

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.



Electrical Specifications

Functional

Activation temperature	+3°C (38°F +/-1°F)
Environmental	
Working temperature	-40°C (-40°F) to 65°C (150°F)
Storage temperature	-45°C (-49°F) to 70°C (160°F)
Humidity environment	0 to 100 %

Supply requirements

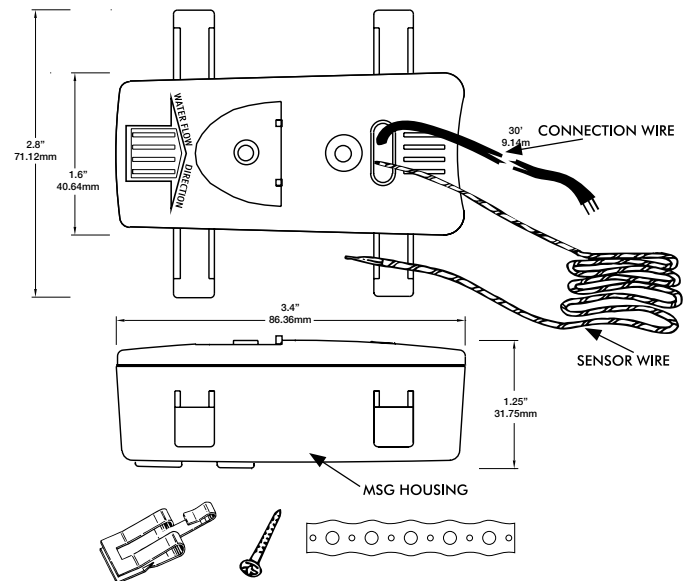
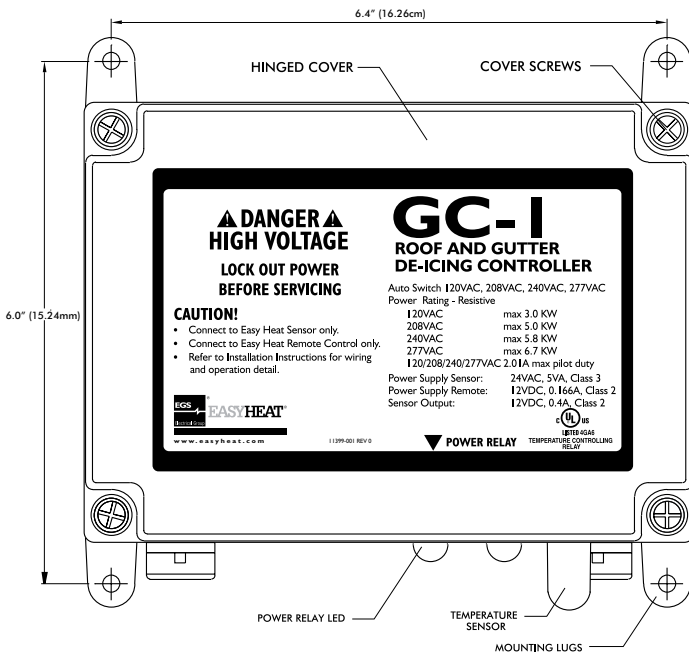
Power supply voltage	120VAC, 208VAC, 240VAC, 277VAC
Frequency	60 Hz
Maximum power consumption	50W

Output characteristics

Output type	relay (wet contact)
Contact output	N.O. max. 24 Amps @ 277VAC

MSG-1 characteristics

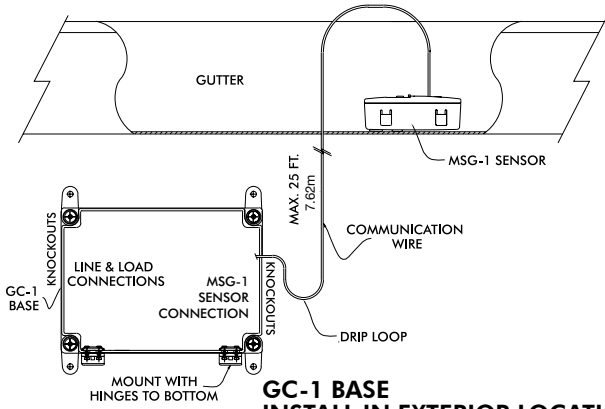
Power supply voltage	24VAC class2
Maximum Amperage	500mA
Accessories	Screws, coated strapping, coated clips
Connection Wire	30'



