SMMC–3 Control Panel
Multi Sensor Snow/Ice Melting Controller

cULus:
 Ordinary Locations

Applications

- The SMMC-3 Control Panel manages snow and ice melting systems for sidewalks, driveways, gutters and downspouts. Suitable for controlling all types of heating cable systems, the SMMC-3 can monitor snow and ice accumulation in three separate zones.
- The SMMC-3 programming allows each zone to be controlled independently or on a priority mode basis.
- The SMMC-3 is housed in an enclosure suitable for commercial/industrial applications (NEMA 12) and features an LCD display, programming and associated indicator lights for operation of each zone.
- The control signal relays operate external contactors.

Features

- Automatic snow/ice melting control
- Manual zone activation
- Hold on Time: Adjustable 0-10 hours in half-hour increments
- Maximizes energy efficiency
- Monitors and controls 3 separate zones, sequentially or independently
- Reduced power requirements when priority operation mode is used
- Power Requirements: 120 Vac, 450 VA
- System Memory: Non-volatile: no data loss with a loss of system power
- Control Relays: 120 Vac, 1 Amp contacts
- Manual Bypass: Manually cycles from 0-10 hours in half-hour increments
- Ambient Operating Temperature Range: -20°C to +70°C (-4°F to +160°F)
- Storage Temperature: -20°C to +85°C (-4°F to +185°F)
- Relative Humidity: 0 to 90% RH, non condensing
- Mechanical: NEMA 12 non-metallic enclosure
- Dimensions: 12.375" W x 10.25" H x 4.75" D
- Operating Modes:
  - Mode 1 – Independent
    - Programmable for 3 independent snow melting systems (zones) for any combination of snow/ice melting or roof, Gutter de-icing systems
    - Controlling any combination
  - Mode 2 – Priority
    - Sequentially operating 3 snow melting zones with individual zone priority level of 1 to 3
    - With one in-ground sensor per zone and an optional Aerial Moisture sensor for priority zone 1

Certifications and Compliances

- UL Standard: UL 873 Temperature-Indicating and -Regulating Equipment
- CSA Standard: CSA C22.2 No. 24-93 Temperature-Indicating and -Regulating Equipment Certified for Canada

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SMMC–3 Control Panel
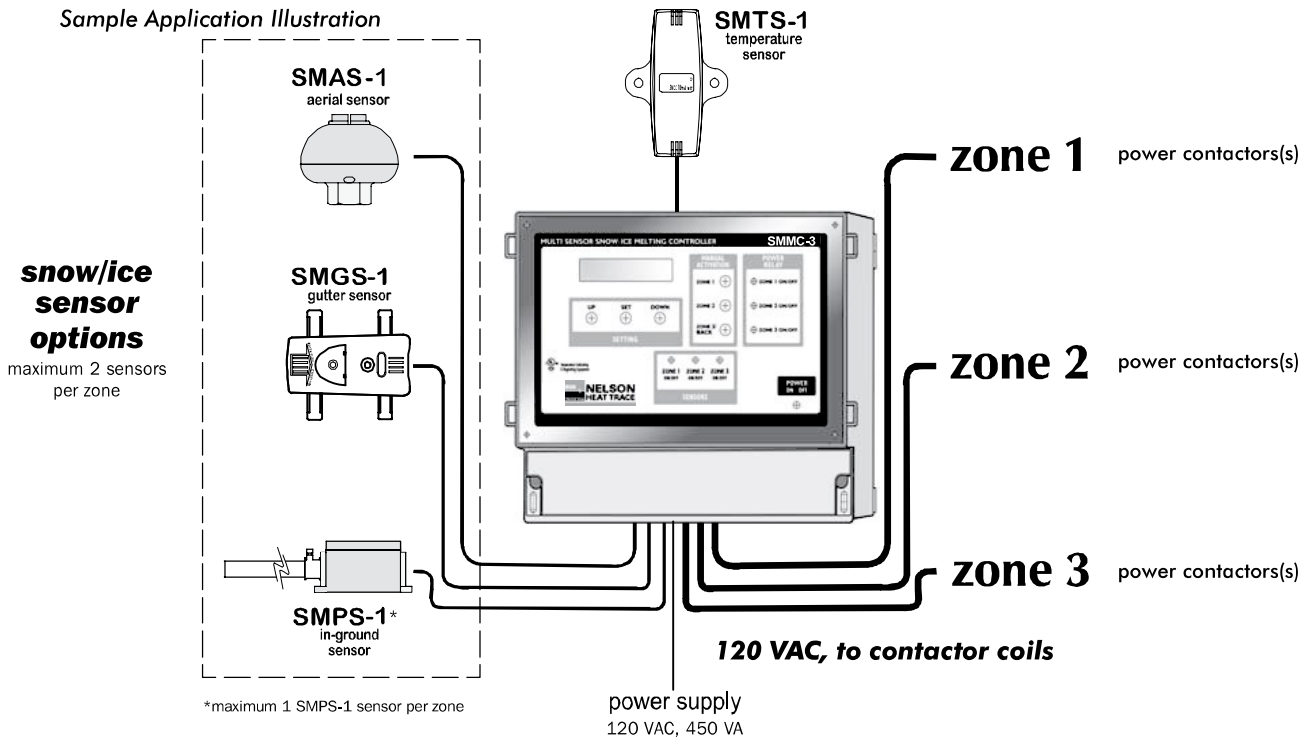## Multi Sensor Snow/Ice Melting Controller

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Sensors for SMMC-3
The SMMC-3 can access information from three different types of moisture sensors - surface (SMPS-1), aerial (SMAS-1) and gutter (SMGS-1) and one type of temperature sensor (SMTS-1). The surface, aerial and gutter sensors detect moisture from snow, ice, sleet, etc. and send appropriate signals to the SMMC-3. Similarly, the temperature sensor sends temperature data back to the SMMC-3. Independent temperature and moisture information is processed by the SMMC-3 to ensure that heating equipment will only be energized when precipitation occurs during freezing conditions. For each of the SMMC-3 control zones, up to two individual moisture sensors can be connected. However, for each zone only one of these may be a surface sensor. Each SMMC-3 must have a temperature sensor, SMTS-1, in order to function. The SMTS-1 is included with each SMMC-3.

SMMC-3 *Installation & Operating Instructions*
Sample Application Illustration

SMAS-1 aerial sensor

SMTS-1 temperature sensor

snow/ice sensor options
maximum 2 sensors per zone

SMGS-1 gutter sensor

SMPS-1 * in-ground sensor

*maximum 1 SMPS-1 sensor per zone

zone 1 — power contactors(s)

zone 2 — power contactors(s)

zone 3 — power contactors(s)

120 VAC, to contactor coils

power supply
120 VAC, 450 VA

COMMERCIAL APPLICATIONS: SNOW MELTING

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