

HOME VENTILATION WITH HEAT RECOVERY

**Ventilation units**  
**M-WRG-S/Z-S**  
**M-WRG-S/Z-24**  
**M-WRG-S/Z-EIB**  
**M-WRG-S/Z-KNX (-F, -FC)**

**Connecting the control cable / bus cable**



**INSTALLATION MANUAL**

Part no. 5301-13-01 Week 22/2017 EN



# Contents

<b>1</b>	<b>Introduction</b> .....	<b>5</b>
1.1	Notes on this installation manual .....	5
1.2	Description .....	5
1.3	Target group .....	5
1.4	Revision index .....	6
1.5	Explanation of the symbols used .....	6
1.6	Supplementary documents .....	6
<b>2</b>	<b>Safety instructions</b> .....	<b>6</b>
2.1	Hazard classification .....	6
2.2	Notes on using the ventilation units safely .....	7
2.3	Intended use .....	7
<b>3</b>	<b>Warranty and liability</b> .....	<b>7</b>
<b>4</b>	<b>Tools and equipment required</b> .....	<b>7</b>
<b>5</b>	<b>Codes for designation of wire colours</b> .....	<b>7</b>
<b>6</b>	<b>Connecting the M-WRG-S/Z-S to the control cable</b> .....	<b>8</b>
6.1	Overview of the modules .....	8
6.1.1	Board in M-WRG-S/Z-S ventilation unit .....	8
6.1.2	Three-step rotary switch with zero position .....	8
6.1.3	Optional pushbutton for intensive ventilation and optional LED for feedback .....	8
6.2	Control cable types .....	9
6.3	Connecting the control cable to the ventilation unit .....	9
6.3.1	Removing the cover from the ventilation unit .....	9
6.3.2	Removing the network connection cover .....	9
6.3.3	Connecting the control cable and optional pushbutton/LED to the ventilation unit boards .....	10
6.3.3.1	Terminal assignment .....	10
6.3.3.2	Circuit diagram .....	11
6.3.4	Inserting the network connection cover and attaching the cover to the ventilation unit ..	12
<b>7</b>	<b>Connecting the M-WRG-S/Z-24 to the control cable</b> .....	<b>13</b>
7.1	Overview of the modules .....	13
7.1.1	Board in M-WRG-S/Z-24 ventilation unit .....	13
7.2	Control cable types .....	13
7.3	Connecting the control cable to the ventilation unit .....	13
7.3.1	Removing the cover from the ventilation unit and removing the network connection cover .....	13
7.3.2	Connecting the control cable to the ventilation unit board .....	14
7.3.2.1	Input assignment (BCD encoding) .....	14
7.3.2.2	Output assignment .....	14
7.3.2.3	Circuit diagram .....	15
7.3.3	Inserting the network connection cover and attaching the cover to the ventilation unit ..	15
<b>8</b>	<b>Connecting the M-WRG-S/Z-EIB to the EIB universal interface 6119/40 and EIB bus cable</b> .....	<b>16</b>
8.1	Overview of the modules .....	16

8.1.1	Board in M-WRG-S/Z-EIB ventilation unit .....	16
8.1.2	EIB universal interface 6119/40 .....	16
8.2	Control cable types (EIB bus cable) .....	17
8.3	Connecting the EIB universal interface 6119/40 to the ventilation unit .....	17
8.3.1	Removing the cover from the ventilation unit and removing the network connection cover .....	17
8.3.2	Connecting the EIB universal interface 6119/40 to the ventilation unit's board .....	17
8.3.2.1	Input assignment (BCD encoding) .....	17
8.3.2.2	Output assignment (processed by the EIB interface) .....	18
8.3.2.3	Circuit diagram for wiring without feedback .....	18
8.3.2.4	Circuit diagram for wiring with feedback .....	19
8.4	Fixing the EIB universal interface 6119/40 in the ventilation unit and connecting the EIB bus cable .....	20
8.4.1	Fixing the EIB universal interface 6119/40 to the network connection cover .....	20
8.4.2	Connecting the EIB bus cable to the EIB universal interface 6119/40 .....	20
8.5	Programming the EIB universal interface 6119/40 .....	20
8.6	Final tasks .....	20
<b>9</b>	<b>Connecting the M-WRG-S/Z-KNX (-F, -FC) to the KNX bus cable .....</b>	<b>21</b>
9.1	Overview of the modules .....	21
9.1.1	KNX interface ABB US/U 12.2 .....	21
9.1.2	Board in M-WRG-S/Z-KNX (-F, -FC) ventilation unit .....	21
9.1.3	Position of the assemblies .....	22
9.2	Control cable types (KNX bus cable) .....	22
9.3	Terminal assignment of the KNX interface .....	23
9.3.1	M-WRG-S/Z-KNX ventilation unit .....	23
9.3.2	M-WRG-S/Z-KNX-F ventilation unit .....	23
9.3.3	M-WRG-S/Z-KNX-FC ventilation unit .....	24
9.4	Connecting the KNX bus cable to the KNX interface .....	25
9.5	Configuring the KNX interface .....	26
9.5.1	Assigning the physical address .....	26
9.5.2	Parameter settings for the KNX interface .....	26
9.5.2.1	US/U 12.2 parameters - General .....	26
9.5.2.2	US/U 12.2 parameters, channels A, B, C, D, I, J (switching channels for controlling the ventilation programs in the ventilation unit) .....	27
9.5.2.3	US/U 12.2 parameters, channels E, F, G, H, K, L (feedback channels from ventilation unit) .....	27
9.5.3	Creating the group address .....	28
9.5.4	KNX pushbutton sensors .....	28
9.5.5	Example of linking the KNX pushbutton sensor (provided by the customer) and LED feedback .....	30
9.5.5.1	Linking with reference to the example of "Reduced ventilation" - pushbutton sensor ....	30
9.5.5.2	Linking with reference to the example of "Reduced ventilation" - LED feedback .....	30
9.6	Final tasks .....	31
9.6.1	Fixing the KNX interface to the network connection cover .....	31
9.6.2	Attaching the cover to the ventilation unit .....	31



# 1 Introduction

## 1.1 Notes on this installation manual



This installation manual contains important information that should be followed when connecting the control cables / bus cables to the M-WRG-S/Z-S, M-WRG-S/Z-24, M-WRG-S/Z-EIB and M-WRG-S/Z-KNX (-F, -FC) ventilation units.

- ▶ Read all the instructions carefully before installing to avoid possible risks and mistakes.
- ▶ When installation is complete, give these instructions to the home owner, caretaker or property manager.
- ▶ These instructions are part of the product. Keep the instructions in a safe place for future reference.

### **WARNING**

- ▶ Follow ALL danger and warning instructions and notes on precautionary measures.
- ▶ Read section „2 Safety instructions“ on page 6 carefully.

### **NOTE**

- ▶ Also follow the installation manual M-WRG-S.../M-WRG-K..., part no. 5300-10-01 (see section 1.6 on page 6), for installing the ventilation units.

## 1.2 Description

This manual describes how to connect the control cables / bus cables to the following ventilation units:

- Connecting the M-WRG-S/Z-S to the control cable (see section 6 from page 8)
- Connecting the M-WRG-S/Z-24 to the control cable (see section 7 from page 13)
- Connecting the M-WRG-S/Z-EIB to the EIB universal interface 6119/40 and EIB bus cable (see section 8 from page 16)
- Connecting the M-WRG-S/Z-KNX (-F, -FC) to the KNX bus cable (see section 9 from page 21)

## 1.3 Target group

The activities described in this manual must only be carried out by technicians with the following qualifications:

- Training in the installation and commissioning of electrical devices
- Training in electrical hazards and the local safety requirements
- Knowledge of the relevant standards and directives
- Knowledge and observance of this document and all the safety instructions

## 1.4 Revision index

Edition	Manual	Date
First edition	Installation manual M-WRG-S/Z-S, M-WRG-S/Z-24, M-WRG-S/Z-EIB and M-WRG-S/Z-KNX (-F, -FC)	Week 22/2017 EN

## 1.5 Explanation of the symbols used

- ▶ This symbol indicates an action to be taken.
- This symbol indicates a list.

## 1.6 Supplementary documents

Manual	Part no.
Installation manual M-WRG-S.../M-WRG-K...	5300-10-01

# 2 Safety instructions

This manual contains notes that you must follow for your own personal safety and to avoid injury and damage to property. They are highlighted by warning triangles and are shown as follows according to the level of danger.

## 2.1 Hazard classification

### **DANGER**

The signal word designates a hazard with a **high** degree of risk which, if it is not avoided, will result in death or severe injury.

### **WARNING**

The signal word designates a hazard with a **medium** degree of risk which, if it is not avoided, will result in death or severe injury.

### **CAUTION**

The signal word designates a hazard with a **low** degree of risk which, if it is not avoided, could result in minor or moderate injury.

### **NOTE**

A note as used in this manual contains important information about the product or about a part of the manual to which particular attention should be paid.

## 2.2 Notes on using the ventilation units safely

### CAUTION

#### — Starting and using the ventilation unit

- ▶ Do not start up the ventilation unit until it is fully installed.
- ▶ Always make sure that the cover is closed and locked in place before using the ventilation unit.

## 2.3 Intended use

- The intended use includes compliance with all the notes in the installation manual.
- The ventilation unit must not be operated without air filters.
- For any use contrary to the intended use, Meltem Wärmerückgewinnung GmbH & Co. KG shall accept no liability for any damage that may occur and offers no warranty that the components will work perfectly and correctly.

## 3 Warranty and liability

The warranty and liability shall be void if the ventilation unit is not connected as described in this installation manual.

## 4 Tools and equipment required

- Set of cross-head screwdrivers
- Set of slotted screwdrivers

## 5 Codes for designation of wire colours

Colour	Code as per IEC 60757
Black	BK
Brown	BN
Red	RD
Orange	OG
Yellow	YE
Green	GN
Blue	BU
Violet	VT
Grey	GY
White	WH

Table 1: Codes for designation of wire colours

## 6 Connecting the M-WRG-S/Z-S to the control cable

### NOTE

The installation must be carried out in accordance with the generally acknowledged rules of technology.

