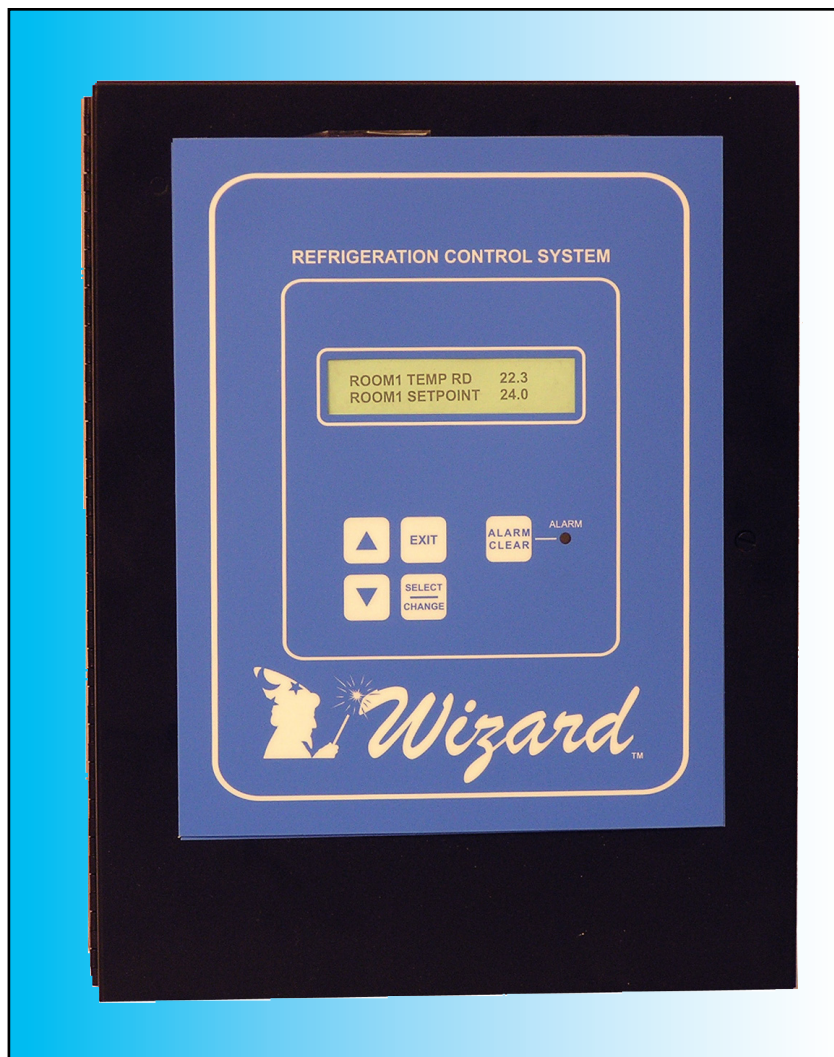


# *Wizard*

## **Gang Defrost Clock**



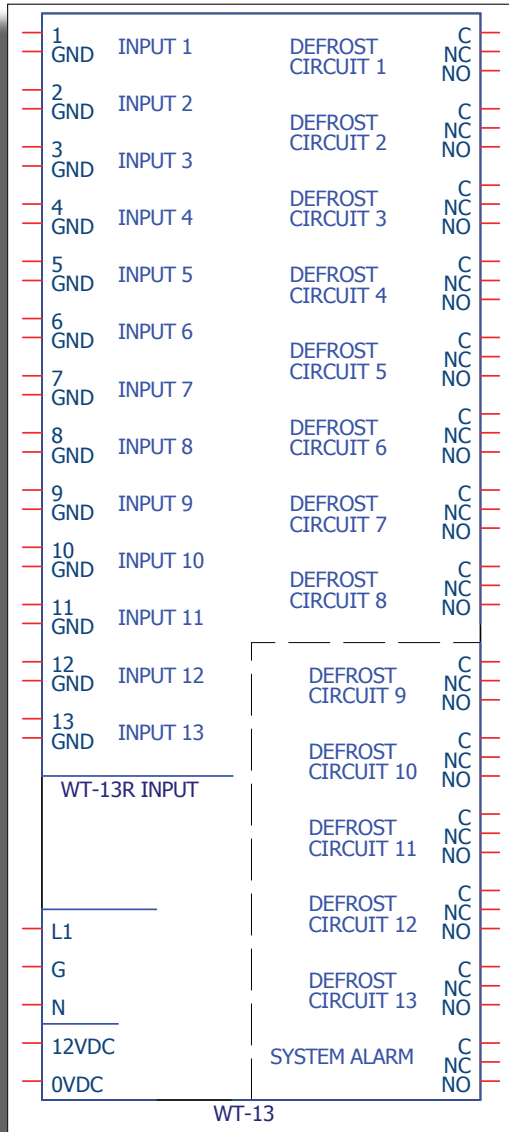
**Master Timer and Stager For Up To 13**  
*Wizards (WT-13R)*

