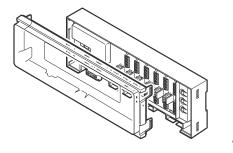
# Uponor Base controller H pump X-60 6x 230V



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Uponor Base controller H pump X-60 6x 230V (controller X-60) is one of the core components in radiant heating systems. It controls the heating source, pump, 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 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-60 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 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-60 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.

The autobalancing controller X-60 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).
- Digital inputs: day/night switch.
- Pump relay.
- Can operate up to 6 thermostats:
  - 4 connectors per thermostat (L N Demand and output for day/night switch).
  - 6 red thermostat channel LEDs, which are used during the connection process.
- Can operate up to 12 actuators, with 2 actuators at a time that follow a common thermostat:
  - 6 double noiseless actuator outputs (triacs).
  - 6 bi-colour 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 (set by default).
- Autobalancing (set by default).
  - ON/OFF outputs management.
- Pump management.
- Valve exercise.

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- Day/night switch.
- Assignment of input output (thermostats actuators).
- Factory reset.

## **Technical specifications**

Description	Value
Product name	Uponor Base controller H pump X-60 6x 230V
Dimension	265 x 90 x 56 mm
Weight	590 g
Purpose of control	Automatic control
Construction of control	Electronic independently mounted control
Method of disconnection	Туре Х
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
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
Valve outputs	230 V
Pump relay output	5 A / 230 V max – resistive only
Connection terminals	0,13 1,5 mm²
Power supply cable (not included)	Ø min. 6,5 max. 8,0 mm
Command interface	Keyboard, 3 keys

 $^{\star})$  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. 1)



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

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

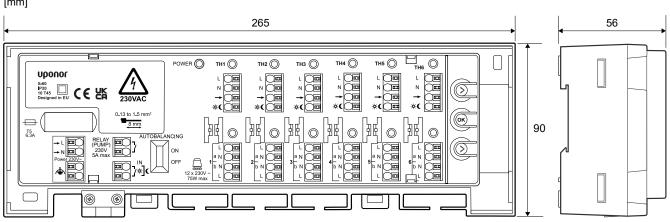
1) Refer to the related Uponor product for the specified certification and compliance marks.

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



## **Dimensions**

[mm]



#### **Uponor GmbH**

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1139824 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.



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