

# All Series Low Temperature Cutout Controls Catalog Page

2021-08-20 LIT-1927005



### Description

The A11 Series Low Temperature Cutout Controls are available with single-pole, single-throw (SPST) or single-pole, double-throw (SPDT) contact action. Applications include the sensing of low temperature conditions to avoid over cooling or icing of hydronic coils, cooling coils, and liquid-handing pipes. The controls are compact and sturdy, and have an adjustable temperature setpoint range with a fixed differential. You can access the range adjustment screw at the bottom of the control, or at the top of the control when you remove the cover. A factory-set low temperature stop is available when specified.

Refer to the *A11 Series Low Temperature Cutout Controls Product Bulletin (LIT-125010)* for additional product application information.

### **Features**

- Precision repeat accuracy: the control always senses at the coldest point across the full length of the sensing element. The control remains unaffected by ambient temperature at the diaphragm cup and the 4 ft (1.2m) capillary. Install a 20 ft (6.1 m) or 40 ft (12.2 m) sensing element in the controlled area.
- Trip-free manual reset provides the option to reset the lever. Press and release the lever before operation resumes.
- Precision snap-acting contacts in a dust protected enclosure provides for the A11 Control to operate to the fullest potential.
- Direct reading scale provides easy-to-adjust setpoint. You can make adjustments from the top or bottom of the control.

### Repair information

If the A11 Series Low Temperature Cutout Control fails to operate within its specifications, replace the unit. For a replacement control, contact the nearest Johnson Controls® representative.

## All electrical rating

Table 1: A11 Series electrical rating

Description	cULus		
Volts AC 50/60 Hz	120	208	240
Full load amperes	16	9.2	8
Lock rotor amperes	96	55.2	48
Resistive amperes	16	9.2	8
Pilot duty	125 VA, 24 VAC to 277 VAC		

### Selection chart

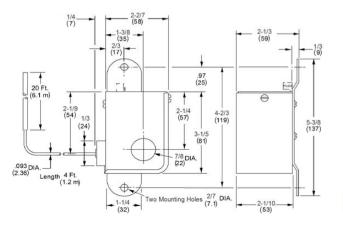
### **Table 2: Selection chart**

Model	Description	
A11A	SPST, open low, manual reset	
A11B	SPST, open low, automatic recycle	
A11D	SPDT, manual reset	
A11E	SPDT, automatic recycle	



### **Dimensions**

# Figure 1: A11 Series Low Temperature Cutout Controls dimensions, in. (mm)



# All Low Temperature Cutout Controls technical specifications

**Table 3: A11 Low Temperature Cutout Controls technical specifications** 

Specification	Description	
Product codes	A11A: SPST, open low, manual reset	
	A11B: SPST, open low, automatic recycle	
	A11D: SPDT, manual reset	
	A11E: SPDT, automatic recycle	
Range cutout	35°F to 45°F (2°C to 7°C)	
Differential	A11A and A11D: Temperature must be 12°F (6.7°C) above cutout point before you can reset the control.	
	A11B and A11E: 12°F (6.7°C)	
Maximum temperature at bulb	250°F (121°C)	
Sensing element	1/8 in. x 20 ft (3.2 mm x 6.1 m) or 1/8 in. x 40 ft (3.2 mm x 12.2 m)	
Capillary length	4 ft (1.2 m)	
Switch	Snap-acting contacts in dust-protected enclosure	
Material	Case: 0.6 in. (1.6 mm) cold rolled steel	
	Cover: 0.3 in. (0.8 mm) cold rolled steel	
Finish	Galvanized steel	
Mounting bracket	Standard on all controls	
Shipping weight	Individual pack: 1.8 lb (0.8 kg)	
	Overpack of 20 units: 38 lb (17 kg)	

# All conformity declaration

**Table 4: Conformity declaration** 

Information	Description
Purpose of the control	Low temperature cutout control
Construction of the control	Electromechanical independently mounted control
Number of cycles	30K cycles auto reset, 6K cycles manual reset
Method of mounting the control	Permanently attached through hole in mounting bracket

### **Table 4: Conformity declaration**

Information	Description		
Method of earthing the	Wiring binding screw terminal		
control			
Type 1 or Type 2 action	Type 1.B; micro-disconnection		
External pollution situation	Pollution degree 3		
Internal pollution situation	Pollution degree 2		
Rated impulse voltage	4,000 VAC		
Ball pressure temperature	Switch component 302°F (150°C)		
Field wiring rating	Use copper conductors only, rated at least 194°F (90°C)		
Switch	SPST (A11A, A11B), SPDT (A11D, A11E)		
Enclosure	UL: Type 1 (NEMA)		
Wiring connection	Three color-coded screw terminals, SPDT only, and one		
	ground terminal		
Conduit connection	One 7/8 in. (22 mm) hole for 1/2 in. (12.7 mm) trade size		
	(or PG16) conduit		
Ambient conditions	0°F (-18°C) to 140°F (60°C)		
Compliance	North America	cULus listed; UL60730, CSA E60730 File SA516	

## **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	Europe	NA/SA
JOHNSON CONTROLS	JOHNSON CONTROLS	JOHNSON CONTROLS
C/O CONTROLS PRODUCT	VOLTAWEG 20	507 E MICHIGAN ST
MANAGEMENT	6101 XK ECHT	MILWAUKEE WI 53202
NO. 32 CHANGJIANG RD NEW DISTRICT	THE NETHERLANDS	USA
WUXI JIANGSU PROVINCE 214028		
CHINA		

### Contact information

Contact your local branch office: www.johnsoncontrols.com/locations

Contact Johnson Controls: www.johnsoncontrols.com/contact-us

