

HIGH TEMPERATURE LIMIT THERMOSTATS

1NT Series "Stat-on-Stilts"™ Extended Airstream Mount for Gas and Flectric Furnaces

WORLD CLASS PERFORMANCE

The 1NT Series of High Temperature Limit Thermostats have been specifically designed to be applied as an "airstream" mounted safety switch for gas and electric furnaces. Based on Sensata's patented "Klixon" snap action disc technology these robust devices are available in several different mounting styles and thermal configurations.

Sensata Technologies has been a leading global supplier of pressure sensors & switches for over 50 years.

Designed as a safety switch for gas and electric furnaces the Sensata "Stat-on-Stilts" TM may be used anywhere a temperature switch must be mounted remotely from electrical terminations. The most common application is as the primary temperature limit in gas furnaces and unit heaters.

"Stat-on-Stilts" thermostats from Sensata Technologies are custom-built devices designed to meet your specific application requirements. Their patented, tamperproof Klixon® snap-acting bimetal disc provides reliable, repeatable switch actuation for electrical loads ranging from dry circuits to 10A @ 240 Vac.

The unique welded, single piece terminal construction insures reliable, low resistance electrical connections. Mechanical joints which may loosen and cause poor electrical connections are eliminated.

The core of each "Stat-on-StiltsTM product is the proven 1NT thermostat. Recognized by all major worldwide electrical approval agencies; hundreds of millions are used daily in a wide variety of appliance, automotive and specialty applications. Manufactured since 1981, the 1NT thermostat is produced at ISO 9000 certified manufacturing sites in China and Mexico.

While most "Stat-on-Stilts" are built to automatically reset 30°F (17°C) below their opening temperature, custom setpoints and switch configurations are available, including manual reset and single operation devices.

Features & Benefits

- ISO Certified quality system
- UL/CSA approved
- Low-cost, reliable operation built on proven 1NT thermostat
- High temperature capability operating temperatures to 350°F (117°C)
- Multiple mounting configurations: 3" or 7" extension

 - Standard molded housing assures exceptional dimensional stability
 - 1/4" and 3/16" QC terminals available
 - Stamped phenolic construction allows low-profile mounting
- Welded 1 piece terminal eliminates loose rivet joints
- Enclosed or exposed discs available

Agency Approvals

	File No.	Category
UL	E9977	XAPX8
CSA	LR21794	482302



Application shown: Residential Gas furnace

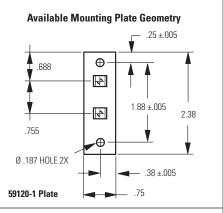
Typical Physical Characteristics

Standard Molded Phenolic Construction 1NT17 - 3" Extension: 1NT21 - 7" Extension .830 MAX "A" = 3.05 7.05 1NT THERMOSTAT "B" = 2.806.80 WELD (2x) DIM "A" DIM. "B 1/4" OR 3/16" Q.C. MALE

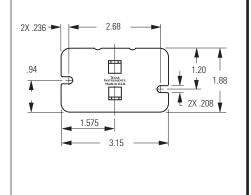
Low Profile Stamped Phenolic Construction Options shown: 45° 1/4" Q.C.; Flat Al cup 1NT23-3" Extension / 1NT24-7" Extension L = 2.80Ø .625 1NT THERMOSTAT WELDED TO **TERMINALS FIBERGLASS** DIM. L INSULATION **SLEEVES** 1 PIECE TERMINALS RIVETED TO

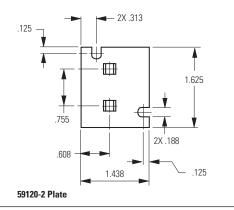
1/4" Q.C. MALE

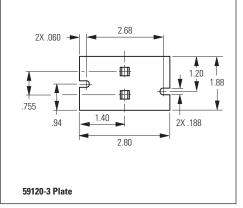
MOUNTING PLATE



Available Mounting Plate Geometries







Standard Temperatures, **Tolerances and Differential**

"Stat-on-Stilts"

Nominal Top	Standard Tolerances	
Temperature °F	Open °F	Close °F
100 - 195	5.5	9
200 - 245	6.5	10
250 - 300	7.5	10
305 - 350	9	13

Operating Temperatures:

100° to 350°F (38° to 177°C) Standard setpoints available at 5°F increments

Standard Differential:

30°F (16.7°C)

Minimum Differential:

20°F (11°C)

Notes:

1NT17 and 1NT21 are available with 1/4" - .032" thk. or 3/16" - .020" thk. male quick connect terminals and fiberglass insulating mounting gaskets.

1NT23 and 1NT24 are available with 1/4" - .032" thk. male guick connect terminals and fiberglass insulation sleeves in various colors.

59120-2 and -3 plate styles are available with fiberglass insulating mounting gaskets.

Sample Order Placement

To enable Sensata to serve you in a quicker, more efficient manner, please be prepared to provide the following information when requesting samples:

- 1. Detailed application description

- Estimated yearly usage
 Opening and closing temperatures
 Max. temperature tolerances allowable

- Switch type
 Mounting style desired
 Terminal orientation and material
- 8. Electrical load

Other conditions which are likely to affect the 1NT operation should also be described. These include:

- 1. Maximum temperature exposure
- 2. Location with respect to heat source 3. Temperature transfer medium (air, metal surface, etc.)
- 4. Possible contamination sources (lint, chemical fumes, etc.)

When ordering thermocouple samples, specify whether J, K, or T type and the lead length desired. Standard wire size is 30 Ga.



Sensata Technologies

529 Pleasant Street, MS B19 Attleboro, MA 02703-2964 Phone 1-888-438-2214 Fax: 508-236-2349 email: sensors@sensata.com

www.sensata.com

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