### 6.1 Overview of the modules

#### 6.1.1 Board in M-WRG-S/Z-S ventilation unit

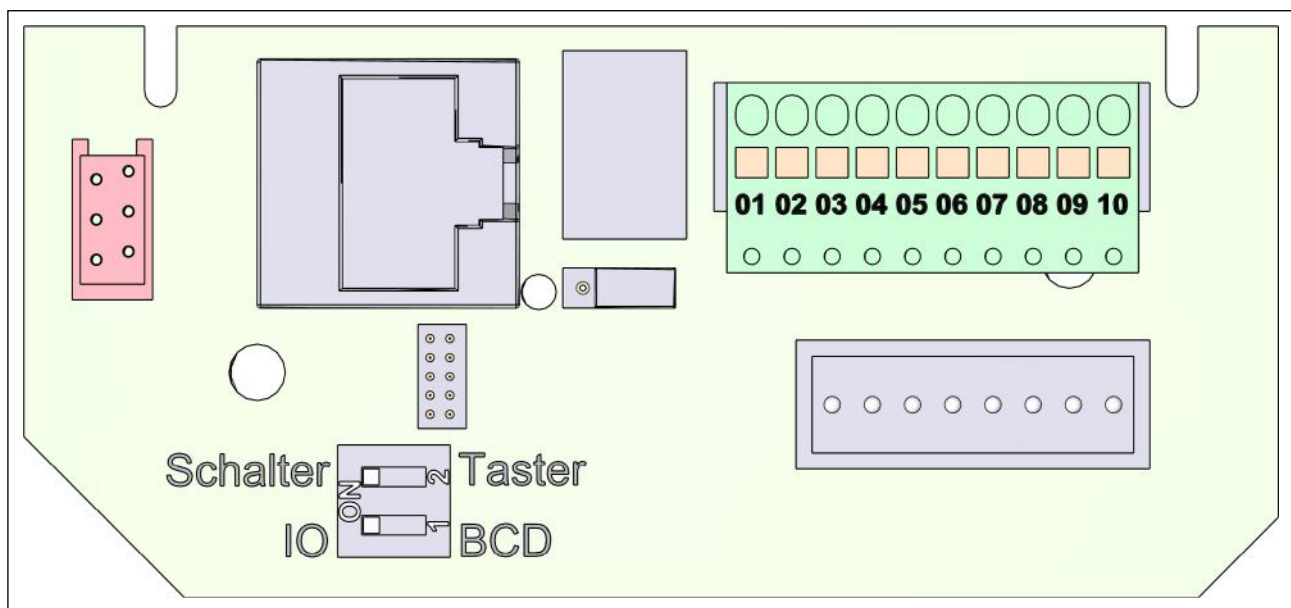


Fig. 1: Board in M-WRG-S/Z-S ventilation unit

### NOTE

- The DIP switches and jumpers on the board are preset at the factory.
  - ▶ Do not change the position of any DIP switches or jumpers.
- You will find the terminal assignment for the ventilation unit in section 6.3.3.1 on page 10.

#### 6.1.2 Three-step rotary switch with zero position

To operate the ventilation units, you will need a three-step rotary switch with zero position on site. A suitable example is available from BUSCH-JAEGER, part no. 2710 U, order no. 1101-0-0918.

The three-step rotary switch allows you to activate ventilation level I, II or III. In the zero position, the ventilation unit is in standby mode.

#### 6.1.3 Optional pushbutton for intensive ventilation and optional LED for feedback

You can start the ventilation unit's intensive ventilation level with an optional pushbutton provided by the customer.

If required, you can use an LED to display when the intensive ventilation is active.



## 6.2 Control cable types

Part no.	Type of ventilation unit	Control cable types
5016-1-0	M-WRG-S/Z-S	J-Y (St) Y 4 x 2 x 0.6 mm <sup>2</sup> or J-Y (St) Y 4 x 2 x 0.8 mm <sup>2</sup>

Table 2: Allocation of ventilation unit type and control cable type

## 6.3 Connecting the control cable to the ventilation unit

### 6.3.1 Removing the cover from the ventilation unit

- ▶ Using both thumbs, press the two latches (item 1 in Fig. 2) on the bottom of the ventilation unit. The cover will come away.
- ▶ At the same time, push your index fingers into the gap between the cover and housing, and lift the cover away from the housing.

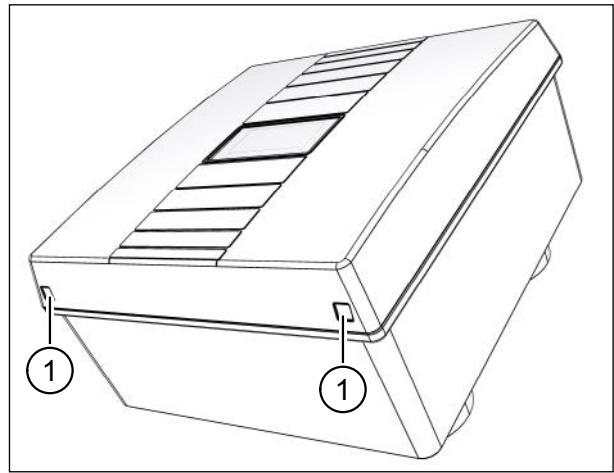


Fig. 2: Removing the cover from the ventilation unit

### 6.3.2 Removing the network connection cover

- ▶ Press the latch (item 1 in Fig. 3) of the network connection cover (item 2 in Fig. 3) gently towards the middle of the unit, and lift up the network connection cover.

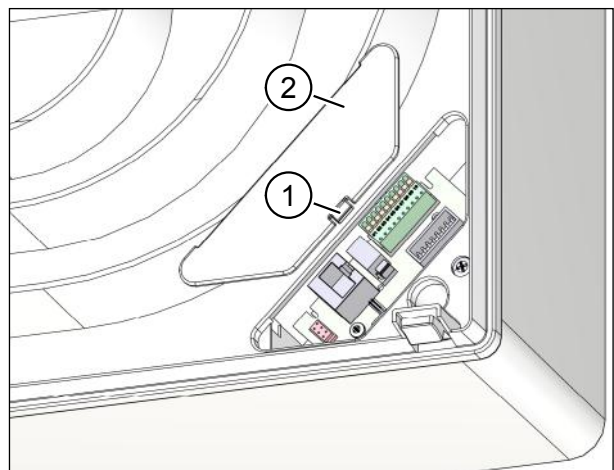


Fig. 3: Removing the network connection cover

### 6.3.3 Connecting the control cable and optional pushbutton/LED to the ventilation unit boards

- ▶ Connect the control cable and optional pushbutton/LED to the M-WRG-S/Z-S ventilation unit boards (see terminal assignment in section 6.3.3.1 and circuit diagram in Fig. 4 on page 11).

#### 6.3.3.1 Terminal assignment

Terminal on board	Terminal on BUSCH-JAEGER 2710 U three-step rotary switch	Optional pushbutton for intensive ventilation	Optional LED for intensive ventilation feedback (24 VDC)	Function	Wire colour
01			X (cathode)	0 V	
02	2	X		+24 V DC	
03	1			Ventilation level I (set to 15 m <sup>3</sup> /h at the factory)	
04	5			Ventilation level II (set to 30 m <sup>3</sup> /h at the factory)	
05	3			Ventilation level III (set to 60 m <sup>3</sup> /h at the factory)	
06		X		Intensive ventilation (set to 100 m <sup>3</sup> /h at the factory)	
07					
08					
09					
10			X (anode)	Intensive ventilation feedback	

Table 3: Terminal assignment of the control cable for M-WRG-S/Z-S ventilation unit

### 6.3.3.2 Circuit diagram

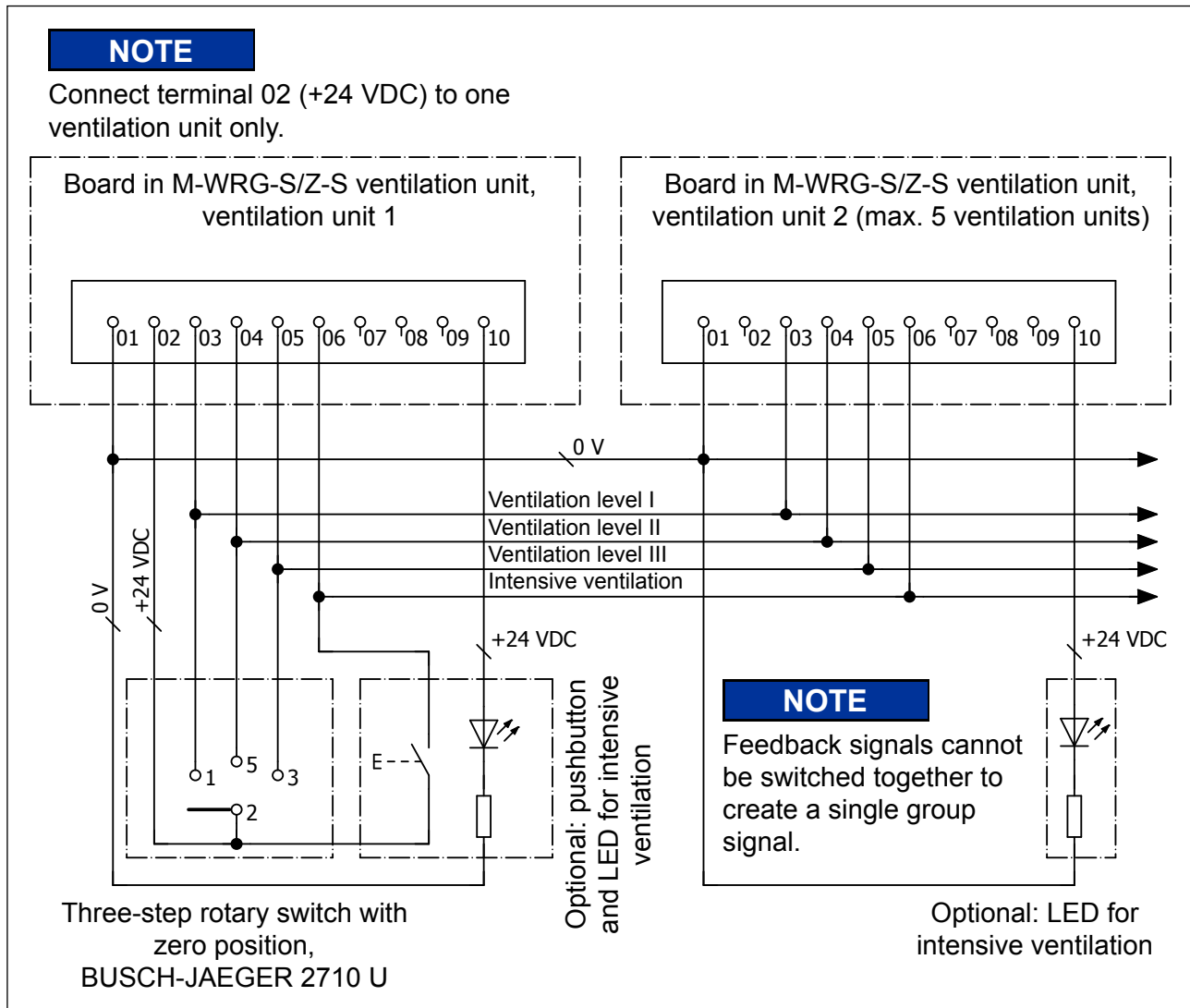


Fig. 4: Circuit diagram for wiring the M-WRG-S/Z-S ventilation unit with control cable and optional pushbutton/LED

#### NOTE

- Up to five M-WRG-S/Z-S ventilation units may be connected to the three-step rotary switch and intensive ventilation pushbutton. No separate power supply is needed.
- Please note the following if you intend to connect more than one M-WRG-S/Z-S ventilation unit to the three-step rotary switch:
  - The terminals 01 (0 V) of all ventilation units must be connected to one another (see Fig. 4).
  - The terminal 02 (+24 V DC) of the three-step rotary switch may only be connected to the terminal 02 of a single ventilation unit (see Fig. 4).
- The feedback from multiple ventilation units for intensive ventilation cannot be combined in a single group signal.
- The total length of the control cable must not exceed 50 m.

### 6.3.4 Inserting the network connection cover and attaching the cover to the ventilation unit

- ▶ Re-insert the network connection cover (see item 2 in Fig. 3 on page 9).
- ▶ Hold the cover of the ventilation unit with both hands and tilt the top edge of the cover towards the ventilation unit.
- ▶ Insert the tabs of the cover into the openings (item 1 in Fig. 5) on the top of the ventilation unit.
- ▶ Lightly press the bottom edge of the cover against the ventilation unit until you hear the cover snap in place.

