

FEATURES

- 4 outputs for 12 or 24V motorised grilles*.
- Zoning module allowing the control of up to 12 zones and up to 2 zone groups.
- Total data saving on power failure.
- Manual control through buttons and status indicator LED.
- 230V supply required for feeding of the 4 outputs.
- KNX BCU integrated.
- Size 67 x 90 x 80 mm (4.5 DIN units).
- DIN rail unit assembly (EN 50022), with snap fit clamp.
- CE directives compliant (CE-mark on the right side).

* Before connecting the device to the facility, it must be assured that the switch position agree with the grilles voltage.

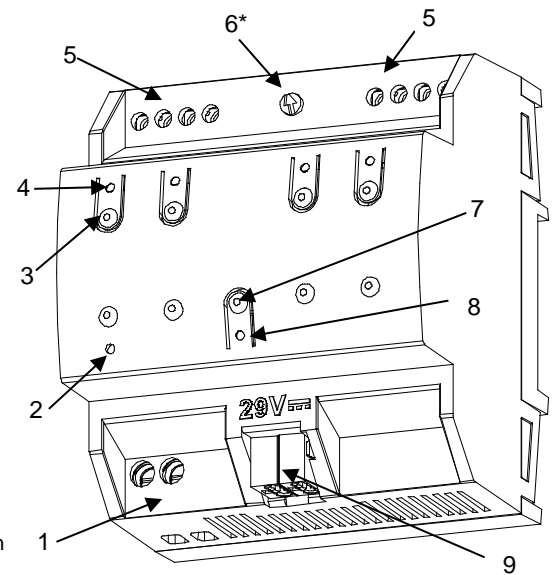


Figure 1. ZoningBOX 4

1. 230V input	2. Power indicator LED	3. Grille control button	4. Grille status indicator LED
5. Grille outputs	6. 12/24V switch	7. Programming/test button	8. Programming/test LED
			9. KNX connector

Programming/test button: short button press to set programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode.

Programming/Test LED: programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During start up (after reset or power failure) and if the device is not in safe mode, LEDs indicator blink red once.

GENERAL SYSTEM SPECIFICATIONS				
CONCEPT		DESCRIPTION		
Type of device		Electric operation control device		
KNX supply	Voltage (typical)	29VDC SELV		
	Voltage range	21...31VDC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	6	174
24VDC ⁽¹⁾	10	240		
Bus connection		Typical TP1 bus connector; 0.80mm ² section		
External power supply		230VAC 50/60Hz		
Ambient temperature		from 0°C to +45°C		
Storage temperature		from -20°C to +55°C		
Ambient humidity		5 to 95% RH (no condensation)		
Storage humidity (relative)		5 to 95% RH (no condensation)		
Complementary characteristics		Class B		
Safety class		II		
Operation type		Continuous operation		
Device action type		Type 1		
Electrical stress period		Long		
Degree of protection		IP20, clean environment		
Assembly		Independent device to be mounted inside electrical panels with DIN rail (EN 50022).		
Minimum clearances		Not required		
KNX bus failure response		Data saving according to parameterization		
Response when restarting KNX bus		Data recovering according to parameterization		
Operation indication		Programming LED indicates programming mode (red) and test mode (green). Power indicator LED (green) represents correct feeding. Each output LED indicates its status (fixed = open grille/dumper; off = closed grilles/dumper; flashing = error, see Fig. 2)		
Weight		192g		
PCB CTI index		175V		
Housing material		PC FR V0 halogen free		

⁽¹⁾ Maximum consumption in the worst case scenario (KNX Fan-In model)

OUTPUT SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of outputs	4	
Output voltage	12VDC or 24VDC (Selected meanwhile switch)	
Output type	Solid state switching device	
Maximum values per output	Quantity of grilles ⁽²⁾	2
	Current (RMS)	750mA
Short-circuit protection	YES	
Overload protection	YES	
Connection method	Cable screw terminal	
Cable cross-section	0.5mm ² to 2.5mm ² (26-12 AWG)	

⁽²⁾ This value could be more restrictive depending on the current consumed by the grille.

