Motor Coil Temperature Sensor

Overview
The motor coil temperature sensor provides temperature feedback regarding the operating condition of an electric motor. The sensor can be interlaced into the stator coil or tied to the neutral bus bar on the motor circuit. The sensor provides temperature feedback to indicate motor load or stall conditions. If the motor has an excessive load or a stall condition, the current in the coil of the bus bar increases. This increase in current will create a temperature rise in the system, which is measured by the temperature sensor. By feeding back the temperature condition of the motor, the motor coil control system could use this information to prevent damage to the motor.

Features
- Amphenol Advanced Sensors NTC thermistor
  - High reliability, stability and accuracy
- Configurable for alternative resistance vs. temperature curves
- Connector, terminal or straight leads are optional
- One of many products that Amphenol offers for EV applications
- Some designs rated to 210°C

Applications
- EV/HEV – Motor Applications
- Starter/Generator Motor
- Industrial Motor/Generator
- Drive/Traction Motor