Series M-51 Bi-Metal Air Temperature Switches
Double Adjustable, Heavy Duty, Automatic Reset

**FEATURES**
- UL listed, CSA Certified.
- Automatic or Manual reset.
- SPST mercury switch (SPDT switches available).
- Visible dial shows duct temperature.
- Two adjustments: one sets high temperature set point, the other sets low temperature reset.

**SPECIFICATIONS**
Service: Compatible gases.
Temperature Limit: Process: range maximum, Ambient: 180°F (82°C).
Enclosure Rating: General purpose.
Switch Type: SPST mercury switch. Optional SPDT.
Electrical Rating: 10A @ 120 VAC/DC, 5A @ 240 VAC/DC. 3/4 HP @ 120/240 VAC single phase, 1/3 HP @ 120/240 VDC.
Electrical Connections: Screw terminal.
Conduit Connection: 7/8” (22.23 mm) hole for 1/2” (12.7 mm) conduit hub.
Process Connection: Mounting flange. Reversible for flat or curved surfaces.
Mounting Orientation: Horizontal and level.
Set Point Adjustment: Internal moveable pointers for set point and reset point.
Weight: 5 lb (2.27 kg).
Deadband: Adjustable from minimum in model chart to full range.
Options: SPDT and DPST switches. Switch that closes on temperature increase.
Agency Approvals: UL and CSA. FM only on models M-51R-74 and MX-51R-75.

**MODELS**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Switch Action on Temp. Rise</th>
<th>Range °F (°C)</th>
<th>Minimum Deadband °F (°C)</th>
<th>Dim. A Insertion Length</th>
<th>Switch Reset</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-51-71</td>
<td>Opens</td>
<td>25 to 125</td>
<td>12 (7)</td>
<td>5/8 (16)</td>
<td>Automatic</td>
</tr>
<tr>
<td>M-51R-71</td>
<td>Opens</td>
<td>25 to 125</td>
<td>12 (7)</td>
<td>5/8 (16)</td>
<td>Manual</td>
</tr>
<tr>
<td>M-51-74</td>
<td>Opens</td>
<td>50 to 500</td>
<td>20 (11)</td>
<td>4/32 (11)</td>
<td>Automatic</td>
</tr>
<tr>
<td>MX-51-75</td>
<td>Opens</td>
<td>50 to 650</td>
<td>20 (11)</td>
<td>4/32 (11)</td>
<td>Automatic</td>
</tr>
</tbody>
</table>

**Series FM Immersion Temperature Control**
Visible Setpoint Adjustment, Adjustable Deadband

**SPECIFICATIONS**
Service: Compatible liquids or gases.
Wetted Materials: Well: Copper or 304 SS.
Temperature Limit: Process: 375°F (190°C), Ambient: 180°F (82°C).
Pressure Limit: Copper well: 200 psi (13.8 bar) @ 300°F (149°C);
304 SS well: 900 psi (62 bar) @ 300°F (149°C).
Enclosure Rating: General purpose.
Switch Type: SPDT mercury switch. Optional SPDT.
Electrical Rating: 4A @ 120 VAC/DC, 2A @ 240 VAC/DC, 1/8 HP @ 120/240 VAC single phase.
Electrical Connections: Screw terminal.
Conduit Connection: 7/8” (22.23 mm) hole for 1/2” (12.7 mm) conduit hub.
Process Connection: 3/4” NPT male.
Mounting Orientation: Horizontal and level.
Set Point Adjustment: Internal moveable pointers for set point and reset point.
Weight: 2 lb (0.9 kg).
Deadband: Adjustable, see model chart.
Options: SPST mercury switches with higher current ratings.
Set Point Scale: Indication in °F standard, °C optional.
Agency Approvals: UL, FM and CSA.

**COMPACT AND LOW COST**, Series FM-437 employs a bimetal element inside an immersion well. Instrument is detachable from the well, allowing maintenance without draining system. Visible calibrated dial reduces “start up” time and speeds set point changing. Contacts are hermetically sealed and mercury wetted. High current (up to 17A) capacity switches available on special order.

**MODELS**

<table>
<thead>
<tr>
<th>Copper Well Model No.</th>
<th>304SS Well Model No.</th>
<th>Operating Temp. Range °F (°C)</th>
<th>Deadband °F (°C)</th>
<th>Well Dim. in. (A x B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM-437-153-3515</td>
<td>FM-437S5-153-3515</td>
<td>40-200 (-49 to -94)</td>
<td>58.8 [56.0]</td>
<td>21/16 (5.4)</td>
</tr>
<tr>
<td>FM-437-153-3516</td>
<td>FM-437S5-153-3516</td>
<td>40-200 (-49 to -94)</td>
<td>58.8 [56.0]</td>
<td>21/16 (5.4)</td>
</tr>
<tr>
<td>FM-437-153-3510</td>
<td>FM-437S5-153-3510</td>
<td>80-240 (27-115)</td>
<td>58.4 [56.0]</td>
<td>21/16 (5.4)</td>
</tr>
<tr>
<td>FM-437-153-3511</td>
<td>FM-437S5-153-3511</td>
<td>80-240 (27-115)</td>
<td>58.4 [56.0]</td>
<td>21/16 (5.4)</td>
</tr>
<tr>
<td>FM-437-153-3528</td>
<td>FM-437S5-153-3528</td>
<td>160-300 (71-149)</td>
<td>58.4 [56.0]</td>
<td>21/16 (5.4)</td>
</tr>
<tr>
<td>FM-437-153-3529</td>
<td>FM-437S5-153-3529</td>
<td>160-300 (71-149)</td>
<td>58.4 [56.0]</td>
<td>21/16 (5.4)</td>
</tr>
</tbody>
</table>