

TB110 HAZARDOUS-AREA BULB & CAPILLARY TEMPERATURE CONTROLLER

Features & Benefits

- ▶ Temperature control on heat tracing, freeze protection, and process maintenance applications
- ▶ Numerous temperature range choices to fit your application
- ▶ Suitable for hazardous-area environments

Specifications

Voltage: Up to 480 VAC

Maximum Amp Load: 22 amps

Temperature Display Unit: Dial setpoint °F and °C

Sensor Input: 304 stainless-steel bulb and capillary, 10 ft (3 m) long (remote sensing only)

Power Connections: Single pole double throw (SPDT) contacts

Average Accuracy: ±5°F (3°C)

Hysteresis: 6°F (3°C)

Repeatability: 1% of range

Enclosure Rating: NEMA 7 & 9, for hazardous areas

Environmental Exposure Temperature Range: -40°F to 160°F (-40°C to 71°C)



Class I Division 1 & 2 Group B, C, D
Class II Division 1 & 2 Group E, F, G
Class III
Class I, Zone 1, Group IIB + H2 T6



II 2 G Ex d IIC T6 Gb
II 2 D Ex tb IIC T85°C Db IP66
Tamb = -40°C to 75°C



Ex d IIC T6 Gb
Ex tb IIC T85°C Db IP66
Tamb = -40°C to 75°C

Ordering Information

Bulb and Capillary

Single set-point Part No.	Dual set-point Part No.	Set-point range	Bulb Dimensions	
			Diameter in (mm)	Length in (mm)
TB111N-325	TB112N-325	25°F-325°F (-4°C-163°C)	0.25 (6)	10.25 (200)
TB113N-650	TB114N-650	300°F-650°F (149°C-343°C)	0.25 (6)	12.50 (318)

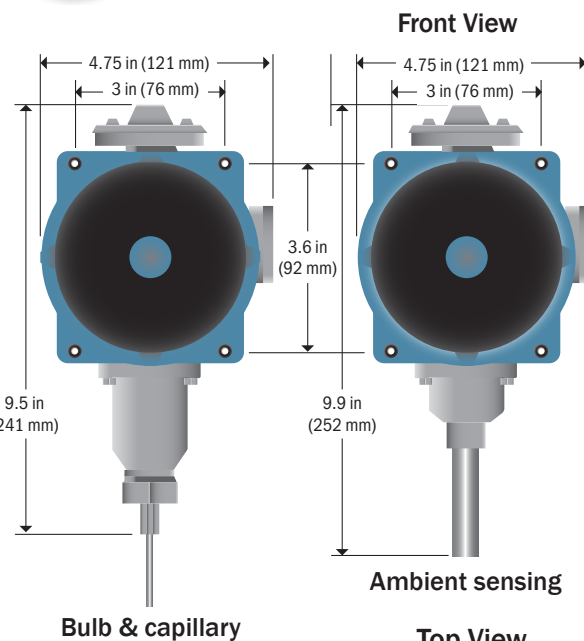
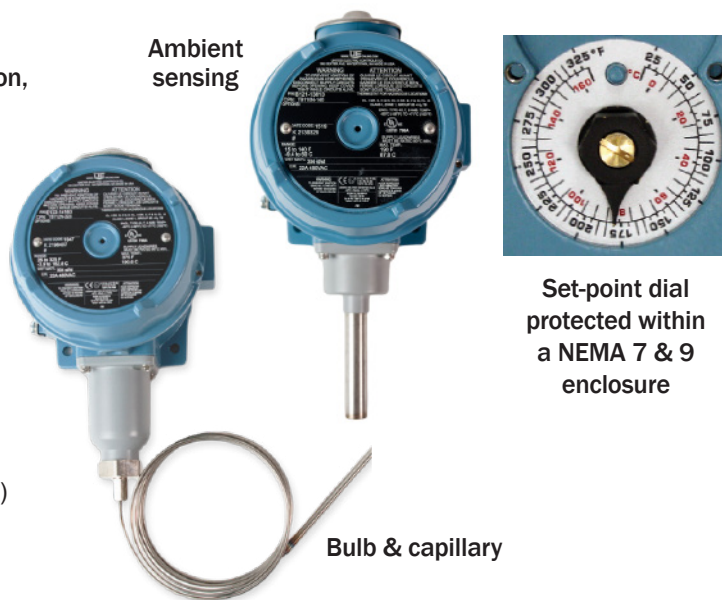
The Dual set-point controller has two independent set-point dials and two independent SPDT contacts allowing two different temperature set-points.

Ambient Sensing

Part No.	Set-point range	Bulb Dimensions	
		Diameter in (mm)	Length in (mm)
TB110N-140	15°F - 140°F (-9°C-60°C)	0.56 (14)	2.69 (68)

Accessories

Part No.	Description
TB110N-BW	0.5 in NPT brass bulb well
TB110N-BWS	0.5 in NPT stainless steel bulb well



Set-point dial protected within a NEMA 7 & 9 enclosure