Product datasheet

Specifications

Converter for thermocouples, Harmony Analog, temperature transmitter, 0...1200 degree COr 32...2192 degree F

RMTK90BD

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 conforming to 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 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
[Us] Rated Supply Voltage	24 V DC +/- 20 %, non isolated
Current Consumption	<= 40 mA for voltage <= 40 mA for voltage output <= 60 mA for current
Local Signalling	LED (green) for power ON
Measurement Error	+/- 1 % of full scale at 20 °C (temporary performance degradation when subject to electromagnetic interference)
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 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	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	0.12 kg

Environment

Standards	IEC 60584-1 IEC 60947-1
Product Certifications	GL UL CSA
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 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 11 CISPR 22 group 1 - class B
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	2.7 cm
Package 1 Width	8.2 cm
Package 1 Length	8.5 cm
Package 1 Weight	101.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	47
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.253 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium^{TM} label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes

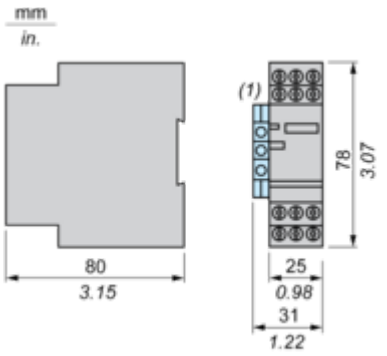
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Dimensions Drawings

Analog Interface (Converter)

Dimensions

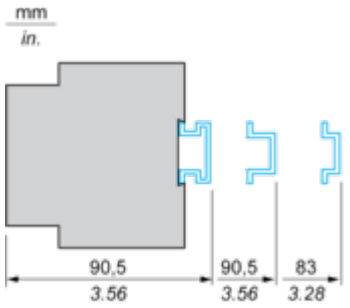


(1) Terminal block AB1TP435U or AB1RRNTP435U2

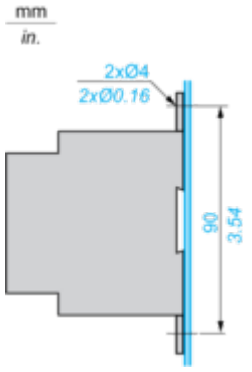
Mounting and Clearance

Mounting

Mounting on Rails AM1•••••



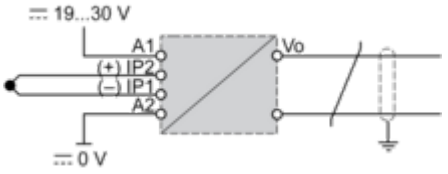
Panel Mounting



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.