

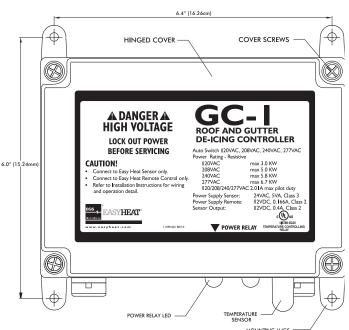
GC-1 **Roof & Gutter De-Icing Controller**



Description

The GC-1 roof and gutter de-icing controller is designed to energize the heating cable only when moisture conditions exist and there is risk of freezing. If the temperature is below 3°C (38°F) and the MSG-1 sensor detects moisture, the controller will apply power to the heating cable. The cable remains energized until 3 hours (hold time) after the sensor is dry.





GC-1 CONTROLLER

Electrical Specifications

Functional

Activation temperature $+3^{\circ}C (38^{\circ}F + /-1^{\circ}F)$

Environmental

Working temperature -40°C (-40°F) to 65°C

(150°F)

Storage temperature -45°C (-49°F) to 70°C $(160^{\circ}F)$

0 to 100 %

Humidity environment Supply requirements

Power supply voltage 120VAC, 208VAC,

240VAC, 277VAC Frequency 60 Hz 50W Maximum power consumption

Output characteristics

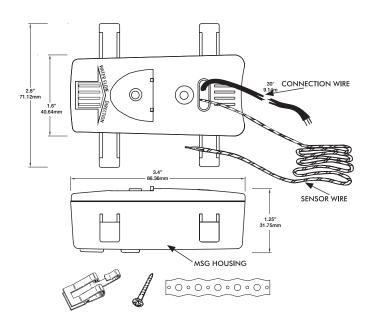
relay (wet contact) Output type Contact output N.O. max. 24 Amps @

277VAC

MSG-1 characteristics

24VAC class2 Power supply voltage Maximum Amperage 500mA Accessories Screws, coated strapping,

coated clips Connection Wire 30'



MSG-1 AND ACCESSORIES





SENSOR

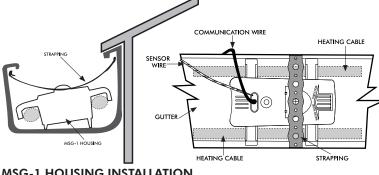
MOUNT WITH __ HINGES TO BOTTOM

Installation GUTTER Н Н л. 25 FT. 7.62m MSG-1 SENSOR MAX. COMMUNICATION LINE & LOAD CONNECTIONS MSG-1

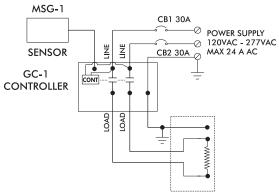
DRIP LOOP

INSTALL IN EXTERIOR LOCATION

GC-1 BASE



MSG-1 HOUSING INSTALLATION



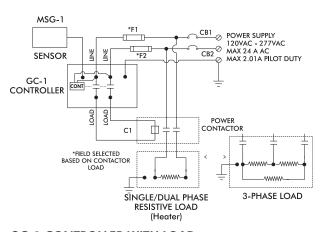
RESISTIVE LOAD (Heater)

HEATING CABLE **MSG-1 SENSOR** WIRE INSTALLATION MSG-1 SENSOR WIRE

Wiring 3 SEGMENT CONNECTOR WHITE BLACK $\emptyset \oplus$ GC-1 CONTROLLER MSG-1 SENSOR ONNECT**I**O RED

MSG-1 CONNECTION

GC-1 CONTROLLER WITH SINGLE/DUAL PHASE **LOAD LESS THAN OR EQUAL TO 24A**



GC-1 CONTROLLER WITH LOAD HIGHER THAN 24A OR 3 - PHASE LOADS

At the beginning of the heating season and monthly during operation inspect for and remove all leaves and combustible debris from roofs gutters and downspouts. At the beginning of the heating season the MSG-1 must be inspected for physical damage and the snow sensor surface cleaned. To clean the snow sensor surface:

- 1. Lock-out the power supply to the GC-1.
- 2. Remove the MSG-1 sensor housing from the gutter.
- 3. With a clean wet swab clean up the surface of the snow sensor.
- 4. Replace the MSG-1 sensor housing in the gutter.
- 5. Reconnect GC-1 to the power supply.



