![PRODUAL measure-be sure.]

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.
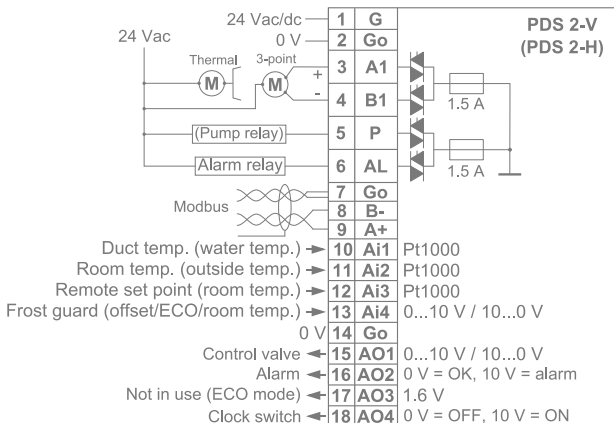
PDS 2-H

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.

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
	2 x 0 / 10 V
	1 x 1.6 V
	4 x 24 Vac, 1 A
Communication	Modbus RTU (RS-485)
Operating conditions	
Temperature	0...+50 °C
Humidity	0...85 % RH (non cond.)
Wiring terminals	1,5 mm²
Housing	IP20, for 35 mm DIN rail
Dimensions (w x h x d)	53 x 90 x 58 mm

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

Wiring

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).