

## CZ SNOWMELT GROUND SENSOR CONTROLLER AND ACCESSORIES

### Advanced Snowmelt Control



**CZ OUTDOOR TEMPERATURE SENSOR**



**CZ ROOF SENSOR**



**CZ GROUND SENSOR**



**CZ SNOWMELT CONTROLLER**



**CZ SNOWMELT CONTROLLER ENCLOSURE**

### Intelligent Control of Ice and Snow Melting

An all-in-one solution for ice and snow melting, useable for all applications within hydronic as well as electric snow melting systems. Optimal operation is ensured through output control, making the system both effective and economical.

- Electronic on/off control up to 11 KW
- 2-zone control, individually controlled
- Economical control (minimal energy consumption)
- Detection of both temperature and moisture
- Display and “knob wheel” for easy programming
- Control of electric or hydronic ice and snow melting systems
- Alarm relay for external signal
- Several language options

Warmzone provides the industry leading controller for ice and snow melting in gutters and ground areas. Using readings from temperature and moisture sensors, the controller ensures economical control of power while keeping outdoor areas free of ice and snow. The moisture sensor should be installed in the ground

surface or in the gutter. When precipitation and temperature conditions warrant, the controller activates the snow melting system. Once the sensor has dried out, the thermostat goes into ‘afterrun’ mode for a set time to dry the area and prevent ice from forming.

#### Minimal Energy Consumption

The snow melting system is only energized when the outdoor temperature drops below the selected setting and snow or ice is detected by the sensors.

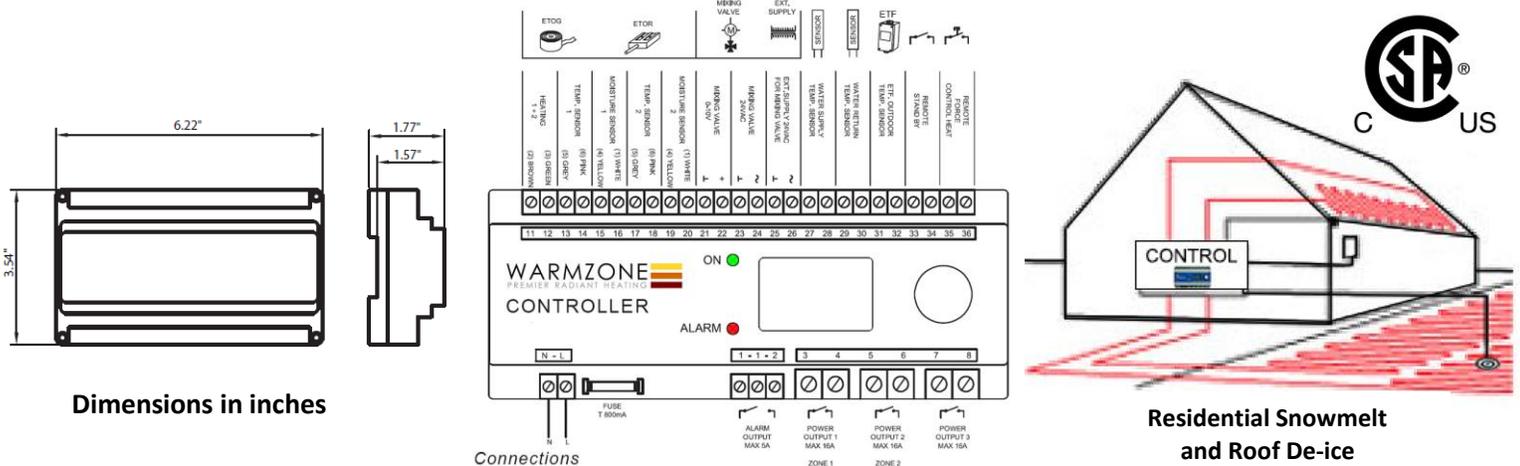
#### CZ Snowmelt Control Options

##### For gutters - ETO2-4550, ETOR-55 and ETF-744/99

The ETOR sensor is designed for installation in gutters, downspouts, etc. ETOR sensors detect moisture, while ETF sensors measure temperature.

##### For outdoor surfaces - ETO2-4550, ETOG-55 and ETOG-56/ETOK-1

The ETOG sensor is designed for embedding in the surface of the outdoor area. ETOG sensors measure ground temperature and moisture. The ETF-744/99 sensor can be used for measuring rapid temperature drops.



Dimensions in inches

Residential Snowmelt and Roof De-ice

### Remote Control

It is possible to control the CZ Controller from an external signal (day/week timer, GSM Module or other signal source). The CZ Controller can be switched on/off (standby), and the system can be temporarily forced to provide heat during the period of time set in the 'afterrun' menu.

### SENSORS:

#### CZ GROUND SENSOR TYPE 56:

Designed for use in new asphalt and concrete, its features include: 82 feet of connection wire. It also has a stainless steel tube that is mounted prior to the asphalt or concrete pour, facilitating conduit attachment and installation of the sensor.

#### CZ GUTTER SENSOR:

Designed for roof and gutter mounting, this unit detects moisture only and must be used in conjunction with a CZ OUTDOOR sensor for proper operation.

### PRODUCT PROGRAM

Type	Product
CZ Control	Snow control includes the CZ enclosure
<b>Accessories</b>	
Ground sensor ETOG-56	Ground sensor for embedding in outdoor surfaces (82' 2" cable).
Ground sensor ETOG-55	Ground sensor for detecting moisture and temperature (32' 9.7" cable)
CZ Gutter	3.39 / 1.77 / 1.38 inches
CZ Outdoor	Outdoor sensor for temperature
CZ Enclosure	The CZ Enclosure is required for UL in USA

### CZ OUTDOOR SENSOR:

Designed to detect outdoor temperatures and is used in conjunction with the CZ-gutter sensor. This sensor

may be used alone for temperature only applications as well as with the CZ-Ground sensors (optional) to detect rapidly changing air temperatures.

### TECHNICAL DATA

#### CZ Control

Supply voltage	120 to 240V +/- 10%, 50-60Hz.
Temperature range	0 to + 50°
Working range	0 to +122°
Built in timer for manual snowmelt and afterrun delay	1-6 hours
Output relay	3 x 16A potential free relay
Two-zone application	Output is 2 x 16A potential free relay
Display	Graphic LCD with backlight
Ambient temperature	32°F to 122°F
UL listed CZ enclosure	Nema 1
Enclosure dimen. H/W/D	6.25 x 10.25 x 3.75 inches
<b>LED Functions</b>	
ON / Green	Supply voltage connected
Alarm / Red	Fault indication

#### CZ Ground Sensor

Detecting	Moisture and temperature
Mounting	Concrete, asphalt and paver
Housing	IP 68
Ambient temperature	-4°F to 158°F
Dimensions (H / Diam.)	1.25 / 2.375 inches

#### CZ Gutter Sensor

Detecting	Moisture and temperature
Mounting	Gutter and roof
Housing	IP 54
Ambient temperature	-4°F to 158°F
Dimensions (H/W/D)	3.39 / 1.77 / 1.38 inches