

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. Can also be used to control electrical heating systems and to switch acoustic or optical alarm signals.

Models

order no.	coil length (m)	bulb	reset
FT6960-18	1.8	with bulb	manual
FT6960-30	3.0	without bulb	
FT6960-60	6.0	without bulb	
FT6961-18	1.8	with bulb	automatic
FT6961-30	3.0	without bulb	
FT6961-60	6.0	without bulb	

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	-8...+8 °C (+18...+46 °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 ² 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

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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.

When unwinding, 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

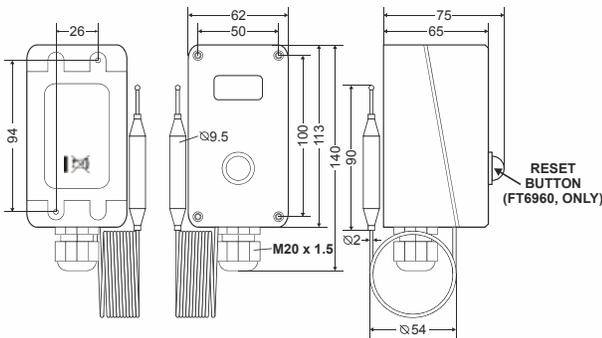


Fig. 1. Dimensions in mm

WARNING

All operations performed on the unit - including wiring, testing, or maintenance - must be done without power supply on the unit, by qualified personnel, and in compliance with local electrical regulations.

Honeywell is not liable for possible damages caused by an improper installation or incorrect electrical wiring or by removed or exchanged electrical safety features.

To guarantee the sealed protection on the unit, tighten the cover screws and fasten the grommet.

FIELD WIRING

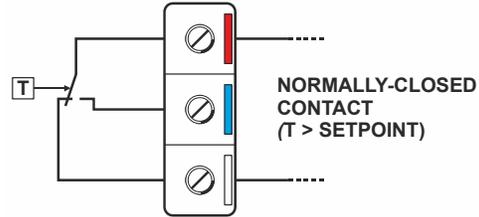


Fig. 2. Field wiring (frost protection)

Monitoring for dropping temperature (frost protection): Wire the red and white terminals. The resultant normally-closed contact will open when the temperature drops below the setpoint.

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. After the temperature has dropped below the setpoint, the contact remains open until moved back to its normally-closed position by manually pressing the reset button on the front.

NOTE: Press the reset button only after the installation has been rechecked by qualified service personnel, and only after the temperature has risen at least 2-3 K (hysteresis + margin of error) above the setpoint.

The FT6961 models are automatic reset types. After the temperature has dropped below the setpoint, the contact automatically returns to its normally-closed position as soon the temperature rises at least 2-3 K (hysteresis + margin of error) above the setpoint.

ACCESSORIES

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

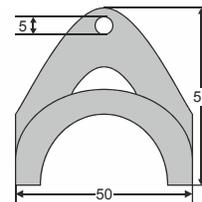


Fig. 3. Fastening clamp, dimensions in mm