Product data sheet
Characteristics

RMPT53BD
Converter for Optimum Pt100 probes, Harmony Analog, temperature transmitter, 0...250 degree COr 32...482 degree F

Main

Range of Product	Harmony Analog
Product or Component Type	Converter for Optimum Pt100 probes
Analogue input type	Temperature probe 0...250 °C/32...482 °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 power supply Overvoltage protection on output (+/- 30 V) Reverse polarity 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 +/- 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	1 x 2.5 mm² 2 x 1.5 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)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
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.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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 EN/IEC 60751 EN/IEC 60947-1 EN/IEC 60584-1
Product Certifications	UL[RETURN]CSA[RETURN]GL
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	3389110108996
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	3.60 oz (102.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	11.57 lb(US) (5.25 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	752
Package 3 Height	29.53 in (75 cm)
Package 3 Width	15.75 in (40 cm)
Package 3 Length	31.50 in (80 cm)
Package 3 Weight	224.22 lb(US) (101.704 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)
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.

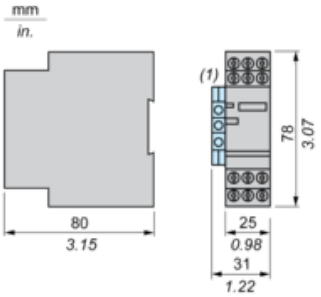
Contractual warranty

Warranty	18 months

RMPT53BD

Analog Interface (Converter)

Dimensions

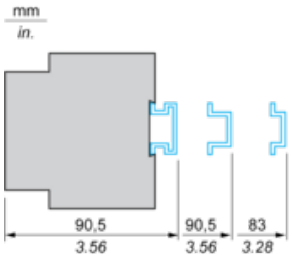


(1) Terminal block AB1TP435U or AB1RRNTP435U2

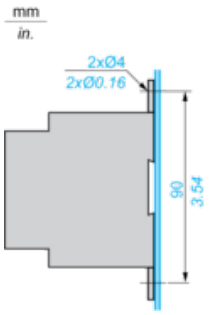
RMPT53BD

Mounting

Mounting on Rails AM1•••••

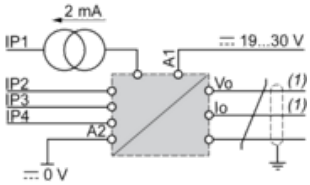


Panel Mounting



Analog Interface: Converter for Optimum Pt100 Probe

Wiring Diagram



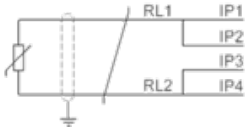
(1) Use 1 output only.

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.

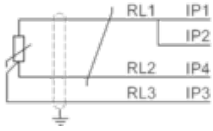
Input Connections

2-wire type



RL1 + RL2 ≤ 200 mΩ

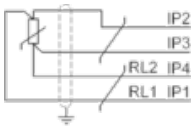
3-wire type



RL1 = RL2 = RL3

RL1 + RL2 ≥ 200 Ω

4-wire type



RL1 + RL2 ≤ 200 Ω