

# RMTK90BD

Harmony Analog, Converter for thermocouples, temperature transmitter, 0...1200 °C/32...2192 °F



## Main

Range of Product	Harmony Analog
Product or Component Type	Converter for thermocouples
Analogue input type	Thermocouple 0...1200 °C/32...2192 °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 <= 40 mA voltage output <= 60 mA current
Local signalling	For power ON LED (green)
Measurement error	+/- 10 % of full scale 20 °C electromagnetic interference of 10 V/m +/- 1 % of full scale 20 °C
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	2 x 1.5 mm <sup>2</sup> 1 x 2.5 mm <sup>2</sup>
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	2 kV
Fixing mode	By screws mounting plate) Clip-on 35 mm symmetrical DIN rail)
Safety reliability data	MTTFd = 49.2 years B10d = 45447
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

Standards	IEC 60584-1 IEC 60947-1
Product Certifications	GL UL CSA
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 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	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3389110109061
Nbr. of units in pkg.	1
Package weight(Lbs)	3.56 oz (101 g)
Returnability	No
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
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)
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Weight	11.58 lb(US) (5.253 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>

Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

### Contractual warranty

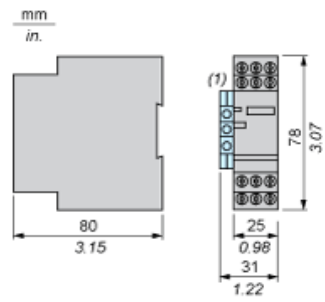
Warranty	18 months
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Analog Interface (Converter)

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Dimensions



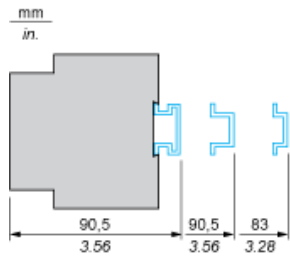
(1) Terminal block AB1TP435U or AB1RRNTP435U2

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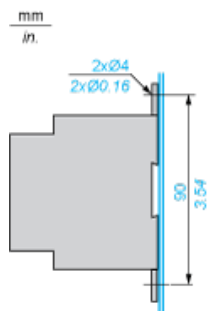
Mounting

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Mounting on Rails AM1•••••

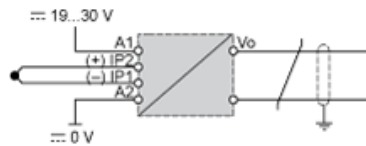


Panel Mounting



## 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 input and output cables must be shielded as indicated in the diagram and must be kept away from each other.