

SNOW SWITCH MODEL GF PRO

Automatic snow
and ice melting system control

Description

The Snow Switch Model GF Pro is an automatic snow and ice melting control system. Utilizing standard Environmental Technology snow and ice sensors (sold separately), applications include snow and ice detection and melting for pavement, sidewalks, loading docks, roofs, gutters and downspouts in commercial and residential environments.

The GF Pro interfaces with up to two standard Environmental Technology sensors to meet site requirements. Roof or mast mounted, CIT-1 Aerial Snow Sensor can be paired with the GIT-1 Gutter Ice Sensor (gutter deicing applications) or the SIT-6E Pavement-Mounted Snow and Ice Sensor (trafficked surface applications). All three sensors detect precipitation as snow at snow and ice melting. Since 1968, these sensors have been the industry's most versatile and cost-effective automatic snow melting control sensors.

The GF Pro features built-in 30mA, self-testing Ground Fault Equipment Protection (GFEP), digitally filtered to minimize false tripping. A ground fault condition must be manually reset using the Test/Reset switch before heater operation can continue.

The GF Pro uses both automatic and manual-override operator controls. The adjustable Hold-On timer can continue heater operations up to 8 hours after snow or ice conditions end to ensure complete melting and a dry surface. The Heater Cycle control button allows manual initiation or cancelation of a heating cycle. Use the optional RCU-4 remote control unit for convenient monitoring and operation. These flexible control options provide complete snow melting and water evaporation for lower operating costs.

The GF Pro weighs only 3 pounds and measures 5 1/2" (L) x 8 1/8" (W) x 4 3/8" (H). Comprehensive instruction manuals simplify installation and operation. GF Pro controllers are backed by Environmental Technology's Technical Support.

The GF Pro is a capable snow and ice control for medium-sized applications whose features and power requirements do not require an APS or EUR Series control panel. For complete information describing application, installation, and features, please contact Environmental Technology Customer Service or visit our website at networketi.com.



Features and Benefits

- Automatic snow and ice melting control minimizes operating costs
- Supply Voltage 100 – 277 VAC Rated for up to 30 amp resistive loads
- Integral 30mA of Ground Fault Equipment Protection (GFEP)
- Weather-resistant NEMA 4X enclosure
- UL Listed for Temperature Regulating Equipment
- Adjustable Hold-On timer continues heater operation after snow and ice stop to ensure complete melting
- Dual sensor capability to meet site performance requirements
- Automatic and manual-override operator controls for changing environmental conditions
- Optional remote control operation for added convenience

Specifications

General

| | |
|--------------|--|
| Area of Use: | Non-hazardous locations |
| Approvals: | C-UL-US Type 873 Temperature Regulating Equipment Also evaluated by Underwriters Laboratories Inc® in accordance with UL 1053 Ground-Fault Sensing and Relaying Equipment |

Enclosure

| | |
|-------------------|--|
| Protection: | IP 66, NEMA 4X |
| Cover Attachment: | Polycarbonate with machine screws |
| Entries: | 2 x 3/4" entry (bottom right) for NEC Class 2 connections 3 x 1-1/16" entries (bottom left) for supply and load power |
| Material: | Polycarbonate |
| Mounting: | Wall mount |
| Dimensions: | 5 1/2" (L) x 8 1/8" (W) x 4 3/8" (H) 140mm (L) x 207mm (W) x 112mm (H) |

Control

| | |
|-----------------------|--|
| Supply Voltage: | 100 –277 VAC; 50/60 Hz |
| Load: | 30 amp maximum resistive |
| Contact Type: | 2 Form A |
| Weight: | 3 Pounds (not including sensors) |
| Maximum Ratings: | Voltage: 277 VAC Current: 30 amps |
| Heater Hold-On Timer: | 0 to 8 hours; actuated by snow stopping or toggle switch |
| System test: | Switch toggles heater contact on and off. If temperature exceeds optional high limit thermistor (45°F), heater shuts off to reduce costs and prevent damage. |

Front Panel Interface

| | |
|-------------------|---|
| Status Indicator: | SUPPLY (green): Power on HEAT (yellow): Heating cycle in progress SNOW (yellow): Sensor(s) detect snow GFEP (red): Ground Fault condition GFEP (red, flashing): Failed GFEP (red, rapid flashing): GFEP test in progress |
|-------------------|---|

Snow / Ice Sensors

| | |
|-------------------|--|
| Maximum Quantity: | 2 ETI sensors |
| Circuit Type: | NEC Class 2 |
| Lead Length: | Up to 500' (152m) using 18 AWG 3-wire jacketed cable Up to 2,000' (609m) using 12 AWG 3-wire jacketed cable |

Wire & Cable Ratings

| | |
|----------------|--|
| Power Cable: | Size for heater load (30 amps maximum) |
| Sensor Wiring: | #18 AWG jacketed, 3-conductor |
| Heater Cable: | Size for maximum heater load |
| Remote Wiring: | #22 AWG jacketed, 2-conductor |

