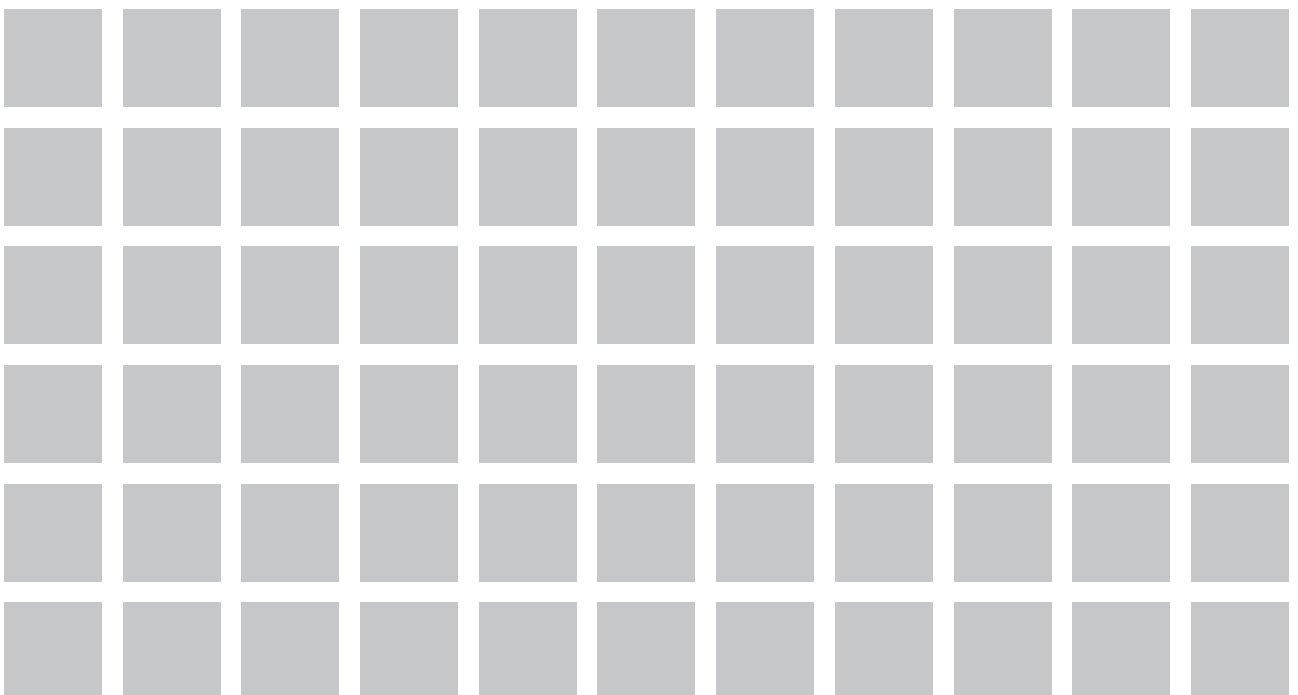
