

# Temperature

## Remote Mount Temperature Switches

## Series MT1H, T2H

### Features

- ▶ Reliable & accurate
- ▶ Ambient compensated
- ▶ NEMA 4, 13 and IP 65
- ▶ UL, CSA & CE approved
- ▶ Single or dual switching

### Applications

- ▶ Marine & shipbuilding
- ▶ Railroad
- ▶ Oil & gas
- ▶ Medical
- ▶ Compressors
- ▶ Water equipment
- ▶ Process equipment
- ▶ Machine tools and industrial equipment



### General Specifications\*

<b>Accuracy:</b> (Repeatability)	±1% of mid-60% of full range. At constant ambient ±0.5% of full scale. (Knob indication is reference only)
<b>Switch:</b>	One (1) SPDT or two (2) independent SPDT circuits
<b>Electrical Characteristics:</b>	All models incorporate Underwriters' Laboratories, Inc. and CSA listed single pole double throw snap-action switching elements. Switches may be wired normally open or normally closed.
<b>Wetted Parts:</b>	Copper or 304 stainless steel
<b>Electrical Connection:</b>	Single: 3-Pin terminal strip Dual: 6-Pin terminal strip
<b>Electrical Ratings:</b>	AC value at 75% power factor —10 amps @ 125, 250 volts AC, 3 amps @ 480 volts AC. Automatically reset by snap-action of switch.
<b>Enclosure/Housing:</b>	Watertight and dust-tight indoor and outdoor (NEMA 4)/oil-tight and dust-tight indoor (NEMA 13).

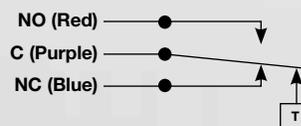
<b>Bulb &amp; Capillary:</b>	6 and 12 foot length standard. See operating characteristics and product configurator.
<b>Approvals:</b>	Underwriters' Laboratories, Inc. and Canadian Standard Assoc. are listed under temperature indicating and regulating equipment.
UL:	File No. E56247, Guide No. XAPX
CSA:	File No. LR34555, Guide 400-E-O Class 4813
<b>Temperature Range:</b>	See product configurator
<b>Adjustment:</b>	Tamper resistant external adjustment. Turn knob clockwise to increase setpoint. (Knob indication is reference only)
<b>Weight:</b>	Single: approximate 1.5 lbs. Dual: approximate 3.0 lbs.

\* See Product Configurator for additional options.

### Wiring Code

Lead	Circuit #1	Circuit #2
Normally Closed	Blue	Orange
Common	Purple	Brown
Normally Open	Red	Yellow

