Part number</b>		<b>233837</b>	<b>233837</b>	<b>233837</b>
Type		AWG 560 H-SR	AWG 560 H-SR	AWG 560 H-SR
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Recommended accessories</b>				
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>232805</b>	<b>232805</b>	
Type		HM Trend	HM Trend	
Description		Hydraulic module	Hydraulic module	
<b>Part number</b>		<b>233826</b>	<b>233826</b>	
Type		HMS Trend	HMS Trend	
Description		Hydraulic module	Hydraulic module	
<b>DHW cylinder</b>				
<b>Part number</b>		<b>203801</b>	<b>203801</b>	
Type		HSBC 300 cool	HSBC 300 cool	
Description		Integral cylinder	Integral cylinder	
<b>Part number</b>		<b>221360</b>		
Type		SBB 301 WP		
Description		DHW cylinder		
<b>Part number</b>			<b>221361</b>	<b>221361</b>
Type			SBB 302 WP	SBB 302 WP
Description			DHW cylinder	DHW cylinder
<b>Part number</b>				<b>221362</b>
Type				SBB 401 WP SOL
Description				DHW cylinder
<b>Part number</b>		<b>229981</b>	<b>229981</b>	<b>229981</b>
Type		SBS 801 W	SBS 801 W	SBS 801 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>233510</b>	<b>233510</b>	
Type		HSBC 200	HSBC 200	
Description		Integral cylinder	Integral cylinder	
<b>Part number</b>		<b>234801</b>	<b>234801</b>	
Type		HSBC 200 S	HSBC 200 S	
Description		Integral cylinder	Integral cylinder	

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Air source heat pumps, indoor installation – fixed speed

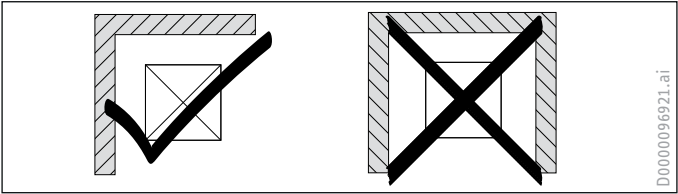
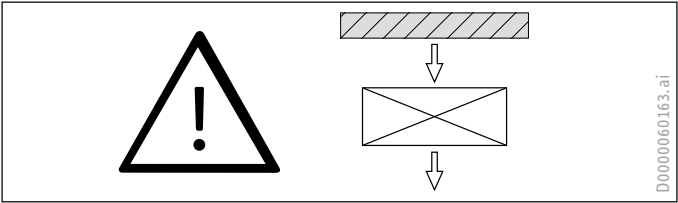
Fixed speed

		WPL 13 E	WPL 18 E	WPL 23 E
Buffer cylinder				
Part number		185458		
Type		SBP 200 E		
Description		Buffer cylinder		
Part number		203763		
Type		STH 210 Plus		
Description		Buffer cylinder		
Part number		203764	203764	203764
Type		STH 415 Plus	STH 415 Plus	STH 415 Plus
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder
Part number			220824	220824
Type			SBP 400 E	SBP 400 E
Description			Buffer cylinder	Buffer cylinder

The housing required for indoor or outdoor installation is available as an accessory.

Wall outlets and air hoses for indoor installation must be ordered separately and are available as accessories in various versions.Preliminary specification (Product: 227756, 227758)

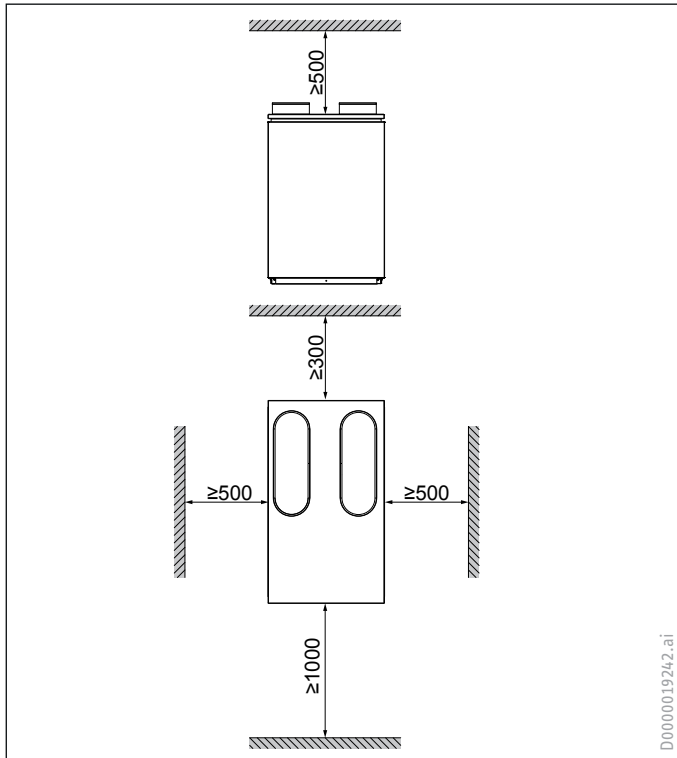
Installation conditions



## Air source heat pumps, indoor installation – fixed speed

### Fixed speed

#### Minimum clearance diagram



# Air source heat pumps, indoor installation – fixed speed

## Fixed speed

### WPL 13-23 cool



WPL 13 cool

#### Benefits

- › Air source heat pump for heating and cooling
- › High heating output at low outside temperatures through enhanced vapour injection
- › Higher COP through optimised refrigerant circuit
- › Active cooling through circuit reversal
- › Can be integrated into the home network and operated via a smartphone

**Application** • The air source heat pump can be installed either outdoors or indoors as a mono block and has enhanced vapour injection. • It can be used for heating and DHW operation, as well as for efficient cooling through circuit reversal.

**Convenience features** • Quiet operation thanks to twin anti-vibration compressor mounts. • Enhanced vapour injection cools the scroll compressor at low outside temperatures, thereby achieving a higher heating output. • The built-in 4/2-way valve allows the refrigerant circuit to be switched from heating to cooling mode. • In combination with the ISG Internet Service Gateway, the on-site heat pump controller can be used to control the system in the home network or via a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • An emergency/auxiliary heater enables mono energetic operation. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R407C

**Efficiency** • Time optimised and energy efficient defrosting through circuit reversal with a 4/2-way valve. • For efficient defrosting, the condensate pan is also heated by the refrigerant circuit.

**Installation** • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.



		WPL 13 cool	WPL 18 cool	WPL 23 cool
Part number		223400	223401	223402
Specification				
Energy efficiency class, heat pump W35		A+	A++	A+
Energy efficiency class, heat pump W55		A+	A+	A+
Energy efficiency class, composite system (heat pump + controller) W35		A++	A++	A+
Energy efficiency class, composite system (heat pump + controller) W55		A+	A++	A+
Heating output at A7/W35 (EN 14511)	kW	9.01	12.30	14.45
Heating output at A2/W35 (EN 14511)	kW	8.10	11.30	14.14
Heating output at A-7/W35 (EN 14511)	kW	6.60	9.72	12.27
COP at A7/W35 (EN 14511)		4.00	4.30	3.52
COP at A2/W35 (EN 14511)		3.40	3.70	3.23
COP at A-7/W35 (EN 14511)		3.00	3.20	2.91
SCOP (EN 14825)		3.75	4.075	3.475
Sound power level (EN 12102)	dB(A)	64	65	65
Sound power level, outdoor installation (EN 12102)	dB(A)	62	65	65
Min./max. application limits for heat source	°C	-20...40	-20...40	-20...40
Max. application limit on the heating side	°C	60	60	60
Height	mm	1116	1116	1116
Width	mm	784	784	784
Depth	mm	1182	1182	1182

Continue on next page >

## Air source heat pumps, indoor installation – fixed speed

### Fixed speed

		WPL 13 cool	WPL 18 cool	WPL 23 cool
Weight	kg	210	214	220
Rated voltage, compressor	V	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400
Rated voltage, control unit	V	230	230	230
Refrigerant		R407C	R407C	R407C
Colour		white	white	
<b>Required accessories</b>				
<b>Part number</b>		<b>074412</b>	<b>074412</b>	<b>074412</b>
Type		Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I	Zubehör WPL 13/18/23 I
Description		Casing components for indoor installation	Casing components for indoor installation	Casing components for indoor installation
<b>Part number</b>		<b>074413</b>	<b>074413</b>	<b>074413</b>
Type		Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A	Zubehör WPL 13/18/23 A
Description		Casing components for outdoor installation	Casing components for outdoor installation	Casing components for outdoor installation
<b>Part number</b>		<b>201721</b>	<b>201721</b>	<b>201721</b>
Type		LSWP 560-3 SG	LSWP 560-3 SG	LSWP 560-3 SG
Description		Thermally and sound insulated air hose	Thermally and sound insulated air hose	Thermally and sound insulated air hose
<b>Part number</b>		<b>233837</b>	<b>233837</b>	<b>233837</b>
Type		AWG 560 H-SR	AWG 560 H-SR	AWG 560 H-SR
Description		External wall outlet, thermally insulated	External wall outlet, thermally insulated	External wall outlet, thermally insulated
<b>Recommended accessories</b>				
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>232805</b>	<b>232805</b>	
Type		HM Trend	HM Trend	
Description		Hydraulic module	Hydraulic module	
<b>Part number</b>		<b>233826</b>	<b>233826</b>	
Type		HMS Trend	HMS Trend	
Description		Hydraulic module	Hydraulic module	
<b>DHW cylinder</b>				
<b>Part number</b>		<b>221360</b>		
Type		SBB 301 WP		
Description		DHW cylinder		
<b>Part number</b>			<b>221361</b>	<b>221361</b>
Type			SBB 302 WP	SBB 302 WP
Description			DHW cylinder	DHW cylinder
<b>Part number</b>				<b>221362</b>
Type				SBB 401 WP SOL
Description				DHW cylinder
<b>Buffer cylinder</b>				
<b>Part number</b>		<b>185458</b>		
Type		SBP 200 E		
Description		Buffer cylinder		
<b>Part number</b>		<b>203763</b>		
Type		STH 210 Plus		
Description		Buffer cylinder		
<b>Part number</b>			<b>203764</b>	<b>203764</b>
Type			STH 415 Plus	STH 415 Plus
Description			Buffer cylinder	Buffer cylinder

Continue on next page >

Air source heat pumps, indoor installation – fixed speed

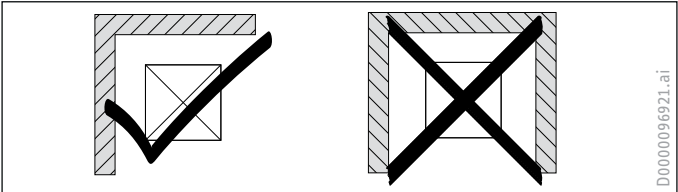
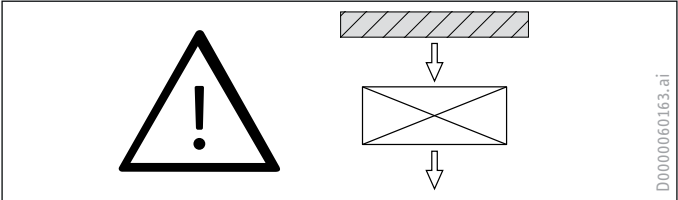
Fixed speed

		WPL 13 cool	WPL 18 cool	WPL 23 cool
Part number			220824	220824
Type			SBP 400 E	SBP 400 E
Description			Buffer cylinder	Buffer cylinder

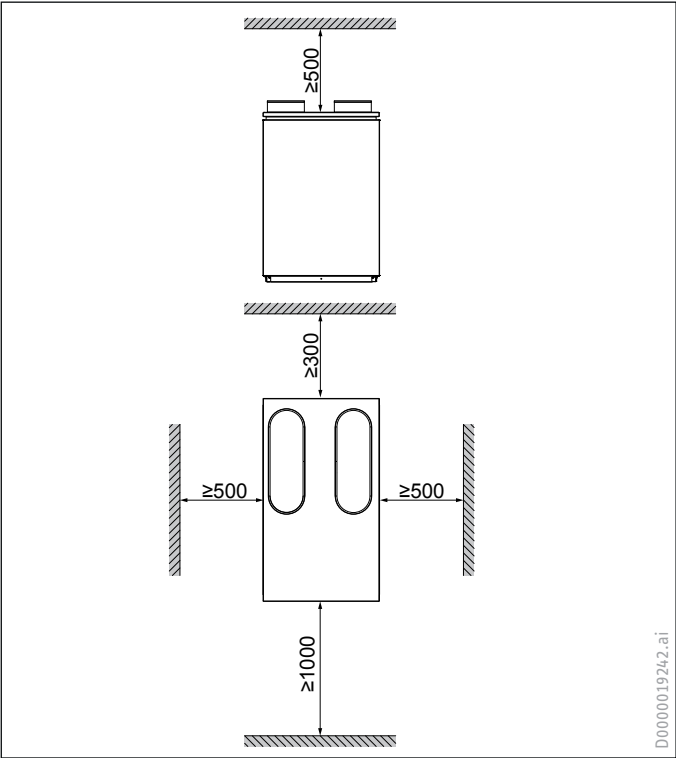
The housing required for indoor or outdoor installation is available as an accessory.

Wall outlets and air hoses for indoor installation must be ordered separately and are available as accessories in various versions.

Installation conditions



Minimum clearance diagram





<b>Accessories</b> Accessories	253
-----------------------------------	-----

Accessories for air source heat pumps installed indoors

Accessories

LSWP AWG Set



Connection set for installing the air routing (supply and exhaust air) of a heat pump installed indoors. Quick and easy installation. Includes an air hose with quick-fit adaptors prefitted at both ends and the wall outlet to be sealed in with foam.

LSWP 315-2 S AWG SR Set

		LSWP 315-2 S AWG SR Set
Part number		236931
Specification		
Length	mm	2.00
Nominal diameter	mm	315
Colour of air hose		silver-metallic
Colour of weather grille		metallic silver
Version		With weather grille

Standard delivery includes: wall outlet, air hose, quick-fit adaptors

ZSA



EPS quick-fit adaptor for attaching air hoses to the appliance's air connections.

ZSA 315

		ZSA 315
Part number		236934

Standard delivery includes: quick-fit adaptor, fixing screws, hose clips for the internal and external hose.

## Accessories for air source heat pumps installed indoors

### Accessories

#### AWG WP



#### Benefits

- › Condensate run marks on the face panel are prevented by a wide drip edge on the frame
- › Integral rodent guard prevents small animals and leaves getting in
- › Good protection from weather and low pressure losses, thanks to optimised fin geometry

The thermally insulated external wall outlet is suitable for air routing for integral systems and air source heat pumps installed indoors. The length can be adjusted to suit the wall thickness thanks to telescopic technology.

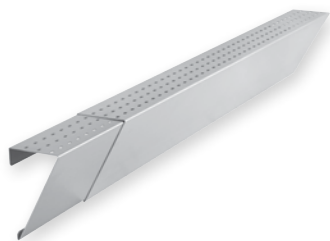
#### AWG 560 L

		AWG 560 L	AWG 600 L	AWG 560 H-GL	AWG 560 V-GL	AWG 560 H-SR	AWG 560 V-SR
Part number		231041	231044	232956	232957	233837	233838
Specification							
Height	mm	477	647	490	894	490	894
Width	mm	878	649	897	483	897	483
Depth	mm	625	525	627	627	627	627
Nominal diameter	mm	560	560	560	560	560	560
Wall thickness	mm	280 - 500	260 - 400	280 - 500	280 - 500	280 - 500	280 - 500
Min. outlet aperture	mm	830x430	600x600	830x430	430x830	830x430	430x830
Max. air flow rate	m <sup>3</sup> /h	3500	3500	3500	3500	3500	3500
Colour		Aluminium, anodised	Aluminium, anodised	RAL 9006	RAL 9006	silver-metallic	silver-metallic
Material		Sheet steel	Sheet steel	Sheet steel	Sheet steel	Sheet steel	Sheet steel
Version		For light well version	For light well version	Horizontal with grey painted weather grille	Vertical with grey painted weather grille	Horizontal weather grille painted in metallic silver	Vertical with grey painted weather grille
Required accessories							
Part number		232342					
Type		LLB AWG 560 L					
Description		Air deflector for light well grille					

## Accessories for air source heat pumps installed indoors

### Accessories

#### LLB AWG



##### Benefits

- › Quick and easy to install

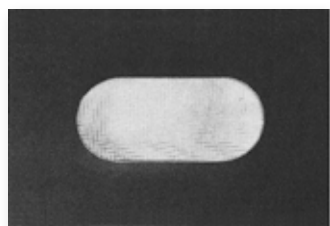
The aluminium air deflector is installed in a light well and directs exhaust air expelled from a building away from the external wall. This reduces the formation of moisture from condensation. The width of the deflector can be adjusted to the light well.

LLB AWG 315 L

		LLB AWG 315 L	LLB AWG 560 L
Part number		232341	232342
Specification			
Height	mm	128	128
Length	mm	900	1,500
Colour		Aluminium	Aluminium

6

#### SAPL



Hose connection panel for fitting on standard cellar window. Thermally insulated, with collar and hose clips for joining the hose to the wall outlet.

Schlauchanschlussplatte 560 oval

		Schlauchanschlussplatte 560 oval
Part number		003478
Specification		
Height	mm	780
Width	mm	1200
Air connection	mm	560

## Accessories for air source heat pumps installed indoors

### Accessories

#### LSWP



##### Benefits

- › Good sound insulation thanks to a 50 mm layer of acoustic insulating material
- › Prevents condensation forming on the outer cover

**Application** • The thermally and sound insulated flexible air hose is suitable for routing the outdoor and exhaust air to/from an air source heat pump installed indoors. • The outer sheath is made from aluminium laminate, the inner sheath from polypropylene cloth, and the intermediate layer from mineral wool, providing thermal and sound insulation. The hose ends can be shaped into ovals for easier fitting.

LSWP 560-3 SG

		LSWP 560-3 SG	LSWP 560-4 S	LSWP 560-4 SG
Part number		201721	234647	201619
Specification				
Nominal diameter	mm	560	560	560
Length	mm	3000	4000	4000
Thermal insulation thickness	mm	50	50	50
Colour of air hose		Grey outer sheath	Aluminium-coloured outer sheath	Grey outer sheath

#### PK 10



**Application** • Condensate pump for ventilation units and heat pumps installed indoors. • The appliance features an integral condensate collecting vessel and can be installed horizontally on the floor or the wall. • Integral alarm contact, for activating an indicator lamp or warning sound or switching off the connected main appliance. An additional float prevents the collecting vessel from overflowing. • Pressure hose and power cable are included in the standard delivery.

PK 10

		PK 10
Part number		229286
Specification		
Max. delivery volume	l/h	500
Max. delivery head	m	5
Height	mm	171
Width	mm	279
Depth	mm	130
Weight	kg	2
Electrical connection		1/N/PE~230 V
Power consumption	W	70

# Accessories for air source heat pumps installed indoors

## Accessories











### ZVK-WPL I



Corrosion-protected sheet metal casing, made from galvanised and powder coated sheet steel, for air source heat pumps installed indoors.

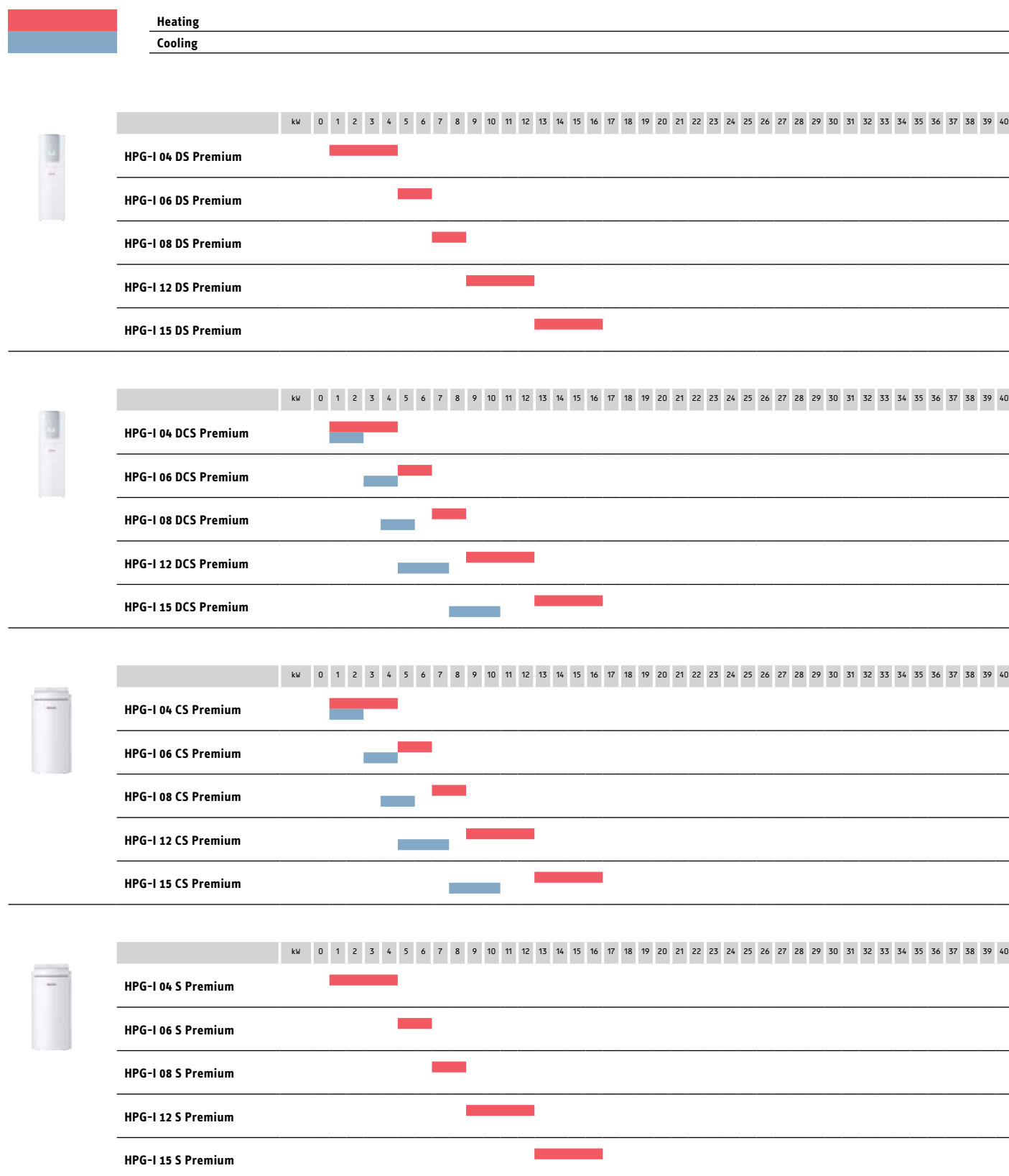
Zubehör WPL 13/18/23 I

		Zubehör WPL 13/18/23 I
Part number		074412
Specification		
Colour		white

Ground source heat pumps – inverter	    	262
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Accessories for ground source heat pumps		314

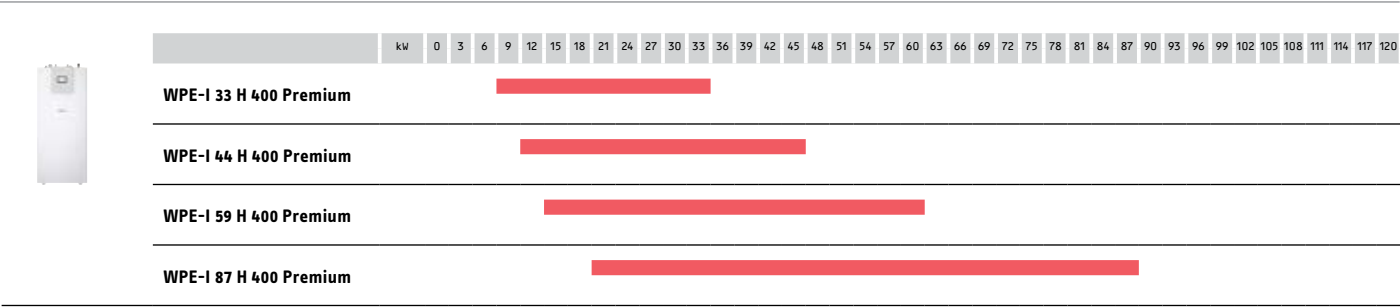
# Ground source heat pumps – inverter

## Application areas



# Ground source heat pumps – inverter

## Application areas





<b>Inverter</b>	
HPG-I 04-15 DS Premium	263
HPG-I 04-15 DCS Premium	266
HPG-I 04-15 CS Premium	269
HPG-I 04-15 S Premium	274
WPE-I 33-87 H 400 Premium	279

# Ground source heat pumps – inverter

## Inverter

### HPG-I 04-15 DS Premium



HPG-I 04 DS Premium

#### Benefits

- › High degree of DHW convenience and monovalent heating thanks to high flow temperatures of up to 75 °C
- › Pressure monitoring in the heat source circuit with integral brine pressure switch
- › Quick, space saving installation thanks to built-in DHW cylinder and high level of integration
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Very quiet operation thanks to the intelligent sound prevention concept including a number of anti-vibration mounts
- › Futureproof and eco-friendly refrigerant with high efficiency
- › Easy to transport as the refrigerant circuit and cylinder module can be separated from one another and are fitted with integral carrying handles

**Application** • The compact ground source heat pump with output-dependent control and inverter technology is installed indoors. • The appliance is equipped with an integral DHW cylinder. • The DHW cylinder is built into the casing and ready for operation. • Can be used in mono mode to provide heating and DHW in new and modernised buildings thanks to demand-dependent flow temperatures all year round. The system is also suitable for apartment buildings, depending on the heat load of the building. • A high level of integration enables the heat pump to be installed directly, requiring a small installation area thanks to the compact design.

**Convenience features** • Heat pump operation is particularly quiet due to the encapsulated refrigerant circuit and acoustically isolated compressor. • High flow temperature of up to 75 °C as a heating output thanks to the consistent source temperature. • If the on-site heat pump controller is combined with the ISG Internet Service Gateway, the system can be integrated into a smart home network and controlled via a mobile device. Heat and electricity metering is implemented using integrated refrigerant circuit data. • Control of the heating system is fully automatic and subject to the outside temperature. • One high efficiency circulation pump is built in for the brine side and one for the heating side. • Also integrated as standard are an electric emergency/auxiliary heater for mono energetic operation and pasteurisation, a diverter valve for DHW heating and a safety valve with discharge hose. • The refrigerant circuit works with the eco-friendly, futureproof refrigerant R454C, which has excellent properties in heat pump application. • The casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.

**Efficiency** • Thanks to the energy saving inverter technology and integral recuperator, the heat pump works extremely efficiently all year round.

**Installation** • No special safety precautions are required; there is just a minimum installation room size. • Straight-forward to install as the refrigerant circuit can be easily separated from the cylinder module. Both parts also have integral carrying handles. • The internal pressure hoses enable simple direct hydraulic connection to the heating and source side.



		HPG-I 04 DS Premium	HPG-I 06 DS Premium	HPG-I 08 DS Premium	HPG-I 12 DS Premium	HPG-I 15 DS Premium
Part number		202622	202623	202624	202625	202626
Specification						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+++	A+++	A+++	A+++	A+++
Heating output at B0/W35 (EN 14511)	kW	1.96	2.37	2.78	4,19	5,18
Heating output at B0/W35 (min./max.)	kW	1.0 - 4.2	1.0 - 6.6	1.0 - 7.6	2.1 - 12.7	2.1 - 14.8
COP at B0/W35 (EN 14511)		4.60	4.60	4.67	5.01	4.86
SCOP (EN 14825)		5.07	5.20	5.12	5.59	5.44
Sound power level (EN 12102)	dB(A)	43 - 46	43 - 48	43 - 48	43 - 49	43 - 49
Min. installation room volume	m³	10	10	10	18	18
Height	mm	1937	1937	1937	1937	1937
Width	mm	600	600	600	600	600

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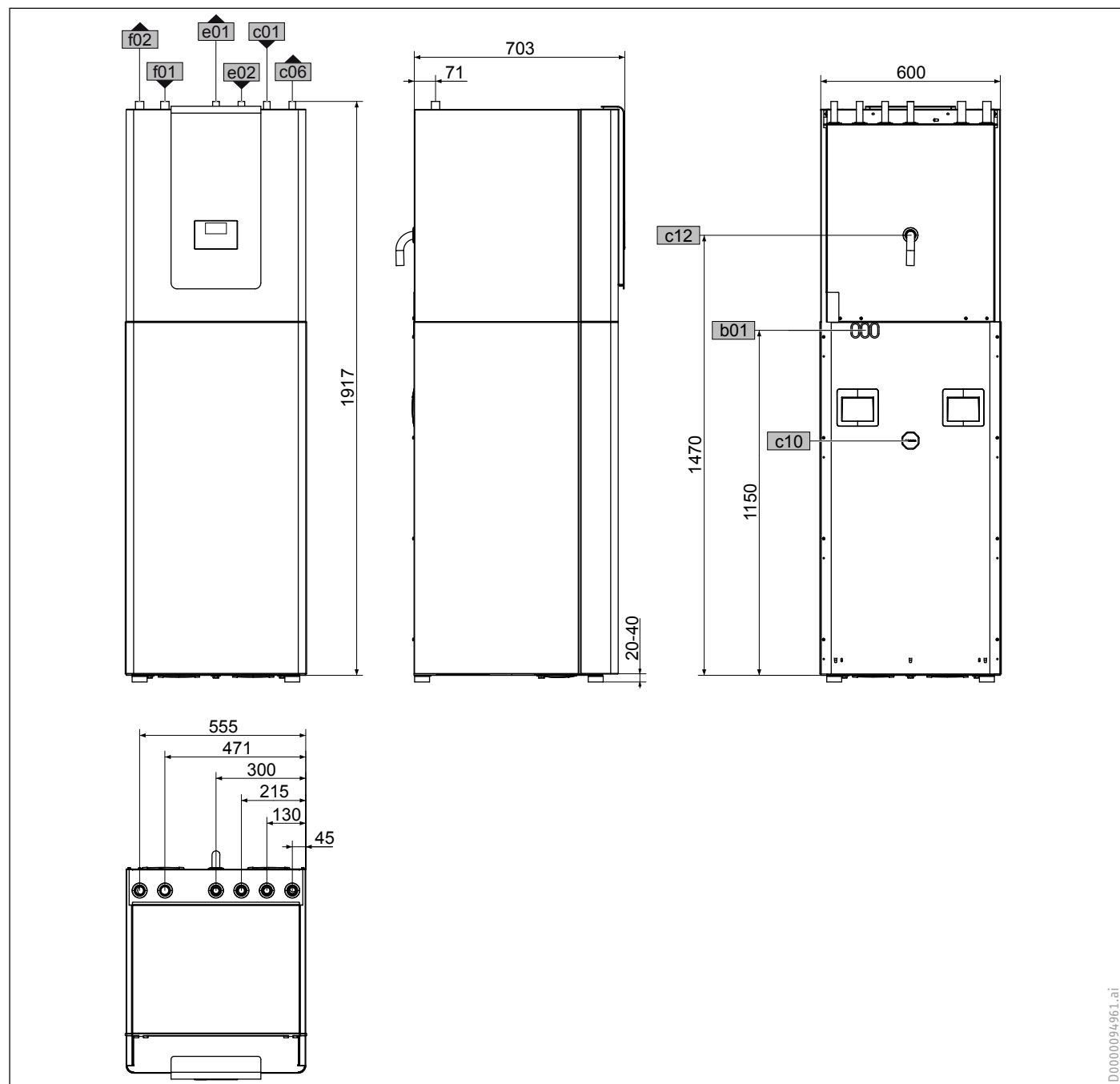
## Ground source heat pumps – inverter

### Inverter

		HPG-I 04 DS Premium	HPG-I 06 DS Premium	HPG-I 08 DS Premium	HPG-I 12 DS Premium	HPG-I 15 DS Premium
Depth	mm	703	703	703	703	703
Nominal capacity	l	175	175	175	162	162
Weight	kg	265	265	265	275	275
Rated voltage, compressor	V	230	230	230	230	230
Rated voltage, emergency/auxiliary heater	V	230	230	230	230	230
Refrigerant		R454C	R454C	R454C	R454C	R454C
Surface area, heat exchanger	m²	2.10	2.10	2.10	3.50	3.50
Energy efficiency class, DHW heating with load profile XL		A	A	A	A	A
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit

## Ground source heat pumps – inverter

### Inverter



		HPG-I 04 DS Premium	HPG-I 06 DS Premium	HPG-I 08 DS Premium	HPG-I 12 DS Premium	HPG-I 15 DS Premium
b01 Entry electrical cables						
c01 Cold water inlet Diameter	mm	22	22	22	22	22
c06 DHW outlet Diameter	mm	22	22	22	22	22
c10 DHW circulation						
c12 Safety valve drain						
e01 Heating flow Diameter	mm	22	22	22	22	22
e02 Heating return Diameter	mm	22	22	22	22	22
f01 Heat source flow Diameter	mm	28	28	28	28	28
f02 Heat source return Diameter	mm	28	28	28	28	28

# Ground source heat pumps – inverter

## Inverter

### HPG-I 04-15 DCS Premium



HPG-I 04 DCS Premium

#### Benefits

- › High degree of DHW convenience and monovalent heating thanks to high flow temperatures of up to 75 °C
- › Pressure monitoring in the heat source circuit with integral brine pressure switch
- › Passive cooling function with minimal operating costs via a geothermal probe system
- › Quick, space saving installation thanks to built-in DHW cylinder and high level of integration
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Very quiet operation thanks to the intelligent sound prevention concept including a number of anti-vibration mounts
- › Futureproof and eco-friendly refrigerant with high efficiency
- › Easy to transport as the refrigerant circuit and cylinder module can be separated from one another and are fitted with integral carrying handles

**Application** • The compact ground source heat pump with output-dependent control and inverter technology is installed indoors. It can be installed directly thanks to the high level of integration. • The DHW cylinder is built into the casing and ready for operation, as is the heat exchanger for energy efficient passive cooling via an area heating system. • Can be used in mono mode for heating and DHW operation in both new and modernised buildings thanks to high flow temperatures. • The system is also suitable for apartment buildings, depending on the heat load of the building. • A small footprint means little space required for installation.

**Convenience features** • Extremely quiet operation thanks to the encapsulated refrigerant circuit and acoustically isolated compressor. • High flow temperature of up to 75 °C as a heating output all year round thanks to the consistent source temperature. • The integral heat pump controller ensures fully automatic control of the heating system irrespective of the outside temperature. • The heat pump can be combined with the ISG Internet Service Gateway and controlled via the home network or a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • One high efficiency circulation pump is built in for the brine side and one for the heating side. • Electric emergency/auxiliary heater for mono energetic operation and pasteurisation. • Diverter valve for DHW heating and safety valve with discharge hose. • The refrigerant circuit works with the eco-friendly, futureproof refrigerant R454C, which has excellent properties in heat pump application.

**Efficiency** • Thanks to the energy saving inverter technology and integral recuperator, the heat pump works extremely efficiently all year round.

**Installation** • No special safety precautions are required; there is just a minimum installation room size. • The supplied pressure hoses enable direct hydraulic connection to the heating side and source side. • The casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish. • To facilitate installation, the refrigerant circuit can be easily separated from the cylinder module, and both parts have integral carrying handles.



		HPG-I 04 DCS Premium	HPG-I 06 DCS Premium	HPG-I 08 DCS Premium	HPG-I 12 DCS Premium	HPG-I 15 DCS Premium
Part number		202632	202633	202634	202635	202636
Specification						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+++	A+++	A+++	A+++	A+++
Heating output at B0/W35 (EN 14511)	kW	1,96	2.37	2.78	4.19	5.18
Heating output at B0/W35 (min./max.)	kW	1.0 - 4.2	1.0 - 6.6	1.0 - 7.6	2,1 - 12,7	2.1 - 14.8
COP at B0/W35 (EN 14511)		4.60	4.60	4.67	5.01	4.86
Cooling capacity at B15/W23	kW	2.5	3	4	6	8
SCOP (EN 14825)		5.07	5.20	5.12	5.59	5.44

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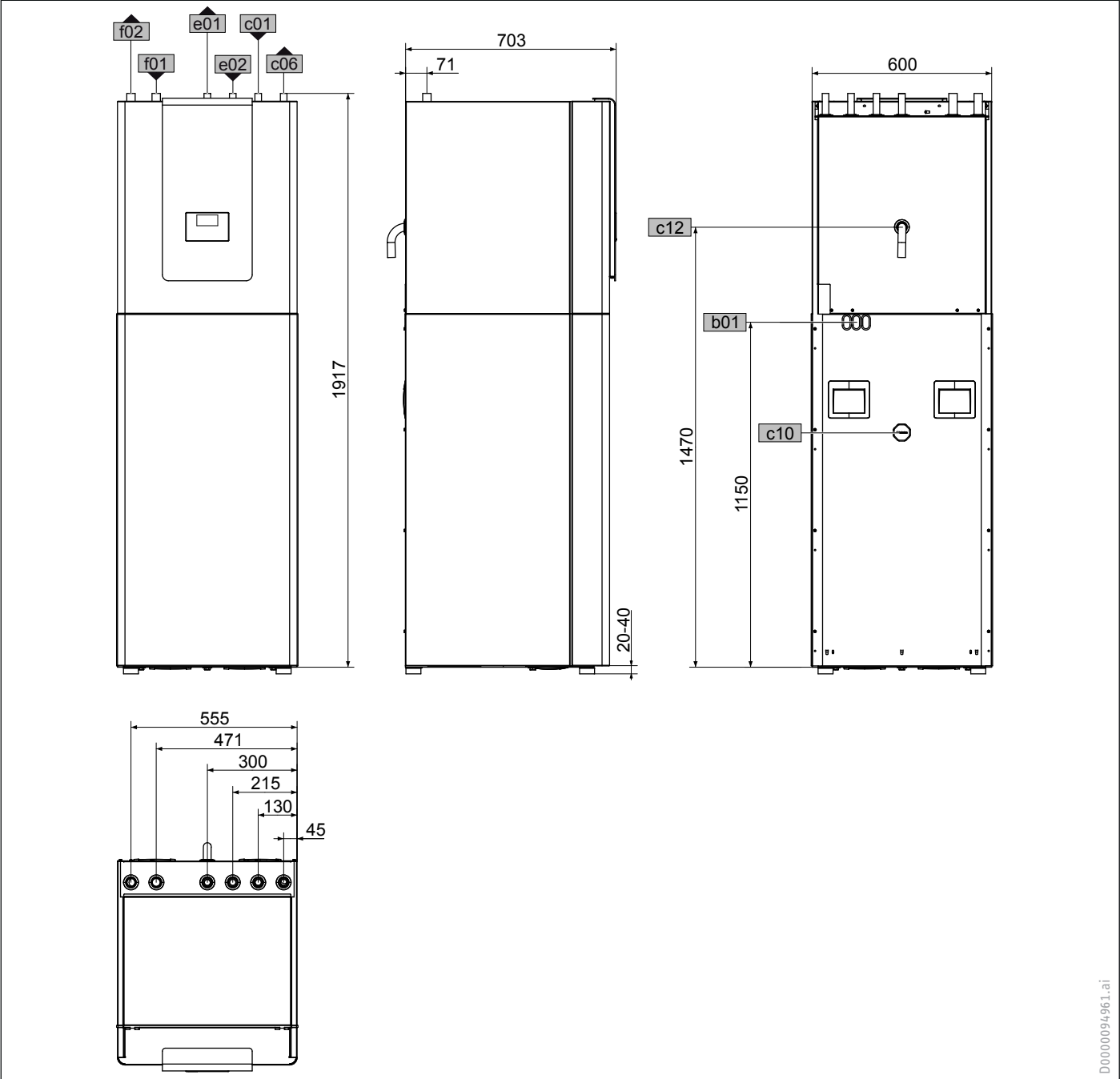
## Ground source heat pumps – inverter

### Inverter

		HPG-I 04 DCS Pre- mium	HPG-I 06 DCS Pre- mium	HPG-I 08 DCS Pre- mium	HPG-I 12 DCS Pre- mium	HPG-I 15 DCS Pre- mium
Sound power level (EN 12102)	dB(A)	43 - 46	43 - 48	43 - 48	43 - 49	43 - 49
Max. application limit on the heating side	°C	75	75	75	75	75
Min. installation room volume	m³	10	10	10	18	18
Height	mm	1937	1937	1937	1937	1937
Width	mm	600	600	600	600	600
Depth	mm	703	703	703	703	703
Nominal capacity	l	175	175	175	162	162
Weight	kg	265	265	265	275	275
Rated voltage, compressor	V	230	230	230	230	230
Rated voltage, emergency/auxiliary heater	V	230	230	230	230	230
Refrigerant		R454C	R454C	R454C	R454C	R454C
Surface area, heat exchanger	m²	2.10	2.10	2.10	3.50	3.50
Energy efficiency class, DHW heating with load profile XL		A	A	A	A	A
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit

Ground source heat pumps – inverter

Inverter



		HPG-I 04 DCS Pre- mium	HPG-I 06 DCS Pre- mium	HPG-I 08 DCS Pre- mium	HPG-I 12 DCS Pre- mium	HPG-I 15 DCS Pre- mium
b01 Entry electrical cables						
c01 Cold water inlet Diameter	mm	22	22	22	22	22
c06 DHW outlet Diameter	mm	22	22	22	22	22
c10 DHW circulation						
c12 Safety valve drain						
e01 Heating flow Diameter	mm	22	22	22	22	22
e02 Heating return Diameter	mm	22	22	22	22	22
f01 Heat source flow Diameter	mm	28	28	28	28	28
f02 Heat source return Diam- eter	mm	28	28	28	28	28

# Ground source heat pumps – inverter

## Inverter

### HPG-I 04-15 CS Premium



HPG-I 04 CS Premium

#### Benefits

- › Easy and time saving installation with high level of integration
- › High degree of DHW convenience and monovalent heating thanks to high flow temperatures of up to 75 °C
- › Pressure monitoring in the heat source circuit with integral brine pressure switch
- › Passive cooling function with minimal operating costs via a geothermal probe system
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Very quiet operation thanks to the intelligent sound prevention concept including a number of anti-vibration mounts
- › Futureproof and eco-friendly refrigerant with high efficiency

**Application** • Ground source heat pump with output-dependent control and inverter technology is installed indoors and features a high level of integration. • The additional, integral heat exchanger ensures energy efficient passive cooling via an area heating system. • Can be used in mono mode for heating and DHW operation. • Suitable for both new and modernised buildings thanks to very high flow temperatures. • The heat pump can also be used for apartment buildings, depending on the heat load of the building.

**Convenience features** • Quiet operation thanks to encapsulated refrigerant circuit and acoustically isolated compressor. • The consistent source temperature ensures a constant heating output with high flow temperatures of up to 75 °C all year round. • Fully automatic, weather-compensated control of the heating system by the integral heat pump controller. • In combination with the optional ISG Internet Service Gateway, the heating system can be controlled via the home network or a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • One high efficiency circulation pump and one expansion vessel are provided for the brine side, and the same for the heating side. • Standard delivery includes the electric emergency/auxiliary heater for mono energetic operation and pasteurisation, the diverter valve for DHW heating and a safety valve with discharge hose. • The refrigerant circuit works with the eco-friendly and futureproof refrigerant R454C. This has optimum properties for heat pump applications. • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.

**Efficiency** • The inverter and built-in recuperator ensure optimised heat pump operation and therefore maximum efficiency all year round.

**Installation** • Due to the integrated safety concept, no special measures are necessary during installation. Only a minimum room size must be ensured. • Internal pressure hoses enable direct hydraulic connection to the heating and brine circuits. • For easy installation, the hydraulic connections are equipped with quick-release fittings and thermal insulation. Carrying handles on the back panel facilitate appliance handling.



		HPG-I 04 CS Premium	HPG-I 06 CS Premium	HPG-I 08 CS Premium	HPG-I 12 CS Premium	HPG-I 15 CS Premium
Part number		202627	202628	202629	202630	202631
Specification						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+++	A+++	A+++	A+++	A+++
Heating output at B0/W35 (EN 14511)	kW	1,96	2,37	2,78	4,19	5,18
Heating output at B0/W35 (min./max.)	kW	1,0 - 4,2	1,0 - 6,6	1,0 - 7,6	2,1 - 12,7	2,1 - 14,8
COP at B0/W35 (EN 14511)		4.60	4.60	4.67	5.01	4.86
Cooling capacity at B15/W23	kW	2.5	3	4	6	8
SCOP (EN 14825)		5.07	5.20	5.12	5.59	5.44

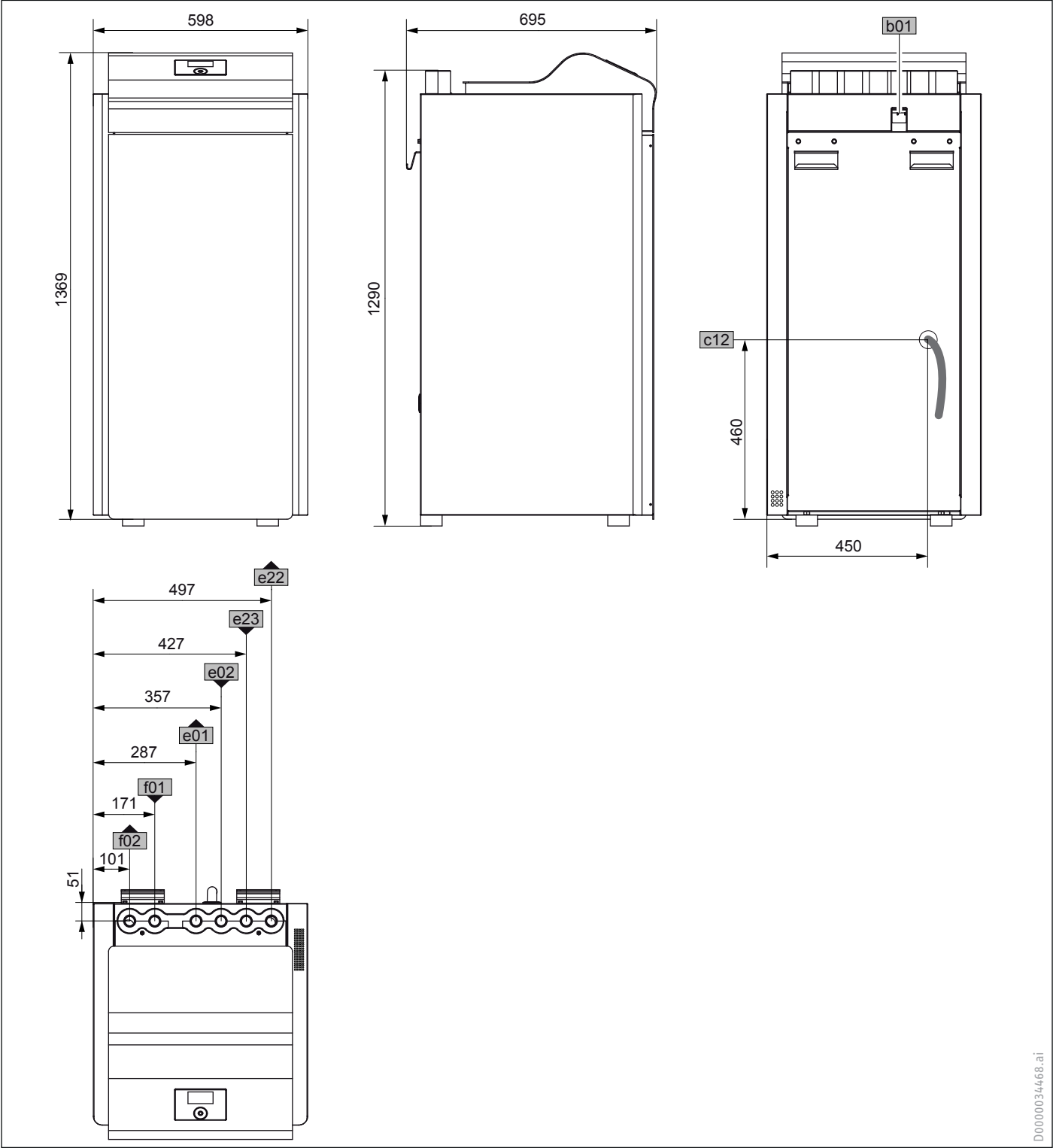
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## Ground source heat pumps – inverter

### Inverter

		HPG-I 04 CS Premium	HPG-I 06 CS Premium	HPG-I 08 CS Premium	HPG-I 12 CS Premium	HPG-I 15 CS Premium
Sound power level (EN 12102)	dB(A)	38 - 40	38 - 43	38 - 45	39 - 46	39 - 47
Max. application limit on the heating side	°C	75	75	75	75	75
Min. installation room volume	m <sup>3</sup>	11	11	11	18	11
Height	mm	1369	1369	1369	1369	1369
Width	mm	598	598	598	598	598
Depth	mm	658	658	658	658	658
Weight	kg	180	180	180	190	190
Rated voltage, compressor	V	230	230	230	230	230
Rated voltage, emergency/auxiliary heater	V	230	230	230	230	230
Refrigerant		R454C	R454C	R454C	R454C	R454C
Connection, heating side		28 mm	28 mm	28 mm	28 mm	28 mm
Connection, heat source side		28 mm plug-in connection	28 mm plug-in connection	28 mm plug-in connection	28 mm plug-in connection	28 mm plug-in connection
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit
<b>DHW cylinder</b>						
<b>Part number</b>		<b>221360</b>	<b>221360</b>	<b>221360</b>	<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP	SBB 301 WP	SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder	DHW cylinder	DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229980</b>	<b>229980</b>			
Type		SBS 601 W	SBS 601 W			
Description		Instantaneous water cylinders	Instantaneous water cylinders			
<b>Part number</b>				<b>229981</b>	<b>229981</b>	<b>229981</b>
Type				SBS 801 W	SBS 801 W	SBS 801 W
Description				Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>236684</b>	<b>236684</b>			
Type		HSBC 200 L	HSBC 200 L			
Description		Integral cylinder	Integral cylinder			
<b>Part number</b>		<b>238826</b>	<b>238826</b>	<b>238826</b>	<b>238826</b>	<b>238826</b>
Type		HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool
Description		Integral cylinder	Integral cylinder	Integral cylinder	Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>						
<b>Part number</b>					<b>203763</b>	<b>203763</b>
Type					STH 210 Plus	STH 210 Plus
Description					Buffer cylinder	Buffer cylinder

Ground source heat pumps – inverter  
Inverter

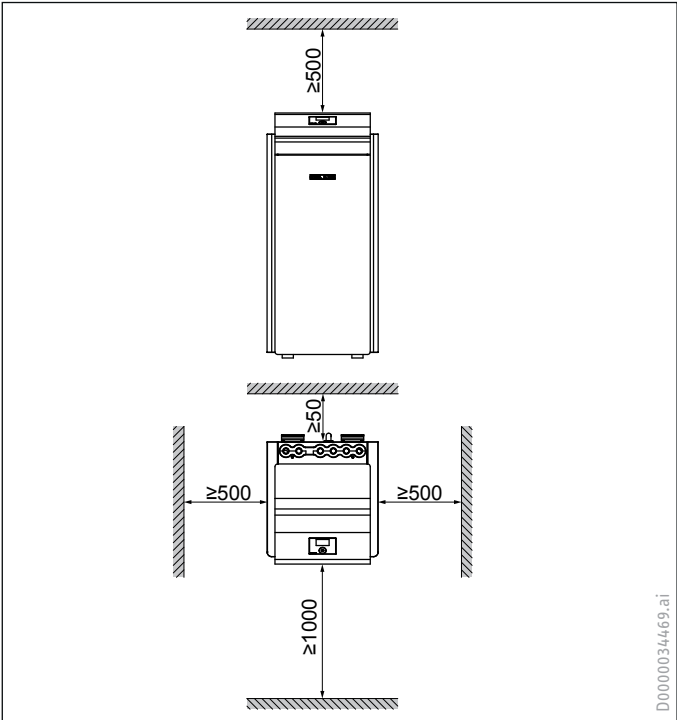


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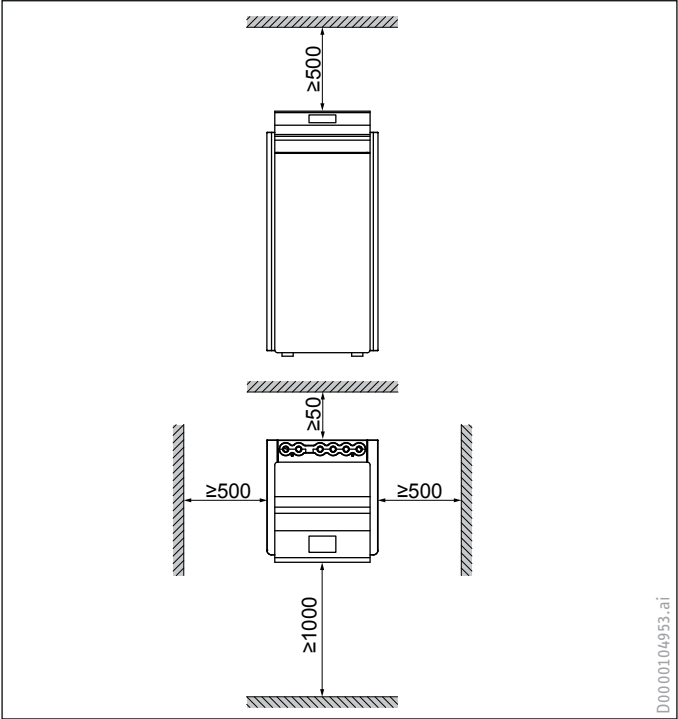
# Ground source heat pumps – inverter Inverter

		HPG-I 04 CS Premium	HPG-I 06 CS Premium	HPG-I 08 CS Premium	HPG-I 12 CS Premium	HPG-I 15 CS Premium
b01 Entry electrical cables						
c12 Safety valve drain						
e01 Heating flow Diameter	mm	28	28	28	28	28
e02 Heating return Diameter	mm	28	28	28	28	28
e22 Cylinder flow Diameter	mm	28	28	28	28	28
e23 Cylinder return Diameter	mm	28	28	28	28	28
f01 Heat source flow Diameter	mm	28	28	28	28	28
f02 Heat source return Diameter	mm	28	28	28	28	28

Minimum clearance diagram



Ground source heat pumps – inverter  
Inverter



# Ground source heat pumps – inverter

## Inverter

### HPG-I 04-15 S Premium



HPG-I 04 S Premium

#### Benefits

- › Easy and time saving installation with high level of integration
- › High degree of DHW convenience and monovalent heating thanks to high flow temperatures of up to 75 °C
- › Pressure monitoring in the heat source circuit with integral brine pressure switch
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Very quiet operation thanks to the intelligent sound prevention concept including a number of anti-vibration mounts
- › Futureproof and eco-friendly refrigerant with high efficiency

**Application** • The ground source heat pump with output-dependent control and inverter technology is installed indoors. • The high level of integration simplifies installation whilst the small footprint means that it does not take up much space. • The heat pump can be used for modernisation projects as flow temperatures of up to 75 °C are available all year round for heating and DHW heating. • Mono mode is possible for both heating and DHW heating.

**Convenience features** • Quiet operation, due to encapsulated refrigerant circuit and acoustically isolated compressor. • Fully automatic, weather-compensated control of the heating system is assured by the integral heat pump manager. Control via the home network or from a mobile device is possible via the optional Internet Service Gateway (ISG). With integral heat and electricity metering via refrigerant circuit data. • High level of integration: High efficiency circulation pumps and expansion vessels for the brine and heating side are included. Also integrated are the electric emergency/auxiliary heater for mono energetic operation and pasteurisation, a diverter valve for DHW heating and a safety valve with discharge hose. • The refrigerant circuit works with the eco-friendly and futureproof refrigerant R454C whose properties are optimised for use in heat pumps. • The corrosion-protected, enamelled metal casing is made from hot-dip galvanised, powder coated sheet steel. Colour: Alpine white.

**Efficiency** • Optimum operation and high efficiency all year round thanks to the inverter and integral recuperator.

**Installation** • Carrying handles are provided on the back panel for easy transport. No special safety precautions are required when siting. Only the minimum room size must be complied with. Internal pressure hoses enable direct hydraulic connection to the heating and brine circuits. • For easy installation, the hydraulic connections are equipped with quick-release fittings and come with thermal insulation.