INPUT SPECIFICATIONS AND CONNECTIONS OF EXTERNAL POWER SUPPLY		
CONCEPT	DESCRIPTION	
Power supply protection fuse	Voltage	250V
	Current	4A
	Response type	F (Fast acting)
Connection method	Cable screw terminal	
Cable cross-section	0.2mm ² to 4mm ² (26-10 AWG)	

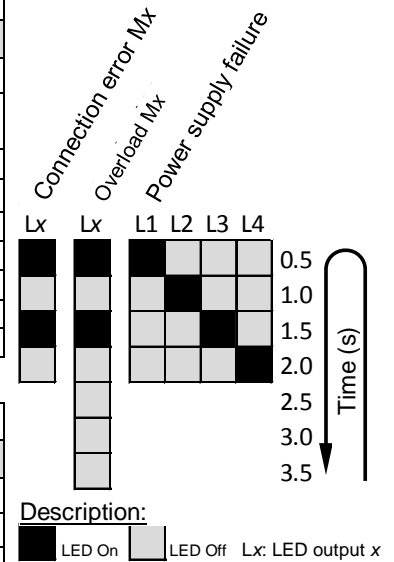
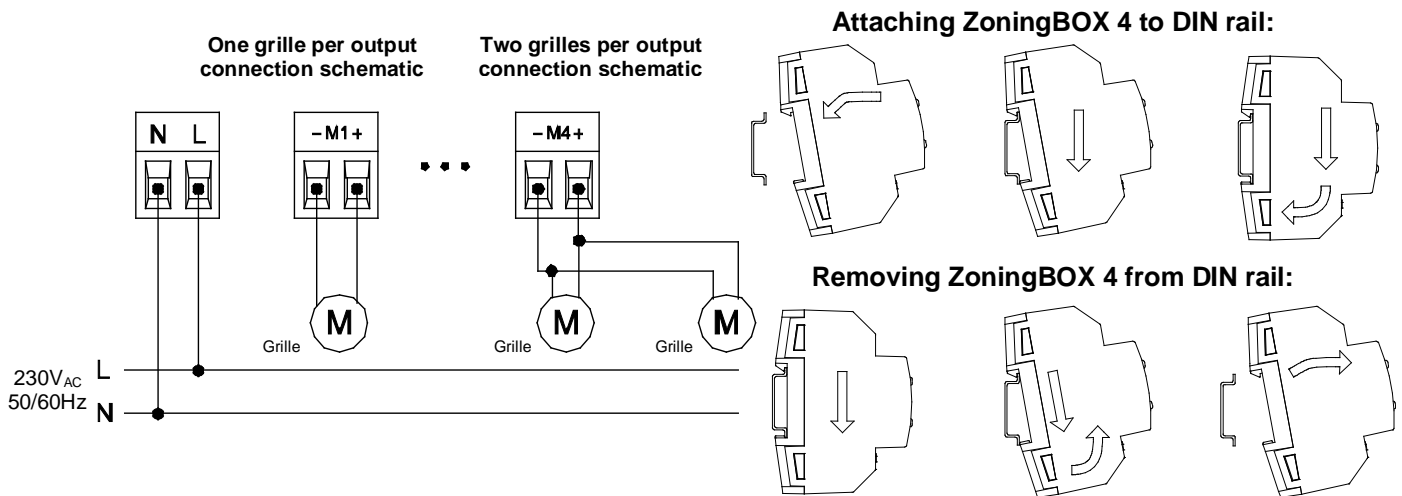


Figure 2. Error notification through grille status LED



Notes:

- The simultaneous connection of a grille to several outputs nor the connection of 12VDC and 24VDC grilles at the same time is not allowed.
- In case of connecting two grilles to an output, those must have similar consumption characteristics.
- The polarity of the connection must be checked. This can be done, under the Test On mode, through the grille control buttons: the first press should imply an attempt to open the grille, while the second press should cause an attempt to close it. Once the device is parameterized, switched-on LEDs should correspond to open grilles.
- After connecting a grille, a synchronisation must be provoked (for example, disconnecting and connecting the KNX bus).
- Compatibility of grilles must be checked following the next steps for a complete verification:
 1. The grille must be connected to an enabled output, without other grilles in that output, (Please be careful to ensure the polarity is respected).
 2. The device must be fed with auxiliary power and then connected to the KNX bus.
 3. The grilles connected to outputs try a sequential opening movement. If the grille needs more than 3.5 seconds to complete the opening movement, it is not suitable for ZoningBOX.
 4. Next, the grilles connected to outputs try a sequential closing movement. If the grille does not complete the closing movement, it is not suitable for ZoningBOX.

SAFETY INSTRUCTIONS

- ⚠ Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law
- ⚠ Do not connect Main Voltage (230VAC) or any other external voltages to any point of the BUS.
- ⚠ Connecting an external voltage might put the entire KNX system at risk.
- ⚠ This device contains a security short-circuit proof transformer.
- ⚠ Make sure during the installation that there is always sufficient insulation between the mains voltage 230VAC and the bus or the extension inputs.
- ⚠ Once the device is installed, it must not be accessible from the outside.
- ⚠ Keep away from water and do not cover the device with clothes, paper or any other material when in use.
- ♻ The WEEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of <http://zennio.com/wEEE-regulation>.