SERIES 08-01 & 08-02

Precision Snap Disc Thermostats Surface Mounting Type



8.10.10

FEATURES

- Ratings to 12A at 240VAC
- 100,000 Cycle Rating
- UL Component Recognized 91
- Series 08-02 CSA Certified &
- CE Compliant €€
- · Tamper-Proof Preset Temperature
- Calibrated Settings from 10 to 350°F/-12 to 176°C
- Automatic Reset
- · Vibration Resistant

APPLICATIONS

- Power Supplies
- Copiers
- · Communications Equipment
- · Refrigeration Compressors
- Welding Equipment
- Food Equipment
- X-ray Equipment

DESCRIPTION

A snap-acting bimetal 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 polyphenelene sulfide 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.



Series 08-01

Series 08-01 is a low profile thermostat, measuring only .250" high with a current carrying capacity of 7A. The switching mechanism assures good contact wiping action, making it particularly suitable for light loads.

Series 08-02

Thermostats feature current carrying capacities up to 12A at 240VAC measuring .350" in height. 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 from Fenwal or your local Fenwal sales representative.

Selected 08-02 models can be ordered from the Quick Ship Program for next day delivery. Consult Quick Ship brochure.

SPECIFICATIONS

Switch Action

SPST (normally open or normally closed)

Dielectric Strength

1500 VAC terminals to case

Insulation Resistance

100 Megohms minimum at 500VDC

Vibration

08-01 MIL-STD-202D. Method 204B. 20 G's 08-02 MIL-STD-202D, Method 204B, 10 G's

Shock

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

Ranges and Tolerances

TABLE 1

SERIES	TEMP.	TOLERANCES		DIFFL.	AMBIENT
SERIES	RANGE	OPEN	CLOSED	(NOMINAL)	RANGE
08-01	10 to 240°F -12 to 115°C	±7°F ±4°C	±7°F ±4°C	20°F 11°C	
	241 to 300°F 116 to 148°C	<u>+</u> 8°F <u>+</u> 4.5°C	±7°F ±4°C	25°F 14°C	
	301 to 350°F 149 to 177°C	±10°F ±6°C	±8°F ±4.5°C	30°F 17°C	-50°F to 350°F/
08-02	10 to 240°F -12 to 115°C	±7°F ±4°C	<u>+</u> 7°F <u>+</u> 4°C	20°F 11°C	-45°C to
	241 to 300°F 116 to 148°C	±7°F ±4°C	±8°F ±4.5°C	25°F 14°C	
	301 to 850°F 149 to 177°C	<u>+</u> 8°F <u>+</u> 4.5°C	±10°F ±6°C	30°F 17°C	

NOTE: Differences in temperature testing procedures and equipment, between those of the manufacturer and the customer, can result in temperature variances of up to 2°F.

Electrical Ratings (Resistive)

TABLE 2

SERIES	120VAC	240VAC	30VDC	CYCLES	APPROVALS
08-01	7A	7A	2A	100,000	<i>9</i> 1
08-02	12A	12A	2A	100,000	B \ @
00-02	120VAC	120VAC		100,000	91. (§)

Al and whits rated for AC operation only U.L. File E18974, Guide XAPX2 C.S.A. File LR 7378, Class 4823 02 Certified by BG Technology

TABLE 3

Mounting Bracket

B1 – No Bracket (Cap only)

B2 - Bottom Oval Flange

B4 – Bottom Rectangular Flange

B5 – Top Mounting Flange (08-02, H4 only)

B6 - Stud Mounting Screw

Cap and Mounting Flange Material

C3 - Stainless Steel

Mounting Hardware Size

H1 – No hardware (use with B1)

H2 – #4 screw for flange mounting

H3 – #5 screw for flange mounting

H4 – #6 screw for flange mounting

H5 – #8 screw for flange mounting (B4 only)

H6 – #6 screw for stud mounting

H7 – #8 screw for stud mounting

H8 – #10 screw for stud mounting

Terminals Positions

T1 – Eyelet, opposed horizontal

T2 - Eyelet, opposed vertical

T3 – Eyelet, parallel horizontal

T4 – Eyelet, parallel horizontal, reverse step

T5 - Eyelet, parallel vertical

T6 – 1/4" Quick Connect, opposed horizontal

T7 - 1/4" Quick Connect, opposed vertical

T8 – ³/₁₆" Quick Connect, opposed horizontal

T9 - 3/16" Quick Connect, opposed vertical

T10 - Leads, opposed horizontal

T11 - Leads, opposed vertical

T12 - Leads, parallel horizontal

T13 – Leads, parallel vertical

T16 - Horizontal lead wires with epoxy filled molded cover

Lead Wires (specify length)