# Master Timer and Stager For Up To 13 Wizards

The *Wizard Defrost Manager Timer Control (WT-13R)* is an ETL tested control designed to help and improve operation of up to thirteen (13) Wizard Defrost / Evaporator (WDC / WEC) Controls.

## INPUT / OUTPUT BOARD

Below shows the input/output wiring connections and system and alarm relays.



The WT-13R can either act as a multiple system defrost termination control or as a “Master unit to stage multiple Wizard defrost controls to defrost and shut off at the scheduled or a forced time either one at a time, in groups or all together depending upon the end users needs. Each relay output is wired to each Wizard Defrost “FORCE DEFROST INPUT” and the individual Wizard’s defrosts are set to zero “0”. This way, only the WT-13R defrosts will operate. Once the Defrost time is over, the control will re-activate each Wizard either one at a time, in groups or all together again depending

upon the end users needs removing the problem of spike voltages due to all of the controls activating at the same time. The control can set up to 13 zones to defrost up to 8 times per day either at the same time or staggered.

The WT-13R can be forced into Standby by either the “FORCE STANDBY” Menu or remotely by using a switch connected to the Forced Standby input. The control also has the option of disabling STANDBY on Saturday and Sunday.

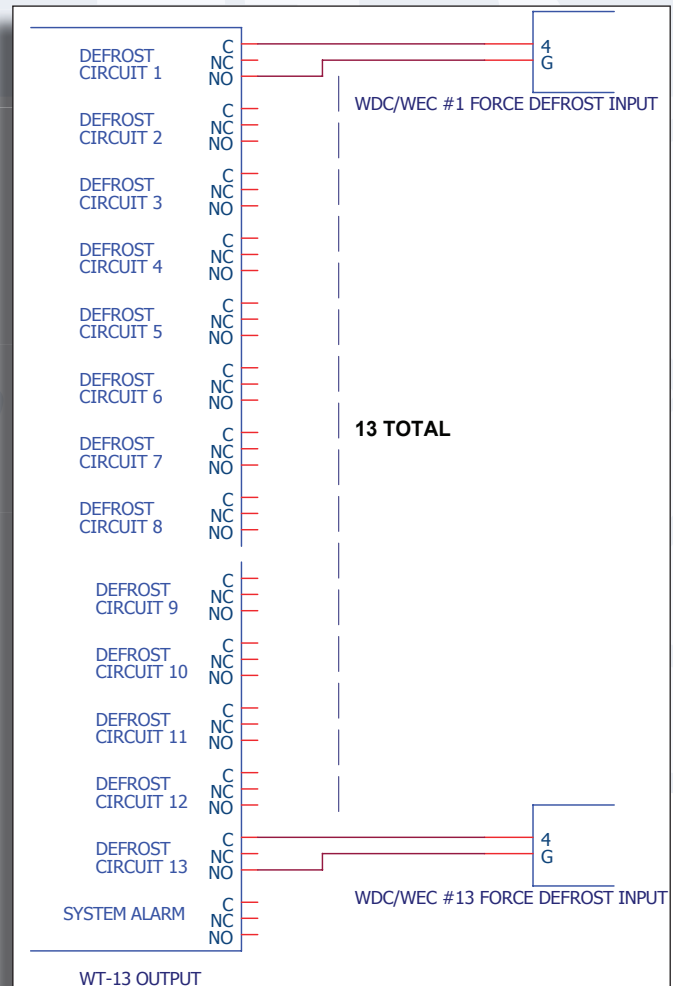
The WT-13R can be connected to GENCOM software for Windows for Remote Communication and GENCOM 3000 Supervisory System to access the control remotely.

## INPUT CONNECTIONS

The Thirteen inputs of the can be configured as Temperature (Thermistor) or Clicks-On (Open / Closed) or disabled (None) depending upon each individual users need.

## TEMPERATURE SENSOR WIRING

Genesis International, Inc. Temperature Sensors are High Precision Thermistor devices that have no required polarity when wiring. For consistency, consult the control manual for correct wiring.



