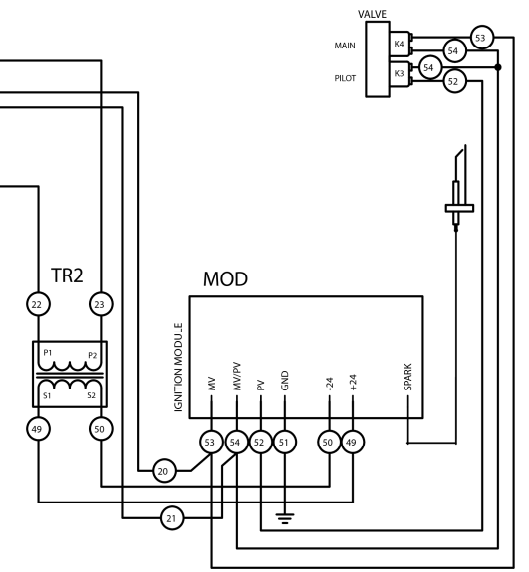
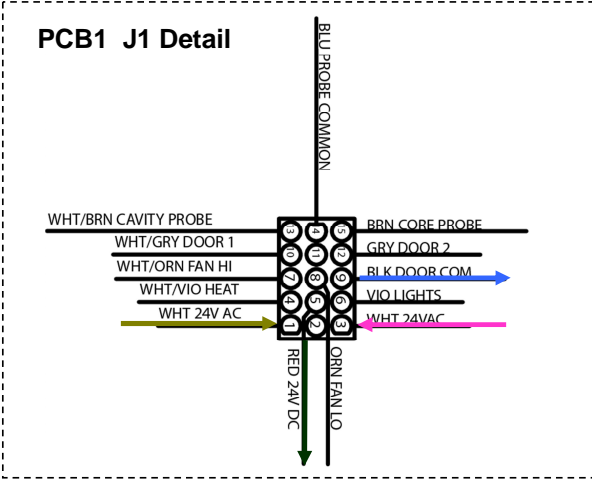
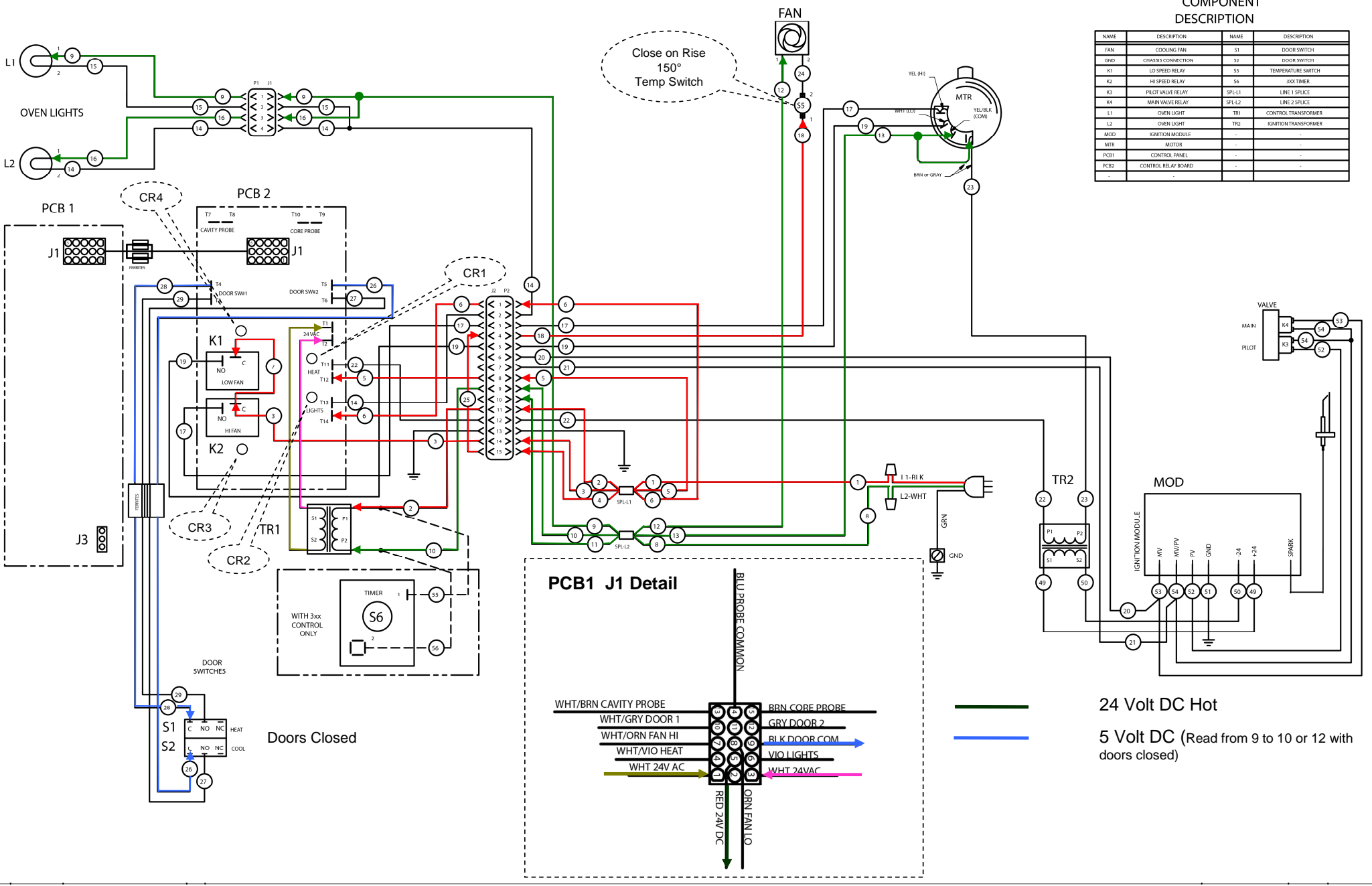


