

# MT1H, T2H Temperature Switch

Remote Bulb and Capillary Temperature Switch

Series MT1H, T2H

- ✦ Reliable & Accurate
- ✦ Ambient Compensated
- ✦ NEMA 4 & IP 65
- ✦ UL, CSA & CE Approved



**B**arksdale's MT1H & T2H Series Temperature Switches provide unmatched performance, quality & reliability in a mechanical thermostat. The single set point MT1H and dual set point T2H, can switch, measure & control temperatures from -50° to 600°F (-45° to 316°C), The optional adjustable differential provides precise control while ambient compensation maintains 1/2% accuracy with external

temperatures from -65° to 165°F. The MT1H & T2H Series are electrically rated for 10 amps @ 125/250

VAC & 3 amps @ 480 VAC. Standard 3- & 6-pin terminal strips simplify installation. The MT1H & T2H Series are rated NEMA 4 & 13; the optional NEMA 4X construction protects the rugged die-cast aluminum enclosure from corrosive environments. A remote bulb and capillary sensor is available in copper or stainless steel allowing the switch to be mounted up to 25 feet from the temperature source. Optional thermowells allow the sensor to work in pressurized vessels to 5000 psi. UL listed & CSA approved, MT1H & T2H Series Temperature Switches are perfect for your temperature sensing needs



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# MT1H, T2H 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.

# MT1H, T2H Temperature Switch

**General Description**

**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.

**Electrical Ratings**

AC value at 75% Power Factor —10 amps 125, 250 volts AC, 3 amps 480 volts AC. Automatically reset by snap-action of switch.

**Performance Characteristics**

**Accuracy**

+/- 1% of mid - 60% of full range. At constant ambient +/- 0.5% of full scale.

**Switch**

One (1) SPDT or Two (2) Independent SPDT Circuits

**Adjustment**

Tamper Resistant External Adjustment

**Bulb & Capillary**

6 and 12 foot length standard. See Operating Characteristics and Ordering Data Chart

**Physical**

**Weight**

Single: Approximate 1.5 lbs.,  
Dual: Approximate 3.0 lbs.

**Enclosure/Housing**

Watertight and Dusttight Indoor and Outdoor (NEMA 4) Oiltight and Dusttight Indoor (NEMA 13).

**Elect. Connection**

Single: 3-Pin Terminal Strip  
Dual: 6-Pin Terminal Strip

**Wetted Materials**

Copper or 304 Stainless Steel

**Approvals/Listings**

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

**Environmental**

**Temperature Range**

See Operating Characteristics and Ordering Data Chart

**Wire Coding**

**Circuit #1**

**Low Circuit**

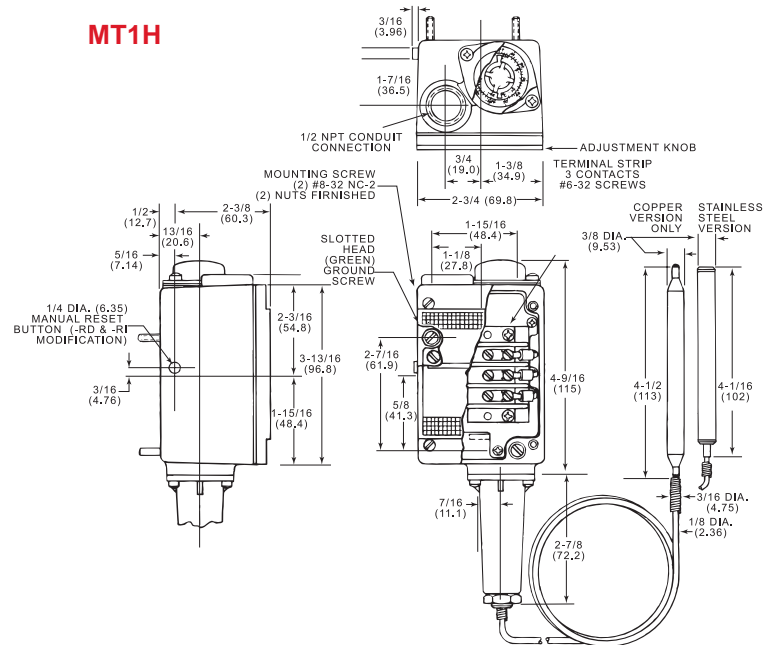
Common: - Purple  
Normally Closed - Blue  
Normally Open - Red

