

PDS 2.2 UNIVERSAL CONTROLLER

PDS 2.2 is a general purpose controller. It can be used for controlling e.g. pressure, humidity or temperature.

The signal of 0...10 Vdc connected to the input of controller is corresponding the 0...100 % setting of the set point. The display can be scaled to show Pa, kPa, °C, bar, m/s, lux, CO₂ or CO.

This controller supports using of 0-10V controlled actuators and also 3-point controlled or thermic actuators.

By using PYR4 transducer the 0-10V output signal of PDS 2.2 can be divided for making a 2-step control.

Configuration, settings and monitoring will be made by using display and push buttons on the cover.

The controllers have built-in RS-485 channel for Modbus communication and they can be connected to any supervisory software / system supporting Modbus RTU.

Modes:

1. Normally (= info mode) input (IN), set point (SP) and output (OUT) values in % values are available at the display.

When the external set point input is disabled, the menu for setting the set point, will be reached by pushing **M**. Desired set point will be set by pushing **+** and **-** and will be accepted by pushing **OK**.

When the external set point is active only the value of set point will be displayed after pushing **M**.

2. Programming mode is available by pushing **+ OK OK M**. This mode includes main levels Con(trol) and Inp(uts).

Con level includes controller parameters: XP, P/PI, T int, 3-P / termo, Tmot s and DIR / REV.

Inp level includes settings for inputs AI1 and AI2.

Info mode is returning by pushing **M** for 5s. Info mode also returns automatically after 60s from the latest pushing.



Technical data:

supply	24 Vac/dc, (20...28V) < 1 VA
inputs	0...10V < 1mA measurement 0...10V external set point setting
outputs	1 x 0...10 Vdc, 2 mA 2 x 24Vac 1A, 1 x 10Vdc, for 4.7...220 kohm pot.
communication	RS-485 Modbus RTU, 9600/19200/38400 bps, 8 data bits, Parity None, 1 Stop Bit
operating conditions	0...95%rH, non-condensing 0...50°C
terminals	1,5 mm ²
housing	IP20, for 35mm DIN rail installation
dimensions w x h x d	53 x 90 x 58 mm

Wiring:

1	24 Vac/dc G
2	0 V Go
3	output A1 24Vac thermic- or 3-point actuator +
4	output B1 24Vac thermic- or 3-point actuator -
5	n/a
6	output AL 24Vac alarm relay
7...9	n/a
10	input AI1 0...10V measurement
11	input AI2 0-10V external set point
12...13	n/a
14	0 V Go
15	output AO1, 0...10V/10...0V actuator
16	output AO2, 10V for ext. set point potentiometre
17...18	n/a

Ordering guide:

Model	Product number	Description
PDS 2.2	1150150	universal controller

Products fulfil the requirements of directive 2004/108/EY and are in accordance with the standards EN61000-6-3: 2001 (Emission) and EN61000-6-2: 2001 (Immunity).