

# PID TEMPERATURE CONTROLLERS

## PID330 1/4DIN (96X96) PID CONTROLLER



- Dual display of set point and process value
- On demand autotuning of PID parameters
- Programmable thermocouple, PT100, mV, 0-10V or 0-20mA inputs
- Up to 3 relay or SSR outputs (mV/mA available)
- 1 or 2 on/off or PID control outputs + alarm
- Single point ramp-soak algorithm
- Sensor break detection & error compensation

The PID330 is a sophisticated autotuning PID controller housed in a 96 x 96mm 1/4 DIN case. It has selectable thermocouple, RTD or analogue inputs and up to three outputs. Versions are available with relay, SSR, and analogue outputs. The controller can be configured as 1 on/off or PID control and up to 2 alarm outputs, or as 2 on/off or PID controls (heat/cool) plus 1 alarm output. It has a large dual 4 digit LED display to show the set point and the process value and is suitable for use with power supplies of 85 to 270 Vac/dc or 24Vac/dc.

### SPECIFICATION

Supply voltage: 24Vac/dc  
85-270Vac/dc, 50/60 Hz

Inputs : J, K, T, R, S, C, E, B, N, U, W and Platinel thermocouples, PT100 2/3 wire, -5 to 56mV, 0 to 10V, 0 to 20mA

Sensor range:

J	-200 to 750°C
K	-200 to 1350°C
T	-200 to 400°C
R	0 to 1750°C
S	0 to 1750°C
C	0 to 2300°C
E	-200 to 750°C
B	149 to 1820°C
N	-200 to 1300°C
L	-200 to 900°C
U	-200 to 400°C
W	0 to 2300°C
Platinel II	0 to 1390°C
PT100	-100 to 850°C

Outputs 1-3: 5A @ 240Vac NO relay or 18Vdc 20mA SSR drive

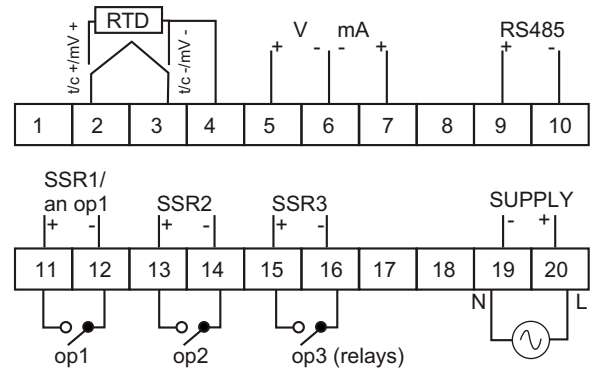
Output 1: (option) Optional 0/ 4-20mA, 0-10V or 0-5V  
Update rate 100msec  
Max load resistance 500 ohm

Control action: PID (autotune) or on/off forward or reverse action.  
outputs 1&2 Absolute or deviation alarm  
outputs 2&3  
Accuracy: Greater of +/-0.25% FS or +/- 1°C  
Resolution: 1/0.1°C for thermocouples/RTDs  
1/0.1/0.01/0.001 for analogue I/P

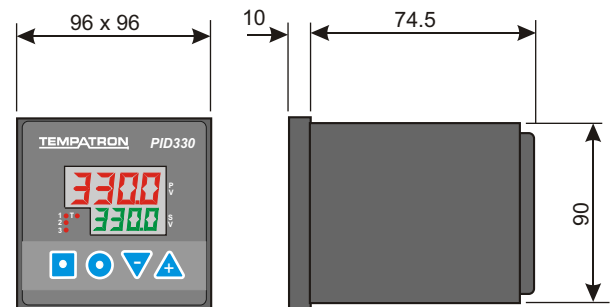
Approvals: Conforms to CE generic standards EN50081-1 and EN50082-1 for emc and EN61010-1 for low voltage

Ambient range: 0 to 50°C, 85% RH non-condensing  
Weight: 270gms

### CONNECTION DIAGRAM



### DIMENSIONS



Panel cut-out: 92 x 92mm

### Part Numbering Options : PID330M A - B - C - D

Option	Description	Configuration	Code
A	Power supply	24Vac/dc 85/270 Vac/dc	L H
B	Output 1	Relay SSR drive 4 to 20mA 0 to 10V 0 to 5V 0 to 20mA	0 1 2 3 4 5
C	Output 2	Relay SSR drive	0 1
D	Output 3	None Relay SSR drive	00 01 02

### STANDARD ITEMS

Voltage	OP1	OP2	OP3	Part Number
24Vac/dc	Relay	Relay	-	PID330ML-0000
24Vac/dc	SSR	Relay	-	PID330ML-1000
85-270Vac/dc	Relay	Relay	-	PID330MH-0000
85-270Vac/dc	Relay	Relay	Relay	PID330MH-0001
85-270Vac/dc	SSR	Relay	-	PID330MH-1000

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