

Mechanical temperature switches

T2H

with capillary

Features

- ▶ Dual switch with remote sensor and explosion proof housing
- ▶ 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
- ▶ Optional for high circuit S2:
 - Disconnection with manual reset, RD-micro switch
 - Adjustable hysteresis (dead band), S-micro switch
 - The low circuit S1 can also be used for max. or min. monitoring or for sensor monitoring
- ▶ Approvals: Ex ia, UL, CSA, SIL2 (IEC 61508)

Adjustment ranges

-45 °C...+66 °C to +160 °C...+316 °C

Applications

Temperature monitoring and control in industry, shipbuilding, railcars



Technical Data

| | |
|-------------------------------------|---|
| Housing material: | Die-cast aluminium, anodized |
| Temperature sensor material: | 304 stainless steel (1.4301) |
| Temperature sensor type: | Capillary, 1.8 m long (6 foot) (optional 3.6 m and 7.5 m) (12 and 25 foot), armoured If not equipped with thermowell the sensor may only be used up to 21 bar max. |
| 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 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 |
| Standards: | The equipment is in conformity with the following harmonised European standards: EN 60014 1977 + A1 to A4 and EN 500120 1977 + A1 |
| Intrinsic safety: | The switches are also suitable for intrinsically safe applications. Add "Exi" in case of ordering. The following max. values are valid when using these switches: U _{max} = 28 V I _{max} = 50 mA |
| Approvals: | Ex ia, UL, CSA |
| Weight: | 1.5 kg approx. |

Adjustment ranges

| Code adjustment range | Sensor temperature limits (°C) | Adjustment range (°C) | Hysteresis (°C)* for micro switch | | | |
|-----------------------|--------------------------------|-----------------------|-----------------------------------|------------|-------------|--------------|
| | | | H, GH | M, GM | S | RD |
| | | | | | | 2.8...manual |
| 154 | -73 ... +93 | -45... +66 | 0.5... 1.1 | 1.1... 2.2 | 2.2... 8.3 | |
| 251 | -73 ... +149 | +10... +121 | 0.5... 1.1 | 1.1... 2.2 | 2.2... 8.3 | |
| 351 | -73 ... +205 | +66... +177 | 0.5... 1.1 | 1.1... 2.2 | 2.2... 8.3 | |
| 601 | -18 ... +343 | +149... +227 | 1.1... 2.2 | 2.2... 3.3 | 3.9... 13.9 | |
| 603 | -18 ... +343 | +160...+316 | 1.1... 2.2 | 2.2... 3.3 | 3.9... 13.9 | |

