

FEATURES

- 2 different configurable blocks:
 - Shutter channels (up to 4).
 - Individual outputs (up to 8).
 - 2-pipe fan coil control (up to 2 units).
- Manual output operation with push button and LED status indicator.
- Suitable for capacitive loads, maximum **140 µF**.
- Logical functions included.
- Output timing facilities.
- Total data saving on power failure
- Size 67 x 90 x 80 mm (4.5 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 outputs.
- CE directives compliant.

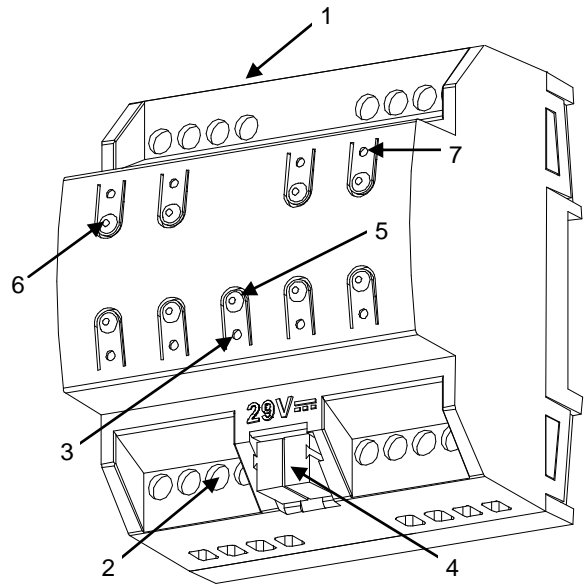


Figure 1. MAXinBOX 8 Plus

Programming/test button: short button press to set 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. The manual mode is indicated by the colour green. During start up (after reset or power failure) and if the device is not in safe mode, LED blinks in blue for a few seconds

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 LED indicator	

GENERAL SYSTEM SPECIFICATIONS

CONCEPT		DESCRIPTION		
Type of device		Electric operation control device		
KNX supply	Voltage (typical)	29V DC SELV		
	Voltage range	21...31V DC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	5.8	168.2
24VDC ⁽¹⁾	10	240		
Bus connection		Typical bus connector TP1, 0,50 mm ² section		
External power supply		No		
Ambient temperature		from 0°C to +55°C		
Storage temperature		from -20°C to +70°C		
Ambient humidity		5 to 95% RH (no condensation)		
Storage humidity (relative)		5 to 95% RH (no condensation)		
Complementary characteristics		Class B		
Safety class		II		
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 if channel configured as shutter.		
Response when restarting KNX bus		Data recovering and output status change according to programming when recovering.		
Operation indication		Programming LED indicates programming mode (red) and test mode (green). Output status LED indicators reflect current output state.		
Weight		290 g.		
PCB CTI index		175 V		
Enclosure		PC FR V0 halogen free		

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

OUTPUTS SPECIFICATIONS AND CONNECTIONS		
Contact type	Potential free outputs through bistable relays with tungsten pre-contact.	
Disconnection type	Micro-disconnection	
Rated current by output	~16(6)A * 250V AC (4000 VA)  16(6)A * 30V DC (480W)	
Maximum inrush current	800A/200µs (fluorescent lamps) 165A/20ms (resistive lamps)	
Outputs per common	1 individual output	
Different phases connection	Possibility to connect different phases in adjoining outputs	
Maximum current	80A	
Maximum power	Resistive load	4000W
	Inductive load	1500W
Connection type	Terminal block (screw)	
Recommended cable section	0,25 mm ² to 4 mm ² (26-10AWG)	
Cable type	Stranded or solid wire.	
Maximum response time	50 ms	
Expected life	Mechanical (min)	3 million operations (60cpm)
	Electrical (min.)	100.000 cycles at max. current (6cpm and resistive load)

