

TECHNICAL DOCUMENTATION

FEATURES

- Up to 4 shutter channels.
- 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.
- Dimensions 67 x 90 x 79 mm (4.5 DIN units).
- DIN rail mounting (EN 50022), with fixing clamp.
- Possibility of connecting different phases in adjacent outputs.
- Conformity with the CE directives (CE-mark on the right side).

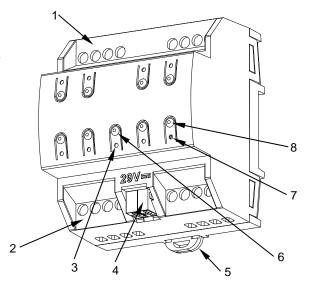


Figure 1: MAXinBOX SHUTTER 4CH v2

Upper outputs	2. Lower outputs	3. Programming/Test LED	4. KNX connector
Fixing clamp	6. Programming/Test button	7. Output status LED	8. Output control button

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.

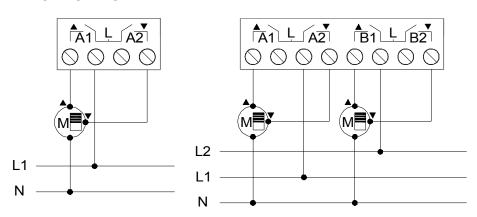
Programming/Test LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it starts a blue blinking sequence.

GENERAL SPECIFICATIONS						
CONCEPT		DESCRIPTION				
Type of device		Electric operation control device	Electric operation control device			
	Voltage (typical)		29VDC SELV	29VDC SELV		
Voltage range			2131VDC	2131VDC		
KNX supply Maximum	Maximum	Voltage	mA	mW		
	consumption	29VDC (typical)	4.10	118.9		
		24VDC ¹	10	240		
	Connection ty	pe	Typical TP1 bus connector for	r 0.80mm Ø rigid cable		
External power			Not required			
Operation tem	Operation temperature			0°C +55°C		
	Storage temperature		-20°C +55°C	-20°C +55°C		
Operation humidity		5 95% (No condens.)				
	Storage humidity		5 95% (No condens.)			
Complementary characteristics		Class B	Class B			
Protection class		II	II			
	Operation type		Continuous operation	Continuous operation		
Device action type		Type 1				
Electrical stress period		Long	Long			
Degree of protection		IP20, clean environment				
Installation		Independent device to be mount 50022)	Independent device to be mounted inside electrical panels with DIN rail (EN 50022)			
Minimum clea	Minimum clearances		Not required	Not required		
Response on	Response on KNX bus failure			Data saving according to parameterization and relays contacts opening		
	Response on KNX bus restart		Data recovery according to parameterization			
Operation indicator		The programming LED indicat	The programming LED indicates programming mode (red) and test mode (green). Each output LED indicates its status			
Weight		250g				
PCB CTI inde	PCB CTI index		175V	175V		
Housing mate	Housing material		PC FR V0 halogen free	PC FR V0 halogen free		

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

OUTPUTS SPECIFICATIONS AND CONNECTIONS				
CONCEPT		DESCRIPTION		
Number of outputs		4 shutter channels		
Output type / Disconnection type		Potential-free outputs through bistable relays / Micro-disconnection		
Rated current per output		AC 8(4)A @ 250VAC (2000VA) DC 5A @ 30VDC (150W)		
Maximum load per output	Resistive	2000W		
	Inductive	1000VA		
Different phases connection		Possibility of connecting different phases. It is not allowed to connect power supplies of different order, SELV with NO SELV, in the same block		
Short-circuit protection		NO		
Overload protection		NO		
Connection method		Screw terminal block		
Cable cross-section		1.5-4mm² (IEC) / 26-10AWG (UL)		
Outputs per common		2		
Maximum response time		15ms		
Mechanical lifetime (min. cycles)		1 000 000		

WIRING DIAGRAMS

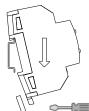


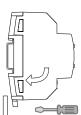
⚠ In order to ensure the expected status of the relays, please check that the device is connected to the KNX bus before energizing the power circuit.

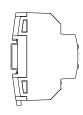
Figure 3: Wiring example (from left to right): one shutter on channel A and two shutters on channels A and B with different phases.













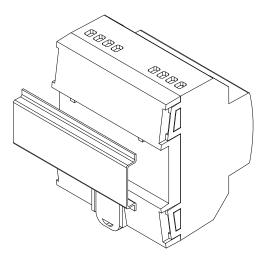
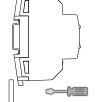
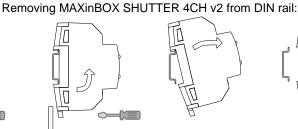
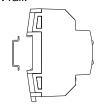


Figure 2: Mounting MAXinBOX SHUTTER 4CH v2 on DIN rail











SAFETY INSTRUCTIONS

- 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 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.

