



1145-33



11A79-2

FAST RESPONSE DIRECT IMMERSION CONTROLS

1145-33 Control has Thermal Element Immersed Directly in the Water for use as a High Limit and/or Operating Control. 11A79-2 for Immersion Directly in the Boiler Water. Use as a High Limit, Low Limit, Circulator Control or Combination Low Limit and Circulator Control.

FEATURES

- Specially designed hydraulic action element for fast response to temperature change.
- Temperature dial calibrated in °F and °C and can be adjusted through cover.
- Control mounts in any position without affecting performance.
- 3/4" bushing furnished with each control.

SPECIFICATIONS

|                           |                                                                                                                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions . . . . .      | (1145-33) 5 <sup>3</sup> / <sub>8</sub> "H x 2 <sup>5</sup> / <sub>16</sub> "W x 1 <sup>7</sup> / <sub>8</sub> "D<br>(11A79-2) 5 <sup>3</sup> / <sub>8</sub> "H x 2 <sup>5</sup> / <sub>16</sub> "W x 1 <sup>7</sup> / <sub>8</sub> "D |
| Bulb Extensions . . . . . | Element has 1/2" pipe threads<br>(1145-33) 11 <sup>3</sup> / <sub>16</sub> "beyond threads<br>(11A79-2) 3 <sup>3</sup> / <sub>8</sub> "beyond threads                                                                                  |
| Finish . . . . .          | Grey                                                                                                                                                                                                                                   |
| Agency . . . . .          | U.L. listed and C.S.A. certified                                                                                                                                                                                                       |

PARTS AND ACCESSORIES See end of this section for parts and accessories

| Model Number | Range                         | Differential             | Thread Size | Switch Action | Full Electrical Rating | Motor Rating (Full Load) |         | Valves and Relays |            |
|--------------|-------------------------------|--------------------------|-------------|---------------|------------------------|--------------------------|---------|-------------------|------------|
|              |                               |                          |             |               |                        | 120 VAC                  | 240 VAC | 24 VAC            | 0.3-12v DC |
| 1145-33 ①    | 100 to 240°F<br>(38 to 116°C) | 5 to 45°F<br>(3 to 25°C) | 1/2"        | Open on Rise  | HTV<br>See page 416    | 10.0A                    | 6.0A    | 6.0A              | 1.0A       |
| 11A79-2 ②    | 100 to 240°F<br>(38 to 116°C) | 7 to 45°F<br>(4 to 25°C) | 1/2"        | SPDT          | HH<br>See page 416     | 7.4A                     | 3.7A    | 2.9A              | —          |

① Dial has U.L. approved adjustable stop, factory pre-set at 185°F (85°C) maximum setting.  
② Dial has U.L. approved adjustable stop, factory pre-set at 220°F maximum.

**CONTRACTOR TIP: TESTING AUTOMATIC TEMPERATURE CONTROLS** To verify a control is opening and closing properly, disconnect all power before testing. Testing must be performed with the sensing element at a temperature within the setting range of the control. For most hydronic controls with a range of 100 to 240°F, a pan of hot water is sufficient to reach the control range.

Attach an ohmmeter or continuity tester across the Open on Rise contacts. Lower the temperature setting dial to the lowest setting. If the lowest setting is below the temperature of the sensing element minus the differential of the control, the contacts should be open. Raise the temperature dial slowly. When the setting is raised above the temperature of the sensor, the contacts should close.