We Manage Heat ®

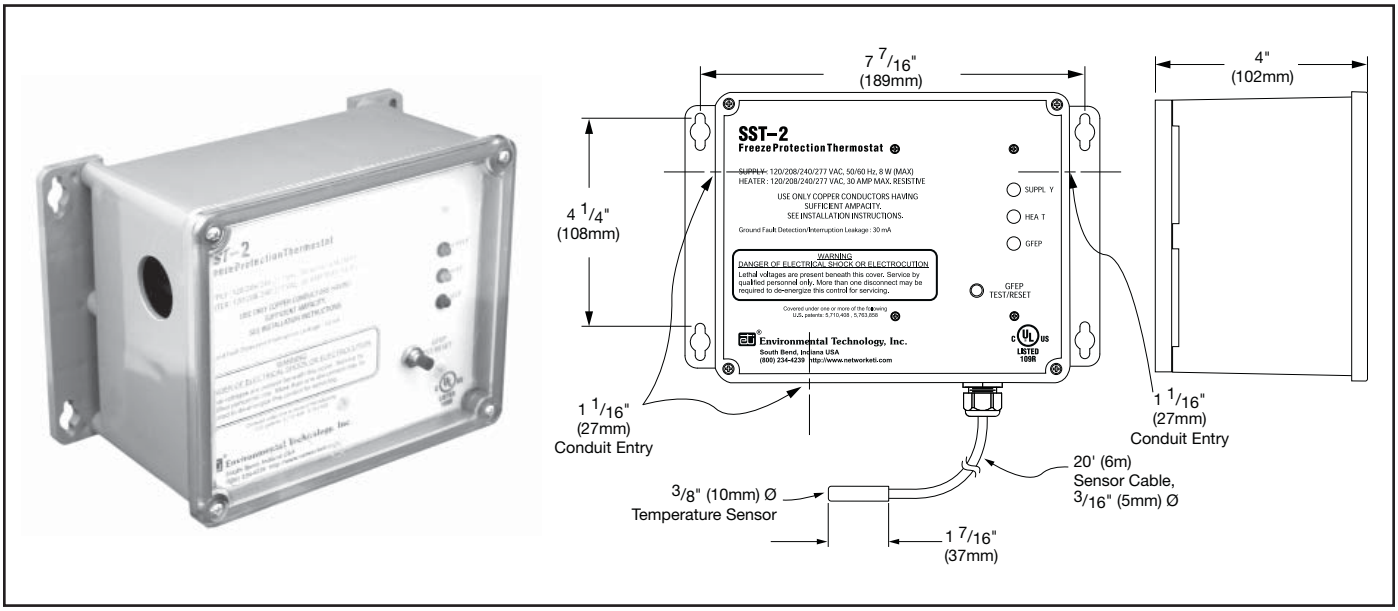
Electronic Thermostat with Ground Fault Equipment Protection

MODEL SST™–2 FREEZE PROTECTION THERMOSTAT

DATA SHEET

FEATURES & BENEFITS

- Automatic freeze protection
- 40°F (4.4°C) set point
- Automatic supply voltage selection
- Two-pole contactor switches up to 30 AMP heater loads
- Alarm relay with isolated contact
- Integral 30 mA GFEP
- C-UL-US listed
- Simple to install and operate
- Minimum energy costs



DESCRIPTION

The C-UL-US listed SST–2 Freeze Protection Thermostat replace electromechanical thermostats in cost-sensitive applications requiring ground fault equipment protection (GFEP). The SST–2 is listed by Underwriters Laboratories to Standard UL 873 for Temperature-Indicating and -Regulating Equipment.

The SST–2 operates heaters at temperatures below 40°F (4.4°C) and turn them off above 42°F (5.5°C). The external temperature sensor (supplied) is a NEC Class 2 device rated for wet locations.

The SST–2 features a built-in 30 mA GFEP that is digitally filtered to minimize false tripping. A ground fault must be manually reset with the TEST/RESET switch before heater operation can be resumed. The GFEP function is automatically tested along with the heaters whenever power is applied and once every 24 hours thereafter for additional safety.

The SST–2 includes an alarm relay with an isolated SPDT 1 AMP contact. The alarm relay is reverse acting and is normally energized unless there is a ground fault condition, GFEP circuitry fails a test, or when there is a bad temperature sensor.

The SST–2 Freeze Protection Thermostat operates from automatically selected operating voltages of 120, 208, 240 or 277 volts, single-phase. They control heater loads of up to 30 amps while consuming less than 2 watts when idling. The temperature sensor is an NEC Class 2 device that can be located up to 2,000' (610 m) away from the SST. They operate in non-hazardous environments in a temperature range extending from –40° to 130°F (–40° to 55°C). The rugged non-metallic enclosure is appropriate for installation in indoor or outdoor locations suitable for NEMA 4x applications.

For complete information describing its application, installation and features, please contact Customer Service or check on the web at www.networketi.com.

