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 contolled actuators and also 3-point controlled or thermic actuators.

By using PYR4 transducer the 0-10V output signal of PDS 2.2 can be devided 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 parametres: 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 automaticly 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 mm²
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 termic- or 3-point actuator +
4	output B1 24Vac termic- 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