Electric Radiant Snow & Ice Melting System

SMART HEAT

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Aberdeen, SD 57401

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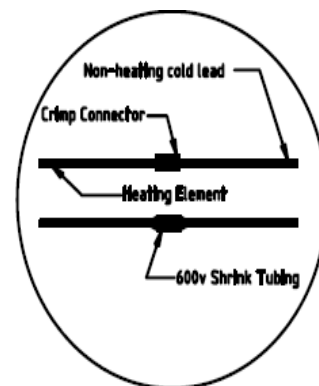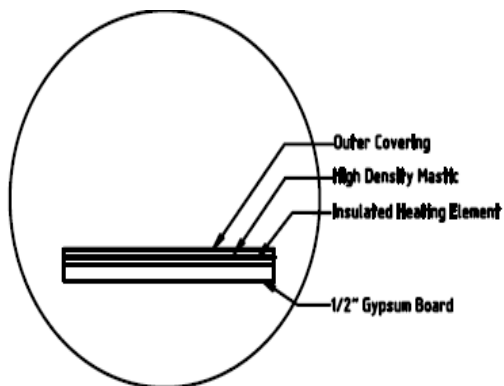
www.thesmartestheat.com
SmartHeat@nvc.net

representing

ThermaRay
Electric Radiant Heating

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Fredericton, NB Canada E3B 7K4
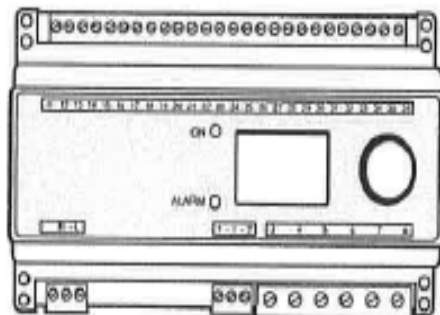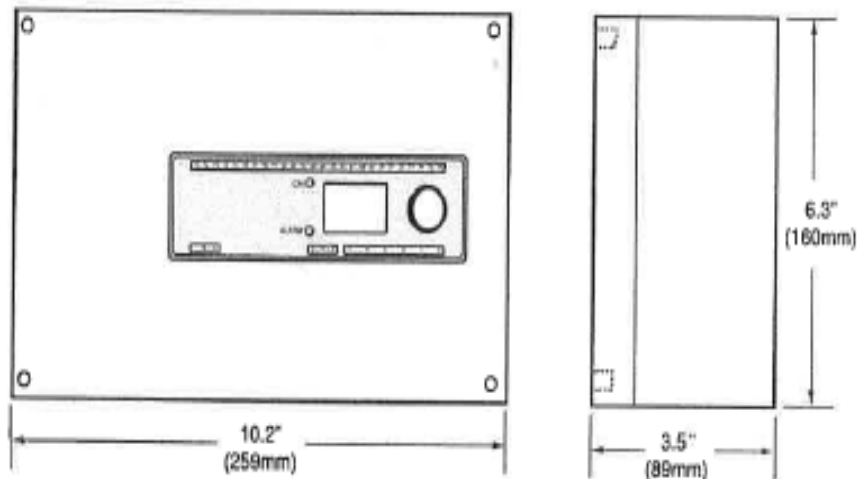www.thermaray.com
866-457-4600

Snow & Ice Melting Panels

Outer Covering
High Density Mastic
Insulated Heating Element
1/2" Gypsum Board

Non-heating cold lead
Crimp Connector
Heating Element
600v Shrink Tubing

SKU	Volts	Watts	Width	Length
ES 5C300-208	208	300	18"	5'
ES 7C515-208	208	515	18"	7'
ES 8C565-208	208	565	18"	8'
ES 4C280-240	240	280	18"	4'
ES 5C320-240	240	320	18"	5'
ES 7C460-240	240	460	18"	7'
ES 9C670-240	240	670	18"	9'
ES 5C300-277	277	300	18"	5'
ES 7C460-277	277	460	18"	7'
ES 8C540-277	277	540	18"	8'

ThermaRay
Electric Radiant Heating

FEATURES & BENEFITS

- Automatic snow/ice melting control
- Detection of temperature and moisture
- Includes UL Listed wall mounted metal enclosure
- Easy to program and affordable

- Digital interface
- Can utilize up to 2 slab mounted snow sensors (SLAB-SS)
- CSA Certified for use in Canada and US

6.3"
(160mm)

10.2"
(259mm)

3.5"
(89mm)

(Inside Metal Box)

DESCRIPTION

The SCE-120 Economy Snow Melt Control is a fully automatic solution for snow and ice melting on outdoor areas. This control detects both temperature and moisture and the heating system will only be activated if snow or ice is indicated by both sensors.