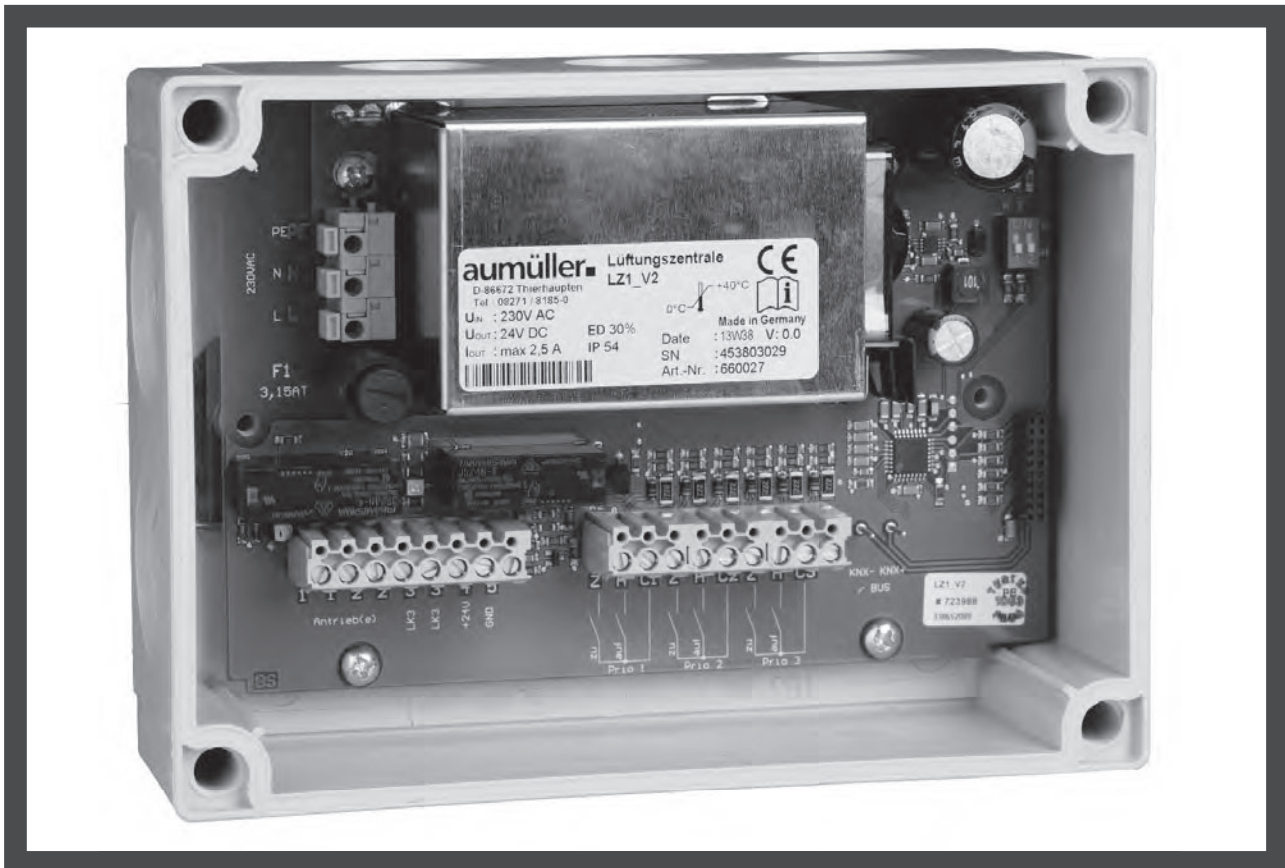


