



9145 / 9045 Series

UNIVERSAL DEFROST TIMERS

<http://waterheatertimer.org/Paragon-timers-and-manuals.html>



### Features and Benefits

The Paragon® 9045-00 and 9145-00 Universal Defrost Timers are the only multi-voltage defrost timers engineered to refrigeration standards. At four defrosts per day, the Paragon Universal Defrost Timer switches last 16 years longer than competitive offerings.

- Certified to UL873 Standard for Temperature-Indicating and Regulating Equipment, as Refrigeration Controllers
- Wires directly to 120V AC, 208V AC or 230V AC power sources without jumpers or switches
- Easy programming, easy set-up, set time, set defrost start and defrost end
- Initiate 15 minute manual defrost
- 100 hours of power loss protection for both time and defrost schedule
- Display shows defrost start time and duration
- Real-time clock
- Lighted display
- System status indicators
- Mechanism-only versions designed to fit in the standard Paragon enclosures

### As Easy As 1 – 2 – 3

#### 1. Set Time

Scroll cursor to desired time.  
Select SET TIME button.

#### 2. Set Defrost

Scroll cursor to desired defrost times.  
Select DEFROST START/STOP button.

#### 3. Clear Defrost

Rotate cursor to the first segment in the defrost screen.  
Select CLEAR button.

Additional programming features are just as simple to use. Install our Universal Defrost Timer today to understand why Paragon® is Simply the Right Choice™ in Defrost Timers.

An ISO 9001 – 2008 Certified Company

**1** Year Limited Warranty



# 9145 / 9045 Series

# UNIVERSAL DEFROST TIMERS

## Ordering Information

- 9145-00** Time Initiate/Temperature, Pressure Terminate Defrost Timer with Metal Enclosure
- 9145-00M** Time Initiate/Temperature, Pressure Terminate Defrost Timer – Mechanism Only
- 9045-00** Time Initiate/Time Terminate Defrost Timer with Metal Enclosure
- 9045-00M** Time Initiate/Time Terminate Defrost Timer – Mechanism Only

## Specifications

**Input Power**  
120/208–240 VAC 60 Hz (+10, -15%)

**Power Consumption**  
6VA max, Defrost termination switch (terminal “G”) input impedance to terminal C: 85kΩ +/- 5%

**Operating Voltage**  
102 VAC min to 132 VAC max @ 60 Hz  
176.8 VAC min to 264 VAC max @ 60Hz  
NOTE: No user-required adjustments to switch between the high and low voltage.

**Ambient Operating Conditions**  
-40°F to 131°F (-40°C to 55°C);  
0 to 95% RH (non-condensing)

**Storage Temperature**  
-40°F to 140°F (-40°C to 60°C)

**Outside Dimensions**  
Individual unit  
4.40”W x 7.82”H x 3.80”D

Individual unit (in shipping box)  
4.75”W x 8.875”H x 4.75”D

**Individual Case Shipping Weight**  
3.2 lbs

**Agency Listings**  
UL LISTED File number SA512 (9045-00 and 9145-00)

UL LISTED File number SA512 (9045-00M and 9145-00M)

The devices are listed as Refrigeration Controllers.

