

APS-3C Snow Melting/De-icing Controller



- Automatic Snow/Ice Melting Control
- Energy Management Computer (EMC) Interface
- Compatible with MI, Constant Wattage and Self-Regulating Heaters
- Multiple Sensor Capability
 - Up to 6 Temperature/Moisture Sensors
- Heater Hold-On and Test Capabilities
- C-UL-US
- Simple to Install and Operate
- Low System Costs
- Minimum Energy Costs

Description

The APS-3C Snow Switch when used with compatible sensors automatically controls snow/ice melting heaters, ensuring minimum operating costs. Typical applications include pavement, sidewalk, loading dock, roof, gutter and down spout snow/ice melting. The APS-3C is interchangeable with earlier APS-3 models.

The adjustable hold-on timer continues heater operation for up to 10 hours after snow stops to ensure complete melting. The optional RCU-3 Remote Control Unit can be located where system operation can be conveniently observed. It duplicates many of the controls and indicators on the APS-3C front panel. It is used to clear tracked and drifting snow that may not land on a sensor.

The calibrated 40°F to 90°F (4°C to 32°C) high limit thermostat prevents excessive temperatures when using constant wattage and MI heaters. It also permits safe testing at outdoor temperatures too high for continuous heater operation. The temperature sensor is included.

The APS-3C provides a relay closure interface for use with energy management computers (EMC). This feature can also be used for general purpose remote control and annunciation and other advanced applications.

All sensor and communications wiring is NEC Class 2. This simplifies installation while enhancing fire and shock safety. The APS-3C can interface up to six sensors from the CIT-1 product family. Using more sensors provides superior performance by better matching the controller to site performance requirements.

The APS-3C is an exceptionally capable deicing controller. For complete information describing its application, installation and features, please contact your local Chromalox sales office.

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APS-3C

Snow Melting/De-Icing Controller

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Specifications

General

Area of use Nonhazardous locations

Enclosure

Protection NEMA 3R
 Cover attachment Hinged polycarbonate cover, lockable
 Entries 3 × 1-1/16" entries
 Material Polycarbonate
 Mounting Wall mounted

Control

| | | |
|----------------------|---|--------------------------------|
| Supply | PCN 389837 | 120 VAC, 50/60 Hz, 35 VA |
| | PCN 389829 | 208-240 VAC, 50/60 Hz, 35 VA |
| Load | PCN 389837 | 120 VAC, 24 amp max. inductive |
| | PCN 389829 | 240 VAC, 24 amp max. inductive |
| Contact type | Form C (NO-C-NC) | |
| Maximum Ratings | Voltage: 240 VAC Current: 24 amps | |
| Heater hold-on timer | 0 to 10 hours; actuated by snow stopping or toggle switch System test Switch toggles the heater contact on and off. If temperature exceeds high limit, heater cycles to prevent damage. | |

Snow/Ice Sensors

Sensor type Up to 6 sensors from the CIT-1 product family
 Circuit type NEC Class 2
 Lead length Up to 500' (152m) using 18 AWG 3-wire jacketed cable
 Up to 2,000' (609m) using 12 AWG 3-wire jacketed cable

High Limit Thermostat

Adjustment range 40°F to 90°F (4°C to 32°C)
 Dead band 1°F (0.6°C)
 Sensor type Thermistor network
 Circuit type NEC Class 2
 Lead length Up to 500' (152m) using 18 AWG 2-wire jacketed cable
 Up to 1,000' (304m) using 12 AWG 2-wire jacketed cable

Energy Management Computer (EMC) Interface

Inputs OVERRIDE ON (10 ma dry switch contact)
 OVERRIDE OFF (10 ma dry switch contact)
 Outputs SUPPLY (10 ma dry switch contact)
 SNOW (10 ma dry switch contact)
 HEAT (10 ma dry switch contact)
 HIGH TEMP (10 ma dry switch contact)
 ALARM (10 ma dry switch contact)

Environmental

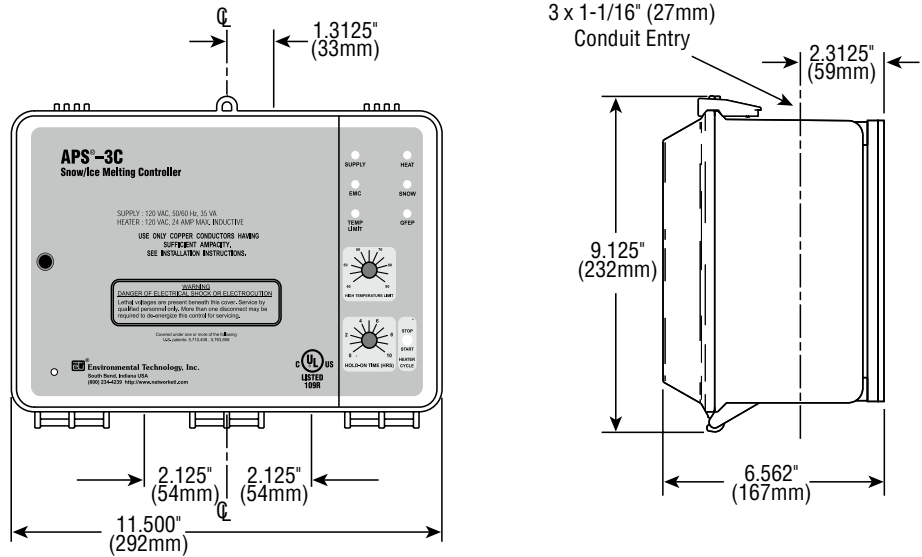
Operating temperature -40°F to 160°F (-40°C to 71°C)
 Storage temperature -50°F to 180°F (-45°C to 82°C)

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Dimensions



Specifications and Ordering Information

| Model Number | PCN | Stock |
|-----------------------------------|--------|-------|
| APS-3C Control Panel, 120 VAC | 389837 | NS |
| APS-3C Control Panel, 208-240 VAC | 389829 | S |

Stock Status: S = stock AS = assembly stock NS = non-stock
To Order—Specify model, PCN and quantity.