

MAXinBOX SHUTTER 8CH

Shutter actuator with up to 8 Shutter Channels

ZIO-MBSHU8

Technical Documentation

- FEATURESUp to 8 shutter channels.
- Manual output operation with push button and LED status indicator.
- Logical functions included.
- Output timing facilities.
- Total data saving on KNX bus failure.
- Dimensions 67 x 90 x 140mm (8 DIN units).
- DIN rail unit assembly (EN 50022), through pressure.
- No external power supply required other than the bus.
- Integrated KNX BCU.
- Possibility to connect different phases in adjoining shutter channel outputs.
- Conformity with the CE directives (CE-mark on the right side).

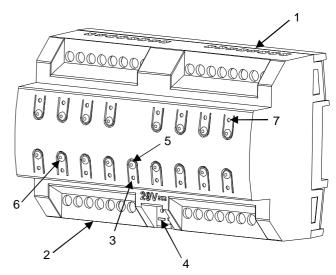


Figure 1. MAXinBOX SHUTTER 8CH

1. Upper outputs	2. Lower output screws	3.Programming/Test LED	4.KNX connector	
5.Programming/Test button	6.Output control button	7.Output status indicator LED		

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

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

GENERAL SPECIFICATIONS CONCEPT			DESCRIPTION		
Type of device			Electric operation control device		
Voltage (typical)		I)	29VDC SELV		
KNX supply	Voltage (typical	u <i>)</i>	2131V DC		
	voltage range	Voltage	mA	mW	
	Consumption	29VDC (typical)	6.6	191.4	
	Consumption	24VDC ⁽¹⁾	10	240	
	Connection typ		Typical bus connector TP1 for rigid cable 0.80mm Ø		
External power supply			No required		
Operation temperature			from 0°C to +55°C		
Storage temperature			from -20°C to +70°C		
Operation humidity			5 to 95% RH (no condensation)		
Storage humidity			5 to 95% RH (no condensation)		
Complementary characteristics		ics	Class B		
Protection class			11		
Operation type			Continuous operation		
Device action type			Type 1		
Electrical stress period			Long		
Degree of protection			IP20, clean environment		
Installation			Independent device to be mounted inside electrical panels with DIN rail (EN 50022).		
Minimum clearances			Not required.		
Response on KNX bus failure		e	Data saving according to parameterization and relays open.		
Response on KNX bus restart		rt	Data recovery according to parameterization		
Operation indication			Programming LED indicates programming mode (red) and test mode (green). Output status LED indicators reflect current output state.		
Weight			451g		
PCB CTI index			175V		
Housing m	aterial		PC FR V0 halogen free		

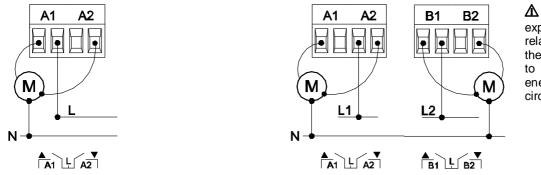
⁽¹⁾ Maximum consumption in the worst case scenario (KNX Fan-In model)

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OUTPUTS SPECIFICATIONS AND CONNECTIONS					
Contact type		Potential free outputs through bistable relays			
Disconnection type		Micro-disconnection			
Rated current by output					
Outputs per common		1 common per shutter channel			
Different phases connection		Possibility to connect different phases in adjoining shutter channel outputs (see "wiring and assembly diagrams" section)			
Maximum power per	Resistive	2500W			
output	Inductive	1250VA			
Connection type		Screw terminal block			
Recommended cable section		0.5 mm ² to 4 mm ² (26-10 AWG)			
Maximum response time		50 ms			
Lifetime	Mechanical (min)	3 million cycles (180cpm)			
Lileume	Electrical (min)	50.000 cycles (6cpm with resistive load)			

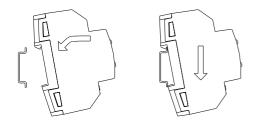
WIRING AND ASSEMBLY DIAGRAMS



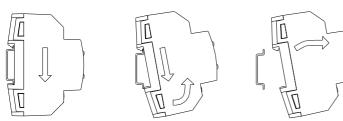
▲ In order to ensure the expected status of the relays, please check that the device is connected to the KNX bus before energizing the power circuit.

Figure 2. Wiring examples (from left to right): channel A and channel A and B with different phases

Attaching MAXinBOX SHUTTER 8CH to DIN rail:



Removing MAXinBOX SHUTTER 8CH from DIN rail:



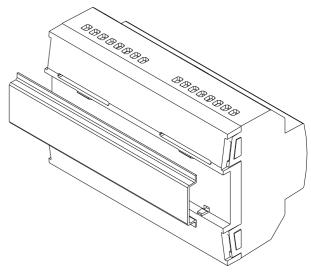


Figure 3. Mounting MAXinBOX SHUTTER 8CH on a DIN rail

A SAFETY INSTRUCTIONS

- Installation should only be performed by qualifies 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 panl or box), it must not be accessible from outside.
- . Keep the device away from water 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 http://zennio.com/weee-regulation.

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