

THR, THL Temperature Switch

Temperature Switch for Industrial Applications

Series THR, THL

- ✦ High Accuracy
- ✦ Line or Ambient Sensing
- ✦ Nema 4X & IP 65
- ✦ UL, CSA and CE Approved



Barksdale's THR & THL Series Temperature Switches add flexibility to Barksdale's solid reputation for quality & reliability and offers versatility for your temperature switching needs. These thermostats are ideal for freeze protection or temperature control in more demanding industrial applications. The THR & THL Series thermostats feature 10 foot stainless steel sensors for remote monitoring and local mount sensors for ambient temperature sensing. The THR & THL 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 THR & THL Series models are all UL listed & CSA approved.



TR Automatyka Sp. z o.o.

ul. Lechicka 14
02-156 Warszawa
tel. +48 (22) 886 10 16, fax. +48 (22) 846 50 37
NIP: 522-27-58-993
<http://www.trautomatyka.pl>
e-mail: biuro@trautomatyka.pl

THR, THL 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 them a over bads. 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.

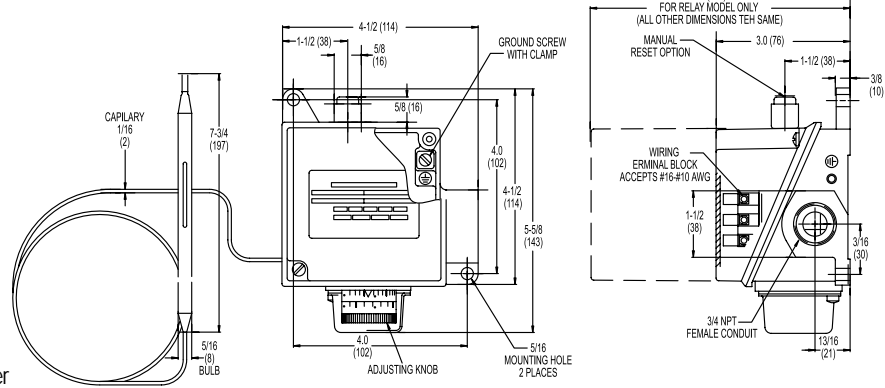
THR, THL Temperature Switch

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

Physical

Bulb and Capillary
 Material 316L Stainless Steel
 Bulb 7-3/4" (197mm), 5/16" (8mm) dia.
 Capillary Length 10' (3m), Remote Mount
 System Pressure (max) 300 psi without thermowell
 Fill Silicone oil-filled
 Weight 1.9 pound (0.9 kg)
 Enclosure Anodized die cast aluminum. Other exposed parts, stainless steel
 Ratings NEMA 4
 Electrical Connection 3/4" NPT female conduit connection. 3 pole terminal block accepts 14-10 AWG wire
 Approvals UL and CSA approved



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).
 X - NEMA 4X enclosure,
 R* - DPST relay switch. 22 amp @ 120/240/277 VAC. Relay Coil: 120 VAC, 4VA.

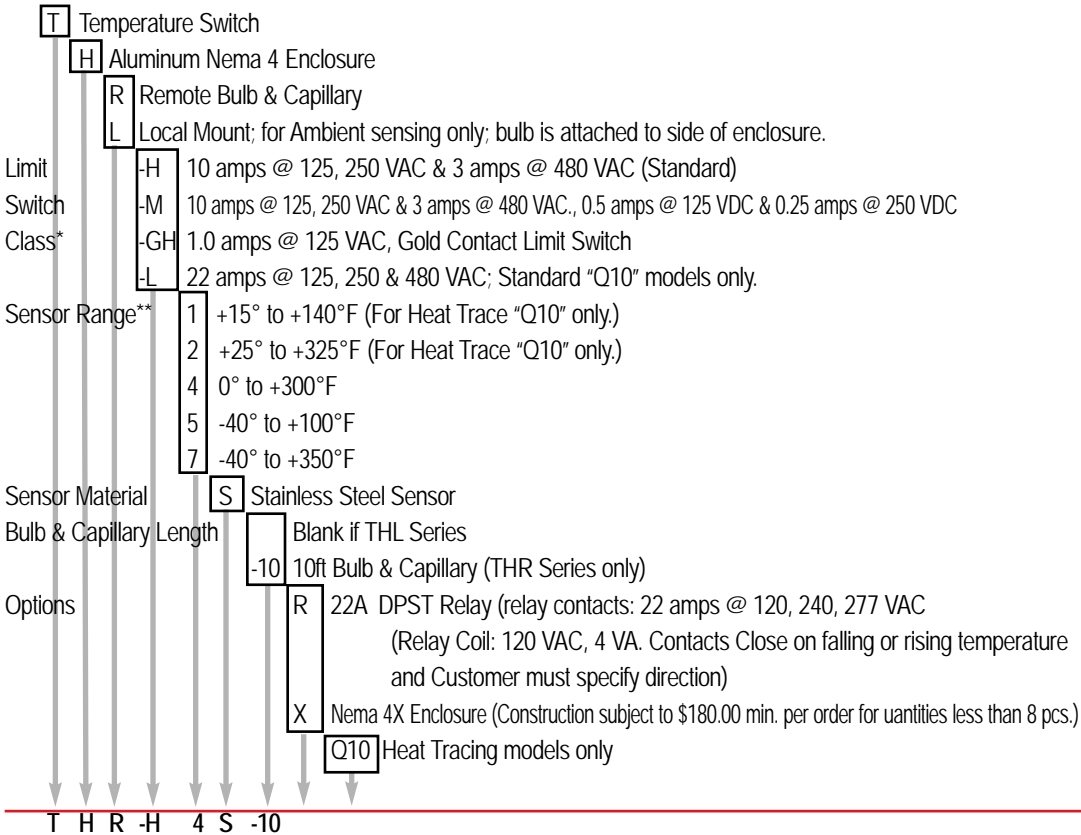
*Must specify; close on rising or falling temperature
 Limit Switch Options Consult factory for support.

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)		THR-H4S-10
-65° to 150°F (-54° to 66°C)	-40° to 100°F (-40° to 138°C)	10°F (5.6°C)		THL-H5S
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	THR-L2S-10X-Q10
-40° to 160°F (-40° to 71°C)	15° to 140°F (-18° to 149°C)	10°F (5.6°C)	Ambient Sensing T-stat	THL-L1S-X-Q10

THR, THL Temperature Switch

Temperature Switch for Industrial Applications

Series THR, THL



Example: THR-H4S-10

Operating Characteristics

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

NOTE:

* Changing Limit Switch will affect Deadband.

See Sales Drawing.

** See Operating Characteristics.



TR Automatyka Sp. z o.o.

ul. Lechicka 14
 02-156 Warszawa
 tel. +48 (22) 886 10 16, fax. +48 (22) 846 50 37
 NIP: 522-27-58-993
<http://www.trautomatyka.pl>
 e-mail: biuro@trautomatyka.pl