Product data sheet

Specifications

Converter for Universal Pt100 probes, Harmony Analog, temperature transmitter, 100...100 degree COr 148...212 degree F

RMPT20BD

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

Main

Range of Product	Harmony Analog
Product or Component Type	Converter for Universal Pt100 probes
Analogue input type	Temperature probe - 100...100 °C/- 148...212 °F Pt 100 2, 3 or 4 wires

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
Current consumption	<= 40 mA voltage output <= 60 mA current output
Local signalling	LED (green) for power ON
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
Clamping Connection Capacity	1 x 2.5 mm² 2 x 1.5 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)
Safety reliability data	MTTFd = 32.9 years B10d = 30437
Net Weight	0.26 lb(US) (0.12 kg)
Temperature Coefficient	150 ppm/°C

Environment

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

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	DIN 43760 IEC 60751 IEC 60584-1 IEC 60947-1
Product Certifications	GL CSA UL
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 (f= 10…100 Hz) conforming to 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…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	US10CP222375
Discount Schedule	0CP2
GTIN	3389110108941
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.063 in (2.700 cm)
Package 1 Width	3.228 in (8.200 cm)
Package 1 Length	3.346 in (8.500 cm)
Package weight(Lbs)	3.810 oz (108.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	12.154 lb(US) (5.513 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained

How we assess product sustainability

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
SCIP Number	**A23b5c8f-6893-4fd3-af99-564158dacf76**
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**

Use Again

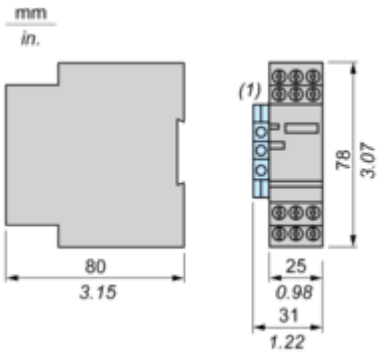
Repack and remanufacture

Circularity Profile	**End of Life Information**
Take-back	**No**

Dimensions Drawings

Analog Interface (Converter)

Dimensions

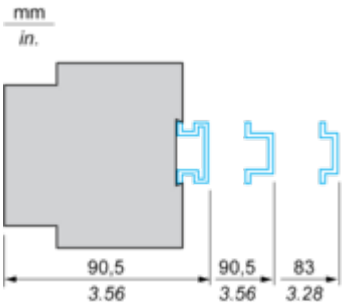


(1) Terminal block AB1TP435U or AB1RRNTP435U2

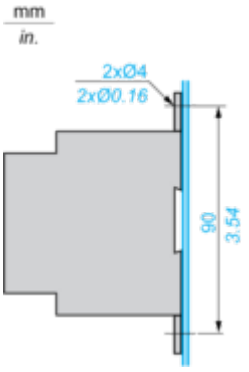
Mounting and Clearance

Mounting

Mounting on Rails AM1•••••



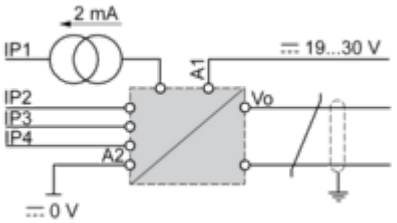
Panel Mounting



Connections and Schema

Analog Interface: Converter for Universal Pt100 Probe

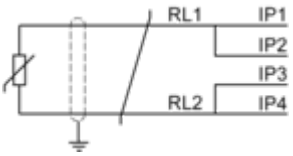
Wiring Diagram



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.

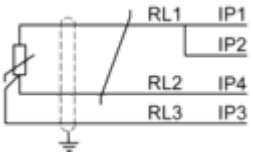
Input Connections

2-wire type



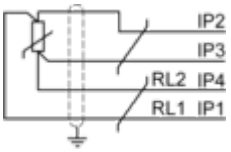
RL1 + RL2 ≤ 200 mΩ

3-wire type

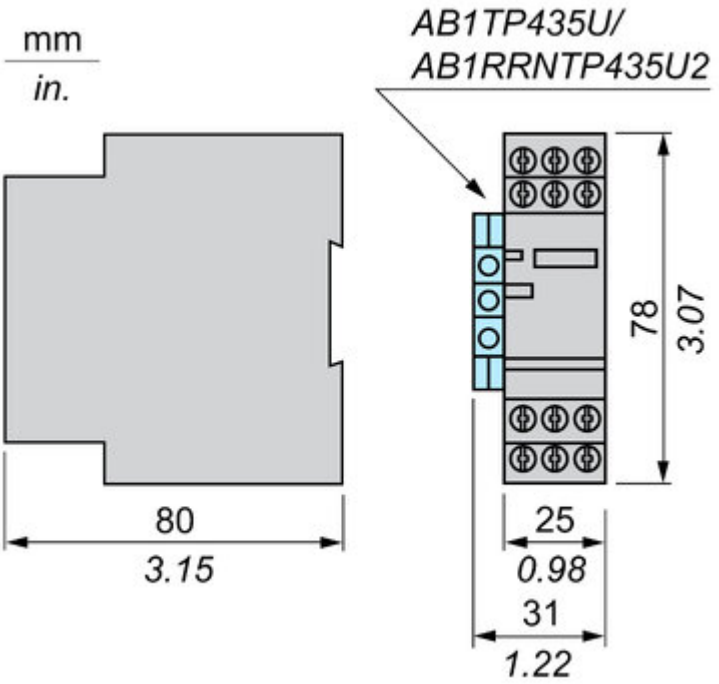


RL1 = RL2 = RL3
RL1 + RL2 ≥ 200 Ω

4-wire type



RL1 + RL2 ≤ 200 Ω

Technical Illustration

Dimensions