		HPG-I 04 S Premium	HPG-I 06 S Premium	HPG-I 08 S Premium	HPG-I 12 S Premium	HPG-I 15 S Premium
Part number		202617	202618	202619	202620	202621
Specification						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+++	A+++	A+++	A+++	A+++
Heating output at B0/W35 (EN 14511)	kW	1,96	2,37	2,78	4,19	5,18
Heating output at B0/W35 (min./max.)	kW	1,0 - 4,2	1,0 - 6,6	1,0 - 7,6	2,1 - 12,7	2,1 - 14,8
COP at B0/W35 (EN 14511)		4.60	4.60	4.67	5.01	4.86
SCOP (EN 14825)		5.07	5.20	5.12	5.59	5.44
Sound power level (EN 12102)	dB(A)	38 - 40	38 - 43	38 - 45	39 - 46	39 - 47
Max. application limit on the heating side	°C	75	75	75	75	75
Min. installation room volume	m³	11	11	11	18	11
Height	mm	1369	1369	1369	1369	1369
Width	mm	598	598	598	598	598
Depth	mm	658	658	658	658	658
Weight	kg	180	180	180	190	190

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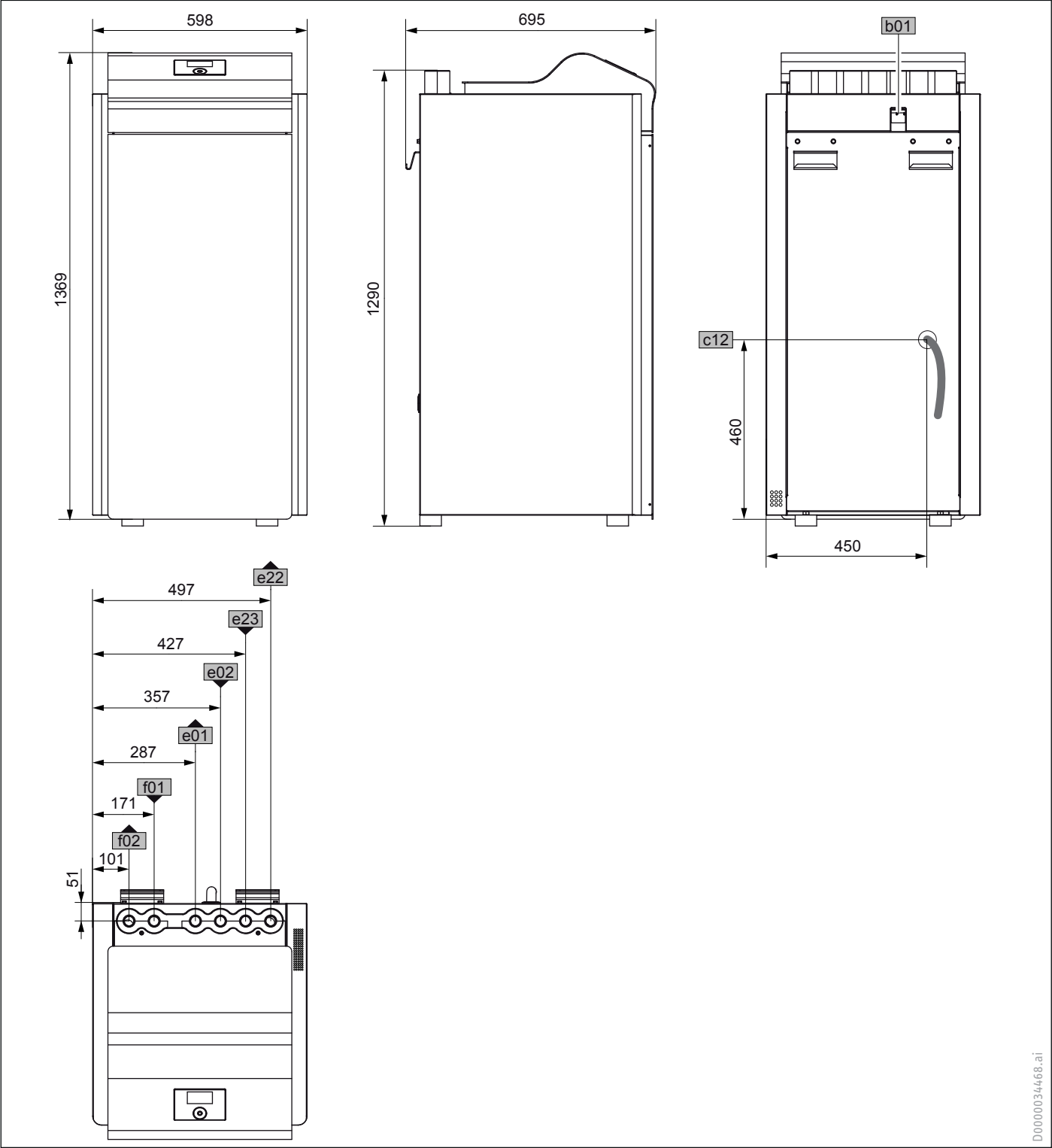
## Ground source heat pumps – inverter

### Inverter

		HPG-I 04 S Premium	HPG-I 06 S Premium	HPG-I 08 S Premium	HPG-I 12 S Premium	HPG-I 15 S Premium
Rated voltage, compressor	V	230	230	230	230	230
Rated voltage, emergency/auxiliary heater	V	230	230	230	230	230
Refrigerant		R454C	R454C	R454C	R454C	R454C
Connection, heating side		28 mm	28 mm	28 mm	28 mm	28 mm
Connection, heat source side		28 mm plug-in connection	28 mm plug-in connection	28 mm plug-in connection	28 mm plug-in connection	28 mm plug-in connection
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit
<b>DHW cylinder</b>						
<b>Part number</b>		<b>221360</b>	<b>221360</b>	<b>221360</b>	<b>221360</b>	<b>221360</b>
Type		SBB 301 WP	SBB 301 WP	SBB 301 WP	SBB 301 WP	SBB 301 WP
Description		DHW cylinder	DHW cylinder	DHW cylinder	DHW cylinder	DHW cylinder
<b>Part number</b>		<b>229980</b>	<b>229980</b>			
Type		SBS 601 W	SBS 601 W			
Description		Instantaneous water cylinders	Instantaneous water cylinders			
<b>Part number</b>				<b>229981</b>	<b>229981</b>	<b>229981</b>
Type				SBS 801 W	SBS 801 W	SBS 801 W
Description				Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>236684</b>	<b>236684</b>			
Type		HSBC 200 L	HSBC 200 L			
Description		Integral cylinder	Integral cylinder			
<b>Part number</b>		<b>238826</b>	<b>238826</b>	<b>238826</b>	<b>238826</b>	<b>238826</b>
Type		HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool
Description		Integral cylinder	Integral cylinder	Integral cylinder	Integral cylinder	Integral cylinder
<b>Buffer cylinder</b>						
<b>Part number</b>					<b>203763</b>	<b>203763</b>
Type					STH 210 Plus	STH 210 Plus
Description					Buffer cylinder	Buffer cylinder

Ground source heat pumps – inverter

Inverter



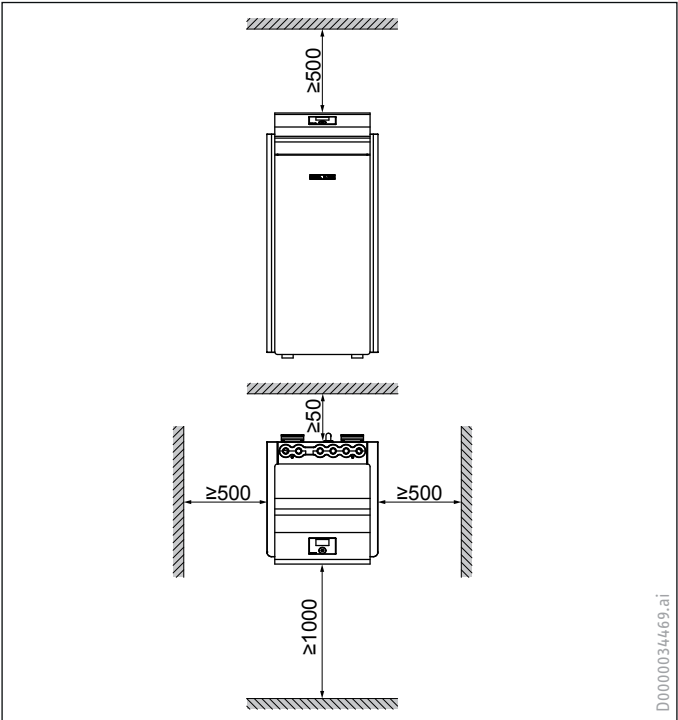
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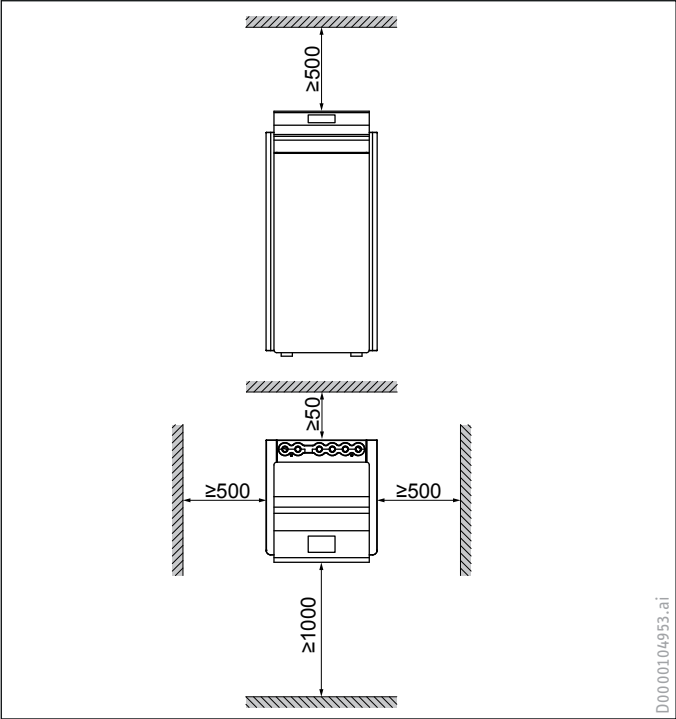
# Ground source heat pumps – inverter

## Inverter

		HPG-I 04 S Premium	HPG-I 06 S Premium	HPG-I 08 S Premium	HPG-I 12 S Premium	HPG-I 15 S Premium
b01 Entry electrical cables						
c12 Safety valve drain						
e01 Heating flow Diameter	mm	28	28	28	28	28
e02 Heating return Diameter	mm	28	28	28	28	28
e22 Cylinder flow Diameter	mm	28	28	28	28	28
e23 Cylinder return Diameter	mm	28	28	28	28	28
f01 Heat source flow Diameter	mm	28	28	28	28	28
f02 Heat source return Diameter	mm	28	28	28	28	28

Minimum clearance diagram





# Ground source heat pumps – inverter

## Inverter

### WPE-I 33-87 H 400 Premium



WPE-I 33 H 400 Premium

#### Benefits

- › Particularly efficient DHW heating using hot gas technology
- › Inverter technology allows ideally matched heating output through the variable speed compressor
- › Highly versatile, as both cascade control and dual mode integration are possible
- › Intuitive operation via colour touchscreen
- › Easy to integrate thanks to various BMS interfaces

**Application** • Ground source heat pump with output control and inverter technology. The system is installed indoors and is suitable for apartment buildings and commercial premises. • With the help of additional hydraulic components, the existing source system can be used for passive and active cooling, or for simultaneous heating and cooling. • It can be used in mono mode for heating and DHW operation. • Up to 16 heat pumps can be operated in a cascade to achieve the required heating output.

**Convenience features** • The heat pump can be installed in a variety of buildings, as the integral inverter continually adjusts the system's heating output to the current energy demand, thereby ensuring flexibility in terms of the range of application. • One high efficiency circulation pump is provided for the brine side and one for the heating side. • The hot gas technology enables simultaneous DHW heating via an additional heat exchanger. • Fully automatic, weather-compensated control of the heating system is taken care of by the integral heat pump manager with colour touchscreen. When combined with the optional Internet Service Gateway (ISG), it is also possible to control the system in the home network or with a mobile device. There is also optional provision for external control of the heating system via a building management system. • To minimise the transfer of structure-borne sound to the building, the refrigerant circuit is mounted on an anti-vibration base plate and its internal hydraulic connections are flexible. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R410A.

**Efficiency** • The heat pump's all year round demand-dependent output provision is ensured by the integral inverter which also enables the system to operate very efficiently. • The standard-fitted hot gas technology ensures that high DHW temperatures are achieved very efficiently and at low cost.

**Installation** • The vertical design means that only a small installation space is required. • The high level of integration enables quick and simplified installation, even with larger systems. The appliances are fully installed and delivered ready for operation. • Internal pressure hoses are provided for direct hydraulic connection to the heating and brine circuits.



		WPE-I 33 H 400 Premium	WPE-I 44 H 400 Premium	WPE-I 59 H 400 Premium	WPE-I 87 H 400 Premium
Part number		201412	201413	201414	201415
Specification					
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+++	A+++	A+++	A+++
Heating output at B0/W35 (EN 14511)	kW	20,18	26,71	35,60	52,00
Heating output at B0/W35 (min./max.)	kW	10 - 33	11 - 44	14 - 59	21 - 87
COP at B0/W35 (EN 14511)		4.73	4.60	4.50	4.71
SCOP (EN 14825)		5.55	5.65	5.19	5.17
Sound power level (EN 12102)	dB(A)	41-56	41-56	46-61	46-63
Max. application limit on the heating side	°C	65	65	65	65
Height	mm	1723	1723	1742	1742
Width	mm	692	692	900	900

Continue on next page >

## Ground source heat pumps – inverter

### Inverter

		WPE-I 33 H 400 Premium	WPE-I 44 H 400 Premium	WPE-I 59 H 400 Premium	WPE-I 87 H 400 Premium
Depth	mm	803	803	848	848
Weight	kg	300	300	430	550
Rated voltage, compressor	V	400	400	400	400
Refrigerant		R410A	R410A	R410A	R410A
Connection, heating side		35 mm	35 mm	42 mm	42 mm
Connection, hot gas	mm	28.00	28.00	28.00	28.00
Connection, heat source side		42 mm	42 mm	54 mm	54 mm
<b>Recommended accessories</b>					
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>201715</b>	<b>201715</b>	<b>201715</b>	<b>201715</b>
Type		EM 33-87	EM 33-87	EM 33-87	EM 33-87
Description		Extension module for WPMG	Extension module for WPMG	Extension module for WPMG	Extension module for WPMG
<b>Part number</b>		<b>201716</b>	<b>201716</b>	<b>201716</b>	<b>201716</b>
Type		HG Set 33-87	HG Set 33-87	HG Set 33-87	HG Set 33-87
Description		Hot gas set	Hot gas set	Hot gas set	Hot gas set
<b>Part number</b>		<b>201767</b>	<b>201767</b>	<b>201767</b>	<b>201767</b>
Type		FE 33-87	FE 33-87	FE 33-87	FE 33-87
Description		Digital remote control	Digital remote control	Digital remote control	Digital remote control
<b>Part number</b>		<b>202062</b>	<b>202062</b>	<b>202062</b>	<b>202062</b>
Type		EMW 33-87	EMW 33-87	EMW 33-87	EMW 33-87
Description		Extension module with wall mounted enclosure	Extension module with wall mounted enclosure	Extension module with wall mounted enclosure	Extension module with wall mounted enclosure
<b>Part number</b>		<b>202779</b>	<b>202779</b>	<b>202779</b>	<b>202779</b>
Type		FS-HP Strömungswächter	FS-HP Strömungswächter	FS-HP Strömungswächter	FS-HP Strömungswächter
Description		Flow switch	Flow switch	Flow switch	Flow switch
<b>Part number</b>		<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>
Type		DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter
Description		Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit
<b>DHW cylinder</b>					
<b>Part number</b>		<b>229982</b>	<b>229982</b>	<b>229982</b>	<b>229982</b>
Type		SBS 1001 W	SBS 1001 W	SBS 1001 W	SBS 1001 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>229983</b>	<b>229983</b>	<b>229983</b>	<b>229983</b>
Type		SBS 1501 W	SBS 1501 W	SBS 1501 W	SBS 1501 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Buffer cylinder</b>					
<b>Part number</b>		<b>185459</b>	<b>185459</b>		
Type		SBP 700 E	SBP 700 E		
Description		Buffer cylinder	Buffer cylinder		
<b>Part number</b>		<b>203765</b>	<b>203765</b>		
Type		STH 720 Plus	STH 720 Plus		
Description		Buffer cylinder	Buffer cylinder		
<b>Part number</b>				<b>227564</b>	
Type				SBP 1000 E	
Description				Buffer cylinder	

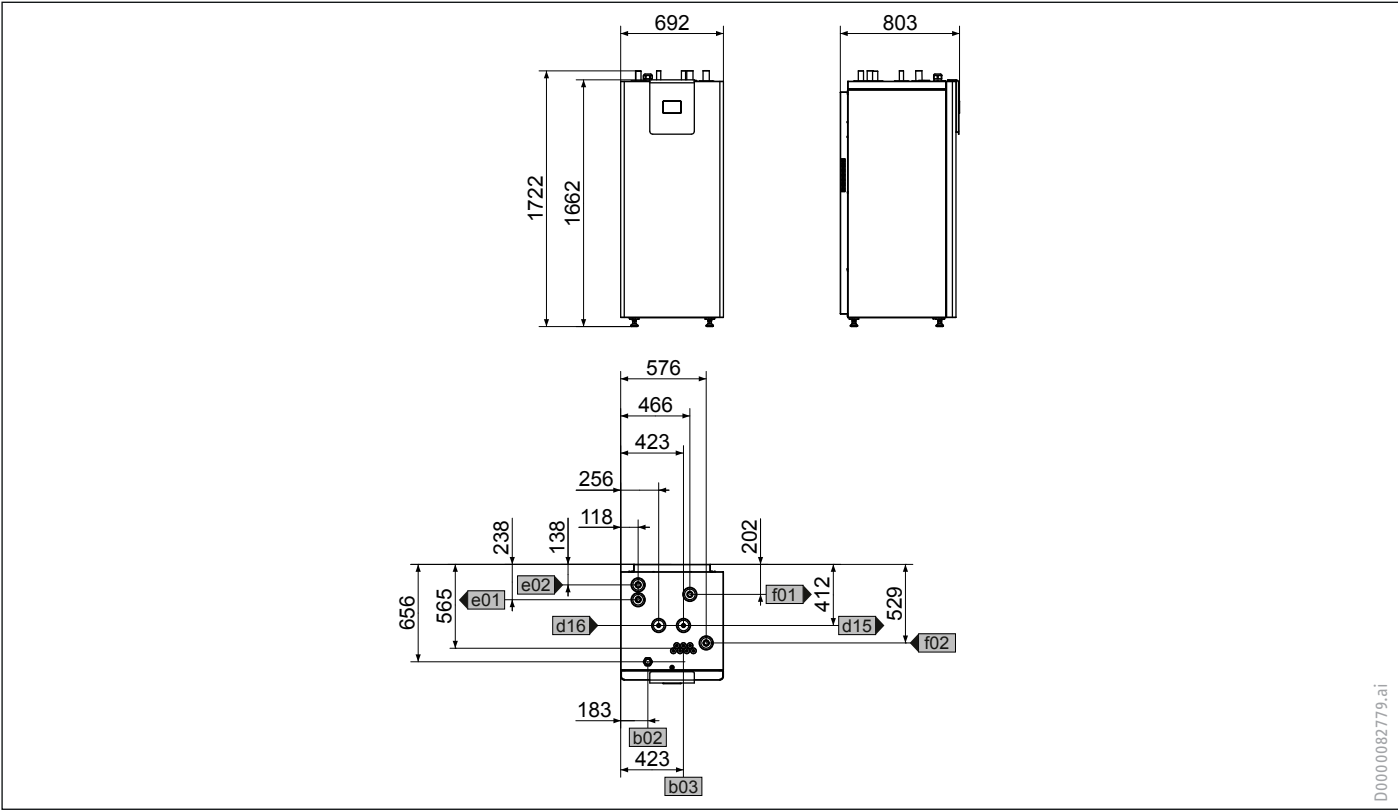
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Ground source heat pumps – inverter

Inverter

		WPE-I 33 H 400 Premium	WPE-I 44 H 400 Premium	WPE-I 59 H 400 Premium	WPE-I 87 H 400 Premium
Part number					227565
Type					SBP 1500 E
Description					Buffer cylinder

WPE-I 33 H 400 Premium  
WPE-I 44 H 400 Premium



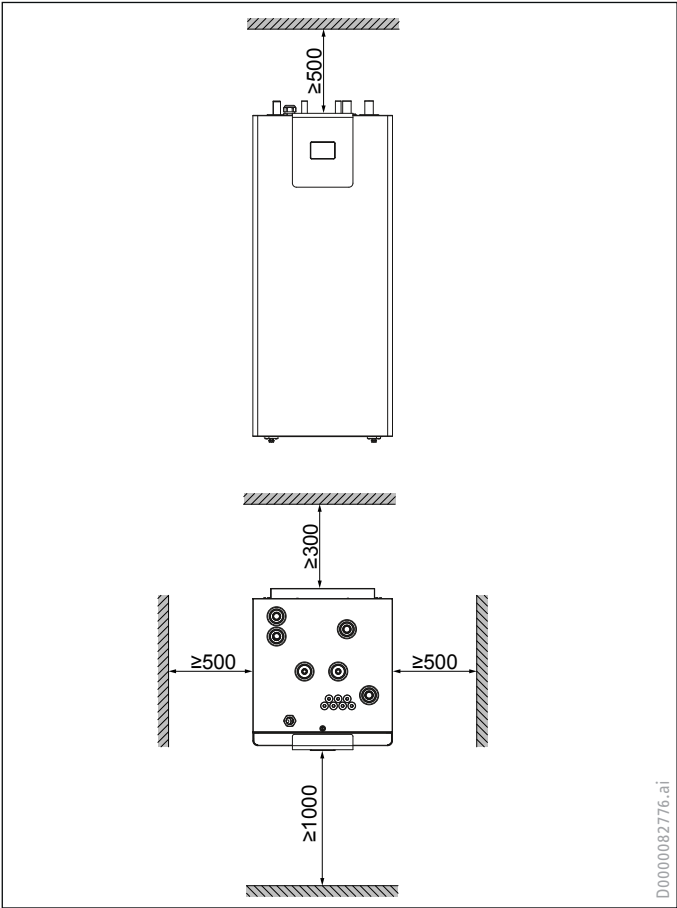
# Ground source heat pumps – inverter Inverter

		WPE-I 33 H 400 Premium	WPE-I 44 H 400 Premium	WPE-I 59 H 400 Premium	WPE-I 87 H 400 Premium
b02 Entry electrical cables I					
b03 Entry electrical cables II					
d15 Hot gas DHW flow opt. Diameter	mm	28	28	28	28
d16 Hot gas DHW return opt. Diameter	mm	28	28	28	28
e01 Heating flow Diameter	mm	35	35	42	42
e02 Heating return Diameter	mm	35	35	42	42
f01 Heat source flow Diameter	mm	42	42	54	54
f02 Heat source return Diameter	mm	42	42	54	54

## Minimum clearance diagram


WPE-I 33 H 400  
Premium  
WPE-I 44 H 400

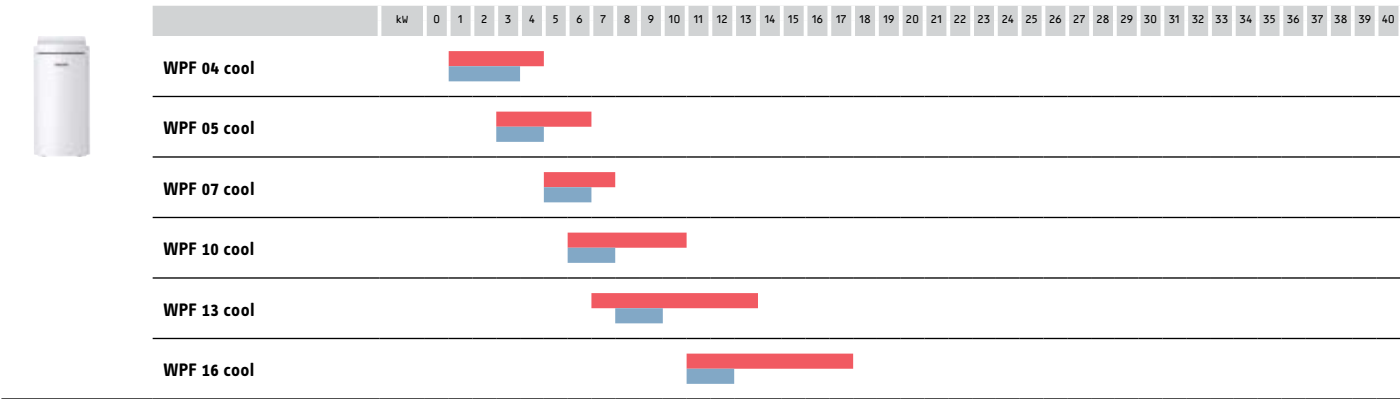
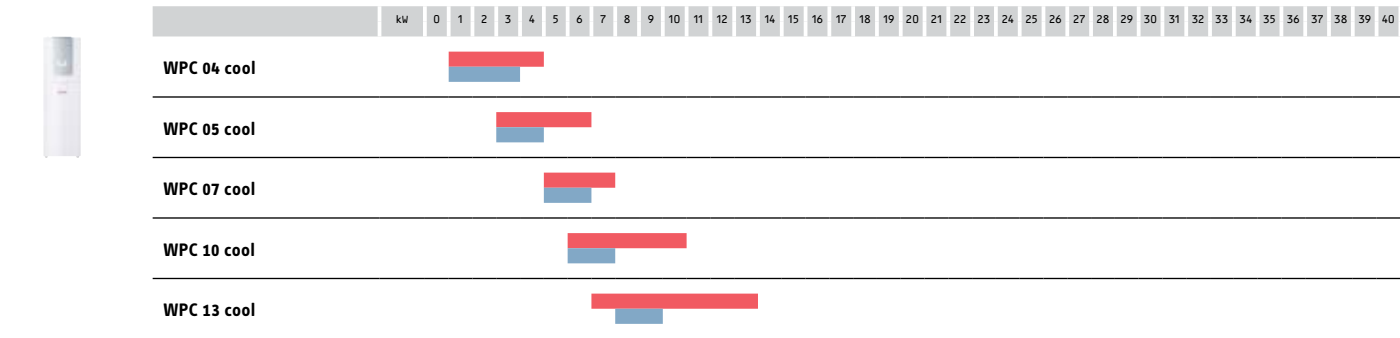
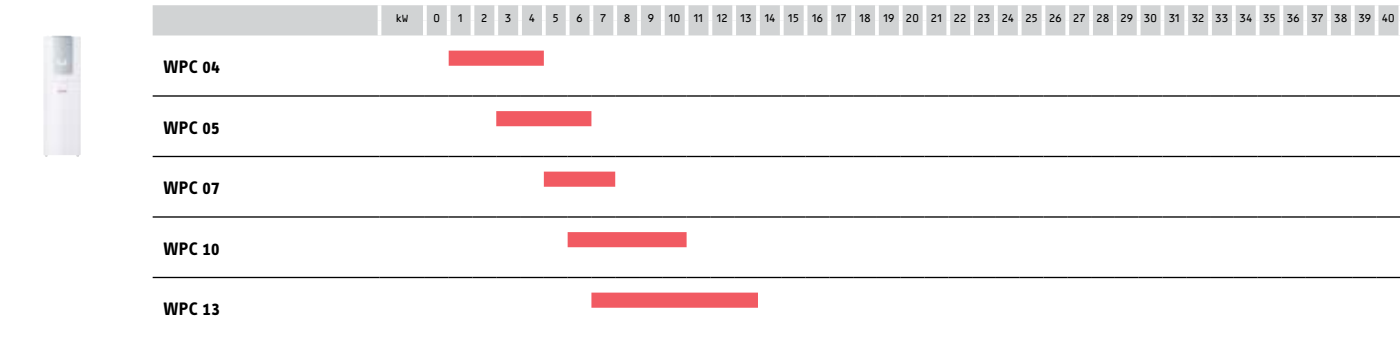
Premium



Ground source heat pumps – fixed speed

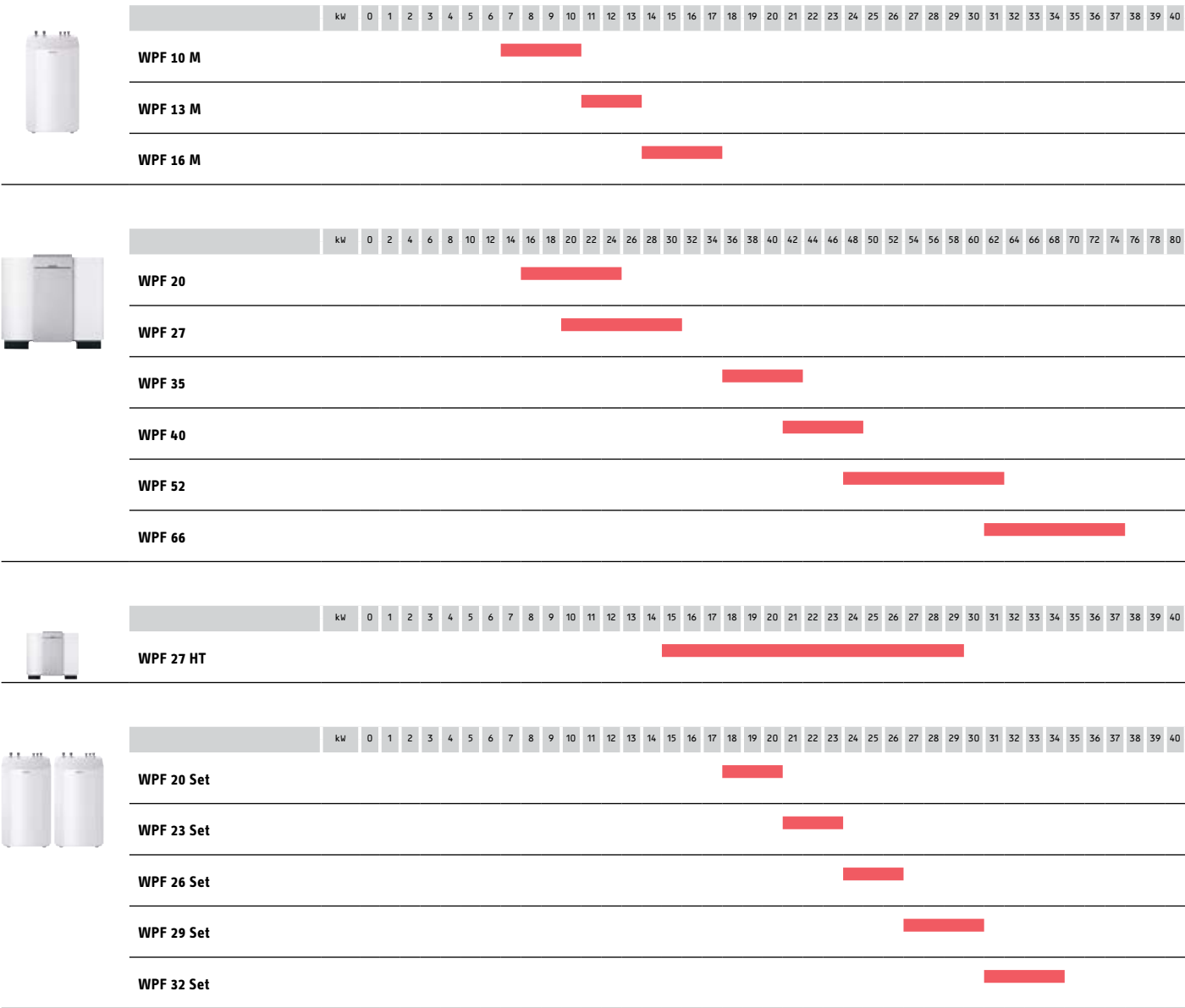
Application areas

	Heating
	Cooling



Ground source heat pumps – fixed speed

Application areas





<b>Fixed speed</b>	
WPC 04-13	287
WPC 04-13 cool	290
WPF 04-16	294
WPF 04-16 cool	299
WPF 10-16 M	304
WPF 20-66	306
WPF 27 HT	309
WPF 20-32 Set	312

# Ground source heat pumps – fixed speed

## Fixed speed

### WPC 04-13



WPC 04

#### Benefits

- › Compact ground source heat pump for heating
- › Low operating costs due to high coefficient of performance all year round
- › Straightforward and space saving installation due to integral DHW cylinder and high level of integration
- › Very quiet operation thanks to multiple anti-vibration mounts
- › Easy to transport as the refrigerant circuit and cylinder module can be separated from one another and are fitted with integral carrying handles
- › High level of DHW convenience with flow temperatures of up to 65 °C
- › Pressure in the heat source circuit is monitored with an integral brine pressure switch

**Application** • The compact ground source heat pump is suitable for indoor installation and is equipped with an integral DHW cylinder. It requires only a very small installation area thanks to the high level of integration. • Can be used in mono mode for heating and DHW operation in both new and modernised buildings, due to demand-dependent high flow temperatures all year round.

**Convenience features** • Quiet operation thanks to the refrigerant circuit mounted on an anti-vibration base plate, which minimises the transfer of structure-borne sound to the building. • The consistent source temperature ensures demand-dependent heating output with flow temperatures of up to 65 °C all year round. • The integral heat pump manager enables fully automatic, weather-compensated control of the heating system. In combination with the optional Internet Service Gateway (ISG), the heating system can be controlled via the home network or a mobile device. Integral heat and electricity metering is implemented using refrigerant circuit data. • One high efficiency circulation pump is provided for the brine side and one for the heating side. Standard delivery also includes the electric emergency/auxiliary heater for mono energetic operation and pasteurisation, diverter valve for DHW heating and safety valve with discharge hose. • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel. It has an alpine white stove enamel finish.

**Efficiency** • The scroll compressor with soft starter and the optimised heat exchangers increase the efficiency of the system.

**Installation** • To facilitate transport to the installation site, the refrigerant circuit can be separated from the cylinder module with minimal effort. In addition, the top and bottom sections have integral carrying handles. • The supplied pressure hoses allow easier direct hydraulic connection to the heating side and source side.



DESIGN PLUS  
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DESIGN PLUS



232926, 232927,  
232928, 232929,  
232930

232926

232926, 232927,  
232928, 232929,  
232930

232937, 232938,  
232939, 232940

Accessories necessarily  
232926, 232927,  
232928, 232929,  
232930

		WPC 04	WPC 05	WPC 07	WPC 10	WPC 13
Part number		232926	232927	232928	232929	232930
Specification						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	4.77	5.82	7.50	10.31	13.21
COP at B0/W35 (EN 14511)		4.50	4.80	4.84	5.02	4.82
SCOP (EN 14825)		4.925	5.325	5.325	5.60	5.275
Sound power level (EN 12102)	dB(A)	43	45	48	49	50
Height	mm	1917	1917	1917	1917	1917
Width	mm	600	600	600	600	600
Depth	mm	703	703	703	703	703
Nominal capacity	l	175	175	175	162	162
Weight	kg	243	246	259	277	283
Rated voltage, compressor	V	400	400	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400	400	400
Refrigerant		R410A	R410A	R410A	R410A	R410A
Surface area, heat exchanger	m²	2.10	2.10	2.10	3.60	3.60
Energy efficiency class, DHW heating with load profile XL		A	A	A	A	A

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## Ground source heat pumps – fixed speed

### Fixed speed

		WPC 04	WPC 05	WPC 07	WPC 10	WPC 13
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>
Type		DWS1 Soledruck- wächter	DWS1 Soledruck- wächter	DWS1 Soledruck- wächter	DWS1 Soledruck- wächter	DWS1 Soledruck- wächter
Description		Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit

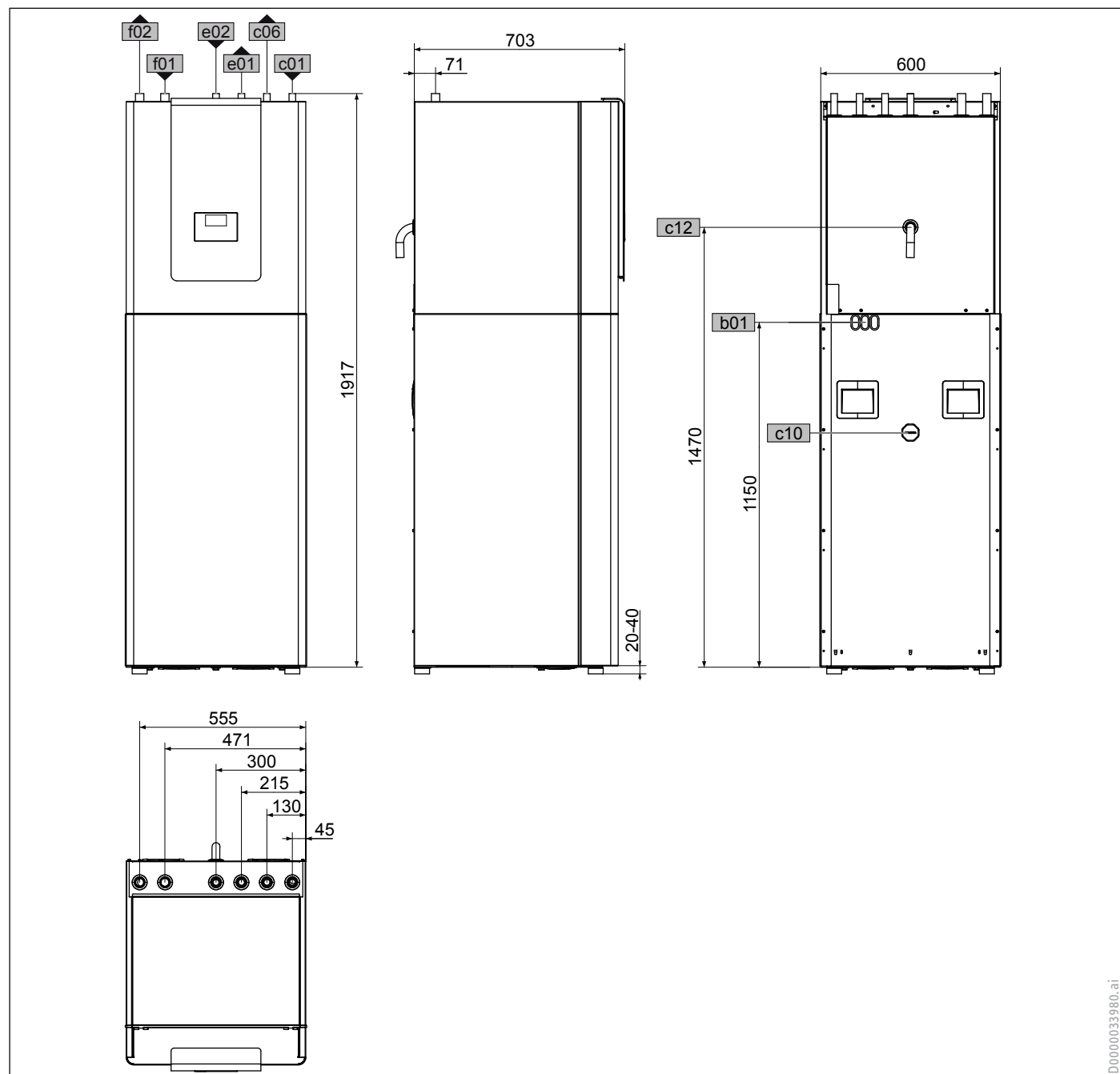
		WPC 05 S	WPC 07 S	WPC 10 S	WPC 13 S
<b>Part number</b>		<b>232937</b>	<b>232938</b>	<b>232939</b>	<b>232940</b>
<b>Specification</b>					
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	5.88	7.61	10.31	13.01
COP at B0/W35 (EN 14511)		4.78	4.75	4.76	4.75
SCOP (EN 14825)		5.225	5.30	5.20	5.175
Sound power level (EN 12102)	dB(A)	45	48	49	50
Height	mm	1917	1917	1917	1917
Width	mm	600	600	600	600
Depth	mm	703	703	703	703
Nominal capacity	l	175	175	162	162
Weight	kg	246	259	277	283
Rated voltage, compressor	V	230	230	230	230
Rated voltage, emergency/auxiliary heater	V	230	230	230	230
Refrigerant		R410A	R410A	R410A	R410A
Surface area, heat exchanger	m²	2.10	2.10	3.60	3.60
Energy efficiency class, DHW heating with load profile XL		A	A	A	A

<b>Recommended accessories</b>					
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>
Type		DWS1 Soledruck- wächter	DWS1 Soledruck- wächter	DWS1 Soledruck- wächter	DWS1 Soledruck- wächter
Description		Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit

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## Ground source heat pumps – fixed speed

### Fixed speed



		WPC 04	WPC 05	WPC 07	WPC 10	WPC 13	WPC 05 S	WPC 07 S	WPC 10 S	WPC 13 S
b01 Entry electrical cables										
c01 Cold water inlet Diameter	mm	22	22	22	22	22	22	22	22	22
c06 DHW outlet Diameter	mm	22	22	22	22	22	22	22	22	22
c10 DHW circulation Male thread		G 1/2	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2
c12 Safety valve drain										
e01 Heating flow Diameter	mm	22	22	22	22	22	22	22	22	22
e02 Heating return Diameter	mm	22	22	22	22	22	22	22	22	22
f01 Heat source flow Diameter	mm	28	28	28	28	28	28	28	28	28
f02 Heat source return Diameter	mm	28	28	28	28	28	28	28	28	28

# Ground source heat pumps – fixed speed

## Fixed speed

### WPC 04-13 cool



WPC 04 cool

#### Benefits

- › Compact ground source heat pump for heating and cooling
- › Low operating costs due to high coefficient of performance all year round
- › Straightforward and space saving installation due to integral DHW cylinder and high level of integration
- › Passive cooling function with minimal operating costs via a geothermal probe system
- › Very quiet operation thanks to multiple anti-vibration mounts
- › Easy to transport as the refrigerant circuit and cylinder module can be separated from one another and are fitted with integral carrying handles
- › High level of DHW convenience with flow temperatures of up to 65 °C
- › Pressure in the heat source circuit is monitored with an integral brine pressure switch

**Application** • The compact ground source heat pump is installed indoors. It features a high level of integration and an integral DHW cylinder. Additionally with integral heat exchanger for energy efficient passive cooling via an area heating system. • Can be used in mono mode to provide heating and DHW in new and modernised buildings due to the high flow temperatures. • Very small footprint thanks to the compact design.

**Convenience features** • To minimise the transfer of structure-borne sound to the building, the refrigerant circuit is mounted on an anti-vibration base plate. • Due to the consistent source temperature, a constant heating output with flow temperatures of up to 65 °C is guaranteed all year round. • The integral heat pump controller enables fully automatic, weather-compensated control of the heating system. • In combination with the optional ISG, the system can be controlled via the home network or a mobile device. • Integral heat and electricity metering is implemented using refrigerant circuit data. • One high efficiency circulation pump is provided for the brine side and one for the heating side. • An electric emergency/auxiliary heater for mono energetic operation and pasteurisation, the diverter valve for DHW heating and a safety valve with discharge hose are integrated as standard. • The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R410A. • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel, with an alpine white stove enamel finish.

**Efficiency** • The heat pump unit is equipped with a scroll compressor with a soft starter and optimised heat exchangers for improved efficiency.

**Installation** • The supplied pressure hoses enable direct hydraulic connection to the heating side and source side. • To facilitate installation, the heat pump refrigerant circuit can be easily separated from the cylinder module. Integral carrying handles at the top and bottom make handling easier.



DESIGN PLUS  
powered by light building



		WPC 04 cool	WPC 05 cool	WPC 07 cool	WPC 10 cool	WPC 13 cool
Part number		232931	232932	232933	232934	232935
Specification						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	4.77	5.82	7.50	10.31	13.21
COP at B0/W35 (EN 14511)		4.50	4.80	4.84	5.02	4.82
Cooling capacity at B15/W23	kW	3.00	3.80	5.20	6.00	8.50
SCOP (EN 14825)		4.925	5.325	5.325	5.60	5.275
Sound power level (EN 12102)	dB(A)	43	45	48	49	50
Height	mm	1917	1917	1917	1917	1917
Width	mm	600	600	600	600	600
Depth	mm	703	703	703	703	703
Nominal capacity	l	175	175	175	162	162
Weight	kg	248	251	264	283	288
Rated voltage, compressor	V	400	400	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400	400	400
Refrigerant		R410A	R410A	R410A	R410A	R410A

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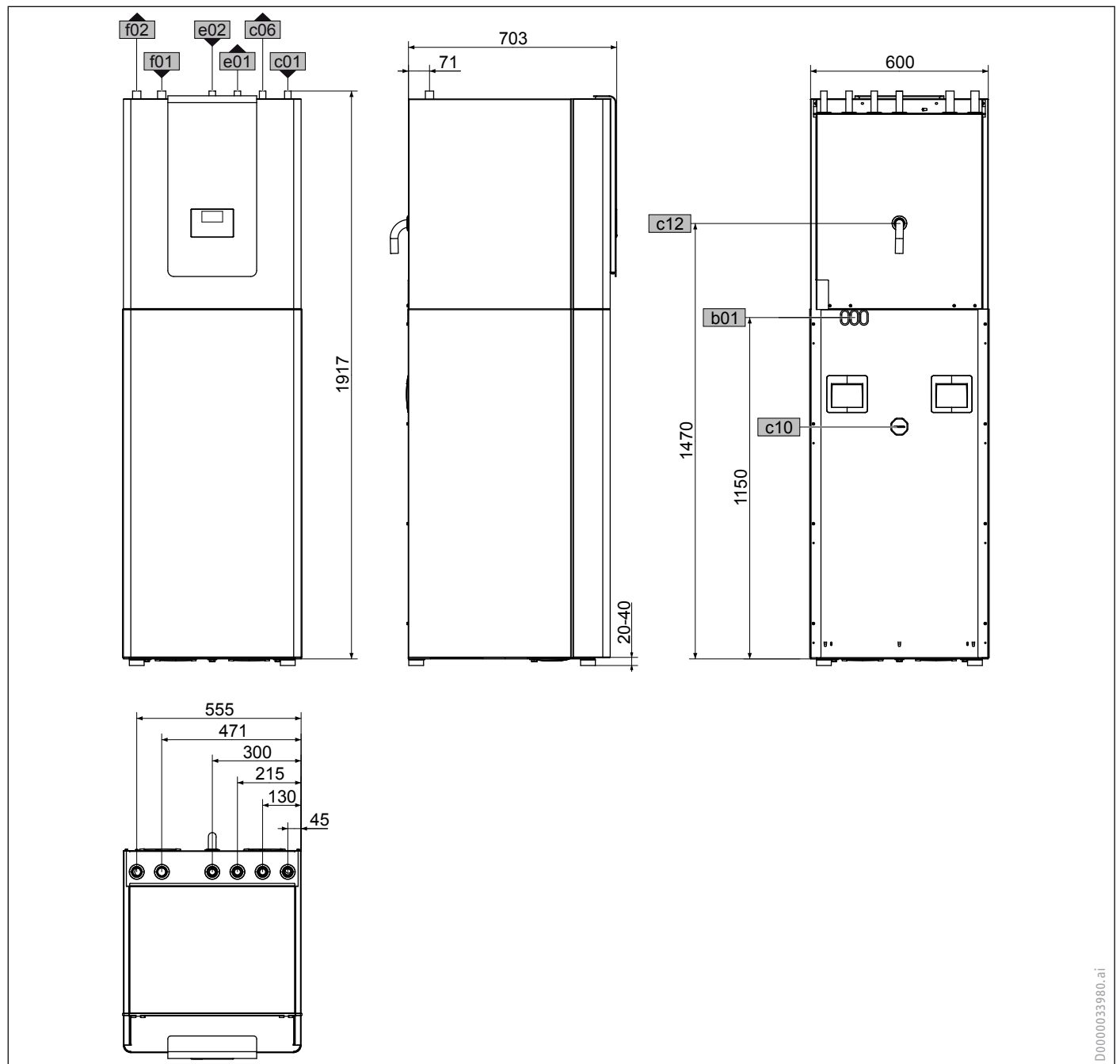
## Ground source heat pumps – fixed speed

### Fixed speed

		WPC 04 cool	WPC 05 cool	WPC 07 cool	WPC 10 cool	WPC 13 cool
Surface area, heat exchanger	m <sup>2</sup>	2.10	2.10	2.10	3.60	3.60
Energy efficiency class, DHW heating with load profile XL		A	A	A	A	A
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>
Type		DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter
Description		Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit

## Ground source heat pumps – fixed speed

### Fixed speed



		WPC 04 cool	WPC 05 cool	WPC 07 cool	WPC 10 cool	WPC 13 cool
b01 Entry electrical cables						
c01 Cold water inlet Diameter	mm	22	22	22	22	22
c06 DHW outlet Diameter	mm	22	22	22	22	22
c10 DHW circulation Male thread		G 1/2	G 1/2	G 1/2	G 1/2	G 1/2
c12 Safety valve drain						
e01 Heating flow Diameter	mm	22	22	22	22	22
e02 Heating return Diameter	mm	22	22	22	22	22
f01 Heat source flow Diameter	mm	28	28	28	28	28
f02 Heat source return Diameter	mm	28	28	28	28	28

# Ground source heat pumps – fixed speed

## Fixed speed

WPF 04-16



WPF 04

### Benefits

- › Ground source heat pump for heating
- › Low operating costs due to high coefficient of performance all year round
- › Easy and time saving installation with high level of integration
- › Very quiet operation thanks to multiple anti-vibration mounts
- › High level of DHW convenience with flow temperatures of up to 65 °C
- › Pressure in the heat source circuit is monitored with an integral brine pressure switch

**Application** • The ground source heat pump is suitable for indoor installation. • Fast, space saving installation thanks to the high level of integration. • Can be used in mono mode to provide heating and DHW in new and modernised buildings, due to demand-dependent high flow temperatures all year round. • The system is also suitable for apartment buildings, depending on the heat load of the building.

**Convenience features** • Very quiet operation thanks to the intelligent noise reduction concept, with the refrigerant circuit mounted on an anti-vibration base plate. • The consistent source temperature guarantees a demand-dependent heating output all year round, with flow temperatures of up to 65 °C. • The integral heat pump manager enables fully automatic, weather-compensated control of the system. • The heat pump can be combined with the Internet Service Gateway (ISG) and controlled via the home network or a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • A high efficiency circulation pump and an expansion vessel are provided for both the brine side and the heating side. • Also integrated as standard: an electric emergency/auxiliary heater for mono energetic operation and pasteurisation, diverter valve for DHW heating and safety valve with discharge hose. • The metal casing is corrosion-protected with an alpine white finish and made from hot-dip galvanised, powder coated sheet steel.

**Efficiency** • The scroll compressor with soft starter and the optimised heat exchangers increase efficiency.

**Installation** • Transport handles on the back panel of the heat pump facilitate transport to the installation site. • Internal pressure hoses enable straightforward, direct hydraulic connection to the heating and brine circuits. The hydraulic connections are equipped with quick-release fittings and thermal insulation.



		WPF 04	WPF 05	WPF 07	WPF 10	WPF 13
Part number		232909	232910	232911	232912	232913
<b>Specification</b>						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	4.77	5.82	7.50	10.31	13.21
COP at B0/W35 (EN 14511)		4.50	4.80	4.84	5.02	4.82
SCOP (EN 14825)		4.925	5.325	5.325	5.60	5.275
Sound power level (EN 12102)	dB(A)	43	43	47	48	49
Max. application limit on the heating side	°C	65	65	65	65	65
Height	mm	1319	1319	1319	1319	1319
Width	mm	598	598	598	598	598
Depth	mm	658	658	658	658	658
Weight	kg	142	144	161	168	171
Rated voltage, compressor	V	400	400	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400	400	400
Refrigerant		R410A	R410A	R410A	R410A	R410A

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## Ground source heat pumps – fixed speed

### Fixed speed

		WPF 04	WPF 05	WPF 07	WPF 10	WPF 13
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit
<b>DHW cylinder</b>						
<b>Part number</b>					<b>221360</b>	<b>221360</b>
Type					SBB 301 WP	SBB 301 WP
Description					DHW cylinder	DHW cylinder
<b>Part number</b>				<b>229981</b>	<b>229981</b>	<b>229981</b>
Type				SBS 801 W	SBS 801 W	SBS 801 W
Description				Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>236684</b>	<b>236684</b>			
Type		HSBC 200 L	HSBC 200 L			
Description		Integral cylinder	Integral cylinder			
<b>Part number</b>		<b>238826</b>	<b>238826</b>	<b>238826</b>	<b>238826</b>	
Type		HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool	
Description		Integral cylinder	Integral cylinder	Integral cylinder	Integral cylinder	
<b>Buffer cylinder</b>						
<b>Part number</b>						<b>185458</b>
Type						SBP 200 E
Description						Buffer cylinder
<b>Part number</b>					<b>203763</b>	<b>203763</b>
Type					STH 210 Plus	STH 210 Plus
Description					Buffer cylinder	Buffer cylinder
		WPF 16	WPF 05 S	WPF 07 S	WPF 10 S	WPF 13 S
<b>Part number</b>		<b>232914</b>	<b>232922</b>	<b>232923</b>	<b>232924</b>	<b>232925</b>
<b>Specification</b>						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	17.02	5.88	7.61	10.31	13.01
COP at B0/W35 (EN 14511)		4.54	4.78	4.75	4.76	4.75
SCOP (EN 14825)		4.925	5.225	5.30	5.20	5.175
Sound power level (EN 12102)	dB(A)	53	43	47	48	49
Max. application limit on the heating side	°C	65	60	60	60	60
Height	mm	1319	1319	1319	1319	1319
Width	mm	598	598	598	598	598
Depth	mm	658	658	658	658	658

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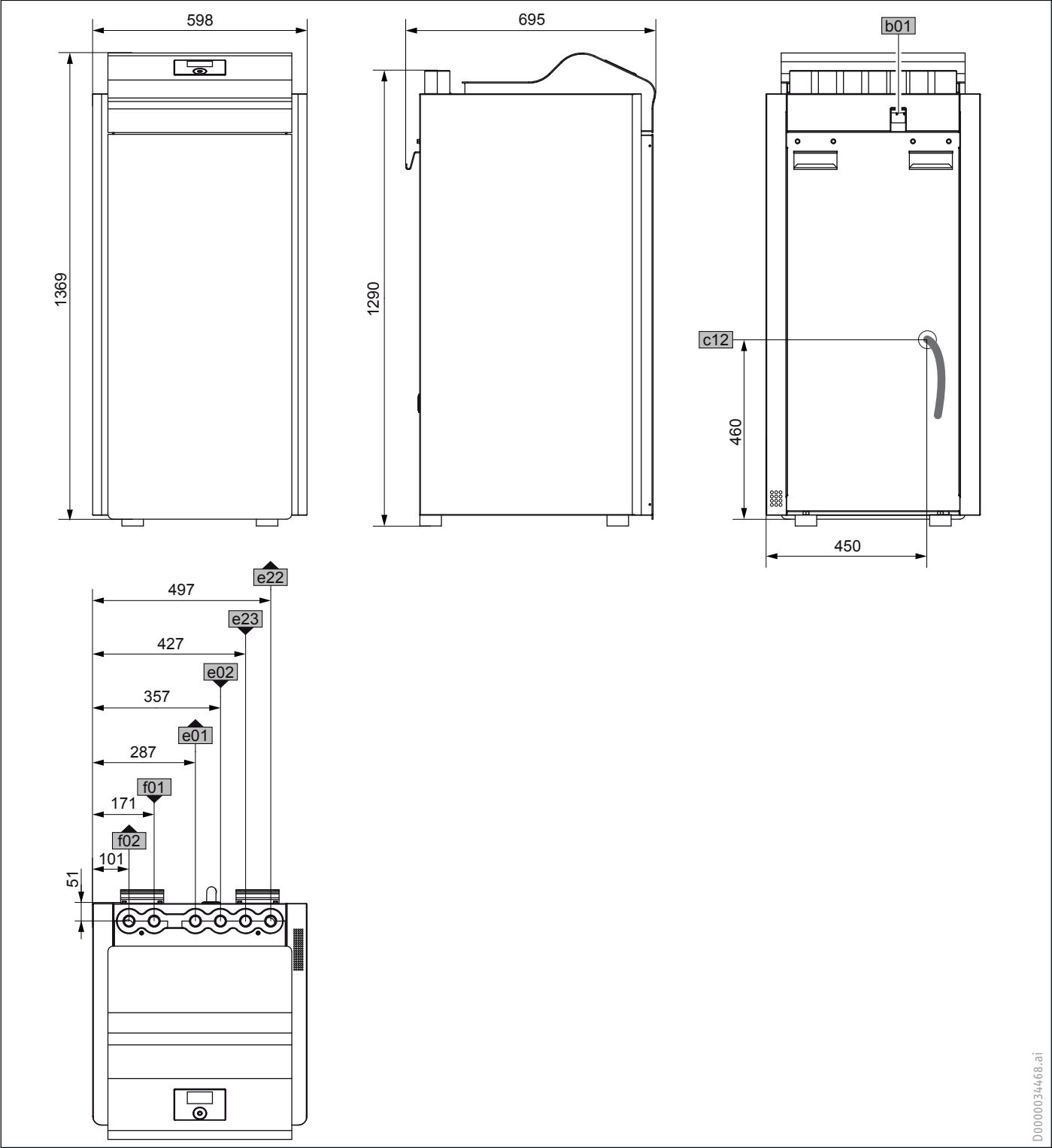
## Ground source heat pumps – fixed speed

### Fixed speed

		WPF 16	WPF 05 S	WPF 07 S	WPF 10 S	WPF 13 S
Weight	kg	185	144	161	168	170
Rated voltage, compressor	V	400	230	230	230	230
Rated voltage, emergency/auxiliary heater	V	400	230	230	230	230
Refrigerant		R410A	R410A	R410A	R410A	R410A
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit
<b>DHW cylinder</b>						
<b>Part number</b>		<b>221361</b>				
Type		SBB 302 WP				
Description		DHW cylinder				
<b>Part number</b>					<b>229980</b>	
Type					SBS 601 W	
Description					Instantaneous water cylinders	
<b>Part number</b>		<b>229981</b>		<b>229981</b>		<b>229981</b>
Type		SBS 801 W		SBS 801 W		SBS 801 W
Description		Instantaneous water cylinders		Instantaneous water cylinders		Instantaneous water cylinders
<b>Part number</b>			<b>236684</b>			
Type			HSBC 200 L			
Description			Integral cylinder			
<b>Part number</b>			<b>238826</b>	<b>238826</b>		
Type			HSBC 300 L cool	HSBC 300 L cool		
Description			Integral cylinder	Integral cylinder		
<b>Buffer cylinder</b>						
<b>Part number</b>		<b>185458</b>				<b>185458</b>
Type		SBP 200 E				SBP 200 E
Description		Buffer cylinder				Buffer cylinder
<b>Part number</b>		<b>203763</b>			<b>203763</b>	<b>203763</b>
Type		STH 210 Plus			STH 210 Plus	STH 210 Plus
Description		Buffer cylinder			Buffer cylinder	Buffer cylinder

Ground source heat pumps – fixed speed

Fixed speed



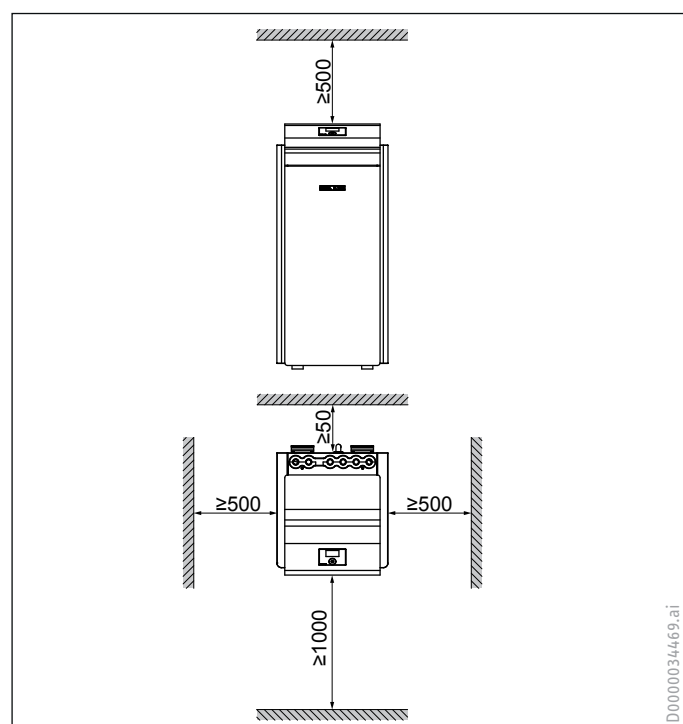
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## Ground source heat pumps – fixed speed

### Fixed speed

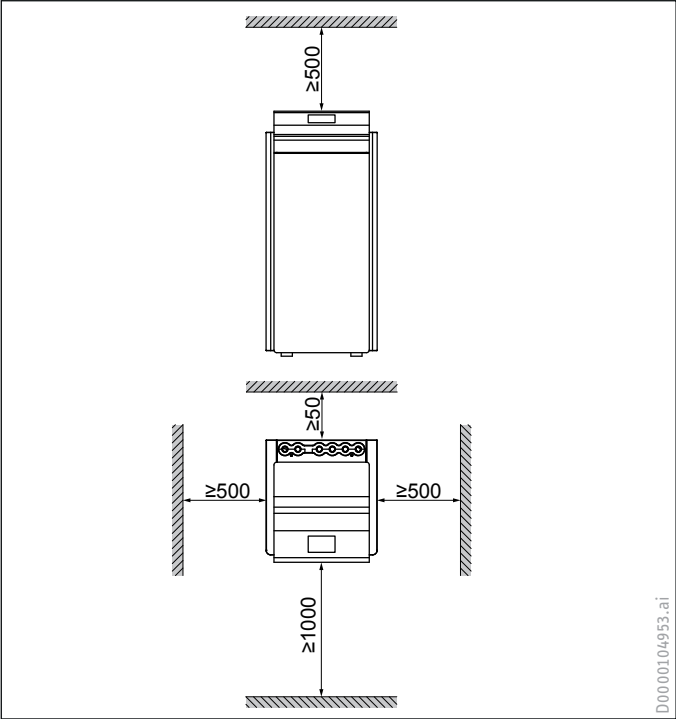
		WPF 04	WPF 05	WPF 07	WPF 10	WPF 13	WPF 16	WPF 05 S	WPF 07 S	WPF 10 S	WPF 13 S
b01 Entry electrical cables											
c12 Safety valve drain											
e01 Heating flow Diameter	mm	28	28	28	28	28	28	28	28	28	28
e02 Heating return Diameter	mm	28	28	28	28	28	28	28	28	28	28
e22 Cylinder flow Diameter	mm	28	28	28	28	28	28	28	28	28	28
e23 Cylinder return Diameter	mm	28	28	28	28	28	28	28	28	28	28
f01 Heat source flow Diameter	mm	28	28	28	28	28	28	28	28	28	28
f02 Heat source return Diameter	mm	28	28	28	28	28	28	28	28	28	28

#### Minimum clearance diagram



Ground source heat pumps – fixed speed

Fixed speed



# Ground source heat pumps – fixed speed

## Fixed speed

### WPF 04-16 cool



WPF 04 cool

#### Benefits

- › Ground source heat pump for heating and cooling
- › Low operating costs due to high coefficient of performance all year round
- › Passive cooling function with minimal operating costs via a geothermal probe system
- › Easy and time saving installation with high level of integration
- › Very quiet operation thanks to multiple anti-vibration mounts
- › High level of DHW convenience with flow temperatures of up to 65 °C
- › Pressure in the heat source circuit is monitored with an integral brine pressure switch

**Application** • Ground source heat pump for indoor installation with high level of integration. Additionally with integral heat exchanger for energy efficient passive cooling via an area heating system. Can be used in mono mode to provide heating and DHW in new and modernised buildings due to the high flow temperatures. Also suitable for apartment buildings, depending on the heat load of the building.

