

HIGH RELIABILITY MILITARY AND AEROSPACE THERMOSTATS

Figure 12. 3153 Series Low Profile Thermostats

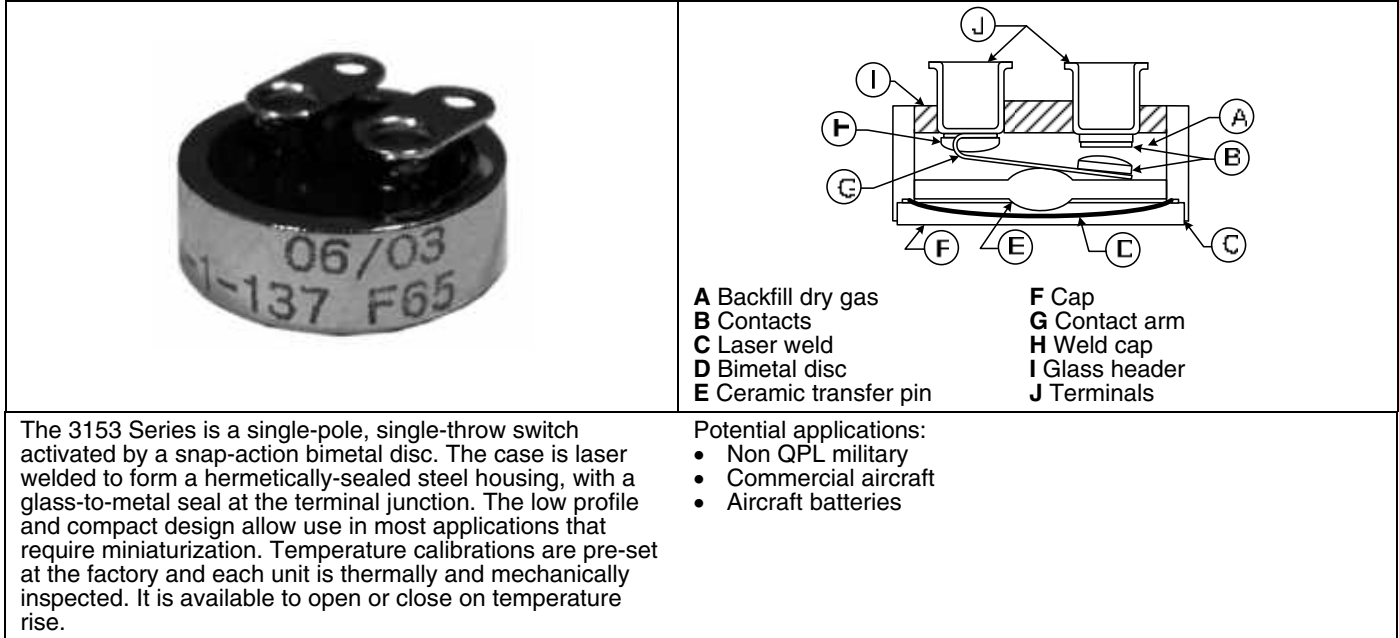


Table 31. 3153 Series Standard Temperature Characteristics

| Temperature Setpoint Range | Tolerance | | Nominal Differential °C [°F] | Max. Differential °C [°F] |
|--|---------------------------|------------------|---------------------------------|------------------------------|
| | Open °C [°F] | Close °C [°F] | | |
| -28,89 °C to -12,2 °C [-20 °F to 10 °F] | ±5,6 [±10] | ±4,4 [±8] | 16,7 to 22,2 [30 to 40] | - |
| | ±4,4 [±8] | ±4,4 [±8] | 11,1 to 16,1 [20 to 29] | - |
| | ±3,9 [±7] | ±3,9 [±7] | 11,1 to 16,1 [20 to 29] | - |
| -11,7 °C to 9,4 °C [11 °F to 49 °F] | ±2,8 [±5] | ±2,8 [±5] | 11,1 to 22,2 [20 to 40] | - |
| | ±2,8 [±5] | ±2,8 [±5] | 8,3 to 10,6 [15 to 19] | - |
| | ±2,8 [±5] | ±2,8 [±5] | 6,1 to 7,8 [11 to 14] | - |
| | Open or Close Only | | - | 4,4 [8] |
| 10 °C to 107,2 °C [50 °F to 225 °F] | ±2,8 [±5] | ±2,8 [±5] | 11,1 to 22,2 [20 to 40] | - |
| | ±2,8 [±5] | ±2,8 [±5] | 8,3 to 10,6 [15 to 19] | - |
| | ±2,8 [±5] | ±2,8 [±5] | 6,1 to 7,8 [11 to 14] | - |
| | Open or Close Only | | - | 4,4 [8] |
| 107,8 °C to 148,9 °C [226 °F to 350 °F] | ±4,4 [±8] | ±3,3 [±6] | 13,9 to 27,8 [25 to 50] | - |
| | ±3,9 [±7] | ±3,3 [±6] | 11,1 to 13,3 [20 to 24] | - |
| | ±3,3 [±6] | ±3,3 [±6] | 8,3 to 10,6 [15 to 19] | - |
| | Open or Close Only | | - | 6,7 [12] |
| 149,4 °C to 176,7 °C [301 °F to 350 °F] | ±6,7 [±12] | ±5,6 [±10] | 19,5 to 27,8 [35 to 50] | - |
| | ±5,6 [±10] | ±5,6 [±10] | 13,6 to 18,9 [25 to 34] | - |
| | ±4,4 [±8] | ±4,4 [±8] | 8,3 to 13,3 [15 to 24] | - |
| | Open or Close Only | | - | 8,3 [15] |

Table 32. 3153 Series Specifications

| Characteristic | Parameter |
|------------------------------|---|
| Switch type | SPST |
| Reset type | automatic |
| Amperage | 5 A resistive |
| Voltage | 28 Vac/dc |
| Operating temperature range | -29 °C to 177 °C [-20 °F to 350 °F] |
| Environmental exposure range | -65 °C to 260 °C [-85 °F to 500 °F] |
| Dielectric strength | MIL-STD-202, Method 301, 1250 Vac |
| Insulation resistance | MIL-STD-202, Method 302, 500 MOhm |
| Contact resistance | MIL-STD-202, Method 307, 50 mOhm max. |
| Hermetic seal | MIL-STD-202, Method 112, Cond. A |
| Moisture resistance | MIL-STD-202, Method 106 |
| Shock | MIL-STD-202, Method 213, 100 G |
| Vibration | MIL-STD-202, Method 204, 20 G |
| Thermal shock | Mil-STD-202, Method 107, Cond. B |
| Salt spray* | Mil-STD-202, Method 101, Cond. B |
| Housing material | cold rolled plated steel |
| Marking | MIL-STD-1285 |
| Weight | 6 g [0.12 oz] (brackets not included) |
| Approvals | Acceptance testing performed in accordance with MIL-PRF-24236, Table III. |

*Not applicable to thermostats with brackets or those operating at temperatures above 162,8°C [325 °F].

Table 33. 3153 Series Contact Ratings

| Load Type | Life Cycles | 28 Vac/dc | 115 Vac |
|-----------|-------------|-----------|---------|
| Resistive | 100,000 | 5 A | 2 A |
| Inductive | 100,000 | 2.5 A | 1 A |
| Lamp | 100,000 | 1 A | 0.5 A |