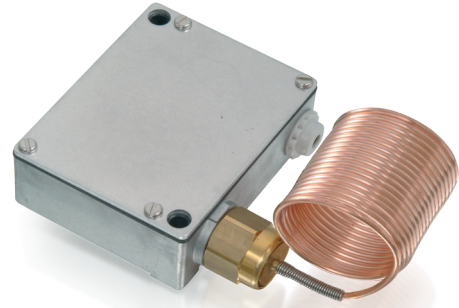


# FROSTSTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature. The Froststat was specifically designed as single stage temperature controller for monitoring temperature around 0°C, i. e. to prevent ice build-up on air heaters.



## Applications

- HVAC
- Refrigeration

## Features

- Rugged aluminium housing
- Short response time
- Protection IP54
- Electrical connection on terminal screw

## Technical Data

|                            |                              |                        |                                   |
|----------------------------|------------------------------|------------------------|-----------------------------------|
| Designation of application | Frost protection thermostat  | Switching differential | Not adjustable                    |
| Measuring range            | -5°C ... +15°C               | Repeatability          | ± 0.5 % FS typ.                   |
| Output signal              | Floating change-over contact | Approval / conformity  | EN60730-1/ EN60730-2-9: Typ 2.B.H |

01/2017

Data sheet H72123f

Subject to change

## Ordering information/type code

|                          |                         | XXX . XXXX | XXXXXX |
|--------------------------|-------------------------|------------|--------|
| <b>Custom build code</b> | Sensor 3m               | 990 . 1299 |        |
|                          | Sensor 6m               | 991 . 1299 |        |
|                          | Sensor 3m, limiter      | 992 . 1299 |        |
|                          | Sensor 6m, limiter      | 993 . 1299 |        |
| <b>Accessories</b>       | Protection level IP65   |            | 20     |
|                          | 6 pcs. Capillary holder |            | K80140 |

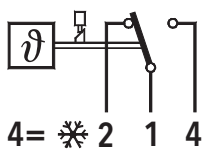
## Standard products (extra short lead time)

| Product No. | Type Code    | Sensor material             | Set point adjustment                                 |
|-------------|--------------|-----------------------------|--|
| F15         | 991 1299 000 | Copper capillary tube, L=6m | Internal setpoint adjustment                         |
| F153        | 990 1299     | Copper capillary tube, L=3m | Internal setpoint adjustment                         |
| F15R        | 993 1299 000 | Copper capillary tube, L=6m | Internal setpoint adjustment and external reset knob |
| F153R       | 992 1299     | Copper capillary tube, L=3m | Internal setpoint adjustment and external reset knob |

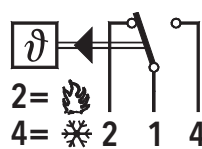
| Specifications                  |                          |   |
|---------------------------------|--------------------------|---|
| <b>Accuracy</b>                 | Repeatability            | ± 0.5 % FS typ.   |
|                                 | Scale accuracy typ.      | ± 1.5 % FS typ.   |
|                                 | Switching differential   | 2.0°C typ.  |
| <b>Environmental conditions</b> | Media temperature        | Sensor temperature max.: 140°C<br>Sensor reponse length : ~ 30 cm                   |
|                                 | Ambient temperature      | Max. operating temperature: +70°C<br>Min. operating temperature: switch point + 2°C |
|                                 | Storage temperature      | -30°C ... +70°C   |
|                                 | Protection               | IP 54   |
|                                 | Humidity                 | Max. 95 % relative  |
| <b>Mechanical Data</b>          | Sensor housing           | Copper (Cu)   |
|                                 | Filling                  | Liquid  |
|                                 | Housing                  | AlSi9Pb3  |
|                                 | Screwed cable gland      | PE, Polyethylen   |
|                                 | Installation             | any position  |
|                                 | Weight                   | ~ 850 g   |
| <b>Microswitch</b>              | Rating                   | See table   |
|                                 | Resistance of insulation | > 2 MΩ  |
|                                 | Dielectric strength      | 2 kV terminal ground  |
|                                 | Life time (mechanical)   | 0.3 Mio. cycles   |
| <b>Electrical connection</b>    | Cable gland              | M20x1.5<br>Cable-Ø 8...13 mm  |
|                                 | Terminal screw           | 3 x 1...2.5 mm <sup>2</sup>   |

