Pixsys®
ELECTRONICS

DRR460

Controller / Regolatore

User manual - Manuale uso

2 Model identification

DRR460-12A-T128	Power supply 24Vdc ±15% + 1 analogue input + 2 logic output 24Vdc/50mA + 1 output 0/4...20mA + RS485 +C.T.
DRR460-12A-CAN	Power supply 24Vdc ±15% + 1 analogue input + 2 logic output 24Vdc/50mA + 1 output 0/4...20mA + CANopen +C.T.

3 Technical data

3.1 Main features

Operating temperature	0-45°C, humidity 35..95uR%
Contenitore	DIN43880, 18 x 90 x 64 mm
Material	Box: PC UL94V0 self-extinguishing; front panel: PC UL94V0 self-extinguishing
Protezione	IP20 (box and terminal blocks)
Peso	Approx. 30 g

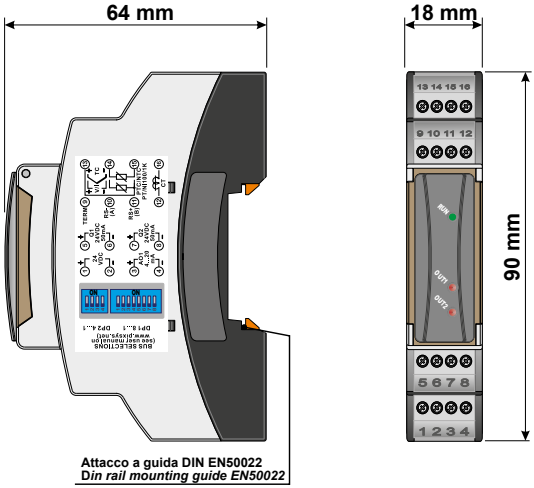
3.2 Hardware Features

Power supply	24 VDC ±15%	Consumption: 3 VA
Analogue input	**1**: AN1 Configurable via software. **Input**: Thermocouple type K, S, R, J, T, E, N, B. Automatic compensation of cold junction from 0..50°C. **Thermoresistance**: PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (β 3435K). **Input V/I**: 0-10 V, 0-20 or 4-20 mA, 0-60 mV. **Pot. input**: Configurable 1..150kΩ, **1**: C.T.: 50 mAAC 50/60 Hz	Tolerance (25 °C) +/-0.3% ±1 digit (su F.s.) for thermocouple, thermoresistance and V / mA. Cold junction accuracy 0.1 °C/°C **Impedence**: **0-10 V**: Ri>110 kΩ **0-20 mA**: Ri<50 Ω **4-20 mA**: Ri<50 Ω **0-60 mV**: Ri>500 kΩ
Logic output	**2** SSR. Configurable as command or alarm output	+24VDC ±15%/ 50mA
Analogue output	**1** 0/4..20 mA. Configurable as command output, alarm output or retransmission	0..20 mA: 42500 points, ±0.3% on F.S. 4..20 mA 34000 points, ±0.3% on F.S.

3.3 Software features

Regulation algorithms	ON-OFF with hysteresis. P, PI, PID, PD proportional time.
Proportional band	0..999°C or °F
Integral time	0,0..999,9 s (0 excludes integral function)
Derivative time	0,0..999,9 s (0 excludes derivative function)
Controller functions	Manual or automatic tuning, configurable alarm, Start/Stop.

4 Dimensions and Installation

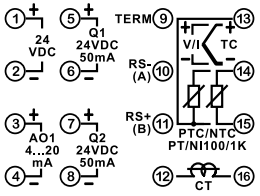


5 Electrical wirings

This controller has been designed and manufactured in conformity to Low Voltage Directive 2014/35/EU (LVD) and EMC Directive 2014/30/EU (EMC). For installation in industrial environments please observe following safety guidelines:

- Separate control line from power wires.
- Avoid proximity of remote control switches, electromagnetic contactors, powerful engines and use specific filters.
- Avoid proximity of power groups, especially those with phase control.
- It is strongly recommended to install adequate mains filter on power supply of the machine where the controller is installed, particularly if supplied 230Vac. The controller is designed and conceived to be incorporated into other machines, therefore CE marking on the controller does not exempt the manufacturer of machines from safety and conformity requirements applying to the machine itself.
- Wiring of pins use crimped tube terminals or flexible/rigid copper wire with diameter 0.25 to 1.5 mm2 (min. AWG28, max. AWG16, operating temperature: min. 70°C). Cable stripping lenght 7 to 8 mm.

5.1 Wiring diagram



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5.1.a Power Supply

Power supply 24 VDC ±15% – 3 VA