# RMTK90BD



#### Main

Range of product	Zelio Analog	
Product or component type	Converter for thermocouples	
Analogue input type	Thermocouple 01200 °C/322192 °F thermocouple K 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	
Analogue output voltage	-1511 V when no input or input wire broken 1115 V when no input or input wire broken	
Analogue output current	030 mA when 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	LED green (power ON)	
Measurement error	At 20 °C (electromagnetic interference of 10 V/m) 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	1 x 2.5 mm <sup>2</sup> 2 x 1.5 mm <sup>2</sup>	
Tightening torque	5.319.73 lbf.in (0.61.1 N.m)	
Marking	CE	
Surge withstand	0.5 kV 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	
Product weight	0.26 lb(US) (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	1562 °F (850 °C) conforming to IEC 60695-2-1 1562 °F (850 °C) conforming to UL	
shock resistance	50 gn 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 11 CISPR 22 group 1 - class B	
ambient air temperature for storage	-40185 °F (-4085 °C)	
ambient air temperature for operation	32122 °F (050 °C) (mounting side by side) 32140 °F (060 °C) (2 cm spacing)	
pollution degree	2 conforming to IEC 60664-1	

### Offer Sustainability

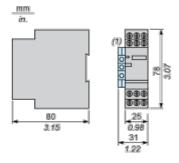
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Nickel compounds, which is known to the State of California to cause cancer, and	Nickel compounds, which is known to the State of California to cause cancer, and
Di-isodecyl phthalate (DIDP), which is known to the Stat of California to cause birth defects or other reproductive harm.	eDi-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	For more information go to www.p65warnings.ca.gov

### Contractual warranty

Warranty period	18 months	
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# **Analog Interface (Converter)**

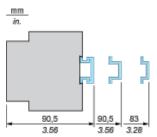
### **Dimensions**



(1) Terminal block AB1TP435U or AB1RRNTP435U2

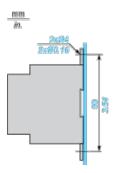
## **Mounting**

## Mounting on Rails AM1 •••••



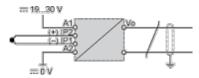
**Panel Mounting** 





# **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.