

Product data sheet

Specifications



Converter for Universal Pt100 probes, Harmony Analog, temperature transmitter, 0...500 degree COr 32...932 degree F

RMPT70BD

Product availability: Non-Stock - Not normally stocked in distribution facility

Price*: 141.00 USD

Main

Range of Product	Harmony Analog
Product or Component Type	Converter for Universal Pt100 probes
Analogue input type	Temperature probe 0...500 °C/32...932 °F Pt 100 2, 3 or 4 wires
Analogue output type	Current 0...20 mA <= 500 Ohm Current 4...20 mA <= 500 Ohm Voltage 0...10 V >= 100 kOhm

Complementary

Protection Type	Reverse polarity protection on output Overvoltage protection on output (+/- 30 V) Reverse polarity protection on power supply Short-circuit protection on output
abnormal analogue output voltage	-15...-11 V no input or input wire broken 11...15 V no input or input wire broken
abnormal analogue output current	-30...0 mA no input or input wire broken 22...30 mA no input or input wire broken
[Us] Rated Supply Voltage	24 V DC non isolated +/- 20 %
Current consumption	<= 40 mA voltage output <= 60 mA current output
Local signalling	for power ON LED (green)
Measurement error	+/- 0.5 % of full scale 3 or 4 wires)20 °C temporary performance degradation when subject to electromagnetic interference) +/- 1 % of full scale 2 wires)20 °C temporary performance degradation when subject to electromagnetic interference)
Repeat accuracy	+/- 0.2 % full scale 20 °C +/- 0.6 % full scale 60 °C
Temperature Coefficient	150 ppm/°C
Maximum wiring resistance	0.2 Ohm 2 wires
clamping connection capacity	2 x 1.5 mm² 1 x 2.5 mm²
Tightening torque	5.3...9.7 lbf.in (0.6...1.1 N.m)
marking	CE
Surge withstand	0.5 kV 1.2/50 µs IEC 61000-4-5
[Ui] Rated Insulation Voltage	2000 V
Fixing mode	Clip-on (35 mm symmetrical DIN rail) Fixed (mounting plate)

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Safety reliability data	MTTFd = 32.9 years B10d = 30437
Net Weight	0.26 lb(US) (0.12 kg)

Environment

Electromagnetic compatibility	Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2
Standards	IEC 60751 DIN 43760 IEC 60947-1 IEC 60584-1
Product Certifications	UL CSA GL
IP degree of protection	IP20 terminal block) IP50 housing)
Fire resistance	1562.0000000000 °F (850 °C) IEC 60695-2-1 1562.0000000000 °F (850 °C) UL
Shock resistance	50 gn 11 ms IEC 60068-2-27
Vibration resistance	5 gn 10...100 Hz)IEC 60068-2-6
Resistance to fast transients	1 kV IEC 61000-4-4 on input-output) 2 kV IEC 61000-4-4 on power supply)
Disturbance radiated/conducted	CISPR 11 CISPR 22 group 1 - class B
Ambient Air Temperature for Storage	-40.0000000000...185.0000000000 °F (-40...85 °C)
Ambient Air Temperature for Operation	32.0000000000...122.0000000000 °F (0...50 °C) mounting side by side 32.0000000000...140.0000000000 °F (0...60 °C) 2 cm spacing
Pollution degree	2 IEC 60664-1

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3389110109009
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.06 in (2.7 cm)
Package 1 Width	3.2 in (8.2 cm)
Package 1 Length	3.3 in (8.5 cm)
Package 1 Weight	3.7 oz (105.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Height	5.9 in (15 cm)

Package 2 Width	11.8 in (30 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	11.693 lb(US) (5.304 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	752
Package 3 Height	29.5 in (75 cm)
Package 3 Width	15.7 in (40 cm)
Package 3 Length	31.5 in (80 cm)
Package 3 Weight	229.19 lb(US) (103.96 kg)

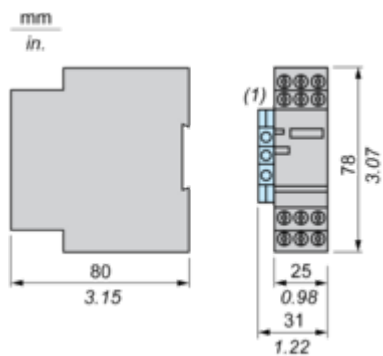
Contractual warranty

Warranty	18 months
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Dimensions Drawings

Analog Interface (Converter)

Dimensions

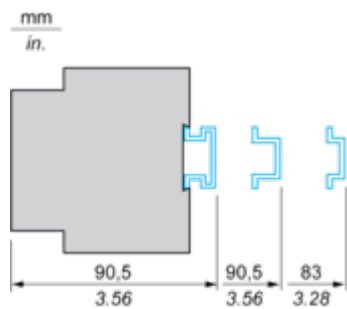


(1) Terminal block AB1TP435U or AB1RRNTP435U2

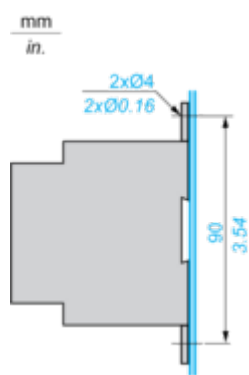
Mounting and Clearance

Mounting

Mounting on Rails AM1.....



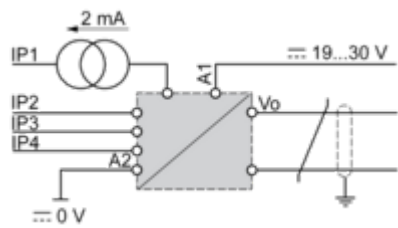
Panel Mounting



Connections and Schema

Analog Interface: Converter for Universal Pt100 Probe

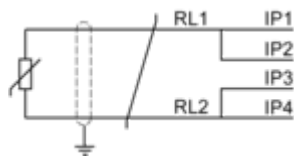
Wiring Diagram



The input, output and power supply lines must be kept away from the power cables to avoid effects due to induced interference.
The supply, input and output cables must be shielded as indicated in the schemes and must be kept away from each other.

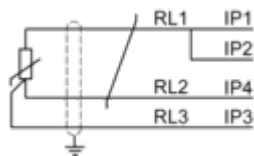
Input Connections

2-wire type



$RL1 + RL2 \leq 200 \text{ m}\Omega$

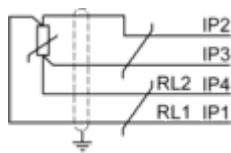
3-wire type



$RL1 = RL2 = RL3$

$RL1 + RL2 \geq 200 \text{ }\Omega$

4-wire type



$RL1 + RL2 \leq 200 \text{ }\Omega$

Technical Illustration

Dimensions

