

## FT69 Series

### SINGLE-STAGE FROST PROTECTION THERMOSTATS

#### SPECIFICATION DATA & MOUNTING INSTRUCTIONS



### GENERAL

Suitable for use as frost-protection thermostats for the protection of downstream air heaters in ventilation and climate control systems as well as heat exchangers in cooling systems. Can also be used to control electrical heating systems and to switch acoustic or optical alarm signals.

### Models

order no.	coil length (mm)	reset
FT6960-18	1.8	manual
FT6960-30	3.0	
FT6960-60	6.0	
FT6961-18	1.8	automatic
FT6961-30	3.0	
FT6961-60	6.0	

### FEATURES

- Gas-filled copper sensor element with 1.8 m, 3 m, or 6 m coil length
- Dust-tight micro switch with switching contacts (heat/cool)
- Easy installation and wiring
- Manual reset (FT6960) or automatic reset (FT6961)
- °C and °F scale

### SPECIFICATION

Switching capacity (Ag contact)	24...250 Vac; 16(8) A
Humidity	10...90% rh, non-condensing
Adjustable temp. range	-10...+10 °C (+14...+50 °F)
Storage temperature	-30...+60 °C (-22...+140 °F)
Operating temperature	-20...+55 °C
Cooling of capillary coil	30 cm (min.)
Max. overload temperature	150 °C (max. 1 hr)
Hysteresis	2 K
Reproducibility	± 1 K
Protection class	I
Protection type	IP65 as per EN60529
Wiring terminals	Screw terminals for wires of up to 1.5 mm <sup>2</sup> cross-section
Cable entry	M20x1.5, for Ø 6...13 mm
Housing materials	ABS and polycarbonate
Weight	320 g
Dimensions (incl. cable gland)	140 x 62 x 65 mm

## MOUNTING AND SETTING

The switching temperature can be set by an adjustment screw on top of the housing. The room temperature at the thermostat body should not drop below the setting point.

Recommended mounting position is vertical with cable entry on bottom side. For mounting, use the screws (included in the package). To securely mount and to prevent soiling by drilling waste, the mounting holes are enclosed separately. For wiring, remove the cover and proceed as shown in Fig. 2.

During the unwinding operation, the capillary tube must be held by the anti-kink device on the diaphragm pot. Maintain a radius of curvature of at least 20 mm. When inserting the coil through openings in sheet metal housings, provide protection against damage. Use the coil bracket included in the package.

## DIMENSIONS

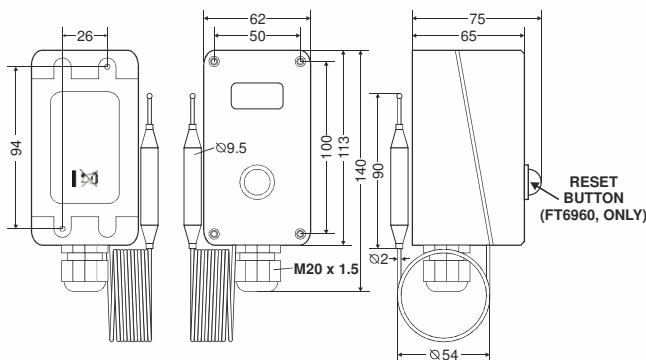


Fig. 1. Dimensions in mm

## ! WARNING

All operations performed on the unit, whether wiring, testing, or maintenance, must be done without power supply on the unit and external loads. Such operations are permitted only by skilled workers.

Honeywell is not liable for possible damages caused by an inadequate installation and/or by removed or exchanged security devices.

To guarantee the sealed protection on the unit, turn the cover screws and close the grommet.

## WIRING

### Field Wiring

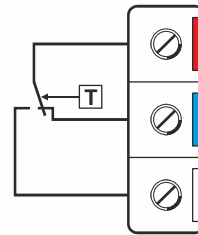


Fig. 2. Field wiring

**Heating:** Connect red to blue; the contact will open when the temperature rises.

**Cooling:** Connect red to white; the contact will open when the temperature drops.

**Signal function:** For service functions, connect a signal lamp to the corresponding opposite contact. The free contact will then close simultaneously (thus acting as a signal contact).

### Reset Function

The **FT6960** models are manual reset types. The switching contact is moved back by pressing the reset button on the front; this must be performed by qualified service personal, only, insofar as resetting necessitates rechecking the unit.

The **FT6961** models are automatic reset types. The switching contact moves back to its normal position if the temperature moves to normal range.

## ACCESSORIES

Included in package: 6 pcs fastening clamps and two fastening screws 3.5 x 20.

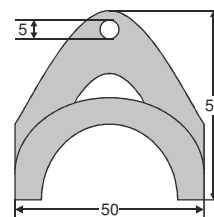


Fig. 3. Fastening clamp, dimensions in mm

**Honeywell**

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