

Basin Heater System

WITH DISCONNECT SWITCH & CIRCUIT BREAKER

engineering data
and specifications



The basin heater system is pre-engineered, UL listed and CSA approved for cooling tower basin freeze protection during system shutdown.

BASIN HEATER SYSTEM PACKAGE ADVANTAGES:

Solid-State Control Technology Combines temperature control with low water level protection in a single solid-state device.

NEMA 4X Enclosure All controls are factory wired inside a rugged NEMA 4X enclosure designed for outdoor use. Pre-engineered designs up to 96 amps are available.

Lower Cost Installation time and cost are reduced by replacing individually-mounted temperature and liquid level control devices with one pre-engineered and assembled control package that requires only one probe to sense both water temperature and level.

THE COMPLETE SYSTEM PACKAGE INCLUDES:

- Electric immersion heater(s)
- Control panel with solid-state printed circuit board
- Sensor probe with cord
- Wiring diagram
- Disconnect switch
- Circuit breaker
- Installation, Operation and Maintenance manual



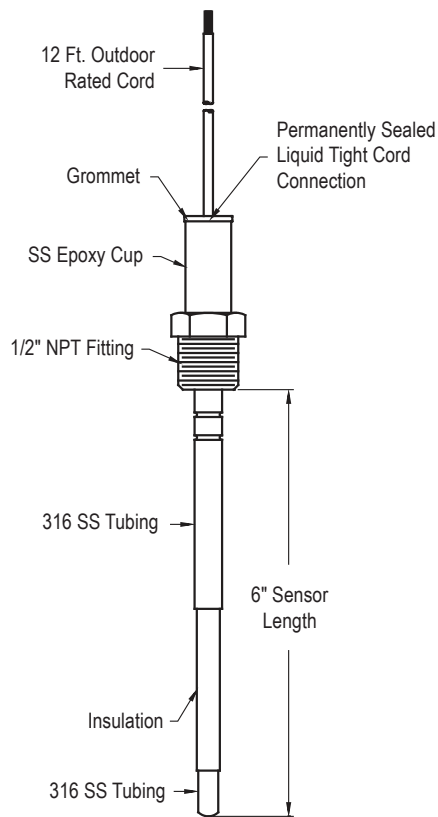
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SENSOR PROBE SPECIFICATIONS:

Sensor Probe assembly incorporates both temperature and liquid level sensors. Probe is 316 stainless steel to minimize corrosion. Probe can be installed vertically or horizontally.

Maximum Pressure Rating for Sensor Probe
15 psi

Cord 12-foot outdoor rated cord with PVC hub connector for installation through tower basin wall. Options include different cord lengths or cord suitable for total immersion.



CONTROL PANEL SPECIFICATIONS:

Solid-State Control Pre-set 45°F ON/OFF temperature control with 5°F switching differential and built-in low water cutoff. Circuit board LEDs provide visual indication of heater-on and liquid level status.

Ambient Temperature Range -40°F – 150°F

Fail Safe Output Relay is de-energized if the thermal cutout sensor is either open or short-circuited. This prevents heater burnout.

NEMA 4X Enclosure with pre-mounted electrical hubs for conduit connections.

Single Probe to sense both water temperature and water level. Sensor probe supplied with 12-foot outdoor rated cord pre-connected to control panel. Probe also supplied with PVC hub connector for attachments through cooling tower basin wall.

Nameplate showing maximum kW and amp ratings at system volts/phase.

System Wiring Diagram

Installation, Operation and Maintenance manual

Rated For 40 amps or a maximum of 50 amps.

Suitable For multiple heaters per basin (maximum of 2 on 40 amp panel).

Disconnect Switch with door interlock and operator handle, which can be padlocked in the OFF position.

Dimensions 8" x 10" x 6" for 40 amp size;
10" x 12" x 7" for 50 amp size; 14" x 16" x 8" for 2 circuits.

Control Panels rated < 50 amps supplied w/ 2 circuits.

Available Voltages 208/230/460/575 3 phase;
other voltages available on request.

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