

Description

Figure 1: A19ABC-24 Remote Bulb Control



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.

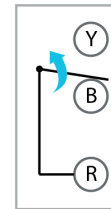
Features

- 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.

Figure 2: A19 Series switch action for single-pole, double-throw (SPDT)



- ① **Note:** On a temperature increase above the set point, the circuit from red to blue (RB) opens, and simultaneously red to yellow (RY) closes.

Selection charts

Specify the control model code number. If required, specify the packing nut or bulb well code number.

Table 1: A19 Series Remote Bulb Control selection chart

Product code number	Switch action	Range °F (°C)	Differential F° (C°)	Bulb and capillary	Bulb well Order separately	Range adjuster	Maximum bulb temperature °F (°C)
Adjustable differential, wide range							
A19ABA-40C ⓘ Note: Replaces White-Rodgers® 1609-101	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-24C ⓘ Note: 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	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)
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-5C ⓘ Note: Case-compensated	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)

Table 2: 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 applications. 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)*.

Electrical ratings

Table 3: A19ADB cULus electrical ratings

VAC 60 Hz	120	208	240	277
Full load amperes	16.0	9.2	12.0	—
Locked rotor amperes	96.0	55.2	72.0	—
Resistive amperes, SPST	26.1			22.0
Pilot duty	125 VA, at 24 VAC to 600 VAC			

Table 4: A19ABC cULus electrical ratings

VAC 60 Hz	120	208	240	277
Full load amperes	16.0	9.2	12.0	—
Locked rotor amperes	96.0	55.2	72.0	—
Resistive amperes, SPST (SPDT)	22.0 (16.0)			
Pilot duty	125 VA, at 24 VAC to 600 VAC			

Table 5: A19ABA cULus electrical ratings

VAC 60 Hz	120	208	240	277
Full load amperes	16.0	9.2	12.0	—
Locked rotor amperes	96.0	55.2	72.0	—
Resistive amperes, SPST	22.0			
Pilot duty	125 VA, at 24 VAC to 600 VAC			

Table 6: A19AAF cULus electrical ratings

VAC 60 Hz	120	208	240	277
Full load amperes	6.0	3.4	3.0	—
Locked rotor amperes	36.0	20.4	18.0	—
Resistive amperes, SPST or SPDT	15.0			
Pilot duty	125 VA, at 24 VAC to 277 VAC			

Table 7: A19AAD cULus electrical ratings

VAC 60 Hz	120	208	240	277
Full load amperes	6.0	3.4	3.0	—
Locked rotor amperes	36.0	20.4	18.0	—
Resistive amperes, SPST	15.0			
Pilot duty	125 VA, at 24 VAC to 277 VAC			

Conformity declaration information

Table 8: Conformity information

Information	Description
Purpose of the control	Temperature control
Method of mounting the control	Surface-mounted. Attached through holes in the back of the case.
Method of grounding the control	Wiring binding screw terminal
Type 1 or Type 2 action	Standard models: Type 1.B micro-disconnection 600 V rating models: Type 1.C micro-interruption
External pollution situation	Pollution degree 3
Rated impulse voltage	6,000 VAC
Compliance	UL Guide No. XAPX, File E6688 cUL Guide XAPX7, File E6688

Note: The 600 VAC rating is for pilot duty only.

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Single point of contact

APAC	EU	UK	NA/SA
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