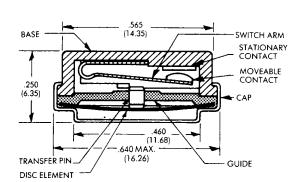
L1 - No Lead Wires

L2 - 105°C PVC, 18 AWG, 600V insulation

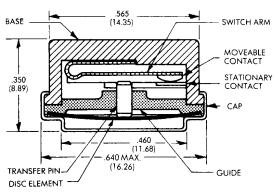
L3 – 200°C TFE, 18 AWG, 300V insulation

L4 – 250°C TGGT, 18 AWG, 300V insulation

OUTLINE DIMENSIONS



Series 08-01

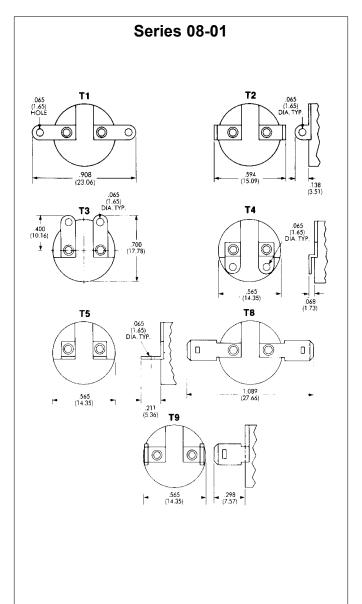


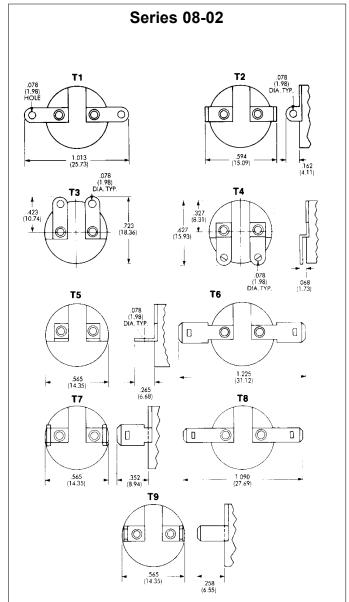
Series 08-02

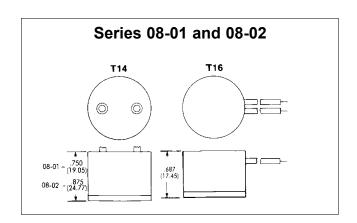
08-02

only

TERMINALS AND POSITIONS



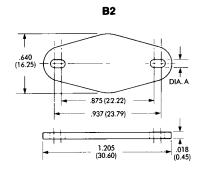




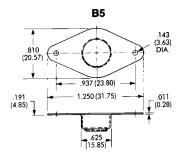
Dimensions in brackets are millimeters.

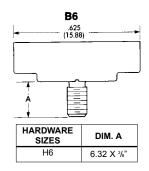
Specifications subject to change without notice

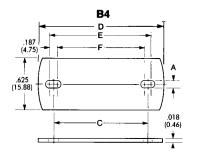
MOUNTING BRACKETS



HARDWARE SIZES	DIM. A	
H2	.117 (2.97)	
H3	.130 (3.30	
H4	.143 (3.63)	







HARDWARE SIZES	DIM. A + .005 000	E	F	С	D
H4	.143	1.125	1.000	1.062	1.436
	(3.63)	(28.58)	(25.40)	(26.97)	(36.47)
H4	.143	1.375	1.250	1.312	1.686
	(3.63)	(34.93)	(31.75)	(33.32)	(42.82)
H5	.172	1.687	1.562	1.625	1.999
	(4.37)	(42.28)	(39.68)	(41.28)	(50.77)

HOW TO ORDER

To more clearly define specific requirements, please complete a Fenwal Snap Disc Application Data Form, available from Fenwal or your local Fenwal sales representative.

To order:

- 1. Select Series Number desired from Table 1 on Page 2.
- 2. Specify opening and closing temperatures in degrees Fahrenheit or Celsius with tolerances; 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, H3, T1, L1 = Series 08-02 thermostat set to open at 175°F \pm 7°F on temperature rise, close at 155°F \pm 7°F on temperature drop. Bottom oval flange mounting bracket; stainless steel cap and mounting flange material; holes to accept #5 mounting hardware (not supplied); eyelets, opposed horizontal; no lead wires.



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These instructions do not purport to cover all the details or variations in the equipment described, nor do they provide for every possible contingency to be met in connection with installation, operation and maintenance. All specifications are subject to change without notice. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to KIDDE-FENWAL, Inc., Ashland, Massachusetts.

P/N 8.10.10 5/27/04