

PDS 2 - TEMPERATURE CONTROLLER

PDS 2 is a temperature controller for building automation applications. The controller has RS-485 connection for Modbus RTU communication.

Controller supports Pt1000 temperature sensors. The actuators can be 0...10 V controlled actuators and/or thermal actuators or 3-point actuators.

The controller has two application profiles for different applications: PDS 2-V and PDS 2-H.

PDS 2-V

PDS 2-V application profile is designed especially for air handling unit control and temperature control. The profile is applicable for constant value control and room/exhaust air temperature compensated control. In addition, the profile can also be used for domestic water temperature control.

To protect the heating coil from freezing, a frost protection thermostat (e.g. JVS 24) can be connected to controller.

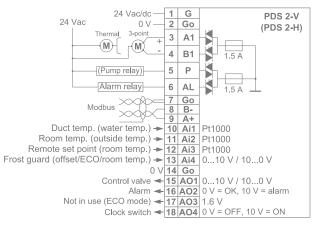
PDS 2-H

PDS 2-H application profile is designed especially for outdoor temperature based heating water circuit temperature control.

The controller controls the supply water temperature according to the five-point curve that is based on the outdoor temperature. The control accuracy can be improved with room temperature compensation.

The ECO mode function and supply water temperature offset can be used to save heating energy during night time, for example.

Wiring





Technical data

Supply 24 Vac/dc*, (20...26 V) < 1 VA

Inputs 3 x Pt1000 1 x 0...10 V

Outputs

1 x 0...10 V / 10...0 V

Modbus RTU (RS-485)

2 x 0 / 10 V 1 x 1.6 V 4 x 24 Vac, 1 A

53 x 90 x 58 mm

Communication
Operating conditions

Dimensions (w x h x d)

Temperature 0...+50 °C

Humidity 0...85 % RH (non cond.)

Wiring terminals 1,5 mm²

Housing IP20, for 35 mm DIN rail

*) NOTE: Only the 0...10 V outputs and Modbus work when using DC supply voltage.

Ordering guide:

| Model | Product number | Description |
|----------------------|----------------|-----------------------------------|
| PDS 2 | 1150120 | controller |
| TEAT PT 1000 | 1174070 | immersion sensor |
| TEHR PT 1000 | 1174190 | room sensor |
| TEK PT 1000 | 1174040 | duct sensor |
| TEP PT 1000 | 1174080 | strap-on sensor |
| TEU PT 1000 | 1174090 | outdoor sensor |
| TEHR PT 1000-P/PDS 2 | 1174231 | room sensor + set point for PDS 2 |

Products fulfil the requirements of directive 2004/108/EC and are in accordance with the standards EN61000-6-3 (Emission) and EN61000-6-2 (Immunity).

