Product datasheet

Specifications



Discontinued

temperature transmitter - 0..250 °C/ 32..482 °F - for Optimum Pt100 probes

RMPT53BD

Discontinued on: 4 Aug 2021

End-of-service on: 3 Aug 2026

EAN Code: 3389110108996

Main

Range of product	Harmony Analog
Product or component type	Converter for Optimum Pt100 probes
Analogue input type	RTD 0...250 °C/32...482 °F Pt 100 2, 3 or 4 wires
Analogue output type	Current 4...20 mA Voltage 0...10 V

Complementary

Protection type	Short-circuit protection on output Reverse polarity protection on power supply Overvoltage protection on output (+/- 30 V) 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
Current consumption	<= 40 mA for voltage output <= 60 mA for current output
Local signalling	LED (green) for power ON
Clamping connection capacity	1 x 2.5 mm² 2 x 1.5 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
Temperature coefficient	150 ppm/°C
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
Repeat accuracy	+/- 0.2 % full scale at 20 °C +/- 0.6 % full scale at 60 °C

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

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 60751 IEC 60947-1 IEC 60584-1
Product certifications	UL CSA GL
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 22 group 1 - class B CISPR 11
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	101.900 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	5.250 kg

Logistical informations

Country of origin	FR

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**
SCIP Number	**A23b5c8f-6893-4fd3-af99-564158dacf76**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**

Use Again

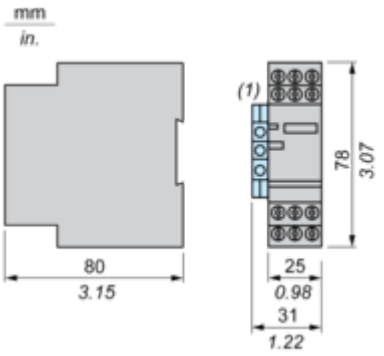
Repack and remanufacture

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

Dimensions Drawings

Analog Interface (Converter)

Dimensions

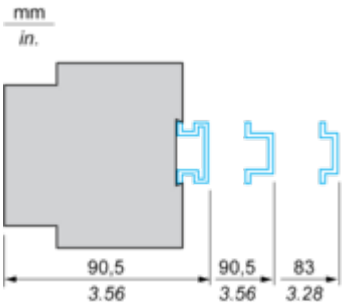


(1) Terminal block AB1TP435U or AB1RRNTP435U2

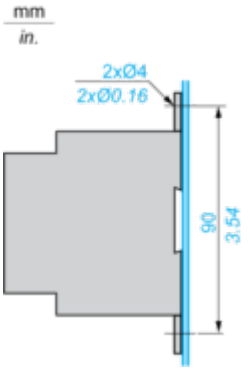
Mounting and Clearance

Mounting

Mounting on Rails AM1•••••



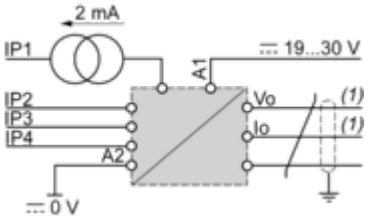
Panel Mounting



Connections and Schema

Analog Interface: Converter for Optimum Pt100 Probe

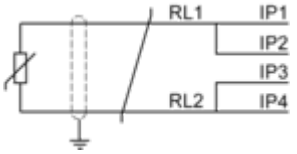
Wiring Diagram



(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.

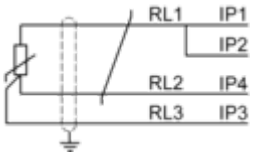
Input Connections

2-wire type



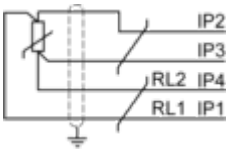
RL1 + RL2 ≤ 200 mΩ

3-wire type



RL1 = RL2 = RL3
RL1 + RL2 ≥ 200 Ω

4-wire type



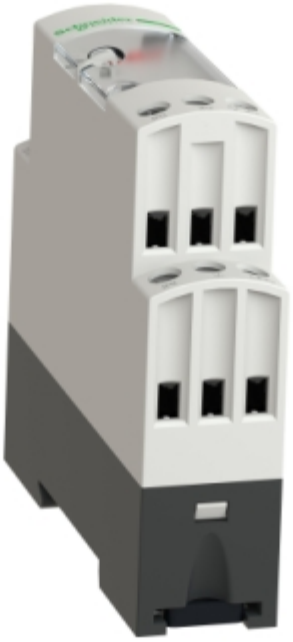
RL1 + RL2 ≤ 200 Ω

Image of product / Alternate images

Alternative










A1
A2
Schneider Electric
RM P
IP3
IP2
IP1
OPG



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