## OUTPUT CONTROL RELAYS

All Relay Outputs are 1 Form C SPDT rated for 250 VAC and 3 Amp per circuit. Each relay circuit is fused with a 3.15 Amp slow blow fuse on the common leg. Relays One to Thirteen (1 - 13) are control relays. Relay Fourteen (14) is a system alarm relay.

### Control Relays

There are thirteen (13) total Control relays that can be configured with the 13 inputs as defrost termination relays or as control relays for individual Wizards. These relays are configured as Common / Normally open (C / NO) that close when activated.

### System Alarm Relay

Relay fourteen (14) is a system alarm relay that will activate when the temperature sensor or clicks-on in any zone is above the setpoint temperature for over one hour. This relay is a "Fail Safe" contact that is configured as Common / Normally Closed (C / NC) that will stay

closed at the Common / Normally Open (C / NO) connection so if the control loses power for any reason, an alarm will also be sent.

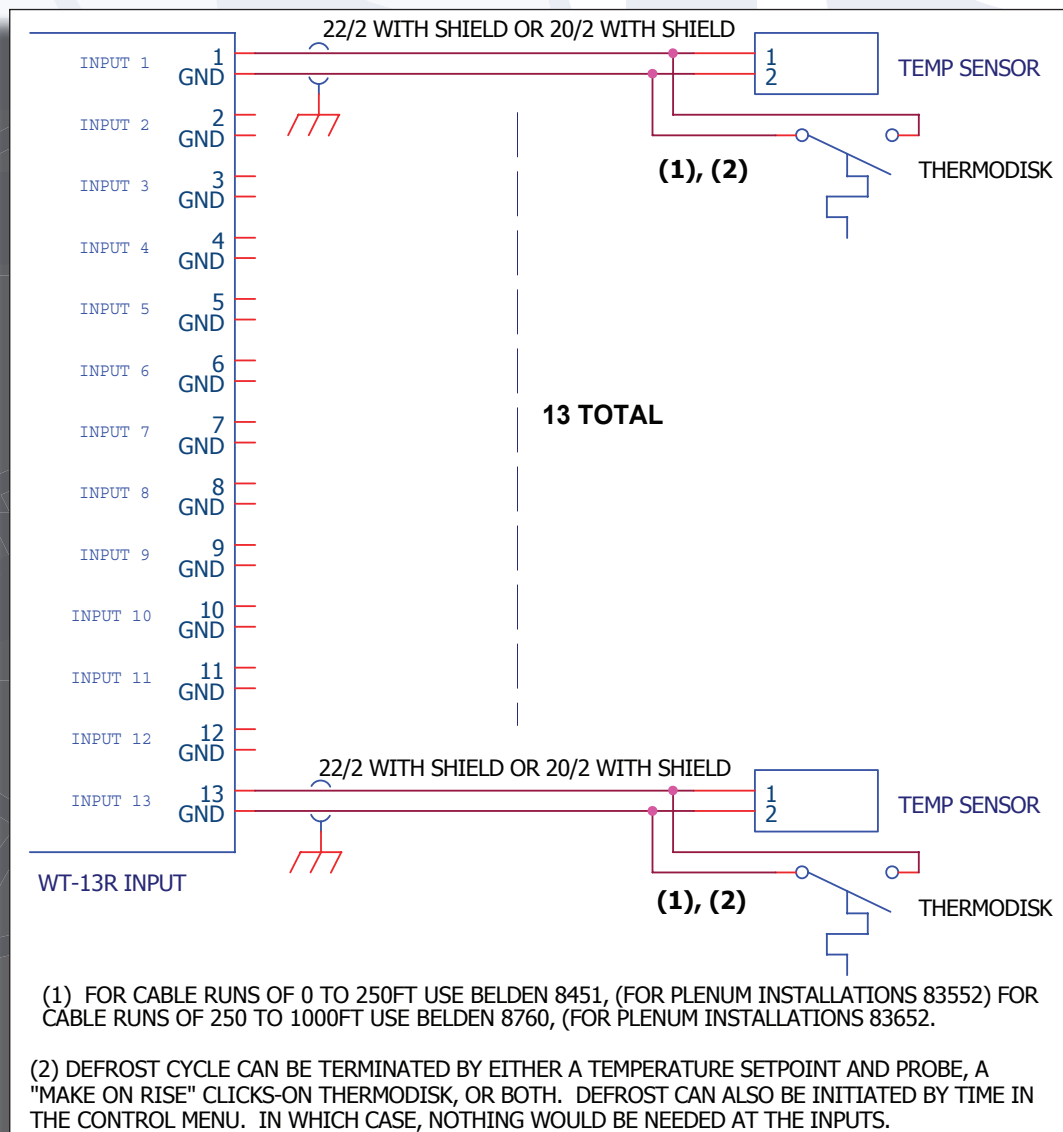
## DEFROST AND DEFROST TERMINATION

### Simple Defrost Control

The Wizard Defrost Manager control can stage up to eight (8) defrosts per day for up to thirteen (13) separate zones using either a Genesis International, Inc. Temperature sensor part number 80-0240 for temperature termination or a locally obtained Clicks-On for ON / OFF. The control will initiate and end defrost by time or by temperature.

### Gang Defrost Using Multiple Wizards

If multiple Wizard Evaporator Defrost Controls (WEC) are used, the "FORCE DEFROST" inputs of each control can be wired to a separate relay output of the Wizard Defrost Manager. The WEC control defrosts are set to zero "0" per day and each Wizard will only go into defrost when the Wizard Defrost Manager schedules each zone to initiate and stop defrost by a set time of up to eight (8) per day. The temperature inputs of the Wizard Defrost Manager are disabled and each Wizard Control Temperature will run each zone separately until the Wizard Defrost Manager activates defrost.



## CONTROL SYSTEM

### Control

Microprocessor based, Program logic stored within non-volatile EPROM memory. Set points and system configuration stored within EEPROM. Logged Data stored within Battery Backed Memory chip, minimum of 10 years storage life.

Menu driven controls with all operating sequences and control algorithms included.