### System Status Indicators



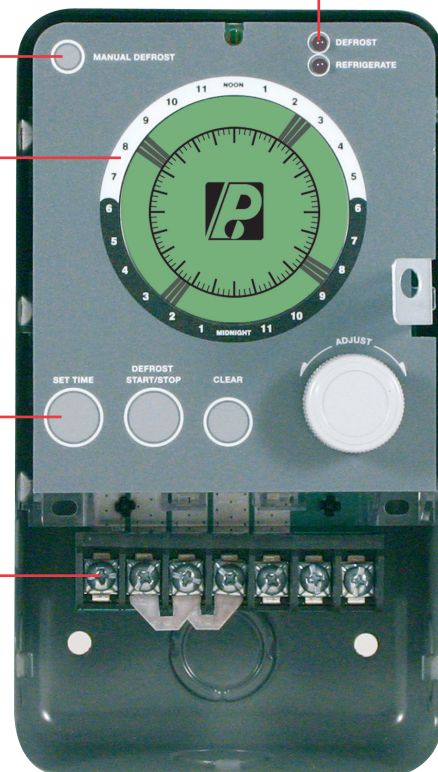
Initiate 15 Minute Manual Defrost



Lighted display shows defrost start time and duration

Easy Set-Up  
Set Time  
Set Defrost Start and Defrost End

Direct Connect Line Voltage – 120/208-240V AC



## 9145 Terminal Data\*

Terminal	A	B	C	D	E	F	G
<b>Relay Contact</b>	SPDT NC Contact	SPDT NO Contact	SPDT COMM Contact	SPDT NO Contact	SPST COMM contact	L2/N Power in to timer	Defrost Termination Device Input L2/N side
<b>Relay Rating</b>	15A resistive @ 120 VAC to 240 VAC  1/4HP @ 120 VAC, 1/2HP @ 208 VAC to 240 VAC	30A resistive @ 120 VAC to 240 VAC  1HP @ 120 VAC, 2HP @ 208 VAC to 240 VAC			30A resistive @ 120 VAC to 240 VAC  1HP @ 120 VAC, 2HP @ 208 VAC to 240 VAC		
<b>Device Connections</b>	Fan (Typical) Compressor (Optional)	Defrost Device (Typical)	L1 Power to timer and to Defrost Termination Device		Compressor (Typical) Fan (Optional)		Defrost Termination Switch

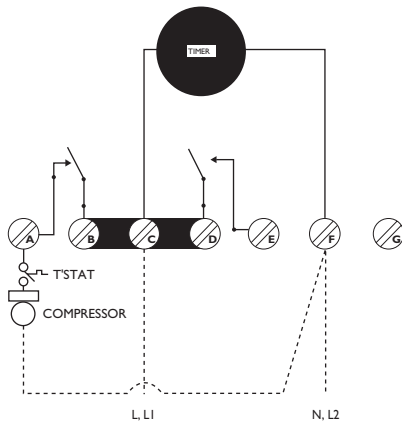
\* 9145 is a general purpose defrost timer and can be used for both Time Initiate/Time Terminate and Time Initiate/Temperature, Pressure Terminate

## 9045 Terminal Data

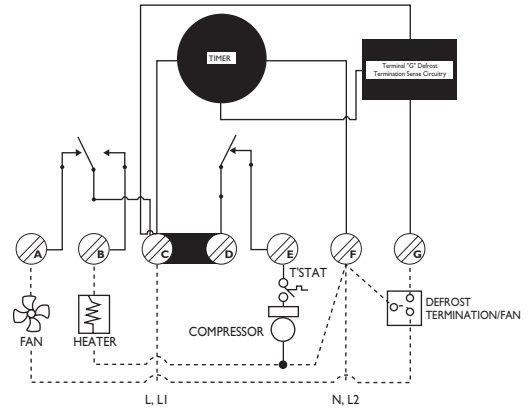
Terminal	A	B	C	D	E	F	G
<b>Relay Contact</b>	SPST #1 NC Contact	SPST #1 COMM Contact	L1 Power in to timer	SPST #2 NO Contact	SPST #2 COMM Contact	L2/N Power in to timer	No Connection
<b>Relay Rating</b>	30A resistive @ 120 VAC to 240 VAC  1HP @ 120 VAC, 2HP @ 208 VAC to 240 VAC				30A resistive @ 120 VAC to 240 VAC  1HP @ 120 VAC, 2HP @ 208 VAC to 240 VAC		
<b>Device Connections</b>	Compressor (Typical)				Defrost Drive (Typical)		

