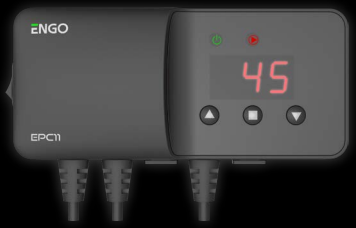
ENGO CONTROLS

EPC

EPC11 | Pump Controller for CH system



Quick Guide

Ver. 1
Release date: III 2023

Producer:
Engo Controls S.C.
43-200 Pszczyna
ul. Górnośląska 3E
Polska

Distributor:
QL CONTROLS Sp z o.o. Sp. k.
43-262 Kobielice
4 Rolna St.
Poland

www.engocontrols.com

Introduction

The controller is designed to control water pump in CH systems. Controller's task is to start the pump when temperature will exceed the desired value and turn it off when boiler will cool down. It prevents unnecessary pump operation and extends its service life, which allows also to save electricity. Thanks to this, pump reliability increases and heating costs are lower.

Product Compliance

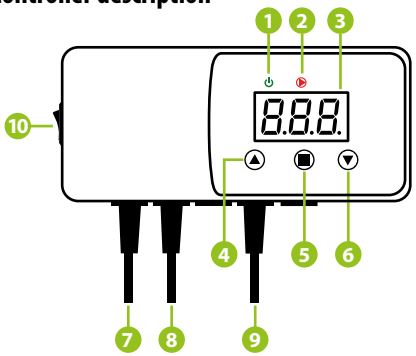
This product complies with the following EU Directives: 2014/30/EU, 2011/65/EU.

Safety Information

Use in accordance to national and EU regulations. Use the device as intended, keeping it in dry condition. Product for indoor use only. Installation must be carried out by a qualified person in accordance to national and EU regulations.

Before carrying out any activities related to the power supply (connecting wires, device installing etc.), make sure that main power is not connected to the controller! Incorrect wiring connections may cause device damage.

Controller description

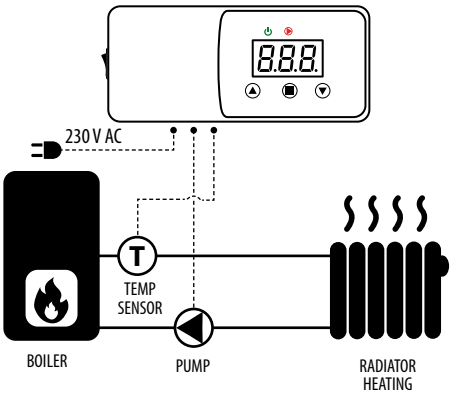


1. Power supply indicator
2. Pump operation indicator
3. Display
4. Increasing setpoint temperature or value
5. Menu button
6. Decreasing setpoint temperature or value
7. Controller power supply
8. Pump power supply
9. Temperature sensor
10. ON/OFF power supply switch

Technical specification

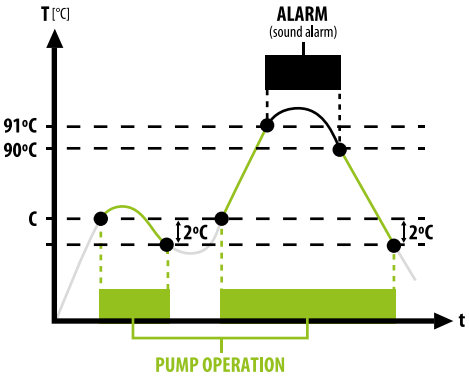
Power supply	230V AC 50Hz
Max load of the pump output	3 (1) A
Temp. measurement range	0 – 99°C
Setpoint temp. range	5 – 80°C
Sensor temp. range	-10 – 120°C
Sensor cable lenght	1,5m
Dimension [mm]	155 x 70 x 39

Wiring diagram



Principle of operation

C - pump start temperature



Controller operation

Setpoint temperature is changed by pressing ■ button- display should indicate a flashing „C" letter. At this point it is possible to change the desired setpoint temperature using ▲ or ▼ buttons. After a few seconds, the controller will go into operating mode and display the current boiler temperature.

C – activation temperature of the CH pump above the set value (setting range 5-80°C).

Manual mode

This function allows to check if connected pump is working correctly. The pump will be turned on after pressing buttons ■ and ▼. Pressing these buttons again will turn off the pump.

Histeresis

This is the difference between setpoint temperature of the pump start and setpoint temperature of the pump stop. Controller has a constant hysteresis of 2°C. For example, after setting the setpoint temperature „C" at 50°C, pump will be turned on after exceeding 50°C, and will be turned off when the temperature will drop to 48°C.

Additional functions

Controller has an „anti-stop" function which protects pump against lime scale when there is no heating season. Pump is turned on every 14 days for 15 seconds.

An additional protection is the frost protection function, which runs pump permanently when temperature on the sensor drops below 5°C.

Alarm

The controller is equipped with an acoustic alarm signaling:
- Too high temperature on the boiler 90 ° C.
- Short circuit in the CH sensor

Error Code

E1 - short circuit in the CH sensor
E2 - broken CH sensor

PLEASE NOTE!

If the E1 or E2 error is displayed, the CH pump works all the time until the fault is removed.