FEATURES

- 4 individual outputs up to 20 A
- Outputs suitable for capacitive loads, maximum 200 µF
- Possibility of connecting different phases in adjacent outputs
- Supports KNX Data Secure
- 2 Master Light controls
- Independent manual control for physical operation/actuation of the relay
- 20 logic functions
- Output timing
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 67 x 90 x 70 mm (4 DIN units)
- DIN rail mounting according to IEC 60715 TH35, with fixing clamp
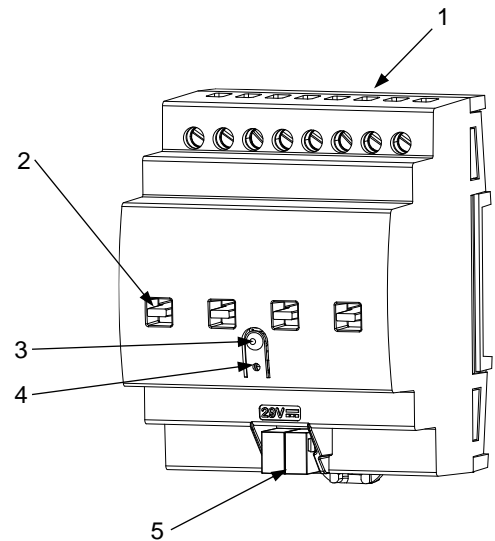- Conformity with the CE, UKCA, RCM directives (marks on the right side)

Figure 1: IndustrialBOX 4

1. Outputs	2. Manual control	3. Programming button	4. Programming LED	5. KNX connector

Programming 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. 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 LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. 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)	4.0		116
		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 / Overvoltage category			II / III (4000 V)		
Operation type			Continuous operation		
Device action type			Type 1		
Electrical stress period			Long		
Degree of protection / Pollution degree			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		
Response on KNX bus restart			Data recovery according to parameterization		
Operation indicator			The programming LED indicates programming mode (red)		
Weight			307 g		
PCB CTI index			175 V		
Housing material / Ball pressure test temperature			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		4
Output type / Disconnection type		Potential-free outputs through bistable relays / Micro-disconnection
Rated current per output		AC 20(7) A @ 250 VAC (5000 VA)
Maximum load per output	Resistive	5000 W
	Inductive	1750 VA
Maximum inrush current		500 A / 2 ms
Connections in adjacent outputs		Possibility of connecting different phases. It is not allowed to connect power supplies of different order, SELV with NO SELV, in the same block.
Maximum current per block		80 A
Short-circuit protection		NO
Overload protection		NO
Connection method		Screw terminal block (0.5 Nm max.)
Cable cross-section		0.5-4 mm² (IEC) / 26-10 AWG (UL)
Outputs per common		1
Maximum response time		15 ms
Mechanical lifetime (min. cycles)		1 000 000
Electrical lifetime (min. cycles)[1]		250000 @ 20 A (VAC)

[1] Lifetime values could change depending on the load type.
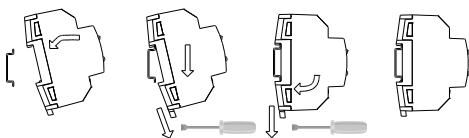
WIRING DIAGRAMS
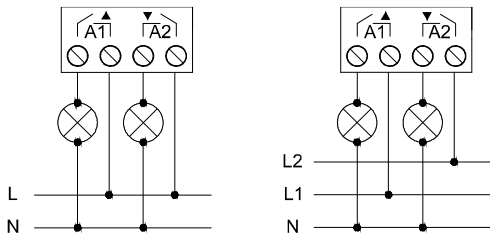
⚠ In order to ensure the expected status of the relays, please manually check the relays before energizing the power circuit.

Figure 3: Wiring example (from left to right): 2 loads and 2 loads connected to different phases

Attaching IndustrialBOX 4 to DIN rail:
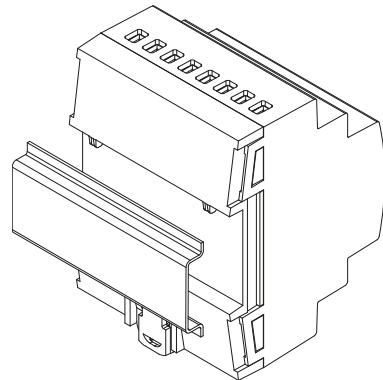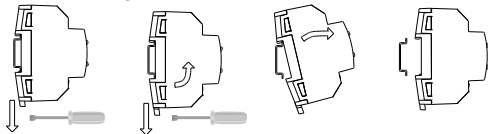

Removing IndustrialBOX 4 from DIN rail:

Figure 2: Mounting IndustrialBOX 4 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.
- 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.