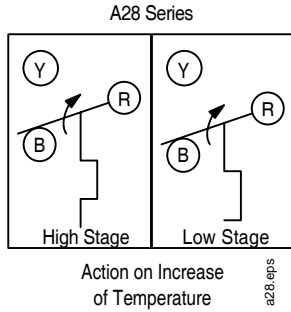


A28 Series

# Two Stage Temperature Control

## Description

The A28 Series are two stage temperature controls that incorporate a liquid filled sensing element.



A28 Action Diagram



A28AA-4



A28AB-29

## Features

- wide temperature ranges available
- constant differential throughout the entire range
- SPDT snap-acting switches
- unaffected by changes in barometric pressure
- unaffected by cross ambient conditions
- compact enclosure
- variety of sensing element styles

## Applications

Use for temperature sensing applications requiring two-stage control of HVAC/Refrigeration equipment.

## Accessories

- packing nut assembly available for direct immersion applications (Part No. **FTG13A-600R**)
- remote bulb models include 5/8 in. mounting clip

## Selection Charts

Code Number	Switch Action	Range °F (°C)	Diff F° (C°)	Bulb and Capillary	Bulb Well No. (order separately)	Range Adjuster
<b>COILED BULB—FIXED DIFFERENTIAL</b>						
A28AA-4C	2-SPDT	30 to 110 (-1 to 43)	3 1/2 (1.9) Ea. Stage 3 (1.7) Fixed Between Stages	1-3/8 in. x 2-1/4 in. Coiled	—	Convertible
<b>CASE COMPENSATED—FIXED DIFFERENTIAL</b>						
A28AA-9C	2-SPDT	20 to 80 (-7 to 27)	3 1/2 (1.9) Ea. Stage 3 (1.7) Fixed Between Stages	3/8 in. x 5 in. 6 ft Cap. <sup>1</sup>	WEL14A-603R	Knob
<b>WIDE RANGE—ADJUSTABLE INTERSTAGE DIFFERENTIAL</b>						
A28AA-28C	2-SPDT	30 to 110 (-1 to 43)	3 1/2 (1.9) Ea. Stage 2 to 7 Adj. Between Stages	12 ft averaging bulb 6 ft Cap.	—	Screwdriver Slot
A28AA-29C	2-SPDT	-30 to 100 (-34 to 38)	5 (2.8) Ea. Stage 2 to 7 Adj. Between Stages	3/8 in. x 4 in. 8 ft Cap. <sup>1</sup>	WEL14A-602R	Convertible
A28AA-36C	2-SPDT	40 to 90 (4 to 32)	3 Ea. Stage 2 to 7 Adj. Between Stages	3/8 in. x 5-3/4 in. 6 ft Cap.	—	Knob
A28AA-37C	2-SPDT	60 to 140 (16 to 60)	5 Ea. Stage 2 to 7 Adj. Between Stages	3/8 in. x 4 in. 6 ft Cap.	WEL14A-602R	Knob
A28AJ-4C	2-SPDT	20 to 80 (-7 to 27)	2 Ea. Stage 2 to 7 Adj. Between Stages	3/16 in. x 22 in. 6 ft Cap.	—	Knob
<b>CHANGEOVER CONTROL</b>						
A28AB-1C	2-SPDT <sup>2</sup>	20 to 80 (-7 to 27)	3 1/2 (1.9)	3/8 in. x 5 in. 6 ft Cap.	WEL14A-603R	Screwdriver Slot
A28AB-2C <sup>3</sup>	2-SPDT <sup>4</sup>	60 to 90 (16 to 32)	5 (2.8)	Strap-on Grid Bulb 42 in. Cap.	—	Screwdriver Slot

1. Packing nut assembly available for direct immersion applications (Part No. **FTG13A-600R**).

2. Switches within 1 F° (0.6 C°) of each other.

3. Maximum sensing element temperature is 250°F (121°C).

4. Switches within 1.5 F° (0.9 C°) of each other.



## Two Stage Temperature Control (Continued)

### Replacement Parts

Code Number	Description
CVR28A-617R	Concealed adjustment
CVR28A-618R	Visible scale
KNB20A-602R	Knob kit

### Technical Specifications

Maximum bulb temperature of A28AA-37 is 230°F (110°C). For all others, maximum bulb temperature is 140°F (60°C).

### Electrical Ratings

Motor Ratings VAC	120	208	240	277
<b>A28AA, A</b>				
AC Full Load A	16.0	9.2	8.0	---
AC Locked Rotor A	96.0	55.2	48.0	---
Non-Inductive or Resistance Load A (Not Lamp Loads)	16.0	9.2	8.0	7.2
Pilot Duty – 125 VA, 24 to 277 VAC <sup>1</sup>				
<b>A28AJ</b>				
AC Full Load A	6.0	3.4	3.0	---
AC Locked Rotor A	36.0	20.4	18.0	---
Non-Inductive or Resistance Load A (Not Lamp Loads)	15.0	9.2	8.0	7.2
Pilot Duty – 125 VA, 24 to 277 VAC <sup>1</sup>				
<b>A28AB</b>				
AC Full Load A	16.0	9.2	8.0	---
AC Locked Rotor A	96.0	55.2	48.0	---
Non-Inductive or Resistance Load A (Not Lamp Loads)	16.0	9.2	8.0	7.2
Pilot Duty – 125 VA, 24 to 277 VAC <sup>1</sup>				

1. When used as two circuit control, the total connected load must not exceed 2000 VA.