# 5

## Natural Ventilation Control Units



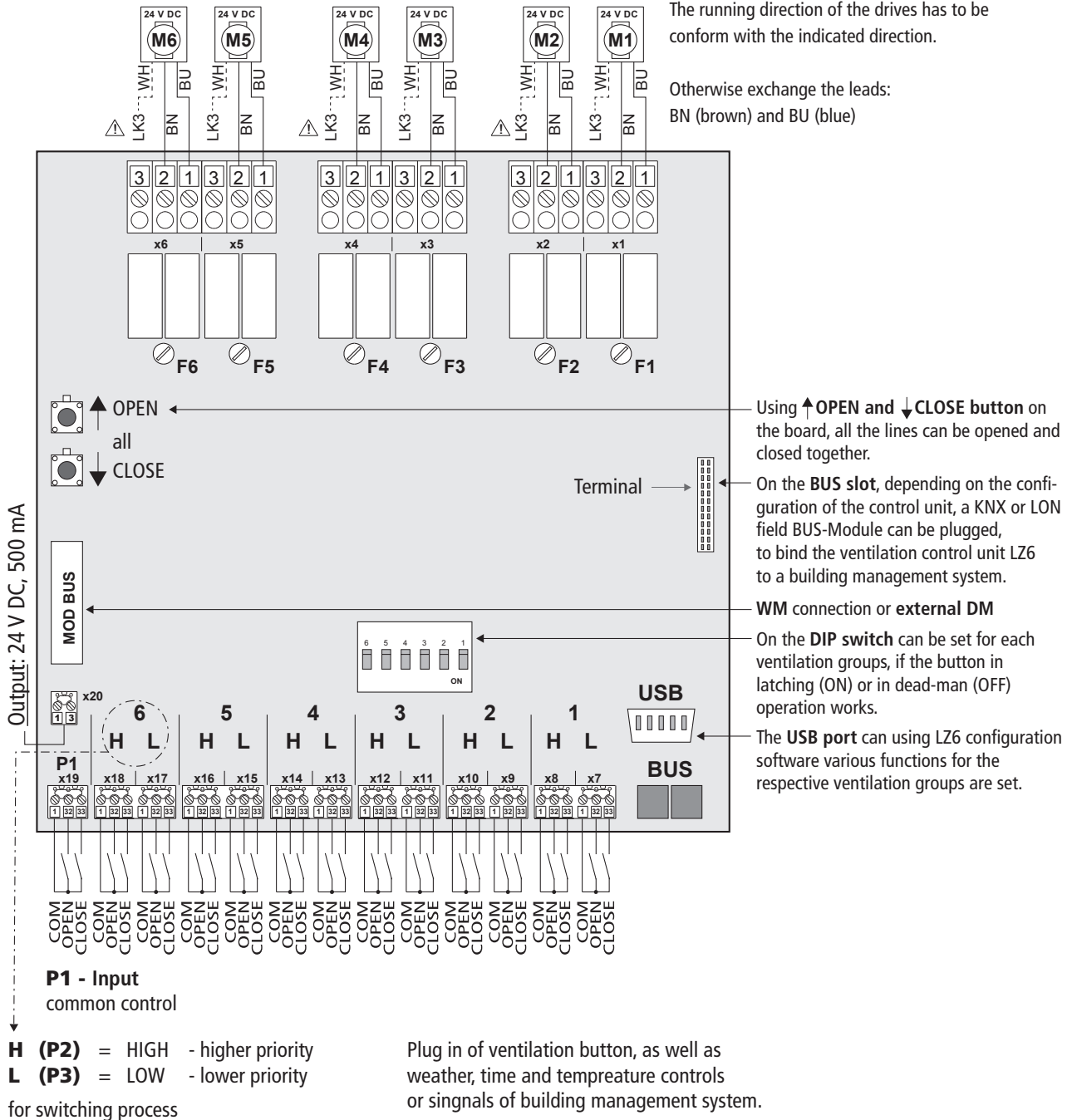


### FEATURES OF NATURAL VENTILATION – CONTROL UNITS AND POWER SUPPLIES

- Control units with accessories like weather sensors and control panels for the control of drives
- 24 V DC for natural ventilation purpose within rooms or buildings
- Low residual ripple output voltage (<2 Vpp)
- Inputs of two or more control units may be switched in parallel
- Connection of various control units in one ventilation group
- Ventilation button inputs with OPEN-STOP-CLOSE function and 2 or 3 priorities
- Vent. push button inputs configurable in dead-man or jog-switch mode
- All drive line outputs are fused
- Input for higher-ranked e.g. volt free wind and rain signals
- Suitable for the use in controlled natural ventilation systems
- Various display and control elements
- Flat surface mounted housings, suitable for the installation in false floor or suspended ceilings
- Optional BUS interface for integration into GLT systems via LON and KNX
- Digital interface for **AUMÜLLER** S12 drives

For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804. The LCA results of the different product types are listed at the end of this product catalogue. The EPD documents can be viewed or downloaded from our homepage [www.aumüller-gmbh.de](http://www.aumüller-gmbh.de).

SIMPLIFIED DIAGRAMM – LZ6



Natural Ventilation Control Units

### ORDER DATA

Part.-No.

