

A19 Series Remote Bulb Control

Description

The A19 Series Controls are single-stage temperature controls that incorporate environmentally friendly liquid-filled sensing elements.

Refer to the *A19 Series Hot Water Heating Controls Well Immersion Product Bulletin (LIT-125025)* for important product application information.

Features

- wide temperature ranges available
- constant differential throughout the entire range
- compact enclosure
- fixed or adjustable differential available
- variety of sensing element styles
- unaffected by cross-ambient conditions

Applications

The A19 is suitable for temperature control in HVAC/R applications.

Selection Charts

A19 Series Remote Bulb Control¹

Product Code Number	Switch Action	Range °F (°C)	Differential F° (C°)	Bulb and Capillary	Bulb Well No. (Order Separately)	Range Adjuster	Max. Bulb Temp. °F (°C)
Adjustable Differential (Wide Range)							
A19ABA-40C²	Single-Pole, Single-Throw (SPST) Open low	-30 to 100 (-34 to 38)	3 to 12 (1.7 to 6.7)	3/8 in. x 4 in., 6 ft. capillary	WEL14A-602R	Screwdriver Slot	140 (60)
A19ABC-4C	SPDT	50 to 130 (10 to 55)	3-1/2 to 14 (1.9 to 8)	3/8 in. x 5 in., 8 ft. capillary	WEL14A-603R	Knob	170 (77)
A19ABC-24C³	SPDT	-30 to 100 (-34 to 38)	3 to 12 (1.7 to 6.7)	3/8 in. x 4 in., 8 ft. capillary	WEL14A-602R	Convertible	140 (60)
A19ABC-36C	SPDT	-30 to 100 (-34 to 38)	3 to 12 (1.7 to 6.7)	3/8 in. x 4 in., 20 ft. capillary	WEL14A-602R	Convertible	140 (60)
A19ABC-37C	SPDT	-30 to 100 (-34 to 38)	3 to 12 (1.7 to 6.7)	3/8 in. x 4 in., 10 ft. capillary	WEL14A-602R	Screwdriver slot	140 (60)
A19ABC-74C	SPDT	-30 to 100 (-34 to 38)	3 to 12 (1.7 to 6.7)	3/8 in. x 4 in., 6 ft. capillary	WEL14A-602R	Screwdriver slot	140 (60)
Fixed Differential							
A19AAF-12C	SPDT	25 to 225 (-4 to 107)	3-1/2 (1.9)	3/8 in. x 3 in., 10 ft. capillary	WEL14A-602R	Screwdriver slot	275 (135)
Fixed Differential (Case Compensated)							
A19AAC-4C	SPDT	0 to 80 (-18 to 27)	5 (2.8)	3/8 in. x 4 in., 6 ft. capillary	WEL14A-602R	Screwdriver slot	140 (60)
A19AAD-12C	SPST Open low	-30 to 50 (-34 to 10)	2-1/2 (1.4)	3/8 in. x 4 in., 7 ft. capillary	WEL14A-602R	Screwdriver slot	140 (60)
Fixed Differential (Close)							
A19AAD-5C⁴	SPST Open low	30 to 50 (-1 to 10) (Bulk Milk Cooler)	2-1/2 (1.4)	3/8 in. x 2-5/8 in., 6 ft. capillary	WEL16A-601R	Screwdriver slot	190 (88)
A19AAF-20C	SPDT	-30 to 100 (-34 to 38)	2-1/2 (1.4)	3/8 in. x 4 in., 6 ft. capillary	WEL14A-602R	Screwdriver slot	140 (60)
A19AAF-21C	SPDT	40 to 90 (4 to 32)	1-1/2 (0.8)	3/8 in. x 5-3/4 in., 6 ft. capillary	WEL14A-603R	Screwdriver slot	140 (60)
Manual Reset							
A19ACA-14C	SPST Open low	-30 to 100 (-34 to 38)	Manual reset	3/8 in. x 4 in. 6 ft capillary	WEL14A-602R	Screwdriver slot	140 (60)
A19ACA-15C	SPST Open low	-30 to 100 (-34 to 38)	Manual reset	3/8 in. x 4 in. 10 ft capillary	WEL14A-602R	Screwdriver slot	140 (60)
A19ADB-1C	SPST Open high	100 to 240 (38 to 116)	Manual reset	3/8 in. x 3-1/2 in. 6 ft capillary	WEL14A-602R	Knob	290 (143)
A19ADB-38C	SPST Open high	100 to 240 (38 to 116)	Manual reset	3/8 in. x 4 in. 6 ft capillary	WEL14A-602R	Screwdriver slot	290 (143)

1. Specify the control model code number, packing nut code number (if required), and bulb well code number (if required).

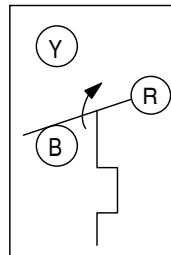
2. Replaces White-Rodgers® 1609-101

3. Replaces White-Rodgers 1609-12, -13; Ranco® 010-1408, -1409, -1410, -1490, 060-110; Honeywell® L6018C-1006, L6021A-1005, T675A-1011, -1508, -1516, -1821, T4301A-1008, T6031A-1011, T6031A-1029

4. Case-Compensated

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult th Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products. © 2015 Johnson Controls, Inc.

A19 Series



Action on Increase of Temperature

**A19 Series
Terminal Arrangement for Single-Pole,
Double-Throw (SPDT)**

a19.eps



A19ABC-24 Remote Bulb Control



Single-Stage Electromechanical Temperature Controls

A19 Series Remote Bulb Control (Continued)

Replacement Parts

Product Code Number	Description
CVR28A-617R	Concealed adjustment cover
CVR28A-618R	Visible scale cover
KNB20A-602R	Replacement Knob Kit

Accessories

A packing nut is available for closed tank application.

Specify the code number **FTG13A-600R**.

Bulb wells (WEL14A Series) are available for liquid immersion applications.

See the selection chart or the *Bulb Wells Catalog Page (LIT-1922135)*.

Technical Specifications

Electrical Ratings

Motor Ratings VAC	120	208	240
Wide Range – Adjustable Differential			
AC Full Load A	16.0	9.2	8.0
AC Locked Rotor A	96.0	55.2	48.0
Non-Inductive A ¹	22 A, 120 to 277 VAC		
Pilot Duty	125 VA, 24 to 600 VAC		
Fixed Differential and Close Differential			
AC Full Load A	6.0	3.4	3.0
AC Locked Rotor A	36.0	20.4	18.0
Non-Inductive A	10 A, 24 to 277 VAC		
Pilot Duty	125 VA, 24 to 277 VAC		
Case Compensated – Fixed Differential A19AAC-4			
AC Full Load A	16.0	9.2	8.0
AC Locked Rotor A	96.0	55.2	48.0
Non-Inductive A ¹	22 A, 120 to 277 VAC		
Pilot Duty	125 VA, 24 to 600 VAC		
A19AAD-12			
AC Full Load A	6.0	3.4	3.0
AC Locked Rotor A	36.0	20.4	18.0
Non-Inductive A	10 A, 24 to 277 VAC		
Pilot Duty	125 VA, 24 to 277 VAC		
Manual Reset			
AC Full Load A	16.0	9.2	8.0
AC Locked Rotor A	96.0	55.2	48.0
Non-Inductive A	16.0	9.2	8.0
Pilot Duty	125 VA, 24 to 600 VAC		

1. SPST and N.O. contact of SPDT control;
SPDT N.C. contact- 16 amperes 120 to 277 VAC