

# PTC Thermistor MOTOR PROTECTION SENSOR

## Features:

- Provides economical and reliable protection for 3-phase motors
- Sharp increase in resistance near trip temperature
- Wide trip temperature range from 85°C to 135°C
- Rugged design for installation during motor manufacturing
- Directly senses motor winding temperature
- Rapid response to changes in temperature
- No field adjustment required
- Designed to work with TI® 40/41/42AA Series Electronic Motor Protection modules

## Options:

- Wire length and color
- Trip temperature

## Description:

ATP's PTC Motor Protection Sensors are designed to provide economic and reliable overtemperature protection for three-phase motors. This assembly utilizes a small PTC disk that has a low base resistance. Once the motor winding temperature reaches the trip temperature of the PTC thermistor, its resistance increases several orders of magnitude for a small increase in temperature. This sharp increase in resistance is easily recognized by the motor protection module or other electronics and can be used to shut down the system before any damage occurs.

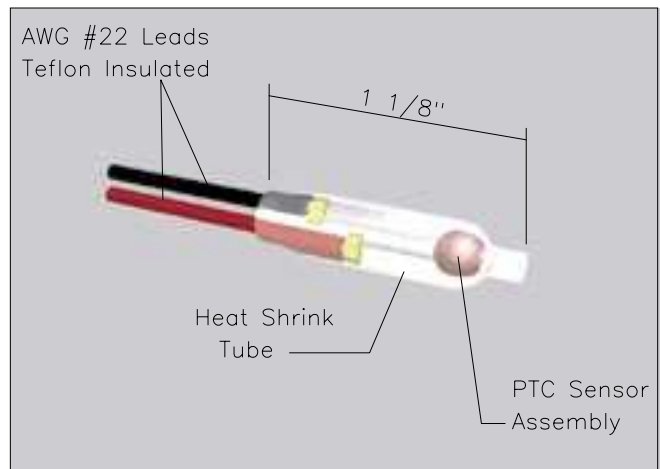
Because the PTC assemblies are very small and rugged, they can be located in compact locations where protection is needed, such as directly inside the motor windings and can withstand standard varnish dip and bake operations and other handling.

A number of sensors can be connected in series to cover a larger area. If any of the assemblies see an overtemperature condition, it will increase in resistance and indicate a fault condition.

Please contact the factory to discuss your specific application or to discuss the availability of any options.



PTC Motor Protection Sensor



## Ordering Information

ATP Part Number	T <sub>TRIP</sub> (°C)	Wire Color
P1005A085R153A	85	White/White
P1005A095R153A	95	White/Black
P1005A105R153A	105	White/Red
P1005A115R153A	115	Black/Black
P1005A125R153A	125	Black/Red
P1005A135R153A	135	Red/Red

R25 = 500 - 2500Ω  
R (trip) = 14,000Ω @ T<sub>TRIP</sub> ±5°C  
Wire is AWG#22, Teflon insulated