

PDI 92 PID Controller

CARLO GAVAZZI



- 48x96 mm case, for flush-in panel mounting
- °C/°F/Kelvin unit selectable for temperature probe
- 5 outputs status LEDs
- AUTOTUNING function
- Heater Break Alarm function enable

Product Description

Digital microprocessor based controller with dual display, 4 red + 4 green digits and 3 operation buttons, designed for different application such as Plastics Industries, Thermal Equipment, Packaging Machinery, Textile/die processing machinery, generic cooling/heating process, water chillers, eat recovery system, Chemical, etc. Multi input and up to 5 configurable outputs for relay or solid state

relay (SSR) driving. 1 or 2 regulation outputs, 1 or 2 alarm outputs and 1 HB alarm output. Different alarm output configuration available. The device incorporates different control modes: ON/OFF, single or double (direct and reverse) action PID control. Multi-level parameters programming protected by password.

Ordering Key PDI92 T XX 2R R X H

Model _____
 Input Signal _____
 Output A (HB) _____
 Output B and Output C (AI1 or AI1+AI2) _____
 Output D (C1) _____
 Output E (C2) _____
 Power Supply _____

Approvals



Type Selection

Input Signal	Heater Break Alarm HB (OUT A)	Alarm Outputs (AI1 + AI2) (OUTB and OUTC)	Main output C1 (OUTD)	Second output C2 (OUTE)	Power Supply
T: TC (J, K, R, S, T), RTD Pt100	XX: No HR: Relay Output (HB) HO: 24VDC output for SSR driving (HB)	XX: No 1R: 1 Alarm with Relay Output (AI1) 1O: 1 Alarm with SSR driving (AI1) 2R: 2 Alarms with Relay Output (AI1+AI2) 2O: 2 Alarms with SSR driving (AI1+AI2)	R: 5A-AC1, 2A-AC3/250VAC Relay or 24VDC for SSR	X: No R: 5A-AC1, 2A-AC3/250VAC Relay O: 24VDC for SSR	H: 90...240VAC L: 24VAC/DC

Input Data

One multi-configurable Input Thermocouples	TC J, K, R, S, T - According to IEC 584-2, accuracy class 1 or 2
Thermoresistance	RTD Pt100 - According to IEC 751, accuracy class A or B
One Current Transformer Input	CT Input with K=1/0.002 (max 200mA)

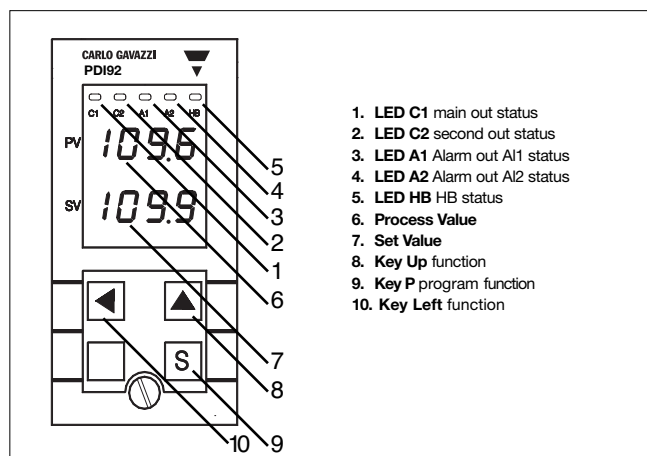
Output Data

Up to five Outputs Relay	(5A-AC1, 2A-AC3 / 250VAC) (10A max. per common)
Relay electric life	100000 operations
Voltage SSR driving	24VDC/0mA, 14VDC/20mA
Note:	HB, AI1 and AI2 alarms Outputs have to be the same type.

Functional Data

Control	ON/OFF, PID single and double action programmable
Overall accuracy	±0.25% full scale,
Display resolution	According to the used probe 1/0,1
Input measurement range	According to the used probe and to the measurement unit
Sampling rate	1 samples per second
Display	4 red + 4 green digits h=7 mm
Parameter access	Protected by password
Fast parameters programming	By using programming PDI-KEY
Operating temperature	0-55 °C
Operating humidity	30-95 RH% without condensation

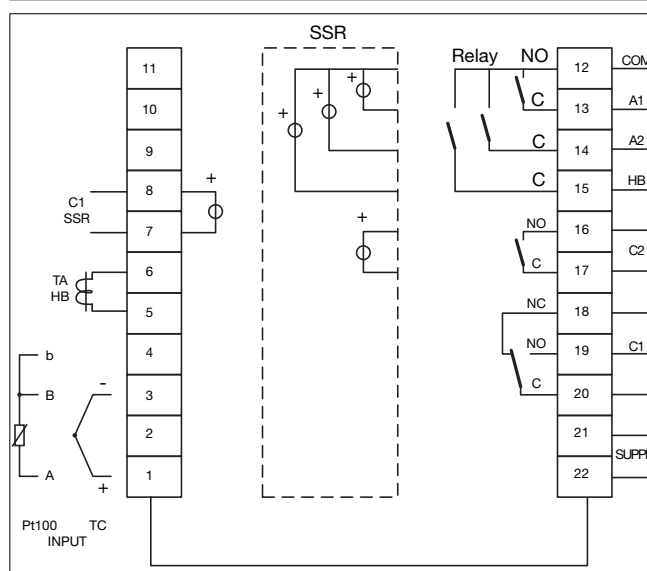
Front Panel Description



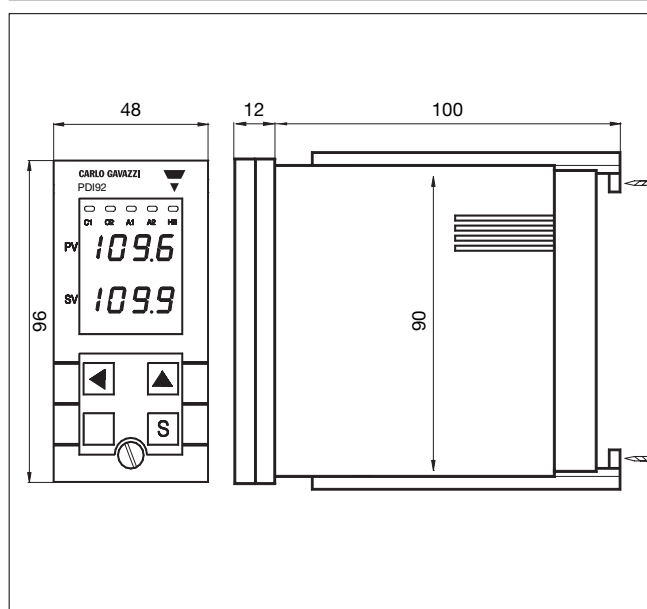
General Data

Mechanical Characteristics	
Housing	Self-extinguishing plastic, UL94 V0
Connections	6.3mm faston terminal block
Mounting	Flush in panel cut out 45x92mm
Front panel protection	IP54 mounted in panel with gasket
Dimensions	W 48 x H 96 x D 100mm
Weight	290g
Storage temperature	-10°C to +60°C
Electrical Data	
Power Supply	24VAC/VDC, 90-240VAC +/-10%
AC Frequency	50 / 60Hz
Power consumption	7VA approx.
Electric shock protection class	Class II for Front panel
Insulation	Reinforced insulation between the low voltage section (power supply and relay outputs) and the front panel or between the low voltage section (power supply 100-240VAC and relay outputs) and the extra low voltage section (inputs and SSR outputs); no insulation between SSR outputs and input.

Connections



Dimensions (mm)



Panel Cut Out (mm)

