



ENGLISH

Datasheet

Stock No: 1241059

RS Pro 35 x 77mm ON/OFF/PID Temperature Controller, 2 outputs



At a glance

- 35x77mm size
- Heating or cooling applications
- Thermocouple or PT100 inputs
- Two outputs for control and alarms
- ON/OFF or PID control

Overview

Compact 35mm x 77mm digital thermostat for general industrial applications. Thermocouple or PT100 sensor input and two outputs, relay and SSR.

Key Features

- On sensor failure, manual control can be selected
- Sensor input offset setting
- Two setpoint - selectable from front panel
- Selectable thermocouple types or PT100 input. (Specify at order)
- PID Autotune
- Soft-Start feature
- Two outputs - Relay (control or alarm) and SSR (control)
- CE marked



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Specifications

Inputs

Input Type		Temperature Range		Accuracy
		°C	°F	
PT100 MODEL ONLY, 1241058				
PT100 Resistance thermometer	EN 60751	-99.9...300.0 °C	-99.9...543.0 °F	± 0.5% (for full scale) ± 1 Digit
PT100 Resistance thermometer	EN 60751	-200...600 °C	-328...1112 °F	± 0.5% (for full scale) ± 1 Digit
THERMOCOUPLE MODELS ONLY, 1241059 & 1241060				
J (FeCuNi) Thermocouple	EN 60584	0... 600 °C	+32... +1112 °F	± 0.5% (for full scale) ± 1 Digit
K (NiCr-Ni) Thermocouple	EN 60584	0...1300 °C	+32... +2372 °F	± 0.5% (for full scale) ± 1 Digit
T (Cu-CuNi) Thermocouple	EN 60584	0... 400 °C	+32... +752 °F	± 0.5% (for full scale) ± 1 Digit
S (Pt10Rh-Pt) Thermocouple	EN 60584	0...1700 °C	+32... +3092 °F	± 0.5% (for full scale) ± 1 Digit
R (Pt13Rh-Pt) Thermocouple	EN 60584	0... 1700 °C	+32... +3092 °F	± 0.5% (for full scale) ± 1 Digit

Environmental Conditions

Ambient / Storage Temperature	0 ... +50°C/-25 ... +70°C (with no icing).		
Max. Relative humidity	Relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.		
Protection Class	According to EN60529;	Front panel : IP65	Rear Panel : IP20
Height	Max. 2000m		

Electrical Characteristics

Supply	230V AC +%10 -%20, 50/60Hz or 24V AC %10, 50/60Hz
Power Consumption	Max. 5VA
Wiring	Power connector: 2.5mm ² screw-terminal, Signal connector: 1,5mm ² screw-terminal connection.
Line Resistance	Max. 100ohm
Data Retention	EEPROM (minimum 10 years)
EMC	EN 61326-1: 2013
Safety Requirements	EN 61010-1: 2010 (Pollution degree 2, overvoltage category II)

Outputs

C/A2 Output	Relay : 250V AC, 8A (for resistive load), Selectable as NO+NC Control or Alarm2 output.
SSR Output	Max 20mA 12Volt (as control output)
Life Expectancy for Relay	Mechanical 30.000.000; Electrical 100.000 operation. 250V AC, 8A

Control

Control Type	Single-setpoint and alarm control.
Control Algorithm	On-Off / P, PI, PD, PID (selectable)
A/D Converter	12 bit
Sampling Time	100ms
Proportional Band	Adjustable between 0% and 100%. If Pb=0%, On-Off control is selected.
Control Period	Adjustable between 1 and 250 seconds
Hysteresis	Adjustable between 1 and 50°C/F
Output Power	The ratio of power at a set point can be adjusted between 0% and 100%



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Housing

Housing Type	Suitable for flush-panel mounting according to DIN 43 700.
Dimensions	H35xW77xD71mm
Weight	Approx. 200g (After packing)
Enclosure Material	Self extinguishing plastics.

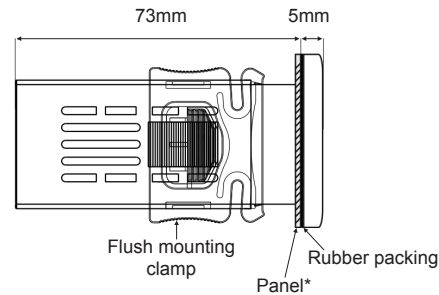
Dimensions

Front Fascia 35 x 77mm.

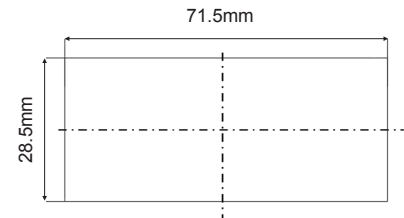
Front



Depth



Panel cut-out



*Panel thickness should be maximum 7mm.

Ordering

Stock Number	Supply Voltage	Number Outputs	Sensor Type
1241058	230V ac	1 x relay, 1 x SSR	PT100
1241059	230V ac	1 x relay, 1 x SSR	Thermocouple
1241060	24V ac	1 x relay, 1 x SSR	Thermocouple