



SNOW OWL

SNOW MELTING / ROOF DE-ICING

Aerial Mounted Snow Sensor

DESCRIPTION

The Snow-Owl is designed to work with a controller contactor, optimizing energy usage in heated snow/ice melting applications. The Snow-Owl is also an excellent solution for building automation applications. During dry or warm weather, the system's heaters are turned off to save energy costs. The heaters are turned on only when snow and ice is present, and kept on only long enough to ensure complete melting and drying. Temperature and time parameters are preset for optimum system performance.

Typical applications include controlling snow melting systems or sidewalks, doorways, stairs, loading docks, ramps and parking garages. Easy installation is another key Snow-Owl feature. Low voltage operation up to 2,000' (609.6 m) separation from the control panel, mast or roof mounting, and non-critical extension wiring are a few of the features that make this possible.

The housing is made with ASA uv-resistant plastic that was formulated by the auto industry for exterior plastic trim. The Snow-Owl can be mounted at a distance up to 500' away from the controller or contactor using 22-gauge wires, up to 1000' using 18-gauge wires and up to 2000' using 14-gauge wires.



FEATURES

Set-point temperature

- 3.33 °C (38 °F).

Storage temperature

- -45 °C to 85 °C (-50 °F to 185 °F).

Voltage

- 24VAC 50/60 Hz.
- 24VDC, or 24V full wave rectified AC/pulsed DC 0.2A max.

Dimensions

- 3-3/4" tall, 1-3/4" diameter.

Hold-on times

- Set 1-minute.

Relay contacts

- 2A max, 30V

Warranty

- 2-year limited warranty.

Low consumption

- Reduce energy use in sidewalk, gutter/downspout and snow and ice melting applications.

Installation

- Mounts on 3/4" PVC conduit
- Easy and simple install

Materials

- Made for the elements and a long-life
- UV-tolerant and corrosion-resistant materials.

Connection

- Simple three wire connections.
- 2 for power, 1 for signal output.

Operation

- Safe low voltage.

Power-on self test

- Verify proper sensor operation.

SENSOR PROCESS

The Snow-Owl sensor monitors atmospheric conditions to determine when a snow/freezing rain event occurs and responds by providing a grounded output to the control circuit or contactor which in turn will enable the heating system. It does this by using the snowflake shaped sensor at the top cap to melt the snow/ice that lands on it and then detects the water using a low voltage current.

The detection of water alone will not provide an output but is used in combination with a temperature reading below 38 °F. An internal processor looks for this combination of moisture and temperature and triggers the output only when both conditions are present. Once the Snow-Owl has triggered it will remain on until one or both of the stimuli is removed, and it determines that the stimuli remains missing for the next four minutes.

MODEL

PRODUCT #	DESCRIPTION	VOLTS
SNOW-OWL	Aerial mounted snow sensor	24