### Wiring Diagram



MT1H



T2H

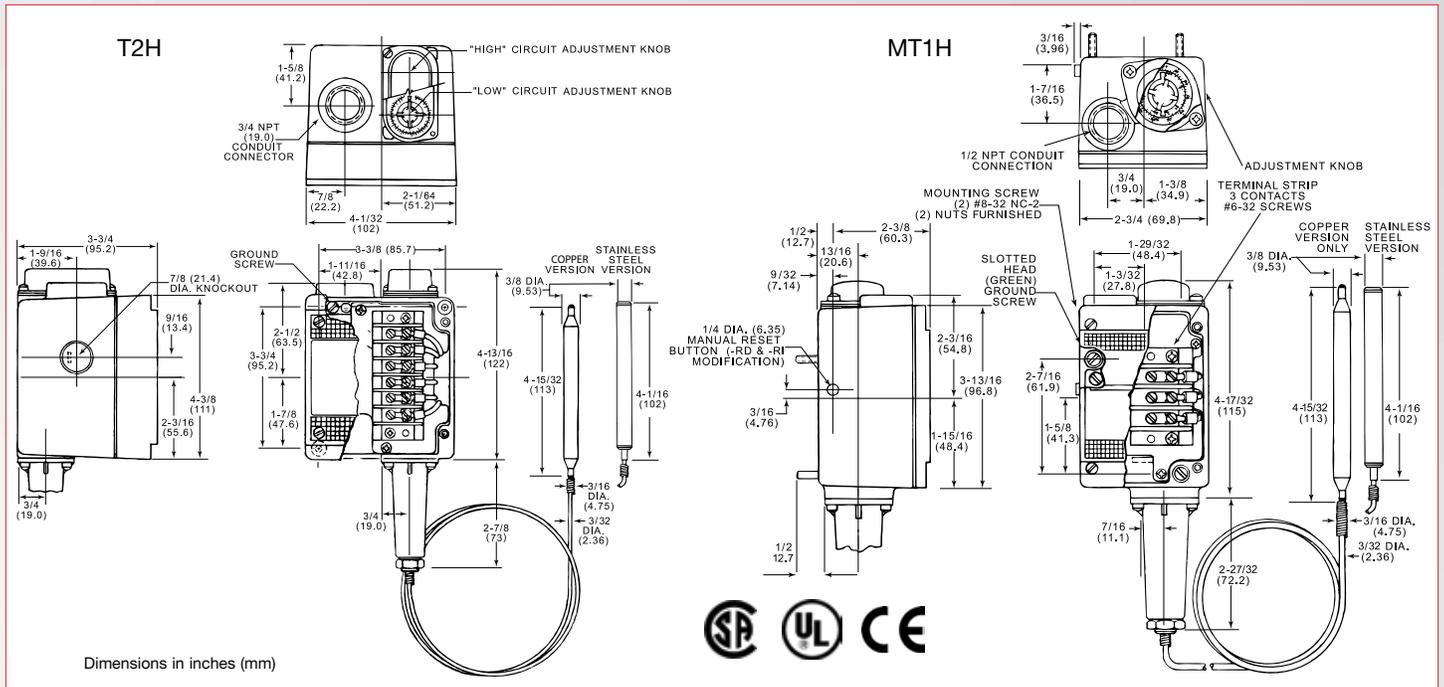
**Barksdale**  
CONTROL PRODUCTS

Barksdale, Inc./Barksdale GmbH  
A Subsidiary of Crane Co.

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## Technical Drawing



## Product Configurator

Example H M T1 H -HH 154 S -12 -A -FX

**H** Hermetically sealed limit switch option - Class I, Division II (requires AA, CC, GH or HH limit switch)

**Blank** Standard

**M** Single set point switch models

**Blank** Dual switch models

**Switch**

**T1** Single SPDT

**T2** Dual switch 2 independent SPDT

**Enclosure**

**H** NEMA 4 & IP65 enclosure

**Limit Switch 1**

-H	10 amps @ 125/250 VAC; 3 amp @ 480 VAC (standard)
-B	10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; 0.05 amps @ 125 VDC; 0.03 amps @ 250 VDC
-G <sup>2</sup>	10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; 0.4 amps @ 125 VDC; MANUAL RESET
-J	10 amps @ 125/250 VAC; 3 amps @ 480 VAC (with elastomer boot)
-L	15 amps @ 125/250/480 VAC; 0.03 amps @ 125 VDC; 0.02 amps @ 250 VDC
-M	10 amps @ 125/250 VAC; 3 amp @ 480 VAC; 0.5 amps @ 125 VDC; 0.25 amps @ 250 VDC
-S <sup>3</sup>	15 amps @ 125/250/480 VAC; 0.05 amps @ 125 VDC; Adjustable differential
-GH	1 amp @ 125VAC; gold contacts
-AA	Hermetically sealed; 4 amps @ 125/250 VAC
-CC	Hermetically sealed; 10 amps @ 125/250 VAC
-HH	Hermetically sealed; 5 amps @ 125/250 VAC
-GH	Hermetically sealed; 1 amp @ 125 VAC; gold contacts

**Options**

-RD <sup>2</sup>	Manual reset
-FX <sup>4</sup>	NEMA 4X enclosure
-SXXX	Factory pre-set (consult factory)

**Armor Options**

<b>Blank</b>	Blank if not required
-A	302 stainless steel armor (standard)

**Capillary Length**

-12	12 foot capillary
-25 <sup>5</sup>	25 foot stainless steel [use -A (armor) and S (stainless steel wetted material) options]

**Wetted Material**

<b>Blank</b>	6 foot copper capillary
S	6 foot 304 stainless steel capillary

**NOTES:**

<sup>1</sup> Changing limit switch will effect dead band; See sales drawing.

<sup>2</sup> Use G limit switch for single set point models that need this option. When selecting the manual reset option on dual setting switches (T2H), the manual reset limit switch will be on the high circuit. The low circuit limit switch must be specified by the customer.

<sup>3</sup> When selecting the 'S' adjustable differential limit switch option on a dual setting switch (T2H), a standard 'H' switch will be paired with an 'S' switch. Dual 'S' pricing will apply.

<sup>4</sup> Add 'S' wetted material. FX models require stainless steel capillaries.

<sup>5</sup> Add 'S' wetted material adder to this. No additional adder from armor options table.

**Temperature Range**

Range	Adjustable Range		Media Temperature Limit (Proof)		Differential <sup>1</sup> (Approx.) Liquid		°F	°C	Calibrated Dial Adjustment
	°F	°C	°F	°C	°F	°C			
154	-50	+150	-45	+66	-100	+200	-73	+93	1 to 2 .5 to 1.1
251	+50	+250	+10	+121	-100	+300	-73	+149	1 to 2 .5 to 1.1
351	+150	+350	+66	+177	-100	+400	-73	+205	1 to 2 .5 to 1.1
601	+300	+400	+149	+227	0	+650	-18	+343	2 to 4 1.1 to 2.2
603	+320	+600	+160	+316	0	+650	-18	+343	2 to 4 1.1 to 2.2