•Zennio® Multifunction actuator with 8 outputs (16 A)

ZIOMB8V3

MAXinBOX 8 v3

TECHNICAL DOCUMENTATION

FEATURES

- 2 different configurable blocks: shutter channels (up to 4), individual outputs (up to 8) and 2-pipe fan coil control (up to 2)
- Outputs suitable for capacitive loads, maximum 140 µF
- Manual output operation with push button and LED status indicator
- 20 logic functions
- Output timing
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 67 x 90 x 79 mm (4.5 DIN units)
- DIN rail mounting according to IEC 60715 TH35, with fixing clamp
- Possibility of connecting different phases in adjacent outputs
- Conformity with the CE, UKCA, RCM directives (marks on the right side)

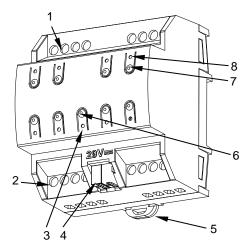


Figure 1: MAXinBOX 8 v3

1. Upper outputs	2. Lower outputs	3. Programming/test LED	4. KNX Connector
5. Fixing clamp	6. Programming/test button	7. Output control button	8. Output status LED indicator

Programming/Test button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode. If this button is held for more than 3 seconds, the device enters the test mode.

Programming/Test LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it starts a blue blinking sequence.

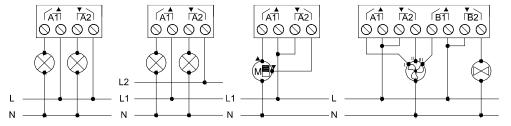
GENERAL SPECIFICATIONS					
CONCEPT		DESCRIPTION			
Type of device		Electric operation control dev	Electric operation control device		
Voltage (typical)		29 VDC SELV			
	Voltage range		21-31 VDC	21-31 VDC	
	Maximum	Voltage	mA	mW	
KNX supply		29 VDC (typical)	4	116	
	consumption	24 VDC ¹	10	240	
	Connection type		Typical TP1 bus connector for 0.8 mm Ø rigid cable		
External power supply		Not required	Not required		
Operation terr	Operation temperature		0 +55 °C		
Storage temp	erature		-20 +55 °C	-20 +55 °C	
Operation humidity		595%			
Storage humidity		595%			
Complementary characteristics		Class B			
Protection class / Overvoltage category		II / III (4000 V)			
Operation type		Continuous operation			
Device action type		Type 1			
Electrical stress period		Long			
Degree of protection / Pollution degree		IP20 / 2 (clean environment)			
Installation		Independent device to be mo	Independent device to be mounted inside electrical panels with DIN rail (IEC		
		60715)			
Minimum clearances		Not required			
Response on KNX bus failure		Data saving according to parameterization			
Response on KNX bus restart		Data recovery according to parameterization			
Operation indicator		The programming LED indicates programming mode (red) and test mode			
		(green). Each output LED indicates its status			
Weight		188 g			
PCB CTI index		175 V			
Housing material / Ball pressure test temperature		PC FR V0 halogen free / 75 °C (housing) - 125 °C (connectors)			

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

OUTPUTS SPECIFICATIONS AND CONNECTIONS					
CONCEPT		DESCRIPTION			
Number of outputs		8			
Output type / Disconnection type		Potential-free outputs through bistable relays with tungsten pre-contact / Micro-disconnection			
Rated current per output		AC 16(6) A @ 250 VAC (4000 VA) DC 7 A @ 30 VDC (210 W)			
Maximum load per output	Resistive	4000 W			
	Inductive	1500 VA			
Maximum inrush current		800 A/200 μs 165 A/20 ms			
Connections in adjacent outputs		Possibility of connecting different phases. It is not allowed to connect power supplies of different order, SELV with NO SELV, in the same block			
Total maximum current in device		80 A			
Short-circuit protection		NO			
Overload protection		NO			
Connection method		Screw terminal block (0.5 Nm max.)			
Cable cross-section		1.5-4 mm ² (IEC) / 26-10 AWG (UL)			
Outputs per common		1			
Maximum response time		10 ms			
Mechanical lifetime (min. cycles)		3 000 000			
Electrical lifetime (min. cycles) ¹		100000 @ 8 A / 25000 @ 16 A (VAC)			
Lifetime values could change de	pending on the load typ				

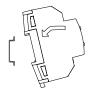
¹ Lifetime values could change depending on the load type.

WIRING DIAGRAMS

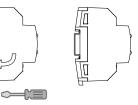


 \bigtriangleup In order to ensure the expected status of the relays, please check that the device is connected to the KNX bus before energizing the power circuit.

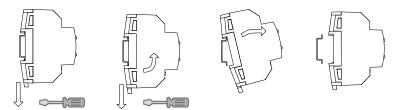
Figure 2: Wiring example (from left to right): 2 loads, 2 loads connected to different phases, shutter and fan coil



Attaching MAXinBOX 8 v3 to DIN rail:



Removing MAXinBOX 8 v3 from DIN rail:



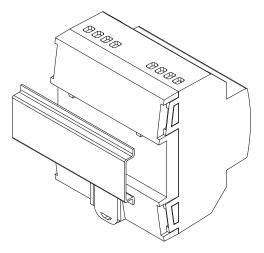


Figure 3: Mounting MAXinBOX 8 v3 on DIN rail

N SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at https://www.zennio.com/en/legal/weee-regulation.
- This device contains software subject to specific licences. For details, please refer to http://zennio.com/licenses.