**Circuit #2**

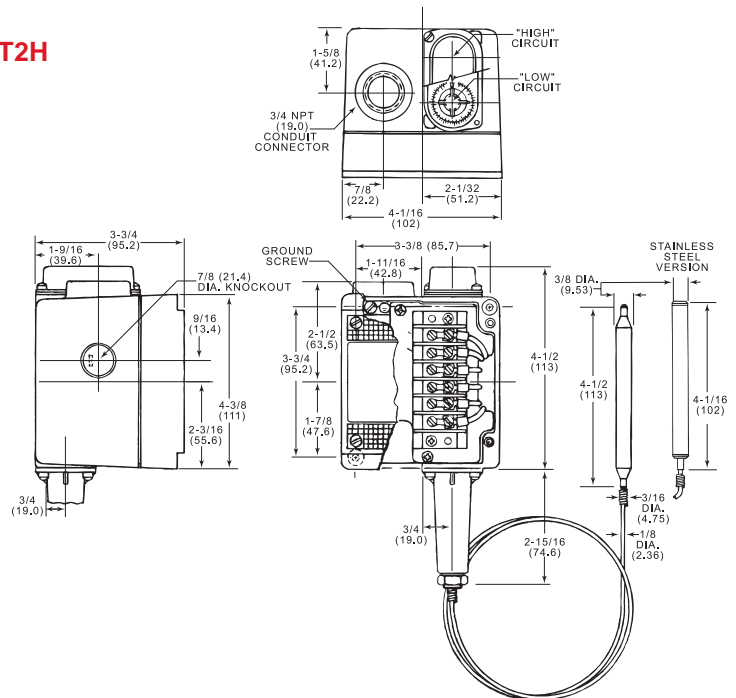
**High Circuit**

Common - Brown  
Normally Closed - Orange  
Normally Open - Yellow

**MT1H**



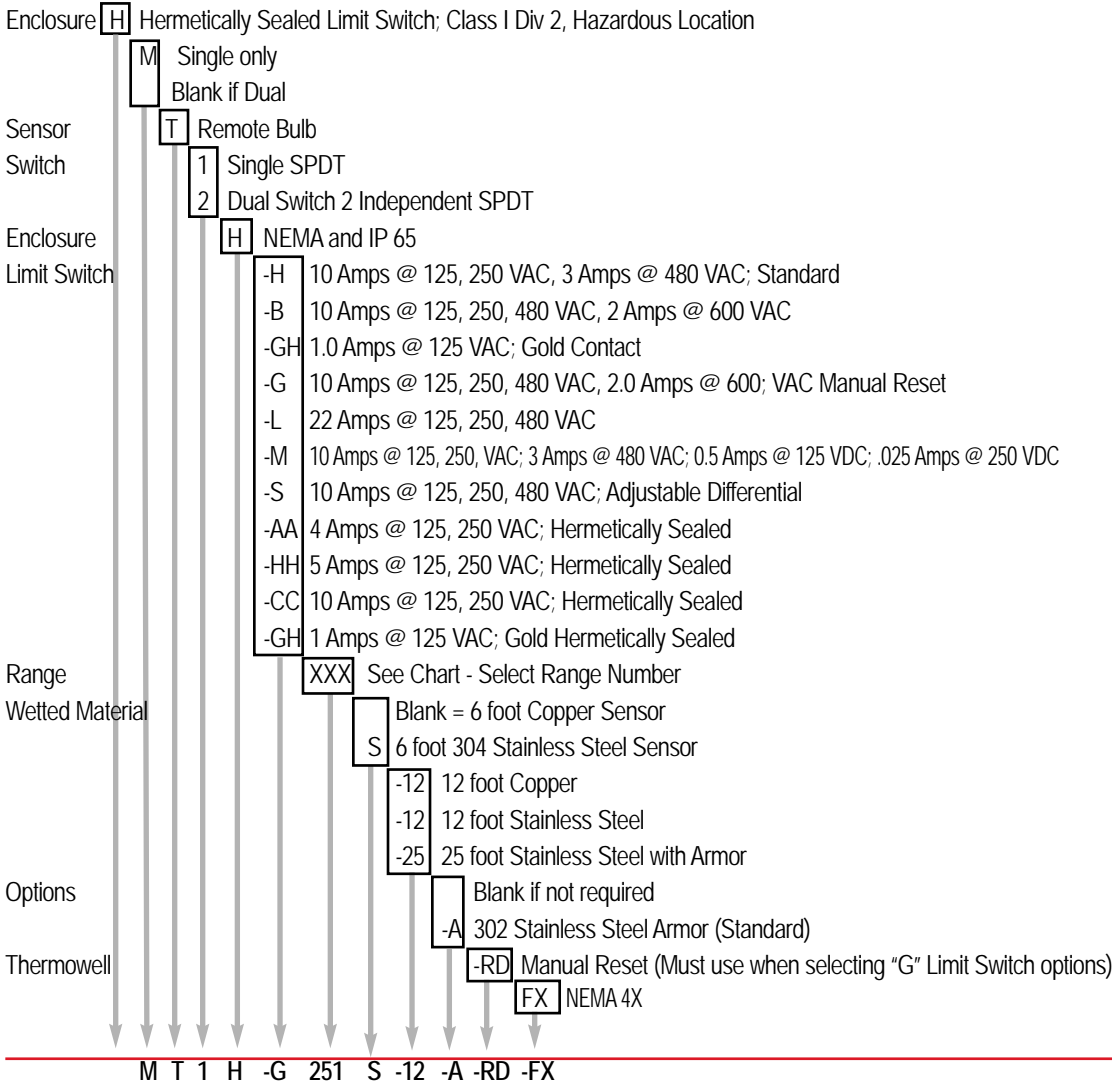
**T2H**



# MT1H, T2H Temperature Switch

## Remote Bulb and Capillary Temperature Switch - Configurator

### Series MT1H, T2H



Example: MT1H-G251S-12-A-RD-FX

NOTE: 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.

NOTE: Changing limit switch will effect dead band; See sales drawing

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			
154	-50	+150	-45	+66	-100	+200	-73	+93	1 to 2	5 to 1.1	Calibrated
251	+50	+250	+10	+121	-100	+300	-73	+149	1 to 2	5 to 1.1	5° Subdivision
351	+150	+350	+66	+177	-100	+400	-73	+205	1 to 2	5 to 1.1	200° Span
601	+300	+440	+149	+227	0	+650	-18	+343	2 to 4	1.1 to 2.2	5° Subdivision
603	+320	+600	+160	+316	0	+650	-18	+343	2 to 4	1.1 to 2.2	140° Span
											10° Subdivision
											280° Span



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