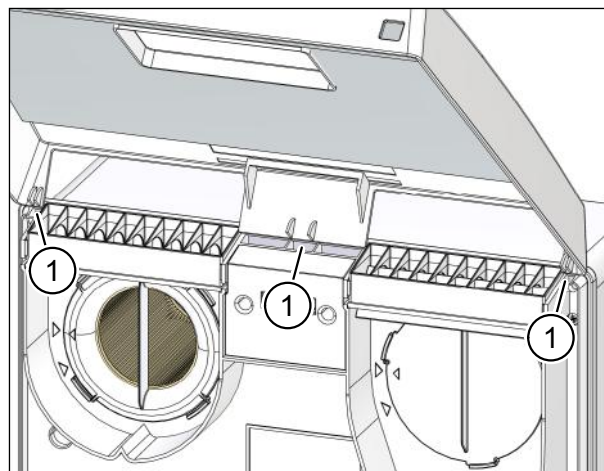


Fig. 5: Cover pivot points

## 7 Connecting the M-WRG-S/Z-24 to the control cable

### NOTE

The installation must be carried out in accordance with the generally acknowledged rules of technology.

### 7.1 Overview of the modules

#### 7.1.1 Board in M-WRG-S/Z-24 ventilation unit

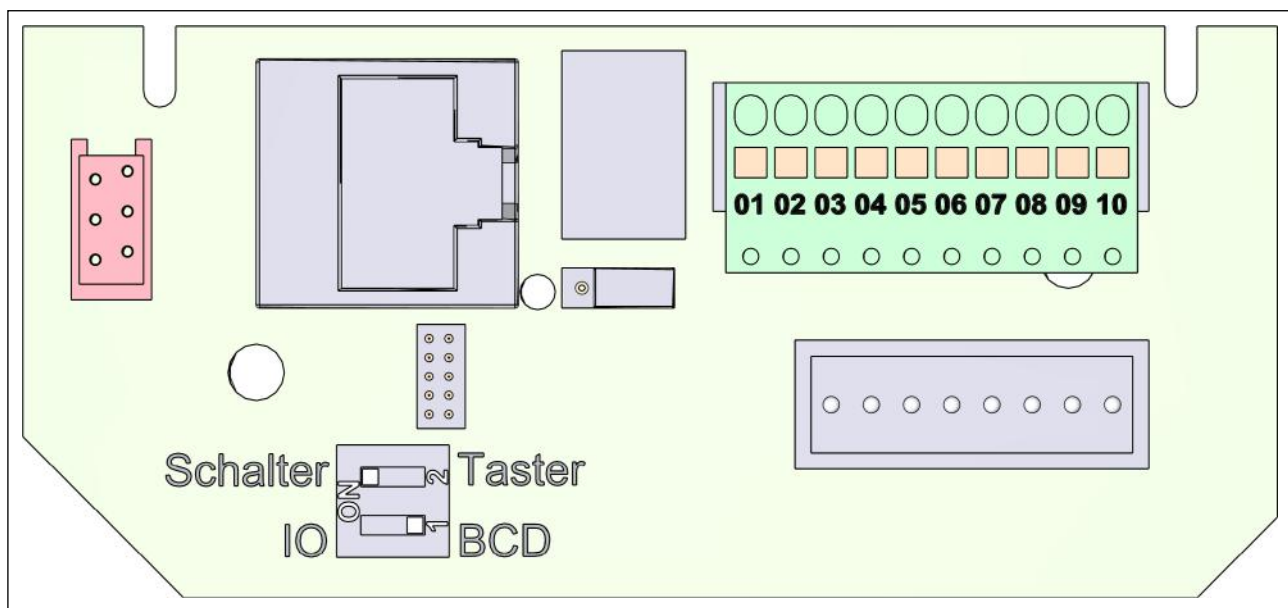


Fig. 6: Board in M-WRG-S/Z-24 ventilation unit

### NOTE

- The DIP switches and jumpers on the board are preset at the factory.
  - ▶ Do not change the position of any DIP switches or jumpers.

### 7.2 Control cable types

Part no.	Type of ventilation unit	Control cable types
5016-2-1	M-WRG-S/Z-24	J-Y (St) Y 4 x 2 x 0.6 mm <sup>2</sup> or J-Y (St) Y 4 x 2 x 0.8 mm <sup>2</sup>

Table 4: Allocation of ventilation unit type and control cable type

### 7.3 Connecting the control cable to the ventilation unit

#### 7.3.1 Removing the cover from the ventilation unit and removing the network connection cover

- ▶ Remove the cover from the ventilation unit (see section 6.3.1 on page 9).
- ▶ Remove the network connection cover (see section 6.3.2 on page 9).

### 7.3.2 Connecting the control cable to the ventilation unit board

- ▶ Connect the control cable to the M-WRG-S/Z-24 ventilation unit board (see terminal assignment in sections 7.3.2.1 and 7.3.2.2 and circuit diagram in section 7.3.2.3 on page 15).

#### 7.3.2.1 Input assignment (BCD encoding)

BCD	E1 to 03 Wire colour:	E2 to 04 Wire colour:	E3 to 05 Wire colour:	E4 to 06 Wire colour:	Function	
0					Operation with 3-way stepping switch on ventilation unit	
1					Standby mode	
2					Ventilation level: 01	
3					Ventilation level: 02	
4					Ventilation level: 03	
5					Ventilation level: 04	
6					Ventilation level: 05	
7					Ventilation level: 06	
8					Ventilation level: 07	
9					Ventilation level: 08	
A					Ventilation level: 09	
B					Ventilation level: 10	
C					Supply air VL: 01	Extract air VL: 05
D					Supply air VL: 01	Extract air VL: 10
E					Supply air VL: 05	Extract air VL: 01
F					Supply air VL: 10	Extract air VL: 01

Table 5: Input assignment (BCD encoding) for M-WRG-S/Z-24 ventilation unit

#### 7.3.2.2 Output assignment

Output	State	Function
A1 to 07 Wire colour:	0 V	Operation with 3-way stepping switch on ventilation unit
	+24 VDC	Ventilation unit is controlled via building control system
A2 to 08: Wire colour:	0 V	Frost protection inactive
	+24 VDC	Frost protection active

Table 6: Output assignment for the M-WRG-S/Z-24 ventilation unit

### 7.3.2.3 Circuit diagram

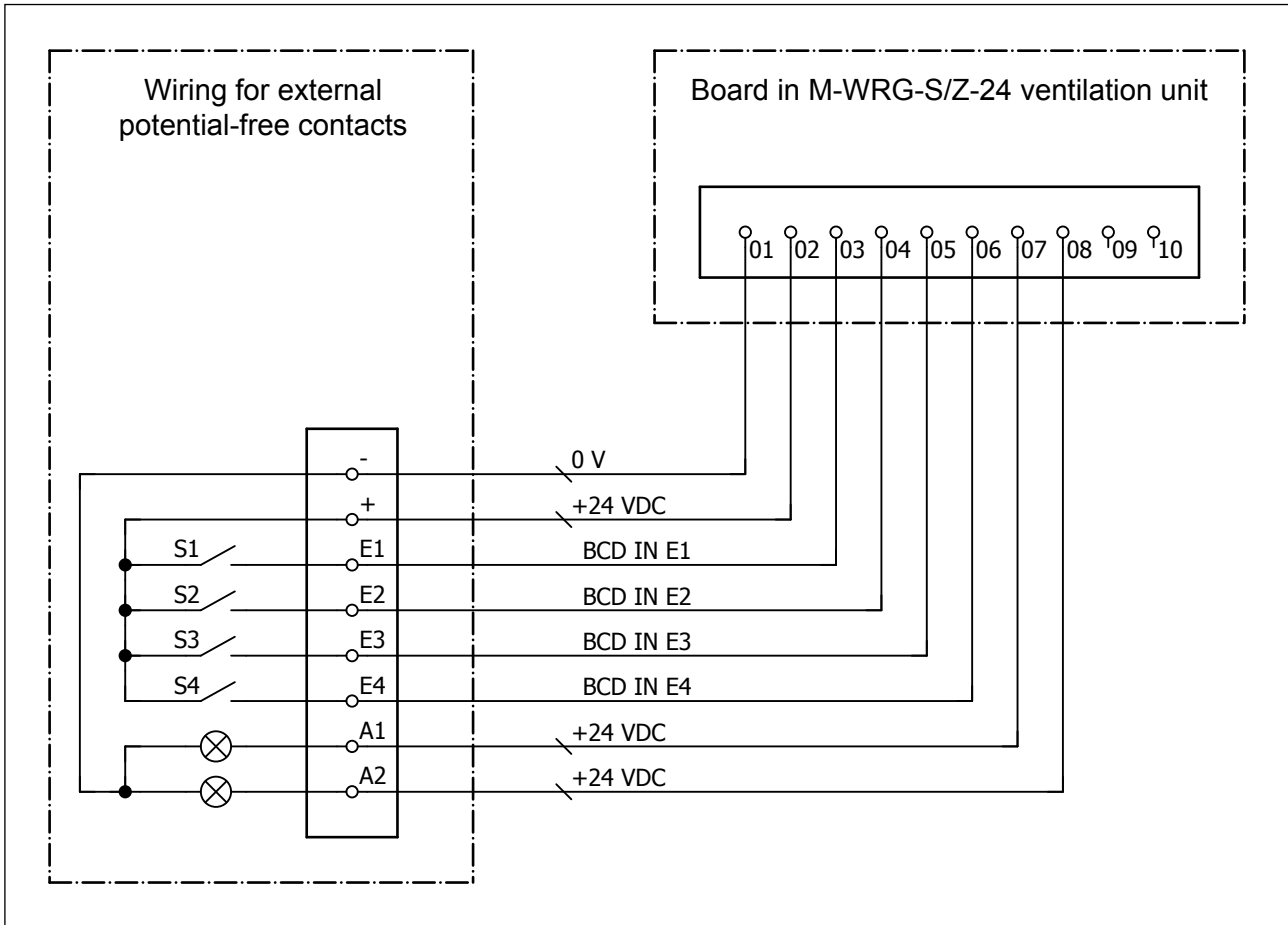


Fig. 7: Circuit diagram for wiring the M-WRG-S/Z-24 ventilation unit with control cable

### 7.3.3 Inserting the network connection cover and attaching the cover to the ventilation unit

- ▶ Insert the network connection cover once more and attach the cover to the ventilation unit (see section 6.3.4 on page 12).

## 8 Connecting the M-WRG-S/Z-EIB to the EIB universal interface 6119/40 and EIB bus cable

### NOTE

The installation must be carried out in accordance with the generally acknowledged rules of technology.

