

8 shutter channel actuator

# MAXinBOX Shutter 8CH

## **Technical Documentation**

#### **FEATURES**

**ZIO-MBSHU8** 

- 8 shutter channel outputs.
- Manual output operation with push button and LED status indicator.
- Logical functions included.
- Output timing facilities.
- Total data saving on power failure.
- Size 90 x 60 x 140 mm (8 DIN units).
- DIN rail unit assembly (EN 50022), with snap fit clamp.
- No external power supply required other than the bus.
- KNX BCU integrated.
- Possibility to connect different phases in adjoining shutter channel outputs.
- CE directives compliant.

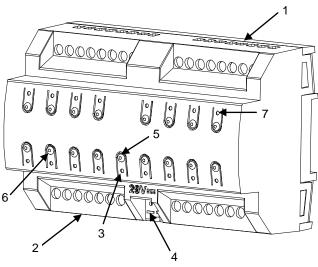


Figure	1.	MAXinBOX	Shutter	8CH
riguio	•••		Onation	

1. Upper outputs	2. Lower outputs	3.Programming/Test 4.KNX LED connector		
5.Programming/Test button	6.Output co button	•	ol 7.Output status LED indicator	

**Programming/test button**: short button press to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode. If this button is held more than 3 seconds, the device goes into manual mode (test mode)

LED: programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second. It lights in green when the device is in manual mode. During start up (after reset or power failure), if the device is not in safe mode, programming LED blinks in blue for a few seconds.

GENERAL SYSTEM SPECIFICATIONS					
CONCEPT			DESCRIPTION		
Type of device			Electric operation control device	Electric operation control device	
Voltage (typical)			29VDC SELV		
KNX	Voltage range		2131V DC		
		Voltage	mA	mW	
	Maximum	29VDC (typical)	11	320	
Supply	consumption	24VDC	12.5	300	
		Starting	25	725	
	Bus connectio	n	Typical bus connector TP1, 0.50 mm <sup>2</sup> section		
External por	wer supply		No		
Ambient ter	nperature		from 0°C to +55°C		
Storage ten	nperature		from -20°C to +70°C		
Ambient hu	midity		5 to 95% RH (no condensation)		
Storage humidity (relative)			5 to 95% RH (no condensation)		
Complemen	ntary characterist	ics	Class B		
Safety class			11		
Operation type			Continuous operation		
Device action type			Type 1		
Electrical solicitations period			Long		
Type of protection			IP20, clean environment		
Assembly			Independent control assembly device to be mounted inside of electrical panels with DIN rail (EN 50022).		
KNX bus failure response			Data saving and relays open.		
Response when restarting KNX bus			Data recovering and output status change according to programming.		
Operation indication			Programming LED indicates programming mode (red) and test mode (green). Output status LED indicators reflect current output state.		
Weight			430gr.		
PCB CTI index			175 V		
Enclosure			PC FR V0 halogen free		

#### **Technical Documentation**

© Zennio Avance y Tecnología S.L.

OUTPUTS SPECIFICATIONS AND CONNECTIONS					
Contact type		Potential free outputs through bistable relays			
Disconnection type		Micro-disconnection			
Rated current by output					
Outputs per common		1 shutter channel			
Different phases connection		Possibility to connect different phases in adjoining shutter channel outputs (see "wiring and assembly diagrams" section)			
	Resistive load	2500W			
Maximum power	Inductive load	1250VA			
Connection type		Terminal block (screw)			
Recommended cable section		0.25 mm <sup>2</sup> to 4 mm <sup>2</sup>			
Cable type		Stranded or solid wire.			
Maximum response time		50 ms			
Expected life	Mechanical	1 million operations (180cpm)			
	Electrical	50.000 cycles (6cpm with resistive load)			

#### WIRING AND ASSEMBLY DIAGRAMS

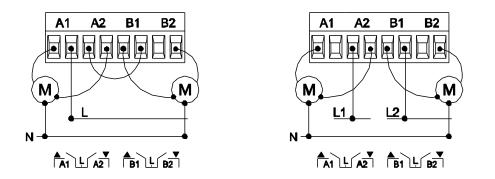
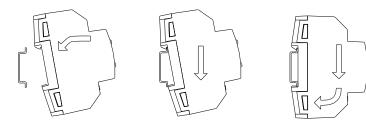
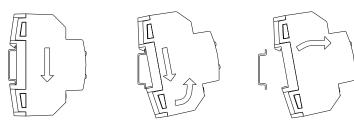


Figure 2. Shutter channel A and B wiring examples with the same and with different phase

#### Attaching MAXinBOX Shutter 8CH to DIN rail:



### Removing MAXinBOX Shutter 8CH from DIN rail:



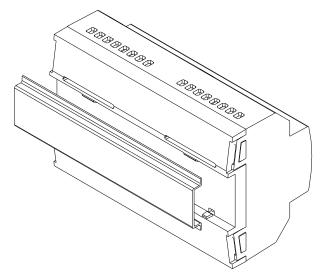


Figure 3. MAXinBOX Shutter 8CH DIN-rail assembly

# 

- Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law
- Do not connect Mains Voltage (230 V) or any other external voltages to any point of the bus. Connecting an external voltage might put the entire KNX system at risk.
- Make sure during the installation that there is always sufficient insulation between the mains voltage 230V and the bus or the extension inputs.
- Once the device is installed, the output terminal should not be accessible.

#### **Technical Documentation**

© Zennio Avance y Tecnología S.L.