

ICM314 DEFROST CONTROL



LEAD FREE



Heat pump defrost control board with high power relay outputs for fan and strip heat.

The ICM314 integrates multiple time and temperature defrost functions into a low cost solution.

Features

- Time and temperature terminated defrost
- Integral short cycle protection
- High/low pressure switch monitoring
- Pressure switch bypass
- High power condenser fan relay output
- Strip heat & reversing valve outputs
- Anti-bang feature when entering and exiting defrost mode
- User selectable compressor delay mode
- Lead free

Specifications

Input

- Voltage: 18-30 VAC
- Frequency: 50/60 Hz
- Power: 4.8VA Maximum (200 mA at 24 VAC)

Output: O – RV

- Type : Relay
- Rating: 1 amp @ 24VAC

CNT

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- Rating: 1 amp @ 24 VAC

OFM

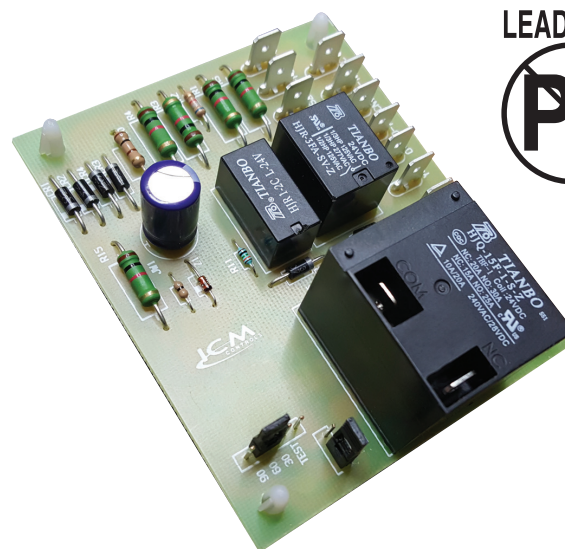
- Type: Relay
- Form: SPST N.C.
- Rating: 15 amps @240VAC

Time Delays

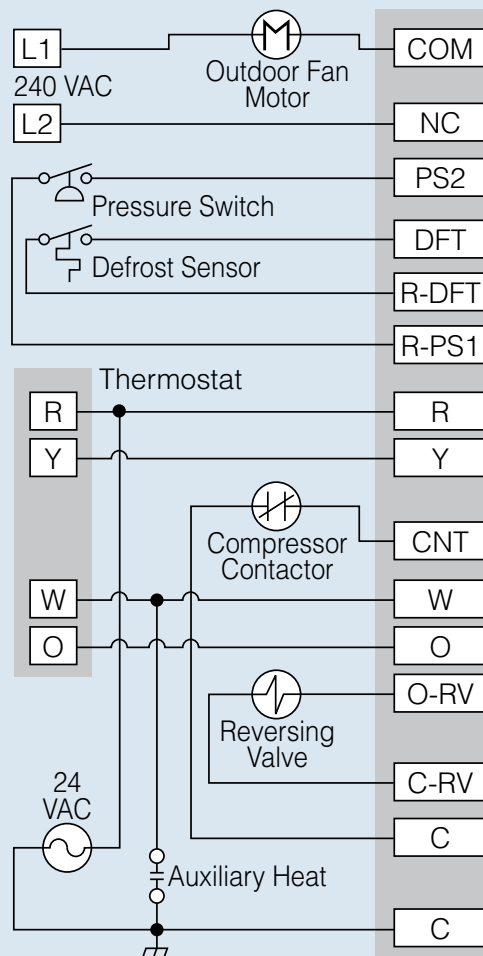
- Anti-Short Cycle Delay: 3 minutes
- Defrost Time: Fixed at 12 minutes
- Interval Time Between Defrosts: Pin-selectable 30/60/90 mins.
- Test Mode: Short across test terminals reduces test time by 240X

Mode of Operation

When the defrost thermostat (DFT) is closed and O (reversing valve) is de-energized, the ICM314 will accumulate the run time of the compressor. When the elapsed compressor run time equals the user settable interval, the unit will go into defrost. The pressure switch is bypassed for the initial 5 minutes of the defrost cycle. If the compressor delay mode (DLY) is selected, the compressor will turn off for 30 seconds when entering the defrost cycle. The defrost cycle terminates if a warm coil causes the DFT to open or 12 minutes of compressor run time has elapsed. The pressure switch is bypassed for 5 minutes after the end of the defrost cycle. If DLY is selected, the compressor will turn off for 30 seconds when terminating the defrost cycle.



Wiring Diagram



Replaces

Direct replacement for Goodman PCBDM 133