**DIGITAL TEMPERATURE SWITCH PROBES & ACCESSORIES**

Probes to be used with TS2, TSS2, TSWB, TSW, TS3, TSX3, and 40M

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**FEATURES/BENEFITS**
- 5 or 10 foot cable lengths
- PTC or NTC temperature curves

**APPLICATIONS**
- HVAC equipment
- Vapor-filled copper capillary sensing element
- Heat exchangers and cooling coils

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**SERIES DFS2**

**LOW LIMIT FREEZE PROTECTION SWITCH**

Manual and Automatic Reset

The Series DFS2 Low Limit Freeze Protection Switch protects cooling coils in air handler systems by preventing frost build up. The thermostat and its capillary sensing element provide an antifreeze function by sensing the lowest temperature along any one foot section of capillary. The DPDT manual or automatic reset relays signal the building management system as well as cut off the fan. The Series DFS2 will detect temperature drops below the fixed safety value (set point) which can be set as low as 34°F (1°C) utilizing the visual set point indicator and set point screw.

**FEATURES/BENEFITS**
- Manual and automatic reset options.
- Automatic and manual reset

**APPLICATIONS**
- HVAC equipment
- Heat exchangers and cooling coils

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**SPECIFICATIONS**

Sensing Element: Vapor-filled capillary.
Operating Temperature: 14°F to 54°F (-10°C to 12°C).
Capillary Overload Temperature: 392°F (200°C), maximum 60 minutes.
Humidity Limit: 0 to 95% RH, non-condensing.
Enclosure: Galvanized steel base, ABS cover.
Enclosure Rating: NEMA 1 (IP40).
Capillary Material: Copper.
Cable Entry: (1) M20 compression fitting.

Reset Action: Available in automatic or manual reset options.
Low-level Setpoint: Factory Set: 39°F (4°C), and safety lock secured; Adjustment via screwdriver slot.
Wire Connection: Terminal with wire-retaining screws.
Wire Size: Max. 14 AWG.
Electrical Rating: 24-250 VAC, 15 (8) A.
Electrical Connections: Two each NO/NC/COM.
Deadband: 1.8°F (fixed).
Weight: 1.6 lb (0.7 kg).
Agency Approvals: CE.

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**ACCESSORIES**

Model | Description
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A-TS-AP | 1/4 DIN adapter plate
TS2-K | Configuration key
TS-W | Brass thermowell (for use with TS-1, TS-11, TS-2, TS-21)

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**MODEL CHART - SENSORS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sensor</th>
<th>Cap Material</th>
<th>Length ft (m)</th>
<th>Model</th>
<th>Sensor</th>
<th>Cap Material</th>
<th>Length ft (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS-1</td>
<td>PTC</td>
<td>Brass</td>
<td>5 (1.5)</td>
<td>TS-7</td>
<td>NTC</td>
<td>None</td>
<td>5 (1.5)</td>
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<tr>
<td>TS-11</td>
<td>PTC</td>
<td>Stainless steel</td>
<td>10 (3)</td>
<td>TS-71</td>
<td>NTC</td>
<td>None</td>
<td>10 (3)</td>
</tr>
<tr>
<td>TS-21</td>
<td>PTC</td>
<td>Stainless steel</td>
<td>10 (3)</td>
<td>TS-81</td>
<td>NTC</td>
<td>Stainless steel</td>
<td>10 (3)</td>
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<tr>
<td>TS-6</td>
<td>PTC</td>
<td>PVC</td>
<td>5 (1.5)</td>
<td>TS-881</td>
<td>NTC</td>
<td>Stainless steel</td>
<td>15 (4.5)</td>
</tr>
<tr>
<td>TS-61</td>
<td>PTC</td>
<td>Polyamide resin coated brass</td>
<td>10 (3)</td>
<td>TS2-K</td>
<td>J-type</td>
<td>Stainless steel</td>
<td>4 (1.21)</td>
</tr>
<tr>
<td>TS-W</td>
<td>NTC</td>
<td>Stainless steel</td>
<td>4 (1.21)</td>
<td></td>
<td>K-type</td>
<td>Stainless steel</td>
<td>4 (1.21)</td>
</tr>
</tbody>
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