

T H E R M O M E T R I C S  
A C O M M I T M E N T T O E X C E L L E N C E

# AIT

## Active Incar Temperature Sensor



An integrated, low-noise fan draws a greater volume of cabin air across the temperature sensor, providing a faster response as compared to traditional passive sensors. This can result in a more accurate climate control, leading to better cabin comfort. This sensor can also help improve the efficiency of the temperature control system by reducing the on / off cycles of the heating and cooling system.

### Applications

- For in cabin vehicle temperature measurement for vehicles that have an automated temperature control system

### Features

- Existing field proven design
- Fast Response
- Accuracy maximizes driver/passenger comfort
- Ultra-low noise, high air flow optimised system design
- Coreless Type Motor
- Small size & flexible packaging facilitates installation & service
- Low current consumption
- Long-term stability – even in extreme humidity environments
- Alternate RvT curves available
- Available with/without humidity sensor
- Electronics integrated into one assembly with the temperature sensor.
- Different geometries to meet package requirements

# Amphenol

## Advanced Sensors

# Specifications

## R @ 25°C

30.0 kΩ ±1.2%

## B (0/50)

3887K ±1%

## Operating Temperature Range

-40°C to 85°C

## Storage Temperature Range

-40°C to 85°C

## Response Time

< 10 seconds (25°C to > 85°C in OIL)

## Housing Material

PP-(GF+TD)15

## NTC Part Number

TC330S39FB

## Weight

29.5 grams/piece

## Air Flow Volume

Minimum 1.2 m/s (at 23 ±5°C, 13.5 ±0.1V), inlet

## Operating Current

70.0mA Maximum (at 14.0 ±0.1V)

## Rated Voltage

12.0V

## Minimum Starting Voltage

9.0V MAX

## Noise

38.0dB MAX (at 12.0±0.1V)

## Connector

YAZAKI 7282-8663

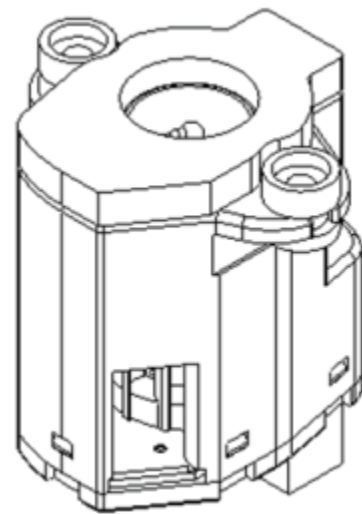
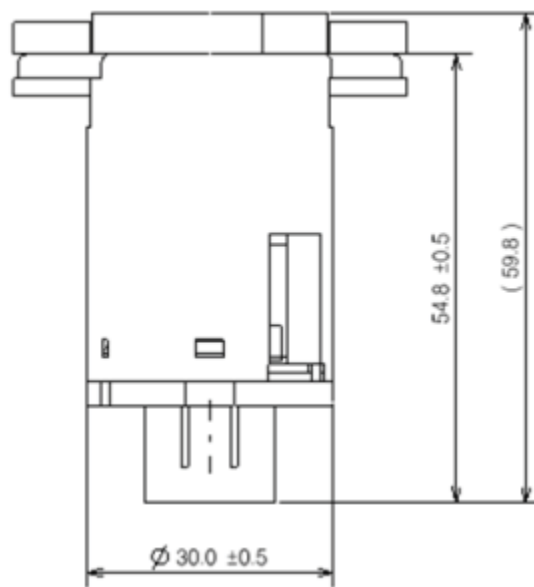
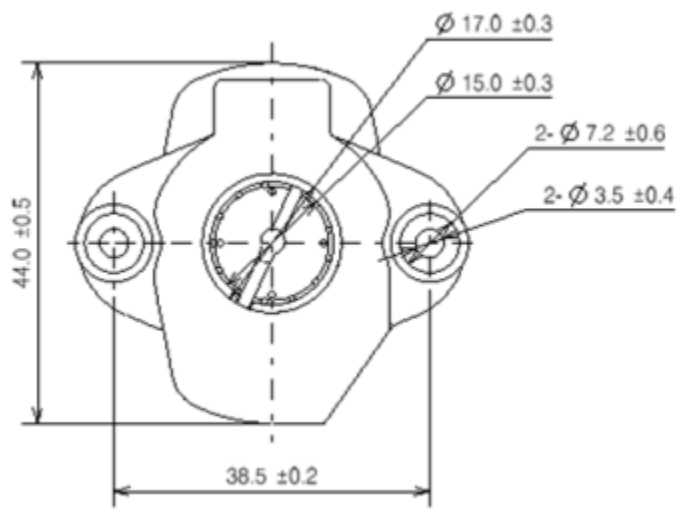
## Mating Connector

KET MG651439

# Resistance and Temperature Accuracy

| Temp.<br>(°C) | Tolerance<br>(%) | R<br>(KOhms) | Tolerance<br>(%) |
|---------------|------------------|--------------|------------------|
| +60           | -0.73/+0.71      | 7.463        | ±2.6             |
| +50           | -0.59/+0.58      | 10.810       | ±2.2             |
| +35           | ±0.39            | 19.590       | ±1.6             |
| +25           | ±0.27            | 30.000       | ±1.2             |
| +15           | -0.36/+0.35      | 47.130       | ±1.7             |
| 0             | -0.47/+0.46      | 97.710       | ±2.4             |
| -15           | -0.58/+0.57      | 216.100      | -3.1/+3.2        |
| -30           | -0.69/+0.67      | 509.600      | -4.0/+4.1        |

# Drawing



ISO VIEW

