Product data sheet Characteristics

RMTJ60BD

temperature transmitter - 0..300 °C/32..572 °F - for thermocouples $\mbox{\rm J}$





Main

Range of product	Harmony Analog
Product or component type	Converter for thermocouples
Analogue input type	Thermocouple 0300 °C/32572 °F thermocouple J conforming to IEC 60584
Analogue output type	Current 020 mA <= 500 Ohm Current 420 mA <= 500 Ohm Voltage 010 V >= 100 kOhm

Complementary

Protection type	Overvoltage protection on output (+/- 30 V)
•	Reverse polarity protection on output
	Short-circuit protection on output
Abnormal analogue output voltage	-1511 V when no input or input wire broken
	1115 V when no input or input wire broken
Abnormal analogue output current	-300 mA when no input or input wire broken
[Us] rated supply voltage	24 V DC +/- 20 %, non isolated
Current consumption	<= 40 mA for voltage output
	<= 60 mA for current output
Local signalling	LED (green) for power ON
Measurement error	+/- 10 % of full scale at 20 °C (electromagnetic interference of 10 V/m)
	+/- 1 % of full scale at 20 °C
Repeat accuracy	+/- 0.25 % full scale at 20 °C
	+/- 0.8 % full scale at 60 °C
Temperature coefficient	200 ppm/°C
Cold junction compensation	Built-in, measurement: between 0 and 60 °C
Clamping connection capacity	2 x 1.5 mm²
	1 x 2.5 mm ²
Tightening torque	0.61.1 N.m
Marking	CE
Surge withstand	0.5 kV during 1.2/50 µs conforming to IEC 61000-4-5
[Ui] rated insulation voltage	2 kV
Fixing mode	By screws (mounting plate)
	Clip-on (35 mm symmetrical DIN rail)
Safety reliability data	B10d = 45447
	MTTFd = 49.2 years
Net weight	0.12 kg

Environment

Standards	IEC 60584-1
	IEC 60947-1
Product certifications	CSA
	GL
	UL
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= 10100 Hz) conforming to IEC 60068-2-6
Resistance to electrostatic discharge	6 KV (in contact) conforming to IEC 61000-4-2 level 3
	8 kV (in air) conforming to IEC 61000-4-2 level 3
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	-4085 °C
Ambient air temperature for operation	050 °C mounting side by side
	060 °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 Weight	101.0 g
Package 1 Height	2.7 cm
Package 1 width	8.2 cm
Package 1 Length	8.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Weight	5.202 kg
Package 2 Height	15.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEU RoHS
Mercury free	Yes
RoHS exemption information	€Yes
China RoHS Regulation	China RoHS Declaration
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

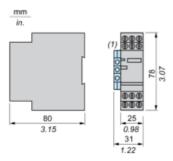
Warranty	18 months

Product data sheet Dimensions Drawings

RMTJ60BD

Analog Interface (Converter)

Dimensions



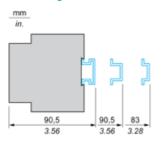
(1) Terminal block AB1TP435U or AB1RRNTP435U2

Product data sheet Mounting and Clearance

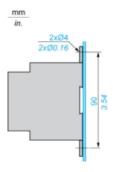
RMTJ60BD

Mounting

Mounting on Rails AM1 *****



Panel Mounting

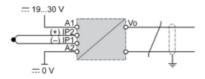


Product data sheet Connections and Schema

RMTJ60BD

Analog Interfaces

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.