

### FEATURES

- 2 connections configurable as binary input, LED output or solid-state switch control output
- Total data saving on power failure
- Integrated KNX BCU (TP1-256)
- Reduced size: 39 x 39 x 10.5 mm
- Can be mounted within distribution boxes or wall back boxes
- Conformity with the CE, UKCA, RCM directives (marks on the front side)

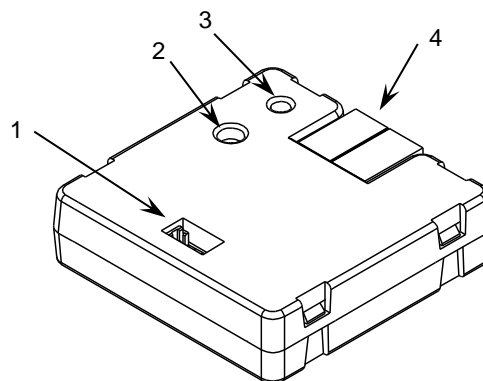


Figure 1: BIN 2X

1. Binary inputs / Outputs	2. Programming button	3. Programming LED	4. KNX connector
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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.

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 emits a red flash.

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)	11.7	339.3
	24 VDC <sup>1</sup>	15	360	
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		III		
Operation type		Continuous operation		
Device action type		Type 1		
Electrical stress period		Long		
Degree of protection		IP20, clean environment		
Installation		Independent device to be mounted in electrical panels (DIN rail), distribution boxes or wall back boxes.		
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		18 g		
PCB CTI index		175 V		
Housing material		PC FR V0 halogen free		

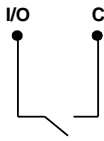
<sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

BINARY INPUTS SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Number of inputs/outputs	2
Inputs per common	1
Input/output voltage	Adapted to the load up to a maximum value of 12 VDC for each output
Input/output current	2 mA
Switching type	Dry voltage contacts between input and common
Connection method	4-wire connector with cable (included)
Cable cross-section	0.08 mm <sup>2</sup> (28 AWG) – 30 cm length
Maximum cable length	30 m (@ 1 mm <sup>2</sup> )
Maximum response time	10 ms

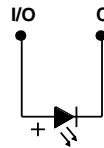
## WIRING DIAGRAMS

Any combination of the next devices is allowed in the different inputs/outputs, although the simultaneous connection of a switch and outputs in the same port is not allowed:

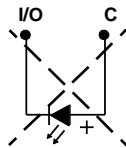
### Binary input



### LED Output

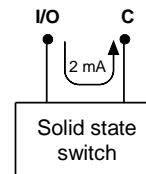


✓ Right load wiring

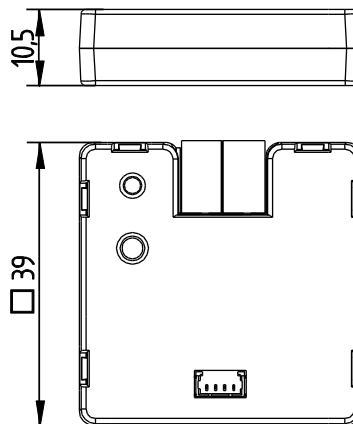


✗ Wrong load wiring

### Solid-state switch control output



## DIMENSIONS (mm)



## 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>.