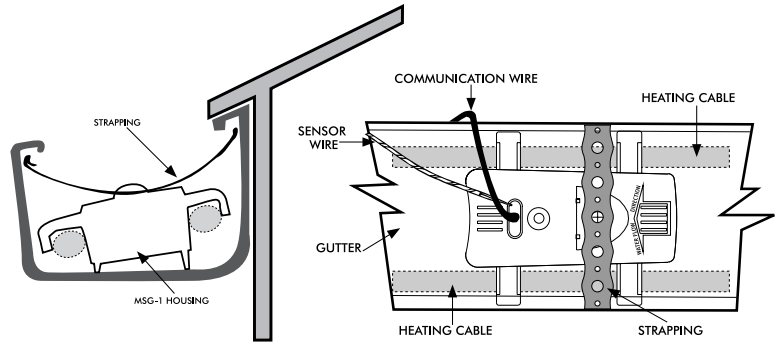
GC-1 CONTROLLER

MSG-1 AND ACCESSORIES

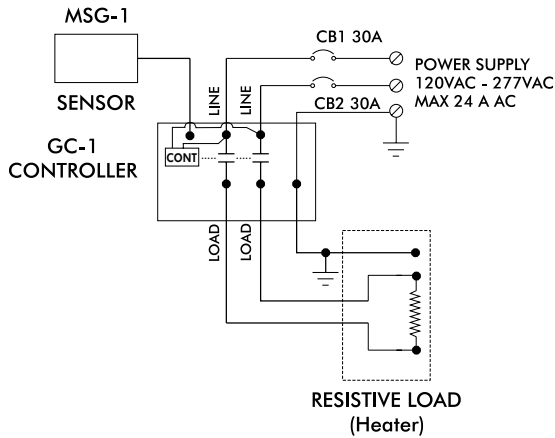
Installation



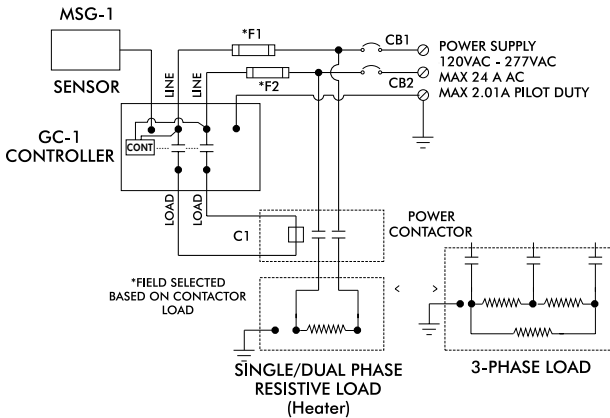
**GC-1 BASE
INSTALL IN EXTERIOR LOCATION**



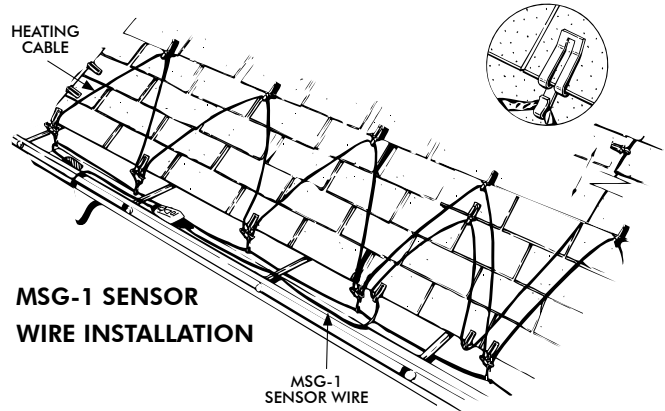
MSG-1 HOUSING INSTALLATION



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

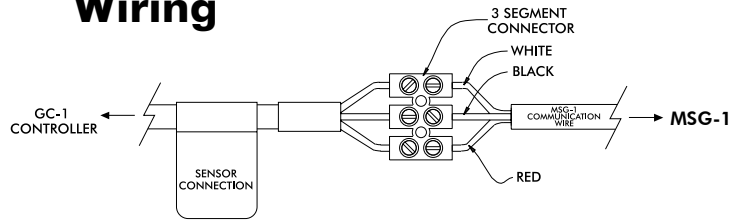


**GC-1 CONTROLLER WITH LOAD
HIGHER THAN 24A OR 3 - PHASE LOADS**



**MSG-1 SENSOR
WIRE INSTALLATION**

Wiring



MSG-1 CONNECTION

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.