Evaporator Core Temperature Sensor



This sensor measures the Evaporator Core temperature so that it doesn't freeze over, preventing a costly repair. The Evaporator cools the refrigerant that is pumped around the vehicle's HVAC system. The ultra fast response time aids in the HVAC system efficiency by enabling the evaporator core to operate closer to 0°C without the risk of a freeze over condition.

Applications

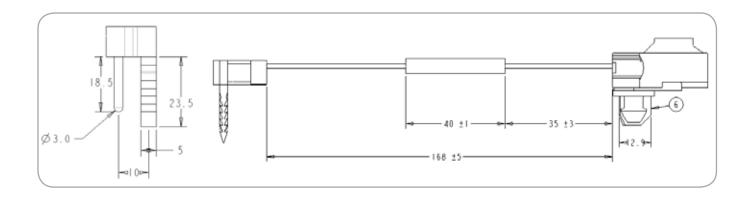
- Automotive HVAC systems
- Senses surface temperature of evaporator core

Features

- Existing field proven design
- Probe construction protects the thermistor from moisture

- Fast response time using geometry and materials optimized for maximum heat transfer
- Small size & flexible packaging facilitates installation & service
- Snap-fit housing eliminates wiring insulation damage and provides strain relief
- Long-term stability proprietary silver migration controls
- Salt Fog resistant
- Alternate RvT curves available
- Different geometries to meet package requirements available





Specifications

R @ 77°F (25°C)

 $30000 \pm 1\% \Omega$

B (25/85)°C

3943

Operating Temperature

-40°C to 120°C

Storage Temperature

-40°C to 150°C

Temperature Accuracy

±1.40°C at 0°C

Response time

Less than 4 seconds from 0°C water to 10°C water

Housing Material

Al 3003

NTC part number

AX-29130

Weight

14.5 grams

Connector

7282-6443-50 Yazaki

Mating Connector

7283-5530-50 Yazaki

Resistance vs. Temperature Data

Resistance @ 25°C = 30000 Ohms

Temperature (°C)	Rnominal (ohms)	Res. Tol. ±%	Rmin. (Ohms)	Rmax. (Ohms)	Coef. (%/°C)	Accuracy (±°C)
-40	925,021	10.0%	832,519	1,017,523	6.45	1.92
-20	276,959	5.0%	263,111	290,807	5.64	1.70
-5	123,458	5.0%	117,311	129,659	5.14	1.48
-2	105,977	5.0%	100,679	111,276	5.05	1.44
0	95,851	5.0%	91,058	100,644	5.00	1.40
2	86,787	5.0%	82,448	91,126	4.94	1.38
5	74,940	5.0%	71,193	78,687	4.85	1.36
10	59,016	5.0%	56,065	61,967	4.71	1.31
15	46,797	5.0%	44,457	49,137	4.57	1.26
20	37,340	5.0%	35,473	39,207	4.45	1.21
25	30,000	5.0%	28,500	31,500	4.32	1.16
40	16,113	5.0%	15,307	16,919	3.99	1.51
60	7,548	5.0%	7,171	7,925	3.57	2.02
100	2,080	5.0%	1,976	2,184	2.92	3.10
120	1,191	5.0%	1,131	1,251	2.66	3.54