The SCE-120 is suitable for controlling WarmlyYours snow melting systems in 1 or 2 zones. Easy to operate and program with simple controls and backlit graphic display.

Programmable in either Fahrenheit or Celsius temperature settings.

Comes complete with approved wall-mounting box and terminals for easy power supply connections. Installation must be performed in accordance with National and local codes. CSA certified for use in Canadian and US markets. CAN/CSA E 60730-2-9:01, UL 60730-2-9

SPECIFICATIONS

General

Area of use .... Nonhazardous locations

Approvals .... CAN/SCA E 60730-29:01, UL 60730-2-9

Enclosure

Rating .... IP 20 / Nema 1 (indoor)

Entries .... By installer, drill as required

Mounting .... Wall mounted

Dimension .... 10-1/4" (260mm) length

                x 6-5/16" (160mm) high

                x 3-5/8" (92mm) deep - (includes box)

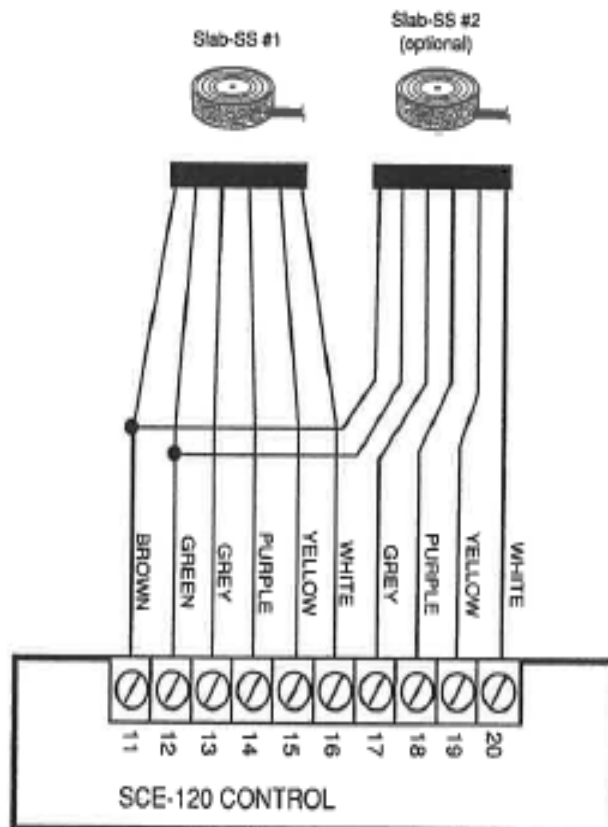Weight .... 6.2 lbs (2.8kg) (includes box)

Control

Supply .... 120V + 10%, 50-60 HZ

Output relays ..... Three, .3x16A

Alarm relay .... Max .5A

Snow Melt Sensors

Sensor type ...... Up to 2 SLAB-SS slab-mounted snow

.... sensors

Circuit type .... NEC Class 2 (24V)

Lead length ...... 33 Ft (10m)

Environmental
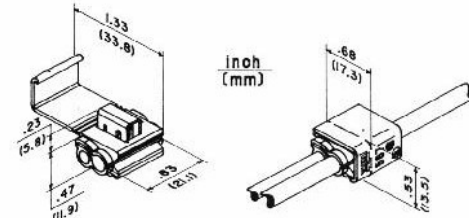
Operating temperature 32°F to 122° F (0°C to 50°C)

ORDERING INFORMATION

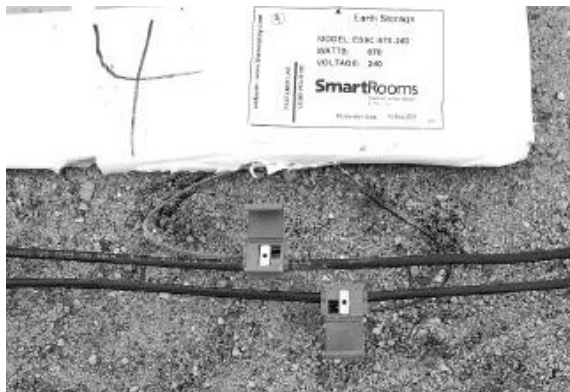| ORDER NUMBER	DESCRIPTION	SNOW MELT SENSORS (SOLD SEPARATELY)
SCE-120	ECONOMY SNOW MELT CONTROL	SLAB-SS SLAB-MOUNTED SNOW SENSOR

Installation Instructions

1. Using the 3M 567 Connectors, connect the main feed to the individual panel as is illustrated below.

INSTRUCTIONS

Use only with insulated wire. Do not strip insulation.