### 8.1 Overview of the modules

#### 8.1.1 Board in M-WRG-S/Z-EIB ventilation unit

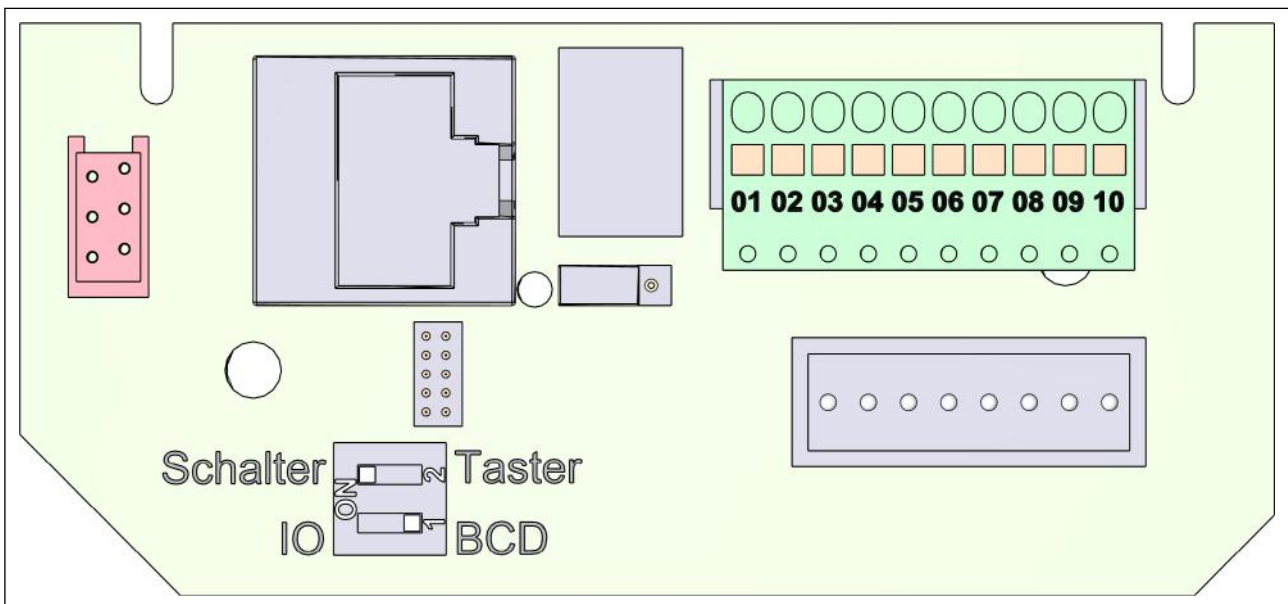


Fig. 8: Board in M-WRG-S/Z-EIB ventilation unit

### NOTE

- The DIP switches and jumpers on the board are preset at the factory.
  - ▶ Do not change the position of any DIP switches or jumpers.

#### 8.1.2 EIB universal interface 6119/40

To control the M-WRG-S/Z-EIB ventilation unit you will need an EIB universal interface with four connections that can be configured as inputs or outputs, e.g. from BUSCH-JAEGER, part no. 6119/40, order no. 6133-0-0151.

You will need an EIB universal interface with four outputs and two inputs in order to activate all the ventilation unit functions and signal both feedbacks.

### NOTE

The EIB universal interface 6119/40 is not one of the items supplied.



## 8.2 Control cable types (EIB bus cable)

Part no.	Type of ventilation unit	Control cable types (EIB bus cable)
5016-2-2	M-WRG-S/Z-EIB	J-Y (St) Y 2 x 2 x 0.8 mm <sup>2</sup> or EIB-Y (St) Y 2 x 2 x 0.8 mm <sup>2</sup>

Table 7: Allocation of ventilation unit type and control cable type (EIB bus cable)

## 8.3 Connecting the EIB universal interface 6119/40 to the ventilation unit

### 8.3.1 Removing the cover from the ventilation unit and removing the network connection cover

- ▶ Remove the cover from the ventilation unit (see section 6.3.1 on page 9).
- ▶ Remove the network connection cover (see section 6.3.2 on page 9).

### 8.3.2 Connecting the EIB universal interface 6119/40 to the ventilation unit's board

- ▶ Connect the EIB universal interface 6119/40 (item 1 in Fig. 9) to the board of the ventilation unit (item 2 in Fig. 9).
  - You will find the terminal assignments for the inputs and outputs on the board in the ventilation unit in sections 8.3.2.1 and 8.3.2.2.
  - The circuit diagram in section 8.3.2.3 on page 18 shows the wiring without feedback. The circuit diagram in section 8.3.2.4 on page 19 shows the wiring with feedback.

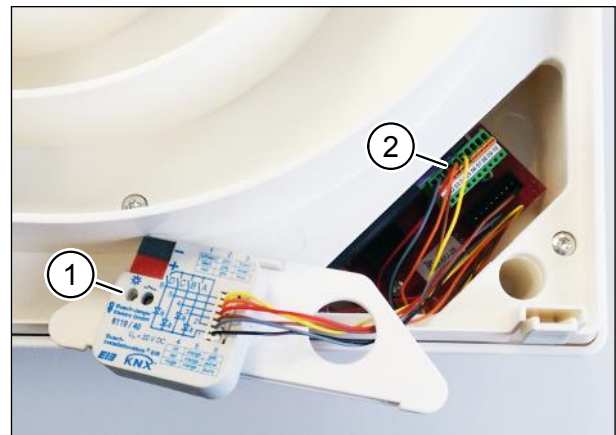


Fig. 9: Connecting the EIB universal interface to the board

#### 8.3.2.1 Input assignment (BCD encoding)

BCD	A to 03 / BN	B to 04 / RD	C to 05 / OG	D to 06 / YE	Function
0					Operation with 3-way stepping switch on ventilation unit
1					Standby mode
2					Ventilation level: 01
3					Ventilation level: 02
4					Ventilation level: 03
5					Ventilation level: 04
6					Ventilation level: 05
7					Ventilation level: 06
8					Ventilation level: 07
9					Ventilation level: 08
A					Ventilation level: 09

BCD	A to 03 / BN	B to 04 / RD	C to 05 / OG	D to 06 / YE	Function	
B	●—●	●—●	●—○	●—●	Ventilation level: 10	
C	○—●	○—●	●—●	●—●	Supply air VL: 01	Extract air VL: 05
D	●—●	○—●	●—●	●—●	Supply air VL: 01	Extract air VL: 10
E	○—●	●—●	●—●	●—●	Supply air VL: 05	Extract air VL: 01
F	●—●	●—●	●—●	●—●	Supply air VL: 10	Extract air VL: 01

Table 8: Input assignment (BCD encoding) for M-WRG-S/Z-EIB ventilation unit

### 8.3.2.2 Output assignment (processed by the EIB interface)

Output	State	Function
A1 to 07 Wire colour:	0 V	Operation with 3-way stepping switch on ventilation unit
	+5 VDC	Ventilation unit is controlled via building control system
A2 to 08 Wire colour:	0 V	Frost protection inactive
	+5 VDC	Frost protection active

Table 9: Output assignment for the M-WRG-S/Z-EIB ventilation unit

### 8.3.2.3 Circuit diagram for wiring without feedback

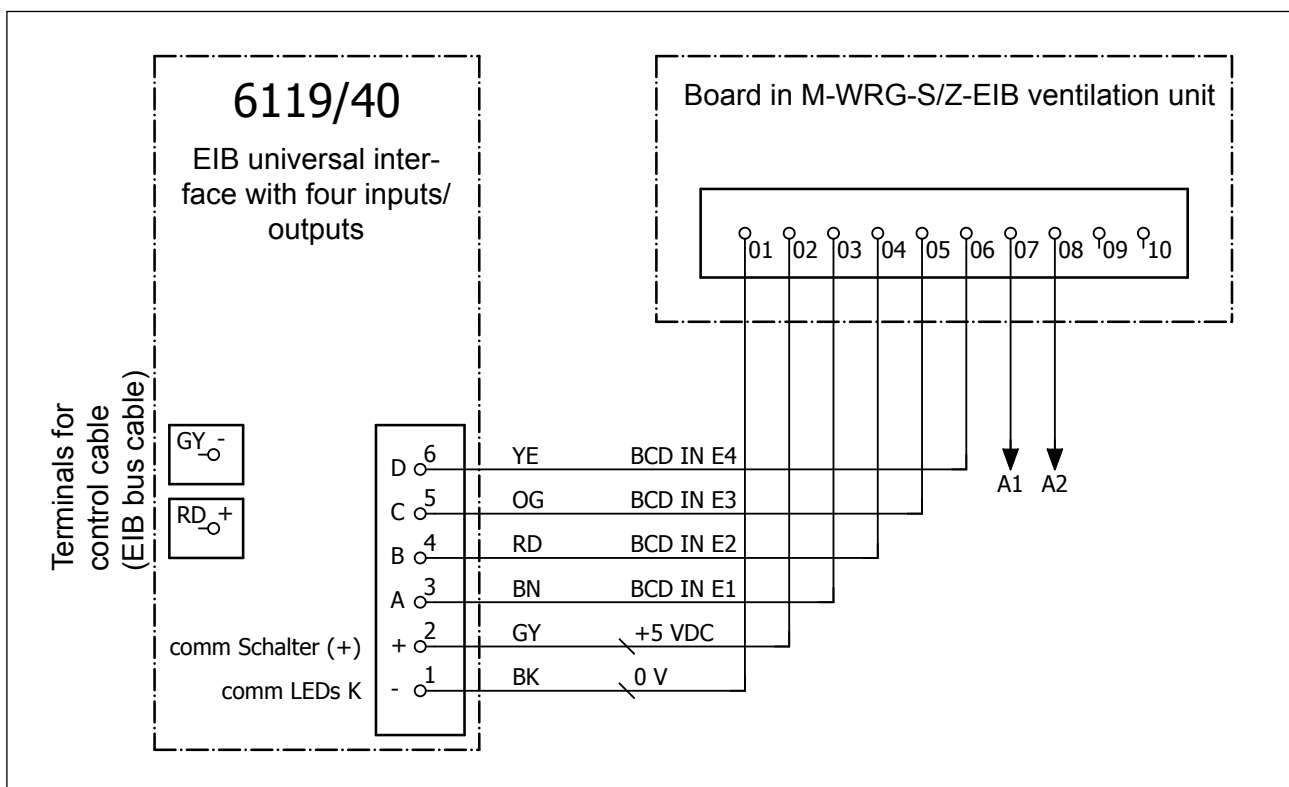


Fig. 10: Circuit diagram for wiring the M-WRG-S/Z-EIB ventilation unit without feedback

### 8.3.2.4 Circuit diagram for wiring with feedback

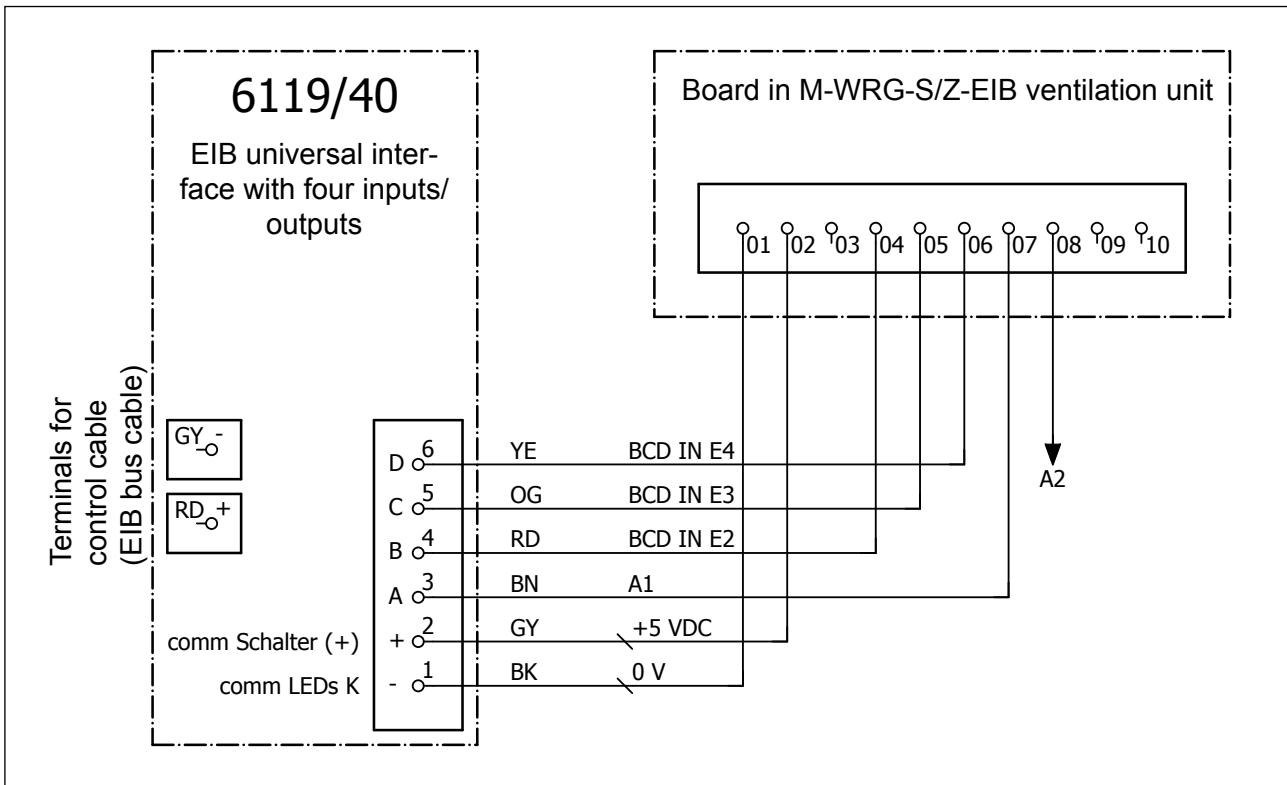


Fig. 11: Circuit diagram for wiring the M-WRG-S/Z-EIB ventilation unit with feedback

