

ICM6502

Air Handler Control Board



APPLICATIONS:

APPLIANCE |

ELECTRICAL

HVAC/R | MARINE | POOL & SPA |



OVERVIEW

The **ICM6502** is a package unit heat pump control board designed to provide control of the compressor, reversing valve, auxiliary heat elements, the condenser and evaporator fans. The **ICM6502** also accepts inputs from a thermostat, indoor coil temperature, outdoor coil temperature, outdoor ambient temperature, indoor room temperature and a shutdown switch (front desk). The ICM6502 provides compressor protection from short cycling with an anti-short cycle timer and low ambient lockout. A built in defrost cycle will protect the outdoor coil from freezing up when in heating mode.

REPLACES

■ ClimaTek/ First Company: CB1025, CB1026

FEATURES

- ▼ Power interruption protection for the compressor
- Random Start delay
- 6-minute anti-short cycle timer protects compressor from rapid short cycling
- Two stages of heating (compressor & auxiliary back up heat)
- Low outdoor ambient compressor lockout (cooling/heating)
- Steady state cooling
- Low indoor coil temperature cooling shut down
- ▼ Low outdoor coil defrost lockout (defrost mode)
- ▼ Low indoor room ambient (RS) auxiliary heat mode
- Front Desk shut down switch input
- Speed up test mode reduces timing for field testing of the board
- **Dimensions:** 7.50" x 5.50"

SPECIFICATIONS

INPUT

■ L1 & L2: 240 VAC system power connections

■ Control Voltage: 24VAC

■ **G:** Fan

■ W1/Y: Heat/Cool - Stage 1

■ W2: Auxiliary Heat - Stage 2

■ O: Reversing Valve

■ **FD:** Front Desk Switch

■ **RS:** Indoor Room Sensor

■ Indoor: Indoor Coil Sensor

Outdoor: Outdoor Coil Sensor

■ Cooling Lockout: Outdoor Ambient Sensor

OUTPUT

■ Compressor, K5, K6: 10 FLA @240 Vac

■ Low Speed Evap. Fan, Kg: 2FLA @240 Vac

■ High Speed Evap. Fan, K11: 2FLA @240 Vac

■ Auxiliary Heat Stage 1, K1, K2: 21A Resistive @240 VAC

■ Auxiliary Heat Stage 2, K3, K4: 21A Resistive @240VAC

■ Reversing Valve, K8: 24 Vac 5VA

■ Condenser Fan, K7: 24 Vac 1A Pilot Duty

■ Thermostat Outputs: • R (24 Vac) • Com



