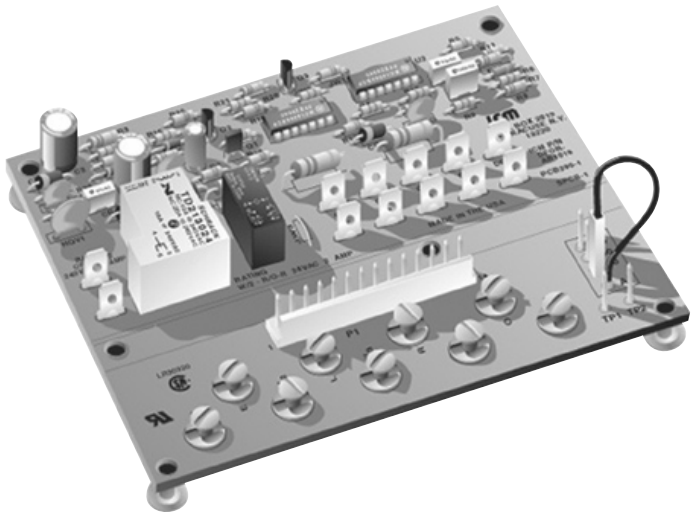
Defrost Controls

ICM320

Low cost, high performance solid state defrost control, a low cost replacement for Carrier's HK32FA006.

The ICM320 features stable pin post construction and conformal coating for greater reliability in harsh environments. On-board test pins reduce test times by 256 times.

The control is easy to mount, features a heavy duty relay output and integrates multiple time and temperature defrost functions onto a low cost, conformally coated open, board package.



Mode of Operation

The ICM320 provides a selectable time interval (30, 50, 90 min.) between defrost cycles. Upon application of power and when the DFT is closed, the timing sequence begins with the delay period first, and then the 10 minute defrost period.

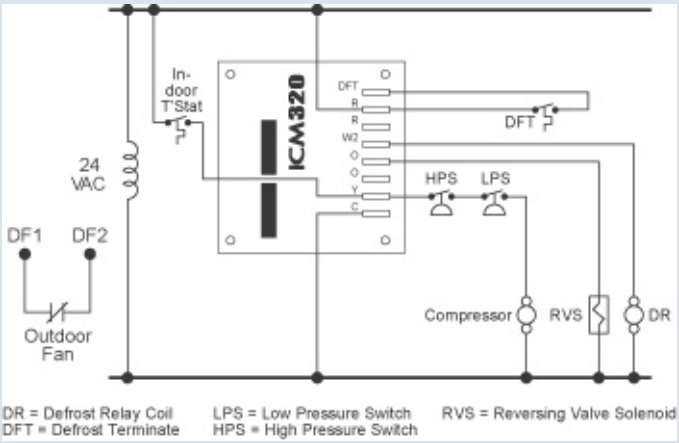
Defrost Terminate Input: When open, will terminate the defrost period and reset all times.

The "Y" terminal is used to track compressor run times. The on-board test pins reduce test time by 256x.

Each defrost control is shipped with detailed instructions.

All features and specifications subject to change without notice.

Ladder Diagram



Specifications

Time Delays

- Defrost Time: Fixed 10 min. ± 5%
- Interval Time between defrosts: Pin-selectable 30/50/90 min.
- Power on Reset Time: 500 ms.
- Test time: short across test terminals reduces test time 256x

Input

- Voltage: 18-30 VAC
- Frequency: 50/60 Hz
- Power Consumption: 1 watt max.

Output

O, W2

- Type: Relay
- Form: DPST, N.O.
- Rating: 2 amps @ 24 VAC

DF1, DF2

- Type: Relay
- Form: SPST, N.C.
- Rating: 10 amps @ 240 VAC

Mechanical

- Dimensions: 4.75" x 5"
- Mounting: Surface mount, using (6) #6 or #8 screws or plastic standoffs

Environmental

- Operating Temperature: -40˚C to +75˚F, -40˚ to 167˚F

Transient Protection

- IEEE 587 Categories A&B without false output or degradation (6Kv 0.5 µs x 100 Khz Ring Wave)(6Kv 1.2 µs x 50 Khz Impulse Wave)

Replaces

Direct OEM Replacement for:

Carrier: HK32FA006

Test Mode Times

Compressor Run Times		Defrost Times	
Actual Interval Time	Equivalent Test Time	Actual Defrost Time	Equivalent Test Time
30 min. fixed	7.03 sec.	10 min. fixed	2.34 sec.
50 min. fixed	11.72 sec.	10 min. fixed	2.34 sec.
90 min. fixed	21.09 sec.	10 min. fixed	2.34 sec.

Ordering Information

Part #	Product Code	Description
ICM301	DFOR-AB1016	10 min. Defrost 30/50/90 min. intervals

Toll-free 800.365.5525
Application Assistance

ICM CONTROLS

Phone 315.233.5266
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