## FEATURES

- Up to 8 shutter channels

- Possibility of controlling blinds/shutters with 2 or 3 dry contacts*

- Manual output operation with push button and LED status indicator

- Supports KNX Data Secure

- 20 logic functions

- Output timing

- Total data saving on KNX bus failure

- Integrated KNX BCU (TP1-256)

- Dimensions 67 x 90 x 140 mm (8 DIN units)

- DIN rail mounting according to IEC 60715 TH35, with fixing clamp

- Possibility of connecting different phases in adjacent outputs

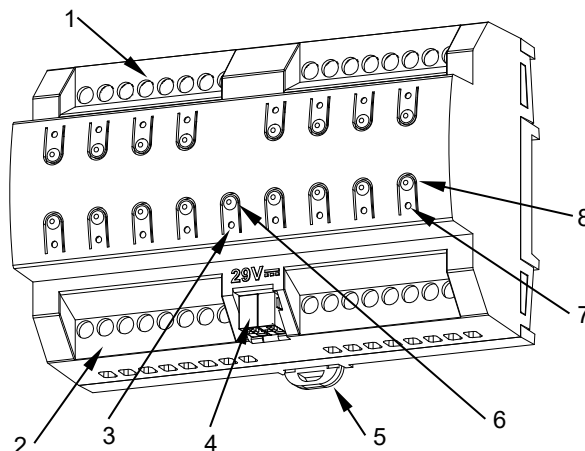- Conformity with the CE, RCM directives (marks on the right side)

* In case of 3 dry contacts, an individual output on another actuator is required for the stop contact



Figure 1: MAXinBOX SHUTTER 8CH v3

| 1. Upper outputs | 2. Lower outputs | 3. Programming/Test LED | 4. KNX connector |
|---|---|---|---|
| 5. 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. In order to perform a KNX Secure factory reset, while the device is in safe mode, press the button for 10 seconds until the programming LED changes its state.

Programming/Test LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. The test 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 | |
| KNX supply | Voltage (typical) | | 29 VDC SELV | |
| | Voltage range | | 21-31 VDC | |
| | Maximum consumption | Voltage | mA | mW |
| | | 29 VDC (typical) | 4.5 | 130.5 |
| | | 24 VDC[1] | 10 | 240 |
| | Connection type | | Typical TP1 bus connector for 0.8 mm Ø rigid cable | |
| External power supply | | | Not required | |
| Operation temperature | | | 0 .. +55 °C | |
| Storage temperature | | | -20 .. +55 °C | |
| Operation humidity | | | 5 .. 95% | |
| Storage humidity | | | 5 .. 95% | |
| Complementary characteristics | | | Class B | |
| Protection class | | | II / III (4000 V) | |
| Operation type | | | Continuous operation | |
| Device action type | | | Type 1 | |
| Electrical stress period | | | Long | |
| Degree of protection | | | IP20 / 2 (clean environment) | |
| Installation | | | 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 and relays contacts opening | |
| 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 | | | 452 g | |
| PCB CTI index | | | 175 V | |
| Housing material | | | 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 shutter channels |
| Output type / Disconnection type | | Potential-free outputs through bistable relays / micro-interruption |
| Rated current per output | | AC 8(4) A @ 250 VAC (2000 VA) DC 5 A @ 30 VDC (150 W) |
| Maximum load per output | Resistive | 2000 W |
| | Inductive | 1000 VA |
| 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 (0.5 Nm max.) |
| Cable cross-section | | 1.5-4 mm² (IEC) / 26-10 AWG (UL) |
| Outputs per common | | 2 |
| Maximum response time | | 15 ms |
| Mechanical lifetime (min. cycles) | | 1 000 000 |

