DRR244

PID controller Rail DIN mount
Programmable input, isolated analogue output, multi-voltage power supply, current transformer input, digital input, serial communication

PID controller DRR244 stands out in the segment of rail-mounted controllers thanks to its flexibility and configurability that are summed up in a **single ordering code.**

The analogue input can be programmed for extensive range of **temperature sensors** (resistance thermometers and thermocouples) as well as for process signals mA/Volt (typically pressure transmitters, humidity and flow sensors).

The **outputs** can be selected as **command/multiple alarm modes/analogue retransmission**. Serial communication is RS485 with Modbus RTU/Slave protocol. The controller is equipped with extended range power supply 24 to 230V AC/DC with galvanic isolation from the network.

In addition to its function as heating/cooling PID controller, DRR244 controller also serves as a **signal converter** thanks to its galvanically isolated and relascalable analogue output, which can be used for process/setpoint retransmission.

Main features

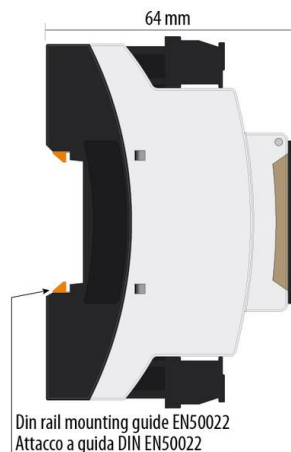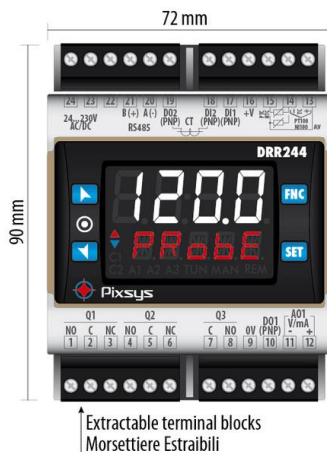|	
Enclosure	4 modules, DIN43880, DIN-rail mount DIN EN50022
Power supply	24…230V AC/DC ±15% 50/60 Hz (galvanic isolation 2500V)
Consumption	9VA
Display	White LED Display 4 digits 0,5" + red LED 5 digits 0,3" (Alphanumeric)
Operating conditions	Temperature 0-45 °C, humidity 35..95 uR% (non-condensing)
Material	Enclosure: Polycarbonate V0; Front: Silicon V0 self-extinguishing
Weight	approx. 210 g
Sealing	Enclosure and terminal blocks IP20
Quick set-up options	APP **MyPixsys**, Memory Card USB, **LabSoftView** software, EASY-UP codes
Connections	Extractable terminal blocks

Inputs

1 analogue input	Resolution16bit, programmable for Thermocouples K, S, R, J, T, N, B (automatic compensation of cold junction -25..85°C, ±0,2% F.S. ±1 digit F.S.), Thermoresistances PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (β 3435K), process signals 0..10 V (50000 points), 0/4..20mA (40000 points), 0..60 mV (25000 points), potentiometer 1..150 KΩ (50000 points)
Sampling time	Programmable up to 2,1ms (frequency up 470 Hz)
2 digital inputs	PNP, programmable for Setpoint change/ Hold/ Run/ Start Tuning, Start -Stop/ configuration lock
1 Current transformer input	50 mA, 800µs - 4096 points

Outputs

3 Relays	Q1, Q2 5A - 250VAC resistive loads Q3 2A - 250VAC resistive loads
2 Digital outputs	12 / 24 V DC - 30 mA max
1 Analogue output	4..20 mA (40000 points ± 0,2% F.S.) or 0..10 V DC (40000 points ± 0,2% F.S.) for command or retransmission PV / SPV
1 Auxiliary output	12/24VDC - max 30mA, to supply the sensor
Serial communication	RS485 Modbus RTU - Slave

Software feature

Setpoints	Up to 6 setpoints
Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time-proportioned, dead band. Manual/automatic control of output
Tuning	Manual or automatic
Data protection	Lock command and/or alarm setpoints. Password to access configuration parameters
Alarm modes	Absolute / Threshold , Band alarm, Upper/Lower deviation. Retentive alarms, Activation delay. Loop Break Alarm
Dual PID action	Combined Heating/Cooling PID action, Dual PID
Soft-Start	Rising gradient expressed as Degrees / Hour
Programmer function	Start/Stop pre-programmed cycle, 3 steps
Open/Close logic	Motorized valves control

Extractable terminal blocks
Morsettiere Estraibili

Din rail mounting guide EN50022
Attacco a guida DIN EN50022

Ordering codes

DRR244-13ABC-T
1 analogue input + 3 Relays + 2 SSR + 2 D.I. + 1 Analogue output V/mA + RS485 + CT / Supply 24..230V AC/DC