Explosion-Proof Thermostat - XT

Application

The Model XT explosion-proof thermostat utilizes the unique *x-Max*® system (U.S. Pat. No. 5,798,910, CDN Pat. No. 2,212,500) to provide maximum durability, safety and ease of use. Three basic units are available to suit most hazardous location temperature control applications.

XT thermostats are suitable for air, duct, pipe or tank temperature control.

Features

- approvals for all area classifications
- value engineered
- remote or local temperature sensing
- ratings to 600V, S.P.S.T. and D.P.S.T.
- multiple conduit entries
- externally adjustable with tamper-proof feature
- O-rings for moisture protection

Type XTB

The model XTB unit is normally used for remote sensing. ACSA certified packing gland is provided to allow the 57" capillary to exit the *x-Max*® housing.
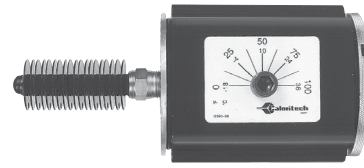

Model XTB Externally Adjustable Mode Shown

All XTB models are certified for Class I Groups C & D, Class II Groups E, F & G, and Class III hazardous locations, Divisions 1 and 2.

Type XTW

The model XTW unit is suitable for air or liquid temperature sensing and control in all hazardous locations. For air sensing applications, a finned stainless steel thermostat well assembly is provided to enclose the thermostat bulb. For liquid sensing applications, the model XTWL has an external 1/2" NPT thread on the well assembly to permit easy installation into the tank wall.

All XTW models are certified for Class I Groups A, B,C & D, Class II Groups E, F & G and Class III hazardous locations, Divisions 1 and 2.

Model XTW Tamper-Proof Adjustable Mode Shown

To set the temperature in tamper-proof adjustable mode, disconnect the power to the unit, remove the socket-head cap screw and use a slot-type screwdriver to adjust.

Type XTK

The type XTK is a thermostat kit suitable for field installation into other Caloritech™ products, such as the CX explosion-proof screwplug heater. This allows these products to be stocked without thermostat and have a kit supplied when required.
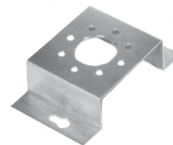
The model XTK is available either with a thermostat well assembly or with a packing gland and 60" capillary for remote bulb sensing.
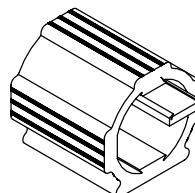

Type XTK
x-Max® Kit

Construction

Housings and covers are made from copper-free extruded aluminum. Consult page F12 for unit dimensions. Standard models XTW and XTB have an attractive black finish. Enclosures are provided with 3/4" NPT conduit entries on two sides. All units are shipped with a universal bracket suitable for horizontal or vertical mounting.

Universal Mounting Bracket (See Page F7 for Dimensions)

All XT explosion-proof thermostats use the unique **'Track and Trolley'** wiring system for ease of connection. Models XTW and XTB are provided with a #14 GA wire lead for grounding purposes.

XT

Selection

Refer to Table 1 to select the XT model best suited to your application. Note that all XT's are field convertible in minutes from externally adjustable to internally adjustable 'tamper-proof'. Just turn off the power and then simply open the cover, press down on the spring-loaded thermostat and unscrew the knob and shaft assembly. Replace this assembly with the socket-head cap screw provided as standard. When the cap screw is removed, the temperature can be adjusted using a slot-type screwdriver without having to remove the cover.

