

Product data sheet

Specifications



Converter for thermocouples, Harmony Analog, temperature transmitter, 0...600 degree COr 32...112 degree F

RMTK80BD

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

Main

Range of Product	Harmony Analog
Product or Component Type	Converter for thermocouples
Analogue input type	Thermocouple 0...600 °C/32...112 °F thermocouple K IEC 60584
Analogue output type	Current 0...20 mA <= 500 Ohm 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 output 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
[Us] rated supply voltage	24 V DC +/- 20 %, non isolated
Current consumption	<= 40 mA voltage output <= 60 mA current output
Local signalling	for power ON LED (green)
Measurement error	+/- 1 % of full scale 20 °C temporary performance degradation when subject to electromagnetic interference)
Repeat accuracy	+/- 0.25 % full scale 20 °C +/- 0.8 % full scale 60 °C
Temperature Coefficient	200 ppm/°C
Cold junction compensation	Built-in between 0 and 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	2 kV
Fixing mode	By screws (mounting plate) Clip-on (35 mm symmetrical DIN rail)
Safety reliability data	MTTFd = 49.2 years B10d = 45447
Product Weight	0.26 lb(US) (0.12 kg)

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

Environment

Standards	IEC 60584-1 IEC 60947-1
Product Certifications	CSA UL 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 (f= 10...100 Hz) conforming to IEC 60068-2-6
Resistance to electrostatic discharge	6 kV in contact)IEC 61000-4-2 level 3 8 kV in air)IEC 61000-4-2 level 3
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	3389110109054
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 (2.700 cm)
Package 1 Width	3.23 in (8.200 cm)
Package 1 Length	3.35 in (8.500 cm)
Package 1 Weight	3.668 oz (104.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	11.563 lb(US) (5.245 kg)

Contractual warranty

Warranty	18 months
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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 >](#)

Environmental footprint	
Environmental Disclosure	Product Environmental Profile

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

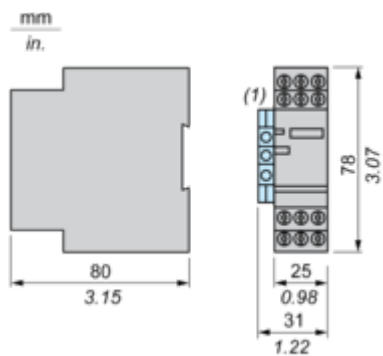
Use Again

Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions Drawings

Analog Interface (Converter)

Dimensions

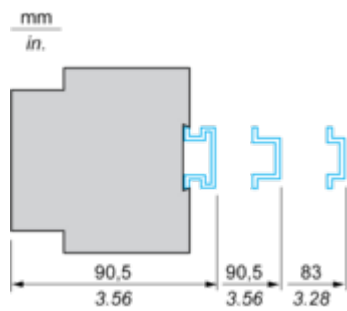


(1) Terminal block AB1TP435U or AB1RRNTP435U2

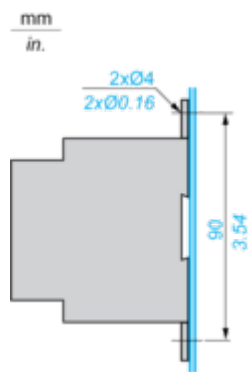
Mounting and Clearance

Mounting

Mounting on Rails AM1••••



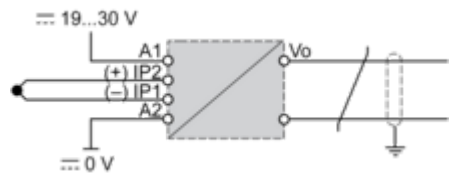
Panel Mounting



Connections and Schema

Analog 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.

Technical Illustration

Dimensions

