

Copeland® Digital Compressor Controller



Low Voltage Terminals

24 COM Module Power
24 VAC Module Power
C1 Demand Input -
C2 Demand Input +
P1 Pressure Common
P2 Pressure Input
P3 Pressure Power 5VDC
P4 Pressure Shield
P5 Pressure Output -
P6 Pressure Output +
T1 Discharge Temp Sensor
T2 Discharge Temp Sensor

High Voltage Terminals

A1 Alarm Relay Out
A2 Alarm Relay Out
L1 Control Voltage N
L2 Control Voltage L
M1 Contactor
M2 Contactor
U1 Unloader Solenoid
U2 Unloader Solenoid
V1 Vapor Injection Solenoid
V2 Vapor Injection Solenoid

All high voltage terminals
rated 24-250 VAC

LED Descriptions

Green LED - 24VAC Power
Yellow LED - Unloader Solenoid On
Red LED - ALERT Flash Code

- Flashing Green LED indicates anti-short cycle timer active
- All LEDs flashing at same rate indicates 24VAC supply too low for operation
- All LEDs solid at same time indicates controller failure
- Reset ALERT code by removing 24VAC supply to module
- All ALERTs close alarm relay contacts
- All ALERTs deenergize contactor and solenoids except Code 6
- Compressor always unloads for 0.1 second at startup
- Compressor only starts when Demand signal input is above 1.45 VDC and no ALERTs are present

Troubleshooting ALERT Flash Codes

- Code 1 Reserved for future use
- Code 2 High Discharge Temperature
Discharge thermistor above trip set point or thermistor short circuited. Resets after 30 minutes and motor cools down.
- Code 3 Compressor Protector Trip
No compressor current is detected when compressor should be running. Resets when compressor current is detected.
- Code 4 Locked Rotor
Locked rotor condition is detected. Reset after 30 minutes.
- Code 5 Demand Signal Loss
Demand input signal is below 0.5VDC. Resets after demand input signal rises above 1.0VDC.
- Code 6 Discharge Thermistor Fault
Thermistor is not connected. Reset by reconnecting thermistor.
- Code 7 Reserved for future use
- Code 8 Compressor Contactor Fault
Compressor current is detected when compressor should be off. Resets when current is no longer detected.
- Code 9 Low 24VAC Supply
Supply voltage to module has dropped below 18.5VAC. Resets after voltage rise above 19.5VAC.

For More Information:
EmersonClimate.com
Online Product Information (OPI)
AE Bulletin AE8-1328

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