**TM4 - A1 Temperature Control**

**Bimetallic Monocontact Thermo-Switch Series TM4 - A1**

TM4 - A1 Series close on rise when the fluid temperature exceeds the higher set point (turning the fan on) and they re-open at the lower set point (turning the fan off).

The 22°F hysteresis prevents the fan from over-cycling. The top of the switch may be rotated in 90° increments for ease of wiring.

**Technical Data**

- **Power Supply**: 12v - 24v - 230v
- **Working temperature**: -4°F to 248°F
- **Maximum Pressure**: 2900 PSI
- **Switching Accuracy**: ± 7°F
- **Body Material**: Brass
- **Mounting**: Any Position
- **Weight**: 0.25 oz

**Part Number** | **Temperature Range** | **Ordering Code**
--- | --- | ---
TM 44 - A1 | 104 - 82°F | 1
TM 45 - A1 | 122 - 100°F | 2
TM 46 - A1 | 140 - 118°F | 3
TM 47 - A1 | 158 - 136°F | 4
TM 48 - A1 | 176 - 154°F | 5
TM 49 - A1 | 194 - 172°F | 6

Normally closed switches are available: Consult factory.

**TM4 - P1 Pre-Wired Temperature Switch**

**Bimetallic Monocontact Thermo-Switch Series TM4 - P1**

The TM4 - P1 series allows the closing of an electrical contact when the fluid temperature exceeds the set-point value of the thermostatic switch.

**Technical Data**

- **Power Supply**: 12v - 24v
- **Working temperature**: -4°F to 248°F
- **Maximum Pressure**: 2900 PSI
- **Switching Accuracy**: ± 7°F
- **Body Material**: Brass
- **Mounting**: Any Position
- **Weight**: 2.8 oz

**Electrical Data**

- **Electrical Connections**: Metripack 280
- **Electrical Protection**: DIN 40050 IP65
- **Electrical Contact**: Normally Open
- **Maximum Contact Load**: 12v - 24v 10 Amp
  - 24v 5 Amp
  - 115v 10 Amp
  - 230v 15 Amp

**Part Number** | **Temperature Range** | **Ordering Code**
--- | --- | ---
TM45 - P1 | 122°F - 100°F | 2B
TM46 - P1 | 140°F - 118°F | 3B

Other Temperature settings Available. Consult Factory.
The XT51 temperature switch closes on rise when the fluid temperature exceeds the set-point value of the switch.

The working temperature can be adjusted by moving the centigrade scale which is located below the waterproof protected top cover.

**Technical Data**

- **Power Supply**: 12v - 24v
- **Temperature Range**: 104°F to 194°F
- **Working temperature**: -4°F to 248°F
- **Maximum Pressure**: 1450 PSI
- **Switching Accuracy**: ± 3°F
- **Body Material**: Brass
- **Mounting**: Any Position
- **Weight**: 0.4 lbs

**Electrical Data**

- **Electrical Connections**: DIN 43650
- **Electrical Protection**: DIN 40050 IP65
- **Electrical Contact**: Normally Open
- **Maximum Contact Load**: 1.4 Amp

The XT51 temperature switch With Integrated Relay

**Technical Data**

- **Power Supply**: 12v - 24v
- **Working temperature**: -4°F to 248°F
- **Maximum Pressure**: 2900 PSI
- **Fixed Hysteresis Value**: About 22°F
- **Switching Accuracy**: ± 7°F
- **Power Supply Cord Length**: 28”
- **Fan Motor Cord Length**: 28”
- **Body Material**: Brass
- **Mounting**: Any Position
- **Weight**: 0.6 lbs

**Electrical Data**

- **Electrical Connections**: Metripack 280
- **Positive**: (A) Brown Wire
- **Negative**: (B) Blue Wire
- **Electrical Protection**: IP 67
- **Electrical Contact**: Normally Open
- **Approvals**: CE
- **Maximum Contact Load**: TMR 4X 30 Amp  
  TMR 5X 40 Amp