#### LZ1 2,5 A – Natural ventilation control unit 24 V DC

**Application:** Natural ventilation control panel with power supply for the controlling of 24 V DC drives in one ventilation group.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Power consumption:	60 W
Output voltage:	24 V DC (20 – 28 V DC / 2 Vpp)
Output current:	<b>2,5 A</b>
Inputs:	1 Ventilation button line with 3 priorities
Outputs:	1 Drive line 24 V DC / 500 mA (e.g. rain sensor)
Display:	Power, output voltage switched in OPEN/CLOSE direction
Slot:	BUS-Module (LON, KNX)
Connections:	S12 drives (for communication with BUS-Modules)
Housing:	Surface mounting, plastic (ABS)
Dimensions (WxHxD):	<b>180 x 130 x 60 mm</b>
Connection terminals:	Screw terminals 2,5 mm <sup>2</sup> (rigid wire)
Protection rating:	IP54

#### Feature/Equipment

- DIP switch for the configuration of the inputs with low priority in jog-switch or dead-man mode
- Inputs of various LZ1 and/or LZ6 are switchable in parallel
- With the BUS-Module it is possible to control drives with internal intelligent cut-off switch S12 for controlled natural ventilation via the bus protocol

#### VERSIONS

LZ1 2,5 A	<b>without</b> BI-K - KNX-Interface-Module	<b>660027</b>		
LZ1 2,5 A	<b>including</b> BI-K - KNX-Interface-Module (Part.-No.: 683999)	<b>660028</b>		

#### LZ6 – Natural ventilation control unit 24 V DC

**Application:** Natural ventilation control panel with power supply for the controlling of 24 V DC drives in 6 ventilation groups.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	506 W / 805 W / 1518 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>10 A / 24 A / 30 A</b>
Inputs:	6 Ventilation button lines with 2 priorities (P3: LOW; P2: HIGH)
Outputs:	1 Input all outputs OPEN/CLOSE (P1) 6 Drive output lines 24 V DC / 500 mA (e.g. rain sensor)
Display:	Power, output voltage switched in OPEN/CLOSE direction
Slot:	for optional BUS-Module (LON / KNX)
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>420 x 300 x 144 mm</b>
Connection terminals:	Screw terminals 2,5 mm <sup>2</sup> (rigid wire)
Protection rating:	IP30

#### Feature/Equipment

- DIP switch for the configuration of the inputs with low priority in jog-switch or dead-man mode
- Inputs of various LZ1 and/or LZ6 are switchable in parallel
- All outputs are fused

#### VERSIONS

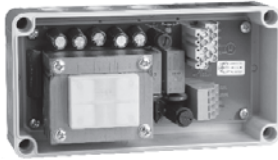
LZ6 10 A	Output current: 6 x 1,6 A	<b>660070</b>		
LZ6 24 A	Output current: 6 x 4,0 A	<b>660071</b>		
LZ6 30 A	Output current: 6 x 5,0 A	<b>660072</b>		

## ORDER DATA

Part.-No.

NT-T-2,5 – Power supply 230 V AC / 24 V DC, 2,5 A

660009

**Application:** Power supply with transformer for the controlling of 24 V DC drives in one ventilation group.**TECHNICAL DATA (Rated values)**

Operating voltage: 230 V AC (+/-10%)  
 Power consumption: 60 W  
 Output voltage: 24 V DC (21 – 28 V DC)  
 Output current: **2,5 A**  
 Duty cycle: ED20% (10 min)  
 Ambient temperature range: -5 °C ... +40 °C

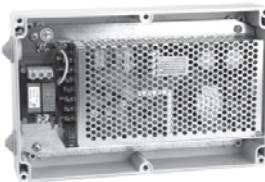
Housing: Surface mounting, plastic (ABS)  
 Dimensions (WxHxD): 94 x 180 x 81 mm  
 Connection terminals: Screw terminals 2,5 mm<sup>2</sup> (230 V) / 4 mm<sup>2</sup> (24 V) (rigid wire)  
 Protection rating: IP54

