MURPHY

Air Temperature Sensor - Model 12

- **Ambient Air Temperature Sensor**
- **Monitors Slowly Changing Temperatures**
- **Wide Temperature Range for Industrial Applications**
- **0 - 5 VDC Output**
- **Ideal for Wind Machines and Cargo Temperature Applications**

The Model 12 is an air temperature sensor. It is intended for use in applications that monitor slowly changing temperatures. The unit gives approximately 0.5° F (0.2° C) resolution when used with an 8-bit analog input.

Applications

Applications for the sensor include the following:

- Monitor ambient temperature and signal wind machines to start.
- Monitor and maintain cargo temperatures.

Temperature Sensing Range

VDC OUT	°C	°F
0.00	− 18.0°	0°
0.25	− 14.5°	5.8°
0.50	− 11.4°	11.5°
0.75	− 8.2°	17.3°
1.00	− 5.0°	23.0°
1.25	− 1.8°	28.8°
1.50	1.4°	34.5°
1.75	4.6°	40.3°
2.00	7.8°	46.0°
2.25	11.0°	51.8°
2.50	14.2°	57.5°
2.75	17.4°	63.3°
3.00	20.6°	69.0°
3.25	23.8°	74.8°
3.50	27.0°	80.5°
3.75	30.2°	86.3°
4.00	33.3°	92.0°
4.25	36.6°	97.8°
4.50	39.7°	103.5°
4.75	42.9°	109.3°
5.00	46.0°	115.0°

How to Order:

Air Temperature Sensor - Model 12
FW Murphy part number: 10-70-7483

Sensor Hookup

Connect the Model 12 Air Temperature Sensor as shown:

RED: 9 TO 28 VDC (+)

WHITE: SIGNAL OUT (0-5 VDC)

BLACK: GROUND VDC (-)
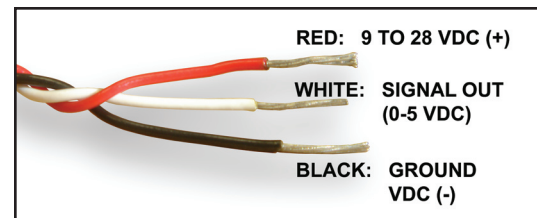
Specifications

Useful Operating Temperature Range:
    0° to +115° F (-18° to +46° C)
Component Temperature Range:
    -85° to +300° F (-65° to +150° C)
Accuracy:
    2% of full scale with software offset correction.
Voltage: Power Input Voltage:
    9 to 28 VDC
Voltage: Current Draw:
    1 ma
Output:
    0 to 5 VDC
Product Weight:
    0.05 lb.   (0.02 kg.)
Sensor Diameter:
    0.5" (13 mm)
Sensor Length:
    2.25" (57 mm)
Wire Length:
    24.0" (0.61 m)
Shipping Weight:
    0.3 lb.   (0.14 kg.)
Shipping Dimensions:
    6.0"H x 4.0"W x 4.0"D (152 x 102 x 102 mm)

CALL MURCAL TO PLACE YOUR ORDER
P:(661)272-4700   F:(661)947-7570
www.murcal.com
e-mail: sales@murcal.com

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