VERIS INDUSTRIES ™

TW Series

Wall Mount Temperature Sensor

Product Overview

The TW Series temperature sensors are equipped with highly accuracy RTD/thermistor devices and an analog output compatible with most building control systems. To maintain accurate functionality, keep all vents free of dust, debris, etc. These units are warranted for a period of five years.

Product Identification

	Local Display	Sensor Type	Setpoint/Override	Cal Certificate	Housing Color
TW	☐	☐	☐	☐	☐

Local Display	Sensor Type	Setpoint/Override	Cal Certificate	Housing Color
L = LCD	B = 100R platinum, RTD	0 = None	0 = None	None = Cloud White
X = No	C = 1k platinum, RTD	1 = Override*	1 = 1 point Cal	B = Black
	D = 10k T2, Thermistor	2 = 1k Setpoint	2 = 2 point Cal	
	E = 2.2k, Thermistor	3 = 10k Setpoint		
	F = 3k, Thermistor	4 = 1k Setpoint with override		
	G = 10k CPC, Thermistor	5 = 10k Setpoint with override		
	H = 10k T3, Thermistor			
	J = 10k Dale, Thermistor			
	K = 10k w/11k shunt,Thermistor			
	M = 20k NTC, Thermistor			
	N = 1800 ohm, Thermistor			
	P = 10mV/°C, Linitemp			
	R = 10k US, Thermistor			
	S = 10k 3A221, Thermistor	*Pushbutton override short circuits the RTD/thermistor output.*		
	T = 100k, Thermistor			
	U = 20k D Thermistor			
	W = 10k T2 high accuracy Thermistor			
	Y = 10kT3 high accuracy Thermistor			
	Z = 10k E1 Thermistor			

Specifications

Input Power	4-20mA mode: loop powered 12-30VDC only, 30mA max.
	05-/0-10V mode: 12-30VDC/24VAC, 15mA max.
Temp Output	2-wire, loop powered 4-20mA or 3-wire, 0-5V/0-10VDC (switch selectable)
Ranges	10° to 35°C (50° to 95°F), 0° to 50°C (32° to 122°F) (jumper selectable)

CE

Dimensions

1.2"
(30 mm)

4.8"
(121 mm)

3.5"
(89 mm)
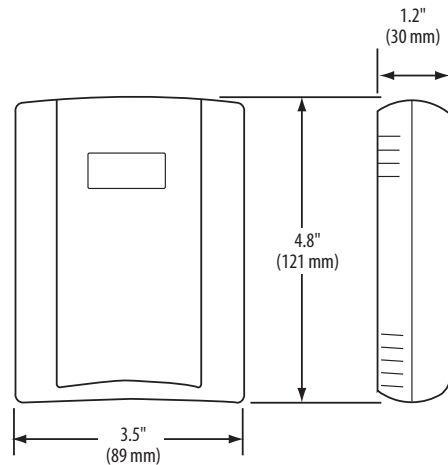
Installation

Observe precautions for handling static sensitive devices to avoid damage to the circuitry that is not covered under the factory warranty.
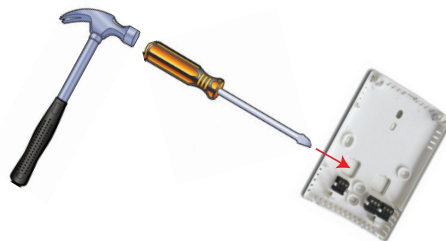
1. Locate the tab at the top of the sensor housing. Using only the minimum required force, press this tab down and pull the cover outward from the top. Set the cover aside.

Housing, Top View

Tab

2. Remove the backplate by unfastening the sensor from the bottom of the backplate and pivoting the sensor outward.
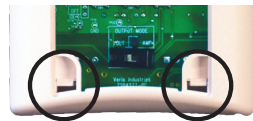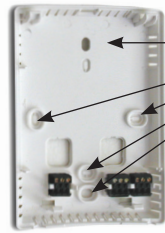
3. Punch out wire opening in the backplate.

