SERIES RHPLC | WALL MOUNT HUMIDITY/TEMPERATURE TRANSMITTER

BENEFITS/FEATURES

- **Reduced installation cost with combined humidity and temperature sensing**
- **Wide application environments from a large selection of temperature sensors and 2% to 3% accuracies**

APPLICATIONS

- Air economizers
- Room comfort monitoring

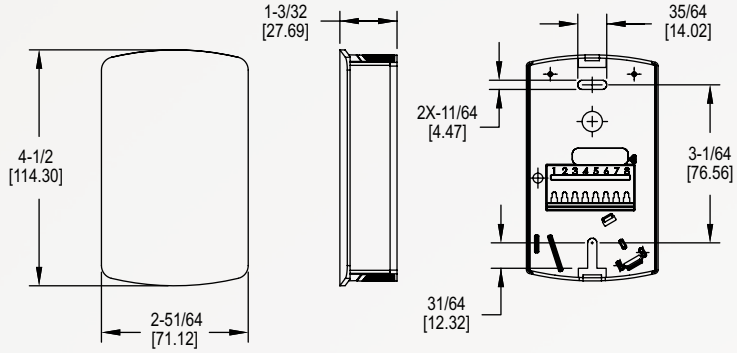
DESCRIPTION

The **Series RHPLC Wall Mount Humidity/Temperature Transmitter** is a compact economical sensor for the building automation marketspace. The stylish housing is well vented to provide air flow across the sensor to improve measurement accuracy. Each unit utilizes a capacitive polymer sensing element to deliver a proportional analog output. A combination humidity and temperature model can be configured with current, voltage, RTD, or thermistor output. A wide selection of passive RTD or thermistor sensors are available in this series.

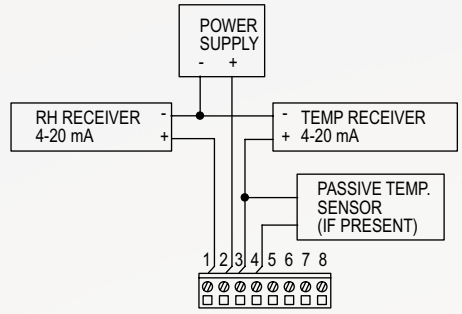
SPECIFICATIONS

Sensor	Capacitive polymer.
Relative Humidity Range	0 to 100% RH.
RH Accuracy	±2% 10 to 90% RH @ 25ºC for 2% accuracy units; ±3% 20 to 80% RH @ 25°C for 3% accuracy units.
RH Hysteresis	±0.8%.
RH Repeatability	±0.1% typical.
Temperature Output Range	-40 to 140°F (-40 to 60°C).
Accuracy Passive Thermistor Temperature Sensor	±0.36ºF @ 77ºF (±0.2ºC @ 25ºC).
Accuracy RTD Temperature Sensor	DIN class B; ±0.3ºC @ 0ºC (±0.54ºF @ 77ºF).
Accuracy Current/Voltage Temperature Output	±0.9ºF @ 72ºF (±0.3ºC @ 25ºC).
Temperature Limits	Operating: -40 to 140°F (-40 to 60°C); Storage: -40 to 176°F (-40 to 80°C).
Power Requirements	10-35 VDC for 4-20 mA or 0-5 VDC output; 15-35 VDC for 0-10 VDC output; 10-29 VAC for 0-5 VDC output; 15-29 VAC for 0-10 VDC output.
Response Time	8 s (τ63).
Electrical Connections	Screw terminal block.
Drift	<0.25% RH/year.
Enclosure Material	Polycarbonate.
Weight	4.4 oz (125 g).
Agency Approval	CE.

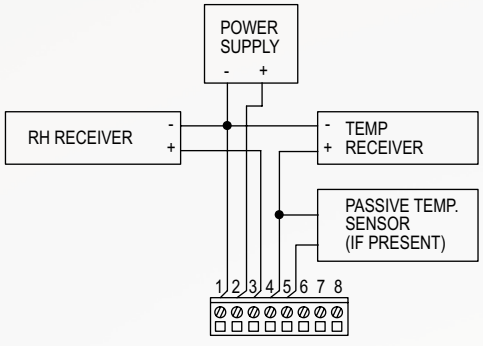
DIMENSIONS



WIRING DIAGRAMS



Current output wiring



Voltage output wiring

HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

RHPLC **-2** **N** **1** **0** **-FC**

SERIES
RHPLC: Wall mount humidity/temperature transmitter

ACCURACY
-2: 2% accuracy
-3: 3% accuracy

HOUSING
N: North American style wall mount

HUMIDITY OUTPUT
1: Current 4-20 mA
2: Voltage 0-10 VDC
3: Voltage 0-5 VDC

OPTIONS
FC: Factory calibration certificate (3% accuracy units)

TEMPERATURE OUTPUT
0: None
1: Current 4-20 mA
2: Voltage 0-10 VDC
3: Voltage 0-5 VDC
A: 10K Ω @ 25°C thermistor type III
B: 10K Ω @ 25°C thermistor type II
C: 3K Ω @ 25°C thermistor
D: 100 Ω RTD DIN 385
E: 1K Ω RTD DIN 385
F: 20K Ω @ 25°C thermistor

ORDER ONLINE TODAY!

dwyer-inst.com/Product/SeriesRHPLC

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