



# SUBMITTAL : 91101-45190

## Tank Temperature Sensor



Job Name	Location		
Purchaser	Engineer		
Submitted to	Reference <input type="checkbox"/>	Approval <input type="checkbox"/>	Construction <input type="checkbox"/>
Unit Designation	Schedule #		

Specifications	91101-45190
<b>Performance</b>	
Resistance at 50°F (Ohms)	20,500Ω
Resistance at 68°F (Ohms)	12,500Ω
Resistance at 86°F (Ohms)	8,100Ω
Resistance at 104°F (Ohms)	5,300Ω
Resistance at 122°F (Ohms)	3,600Ω
Resistance at 140°F (Ohms)	2,500Ω
Resistance at 150°F (Ohms)	2,070Ω
Accuracy	Plus/Minus 3%
<b>Physical Data</b>	
Barrel material	Copper
Sensor Bulb size - Diameter	Ø1/4" x 1"
Wire size	18 AWG
Wire length	18 3/4"

### Construction

Sensor or Thermistor shall be constructed with a Copper barrel for temperature sensing resin bonded to 2 x 18AWG leads for connection to the GS4-45HPC, GS4-45HPC-D, GS5-45HPC & GS5-45HPC-D Heat Pumps

### Sensing

Sensing shall be via a micro chip thermistor with an accuracy of +/- 3%

### Voltage

Heat Pump shall provide a 5VDC signal to the thermistor

### Installation of Tank Temperature Sensor

Sensor shall be inserted into a dry thermal well

Heat Transfer paste is not required

Flying leads shall require wire stripping for connection to Heat Pump thermistor wiring

Thermistor shall not be polarity sensitive

### Application

Each GS4 or GS5 Heat Pump unit shall require an individual Tank Temperature Sensor.

It shall not be permissible to connect multiple Heat Pump units to one Sensor as this process will alter the Tank temperature signal to the GS4 or GS5 Heat Pump and cause operation issues

