ML1H, L2H Temperature Switch

Local Mount Temperature Switch

Series ML1H, L2H

- Reliable & Accurate
- +/- 1% Repeatability
- Nema 4 & IP 65
- UL, CSA & CE Approved

L2H

ML1H

Barksdale's ML1H & L2H Series Temperature Switches provide unmatched performance, quality & reliability in a mechanical thermostat. The single set point ML1H and dual set point L2H, can switch, measure & control temperatures from -50° to 450°F (-45° to 232°C), while the optional adjustable differential provides precise control. These locally mounted switches provide fast response and accurate measurements at the temperature source. Both the ML1H & L2H Series are electrically rated for 10 amps @ 125/250 VAC & 3 amps @ 480 VAC. Standard 3- & 6-pin terminal strips simplify installation. The ML1H & L2H Series are rated NEMA 4 & 13; the optional NEMA 4X construction protects the rugged die-cast aluminum enclosure from corrosive environments. Copper or stainless steel temperature sensors are available to handle a wide range of media. Optional thermowells allow the sensor to work in pressurized vessels to 5000 psi. UL listed & CSA approved, ML1H & L2H Series Temperature Switches are perfect for your temperature sensing needs.

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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: 1-800-835-1060.

ML1H, L2H 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	Single: One (1) SPDT, Dual Switching, 2 Independent SPDT Circuits
Adjustment	Tamper resistant External Adjustment

Physical

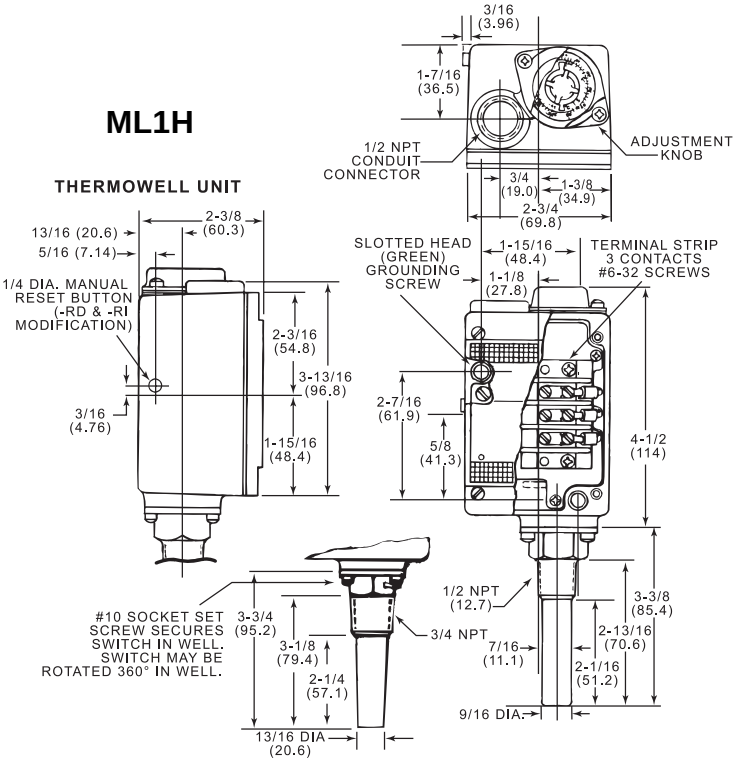
Weight	Single: Approximate 1.5 lbs., Dual: Approximate 3.0 lbs.
Enclosure/Housing	Watertight and Dusttight Indoor and Outdoor (NEMA 4) Oil-tight and Dust-tight Indoor (NEMA 13).
Elect. Connection	Single: 3-Pin Terminal Strip Dual: 6-Pin Terminal Strip
Wetted Materials	Brass or 304 Stainless Steel
Approvals/Listings	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

