Product data sheet

Specifications

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

RMPT73BD

Main

Range of product	Harmony Analog
Product or component type	Converter for Optimum Pt100 probes
Analogue input type	Temperature probe 0...500 °C/32...932 °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	Overvoltage protection on output (+/- 30 V) Reverse polarity protection on power supply Short-circuit protection on output Reverse polarity protection on output
abnormal analogue output voltage	-15...-11 V when no input or input wire broken 11...15 V when no input or input wire broken
abnormal analogue output current	-30…0 mA when no input or input wire broken 22…30 mA when no input or input wire broken
[Us] rated supply voltage	24 V DC non isolated +/- 20 %
Current consumption	<= 40 mA for voltage output <= 60 mA for current output
Local signalling	LED (green) for power ON
Measurement error	+/- 0.5 % of full scale (3 or 4 wires) at 20 °C (temporary performance degradation when subject to electromagnetic interference) +/- 1 % of full scale (2 wires) at 20 °C (temporary performance degradation when subject to electromagnetic interference)
Repeat accuracy	+/- 0.2 % full scale at 20 °C +/- 0.6 % full scale at 60 °C
Temperature coefficient	150 ppm/°C
Maximum wiring resistance	0.2 Ohm connection in 2 wires
Clamping connection capacity	2 x 1.5 mm² 1 x 2.5 mm²
tightening torque	0.6…1.1 N.m
Marking	CE
Surge withstand	0.5 kV during 1.2/50 µs conforming to 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	0.12 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	DIN 43760 IEC 60584-1 IEC 60947-1 IEC 60751
Product certifications	GL UL CSA
IP degree of protection	IP20 (terminal block) IP50 (housing)
Fire resistance	850 °C conforming to IEC 60695-2-1 850 °C conforming to UL
Shock resistance	50 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	5 gn (f= 10…100 Hz) conforming to IEC 60068-2-6
Resistance to fast transients	1 kV (on input-output) conforming to IEC 61000-4-4 2 kV (on power supply) conforming to IEC 61000-4-4
Disturbance radiated/conducted	CISPR 11 CISPR 22 group 1 - class B
Ambient air temperature for storage	-40…85 °C
Ambient air temperature for operation	0…50 °C mounting side by side 0…60 °C 2 cm spacing
Pollution degree	2 conforming to IEC 60664-1

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.700 cm
Package 1 Width	8.200 cm
Package 1 Length	8.500 cm
Package 1 Weight	109.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.214 kg

Contractual warranty

Warranty	18 months

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

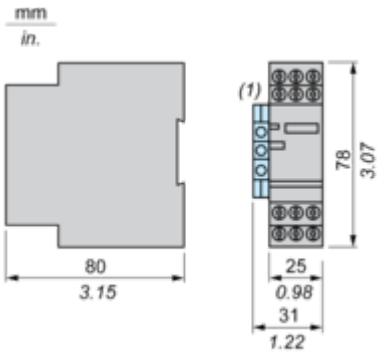
Repack and remanufacture

End of life manual availability	**End of Life Information**
Take-back	**No**

Dimensions Drawings

Analog Interface (Converter)

Dimensions

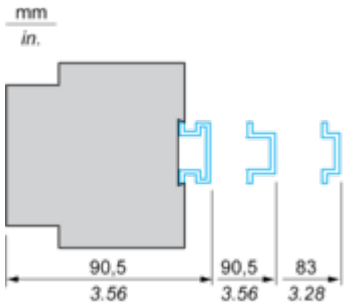


(1) Terminal block AB1TP435U or AB1RRNTP435U2

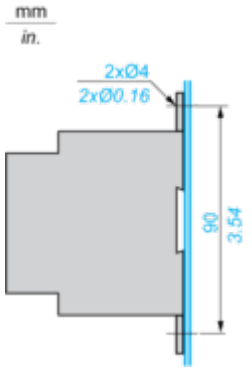
Mounting and Clearance

Mounting

Mounting on Rails AM1•••••



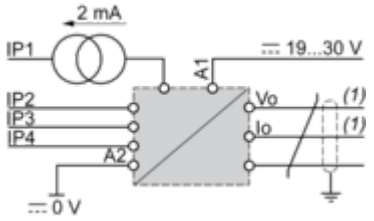
Panel Mounting



Connections and Schema

Analog Interface: Converter for Optimum Pt100 Probe

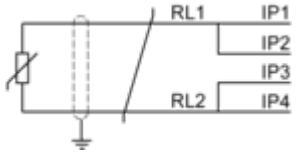
Wiring Diagram



(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.

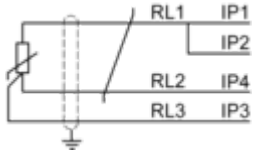
Input Connections

2-wire type



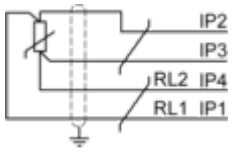
RL1 + RL2 ≤ 200 mΩ

3-wire type



RL1 = RL2 = RL3
RL1 + RL2 ≥ 200 Ω

4-wire type



RL1 + RL2 ≤ 200 Ω

Technical Illustration

Dimensions

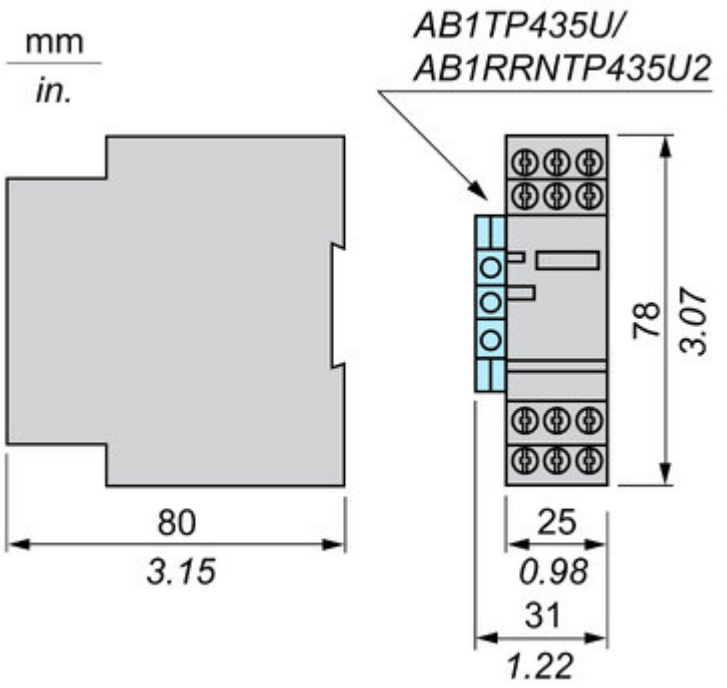
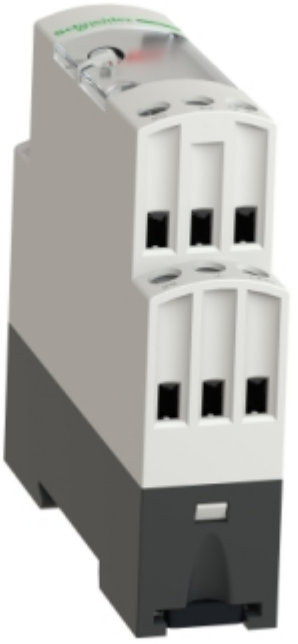


Image of product / Alternate images

Alternative




A1
A2
Schneider Electric
RM P
IP3
IP2
IP1
IP4
OPG


RMPTXXBD
Use copper conductors only
Designed in Singapore
Made in Indonesia