Product data sheet

Characteristics

RMPT30BD
temperature transmitter - 0..100 °C/32..212 °F -
for Universal Pt100 probes

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**Main**

<table>
<thead>
<tr>
<th>Range of product</th>
<th>Zelio Analog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product or component type</td>
<td>Converter for Universal Pt100 probes</td>
</tr>
<tr>
<td>Analogue input type</td>
<td>Temperature probe 0...100 °C/32...212 °F Pt 100 2, 3 or 4 wires</td>
</tr>
</tbody>
</table>
| Analogue output type | Current 0...20 mA <= 500 Ohm  
                         Current 4...20 mA <= 500 Ohm  
                         Voltage 0...10 V >= 100 kOhm |

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**Complementary**

| Protection type | Reverse polarity protection on power supply  
                 | Short-circuit protection on output  
                 | Overvoltage protection on output (+/- 30 V)  
                 | Reverse polarity 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  
                                     22...30 mA when no input or input wire broken |
| [Us] rated supply voltage | 24 V DC non isolated +/- 20 % |
| Current consumption | <= 40 mA for voltage output  
                        <= 60 mA for current output |
| Local signalling | LED (green)power ON: |
| Measurement error | +/- 0.5 % of full scale (3 or 4 wires) at 20 °C  
                     +/- 1 % of full scale (2 wires) at 20 °C  
                     +/- 10 % of full scale at 20 °C (electromagnetic interference of 10 V/m) |
| Repeat accuracy | +/- 0.2 % full scale at 20 °C  
                     +/- 0.8 % full scale at 60 °C |
| Temperature coefficient | 150 ppm/°C |
| Maximum wiring resistance | 0.2 Ohm connection in 2 wires |
| Clamping connection capacity | 1 x 2.5 mm²  
                                2 x 1.5 mm² |
| Tightening torque | 0.6…1.1 N.m |
| Marking | CE |

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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.

May 13, 2020
**Surge withstand**
0.5 kV during 1.2/50 μs conforming to IEC 61000-4-5

**[Ui] rated insulation voltage**
2000 V

**Fixing mode**
Clip-on (35 mm symmetrical DIN rail)
Fixed (mounting plate)

**Safety reliability data**
MTTFd = 32.9 years
B10d = 30437

**Net weight**
0.12 kg

### Environment

**Electromagnetic compatibility**
Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2
Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2

**Standards**
DIN 43760
EN/IEC 60751
EN/IEC 60947-1
EN/IEC 60584-1

**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 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 22 group 1 - class B
CISPR 11

**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

### Offer Sustainability

**Sustainable offer status**
Green Premium product

**EU RoHS Directive**
Pro-active compliance (Product out of EU RoHS legal scope)
EU RoHS Declaration

**Mercury free**
Yes

**RoHS exemption information**
Yes

**China RoHS Regulation**
China RoHS declaration

**Environmental Disclosure**
Product Environmental Profile

**Circularity Profile**
End of Life Information

**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