**Convenience features** • To minimise the transfer of structure-borne sound to the building, the refrigerant circuit is mounted on an anti-vibration base plate. Due to the consistent source temperature, a constant heating output with flow temperatures of up to 65 °C is guaranteed all year round. The integral heat pump controller enables fully automatic, weather-compensated control of the heating system. In combination with the optional ISG, the heating system can be controlled via the home network or a mobile device. Integral heat and electricity metering is implemented using refrigerant circuit data. A high efficiency circulation pump and an expansion vessel are provided for both the brine side and the heating side. An electric emergency/auxiliary heater for mono energetic operation and pasteurisation, diverter valve for DHW heating and safety valve with discharge hose are integrated as standard. The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R410A.

**Efficiency** • The heat pump unit is equipped with a scroll compressor with a soft starter and optimised heat exchangers for improved efficiency.

**Installation** • Internal pressure hoses enable direct hydraulic connection to the heating and brine circuits. For easy installation, the hydraulic connections are equipped with quick-release fittings and are already thermally insulated. The metal casing is corrosion-protected and made from galvanised, powder coated sheet steel with an alpine white stove enamelled finish. Carrying handles on the back panel facilitate appliance handling.



		WPF 04 cool	WPF 05 cool	WPF 07 cool	WPF 10 cool	WPF 13 cool	WPF 16 cool
Part number		232915	232916	232917	232918	232919	232920
<b>Specification</b>							
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++	A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	4.77	5.82	7.50	10.31	13.21	17.02
COP at B0/W35 (EN 14511)		4.50	4.80	4.84	5.02	4.82	4.54
Cooling capacity at B15/W23	kW	3.00	3.80	5.20	6.00	8.50	11.00
SCOP (EN 14825)		4.925	5.325	5.325	5.60	5.275	4.925
Sound power level (EN 12102)	dB(A)	43	43	47	48	49	53
Max. application limit on the heating side	°C	65	65	65	65	65	65
Height	mm	1319	1319	1319	1319	1319	1319
Width	mm	598	598	598	598	598	598
Depth	mm	658	658	658	658	658	658
Weight	kg	158	160	165	177	182	192
Rated voltage, compressor	V	400	400	400	400	400	400

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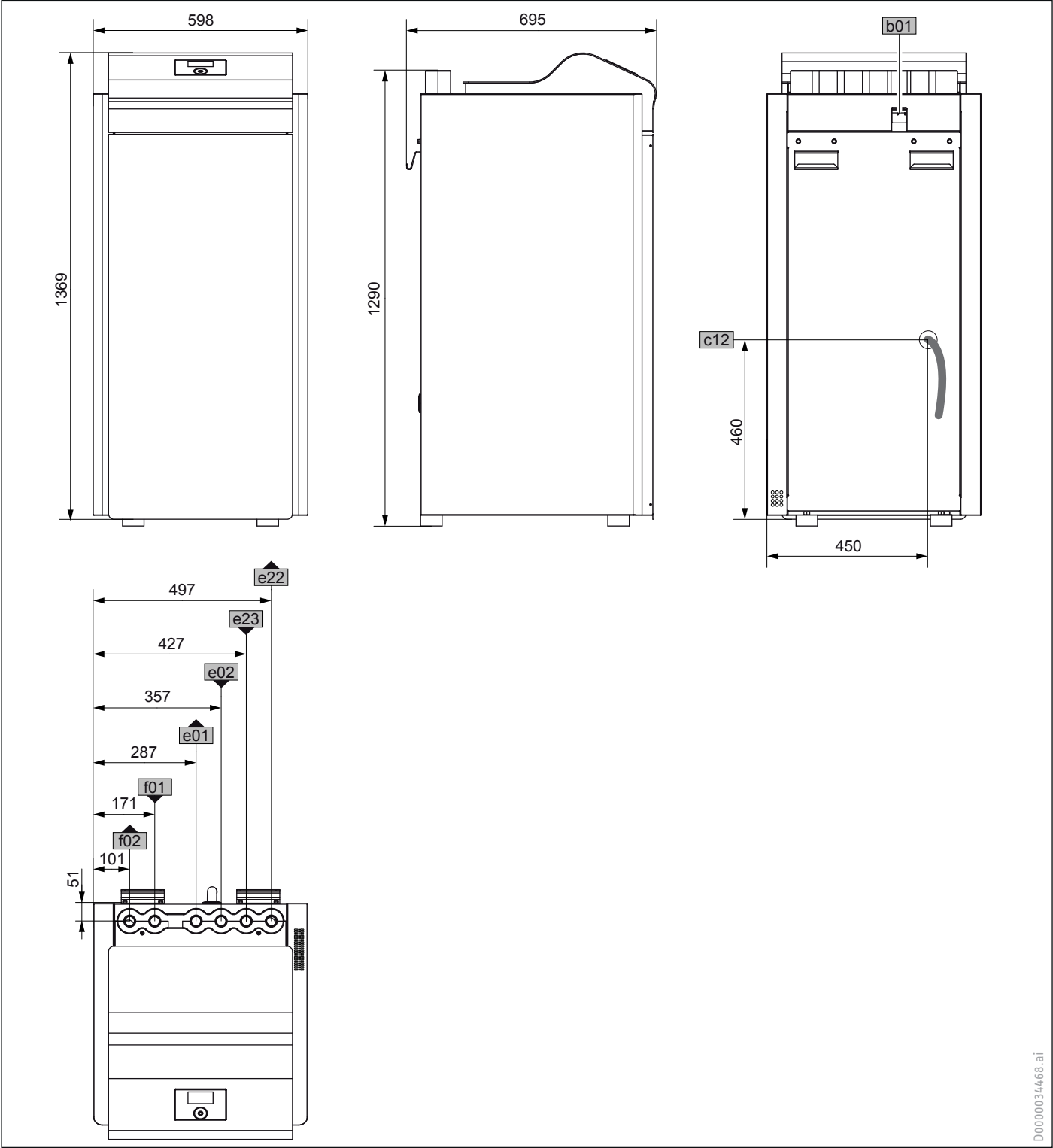
## Ground source heat pumps – fixed speed

### Fixed speed

		WPF 04 cool	WPF 05 cool	WPF 07 cool	WPF 10 cool	WPF 13 cool	WPF 16 cool
Rated voltage, emergency/auxiliary heater	V	400	400	400	400	400	400
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A
<b>Recommended accessories</b>							
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF	WPSF	WPSF	WPSF
Description		WPSF Multi-functional brine charging unit	WPSF Multi-functional brine charging unit	WPSF Multi-functional brine charging unit	WPSF Multi-functional brine charging unit	WPSF Multi-functional brine charging unit	WPSF Multi-functional brine charging unit
<b>DHW cylinder</b>							
<b>Part number</b>					<b>221360</b>	<b>221360</b>	
Type					SBB 301 WP	SBB 301 WP	
Description					DHW cylinder	DHW cylinder	
<b>Part number</b>							<b>221361</b>
Type							SBB 302 WP
Description							DHW cylinder
<b>Part number</b>				<b>229981</b>	<b>229981</b>	<b>229981</b>	<b>229981</b>
Type				SBS 801 W	SBS 801 W	SBS 801 W	SBS 801 W
Description				Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>236684</b>	<b>236684</b>				
Type		HSBC 200 L	HSBC 200 L				
Description		Integral cylinder	Integral cylinder				
<b>Part number</b>		<b>238826</b>	<b>238826</b>	<b>238826</b>	<b>238826</b>		
Type		HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool	HSBC 300 L cool		
Description		Integral cylinder	Integral cylinder	Integral cylinder	Integral cylinder		
<b>Buffer cylinder</b>							
<b>Part number</b>						<b>185458</b>	<b>185458</b>
Type						SBP 200 E	SBP 200 E
Description						Buffer cylinder	Buffer cylinder
<b>Part number</b>					<b>203763</b>	<b>203763</b>	<b>203763</b>
Type					STH 210 Plus	STH 210 Plus	STH 210 Plus
Description					Buffer cylinder	Buffer cylinder	Buffer cylinder

Ground source heat pumps – fixed speed

Fixed speed

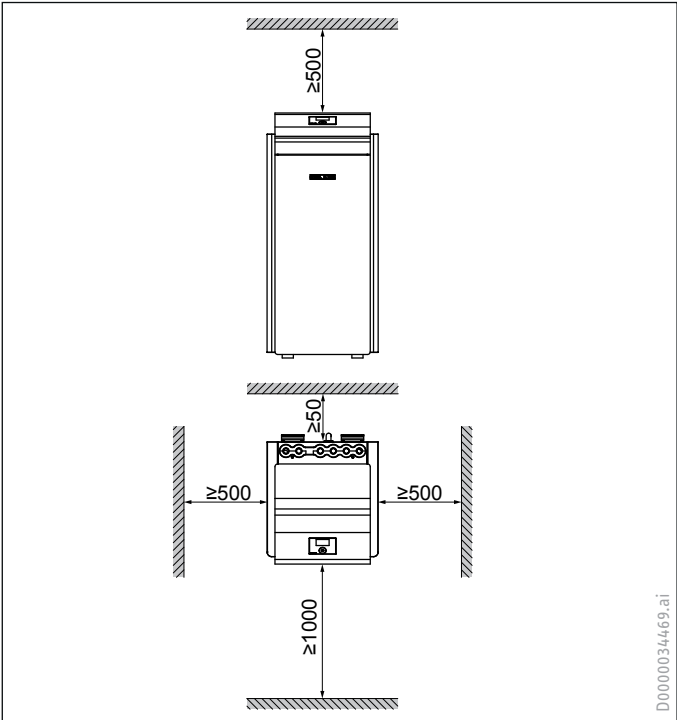


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# Ground source heat pumps – fixed speed Fixed speed

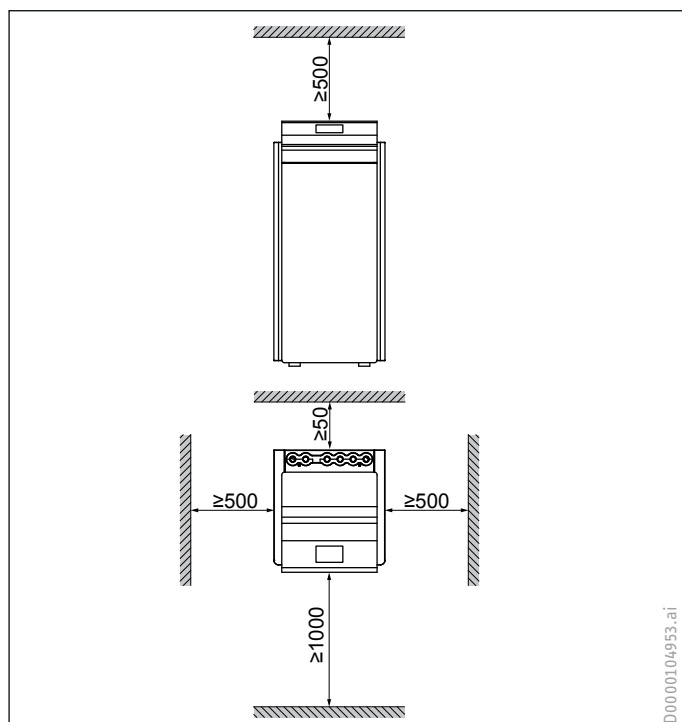
		WPF 04 cool	WPF 05 cool	WPF 07 cool	WPF 10 cool	WPF 13 cool	WPF 16 cool
b01 Entry electrical cables							
c12 Safety valve drain							
e01 Heating flow Diameter	mm	28	28	28	28	28	28
e02 Heating return Diameter	mm	28	28	28	28	28	28
e22 Cylinder flow Diameter	mm	28	28	28	28	28	28
e23 Cylinder return Diameter	mm	28	28	28	28	282	28
f01 Heat source flow Diameter	mm	28	28	28	28	28	28
f02 Heat source return Diameter	mm	28	28	28	28	28	28

Minimum clearance diagram



## Ground source heat pumps – fixed speed

### Fixed speed



# Ground source heat pumps – fixed speed

## Fixed speed

### WPF 10-16 M



WPF 10 M

#### Benefits

- › Ground source heat pump for heating
- › Suitable for cascade connection with high output demand
- › The heat source system (WQA) can be used between -5 °C and +20 °C
- › Heating system flow temperature up to 60 °C
- › With integral heat and electricity meters

**Application** • The ground source heat pump set is suitable for flexible indoor installation. • Can be used in mono mode for heating and DHW operation. • Ideal for use in apartment buildings and commercial premises due to high output in a cascade and high flow temperatures. • Thanks to the compact design, only a small installation area is required.

**Convenience features** • The consistent source temperature ensures a constant heating output with flow temperatures of up to 60 °C all year round. • In combination with the ISG Internet Service Gateway (optional accessory), the heat pump controller (accessory) can be used to control the system via the home network or a mobile device. • With integral heat and electricity metering via refrigerant circuit data. • Fault messages can be processed externally; a 230 V signal is available for this. • Option of integration into a building automation system using a software extension. • The robust single compressor heat pump unit is equipped with a scroll compressor and a stainless steel plate heat exchanger. Safety equipment is integrated, such as a high/low pressure switch and frost protection. The refrigerant circuit is hermetically sealed, tested for leaks at the factory and filled with safety refrigerant R410A. • Corrosion-protected casing components made from white powder coated, hot-dip galvanised sheet steel.

**Efficiency** • The heat pump unit is equipped with a scroll compressor with a soft starter and optimised heat exchangers for improved efficiency.

**Installation** • Hydraulic connectors have screw fittings for straightforward installation.



		WPF 10 M	WPF 13 M	WPF 16 M
<b>Part number</b>		<b>185349</b>	<b>182135</b>	<b>220894</b>
<b>Specification</b>				
Energy efficiency class, heat pump W35		A+++	A+++	A+++
Energy efficiency class, heat pump W55		A+	A++	A+
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A+	A++	A+
Heating output at B0/W35 (EN 14511)	kW	10.02	12.98	16.99
COP at B0/W35 (EN 14511)		4.49	4.57	4.35
SCOP (EN 14825)		5.075	5.125	4.875
Sound power level (EN 12102)	dB(A)	51	53	53
Max. application limit on the heating side	°C	60	60	60
Height	mm	960	960	960
Width	mm	510	510	510
Depth	mm	680	680	680
Weight	kg	112	120	125
Rated voltage, compressor	V	400	400	400
Refrigerant		R410A	R410A	R410A
<b>Recommended accessories</b>				
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium

Continue on next page >

## Ground source heat pumps – fixed speed

### Fixed speed

		WPF 10 M	WPF 13 M	WPF 16 M
<b>Part number</b>		<b>221382</b>	<b>221382</b>	<b>221382</b>
Type		DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter
Description		Brine pressure switch	Brine pressure switch	Brine pressure switch
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>Part number</b>		<b>233307</b>	<b>233307</b>	<b>233307</b>
Type		WPSF	WPSF	WPSF
Description		WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit	WPSF Multifunctional brine charging unit

Short term (max. 30 min) HS temperature up to 40 °C permissible. (Product: 185349, 182135, 220894)

# Ground source heat pumps – fixed speed

## Fixed speed

### WPF 20-66



WPF 20

#### Benefits

- › Ground source heat pump for flexible use
- › Low operating costs due to high coefficient of performance all year round
- › Suitable for use in residential and commercial buildings due to high output
- › Where available space is limited, two appliances can be installed one above the other
- › High reliability thanks to robust single compressor design

**Application** • The ground source heat pump can be installed either indoors or outdoors with weather protection. • Suitable for apartment buildings and commercial applications due high outputs: 66 kW per individual appliance or up to 400 kW in a cascade. • With the help of additional hydraulic components, the existing source system can be used for passive and active cooling, or for simultaneous heating and cooling. • Optimised for space saving installation, because 2 appliances can be installed one above the other. • Can be used in mono mode for heating and DHW operation.

**Convenience features** • To minimise the transfer of structure-borne sound to the building, the refrigerant circuit is mounted on an anti-vibration base plate for quiet operation. • The system can be controlled via the home network or a mobile device. This is achieved by combining the heat pump controller (accessory) with the Internet Service Gateway (ISG) as an optional accessory. With integral heat and electricity metering via refrigerant circuit data. • Fault messages can be processed externally via a 230 V signal. • The system can be integrated into an existing building automation system if required using a software extension. • Safety equipment is integrated, such as a high/low pressure switch and frost protection. • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel with an alpine white stove enamelled finish.

**Efficiency** • The heat pump unit is equipped with a scroll compressor with a soft starter and optimised stainless steel heat exchangers for improved efficiency.

**Installation** • To facilitate installation in confined spaces, it is possible to reduce the standard unit to a width of 800 mm for transport. Fixing points for lifting eyes are also provided.

DESIGN  
PLUS



		WPF 20	WPF 27	WPF 35	WPF 40	WPF 52	WPF 66
Part number		233003	233004	233005	233006	233007	233008
Specification							
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++	A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	21,5	29,69	38,04	43,1	55,83	67,10
COP at B0/W35 (EN 14511)		4.66	4.85	4.78	4.67	4.81	4.56
SCOP (EN 14825)		5.00	5.28	5.20	5.05	5.20	4.95
Sound power level (EN 12102)	dB(A)	54	55	55	58	58	59
Max. application limit on the heating side	°C	60	60	60	60	60	60
Height	mm	1154	1154	1154	1154	1154	1154
Width	mm	1242	1242	1242	1242	1242	1242
Depth	mm	860	860	860	860	860	860
Weight	kg	345	367	391	415	539	655
Rated voltage, compressor	V	400	400	400	400	400	400
Rated voltage, emergency/auxiliary heater	V	400	400	400	400	400	400
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A

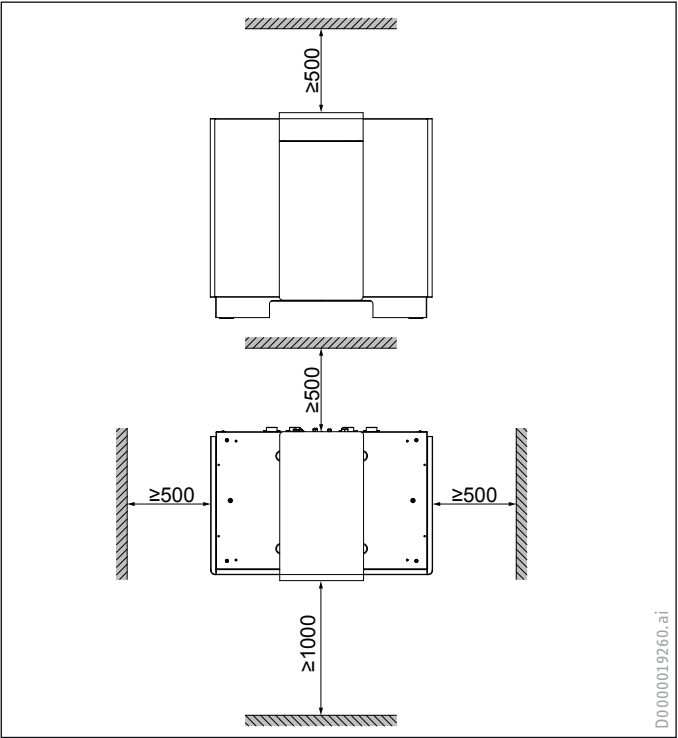
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## Ground source heat pumps – fixed speed

### Fixed speed

		WPF 20	WPF 27	WPF 35	WPF 40	WPF 52	WPF 66
<b>Required accessories</b>							
<b>Part number</b>		<b>236000</b>	<b>236000</b>	<b>236000</b>	<b>236000</b>	<b>236000</b>	<b>236000</b>
Type		WPM international	WPM international	WPM international	WPM international	WPM international	WPM international
Description		Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure	Heat pump manager in wall mounted enclosure
<b>Recommended accessories</b>							
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>
Type		DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter
Description		Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch
<b>Part number</b>		<b>222375</b>	<b>222375</b>				
Type		WPSB 308 E	WPSB 308 E				
Description		Brine assembly for the heat source system	Brine assembly for the heat source system				
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway
<b>DHW cylinder</b>							
<b>Part number</b>		<b>229982</b>	<b>229982</b>	<b>229982</b>	<b>229982</b>	<b>229982</b>	<b>229982</b>
Type		SBS 1001 W	SBS 1001 W	SBS 1001 W	SBS 1001 W	SBS 1001 W	SBS 1001 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>229983</b>	<b>229983</b>	<b>229983</b>	<b>229983</b>	<b>229983</b>	<b>229983</b>
Type		SBS 1501 W	SBS 1501 W	SBS 1501 W	SBS 1501 W	SBS 1501 W	SBS 1501 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Buffer cylinder</b>							
<b>Part number</b>		<b>227564</b>	<b>227564</b>				<b>227564</b>
Type		SBP 1000 E	SBP 1000 E				SBP 1000 E
Description		Buffer cylinder	Buffer cylinder				Buffer cylinder
<b>Part number</b>				<b>227565</b>	<b>227565</b>	<b>227565</b>	
Type				SBP 1500 E	SBP 1500 E	SBP 1500 E	
Description				Buffer cylinder	Buffer cylinder	Buffer cylinder	

Minimum clearance diagram



# Ground source heat pumps – fixed speed

## Fixed speed

### WPF 27 HT



WPF 27 HT

#### Benefits

- › Ground source heat pump for flexible use
- › High degree of DHW convenience with flow temperatures of up to 75 °C
- › Low operating costs due to high coefficient of performance all year round
- › Suitable for use in residential and commercial buildings due to high output
- › Ideal for DHW heating in a cascade of ground source heat pumps
- › Where available space is limited, two appliances can be installed one above the other
- › High reliability thanks to robust single compressor design

**Application** • The ground source heat pump is suitable for indoor installation, or outdoor installation with weather protection. • Suitable for apartment buildings and commercial applications due high outputs: 66 kW per individual appliance or up to 400 kW in a cascade. • With the help of additional hydraulic components, the existing source system can be used for passive and active cooling, or for simultaneous heating and cooling. • Optimised for space saving installation, because 2 appliances can be installed one above the other. • Can be used in mono mode for heating and DHW operation.

**Convenience features** • To minimise the transfer of structure-borne sound to the building, the refrigerant circuit is mounted on an anti-vibration base plate for quiet operation. • The system can be controlled via the home network or a mobile device. This is achieved by combining the heat pump controller (accessory) with the Internet Service Gateway (ISG) as an optional accessory. With integral heat and electricity metering via refrigerant circuit data. • Fault messages can be processed externally via a 230 V signal. • The system can be integrated into an existing building automation system if required using a software extension. • Safety equipment is integrated, such as a high/low pressure switch and frost protection. • The metal casing is corrosion-protected and made from hot-dip galvanised, powder coated sheet steel with an alpine white stove enamelled finish.

**Efficiency** • The heat pump unit: The heat pump unit is equipped with a scroll compressor with soft starter and optimised stainless steel heat exchangers for improved efficiency.

**Installation** • To facilitate installation in confined spaces, it is possible to reduce the standard unit to a width of 800 mm for transport. In addition, there are fixing points on the standard appliance for lifting eyes.

DESIGN  
PLUS



WPF 27 HT		
Part number		233009
<b>Specification</b>		
Energy efficiency class, heat pump W35		A+++
Energy efficiency class, heat pump W55		A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++
Heating output at B0/W35 (EN 14511)	kW	27,41
COP at B0/W35 (EN 14511)		4.34
SCOP (EN 14825)		4.58
Sound power level (EN 12102)	dB(A)	60
Max. application limit on the heating side	°C	75
Height	mm	1154
Width	mm	1242
Depth	mm	860

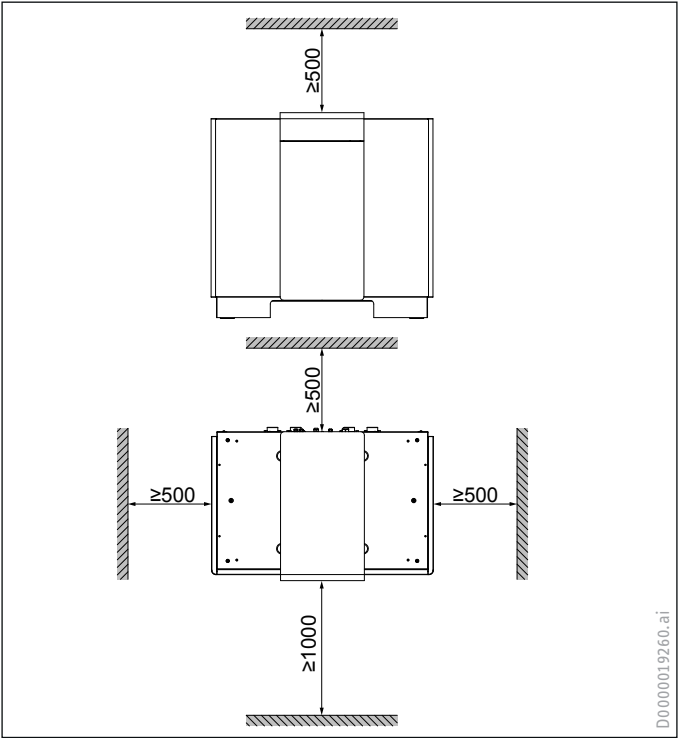
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## Ground source heat pumps – fixed speed

### Fixed speed

		WPF 27 HT
Weight	kg	409
Rated voltage, compressor	V	400
Rated voltage, emergency/auxiliary heater	V	400
Refrigerant		R134a
Required accessories		
Part number		236000
Type		WPM international
Description		Heat pump manager in wall mounted enclosure
Recommended accessories		
Part number		161696
Type		MEG 30
Description		Heat transfer medium
Part number		221382
Type		DWS1 Soledruckwächter
Description		Brine pressure switch
Part number		229336
Type		ISG web
Description		Internet Service Gateway
DHW cylinder		
Part number		229982
Type		SBS 1001 W
Description		Instantaneous water cylinders
Part number		229983
Type		SBS 1501 W
Description		Instantaneous water cylinders
Buffer cylinder		
Part number		227564
Type		SBP 1000 E
Description		Buffer cylinder

Minimum clearance diagram



# Ground source heat pumps – fixed speed

## Fixed speed

### WPF 20-32 Set



WPF 20 Set

#### Benefits

- › Ground source heat pump for heating
- › A kit for connecting up the heating and heat source pipework is included
- › Heat pump manager included in the pack
- › Heating system flow temperature up to 60 °C
- › The heat source system (WQA) can be used between -5 °C and +20 °C
- › With integral heat and electricity meters
- › It is possible to install a shared or separate brine circulation pump

Heat pump set in various output classes. • The sets each comprise two WPF M heat pumps, a pipework set for heating and heat source, and the heat pump manager. • The modular design enables sizing in line with the heat demand, as well as 2-stage output matching subject to outside temperature. • The heat pumps are equipped with a hermetically sealed compressor, starting current limiter, condenser, evaporator, safety equipment such as high and low pressure limiters, and frost protection. They are filled with safety refrigerant R410A.



		WPF 20 Set	WPF 23 Set	WPF 26 Set	WPF 29 Set	WPF 32 Set
<b>Part number</b>		<b>185365</b>	<b>185366</b>	<b>182139</b>	<b>220896</b>	<b>220897</b>
<b>Specification</b>						
Energy efficiency class, heat pump W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55		A++	A++	A++	A++	A++
Energy efficiency class, composite system (heat pump + controller) W35		A+++	A+++	A+++	A+++	A+++
Energy efficiency class, composite system (heat pump + controller) W55		A++	A++	A++	A++	A++
Heating output at B0/W35 (EN 14511)	kW	20.04	23.00	25.96	29.94	33.98
COP at B0/W35 (EN 14511)		4.49	4.54	4.57	4.44	4.35
Max. application limit on the heating side	°C	60	60	60	60	60
Height	mm	960	960	960	960	960
Width	mm	1240	1240	1240	1240	1240
Depth	mm	680	680	680	680	680
Weight	kg	224	232	240	245	250
Rated voltage, compressor	V	400	400	400	400	400
Refrigerant		R410A	R410A	R410A	R410A	R410A
<b>Recommended accessories</b>						
<b>Part number</b>		<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>	<b>161696</b>
Type		MEG 30	MEG 30	MEG 30	MEG 30	MEG 30
Description		Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium	Heat transfer medium
<b>Part number</b>		<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>	<b>221382</b>
Type		DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter	DWS1 Soledruckwächter
Description		Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch	Brine pressure switch
<b>Part number</b>		<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>	<b>229336</b>
Type		ISG web	ISG web	ISG web	ISG web	ISG web
Description		Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway	Internet Service Gateway

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## Ground source heat pumps – fixed speed

### Fixed speed

		WPF 20 Set	WPF 23 Set	WPF 26 Set	WPF 29 Set	WPF 32 Set
<b>DHW cylinder</b>						
<b>Part number</b>		<b>229982</b>	<b>229982</b>	<b>229982</b>	<b>229982</b>	<b>229982</b>
Type		SBS 1001 W	SBS 1001 W	SBS 1001 W	SBS 1001 W	SBS 1001 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Part number</b>		<b>229983</b>	<b>229983</b>	<b>229983</b>	<b>229983</b>	<b>229983</b>
Type		SBS 1501 W	SBS 1501 W	SBS 1501 W	SBS 1501 W	SBS 1501 W
Description		Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders	Instantaneous water cylinders
<b>Buffer cylinder</b>						
<b>Part number</b>		<b>227564</b>	<b>227564</b>	<b>227564</b>		
Type		SBP 1000 E	SBP 1000 E	SBP 1000 E		
Description		Buffer cylinder	Buffer cylinder	Buffer cylinder		
<b>Part number</b>					<b>227565</b>	<b>227565</b>
Type					SBP 1500 E	SBP 1500 E
Description					Buffer cylinder	Buffer cylinder

The weight is split approx. equally over both heat pumps. (Product: 185365, 185366, 182139, 220896, 220897)

<b>Accessories</b> Accessories	315
-----------------------------------	-----

## Accessories for ground source heat pumps

### Accessories

#### UPF



UPF 30/1-8 E

#### Benefits

- › with connecting cable and non-return valve (Product: 232532)
- › with connecting cable (Product: 235053)

Circulation pump with vapour diffusion-proof thermal insulation. Energy efficient thanks to integral electronic output control for constant or variable differential pressure. The circulation pump is suitable for operation on the heat source side of ground source heat pumps.

		UPF 30/1-8 E	UPF 30/1-12 E	UPF 40/1-8 E	UPF 50/1-12 E
Part number		232532	235053	227413	227414
Specification					
Energy Efficiency Index EEI		0.23	0.23	0.23	0.23
Connection		G 2	G 2	DN 40	DN 50
Delivery head	m	8.00	12.00	8.00	12.00
Max. flow rate	m³/h	8.00	10.00	15.00	29.00
Power consumption	W	8-130	16-310	12-310	25-590
Rated voltage	V	230	230	230	230
Control via 0-10 V signal with IF module		-	-	-	-
Control via differential pressure		x	x	x	x
Control via PWM signal		-	-	-	-
Installation length (centre distance)	mm	180	180	220	280

#### GWS 1/2



GWS 1

#### Benefits

- › For the use of groundwater as a heat source in ground source heat pumps
- › Thermally insulated casing

**Application** • Groundwater station, for the use of groundwater as a heat source in ground source heat pumps. • The station module comprises a corrosion-resistant stainless steel plate heat exchanger, two 3-way diverter valves as shut-off valves with drain & fill valves, and a duplex casing made from thermally insulating plastic. • The groundwater station can be rotated 180° for connection on the left or right of the heat pump, depending on the situation. Alternative application: use of ground source heat pumps with non-approved heat transfer media.

		GWS 1	GWS 2
Part number		230659	230660
Specification			
Connection, heat pump		28 mm	28 mm
Connection, heat source side		G 1 1/4	G 1 1/4
Chlorine heat transfer medium	mg/l	<0.5	<0.5
Chloride heat transfer medium	mg/l	<300	<300
Iron and manganese heat transfer medium	mg/l	<0.5	<0.5
Height	mm	630	630

Continue on next page >

## Accessories for ground source heat pumps

### Accessories

		GWS 1	GWS 2
Width	mm	640	640
Depth	mm	230	230
Weight	kg	20.50	26.50

#### WPSB



WPSB 308 E

#### Benefits

- › Quick and straightforward installation

Assembly with wall mounting bracket for the heat source system of the ground source heat pump, for quick and straightforward installation. The standard delivery includes a high efficiency brine circuit pump, including shut-off valves and insulation shell, brine-resistant diaphragm expansion vessel, pressure gauge, safety valve and drain valve.

		WPSB 308 E
Part number		222375
Specification		
Circulation pump type		Stratos PARA 30/1-8 E
Flow rate	m <sup>3</sup> /h	2.0
Max. delivery head	m	7.00
Safety valve	bar	2.50
Expansion vessel	l	25

#### WPSF



WPSF

#### Benefits

- › Microbubble separator and filter already integrated (Product: 233307)
- › Filter element easy to remove (Product: 233307)
- › All important components for the source side are pre-assembled (Product: 233307)

Multifunction filling unit for ground source heat pumps with a heating output of up to 16 kW. Used for filling and flushing the brine circuit and for quick and easy installation on the heat source side. Standard delivery includes a brine safety valve, pressure gauge, filter, quick-action air vent valve, microbubble separator and vapour diffusion-proof insulation.

		WPSF
Part number		233307

## Accessories for ground source heat pumps

### Accessories

		WPSF
<b>Specification</b>		
Connection, heat source side		G 1 1/4 A
Safety valve response pressure	MPa	0.30
Max. application limit, heat source	°C	40
Min. application limit, heat source	°C	-5
Max. operating pressure	MPa	0.60

#### DWS



DWS1 Soledruckwächter

#### Benefits

- › Adjustable switching point

**Application** • Brine pressure switch for the geothermal collectors and probes in accordance with VDI 4640 for leak detection. • The switching point can be set between 0.08 MPa and 0.15 MPa. If an audible or visual signal is required, an additional appropriate signal transmitter can be installed.

		DWS1 Soledruckwächter
<b>Part number</b>		221382

Included in standard delivery: pressure hose

#### AG



MAG 12

#### Benefits

- › For wall mounting (Product: 235218, 235219, 235220)
- › For floorstanding installation (Product: 235221)

Brine-resistant diaphragm expansion vessel for ground source heat pumps. With rolling diaphragm for pressure maintenance and volume compensation for the heat source side.

		MAG 12	MAG 18	MAG 25	MAG 50
<b>Part number</b>		235218	235219	235220	235221
<b>Specification</b>					
Expansion vessel	l	12	18	25	50
Pre-charge pressure	bar	0.50	0.50	0.50	0.50

## Accessories for ground source heat pumps

### Accessories

#### MEG



Heat transfer medium for ground source heat pumps, to protect against frost and corrosion on the heat source side.

MEG 30

		MEG 30
Part number		161696
Specification		
Type of liquid		Ethylene glycol
Liquid content	l	30

The concentrate must be mixed with water prior to filling the heat source system. Observe the mixing ratio shown in the heat pump instructions. Heat transfer medium MEG, mix with water prior to filling into the system.

Never use potassium carbonate in connection with hemp gaskets. (Product: 161696)

#### FS-WP



##### Benefits

- › With backflushing facility (Product: 233511)
- › With a removable filter (Product: 233512)

Filter to protect the ground source heat pump against contamination. Installed in the return of the heat generator.

FS-WP 22

		FS-WP 22	FS-WP 28
Part number		233511	233512
Specification			
Connection		G 1 A / Cu 22 x 1	G 1 1/4 A / Cu 28 x 1.5

# Accessories for ground source heat pumps

## Accessories

MFS-WP



**Benefits**

- › With removable filter element, pressure gauge and ball valve (Product: 235234)

Filter to protect the ground source heat pump against contamination. Installed in the return of the heat generator. Integral pressure gauge shows the system pressure.

MFS-WP 28

		MFS-WP 28
Part number		235234
Specification		
Connection		G 1 1/4 A / Cu 28 x 1.5

SDB 40-50 G



Pressure hose for brine flow and return lines. With threaded fitting on one side and locking ring fitting on the other. Uninsulated.

SDB 40-0.8 G

		SDB 40-0.8 G	SDB 50-0.8 G
Part number		201713	201714
Specification			
For pressure hose size DN		40	50

# Accessories for ground source heat pumps

## Accessories

EM 33-87



**Benefits**

- › Extension module for extended WPMG controller functions
- › Suitable for installation in the heat pump

Extension module for actuating other functions and integrating additional heating circuits or heat generators, for example.

EM 33-87

		EM 33-87
Part number		201715

EMW 33-87



**Benefits**

- › Extension module for extended WPMG controller functions
- › A wall mounted enclosure for installation direct onto the wall is included in the standard delivery

Extension module for actuating additional functions such as other heating circuits or heat generators. Supplied with wall mounted enclosure.

EMW 33-87

		EMW 33-87
Part number		202062
Specification		
Width	mm	300
Height	mm	180
Depth	mm	109

# Accessories for ground source heat pumps

## Accessories

### HG Set 33-87



**Benefits**

- › Hot gas set

Set for DHW heating via hot gas. It consists of a circulation pump and a line regulating valve.

HG Set 33-87

		HG Set 33-87
Part number		201716
Specification		
Power consumption	W	6
Rated voltage	V	230

### FE 33-87










**Benefits**

- › Remote control for adjusting room temperature or heating circuit temperature

Remote control for combining with the WPMG controller. The integral sensor captures the room temperature in the lead room; the room temperature or set temperature can be adjusted.

FE 33-87

		FE 33-87
Part number		201767

<b>Control units</b>		324
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<b>Controller</b>	
Accessories	325
<b>Connectivity</b>	
Accessories	327
<b>Controller accessories</b>	
Accessories	328

## Control units

### Controller

#### WPM



WPM international

#### Benefits

- › Heat pump manager in stylish wall mounted enclosure
- › Management of a two-stage on/off or inverter cascade for one direct heating circuit and two heating circuits with mixers
- › Straightforward electrical installation thanks to RAST 5 connector technology
- › Integral heat metering
- › Cooling control function
- › A second heat generator can be controlled
- › Screed drying program
- › DHW circulation pump management
- › PWM circulation pump management
- › Three immersion/contact sensors and one outside sensor are included in the standard delivery
- › Fault output 230 V
- › Update via an SD card
- › An internet interface is available as an option
- › SG Ready (optional)
- › Smart home and energy management interfaces (optional)

**Application** • The heat pump manager (WPM) is the main controller in the system. One direct and two heating circuits with mixer can be controlled via the integral programming unit. Two heat pumps can also be operated in a cascade. • If the WPM is combined with the Internet Service Gateway (ISG), the heat pump can be integrated into a home network or controlled from mobile devices. • Direct connection of high efficiency circulation pumps is possible via relay outputs or PWM outputs. • The WPM also provides a fault contact for external pick-up of system faults. • A drip-proof wall mounted enclosure with large installation area provides sufficient space for the electrical connections and other components such as the top-hat rail relays. • A well designed cable layout ensures easy connection.

		WPM international
Part number		236000
Specification		
Protection class		I
Supply voltage	V	230
IP rating		IP 21
Width	mm	310
Height	mm	400
Depth	mm	100

(Product: 236000)

#### WPE



WPE

#### Benefits

- › Function extension module for the WPM heat pump manager
- › Data link via the system bus
- › Straightforward electrical installation thanks to RAST 5 connector technology
- › The sensor is adjusted and operated via the programming unit on the WPM heat pump manager
- › Management of four additional heat pump stages
- › Two additional heating circuits with mixer can also be controlled
- › Swimming pool management
- › Universal differential controller
- › Three immersion/contact sensors are included in the standard delivery

**Application** • The WPE adds numerous functions to the WPM heat pump manager. It offers two additional heating circuits with mixer, a swimming pool controller and cascade control for up to six heat pumps. • Two additional 0-10 V interfaces, a differential controller and switching outputs are also available. • The enclosure is installed to the right or left of the WPM and is connected with it to the power supply and via the bus. • The module's additional functions can be set at the programming unit of the WPM.

		WPE
Part number		234725

Continue on next page >

Control units

Controller

		WPE
Specification		
Protection class		I
Supply voltage	V	230
IP rating		IP 21
Width	mm	310
Height	mm	400
Depth	mm	100
Required accessories		
Part number		236000
Type		WPM international
Description		Heat pump manager in wall mounted enclosure

ISG web



Benefits

- › Browser-based operation of the heat pump in a home network
- › Can be integrated into home automation systems through Modbus TCP/IP software interface fitted as standard
- › Forecast-based on-site PV self-consumption facilitated by optional EMI software extension
- › Optional automation with KNX IP software extension

**Application** • The Internet Service Gateway (ISG) connects the heat pump to the home network and enables the appliance to be operated using a computer or tablet browser. • Once enabled, appliance data is transferred to the Stiebel Eltron Internet Service Portal. • The ISG plus is a required accessory for use of the SG Ready functions of the heat pump manager (WPM). The ISG can be integrated into an existing building management system via the Modbus TCP/IP data interface.

ISG web

		ISG web
Part number		229336
Specification		
Version		Wall mounting
10/100 Ethernet		RJ45
CAN		RJ45
RS232		RJ 12
Width	mm	158
Height	mm	95
Depth	mm	37
Min./max. application range	°C	0 / 60

Observe the compatibility list.

Control units

Controller accessories

FE7



- Benefits**
- › The integral sensor captures the room temperature
  - › Choice of operating mode
  - › Remote control for the WPM heat pump manager

Analogue remote control with integral temperature sensor to capture room temperature. The remote control is used to adjust the set room temperature and adapt operating modes.

FE 7 Fernbedienung

		FE 7 Fernbedienung
Part number		185579
Specification		
Width	mm	80
Height	mm	80
Depth	mm	30

FEK 2



- Benefits**
- › Room temperature and humidity measurement
  - › Dew point monitoring
  - › Convenient entry and display of system parameters

FEK digital remote control for convenient entry and display of system parameters (e.g. operating modes, outside temperature, relative humidity and heating circuit parameters). For cooling via an area heating system, the FEK must be installed in a reference room. It measures relative humidity and room temperature for dew point monitoring.

FEK2

		FEK2
Part number		200168
Specification		
Width	mm	147
Height	mm	97
Depth	mm	33

## Control units

### Controller accessories

#### FET



##### Benefits

- › Data link via the system bus
- › Remote room control with thermostatic function for the WPM heat pump manager
- › Can be used for each of the five heating circuits in the WPM system
- › Illuminated graphic display
- › Display of time, room temperature and room humidity, along with outside temperature
- › Touch-Wheel operation
- › Room temperature and humidity measurement
- › Simple adjustment of comfort temperature
- › Energy savings with selectable eco function
- › Activating a DHW charging process

FET

FET digital remote control for convenient control of a heating zone. The remote control measures the relative humidity and room temperature.

		FET
Part number		234723
Specification		
Width	mm	145
Height	mm	96
Depth	mm	31

#### TAF PT



PT 1000 sensor. It can be used in heat pump systems as an immersion sensor or contact sensor.

TAF PT 5m

		TAF PT 5m	TAF PT 2m
Part number		235995	235996
Specification			
Version		Temperature sensor	Temperature sensor
With supply line		•	•
Colour		white	white
Diameter	mm	6	6

(Product: 235995, 235996)

Control units

Controller accessories

AF PT



Outside temperature sensor in plastic casing, without power cable.

AF PT

		AF PT
Part number		235997
Specification		
Version		Outside sensor
Installation type		Surface mounted
With supply line		-
Width	mm	40
Height	mm	82
Depth	mm	38

AVF 6



PTC contact sensor as additional sensor for the heat pump system.

AVF 6 Anlegefühler

		AVF 6 Anlegefühler
Part number		165341
Specification		
Version		Cable sensor
With supply line		•
Supply line length	m	2.00
Diameter	mm	6

## Control units

### Controller accessories

#### TF 6



TF 6 as an additional PTC immersion sensor for the heat pump system.

TF 6 Tauchfühler

		TF 6 Tauchfühler
Part number		165342
Specification		
Version		Temperature sensor
With supply line		•
Supply line length	m	1.00
Diameter	mm	6

#### WPM-RBS



##### Benefits

- › Relay set for connecting high efficiency pumps
- › The integral relay PCB provides up to six inputs and outputs
- › The assembly is connected via Rast 5 plug-in connectors with screw terminals
- › When using the Wilo Yonos UP 25/7.5 PCV (235949) circulation pump series, the relay set is not required.

Relay connecting assembly for high efficiency pumps with a high starting current.

WPM-RBS

		WPM-RBS
Part number		230381
Specification		
Max. peak load current	A	65
Max. relay output breaking capacity	A	2 (2)
Max. power across terminal "Netz-L" [mains L]	A	10
Supply voltage	V	230
IP rating		IP 31
Width	mm	205
Height	mm	211
Depth	mm	56

<b>Mono mode Accessories</b>	333
----------------------------------	-----

# Hydraulic modules

## Mono mode

HM



HM

### Benefits

- › Time saving installation of heating components thanks to high level of integration
- › Simple connection to the heat pump via water pipes
- › Very good thermal insulation for heating and cooling, with main body in expanded polypropylene (EPP) and high grade sheet steel casing

**Application** • Hydraulic module for simple hydraulic connection of mono block heat pumps to the heating system. Designed for heating or cooling in family homes. Space saving wall mounting in the installation room, robust painted steel casing with insulated EPP main body.

**Convenience features** • Fully automatic, weather-compensated control of the heating system thanks to integral heat pump manager. In combination with the optional Internet Service Gateway (ISG), the heating system can be controlled via the home network or using a mobile device. With integral heat and electricity metering via refrigerant circuit data.

- High level of integration, with the following components housed inside the casing: high efficiency circulation pump and expansion vessel for the heating circuit, electric emergency/auxiliary heater for mono energetic operation and pasteurisation, diverter valve for DHW heating and a safety valve with discharge hose.

		HM	HMS
<b>Part number</b>		<b>233010</b>	<b>233827</b>
<b>Specification</b>			
Max. permissible pressure	MPa	0.30	0.30
External available pressure differential at 1.0 m³/h	hPa	715	715
External available pressure differential at 1.5 m³/h	hPa	661	661
External available pressure differential at 2 m³/h	hPa	468	468
External available pressure differential at 2.5 m³/h	hPa	300	300
Expansion vessel volume	l	24	24
Rated voltage, control unit	V	230	230
Rated voltage, emergency/auxiliary heater	V	400	230
Power consumption, emergency/auxiliary heater	kW	8.80	5.90
Height	mm	896	896
Height incl. connector block	mm	1131	1131
Width	mm	590	590
Depth	mm	405	405
Weight	kg	45	45
Connection		G 1	G 1
<b>Recommended accessories</b>			
<b>Part number</b>		<b>232806</b>	<b>232806</b>
Type		ASL-HM	ASL-HM
Description		Insulated connector block	Insulated connector block
<b>Part number</b>		<b>233750</b>	<b>233750</b>
Type		AS-HM Trend	AS-HM Trend
Description		Hydraulic module connection set	Hydraulic module connection set

## Hydraulic modules

### Mono mode

#### HM Trend



HM Trend

#### Benefits

- › Time saving installation of heating components thanks to high level of integration
- › Simple connection to the heat pump via water pipes

**Application** • Hydraulic module for simple hydraulic connection of mono block heat pumps to the heating system. Designed for heating or cooling in family homes. • Space saving wall mounting of the insulated, black EPP casing in the installation room.

**Convenience features** • Fully automatic, weather-compensated control of the heating system thanks to integral heat pump manager. In combination with the optional Internet Service Gateway (ISG), the heating system can be controlled via the home network or using a mobile device. With integral heat and electricity metering via refrigerant circuit data. • High level of integration – a high efficiency circulation pump and an expansion vessel are already included for the heating circuit. Also integrated are the electric emergency/auxiliary heater for mono energetic operation and pasteurisation, the diverter valve for DHW heating and a safety valve with discharge hose.

		HM Trend	HMS Trend
Part number		232805	233826
Specification			
Max. permissible pressure	MPa	0.30	0.30
External available pressure differential at 1.0 m³/h	hPa	715	715
External available pressure differential at 1.5 m³/h	hPa	661	661
External available pressure differential at 2 m³/h	hPa	468	468
External available pressure differential at 2.5 m³/h	hPa	300	300
Expansion vessel volume	l	24	24
Rated voltage, control unit	V	230	230
Rated voltage, emergency/auxiliary heater	V	400	230
Power consumption, emergency/auxiliary heater	kW	8.80	5.90
Height	mm	896	896
Height incl. connector block	mm	1131	1131
Width	mm	590	590
Depth	mm	405	405
Weight	kg	27	27
Connection		G 1	G 1
Recommended accessories			
Part number		232806	232806
Type		ASL-HM	ASL-HM
Description		Insulated connector block	Insulated connector block
Part number		233750	233750
Type		AS-HM Trend	AS-HM Trend
Description		Hydraulic module connection set	Hydraulic module connection set

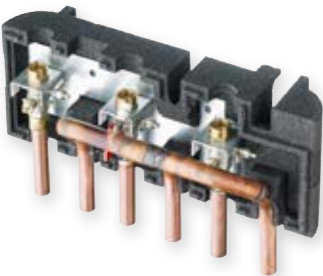


<b>Accessories</b>	
Accessories	337

Accessories for hydraulic modules

Accessories

ASL-HM



Accessories which facilitate connection of the hydraulic module to the pipework on site. Flows with ball valve, and heating and DHW return coated with vapour diffusion-proof EPP

ASL-HM

		ASL-HM
Part number		232806
Specification		
Height	mm	285
Width	mm	580
Depth	mm	215
Weight	kg	4.50
Connection		28 mm

AS-HM Trend



The accessory, featuring ball valves in the flows, simplifies connection of the hydraulic module to the on-site pipework.

AS-HM Trend

		AS-HM Trend
Part number		233750
Specification		
Connection		G 1 - 28 mm

<b>With integral buffer cylinder</b>	
Accessories	339
<b>Without integral buffer cylinder</b>	
Accessories	344

# Integral cylinder

## With integral buffer cylinder

### HSBC 300 cool



HSBC 300 cool

#### Benefits

- › NEW: The integral WPM heat pump manager makes the system easier to install
- › The integral cylinder for DHW heating is combined with a heating heat pump and integrated into the heating system.
- › Space saving positioning thanks to integration of DHW cylinder, buffer cylinder and hydraulic working parts into a single appliance
- › Large area heat exchanger for high DHW demand
- › Can be used for cooling via area heating system or fan convectors (condensation resistance)

**Application** • Integral cylinder for DHW heating in heat pump mode. • Prepared for optional addition of another heating circuit. • The cylinder simplifies hydraulic connection in heating systems, as the heat pump and heating circuit flows are separated by means of an integral buffer cylinder. This means that it can be used in different heat distribution systems. • Can be used for heating and cooling in a detached house (new or existing building).

**Convenience features** • DHW cylinder and buffer cylinder are steel cylinders with directly applied foam insulation. The DHW cylinder is equipped with an internal indirect coil and magnesium signal anode for additional corrosion protection. The two cylinders are installed space-efficiently one above the other, and each have practical recessed grips. • Space saving installation through integration of key components in a single casing: WPM heat pump manager, cylinder charging pump, heating circuit pump, 3/2-way diverter valve. • Easy to handle, as the DHW cylinder and the buffer cylinder can be transported separately.

**Efficiency** • Low standby losses, because both the cylinder volume and the heat exchanger surface area are matched to the requirements.

		HSBC 300 cool
<b>Part number</b>		<b>203801</b>
<b>Specification</b>		
Energy efficiency class		B
Nominal capacity, DHW cylinder	l	270
Nominal capacity, buffer cylinder	l	100
Surface area, heat exchanger	m <sup>2</sup>	3.20
Capacity, heat exchanger	l	21
Standby energy consumption/ 24 h at 65 °C	kWh	1.45
Height	mm	1918
Width	mm	680
Depth	mm	910
Height when tilted	mm	2123
Weight	kg	250
<b>Recommended accessories</b>		
<b>Part number</b>		<b>238825</b>
Type		HSBC 3-HKM
Description		Mixer circuit pump assembly

Availability on request

# Integral cylinder

## With integral buffer cylinder

### HSBC 300 (L) cool



HSBC 300 L cool

#### Benefits

- › The integral cylinder for DHW heating is combined with a heating heat pump and integrated into the heating system.
- › Space saving positioning thanks to integration of DHW cylinder, buffer cylinder and hydraulic working parts into a single appliance
- › High level of integration for reduced installation effort
- › Large cylinder volume and heat exchanger surface area for high DHW demand
- › Can be used for cooling, e.g. via an area heating system or fan convectors (condensation resistance)
- › Not equipped with a cylinder charging pump for combination with recommended heat pump types (Product: 238826)

**Application** • Integral cylinder for DHW heating and simultaneous hydraulic connection to heating systems and for pumping and separation between the heat pump and heating circuit. Optimised for combination with heat pumps with integral controller and circulation pump. Designed for use in detached houses for heating and cooling.

