

Product data sheet

Specifications



Converter for Optimum Pt100 probes, Harmony Analog, temperature transmitter, 0...100 degree COr 32...212 degree F

RMPT33BD

Product availability : Stock - Normally stocked in distribution facility

Main

Range of Product	Harmony Analog
Product or Component Type	Converter for Optimum Pt100 probes
Analogue input type	Temperature probe 0...100 °C/32..212 °F Pt 100 2, 3 or 4 wires
Analogue output type	Current 4...20 mA <= 500 Ohm Voltage 0...10 V >= 100 kOhm

Complementary

Protection Type	Short-circuit protection on output Reverse polarity protection on output Overvoltage protection on output (+/- 30 V) Reverse polarity protection on power supply
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 +/- 1 % of full scale 2 wires)20 °C +/- 10 % of full scale20 °C electromagnetic interference of 10 V/m)
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	5.31...9.74 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)

Safety reliability data	MTTFd = 43.9 years B10d = 40564
Net Weight	0.26 lb(US) (0.12 kg)
Environment	
Electromagnetic compatibility	Electrostatic discharge 6 kV contact discharge)level 3 IEC 61000-4-2 Electrostatic discharge 8 kV air discharge)level 3 IEC 61000-4-2
Standards	DIN 43760 EN/IEC 60584-1 EN/IEC 60751 EN/IEC 60947-1
Product Certifications	UL GL CSA
IP degree of protection	IP20 terminal block) IP50 housing)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1 1562 °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 22 group 1 - class B CISPR 11
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
Ambient Air Temperature for Operation	32...122 °F (0...50 °C) mounting side by side 32...140 °F (0...60 °C) 2 cm spacing
Pollution degree	2 IEC 60664-1

Ordering and shipping details

Category	22375-INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3389110108972
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	3.23 in (8.2 cm)
Package 1 Length	3.35 in (8.5 cm)
Package 1 Weight	3.84 oz (109.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	12.34 lb(US) (5.596 kg)

Offer Sustainability

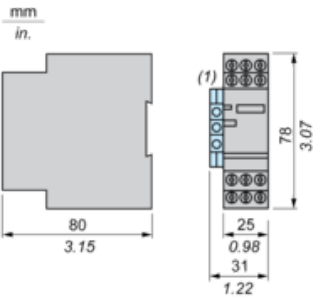
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	18 months
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Analog Interface (Converter)

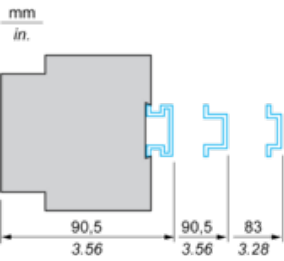
Dimensions



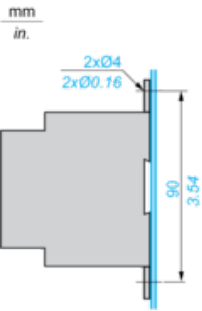
(1) Terminal block AB1TP435U or AB1RRNTP435U2

Mounting

Mounting on Rails AM1•••••

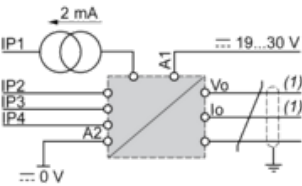


Panel Mounting



Analog Interface: Converter for Optimum Pt100 Probe

Wiring Diagram



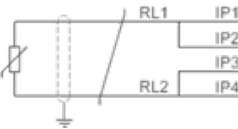
(1) Use 1 output only.

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.

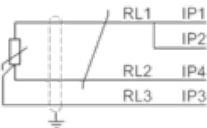
Input Connections

2-wire type



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

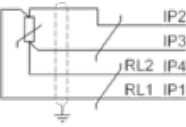
3-wire type



$RL1 = RL2 = RL3$

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

4-wire type



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

Recommended replacement(s)