#### NOTE

- With this wiring, signal A1 from terminal 7 on the board in the ventilation unit is connected to terminal A on the EIB universal interface 6119/40. Terminal A is configured as an input. The consequence of this is that only those functions in which terminal A is interpreted as open can be activated. In this case, this would be the functions with BCD code 0, 2, 4, 6, 8, A, C, E (see BCD encoding in section 8.3.2.1 on page 17).
- Note which functions are available if the feedback is wired at a terminal other than terminal A.

## 8.4 Fixing the EIB universal interface 6119/40 in the ventilation unit and connecting the EIB bus cable

### 8.4.1 Fixing the EIB universal interface 6119/40 to the network connection cover

- ▶ Thread the EIB bus cable through the opening (item 1 in Fig. 12) in the network connection cover.
- ▶ Re-insert the network connection cover (item 2 in Fig. 12).
- ▶ Pull the glue dot off the Velcro dot (item 3 in Fig. 12).
- ▶ Fix the EIB universal interface to the Velcro dot.

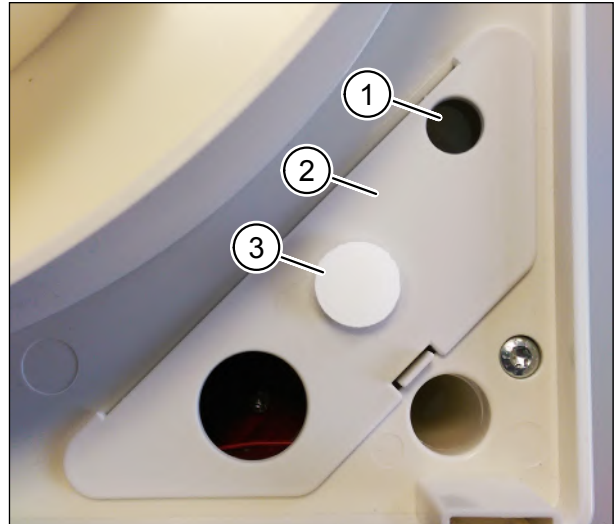


Fig. 12: Fixing the EIB universal interface 6119/40 to the Velcro dot

### 8.4.2 Connecting the EIB bus cable to the EIB universal interface 6119/40

- ▶ Connect the EIB bus cable to the EIB universal interface 6119/40, ensuring that the polarity is correct:
  - ▶ Connect the “+” bus wire to the red terminal (item 1 in Fig. 13).
  - ▶ Connect the “-” bus wire to the grey terminal (item 2 in Fig. 13).

#### NOTE

The EIB universal interface will not work if the bus cables are connected with the wrong polarity.

## 8.5 Programming the EIB universal interface 6119/40

- ▶ The EIB universal interface 6119/40 must be programmed by the electrician on site.

## 8.6 Final tasks

- ▶ Attach the cover to the ventilation unit (see section 6.3.4 on page 12).

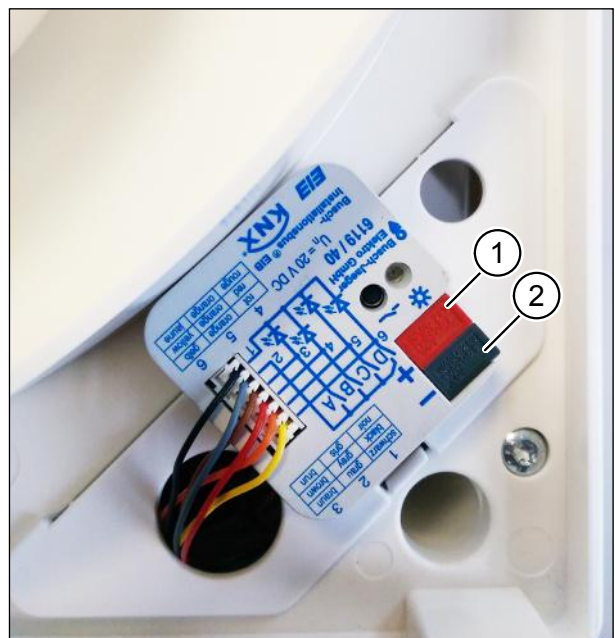


Fig. 13: Connecting the EIB bus cable to the EIB universal interface 6119/40

## 9 Connecting the M-WRG-S/Z-KNX (-F, -FC) to the KNX bus cable

### NOTE

- The installation must be carried out in accordance with the generally acknowledged rules of technology.

### 9.1 Overview of the modules

#### 9.1.1 KNX interface ABB US/U 12.2

Item	Designation
1	KNX interface ABB US/U 12.2
2	Terminal for “+” bus wire
3	Terminal for “-” bus wire
4	Programming button
5	Cable wires to board with terminal blocks

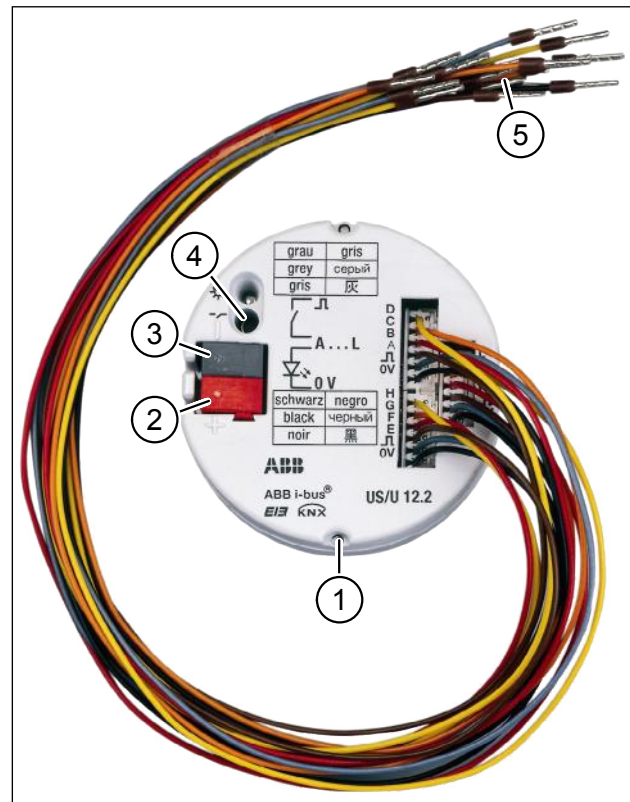


Fig. 14: KNX interface ABB US/U 12.2

#### 9.1.2 Board in M-WRG-S/Z-KNX (-F, -FC) ventilation unit

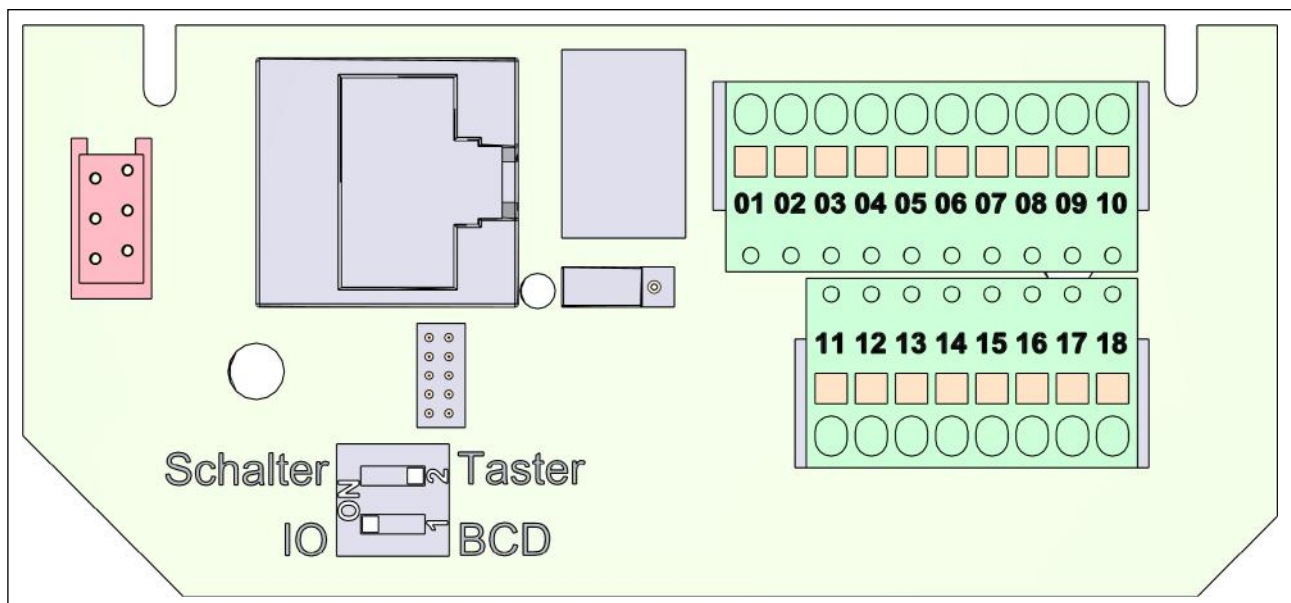


Fig. 15: Board in M-WRG-S/Z-KNX (-F, -FC) ventilation unit



**NOTE**

- The DIP switches and jumpers on the board are preset at the factory.
  - ▶ Do not change the position of any DIP switches or jumpers.
- The KNX interface ABB US/U 12.2 was connected to the terminal blocks on the board at the factory.
- You will find the terminal assignment for the ventilation unit in Table 11, Table 12 or Table 13 in section 9.3 from page 23.