**Convenience features** • The generously sized DHW cylinder has a steel cylinder with directly applied foam insulation. • The internal indirect coil and magnesium signal anode offer additional corrosion protection. • Equipped with a heating circuit pump and 3/2-way diverter valve. • The integral cylinder can optionally be operated with a heating circuit with mixer. • The cylinder casing consists of a plastic jacket in pure white, permanently attached at the sides and the back. The removable front panel is made of sheet metal in white with a design fascia in Eloxal silver.

**Efficiency** • Standby losses are low, because the cylinder volume and the indirect coil surface area have been optimised.

**Installation** • Integral recessed grips facilitate transport to the installation site.

		HSBC 300 L cool
Part number		238826
Specification		
Energy efficiency class		B
Nominal capacity, DHW cylinder	l	270
Nominal capacity, buffer cylinder	l	100
Surface area, heat exchanger	m <sup>2</sup>	3.20
Capacity, heat exchanger	l	21
Standby energy consumption/ 24 h at 65 °C	kWh	1.45
Height	mm	1918
Width	mm	680
Depth	mm	910
Height when tilted	mm	2123
Weight	kg	248
Recommended accessories		
Part number		238825
Type		HSBC 3-HKM
Description		Mixer circuit pump assembly

# Integral cylinder

## With integral buffer cylinder

### HSBC 200



HSBC 200

#### Benefits

- › The integral cylinder for DHW heating is combined with a heating heat pump and integrated into the heating system.
- › Space saving positioning thanks to integration of DHW cylinder, buffer cylinder and hydraulic working parts into a single appliance
- › Installation requires little effort thanks to high level of integration including WPM heat pump manager
- › Can be used for cooling, for example with an area heating system
- › Large area heat exchanger for high DHW demand

**Application** • Integral cylinder for DHW heating and simultaneous hydraulic connection to heating systems and for pumping and separation between the heat pump and heating circuit. Designed for use in detached houses for heating and cooling.

**Convenience features** • DHW cylinder and buffer cylinder are steel cylinders with directly applied foam insulation. The DHW cylinder is equipped with an internal indirect coil and magnesium signal anode for additional corrosion protection. The two cylinders are installed space-efficiently one above the other, and each have practical recessed grips. • Space saving installation through integration of key components in a single casing: WPM heat pump manager, cylinder charging pump, heating circuit pump, 3/2-way diverter valve. • Easy to handle, as the DHW cylinder and the buffer cylinder can be transported separately. • The integral cylinder can optionally be operated with a heating circuit with mixer. • The cylinder casing consists of a plastic jacket in pure white, permanently attached at the sides and the back. • The removable front panel is made of sheet metal in white with a design fascia in Eloxal silver.

**Efficiency** • Standby losses are low, because the cylinder volume and the indirect coil surface area are perfectly matched to the system.

**Installation** • The cylinders are arranged one above the other and can be separated. Two recessed grips facilitate transport to the installation site.

		HSBC 200	HSBC 200 S
Part number		233510	234801
Specification			
Energy efficiency class		B	B
Nominal capacity, DHW cylinder	l	168	168
Nominal capacity, buffer cylinder	l	100	100
Surface area, heat exchanger	m <sup>2</sup>	3.30	3.30
Capacity, heat exchanger	l	21	21
Standby energy consumption/ 24 h at 65 °C	kWh	1.30	1.30
Height	mm	1908	1908
Width	mm	680	680
Depth	mm	871	871
Height when tilted	mm	2107	2107
Weight	kg	203	203
Recommended accessories			
Part number		234648	234648
Type		HSBC-HKM	HSBC-HKM
Description		Mixer circuit pump assembly	Mixer circuit pump assembly

# Integral cylinder

## With integral buffer cylinder

### HSBC 200 L



HSBC 200 L

#### Benefits

- › High level of integration for reduced installation effort
- › The integral cylinder for DHW heating is combined with a heating heat pump and integrated into the heating system.
- › Space saving positioning thanks to integration of DHW cylinder, buffer cylinder and hydraulic working parts into a single appliance
- › Can be used for cooling, for example with an area heating system

**Application** • Integral cylinder for DHW heating and simultaneous hydraulic connection to heating systems and for pumping and separation between the heat pump and heating circuit. Designed for use in detached houses for heating and cooling

**Convenience features** • DHW cylinder and buffer cylinder are steel cylinders with directly applied foam insulation. The DHW cylinder is equipped with an internal indirect coil and magnesium signal anode for additional corrosion protection. The two cylinders are installed space-efficiently one above the other, and each have practical recessed grips. • Space saving installation and integral heating circuit pump • Easy to handle, as the DHW cylinder and the buffer cylinder can be transported separately. • The integral cylinder can optionally be operated with a heating circuit with mixer. • The cylinder casing consists of a plastic jacket in pure white, permanently attached at the sides and the back.

**Efficiency** • Standby losses are low, because the cylinder volume and the indirect coil surface area are perfectly matched to the application area.

**Installation** • The cylinders are arranged one above the other and can be separated. Two recessed grips facilitate transport to the installation site.

		HSBC 200 L
Part number		236684
Specification		
Energy efficiency class		B
Nominal capacity, DHW cylinder	l	180
Nominal capacity, buffer cylinder	l	100
Surface area, heat exchanger	m <sup>2</sup>	1.60
Capacity, heat exchanger	l	10
Standby energy consumption/ 24 h at 65 °C	kWh	1.30
Height	mm	1908
Width	mm	680
Depth	mm	800
Height when tilted	mm	2107
Weight	kg	185
Recommended accessories		
Part number		234648
Type		HSBC-HKM
Description		Mixer circuit pump assembly

# Integral cylinder

## With integral buffer cylinder

### HSBC 180 Plus



HSBC 180 Plus

#### Benefits

- › The integral cylinder for DHW heating is combined with a heating heat pump and integrated into the heating system.
- › Space saving positioning thanks to integration of DHW cylinder, buffer cylinder and hydraulic working parts into a single appliance
- › Installation requires little effort thanks to high level of integration including WPM heat pump manager
- › Can be used for cooling via area heating system or fan convectors (condensation resistance)

**Application** • Integral cylinder for DHW heating in combination with a heat pump. The cylinder simplifies hydraulic connection in heating systems, as the heat pump and heating circuit flows are separated by means of an integral buffer cylinder. • Designed for use in detached houses for heating and cooling.

**Convenience features** • Standard delivery includes: WPM heat pump manager, cylinder charging pump, heating circuit pump, 3/2 way diverter valve, safety valve with drain routed out of the appliance, and electric emergency/auxiliary heater. • The DHW cylinder is an enamelled steel cylinder with directly applied foam insulation. It is equipped with an internal indirect coil and a magnesium anode for additional corrosion protection. The buffer cylinder is also a steel cylinder with directly applied foam insulation.

**Efficiency** • Specific matching of the cylinder volume and the indirect coil surface area to the application ensures low standby losses.

**Installation** • The integral carrying aids facilitate transportation to the installation site.

		HSBC 180 Plus	HSBC 180 S Plus
Part number		202927	203082
Specification			
Energy efficiency class		B	B
Nominal capacity, DHW cylinder	l	178	178
Nominal capacity, buffer cylinder	l	80	80
Surface area, heat exchanger	m <sup>2</sup>	1.59	1.59
Capacity, heat exchanger	l	10	10
Standby energy consumption/24 h at 65 °C	kWh	1.29	1.29
Height	mm	1892	1892
Width	mm	605	605
Depth	mm	917	917
Height when tilted	mm	2007	2007
Weight	kg	145	145
Recommended accessories			
Part number		204642	204642
Type		CDT 180	CDT 180
Description		Cooling accessory	Cooling accessory

Availability on request

# Integral cylinder

## Without integral buffer cylinder

### HSBB 180 Plus



HSBB 180 Plus

#### Benefits

- › The integral cylinder for DHW heating is combined with a heating heat pump and integrated into the heating system.
- › Space saving positioning, as the DHW cylinder and hydraulic parts are integrated in a single appliance
- › Can be used for cooling via area heating system or fan convectors (condensation resistance)
- › Installation requires little effort thanks to high level of integration including WPM heat pump manager

**Application** • Integral cylinder for DHW heating. The appliance is integrated into the heating system and connects the heat pump hydraulically to the heating circuit. • The cylinder is designed for heating and cooling in the single-family house and is optimised for use with an underfloor heating system.

**Convenience features** • The DHW cylinder comprises an enamelled steel cylinder with foam insulation, an internal indirect coil and a magnesium anode for additional corrosion protection. Can be used for cooling via underfloor heating system or fan convectors. • Equipment includes: WPM heat pump manager, DHW/heating circuit charging pump, 3/2 way diverter valve, safety valve with drain connector, and electric emergency/auxiliary heater. • Easy to transport thanks to integral carrying aids.

**Efficiency** • Low standby losses.

		HSBB 180 Plus	HSBB 180 S Plus
Part number		202926	203084
Specification			
Energy efficiency class		B	B
Nominal capacity, DHW cylinder	l	178	178
Surface area, heat exchanger	m <sup>2</sup>	1.59	1.59
Capacity, heat exchanger	l	10	10
Standby energy consumption/ 24 h at 65 °C	kWh	1.29	1.29
Height	mm	1280	1280
Width	mm	605	605
Depth	mm	917	917
Height when tilted	mm	1500	1500
Weight	kg	100	100
Suitable for		Heat pump	Heat pump
Recommended accessories			
Part number		204642	204642
Type		CDT 180	CDT 180
Description		Cooling accessory	Cooling accessory

Availability on request

Integral cylinder  
Without integral buffer cylinder

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<b>Accessories</b>	
Accessories	347

# Accessories for integral cylinders

## Accessories

### HSBC (3)-HKM



HSBC-HKM

Mixer circuit pump assembly for expanding the integral cylinder with a heating circuit with mixer. The assembly comprises insulated connection pipework, the heating circuit pump and 3-way mixer with servomotor. It is intended for use inside the integral cylinder using the prepared connections.

		HSBC-HKM	HSBC 3-HKM
Part number		234648	238825
Specification			
Connection, heating circuit	mm	22	22

### CDT



CDT 180

#### Benefits

- › Condensate pan with condensate pump for installation in the integral cylinder
- › Used for seasonal cooling below the dew point or for cooling without dew point monitoring

**Application** • The condensate pan with condensate pump is intended for installation in the integral cylinder. • It is necessary for seasonal cooling below the dew point or for cooling without dew point monitoring, e.g. with fan convectors. • Without this accessory, cooling rooms is only permissible with dew point monitoring. • Standard delivery includes a condensate pan with condensate pump incl. hose for external drainage, a wiring harness for the electrical connection and installation accessories.

		CDT 180
Part number		204642

<b>DHW cylinder</b> Accessories	349
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## DHW cylinder

## DHW cylinder

### SBB 301-501 WP SOL



SBB 301 WP

#### Benefits

- › DHW cylinders for use in combination with heating heat pumps
- › Large mixed water volume due to matched inlet and outlet flow technology
- › Large area heat exchanger for high DHW demand
- › Installation-friendly fittings including signal anode and flexible, multi-directional cold water connection
- › Additional application range thanks to integral solar indirect coil (type-dependent)
- › Additional application range thanks to integral solar indirect coil (Product: 221362, 227534)

**Application** • DHW cylinder for operation with heat pumps. The cylinder can be used for DHW supply in family homes and apartment buildings, depending on the nominal capacity and the indirect coil surface area.

**Convenience features** • The enamelled steel cylinder with foam insulation is equipped with an inspection flange and a protective anode for additional corrosion protection. The heat pump is connected via the internal indirect coil. A plug-in dial thermometer is included in the standard delivery. • The cylinder casing can be removed for transport to the installation site. The plastic outer cover is white and the plinth trim is basalt grey.

		SBB 301 WP	SBB 302 WP	SBB 401 WP SOL	SBB 501 WP SOL
Part number		221360	221361	221362	227534
Specification					
Energy efficiency class		C	C	C	C
Nominal capacity	l	301	290	395	495
Surface area, heat exchanger, top	m <sup>2</sup>	3.20	4.80	4.00	5.00
Surface area, heat exchanger, bottom				1.40	1.40
Standby energy consumption/ 24 h at 65 °C	kWh	2.10	2.10	2.40	2.40
Height	mm	1710	1710	1880	1988
Diameter incl. thermal insulation	mm	700	700	750	810
Height when tilted	mm	1,750	1,750	1,930	2,035
Weight	kg	156	184	219	260

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### SB-VTI 100-500



SB-VTI 100

#### Benefits

- › DHW cylinders for use in combination with heating heat pumps
- › Slimline design due to simple insulation concept
- › Heat exchanger surface areas matched to the DHW performance of the recommended heat pump types

**Application** • The DHW cylinder for heat pump operation was developed for use in family homes. • The enamelled steel cylinder with directly applied foam insulation in the sheet steel jacket is equipped with an inspection flange and a protective anode for additional corrosion protection. • An internal indirect coil for connecting the heat pump.

		SB-VTI 100	SB-VTI 150	SB-VTI 200	SB-VTI 300	SB-VTI 400	SB-VTI 500
Part number		200156	200157	200158	200159	200160	200161
Specification							
Energy efficiency class		B	C	C	C	C	C
Nominal capacity	l	113	147	192	295	412	496
Surface area, heat exchanger, top	m <sup>2</sup>	1.00	1.10	1.30	1.50	1.90	2.30

Continue on next page >

## DHW cylinder

## DHW cylinder

		SB-VTI 100	SB-VTI 150	SB-VTI 200	SB-VTI 300	SB-VTI 400	SB-VTI 500
Standby energy consumption/ 24 h at 65 °C	kWh	1.10	1.40	1.50	2.20	2.50	2.70
Height	mm	1022	1262	1574	1552	1543	1813
Diameter incl. thermal insulation	mm	550	550	550	650	750	750
Height when tilted	mm	1,180	1,400	1,700	1,730	1,700	1,970
Weight	kg	66	81	96	126	188	213

### SB-VTH 100-150



SB-VTH 100

#### Benefits

- › Hydraulic connections on the top of the appliance
- › Directly applied foam insulation in a sheet steel jacket
- › Protective anode for corrosion protection as standard
- › Adjustable feet for levelling on uneven floors

**Application** • The DHW cylinder is suitable for indirect DHW heating in heating systems and for supplying multiple draw-off points in a family home.

**Convenience features** • The enamelled steel cylinder with directly applied foam insulation in the sheet steel jacket is equipped with an inspection flange and a protective magnesium anode for additional corrosion protection. • Internal indirect coil for connection of the heat generator. • The cylinder thermostat signals a heat demand when the selected set temperature is undershot. • Plug-in dial thermometer included in the standard delivery.

		SB-VTH 100	SB-VTH 120	SB-VTH 150
Part number		200153	200154	200155
Specification				
Energy efficiency class		B	C	C
Nominal capacity	l	94	115	150
Standby energy consumption/ 24 h at 65 °C	kWh	1.10	1.30	1.50
Height	mm	938	1067	1307
Diameter	mm	550	550	550
Weight, empty	kg	58	65	76

### STD 315-520-1 Plus



STD 315-1 Plus

#### Benefits

- › Low standby losses for efficient operation
- › Protective anode for corrosion protection as standard

		STD 315-1 Plus	STD 420-1 Plus	STD 520-1 Plus
Part number		204784	204785	204786

Continue on next page >

## DHW cylinder

## DHW cylinder

		STD 315-1 Plus	STD 420-1 Plus	STD 520-1 Plus
Specification				
Energy efficiency class		B	B	B
Nominal capacity	l	314	418	522
Surface area, heat exchanger, top	m²	2.00	2.60	3.20
Standby energy consumption/ 24 h at 65 °C	kWh	1.70	1.80	1.90
Height	mm	1619	1799	1904
Diameter incl. thermal insulation	mm	650	730	780
Height when tilted	mm	1,750	1,946	2,063
Weight	kg	111	139	182

### SBB 600-1000 WP SOL



SBB 600 WP SOL

#### Benefits

- › Additional application range thanks to integral solar indirect coil
- › DHW cylinder for combination with heating heat pumps with high output
- › Large heat exchanger surface area for high DHW demand through the use of twin pipe indirect coils

**Application** • The DHW cylinder is suitable for heat pump operation with a high output, depending on nominal capacity and indirect coil surface area, for use in larger family homes and apartment buildings, as well as commercial buildings. • Optional integration of solar thermal backup is possible.

**Convenience features** • The enamelled steel cylinder is equipped with a signal anode for additional corrosion protection. • Features two internal twin pipe indirect coils: the lower coil connects to the solar thermal system whilst the upper coil connects to the heat pump. • For heat pumps with a higher output, the two indirect coils can be connected in series. • The inspection flanges are sealed with blank flanges and can be fitted with additional heat exchangers or flanged immersion heaters if required.

**Efficiency** • Low standby losses in connection with thermal insulation as an accessory. • Matched inlet and outlet technology for good temperature stratification.

		SBB 600 WP SOL	SBB 800 WP SOL	SBB 1000 WP SOL
Part number		235906	235907	235908
Specification				
Height	mm	1775	1943	2153
Height when tilted	mm	1,813	1,990	2,185
Weight	kg	256	302	321
Required accessories				
Part number		235909		
Type		WDH 600 SBB		
Description		Thermal insulation		
Part number			235910	
Type			WDH 800 SBB	
Description			Thermal insulation	
Part number				235911
Type				WDH 1000 SBB
Description				Thermal insulation
Recommended accessories				
Part number		232629	232629	232629
Type		WRV 40	WRV 40	WRV 40
Description		Corrugated pipe connector for indirect coils	Corrugated pipe connector for indirect coils	Corrugated pipe connector for indirect coils

The max. recommended collector aperture area relates to STIEBEL ELTRON flat-plate collectors.

(Product: 235906)The max. recommended collector aperture area relates to STIEBEL ELTRON flat-plate collectors. (Product: 235907)The max. recommended collector aperture area relates to STIEBEL ELTRON flat-plate collectors.

The max. recommended collector aperture area relates to STIEBEL ELTRON flat-plate collectors. (Product: 235908)

# DHW cylinder

## DHW cylinder

### SBB 751-1001 (SOL)



SBB 751

#### Benefits

- › DHW cylinder for combination with heating heat pumps with high output
- › DHW heating in heat pump mode in connection with an external charging station (accessory)
- › Additional application range thanks to integral solar indirect coil (type-dependent)
- › Additional application range thanks to integral solar indirect coil (Product: 229294, 229295)

**Application** • The DHW cylinder, in conjunction with powerful heat pumps, is suitable for use in apartment buildings or commercial buildings. Intended for use in combination with a charging station as an accessory for DHW heating outside of the cylinder and subsequent storage. • Optional integration of solar thermal backup is possible with SOL types.

**Convenience features** • The enamelled steel cylinder is equipped with a signal anode for additional corrosion protection. • The radial DHW inlet optimises stratification in the cylinder. • The inspection flanges are sealed with blank flanges and can be fitted with additional heat exchangers or flanged immersion heaters. • The SOL types have an internal smooth tube solar indirect coil.

**Efficiency** • Low standby losses in connection with thermal insulation as an accessory. Matched inlet and outlet technology for good temperature stratification.

		SBB 751	SBB 751 SOL	SBB 1001	SBB 1001 SOL
Part number		229292	229294	229293	229295
Specification					
Height	mm	1777	1777	2277	2277
Height when tilted	mm	1,840	1,840	2,335	2,335
Weight	kg	210	242	267	296
Required accessories					
Part number		231923	231923		
Type		WDH 751 SBB	WDH 751 SBB		
Description		Thermal insulation	Thermal insulation		
Part number				231924	231924
Type				WDH 1001 SBB	WDH 1001 SBB
Description				Thermal insulation	Thermal insulation



<b>Accessories</b>	
Accessories	355

## Accessories for DHW cylinders

### Accessories

#### WRV 32-40



WRV 32

Corrugated connection pipe for linking the upper and lower indirect coils. Includes union nuts and threaded ends.

		WRV 32	WRV 40
Part number		232628	232629
Specification			
Nominal diameter, corrugated pipe		DN 32	DN 40
Union nut fitting connection		G 1 1/2	G 2

#### WDH 600-1000 SBB



WDH 600 SBB

##### Benefits

- › Composite thermal insulation made from rigid foam and fleece
- › Graphite inserts for good insulation properties
- › Two insulation semi-shells to make it easier to match the shape

**Application** • High grade thermal insulation made from EPS rigid foam with insulated cover and floor disc. Graphite inserts in the EPS and the fleece ensure lowest heat losses. • The wedge-shaped cut-outs and fleece layer ensure that the thermal insulation can be optimally adapted to the cylinder. The prepared adhesive joints in the wedge-shaped cut-outs also contribute to this. • The outer plastic jacket is white; the cover is grey. • The thermal insulation is attached by means of a quick-release hook strip.

		WDH 600 SBB	WDH 800 SBB	WDH 1000 SBB
Part number		235909	235910	235911
Specification				
Insulation for		SBB 600 WP SOL	SBB 800 WP SOL	SBB 1000 WP SOL
Thermal insulation thickness	mm	110	110	110
Standby energy consumption/ 24 h at 65 °C	kWh	2.70	3.00	3.40

# Accessories for DHW cylinders

## Accessories

### WDH 751-1001 SBB



WDH 751 SBB

**Benefits**

- › Composite thermal insulation made from rigid foam and fleece
- › Graphite inserts for good insulation properties
- › Two insulation semi-shells to make it easier to match the shape

**Application** • High grade thermal insulation with insulated cover and floor disc. • Graphite inserts ensure low heat losses. • The wedge-shaped cut-outs and fleece layer ensure that the insulation can be matched perfectly to the cylinder. • The prepared adhesive joint in the wedge-shaped cut-outs enables adjustment to the shape prior to installation. • Outer plastic jacket in white; cover in basalt grey. • The thermal insulation is attached by means of a quick-release hook strip.

		WDH 751 SBB	WDH 1001 SBB
Part number		231923	231924
Specification			
Insulation for		SBB 751 and 751 SOL	SBB 1001 and 1001 SOL
Thermal insulation thickness	mm	110	110
Standby energy consumption/ 24 h at 65 °C	kWh	2.90	3.50



<b>Instantaneous water cylinders</b>	
<b>Accessories</b>	359

Instantaneous water cylinders  
Instantaneous water cylinders

**SBS 601-1501 W (W SOL)**



SBS 601 W

## Benefits

- › Efficient operation through inlet device for demand-dependent, zoned charging
- › Highly versatile, as it can be combined with various heat generators
- › Space saving combination of heating buffer cylinder and DHW heating in a single unit
- › Hygienic DHW heating through instantaneous water heater principle
- › Additional application range thanks to integral solar indirect coil (Product: 229984, 229985, 229986, 229987)

**Application** • Combi instantaneous water cylinder for DHW heating. Can be used simultaneously as a buffer cylinder for hydraulic separation between the heat pump and heating circuit, and to store heating energy. For use in family homes, as well as apartment buildings with hydraulically interconnected cylinders. Optional integration of solar thermal backup is possible with “SOL” types.

**Convenience features** • Steel cylinder with an integral stainless steel corrugated pipe indirect coil for instantaneous DHW heating. Connectors facing the front allow various system-specific hydraulic connections. A threaded immersion heater can be installed in the inspection port, if required.

**Efficiency** • Low standby losses thanks to the high grade thermal insulation available as an accessory. Matched inlet and outlet technology with integral PRO temp-Flow inlets ensures good temperature stratification. Flow turbulence is reduced by up to 60 percent.

		SBS 601 W	SBS 601 W SOL	SBS 801 W	SBS 801 W SOL
Part number		229980	229984	229981	229985
Specification					
Nominal capacity	l	613	599	759	740
Surface area, DHW indirect coil	m²	6.00	6.00	6.50	6.50
Max. recommended collector aperture area			12		16
Height incl. thermal insulation	mm	1,775	1,775	1,940	1,940
Diameter incl. thermal insulation	mm	970	970	1,010	1,010
Height when tilted	mm	1,840	1,840	1,880	1,880
Weight	kg	135	180	150	195
Required accessories					
Part number		231925	231925		
Type		WDH 601 SBS	WDH 601 SBS		
Description		Thermal insulation	Thermal insulation		
Part number				231926	231926
Type				WDH 801 SBS	WDH 801 SBS
Description				Thermal insulation	Thermal insulation
Recommended accessories					
Part number		230312	230312	230312	230312
Type		ZW 1 1/4	ZW 1 1/4	ZW 1 1/4	ZW 1 1/4
Description		DHW circulation set, instantaneous water cylinder	DHW circulation set, instantaneous water cylinder	DHW circulation set, instantaneous water cylinder	DHW circulation set, instantaneous water cylinder
		SBS 1001 W	SBS 1001 W SOL	SBS 1501 W	SBS 1501 W SOL
Part number		229982	229986	229983	229987
Specification					
Nominal capacity	l	941	916	1430	1399
Surface area, DHW indirect coil	m²	8.70	8.70	10.00	10.00
Max. recommended collector aperture area			20		30

Continue on next page >

## Instantaneous water cylinders

## Instantaneous water cylinders

		SBS 1001 W	SBS 1001 W SOL	SBS 1501 W	SBS 1501 W SOL
Height incl. thermal insulation	mm	2,350	2,350	2,265	2,265
Diameter incl. thermal insulation	mm	1,010	1,010	1,220	1,220
Height when tilted	mm	2,285	2,285	2,225	2,225
Weight	kg	175	220	236	291
<b>Required accessories</b>					
<b>Part number</b>		<b>231927</b>	<b>231927</b>		
Type		WDH 1001 SBS	WDH 1001 SBS		
Description		Thermal insulation	Thermal insulation		
<b>Part number</b>				<b>231928</b>	<b>231928</b>
Type				WDH 1501 SBS	WDH 1501 SBS
Description				Thermal insulation	Thermal insulation
<b>Recommended accessories</b>					
<b>Part number</b>		<b>230312</b>	<b>230312</b>	<b>230312</b>	<b>230312</b>
Type		ZW 1 1/4	ZW 1 1/4	ZW 1 1/4	ZW 1 1/4
Description		DHW circulation set, instantaneous water cylinder	DHW circulation set, instantaneous water cylinder	DHW circulation set, instantaneous water cylinder	DHW circulation set, instantaneous water cylinder

The max. recommended collector aperture area relates to STIEBEL ELTRON flat-plate collectors. (Product: 229984)



<b>Accessories</b>	
Accessories	363

## Accessories for instantaneous water cylinders

### Accessories

#### WDH 601-1501 SBS



WDH 601 SBS

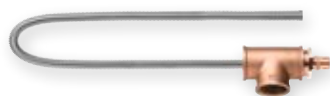
#### Benefits

- › Graphite inserts for good insulation properties
- › Two insulation semi-shells to make it easier to match the shape
- › Composite thermal insulation made from rigid foam and fleece

**Application** • High grade thermal insulation made from EPS rigid foam with insulated cover and floor disc. Graphite inserts in the EPS and the fleece ensure lowest heat losses. • The wedge-shaped cut-outs and fleece layer ensure that the thermal insulation can be optimally adapted to the cylinder. The prepared adhesive joints in the wedge-shaped cut-outs also contribute to this. • The outer plastic jacket is white; the cover is grey. • The thermal insulation is attached by means of a quick-release hook strip.

		WDH 601 SBS	WDH 801 SBS	WDH 1001 SBS	WDH 1501 SBS
Part number		231925	231926	231927	231928
Specification					
Insulation for		SBS 601 W, W SOL	SBS 801 W, W SOL	SBS 1001 W, W SOL	SBS 1501 W, W SOL
Thermal insulation thickness	mm	110	110	110	110
Standby energy consumption/ 24 h at 65 °C	kWh	2.60	2.90	3.50	4.10

#### ZW 1 1/4



The DHW circulation set for instantaneous water cylinders ensures quick and straightforward connection of the circulation return to the DHW connection.

ZW 1 1/4

		ZW 1 1/4
Part number		230312
Specification		
Connection		G 1 1/4
DHW circulation connection		G 1/2

<b>Buffer cylinder</b> <b>Accessories</b>	365
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# Buffer cylinder

## Buffer cylinder

### SBP 100



SBP 100

#### Benefits

- › Particularly space saving for use in detached houses
- › Wall mounted buffer cylinder for integration into the heating system

**Application** • Wall mounted buffer cylinder for hydraulic separation of the heat pump flow and heating circuit flow.

**Convenience features** • The steel cylinder with directly applied foam insulation is fitted with a sheet metal jacket and vent connector. An electric emergency/auxiliary heater can be retrofitted thanks to the flanged aperture. The hydraulic connections are routed through the side. The wall mounting bracket provides significantly more freedom in terms of placement.

**Efficiency** • Low standby losses due to efficient thermal insulation.

		SBP 100
Part number		185443
Specification		
Energy efficiency class		C
Nominal capacity	l	100
Standby energy consumption/ 24 h at 65 °C	kWh	1.40
Height	mm	955
Width	mm	510
Depth	mm	510
Weight	kg	42.50
Recommended accessories		
Part number		074347
Type		WPKI - V
Description		Compact installation
Part number		233097
Type		WPKI-P E
Description		Compact installation, WPKI-P E
Part number		233098
Type		WPKI-H E
Description		Heating circuit assembly without mixing valve
Part number		233099
Type		WPKI-W E
Description		Compact installation

## Buffer cylinder

## Buffer cylinder

### SBP 100 classic



SBP 100 classic

#### Benefits

- › Suitable for heating and cooling operation as the impermeable complete foam insulation on the buffer cylinder makes it suitable for cooling
- › Particularly space saving for use in detached houses
- › Floorstanding buffer cylinder for integration into the heating system

**Application** • Buffer cylinder for hydraulic separation of the heat pump flow and the heating/cooling circuit flow.

**Convenience features** • The steel cylinder with directly applied foam insulation is equipped with a protective cover and connections at the top for ventilation and draining.

**Efficiency** • Reduced mixing due to matched inlet and outlet technology.

		SBP 100 classic
Part number		235200
Specification		
Energy efficiency class		C
Nominal capacity	l	100
Standby energy consumption/ 24 h at 65 °C	kWh	1.20
Height	mm	877
Diameter	mm	510
Height when tilted	mm	968
Weight	kg	21

### SBP 200-700 E (SOL)



SBP 200 E

#### Benefits

- › Easy to transport at the installation site as the casing can be removed if necessary
- › Suitable for cooling due to complete thermal foam insulation of the cylinder
- › Efficient thermal insulation allows use in heating and cooling modes
- › Low standby losses for efficient operation
- › Buffer cylinder for heating systems with heat pumps
- › Additional application range thanks to integral solar indirect coil (Product: 185460)

**Application** • Buffer cylinder for heat pump heating systems in family homes (depending on the nominal capacity). The buffer cylinder can also be used in cooling mode and provides hydraulic separation between the heat pump and heating circuit, extends heat pump runtimes and stores heating energy. • Designed for connecting heat pumps with high flow rates on the primary side. • Integration of solar thermal backup is possible with “SOL” types.

**Convenience features** • Steel cylinder with directly applied foam insulation, hydraulic connectors arranged at the front one above the other. Connectors are provided for fitting of threaded immersion heaters. “SOL” types are also equipped with one internal indirect coil for solar connection. • The cylinder casing consists of a plastic outer cover in pure white, plus cylinder cover and plinth trim in basalt grey.

**Efficiency** • Low standby losses.

		SBP 200 E	SBP 400 E	SBP 700 E	SBP 700 E SOL
Part number		185458	220824	185459	185460
Specification					
Energy efficiency class		B	B		
Nominal capacity	l	207	415	720	703
Surface area, heat exchanger, bottom					2

Continue on next page >

## Buffer cylinder

## Buffer cylinder

		SBP 200 E	SBP 400 E	SBP 700 E	SBP 700 E SOL
Standby energy consumption/ 24 h at 65 °C	kWh	1.10	1.60	2.20	2.20
Height	mm	1535	1710	1890	1890
Diameter incl. thermal insulation	mm	630	750	910	910
Height when tilted	mm	1650	1800	2000	2000
Weight	kg	58	81	185	216
<b>Recommended accessories</b>					
<b>Part number</b>		<b>003711</b>	<b>003711</b>	<b>003711</b>	<b>003711</b>
Type		Anschlusszubehör SBP	Anschlusszubehör SBP	Anschlusszubehör SBP	Anschlusszubehör SBP
Description		Inserts	Inserts	Inserts	Inserts
<b>Part number</b>		<b>234762</b>	<b>234762</b>	<b>234762</b>	<b>234762</b>
Type		WPKI 6 Set	WPKI 6 Set	WPKI 6 Set	WPKI 6 Set
Description		WPKI 6 Compact installation	WPKI 6 Compact installation	WPKI 6 Compact installation	WPKI 6 Compact installation
<b>Part number</b>		<b>234763</b>	<b>234763</b>	<b>234763</b>	<b>234763</b>
Type		WPKI 5	WPKI 5	WPKI 5	WPKI 5
Description		WPKI 5 Compact installation	WPKI 5 Compact installation	WPKI 5 Compact installation	WPKI 5 Compact installation
<b>Part number</b>		<b>234764</b>	<b>234764</b>	<b>234764</b>	<b>234764</b>
Type		BBI 5	BBI 5	BBI 5	BBI 5
Description		Compact installation BBI 5	Compact installation BBI 5	Compact installation BBI 5	Compact installation BBI 5

### STH 210-720-1 Plus



STH 210 Plus

#### Benefits

- Easy to transport at the installation site as the casing can be removed if necessary
- Suitable for cooling due to complete thermal foam insulation of the cylinder
- Efficient thermal insulation allows use in heating and cooling modes
- Low standby losses for efficient operation
- Buffer cylinder for heat pump heating systems

**Application** • The buffer cylinders are suitable for heat pump heating systems and can also be used in cooling mode. • They provide hydraulic separation between the heat pump and the heating/cooling circuit, extend heat pump run-times and store heating energy. • Suitable for use in family homes, depending on nominal capacity. • In the case of Plus types, it is possible to integrate solar thermal backup.

**Convenience features** • The steel cylinder with directly applied foam insulation has hydraulic connectors arranged at the front, one above the other. Connectors are also provided for electric threaded immersion heaters if required. • With Plus types, an internal indirect coil enables solar connection. • The cylinder casing consists of a plastic outer cover in pure white, plus cylinder cover and plinth trim in basalt grey.

**Efficiency** • Low standby losses. Designed for connecting heat pumps with high flow rates on the primary side.

		STH 210 Plus	STH 415 Plus	STH 720 Plus	STH 720-1 Plus
<b>Part number</b>		<b>203763</b>	<b>203764</b>	<b>203765</b>	<b>203766</b>
<b>Specification</b>					
Energy efficiency class		B	B		
Nominal capacity	l	207	415	720	703
Surface area, heat exchanger, bottom					2
Standby energy consumption/ 24 h at 65 °C	kWh	1.10	1.60	2.20	2.20
Height	mm	1535	1710	1890	1890
Diameter incl. thermal insulation	mm	630	750	910	910
Height when tilted	mm	1650	1800	2000	2000
Weight	kg	58	81	185	216

Continue on next page >

## Buffer cylinder

## Buffer cylinder

		STH 210 Plus	STH 415 Plus	STH 720 Plus	STH 720-1 Plus
<b>Recommended accessories</b>					
<b>Part number</b>		<b>003711</b>	<b>003711</b>	<b>003711</b>	<b>003711</b>
Type		Anschlusszubehör SBP	Anschlusszubehör SBP	Anschlusszubehör SBP	Anschlusszubehör SBP
Description		Inserts	Inserts	Inserts	Inserts
<b>Part number</b>		<b>234762</b>	<b>234762</b>	<b>234762</b>	<b>234762</b>
Type		WPKI 6 Set	WPKI 6 Set	WPKI 6 Set	WPKI 6 Set
Description		WPKI 6 Compact installation	WPKI 6 Compact installation	WPKI 6 Compact installation	WPKI 6 Compact installation
<b>Part number</b>		<b>234763</b>	<b>234763</b>	<b>234763</b>	<b>234763</b>
Type		WPKI 5	WPKI 5	WPKI 5	WPKI 5
Description		WPKI 5 Compact installation	WPKI 5 Compact installation	WPKI 5 Compact installation	WPKI 5 Compact installation
<b>Part number</b>		<b>234764</b>	<b>234764</b>	<b>234764</b>	<b>234764</b>
Type		BBI 5	BBI 5	BBI 5	BBI 5
Description		Compact installation BBI 5	Compact installation BBI 5	Compact installation BBI 5	Compact installation BBI 5

Availability on request

### SBPE 400



SBPE 400

#### Benefits

- › Can be used in heating or cooling mode
- › Easy to transport with recessed grips and removable casing
- › Low standby losses for efficient operation
- › Buffer cylinder for heating systems with heat pumps
- › Suitable for cooling due to complete thermal foam insulation of the cylinder
- › Quality appliance design thanks to its rectangular shape and the front panel on the cylinder casing

**Application** • The buffer cylinders are suitable for heat pump heating systems in family homes and can also be used in cooling mode. • They provide hydraulic separation between the heat pump and the heating/cooling circuit, extend heat pump runtimes and store heating energy.

**Convenience features** • Rectangular shaped cylinder with directly applied diffusion-proof foam insulation; hydraulic connections at the rear. • Integral recessed grips facilitate handling at the installation site. • If required, an electric threaded immersion heater can be fitted behind the front cover. • The cylinder casing consists of two plastic side panels and a cylinder cover finished in pure white, plus front cover in eloxal silver.

**Efficiency** • Low standby losses. Designed for connecting heat pumps with high flow rates on the primary side.

		SBPE 400
<b>Part number</b>		<b>235199</b>
<b>Specification</b>		
Energy efficiency class		A
Nominal capacity	l	396
Standby energy consumption/ 24 h at 65 °C	kWh	1.30
Height	mm	1717
Width	mm	787
Depth	mm	852
Height when tilted	mm	1895
Weight	kg	131

# Buffer cylinder

## Buffer cylinder

### SBP 1000-1500 E SOL



SBP 1000 E

#### Benefits

- › Buffer cylinder for heating systems with large heat pumps
- › Highly versatile, as it can be combined with various heat generators
- › The buffer cylinder is designed for high flow rates with suitably sized flanged connections
- › Additional application range thanks to integral solar indirect coil (Product: 227566)
- › Suitable in multi storey construction thanks to extremely reliable operating pressure (Product: 236569)
- › Additional flanged connection for special applications (Product: 236569)

**Application** • Buffer cylinders for heating heat pumps in large systems. The cylinder enables hydraulic separation of the heat pump and heating circuit flows, extends the operating time of the heat pump and stores heating energy. Suitable for use in apartment buildings and commercial buildings.

**Convenience features** • Steel cylinder with flange connections arranged at the front, one above the other, for the primary and secondary circuit. There is also an additional connector for combination with further heat generators. An additional indirect coil or a flanged immersion heater can also be fitted as required for the specific system. For this purpose, a flanged aperture sealed with a blank flange has been integrated. The SOL types are, in addition, equipped with an internal smooth tube solar indirect coil.

**Efficiency** • Low standby losses in conjunction with the high grade thermal insulation as an accessory. Good temperature stratification due to matched inlet and outlet technology. Designed for connecting heat pumps with high flow rates on the primary side.

		SBP 1000 E	SBP 1000 E SOL	SBP 1010 E	SBP 1500 E	SBP 1500 E SOL
<b>Part number</b>		<b>227564</b>	<b>227566</b>	<b>236569</b>	<b>227565</b>	<b>227567</b>
<b>Specification</b>						
Nominal capacity	l	1006	979	1006	1503	1473
Surface area, heat exchanger, bottom			3.00			3.60
Max. permissible pressure	MPa	0.30	0.30	1.00	0.30	0.30
Height incl. thermal insulation	mm	2340	2340	2340	2255	2255
Diameter incl. thermal insulation	mm	1010	1010	1010	1220	1220
Height when tilted	mm	2335	2335	2335	2250	2250
Weight	kg	172	219	233	229	285
<b>Required accessories</b>						
<b>Part number</b>				<b>201662</b>		
Type				WDH 1010 SBP		
Description				Thermal insulation		
<b>Part number</b>		<b>231929</b>	<b>231929</b>			
Type		WDH 1000 SBP	WDH 1000 SBP			
Description		Thermal insulation	Thermal insulation			
<b>Part number</b>					<b>231930</b>	<b>231930</b>
Type					WDH 1500 SBP	WDH 1500 SBP
Description					Thermal insulation	Thermal insulation
<b>Recommended accessories</b>						
<b>Part number</b>		<b>231884</b>	<b>231884</b>	<b>231884</b>	<b>231884</b>	<b>231884</b>
Type		BF 80 Set	BF 80 Set	BF 80 Set	BF 80 Set	BF 80 Set
Description		Flange adaptor	Flange adaptor	Flange adaptor	Flange adaptor	Flange adaptor
<b>Part number</b>		<b>231885</b>	<b>231885</b>	<b>231885</b>	<b>231885</b>	<b>231885</b>
Type		FG 80/2 Set	FG 80/2 Set	FG 80/2 Set	FG 80/2 Set	FG 80/2 Set
Description		Flange adaptor	Flange adaptor	Flange adaptor	Flange adaptor	Flange adaptor

# Buffer cylinder

## Buffer cylinder

### SBP 1000-1500 E cool



SBP 1000 E cool

#### Benefits

- › Suitable for either heating or cooling operation
- › Buffer cylinder for heating systems with large heat pumps
- › Suitable for cooling due to combination of thermal insulation and pre-insulated cylinder
- › Suitable in multi storey construction thanks to extremely reliable operating pressure (Product: 236570)

**Application** • Buffer cylinder for heat pumps in apartment buildings and commercial premises, for either heating or cooling operation. The cylinder enables hydraulic separation of the heat pump and heating circuit flows, extends the operating time of the heat pump and stores heating energy.

**Convenience features** • Pre-insulated steel cylinder with flange connections arranged at the front, one above the other, for the primary and secondary circuit. Additional connectors for combining with extra heat generators. • A flanged aperture sealed with a blank flange is provided, so that the cylinder can be fitted with an additional indirect coil or flanged immersion heater.

**Efficiency** • The cooling-compatible high grade thermal insulation as an accessory, together with the insulation applied to the cylinder, result in low standby losses. This combination is an essential requirement for the buffer cylinder cooling capability. • Matched inlet and outlet technology ensure good temperature stratification. • The buffer cylinder is designed for connecting heat pumps with high flow rates on the primary side.

		SBP 1000 E cool	SBP 1010 E cool	SBP 1500 E cool
<b>Part number</b>		<b>227588</b>	<b>236570</b>	<b>227589</b>
<b>Specification</b>				
Nominal capacity	l	1006	1006	1503
Max. permissible pressure	MPa	0.30	1.00	0.30
Height incl. thermal insulation	mm	2340	2340	2255
Diameter incl. thermal insulation	mm	1010	1010	1220
Height when tilted	mm	2335	2335	2250
Weight	kg	181	242	239
<b>Required accessories</b>				
<b>Part number</b>		<b>231921</b>	<b>231921</b>	
Type		WDH 1000 cool	WDH 1000 cool	
Description		Thermal insulation	Thermal insulation	
<b>Part number</b>				<b>231922</b>
Type				WDH 1500 cool
Description				Thermal insulation
<b>Recommended accessories</b>				
<b>Part number</b>		<b>231884</b>	<b>231884</b>	<b>231884</b>
Type		BF 80 Set	BF 80 Set	BF 80 Set
Description		Flange adaptor	Flange adaptor	Flange adaptor
<b>Part number</b>		<b>231885</b>	<b>231885</b>	<b>231885</b>
Type		FG 80/2 Set	FG 80/2 Set	FG 80/2 Set
Description		Flange adaptor	Flange adaptor	Flange adaptor



<b>Accessories</b>	
Accessories	373

## Accessories for buffer cylinders

### Accessories

#### WPKI 5



WPKI 5

##### Benefits

- › For heating heat pumps without integral circulation pump (Product: 234763)
- › Including insulation assembly for flow/return connector (Product: 234763)
- › Integral non-return valve (Product: 234763)

**Application** • The compact installation includes all the components needed for the hydraulic connection of the heating heat pump to 200-700 l buffer cylinders. • The standard delivery includes: safety valve, thermometer/pressure gauge, shut-off valves, non-return valve and the option to connect an expansion vessel, plus the DHW heating set. • Compact installation is only suitable for heating heat pumps without an integral heating circuit pump.

		WPKI 5
Part number		234763
<b>Specification</b>		
Connection		G 1 1/4
Max. operating pressure	MPa	0.30
<b>Required accessories</b>		
Part number		201620
Type		UP 25/7.5 PCV
Description		Heating circuit pump

#### BBI 5



BBI 5

##### Benefits

- › Integral non-return valve (Product: 234764)

DHW heating set for compact installation of a buffer cylinder. Contains all required components for the hydraulic connection of heat pumps to the DHW cylinder.

		BBI 5
Part number		234764
<b>Specification</b>		
Connection		G 1 1/4 / Cu 28 x 1.5
Max. operating pressure	MPa	0.30
<b>Required accessories</b>		
Part number		201620
Type		UP 25/7.5 PCV
Description		Heating circuit pump
Part number		234763
Type		WPKI 5
Description		WPKI 5 Compact installation

Accessories for buffer cylinders

Accessories

WPKI 6



WPKI 6 Set

- Benefits**
- › Including insulation assembly for flow/return connector (Product: 234762)
  - › For heating heat pumps with integral circulation pump (Product: 234762)

Compact installation for the hydraulic connection of the heating heat pump (with integral heating circuit pump) to 200-700 l buffer cylinders. Contains all the necessary components.

		WPKI 6 Set
Part number		234762
Specification		
Connection		G 1 1/4
Max. operating pressure	MPa	0.30

ET SBP



Adaptor fittings with female threads for the hydraulic connection of buffer cylinders with 200-700 l capacity. Only required if no compact installation has been used.

Anschlusszubehör SBP

		Anschlusszubehör SBP
Part number		003711

Accessories for buffer cylinders

Accessories

WPKI-V



WPKI - V

- Benefits**
- › Including a connection option for DHW return (Product: 074347)

Installation set for the hydraulic connection of a ground source heat pump to a 100 litre buffer cylinder. Contains all the necessary components.

		<b>WPKI - V</b>
Part number		<b>074347</b>

WPKI-P E



WPKI-P E

- Benefits**
- › Compact installation for the connection of the heat pump to the buffer cylinder (Product: 233097)
  - › Including thermal insulation (Product: 233097)

The compact installation contains all the components needed for hydraulic connection of the heating heat pump to the buffer cylinder. The safety valve, shut-off valves, non-return valve, thermometer, pressure gauge and rigid foam thermal insulation are built in. The heating circuit pump must be selected separately to suit the system.

		<b>WPKI-P E</b>
Part number		<b>233097</b>
Required accessories		
Part number		<b>185443</b>
Type		SBP 100
Description		Wall mounted buffer cylinder
Part number		<b>201620</b>
Type		UP 25/7.5 PCV
Description		Heating circuit pump

## Accessories for buffer cylinders

### Accessories

#### WPKI-H E



##### Benefits

- › Including thermal insulation (Product: 233098)
- › The compact installation includes all components required for hydraulic connection to the heating circuit (Product: 233098)

The compact installation contains all the components needed for hydraulic connection of the buffer cylinder to the heating circuit side. • Standard delivery includes shut-off valves, thermometer and rigid foam thermal insulation. • The heating circuit pump must be selected separately to suit the system.

WPKI-H E

		WPKI-H E
Part number		233098
Required accessories		
Part number		185443
Type		SBP 100
Description		Wall mounted buffer cylinder

#### WPKI-W E



##### Benefits

- › Including thermal insulation (Product: 233099)
- › Including pump fitting (Product: 233099)

The compact installation includes all the components needed for the hydraulic connection of the heating heat pump to the DHW cylinder: shut-off valves, check valve, thermometer and rigid foam thermal insulation. • Using the kit, the buffer cylinder can be quickly and easily connected to the compact installation. • The heating circuit pump must be selected separately to suit the system.

WPKI-W E

		WPKI-W E
Part number		233099
Required accessories		
Part number		201620
Type		UP 25/7.5 PCV
Description		Heating circuit pump
Part number		233097
Type		WPKI-P E
Description		Compact installation, WPKI-P E

## Accessories for buffer cylinders

### Accessories

#### BF FG 80/2



Flange adaptor for combining buffer cylinders with different threaded immersion heaters.

BF 80 Set

		BF 80 Set	FG 80/2 Set
Part number		231884	231885
Specification			
Flange diameter		DN 80	DN 80
Threaded connection			G 2 A

#### WDH 1000-1500 SBP



WDH 1010 SBP

##### Benefits

- › Composite thermal insulation made from rigid foam and fleece
- › Graphite inserts for good insulation properties
- › Two insulation semi-shells to make it easier to match the shape

**Application** • High grade thermal insulation made from EPS rigid foam with insulated cover and floor disc. Graphite inserts in the EPS and the fleece ensure lowest heat losses. • The wedge-shaped cut-outs and fleece layer ensure that the thermal insulation can be optimally adapted to the cylinder. The prepared adhesive joints in the wedge-shaped cut-outs also contribute to this. • The outer plastic jacket is white; the cover is grey. • The thermal insulation is attached by means of a quick-release hook strip.

		WDH 1010 SBP	WDH 1000 SBP	WDH 1500 SBP
Part number		201662	231929	231930
Specification				
Insulation for		SBP 1010 E	SBP 1000 E and E SOL	SBP 1500 E and E SOL
Thermal insulation thickness	mm	110	110	110
Standby energy consumption/ 24 h at 65 °C	kWh	3.60	3.60	4.10

Accessories for buffer cylinders

Accessories

WDH 1000-1500 cool



WDH 1000 cool

- Benefits**
- › Composite thermal insulation made from rigid foam and fleece
  - › Graphite inserts for good insulation properties
  - › Two insulation semi-shells to make it easier to match the shape
  - › A pre-insulated cylinder can be used for cooling in conjunction with this thermal insulation

**Application** • High grade thermal insulation made from EPS rigid foam with insulated cover and floor disc. Graphite inserts in the EPS and the fleece ensure lowest heat losses. • The wedge-shaped cut-outs and fleece layer ensure that the thermal insulation can be optimally adapted to the cylinder. The prepared adhesive joints in the wedge-shaped cut-outs also contribute to this. • The outer plastic jacket is white; the cover is grey. • The thermal insulation is attached by means of a quick-release hook strip.

		WDH 1000 cool	WDH 1500 cool
Part number		231921	231922
Specification			
Insulation for			SBP 1500 E cool
Thermal insulation thickness	mm	110	110
Standby energy consumption/ 24 h at 65 °C	kWh	3.50	4.00



<b>Electric threaded immersion heaters and flanged immersion heaters</b> Accessories	381
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## Additional accessories

### Electric threaded immersion heaters and flanged immersion heaters

#### SBP-HF



Flanged immersion heater for retrofitting to a wall mounted buffer cylinder.

SBP-HF

		SBP-HF
Part number		074252

#### BGC



##### Benefits

- › For matching to individual usage scenarios
- › High DHW convenience thanks to powerful heating elements
- › Variable temperature setting via rotary selector

**Application** • Threaded immersion heater for sealed unvented heating systems and DHW heating systems.

**Convenience features** • Variable temperature selection and temperature limiting possible.

**Safety and quality** • Integral temperature controller with high limit safety cut-out.

BGC 6 kW 500 mm ET

		BGC 6 kW 500 mm ET	BGC/45	BGC 2/60
Part number		003769	075115	232030
Specification				
Connected load ~ 230 V	kW	2-5,7	2-5,7	2-5,7
Connected load ~ 400 V	kW	6	6	6
Power supply		1/N/PE, 2/PE, 3/PE	1/N/PE, 2/PE, 3/PE	1/N/PE, 2/PE, 3/PE
Rated voltage	V	230/400	230/400	230/400
Frequency	Hz	50/60	50/60	50/60
Version		Universal flange	Universal flange	Universal flange
IP rating		IP 44	IP 44	IP 44
Immersion depth	mm	500	455	480

## Additional accessories

### Electric threaded immersion heaters and flanged immersion heaters

#### FCR



#### Benefits

- › Replaceable copper heating element
- › For matching to individual usage scenarios
- › High DHW convenience thanks to powerful heating elements
- › Variable temperature setting via rotary selector
- › Test techn. Bullets\${att.sf000694.value} \${att.sf000694.name} (Product: 000694)

**Application** • Flanged immersion heaters for horizontal installation in sealed DHW cylinders with flange connector to DIN 4805.

**Convenience features** • Variable temperature selection and temperature limiting possible.

**Safety and quality** • Observe the details supplied by the cylinder manufacturer and DIN 4753 or 4751.

FCR 21/60

		FCR 21/60	FCR 21/120	FCR 28/120	FCR 28/120 E	FCR 28/180
Part number		071330	071331	071332	000694	071333
Specification						
Connected load ~ 230 V	kW	2-4	4			
Connected load ~ 400 V	kW	2-6	8/12	6/12	12	9/18
Power supply		1/N/PE, 3/N/PE	1/N/PE, 2/N/PE, 3/PE	3/PE	3/PE	3/PE
Rated voltage	V	230/400	230/400	400	400	400
Coil voltage	V	230	230	230	400	230
Frequency	Hz	50/60	50/60	50	50	50
Version		Dual/single circuit	Single circuit	Dual/single circuit	Single circuit	Dual/single circuit
Integral contactor		X	-	X	X	X
IP rating		IP 24	IP 24	IP 24	IP 24	IP 24
Immersion depth	mm	400	400	450	325	450
Flange diameter	mm	210	210	280	280	280

		FCR 28/180 E	FCR 28/270 E	FCR 28/270 E Si	FCR 28/360 E
Part number		000695	000696	075141	001502
Specification					
Connected load ~ 400 V	kW	18	27	27	36
Power supply		3/PE	3/PE	3/PE	3/PE
Rated voltage	V	400	400	400	400
Coil voltage	V	400	400		400
Frequency	Hz	50	50	50/60	50/60
Version		Single circuit	Single circuit	Single circuit	Single circuit
Integral contactor		X	X	-	-
IP rating		IP 24	IP 24		IP 24
Immersion depth	mm	325	325	325	450
Flange diameter	mm	280	280	280	280

Additional accessories

Electric threaded immersion heaters and flanged immersion heaters

WPRB



Pipe assembly for threaded immersion heater for electrical reheating.

WPRB Rohrbausatz

		WPRB Rohrbausatz
Part number		074233
Specification		
Length	mm	600

<b>DHW heating</b>	
Accessories	385
<b>Heating system hydraulics</b>	
Accessories	387
<b>Additional accessories</b>	
Accessories	396

Heat pump accessories

DHW heating

UPZ



**Application** • DHW circulation pump with automatic ventilation mode, suitable for single-family houses and apartment buildings. • The highly efficient DHW circulation pump can be controlled via the electronic control thermostat and/or the time switch. • The pump shutdown temperature can be adjusted by means of a rotary selector - this allows the pump runtime and the electronic energy demand for DHW provision to be reduced to a minimum. • Insulation shell, time switch and non-return valve are included in the standard delivery.

UPZ		
		UPZ
Part number		233719
Specification		
Connection		G 1/2
Power consumption	W	2 - 27
Rated voltage	V	220-240
Control via 0-10 V signal with IF module		-
Control via PWM signal		-
Installation length (centre distance)	mm	65

UP B



Circulation pump for DHW circuit. Can be electrically controlled in three stages, inserts are included in the standard delivery.

Pumpe UP 25-60-180		
		Pumpe UP 25-60-180
Part number		056899
Specification		
Connection		G 2
Power consumption	W	46/67/93
Rated voltage	V	230
Installation length (centre distance)	mm	180

Heat pump accessories

DHW heating

WT



- Benefits**
- › The plate heat exchanger consists of multiple hard-soldered stainless steel plates
  - › For DHW heating or swimming pool water heating

Plate heat exchanger comprising several hard-soldered stainless steel plates for DHW heating or swimming pool heating. Including thermal insulation. Observe application limits.

WT 30

		WT 30	WT 40
Part number		071091	229338
Specification			
Output	kW	40	50
Primary pressure drop	hPa	90	120
Secondary pressure drop	hPa	60	200
Height	mm	313	313
Width	mm	113	113
Depth	mm	173.5	219.7
Weight	kg	8.0	10.2

## Heat pump accessories

### Heating system hydraulics

#### UP



#### Benefits

- › Can be controlled via either a PWM signal or differential pressure (Product: 201620)
- › 0-10 V actuation possible with IF module (Product: 227422, 227423)

Heating circuit pump. Energy efficient thanks to the integral electronic output control for pumping the heat transfer medium and the variable differential control.

