Universal Interface with 4 configurable binary inputs / LED outputs

ZIO-BIN4X

FEATURES

- 4 conections configurable as binary input, LED output or solid-state switch control output.

- Total data saving on power failure.

- Integrated KNX BCU.

- Device to be mounted inside distribution, junction or wall back boxes.

- Reduced size: 39 x 39 x 10.5mm.

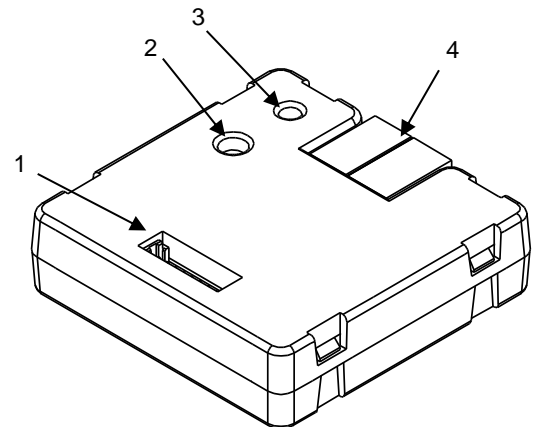- Conformity with the CE directives (CE-mark on the front side).

Figure 1: BIN 4X

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

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)		29VDC SELV	
	Voltage range		21..31VDC	
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	11.7	339.3
		24VDC[1]	15	360
	Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable	
External power supply			Not required	
Operation temperature			0°C .. +55°C	
Storage temperature			-20°C .. +55°C	
Operation humidity			5 .. 95% (No condens.)	
Storage humidity			5 .. 95% (No condens.)	
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 inside distribution boxes, junction 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			18g	
PCB CTI index			175V	
Housing material			PC FR V0 halogen free	

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

BINARY INPUTS SPECIFICATIONS AND CONNECTIONS

| CONCEPT	DESCRIPTION
Number of inputs/outputs	4
Inputs per common	1
Input/output voltage	Adapted to the load up to a maximum value of 12VDC for each output
Input/output current	2mA
Switching type	Dry voltage contacts between input and common
Connection method	8-wire connector with cable (included)
Cable cross-section	0.08mm² (28AWG) – 30cm length
Maximum cable length	30m (@ 1mm²)
Maximum response time	10ms

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:
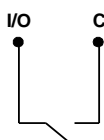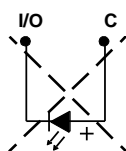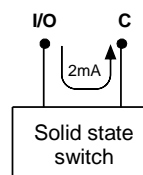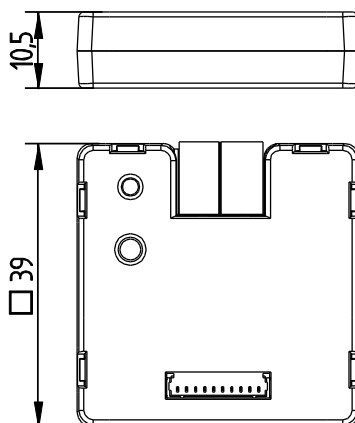
Binary input   **LED Output**   **Solid-state switch control output**
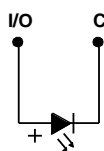
✔ Right load wiring   ✘ Wrong load wiring

DIMENSIONS

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.