

PDI 20 PID Controller



- 48x24 mm case, for flush-in panel mounting
- 2 outputs status LEDs
- PID mode on OUT1 output and ON/OFF mode on OUT2 output with dependent or independent set points.
- AUTOTUNING function for PID mode
- Dynamic set point function to avoid starting over-extension

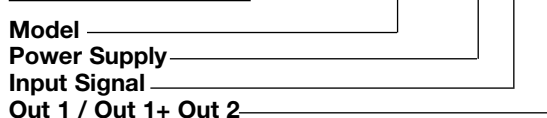
Product Description

Digital microprocessor based controller with single display, 4 red digits and 3 operation buttons, designed for different application such as temperature, relative humidity and pressure controls. Up to 2 configurable set points, a configurable multi input

and up to 2 configurable outputs, one for relay and one for solid state relay (SSR). Alarm output configuration available. The device incorporates different control modes: ON/OFF, PID or NEUTRAL ZONE control.

Ordering Key

PDI20 H V RO



Approvals



Type Selection

Power Supply		Input Signal		Output OUT1		Outputs OUT1 + OUT2	
H:	90...240VAC	V:	0-10 VDC	RX:	Relay	RO:	Out1 Relay/Out2 SSR
L:	24VAC/DC	A:	0-20 mA	OX:	15mA/6VDC for SSR	OR:	Out1 SSR/Out2 Relay
		F:	4-20 mA				
		C:	TC (J, K, S)				
		D:	Pt100, Ni100				
		E:	PTC				

Input Data

One multi-configurable Input	Input Signal
Thermocouples	TC J, K, S - According to IEC 584-2, accuracy class 1 or 2
Infrared Thermocouples	IRS J and K
Thermoresistance	RTD Pt100/Ni100 According to IEC 751, accuracy class A or B
Thermistors	PTC KTY81-121 (990 Ω at 25°C)
Normalized analogue signals	0-20mA, 4-20mA 0-10 V

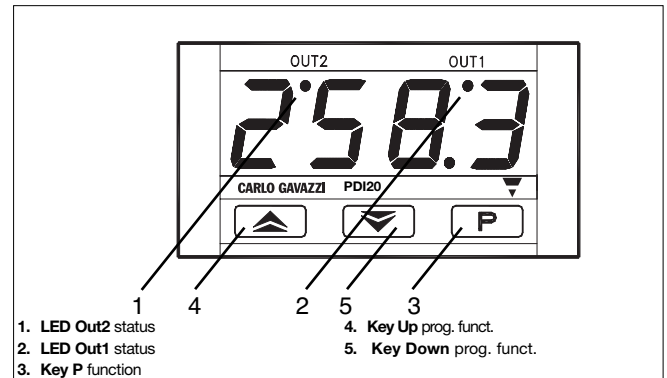
Output Data

Up to two Outputs	Output Data
1 Relay Output	SPST/No (5A-AC1, 2A-AC3 / 250VAC)
Relay electric life	100000 operations
1 Voltage SSR driving	15mA at 6VDC

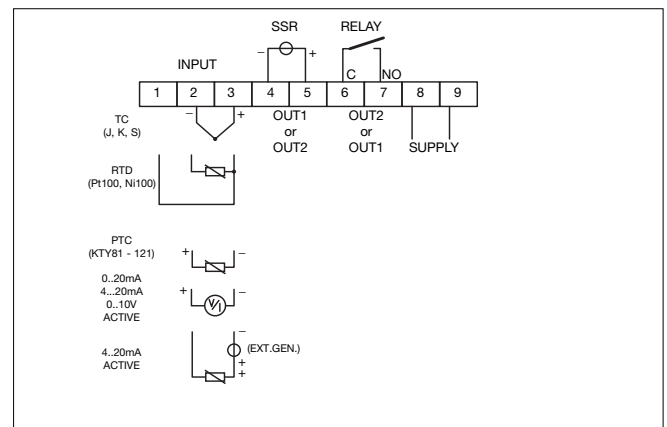
Functional Data

Control	ON/OFF and Neutral Zone for both outputs; PID mode only for OUT1
Multi Set Points	Up to 2 programmable Set Points
Overall accuracy	±0.5% full scale,
Display resolution	According to the used probe 1/0,1/5/0,5
Input measurement range	According to the used probe and to the measurement unit
Sampling rate	1 sample per second
Display	4 red digits h=12mm
Operating temperature	0-50 °C
Operating humidity	30-95 RH% without condensation

Front Panel Description



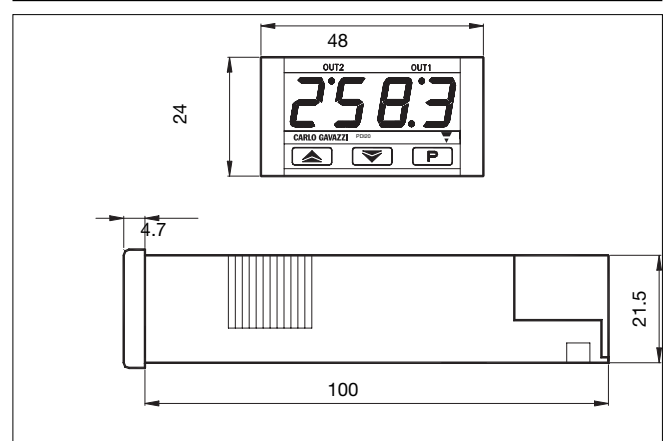
Connections



General Data

Mechanical Characteristics	
Housing	Self-extinguishing plastic, UL94 V0
Connections	Extractable 2,5mm ² screw terminal block
Mounting	Flush in panel cut out 45x22mm
Front panel protection	IP54 mounted in panel with gasket
Dimensions	W 48 x H 24 x D 100mm
Weight	80g
Storage temperature	-10°C to +60°C
Electrical Data	
Power Supply	24VAC/VDC, 90-240VAC ±10%
AC Frequency	50 / 60Hz
Power consumption	3VA approx.
Electric shock protection class	Class II for Front panel
Insulation	Reinforced insulation between the low voltage section (power supply and relay output) and the front panel or between the low voltage section (power supply and relay output) and the extra low voltage section (input and SSR output); no insulation between input and output for SSR driving.

Dimensions (mm)



Panel Cut Out and Mounting (mm)

