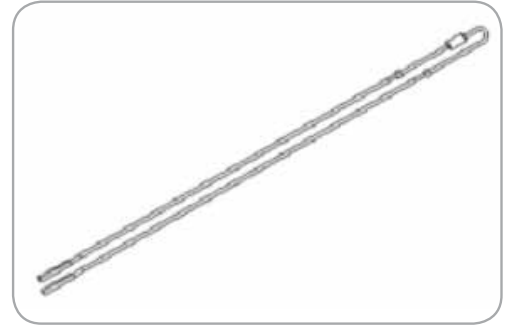


T H E R M O M E T R I C S  
A C O M M I T M E N T T O E X C E L L E N C E

# A-1737 Motor Coil Temperature Sensor



This sensor is used on a starter generator to provide temperature measurement of the motor coil. Typically mounted on the neutral bar, it detects increases in current that would indicate a failure that could lead to a stall. The sensor can also be used to monitor the motor windings temperature and warn of an over-temperature condition.

## Applications

- EV / HEV motor coil
- HVACR motor protection
- Industrial automation and control

## Features

- High accuracy and long term stability
- Existing field proven design
- Weld connections covered by PTFE Heat Shrink
- Meets the temperature and vibration demands of EV and HEV traction motors
- Alternate RvT (resistance versus temperature) curves available
- Custom packages available to meet various motor configurations.
- A variety of terminal and connector options

**Amphenol**  
Advanced Sensors

# Specifications

## R @ 25°C

30,000 ohms ±5%

## R @ 210°C

155.45 ohms ±11.5%

## B (25/85)

3974

## Operating Temperature Range

-40°C to 210°C

## Storage Temperature Range

-40°C to 225°C

## Temperature Accuracy

1.53°C at -40°C

1.25°C at 25°C

6.23°C at 210°C

## Response time

7 seconds liquid to liquid

## Housing Material

Axial leaded glass NTC thermistor

## Terminal

Molex Terminal 33011-3001

## NTC Part Number

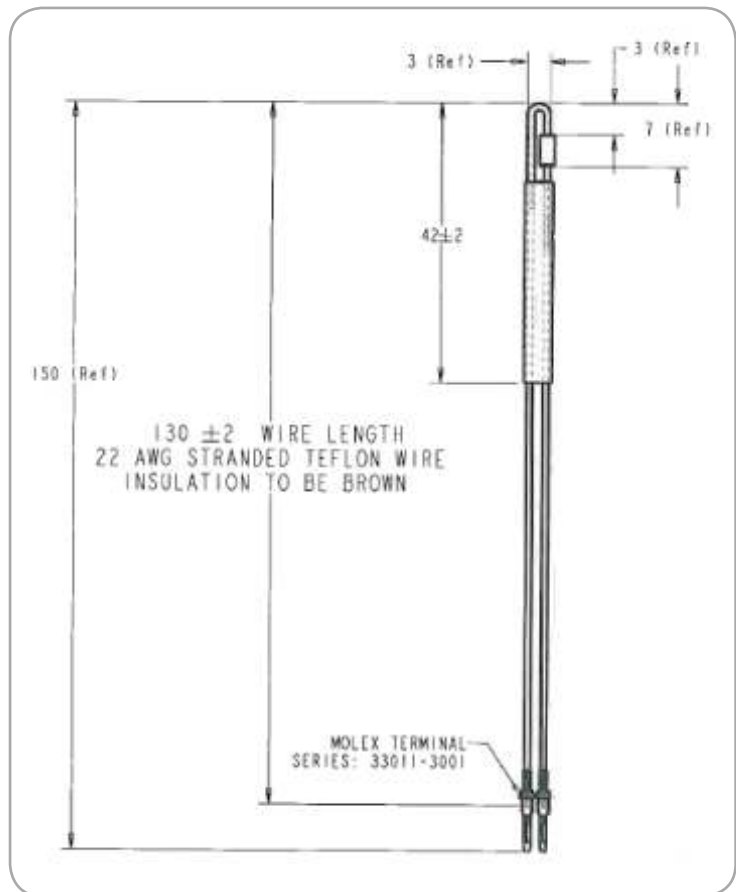
AL03006-17.53-98-G2

## Weight

2 grams

## Ordering Code

A-1737



## Resistance vs. Temperature Data

Resistance = 30000 Ohms at 25 °C Rtol. @ 25°C 5.0%

Temp. (°C)	Rnominal (ohms)	Res. Tol. ±%	Rmin. (Ohms)	Rmax. (Ohms)
-40.00	965,530	10.0	869,073	1,061,986
0	96,248	6.5	89,982	102,504
20	37,386	5.3	35,409	39,365
25	30,000	5.0	28,500	31,500
50	10,851	6.4	10,154	11,548
175	310.05	10.7	276.93	343.16
210	155.40	11.5	137.60	173.30

**Amphenol**  
Advanced Sensors

[www.amphenol-sensors.com](http://www.amphenol-sensors.com)

© 2015 Amphenol Corporation. All Rights Reserved. Specifications are subject to change without notice. Other company names and product names used in this document are the registered trademarks or trademarks of their respective owners.

AAS-920-540B-12/2015