Data sheet

ETS
Controller For Snow Melting Systems

Application:

ETS is a 24 volt snow melting controller capable of switching an outdoor heating system on/off based on temperature and precipitation. Snow melt controller applications can include snow removal in walkways, steps, driveways, garage entrances, gutters, loading platforms or other locations where ice and snow accumulation is a problem. ETS detects outdoor temperature, ground temperature, and moisture, and energizes electrical relays when snow or ice occurs. The system's heat source can be either hydronic or electric heating cables (with the use of an external relay).

Features:
- Electronic on/off control
- Detects moisture and temperature, or temperature only
- Choice of ground, gutter, or outdoor sensor
- Several sensors can be connected to the controller
- Selection of either temperature or temperature/moisture activation of controller

Ordering Information:

Code No.	Description
ETS-3551	ETS-3551 Snow melting system controller, 24V low voltage version
ETOG-550	ETOG-550, Ground sensor for detection of slab temperature and moisture, 33ft (10m) cable
ETSR5500	ETSR5500, Gutter sensor for detection of moisture, 33ft (10m) cable
ETF-744/99	ETF-744/99, Outdoor sensor for detection of temperature

Technical Data:

ETS-3551 Snow/Ice Melting Controller

Mounting	Interior wall surface
Dimensions	3.4" x 2.1" x 2.3" (L x W x D)
Supply voltage	24 Vac ±10%
Output relays	1 relay: 10-A, (potential free contacts)
On/Off differential	0.6°F (0.3°C)
Ambient temperature	+32° to 122°F (0° to +50°C)
Temperature range	+32°F to 41°F (0° to +5°C)
Detection mode	1) Moisture & temperature sensing 2) Temperature only
Scale Adjustment	Fine tuning of temperature setup ± 9°F (± 5°C)

ETOG-550, Ground Sensor

Detection	Moisture
Mounting	Flush to surface
Cable length	33ft (10m)
Ambient temperature	-4 to 158°F (-20 to 70°C)
Dimensions	H: 1.25", ± 2.4" (H: 32mm, ± 60mm)

ETSR5500, Gutter Sensor

Detection	Moisture
Mounting	Gutter or downspout, used in combination with ETF-744/99
Cable length	33ft (10m)
Ambient temperature	-4° to 158°F (-20° to 70°C)
Dimensions	4.15" x 1.2" x 0.5" (105 x 30 x 13mm) L x W x H

ETF-744/99, Outdoor Sensor

Detection	Air temperature
Mounting	Exterior wall
Ambient temperature	-4° to 158°F (-20° to 70°C)
Dimensions	4.15" x 1.2" x 0.5" (105 x 30 x 13mm) L x W x H

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Controller For Snow Melting Systems

Function:

