RTD Thermometer
omnigrad TST434

Medium duty - Building automation
for outdoor ambient temperature
with housing for wall mounting

Description
TST434 RTD thermometer includes a 8 mm diameter aluminium anodised thermowell with 20 mm diameter fins and housing suitable for wall mounting

Application
For outdoor temperature measurements or in any wet ambient like refrigerators and climatic chambers. The signal can be transmitted either by ohmic value or a 4...20 mA signal by means of a head transmitter installed in a IP67 Polycarbonate case or in a IP68 head DIN 43729 form B type.
## Technical data

**Allowed temperature:**
-30°C to +100°C without transmitter
-20°C to +80°C with transmitter

### Protecting tube
- **Standard diameter:** 8 mm diameter with 20 mm diameter fins
- **Standard material:** anodised aluminium

### Inset
- **Sensing element:** Platinum resistance, 1 Pt100 Ω at 0°C
- **Tolerances:** Class A or B to IEC 751
- **Wiring:** 3 wire connections
- **Insulation resistance:** ≥ 100 MΩ, test voltage 250V at ambient temperature
- **Electrical connections:** plate for transmitter mounting or terminal board

### TA20A terminal head
- **Dimensions:** according to DIN43763 form B
- **Protection grade:** IP68
- **Transmitter mounting holes distance:** 33 mm
- **Cable entry:** PG16 + grey gland skintop
- **Thermowell entry:** by standard mounting kit
- **Body colour:** blue according to RAL 5012, epoxy coated
- **Cap colour:** grey according to RAL 7035, epoxy coated

### TA 30 housing
- **Dimensions:** 80x82x55 mm
- **Protection grade:** IP67
- **Transmitter mounting holes distance:** 33 mm
- **Material:** polycarbonate
- **Cable entry:** PG9 with cable gland
- **Thermowell entry:** by standard mounting kit
- **Colour:** grey according to RAL 7035
Terminal head

Table 1: Built-in head transmitter

<table>
<thead>
<tr>
<th>(*)</th>
<th>Features</th>
<th>Model</th>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Transmitter 4...20mA, 0...50°C</td>
<td>Analogue</td>
<td>Suitable for</td>
</tr>
<tr>
<td>B</td>
<td>Transmitter 4...20mA, 0...100°C</td>
<td>Fixed Range</td>
<td>Form B head</td>
</tr>
<tr>
<td>C</td>
<td>Transmitter 4...20mA, 0...150°C</td>
<td>TMT137</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>4...20mA analogue output with I/O isolation</td>
<td>Digital PC settable</td>
<td>Suitable for Form B head</td>
</tr>
<tr>
<td>Q</td>
<td>4...20mA analogue output with I/O isolation (Ex ia version)</td>
<td>TMT181</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Hart® analogue with I/O isolation</td>
<td>Hart® Protocol</td>
<td>Suitable for Form B head</td>
</tr>
<tr>
<td>T</td>
<td>Hart® analogue with I/O isolation (Ex ia version)</td>
<td>TMT182</td>
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<tr>
<td>0</td>
<td>Without built-in transmitter</td>
<td>On request</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Built-in transmitter TH11, ordered separately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Built-in transmitter as specified</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) refer to the order key

Order key

TST434 - RTD THERMOMETER - Medium duty - Building automation -
For outdoor ambient temperature - With housing for wall mounting

Electrical connection type
K  Terminal block for wire connection
J  Plate for transmitter mounting

Class and type of inset
1B3 - 1 Pt100 class B, 3 wire
1A3 - 1 Pt100 class A, 3 wire
9Y9 - RTD class and type to specification

Head type
A  TA20A DIN B, in Al  IP68
G  TA30 Polycarbonate housing  IP67

Built-in head transmitter (see table 1)

TST434- Complete Order Code