### WIRING DIAGRAMS
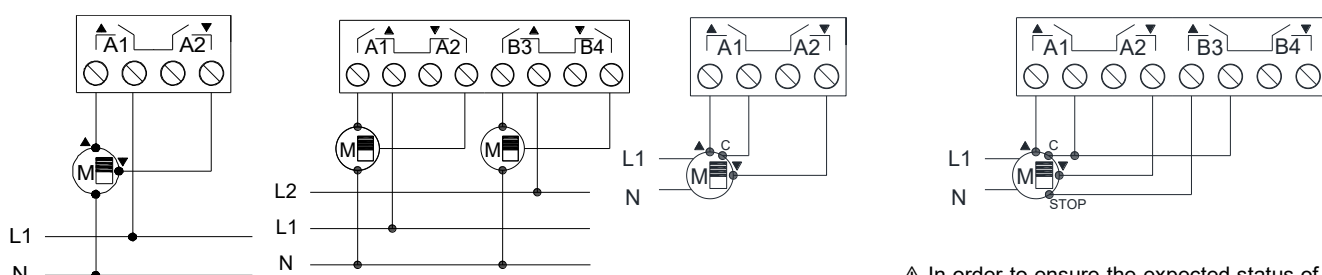


Figure 2: Wiring example (from left to right): one shutter on channel A, two shutters on channels A and B with different phases, one shutter with 2 dry contacts and one shutter with 3 dry contacts.

⚠ 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.

Attaching MAXinBOX SHUTTER 8CH v3 to DIN rail:
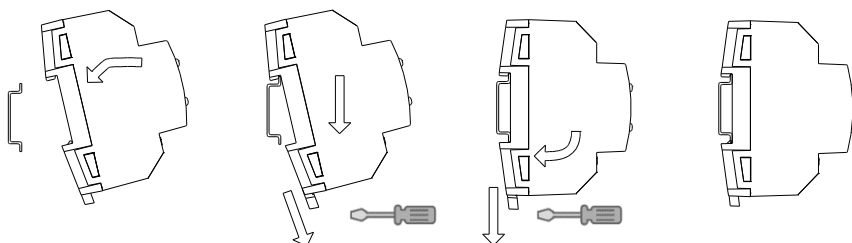
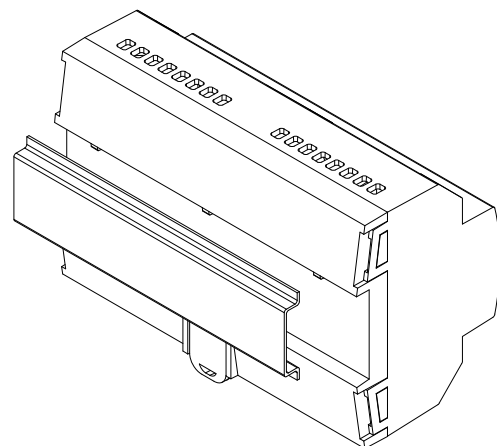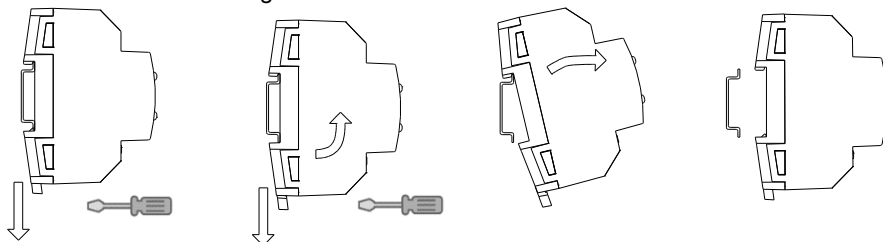

Removing MAXinBOX SHUTTER 8CH v3 from DIN rail:





Figure 3: Mounting MAXinBOX SHUTTER 8CH v3 on DIN rail

### ⚠ 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.
- The home automation facility must be equipped with a device that ensures the omnipolar sectioning. Installation of a 10 A mini-circuit-breaker is recommended. To prevent accidents, it must remain open in case of manipulation of the device.
- 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 https://zennio.com/licenses.