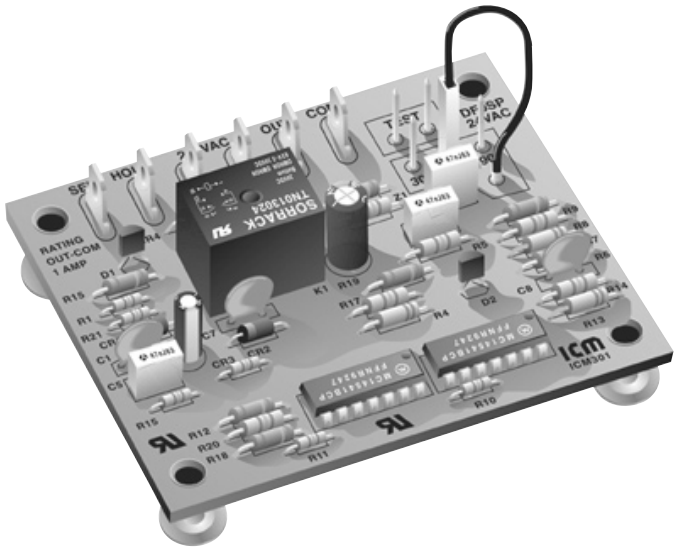
Defrost Controls

ICM301

Ultra low cost heat pump defrost timer.

The ICM301 integrates multiple time and temperature defrost functions onto a low cost, conformally coated, open board package.

- **Sensor input for defrost terminate**
- **Time and temperature terminate**
- **10 minute fixed defrost time**
- **Pin-selectable: 30/60/90 min. defrost intervals**
- **On-board test pins reduce test time by 256X**
- **Hold input accumulates actual compressor run time regardless of disc thermostat condition prior to defrost**
- **c UL us recognized: E118867**



Mode of Operation

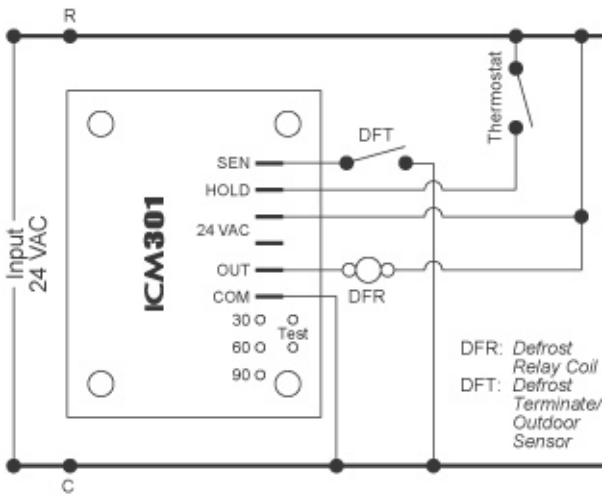
The ICM301 provides a selectable time interval between defrost cycles. It will allow a 10 minute defrost every 30/60/90 minutes as long as the DFT is closed on the SEN terminal. A HOLD input allows the timer to accumulate time while the compressor is running.

A warm coil causes the DFT to open which will prevent time accumulation or end the defrost period. When the defrost period ends, either by opening the DFT or after the 10 minute defrost period has elapsed, the timer is reset.

Each defrost control is shipped with detailed instructions.

All features and specifications subject to change without notice.

Ladder Diagram



Specifications

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

Output
- Type: Relay
- Form: SPST, Normally Open
- Rating: 1 Amp

Time Delays
- Defrost Time: Fixed 10 min. ± 5%
- Interval Time between defrosts: Pin-selectable 30/60/90 min.
- Power on Reset Time: 500ms
- Test time: short across test terminals reduces test time 256x

Mechanical
- Dimensions: 3.5" x 2.875"
- Mounting: Surface mount using (4) #6 or #8 screws

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:

Rheem: 47-21776-06

ICM: DFOSP24A2

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.
60 min. fixed	14.06 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	DFOSP24A2	10 min. Defrost 30/60/90 min. intervals