**9.1.3 Position of the assemblies**

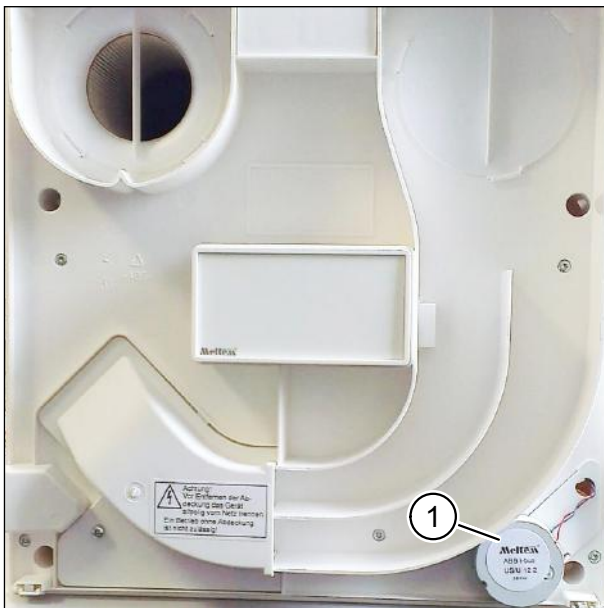


Fig. 16: KNX interface

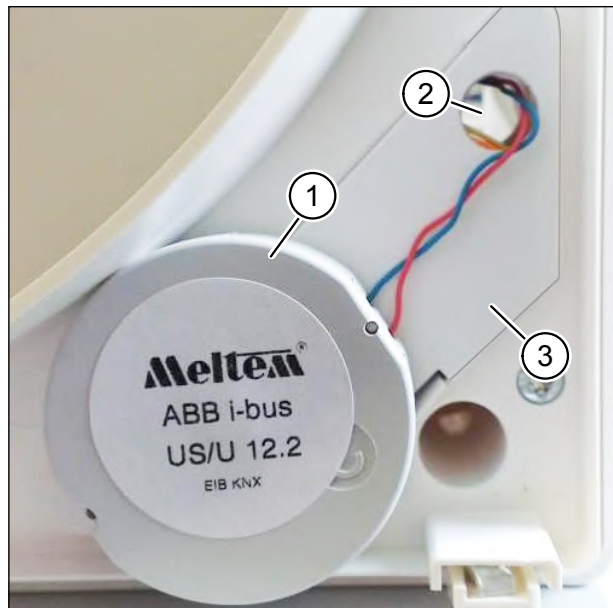


Fig. 17: KNX interface and board with terminal blocks

Item	Designation
1	KNX interface ABB US/U 12.2

Item	Designation
1	KNX interface ABB US/U 12.2
2	Opening for KNX bus cable
3	Network connection cover

**9.2 Control cable types (KNX bus cable)**

Part no.	Type of ventilation unit	Control cable types (KNX bus cable)
5016-1-2	M-WRG-S/Z-KNX	J-Y (St) Y 2 x 2 x 0.8 mm <sup>2</sup> or EIB-Y (St) Y 2 x 2 x 0.8 mm <sup>2</sup>
5016-1-2-1	M-WRG-S/Z-KNX-F	
5016-1-2-2	M-WRG-S/Z-KNX-FC	

Table 10: Allocation of ventilation unit type and control cable type (KNX bus cable)

## 9.3 Terminal assignment of the KNX interface

### 9.3.1 M-WRG-S/Z-KNX ventilation unit

Terminal on board	KNX interface ABB US/U 12.2		Function
	Terminal designation	Wire colour	
1	0V	BK	
2	<b>⏏</b>	GY	
3	A	BN	Reduced ventilation
4	B	RD	Normal ventilation
5	C	OG	Increased ventilation
6	D	YE	Intensive ventilation
7	E	BN	Reduced ventilation LED
8	F	RD	Normal ventilation LED
9	G	OG	Increased ventilation LED
10	H	YE	Intensive ventilation LED
11	I	BN	Supply air operation
12	J	RD	Extract air operation
13			
14			
15	K	OG	Supply air operation LED
16	L	YE	Exhaust air operation LED
17			
18			

Table 11: Terminal assignment of KNX interface for M-WRG-S/Z-KNX ventilation unit

### 9.3.2 M-WRG-S/Z-KNX-F ventilation unit

Terminal on board	KNX interface ABB US/U 12.2		Function
	Terminal designation	Wire colour	
1	0V	BK	
2	<b>⏏</b>	GY	
3	A	BN	Reduced ventilation
4	B	RD	Normal ventilation
5	C	OG	Increased ventilation
6	D	YE	Intensive ventilation
7	E	BN	Reduced ventilation LED
8	F	RD	Normal ventilation LED
9	G	OG	Increased ventilation LED

Terminal on board	KNX interface ABB US/U 12.2		Function
	Terminal designation	Wire colour	
10	H	YE	Intensive ventilation LED
11	I	BN	Supply air operation
12			
13	J	RD	Humidity control
14			
15	K	OG	Supply air operation LED
16			
17	L	YE	Humidity control LED
18			

Table 12: Terminal assignment of KNX interface for M-WRG-S/Z-KNX-F ventilation unit

### 9.3.3 M-WRG-S/Z-KNX-FC ventilation unit

Terminal on board	KNX interface ABB US/U 12.2		Function
	Terminal designation	Wire colour	
1	0V	BK	
2	<b>⏏</b>	GY	
3	A	BN	Reduced ventilation
4	B	RD	Normal ventilation
5	C	OG	Increased ventilation
6	D	YE	Intensive ventilation
7	E	BN	Reduced ventilation LED
8	F	RD	Normal ventilation LED
9	G	OG	Increased ventilation LED
10	H	YE	Intensive ventilation LED
11			
12			
13	I	BN	Humidity control
14	J	RD	Mixed gas/CO <sub>2</sub> control
15			
16	K	OG	Humidity control LED
17	L	YE	Mixed gas/CO <sub>2</sub> control LED
18			

Table 13: Terminal assignment of KNX interface for M-WRG-S/Z-KNX-FC ventilation unit



## 9.4 Connecting the KNX bus cable to the KNX interface

### NOTE

- The KNX interface ABB US/U 12.2 was connected to the terminal blocks on the board at the factory.
  - The KNX interface is attached to the network connection cover of the ventilation unit with a Velcro dot.
  - The KNX interface must be detached from the network connection cover in order to connect it to the KNX bus cable and for programming.
  - The KNX interface must be programmed by the electrician on site.
- 
- ▶ Remove the cover from the ventilation unit (see section 6.3.1 on page 9).
  - ▶ Detach the KNX interface (item 1 in Fig. 18) from the network connection cover (item 4 in Fig. 18).
  - ▶ Connect the KNX bus cable to the KNX interface, ensuring that the polarity is correct:
    - ▶ Connect the “+” bus wire to the red terminal (item 2 in Fig. 18).
    - ▶ Connect the “-” bus wire to the grey terminal (item 3 in Fig. 18).

### NOTE

The KNX interface will not work if the bus cables are connected with the wrong polarity.

### NOTE

The board with the terminal blocks is located behind the network connection cover (item 4 in Fig. 18).

- ▶ Remove the network connection cover if you want to check the wiring between the KNX interface and the terminals. You will find the terminal assignment for the ventilation unit in Table 11, Table 12 or Table 13 in section 9.3 from page 23.

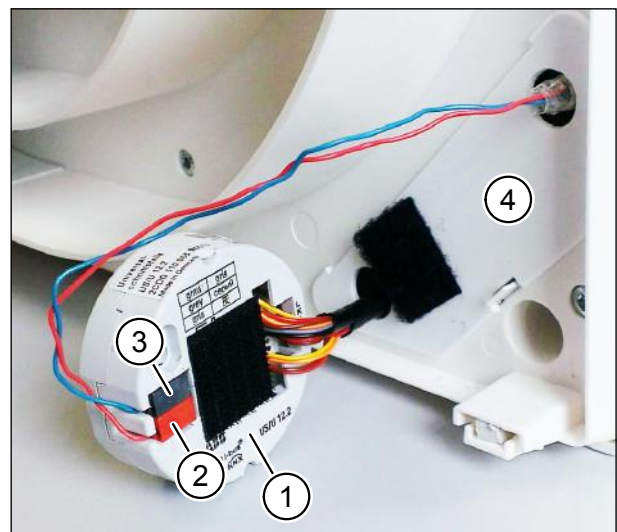


Fig. 18: Connecting the KNX bus cable to the KNX interface

## 9.5 Configuring the KNX interface

### NOTE

- You can download the applications for the KNX interface ABB US/U 12.2 from the download area at [www.meltem.com](http://www.meltem.com) (see also the QR code).
- Programming is possible under the following ETS versions:
  - ETS3
  - ETS4
- To program the KNX interface, press the programming button (see item 4 in Fig. 14 on page 21). First detach the KNX interface from the network connection cover (see item 4 in Fig. 18 on page 25).