| Electrical data switch |   |   |  |
|------------------------|---|---|--|
| Type                   | Features  | Rating  |  |
|                        |   | Resistive Load (Inductive Load)                               |  |
|                        |   | AC  | DC   |
| 12                     | Average switching differential, high vibration resistance | 125 V, 15 (1.5) A<br>250 V, 15 (1.25) A<br>500 V, 10 (0.75) A | 250 V, 0.3(0.2) A<br>125 V, 0.75(0.4) A<br>30 V, 15(1.5) A<br>14 V, 15 (1.5) A |

## Electrical Connection

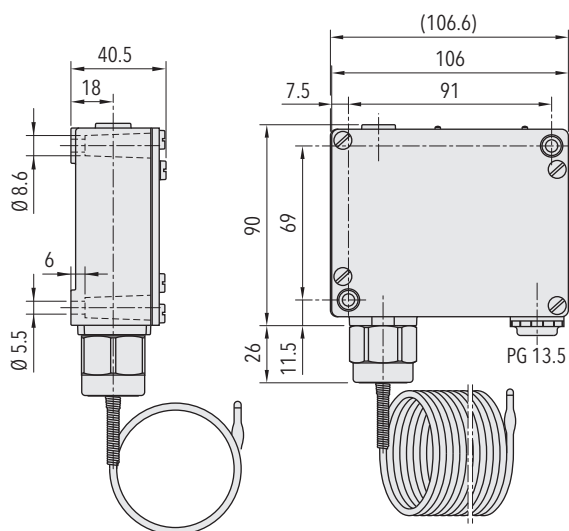


992/993  
Limiter, decreasing

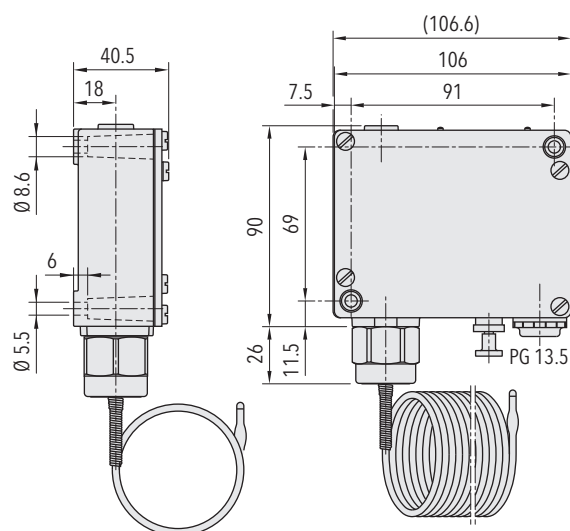


990/991

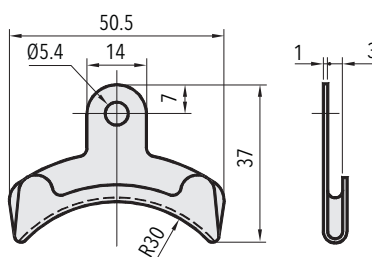
## Dimensions



990/991.XXXX.XX



992/993.XXXX.XX



99X.XXXX.K80140

### Additional information

#### Documents

|              |  |
|--------------|--|
| Data sheet   | <a href="http://www.trafag.com/H72123">www.trafag.com/H72123</a> |
| Instructions | <a href="http://www.trafag.com/H70821">www.trafag.com/H70821</a> |
| Flyer        | <a href="http://www.trafag.com/H70952">www.trafag.com/H70952</a> |