TWS Series

Wall Mount with Analog Setpoints, LCD and Thermostat Control

Product Overview

The TWS analog series measures the temperature of the air inside a room. Devices are designed for use in hospital rooms, laboratories, and other spaces that require precise environmental control. The keypad allows control of setpoint values. The slide switch position determines the output type (amp or volt). To maintain accuracy, keep vents clear of dust, debris, etc. The TWS is warranted for period of five years.

NOTICE

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- Read and understand the instructions before installing this product.
- Turn off all power supplying equipment before working on it.
- The installer is responsible for conformance to all applicable codes.

No responsibility is assumed by Veris Industries for any consequences arising out of the use of this material.

Product Identification

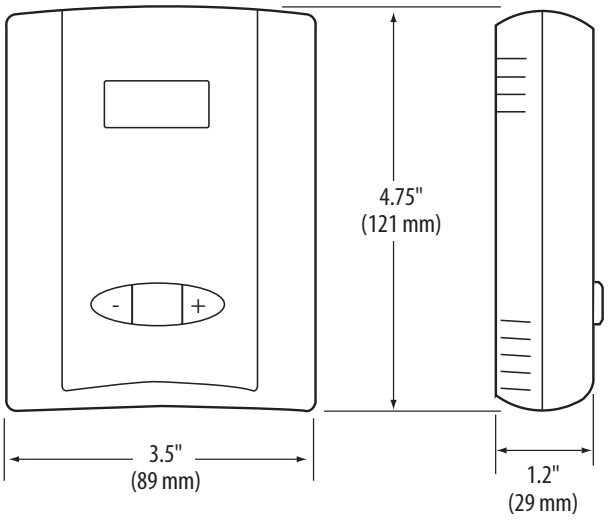
	Setpoint		*Temp Cal Certificate*	*Option*
TWS	A	S	☐	☐
	= Analog	= CE	0 = None 1 = 1 point Cal Validation 2 = 2 point Cal Validation	B = 100R Platinum, RTD C = 1k Platinum, RTD D = 10k T2, Thermistor E = 2.2k, Thermistor F = 3k, Thermistor G = 10k CPC, Thermistor H = 10k T3, Thermistor I = 1k Balco (nickel-iron) RTD J = 10k Dale, Thermistor K = 10k w/11k shunt,Thermistor M = 20k NTC, Thermistor N = 1800 ohm TAC, Thermistor Q = 1uA/C, Linitemp R = 10k US, Thermistor S = 10k 3A 221, Thermistor T = 100k, Thermistor U = 20k "D", Thermistor W = 10k T2 high accuracy, Thermistor Y = 10k T3 high accuracy, Thermistor Z = 10k E1, Thermistor CC= 15k, Thermistor

Specifications

Input Power	15-30VDC/24VAC, 100mA max.
Outputs	Switch-selectable amp or volt If volt is selected, the configuration menu allows selection between 0-5V or 0-10V
Physical	UL 94-V-O fire retardant ABS
Temperature Accuracy	±0.5°C (±1°F)
Operating Humidity Range	0-100% RH (non-condensing)
Operating Temperature Range	10° to 35°C (50° to 95°F)
Analog Output Scaling	10° to 35°C (50° to 95°F) or 0° to 50°C (32° to 122°F), menu selectable*
Calibration Offset	Adjustable ±9.9° (C or F) in 0.1° increments
Setpoint Range	Minimum to Full Scale in 1° (C or F) increments

** If the 0° to 50°C (32° to 122°F) scaling range is selected, the device's operating temperature range still applies.*
One side of the transformer secondary is connected to the signal common, so an isolation transformer or dedicated power supply may be required.
RTD/Thermistors in wall packages are not compensated for internal heating of the product.
EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper surge protection (EN 61000-6-1:2007 specification requirements).

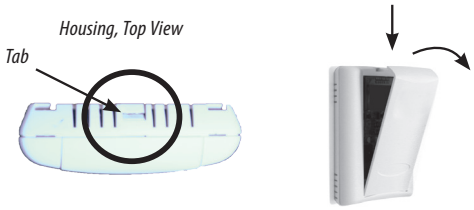
Dimensions



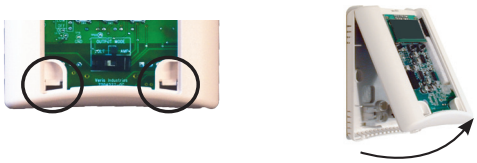
Installation

Observe precautions for handling static sensitive devices to avoid damage to the circuitry that is not covered under the factory warranty.