The ETS is a stand alone snow melt controller that provides an economical method for removing the accumulation of snow or ice in unwanted areas.
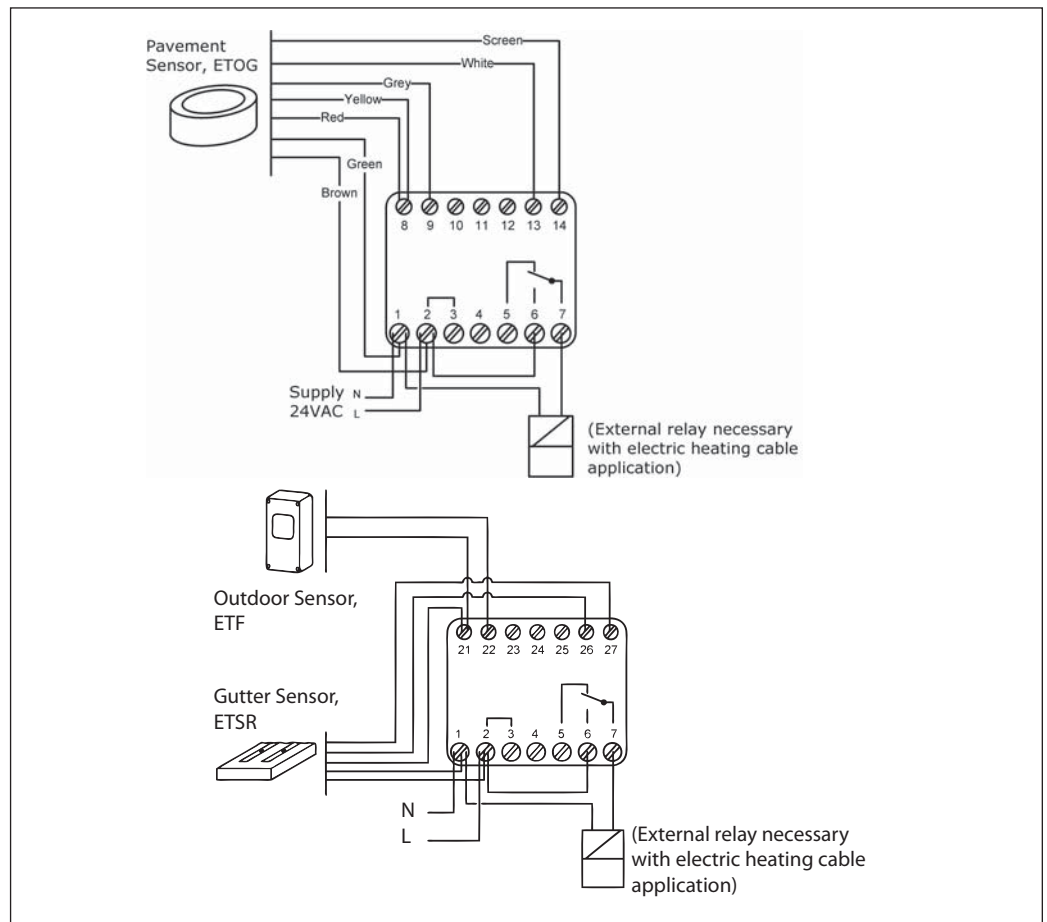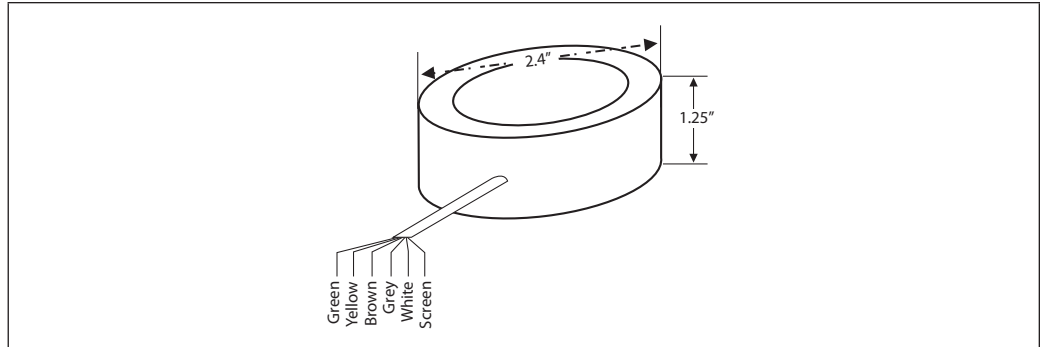
Mode Selection:
The controller can be selected to activate based upon either both temperature and precipitation or through temperature only, via toggle switch.
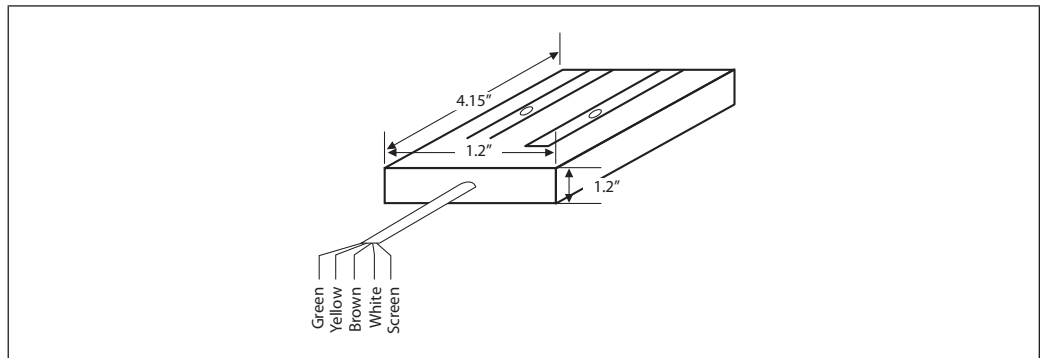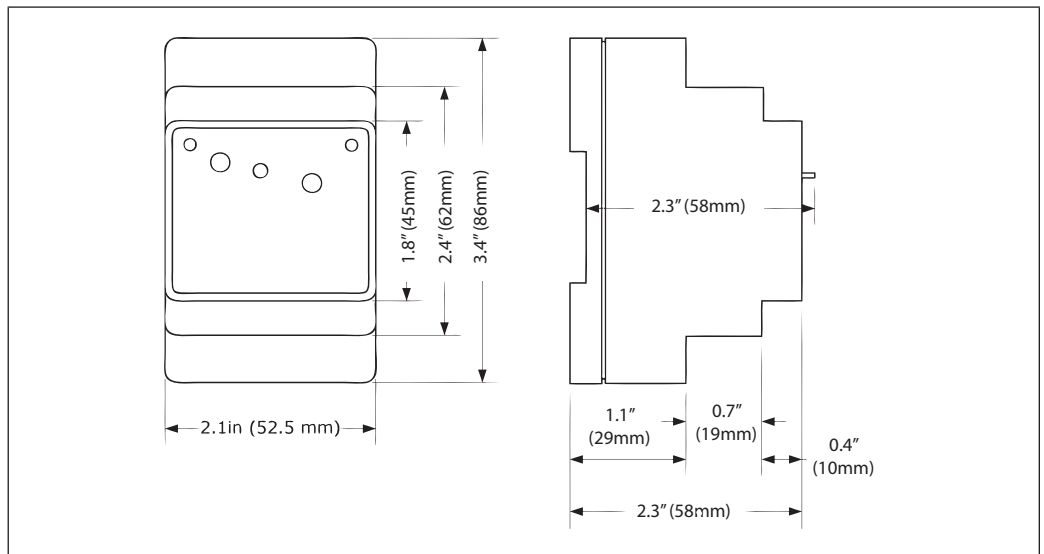
The different sensors ETOG, ETSR and ETF sensors are wired to the controller to provide the feedback for the controller

Settable Temperature for Activation of Controller:
The large adjustable knob sets the temperature at which the controller would start the system. This scale adjustment is adjustable from 32° to 41°F (0° to 5°C). Depending on the mode selection, once the controller senses the temperature through either the ETOG pavement sensor or ETF outdoor sensor the controller would activate.

Scale Adjustment:
Between the mode and settable temperature, there is an adjustment knob to fine tune the settable temperature. The adjustment of the temperature is ± 9°F (± 5°C).

Wiring Diagrams:

Dimensions:

ETOG Sensor

2.4"

1.25"

Green
Yellow
Brown
Grey
White
Screen

ETSR Sensor

4.15"

1.2"

1.2"

Green
Yellow
Brown
White
Screen

ETS Controller

1.8" (45mm)

2.4" (62mm)

3.4" (86mm)

2.3" (58mm)

2.1in (52.5 mm)

1.1" (29mm)

0.7" (19mm)

0.4" (10mm)

2.3" (58mm)

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