TXR, TXL Temperature Switch

Temperature Switch for Hazardous Areas

Series TXR, TXL

- ✧ Explosion-Proof
- ✧ High Accuracy
- ✧ Line or Ambient Sensing
- ✧ UL, CSA & ATEX Approved

Qualified

Model TXR for remote sensing shown.

Barksdale's **TXR** & **TXL Series** Temperature Switches add flexibility to Barksdale's solid reputation for quality & reliability and offer versatility for your temperature switching needs. These thermostats are ideal for freeze protection or temperature control in hazardous applications. The **TXR** & **TXL Series** thermostats feature 10 foot stainless steel sensors for remote monitoring and local mount sensors for ambient temperature sensing. The **TXR** & **TXL Series** feature limit switches with 10 amps @ 125/250 VAC and 3 amps @ 480 VAC electrical ratings. Optional 22 amp limit switches allow thermostats to be used for higher current, heat tracing applications. The **TXR** & **TXL Series** models are all UL listed & CSA approved and ATEX certified for use in hazardous zones within the European Community.

TXR, TXL Temperature Switch

When Temperature Matters, Call Barksdale

For many years, Barksdale temperature switches have been switching, measuring and controlling critical processes throughout the world.

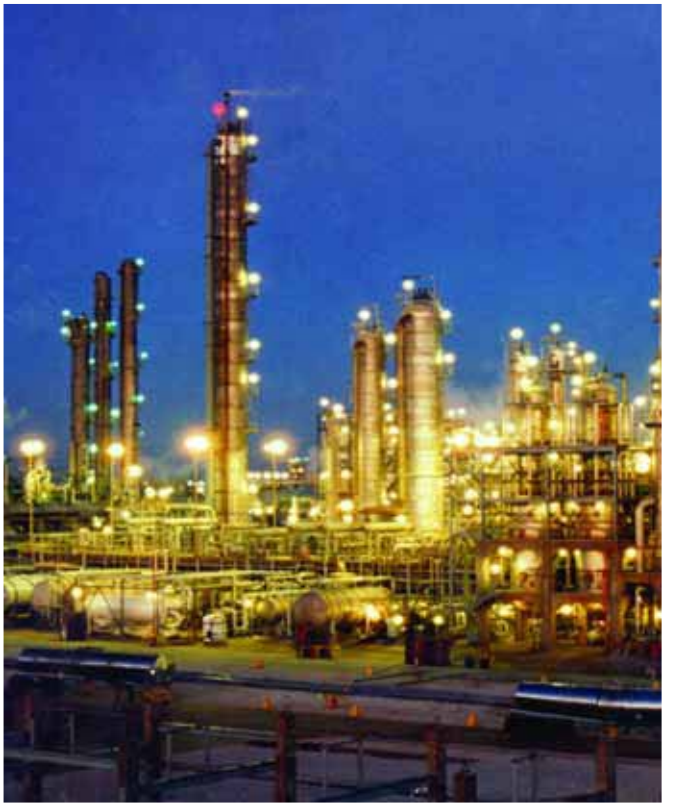
Protect Your Equipment with Barksdale

Barksdale temperature switches prevent damage to heavy industrial equipment by monitoring the temperature of engine fluids and protecting against thermal overloads. Hydraulic power units are protected by controlling the temperature of fluids in systems in reservoirs.

In cold climates, Barksdale temperature switches control heating devices that prevent pipes, valves and fittings from freezing preventing expensive loss and downtime. Barksdale thermostats also control the temperature in process piping to maintain the proper flow of media.

Barksdale temperature switches can be used in a variety of applications:

- Hydraulic Power Units
- Combustion Engines
- Tanks and Reservoirs
- Gearboxes
- Pumps
- Compressors
- Machine Tools and Industrial Equipment
- Farm & Construction Machinery
- Process Equipment



Need Something Special?

If you have special product requirements, we can help. Barksdale specializes in custom design solutions to meet your needs. We have design engineers and technical specialists who are experts in solving your unique temperature problems. Our technology and resources are at your disposal.

Need More Information?

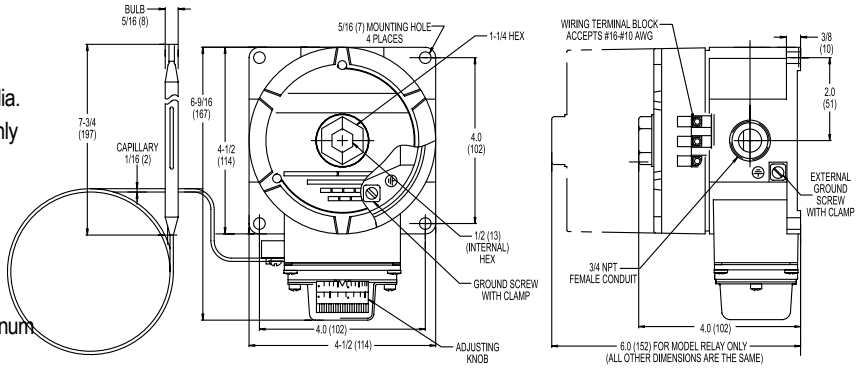
We are only a phone call away.