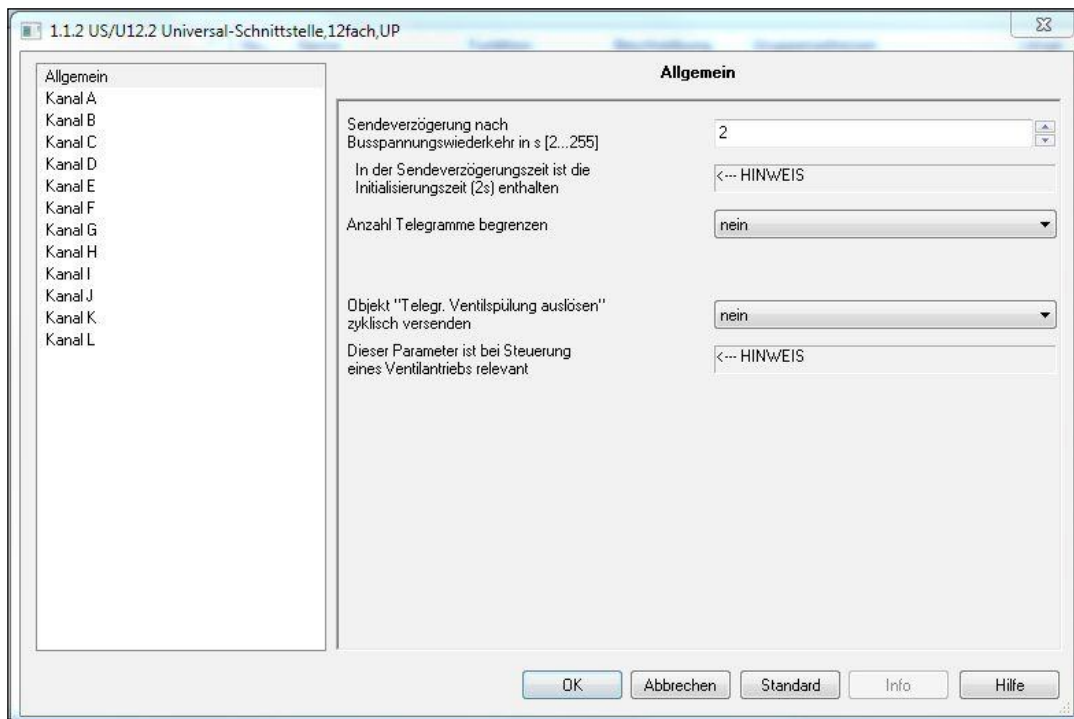


### 9.5.1 Assigning the physical address

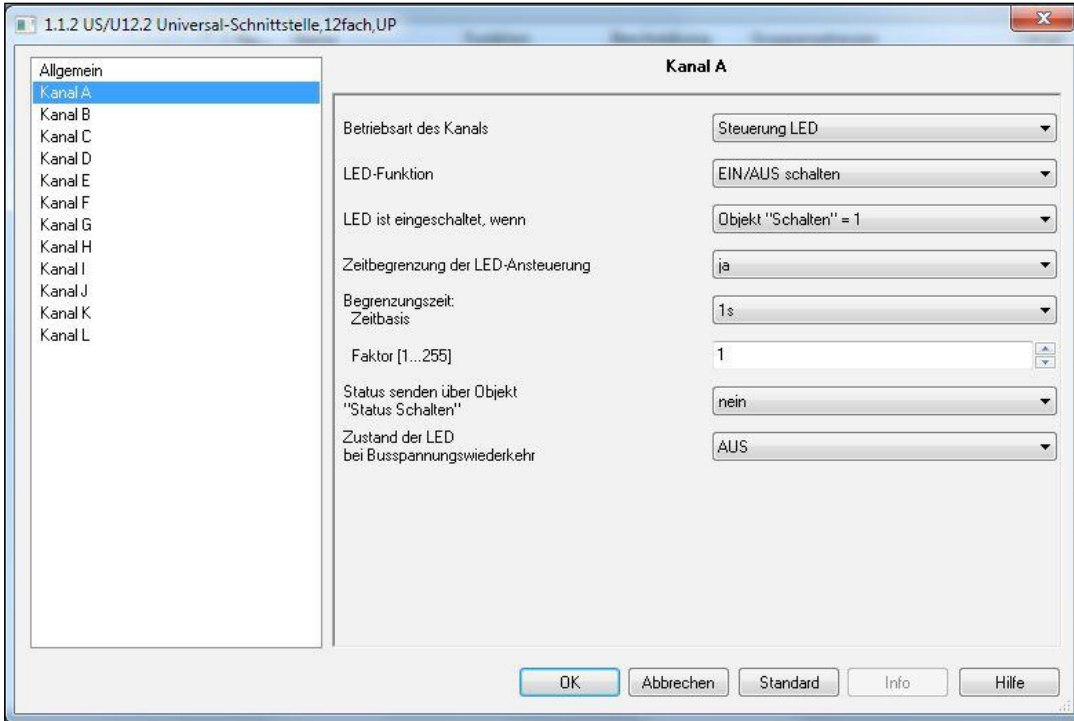
The physical address of the ABB i-bus<sup>®</sup> IP interface is assigned via the ETS and the programming button on the KNX interface. The red programming LED lights up when the programming button is pressed. It goes out as soon as the ETS has assigned the physical address or the programming button is pressed again.

### 9.5.2 Parameter settings for the KNX interface

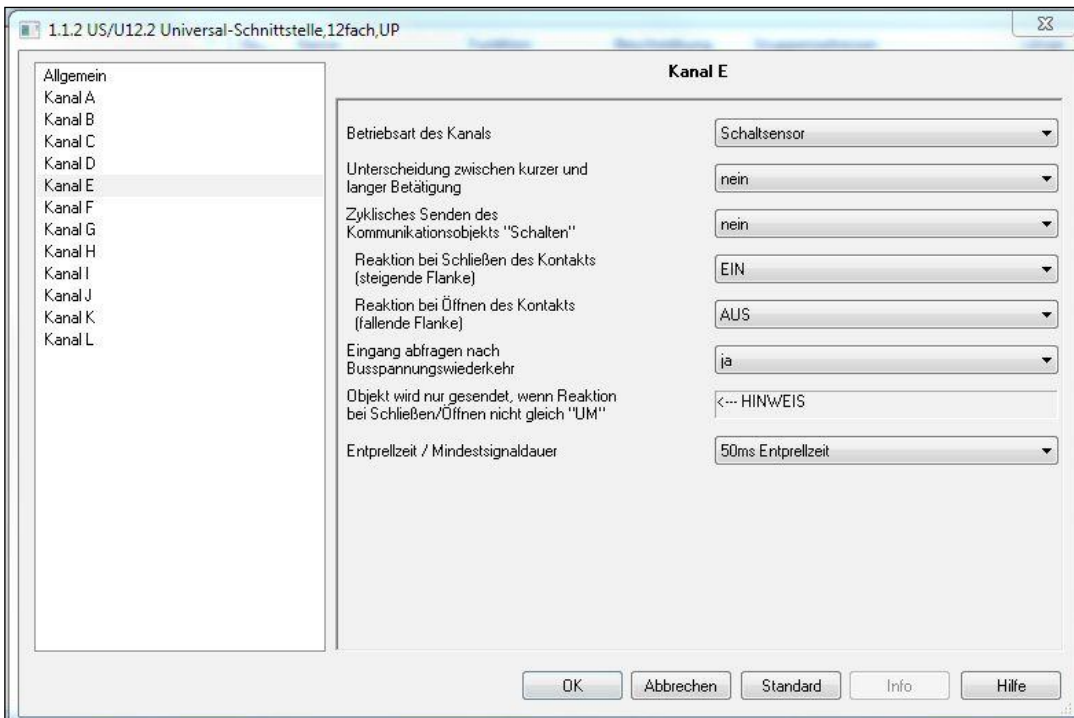
#### 9.5.2.1 US/U 12.2 parameters - General



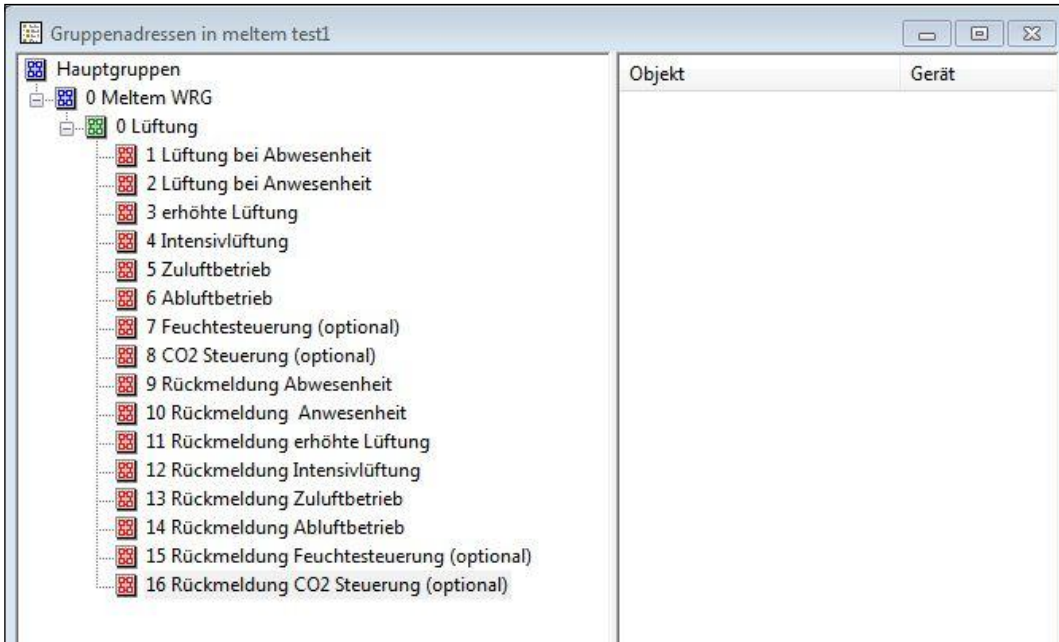
### 9.5.2.2 US/U 12.2 parameters, channels A, B, C, D, I, J (switching channels for controlling the ventilation programs in the ventilation unit)



