

## Universal Interface with 4 binary inputs and 4 LED outputs

ZIO-BIN44 TECHNICAL DOCUMENTATION

#### **FEATURES**

- 4 binary inputs
- 4 outputs configurable as 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)

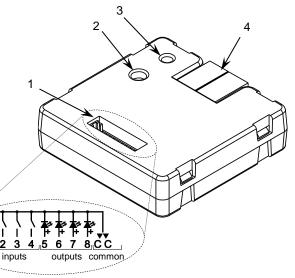


Figure 1: BIN 44

<ol> <li>Binary inputs / Outputs</li> </ol>	Programming button	3. Programming LED	<ol><li>KNX connector</li></ol>
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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			
Voltage (typical)		al)	29 VDC SELV		
Voltage range		)	21-31 VDC		
KNIV gunnly	Maximum	Voltage	mA	mW	
KNX supply	consumption	29 VDC (typical)	12.4	359.6	
	Consumption	24 VDC <sup>1</sup>	15	360	
	Connection ty	ре	Typical TP1 bus connector for 0.8 mm Ø rigid cable		
External power	er supply		Not required	Not required	
Operation ten	nperature		0 +55 °C	0 +55 °C	
Storage temp	Storage temperature		-20 +55 °C	-20 +55 °C	
Operation hu	Operation humidity		5 95%		
Storage humidity		5 95%			
Complementary characteristics		Class B			
Protection class					
Operation type		Continuous operation			
Device action type		Type 1			
Electrical stress period		Long			
Degree of protection		IP20, clean environment			
Installation	Installation		Independent device to be mounted in 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		19 g			
PCB CTI index		175 V	175 V		
Housing material		PC FR V0 halogen free	PC FR V0 halogen free		

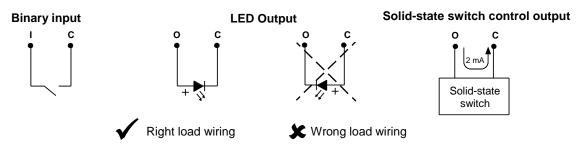
<sup>&</sup>lt;sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

OUTPUTS SPECIFICATIONS AND CONNECTIONS			
CONCEPT	DESCRIPTION		
Number of outputs	4		
Output Voltage	Adapted to the load up to a maximum value of 12VDC for each output		
Output current	2 mA		
Maximum cable length	30 m (@ 1 mm²)		
Connection method	10-wire connector with cable (included) <sup>2</sup>		
Cable cross-section	0.08 mm <sup>2</sup> (28 AWG) – 30 cm length		
Outputs per common	4		
Maximum response time	10 ms		

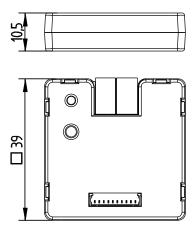
BINARY INPUTS SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of inputs	4	
Inputs per common	4	
Operation voltage	+3.3 VDC for the input	
Operation current	Limited to 1.0 mA	
Switching type	Dry voltage contacts between input and common	
Connection method	10-wire connector with cable (included) <sup>2</sup>	
Cable cross-section	0.08 mm <sup>2</sup> (28 AWG) – 30cm length	
Maximum cable length	30 m (@ 1 mm²)	
Maximum response time	10 ms	

<sup>&</sup>lt;sup>2</sup> Only one connector for both inputs and outputs. See Figure 1.

### **WIRING DIAGRAMS**



### **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.