

Temperature

Remote Mount Temperature Switches

Series MT1H, T2H

Features

- ▶ Reliable & accurate
- ▶ Ambient temperature compensated
- ▶ NEMA 4, 13
- ▶ 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*

Accuracy: (Repeatability)	±1% of mid-60% of full range. At constant ambient ±0.5% of full scale. (Knob indication is reference only)
Switch:	One (1) SPDT or two (2) independent SPDT circuits
Electrical Characteristics:	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.
Wetted Parts:	Copper or 304 stainless steel
Electrical Connection:	Single: 3-Pin terminal strip Dual: 6-Pin terminal strip
Electrical Ratings:	AC value at 50% power factor —10 amps @ 125, 250 volts AC, 3 amps @ 480 volts AC. Automatically reset by snap-action of switch.
Enclosure/Housing:	Watertight and dust-tight indoor and outdoor (NEMA 4)/oil-tight and dust-tight indoor (NEMA 13).

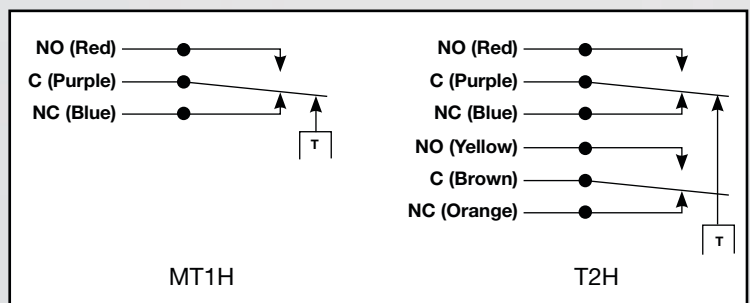
Bulb & Capillary:	6 and 12 foot length standard. See operating characteristics and product configurator.
Approvals:	Underwriters' Laboratories, Inc. and Canadian Standard Assoc. are listed under temperature indicating and regulating equipment.
UL:	File No. E56247, Guide No. XAPX
CSA:	File No. LR34555,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

* See Product Configurator for additional options.

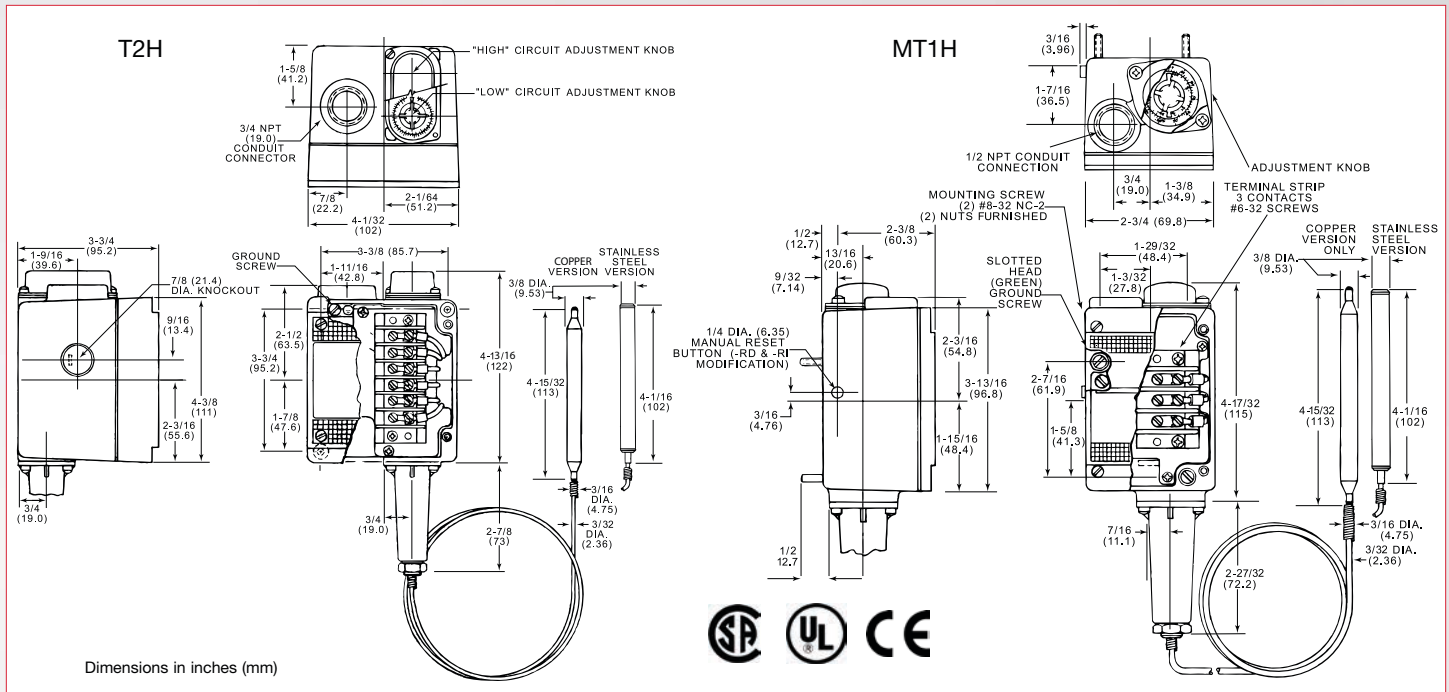
Wiring Code

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

Wiring Diagram



Technical Drawing



Product Configurator

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

Enclosure

H NEMA 4 enclosure

Switch

T1 Single SPDT
T2 Dual switch 2 independent SPDT

Limit Switch 1

H Hermetically sealed limit switch option - Class I, Division II (requires AA, CC, GH or HH limit switch, 60°C Ta max.)
Blank Standard

M Single setpoint switch models
Blank Dual switch models

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 ²	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	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 ²	Manual reset
-FX ³	NEMA 4X enclosure (consult factory)
-SXXX ⁵	Factory pre-set (consult factory)

Armor Options

Blank	Blank if not required
-A	302 stainless steel armor

Capillary Length

Blank	6 foot capillary
-12	12 foot capillary
-25 ⁴	25 foot stainless steel capillary

Wetted Material

Blank	Copper sensor
S	304 stainless steel

NOTES:

- Changing limit switch will effect dead band; See sales drawing.
- Use G limit switch for single setpoint 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.
- Add 'S' wetted material. FX models require stainless steel capillaries. Consult factory; minimum quantities required.
- Add 'S' wetted material adder and 'A' armor adder to this. Capillary length '25' requires stainless steel capillary and armor.
- Factory preset is available for all ranges, limited to 400°F setpoint(s).

Temperature Range

Range	Adjustable Range		Media Temperature Limit (Proof)				Differential ¹ (Approx.) Liquid		Calibrated Dial Adjustment
	°F	°C	°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