

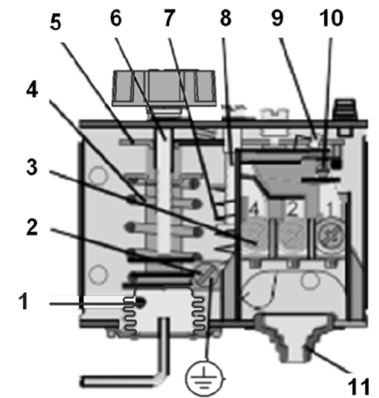
Temperature Switch Installation Guide

I . Switch Name And Application

Temperature switches are used for regulating temperature in heating, ventilation and air conditioning systems. They also function as devices for frost or overheating protection.

II . Design And Function

1. Corrugated pipe
2. Grounding screw
3. SPDT device
4. Temperature regulating spring
5. Bouncing board
6. Temperature adjusting screw
7. Temperature difference adjustin-g spring
8. Temperature difference adjusting screw
9. Balance piece
10. Common terminal
11. Wiring sheath



III. Technical Parameter

Ambient temperature		-40℃~65℃	
Action type		Evaporation type / Adsorption type	
Sensor type		Copper capillary	
Capillary length [m]		1、 2、 3、 4、 6、 11.5(Depending on the model,Customizable length)	
Electrical parameters	AC current(AC)	AC-1	16A, 400V
		AC-3	16A, 400V
		AC-15	10A, 400V
	Direct current(DC)	DC-13	12W, 220V
Electrical contact mode		Single pole double throw	
Cable interface		Sealed entry for cables with 5-10 mm diameter	
IP code		IP30	
Maximum sensor temperature		120 ℃	

IV. Working Principle

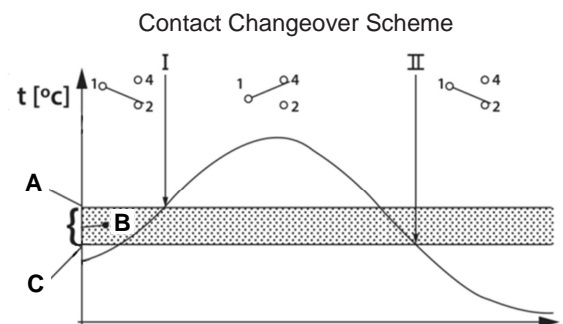
When the temperature exceeds the set value (RANGE scale), contacts 1-4 make and contacts 1-2 break (point I).

The contacts return to their initial position when the temperature drops below the value which is equal to the set point value (RANGE scale) minus the differential value (DIFF scale) (point II).

A - Set point

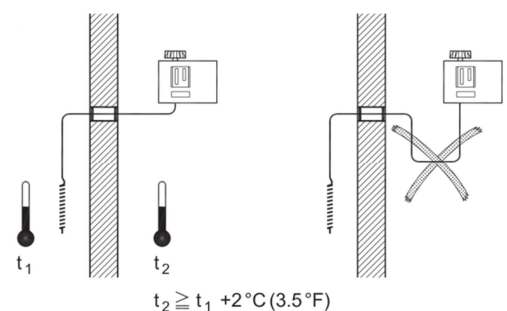
B - Differential

C - Set point minus differential



V. Installation Instructions

General safety requirements must be observed when mounting the device. Mounting may only be performed by qualified personnel in compliance with the applicable standards. Do not touch moving parts with your fingers or any tools. Mount and adjust the temperature switch in the absence of electrical voltage only. The temperature of the switch housing must be at least 2℃ higher than the sensor temperature.



VI. Setting Temperature

Using a slotted screwdriver, loosen screw 1 and remove knob 2. Using a Phillips screwdriver, loosen screws 3 and remove locking plate 4.

Use an Allen screwdriver or knob 2 to adjust screw A against scale plate A. Use an Allen screwdriver or a slotted screwdriver to adjust screw B against scale plate B.

