

PPT245

DIN-Rail Mounted Multifunction Indicator/Controller



- Metalworking furnaces
- Heating element control
- Footwear machinery
- Plastic extrusion
- Injection moulding
- Motorised valve control
- Woodworking machinery
- Pharmaceutical industry
- Current control
- Remote control via RS485
- Signal converter

GENERAL SPECIFICATIONS

Housing	DIN 43880 for mounting on type EN 50022 rail or on a flat surface
Supply Voltage	24 to 230VAC/DC +/- 15% 50/60Hz
Power Consumption	3W
Display	4-digit dual LED, 8 red status LEDs
Operating Conditions	0-45°C, 35-95%RH
Inputs	1 configurable for J, K, R or S thermocouples; Pt100; Ni100; Pt1000; Pt500; PTC1k; NTC10k; 0 to 10V; 0/4 to 20mA; 0 to 40mV; potentiometer 6kΩ / 150kΩ; TA 50mA.
Outputs	2 relays 5A resistive + 1 logic SSR 12V-30mA / 4 to 20mA / 0 to 10V for control or retransmission, galvanically isolated from input and power supply RS485 Modbus RTU (57600 baud max) Input TA 50mA for Loop Break Alarm
Digital Input	Tuning start, Setpoint change, Man/Auto selection, Hold function, Start/Stop preprogrammed cycle
Control Modes	ON/OFF, P, PI, PID, Autotuning
Accuracy	0.5%±1digit for TC/RTD; 0.2%±1digit for V/mA
Sampling Time	Selectable (15ms max)
Sealing	IP20
Configuration	Parameters protected by password; optional memory card with battery for repeat configurations; LabSoftView software for configuration via a PC
Optional Enclosure	Polycarbonate with transparent lid, IP65, 160H x 90W x 90D mm

The PPT245 DIN-rail mounted controller provides a highly versatile alternative to panel-mounted instruments. It has one analogue input which is configurable for up to 18 different sensors/signals, two relay outputs, and a third output which can be configured either as a SSR logic signal or a 4 to 20mA / 0 to 10V analogue signal for control or re-scalable retransmission of the process variable or setpoint.

The analogue output can also be used to adjust the emissivity setting on a PyroEpsilon non-contact temperature sensor – the value is adjusted between 0.2 and 1.0 using the lower (red) LED display and associated push buttons.

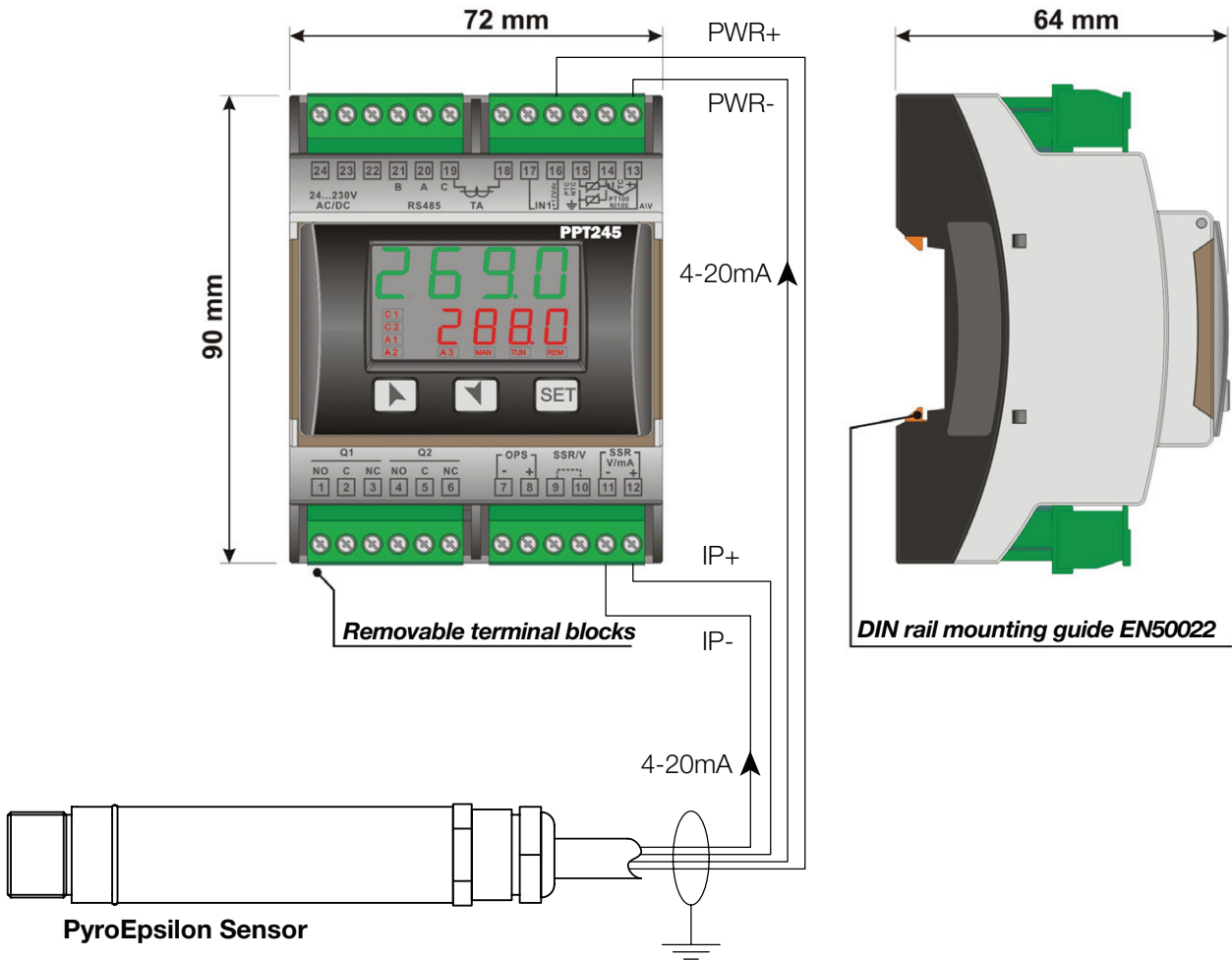
The built-in switching power supply has an extended range of 24 to 230VAC/DC and does not require any jumper setting. The control modes are ON/OFF, PID + Autotuning and Heating/Cooling PID with a neutral zone.

Software features include launch tuning, setpoint selection via digital input, optional manual reset of the output via the front keypad, latch-on function for sensor calibration (including load cells) and a programmable cycle of 3 steps. RS485 serial communication (Modbus RTU) and load monitoring function (Loop Break Alarm) with current transformer TA are also provided.

There is an optional Memory Card to copy all of the configuration parameters from one controller to another without powering them up, whilst LabSoftView for Windows enables setting and monitoring of parameters on a PC.

The PPT245 is also available mounted in an IP65 enclosure with clear lid, which is ideal for mounting on a machine or close to the process where the operator can see the display.

If the PPT245 is ordered with a PyroEpsilon sensor, it is supplied pre-configured to display the 4 to 20mA signal from the sensor over the appropriate temperature range. It is also pre-configured to allow the emissivity setting on the sensor to be adjusted over the range 0.2 to 1.0. Since the PyroEpsilon derives its power from the PPT245 no other power source is required. The PPT245 can be supplied from a 24V to 230V source (+/-15%), AC or DC.



MODEL	INPUTS	OUTPUTS	POWER SUPPLY
PPT245-21ABC-T	Selectable	2Relays + SSR / 4..20mA / 0..10V + RS485	24...230V AC/DC +/- 15% 50/60Hz

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