# **A11 Series Low Temperature Cutout Controls**

# Product Bulletin

A11A, A11B, A11D, A11E

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A11 Series low temperature cutout controls are available with Single-Pull, Single-Throw (SPST) or Single-Pull, Double-Throw (SPDT) contact action. Typical 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. The range adjustment screw is accessible at the bottom of the control, and at the top of the control when the cover is removed.



Figure 1: A11 Series Low Temperature Cutout Control

Features	Benefits
Precision Repeat Accuracy	Remains unaffected by ambient temperature at the control diaphragm cup and 4 ft (1.2 m) capillary (20 ft [6.1 m] sensing bulb must be in the controlled area).
Trip-Free Manual Reset	Allows the lever to reset. You must press and release the lever before operation resumes.
Recision Snap-Acting Contacts in a Dust Protected Enclosure	Enables the A11 to operate to the fullest potential.
Direct Reading Scale	Provides easy to adjust setpoint. Adjustments can be made from the top or bottom of the control.

#### Table 1: Features and Benefits



## Overview

The A11 controls are compact and sturdy and feature an adjustable range with a fixed differential. The range adjustment screw is accessible at the bottom of the control or at the top, when the cover is removed. A factory-set low temperature stop is available when specified.

Figure 2 shows the A11 dimensions. Figure 2 describes the A11 electrical ratings.

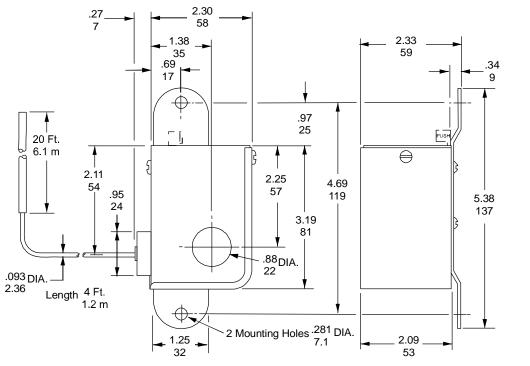


Figure 2: A11 Series Low Temperature Cutout Controls Dimensions, in. (mm)

#### Table 2: Electrical Rating

Motor Rating	120 V	208 V	240 V		
Motor Description	120 V				
AC Full Load Amperes	16.0	9.2	8.0		
AC Locked Rotor Amperes	96.0	55.2	48.0		
Non-Inductive Amperes	16.0	9.2	8.0		
Pilot Duty - 125 VA, 24 to 277 VAC					

# **Ordering Information**

Table 3 describes the A11 Series Low Temperature Cutout Control models.

#### Table 3: A11 Models

Model	Description
A11A	Single-Pull, Single-Throw (SPST), Open Low, Manual Reset
A11B	SPST, Open Low, Automatic Recycle
A11D	Single-Pull, Double Throw (SPDT), Manual Reset
A11E	SPDT, Automatic Recycle

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When ordering an A11 Series Low Temperature Cutout Control:

- 1. Specify the product number.
- 2. Specify the low temperature cutout stop setting, if necessary.

## **Repairs and Replacements**

If the A11 Series Low Temperature Cutout Control fails to operate within its specifications, replace the unit. Contact your nearest Johnson Controls® representative.

# **Technical Specifications**

#### A11 Low Temperature Cutout Controls

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 to 45°F (2 to 7°C)		
Differential	A11A and A11D: Temperature must be 12°F (6.7°C) above cutout point before control can		
	be reset.		
	A11B and A11E: 12°F (6.7°C)		
Ambient Temperature	Minimum: 0°F (-18°C)		
	Maximum: 140°F	(60°C)	
Maximum Temperature at	250°F (121°C)		
Bulb			
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 (1.6 mm) Cold Rolled Steel		
	Cover: 0.3 in. (0.8 mm) Cold Rolled Steel		
Finish	Galvanized Steel		
Conduit Opening	22 mm (0.9 in.) hole for 12.7 mm (1/2 in.) conduit		
Mounting Bracket	Standard on all controls		
Shipping Weight	Individual Pack: 1.8 lb (0.8 kg) Overpack of 20 Units: 38 lb (17 kg)		
Electrical Rating	Pilot Duty: 125 VA, 24 to 277 VAC		
Motor Ratings	AC Full Load Ampere: 120 V = 16.0 A, 208 V = 9.2 A, 240 V = 8.0 A		
	AC Locked Rotor Ampere: 120 V = 96.0 A, 208 V = 55.2 A, 240 V = 48.0 A		
	Non-Inductive Ar	mpere: 120 V = 16.0 A, 208 V = 9.2 A, 240 V = 8.0 A	
Compliance	United States	UL Listed, File SA516, SDFY	
		FCC Compliant to CFR 47, Part 15 Subpart B, Class A	
	Canada	UL Listed, CSA Class No. 1222 01, File LR948	
		Industry Canada, ICES-003	

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



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