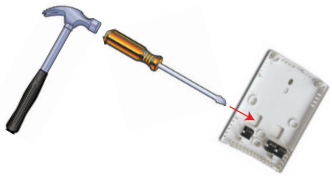
1. Locate the tab at the top of the sensor housing. Using only the minimum required force, press this tab down and pull the cover outward from the top. Set the cover aside.



2. Remove the backplate by unfastening the sensor from the bottom of the backplate and pivoting the sensor outward.



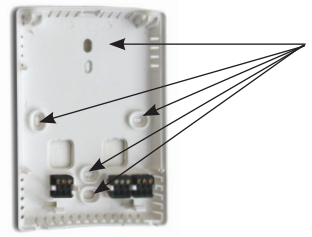
3. Punch out wire opening in the backplate.



4. Position the backplate vertically on the wall, 4 ½ feet (1.4 m) above the floor. Locate away from windows, vents, and other sources of draft. If possible, do not mount on an external wall, as this might cause inaccurate temperature readings.

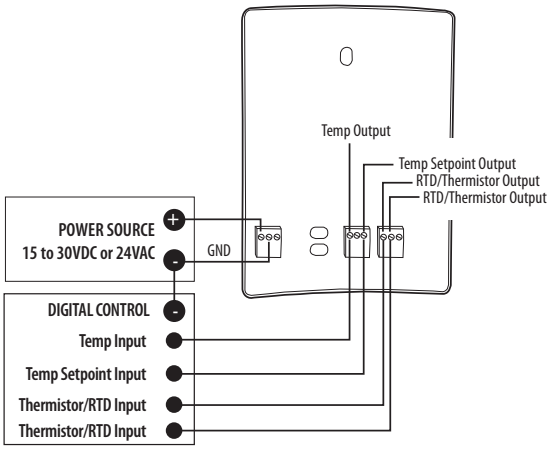
Installation (cont.)

5. Mount the backplate onto the wall using the screws provided.

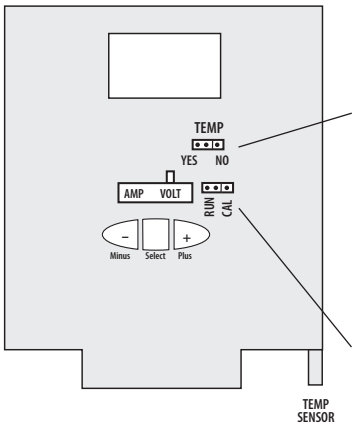


Five screwholes available; use a minimum of two for secure mounting.

6. Wire the backplate.



7. Install and configure the sensor.



TEMP YES/NO Jumper:
YES - allows user to change temp setpoint
NO - user can NOT change temp setpoint

RUN/CAL Jumper:
CAL Mode - allows full access to all features.
RUN Mode - allows access to relay setpoints ONLY.

NOTICE

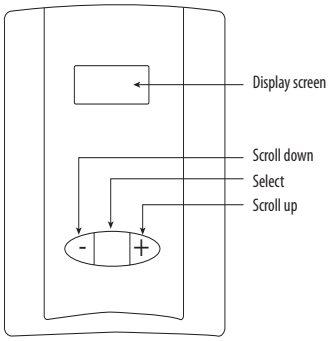
RISK OF EQUIPMENT DAMAGE
· Ensure that the output selection is correct before applying power.
Failure to follow these instructions may result in permanent equipment damage.

8. When the installation is complete, replace the cover and snap it into position.

Calibration Instructions

Temperature calibration allows for a calibration offset of ±9.9° (C or F) at the user's discretion. To calibrate temperature, move the RUN/CAL jumper to CAL position.

Menu Options



NORMAL MODE

6	8	.	5			o	F

↓

SETPOINT MODE
(Enter by any keypress when RH Yes/No jumper is in Yes position)

↓

S	E	T	P	O	I	N	T
		7	0				F

Press +/- to change, press Select button to select Setpoint in °C if Celsius units are selected

↓

CONFIG/CAL MODE
(Enter by any keypress when Run/Cal jumper is in CAL position)

↓

U	N	I	T	S			
*	o	F				o	C

Press +/- to change, press Select button to select

↓

S	E	T	P	O	I	N	T
		7	0				F

Press +/- to change, press Select button to select Setpoint in °C if Celsius units are selected

↓

C	A	L		T			
+	0	.	0				F

Press +/- to change, press Select button to select Setpoint in °C if Celsius units are selected

↓

Output Scaling (does not affect LCD display)

T	E	M	P		S	E	T
+	5	0			+	9	5

Press +/- to change, press Select button to select Options are 50-95°F (10-35°C) or 32-122°F (0-50°C)

↓

Only for switch in Volts position

	O	U	T	P	U	T	
	0	-	1	0	V		

Press +/- to change, press Select button to select

