

# SERIES 30000



## Surface Mounting THERMOSWITCH® Temperature Controllers

11.01.2

### FEATURES

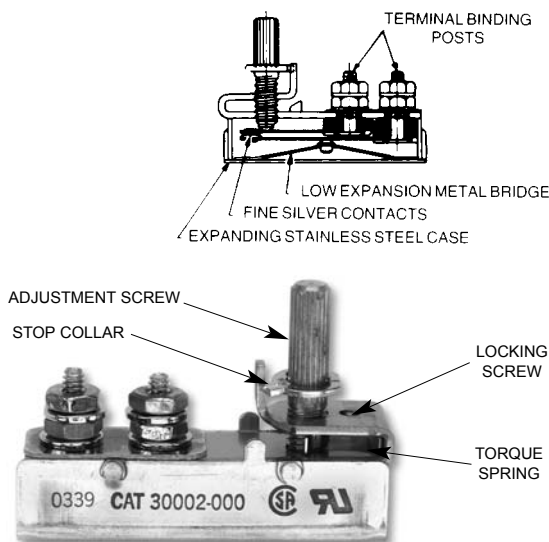
- Fully adjustable
- Overlapping ranges from 50°F to 600°F
- 1200 Watt resistive load rating at 120VAC/240VAC
- Narrow temperature differential
- UL component recognized
- CSA Certified
- Economical
- Compact size

### APPLICATIONS

- Vending Machines
- Platens
- Plastic Laminating Presses
- Dental Equipment
- Popcorn Machines
- Hot Stamp
- Food Warming Trays
- Pressure Washers

### DESCRIPTION

Fenwal Series 30000 Surface Mounting THERMOSWITCH® controllers operate on the principal of differential expansion of metals. A temperature increase causes the stainless steel outer case to expand at a greater rate than the internal bridge assembly. Because the case is in direct contact with the



heated surface, a temperature change is sensed almost instantaneously. With an increase in temperature, the case expands. This results in a linear change of the internal bridge assembly causing the electrical contacts to open. A decrease in temperature closes the contacts.

Field tried and time tested...quality products in the Fenwal tradition.

### SPECIFICATIONS

| DESCRIPTION                       | APPROX. TEMP. RANGE | CATALOG NUMBER    | APPROX. °F PER FULL TURN OF ADJ. SCREW | CONTACT OPERATION ON TEMP. RISE | * MATERIAL                                                                                                                                                                                      | ** CURRENT RATING                                    | DIELECTRIC STRENGTH (Leads to Case) |
|-----------------------------------|---------------------|-------------------|----------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------|
| Adjustable, low temperature type  | 50°F to 300°F       | 11-030000-000 ✓ + | 250                                    | Opens                           | Stainless Steel case and cover. Aluminum bronze adjusting screw. Aluminum mounting clamps, SS mounting clamps, optional. NOTE: Units shipped with "C" mounting clamp unless otherwise specified | 120 VAC<br>10 Amps<br>240 VAC<br>5 Amps<br>Resistive | 1500 VAC<br>60 Hz                   |
|                                   | 85°F to 250°F       | 11-030000-048 ✓ + | 175                                    |                                 |                                                                                                                                                                                                 |                                                      |                                     |
| Adjustable, high temperature type | 50°F to 600°F       | 11-030002-000 ✓ + | 575                                    |                                 |                                                                                                                                                                                                 |                                                      |                                     |

All specifications are subject to change without notice.

\* In applications where contamination, corrosion or electrolysis is suspect, protect the controller so as to realize optimum performance and maximum life. Consult the factory for suggestions.

\*\* Unless otherwise specified, all ratings apply to noninductive loads such as heaters or resistors. Tungsten filament lamps have an inrush 10 to 15 times the steady state current. Do not exceed ratings.

✓ Normally available from stock.