1. Slip circuit (run) wire into side slot. Insert the wire up to stop making sure the wire is visible in the window.
2. Make connection with 9" electrician's (lineman's) pliers, by driving "U" contact down flush with top of connector.
3. Close hinged cover until it locks.

2. Open the hinged closure being careful not to contaminate gel surfaces. Place the feed wire and 3M connections into the gel Endcap.

NOTE: All wires (supply and cold leads) must be inserted at the ends of the gel cap.

3. Compress the gel closure over the 3M connectors making sure that both locking snaps are engaged. Inspect the Endcap. A properly installed enclosure will have both snaps securely locked. Gel will be visible at both ends of the enclosure.

4. Fasten the strap on the PC-3 Endcap using the screw provided making sure to install the drywall screw in the correct fastening position as shown on the panel label.

Revised January 2009

3M

Scotchlok™ 567
Self-Stripping Electrical Tap Connectors

UL LISTED WIRE CONNECTOR 540H   CSA

Data Sheet

Application
Use 3M™ Scotchlok™ Tap Connector 567 to electrically connect a (tap) wire end to a through (run) wire and insulate the connection.

Wire Range
(Tap) 18-14 AWG (.75-1.5 mm²):
(Run) 12-10 AWG (4.0 mm²)
Solid or stranded copper conductors. For use with common thermoplastic insulated wires such as: T, TF, TFF, TFN, TFFN, AWM, TEW, SAE-GPT with a maximum insulation diameter of (tap) .145 inches (3.5 mm) run .190 inches (4.8 mm).
Maximum recommended current for general purpose applications:
18 AWG - 7 AMPS, 16 AWG - 10 AMPS,
14 AWG-15 AMPS, 12 AWG-20 AMPS,
10 AWG-25 AMPS.

Construction
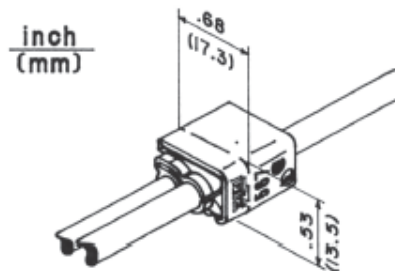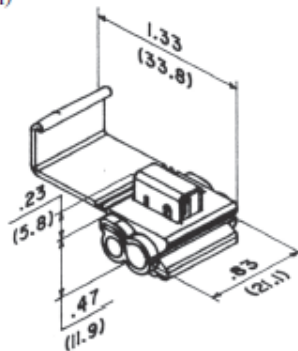U-contact - Tin plated brass, .03 in. (.8 mm) thick

Insulator - Polypropylene
             Color - brown
             UL 94-V-2

Weight
.0067 lb. (3.0 gm)

Recommended Installation Tools
9" Linemans Pliers
3M™ Crimping Tool No. E-9BM

Installation Instructions

⚠ WARNING

Turn power off before installing or removing terminal. All electrical work should be done according to appropriate electrical codes.

1. Place unstripped run wire inside run channel.

2. Insert unstripped tap wire completely and check it's position in the inspection port.

3. Hold tool perpendicular to the wires and make the connection by driving the u-contact down flush with the top of the plastic insulator.

4. Close hinged top cover until latched.

Regulatory Agencies
UL Listed - Tested per UL Standard 486C
UL file No. E23438
CSA certified - CSA Std. C22.2 No. 0. 188-MI983
CSA File No. LR15503, LR32411
(Voltage rated at 600 volts maximum, building wire: 1000 volts maximum, signs, fixtures and luminaires. Operating Temperature: 105°C.)

Engineering Specification

Self-Stripping Electrical Connector (as manufactured by 3M, part No. 567) capable of connecting a tap wire 18-14 AWG solid or stranded copper to a run wire solid or stranded copper. Connector shall be UL Listed and CSA Certified for 600 volts maximum, building wire: 1000 volts maximum, signs, fixtures and luminaires, and temperature rated 105°C maximum.

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