

• **Low cost time and temperature defrost control**

**SPECIFICATIONS**

**Input:**

- **Voltage:** 18-30 VAC
- **Frequency:** 50/60 Hz
- **Power Consumption:** 1 watt maximum
- **Current Draw:** 300mA maximum

**Time Delays:**

**HK32EA001 Operation**

- **Defrost:** 10 minutes
- **Time Interval:** 30/60/90/120 minutes selectable
- **Test Time:** Short speedup pins to reduce runtime by 256x

**HK32EA003 Operation**

- **Defrost:** 10 minutes
- **Forced Defrost:** 30 seconds
- **Time Interval:** 30/60/90/120 minutes selectable
- **ASC:** 5 minutes\*
- **Random Start:** 0-30 seconds optional
- **Quiet Shift:** 30 seconds optional
- **Test Time:** To enter defrost, short speedup pins for 5 seconds and release
- **ASC Test:** Short speedup pins for 1 second and release

**HK32EA008 Operation**

- **Defrost:** 10 minutes
- **Forced Defrost:** 30 seconds
- **Time Interval:** 30/60/90/120 minutes selectable
- **ASC:** 5 minutes\*
- **Random Start:** 0-30 seconds optional
- **Quiet Shift:** 70 seconds optional
- **Test Time:** To enter defrost, short speedup pins for 5 seconds and release
- **ASC Test:** Short speedup pins for 1 second and release

\* Cutting resistor 'R50' will disable the ASC timer

**Mechanical:**

- **Dimensions:** 3.5" x 5.5"
- **Mounting:** Metal standoffs

**Dip Switch Configuration:**

- **Time Interval Selection (switch 1 and 2)**

Switch 1	Switch 2	Time Interval
Off	Off	90 minutes
Off	On	60 minutes
On	Off	30 minutes
On	On	120 minutes

- **Quiet Shift (switch 3)** – On or Off selectable (not for HK32EA001 operation)
- **Random Start Timer (switch 4)** – On or Off selectable (not for HK32EA001 operation)
- **Board Selection (switches 5 and 6)**

Switch 5	Switch 6	Carrier Board
Off	Off	HK32EA001
Off	On	HK32EA003
On	Off	HK32EA003
On	On	HK32EA008

**INSTALLATION**

**HK32EA001 Installation**

1. Disconnect Power
2. Configure the dipswitch.
3. Connect terminals as shown in the wiring diagram.
4. Reapply power.
5. Check operation: (this will provide a shortened 2 second defrost cycle).
  - a. Jump R to Y.
  - b. Jump across the DFT terminals.
  - c. Short across the speedup pins.
  - d. Verify the relays toggle on/off based on the timing below.

Test Mode Times		
Function	Actual Time	Equivalent Test Time
Defrost Time	10 minutes	2.34 seconds
Interval Time	30 minutes	7.03 seconds
	60 minutes	14.06 seconds
	90 minutes	21.09 seconds

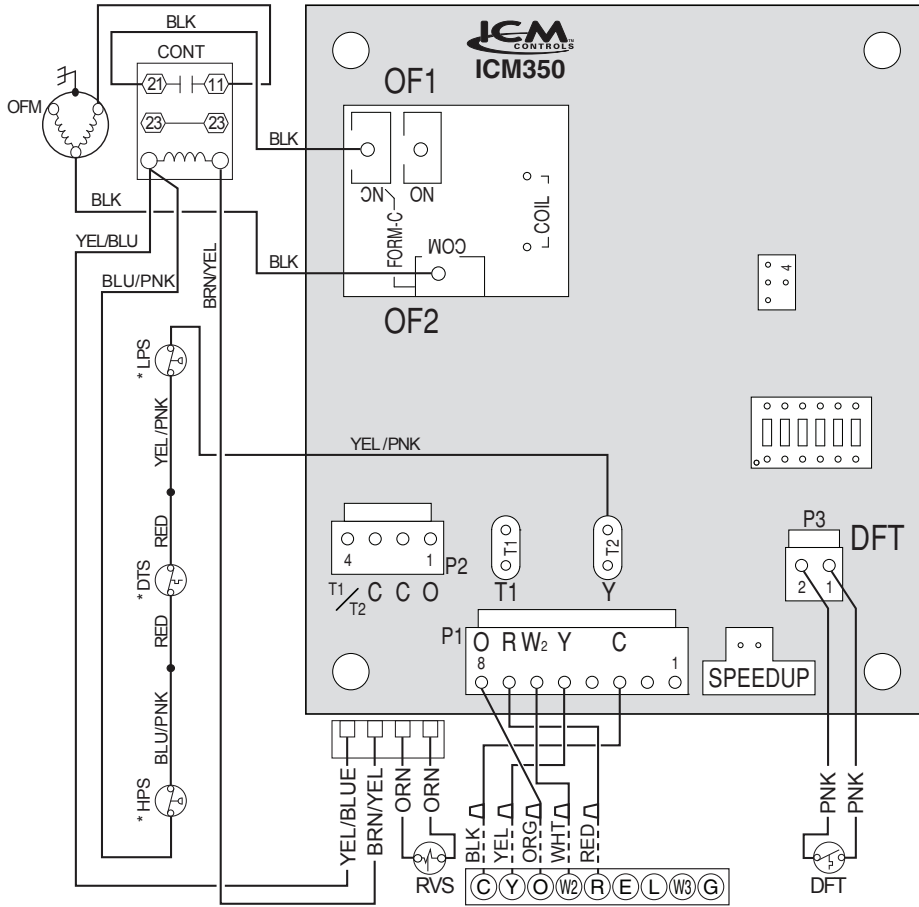
6. Disconnect power.
7. Remove all jumpers.
8. Reapply power.

**HK32EA003/HK32EA008 Installation**

1. Disconnect Power
2. Configure the dipswitch.
3. Connect terminals as shown in the wiring diagram.
4. Reapply power.
5. Check operation: (this will provide a full 10minute defrost cycle if DFT pins remain shorted).
  - a. Jump R to Y.
  - b. Jump across the DFT terminals.
  - c. Short across the speedup pins for 2 seconds and release. The T1/T2 relay turns on (removes the ASC timer).
  - d. Short across the speedup pins for 5 seconds and release.
  - e. Verify the relays toggle on/off (removes interval timer).
6. Disconnect power.
7. Remove all jumpers.
8. Reapply power.

# WIRING DIAGRAMS

**HK32EA001**



**HK32EA003/HK32EA008**

