

# Heating actuator with 4 outputs 230VAC ZCL-4HT230

#### **Technical Documentation**

#### **FEATURES**

- 4 configurable outputs for 230V valve control.
- 4 thermostats.
- 10 Logic functions.
- Total data saving on power failure.
- Manual control through buttons and status LED indicators.
- Common 230V supply required for the 4 outputs.
- KNX BCU integrated.
- Size 67 x 90 x 35 mm (2 DIN units).
- DIN rail unit assembly (EN 50022), with snap fit clamp.
- CE directives compliant.

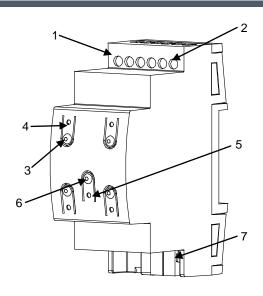


Figure 1. HeatingBOX 230V 4X

1. 230V input (live phase)	2. Valve outputs	3. Output control button	4. Output status indicator LED
5. Programming/Test LED	6. Programming/Test button		7. 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 goes into safe mode.

**Programming/Test LED:** programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During start up (after reset or power failure) and if the device is not in safe mode, LEDs indicator blink red once.

CONCEPT			DESCRIPTION			
Type of device			Electric operation control device	Electric operation control device		
Voltage (typical)		al)	29VDC SELV			
KNX supply	Voltage range		2131VDC			
	Maximum	Voltage	mA	mW		
		29VDC (typical)	7,5	217,5		
,	consumption	24VDC <sup>(1)</sup>	10	240		
	Bus connectio		Typical bus connector TP1, 0,80mm² sec	tion		
External power supply		•	230V 50/60Hz (only phase, for valve supply)			
	t temperature		from 0°C to +55°C			
	temperature		from -20°C to +55°C			
	t humidity		5 to 95% RH (no condensation)			
	humidity (relativ	e)	5 to 95% RH (no condensation)			
Complementary characteristics			Class B			
Safety class						
Operation type			Continuous operation			
Device action type			Type 1	•		
Electrical solicitations period		riod	Long			
Type of protection			IP20, clean environment			
Assembly			Independent control assembly device to be mounted inside of electrical panels with DIN rail (EN 50022).			
Minimal clearances			Not required			
KNX bus failure response		e	Data saving according to parameterization.			
Response when restarting KNX bus		ng KNX bus	Data recovering change according to parameterization.			
Operation indication			Programming LED indicates programming mode (red) and test mode (green). Each output LED indicates its status (fixed = active output; flashing = overload or short-circuit error)			
Weight			98g			
PCB CTI index			175V			
Enclosure			PC FR V0 halogen free			

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

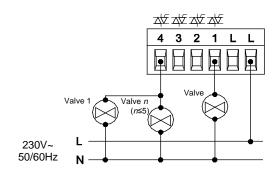
OUTPUT SPECIFICATIONS AND CONNECTIONS				
CONCEPT		DESCRIPTION		
Number of outputs		4		
Output type		Solid state switching device		
Maximum values per output	Quantity of valves <sup>(2)</sup>	5		
	Stationary current	200mA (considering an ambient temperature of 35°C)		
	Inrush current	2,5A		
Short-circuit protection		YES		
Overload protection		YES		
Connection method		Cable screw terminal		
Cable cross-section		0,5 mm <sup>2</sup> to 2,5mm <sup>2</sup> (26-12 AWG)		

<sup>(2)</sup> This value could be more restrictive depending on the valve stationary current and inrush current.

Connecting more than one valve to each output is allowed as long as the maximum current per output is not exceeded:

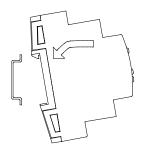
Several valves per output One connection schematic conn

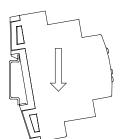
One valve per output connection schematic

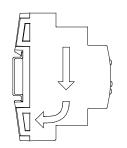


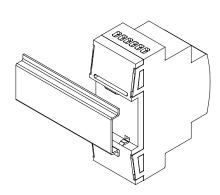
**NOTE**: Simultaneous connection of one valve to several outputs is not allowed.

### Attaching HeatingBOX 230V 4X to DIN rail:

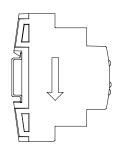


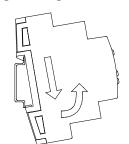






Removing HeatingBOX 230V 4X from DIN rail:





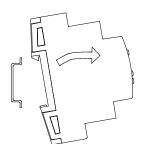


Figure 2. Mounting HeatingBOX 230V 4X on a DIN rail

## ASAFETY INSTRUCTIONS

- Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law
- Do not connect Main Voltage (230VAC) or any other external voltages to any point of the BUS.
- Connecting an external voltage might put the entire KNX system at risk.
- Make sure during the installation that there is always sufficient insulation between the mains voltage 230VAC and the bus or the extension inputs.
- Once the device is installed, it must not be accessible from the outside.
- Keep away from water and do not cover the device with clothes, paper or any other material when in use.
- The WEEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of http://zennio.com/weee-regulation.