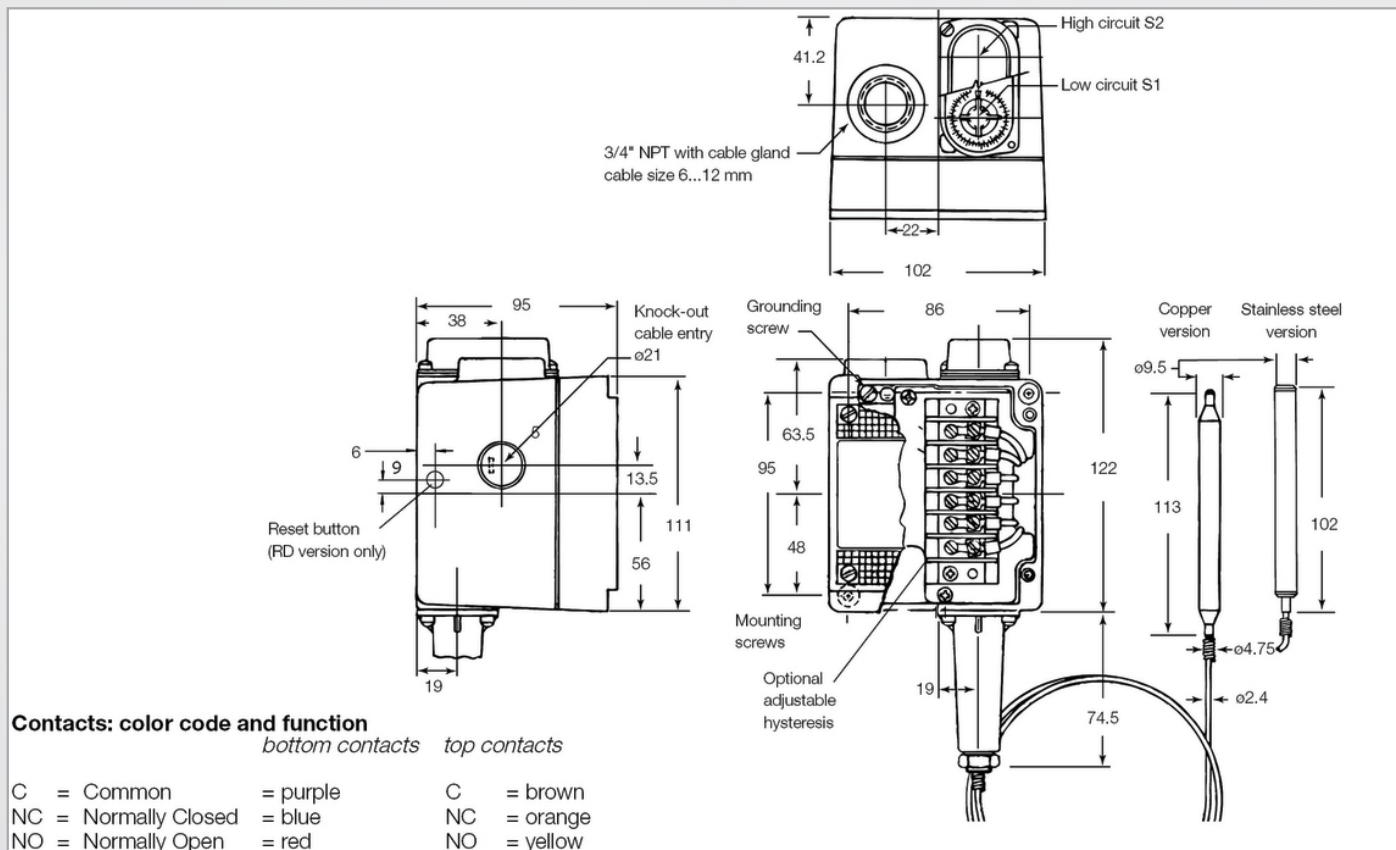
* Dependent on medium

Temperature

Mechanical temperature switches

T2H

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 | Micro switch with silver contacts | 125 250 480 | 10 10 3 | 10 10 3 | 6 to 28 | 0.50 | 0.5 | Small hysteresis; High AC / low DC loads |
| M | Micro switch with 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 | 125 | 1 | 1 | 24 | 1.00 | 1.00 | Small hysteresis |
| GM | | 30 | 0.1 | 0.1 | 30 | 0.10 | 0.1 | Medium hysteresis |
| S | Micro switch with silver contacts | 480 | 15 | 15 | 125 | 0.05 | 0.4 | Adjustable hysteresis |
| RD * | Micro switch with silver contacts | 480 | 10 | 10 | 125 | 0.4 | 0.75 | Manual reset (S2 only) |

* Please note: enter "RD" in "Option" and the micro switch for S1 (H, M, GH or GM) in "Micro switch" when placing your order.
Hermetically sealed micro switch (HT2H) on request

Sensor lengths / Options

| Sensor lengths | Options |
|----------------|---|
| S-A | 1.8 m, armoured, SS (6 foot) |
| S-12-A | 3.6 m, armoured, SS (12 foot) |
| S-25-A | 7.5 m, armoured, SS (25 foot) |
| | RD |
| | EXI |
| | Manual reset (S2 only) |
| | for intrinsically safe application, Ex ia |

Order Code

Example for order number

| Type | Micro switch | Code Adjustment range | Sensor length | Options |
|------|--------------|-----------------------|---------------|---------|
| T2H | M | 251 | S-A | EXI |

Your order number

| | | | | |
|-----|--|--|--|--|
| T2H | | | | |
|-----|--|--|--|--|