

## FEATURES

- Changeover relay and relay output types
- Three outputs
- One universal input
- Supply voltage of 24 V ac/dc
- Easy-to-read OLED display
- DC current, DC voltage, RTD and thermocouple inputs (universal)
- Screw termination type
- DIN-rail mounting
- Operating temperature range of 0°C to +55°C
- Panel depth of 123 mm
- Termination via screw
- IP ratings include IP20

# RS PRO DIN Rail PID Temperature Controller, 22.5 x 110mm 3 Input, 2 Output Changeover Relay, Relay, 24 V ac/dc Supply

RS Stock No.: 144-8683



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

This DIN (Deutsches Institut für Normung) rail PID (proportional integral derivative) temperature controller from the RS PRO range is a device that uses a control loop mechanism to regulate process temperatures.

Basic heating devices perform a binary (on-off) switching function, which can lead to overshoots and lag. PID controllers are more sophisticated, using a mathematical formula to ensure process temperature remains as close to the user set point as possible.

## General Specifications

<b>Control Type</b>	Limit Controller
<b>Configurable Outputs</b>	1 x C/O Relay, 1 x Relay
<b>Setting Method</b>	Digital setting using front panel keys
<b>Display Type</b>	OLED
<b>Display Colour</b>	Black
<b>Additional Functionality</b>	Limit alarm plus warning, high/low or deviation
<b>Applications</b>	Petro-Chemistry, Plastic, Glass, Automotive, Mechanical production, textile

Input Data	
Input Type	DC Current, DC Voltage, RTD, Thermocouple
Number of Inputs	3
Thermocouple	J, K, C, R, S, T, B, L, N
RTD	3 Wire PT100
DC Linear	0 to 20mA, 4 to 20mA, 0 to 50mV, 10 to 50mV, 0 to 5V, 1 to 5V, 0 to 10V, 2 to 10V Scalable -1999 to 9999, with adjustable decimal point
Accuracy	Thermocouple $\pm 0.25\%$ of full range $\pm 1$ LSD ( $\pm 1^\circ\text{C}$ for thermocouple CJC). PT100 $\pm 0.25\%$ of full range, $\pm 1$ LSD, DC Linear $\pm 0.2\%$ of full range, $\pm 1$ LSD.
Sampling	4 per second
Impedance	$>10\text{M}\Omega$ resistive, except DC mA ( $5\Omega$ ) and V ( $47\text{K}\Omega$ )
Sensor Break Detection	$<2$ seconds (except zero based DC ranges), high alarms activate for T/C, RTD and mV ranges, low alarms activate for mA or V ranges

Output Data	
Output Type	Changeover Relay, Relay
Number of Outputs	2
Relay	LIMIT SPDT Form C, AL1 / 2 SPST Form A relay; current capacity 2A at 250V. $>150,000$ operations at rated voltage/ current, resistive load

## Electrical Specifications

Supply Voltage	24 V ac/dc
Frequency	50/60Hz
Termination Type	Screw

## Mechanical Specifications

Size	22.5mm x 110mm
Length	22.5mm
Height	110mm
Depth	121mm
Panel Depth	123mm
Mounting Type	DIN Rail

## Operation Environment Specifications

Temperature Range	0°C to 55°C
Minimum Operating Temperature	0°C
Maximum Operating Temperature	55°C
Relative Humidity	20% to 95% RH non-condensing

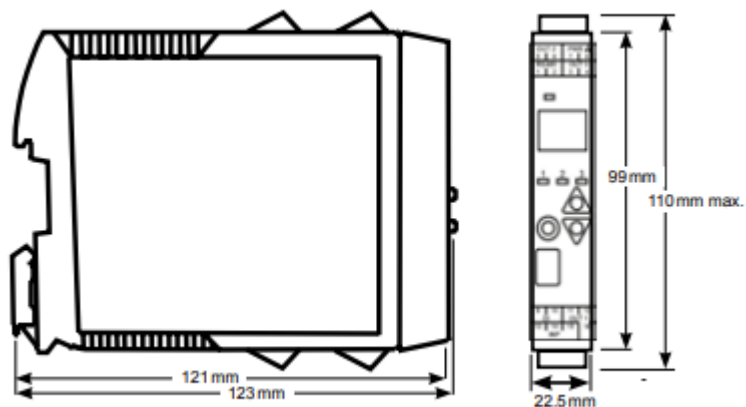
## Protection Category

IP Rating	IP20
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## Approvals

Compliance/Certifications	EN61326(Susceptibility & Emissions), EN61010-1
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## Ordering

### Stock Number

**1448684**

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### Supply Voltage

110-240V ac

24V ac/dc

### Number Outputs

1 x C/O Relay, 1 x Relay

1 x C/O Relay, 1 x Relay