

### ***Changeover Switch General Instructions***

---

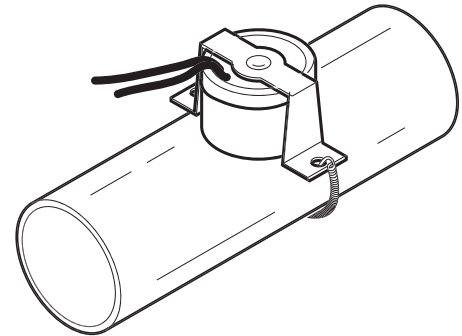
#### **Application**

The 680 series low or line voltage changeover switches are designed to switch a thermostat from heating to cooling based on a change in supply water temperature. The 680 series switches can be mounted on 5/8" or 7/8" O.D. copper tube or iron pipe.

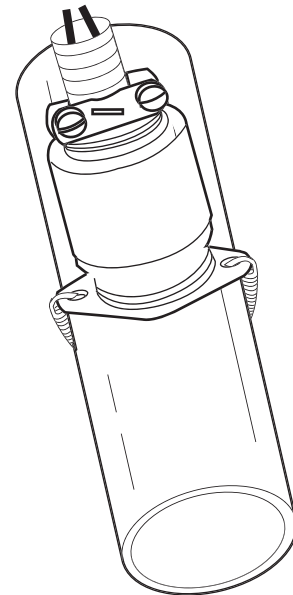
Both models are easily mounted to the supply piping with a simple spring clip included with the thermostat. Each thermostat also includes the necessary wire nuts and strain relief bushing.

#### **Features**

- Strap on seasonal change over switch
- Includes all necessary parts for installation
- Snap acting SPDT



**680-243-5  
Changeover Switch**



**680-243-6  
Changeover Switch  
with Conduit Connection**

## SPECIFICATIONS

### Inputs

#### Connections:

**Power,** Three color-coded leads, 36" (914 mm).

**Current Rating,** See Model Chart.

### Outputs

#### Mechanical:

**Changeover Temperature Range,** Switch closes white to black (heat):  $83^{\circ}\text{F} \pm 5^{\circ}\text{F}$  ( $18^{\circ}\text{C} \pm 2.6^{\circ}\text{C}$ ). Switch closes white to blue (cool):  $65^{\circ}\text{F} \pm 5^{\circ}\text{F}$  ( $28^{\circ}\text{C} \pm 2.6^{\circ}\text{C}$ ).

### Environment

#### Temperature limits:

**Shipping & Storage,** 20 to  $176^{\circ}\text{F}$  ( $-29$  to  $80^{\circ}\text{C}$ )

**Maximum Operating,**  $220^{\circ}\text{F}$  ( $104^{\circ}\text{C}$ ) fluid at ambient temperature of  $125^{\circ}\text{F}$  ( $52^{\circ}\text{C}$ )

**Shipping Weight:** 0.31 lb (69 mg).

**Location:** NEMA Type 1.

### Agency Approval

**CSA:** Approved.

Table-1 Model Chart.

Model	Voltage	Inductive		Resistive Amps	Conduit Connection
		FLA	LRA		
680-243-5	120	5.8	34.8	10	No
	240	2.9	17.4	5	
680-243-6	120	10.0	60.0	25	Yes
	240	5.0	30.0	25	

### TYPICAL APPLICATIONS (wiring diagram)

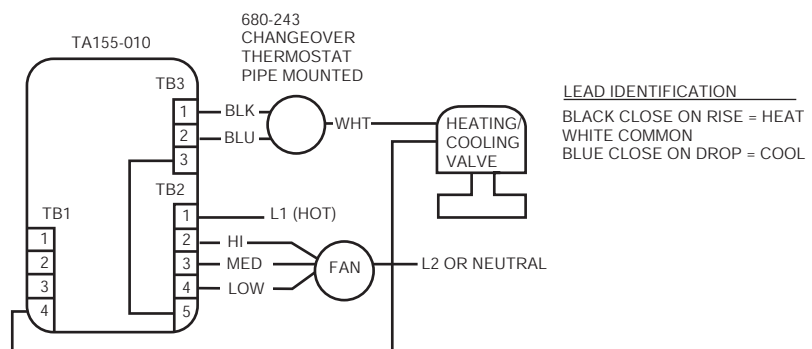


Figure-1 Typical Wiring.

## INSTALLATION

### Inspection

Inspect the package for damage. If damaged, notify the appropriate carrier immediately. If undamaged, open the package and inspect the device for obvious damage. Return damaged products.

#### Requirements

- Training: Installer must be a qualified, experienced technician
- Other accessories as appropriate

### Precautions

#### General

##### CAUTION:

- Electrical shock hazard! Disconnect power before installation to prevent electrical shock or equipment damage.
- Make all connections in accordance with the electrical wiring diagram and in accordance with national and local electrical codes.

##### WARNING:

- Avoid locations where excessive moisture, corrosive fumes, explosive vapors, or vibration are present.
  - Avoid electrical noise interference. Do not install near large conductors, electrical machinery, or welding equipment.
- 

### Mounting

Mount the changeover switch on a main supply header so that 680-243 accurately senses hot or cold fluid in piping. Avoid mounting on or near a section of pipe with no flow.

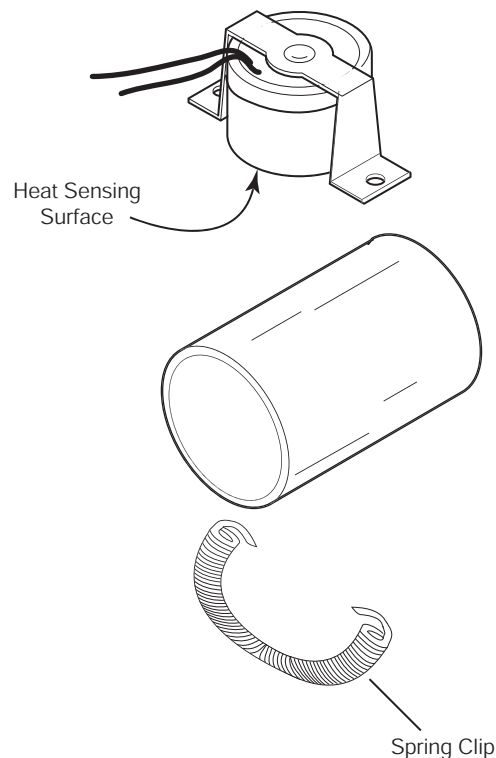


Figure-2 Mounting.

## MAINTENANCE

The 680-243-X series requires no maintenance. Replace defective modules.

Regular maintenance of the total system is recommended to assure sustained, optimum performance.

## FIELD REPAIR

None. Replace any damaged or failed components with functional replacements.

On October 1st, 2009, TAC became the Buildings business of its parent company Schneider Electric. This document reflects the visual identity of Schneider Electric, however there remains references to TAC as a corporate brand in the body copy. As each document is updated, the body copy will be changed to reflect appropriate corporate brand changes.

Copyright 2010, Schneider Electric  
All brand names, trademarks and registered  
trademarks are the property of their respective  
owners. Information contained within this  
document is subject to change without notice.

F-27017-3

