SERIES 08-02

Precision Snap Disc Thermostats

Surface Mounting Type

F-08-02-001
September 2018

FEATURES

- Ratings to 12A at 240 VAC
- 100,000 Cycle Rating
- UL Component Recognized
- CSA Certified
- CE Compliant
- 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 www.fenwalcontrols.com 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	T6	100	80
08-023384-463	B2, H4	T7	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 (Nominal)
	Open	Closed	
35 to 240°F 2 to 116°C	±7°F ±4°C	±8°F ±4°C	20°F 11°C
241 to 300°F 116 to 148°C	±7°F ±4°C	±8°F ±4.5°C	25°F 14°C
301 to 350°F 149 to 177°C	±8°F ±4.5°C	±10°F ±6°C	30°F 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			

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

CE682411

OUTLINE DIMENSIONS

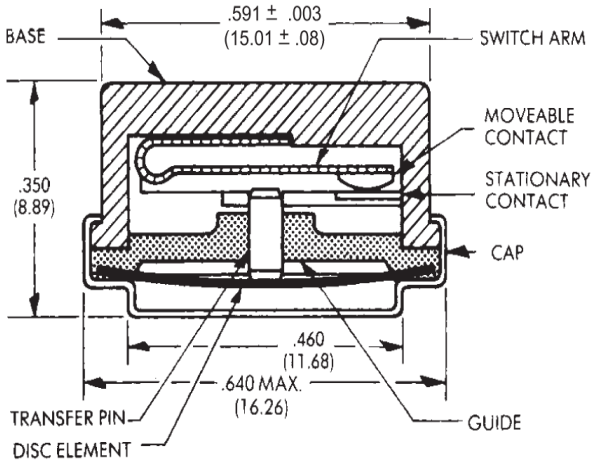
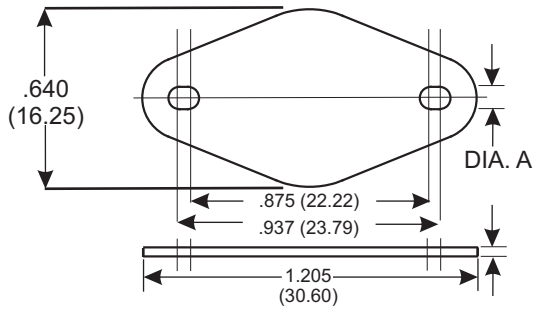


Table 3	
Mounting Bracket Stainless Steel	**Mounting Hardware Size**
B1 - No Bracket (Cap Only)	H1 - No hardware (use B1)
B2 - Bottom Oval Flange	H4 - #6 screw for flange mounting
B6 - Stud Mounting Screw	H6 - #6 screw for stud mounting
Lead Wires Specify length	
L1 - No Lead Wires	L2 - 105°C PVC, 18 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.

MOUNTING BRACKETS AND MOUNTING HARDWARE SIZE

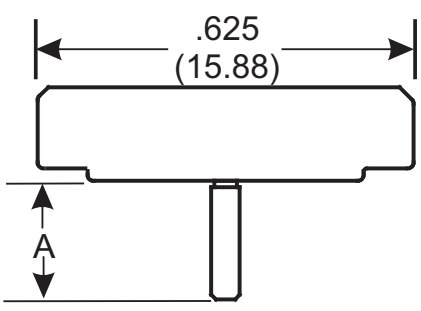
Note: Dimensions in brackets are millimeters. Specifications are subject to change without notice.