UP 25/1-8 PCV

		UP 25/1-8 PCV	UP 25/7.5 PCV	UP 30/1-8 PCV	UP 40/1-8 E	UP 50/1-12 E
Part number		235950	201620	235951	227422	227423
Specification						
Energy Efficiency Index EEI		0.23	0.20	0.23	0.23	0.23
Connection		G 1 1/2	G 1 1/2	G 2	DN 40	DN 50
Delivery head	m	8.00	8.40	8.00	8.00	12.00
Max. flow rate	m³/h	8.00	4.00	8.00	15.00	29.00
Power consumption	W	8-130	10-60	8-130	12-310	25-590
Rated voltage	V	230	230	230	230	230
Control via 0-10 V signal with IF module		-	-	-	x	x
Control via differential pressure		x	x	x	x	x
Control via PWM signal		x	x	x	-	-
Installation length (centre distance)	mm	180	180	180	220	280
Required accessories						
Part number				230381	230381	230381
Type				WPM-RBS	WPM-RBS	WPM-RBS
Description				Relay set for connecting high efficiency pumps	Relay set for connecting high efficiency pumps	Relay set for connecting high efficiency pumps

## Heat pump accessories

### Heating system hydraulics

#### IF-Modul Stratos Extern Off



IF plug-in module for the 0-10 V communication interface.

IF-Modul Stratos Extern Off

		IF-Modul Stratos Extern Off
Part number		235952
Specification		
Weight	kg	0.06

#### WPKI-HKME



**Application** • Pump assembly for one heating circuit with mixer. • The standard delivery includes the integral high efficiency circulation pump, shut-off valves with thermometer and gravity brake including opening mechanism as well as the EPP complete insulation set with wall mounting bracket and white cover. • Flow on the right. • The pump assembly can be installed either on the buffer cylinder or on the wall.

WPKI-HKM E

		WPKI-HKM E
Part number		233603
Specification		
Connection, above		G 1
Connection, below		G 1 1/2 A
Circulation pump type		Para 25-180/7-50/SC-12
Height	mm	420
Width	mm	250
Depth	mm	269
Energy Efficiency Index EEI		0.20
Delivery head	m	7.00
Max. flow rate	m³/h	3.30

## Heat pump accessories

### Heating system hydraulics

#### WPKI-HKE



WPKI-HK E

**Application** • Pump assembly for one heating circuit without mixer. • The standard delivery includes the integral high efficiency circulation pump, shut-off valves with thermometer and gravity brake including opening mechanism as well as the EPP complete insulation set with wall mounting bracket and white cover. • Flow on the right. • The pump assembly can be installed either on the buffer cylinder or on the wall.

		WPKI-HK E
Part number		233602
Specification		
Connection, above		G 1
Connection, below		G 1 1/2 A
Circulation pump type		Para 25-180/7-50/SC-12
Height	mm	420
Width	mm	250
Depth	mm	269
Energy Efficiency Index EEI		0.20
Delivery head	m	7.00
Max. flow rate	m <sup>3</sup> /h	3.30

#### WPKI-HKV 2



Manifold for the installation of up to two heating circuit pump assemblies. Including EPP insulation and fittings.

WPKI-HKV 2

		WPKI-HKV 2
Part number		221142
Specification		
Connection		G 1 1/2

Heat pump accessories

Heating system hydraulics

WPKI-HKV 3



Manifold for installing a maximum of 3 heating circuit pump assemblies. Including EPP insulation and fittings.

WPKI-HKV 3

		WPKI-HKV 3
Part number		236708
Specification		
Connection		G 1 1/2

HUV



3-way heating diverter valve with servomotor for installation in heating systems.

HUV 1

		HUV 1	HUV 2	HUV 65	HUV 80
Part number		227420	223391	227425	227426
Specification					
Connection		G 1	G 2	DN 65	DN 80
kVS value	m³/h	26	49	58	90
IP rating		IP 54	IP 54	IP 54	IP 54
Protection class		II verstärkte Isolierung	II, double insulated	II, double insulated	II, double insulated
Runtime		90 s / 90°	90 s / 90°	7.5 s/mm (18mm)	7.5 s/mm (18mm)
Weight	kg	1.65	4.80	16.30	22.50

Heat pump accessories

Heating system hydraulics

WPHW



WPHW 25

Low loss header for hydraulic separation of heat pump and heating circuit, including air separator and dirt trap. The welded casing with connectors is fully insulated and equipped with automatic float air vent valves, sensor pockets for return sensors and drain valve.

		WPHW 25
Part number		221135
Specification		
Connection, heating system		G 1 1/2
Connection, heat pump		G 1 1/2
Flow rate	m³/h	2

HZEA



HZEA

Benefits

› The volume of softened water is subject to the level of hardness in the water (Product: 230013)

**Application** • Heating descaler for the initial filling and topping up of heating systems. • The fitting is installed in the cold water pipe, directly downstream of the system separator. The water passes through an acidic and high efficiency ion exchange resin. • Depending on the system volume, keep some spare cartridges to hand for the initial filling.

		HZEA
Part number		230013
Specification		
Max. flow rate	m³/h	0.30

## Heat pump accessories

### Heating system hydraulics

#### HZEN



HZEN

##### Benefits

- › The volume of softened water is subject to the level of hardness in the water (Product: 230031)

Replacement cartridge for the HZEN heating water softening device.

		HZEN
Part number		230031
Specification		
Max. permissible pressure	MPa	0.80
Weight	kg	1.20
Capacity	l x °dH	6000
Required accessories		
Part number		230013
Type		HZEN
Description		Heating water softening device

#### SD..G/GE



##### Benefits

- › Pressure hose for flow or return line

Vapour diffusion-proof pressure hoses with straight end pieces, for flow and return lines, including thermal insulation and threaded fittings.

SD 25-1 G

		SD 25-1 G	SD 25-2 GE	SD 25-2.5 GE	SD 32-0.6 G
Part number		232976	233828	232971	201710
Specification					
Connection, heating and source side		G 1 1/4	G 1 1/4	G 1 1/4	
For pressure hose size DN		25	25	25	32
Length	m	1	2	2.5	
Max. operating pressure	bar	3.00	3.00	3.00	
Thermal insulation thickness	mm	19	30	30	
External diameter incl. insulation	mm	80	99	99	

Continue on next page >

## Heat pump accessories

### Heating system hydraulics

		SD 32-1 G	SD 32-2 GE	SD 40-0.8 G
Part number		232977	233831	201711
Specification				
Connection, heating and source side		G 1 1/4	G 1 1/4	
For pressure hose size DN		32	32	40
Length	m	1	2	
Max. operating pressure	bar	3.00	3.00	
Thermal insulation thickness	mm	19	30	
External diameter incl. insulation	mm	86	106	

#### SD..E



Vapour diffusion-proof pressure hoses with one right angle and one straight end piece, for flow and return lines, including thermal insulation and threaded fittings.

SD 25-1 E

		SD 25-1 E	SD 32-1 E	SD 50-1 E	Druckschl. 25 x 1000	Druckschl. 32x 1000
Part number		232965	232968	232972	074415	074414
Specification						
Connection, heating and source side		G 1 1/4	G 1 1/4	G 2	G 1 1/4	G 1 1/4
For pressure hose size DN		25	32	50	25	32
Length	m	1	1	1	1	1
Max. operating pressure	bar	2.50	2.50	2.50	2.50	2.50
Thermal insulation thickness	mm	30	30	50	19	19
External diameter incl. insulation	mm	99	106	134	80	86

Heat pump accessories

Heating system hydraulics

SD..KE



Vapour diffusion-proof pressure hoses (can be trimmed) for flow and return lines, incl. thermal insulation and threaded fittings.

SD 25-1 KE

		SD 25-1 KE	SD 32-1 KE
Part number		232974	232975
Specification			
Connection, heating and source side		G 1 1/4	G 1 1/4
For pressure hose size DN		25	32
Length	m	1	1
Max. operating pressure	bar	2.50	2.50
Thermal insulation thickness	mm	30	30
External diameter incl. insulation	mm	99	106

SV DS



Hose fittings for trimming the pressure hoses with threaded fittings.

Schlauchverschr.DN25

		Schlauchverschr.DN25	Schlauchverschr.DN32
Part number		003713	070692

Heat pump accessories  
Heating system hydraulics

FS-HP



**Benefits**  
› Liquid and gaseous media in the pipework are monitored by the FS-HP flow switch

FS-HP flow switch for reliable monitoring of liquid and gaseous media in pipework. A connection adaptor to G 1/4" and a five metre PUR cable with a 1/2" plug-in connection are included in the standard delivery.

FS-HP Strömungswächter

		FS-HP Strömungswächter
Part number		202779

Heat pump accessories

Additional accessories

STB-FB










Bi-metal contact thermostat incl. casing. Limits the maximum permissible flow temperature.

STB-FB

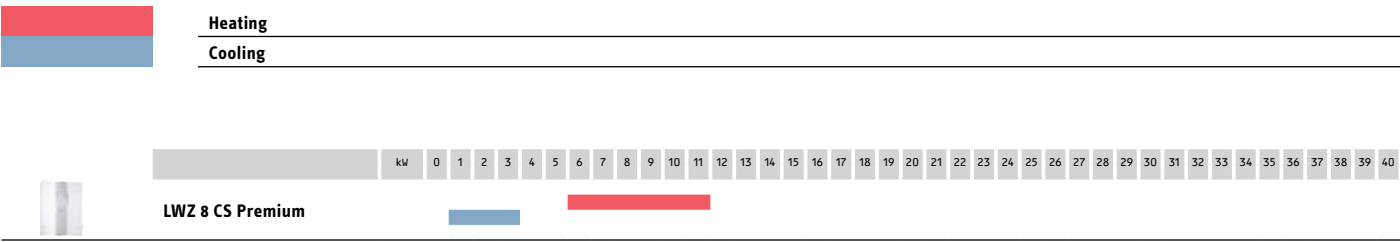
		STB-FB
Part number		233711
Specification		
Temperature setting range	°C	20-90
Switching hysteresis	K	8±3
IP rating		IP 30



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# Ventilation with integral heat pump

## Application areas



<b>Room heating, DHW heating and supply/extract air with heat recovery LWZ CS Premium</b>	<b>401</b>
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# Ventilation with integral heat pump

## Room heating, DHW heating and supply/extract air with heat recovery

### LWZ CS Premium



LWZ 8 CS Premium

#### Benefits

- › Compact appliance for ventilation, heating, cooling and DHW heating
- › Intuitive operation via matrix display with Touch-Wheel
- › Energy saving heat distribution by integral high efficiency pump
- › Integral DHW cylinder for maximum DHW convenience
- › Simple to control via the ergonomic programming unit

**Application** • The output-controlled integral system with reversible air source heat pump performs the following tasks in new builds and detached houses: central ventilation, central DHW heating, heating and cooling.

**Convenience features** • The integral electronic weather-compensated control unit ensures output control for all application areas. The intelligent controller allows program preselection for fans, heating, DHW and absence or holidays. • A range of additional functions is also included: humidity protection with integral humidity sensor in the extract air, air flow rate reduction when humidity is too low, passive cooling and dry heating program. • The programming unit is integrated directly in the appliance, with the option of adding a remote control with humidity sensor. • The Internet Service Gateway (ISG) with optional KNX and photovoltaic optimisation can be added if required. • Extensive safety equipment in the refrigerant circuit of the air source heat pump. • Cooling with option of direct area cooling. • Electric emergency/auxiliary heater for DHW heating and room heating. • The integral DHW cylinder has a special enamel coating and is equipped with a protective magnesium anode with electronic monitoring. • Outdoor air is preheated by a refrigerant circuit supercooler. • Coarse dust filters are integrated for the supply and extract air.

**Efficiency** • High efficiency due to demand-dependent control of the inverter compressor. • Solar thermal energy can be used thanks to the additional solar heat exchanger in the heating circuit. • The combination of the plastic cross-counter-current heat exchanger and an economical constant flow rate fan is particularly efficient.

**Installation** • All air connections are located at the top of the appliance. • Robust sheet steel casing in a contemporary design.



		LWZ 8 CS Premium
Part number		201290
Specification		
Heat recovery level up to	%	90
Filter class		ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)
Heating output at A-7/W35 (EN 14511)	kW	8.34
Heating output at A2/W35 (EN 14511)	kW	5.16
Cooling capacity at A35/W7	kW	2.69
Cooling capacity factor at A35/W7		1.92
COP at A2/W35 (EN 14511)		3.74
COP at A-7/W35 (EN 14511)		2.61
Sound power level (EN 12102)	dB(A)	50
Height	mm	1885
Width	mm	1430
Depth	mm	812
Cylinder capacity V	l	235
Weight	kg	442
Rated voltage, emergency/auxiliary heater	V	400
Rated voltage, control unit	V	230
Rated voltage, compressor	V	230
Refrigerant		R410 A
Air flow rate	m³/h	80-300
Energy efficiency class, heat pump W35		A++
Energy efficiency class, heat pump W55		A++

Continue on next page >

## Ventilation with integral heat pump

### Room heating, DHW heating and supply/extract air with heat recovery

		LWZ 8 CS Premium
Energy efficiency class, composite system (heat pump + controller) W35		A++
Energy efficiency class, composite system (heat pump + controller) W55		A++
Energy efficiency class, DHW heating with load profile XL		A
<b>Required accessories</b>		
<b>Part number</b>		<b>201720</b>
Type		LSWP 315-1.5 SG
Description		
<b>Part number</b>		<b>227664</b>
Type		FES Komfort
Description		Remote control
<b>Part number</b>		<b>233836</b>
Type		AWG 315 SR
Description		
<b>Recommended accessories</b>		
<b>Part number</b>		<b>201618</b>
Type		LSWP 315-4 SG
Description		
<b>Part number</b>		<b>202933</b>
Type		LWF SK 315 - 0,6
Description		Splitter silencer
<b>Part number</b>		<b>227665</b>
Type		LSK Inverter
Description		Summer cassette
<b>Part number</b>		<b>229336</b>
Type		ISG web
Description		Internet Service Gateway
<b>Part number</b>		<b>231039</b>
Type		AWG 315 L
Description		
<b>Part number</b>		<b>232341</b>
Type		LLB AWG 315 L
Description		Air deflector for light well grille
<b>Part number</b>		<b>232675</b>
Type		LULH 315 o
Description		Air diverter hood, outdoor/exhaust air
<b>Part number</b>		<b>232955</b>
Type		AWG 315 GL
Description		
<b>Part number</b>		<b>233301</b>
Type		ZLWZ Zirku set
Description		Connection set for DHW circulation pump
<b>Part number</b>		<b>233867</b>
Type		LWTF Inverter Enthalpie LWZ 5+8
Description		Enthalpy heat exchanger
<b>Maintenance</b>		
<b>Part number</b>		<b>231330</b>
Type		FMS G4-10 ABL Inverter
Description		Filter mat set
<b>Part number</b>		<b>231331</b>
Type		FMK M5-2 ZUL Inverter
Description		Filter cassette set

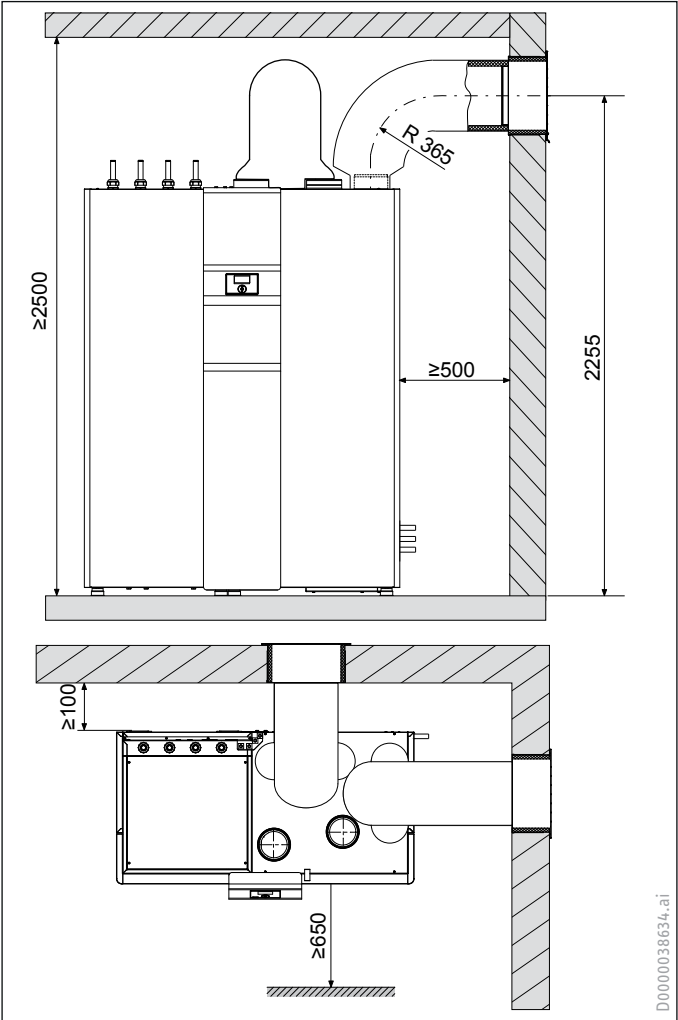
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Ventilation with integral heat pump  
Room heating, DHW heating and supply/extract air with heat recovery

		LWZ 8 CS Premium
Part number		231332
Type		FMK F7-2 ZUL Inverter
Description		Filter cassette set

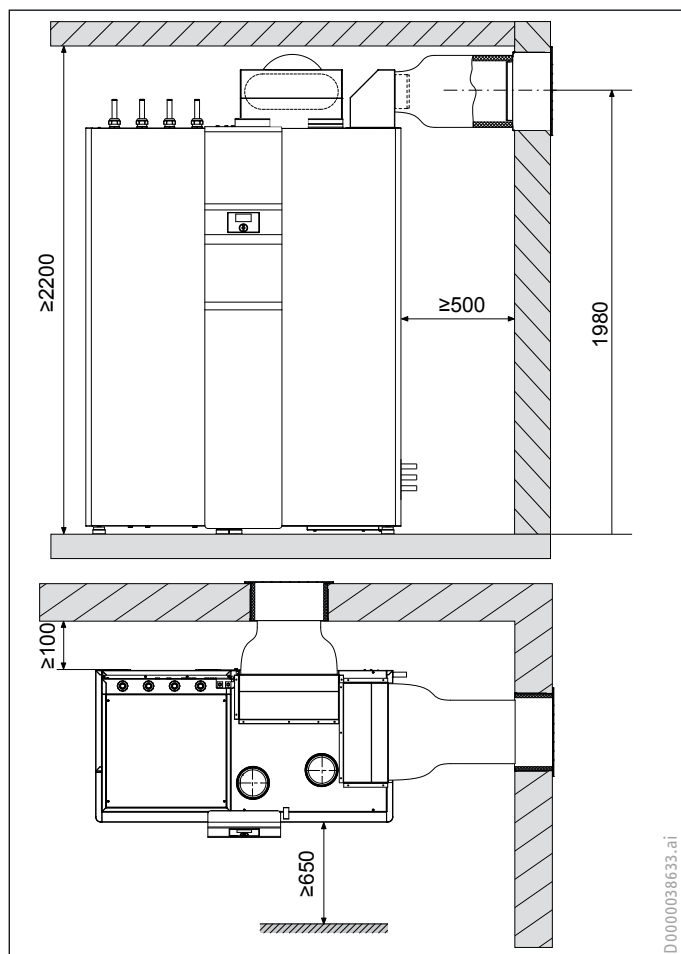
Consisting of function module and cylinder module.

Installation conditions



## Ventilation with integral heat pump

Room heating, DHW heating and supply/extract air with heat recovery



Ventilation with integral heat pump  
Room heating, DHW heating and supply/extract air with heat recovery

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<b>Accessories</b>	
Accessories	407

## Accessories for ventilation with integral heat pump

### Accessories

#### FES comfort



##### Benefits

- › Touch-Wheel operation
- › Illuminated graphic display
- › Room temperature and humidity measurement
- › Data link via the system bus
- › Choice of operating mode

**Application** • The FES Komfort programming unit is combined with integral ventilation units and enables convenient operation and display of the system parameters for the living space. The integral room temperature sensor enables automatic heating curve adjustment. The unit is installed on a surface box, with wired communication via the Stiebel Eltron bus.

FES Komfort

		FES Komfort
Part number		227664
<b>Specification</b>		
Width	mm	145
Height	mm	96
Depth	mm	31

#### ISG web



##### Benefits

- › Browser-based operation of the heat pump in a home network
- › Can be integrated into home automation systems through Modbus TCP/IP software interface fitted as standard
- › Forecast-based on-site PV self-consumption facilitated by optional EMI software extension
- › Optional automation with KNX IP software extension

**Application** • The Internet Service Gateway (ISG) connects the heat pump to the home network and enables the appliance to be operated using a computer or tablet browser. • Once enabled, appliance data is transferred to the Stiebel Eltron Internet Service Portal. • The ISG plus is a required accessory for use of the SG Ready functions of the heat pump manager (WPM). The ISG can be integrated into an existing building management system via the Modbus TCP/IP data interface.

ISG web

		ISG web
Part number		229336
<b>Specification</b>		
Version		Wall mounting
10/100 Ethernet		RJ45
CAN		RJ45
RS232		RJ 12
Width	mm	158
Height	mm	95
Depth	mm	37
Min./max. application range	°C	0 / 60

Observe the compatibility list.

## Accessories for ventilation with integral heat pump

### Accessories

#### AWG 315



AWG 315 L

		AWG 315 L	AWG 315 GL	AWG 315 SR
Part number		231039	232955	233836
Specification				
Height	mm	477	490	490
Width	mm	479	483	483
Depth	mm	625	627	627
Nominal diameter	mm	315	315	315
Wall thickness	mm	280 - 500	280 - 500	280 - 500
Min. outlet aperture	mm	450x450	450x450	450x450
Max. air flow rate	m³/h	1500	1300	1300
Colour		Aluminium, anodised	RAL 9006	silver-metallic
Material		Sheet steel	Sheet steel	Sheet steel
Version		For light well version	With grey painted weather grille	With weather grille painted with metallic silver
Required accessories				
Part number		232341		
Type		LLB AWG 315 L		
Description		Air deflector for light well grille		

#### LLB AWG



#### Benefits

- › Quick and easy to install

The aluminium air deflector is installed in a light well and directs exhaust air expelled from a building away from the external wall. This reduces the formation of moisture from condensation. The width of the deflector can be adjusted to the light well.

LLB AWG 315 L

		LLB AWG 315 L	LLB AWG 560 L
Part number		232341	232342

Continue on next page >

## Accessories for ventilation with integral heat pump

### Accessories

		LLB AWG 315 L	LLB AWG 560 L
Specification			
Height	mm	128	128
Length	mm	900	1,500
Colour		Aluminium	Aluminium

#### LSWP 315



##### Benefits

- › Good sound insulation thanks to a 50 mm layer of acoustic insulating material
- › Prevents condensation forming on the outer cover

LSWP 315-1.5 SG

		LSWP 315-1.5 SG	LSWP 315-4 S	LSWP 315-4 SG
Part number		201720	234646	201618
Specification				
Nominal diameter	mm	315	315	315
Length	mm	1500	4000	4000
Thermal insulation thickness	mm	50	50	50
Colour of air hose		Grey outer sheath	Aluminium-coloured outer sheath	Grey outer sheath

#### LWF SK



##### Benefits

- › Excellent sound attenuation at low frequencies

The splitter silencer consists of an external pipe, a perforated internal pipe, a baffle and two connection ends with double lip gasket. It is used to reduce noise levels in the exhaust air at the external grille for integral systems and air source heat pumps. The space is filled with sound-absorbing insulation material. A glass fleece between the internal pipe and insulation prevents any contact between the insulating material and the air stream.

LWF SK 315 - 0,6

		LWF SK 315 - 0,6
Part number		202933
Specification		
Nominal diameter	mm	315
External diameter	mm	515

# Accessories for ventilation with integral heat pump

## Accessories

### LULH



- Benefits**
- › Compact, space saving design

The air diverter hood for integral systems is suitable for routing the outdoor air, or the outdoor and exhaust air. It is used with low ceilings from 2200 mm and is suitable for air hose LSWP 315. The white sheet steel casing has a stove enamel finish and is insulated on the inside.

LULH 315 o

		LULH 315 o
Part number		232675
Specification		
Height	mm	260
Width	mm	488
Depth	mm	218

### LSK Inverter



The insert replaces the cross-countercurrent heat exchanger in summer, in order to prevent unwanted heat transfer.

LSK Inverter

		LSK Inverter
Part number		227665
Specification		
Application		Ventilation units

## Accessories for ventilation with integral heat pump

### Accessories

#### LWTF Inverter



##### Benefits

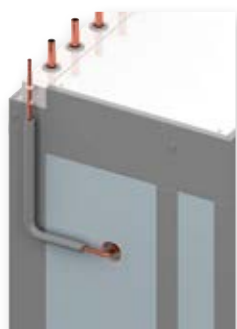
- › Less dry air in winter thanks to moisture recovery
- › Thanks to the special membranes, odours and harmful substances are not allowed through

**Application** • Enthalpy heat exchanger for the integral units, to replace the cross-countercurrent heat exchanger during the winter months.0• Highly efficient, moisture-transferring, countercurrent heat exchanger with selective plastic film membrane. • This membrane in the heat exchanger can recover the moisture from the extract air and transfer it to the supply air, thereby allowing the low relative humidity found in rooms during the winter months to be raised. • No transfer of gases or impurities, long service life, excellent leak tightness, low pressure drop, antimicrobial, resistant to frost and heat.

LWTF Inverter Enthalpie LWZ 5+8

		LWTF Inverter Enthalpie LWZ 5+8
Part number		233867
Specification		
Height	mm	366
Width	mm	366
Depth	mm	345

#### ZLWZ Zirku Set



The connection set for a DHW circulation pump to integral systems consists of a pipe bend assembly with gasket and insulating hose. The pipe assembly is installed within the side panel, and the connection can be found at the top of the unit, to the back left.

ZLWZ Zirku set

		ZLWZ Zirku set
Part number		233301
Specification		
Height	mm	535
Width	mm	260
Depth	mm	52

# Accessories for ventilation with integral heat pump

## Accessories

### FMS G2 LWA 100



Set of 5 filter mats made of synthetic randomly laid nonwoven fabric, without the addition of chemical binders. Outstanding dust-holding capacity with little pressure loss, thanks to progressively compressed construction and an optimised nonwoven structure.

FMS G2 LWA 100

		FMS G2 LWA 100
Part number		221398
Specification		
Quantity		5
Filter class		ISO Coarse > 30 % (G2)
Application		Ventilation units

### FMS G4 LWZ Inverter



Set of 10 filter mats made of randomly laid synthetic nonwoven fabric, without the addition of chemical binders. Outstanding dust-holding capacity with little pressure loss, thanks to progressively compressed construction and an optimised nonwoven structure.

FMS G4-10 ABL Inverter

		FMS G4-10 ABL Inverter
Part number		231330
Specification		
Quantity		10
Filter class		ISO Coarse > 60 % (G4)
Application		Ventilation units

# Accessories for ventilation with integral heat pump

## Accessories

### FMK M5-2 ZUL Inverter



The set contains synthetic nonwoven filter cassettes for the supply air. Low pressure drop thanks to large Z-fold compressed nonwoven filters in a rigid frame.

FMK M5-2 ZUL Inverter

		FMK M5-2 ZUL Inverter
Part number		231331
Specification		
Quantity		2
Filter class		ePM10 ≥ 50 % (M5)
Application		Ventilation units

### FMK F7-2 ZUL



Set of 2 synthetic nonwoven filter cassettes for supply air. Low pressure drop thanks to large Z-fold compressed nonwoven filters in a rigid frame.

FMK F7-2 ZUL Inverter

		FMK F7-2 ZUL Inverter
Part number		231332
Specification		
Quantity		2
Filter class		ePM1 ≥ 50 % (F7)
Application		Ventilation units

# Accessories for ventilation with integral heat pump

## Accessories

### ZLWZ Trans



- Benefits**
- › Highly robust transport aids that can be used multiple times for all appliances in the range

Transport aids for the function modules of the Plus, Trend, Eco and Flex ranges of compact ventilation units. They comprise two stable angled panels with corresponding fixing screws.

ZLWZ Trans

		<b>ZLWZ Trans</b>
<b>Part number</b>		<b>233485</b>

### RC 1



- Benefits**
- › Remote control for convenient control
- Remote control for easier operation of the ventilation units with DHW heat pump.

RC1 Lüftg. Fernverst.

		<b>RC1 Lüftg. Fernverst.</b>
<b>Part number</b>		<b>170328</b>

Specification		
Width	mm	80
Height	mm	80
Depth	mm	30

# Accessories for ventilation with integral heat pump

## Accessories

### ALD



The supply air vents for decentralised air supply are made from plastic with weather grille, wind pressure protection and filter. They are designed for wall installation and can be manually closed.

ALD 160

		ALD 160
Part number		189813
Specification		
For nominal diameter	mm	160
Required accessories		
Part number		189816
Type		Montagerohr ALD
Description		Installation pipe

Required ALD accessories: Installation pipe DN 160 (part no. 189816) (Product: 189813)










### ZALD



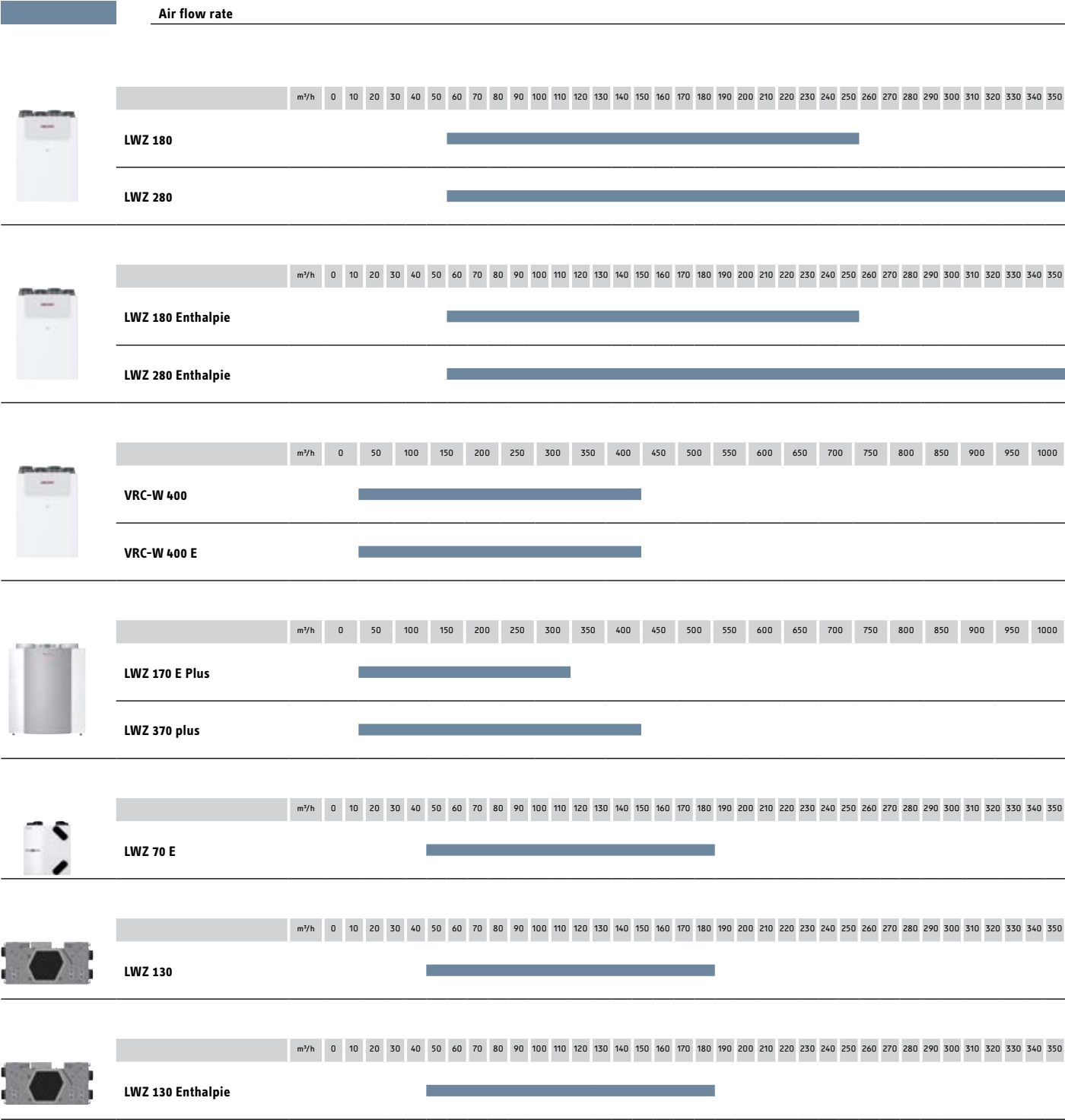
The plastic (PPS) pipe is used for installing the external wall vent. It can be trimmed to the thickness of the wall and can also be used with walls of greater thickness.

Montagerohr ALD

		Montagerohr ALD
Part number		189816
Specification		
Diameter	mm	160
Material		Plastic

<b>Central ventilation</b>	  	418
<b>Accessories for central ventilation</b>		436
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Central ventilation  
Application areas



<b>Supply and extract air with heat recovery, wall mounting</b>	
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# Central ventilation

## Supply and extract air with heat recovery, wall mounting

### LWZ 180/280



LWZ 180

#### Benefits

- › For apartments, detached houses and commercial properties with an area of up to 250 m²
- › Central supply and extract air system for optimum air quality
- › Efficient operation through by the constant flow rate fan, which ensures a balanced air flow rate
- › Simple to control via the ergonomic programming unit
- › Balanced flow rate in winter by means of integral preheating coil
- › The programming unit can also be used as a remote control for ventilation regulated by the humidity sensor
- › During the hot summer nights, temperature is reduced by means of the integral bypass module
- › Pollutants are continuously removed from the living space
- › Easy electrical installation as the connection panel is readily accessible even when the appliance is closed

**Application** • The central ventilation unit with heat recovery is ideal for ventilating detached houses, large apartments and small commercial properties.

**Convenience features** • The appliance features a contemporary design with ergonomically arranged programming unit and separate filter cover panel. • The integral controller is operated via the multifunction display, which is also used to set the seven-day program. The display can be used as a remote control. • The integral bypass damper in the supply air line prevents heat recovery from the extract air on hot summer nights. • The heating coil with electric preheating provides additional comfort by routing the supply air, which is a higher temperature, into the room. • The humidity sensor can be used for humidity-dependent control of the air flow rate.

**Efficiency** • The backwards-curved constant flow rate fan with air flow rate control ensures balanced air flow rates, promoting efficient operation. • The cross-counter-current heat exchanger routes the supply and extract air streams so that they cross each other inside the unit. This extends the contact time for heat exchange, which improves the overall efficiency of the system. • The filter can be replaced easily thanks to the combi filter cassette. A fine dust filter is available as an optional accessory.

**Installation** • The unit can be installed in residential units, utility rooms and basement rooms. • The air connections are located at the top of the unit. • The electrical connection panel is easy to access without having to open the unit. • The ventilation unit has a duplex sheet steel casing with visible surfaces in alpine white with powder coated finish.



232361

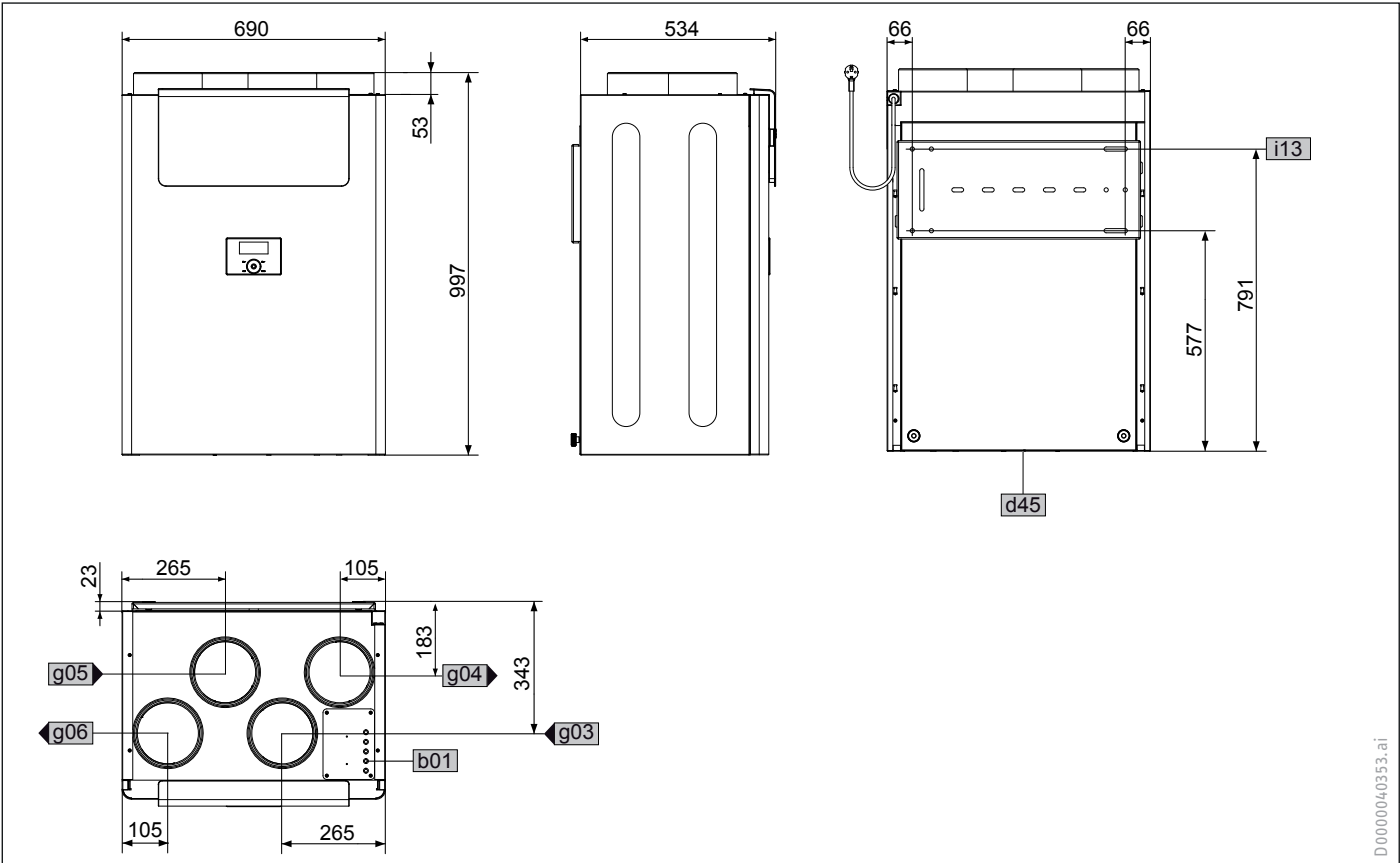
		LWZ 180	LWZ 280
Part number		232361	232362
Specification			
Filter class		ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)	ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)
Power consumption, fan	W	65	132
Sound power level (EN 12102)	dB(A)	43	48
Depth	mm	534	534
Air connection diameter	mm	160	160
Weight	kg	78	78
Rated voltage	V	230	230
Air flow rate	m³/h	60-250	60-350
Specific energy consumption in moderate climates, time control	kWh/(m²a)	-39.95	-38.51
Specific energy consumption in moderate climates, central demand-dependent control	kWh/(m²a)	-41.58	-40.63
Energy efficiency class, moderate climates, time control		A	A
Energy efficiency class, moderate climates, central demand-dependent control		A	A
Width	mm	690	690
Height	mm	997	997
Heat recovery level up to	%	94	94
Energy efficiency class		A	A

Continue on next page >

Central ventilation

Supply and extract air with heat recovery, wall mounting

		LWZ 180	LWZ 280
Recommended accessories			
Part number		236039	236039
Type		FEB	FEB
Description		Comfort programming unit for wall mounting	Comfort programming unit for wall mounting
Maintenance			
Part number		234147	234147
Type		FMS G4-10 180	FMS G4-10 180
Description		Filter mat set	Filter mat set
Part number		234148	234148
Type		FMK M5-2 180	FMK M5-2 180
Description		Filter cassette set	Filter cassette set
Part number		234208	234208
Type		FMK F7-2 180	FMK F7-2 180
Description		Filter cassette set F7, 2 pce	Filter cassette set F7, 2 pce

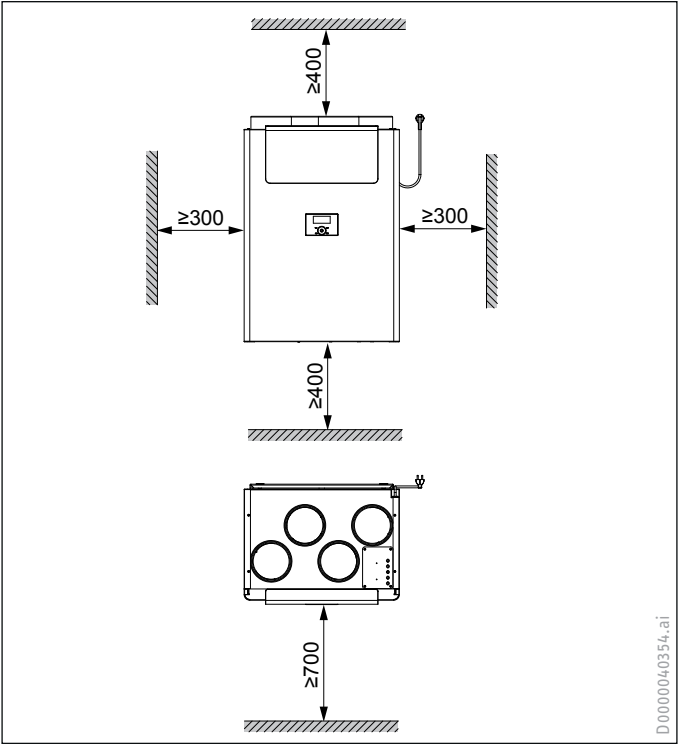


# Central ventilation

## Supply and extract air with heat recovery, wall mounting

		LWZ 180	LWZ 280
b01 Entry electrical cables			
d45 Condensate drain Diameter	mm	22	22
g03 Outdoor air Diameter	mm	160 / 180	160 / 180
g04 Exhaust air Diameter	mm	160 / 180	160 / 180
g05 Extract air Diameter	mm	160 / 180	160 / 180
g06 Supply air Diameter	mm	160 / 180	160 / 180
i13 Wall mounting bracket			

Minimum clearance diagram



# Central ventilation

## Supply and extract air with heat recovery, wall mounting

### LWZ 180/280 E



LWZ 180 Enthalpie

#### Benefits

- › An enthalpy heat exchanger is built in for recovering moisture in the winter
- › For apartments, detached houses and commercial properties with an area of up to 250 m<sup>2</sup>
- › Central supply and extract air system for optimum air quality
- › Efficient operation through by the constant flow rate fan, which ensures a balanced air flow rate
- › Simple to control via the ergonomic programming unit
- › Balanced flow rate in winter by means of integral preheating coil
- › The programming unit can also be used as a remote control for ventilation regulated by the humidity sensor
- › During the hot summer nights, temperature is reduced by means of the integral bypass module
- › Pollutants are continuously removed from the living space
- › Easy electrical installation as the connection panel is readily accessible even when the appliance is closed

**Application** • The central ventilation unit with heat recovery is ideal for ventilating detached houses, large apartments and small commercial properties.

**Convenience features** • The unit is in a contemporary design with ergonomically arranged programming unit and separate filter cover panel. • The integral controller is operated via the multifunction display, which is also used to set the seven-day program. The display can be used as a remote control. • The integral bypass damper in the supply air line prevents heat recovery from the extract air on hot summer nights. • The heating coil with electric preheating provides additional comfort by routing the supply air, which is a higher temperature, into the room. • The unit is fitted with an enthalpy heat exchanger for moisture recovery. The humidity sensor can be used for humidity-dependent control of the air flow rate.

**Efficiency** • The backwards-curved constant flow rate fan with air flow rate control ensures balanced air flow rates, promoting efficient operation. • The cross-countercurrent heat exchanger routes the supply and extract air streams so that they cross each other inside the unit. This extends the contact time for heat exchange, which improves the overall efficiency of the system. • The filter can be replaced easily thanks to the combi filter cassette. A fine dust filter is available as an optional accessory.

**Installation** • The unit can be installed in residential units, utility rooms and basement rooms. • The air connections are located at the top of the unit. • The electrical connection panel is easy to access without having to open the unit. • The ventilation unit has a duplex sheet steel casing with visible surfaces in alpine white with powder coated finish.

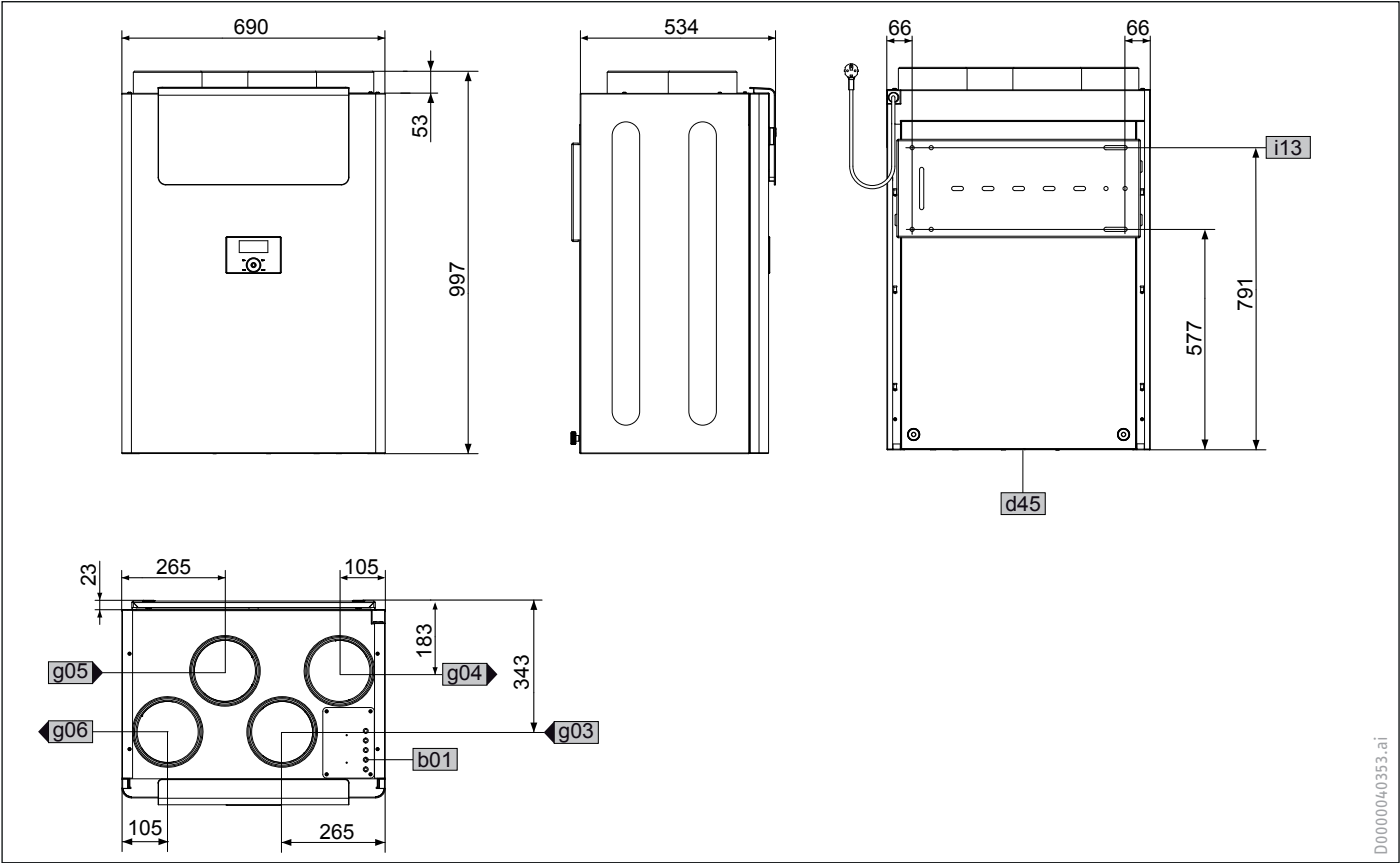
		LWZ 180 Enthalpie	LWZ 280 Enthalpie
Part number		236646	236647
Specification			
Filter class		ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)	ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)
Power consumption, fan	W	65	135
Sound power level (EN 12102)	dB(A)	43	48
Depth	mm	534	534
Air connection diameter	mm	160	160
Weight	kg	80	80
Rated voltage	V	230	230
Air flow rate	m <sup>3</sup> /h	60-250	60-350
Specific energy consumption in moderate climates, time control	kWh/(m <sup>2</sup> a)	-37.32	-35.04
Specific energy consumption in moderate climates, central demand-dependent control	kWh/(m <sup>2</sup> a)	-39.21	-37.73
Energy efficiency class, moderate climates, time control		A	A
Energy efficiency class, moderate climates, central demand-dependent control		A	A
Width	mm	690	690
Height	mm	997	997
Heat recovery level up to	%	89	89
Energy efficiency class		A	A
Recommended accessories			
Part number		236039	236039
Type		FEB	FEB
Description		Comfort programming unit for wall mounting	Comfort programming unit for wall mounting

Continue on next page >

Central ventilation

Supply and extract air with heat recovery, wall mounting

		LWZ 180 Enthalpie	LWZ 280 Enthalpie
Maintenance			
Part number		234147	234147
Type		FMS G4-10 180	FMS G4-10 180
Description		Filter mat set	Filter mat set
Part number		234148	234148
Type		FMK M5-2 180	FMK M5-2 180
Description		Filter cassette set	Filter cassette set
Part number		234208	234208
Type		FMK F7-2 180	FMK F7-2 180
Description		Filter cassette set F7, 2 pce	Filter cassette set F7, 2 pce

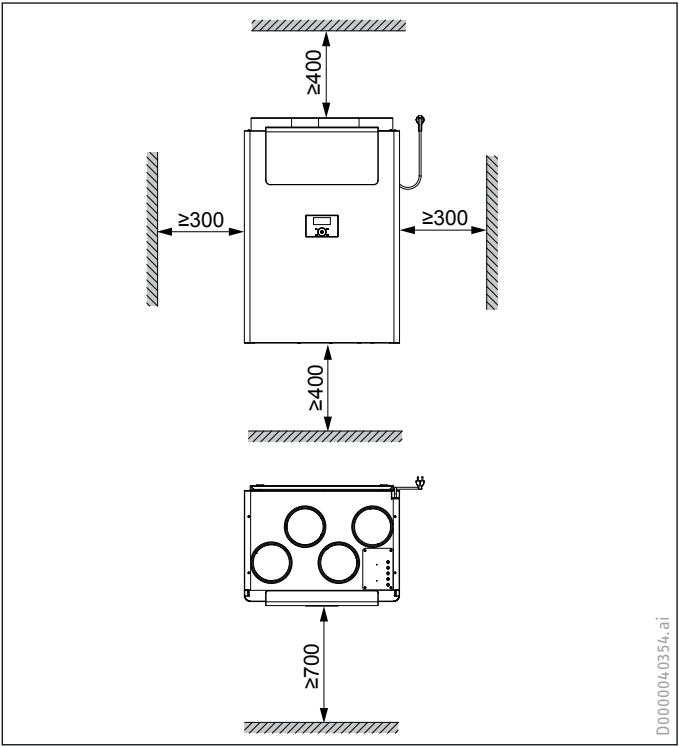


Central ventilation

Supply and extract air with heat recovery, wall mounting

		LWZ 180 Enthalpie	LWZ 280 Enthalpie
b01 Entry electrical cables			
d45 Condensate drain Diameter	mm	22	22
g03 Outdoor air			
g03 Outdoor air Diameter	mm	160 / 180	160 / 180
g04 Exhaust air Diameter	mm	160 / 180	160 / 180
g05 Extract air Diameter	mm	160 / 180	160 / 180
g06 Supply air Diameter	mm	160 / 180	160 / 180
i13 Wall mounting bracket			

Minimum clearance diagram



# Central ventilation

## Supply and extract air with heat recovery, wall mounting

### VRC-W 400



VRC-W 400

#### Benefits

- › For apartments, detached houses and commercial properties with an area of up to 250 m<sup>2</sup>
- › Central supply and extract air system for optimum air quality
- › Efficient operation through by the constant flow rate fan, which ensures a balanced air flow rate
- › Simple to control via the ergonomic programming unit
- › Balanced flow rate in winter by means of integral preheating coil
- › The programming unit can also be used as a remote control for ventilation regulated by the humidity sensor
- › During the hot summer nights, temperature is reduced by means of the integral bypass module
- › Pollutants are continuously removed from the living space
- › Easy electrical installation as the connection panel is readily accessible even when the appliance is closed
- › An enthalpy heat exchanger is built in for recovering moisture in the winter (Product: 203637)

**Application** • The central ventilation unit with heat recovery is used for ventilating detached houses, large apartments and small commercial properties.

**Convenience features** • Contemporary design with ergonomically arranged programming unit. • The integral controller is equipped with a multifunction display and seven-day program and can also be used as a remote control. • The unit offers a wide range of benefits: Highly efficient backwards-curved fans with constant flow rate control. Highly efficient cross-counter-current heat exchanger. • Electric preheating via high performance heating coil. Bypass damper in supply air line; integral humidity sensor in extract air line. The humidity sensor can be used for humidity-dependent control of the air flow rate. • Straightforward filter replacement using combi filter cassettes. Fine dust filters are available as an accessory. • The duplex sheet steel casing has a visible surface in alpine white with powder coated finish.

**Efficiency** • The backwards-curved constant flow rate fans with air flow rate control ensure balanced air flow rates, thereby promoting efficient operation.

**Installation** • Installation in dwellings, utility rooms, basement rooms, etc. • The air connections are located at the top of the unit; the electrical connection panel can be easily accessed without having to open the unit.

		VRC-W 400	VRC-W 400 E
<b>Part number</b>		<b>203636</b>	<b>203637</b>
<b>Specification</b>			
Filter class		ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)	ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)
Power consumption, fan	W	132	135
Sound power level (EN 12102)	dB(A)	50	49.6
Depth	mm	534	534
Air connection diameter	mm	160	160
Weight	kg	78	80
Rated voltage	V	230	230
Air flow rate	m <sup>3</sup> /h	60-400	60-400
Specific energy consumption in moderate climates, time control	kWh/(m <sup>2</sup> a)	-37.96	-34.58
Specific energy consumption in moderate climates, central demand-dependent control	kWh/(m <sup>2</sup> a)	-40.18	-37.28
Energy efficiency class, moderate climates, time control		A+	A
Energy efficiency class, moderate climates, central demand-dependent control		A	A
Width	mm	690	690
Height	mm	997	997
Heat recovery level up to	%	94	89
Energy efficiency class		A	A
<b>Maintenance</b>			
<b>Part number</b>		<b>234147</b>	<b>234147</b>
Type		FMS G4-10 180	FMS G4-10 180
Description		Filter mat set	Filter mat set

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Central ventilation

Supply and extract air with heat recovery, wall mounting

		VRC-W 400	VRC-W 400 E
Part number		234148	234148
Type		FMK M5-2 180	FMK M5-2 180
Description		Filter cassette set	Filter cassette set
Part number		234208	234208
Type		FMK F7-2 180	FMK F7-2 180
Description		Filter cassette set F7, 2 pce	Filter cassette set F7, 2 pce

The following are supplied with the device:

- Wall suspension
- 2 star handles as spacers for the back of the device
- Condensate drain hose, hose clamp, hanging bend
- 4 double nipples nominal width 160 (Product: 203636, 203637)

STIEBEL ELTRON central ventilation unit VRC-W 400 higher air volume (400 m3/h) with heat recovery (sensible heat exchanger), bypass module, integrated preheating. (Product: 203636)

STIEBEL ELTRON central ventilation unit VRC-W 400 E higher air volume (400 m3/h) with heat recovery (enthalpy heat exchanger), bypass module, integrated preheating. (Product: 203637)

## Central ventilation

### Supply and extract air with heat recovery, wall mounting

#### LWZ 170/370 P



LWZ 170 E Plus

#### Benefits

- › Central supply and extract air system for optimum air quality
- › Pollutants are continuously removed from the living space
- › Easy adjustment with constant flow rate fan
- › Easy to program using the integral programming unit
- › High heat recovery through cross-countercurrent heat exchanger
- › Integral bypass module and preheating coil
- › High heat recovery rate of up to 90 %

**Application** • The central ventilation system with heat recovery is specifically designed for use in large detached houses and smaller commercial properties. • The slow-turning, highly efficient fans guarantee a high air flow rate with significantly reduced noise levels. The air flow rate can be conveniently adjusted in three stages via a remote control (required accessories). Up to 90 % of thermal energy is recovered from the extract air by an efficient cross-countercurrent heat exchanger. The optimised heat exchanger and minimisation of the internal pressure drop enable very quiet and efficient operation. An integrated bypass prevents unwanted heat transfer on hot days.



233850

		LWZ 170 E Plus	LWZ 370 plus
Part number		233850	232033
Specification			
Power consumption, fan	W	138	172
Sound power level (EN 12102)	dB(A)	44	54
Depth	mm	567	567
Air connection diameter	mm	160	180
Weight	kg	38	38
Rated voltage	V	230	230
Air flow rate	m³/h	50-300	50-400
Specific energy consumption in moderate climates, time control	kWh/(m²a)	-38.38	-37.23
Specific energy consumption in moderate climates, central demand-dependent control	kWh/(m²a)	-40.01	-39.06
Energy efficiency class, moderate climates, time control		A	A
Energy efficiency class, moderate climates, central demand-dependent control		A	A
Width	mm	677	677
Height	mm	765	765
Heat recovery level up to	%	90	90
Energy efficiency class		A	A

## Central ventilation

### Supply and extract air with heat recovery, wall mounting

#### LWZ 70 E



LWZ 70 E

#### Benefits

- › Central supply and extract air system for optimum air quality
- › Pollutants are continuously removed from the living space
- › Easy adjustment with constant flow rate fan
- › High heat recovery through cross-countercurrent heat exchanger
- › Easy to program using the integral programming unit

**Application** • Central ventilation unit with heat recovery for ventilating apartments and detached houses.

**Convenience features** • Contemporary design with ergonomically arranged programming unit and separate filter cover panel. Highly efficient fan with constant flow rate control, highly efficient cross-countercurrent heat exchanger. • The air flow rate can be selected in three stages. • Simple filter changing. • The sheet steel casing is powder coated in alpine white.