### 9.5.2.3 US/U 12.2 parameters, channels E, F, G, H, K, L (feedback channels from ventilation unit)

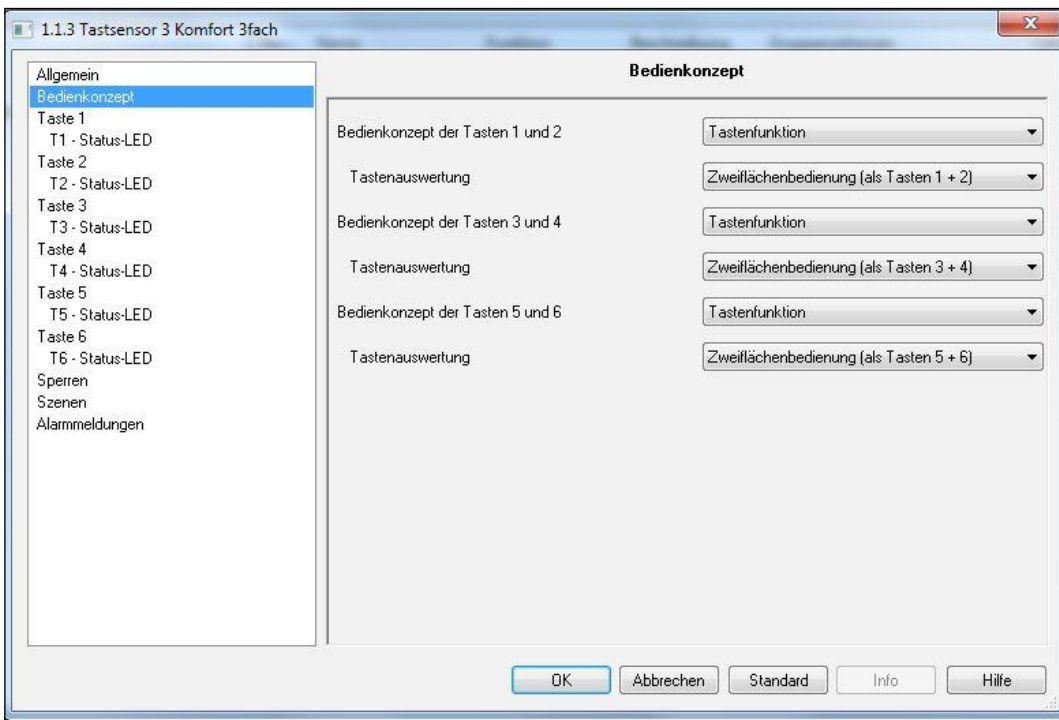


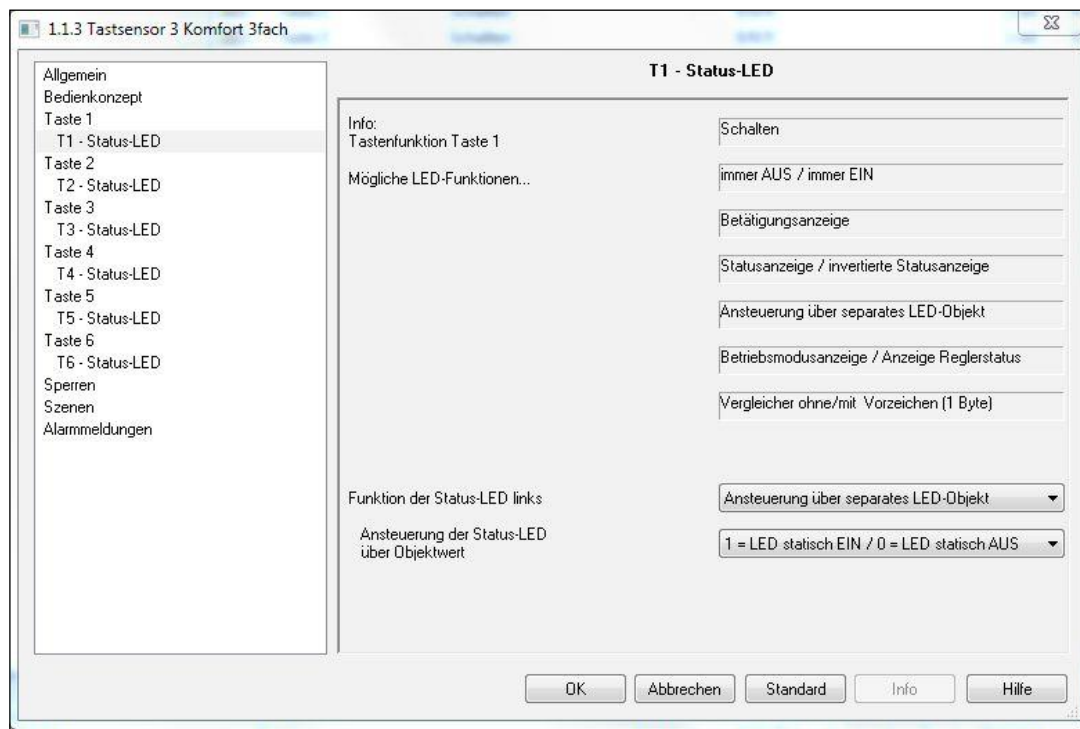
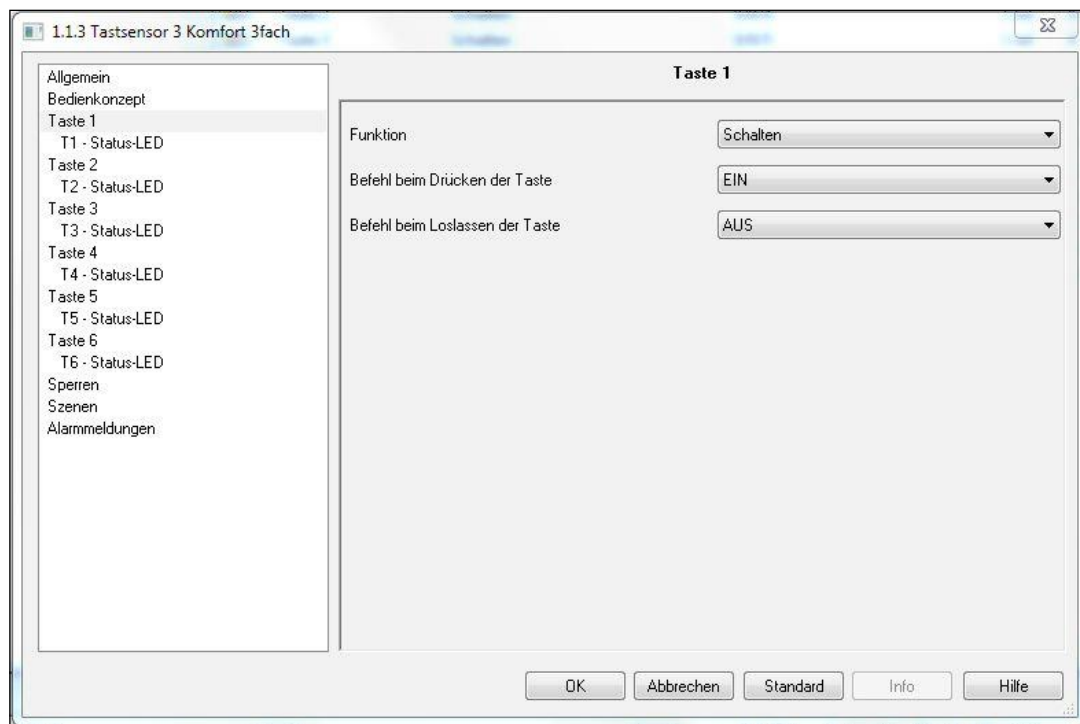
### 9.5.3 Creating the group address



### 9.5.4 KNX pushbutton sensors

The KNX pushbutton sensors provided by the customer must be programmed as pushbuttons. The ventilation unit sends a feedback signal to the pushbutton, thus activating the associated LED. The figures show the parameter settings for the example of Gira pushbutton sensor 3.

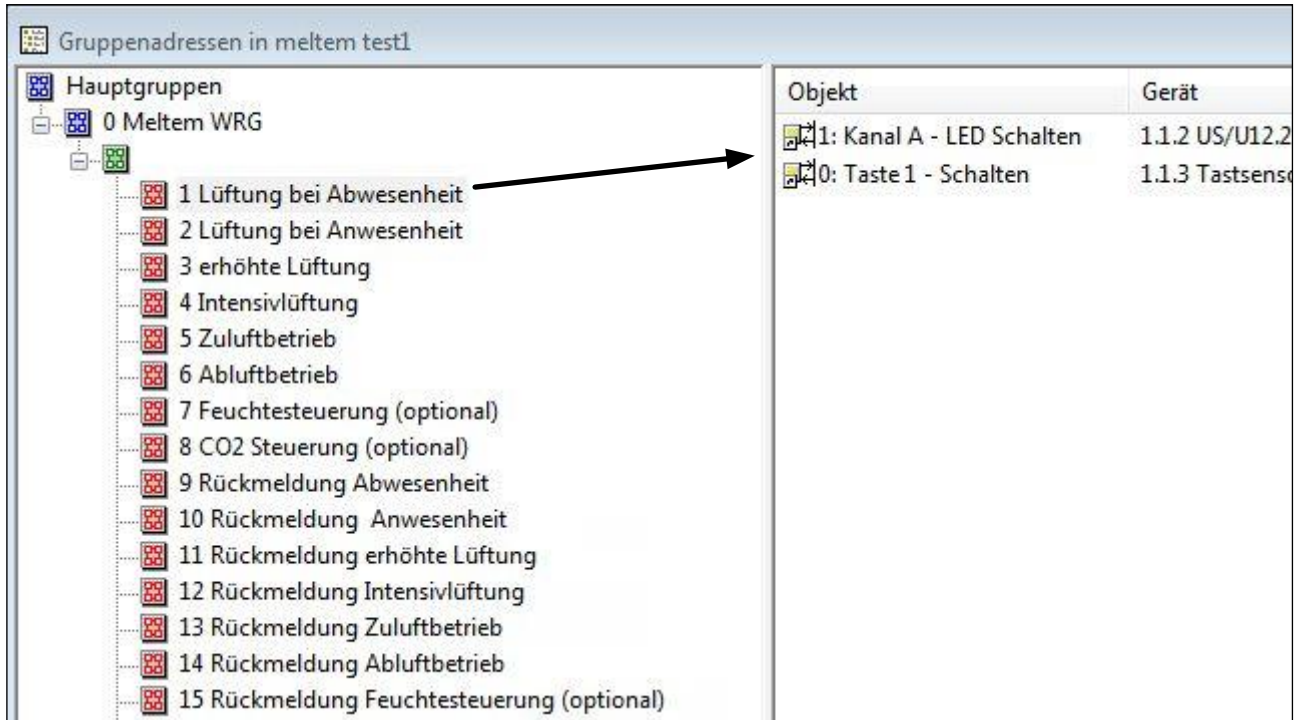






## 9.5.5 Example of linking the KNX pushbutton sensor (provided by the customer) and LED feedback

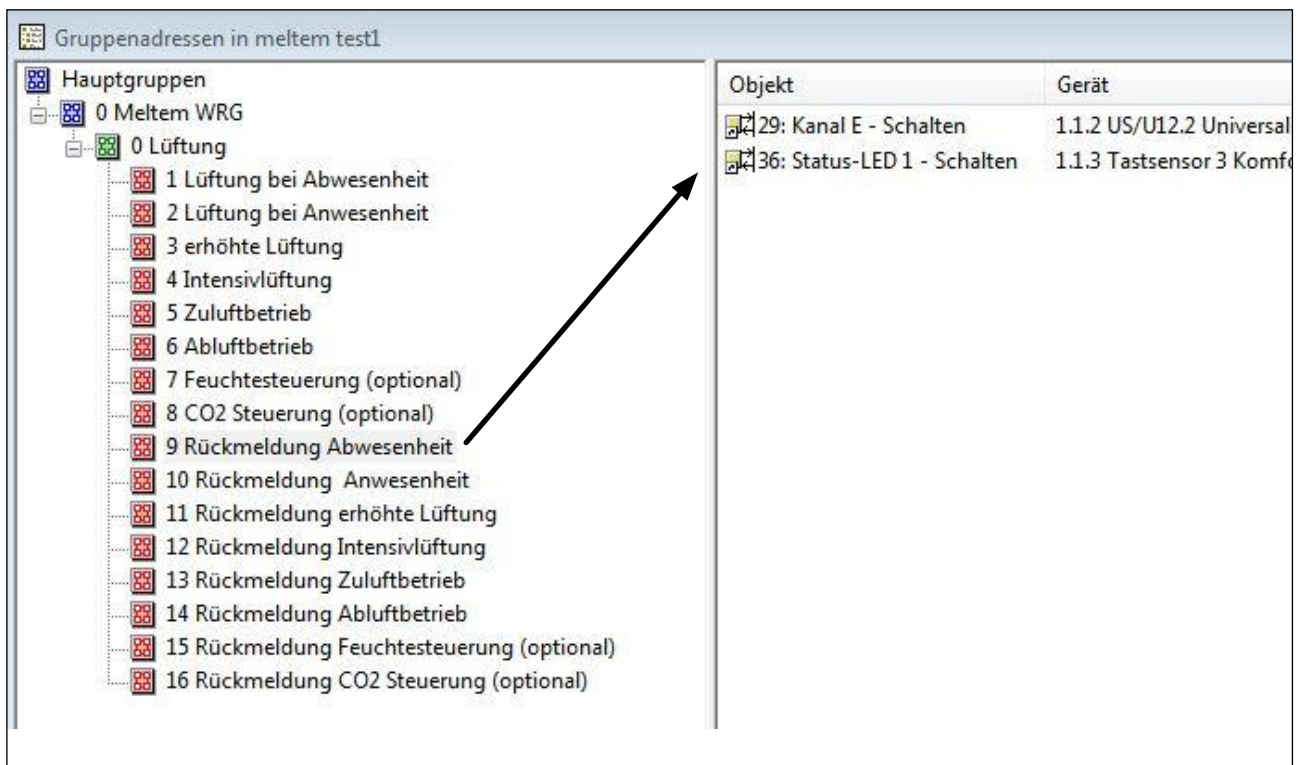
### 9.5.5.1 Linking with reference to the example of “Reduced ventilation” - pushbutton sensor



The screenshot shows the 'Gruppenadressen in meltem test1' window. On the left, under 'Hauptgruppen', there is a tree view for '0 Meltem WRG'. An arrow points from the '1 Lüftung bei Abwesenheit' entry to the right-hand table.

Objekt	Gerät
1: Kanal A - LED Schalten	1.1.2 US/U12.2
0: Taste 1 - Schalten	1.1.3 Tastsense

### 9.5.5.2 Linking with reference to the example of “Reduced ventilation” - LED feedback



The screenshot shows the 'Gruppenadressen in meltem test1' window. On the left, under 'Hauptgruppen', there is a tree view for '0 Meltem WRG' and '0 Lüftung'. An arrow points from the '9 Rückmeldung Abwesenheit' entry to the right-hand table.

Objekt	Gerät
29: Kanal E - Schalten	1.1.2 US/U12.2 Universal
36: Status-LED 1 - Schalten	1.1.3 Tastsensor 3 Komf

## **9.6 Final tasks**

### **9.6.1 Fixing the KNX interface to the network connection cover**

- ▶ Fix the KNX interface to the Velcro dot on the network connection cover once more (see Fig. 18 on page 25).

### **9.6.2 Attaching the cover to the ventilation unit**

- ▶ Attach the cover to the ventilation unit (see section 6.3.4 on page 12).



We have checked the content of this publication for conformity with the unit described in it. There may nevertheless still be differences, so we cannot guarantee complete accuracy.

The information in this publication is regularly checked and any necessary corrections are made in the subsequent editions.

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