### Applications and Wiring Diagrams

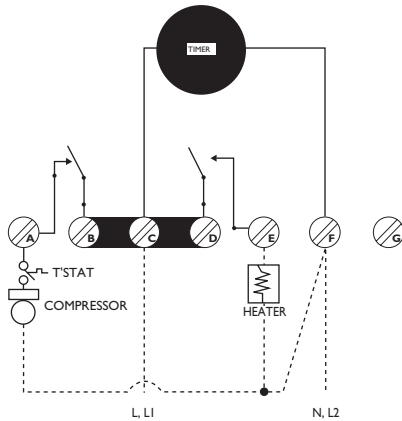
**9045**  
**AIR**  
**DEFROST**  
 Time  
 Initiated  
 Time  
 Terminated



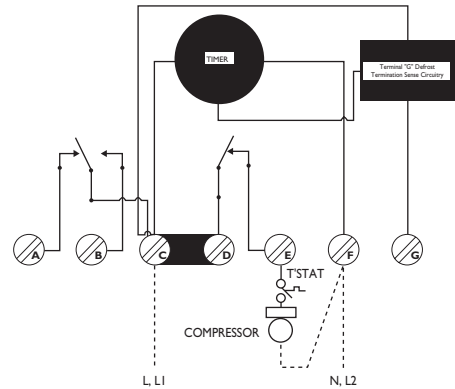
**9145**  
**ELECTRIC**  
**DEFROST**  
 Time  
 Initiated  
 Temperature  
 Terminated



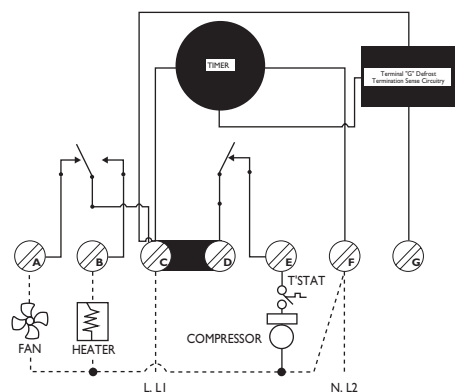
**9045**  
**ELECTRIC**  
**DEFROST**  
 Time  
 Initiated  
 Time  
 Terminated



**9145**  
**AIR**  
**DEFROST**  
 Time  
 Initiated  
 Time  
 Terminated

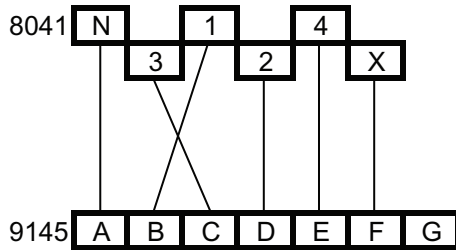


**9145**  
**ELECTRIC**  
**DEFROST**  
 Time  
 Initiated  
 Time  
 Terminated

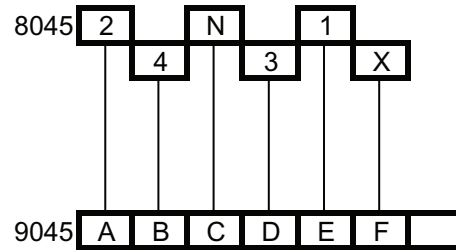


### Conversion Diagrams for Paragon Mechanical Controls

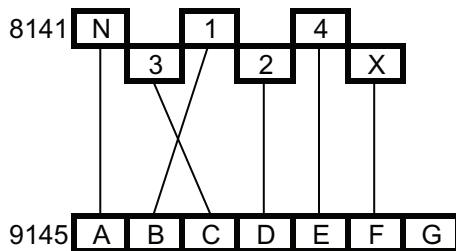
**Convert 8041 to 9145**



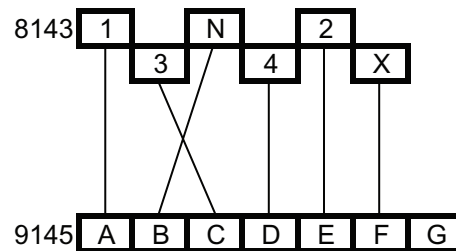
**Convert 8045 to 9045**



**Convert 8141 to 9145**



**Convert 8143 to 9145**



**Convert 8145 to 9145**

