

Specifications

Inputs:

- **Nominal voltage range:** 120-240 VAC
- **Frequency:** 60Hz

Outputs:

- **Type:** Relay

Contact Ratings:

- **Compressor:** [2]&[4]: 30A R, 1HP@120VAC, 2HP@240VAC
- **Electric heat:** [1]&[3]: 40A R, 1HP@120VAC, 2HP@240VAC
- **Fan:** [1]&[F]: 30A R, 1HP@120VAC, 2HP@240VAC

Environmental

- **Operating temperature:** -40 to +131°F
- **Operating humidity:** 0-95%, non-condensing

Mechanical

- **Construction:** Open board (plastic bracket mounted)
- **Mounting:** Vertical or Horizontal orientation

Timing

- **Minimum defrost time:** 15 minutes
- **Maximum defrost time:** 23 hours 45 minutes
- **Terminate defrost:** Defrost can be terminated by shorting "X to N"

Status LED

- **Defrost mode:** (Red LED)
- **Refrigeration mode:** (Green LED)

Replaces

- **Grasslin:** 010-0011B, DT040, DT140, DTAV40, DTMV, DTSX
- **Paragon:** 8041, 8045, 8047, 8141, 8143, 8145, 8245, 8247
- **Precision:** 6041, 6045, 6047, 6141, 6145

Package Contents

- **ICM550** defrost control module
- Bracket mount
- Installation guide
- Terminal block & wiring diagram label sheet
- #8 x 1/2" sheet metal screws (3)
- #6 x 1/2" hex head screws (4)

> > > **CAUTION** < < <



ELECTRICAL SHOCK HAZARD!

Turn off power at the main service panel by removing the fuse or switching the appropriate circuit breaker to the OFF position before working on a high voltage control.

CAUTION!

Installation of the ICM550 shall be performed by trained technicians only. Adhere to all local and national electric codes.

WARNING!

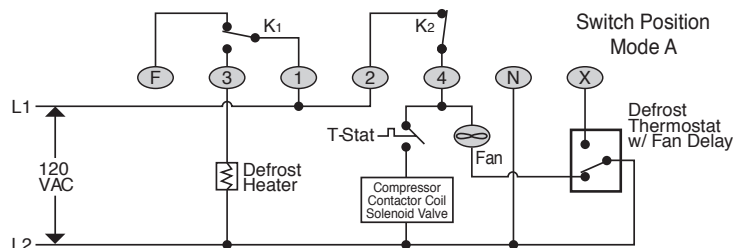
Never turn the dial backward, always turn the dial clockwise to adjust. Do not attempt to touch or adjust the hands of the clock as this may cause permanent damage to the clock.

Terminal Block

"USE COPPER WIRES ONLY"

Tightening torque 15 in-lb.

Default Wiring Diagram



To Set the Current Time

The following example shows the clock set to 2:30 PM:

Turn the outer dial clockwise until the inner clock hands point to the correct time. Each tick mark on the outer dial represents 15 minutes.

The inner dial is representative of conventional clock, with the printed "hand" showing the hour and the physical hand showing the minute. The time displayed on the inner dial will always correspond with the time on the outer dial.



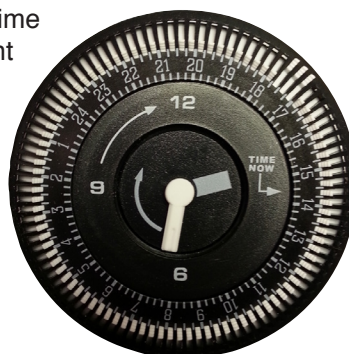
To Set Defrost Time

Decide the amount of defrost time necessary for your environment and the hours which you want defrost to occur. Next, set the switches for each 15 minute interval of defrost you require by moving the switch to the outer position.

Each switch represents a 15 minute interval of defrost and there are 4 intervals per hour.

In this example, the system will begin one defrost cycle at the 5:00 PM, which will last for 45 minutes (3 intervals). The unit will resume normal operation at 5:45 PM.

If multiple defrost cycles are required, please select the appropriate dipswitches to represent each 15 minute interval throughout the 24 hour period where defrost is desired.



Mode Selection Switch

The Mode selection switch is used to set up the condition of relay K2 based on the model you are replacing (See Table 1). When set up in Position A, relay K2 is normally closed and will open in defrost. When set up in position B, relay K2 is normally open and will close in defrost.

Mode “A” Operation

Refrigeration Mode: Green light ON and Red light OFF
(K1 NC, K2 NC)

Defrost Mode: Red light ON and Green light OFF
(K1 NO, K2 NO)

Mode “B” Operation

Refrigeration Mode: Red and Green lights OFF
(K1 NC, K2 NO)

Defrost Mode: Red and Green lights ON
(K1 NO, K2 NC)

Table 1 – Mode Switch Selection Table

Time Initiated & Time Terminated			Time Initiated & Pressure or Temperature Terminated			Time Initiated & Pressure Terminated		Grasslin	SW1
Paragon	Precision	SW1	Paragon	Precision	SW1	Paragon	Precision		
8045	6045	A	8145	6145	A	8245	A	DT040	A
8041	6041	A	8141	6141	A	8247	B	DT140	A
8047	6047	B	8143		B			DTMV	A
								DTSX	A
								DTAV40	A/B per system

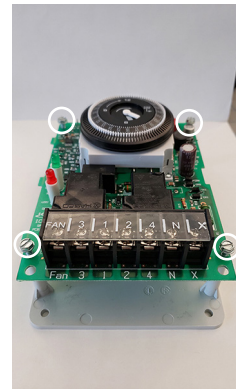
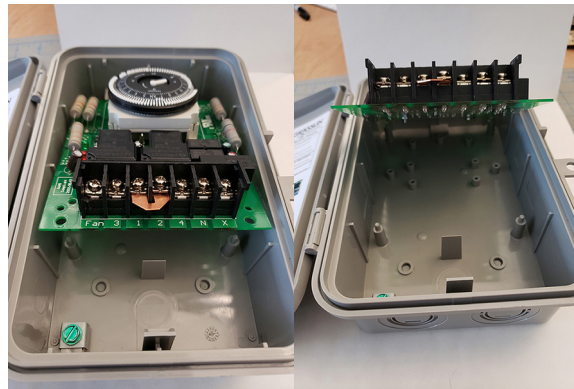
Installing the ICM550 into a Grasslin Enclosure

Push plastic tab DOWN to release the cover and pull the cover out of the enclosure.

Push plastic tab DOWN to release the board.

Pull the bottom of the existing board UP until the board is detached from the enclosure.

Remove the four screws (circled) to release the ICM550 from its bracket. The four holes will be used to connect the ICM550 to the Grasslin enclosure.



Bracket removed from ICM550. Discard the bracket and screws.

Align the ICM550 so it slides UP and INTO the plastic channels (A), while ensuring the screw holes on the ICM550 line up with the plastic standoffs (B) on the enclosure.

The ICM550 correctly placed in channels (A) with screw holes secured using the four plastic standoffs (B) of the enclosure.

Firmly press the board down with thumbs on both sides “****” of “C”.

Replace the cover by aligning the top of the cover into channel “D” then press the bottom of the cover down firmly until it snaps into place.

