## FEATURES

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


Figure 1. HeatingBOX 230 V 4 X

1. 230 V input (live phase)
2. Programming/Test LED
3. Valve outputs
4. Programming/Test button
5. Output status indicator LED
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 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.

| GENERAL SYSTEM SPECIFICATIONS |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  | DESCRIPTION |
| Type of device |  |  | Electric operation contro |
| KNX supply | Voltage (typical) |  | 29VDC SELV |
|  | Voltage range |  | 21...31VDC |
|  | Maximum consumption | Voltage | mA |
|  |  | 29VDC (typical) | 7,5 |
|  |  | $24 \mathrm{VDC}{ }^{(1)}$ | 10 |
|  | Bus connection |  | Typical bus connector T |
| External power supply |  |  | $230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ (only phase, for valve supply) |
| Ambient temperature |  |  | from $0^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ |
| Storage temperature |  |  | from $-20^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ |
| Ambient humidity |  |  | 5 to 95\% RH (no condensation) |
| Storage humidity (relative) |  |  | 5 to 95\% RH (no condensation) |
| Complementary characteristics |  |  | Class B |
| Safety class |  |  | II |
| Operation type |  |  | Continuous operation |
| Device action type |  |  | Type 1 |
| Electrical solicitations period |  |  | 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 |  |  | Data saving according to parameterization. |
| Response when restarting 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 shortcircuit error) |
| Weight |  |  | 98 g |
| PCB CTI index |  |  | 175 V |
| Enclosure |  |  | PC FR V0 halogen free |

[^0]| OUTPUT SPECIFICATIONS AND CONNECTIONS |  |  |
| :--- | :--- | :--- |
| CONCEPT |  | DESCRIPTION |
| Number of outputs | 4 |  |
| Output type | Solid state switching device |  |
| Maximum values per <br> output | Quantity of valves $^{(2)}$ | 5 |
|  | Stationary current | 200 mA (considering an ambient temperature of $\left.35^{\circ} \mathrm{C}\right)$ |
|  | Inrush current | $2,5 \mathrm{~F}$ |
| Short-circuit protection | YES |  |
| Overload protection | YES |  |
| Connection method | Cable screw terminal |  |
| Cable cross-section | $0,5 \mathrm{~mm}^{2}$ to $2,5 \mathrm{~mm}^{2}(26-12$ AWG $)$ |  |

${ }^{(2)}$ 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 valve per output <br> connection schematic |
| :---: | :---: |



Attaching HeatingBOX 230V 4X to DIN rail:


Removing HeatingBOX 230V 4X from DIN rail:



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

## \SAFETY 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.


[^0]:    ${ }^{(1)}$ Maximum consumption in the worst case scenario (KNX Fan-In model)

