Mechanical Temperature Switch

L2H

Local mount type

Features

- Local mount type dual switch
- Terminal clip integrated, set point adjustment in °C and °F under tamper protected cover
- Protection class: IP65, NEMA 4 / 13
- For use as two-position controller optionally with one micro switch with adjustable hysteresis for temperature control
- The second contact can also be used for max. or min. monitoring for for sensor monitoring
- Optional for high circuit S2:
  - Disconnection with manual reset, RD-micro switch
  - Adjustable hysteresis (deadband), S-micro switch
  - Option thermowell: W = Brass
  WS = Stainless steel SS316Ti, 1.4571
- Approvals: Ex ia,
  UL, CSA (on request)
- Suitable for SIL2/3 (IEC 61508) acceptance

Adjustment ranges

- -45 °C...+24 °C to +66 °C...+232 °C

Applications

Temperature monitoring and control in

- Industry
- Shipbuilding

Technical Data

Housing material	Die-cast aluminium, anodized
Process connection	Standard 1/2" NPT male, option W/WS 3/4" NPT male)
Temperature sensor material	Standard: brass / copper, version S: stainless steel (SS304 / 1.4301). If not equipped with thermowell the sensor may only be used up to 21 bar max. For W and WS pressure values refer to accessories data sheet.
Operation pressure without thermowell with thermowell	max. 21 bar (max. 300 psi) see accessories data sheet
Operation temperature Housing Sensor	-40°C...+75°C (-40°F...167°F) except temperature code 454: -18°C...+75°C (0°F...167°F) see table "Adjustment range" (Sensor temperature limits)
Electrical values	All models are equipped with SPDT contacts

Micro switch type	H, M, GH, GM, S, RD
Electrical connection	3/4" NPT female, internal screw terminal, cable gland in PA, for cable size 6...12 mm is included
Protection class	IP65, NEMA 4 / 13
Set point adjustment	Turn adjustment knob clockwise to increase the actuation point
Intrinsic safety	The switches are also suitable for intrinsically safe applications. In this case we recommend gold contacts. Add "Exi" in case of ordering. Maximum rating according to ATEX: Umax = 28 V Imax = 50 mA
Approvals	Ex ia, UL, CSA (on request)
Weight	approx. 1.5 kg

Adjustment ranges

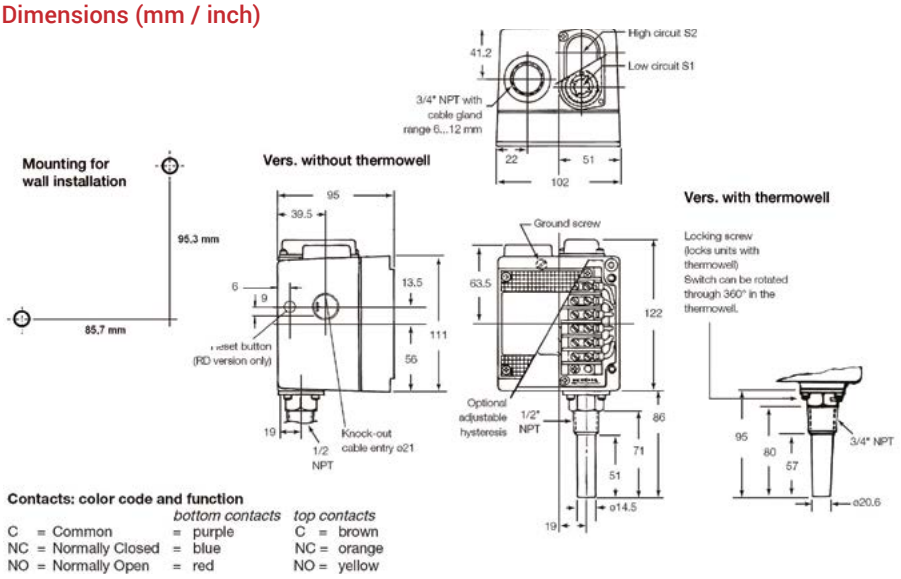
Code adjustment range	Sensor temperature limits (C°)	Adjustment range (°C) [1]	Hysteresis (°C)* for micro switch			
			H, GH	M, GM	S	RD
						2,8 ... manual
201	-73 ... +121	-45 ... +24	0.5 ... 1.6	1.6 ... 3.3	3.3 ... 11.2	
202	-73 ... +121	-9 ... +60	0.5 ... 1.6	1.6 ... 3.3	3.3 ... 11.2	
203	-73 ... +121	+24 ... +93	0.5 ... 1.6	1.6 ... 3.3	3.3 ... 11.2	
204	-73 ... +121	-45 ... +93	0.5 ... 1.6	1.6 ... 3.3	3.3 ... 11.2	
351	-73 ... +205	+38 ... +107	0.5 ... 1.6	1.6 ... 3.3	3.3 ... 11.2	
354	-73 ... +205	+38 ... +177	0,5 ... 1.6	1.6 ... 3.3	3.3 ... 11.2	
454	-18 ... +260	+66 ... +232	1.6 ... 3.3	3.3 ... 5.0	5.5 ... 16.8	

* Dependent on medium

[1] Factory presetting available from -15°C to +175°C

Mechanical Temperature Switch
L2H

Dimensions (mm / inch)



Contacts: color code and function

	bottom contacts	top contacts
C = Common	= purple	C = brown
NC = Normally Closed	= blue	NC = orange
NO = Normally Open	= red	NO = yellow

Electrical Ratings

Micro switch	Special features	Volt AC 50/60 Hz	Ind. Load A	Res. Load A	Volt DC	Ind. Load A	Res. Load A	Comments
H	Silver contacts	125 250 480	10 10 3	10 10 3	6 to 28	0.5	0.5	Small hysteresis; High AC / low DC loads
M	Silver contacts	125 250 480	10 10 3	10 10 3	12 24 250	5.00 1.00 0.25	15.0 2.0 0.4	Medium hysteresis; High AC and DC loads
GH	Micro switch with gold contacts for low voltage and low current (e. g. "Exi")	125	1	1	24	1.00	1.00	Small hysteresis
GM		30	0.1	0,1	30	0.10	0.1	Medium hysteresis
S	Silver contacts	480	15	15	125	0.05	0.4	Adjustable hysteresis
RD*	Silver contacts	480	10	10	125	0.4	0.75	Manual reset

* Please note: enter "RD" in "Option" and the 2nd micro switch (H, M, GH or GM) in "Micro switch" when placing your order.
Hermetically sealed micro switch (HL2H) on request

Order Code

Base model**					
L2H					
	Micro switch				
	-H	with silver contacts			
	-M	with silver contacts			
	-GH	with gold contacts			
	-GM	with gold contacts			
	-S	with silver contacts			
		Code Adjustment range			Adjustment range, (°C) - factory presetting available from -15°C to +175°C
		201			-45... +24
		202			-9 ... +60
		203			+24... +93
		204			-45... +93
		351			+38 ...+107
		354			+38 ...+177
		454			+66 ...+232
			Sensor material		
			---		Brass / copper
			S		Stainless steel
				Options 1	
				-W	Thermowell of brass
				-WS	Thermowell of SS (1.4571, SS316 Ti)
				Options 2	
				-RD	Manual reset (S2 only)
				-EXI	for intrinsically safe application, Ex ia

Example

L2H	-GH	202	S	-WS	-EXI

** Standard parts without UL approval