

Temperature monitor TW

For monitoring temperatures in heating water, hot water systems and other applications in heating, ventilation and air-conditioning systems. When the setpoint temperature is reached, the 1-pin changeover contact (SPDT) is switched. Four different mounting types are possible.

- Pipe contact mounting
- Thermowell mounting
- Wall mounting with probe in flange
- Wall mounting with probe in immersion sleeve







01HT-101CA

Type Overview

| Туре | Output signal temperature switch | Additional features | Capillary |
|------------|----------------------------------|---------------------|-----------|
| 01HT-101CA | Changeover | Auto reset | 1 m |

| | 01HT-101CA | Changeover | Auto reset | 1 m |
|-----------------|---------------------------------------|-----------------|--|---------------------------|
| Technical Data | | | | |
| Electrical data | Electrical connection | | Spring loaded terminal block max. 2.5 mm ² | |
| | Cable entry | | Cable gland with strain rel Ø612 mm | ief M20x1.5 mm, for cable |
| Functional data | Output signal passiv | e temperature | Changeover | |
| | Output signal temperature switch note | | AC 230 V 16 (2.5) A @ Switch position 1-2 AC 230 V 6.3 (2.5) A @ Switch position 1-4 DC 230 V 0.25 A | |
| | Switching reliability | | min. switching current 100 mA @ AC / DC 24 V | |
| | Application | | Air/Water | |
| Measuring data | Measuring values | | Temperature | |
| | Measuring range temperature 3090°C | | | |
| | Setting range Tempe | erature | 3090°C | |
| | Switching differentia | l (temperature) | Тур. 4.2 К | |
| | | | ±1.8 K (upper third of mea ±3.6 K (at scale beginning | |
| Materials | Cable gland | | PA6, black | |
| | Housing Bottom: PA (RAL700 | | Bottom: PA (RAL7001, silve Cover: ABS with inspection Seal: NBR | |
| | Capillary | | Copper | |
| Safety data | Ambient humidity | | Max. 95% r.H., non-conde | nsing |
| | Ambient temperatur | е | 080°C | |
| | Ambient temperatur | e note | On temperature probe ma switch head max. 80°C | x. setpoint +25 K, on |
| | Fluid temperature | | Up to max. 115°C | |
| | Storage temperature | | -3080°C | |
| | EU Conformity | | CE Marking | |
| | Certification IEC/EN | | DIN EN 60730-1 and DIN EN 14597 | |
| | Degree of protection | IEC/EN | IP54 | |
| | Degree of protection | note | IP protection with mounte | d sealing elements |
| | Quality Standard | | ISO 9001 | |
| | Mode of operation | | Type 2 BL | |



Safety notes



This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.



During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

Remarks

Switching function

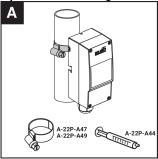
If the temperature on the sensor exceeds the setpoint value, the changeover is activated by the transmission mechanics and the electrical circuit is opened resp. closed. If the temperature falls (cooling down), the changeover is reset to its initial positon.

Installation notes

Installation situation

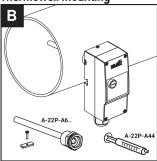
The temperature monitors can be installed in four different ways.





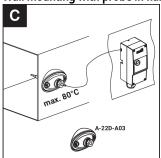
The tightening strap is included in the scope of delivery

Thermowell mounting



The thermowell A-22P-A6... is available as an optional accessory

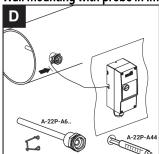
Wall mounting with probe in flange



The A-22D-A03 flange is available as an optional accessory



Wall mounting with probe in immersion sleeve



The thermowell A-22P-A6... is available as an optional accessory

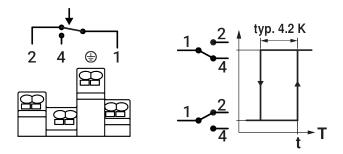
Scope of delivery

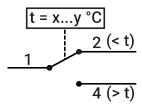
Tightening strap for pipes from Ø15...100 mm

Accessories

| Optional accessories | Description | Туре |
|-------------------------------|---|-----------|
| | Mounting flange for sensor probe 6 mm, up to max. 120°C [248°F], Plastic | A-22D-A03 |
| | Syringe with thermal paste | A-22P-A44 |
| | Fixing strap, for pipes up to Ø 40110 mm [1.64.3"] | A-22P-A47 |
| | Fixing strap, for pipes up to Ø 40250 mm [1.69.8"] | A-22P-A49 |
| Recommended accessories water | Description | Туре |
| | Thermowell pocket kit (fabricated) Brass nickel-plated, 100 mm, G1/2", SW22 | A-22P-A61 |
| | Thermowell pocket kit (fabricated) Brass nickel-plated, 150 mm, G1/2", SW22 | A-22P-A62 |
| | Thermowell pocket kit (fabricated) Brass nickel-plated, 200 mm, G1/2", SW22 | A-22P-A63 |
| | Thermowell pocket kit (fabricated) Stainless steel, 100 mm, G1/2", SW22 | A-22P-A64 |
| | Thermowell pocket kit (fabricated) Stainless steel, 150 mm, G1/2", SW22 | A-22P-A65 |
| | Thermowell pocket kit (fabricated) Stainless steel, 200 mm, G1/2", SW22 | A-22P-A66 |

Wiring diagram

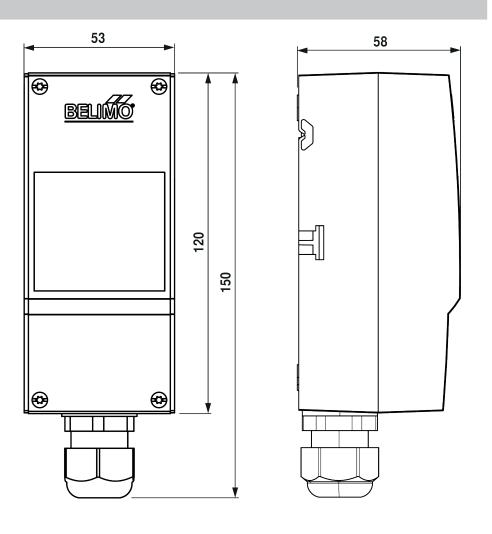




If the capillary leaks, the electrical circuit 1-2 remains permanently closed.



Dimensions



| Туре | Weight | |
|------------|---------|--|
| 01HT-101CA | 0.12 kg | |