3NT | SERIES FIXED TEMPERATURE THERMOSTATS

Introduction

Automatic reset thermostat designed to meet your specific application requirements. Its patented and tamper proof snap action bi-metal disc provides reliable and repeatable switch actuation. The 3NT is suitable for electrical loads ranging from dry circuits to 10A @ 240 VAC.

The core of the 3NT is the proven 1NT thermostat. Recognized by UL/CSA and KEMA/ENEC agencies, hundreds of millions of the 1NT device are in the field today used in a variety of HVAC, appliance, automotive and specialty applications.

Manufactured at ISO 9001 certified manufacturing sites, its dry seal allows direct integration of the thermostat into a wire harness eliminating the need for extra connections.



SPECIFICATIONS

Features

- Automatic reset
- Small and easy to mount
- Fast thermal response
- · Innovative dry seal design protects from moisture and dust

Sensata

Technologies

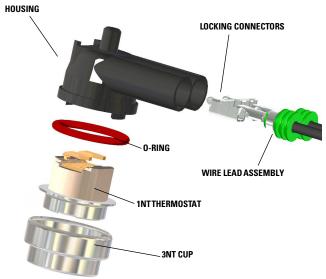
- Reliable 100K cycle life
- High temperature to 275°F (135°C)

Applications

- HVAC
- Commercial
- Dehumidifiers
- Freezers
- Heat pumps
- Ice makers
- Refrigerators
- Condensing or moist environments

Cycles Amps LRA Volts FLA VA Agency x1000 (resistive) UL 100 10 120 Vac 5.8 34.8 125 (USA, Canada) 100 240 Vac 2.9 17.4 10 125 **Electrical Ratings** 30 120 Vac 10.0 40.0 30 240 Vac 10.0 40.0 100 30 Vdc 1 ENEC (Europe) 30 240 Vac 16 **Operating Temperature** -20 to 135°C (-4 to 275°F) **Ambient Temperature** -40°C to maximum wire lead insulation PVC - 105°C **Temperature rating** XLP - 125°C (Allow 15°C de-rating below wire insulation rating at maximum 10A current) **Minimum Nominal Temperature** 8°C (15°F) Differential 750 Vrms **Dielectric Strength** 1500 Vrms terminals to case 18 AWG (1/32" or 1/16" wall thickness in either 105°C PVC or 125°C XLPE) **Standard Wire Leads** 16 AWG (1/32" wall thickness in 105°C PVC)





Important Notice: The 3NT is not hermetically sealed, and should not be submerged in liquid. For such applications, please contact Sensata.



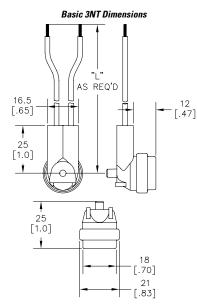
STANDARD TEMPERATURES AND TOLERANCES

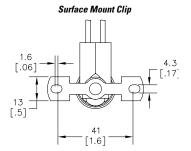
Nominal Top	Temperature	Nominal Differential		Open Temperature		Close Temperature	
°F	°C	°F	°C	°F	٦°	۴	°C
32 to 80	0 to 27	20 - 29 30 - 38 39 - 60	11 - 16 17 - 21 22 - 33	±5.5 ±5.5 ±5.5	±3 ±3 ±3	±7.5 ±8.5 ±10	±4 ±4.5 ±5.5
81 to 167	28 to 75	20 - 23 24 - 29 30- 59	11 -13 14 -16 17 -33	±5.5 ±5.5 ±5.5	±3 ±3 ±3	±7.5 ±8.5 ±10	±4 ±4.5 ±5.5
168 to 199 ⁽¹⁾	76 to 93 ⁽¹⁾	20 -23 24 - 29 30 - 59	11 -13 14 -16 17 -33	±5.5 ±5.5 ±5.5	±3 ±3 ±3	±7.5 ±8.5 ±9	±4 ±4.5 ±5
200 to 249 ⁽¹⁾	94 to 121 ⁽¹⁾	20 - 29 30 - 38 39 - 59 60 - 99	11 - 16 17 - 21 22 - 33 34 - 55	±6.5 ±6.5 ±6.5 ±10	±3.5 ±3.5 ±3.5 ±5.5	±8.5 ±10 ±12 ±20	±4.5 ±5.5 ±6.5 ±11
250 to 275	122 to 135	24 - 38 39 - 59 60 - 99	14 - 21 22 - 33 34 - 55	±7.5 ±7.5 ±10	±4 ±4 ±5.5	±10 ±14.5 ±20	±5.5 ±8 ±11

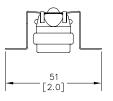
⁽¹⁾ Minimum bottom temperature of 50°C (122°F)

TYPICAL PHYSICAL CHARACTERISTICS

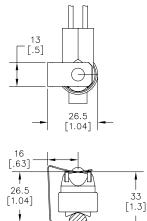
Dimensions in mm (inches)



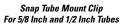


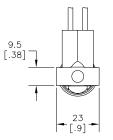


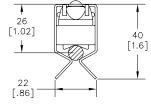
Open Tube Mount Clip (3/8 Inch Shown at 90° CCW Rotation) 90° and 180° CW Rotations Available



Additional Clips Available for [1/4], [5/16], [1/2], [5/8] tubes

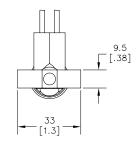


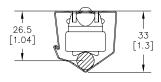






Locking Tube Mount Clip (3/8 Inch Shown)





Additional Clips Available for [1/4], [5/16], [1/2], [5/8] t ubes



Part Number

Family	<u>3NT</u>	01 	L	H T	XXXX
Family					
3NT					
Contact Material					
01: Silver					
11: Gold <12V or <100 mA	L Contraction of the second seco				
Switch Opening Logic					
L: On Temp. Rise					
F: On Temp. fall					
Dry Seal Construction					
H: High Temp. (Silicon rub	ber)				
N: No leads					
ID Number					
-Temperature Code	-Specificatio	ns			
-Wire Leads	-Terminals a	nd Mountin	g Clip		

Temperature Code

Operating Temperature	L	50	F	30
L: Limit F: Fan				
Operating Temperature Nominal Opening Temperature				
Temp. Code C: Celsius				
F: Fahrenheit Differential				
Difference between Nomina Nominal Close Temperature				



AGENCY APPROVALS & CERTIFICATIONS

	File/Report Number	Category
UL (USA) ⁽²⁾	SA995	Category SDFY2
UL (CANADA) ⁽²⁾	SA995	Category SDFY8
DEKRA (ENEC)	2014531.16	EN60730-1, EN60730-2-9
DEKRA (IECEx)	21862646400	IEC60079-0, IEC60079-15 IEC60529

^[2] Recognized to US and Canadian requirements by Underwriters Laboratories (UL873 and C22.2 No. 24)

IMPORTANT NOTICE

These devices may not be used as service components, strictly for use by Original Equipment Manufacturer, not repair.

USERS ARE SOLELY RESPONSIBLE for design application and function of the end use product. Users must evaluate the suitability of these devices to their application with respect to temperature settings, mechanical cycle life, electrical loading and environmental conditions. This product is not hermetically sealed, it should not be submerged in any liquid. This product is not rated as explosion proof and should not be applied in any application where flammable vapors, gases or dust may be present. End of life failure of this device may result in either open or closed circuit condition. Suitable "End of life" protection should be applied in series with this device per safety agency specifications.