Zennio®

Multifunction actuator for flush mounting - 2 outputs (16A C-Load)
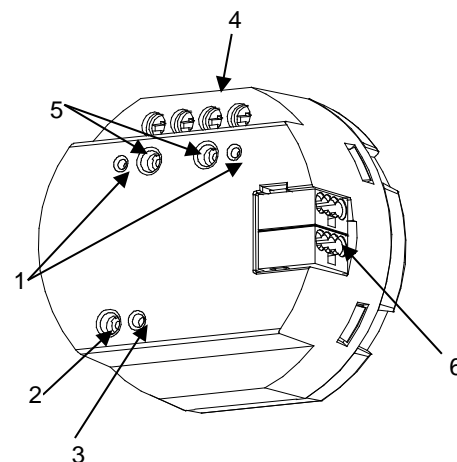**ZIO-IB20**

FEATURES

- 2 outputs configurable as:
  - Shutter channel.
  - Individual outputs (up to 2).
- 10 logical functions.
- Total data saving on KNX bus failure.
- Integrated KNX BCU.
- Dimensions Ø50 x 26mm.
- Can be mounted within distribution boxes, junction boxes or wall back boxes.
- Conformity with the CE directives.

Figure 1. inBOX 20

1. Output status LEDs	**2**. Programming/Test button	**3**. Programming/Test LED
4. Outputs	**5**. Output control buttons	**6**. KNX connector

Programming/test button: short button press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters into safe mode. If this button is held more than 3 seconds, the device enters into test mode.

Programming/Test LED: programming mode indicator (red). When the device enters into safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it makes a blue flashing for a few seconds.

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)	5.08		147.3
		24VDC[1]	10		240
	Connection type		Typical bus connector TP1; 0.80mm ø		
External power supply			Not required		
Operation temperature			0ºC to +55ºC		
Storage temperature			-20ºC to +55ºC		
Operation humidity			5 to 95% RH (no condensation)		
Storage humidity			5 to 95% RH (no condensation)		
Complementary characteristics			Class B		
Protection class			II		
Operation type			Continuous operation		
Device action type			Type 1		
Electrical stress period			Long		
Degree of protection			IP20, clean environment		
Installation			Can be mounted within 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			Programming LED indicates programming mode (red) and test mode (green). Each output LED indicates its status		
Weight			61g		
PCB CTI index			175V		
Housing material			PC FR V0 halogen free		

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

OUTPUTS SPECIFICATIONS AND CONNECTIONS

CONCEPT		DESCRIPTION
Contact type		Potential free outputs through bistable relays with tungsten pre-contact.
Disconnection type		Micro-disconnection
Rated current per output		$\sim$ 16(6)A * 250VAC (4000VA) $---$ 16(6)A * 30VDC (480W)
Maximum power per output	Resistive	4000W
	Inductive	1500W
Maximum inrush current		800A/200µs (fluorescent lamps) 165A/20ms (resistive lamps)
Number of outputs		2 outputs
Outputs per common (Channel)		1 individual output
Total maximum current in device		20A
Connection type		Screw terminal block
Recommended cable section		0.5mm² to 4mm² (20-12 AWG)
Maximum response time		50ms
Lifetime	Mechanical (min)	3 million cycles (60cpm)
	Electrical (min.)	100,000 cycles at max. current (6cpm and resistive load)

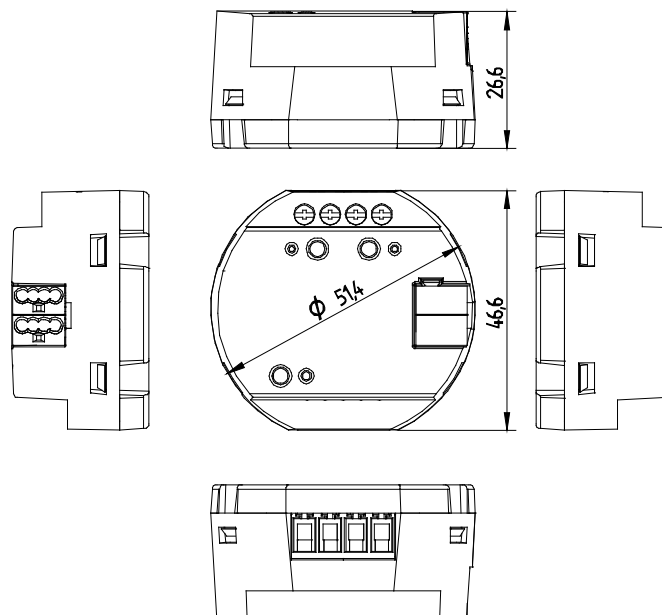## OUTPUTS WIRING DIAGRAM

Shutter channel
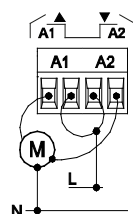
Individual outputs
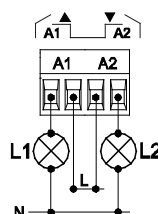
Note: In this device is not possible to connect different phases in adjoining outputs

MAIN DIMENSIONS (in mm)

⚠ 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 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.