All thermostats feature a convenient terminal block mounted to a slide-out trolley. This unique feature simplifies wiring.
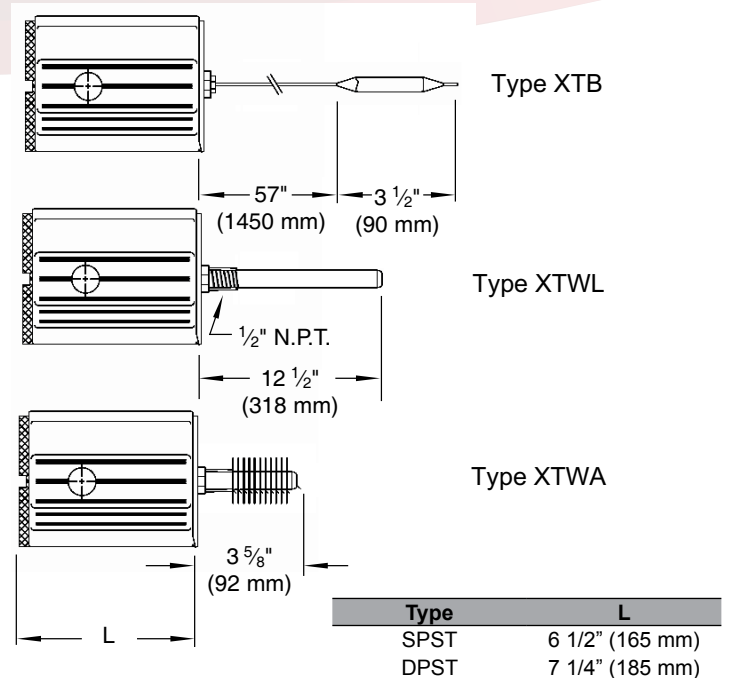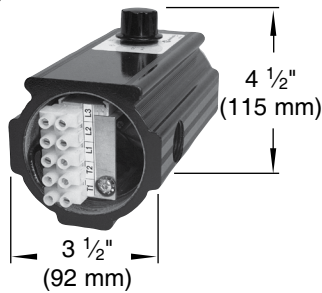

Type XTB

57" (1450 mm) 3 ½" (90 mm)

Type XTWL

½" N.P.T.

12 ½" (318 mm)

Type XTWA

3 ⅝" (92 mm)

L

4 ½" (115 mm)

3 ½" (92 mm)

Type	L
SPST	6 1/2" (165 mm)
DPST	7 1/4" (185 mm)

TABLE 1 - Model XT Explosion Resistant Thermostats

Description	Temperature	Hazardous Area Rating		Catalog No.		Approx. Weight kg (lbs)
		Cl. 1 Gp. A,B,C,D Cl.2 Gp. EFG Cl.3	Cl.1 Gp C,D Cl.2 Gp E,F,G Cl.3	SPST - 15A/600V 1Ø 25A/277V	DPST - 15A/600V 3Ø	
Remote Sensing Bulb, with 57"	-18 to 40°F (0 to 100°F)	—	✓	XTB04481	XTB04483	1.7 (3.8)
(1,448 mm) capillary length	10 to 120°C (50 to 250°F)	—	✓	XTB12481	XTB12483	1.7 (3.8)
Bulb with Well with 1/2" NPT	-18 to 40°F (0 to 100°F)	✓	✓	XTWL04481	XTWL04483	1.8 (4.0)
Fitting for Liquid Sensing	10 to 120°C (50 to 250°F)	✓	✓	XTWL12481	XTWL12483	1.8 (4.0)
Bulb in Finned Well for	-18 to 40°F (0 to 100°F)	✓	✓	XTWA04481	XTWA04483	1.8 (4.0)
Air Sensing	10 to 120°C (50 to 250°F)	✓	✓	XTWA12481	XTWA12483	1.8 (4.0)
For XB heaters, use as an add-	-18 to 40°F (0 to 100°F)	✓	✓	XTKW04481	XTKW04483	0.3 (0.7)
on Kit, Well Assembly provided	10 to 120°C (50 to 250°F)	✓	✓	XTKW12481	XTKW12483	0.3 (0.7)
For CX and XGB heaters, use as	-18 to 40°F (0 to 100°F)	—	✓	XTKB04481	XTKB04483	0.2 (0.5)
an add-on Kit, with 8" (203 mm) capillary	10 to 120°C (50 to 250°F)	—	✓	XTKB12481	XTKB12483	0.2 (0.5)

Options

• 70°C to 280°C (150°F to 550°F) and 160°C to 370°C (300°F to 700°F) temperature ranges
• other cover styles
• series 2 housing construction (4 3/8" - 111mm - I.D.)
• various housing lengths up to 48" (1220 mm) with contactor and transformer
• multiple thermostats in one housing

• custom conduit entry size and location
• other finish options
• capillary protected with flexible armoured cable
• nickel plated or S.S. bulb and capillary

To Order Specify

Quantity, catalog number, area classification and special features (consult factory).

XT