WIRING AND ASSEMBLY DIAGRAMS

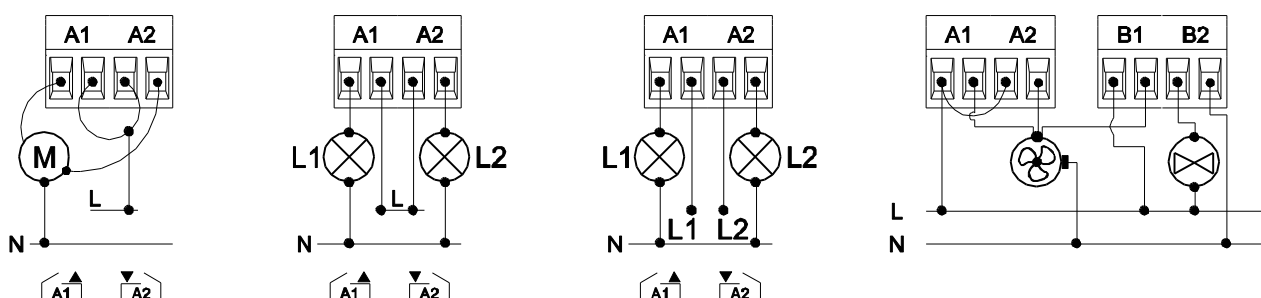
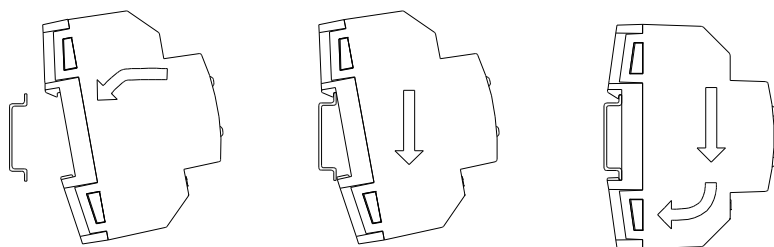


Figure 2. Wiring examples (from left to right): channel A as shutter channel, individual outputs in channel A with the same and different phases and channel A and B as fan coil controller (2 pipe and three-speed fan).

Attaching MAXinBOX 8 Plus to DIN rail:



Removing MAXinBOX 8 Plus from DIN rail:

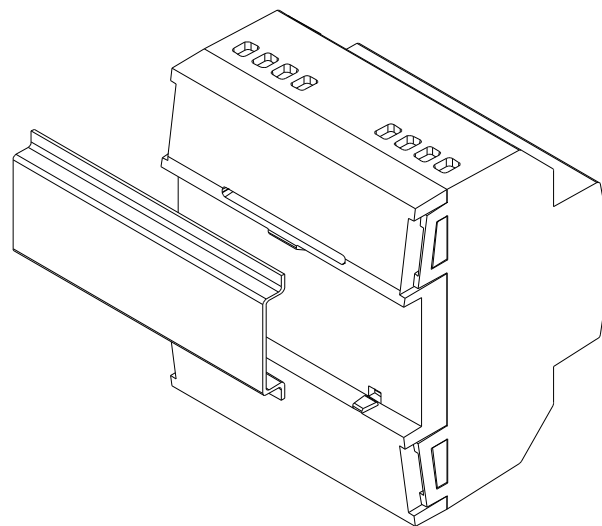
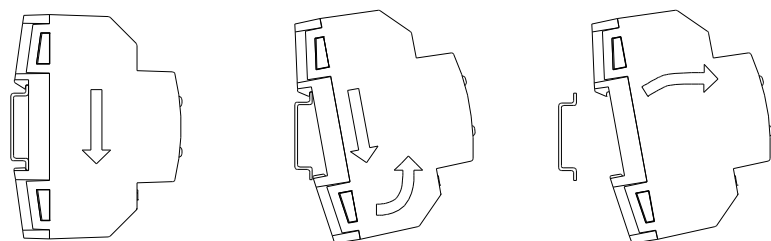


Figure 3. Installation of MAXinBOX 8 Plus on DIN rail



SAFETY INSTRUCTIONS

- 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.

- The WEEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of <http://zennio.com/wEEE-regulation>.