**Feature/Equipment**

- Control of OPEN/CLOSE with the 230 V AC power supply voltage

NT-S-6,5 – Power supply 230 V AC / 24 V DC, 6,5 A

660007

**Application:** Switch mode power supply for the controlling of 24 V DC drives in one ventilation group.**TECHNICAL DATA (Rated values)**

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)  
 Power consumption: 460 W  
 Output voltage: 24 V DC (2 Vpp)  
 Output current: **6,5 A**  
 Duty ratio: ED30% (10 min)  
 Ambient temperature range: -5 °C ... +40 °C

Housing: Surface mounting, plastic (ABS)  
 Dimensions (WxHxD): 160 x 250 x 55 mm  
 Connection terminals: Screw terminals 4 mm<sup>2</sup> (rigid wire)  
 Protection rating: IP54

**Feature/Equipment**

- Control of OPEN/CLOSE with the 230 V AC power supply voltage
- Max. 8 power supplies may be switched in parallel

PS5 – Switch mode power supply

680005

**Application:** Switch mode power supply for fixing on 35-mm mounting rail, for the external power supply of Ventilation-Modules LZA and LZH.**TECHNICAL DATA (Rated values)**

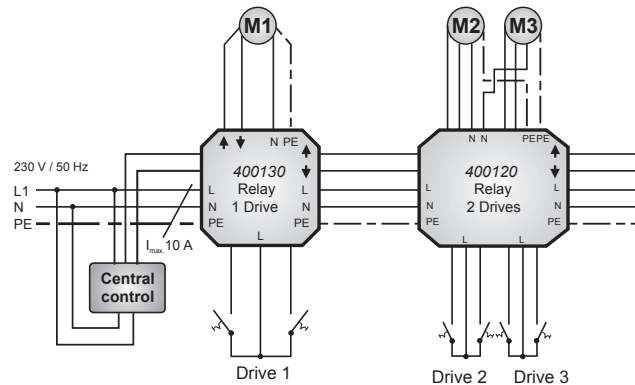
Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)  
 Max. power consumption: 322 W  
 Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)  
 Output current: **5 A**  
 Ambient temperature range: -5 °C ... +40 °C

Housing: suitable for 35-mm mounting rail  
 Dimensions (WxHxD): 65 x 95 x 123 mm  
 Connection terminals: Screw terminals 4 mm<sup>2</sup> (rigid wire)

**Feature/Equipment**

- To be integrated into housing or cabinet

### SIMPLIFIED DIAGRAMM – CONTROL RELAY



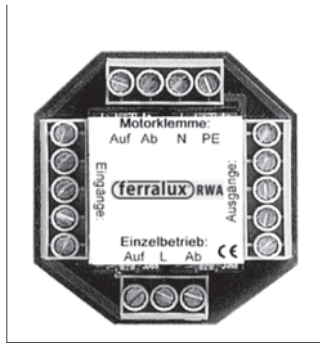
### ORDER DATA

Part.-No.

Universal Control Relay for 1 drive 230 V AC

400130

**Application:** Control Relay for the single or group-wise control of 1 drive 230 V AC, suitable for the installation in a flush-mounted junction box behind the ventilation button.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (+/-10%), 50 Hz
Output voltage:	230 V AC
Current consumption relay:	10 mA
Operating capacity:	<b>5 A</b>
Duty cycle:	ED30% (10 min)
Ambient temperature range:	0 °C ... +60 °C
Connections:	1 Ventilation button 230 V AC 1 Central OPEN/CLOSE (input / output) 1 Drive 230 V AC / 5 A
Operating mode:	Dead-man mode
Housing:	Plastic (ABS), for flush mounting junction box Ø60 mm
Dimensions (WxHxD):	46 x 52 x 30 mm
Connection terminals:	Screw terminal 1,5 mm <sup>2</sup> (rigid wire)
Protection rating:	IP20

#### Feature/Equipment

- Every Control Relay has an inputs and outputs for looping through of a higher priority command (i.e. from ventilation buttons or time switch) and the power supply
- The ventilation input controls the modul-own drive output only

Relay Interface for 2 drives 230 V AC

400120

**Application:** Relay Interface for the single or group-wise control of 2 drives 230 V AC, suitable for the installation in a flush-mounted junction box behind the ventilation button.



