## Product data sheet

### RMPT30BD

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

---

### Characteristics

#### Main

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

#### 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

---

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.

Nov 3, 2019
<table>
<thead>
<tr>
<th><strong>Surge withstand</strong></th>
<th>0.5 kV during 1.2/50 µs conforming to IEC 61000-4-5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>[Ui] rated insulation voltage</strong></td>
<td>2000 V</td>
</tr>
</tbody>
</table>
| **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 |
| **REACH Regulation** | REACh Declaration |
| **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 |