Set Point Setting Scale Differential Setting Scale



Increasing



Decreasing

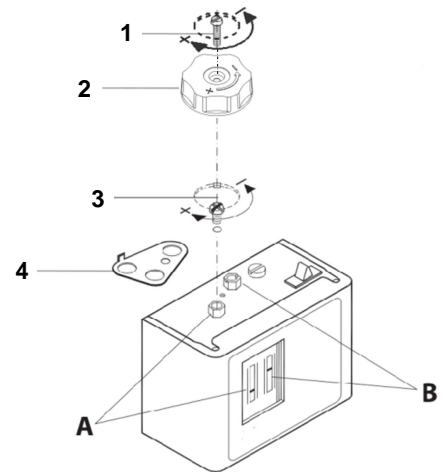


Increasing



Decreasing

A - Set point scale
B - Differential scale



VII. Install Harness, Switch And Capillary Tube

Loosen screws 1 (Fig. 1) and remove the front cover. Route the wire through Cable entry 2 (Fig. 2); connect contacts to the corresponding terminals 3 (Fig. 2), and Connect the earth wire to the corresponding terminal. Put the protective cover on the switch housing and tighten the screws 1 (Fig. 1). Fasten the temperature housing to a flat surface using the supplied bracket.

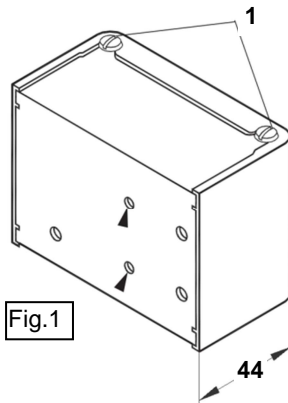


Fig.1

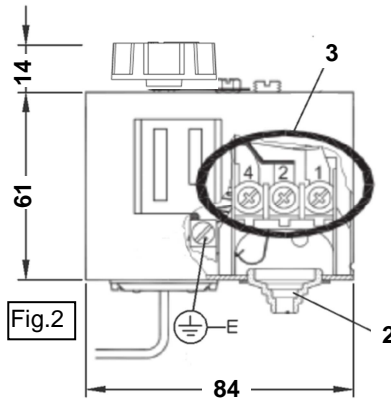


Fig.2

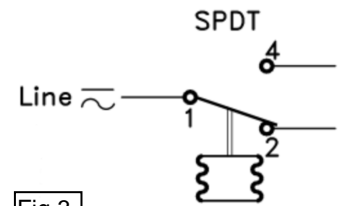
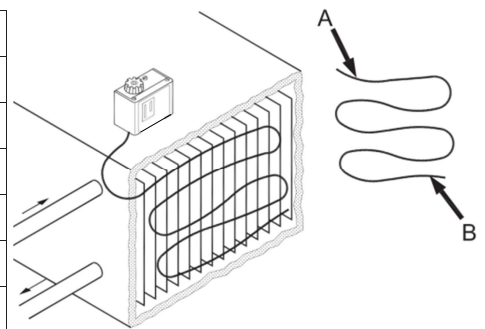


Fig.3

When mounted on a wall bracket, the permissible vibration of the switch housing is within the range of 0–1,000 Hz, 4 g. Install the capillary tube in the air duct, or in any other area where temperature control is required, using the supplied mounting plastic corners. The minimum length of the capillary tube in thermal contact with a controlled environment is as follows:

Capillary length[m]	Switch weight [kg]	AB Minimum length[m]
1	0.460	0.2
2	0.487	0.25
3	0.520	0.28
4	0.565	0.35
6	0.625	0.43
11.5	0.868	0.63



Safety Warning

Temperature switches must be used strictly for their intended purpose indicated in the technical documentation. Only personnel who have studied the design and safety regulations may service the device.

Scope of Supply

The scope of supply includes: temperature switch, wall bracket with screws, plastic fasteners for the capillary tube with screws, user guide.

Marking and Packaging

Information on the manufacturer's trademark, product designation, code number, date of manufacture and main technical characteristics are provided on the product's housing and/or packaging according to the order requirements.