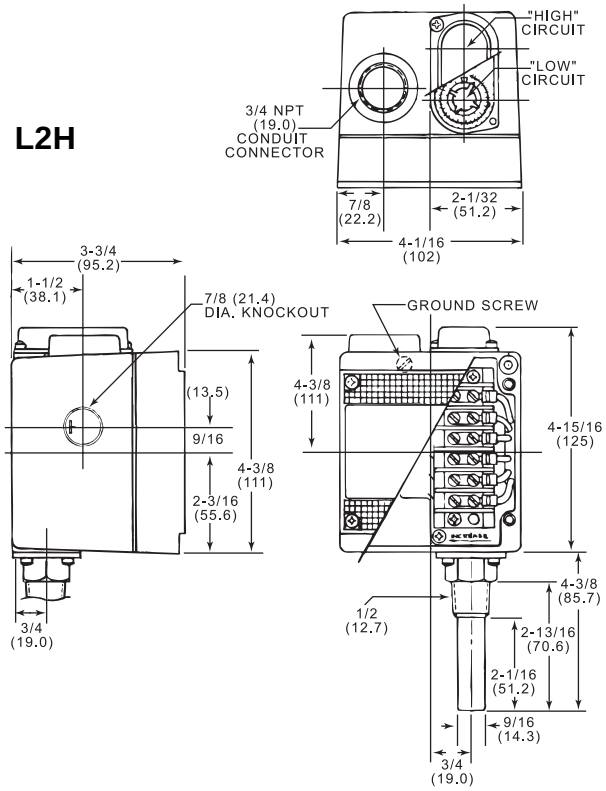
Temperature Range	See Operating Characteristics and Ordering Data Chart

Wire Coding	
Circuit #1	Common: - Purple
Low Circuit	Normally Closed - Blue
	Norrmally Open - Red
Circuit #2 (L2H only)	Common - Brown
High Circuit	Normally Closed - Orange
	Normally Open - Yellow
Standard Options/Modifications	See Configurator Page

ML1H



L2H



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Local Mount Temperature Switch

Series ML1H, L2H

	H	Hermetically Sealed
		Blank if Dual
	M	Size for Single Only
Sensor	L	Local Mount
Switch	1	Single SPDT
	2	Dual Switch 2 Independent SPDT
Enclosure	H	NEMA 4 and IP 65
Limit Switch	-H	10 Amps @ 125, 250 VAC, 3 Amps @ 480 VAC; Standard
Options	-B	10 Amps @ 125, 250, 480 VAC, 2 Amps @ 600 VAC
	-GH	1.0 Amps @ 125 VAC; Gold Contact
	-G	10 Amps @ 125, 250, 480 VAC, 2.0 Amps @ 600; VAC Manual Reset
	-L	22 Amps @ 125, 250, 480 VAC
	-M	10 Amps @ 125, 250, VAC; 3 Amps @ 480 VAC; 0.5 Amps @ 125 VDC; .025 Amps @ 250 VDC
	-S	10 Amps @ 125, 250, 480 VAC; Adjustable Differential
	-AA	4 Amps @ 125, 250 VAC; Hermetically Sealed
	-HH	5 Amps @ 125, 250 VAC; Hermetically Sealed
	-CC	10 Amps @ 125, 250 VAC; Hermetically Sealed
	-GH	1 Amps @ 125 VAC; Gold Hermetically Sealed
Range		See Chart
Wetted Material		Blank if Brass
	S	304 Stainless Steel Sensor
	-RD	Manual Reset (Must use when selecting “G” Limit Switch options)
Thermowell	-W	Brass Local Mount
	-WS	316 Stainless Steel Local Mount
Options	-FX	NEMA 4X

M L 1 H -G 202 S -RD -WS -FX

Example: ML1H-G202S-RD-WS-FX

NOTE: When selecting the manual reset option on dual setting switches (L2H), 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 °F Low	Adjustable Range °F High	Adjustable Range °C Low	Adjustable Range °C High	Media Temperature Limit (Proof) °F Low	Media Temperature Limit (Proof) °F High	Media Temperature Limit (Proof) °C Low	Media Temperature Limit (Proof) °C High	Differential (Approx.) Liquid °F	Differential (Approx.) Liquid °C	Calibrated Dial Adjustment
201	-50	+75	-45	+24	-100	+250	-73	+121	1 to 3	.5 to 1.6	Calibrated
202	+15	+140	-9	+60	-100	+250	-73	+121	1 to 3	.5 to 1.6	2° Subdivision
203	+75	+200	+24	+93	-100	+250	-73	+121	1 to 3	.5 to 1.6	125° Span
351	+100	+225	+38	+107	-100	+400	-73	+205	1 to 3	.5 to 1.6	
204	-50	+200	-45	+93	-100	+250	-73	+121	1 to 3	1.6 to 3.3	5° Subdivision
354	+100	+350	+38	+177	-100	+400	-73	+205	1 to 3	1.6 to 3.3	250° Span
454	+150	+450	+66	+232	0	+500	-18	+260	3 to 6	1.6 to 3.3	10° Subdivision 300° Span

Barksdale
CONTROL PRODUCTS
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