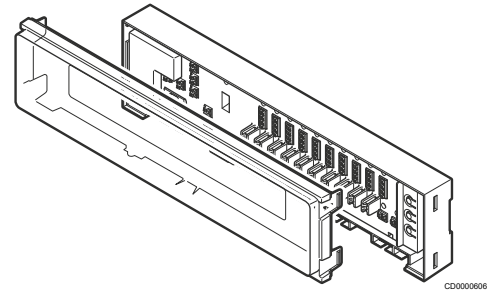


## Uponor Base controller H/C pump X-80 10x 230V



IC0000120



CD0000666

Uponor Base controller H/C pump X-80 10x 230V (controller X-80) is one of the core components in radiant heating and cooling systems. It controls the heating/cooling sources, pumps, and actuators to adjust the indoor temperature in each room based on transmitted demand signals from the thermostats.

### Autobalancing for more comfort and efficiency

When a conventional radiant heating/cooling system is installed, it is necessary to balance it manually to make sure that each room receives the required output. If the system is kept unbalanced with a constant flow rate, some rooms can be overpowered while others are underpowered. A system that is not properly balanced requires more energy to adequately heat all rooms.

The autobalancing technology of the controller X-80 offers a more energy efficient system than a manually balanced system. It constantly calculates and adjusts the accurate energy quantity to keep an optimal comfort in each room. Another advantage is that it is not necessary to balance the system during the initial start.

In renovation projects, the autobalancing feature can easily be adapted to an available installation without any new calculation. In a conventional radiant heating/cooling system, also small changes in a building interior can have an effect on the temperature balance. One reason can be that the required quantity of water at a given supply temperature is necessary to change due to a replacement of floor covering. The autobalancing feature in the controller X-80 can automatically adapt to these changes, to keep the comfort.

### System compatibility

#### Note

For more detailed information, product range and documentation please visit the Uponor website: [www.uponor.com](http://www.uponor.com).

The autobalancing controller X-80 is compatible with Uponor Base thermostats (230 V). This controller is also compatible with other 230 V thermostats available on the market.

### Third-party thermostats



#### Warning!

The installer must make sure that the thermostat is compatible with the controller before the installation is done.

**Following minimum requirements must be obeyed if third-party thermostats should be connected to the controller.**

- 2 wires for power supply 230 V
- 1 output 230 V for the demand

**Following feature is an optional requirement.**

- Day/night input

### Controller features

Main hardware characteristics of this controller:

- 230 V AC input.
  - 1 power LED (green).
- 3 digital inputs: heating/cooling switch, condensation, day/night switch.
- 2 relays: pump and boiler relay.
- Can operate up to 10 thermostats:
  - 4 connectors per thermostat (L – N – Demand and output for day/night switch).
  - 10 red thermostat channels LEDs which used during the connection process.
- Can operate up to 12 actuators which can be assigned independently:
  - 12 single noiseless actuator outputs (triacs).
  - 12 RGB actuator output LEDs which are used during the connection process and to indicate the actuator status.
- 3 push buttons: Thermostat (>), "OK", Actuator (>).
- 1 switch to enable/disable the autobalance function.

## Software features

Main characteristics of the controller software:

- Output management:
  - Autobalancing (set by default).
  - ON/OFF outputs management.
- Pump management.
- Boiler management.
- Valve exercise.
- Day/night switch.
- Cooling mode:
  - The thermostats do not change the status from heating to cooling.
  - The status change is made by the controller which inverts the demand signal from the thermostat.
  - Condensation management.
- Assignment of input – output (thermostats – actuators).
- Factory reset.