SPECIFICATIONS

General

Area of use	Nonhazardous locations
Approvals	c UL us LISTED 109R Type 873 Temperature Regulating Equipment

Enclosure

Protection	NEMA 4x
Cover attachment	Polycarbonate cover, machine screws
Entries	1 × 3/4" entry (bottom right) for NEC Class 2 connections 3 × 1-1/16" entries (bottom left and left) for supply and load power
Material	Polycarbonate
Mounting	Wall mounted

Front Panel Interface

Status indicator	SUPPLY (green) power applied SUPPLY (green, flashing) bad thermistor HEAT (yellow) call for heat GFEP (red) ground fault condition GFEP (red, flashing) failed GFEP test GFEP (red, flashing, rapid) GFEP test in progress

Remote Interface

Alarm relay	Isolated SPDT 1 AMP Class 2 contact
Summary alarms	No Power Ground Fault Condition GFEP function test failure Bad or missing Thermistor

Control

Supply voltage	120, 208, 240 or 277 volts, single phase (automatically selected)
Contact type	Two Form A DPST
Maximum ratings	Voltage: 277 VAC Current: 30 amps

Temperature Sensor

Set point	40°F (4.4°C)
Dead band	2°F (1°C)
Sensor type	Thermistor network
Circuit type	NEC Class 2
Lead length	Up to 2,000' (610m) using 12 AWG 2-wire jacketed cable Up to 500' (152m) using 18 AWG 2-wire jacketed cable

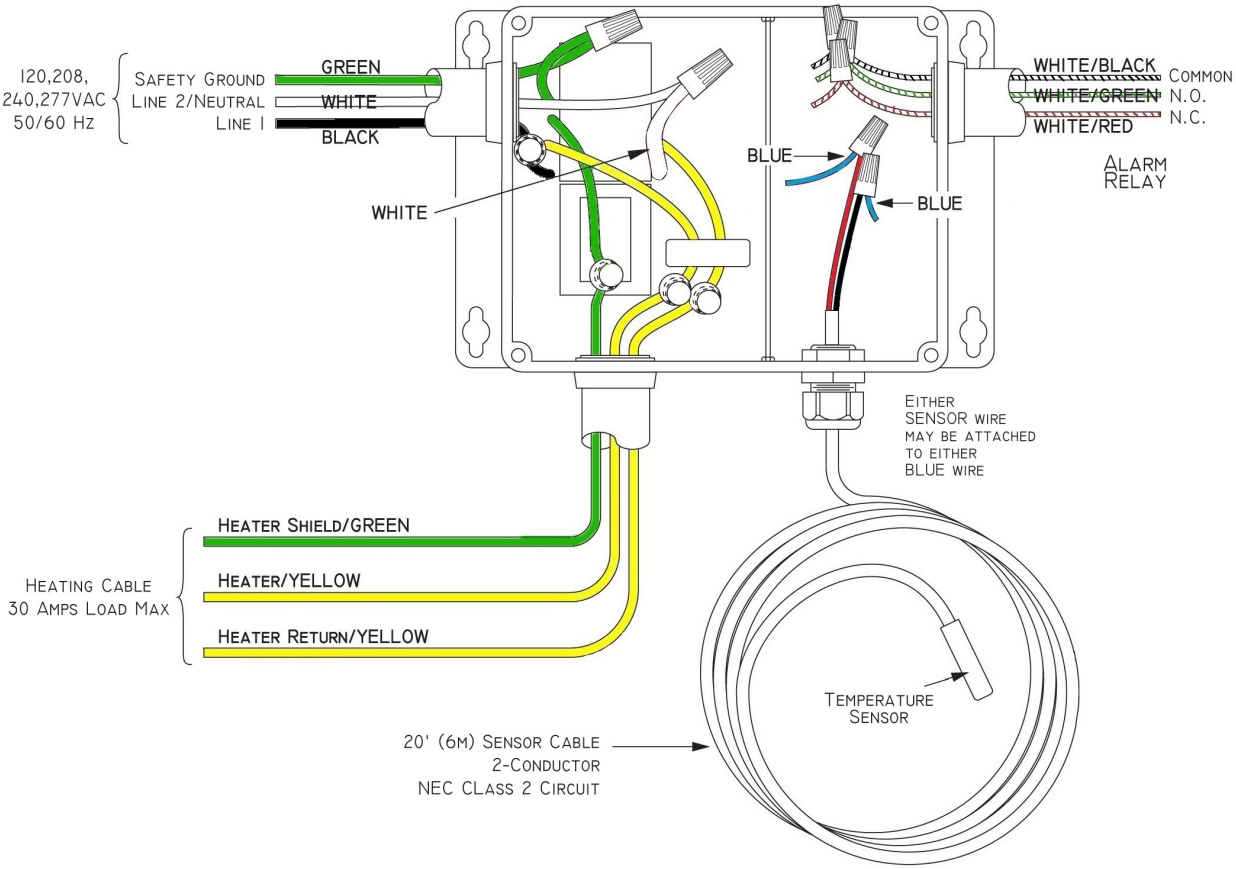
Ground Fault Equipment Protection (GFEP)

Set point	30 mA
Automatic self test	Mode A: Verifies GFEP function before contactors operate Mode B: Verifies GFEP function every 24 hours
Manual test/reset	TEST/RESET switch of front panel

Environmental

Operating temperature	–40°F to 130°F (–40°C to 55°C)
Storage temperature	–67°F to 167°F (–55°C to 75°C)

INSTALLATION



ORDERING INFORMATION

Order Number	Description
22744	Model SST–2 Freeze Protection Thermostat
19272	Temperature Sensor (included)

LIMITED WARRANTY

ETI's two year limited warranty covering defects in workmanship and materials applies. Contact Customer Service for complete warranty information.

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