**Efficiency** • The constant flow rate fans with air flow rate control ensure balanced air flow rates, promoting efficient operation.

**Installation** • The ventilation unit is installed in residential units, for example in utility rooms. The air connections are located at the top of the unit.

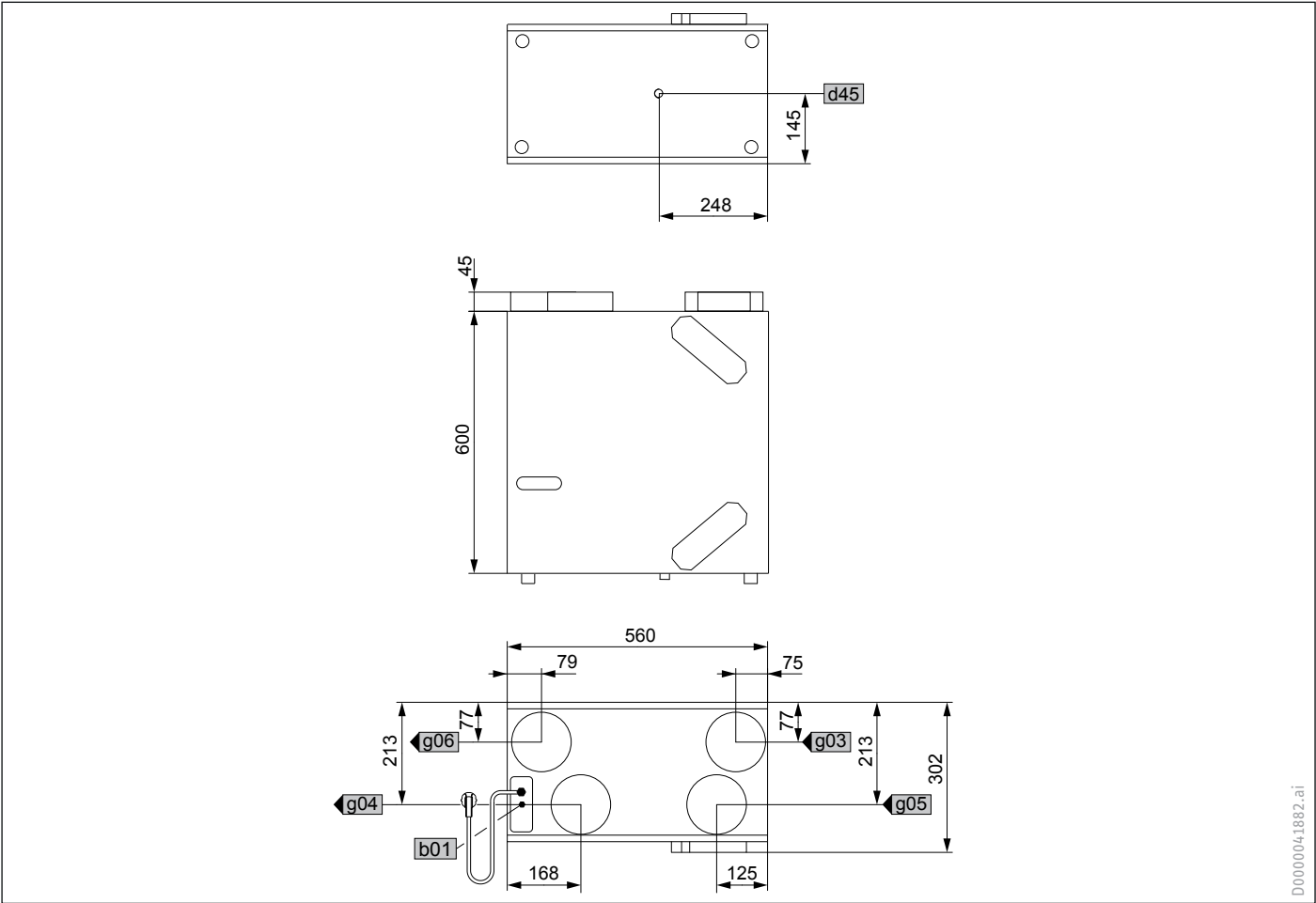
		LWZ 70 E
<b>Part number</b>		<b>233851</b>
<b>Specification</b>		
Power consumption, fan	W	80
Sound power level (EN 12102)	dB(A)	46
Depth	mm	290
Air connection diameter	mm	125
Weight	kg	25
Rated voltage	V	230
Air flow rate	m <sup>3</sup> /h	50-180
Specific energy consumption in moderate climates, time control	kWh/(m <sup>2</sup> a)	-35.96
Specific energy consumption in moderate climates, central demand-dependent control	kWh/(m <sup>2</sup> a)	-38.16
Energy efficiency class, moderate climates, time control		A
Energy efficiency class, moderate climates, central demand-dependent control		A
Width	mm	560
Height	mm	600
Heat recovery level up to	%	90
Energy efficiency class		A
<b>Recommended accessories</b>		
<b>Part number</b>		<b>185358</b>
Type		FEZ
Description		Remote control
<b>Part number</b>		<b>227046</b>
Type		LSK 70 E
Description		Summer cassette
<b>Part number</b>		<b>234866</b>
Type		ZLWZ 4 S
Description		Four-stage switch
<b>Part number</b>		<b>236038</b>
Type		ZLWZ VHR 70 E
Description		Preheating coil

Continue on next page >

Central ventilation

Supply and extract air with heat recovery, wall mounting

		LWZ 70 E
Maintenance		
Part number		222446
Type		FMS G3-10 70
Description		Filter mat set
Part number		227660
Type		FMK F7-2 70
Description		Filter cassette set F7, 2 pce

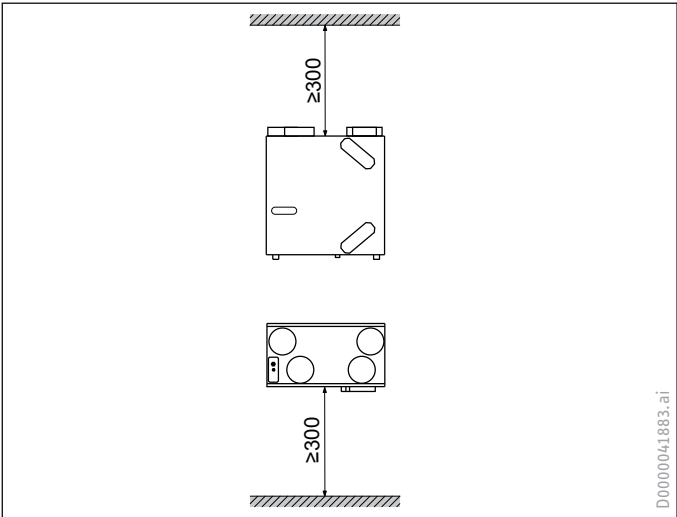


Central ventilation

Supply and extract air with heat recovery, wall mounting

LWZ 70 E		
b01 Entry electrical cables		
d45 Condensate drain Diameter	mm	13
g03 Outdoor air Nominal diameter		DN 125
g04 Exhaust air Nominal diameter		DN 125
g05 Extract air Nominal diameter		DN 125
g06 Supply air Nominal diameter		DN 125

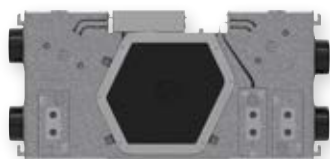
Minimum clearance diagram



# Central ventilation

## Supply and extract air with heat recovery, ceiling mounting

### LWZ 130



LWZ 130

#### Benefits

- › Central supply and extract air system for optimum air quality
- › Integral electric air preheater coil
- › Space saving installation in the ceiling

**Application** • The central ventilation unit with heat recovery is suitable for ventilating apartments and small detached houses.

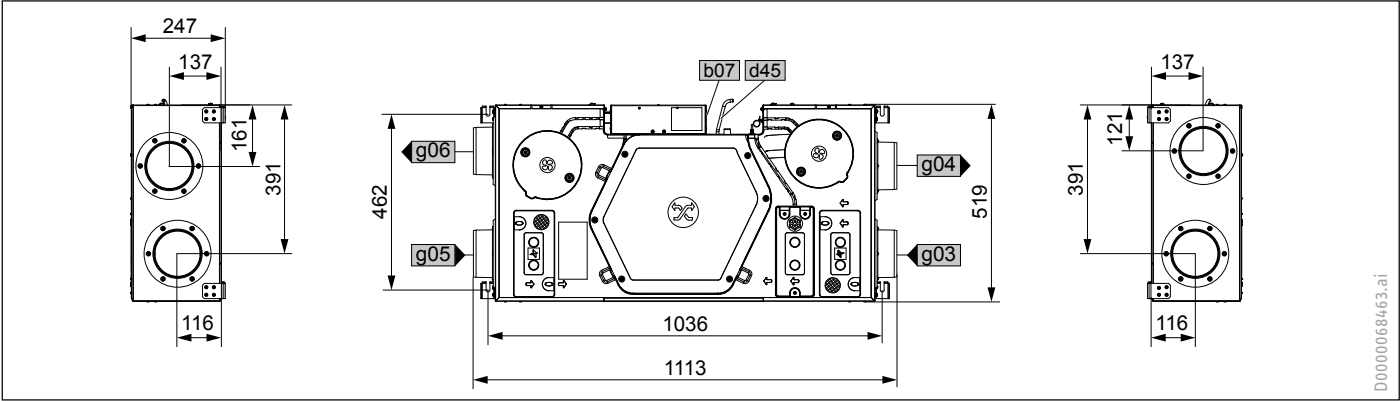
**Convenience features** • Compact design, optimised for installation on suspended ceilings; recommended for living spaces up to approx. 130 m². • The hardwired controller with multifunction display can also be used as a wall mounted programming unit and is equipped with an integral humidity sensor and seven-day program. • The unit includes the following features: efficient constant flow rate fans, highly efficient cross-counter-current heat exchanger with moisture recovery, electric preheating via high performance heating coil, electronic bypass. • Simple filter change, with coarse dust filter in the extract air and medium dust filter, with option of fine dust filter, in the supply air.

**Efficiency** • The constant flow rate fan enables a balanced air flow rate, which promotes efficient operation.

**Installation** • The ceiling mounted unit is installed in residential units, with the air connectors located on the right hand and left hand sides of the unit. • The electrical connection panel is easy to access, without having to open the unit. • The EPS casing has a partial enclosure made from zinc-plated sheet steel. • Termination on the room side by means of a service flap to be installed on site.

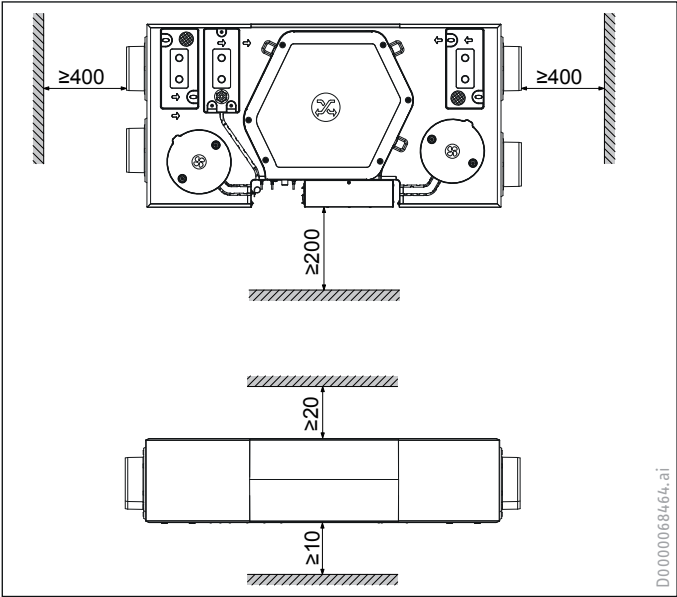
		LWZ 130
<b>Part number</b>		<b>237805</b>
<b>Specification</b>		
Filter class		ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)
Power consumption, fan	W	105
Sound power level (EN 12102)	dB(A)	33
Depth	mm	1113
Air connection diameter	mm	125
Weight	kg	18
Rated voltage	V	230
Air flow rate	m³/h	50-180
Specific energy consumption in moderate climates, time control	kWh/(m²a)	-36.63
Energy efficiency class, moderate climates, time control		A
Width	mm	520
Height	mm	248
Heat recovery level up to	%	94
Energy efficiency class		A
<b>Maintenance</b>		
<b>Part number</b>		<b>238923</b>
Type		FMS G4-10 130/135
Description		Filter mat set
<b>Part number</b>		<b>238924</b>
Type		FMK M5-2 130/135
Description		Filter cassette set
<b>Part number</b>		<b>238925</b>
Type		FMK F7-2 130/135
Description		Filter cassette set F7, 2 pce

Central ventilation  
Supply and extract air with heat recovery, ceiling mounting



LWZ 130			
b07 Electrical connection Elec-trical connection			
d45 Condensate drain Diameter	mm		16.5
g03 Outdoor air Diameter	mm		125
g04 Exhaust air Diameter	mm		125
g05 Extract air Diameter	mm		125
g06 Supply air Diameter	mm		125

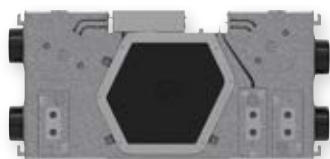
Minimum clearance diagram



# Central ventilation

## Supply and extract air with heat recovery, ceiling mounting

### LWZ 130 E



#### Benefits

- › Central supply and extract air system for optimum air quality
- › Integral electric air preheater coil
- › Integral moisture recovery (on enthalpy version)
- › Enthalpy version simpler to install as there is no condensate drain
- › Space saving installation in the ceiling

**Application** • The central ventilation unit with heat recovery is suitable for ventilating apartments and small detached houses.

**Convenience features** • Compact design, optimised for installation on suspended ceilings; recommended for living spaces up to approx. 130 m². • The hardwired controller with multifunction display can also be used as a wall mounted programming unit and is equipped with an integral humidity sensor and seven-day program. • The unit includes the following features: efficient constant flow rate fans, highly efficient cross-countercurrent heat exchanger with moisture recovery, electric preheating via high performance heating coil, electronic bypass. • Simple filter change, with coarse dust filter in the extract air and medium dust filter, with option of fine dust filter, in the supply air.

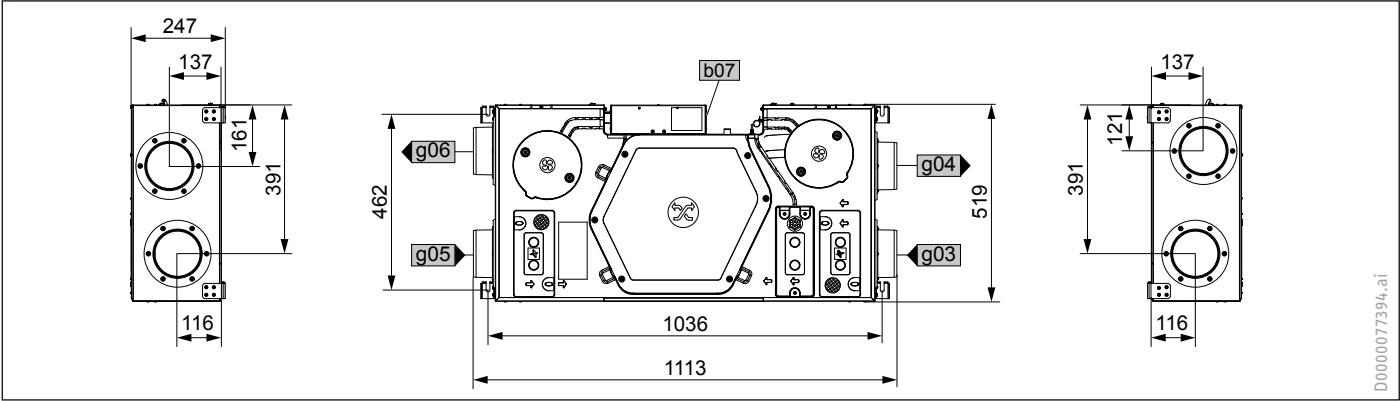
**Efficiency** • The constant flow rate fan enables a balanced air flow rate, which promotes efficient operation.

**Installation** • The ceiling mounted unit is installed in residential units, with the air connectors located on the right hand and left hand sides of the unit. • The electrical connection panel is easy to access, without having to open the unit. • The EPS casing has a partial enclosure made from zinc-plated sheet steel. • Termination on the room side by means of a service flap to be installed on site.

LWZ 130 Enthalpie

		LWZ 130 Enthalpie
<b>Part number</b>		<b>237806</b>
<b>Specification</b>		
Filter class		ePM10 ≥ 50 % (M5)   ISO Coarse > 60 % (G4)
Power consumption, fan	W	105
Sound power level (EN 12102)	dB(A)	33
Depth	mm	1113
Air connection diameter	mm	125
Weight	kg	18
Rated voltage	V	230
Air flow rate	m³/h	50-180
Specific energy consumption in moderate climates, time control	kWh/(m²a)	-34.02
Energy efficiency class, moderate climates, time control		A
Width	mm	520
Height	mm	248
Heat recovery level up to	%	89
Energy efficiency class		A
<b>Maintenance</b>		
<b>Part number</b>		<b>238923</b>
Type		FMS G4-10 130/135
Description		Filter mat set
<b>Part number</b>		<b>238924</b>
Type		FMK M5-2 130/135
Description		Filter cassette set
<b>Part number</b>		<b>238925</b>
Type		FMK F7-2 130/135
Description		Filter cassette set F7, 2 pce

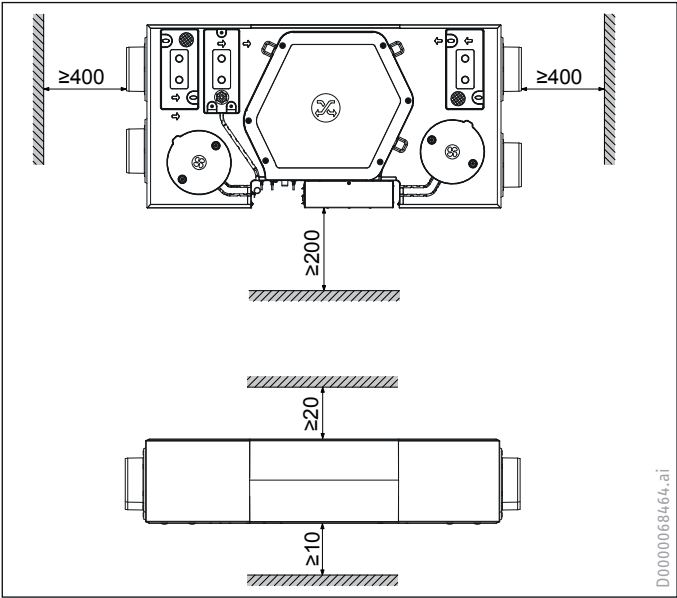
Central ventilation  
Supply and extract air with heat recovery, ceiling mounting



D0000077394.ai

LWZ 130 Enthalpie			
b07 Electrical connection Electrical connection			
g03 Outdoor air Diameter	mm		125
g04 Exhaust air Diameter	mm		125
g05 Extract air Diameter	mm		125
g06 Supply air Diameter	mm		125

Minimum clearance diagram



Central ventilation

Supply and extract air with heat recovery, ceiling mounting

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<b>Accessories</b>	
Accessories	437

Accessories for central ventilation

Accessories

FMS G4 LWZ 100



Set of 10 filter mats made of randomly laid synthetic nonwoven fabric, without the addition of chemical binders. Outstanding dust-holding capacity with little pressure loss, thanks to progressively compressed construction and an optimised nonwoven structure.

FMS G4-10 LWZ 100 Bypass

		FMS G4-10 LWZ 100 Bypass	FMS G4-10 LWZ 100 ABL
Part number		231446	231447
Specification			
Filter class		ISO Coarse > 60 % (G4)	ISO Coarse > 60 % (G4)

FMS G4-10 180



Set of 10 filter mats made of randomly laid synthetic nonwoven fabric, without the addition of chemical binders. Outstanding dust-holding capacity with little pressure loss, thanks to progressively compressed construction and an optimised nonwoven structure.

FMS G4-10 180

		FMS G4-10 180
Part number		234147
Specification		
Quantity		10
Filter class		ISO Coarse > 60 % (G4)
Application		Ventilation units

Accessories for central ventilation

Accessories

FMS G4-10 130



Set of 10 filter mats made of randomly laid synthetic nonwoven fabric, without the addition of chemical binders. Outstanding dust-holding capacity with little pressure loss, thanks to progressively compressed construction and an optimised nonwoven structure.

FMS G4-10 130/135

		FMS G4-10 130/135
Part number		238923
Specification		
Quantity		10
Filter class		ISO Coarse > 60 % (G4)
Application		Ventilation units

FMK M5-2 LWZ 100 ZUL



Set of 2 synthetic nonwoven filter cassettes for supply air. Low pressure drop thanks to large Z-fold compressed nonwoven filters in a rigid frame.

FMK F5-2 LWZ 100 ZUL

		FMK F5-2 LWZ 100 ZUL
Part number		231448
Specification		
Quantity		2
Filter class		ePM10 ≥ 50 % (M5)

Accessories for central ventilation

Accessories

FMK M5-2 180



Set of 2 synthetic nonwoven filter cassettes for supply air. Low pressure drop thanks to large Z-fold compressed nonwoven filters in a rigid frame.

FMK M5-2 180

		FMK M5-2 180
Part number		234148
Specification		
Quantity		2
Filter class		ePM10 ≥ 50 % (M5)
Application		Ventilation units

FMK M5-2 130



Set of 2 synthetic nonwoven filter cassettes for supply air. Low pressure drop thanks to large Z-fold compressed nonwoven filters in a rigid frame.

FMK M5-2 130/135

		FMK M5-2 130/135
Part number		238924
Specification		
Quantity		2
Filter class		ePM10 ≥ 50 % (M5)

# Accessories for central ventilation

## Accessories

### FMK F7-2 70



The replacement filter cassettes for supply air are made from unbreakable polyester fibres with a partially progressive structure. They are thermally bonded, temperature-resistant to 100 °C and folded in a Z-shape within a robust frame made from moisture-resistant cardboard; with pull tab at the front.

FMK F7-2 70

		FMK F7-2 70
Part number		227660
Specification		
Quantity		2
Filter class		ePM1 ≥ 50 % (F7)
Application		Ventilation units

### FMK F7-2 100



Replacement filter cassettes for supply air, made from unbreakable polyester fibres with partially progressive structure, thermally bonded, temperature-resistant to 100 °C, folded in a Z-shape within a robust frame made from moisture-resistant cardboard; with pull tab at the front.

FMK F7-2 LWZ 100 ZUL

		FMK F7-2 LWZ 100 ZUL
Part number		231449
Specification		
Quantity		2
Filter class		ePM1 ≥ 50 % (F7)
Application		Ventilation units

Accessories for central ventilation

Accessories

FMK F7-2 180



FMK F7-2 180

Replacement filter cassettes for supply air, made from unbreakable polyester fibres with partially progressive structure, thermally bonded, temperature-resistant to 100 °C, folded in a Z-shape within a robust frame made from moisture-resistant cardboard; with pull tab at the front.

		FMK F7-2 180
Part number		234208
Specification		
Quantity		2
Filter class		ePM1 ≥ 50 % (F7)
Application		Ventilation units

FMK F7-2 130



FMK F7-2 130/135

Replacement filter cassettes for supply air, made from unbreakable polyester fibres with partially progressive structure, thermally bonded, temperature-resistant to 100 °C, folded in a Z-shape within a robust frame made from moisture-resistant cardboard; with pull tab at the front.

		FMK F7-2 130/135
Part number		238925
Specification		
Quantity		2
Filter class		ePM1 ≥ 50 % (F7)
Application		Ventilation units

## Accessories for central ventilation

### Accessories

#### LWTF 180/280



LWTF 180/280

**Application** • Enthalpy heat exchanger for the 180 and 280 central ventilation units to replace the cross-counter-current heat exchanger in winter months. • Highly efficient, moisture-transferring, countercurrent heat exchanger with selective plastic film membrane. • This membrane in the heat exchanger can recover the moisture from the extract air and transfer it to the supply air, thereby allowing the low relative humidity found in rooms during the winter months to be raised. • No transfer of gases or impurities, long service life, excellent leak tightness, low pressure drop, antimicrobial, resistant to frost and heat.

		LWTF 180/280
Part number		236420
Specification		
Height	mm	366
Width	mm	366
Depth	mm	395

#### FMS G3



Set of filter mats made of synthetic randomly laid nonwoven fabric, without the addition of chemical binders. Outstanding dust-holding capacity with little pressure loss, thanks to progressively compressed construction and an optimised nonwoven structure.

FMS G3-10 70

		FMS G3-10 70
Part number		222446
Specification		
Quantity		10
Filter class		ISO Coarse > 45 % (G3)
Application		Ventilation units

## Accessories for central ventilation

### Accessories

#### FEB



##### Benefits

- › Operating mode can be switched easily via the Touch-Wheel
- › Rapid ventilation function is started with action button
- › Filter change and fault indicators

The FEB programming unit is combined with the 180/280 central ventilation units and enables convenient operation and display of system parameters specific to the living space. Communication via i<sup>2</sup>C bus. Installation on a surface box.

FEB

		FEB
Part number		236039
Specification		
Width	mm	145
Height	mm	96
Depth	mm	31

#### ZLWZ VHR



The electric preheating coil preheats the outdoor air in central ventilation units, in order to keep the cross-counter-current heat exchanger frost-free in winter.

ZLWZ VHR 70 E

		ZLWZ VHR 70 E
Part number		236038
Specification		
Heating output	kW	1000
Connection diameter	mm	160

# Accessories for central ventilation

## Accessories

FEZ



- Benefits**
- › Straightforward operation
  - › Filter change indicator

**Application** • Remote control with day time switch and an operating mode switch to control the fan stages. • A selector switch is used to switch between operating modes. • In automatic mode, changeover between day and night mode is effected by the day time switch. • The remote control has a control display and integral power reserve, and shows upcoming filter changes on a time dependent basis.

FEZ

		FEZ
Part number		185358
Specification		
IP rating		IP 20
Width	mm	160
Height	mm	78
Depth	mm	45

ZLWZ 4 S



The four-stage switch with LED enables setting of fan stages from the living space. The switch is compatible with 70 E, 170 E Plus and 370 Plus central ventilation units, and is supplied with a 1.5 m connecting cable. • Installation on a flush mounted switch box.

ZLWZ 4 S

		ZLWZ 4 S
Part number		234866

Accessories for central ventilation

Accessories

LSK 70



LSK 70 E

**Benefits**

- › Temperature reduction in summer through the supply of fresh and cool outdoor air

Insert for use as an alternative to the cross-countercurrent heat exchanger in order to prevent heat transfer in summer.

		LSK 70 E
Part number		227046
Specification		
Height	mm	458
Width	mm	229
Depth	mm	283

<b>LVE onfloor</b>	
Accessories	451
<b>LVS infloor</b>	
Accessories	456
<b>LWF system</b>	
Accessories	461

## Ventilation

### Distribution system for integral and central ventilation

STIEBEL ELTRON simplifies the preparation of quotations for ventilation systems. A reliable quotation can be generated in just a few steps, which comes very close to the subsequent demand for ventilation material.

- › Simple quotation preparation in just a few steps for the complete system
- › Includes the ventilation unit, the external and exhaust air ducting and the complete air distribution

Procedure:

The offer can easily be determined according to square metres of living space (see example houses).  
Supplementary material can be obtained from wholesalers.

Step 1

- › **Selection of the suitable ventilation unit**

Step 2

- › **Selection of accessories for external and exhaust air connection and air distribution connectors**

Step 3

- › **Selection of the air distribution system**

#### **STIEBEL ELTRON offers two air distribution systems:**

##### STANDARD AIR DISTRIBUTION SYSTEM – ONFLOOR

System for routing the air ducts in the floor structure, consisting of a central air distributor, round plastic duct DN 75, flat plastic duct 130 x 52 mm and moulded parts for the construction of wall, ceiling or floor outlets.

- › Central sound insulated air distributor with adjustable connectors for each line
- › Ideal combination of flexible round duct (LVS) and flexible flat duct (LVE)
- › Installation in the floor structure (wet or dry) and/or in walls
- › Possible combinations of wall, ceiling and floor outlets

##### STANDARD AIR DISTRIBUTION SYSTEM – INFLOOR

System for routing the air ducts in the concrete ceiling or wooden beam layer, consisting of a central air distributor, round plastic duct DN 75 and moulded parts to accommodate the extract and supply air vents

- › Central sound insulated air distributor with adjustable connectors for each line
- › Few moulded parts, high stability and flexibility
- › Installation in the concrete ceiling or suspended ceiling
- › Position of the air outlets: ceiling

# Ventilation

## Distribution system for integral and central ventilation

### Complete overview for easy quotation and calculation of standard systems for controlled mechanical ventilation

Ventilation systems consist of the ventilation unit, the accessories for the outdoor and exhaust air connection, and an air distribution system for supply and extract air in the building. The following compilation gives sample material ranges for applications in detached houses of different sizes. Use this overview to prepare quotations and select materials for your building project. First select the ventilation unit and combine it with an air distribution system. Further information and detailed material ranges depending on house size can be found on the following pages.

Type	Ventilation units					Integral
	LWZ 130/LWZ 70 E	LWZ 130 Enthalpy	LWZ 180/ LWZ 180 E/ LWZ 170 E Plus	LWZ 280/ LWZ 370 P/ VRC-W400	LWZ 280 E/ VRC-W400E	LWZ 8 CS Premium
	237805/233851	237806	232361/ 236646/233850	203636/ 232033/203636	236647/203637	201290
	On demand	On demand	On demand	On demand	On demand	On demand
Product number						
Price of the ventilation unit						

### Accessories for the connection of outdoor and exhaust air (unit installed on the ground floor)

Product no.	Unit price	Type	Designation
200205	On demand	LSWP 125-4 AL	Thermally insulated air hose, 4 m long, DN 125
239139	On demand	KWG 125	Combi external wall grille
239231	On demand	LWF DR 125-1 EPP	Duct insulated with EPP, DN 125, 1 m long
239233	On demand	LWF DRB 125-90 EPP	Duct bend insulated with EPP, DN 125, 90°
234505	On demand	AWG 160 R	Thermally insulating EPS wall outlet incl. weather grille with drip edge
239232	On demand	LWF DR 160-1 EPP	Duct insulated with EPP, DN 160, 1 m long
239235	On demand	LWF DRB 160-90 EPP	Duct bend insulated with EPP, DN 160, 90°
159320	On demand	LWF N 160	Push-fit connector DN 160
234646	On demand	LSWP 315-4 S	Thermally insulated air hose
233836	On demand	AWG 315 SR	Wall outlet with weather grille, thermally insulated

No. of units					
1	1	1			
1	1	1			
2	2	2			
2	2	2			
			2	2	
			4	4	
			3	3	
			2	2	
					1
					2

### InFloor air distribution system | Total price InFloor

House size
Living space 50 m²
Living space 70 m²
Living space 100 m²
Living space 130 m²
Living space 160 m²
Living space 190 m²
Living space 220 m²
Living space 250 m²
Living space 280 m²

Price					
On demand	On demand				
On demand	On demand				
On demand	On demand				
		On demand			
		On demand			On demand
		On demand			On demand
			On demand	On demand	On demand
			On demand	On demand	On demand
			On demand	On demand	On demand

House size
Living space 50 m²
Living space 70 m²
Living space 100 m²
Living space 130 m²
Living space 160 m²
Living space 190 m²
Living space 220 m²
Living space 250 m²
Living space 280 m²

Price					
On demand	On demand				
On demand	On demand				
On demand	On demand				
		On demand			
		On demand			On demand
		On demand			On demand
		£6.175	On demand	On demand	On demand
		£6.256	On demand	On demand	On demand
		£6.422	On demand	On demand	On demand

### OnFloor air distribution system | Total price OnFloor

House size
Living space 50 m²
Living space 70 m²
Living space 100 m²
Living space 130 m²
Living space 160 m²
Living space 190 m²
Living space 220 m²
Living space 250 m²
Living space 280 m²

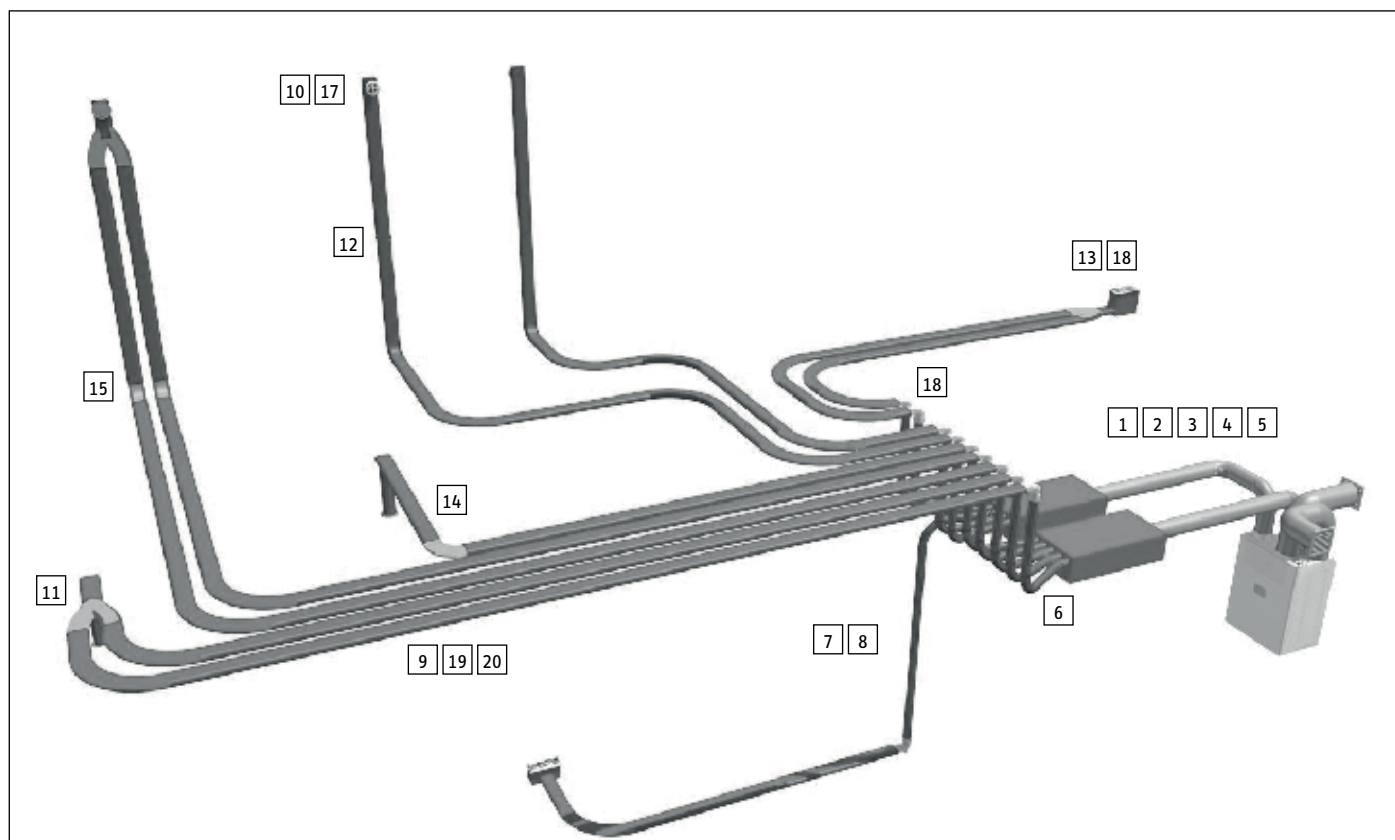
Price					
On demand	On demand				
On demand	On demand				
On demand	On demand				
		On demand			
		On demand			On demand
		On demand			On demand
		£6.175	On demand	On demand	On demand
		£6.256	On demand	On demand	On demand
		£6.422	On demand	On demand	On demand

House size
Living space 50 m²
Living space 70 m²
Living space 100 m²
Living space 130 m²
Living space 160 m²
Living space 190 m²
Living space 220 m²
Living space 250 m²
Living space 280 m²

Price					
On demand	On demand				
On demand	On demand				
On demand	On demand				
		On demand			
		On demand			On demand
		On demand			On demand
		£6.175	On demand	On demand	On demand
		£6.256	On demand	On demand	On demand
		£6.422	On demand	On demand	On demand

## Ventilation

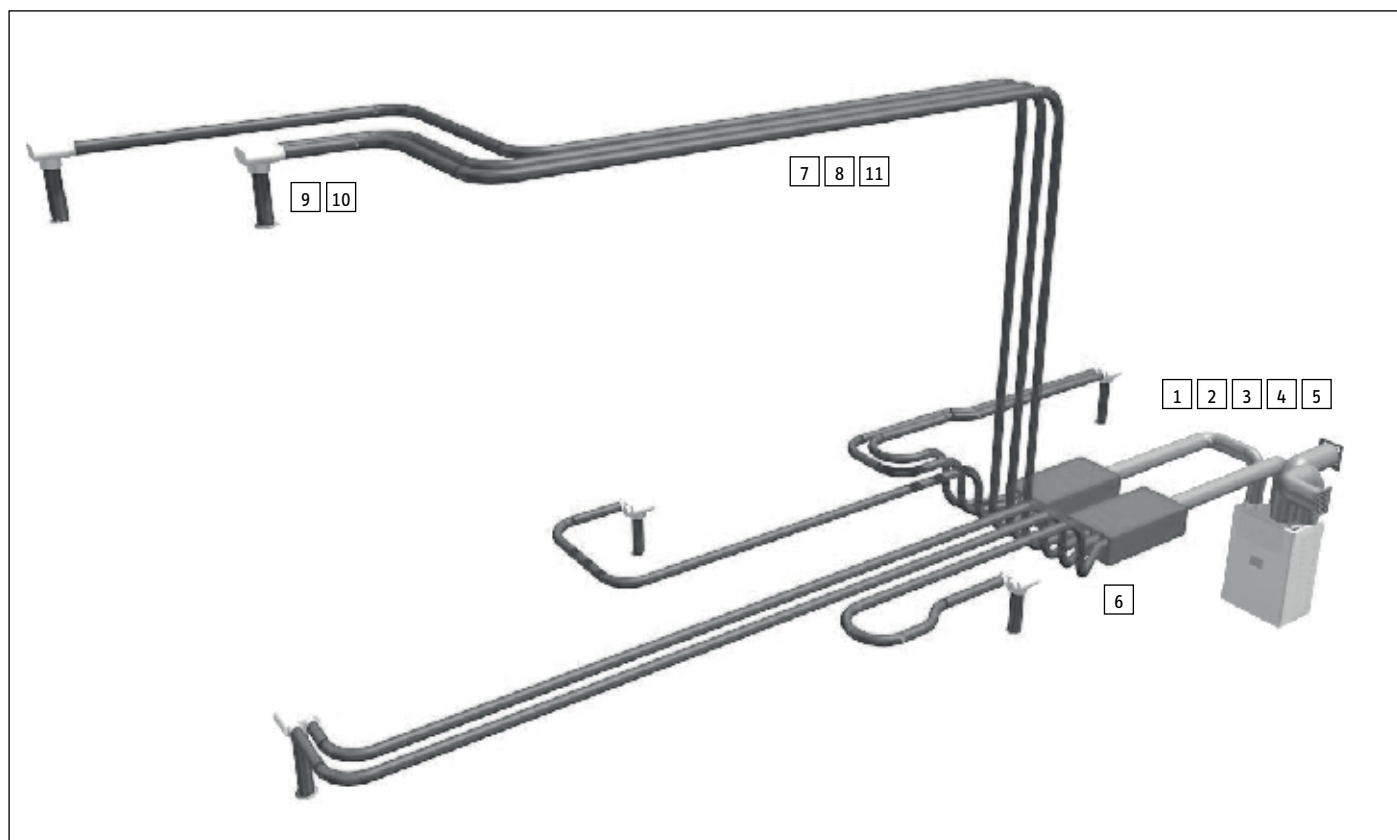
### Distribution system for integral and central ventilation



OnFloor system (sample material range)													
	Product no.	Unit price	Type	Designation	50 m <sup>2</sup>	70 m <sup>2</sup>	100 m <sup>2</sup>	130 m <sup>2</sup>	160 m <sup>2</sup>	190 m <sup>2</sup>	220 m <sup>2</sup>	250 m <sup>2</sup>	280 m <sup>2</sup>
1	159324		LWF RS 160 - 125	Reducer DN 160 to DN 125	2	2	2	2					
2	161095		LWF 125-2	Folded spiral-seam duct DN 125, 2 m long	2	2	2	2					
3	159309		LWF B 125-90	90° duct bend DN 125	3	3	3	3					
4	161096		LWF 160 - 2	Folded spiral-seam duct DN 160, 2 m long					2	2	2	2	2
5	159329		LWF B 160 - 90	90° duct bend DN 160					3	3	3	3	3
6	234493		LVS VTS 9	Sound insulating air distributor for finished walls, 9-way, adjustable					2	2	2	2	2
7	201456		LVS VTS 6	Sound insulating air distributor for finished walls, 6-way, adjustable	2	2	2	2					
8	236421		ZLVS O 75-10	O-Ring seal, 10 pce.					2	2	2	2	2
9	235058		LVS RP75 - 25	Duct pack 25 m long DN 75	1	1	1	1					
10	235059		LVS RP 75 - 50	Duct pack 50 m long DN 75					1	1	1	2	2
11	231111		LVE RP 20	Flat, flexible plastic duct, 20 m long	3	3	4	4	5	6	8	10	10
12	239124		LVE WA 125 O	Wall outlet complete	4	5	6	8	7	7	8	9	9
13	239126		LVE YS	Y piece, 3 x LVE	2	2	2	2	2	2	2	3	3
14	231120		LVE Ü 180	Adaptor for change of position 180°					1	2	3	3	3
15	231125		LVE FA	Floor outlet complete					4	5	5	5	6
16	231122		LVE BF 90	90° bend, complete, horizontal	1	1	1	1	3	3	3	4	4
17	231123		LVE BH 90	90° bend, complete, vertical					2	2	3	5	5
18	235912		LVE ÜB-U	Adaptor bend to LVS; connection from below	6	7	8	11	15	16	16	17	18
19	239130		LVE WGW 125	Slot design, painted white	4	5	6	8	7	7	8	9	9
20	231115		LVE FG	Slot design, brushed stainless steel					4	5	5	5	6
21	231113		LVE KF	Duct fixing clip, 10 pce	4	4	5	5	6	7	8	11	11
22	231112		LVE M	Female connection, 5 pce	1	1	1	1	1	1	2	2	2

## Ventilation

### Distribution system for integral and central ventilation



InFloor system (sample material range)													
	Product no.	Unit price	Type	Designation	50 m <sup>2</sup>	70 m <sup>2</sup>	100 m <sup>2</sup>	130 m <sup>2</sup>	160 m <sup>2</sup>	190 m <sup>2</sup>	220 m <sup>2</sup>	250 m <sup>2</sup>	280 m <sup>2</sup>
1	159324		LWF RS 160 - 125	Reducer DN 160 to DN 125	2	2	2	2					
2	161095		LWF 125-2	Folded spiral-seam duct DN 125, 2 m long	2	2	2	2					
3	159309		LWF B 125-90	90° duct bend DN 125	3	3	3	3					
4	161096		LWF 160 - 2	Folded spiral-seam duct DN 160, 2 m long					2	2	2	2	2
5	159329		LWF B 160 - 90	90° duct bend DN 160					3	3	3	3	3
6	234493		LVS VTS 9	Sound insulating air distributor for finished walls, 9-way, adjustable					2	2	2	2	2
7	201456		LVS VTS 6	Sound insulating air distributor for finished walls, 6-way, adjustable	2	2	2	2					
8	236421		ZLVS O 75-10	O-Ring seal, 10 pce.					2	2	2	2	2
9	235058		LVS RP75 - 25	Duct pack 25 m long DN 75		1				1	1	1	
10	235059		LVS RP 75 - 50	Duct pack 50 m long DN 75	1	1	2	3	3	3	4	4	5
11	239125		LVS WA 125-2-75	Wall outlet complete	4	5	6	9	12	13	14	15	16
12	239130		LVE WGW 125	Air grille, slot design, painted white, 125 mm	4	5	6	9	12	13	14	15	16
13	224897		LVS M 75	Female connection DN 75, 5 pce.		1	1	1	1	1	1	1	1

## Distribution system for integral and central ventilation

### LVE onfloor

#### LVE RP



##### Benefits

- › Flat flexible air duct made of plastic (Product: 231111)
- › Internal pipe with low installed height (Product: 231111)

LVE onfloor flat and flexible plastic air duct; internal pipe with low installed height.

LVE RP 20

		LVE RP 20
Part number		231111
Specification		
Height	mm	52
Width	mm	130
Length	mm	20000

#### LVE BF



##### Benefits

- › Horizontal bend for the flexible air duct (Product: 231121, 231122)
- › 45° angle (Product: 231121)
- › 90° angle (Product: 231122)

Bend for plastic LVE onfloor flat and flexible air distribution system.

LVE BF 45

		LVE BF 45	LVE BF 90
Part number		231121	231122
Specification			
Height	mm	57	57
Width	mm	225	250
Length	mm	225	250

Distribution system for integral and central ventilation

LVE onfloor

LVE BH



- Benefits**
- › Upright bend for the flexible air duct (Product: 231123)
  - › 90° angle (Product: 231123)

90° vertical bend for plastic LVE onfloor flat and flexible air distribution system.

		LVE BH 90
Part number		231123
Specification		
Height	mm	98
Width	mm	98
Length	mm	207

LVE Ü 180



- Benefits**
- › Adaptor for flexible air duct (Product: 231120)
  - › 180° change of direction (Product: 231120)

Adaptor for 180° change of position, for plastic LVE onfloor flat and flexible air distribution system.

		LVE Ü 180
Part number		231120
Specification		
Height	mm	69
Width	mm	144
Length	mm	64

Distribution system for integral and central ventilation

LVE onfloor

LVE Ü 90



Adaptor for connecting LVS pipe DN 75/90 to plastic LVE onfloor flat and flexible air distribution system.

LVE Ü 90

		LVE Ü 90	
Part number		233032	
Specification			
Height	mm		95
Width	mm		144
Length	mm		100

LVE ÜB-0



- Benefits**
- › Plastic adaptor bend (Product: 235913, 235912)
  - › With gasket and locking clip (Product: 235913, 235912)
  - › Connection to the screed from above (Product: 235913)
  - › Connection to the screed from below (Product: 235912)

Adaptor bend for connecting LVS pipe DN 75/90 to LVE onfloor flexible air distribution system; plastic with gasket and locking clip. LVS connection for routing the LVE on screed.

LVE ÜB-0

		LVE ÜB-0	LVE ÜB-U
Part number		235913	235912
Specification			
Height	mm	120	120
Width	mm	144	144

Distribution system for integral and central ventilation

LVE onfloor

LVE M



Female connection for plastic LVE onfloor flat and flexible air distribution system.

LVE M

		LVE M	LVE RA
Part number		231112	231117
Specification			
Height	mm	55	35
Width	mm	130	
Length	mm	115	130

LVE YS



- Benefits
- › Y piece for flexible air duct (Product: 239126)
  - › Division of the flow across two ducts (Product: 239126)

Y piece for plastic LVE onfloor flat and flexible air distribution system.

LVE YS

		LVE YS
Part number		239126
Specification		
Height	mm	57
Width	mm	300
Length	mm	300

## Distribution system for integral and central ventilation

### LVE onfloor

#### LVE KF



##### Benefits

- › Duct fixing sets consisting of sturdy brackets (Product: 231113)
- › For fixing the flexible air duct on the unfinished concrete floor (Product: 231113)
- › Suitable for impact rawl plugs (Product: 231113)

Duct fixing clip made from robust sheet steel brackets, for securing the flexible LVE onfloor air duct to an unfinished concrete floor. Suitable for impact rawl plugs.

LVE KF

		LVE KF
Part number		231113
Specification		
Height	mm	53
Width	mm	25
Length	mm	215

#### LVE WA



##### Benefits

- › Wall outlet made from corrosion-resistant, odour-neutral plastic (Product: 239124, 239690)
- › Connection options for flexible air duct (Product: 239124, 239690)
- › With dummy cover (Product: 239124, 239690)

Wall outlet made from corrosion-resistant, odour-neutral plastic. Connection options for LVE onfloor flexible air duct.

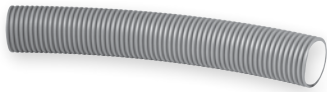
LVE WA 125 O

		LVE WA 125 O	LVE WA 125 U
Part number		239124	239690
Specification			
Height	mm	150	150
Width	mm	144	144
Length	mm	460	460

## Distribution system for integral and central ventilation

### LVS infloor

#### LVS RP



##### Benefits

- › Flexible pipes made of PE plastic (Product: 235059)
- › Odour-neutral and antistatic (Product: 235059)
- › Hygienically unproblematic (Product: 235059)

Flexible LVS corrugated plastic pipe; corrugated on the outside, smooth on the inside; odour-neutral and antistatic.

LVS RP 75-50

		LVS RP 75-50	LVS RPAG 75-50	LVS RP90 Rohrpaket
Part number		235059	203750	223320
Specification				
Weight	kg	17		12
Diameter	mm	75		90

#### LVS VTS



##### Benefits

- › Excellent sound attenuation at low frequencies
- › Distributor plate and inspection cover can be interchanged
- › Can be installed on the wall, ceiling or in a stud frame
- › Air volumes can be adjusted at the distributor

The sound insulated air distributor for LVS infloor and LVS onfloor flexible air distribution systems is mounted on the wall or ceiling.

LVS VTS 6

		LVS VTS 6	LVS VTS 9
Part number		201456	234493
Specification			
Height	mm	150	250
Width	mm	500	500
Length	mm	640	1165
Required accessories			
Part number			236421
Type			ZLVS O 75-10 Dichtring (10 Stk.)
Description			O-ring set DN 90, 10 pce.

## Distribution system for integral and central ventilation

### LVS infloor

#### ZLVS VTÜ



Adaptor DN 75 to DN 90 LVS

ZLVS VTÜ 75-90

		ZLVS VTÜ 75-90
Part number		234494
Specification		
Height	mm	92
Width	mm	92
Length	mm	150
Required accessories		
Part number		236421
Type		ZLVS O 75-10 Dichtring (10 Stk.)
Description		O-ring set DN 90, 10 pce.
Part number		236422
Type		ZLVS O 90-10
Description		O-ring set DN 90, 10 pce.

#### LVS M



Sleeve for the LVS infloor air distribution system.

LVS M 75 Muffen-Set 5 Stk.

		LVS M 75 Muffen-Set 5 Stk.
Part number		224897
Specification		
Length	mm	154
Diameter	mm	75

Distribution system for integral and central ventilation

LVS infloor

ZLVS O



The seal ring set contains O-rings for the LVS pipe set. These are used to seal the connections on the VTS distributor and the LVS diverter.

ZLVS O 75-10 Dichtring (10 Stk.)

		ZLVS O 75-10 Dichtring (10 Stk.)	ZLVS O 90-10
Part number		236421	236422

LVS DA



Diverter to DN 100 for the LVS infloor flexible air distribution system.

LVS DA 75-125-2

		LVS DA 75-125-2
Part number		236423

Specification		
Height	mm	445
Width	mm	230
Length	mm	250

Distribution system for integral and central ventilation

LVS infloor

LVS WA



Benefits

- › Wall outlet made of corrosion-resistant, odour-neutral plastic (Product: 239125)
- › Connection options for flexible air duct (Product: 239125)
- › With dummy cover (Product: 239125)

Wall/ceiling outlet made from corrosion-resistant, odour-neutral plastic. Connection options for flexible LVS infloor air duct, with dummy cover.

LVS WA 125-2-75

		LVS WA 125-2-75
Part number		239125
Specification		
Height	mm	150
Width	mm	144
Length	mm	490

LVS AS



Connector for the LVS flexible air distribution system.

LVS AS 75

		LVS AS 75
Part number		223318
Specification		
Height	mm	98
Width	mm	98
Length	mm	53
Diameter	mm	75

Distribution system for integral and central ventilation

LVS infloor

LVS SVG



Air distributor for LVS flexible distribution system, suitable for installation in the concrete ceiling.

LVS SVG 160-12

		LVS SVG 160-12
Part number		232118
Specification		
Height	mm	130
Width	mm	270
Length	mm	540

LVS SVM



Air distributor for LVS flexible distribution system, suitable for installation in the concrete ceiling.

LVS SVM 160-8

		LVS SVM 160-8
Part number		232117
Specification		
Height	mm	130
Width	mm	270
Length	mm	330

Distribution system for integral and central ventilation

LWF system

LWF T



Tee for folded spiral-seam tubes made from zinc-plated sheet steel with rolling ring sealing system.

LWF T 160 - 160

		LWF T 160 - 160
Part number		159323
Specification		
Installed length	mm	229
Diameter	mm	160

LWF M 100



Sleeve connector for folded spiral-seam tubes made from zinc-plated sheet steel with rolling ring sealing system.

LWF M 125

		LWF M 125
Part number		159299
Specification		
Diameter	mm	125

Distribution system for integral and central ventilation

LWF system

LWF N 100



Push-fit connector for folded spiral-seam tubes made from zinc-plated sheet steel with rolling ring sealing system.

LWF N 160

		LWF N 160
Part number		159320
Specification		
Installed length	mm	8
Diameter	mm	160

LWF RS 125 - 100



Reducer for folded spiral-seam tube made from zinc-plated sheet steel, with rolling ring sealing system.

LWF RS 160 - 125

		LWF RS 160 - 125
Part number		159324
Specification		
Installed length	mm	66
Diameter	mm	160
Reducer diameter	mm	125

## Distribution system for integral and central ventilation LWF system

### LWF F 125 - 5



The flexible aluminium tube to DIN 24146 is folded in two layers and suitable for connecting the appliance to the pipework.

LWF F 125 - 5

		LWF F 125 - 5	LWF F 160 - 5
Part number		159334	159332
Specification			
Diameter	mm	125	160

### LWF DR



Pipework thermally insulated with polyethylene foam, a vapour diffusion-proof, very light and self-supporting material, for routing outdoor and exhaust air.

LWF DR 125-1 EPP

		LWF DR 125-1 EPP	LWF DR 160-1 EPP
Part number		239231	239232
Specification			
Length	mm	1000	1000
Diameter	mm	125	160

Distribution system for integral and central ventilation

LWF system

LWF DRB



Pipework thermally insulated with polyethylene foam, a vapour diffusion-proof, very light and self-supporting material, for routing outdoor and exhaust air.

LWF DRB 125-45 EPP

		LWF DRB 125-45 EPP	LWF DRB 125-90 EPP	LWF DRB 160-45 EPP	LWF DRB 160-90 EPP
Part number		239234	239233	239236	239235
Specification					
Bend radius		45	90	45	90
Material		Foam	Foam	Foam	Foam

LWF DRM



Sound insulated and thermally insulated rigid pipework, with flange collar push-fit connector.

LWF DRM 125 EPP

		LWF DRM 125 EPP	LWF DRM 160 EPP
Part number		239237	239238

Distribution system for integral and central ventilation

LWF system

LWF S



Silencer consisting of an external pipe, a perforated internal pipe and 2 connection ends sized for connectors. • The space is filled with sound-absorbing insulation material, with a fibreglass fleece between the internal pipe and the insulation to protect the air flow.

LWF S 160 - 0,9

		LWF S 160 - 0,9
Part number		159346
Specification		
Length	m	0.9
Nominal diameter	mm	160
External diameter	mm	280

Noise attenuating element made from foam, four per pack (Product: 159346)

LWF SK



**Benefits**  
› Excellent sound attenuation at low frequencies

The splitter silencer consists of an external pipe, a perforated internal pipe, a baffle and two connection ends with double lip gasket. It is used to reduce noise levels in the exhaust air at the external grille for integral systems and air source heat pumps. The space is filled with sound-absorbing insulation material. A glass fleece between the internal pipe and insulation prevents any contact between the insulating material and the air stream.

LWF SK 315 - 0,6

		LWF SK 315 - 0,6
Part number		202933
Specification		
Nominal diameter	mm	315
External diameter	mm	515

# Distribution system for integral and central ventilation

## LWF system

### LWF SF



The silencer consists of an Aluflex external pipe, a perforated Aluflex internal pipe and 2 connection ends sized for connectors. • The space is filled with sound-absorbing insulation material, with a fibreglass fleece between the internal pipe and the insulation to protect the air flow.

LWF SF 315 - 1

		LWF SF 315 - 1
Part number		170018
Specification		
Length	m	1
Nominal diameter	mm	315
External diameter	mm	415

### LWF LB



Installation material for securing the air distribution system.

