

# 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



### **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

#### www.amphenol-sensors.com

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