4. Position the backplate vertically on the wall, 4½ feet (1.37 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.
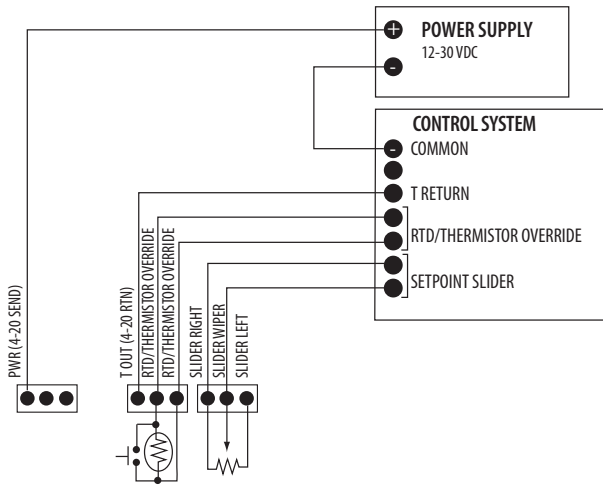
Installation (cont.)

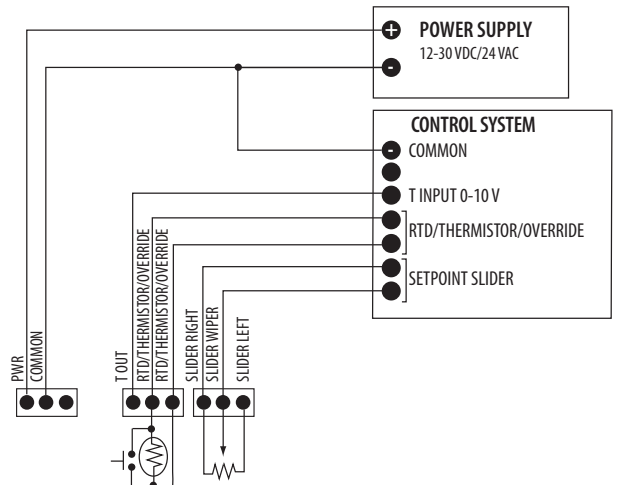5. Mount the backplate onto the wall using the screws provided.

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

6. Wire the backplate.

Current Output (2-Wire, 4-20 mA)

POWER SUPPLY
12-30 VDC

CONTROL SYSTEM
COMMON
T RETURN
RTD/THERMISTOR OVERRIDE
SETPOINT SLIDER

PWR (4-20 SEND)
T OUT (4-20 RTN)
RTD/THERMISTOR OVERRIDE
RTD/THERMISTOR OVERRIDE
SLIDER RIGHT
SLIDER WIPER
SLIDER LEFT

Voltage Output (3-Wire, 0-5/0-10 V)

POWER SUPPLY
12-30 VDC/24 VAC

CONTROL SYSTEM
COMMON
T INPUT 0-10 V
RTD/THERMISTOR/OVERRIDE
SETPOINT SLIDER

PWR
COMMON
T OUT
RTD/THERMISTOR/OVERRIDE
RTD/THERMISTOR/OVERRIDE
SLIDER RIGHT
SLIDER WIPER
SLIDER LEFT

7. Install the sensor onto the backplate and use the switch to select voltage or current output. Output selection must be correct before applying power to the sensor.

OUTPUT SELECT

VOLTS   mA

T OUT
10V   5V

T RANGE   **T SCALE**
50-95(F) 32-122(F)   ºF ºC
10-35(C) 0-50(C)
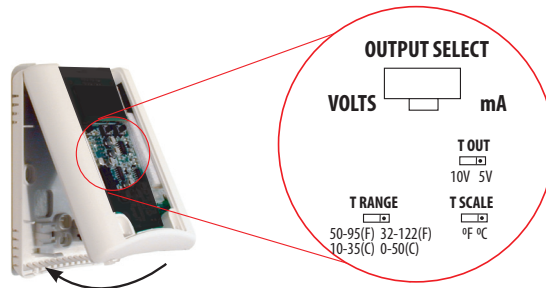
8. When the installation is complete, replace the cover and snap it into position.