

Replaces: Direct replacement for Goodman PCBDM 133

SPECIFICATIONS

Input

Voltage: 18-30 VACFrequency: 50/60 Hz

Power: 4.8VA Maximum (200 mA at 24 VAC)

Output: O - RV
• Type : Relay

• Rating: 1 amp @ 24VAC

CNT

• Type: Relay

• 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.

Mechanical

• Dimensions: 2.9"L X 3.52"W

• Mounting: 0.375" Plastic Snap In Supports

Environmental

• Operating and Storage Temperature: -40°F to 149°F -40°C to 65°C

Lead Free

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 compresor 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.

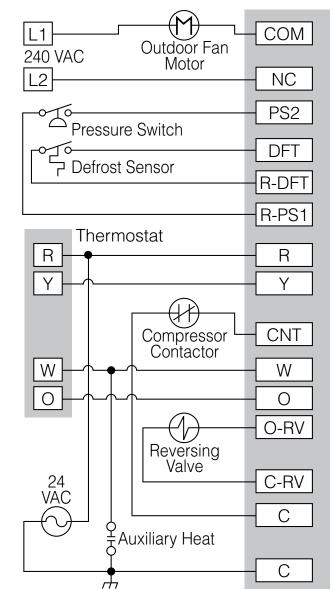
TEST MODE

To put the defrost board into test mode, place a jumper across the TEST pins. After 2 seconds of run time the unit will enter test mode. The interval time is reduced to 5 seconds, anti-short cycle is removed and the defrost time is reduced to 3 seconds.

Compressor Run Times		Defrost Times	
Actual Interval Time	Equivalent Test Time	Actual Defrost Time	Equivalent Test Time
30 minutes fixed	5 seconds	12 minutes	3 seconds
60 minutes fixed	5 seconds	12 minutes	3 seconds
90 minutes fixed	5 seconds	12 minutes	3 seconds

WIRING DIAGRAM

LEAD FREE



TROUBLESHOOTING

Problem	Analysis	
Unit will not go into defrost during TEST mode.	Test Mode reduces test time but does not create a full cycle defrost.	
Unit will not go into defrost in Normal mode	Check for DFT to be closed, compressor is running, all safeties are closed (PS), and interval time has elapsed.	
The heat pump outdoor/indoor coil ices over	Unit may be low on refrigerant, check DFT and reversing valve for proper operation, check interval between defrost is not set too long.	