+ Recognized under the Component Program of Underwriters Laboratories, Inc. File No. E18974

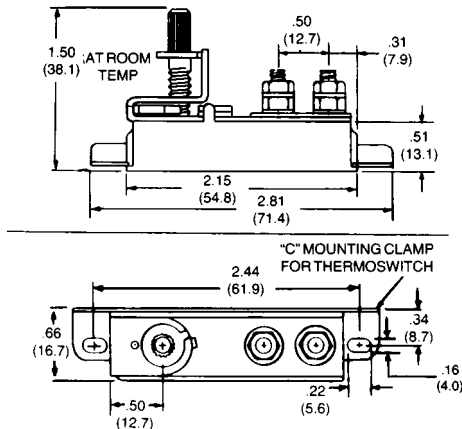
+ Certified by Canadian Standards Association File No. LR7378



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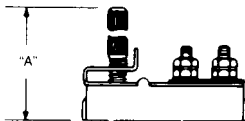
# Series 30000

## OUTLINE DIMENSIONS



## MODIFICATIONS

### 51 Adjusting Screw Length



The Temperature Adjusting Screw may be ordered in different lengths so that dimensions "A" in (inches) is as follows:  $1\frac{3}{64}$ ,  $1\frac{1}{4}$ ,  $1\frac{3}{4}$ ,  $1\frac{7}{8}$ ,  $2\frac{3}{8}$ ,  $2\frac{11}{16}$ . Unless this modification is specified, units will be shipped with dimension "A"  $1\frac{1}{2}$

inch (38 mm) long. When ordering specify Catalog Number and Modification 51 with desired length. Typical order would read "Cat. No.30000 with Mod. 51 dimension "A",  $1\frac{7}{8}$  inches long. Minimum ordering quantities apply.

### 52 Temperature Setting

Any unit may be factory preset at any temperature with in its listed range with a setting tolerance of +5°F or 3% (+10°F or 3% for Catalog Number 30002-0) of setting value, whichever is greater.

A locking screw is furnished with this modification. (See Modification 55)

When ordering: Specify Modification 52 with temperature set at \_\_\_\_\_ °F.

### 53 Special Calibration

Any unit may have special high stop or low stop factory setting within its listed temperature range.

(Setting is *either* at high or low temperature setting *but not both*.)

When ordering specify high or low temperature setting.

|  |   |
|--|---|
|  |   |
|  | ± |
|  | — |
|  | — |

### 55 Locking Screw

If units are to be temperature set by customer, a locking screw is provided with unit. Torque spring is not shipped with this unit.

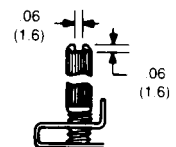
### 55A Locking Screw and Torque Spring

If units are to be temperature set by customer, but still remain adjustable, a locking screw and torque spring are provided with unit.

### 57 Slotted Temperature Adjusting Screw

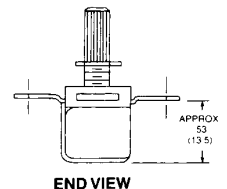
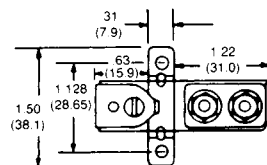
For ease of adjustment, a screwdriver slot is furnished in the adjusting screw.

Minimum ordering quantities apply.

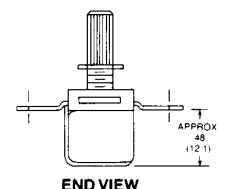


### 62 Optional Cross Mounting Bracket

A cross mounting bracket may be added to any unit as shown on diagram.



### 62A Same as Number 62 above except bracketed in inverted.



## HOW TO ORDER

1. Select temperature range from Specifications table. List appropriate Catalog Number
2. Select required Modification from above and list Modification Numbers after controller Catalog Number.

**EXAMPLE:** 30000-48 with mods. 51 (A =  $1\frac{7}{8}$  inches) and 55.



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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 LICO  
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