Other Temperature settings Available. Consult Factory

www.emmegiinc.com
**Technical Data**

- **Power Supply**: 12v - 24v
- **Working temperature**: -4°F to 176°F
- **Maximum Pressure**: 2900 PSI
- **Fixed Hysteresis Value**: About 9°F
- **Switching Accuracy**: ± 7°F
- **Power Supply Cord Length**: 58”
- **Fan Motor Cord Length**: 9.5”
- **Body Material**: Anodized Aluminium / Brass
- **Mounting**: Any Position
- **Weight**: 0.77 lbs

**Electrical Data**

- **Electrical Connections**: Metripack 280
- **Positive**: (A) Brown Wire
- **Negative**: (B) Blue Wire
- **Electrical Protection**: IP 67
- **Electrical Contact**: Normally Open
- **Approvals**: CE
- **Maximum Contact Load**: 12v - 12 Amp  
  24v - 25 Amp

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**Bimetallic Monocontact Thermo-Switch series TMS4**

The TMS4 Temperature Switches incorporate a soft start feature that eliminates in-rush amp draw during start up. When the temperature setting of the switch is reached, the switch will turn the fan on. It will reach the maximum speed after about 30 seconds. When the temperature decreases by 9°F the fan will turn off.

**Part Number** | **Temperature Setting** | **Ordering Code** (for cooler code)
--- | --- | ---
TMS 44 | 104°F | 7C
TMS 45 | 122°F | 8C
TM4 46 | 140°F | 9C

User connection 2x1.5 with 29.5 inch cable and Metric Pack Series 280 female connector

NOTE: In order to protect the thermostat from polarity reversion it is important to put a fuse in the power line.

**TMS 4 connected to sensor port as shown on an S3 series cooler**

**Fan Motor Cord**: 9.5 inches

**Power Supply Cord**: 58 inches
The TMS 6 Temperature Control incorporates soft start, variable speed, and automatic fan reversing features.

**Operation:**
- Fan turns on at lower temperature range setting.
- Operates at variable speed between the lower and higher temperature range settings.
- Fan is at maximum RPM at the higher temperature range setting.
- After 15 minutes of operation the fan stops, reverses for 30 seconds, and re-starts. The cycle time takes 1.5 minutes. Cycling the fan to blowing operation clears airborne debris from the cooler, maintaining optimum performance.

**Technical Data**
- **Power Supply:** 12v - 24v
- **Working temperature:** -4°F to 176°F
- **Maximum Pressure:** 2900 PSI
- **Switching Accuracy:** ± 3.6°F
- **Power Supply Cord Length:** 19.7"
- **Fan Motor Cord Length:** 19.7"
- **Temperature Sensor Cord Length:** 15.75"
- **Body Material:** Anodized Aluminium
- **Mounting:** Any Position
- **Weight:** 0.55 lbs

**Electrical Data**
- **Electrical Connections:** Metripack 280
- **Positive:** (A) Brown Wire
- **Negative:** (B) Blue Wire
- **Electrical Protection:** DIN 40050IP 67
- **Electrical Contact:** Normally Open
- **Approvals:** CE
- **Maximum Contact Load:** 25 Amp

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Temperature Range</th>
<th>Volts</th>
<th>Model Code Feature Adder</th>
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<tbody>
<tr>
<td>TMS 64 - 12</td>
<td>104°F - 122°F 40°C - 50°C</td>
<td>12</td>
<td>7A</td>
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<tr>
<td>TMS 64 - 24</td>
<td>122°F - 140°F 50°C - 60°C</td>
<td>12</td>
<td>7B</td>
</tr>
<tr>
<td>TMS 65 - 12</td>
<td>140°F - 158°F 60°C - 70°C</td>
<td>12</td>
<td>8A</td>
</tr>
<tr>
<td>TMS 65 - 24</td>
<td></td>
<td>24</td>
<td>8B</td>
</tr>
<tr>
<td>TMS 66 - 12</td>
<td></td>
<td>12</td>
<td>9A</td>
</tr>
<tr>
<td>TMS 66 - 24</td>
<td></td>
<td>24</td>
<td>9B</td>
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