

NTS AAT sensor

Ambient Air Thermistor sensor

DESCRIPTION

The NTS AAT Sensor is designed to measure changes in ambient air temperature. These sensors can be used in laboratories, automotive and HVAC applications to determine a sudden or unacceptable temperature rise or fall. This is accomplished through a plastic molded, glass encapsulated NTC. Custom wire lengths are also available to fit into any application.



FEATURES

- Designed to meet UL1434 and customer specific requirements
- Excellent reliability
- RoHS compliant
- Precision range term 1%, 2%, 3% and 5%
- Custom housing to meet customer specific requirements
- Custom wire lengths available
- Economical and light weight
- Wide variety of packaging options
- Temperature offering up to: -40°C to 125°C

APPLICATIONS

- HVAC air sensing
- Ambient environment temperature sensing
- Condenser coil sensor
- Other remote sensing applications

NTC Thermistor tolerance

Nominal 10K \pm 5% OHMS at 25°C (77°F)

3372 to 3804 OHMS at 50 °C (122 °F)

996 to 1152 OHMS at 85 °C (185 °F)

Temperature Tolerance: \pm 3.1 degrees (F) for the temperature range from -22 degrees (F) to 158 degrees (F)

ZETTLER CONTROLS, INC.

www.zettlercontrols.com

75 Columbia • Aliso Viejo, CA 92656 • Phone:(949) 360-5840 • Fax:(949) 360-5839 • E-MAIL: sales@zettlercontrols.com

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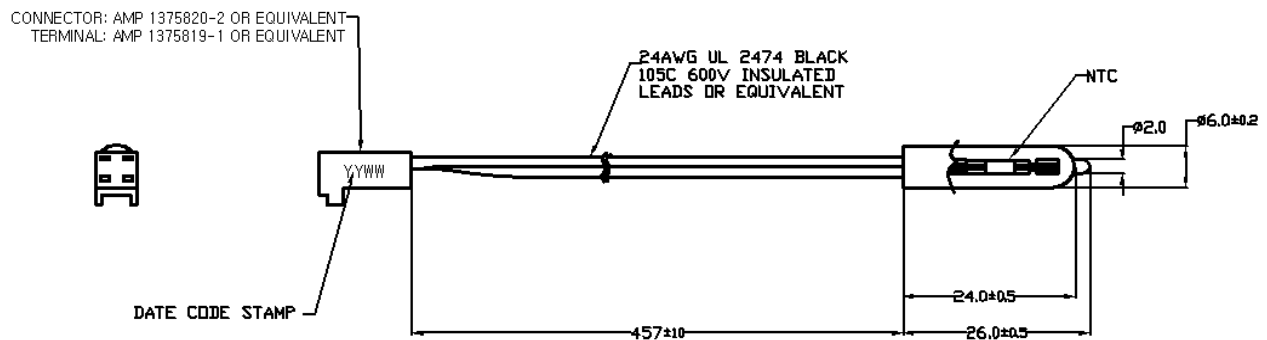
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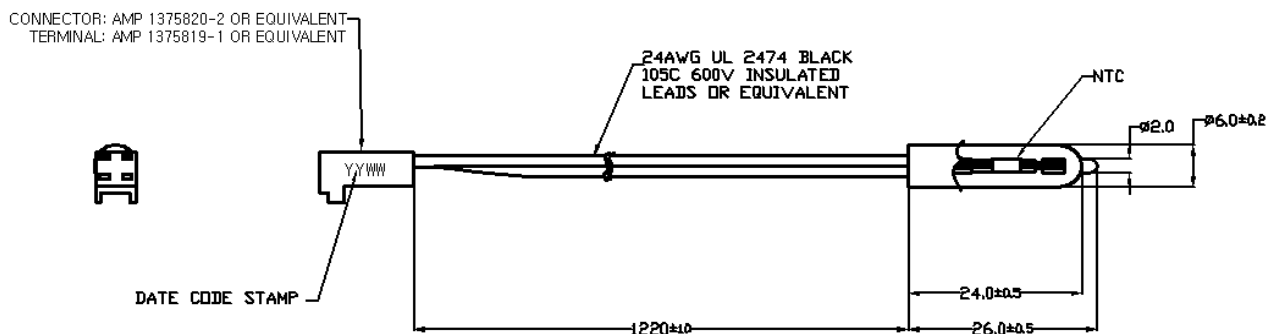
NTS AAT sensor characteristic

Style	Housing Material	NTC tolerance at 25 °C	Lead wire	Terminal & connector	Dielectric strength	Operation temp range	Thermal Time Constant
NTS123001	PBT	5%	UL2474 24# 105C 600V 458mm L	AMP or equivalent	1200V AC 0.5mA 2seconds	-40° C to 105° C	Not more than 20 sec typically (100°C to 25°C oil)
NTS123002	PBT	5%	UL2474 24# 105C 600V 1220mm L	AMP or equivalent	1200V AC 0.5mA 2seconds	-40° C to 105° C	Not more than 20 sec typically (100°C to 25°C oil)

Style NTS123001 Construction



Style NTS123002 Construction



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NTC functional parameter

Dissipation constant: Not less than 2.0 milliwatts/Degree (C) ---Power required to raise thermistor temperature 1 Degree (C)

R-T Curve 1(R25°C=10K)			
B(25/85)=3977K+/-1.5%			
T	Rnor KΩ	T	Rnor KΩ
-30	173.755	90	0.918
-25	129.4075	95	0.791
-20	97.42046	100	0.683
-15	73.21413	105	0.6
-10	55.80149	110	0.521
-5	42.7122	115	0.458
0	32.99768	120	0.4
5	25.55129	125	0.349
10	20.06896	130	0.309
15	15.76075	135	0.273
20	12.51307	140	0.241
25	10	145	0.214
30	8.070342	150	0.191
35	6.544272	155	0.173
40	5.320219	160	0.155
45	4.352173	165	0.141
50	3.583472	170	0.1258
55	2.989108	175	0.113
60	2.49009	180	0.1027
65	2.089073	185	0.093
70	1.749062	190	0.0845
75	1.481049	195	0.07
80	1.258041	200	0.0698
85	1.072034	205	0.065