## Product data sheet Characteristics

### RMTK80BD

temperature transmitter - 0..600 °C/32..112 °F - for thermocouples K



# Main Zelio Analog Product or component type Converter for thermocouples Analogue input type Thermocouple 0...600 °C/32...1112 °F thermocouple K conforming to IEC 60584 Analogue output type Voltage 0...10 V >= 100 kOhm Current 4...20 mA <= 500 Ohm</td>

Current 0...20 mA <= 500 Ohm

### Complementary

Overvoltage protection on output (+/- 30 V)	
Reverse polarity protection on output	
Short-circuit protection on output	
- 13 V when no input wired or wire broken	
0 A when no input wired or wire broken	
24 V DC +/- 20 %, non isolated	
<= 60 mA for current output	
<= 40 mA for voltage output	
LED green (power ON)	
+/- 10 % of full scale at 20 °C (electromagnetic interference of 10 V/m)	
+/- 1 % of full scale at 20 °C	
+/- 0.8 % full scale at 60 °C	
+/- 0.25 % full scale at 20 °C	
200 ppm/°C	
Built-in, measurement: between 0 and 60 °C	
1 x 2.5 mm²	
2 x 1.5 mm <sup>2</sup>	
0.61.1 N.m	
CE	
0.5 kV for 1.2/50 μs conforming to IEC 61000-4-5	
2 kV	
Clip-on, 35 mm symmetrical DIN rail	
By screws, mounting plate	
0.12 kg	
	Reverse polarity protection on output  - 13 V when no input wired or wire broken  0 A when no input wired or wire broken  24 V DC +/- 20 %, non isolated  <= 60 mA for current output <= 40 mA for voltage output  LED green (power ON)  +/- 10 % of full scale at 20 °C (electromagnetic interference of 10 V/m) +/- 1 % of full scale at 20 °C  +/- 0.8 % full scale at 20 °C  200 ppm/°C  Built-in, measurement: between 0 and 60 °C  1 x 2.5 mm² 2 x 1.5 mm² 0.61.1 N.m  CE  0.5 kV for 1.2/50 µs conforming to IEC 61000-4-5 2 kV  Clip-on, 35 mm symmetrical DIN rail By screws, mounting plate

#### Environment

Standards	IEC 60584-1	
	IEC 60947-1	
Product certifications	CSA	
	GL	
	UL	
IP degree of protection	IP50 housing	
	IP20 terminal block	
Fire resistance	850 °C conforming to UL	
	850 °C conforming to IEC 60695-2-1	
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	

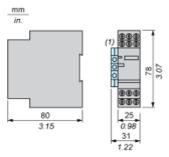
Resistance to electrostatic discharge	8 kV (in air) conforming to IEC 61000-4-2 level 3 6 kV (in contact) conforming to IEC 61000-4-2 level 3
Resistance to fast transients	2 kV on power supply conforming to IEC 61000-4-4 1 kV on input-output conforming to IEC 61000-4-4
Disturbance radiated/conducted	CISPR 11 CISPR 22 group 1 - class B
Ambient air temperature for storage	-4085 °C
Ambient air temperature for operation	060 °C (2 cm spacing) 050 °C (mounting side by side)
Pollution degree	2 conforming to IEC 60664-1

# Product data sheet Dimensions Drawings

### RMTK80BD

### Analog Interface (Converter)

### Dimensions



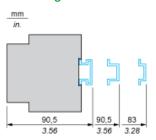
(1) Terminal block AB1TP435U or AB1RRNTP435U2

# Product data sheet Mounting and Clearance

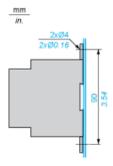
### RMTK80BD

### Mounting

### Mounting on Rails AM1 \*\*\*\*\*



### **Panel Mounting**

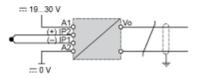


### Product data sheet Connections and Schema

### RMTK80BD

### **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.