The control has non-volatile program memory and a capacitor backed clock in the event of power outage. All programmable options are installed via a "Yes" or "No" question.

### Keypad

Front panel accessible with 5 tactile key switches.

Key assignments -- UP, DOWN, SELECT/CHANGE, EXIT, ALARM RESET.

### Display

2 x 20 character LCD Back Lighted Display. Eight control status lights.

### Power

Input -- 100-250 VAC, 50/60 HZ, 2.5 Amp.

### Housing

Metal Cabinet, NEMA 1, Enclosure  
Option 1 - Metal Cabinet, NEMA 1, Door Mountable  
Option 2 - Metal Cabinet, NEMA 4, Enclosure, Locked Handle

### INPUTS

Thirteen Defrost Termination inputs (Either Clicks-On or Thermistor)

## OUTPUTS

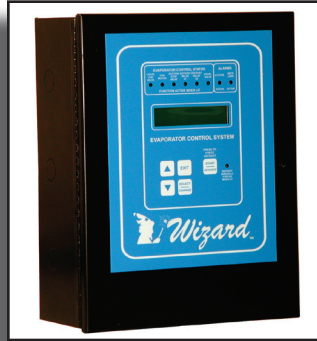
### Control Relays

All Relay Outputs are 1 Form C SPDT rated for 250 VAC and 3 Amp per circuit Each relay circuit is fused with a 3.15 Amp slow blow fuse on the common leg.

All inputs use un-pluggable screw terminals. All outputs use screw terminals.

### LISTINGS

ETL, Conforms to UL Std. 3111-1  
Certified to CAN/CSA  
C22.2 Std. No. 1010.1



**NEMA 1 Compliant Enclosure** - This enclosure is intended for indoor use only primarily to provide a degree of protection against contact with the enclosed equipment. The enclosure is not designed to provide protection from water or to be placed in a hazardous environment. Mount only in Pollution Level 2 environments, ie. environmentally controlled offices, control rooms, or environmentally controlled machine rooms.

**Dimensions** Inches (mm)

12.0 x 9.5 x 5.0 (305 x 241 x 127)

**NEMA 4X Compliant Enclosure** - This enclosure is intended for either indoor or outdoor use, 0 to 50 °C, to provide a degree of protection against corrosion, windblown dust and rain, splashing water, and hose directed water.

**Dimensions** Inches (mm)

14.0 x 15.0 x 8.2 (312 x 381 x 208)

**NEMA 1 Panel Mount Option** - The control and display assemblies must be suitably mounted in an enclosure. The Faceplate may be surface mounted onto a Nema 1 enclosure. The IO Board Assembly must be mounted within an enclosure providing at least Nema 1 protection.

**Dimensions** Inches (mm)

**Faceplate** -

10.2 x 8.5 x 2.0 (259 x 216 x 51)

**Backplate** -

10.6 x 8.5 x 3.0 (269 x 216 x 76)



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