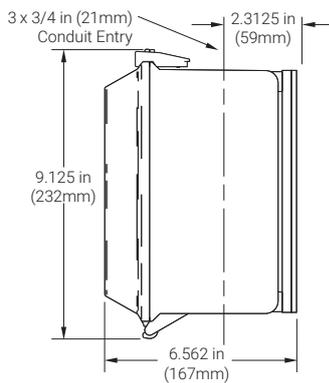
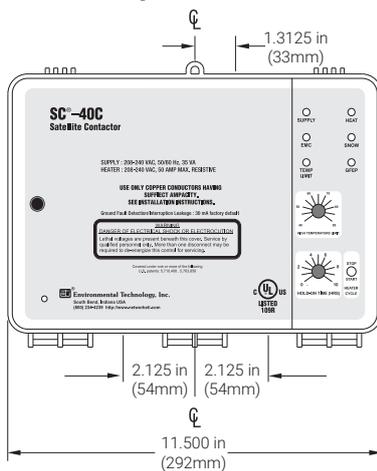


SNOW AND ICE MELTING SATELLITE CONTACTOR



PRODUCT OVERVIEW

The ETI SC-40C snow and ice melting satellite contactor answers the need for cost effective modular snow melting heater control. One or more SC-40Cs, when used with an APS-4C control panel acting as the master control, allow for modular snow melting system design. There is no limit to the number of SC-40Cs that can be interfaced in a single system. This approach reduces front end design, hardware, and installation costs while providing a number of useful features that would be otherwise too expensive and complex to implement.

The SC-40C provides Ground-Fault Equipment Protection (GFEP) as required by the national electrical codes. Upon sensing a ground-fault condition, the SC-40C inhibits operation of its contactor until manually reset. Circuits without a ground fault continue to operate normally, thus partitioning defective heating cables.

The adjustable hold-on timer continues heater operation on each SC-40C for up to 10 hours after snow stops to ensure complete melting and to compensate for differences between zones. The optional RCU-4 remote control unit can be located where system operation can be conveniently observed. It duplicates many of the controls and indicators on the SC-40C front panel.

Each SC-40C provides a complete energy management computer (EMC) interface. This feature provides remote access for advanced applications requiring remote or zone control along with remote annunciation.

Each SC-40C maintains communications to and from the APS-4C using a 3-wire cable. Thus, the APS-4C alarms ground faults occurring anywhere in the system. This feature inserts a short time delay between the operation of each contactor, thus improving power quality by limiting the inrush current. The RCU-4 remote control unit supplied permits overriding zone control in applications requiring the capability.

For complete information describing its application, installation and features, please contact your Thermal Management representative or visit our web site at nVent.com.

GENERAL

Area of use Nonhazardous locations

Approvals



ENCLOSURE

Protection NEMA 3R

Cover attachment Hinged polycarbonate cover, lockable

Entries One 1-1/16" entry (top) for NEC Class 2 connections
Two 1-11/16" entries (bottom) for supply and load power, except 277 V single phase
Two 1-1/16" entries (bottom) for supply and load power, 277 V single phase only

Material Polycarbonate

Mounting Wall mounted

COMMUNICATIONS BUS

Number of cascaded units Unlimited

Contact delay 5 seconds

Bus-wire type 3-wire jacketed cable

Circuit type NEC Class 2

Lead length Up to 500 ft (152 m) using 18 AWG 3-wire jacketed cable
Up to 1,000 ft (504 m) using 12 AWG 3-wire jacketed cable

CONTROL

Supply voltage SC-40C 208/240 V: 208–240 V 50/60 Hz 3-phase
SC-40C 277 V: 277 V 50/60 Hz single phase
SC-40C 277/480 V: 277/480 V 50/60 Hz 3-phase
SC-40C 600 V: 600 V 50/60 Hz 3-phase

Contact type 3 Form A

Maximum ratings Voltage: 600 V
Current: 50 A except 277 V single phase, 40 A for 277 V single phase

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.

GROUND-FAULT EQUIPMENT PROTECTION (GFEP)

Set point 30 mA (default); 60 mA and 120 mA selectable by DIP switch

Automatic self-test Mode A: Verifies GFEP function before contactors operate
Mode B: Verifies GFEP and heaters every 24 hours

Manual test/reset Toggle switch provided for this function

Maintenance facility DC output proportional to ground current provided for troubleshooting the heater system

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

Circuit type NEC Class 2

Lead length Up to 500 ft (152 m) using 18 AWG 2-wire jacketed cable
Up to 1,000 ft (504 m) 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) |
| | REMOTE | (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) |

ORDERING DETAILS

| Catalog number | Part number | Description |
|--|-------------|--|
| SC-40C 208/240V | P000000787 | SC-40C Satellite Contactor, 208-240 Vac 50/60 Hz three phase |
| SC-40C 277V | P000000788 | SC-40C Satellite Contactor, 277 Vac 50/60 Hz single phase |
| SC-40C 277/480V | P000000789 | SC-40C Satellite Contactor, 277/480 Vac 50/60 Hz three phase |
| SC-40C 600V | P000000790 | SC-40C Satellite Contactor, 600 Vac 50/60 Hz three phase |
| Snow/ice sensors (not included) | | |
|  CIT-1 | 512289-000 | CIT-1 Snow sensor |
|  GIT-1 | 126795-000 | GIT-1 Gutter sensor |
|  SIT-6E | P000000112 | SIT-6E Pavement snow sensor |
|  RCU-4 | P000000884 | RCU-4 Remote control unit |

LIMITED WARRANTY

ETI's two year limited warranty covering defects in workmanship and materials applies.

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