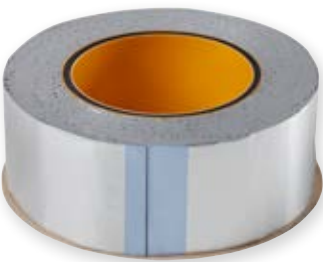
Lochband 10m

		Lochband 10m
Part number		159348
Specification		
Width	mm	16
Length	m	10

Distribution system for integral and central ventilation

LWF system

LWF KB



High quality butyl adhesive tape, for sealing of connections in air duct systems. High adhesive strength.

LWF KB 10

		LWF KB 10
Part number		227948
Specification		
Width	mm	50
Length	m	10

LWF AVM



Extract air vents for wall or ceiling mounting in central supply/extract air systems, adjustable air flow rate, with pipe connectors.

LWF AVM 125

		LWF AVM 125
Part number		227924
Specification		
Max. air flow rate	m³/h	70
Connection diameter	mm	125
Air flow rate adjustable		•
Material		Steel

Distribution system for integral and central ventilation

LWF system

LWF ZVM



Supply air vents for ceiling mounting in central supply air systems; adjustable air flow rate, incl. pipe connectors.

LWF ZVM 125

		LWF ZVM 125
Part number		230163
Specification		
Max. air flow rate	m³/h	40
Connection diameter	mm	125
Air flow rate adjustable		•
Material		Sheet steel

KWG 125-160



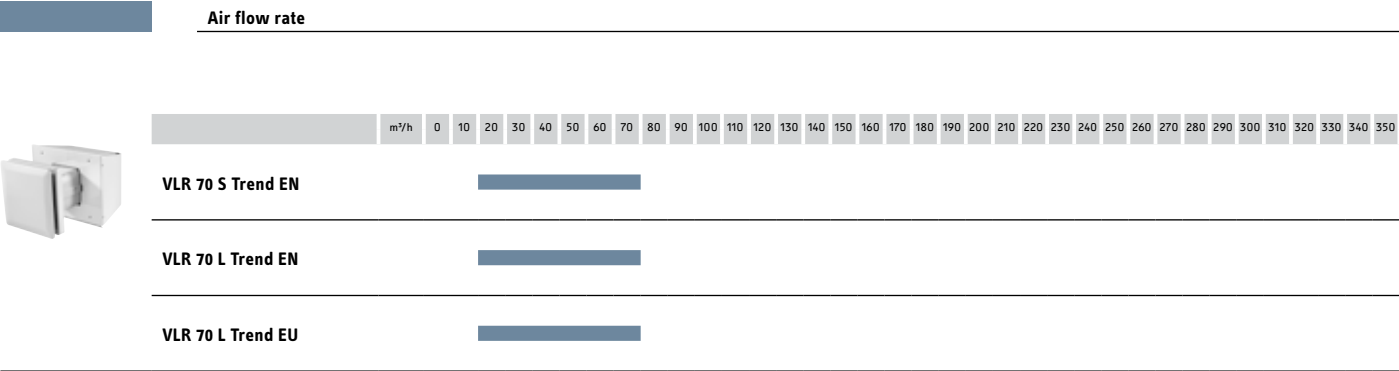
The combined intake/discharge grille is installed on the external wall and is suitable for routing of outdoor and exhaust air for central ventilation units with heat recovery. Exhaust air and outdoor air are arranged next to each other. The grille is made from galvanised sheet steel in silver grey with powder coated finish.

KWG 125

		KWG 125
Part number		239139
Specification		
Max. air flow rate	m³/h	200
Connection diameter	mm	125

# Decentralised ventilation in residential buildings

## Application areas



<b>Supply and extract air with heat recovery</b>	
VLR 70 S/L Trend	475
<b>Extract air without heat recovery</b>	
Accessories	477



# Ventilation

## Decentralised ventilation in residential buildings

### Complete overview for easy quotation and calculation of standard systems for controlled mechanical ventilation

Ventilation systems consist of the ventilation units for the bathroom/WC and living space, as well as the corresponding accessories for the ventilation units. The following compilation gives sample material ranges for applications in detached houses and multistorey apartment buildings of different sizes.

Use this overview to prepare quotations and select materials for your building project. First select the appropriate number of extractors for your bathroom and/or WC and combine this with the number of bidirectional fans for your living space. Further information and detailed material ranges depending on house size can be found on the following pages.

Living space					
40 m²	60 m²	80 m²	100 m²	120 m²	140 m²

#### Bathroom/WC – LA 60

Product no.	Unit price	Type	Designation
201451	On demand	LA 60 VE-A	LA 60 decentralised ventilation unit for surface mounting
201453	On demand	ZLA 60-T	Control module with time run-on for LA 60
231104	On demand	LWF W 100 VA-60	External wall outlet DN 100 for LA 60
201454	On demand	ZLA 60-H	Control module with humidity sensor for LA 60
201450	On demand	LA 60 VE-U	LA 60 decentralised ventilation unit for flush mounted housing
201448	On demand	LA 60 G-U	Flush mounted housing for LA 60
201449	On demand	LA 60 G-UB	Flush mounted housing for LA 60 with fire protection shut-off device
			<b>LA 60</b>

No. of units									
1	1	1	2	1	2		2		2
1	1	1	2	1	2		2		2
			1		1		1		1
			1		2		1		2
1	1	1	1	1	1		1		1

#### Living spaces – VLR 70 L Trend EU

Product no.	Unit price	Type	Designation
203133	On demand	VLR 70 L Trend EU	Fan unit, inner + outer hood, telescope housing
239570	On demand	VLR 70-2 CU	Control unit for 2 units
239571	On demand	VLR 70-4 CU	Control unit for up to 4 units
239572	On demand	VLR 70-8 CU	Control unit for up to 8 units
			<b>VLR 70 L Trend EU</b>

No. of units									
2	2	4	2	4	4	6	4	6	4
1	1		1						
		1		1	1		1		1
						1		1	

#### Living spaces – VLR 70 S Trend EU

Product no.	Unit price	Type	Designation
203132	On demand	VLR 70 S Trend EU	Fan unit, inner + outer hood, telescope housing
239570	On demand	VLR 70-2 CU	Control unit for 2 units
239571	On demand	VLR 70-4 CU	Control unit for up to 4 units
239572	On demand	VLR 70-8 CU	Control unit for up to 8 units
			<b>VLR 70 S Trend EU</b>

No. of units									
2	2	4	2	4	4	6	4	6	4
1	1		1						
		1		1	1		1		1
						1		1	

#### Additional articles LA 60

Product no.	Unit price	Type	Designation
201452	On demand	LA 60 BRA	Fire protection shut-off device for LA 60
201455	On demand	FMS G2-5 LA 60	G2 filter mat set for LA 60, 5 pce

No. of units									
1	1	1	2	1	2		2		2
1	1	1	1	1	1		1		1

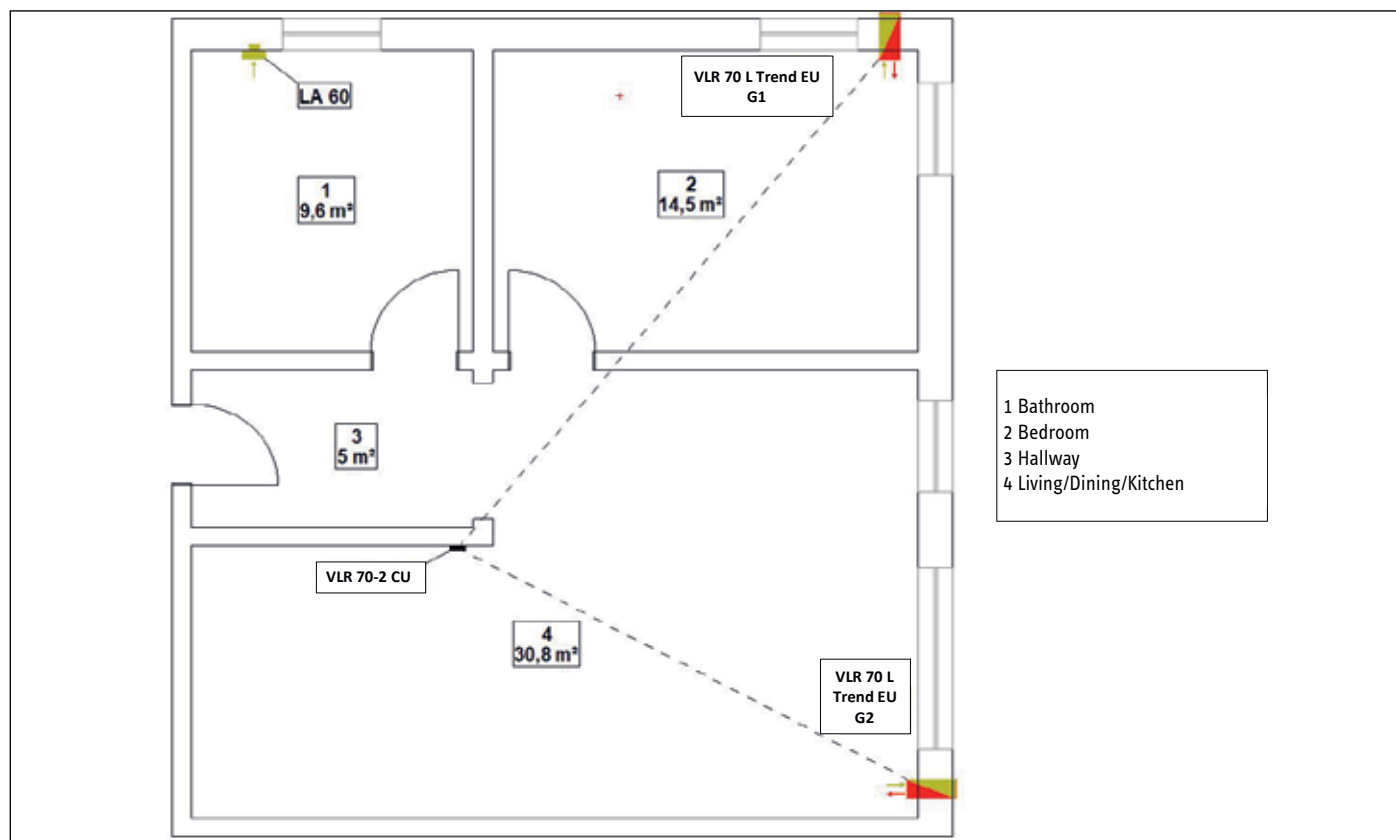
#### Additional/alternative articles VLR 70 L Trend EU

Product no.	Unit price	Type	Designation
239562	On demand	SP VLR 70 RF Coarse 30 G2-4	Filter set G2, 4 pce
239575	On demand	SP VLR 70 RF Coarse 60 G4-4	Filter set G4, 4 pce
239576	On demand	SP VLR 70 RF ePM10 50 M5-4	Filter set M5, 4 pce
239577	On demand	SP VLR 70 RF ePM1 50 F7-4	Filter set F7, 4 pce
203140	On demand	Telescope (S)	Telescope housing 315 mm

No. of units									
1	1	1	1	1	1	1	1	1	1

## Ventilation

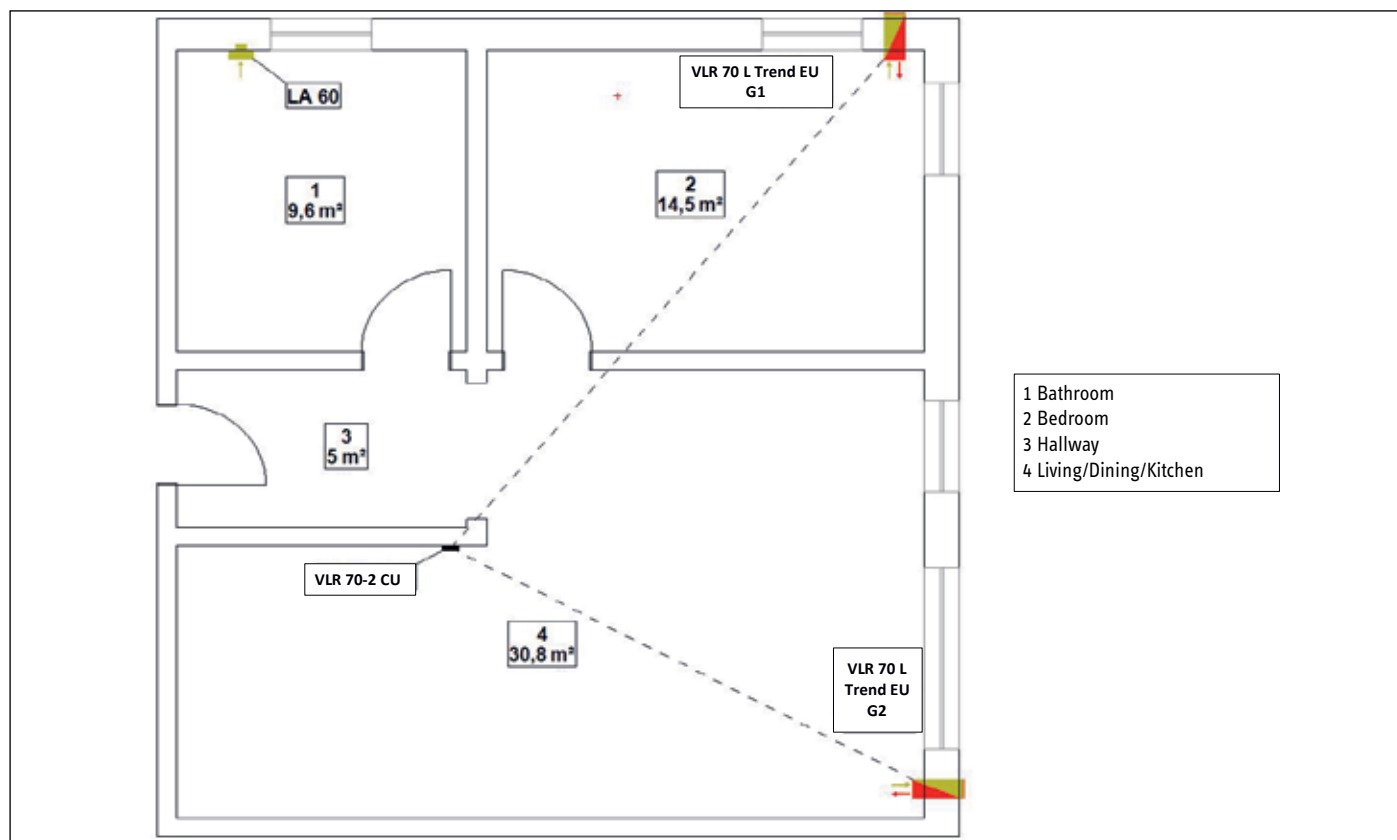
### Decentralised ventilation in residential buildings



Example – material range for different house sizes for quick easy calculation														
	Product no.	Unit price	Type	Designation	40 m²	60 m²	80 m²		100 m²		120 m²		140 m²	
1	203133	On demand	VLR 70 L Trend EU	Fan unit, inner + outer hood, telescope housing	2	2	4	2	4	4	6	4	6	4
2	239570	On demand	VLR 70-2 CU	Control unit for 2 units	1	1		1						
3	239571	On demand	VLR 70-4 CU	Control unit for up to 4 units			1		1	1		1		1
4	239572	On demand	VLR 70-8 CU	Control unit for up to 8 units							1		1	
5	239570	On demand	VLR 70-2 CU	Control unit for 2 units	1	1		1						
6	239571	On demand	VLR 70-4 CU	Control unit for up to 4 units			1		1	1		1		1
7	239572	On demand	VLR 70-8 CU	Control unit for up to 8 units							1		1	
8	201458	On demand	VLR 70 L Trend EN	Fan unit, inner + outer hood, telescope housing	2	2	4	2	4	4	6	4	6	4
9	239570	On demand	VLR 70-2 CU	Control unit for 2 units	1	1		1						
10	239571	On demand	VLR 70-4 CU	Control unit for up to 4 units			1		1	1		1		1
11	239572	On demand	VLR 70-8 CU	Control unit for up to 8 units							1		1	
12	239570	On demand	VLR 70-2 CU	Control unit for 2 units	1	1		1						
13	239571	On demand	VLR 70-4 CU	Control unit for up to 4 units			1		1	1		1		1
14	239572	On demand	VLR 70-8 CU	Control unit for up to 8 units							1		1	
15	239562	On demand	SP VLR 70 RF Coarse 30 G2-4	Filter set G2, 4 pce										
16	239575	On demand	SP VLR 70 RF Coarse 60 G4-4	Filter set G4, 4 pce										
17	239576	On demand	SP VLR 70 RF ePM10 50 M5-4	Filter set M5, 4 pce										
18	239577	On demand	SP VLR 70 RF ePM1 50 F7-4	Filter set F7, 4 pce										
19	203140	On demand	Telescope (S) accessory	Telescope housing 315 mm										

## Ventilation

### Decentralised ventilation in residential buildings



Example – material range for different house sizes for quick easy calculation													
	Product no.	Unit price	Type	Designation	40 m²	60 m²	80 m²		100 m²		120 m²		140 m²
1	201451	On demand	LA 60 VE-A	LA 60 decentralised ventilation unit for surface mounting	1	1	1	2	1	2		2	2
2	201453	On demand	ZLA 60-T	Control module with time run-on for LA 60				1		1		1	1
3	231104	On demand	LWF W 100 VA-60	External wall outlet DN 100 for LA 60				1		1		2	2
4	201454	On demand	ZLA 60-H	Control module with humidity sensor for LA 60	1	1	1	1	1	1		1	1
5	201450	On demand	LA 60 VE-U	LA 60 decentralised ventilation unit for flush mounted housing									
6	201448	On demand	LA 60 G-U	Flush mounted housing for LA 60									
7	201449	On demand	LA 60 G-UB	Flush mounted housing for LA 60 with fire protection shut-off device									
8	201452	On demand	LA 60 BRA	Fire protection shut-off device for LA 60									
9	201455	On demand	FMS G2-5 LA 60	G2 filter mat set for LA 60, 5 pce									

# Decentralised ventilation in residential buildings

## Supply and extract air with heat recovery

### VLR 70 S/L Trend



VLR 70 S Trend EN

#### Benefits

- › Decentralised ventilation unit with heat recovery for new build and modernisation
- › Rapid, hygienic cleaning thanks to aluminium heat exchanger
- › Very good filter performance due to filters on the inside and outside
- › No condensate run marks on the wall face
- › Quick tool-free filter change and tool-free visual monitoring of the heat exchanger, due to compact design of fan unit

**Application** • The decentralised ventilation unit with heat recovery is used for ventilating apartments and small commercial properties.

**Convenience features** • Contemporary design with separate programming unit, for use in living space of up to approx. 100 m². • The axial fan with stable backpressure is also suitable for use in locations exposed to the wind. • With efficient aluminium heat exchanger and external panel that is watertight against heavy rain. • Straightforward filter replacement thanks to easy to remove fan unit. Fine dust filter available as an accessory. • White powder coated stainless steel external panel. Matt white plastic internal panel.

**Efficiency** • EC fan ensures efficient operation.

**Installation** • Installation in round or square wall outlets. Easily accessible electrical connection on the inside of the fan unit.

VLR 70 L Trend EU		
Part number		203133
<b>Specification</b>		
Sound power level LW total relative to air flow rate	dB(A)	35 (at 20 m³/h)
Weight	kg	5.20
IP rating		IP 21
Air flow rate	m³/h	20/30/40/49/70
Width	mm	360
Rated voltage	V	24
Depth	mm	780
Height	mm	285
<b>Required accessories</b>		
Part number		239570
Type		VLR 70-2 CU
Description		Control set for up to 2 decentralised ventilation units, VLR 70
Part number		239571
Type		VLR 70-4 CU
Description		Control set for VLR 70
Part number		239572
Type		VLR 70-8 CU
Description		Control set for VLR 70
<b>Recommended accessories</b>		
Part number		239562
Type		SP VLR 70 RF COARSE 30 G2-4
Description		Filter for VLR 70
Part number		239575
Type		SP VLR 70 RF COARSE 60 G4-4
Description		Filter for VLR 70
Part number		239576
Type		SP VLR 70 RF EPM10 50 M5-4
Description		Filter for VLR 70
Part number		239577
Type		SP VLR 70 RF EPM1 50 F7-4
Description		Filter for VLR 70

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Decentralised ventilation in residential buildings

Supply and extract air with heat recovery

		VLR 70 L Trend EU
Maintenance		
Part number		239562
Type		SP VLR 70 RF COARSE 30 G2-4
Description		Filter for VLR 70
Part number		239575
Type		SP VLR 70 RF COARSE 60 G4-4
Description		Filter for VLR 70
Part number		239576
Type		SP VLR 70 RF EPM10 50 M5-4
Description		Filter for VLR 70
Part number		239577
Type		SP VLR 70 RF EPM1 50 F7-4
Description		Filter for VLR 70

## Decentralised ventilation in residential buildings

### Extract air without heat recovery

#### LA 60 VE



LA 60 VE-U

#### Benefits

- › Fan unit for flush mounting (Product: 201450)
- › Fan unit for single ventilation units to DIN 18017-3 (Product: 201450, 201451)
- › Quiet operation (Product: 201450, 201451)
- › Fan unit for surface mounting (Product: 201451)

**Application** • The fan unit for extractor fans ventilates rooms without outside windows.

**Convenience features** • The casing, internal panel and filter holder are made from high quality white plastic. The unit's modular structure and plug-in control module allow flexibility when selecting the range of functions for the extract air unit. Subsequent replacement of the control module is possible without needing to uninstall.

**Efficiency** • The fan unit has a precision external rotary motor.

**Installation** • Depending on the selected version, the appliances are suitable for flush installation in walls and ceilings or surface mounting. The electrical connection of the fan unit is easily accessible.

		LA 60 VE-U	LA 60 VE-A
Part number		201450	201451
Specification			
Air flow rate	m <sup>3</sup> /h	30/60	30/60
Required accessories			
Part number		201448	
Type		LA 60 G-U	
Description		Flush mounted casing	
Part number		201453	201453
Type		ZLA 60-T	ZLA 60-T
Description		Control module with adjustable start delay and run-on or humidity control	Control module with adjustable start delay and run-on or humidity control
Part number		201454	201454
Type		ZLA 60-H	ZLA 60-H
Description		Control module with adjustable start delay and run-on or humidity control	Control module with adjustable start delay and run-on or humidity control

#### LA 70



LA 70 VE-U

#### Benefits

- › Suitable for installation in walls and ceilings
- › The plug-in control module enables retrospective functional modifications
- › The iris shutter in the internal panel prevents unwanted inflow of outdoor air and reduces noise pollution from outside

**Application** • The fan unit for extractor fans is suitable for ventilation of extract air areas with external walls.

**Convenience features** • The casing, iris shutter and filter holder are made of high quality white plastic. • The iris shutter opens and closes automatically. • The unit's modular structure and plug-in control module allow flexibility when selecting the range of functions for the extract air unit. • The round fan allows rapid installation on the extract air duct. • Subsequent replacement of the control module is possible without needing to uninstall.

**Efficiency** • The fan unit has a 230 V or 12 V SELV motor.

**Installation** • Depending on the version selected, the appliances are suitable for flush installation in walls and ceilings. The fan unit is attached to rigid or flexible ducts with an internal diameter of 100 mm; the electrical connection is easily accessible.

		LA 70 VE-U	LA 70 VE-U 12
Part number		237109	237110
Specification			
Air flow rate	m <sup>3</sup> /h	68	79

Continue on next page >

## Decentralised ventilation in residential buildings

### Extract air without heat recovery

		LA 70 VE-U	LA 70 VE-U 12
<b>Required accessories</b>			
<b>Part number</b>		<b>237103</b>	
Type		ZLA 70-T	
Description		Controller for extract air fan, LA 70	
<b>Part number</b>		<b>237105</b>	
Type		ZLA 70-H	
Description		Controller for extract air fan, LA 70	
<b>Part number</b>			<b>237108</b>
Type			ZLA 70-T eco15s
Description			Controller for extract air fan, LA 70
<b>Recommended accessories</b>			
<b>Part number</b>		<b>237111</b>	<b>237111</b>
Type		LA 70 ABG	LA 70 ABG
Description		External grille for extract air fan LA 70	External grille for extract air fan LA 70
<b>Part number</b>		<b>237773</b>	<b>237773</b>
Type		LA 70 KF	LA 70 KF
Description		Condensate trap for LA 70	Condensate trap for LA 70



<b>Accessories</b> <b>Accessories</b>	481
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# Accessories for decentralised ventilation in residential buildings

## Accessories

### CO2 Sensor



The CO2 sensor for demand-dependent, enhanced ventilation mode is supplied with a sensor and threshold switch.

LTM dezent CO2

		LTM dezent CO2
Part number		237649
Specification		
Width	mm	80
Height	mm	100
Depth	mm	28

### VLR 70-2 CU



**Application** • Control set consisting of control unit, power supply unit and programming unit for controlling the ventilation units. • The control unit is equipped with an LED which signals when cleaning and filter replacement must be carried out. These signals are issued according to the operating time. The programming unit is installed in the flush box provided. • The power supply unit is designed for installation in a flush box.

VLR 70-2 CU

		VLR 70-2 CU
Part number		239570

# Accessories for decentralised ventilation in residential buildings

## Accessories

### VLR 70-4 CU



**Application** • Control set consisting of control unit, power supply unit and programming unit for controlling the ventilation units. • The control unit is equipped with an LED which signals when cleaning and filter replacement must be carried out. These signals are issued according to the operating time. The programming unit is installed in the flush box provided. • The power supply unit is designed for top hat rail mounting.

VLR 70-4 CU

		VLR 70-4 CU	VLR 70-8 CU
Part number		239571	239572

### TL HDY



Humidity sensor for humidity-controlled operation in 2 different stages.

LTM TL HUMIDITY

		LTM TL HUMIDITY
Part number		237126
Specification		
Version		Room sensor
Measurement accuracy	% rF	5
Setting range, relative humidity	%	30-90
Measurement deviation per year	% rF	-1,5
Switching differential	% rF	6
Width	mm	76
Height	mm	76
Depth	mm	34

# Accessories for decentralised ventilation in residential buildings

## Accessories

### TL/DEZ MNT



Installation accessories for decentralised ventilation units.

LTM dezent APD BT

		LTM dezent APD BT
Part number		237644
Specification		
Height	mm	80
Width	mm	80
Depth	mm	37

### SP VLR 70 RF COARSE 30 G2-4



Filter for VLR 70

SP VLR 70 RF COARSE 30 G2-4

		SP VLR 70 RF COARSE 30 G2-4
Part number		239562
Specification		
Quantity		4
Filter class		ISO Coarse > 30 % (G2)

# Accessories for decentralised ventilation in residential buildings

## Accessories

### SP VLR 70 RF COARSE 60 G4-4



Filter for VLR 70

SP VLR 70 RF COARSE 60 G4-4

		SP VLR 70 RF COARSE 60 G4-4
Part number		239575
Specification		
Filter class		ISO Coarse > 60 % (G4)

### SP VLR 70 RF EPM10 50 M5-4



Filter for VLR 70

SP VLR 70 RF EPM10 50 M5-4

		SP VLR 70 RF EPM10 50 M5-4
Part number		239576
Specification		
Filter class		ePM10 ≥ 50 % (M5)

Accessories for decentralised ventilation in residential buildings

Accessories

SP VLR 70 RF EPM1 50 F7-4



Filter for VLR 70

SP VLR 70 RF EPM1 50 F7-4

		SP VLR 70 RF EPM1 50 F7-4
Part number		239577
Specification		
Filter class		ePM1 ≥ 50 % (F7)

LA 60 G



Flush mounted casing for installing the fan unit.

LA 60 G-U

		LA 60 G-U
Part number		201448
Specification		
Height	mm	245
Width	mm	245
Depth	mm	78

# Accessories for decentralised ventilation in residential buildings

## Accessories

### ZLA 60



Control system for connecting to the fan unit. With either humidity control or adjustable start delay and run-on time.

ZLA 60-T

		ZLA 60-T	ZLA 60-H
Part number		201453	201454

### LWF W 100 VA - 60



External wall outlet for decentralised ventilation units.

LWF W 100 VA - 60

		LWF W 100 VA - 60
Part number		231104

Accessories for decentralised ventilation in residential buildings

Accessories

FMS LA 60



Set with 5 filter mats for extract air fan LA 60.

FMS G3-5 LA 60

		FMS G3-5 LA 60
Part number		201455
Specification		
Quantity		5
Filter class		ISO Coarse > 45 % (G3)
Application		Ventilation units

ZLA 70



Control system for connecting to the fan unit.

ZLA 70-T

		ZLA 70-T	ZLA 70-H	ZLA 70-T eco15s
Part number		237103	237105	237108

Accessories for decentralised ventilation in residential buildings

Accessories

LA 70 ABG



Plastic external grille for extract air fan.

LA 70 ABG

		LA 70 ABG
Part number		237111
Specification		
Height	mm	197
Depth	mm	20
Width	mm	197

KF



Condensate trap for LA 70.

LA 70 KF

		LA 70 KF
Part number		237773



<b>Supply and extract air with heat recovery</b>	
VRL-C 870 G Premium	491
VRL-C 870 G Trend	495
VRL-C 870 D Premium	499
VRL-C 870 D Trend	503
VRL-C 300 G Premium	507
VRL-C 300 G Trend	511
VRL-C 300 D Premium	515
VRL-C 300 D Trend	519

# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 870 G Premium



#### Benefits

- › High degree of heat recovery due to aluminium cross-countercurrent heat exchanger
- › The supply and discharge air grilles can be adjusted to optimise air flow
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Very quick and easy installation, even in modernisation projects

VRL-C 870 G Premium

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. Air ducting is required for routing the outdoor and exhaust air. Extract and supply air is routed directly through the grille outlets on the appliance.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. • An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. • With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. • The temperature-dependent bypass automatically circumvents heat recovery when necessary. • All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The equipment is fitted with motorised outdoor/exhaust air flaps to prevent uncontrolled flow of air in standby. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances are connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories). • The integral PCB enables easy integration of additional functions, such as smoke detectors, intermittent ventilation, minimum ventilation, external OFF and control of a hydraulic reheating coil. • With the integral reheating coil, the supply air temperature can be raised to a comfortable level. • The intelligent preheating control permanently monitors temperature and humidity levels in the appliance, reducing the demand for electrical energy to a minimum and lowering the connected load.

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed at various points on the ceiling of the room. • The supply air grille with adjustable air flow direction is located on the front of the appliance. • The extract air is sucked in through a grille on the right of the narrow side.

**Efficiency:** The combination of energy saving EC fans, intelligent control and other sensors ensures efficient operation.

VRL-C 870 G Premium		
Part number		204132
Specification		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 > 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	147
Max. power consumption, fan	W	329
Max. power consumption	W	1,750
Power consumption, preheating coil	W	400
Power consumption, reheating coil	W	1,000
Height	mm	507
Width	mm	902
Length	mm	1,688
Air connection diameter	mm	315
Weight	kg	140

Continue on next page >

## Decentralised ventilation in non-residential buildings

### Supply and extract air with heat recovery

		VRL-C 870 G Premium
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE
Frequency	Hz	50
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	300-870
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	600
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 1
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237629</b>
Type		LTM dezent BA VA 410 B
Description		External cover
<b>Part number</b>		<b>237633</b>
Type		LTM dezent BA VA 410 W
Description		External cover
<b>Part number</b>		<b>237672</b>
Type		LTM dezent 600/800 Z-PSS
Description		Mounting system for decentralised ventilation unit
<b>Part number</b>		<b>237674</b>
Type		LTM dezent RWA
Description		Mounting system for decentralised ventilation unit
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units

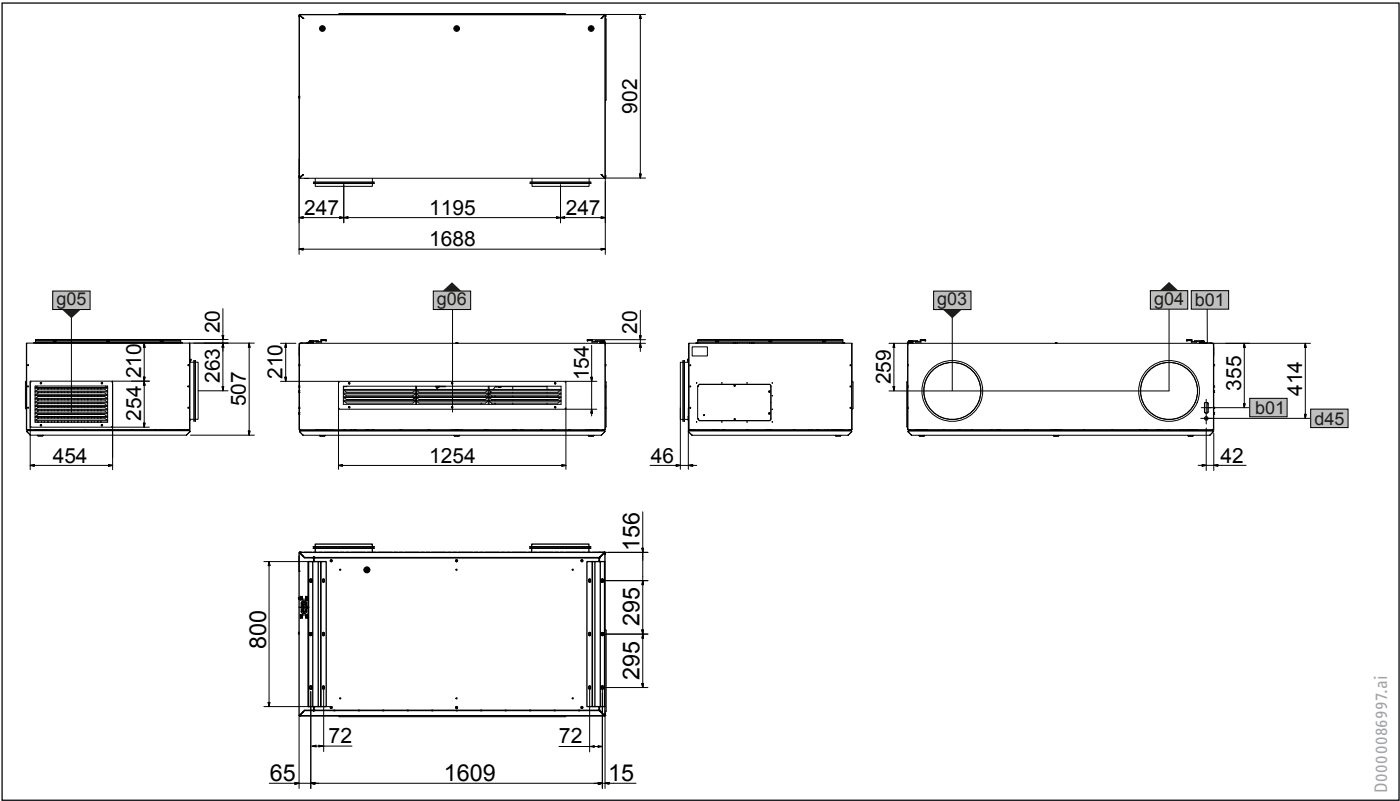
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Decentralised ventilation in non-residential buildings

Supply and extract air with heat recovery

		VRL-C 870 G Premium
Maintenance		
Part number		237665
Type		LTM dezent FMS F7-2
Description		Filter mat set for decentralised ventilation unit.
Part number		237668
Type		LTM dezent FMS F9-1
Description		Filter mat set for decentralised ventilation unit.

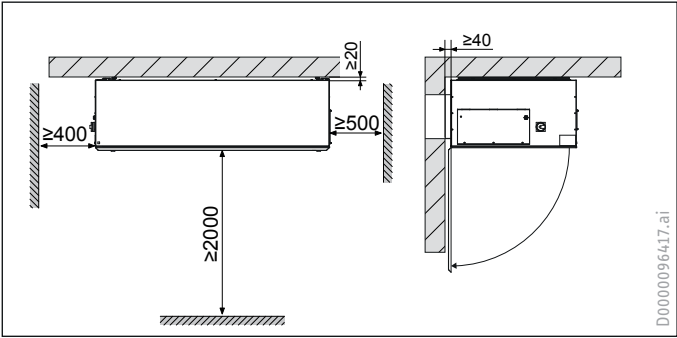
Availability on request



		VRL-C 870 G Premium
b01 Entry electrical cables		
d45 Condensate drain		
g03 Outdoor air Diameter	mm	315
g04 Exhaust air Diameter	mm	315
g05 Extract air		
g06 Supply air		

Decentralised ventilation in non-residential buildings  
Supply and extract air with heat recovery

Minimum clearance diagram



# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 870 G Trend



#### Benefits

- › High degree of heat recovery due to aluminium cross-countercurrent heat exchanger
- › The supply and discharge air grilles can be adjusted to optimise air flow
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Very quick and easy installation, even in modernisation projects

VRL-C 870 G Trend

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. Air ducting is required for routing the outdoor and exhaust air. Extract and supply air is routed directly through the grille outlets on the appliance.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. The temperature-dependent bypass automatically circumvents heat recovery when necessary. All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The system is equipped with motorised outdoor and exhaust air dampers to prevent uncontrolled air flow during idle time. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances can be connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories).

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed in different places on the ceiling. • The direction of the air flow is determined by the adjustable supply air grille on the front of the appliance. • The extract air is sucked in through the extract air grille on the right of the narrow side.

**Efficiency** • The combination of energy saving EC fans, intelligent control and other sensors ensures efficient operation.

		VRL-C 870 G Trend
Part number		204133
<b>Specification</b>		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 > 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	147
Max. power consumption, fan	W	329
Max. power consumption	W	1,850
Power consumption, preheating coil	W	1,500
Height	mm	507
Width	mm	902
Length	mm	1,688
Air connection diameter	mm	315
Weight	kg	140
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE
Frequency	Hz	50

10

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## Decentralised ventilation in non-residential buildings

### Supply and extract air with heat recovery

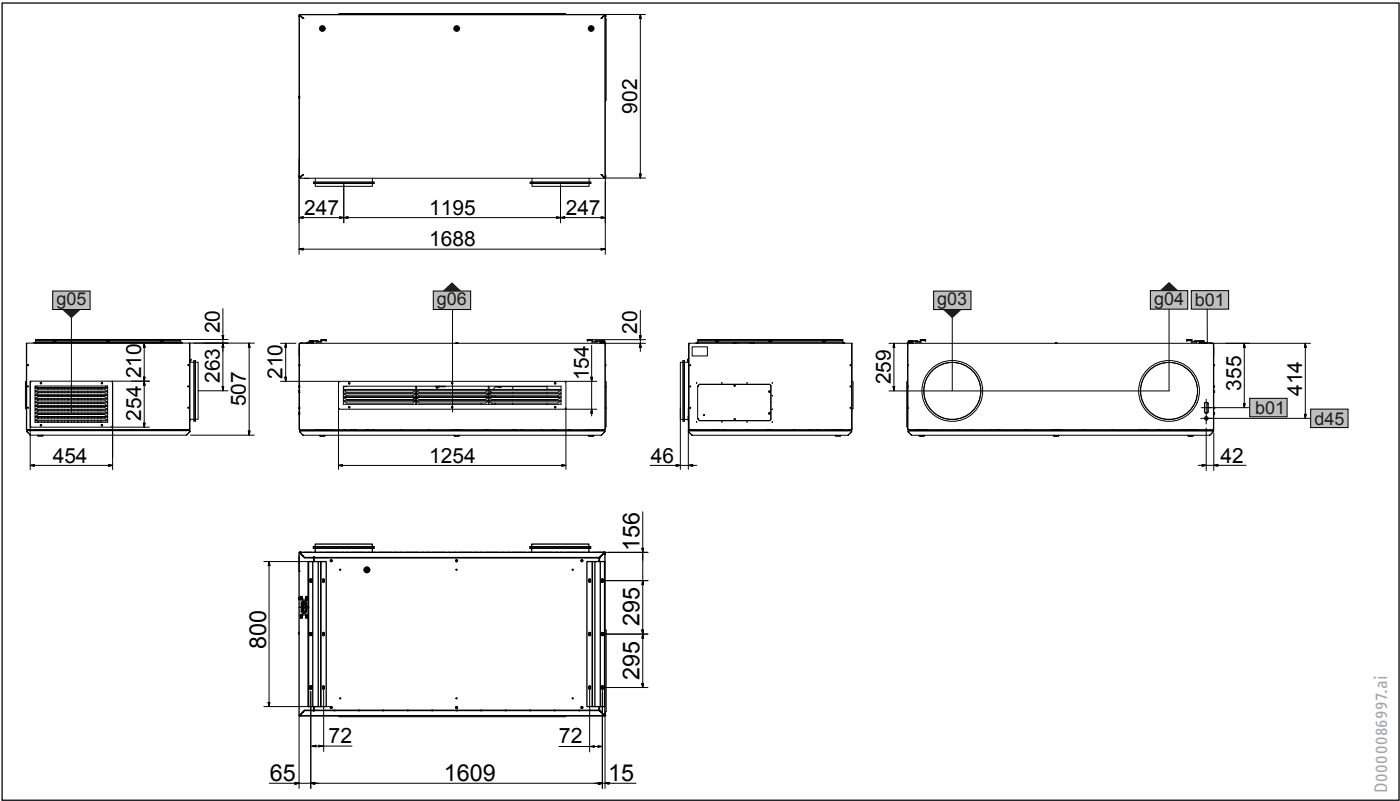
		VRL-C 870 G Trend
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	300-870
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	610
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 1
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237629</b>
Type		LTM dezent BA VA 410 B
Description		
		External cover
<b>Part number</b>		<b>237633</b>
Type		LTM dezent BA VA 410 W
Description		
		External cover
<b>Part number</b>		<b>237672</b>
Type		LTM dezent 600/800 Z-PSS
Description		Mounting system for decentralised ventilation unit
<b>Part number</b>		<b>237674</b>
Type		LTM dezent RWA
Description		Mounting system for decentralised ventilation unit
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units
<b>Maintenance</b>		
<b>Part number</b>		<b>237665</b>
Type		LTM dezent FMS F7-2
Description		Filter mat set for decentralised ventilation unit.
<b>Part number</b>		<b>237668</b>
Type		LTM dezent FMS F9-1
Description		Filter mat set for decentralised ventilation unit.

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# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

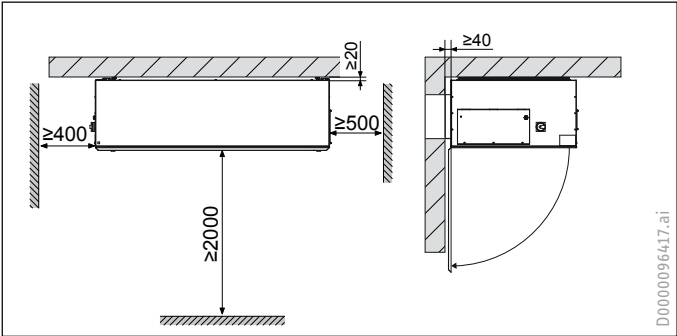
Availability on request



VRL-C 870 G Trend			
b01 Entry electrical cables			
d45 Condensate drain			
g03 Outdoor air Diameter	mm		315
g04 Exhaust air Diameter	mm		315
g05 Extract air			
g06 Supply air			

Decentralised ventilation in non-residential buildings  
Supply and extract air with heat recovery

Minimum clearance diagram



# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 870 D Premium



#### Benefits

- › High degree of heat recovery due to aluminium cross-counter-current heat exchanger
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Connector for air duct
- › Very quick and easy installation, even in modernisation projects

### VRL-C 870 D Premium

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. • Air ducting is required for routing the outdoor and exhaust air. Extract air and supply air can be channelled to precise points in the room or building.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. • An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. • With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. • The temperature-dependent bypass automatically circumvents heat recovery when necessary. • All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The equipment is fitted with motorised outdoor/exhaust air flaps to prevent uncontrolled flow of air in standby. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances are connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories). • The integral PCB allows easy integration of further functions, such as smoke detectors, intermittent ventilation, minimum ventilation, external OFF and control of a hydraulic reheating coil. • With the integral reheating coil, the supply air temperature can be raised to a comfortable level. • Thanks to permanent monitoring of temperature and humidity levels by the intelligent preheating control, demand for electrical energy is reduced to a minimum and the connected load lowered.

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed at various points on the ceiling of the room. • The supply air grille on the front of the appliance can be adjusted to change the direction of the air flow. • The extract air is sucked in through the extract air grille on the right of the narrow side.

**Efficiency** • Energy saving EC fans, in conjunction with the control unit and other sensors, ensure efficient operation.

		VRL-C 870 D Premium
Part number		204134
Specification		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 = 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	147
Max. power consumption, fan	W	329
Max. power consumption	W	1,750
Power consumption, preheating coil	W	400
Power consumption, reheating coil	W	1,000
Height	mm	507
Width	mm	902
Length	mm	1,688
Air connection diameter	mm	315
Weight	kg	140

Continue on next page >

## Decentralised ventilation in non-residential buildings

### Supply and extract air with heat recovery

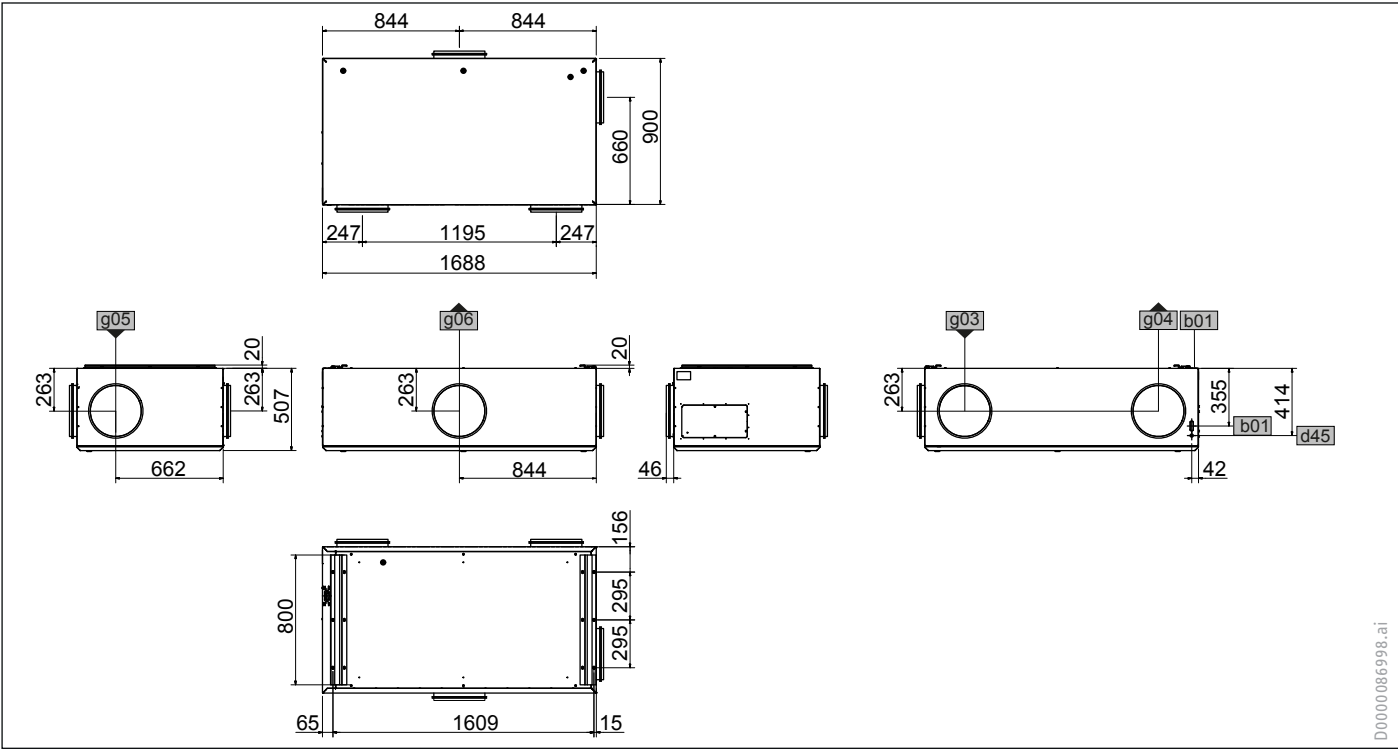
		VRL-C 870 D Premium
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE
Frequency	Hz	50
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	300-870
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	610
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 1
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237629</b>
Type		LTM dezent BA VA 410 B
Description		External cover
<b>Part number</b>		<b>237633</b>
Type		LTM dezent BA VA 410 W
Description		External cover
<b>Part number</b>		<b>237672</b>
Type		LTM dezent 600/800 Z-PSS
Description		Mounting system for decentralised ventilation unit
<b>Part number</b>		<b>237674</b>
Type		LTM dezent RWA
Description		Mounting system for decentralised ventilation unit
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units

Continue on next page >

Decentralised ventilation in non-residential buildings  
Supply and extract air with heat recovery

		VRL-C 870 D Premium
Maintenance		
Part number		237665
Type		LTM dezent FMS F7-2
Description		Filter mat set for decentralised ventilation unit.
Part number		237668
Type		LTM dezent FMS F9-1
Description		Filter mat set for decentralised ventilation unit.

Availability on request

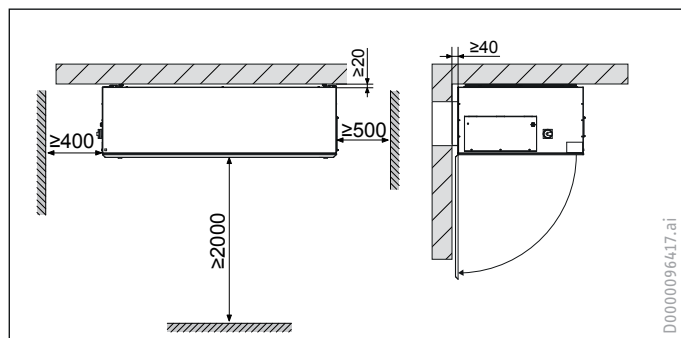


		VRL-C 870 D Premium
b01 Entry electrical cables		
d45 Condensate drain		
g03 Outdoor air Diameter	mm	315
g04 Exhaust air Diameter	mm	315
g05 Extract air Diameter	mm	315
g06 Supply air Diameter	mm	315

# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### Minimum clearance diagram



# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 870 D Trend



#### Benefits

- › High degree of heat recovery due to aluminium cross-counter-current heat exchanger
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Connector for air duct
- › Very quick and easy installation, even in modernisation projects

### VRL-C 870 D Trend

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. Air ducting is required for routing the outdoor and exhaust air. Extract and supply air is routed directly through the grille outlets on the appliance.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. • An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. • With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. • The temperature-dependent bypass automatically circumvents heat recovery when necessary. • All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The equipment is fitted with motorised outdoor/exhaust air flaps to prevent uncontrolled flow of air in standby. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances are connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories).

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed in different places on the ceiling. The supply air connector is located on the front of the appliance. Extract air is routed via the extract air connector on the right of the narrow side.

**Efficiency** • Energy saving EC fans, in conjunction with the control unit and other sensors, ensure efficient operation.

		VRL-C 870 D Trend
Part number		204135
Specification		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 = 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	147
Max. power consumption, fan	W	329
Max. power consumption	W	1,850
Power consumption, preheating coil	W	1,500
Height	mm	507
Width	mm	902
Length	mm	1,688
Air connection diameter	mm	315
Weight	kg	140
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE
Frequency	Hz	50

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## Decentralised ventilation in non-residential buildings

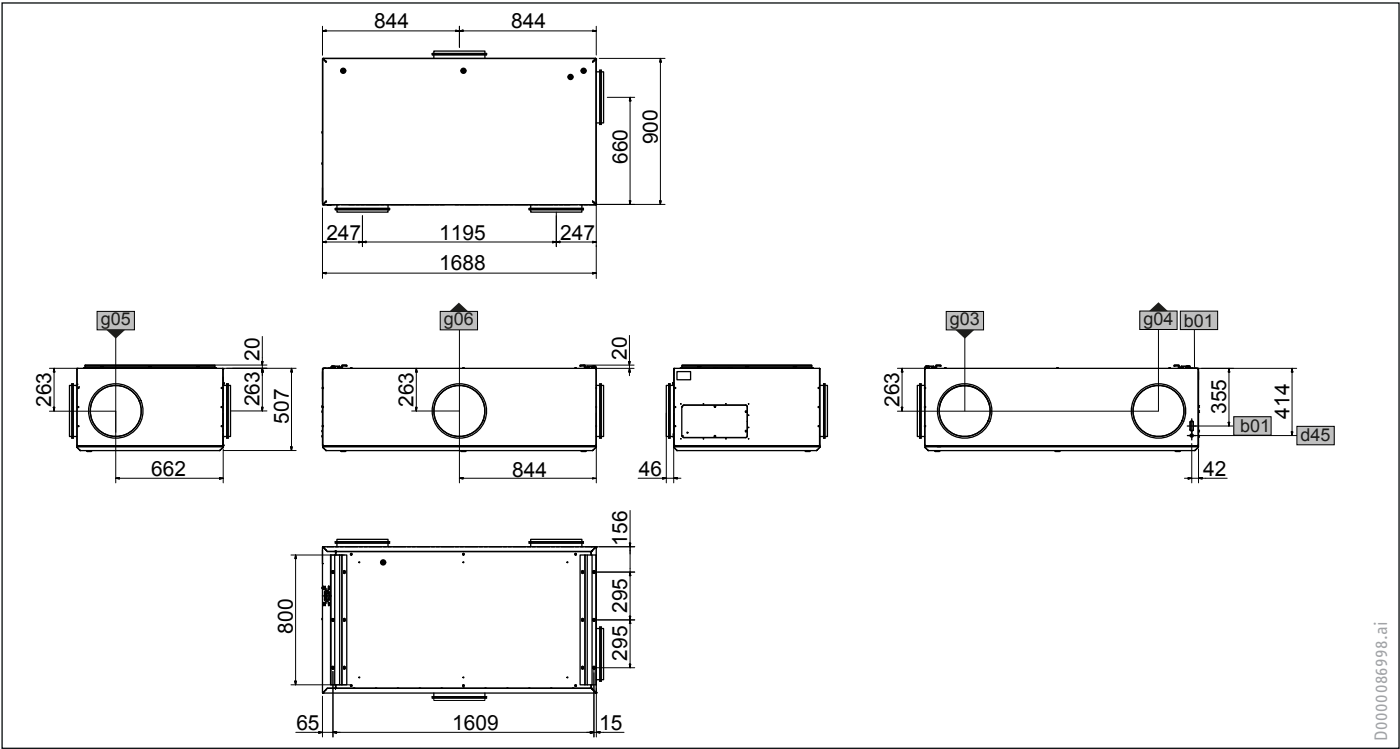
### Supply and extract air with heat recovery

		VRL-C 870 D Trend
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	300-870
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	610
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 1
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237629</b>
Type		LTM dezent BA VA 410 B
Description		
		External cover
<b>Part number</b>		<b>237633</b>
Type		LTM dezent BA VA 410 W
Description		
		External cover
<b>Part number</b>		<b>237672</b>
Type		LTM dezent 600/800 Z-PSS
Description		Mounting system for decentralised ventilation unit
<b>Part number</b>		<b>237674</b>
Type		LTM dezent RWA
Description		Mounting system for decentralised ventilation unit
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units
<b>Maintenance</b>		
<b>Part number</b>		<b>237665</b>
Type		LTM dezent FMS F7-2
Description		Filter mat set for decentralised ventilation unit.
<b>Part number</b>		<b>237668</b>
Type		LTM dezent FMS F9-1
Description		Filter mat set for decentralised ventilation unit.

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Decentralised ventilation in non-residential buildings  
Supply and extract air with heat recovery

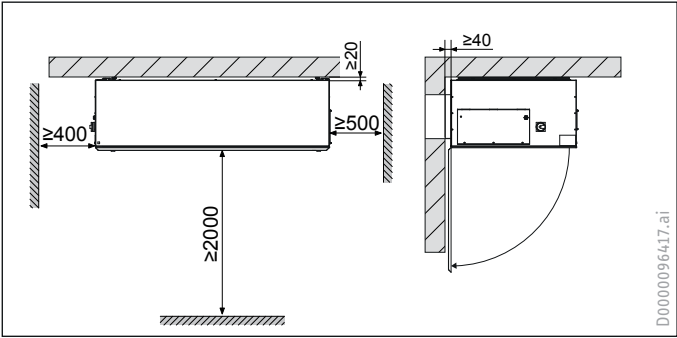
Availability on request



VRL-C 870 D Trend			
b01 Entry electrical cables			
d45 Condensate drain			
g03 Outdoor air Diameter	mm		315
g04 Exhaust air Diameter	mm		315
g05 Extract air Diameter	mm		315
g06 Supply air Diameter	mm		315

Decentralised ventilation in non-residential buildings  
Supply and extract air with heat recovery

Minimum clearance diagram



# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 300 G Premium



#### Benefits

- › High degree of heat recovery due to aluminium cross-countercurrent heat exchanger
- › The supply and discharge air grilles can be adjusted to optimise air flow
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Very quick and easy installation, even in modernisation projects

VRL-C 300 G Premium

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. Air ducting is required for routing the outdoor and exhaust air. Extract and supply air is routed directly through the grille outlets on the appliance.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. The temperature-dependent bypass automatically circumvents heat recovery when necessary. All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The equipment is fitted with motorised outdoor/exhaust air flaps to prevent uncontrolled flow of air in standby. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances are connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories).

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed in different places on the ceiling. • The supply air grille with adjustable air flow direction is located on the front of the appliance. • The extract air is sucked in through a grille on the right of the narrow side.

**Efficiency** • Energy saving EC fans, in conjunction with the control unit and other sensors, ensure efficient operation.