Toll-Free: (800) 576 -6308

TXR, TXL Temperature Switch

Performance Characteristics

Accuracy	±1% of full scale
Switch	
Type	SPDT, Prewired Snap Action
Rating	10 amp @ 125/250 VAC 3 amp @ 480 VAC
Adjustment	External adjustment knob
Bulb and Capillary	
Material	316L Stainless Steel
Bulb	7-3/4" (197mm), 5/16" (8mm) dia.
Capillary Length	10 feet (3m), Remote mount only
System Pressure (max)	300 psi without thermowell
Fill	Silicone oil-filled



Physical

Weight	3.8 pound (1.7 kg)
Enclosure	Anodized, Silver Painted Aluminum
Ratings	NEMA 4, 7, 9, & IP65
Electrical Connection	3/4" NPT female conduit connection. 3 pole terminal block accepts 14-10 AWG wire
Approvals	FM, UL, CSA ATEX EEx d IIC, T6 (Available as option) Class I, Group B, C & D Class II, Group E, F & G

Environmental

Ambient Temperature	-40° to 160°F (-40° to 71°C)
ENI/RFI	to EN 55011
Vibration	10 g's 10-500 Hz, MIL-STD 202F
Shock	50 g's, 10 mS, MIL-STD 901C

Standard Options

(Add dash and suffix letter to end of catalog number)

R - DPST relay switch. 22 amp @ 120/240/277 VAC. Contacts close on falling temperature. Relay Coil: 120 VAC, 4VA.

E - For ATEX approval

Example: TXR-L2S-10-E-Q10

Media Temperature Limits	Adjustable Range	Differential (approximate)	Sensing Location	Catalog Number
-40 to 400°F (-40 to 204°C)	0 to 300°F (-18 to 149°C)	10°F (5.6°C)	Remote	TXR-H4S-10
-40° to 400°F (-40°C to 216°C)	-40° to 350°F (-4° to 163°C)	10°F (5.6°C)	Ambient	TXL-H7S
Heat Tracing				
-40° to 420°F (-40° to 215°C)	25° to 325°F (-4° to 163°C)	10°F (5.6°C)	Line Sensing T-stat	TXR-L2S-10-Q10
-40° to 160°F (-40° to 71°C)	15° to 140°F (-9° to 60°C)	10°F (5.6°C)	Ambient Sensing T-stat	TXL-L1S-Q10

TXR, TXL Temperature Switch

Temperature Switch for Hazardous Areas - Configurator

Series TXR, TXL

	T	Temperature Switch
	X	Aluminum Nema 4, 7 & 9 & IP 65 Explosion Proof Enclosure
	R	Remote Bulb & Capillary
	L	Local Mount; for Ambient sensing only; bulb is attached to side of enclosure.
Limit Switch Class*	-H	10 amps @ 125, 250 VAC & 3 amps @ 480 VAC (Standard)
	-M	10 amps @ 125, 250 VAC & 3 amps @ 480 VAC., 0.5 amps @ 125 VDC & 0.25 amps @ 250 VDC
	-GH	1.0 amps @ 125 VAC, Gold Contact Limit Switch
	-L	22 amps @ 125, 250 & 480 VAC; Standard "Q10" models only.
Sensor Range**	1	+15° to +140°F (For Heat Trace "Q10" only.)
	2	+25° to +325°F (For Heat Trace "Q10" only.)
	4	0° to +300°F
	5	-40° to +100°F
	7	-40° to +350°F
Sensor Material	S	Stainless Steel Sensor
Bulb & Capillary Length		Blank if TXL Series
	-10	10ft Bulb & Capillary (TXR Series only)
Options	R	22A DPST Relay (relay contacts: 22 amps @ 120, 240, 277 VAC (Relay Coil: 120 VAC, 4 VA. Contacts Close on falling or rising temperature and Customer must specify direction)
	Q10	Heat Tracing models only

T X R -H 4 S -10

Example: TXR-H4S-10

NOTE:

* Changing Limit Switch will affect Deadband. See Sales Drawing.

** See Operating Characteristics.

Operating Characteristics

Range	Adjustable Range				Media Temperature Limit (Proof)				Differential (Approx.) Liquid		
	°F		°C		°F		°C				
	Low	High	Low	High	Low	High	Low	High	°F	°C	Calibrated Dial Adjustment
1	+15	+140	-0	+60	-40	+160	-40	+71	10	5.6	Heat Tracing Only
2	+25	+325	-4	+163	-40	+420	-40	+215	10	5.6	Heat Tracing Only
4	0	+300	-18	+149	-40	+400	-40	+204	10	5.6	
5	-40	+100	-40	+38	-65	+150	-54	+66	10	5.6	
7	-40	+350	-40	+177	-40	+400	-40	+204	10	5.6	