B2



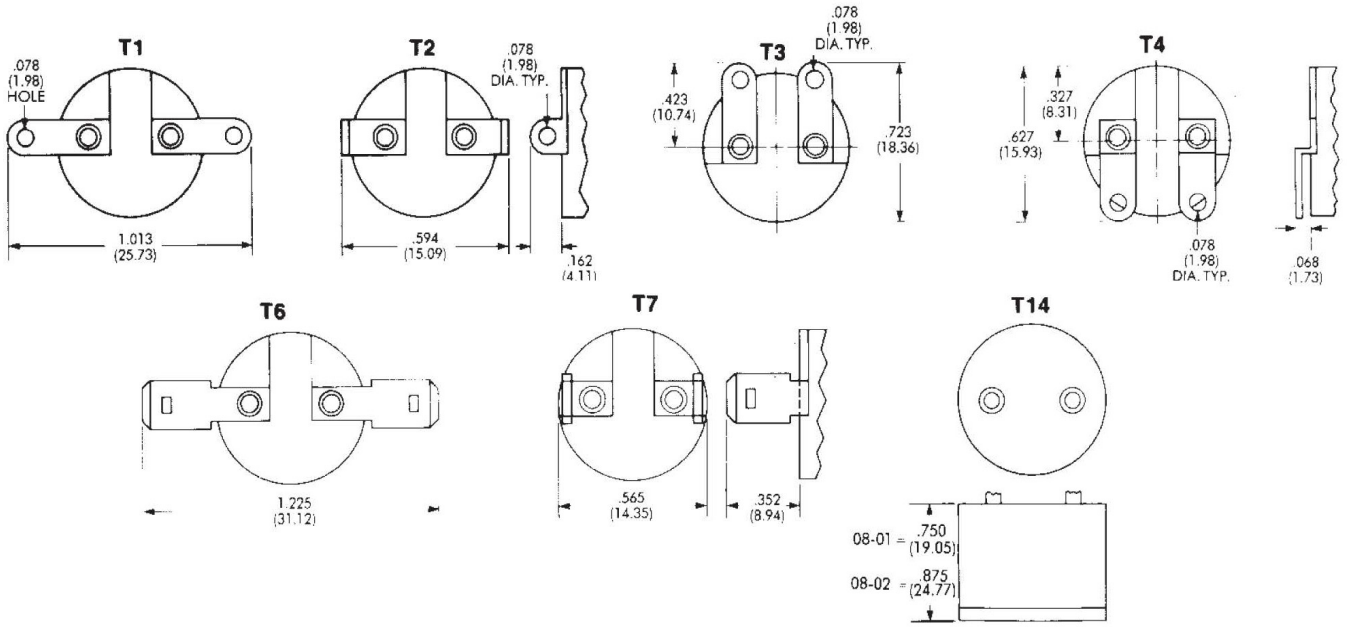
Hardware Size	Dim. A
H4	.143 (3.63)

B6



Hardware Size	Dim. A
H6	6-32 x 3/8"

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); eyelets, opposed horizontal; no lead wires.

EXPORT INFORMATION (USA)
Jurisdiction: EAR
Classification: EAR99
This document contains technical data subject to the EAR.

Fenwal Controls, Kidde-Fenwal Inc.
400 Main Street
Ashland, MA 01721
Tel: 800-FENWAL-1
Fax: 508-881-7619
www.fenwalcontrols.com

This literature is provided for informational purposes only. KIDDE-FENWAL, INC. assumes no responsibility for the product's suitability for a particular application. The product must be properly applied to work correctly. If you need more information on this product, or if you have a particular problem or question, contact KIDDE-FENWAL, INC., Ashland, MA 01721.

© 2018 Kidde-Fenwal Inc. P/N F-08-02-001 Rev AD

Fenwal Controls
400 Main Street
Ashland, MA 01721
Tel. (508) 881-2000

EU DECLARATION OF CONFORMITY

We

Company Name:	Kidde-Fenwal, LLC
Postal Address:	400 Main Street
City and Post Code:	Ashland, MA 01721
Tel:	508-881-2000

Declare that the DoC is issued under sole responsibility and belongs to the following product:

Apparatus Model(s)	Series 08-02 & 08-03 and 08-80 & 08-81
Type:	Fitting
Batch Number	Date code and Revision Level Assigned per production lot, (YYWW RR)

Object of the Declaration:

Series 08-02 & 08-03 Surface Mount Bimetal Thermostats
Series 08-80 & 08- 81 Probe Mount Bimetal Thermostats



SURFACE MOUNT



PROBE MOUNT

The object of the declaration described above is in conformity within the relevant union harmonization legislation:

Gas Appliance Regulation:	**(EU) 2016/426**	*Low Voltage Directive:*	**2014/35/EC**
EMC Directive:	**2014/30/EC**	*Rohs*	**2011/65/EU**

The following harmonized standards and technical specifications have been applied:

BS EN 60730-1:2006 +A1:2019	Automatic Electrical controls for Household and Similar use. Part 1 General Requirements
BS EN 60730-2-9:2019 +A2:2020	Automatic Electrical controls for Household and Similar use Part 2-9 Particular requirements for Temperature Sensing Controls

Name of Notified Body & Number:	BSI Group, 2797, EU Type Examination Certification
Notified Body Certificate No.:	Series 08-02 & 08-03: CE682411 Series 08-80 & 08-81: CE682409
NB GAR Surveillance Certificate No.:	CE 691115 GAR Surveillance
Surveillance Audit Notified Body:	BSI Group

For copies of the Installation Instructions and the EU DoC, got to www.fenwalcontrols.com, - Document Library - Data sheets.

Paul Finn

Kidde-Fenwal, LLC Ashland, MA USA	29 October 2025	Paul Finn, Certification Engineer
Place of Issue:	Date of Issue	Name

© Kidde-Fenwal, LLC 06-237658-001 Rev AE