



The world's best-selling electric floor heating brand™

### DESCRIPTION

The COMMBOX-600 is a "Plug and Play" controlled power distribution panel for frost protection, ice and snow melting applications.

When receiving a signal from the snow sensor/s (such as the AIRsense), it activates the contactors, energizing the heating elements.

Based on the DIP switches configuration, the zones are activated either continuously or in customized sequencing between the zones.

The adjustable *Hold-On* timer keeps the outputs to the zones active, to ensure complete snow melting.

The *Hold-On* (Time delay) is adjustable in the range of up to 99 hours.

The outdoor temperature set-point, as well as ground Upper limit temperature and ambient lower limit temperature can be easily set.

The *Technician Settings* mode allows installer or technician to adjust the parameters for customized installations.

The COMMBOX-600 Built-in Ground Fault interruptor allows settings for the tripping current between 0.1 – 1.0 A.

The GFS adjustable time delay provides a simple and safe protection from nuisance tripping.



Commbox-600 panel



AIRsense sensor



## FEATURES AND BENEFITS

- Automatic Power/Load Distribution
- Up to 5 zones, 600A
- GFEP Protection Built-in
- Sequencing allows sharing of minimum required power supply
- Multiple Snow Sensor inputs
- User-friendly interface
- Integrated Electronic Controller with backlit display
- Energy Efficient Algorithm
- ETL approved with UL approved components.

## THE PARAMETERS THAT CAN BE MODIFIED ARE AS FOLLOW

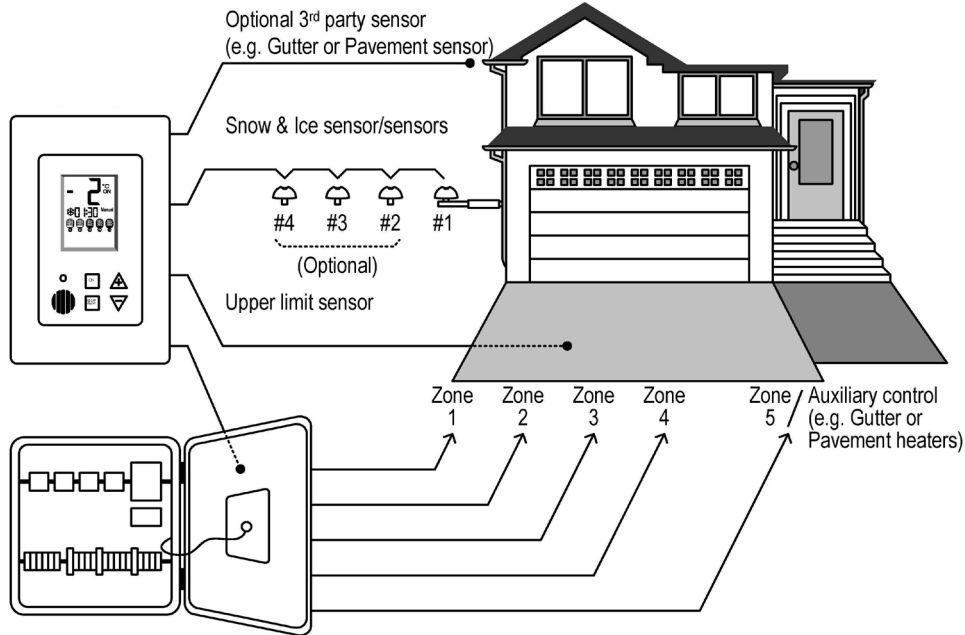
- Temperature set point
- Lower ambient temperature limit
- Slab Upper Temperature Limit to deactivate heaters for Energy Efficiency
- Time delay (Hold-on) before deactivating the heaters
- ON time for Manual mode
- Heaters cycle time / Splitting time between zones
- Number of zones and sequence of operation (Sensors and heaters control logic)
- Snow sensor RH sensitivity
- Number of snow sensors connected

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- DIP Switches located on the controllers provide easy access to technician mode and to the system configuration settings.
  - A 5<sup>th</sup> output (277 VAC, 30A Max Single Phase) can be used as a stand-alone ice melting zone or be activated simultaneously with zone #4. The Zone #5 offers a simple option for gutter, roof ice-melting or critical zone.
  - The COMMBOX-600 allows snow sensor input both from the sensors and also from a 3<sup>rd</sup> party snow sensors.
  - 3 terminals in the COMMBOX-600 are available to connect a CIT-1™, GIT-1™ or SIT-6E™ sensors and use them to control some or all of the zones.
  - Installing the system is a quick and easy task. Apart of mounting the metal box to the wall, the installer needs only to connect the line in and line out wires in the marked terminals and the system is ready to work.

## LIMITATIONS

For effective and energy efficient snow melting installations, Warmup® does not recommend heating in more than two zones.

## GENERAL SYSTEM LAYOUT



## TECHNICAL SPECIFICATIONS

<b>Approvals</b>	ETL Listed CAN/CSA-C22.2 No. 14   UL-508A	<b>Manual Reset GFS</b>	Push button on Front Panel
<b>Enclosure Protection</b>	IP20, Indoor Mounting	<b>Four Satellite</b>	600 VACS, 50 A Max
<b>Dimensions</b>	18x18x8 inch (50x50x25 cm)	<b>Contactors</b>	(Resistive), 50/60 Hz, 3-Poles
<b>Ground Fault</b>	Adjustable trip current 0.1-1 A	<b>One Satellite</b>	277 VAC, 30 A Max (Resistive),
<b>Equipment Protection</b>	(default 0.2A)	<b>Contactor</b>	50/60 Hz, 1-Pole 600 VAC / 50 A per pole
<b>GFS</b>	Adjustable time delay 0.1-1 sec. (default 0.1 sec.)	<b>Terminal blocks</b>	6 mm2 ,10 AWG (max)

## RELATED PRODUCTS

- CIT1 - see WSC-1104
- GIT1 - see WSC-1204
- SIT6E - see WSC-1304
- APS3C - see WSC-1404
- AIRsense - see WSC-0205