		VRL-C 300 G Premium
Part number		204140
Specification		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 > 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	67
Max. power consumption, fan	W	137
Max. power consumption	W	1,150
Power consumption, preheating coil	W	600
Power consumption, reheating coil	W	400
Height	mm	407
Width	mm	585
Length	mm	1,202
Air connection diameter	mm	200
Weight	kg	100
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE

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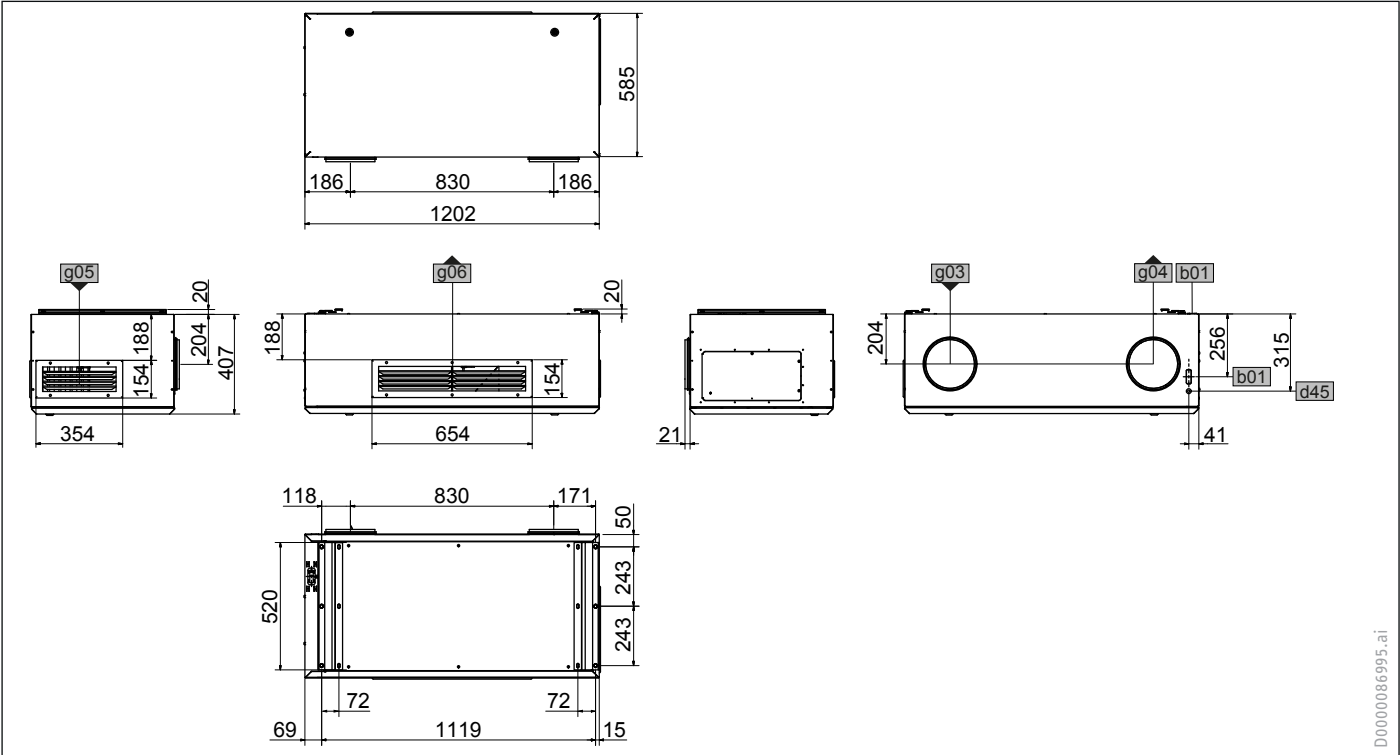
## Decentralised ventilation in non-residential buildings

### Supply and extract air with heat recovery

		VRL-C 300 G Premium
Frequency	Hz	50
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	100-300
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	210
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 2
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237627</b>
Type		LTM dezent 300 BA VA 320 B
Description		
		External cover
<b>Part number</b>		<b>237628</b>
Type		LTM dezent 300 BA VA 320 W
Description		
		External cover
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units
<b>Maintenance</b>		
<b>Part number</b>		<b>237652</b>
Type		LTM dezent 300 FMS M5-10
Description		Filter mat set for decentralised ventilation unit.

Availability on request

Decentralised ventilation in non-residential buildings  
Supply and extract air with heat recovery

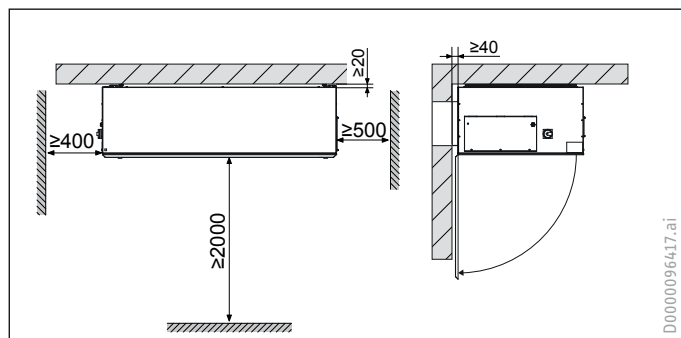


VRL-C 300 G Premium			
b01 Entry electrical cables			
d45 Condensate drain			
g03 Outdoor air Diameter	mm		200
g04 Exhaust air Diameter	mm		200
g05 Extract air			
g06 Supply air			

# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### Minimum clearance diagram



# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 300 G Trend



#### Benefits

- › High degree of heat recovery due to aluminium cross-countercurrent heat exchanger
- › The supply and discharge air grilles can be adjusted to optimise air flow
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Very quick and easy installation, even in modernisation projects

VRL-C 300 G Trend

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. Air ducting is required for routing the outdoor and exhaust air. Extract and supply air is routed directly through the grille outlets on the appliance.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. • An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. • With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. • The temperature-dependent bypass automatically circumvents heat recovery when necessary. • All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The equipment is fitted with motorised outdoor/exhaust air flaps to prevent uncontrolled flow of air in standby. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances are connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories).

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed in different places on the ceiling. The supply air grille on the front of the appliance can be adjusted to change the direction of the air flow. The extract air is sucked in through the extract air grille on the right of the narrow side.

**Efficiency** • Energy saving EC fans, in conjunction with the control unit and other sensors, ensure efficient operation.

VRL-C 300 G Trend		
Part number		204141
Specification		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 > 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	67
Max. power consumption, fan	W	137
Max. power consumption	W	760
Power consumption, preheating coil	W	600
Height	mm	407
Width	mm	585
Length	mm	1,202
Air connection diameter	mm	200
Weight	kg	100
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE
Frequency	Hz	50

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Continue on next page >

## Decentralised ventilation in non-residential buildings

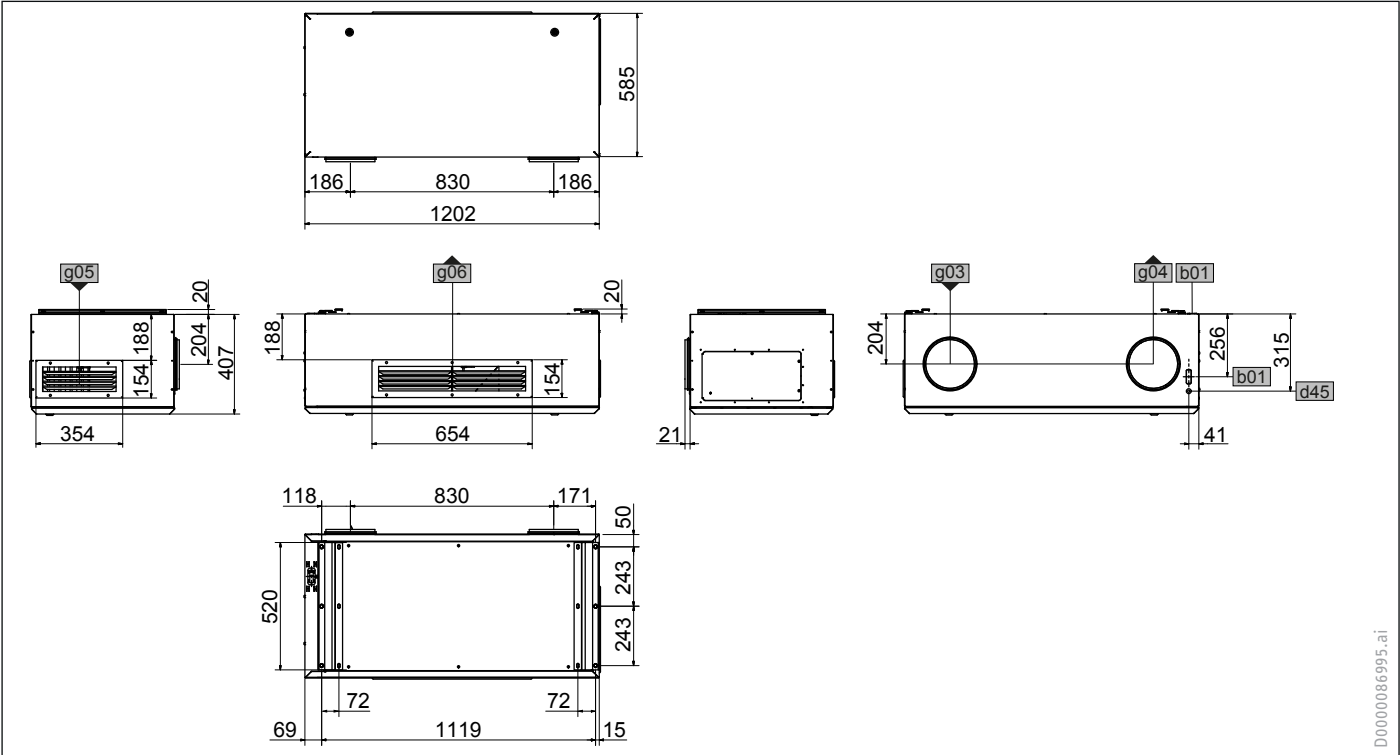
### Supply and extract air with heat recovery

		VRL-C 300 G Trend
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	100-300
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	210
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 2
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237627</b>
Type		LTM dezent 300 BA VA 320 B
Description		
		External cover
<b>Part number</b>		<b>237628</b>
Type		LTM dezent 300 BA VA 320 W
Description		
		External cover
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units
<b>Maintenance</b>		
<b>Part number</b>		<b>237652</b>
Type		LTM dezent 300 FMS M5-10
Description		Filter mat set for decentralised ventilation unit.

Availability on request

# Decentralised ventilation in non-residential buildings

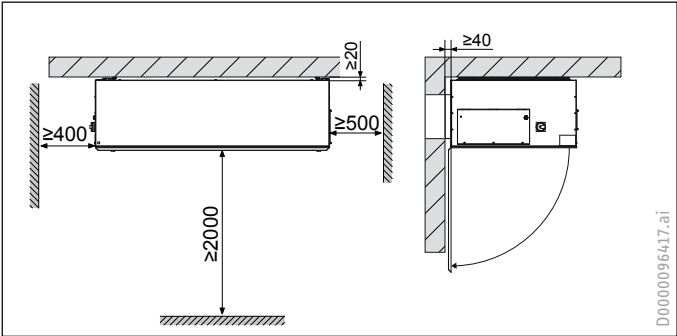
## Supply and extract air with heat recovery



VRL-C 300 G Trend		
b01	Entry electrical cables	
d45	Condensate drain	
g03	Outdoor air Diameter	200 mm
g04	Exhaust air Diameter	200 mm
g05	Extract air	
g06	Supply air	

Decentralised ventilation in non-residential buildings  
Supply and extract air with heat recovery

Minimum clearance diagram



# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 300 D Premium



#### Benefits

- › High degree of heat recovery due to aluminium cross-counter-current heat exchanger
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Connector for air duct
- › Very quick and easy installation, even in modernisation projects

### VRL-C 300 D Premium

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. • Air ducting is required for routing the outdoor and exhaust air. Extract air and supply air can be channelled to precise points in the room or building.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. • An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. • With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. • The temperature-dependent bypass automatically circumvents heat recovery when necessary. • All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The equipment is fitted with motorised outdoor/exhaust air flaps to prevent uncontrolled flow of air in standby. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances are connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories). • The integral PCB allows easy integration of further functions, such as smoke detectors, intermittent ventilation, minimum ventilation, external OFF and control of a hydraulic reheating coil. • With the integral reheating coil, the supply air temperature can be raised to a comfortable level. • Thanks to permanent monitoring of temperature and humidity levels by the intelligent preheating control, demand for electrical energy is reduced to a minimum and the connected load lowered.

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed in different places on the ceiling. • The supply air connector is located on the front of the appliance. Extract air is routed via the extract air connector on the right of the narrow side

**Efficiency** • Energy saving EC fans, in conjunction with the control unit and other sensors, ensure efficient operation.

VRL-C 300 D Premium		
Part number		204142
Specification		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 = 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	67
Max. power consumption, fan	W	137
Max. power consumption	W	1,150
Power consumption, preheating coil	W	600
Power consumption, reheating coil	W	400
Height	mm	407
Width	mm	585
Length	mm	1,202
Air connection diameter	mm	200
Weight	kg	100

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## Decentralised ventilation in non-residential buildings

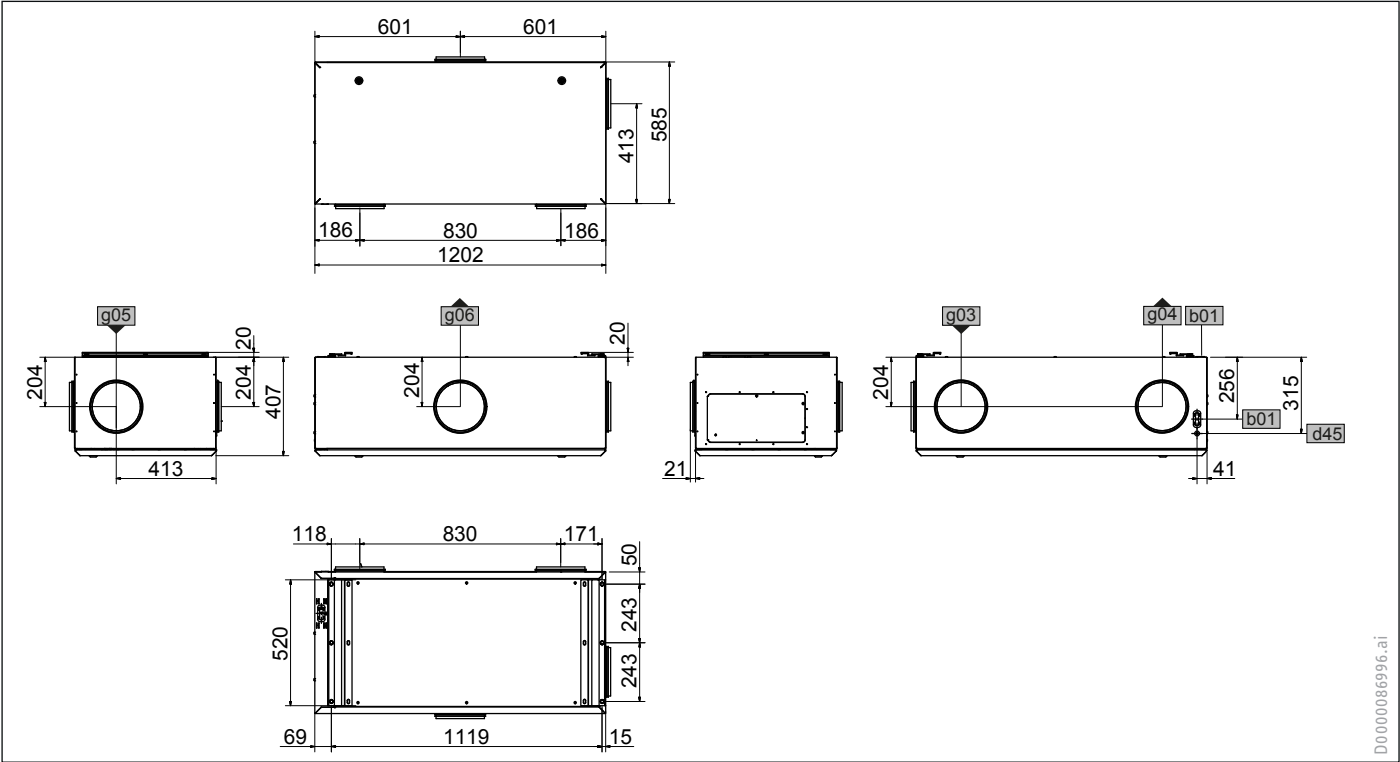
### Supply and extract air with heat recovery

		VRL-C 300 D Premium
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE
Frequency	Hz	50
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	100-300
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	210
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 2
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237627</b>
Type		LTM dezent 300 BA VA 320 B
Description		External cover
<b>Part number</b>		<b>237628</b>
Type		LTM dezent 300 BA VA 320 W
Description		External cover
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units
<b>Maintenance</b>		
<b>Part number</b>		<b>237652</b>
Type		LTM dezent 300 FMS M5-10
Description		Filter mat set for decentralised ventilation unit.

Availability on request

# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

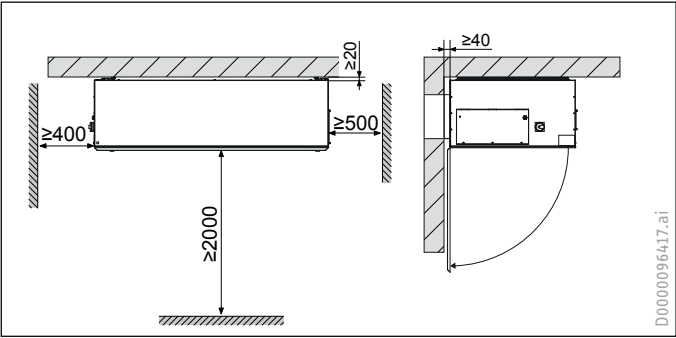


VRL-C 300 D Premium			
b01 Entry electrical cables			
d45 Condensate drain			
g03 Outdoor air Diameter	mm		200
g04 Exhaust air Diameter	mm		200
g05 Extract air Diameter	mm		200
g06 Supply air Diameter	mm		200

# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

Minimum clearance diagram



# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### VRL-C 300 D Trend



#### Benefits

- › High degree of heat recovery due to aluminium cross-countercurrent heat exchanger
- › Easily installed in the ceiling thanks to the matching rail system
- › Easy maintenance as the casing cover pivots open
- › Flexible installation, with choice of flush or surface installation on ceiling
- › Decentralised ventilation unit with heat recovery for schools, nurseries, seminar, therapy and club facilities, offices, community halls
- › Integral preheater coil
- › Connector for air duct
- › Very quick and easy installation, even in modernisation projects

VRL-C 300 D Trend

**Application** • Typical applications include controlled ventilation of larger spaces such as class rooms, conference rooms, sales showrooms, nurseries, restaurants and other function rooms. • The automated room ventilation improves the quality of the indoor air and reduces the level of CO<sub>2</sub>, aerosols, spores and dirt, thanks to the integral filters and heat recovery. At the same time, the high rate of air exchange reduces smells, bacteria and viruses in the indoor air. • The appliances are optimised for low-noise operation and are designed for decentralised usage directly at the point of use. Air ducting is required for routing the outdoor and exhaust air. Extract air and supply air can be channelled to precise points in the room or building.

**Convenience features** • Operating modes, programs and parameters can be adjusted simply and intuitively on the programming unit. The appliances are designed for straightforward and rapid servicing and are easy to maintain. • An additional sensor (accessory) measures the CO<sub>2</sub> concentration in the indoor air and provides fully automatic control of the appliance's ventilation output until the CO<sub>2</sub> falls below the set level again. • With the aid of a movement sensor (accessory), the appliance can switch between basic ventilation and a higher level. • The temperature-dependent bypass automatically circumvents heat recovery when necessary. • All the appliances are fitted with an electric preheating coil and can be used even when outdoor temperatures are very low with balanced supply and extract air flow rates. • The equipment is fitted with motorised outdoor/exhaust air flaps to prevent uncontrolled flow of air in standby. • In the case of fire or loss of power, the spring-loaded outdoor/exhaust air flaps seal the airways, which helps reduce the spread of fire or smoke through the building. • In larger buildings, up to 20 appliances can be linked and controlled using a single programming unit. The appliances are connected to a higher-ranking building management system via BacNet, Modbus or LON interface (accessories).

**Installation** • The appliance is designed for ceiling installation and can be built into a suspended ceiling. It can be installed in different places on the ceiling. The supply air connector is located on the front of the appliance. Extract air is routed via the extract air connector on the right of the narrow side.

**Efficiency** • Energy saving EC fans, in conjunction with the control unit and other sensors, ensure efficient operation.

VRL-C 300 D Trend		
Part number		204143
Specification		
Heat recovery level up to	%	92
Heat recovery level, nominal flow rate DIBt	%	80
Heat recovery class to EN 13053		H1
Filter class, extract air		ePM 10 = 50 % (M5)
Filter class, supply air		ePM1 ≥ 50 % (F7)
Rated power consumption, fan	W	67
Max. power consumption, fan	W	137
Max. power consumption	W	760
Power consumption, preheating coil	W	600
Height	mm	407
Width	mm	585
Length	mm	1,202
Air connection diameter	mm	200
Weight	kg	100
Condensate hose length	m	3
Condensate hose diameter	mm	7
Phases		1/N/PE
Frequency	Hz	50

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## Decentralised ventilation in non-residential buildings

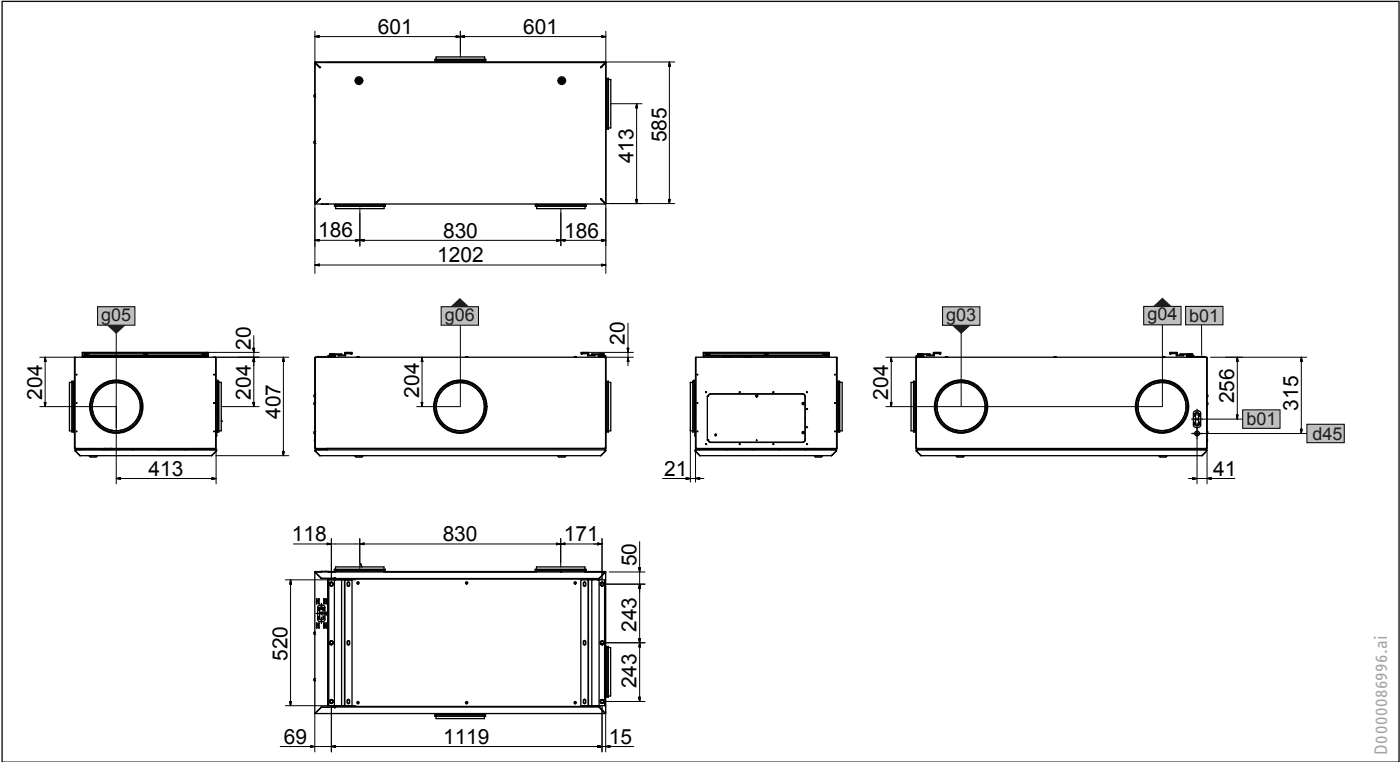
### Supply and extract air with heat recovery

		VRL-C 300 D Trend
Fuse protection	A	16
IP rating		IP 20
Cable length	m	3
Air flow rate	m³/h	100-300
Min. ceiling clearance	mm	20
Nominal air flow rate	m³/h	210
Max. efficiency, cross-counter-current heat exchanger	%	92
Max. ambient conditions, installation room (temperature)	°C	40
Min. ambient conditions, installation room (temperature)	°C	12
SFP classification to EN 13779		SFP 2
<b>Required accessories</b>		
<b>Part number</b>		<b>204144</b>
Type		ZVRL-C CU
Description		Controller for decentralised ventilation unit
<b>Part number</b>		<b>237627</b>
Type		LTM dezent 300 BA VA 320 B
Description		
		External cover
<b>Part number</b>		<b>237628</b>
Type		LTM dezent 300 BA VA 320 W
Description		
		External cover
<b>Recommended accessories</b>		
<b>Part number</b>		<b>237126</b>
Type		LTM TL HUMIDITY
Description		Humidity sensor
<b>Part number</b>		<b>237646</b>
Type		LTM dezent BACnet Web - Ethernet
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237647</b>
Type		LTM dezent LON IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237648</b>
Type		LTM dezent Modbus RS 485 IF
Description		Interface card for connecting decentralised ventilation units to a building management system
<b>Part number</b>		<b>237649</b>
Type		LTM dezent CO2
Description		CO2 sensor
<b>Part number</b>		<b>237658</b>
Type		LTM dezent VOC
Description		VOC sensor for demand-controlled management of decentralised ventilation units
<b>Maintenance</b>		
<b>Part number</b>		<b>237652</b>
Type		LTM dezent 300 FMS M5-10
Description		Filter mat set for decentralised ventilation unit.

Availability on request

# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

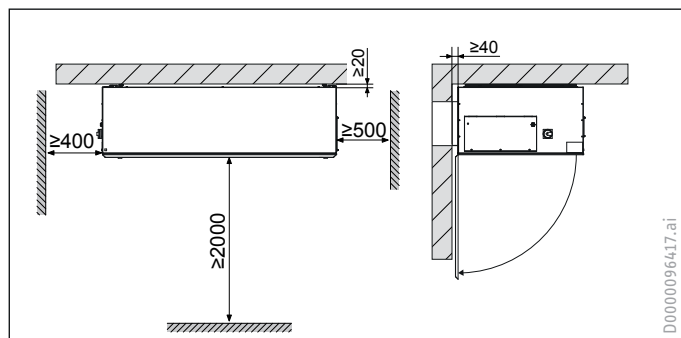


VRL-C 300 D Trend			
b01 Entry electrical cables			
d45 Condensate drain			
g03 Outdoor air Diameter	mm		200
g04 Exhaust air Diameter	mm		200
g05 Extract air Diameter	mm		200
g06 Supply air Diameter	mm		200

# Decentralised ventilation in non-residential buildings

## Supply and extract air with heat recovery

### Minimum clearance diagram





<b>Accessories</b> <b>Accessories</b>	525
--	-----

## Accessories for decentralised ventilation in non-residential buildings

### Accessories

#### DEZ MG



Mounting system for decentralised ventilation unit.

LTM dezent ULB-90

		LTM dezent ULB-90	LTM dezent 600/800 Z-PSS	LTM dezent C-PSS	LTM dezent RWA
Part number		237634	237672	237673	237674
Specification					
Width	mm	600	56	26	477
Length	m	1,688	0,8	1	1,688

#### ABL SL



##### Benefits

- › Weather-resistant stainless steel external cover

External cover for wall terminal on the façade. Mounting frame with integral drip edge and bird guard for installation on the façade. Sealing of plaster with sealing tape. Draining condensate safely in front of the plaster.

LTM dezent 300 BA VA 320 B

		LTM dezent 300 BA VA 320 B	LTM dezent 300 BA VA 320 W	LTM dezent BA VA 410 B	LTM dezent BA VA 410 W
Part number		237627	237628	237629	237633
Specification					
Height	mm	327	327	422	422
Depth	mm	112	112	215	215
Width	mm	324	324	423	423
Colour		other	white	other	white

## Accessories for decentralised ventilation in non-residential buildings

### Accessories

#### ZVRL-C CU



**Application** • Digital control unit for up to 20 units. The programming unit is mounted on the wall and has an integral LCD which displays all the relevant operating modes. • Intuitive operation and parametrisation of the system with six keys. This allows continuously variable control of air flow rates and supply air temperature. • Using the bypass function, night-time cooling in the summer can be set manually or to automatic mode. • The integral time switch automatically switches between summertime and wintertime. • In addition to the monitoring, status and alarm functions (filter change warning signal), demand-dependent operation can be achieved with the aid of CO<sub>2</sub> and VOC sensors.

ZVRL-C CU

		ZVRL-C CU
Part number		204144
Specification		
Colour		white
Width	mm	156
Height	mm	82
Depth	mm	31

Availability on request

#### DEZ IF



Interface cards for connecting decentralised ventilation units to a building management system.

LTM dezent BACnet Web - Ethernet

		LTM dezent BACnet Web - Ethernet	LTM dezent LON IF	LTM dezent Modbus RS 485 IF
Part number		237646	237647	237648
Specification				
Width	mm	100	100	100
Height	mm	50	50	50
Depth	mm	5	5	5

# Accessories for decentralised ventilation in non-residential buildings

## Accessories

### C02 Sensor



The C02 sensor for demand-dependent, enhanced ventilation mode is supplied with a sensor and threshold switch.

LTM dezent C02

		LTM dezent C02
Part number		237649
Specification		
Width	mm	80
Height	mm	100
Depth	mm	28

### VOC



VOC sensor for demand-controlled management of decentralised ventilation units.

LTM dezent VOC

		LTM dezent VOC
Part number		237658
Specification		
Width	mm	100
Height	mm	100
Depth	mm	28

# Accessories for decentralised ventilation in non-residential buildings

## Accessories

FMS dez SL







Filter set with particularly low pressure drop, yet high grade air filtration.

LTM dezent 300 FMS M5-10

		LTM dezent 300 FMS M5-10	LTM dezent FMS F7-2	LTM dezent FMS F9-1
Part number		237652	237665	237668
Specification				
Quantity		10	2	1
Filter class		ePM10 ≥ 50 % (M5)	ePM1 ≥ 50 % (F7)	ePM1 ≥ 80 % (F9)
Application		Ventilation units	Ventilation units	Ventilation units

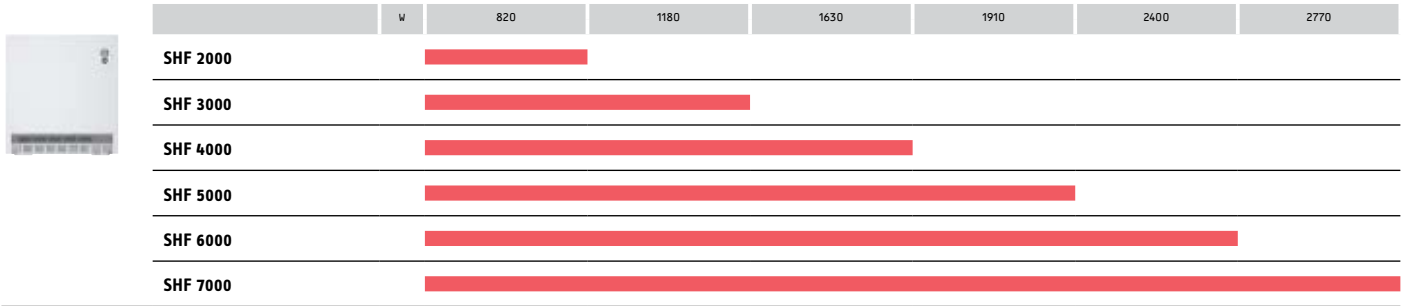


<b>Storage heater</b>	   	532
<b>Accessories for storage heaters</b>		534

Storage heater  
Application areas



Heating output





<b>Standard storage heater</b> SHF 2000-7000	533
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# Storage heater

## Standard storage heater

### SHF 2000-7000



SHF 2000

#### Benefits

- › For convenient, energy saving operation, C-Plus technology is used as an intelligent automatic charging system.
- › Enable time for charging can be set directly on the appliance
- › Integral RT controller with weekly timer and open window detection
- › In timer mode, the self-learning control unit calculates the preheating time automatically
- › Increased safety, as the high limit safety cut-out does not reset automatically
- › The connected load can be reduced with a 3-phase connection
- › Quiet crossflow fan
- › As standard with fluff filter

**Application** • The compact storage heater is installed on the floor and is suitable as a standalone heater for apartments or commercial spaces. • The appliance is used with off-peak economy tariff models with blocking times.

**Convenience features** • The integral electronic charge controller with C-Plus technology charges the storage heater fully automatically and according to demand, without additional control units. • The required room temperature and the enable time for charging can be easily adjusted on the display. • In addition to the programmable weekly timer, there are two preset and one individually programmable time programs available. • In timer mode, the comfort temperature is achieved at precisely the right time thanks to the adaptive control with learning function. • In addition to the comfort temperature, it is also possible to program the setback temperature. • If required, users are able to activate a function on the appliance which detects when windows are open; this avoids unnecessary energy loss. • With 3-phase connection, the connected load can be reduced in four stages. • The control input for AC signals is configured at the factory; a control input for DC signals is available as an optional accessory. • An auxiliary heater can be integrated as an option. • Integral childproofing as the programming unit can be locked. • High heat retention capacity. • The storage heater is equipped as standard with a fluff filter and operates very quietly. •

**Installation** • The appliance is installed directly on the floor or off-floor on suitable floor mounting brackets. • Easily accessible electrical connection with fold-out connection panel. • Single-phase or three-phase connection is possible. • A permanent control voltage is required.

**Safety** • Integral safety temperature limiter.



		SHF 2000	SHF 3000	SHF 4000	SHF 5000	SHF 6000	SHF 7000
Part number		200175	200176	200177	200178	200179	200180
Specification							
Power supply		1/N/PE, 3/N/PE	1/N/PE, 3/N/PE	1/N/PE, 3/N/PE	1/N/PE, 3/N/PE	1/N/PE, 3/N/PE	1/N/PE, 3/N/PE
Frequency	Hz	50/-	50/-	50/-	50/-	50/-	50/-
Rated current	A	2.9	4.3	5.8	7.2	8.7	10.1
Rated connected load	kW	2.00	3.00	4.00	5.00	6.00	7.00
Fuse protection	A	10	10	10	16	16	16
Heating output	W	820	1180	1630	1910	2400	2770
Operating noise	dB(A)	30	32	33	34	34	34
Heat retention capacity	%	47	52	55	56	59	60
Height	mm	650	650	650	650	650	650
Width	mm	605	780	955	1130	1305	1480
Depth	mm	275	275	275	275	275	275
Weight	kg	32	40	48	56	64	72
Weight (incl. bricks)	kg	116	169	220	266	316	373
Number of brick packs		6	9	12	15	18	21
Colour		alpine white	alpine white	alpine white	alpine white	alpine white	alpine white

Core bricks included in the standard delivery.

Overall depth = 30 mm with wall clearance mesh

<b>Control units</b>	
<b>Accessories</b>	535

Accessories for storage heaters

Control units

RTA-S2



- Benefits**
- › ON/OFF switch
  - › Variable temperature selection via rotary selector
  - › Optional temperature setback via external time switch
  - › Adjustable range restriction so that minimum and maximum temperatures can be specified individually

The room temperature controller for surface mounting has an integral bimetal controller with thermal feedback. It is equipped with an on/off switch and terminal for temperature reduction via an external time switch.

RTA-S2

		RTA-S2
Part number		231061
Specification		
Breaking capacity	A	10
Rated voltage	V	230
Frequency	Hz	50/-
IP rating		IP 30
Colour		pure white, RAL 9010
Width	mm	75
Height	mm	75
Depth	mm	26

Convectors	   	538
Rapid heater	   	544

# Convector

## Application areas



<b>Wall installation</b>	
CWM P	538
CNS Trend M	541
<b>Floorstanding appliances</b>	
CWM M-F	542

# Direct heating Convectors

## CWM P



CWM 500 P

### Benefits

- › Wall mounted convector heaters with high heating output
- › Compact metal casing in a slimline design
- › Electronic controller with backlit LCD
- › Weekly timer with 3 time programs, self-learning function and open window detection
- › In timer mode, the self-learning control unit calculates the preheating time automatically
- › Safety through overheating protection
- › Omnipolar ON/OFF switch
- › Long lasting stainless steel tubular heater with steel fins
- › During a power failure, the clock is buffered for up to 10 hours

**Application** • The convector is suitable for use as a standalone heater, as an efficient interim heater in spring/autumn, or for additional heat demand in the living space, bathroom or utility rooms. • With its compact dimensions, it takes up very little space. • The timeless and very slimline design suits any setting.

**Convenience features** • The electronically controlled convector ensures even, silent and accurate heating of the indoor air. • The preferred room temperature is easy to adjust at the top mounted programming unit. • The appliance has a large and easy to read display with programmable weekly timer with one individually programmable and two preset time programs. • In addition to the comfort temperature, it is also possible to program the setback temperature. In timer mode, the comfort temperature is achieved at precisely the right time thanks to the adaptive control with learning function. • Omnipolar ON/OFF switch. • The high grade tubular heater made from stainless steel with aluminium coated steel fins and the robust metal casing both help to ensure a long service life. • The appliance is equipped with an integral frost protection setting.

**Efficiency** • Users can activate a function on the appliance which detects open windows, thereby avoiding unnecessary energy loss.

**Installation** • Straightforward, stable wall mounting needs one person only because the wall mounting bracket is fitted to the wall separately from the appliance and can be readjusted later. All that then remains is to hook the maintenance-free appliance into place. • The power cable is fitted with a Schuko plug.

**Safety** • Integral childproofing means that the programming unit can be locked. • Integral safety temperature limiter.

		CWM 500 P	CWM 750 P	CWM 1000 P	CWM 1500 P
Part number		200254	200255	200256	200257
Specification					
Power supply		1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V
Rated voltage	V	230	230	230	230
Voltage range	V	230	230	230	230
Frequency	Hz	50	50	50	50
Rated current	A	2.2	3.3	4.3	6.5
Connected load	W	500	750	1000	1500
Connected load	kW	0.5	0.75	1.0	1.5
Phases		1/N/PE	1/N/PE	1/N/PE	1/N/PE
Fuse protection	A	10	10	10	10
Setting range	°C	5 - 30	5 - 30	5 - 30	5 - 30
IP rating		IP 24	IP 24	IP 24	IP 24
Protection class		I	I	I	I
Height	mm	450	450	450	450
Width	mm	348	426	426	582
Depth	mm	100	100	100	100
Weight	kg	4.00	4.60	4.60	6.00
Colour		alpine white	alpine white	alpine white	alpine white

		CWM 2000 P	CWM 2500 P	CWM 3000 P
Part number		200258	200259	200260
Specification				
Power supply		1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V
Rated voltage	V	230	230	~230
Voltage range	V	230	230	230

Continue on next page >

# Direct heating Convectors

		CWM 2000 P	CWM 2500 P	CWM 3000 P
Frequency	Hz	50	50	50
Rated current	A	8.7	10.9	13.0
Connected load	W	2000	2500	3000
Connected load	kW	2.0	2.5	3.0
Phases		1/N/PE	1/N/PE	1/N/PE
Fuse protection	A	10	16	16
Setting range	°C	5 - 30	5 - 30	5 - 30
IP rating		IP 24	IP 24	IP 24
Protection class		I	I	I
Height	mm	450	450	450
Width	mm	738	894	1050
Depth	mm	100	100	100
Weight	kg	7.70	9.20	10.90
Colour		alpine white	alpine white	alpine white

Depth including wall mounting bracket

# Direct heating Convectors

## CNS Trend M



CNS 50 Trend M

### Benefits

- › Wall mounted convector heaters with high heating output
- › Compact metal casing in a slimline design
- › Mechanical temperature controller
- › Omnipolar ON/OFF switch
- › Safety through overheating protection
- › Long lasting stainless steel tubular heater with steel fins

**Application** • Compact, wall mounted convector as a standalone heater, as an efficient interim heater in spring/autumn, or for additional heat demand in the living space, bathroom or utility rooms. The timeless and very slimline design suits any setting.

**Convenience features** • The indoor air is heated evenly and silently by the mechanically controlled convector. • The preferred room temperature can be variably adjusted on the programming unit. • A high grade stainless steel tubular heater with steel fins is integrated in the robust metal casing. The appliance features a frost protection setting and an omnipolar ON/OFF switch.

**Installation** • Straightforward, stable wall mounting needs one person only: The wall mounting bracket is fitted to the wall separately from the appliance and can be adjusted later. All that remains is to hook the appliance into place.

**Safety** • Integral safety temperature limiter.

		CNS 50 Trend M	CNS 100 Trend M	CNS 150 Trend M	CNS 200 Trend M	CNS 250 Trend M	CNS 300 Trend M
Part number		203638	203640	203641	203642	203643	203644
Specification							
Power supply		1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V
Rated voltage	V	230	230	230	230	230	230
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Rated current	A	2.2	4.3	6.5	8.7	10.9	10.5
Connected load	W	500	1000	1500	2000	2500	3000
Connected load	kW	0.5	1	1.5	2	2.5	3
Phases		1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE
Fuse protection	A	10	10	10	10	16	16
Setting range	°C	5-35	5-35	5-35	5-35	5-35	5-35
IP rating		IP 24	IP 24	IP 24	IP 24	IP 24	IP 24
Protection class		I	I	I	I	I	I
Height	mm	450	450	450	450	450	450
Width	mm	348	426	582	738	894	1050
Depth	mm	100	100	100	100	100	100
Weight	kg	4.00	4.60	6.00	7.70	9.10	10.50
Colour		alpine white	alpine white	alpine white	alpine white	alpine white	alpine white

Depth including wall mounting bracket

## Convectors

### Floorstanding appliances

#### CWM M-F



CWM 750 M-F

#### Benefits

- › Freestanding convectors with a high heating output
- › Mechanical temperature controller
- › For maximum operational reliability, the integral pendulum switch protects against overturning
- › Handle and feet with castors
- › Omnipolar ON/OFF switch
- › Long lasting stainless steel tubular heater with steel fins

**Application** • The freestanding convector in a robust metal casing features easy handling and can be used for various applications. The convector is ideal where heat is required quickly on demand.

**Convenience features** • Even and silent heating of the indoor air. • The preferred room temperature is easy to adjust at the temperature selector. • The convector has a frost protection setting. • High grade stainless steel tubular heater with steel fins. • Very user friendly thanks to the top mounted operating controls.

**Installation** • Appliance has a handle and feet with castors as standard for use as a floorstanding convector. The appliance is supplied ready for connection with power cable and standard plug.

**Safety** • The integral pendulum switch ensures protection against overturning for maximum safety in operation. Additional protection against overheating through the integral safety temperature limiter.

		CWM 750 M-F	CWM 1000 M-F	CWM 1500 M-F	CWM 2000 M-F	CWM 2500 M-F	CWM 3000 M-F
Part number		204452	204453	204454	204455	204456	204457
Specification							
Power supply		1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE	1/N/PE ~ 230 V	1/N/PE ~ 230 V	1/N/PE ~ 230 V
Rated voltage	V	230	230	230	230	230	230
Voltage range	V	230	230	230	230	230	230
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Rated current	A	3,3	4,3	6,5	8,7	10,9	13
Connected load	W	750	1000	1500	2000	2500	3000
Connected load	kW	0,75	1	1,5	2	2,5	3
Phases		1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE	1/N/PE
Fuse protection	A	10	10	10	16	16	16
Setting range	°C	5-35	5-35	5-35	5-35	5-35	5-35
IP rating		IP 24	IP 24	IP 24	IP 24	IP 24	IP 24
Protection class		I	I	I	I	I	I
Height	mm	546	546	546	546	546	546
Width	mm	426	426	582	738	894	1050
Depth	mm	305	305	305	305	305	305
Weight	kg	5.00	5.00	6.50	8.70	9.00	10.30
Colour		alpine white	alpine white	alpine white	alpine white	alpine white	alpine white

This product is only suitable for well insulated rooms or for occasional use.

Depth and height including feet with castors

Rapid heater  
Application areas

	Heating output
	<div><div></div><div>W</div><div>2000</div></div> <div>CK 20 Premium</div>
	<div><div></div><div>W</div><div>2000</div></div> <div>CK 20 trend LCD</div>
	<div><div></div><div>W</div><div>2000</div></div> <div>CK 20 Plus</div>
	<div><div></div><div>W</div><div>2000</div></div> <div>CK 20 Trend</div>

<b>Rapid heater</b>	
CK Premium	545
CK Trend LCD	546
CK Plus	547
CK Trend	548

# Rapid heater

## Rapid heater

### CK Premium



CK 20 Premium

#### Benefits

- › Elegant design with aluminium front
- › Electronic controller with backlit LCD
- › Silent mode with a quiet heating stage and powerful rapid heat-up stage
- › Weekly timer with 3 time programs, self-learning function and open window detection
- › With short-term timer
- › Safety through overheating protection
- › Omnipolar ON/OFF switch

**Application** • The high quality rapid heater is suitable as a standalone heater or as a booster heater, particularly for rooms that are not heated constantly. • The wall mounted appliance heats the indoor air quickly and evenly. • The appliance, whose design won the Red Dot Design Award, suits any setting.

**Convenience features** • The electronically controlled premium rapid heater is equipped with a large, easy to read display. The required room temperature can be easily adjusted at the top-mounted programming unit. • In addition to the programmable weekly timer, there are two preset and one individually programmable time programs available. • In addition to the comfort temperature, it is also possible to program the setback temperature. In timer mode, the comfort temperature is achieved at precisely the right time thanks to the adaptive control with learning function. • Quiet operation with Silent Mode which features a switchable heating stage and reduced fan speed. • The elegant appliance is equipped with a 3 mm aluminium front and has an integral frost protection setting.

**Efficiency** • Users can activate a function on the appliance which detects open windows, thereby avoiding unnecessary energy loss.

**Installation** • Straightforward, stable wall mounting by just one person because the wall mounting bracket is fitted separately from the appliance and can be adjusted afterwards. All that then remains is to hook the maintenance-free appliance into place.

**Safety** • Integral childproofing as the programming unit can be locked. • Also contributing to the safety credentials is the integral temperature limiter.



		CK 20 Premium
Part number		237835
Specification		
Power supply		1/N/PE ~ 230 V
Rated voltage	V	230
Voltage range	V	220-240
Frequency	Hz	50
Rated current	A	8.7
Connected load	W	2000
Connected load	kW	2
Phases		1/N/PE
Fuse protection	A	16
Sound pressure level	dB(A)	37/48
Setting range	°C	5 - 30
IP rating		IP 24
Protection class		I
Height	mm	470
Width	mm	345
Depth	mm	126
Weight	kg	5.30
Colour		alpine white

Depth including wall mounting bracket

# Rapid heater

## Rapid heater

### CK Trend LCD



CK 20 trend LCD

#### Benefits

- › Compact appliance in a plastic casing
- › Electronic controller with backlit LCD
- › Weekly timer with 3 time programs, self-learning function and open window detection
- › During a power failure, the clock is buffered for up to 10 hours
- › Very high safety thanks to 3-stage overheating protection
- › Fluff filter in the air intake
- › Cable storage at the back for the connecting cable
- › Very quiet operation

**Application** • The rapid heater is suitable as a standalone heater in bathrooms, or as an efficient interim heater in spring/autumn and as a booster heater, e.g. in guest bedrooms or recreational rooms. • Thanks to its compact design, it does not take up much space. • The appliance is designed for wall mounting and heats the indoor air quickly and evenly.

**Convenience features** • The electronically controlled rapid heater is equipped with a large and easy to read display. • The required room temperature can be easily adjusted on the top-mounted programming unit. • In addition to the programmable weekly timer, there are two preset and one individually programmable time programs available. • In addition to the comfort temperature, it is also possible to program the setback temperature. In timer mode, the comfort temperature is achieved at precisely the right time thanks to the adaptive control with learning function. • If required, users are able to activate a function on the appliance which detects when windows are open; this avoids unnecessary energy loss. • The rapid heater has an integral fluff filter. • The casing is made from robust, hard-wearing plastic.

**Efficiency** • The high quality self-limiting ceramic heating element keeps the temperature constant, thereby saving energy.

**Installation** • Straightforward, stable wall mounting needs one person only because the wall mounting bracket is fitted to the wall separately from the appliance and can be readjusted later. All that then remains is to hook the appliance into place. • The power cable comes as standard with a right angle plug. Cable storage is provided on the back to accommodate any excess power cable.

**Safety** • Integral childproofing as the programming unit can be locked. • The 3-stage safety concept includes the self-limiting ceramic heating element, the temperature limiter and the built-in temperature fuse.

		CK 20 trend LCD
Part number		236653
Specification		
Power supply		1/N ~ 230 V
Rated voltage	V	~230
Voltage range	V	220 - 240
Frequency	Hz	50/-
Rated current	A	8.7
Connected load	W	2000
Connected load	kW	2
Phases		1/N
Fuse protection	A	16
Sound pressure level	dB(A)	49
Setting range	°C	5 - 30
IP rating		IP 24
Protection class		II
Height	mm	400
Width	mm	275
Depth	mm	131
Weight	kg	2.50
Colour		alpine white

Depth including wall mounting bracket

# Rapid heater

## Rapid heater

### CK Plus



CK 20 Plus

#### Benefits

- › Efficient primary and booster heater
- › Elegant design with aluminium front
- › High quality rapid heater with mechanical temperature controller
- › Frost protection setting
- › Safety through overheating protection
- › Quiet crossflow fan

**Application** • High grade rapid heater for use as an efficient standalone heater or booster heater. Suitable for rooms with an additional heat demand and which are not heated constantly, e.g. bathrooms. • The wall mounted, mechanically controlled appliance heats the indoor air quickly, quietly and evenly.

**Convenience features** • The preferred room temperature can be variably adjusted and is reached quickly thanks to the quiet crossflow fan. • The metal casing with high quality design has a 3 mm-thick aluminium front panel. The operating controls are integrated in the plastic side components, which also protect them. • The appliance features a frost protection setting.

**Installation** • Straightforward wall mounting needs one person only. The wall mounting bracket is fitted to the wall separately from the appliance and can be adjusted later. • The rapid heater is maintenance-free.

**Safety** • Omnipolar ON/OFF switch. • The integral safety temperature limiter protects against overheating. • The rounded shape of the casing prevents combustible objects being deposited on the appliance.

		CK 20 Plus
Part number		202127
Specification		
Power supply		1/N/PE
Rated voltage	V	230
Voltage range	V	220-240
Frequency	Hz	50
Rated current	A	8.7
Connected load	W	2000
Connected load	kW	2
Phases		1/N/PE
Fuse protection	A	16
Sound pressure level	dB(A)	48
Setting range	°C	5-35
IP rating		IP 24
Protection class		I
Height	mm	470
Width	mm	345
Depth	mm	126
Weight	kg	5.30
Colour		alpine white

Depth including wall mounting bracket  
Note: for sale only outside the EU. (Product: 202127)

# Rapid heater

## Rapid heater

### CK Trend



CK 20 Trend

#### Benefits

- › Compact appliance in a plastic casing
- › Mechanical temperature controller
- › Self-limiting PTC heating element
- › Very high safety thanks to 3-stage overheating protection
- › Fluff filter in the air intake
- › Cable storage at the back for the connecting cable
- › Very quiet operation

**Application** • The compact wall mounted rapid heater is an efficient standalone heater or booster heater for rooms that are not heated constantly. The mechanically controlled appliance heats the indoor air quickly, quietly and evenly.

**Convenience features** • The preferred room temperature can be variably adjusted via the controller at the side. • The casing is made from robust plastic, with an alpine white appliance cover and grey air discharge grille and back panel. • Operating controls on top. • The rapid heater is equipped with cable storage at the back and a fluff filter in the air intake.

**Installation** • Straightforward, stable wall mounting needs one person only: The wall mounting bracket is fitted to the wall separately from the appliance and can be adjusted later. • The maintenance-free appliance has a power cable with right angle plug.




**Safety** • The 3-stage safety concept comprises the self-limiting ceramic heating element, temperature limiter and integral temperature fuse.

		CK 20 Trend
Part number		234918
Specification		
Power supply		1/N ~ 230 V
Rated voltage	V	~230
Voltage range	V	220 - 240
Frequency	Hz	50
Rated current	A	8.7
Connected load	W	2000
Connected load	kW	2
Phases		1/N
Fuse protection	A	16
Sound pressure level	dB(A)	49
Setting range	°C	7-35
IP rating		IP 24
Protection class		II
Height	mm	400
Width	mm	275
Depth	mm	131
Weight	kg	2.50
Colour		alpine white

Depth including wall mounting bracket

Note: Only for sales outside the EU. (Product: 234918)



Hand dryer, warm air			552
Hand dryer, high speed			554

Hand dryer  
Hand dryer

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<b>Warm air</b> HTE	553
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# Hand dryer, warm air

## Warm air

### HTE



HTE 4

#### Benefits

- › Award-winning European design
- › Sensor control
- › Durable plastic casing to prevent damage
- › Easy installation and maintenance
- › Protected against water spray according protection class IP23
- › Quiet operation at only 54 decibels
- › Meets European EN 60335-1 standard

**Application** • The HTE is an electric hand dryer which has a heating element and an air blower to dry the hands after they have been washed. It is commonly used in public toilets as a cost-effective alternative to paper towels. • It operates automatically using a sensor.

**Convenience features** • The HTE hand dryer remains the most hygienic and economical solution for drying hands in a washroom. It eliminates the need to supply and constantly launder hand towels, or paper towels which require disposal and frequent refilling. • By choosing this dryer, you are not only opting for a very hygienic solution; you will also save your business a great deal of time and money. • The HTE Electronic is highly acclaimed, not least because it operates extremely quietly. • An intelligent infrared proximity sensor switches the unit on when hands are held 6 to 12 cm below the air outlet, and automatically switches it off when the hands are moved away. • The robust casing protects the internal components against damage, while the rounded design prevents objects such as cigarette butts from being deposited on the top.

**Installation** • Quick and easy installation. • Drilling template provided. • Mount on the wall using the screws and wall plugs provided. • Connect to the power supply, then it is ready to use.

**Efficiency** • Highest energy efficiency rating – “Electricity Saving Label No. 5”

**Safety** • The HTE is protected against water spray to IP23. • Quiet operation at only 54 decibels. • Meets European EN 60335-1 and TISI electric safety standard.



073007



073007



073007



073007



073007

		HTE 4	HTE 5
Part number		073007	073008
Specification			
Power supply		1/N ~ 220-240 V	1/N ~ 220-240 V
Rated voltage	V	230	230
Frequency	Hz	50/-	50/-
Rated current	A	7.8	7.8
Rated output	W	1800	1800
Operating noise	dB(A)	54	54
Air speed	m/s	12	12
Air flow rate	m³/h	146	146
Drying time	s	36	36
IP rating		IP 23	IP 23
Protection class		II	II
Height	mm	250	266
Width	mm	238	257
Depth	mm	230	230
Weight	kg	2.50	4.00
Casing material		Plastic	Diecast aluminium
Colour		alpine white	signal white, RAL 9003



<b>High speed</b> <b>Ultronic</b>	555
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# Hand dryer, high speed

## High speed

### Ultronic



Ultronic S

#### Benefits

- › Extremely short drying time of less than 15 seconds
- › Hygienic and energy efficient through IR proximity sensors
- › Dries with an air speed of in excess of 300 km/h
- › Easy to install as the wall mountings fit the holes on the HTE and HTT units
- › Energy efficient and environmentally responsible
- › Stable and robust version in a contemporary design

**Application** • High quality high speed electric hand dryer with very short drying time. Dries hands by removing the moisture with a concentrated jet of air. • The appliance is ideally suited to the special demands made on frequently used washroom facilities in restaurants, commerce and public buildings. The design, which has won the iF Design Award, suits any setting.

**Convenience features** • Contactless operation via integral infrared proximity sensors. High air flow rate for short drying times. Very low connected load. Robust and impact-resistant casing made from diecast aluminium.

**Installation** • Easy installation. The appliance has no power cable; the power supply is wired directly into the appliance.

**Safety** • Integral safety temperature limiter.



		Ultronic S	Ultronic W
Part number		231582	231583
Specification			
Power supply		1/N/PE ~ 220-240V	1/N/PE ~ 220-240V
Rated voltage	V	230	230
Frequency	Hz	50/60	50/60
Rated current	A	4.0	4.0
Rated output	W	910	910
Operating noise	dB(A)	82	82
Air speed	m/s	94	94
Air flow rate	m³/h	200	200
Drying time	s	15	15
IP rating		IP 24	IP 24
Protection class		I	I
Height	mm	289	289
Width	mm	257	257
Depth	mm	234	234
Weight	kg	4.40	4.40
Casing material		Diecast aluminium	Diecast aluminium
Colour		Stainless steel look	signal white, RAL 9003





