

F-08-02-001

September 2018



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Precision Snap Disc Thermostats Surface Mounting Type

FEATURES

- Ratings to 12A at 240 VAC
- 100,000 Cycle Rating
- UL Component Recognized **N**
- CSA Certified 🕮
- CE Compliant C€
- Tamper-Proof Preset Temperature
- Calibrated Settings from 35 to 350°F (2 to 176°C)
- Automatic Reset
- Vibration Resistant

APPLICATIONS

- Power Supplies
- Solar Heating
- Copiers
- Communications Equipment
- Refrigeration Compressors
- Welding Equipment
- Food Processing



DESCRIPTION

A snap-acting disc serves as the actuating element in these rugged, precision thermostats. As the temperature reaches the tamper-proof predetermined set point, the disc snaps to provide rapid, positive contact action minimizing radio frequency interference and ensuring high reliability.

These thermostats are individually calibrated and tested to meet both thermal and electrical characteristics. The single contact switch arm assembly minimizes failures due to contact contamination, while the fine silver contacts assure long life and excellent current carrying capacity. Resistance to vibration and harsh environments are additional features.

The ceramic base and metal cap provide protection from contamination and an optional epoxy seal improves resistance to harsh environments.

Many terminations and mounting assemblies are available to permit great flexibility in installation. Thermostats feature current carrying capacities up to 12A at 240VAC. An optional epoxy seal provides additional protection against contamination.

TEST SAMPLES

Operating samples can be supplied for application tests. A completed Fenwal Snap Disc Application Data Form is required to select and produce an operating sample. Application Data Forms are available at <u>www.fenwalcontrols.com</u> or your local Fenwal sales representative.

The following model is normally available from stock.

Normally Closed Contacts - Open on Rise							
P/N	Mounting	Terminals	Opens °F	Close °F			
08-020261-407	Moveable	Т6	100	80			
08-023384-463	B2, H4	Τ7	140	120			
08-023384-594	B2, H4	T7	180	160			

SPECIFICATIONS

Switch Action

SPST (normally open or normally closed)

Dielectric Strength

1500 VAC terminals to case.

Insulation Resistance

100 Megohms minimum 500VDC.

Vibration

MIL-STD-202D, Method 204B, 10 G's.

Shock

MIL-STD-213B, Test Condition K, 30 G's, 11 millisec.

Table 1: Ranges and Tolerances						
Temperature Range	Tolerances		Differential			
	Open	Closed	(Nominal)			
35 to 240°F	±7°F	±8°F	20°F			
2 to 116°C	±4°C	±4°C	11°C			
241 to 300°F	±7°F	±8°F	25°F			
116 to 148°C	±4°C	±4.5°C	14°C			
301 to 350°F	±8°F	±10°F	30°F			
149 to 177°C	±4.5°C	±6°C	17°C			

Note: Differences between customer and manufacturer temperature testing procedures and equipment can result in temperature variance.

Table 2: Electrical Ratings - Resistive					
120VAC	240VAC	30VDC	Cycles	Approvals	
12A	12A	2A	100,000		
120VA	120VA	28	100,000		

A and Sunits rated for AC operation only U.L. File E18974, Guide XAPX2 C.S.A. File LR 7378, Class 4823 02

CE CE682411

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Effective: September 2018



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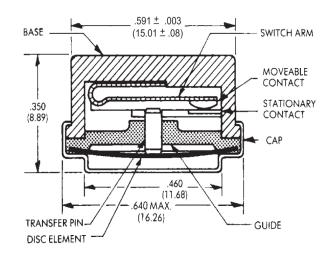
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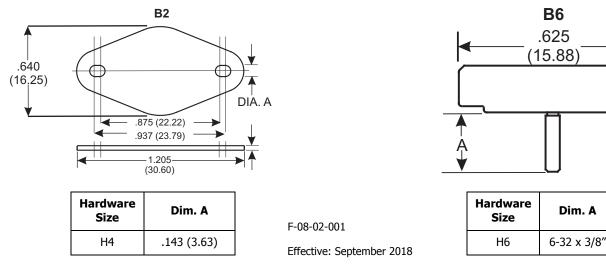
Table 3				
Mounting Bracket Stainless Steel	Mounting Hardware Size			
B1 - No Bracket (Cap Only)	H1 - No hardware (use B1)			
B2 - Bottom Oval Flange	H4 - #6 screw for flange mounting			
B6 - Stud Mounting Screw	H6 - #6 screw for stud mounting			
Lead Wires Specify length				
L1 - No Lead Wires	L2 - 105°C PVC, 18 AWG, 300V insulation			
L3 - 200°C TFE, 18 AWG, 300 V insulation	L4 - 250°C TGGT, 18 AWG, 300V insulation			
Terminals Positions				
T1 - Eyelet, opposed horizontal	T2 - Eyelet, opposed vertical			
T3 - Eyelet, parallel horizontal	T4 - Eyelet, parallel horizontal, reverse step			
T6 - 1/4" Quick Connect, opposed horizontal	T7 - 1/4" Quick Connect, opposed vertical			
T10 - Leads, opposed horizontal	T11 - Leads, opposed vertical			
T12 - Leads, parallel horizontal	T13 - Leads, parallel vertical			
T14 - Vertical lead wires with epoxy filled mylar sleeve	T16 - Molded cover over epoxy with side exit.			

OUTLINE DIMENSIONS



MOUNTING BRACKETS AND MOUNTING HARDWARE SIZE

Note: Dimensions in brackets are millimeters. Specifications are subject to change without notice.





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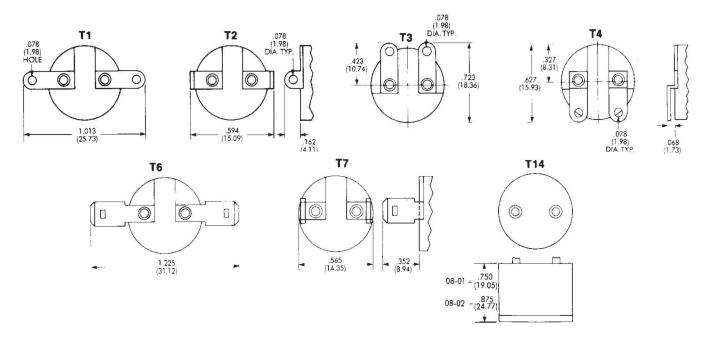
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TERMINALS AND POSITIONS



HOW TO ORDER

To more clearly define specific requirements, please complete a Fenwal Snap Disc Application Data Form, available at www.fenwalcontrols.com or your local Fenwal sales representative. To order:

- 1. Select Series Number desired from Table 1 on Page 2. Specify Series 08-81.
- 2. Specify opening and closing temperatures in degrees Fahrenheit or Celsius with tolerance, and whether the switch action should open or close on temperature rise.
- 3. Specify terminals and mounting configurations by selecting one code number from each category in Table 3. If lead wires are required, specify length.

EXAMPLE: 08-02, open at 175°F, close at 155°F, B2, C3, H4, T1, L1 = Series 08-02 thermostat set to open at 175°F±7°F on temperature rise, close at 155°F±7°F on temperature drop. Bottom oval flange mounting bracket; holes to accept #6 mounting hardware (not supplied); evelets, opposed horizontal; no lead wires.

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Rev AD

Classification: EAR99 This document contains technical data subject to the EAR.

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EXPORT INFORMATION (USA)

Jurisdiction: EAR