Ground fault equipment protection (GFEP)

| | |
|----------------------|---|
| Set Point: | 30mA |
| Automatic Self-Test: | GFEP verified before contactors operate; GFEP runs on start-up and every 24 hours |
| Manual Test/Reset: | Test/Reset switch on front panel |

Environmental

| | |
|------------------------|--------------------------------|
| Operating Temperature: | -31°F to 113°F (-35°C to 45°C) |
| Storage Temperature: | -67°F to 167°F (-55°C to 75°C) |

Ordering Information

| Order Number | Description |
|--------------|---|
| 23917 | GF Pro |
| 23918 | GF Pro Installation and Operations Manual |

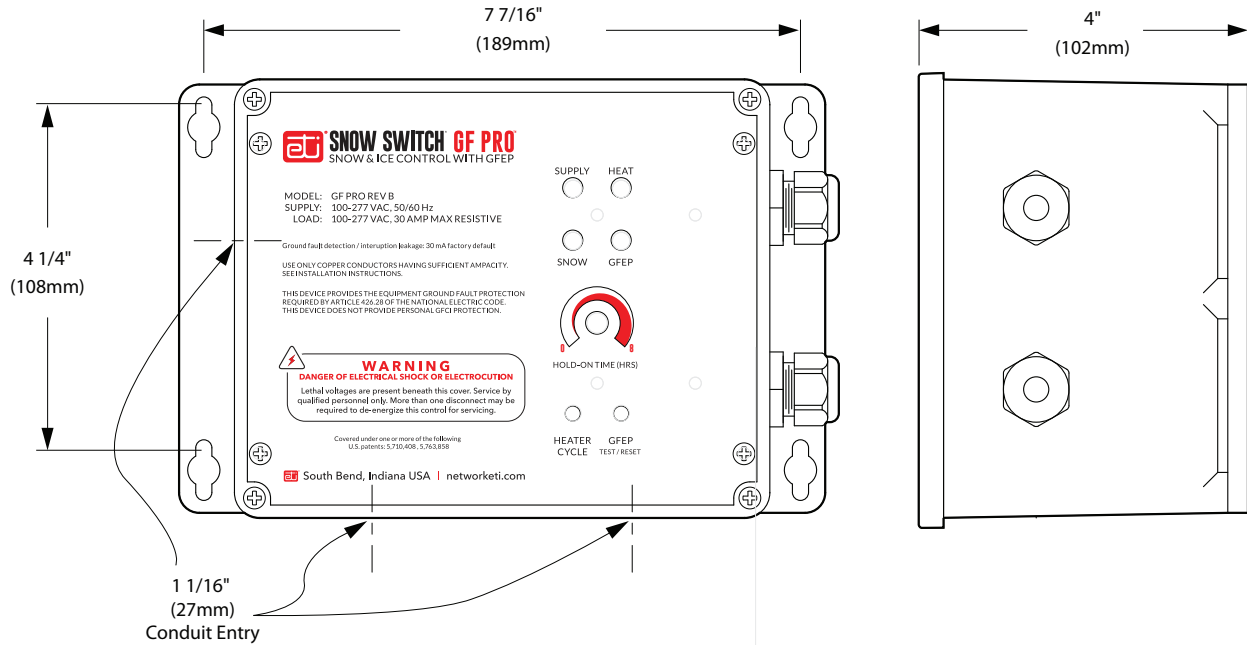
Accessories (Included)

| Order Number | Description |
|--------------|---------------------------------|
| 21358 | RCU-4 Remote Control (Optional) |

Snow & Ice Sensors (Not Included)

| Order Number | Description |
|--------------|---|
| 10001 | CIT-1 Aerial Snow Sensor |
| 11351 | GIT-1 Gutter Ice Sensor |
| 24219 | SIT-6E Pavement Mounted Snow/Ice Sensor |

Dimensional Drawings



Limited Warranty

ETI's two year limited warranty covering defects in workmanship and materials applies. Contact Customer Service for complete warranty information.

Disclaimer

ETI makes no representations or warranties, either expressed or implied, with respect to the contents of this publication or the products that it describes, and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. ETI reserves the right to revise this publication, and to make changes and improvements to the products described in this publication, without the obligation of ETI to notify any person or organization of such revisions, changes or improvements.

The ETI logo, We Manage Heat, CIT, GIT, and SIT are registered trademarks of ETI. EUR and RCU are trademarks of ETI. Copyright © 2013 ETI. All rights reserved. Printed in USA.

Contacting Customer Service

For assistance, contact Customer Service. Office hours are from 8:00 AM until 5:00 PM ET.

Email: info@networketi.com

Web: networketi.com

Mail: ETI
 1850 North Sheridan Street
 South Bend, IN 46628