## Technical specifications

Description	Value
Product name	Uponor Base controller H/C pump X-80 10x 230V
Dimension	365 x 90 x 56 mm
Weight	730 g
Purpose of control	Automatic control
Construction of control	Electronic independently mounted control
Method of disconnection	Type X
Type of action	Type 1C (micro-interruption)
Degree of protection	IP20, class II (IP: degree of inaccessibility to active parts of the product and degree of water)
Max. ambient RH (relative humidity)	85 % at 20 °C
Marking	CE, UKCA
ERP	I
Low voltage tests	EN 60730-1* and EN 60730-2-9**
EMC (electromagnetic compatibility requirements) tests	EN 60730-1
Power supply	230 V AC +10/-15 %, 50 Hz or 60 Hz
Internal fuse (valve protection)	T5 6.3A
Rated impulse voltage	2,5 kV, OVC II
Control pollution degree	2 - Normal household environment
Software class	A
Operating temperature	-10 °C ... +45 °C
Storage temperature	-20 °C ... +60 °C
Temperature for ball pressure test	100 °C
Extension of sensing element	Temperature
Regulation cycle time for load command	2 min / 10 min / see parameters
External load on valve output	230 V / 75 W max per output – valves
External fuse protection on the installation required	5 A fuse on both relay output
Maximum consumption	Without load 3 W
Day/night switch input	Only dry contact
Condensation input	Only dry contact
Heating/cooling switch input	Only dry contact
Valve outputs	230 V
Pump relay output	5 A / 230 V max – resistive only
Boiler relay output	2 A / 230 V max – resistive only
Connection terminals	0,13 ... 1,5 mm <sup>2</sup>
Power supply cable (not included)	Ø min. 6,5 ... max. 8,0 mm
Command interface	Keyboard, 3 keys

\*) EN 60730-1 Automatic electrical controls for household and similar use -- Part 1: General requirements

\*\*) EN 60730-2-9 Automatic electrical controls for household and similar use -- Part 2-9: Particular requirements for temperature sensing controls

## Regulatory conformance

The wired Uponor Base controllers comply with the following directives.

- CE
- UKCA

### EU/UK Declaration of conformity

Hereby, Uponor declares that the wired Uponor Base controllers are in compliance with the relevant Community harmonisation legislation. <sup>1)</sup>



The full text of the EU/UK declaration of conformity is available at the following internet address:

<https://www.uponor.com/doc/1138349>

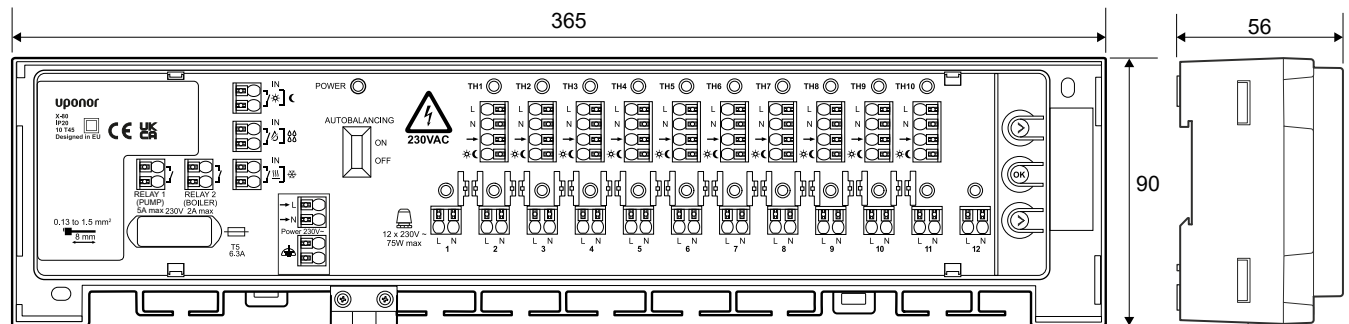
1) Refer to the related Uponor product for the specified certification and compliance marks.

Additional product information and instructions are delivered with the Uponor product. They are available at the website [www.uponor.com/services/download-centre](http://www.uponor.com/services/download-centre) and at the national Uponor websites in local language.



## Dimensions

[mm]



ZD0000087

**Uponor GmbH**

Industriestraße 56,  
D-97437 Hassfurt, Germany

1139821 v2\_10\_2023\_EN  
Production: Uponor/ELO

Uponor reserves the right to change the product portfolio and the related documentation without prior notification, in line with its policy of continuous improvement and development.



[www.uponor.com](http://www.uponor.com)