#### TECHNICAL DATA (Rated values)

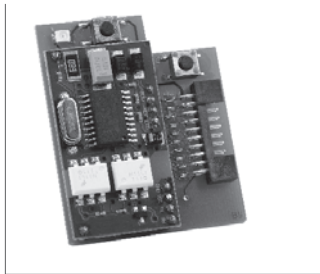
Operating voltage:	230 V AC (+/-10%), 50 Hz
Output voltage:	230 V AC
Current consumption relay:	10 mA
Operating capacity:	<b>5 A per output</b>
Duty cycle:	ED30% (10 min)
Ambient temperature range:	0 °C ... +60 °C
Connections:	2 Ventilation buttons 230 V AC 1 Central OPEN/CLOSE (input / output) 2 Drives 230 V AC / 5 A
Operating mode:	Dead-man mode
Housing:	Plastic (ABS), for flush mounting junction box Ø70 mm
Dimensions (WxHxD):	60 x 60 x 30 mm
Connection terminals:	Screw terminal 1,5 mm <sup>2</sup> (rigid wire)
Protection rating:	IP20

#### Feature/Equipment

- Every Relay Interface has an inputs and outputs for looping through of a higher priority command (i.e. from ventilation buttons or time switch) and the power supply
- Each ventilation input controls its own drive output only

ORDER DATA

		Part.-No.		
<b>BI-K - KNX Interface LZ1 / LZ6 / EMB 7300</b>		<b>683999</b>		
<b>Application:</b> Plug-in card for communication between the controllers <b>AUMÜLLER</b> LZ1, LZ6 and EMB 7300 to the KNX BUS system.				



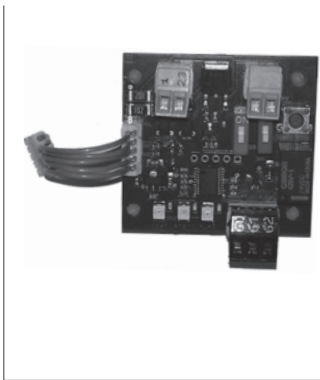
**TECHNICAL DATA**

Rated voltage:	24 V DC
Ambient temperature range:	-5°C ... + 40°C
Relative humidity:	(no condensate) 5% ... 90%
Data points:	up to 16 pieces per drive line
BUS current:	9mA
Housing:	without (assembled PCB)
Dimensions (WxH):	51 x 42 mm
Connection terminals:	2 x 2 x 0,8 mm (KNX-BUS-Terminal)

**Feature/Equipment**

- Data of the control (e.g. drive position) are sent on the KNX-BUS.
- The controls received direct orders from the KNX-BUS (e.g. position information, weather data).
- The licensed version of the „EMB compact configurator“ required - for commissioning.

<b>SHEV-Module LZ6</b>		<b>660066</b>		
<b>Application:</b> SHEV-Module for connecting of one or more smoke detectors (max. 10) to a <b>LZ6</b> ventilation control unit.				



**TECHNICAL DATA**

Rated voltage:	24 V DC
Housing:	without (assembled PCB)
Dimensions (WxH):	45 x 42 mm
Ambient temperature range:	-5 °C ... +60 °C
Relative humidity:	(no condensate) 5% ... 90%

**Feature/Equipment**

- The smoke detector is triggered with the highest priority and leads to the complete opening of the drives connected to the LZ6. All other ventilation commands are locked. This condition is indicated by the alarm LED.