COMPONENT DESCRIPTION

NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S1	DOOR SWITCH
IGND	CHASSIS CONNECTION	S2	DOOR SWITCH
K1	LO SPEED RELAY	S5	TEMPERATURE SWITCH
K2	HI SPEED RELAY	S6	3XX TIMER
K3	PILOT VALVE RELAY	SPL1	LINE 1 SPLICE
K4	MAIN VALVE RELAY	SPL2	LINE 2 SPLICE
L1	OVEN LIGHT	TR1	CONTROL TRANSFORMER
L2	OVEN LIGHT	TR2	IGNITION TRANSFORMER
MOD	IGNITION MODULE	-	-
MTR	MOTOR	-	-
PCB1	CONTROL PANEL	-	-
PCB2	CONTROL RELAY BOARD	-	-
-	-	-	-



— 24 Volt DC Hot
— 5 Volt DC (Read from 9 to 10 or 12 with doors closed)

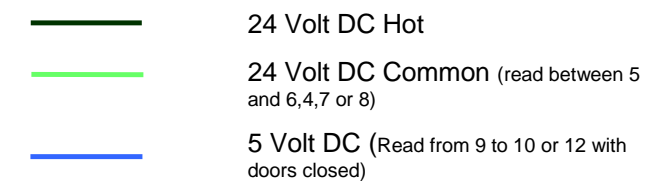
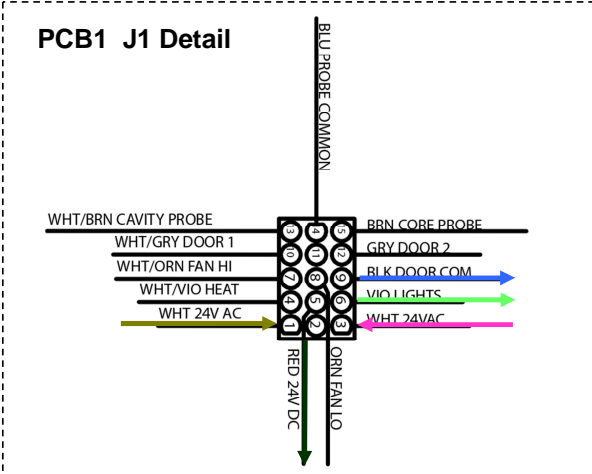
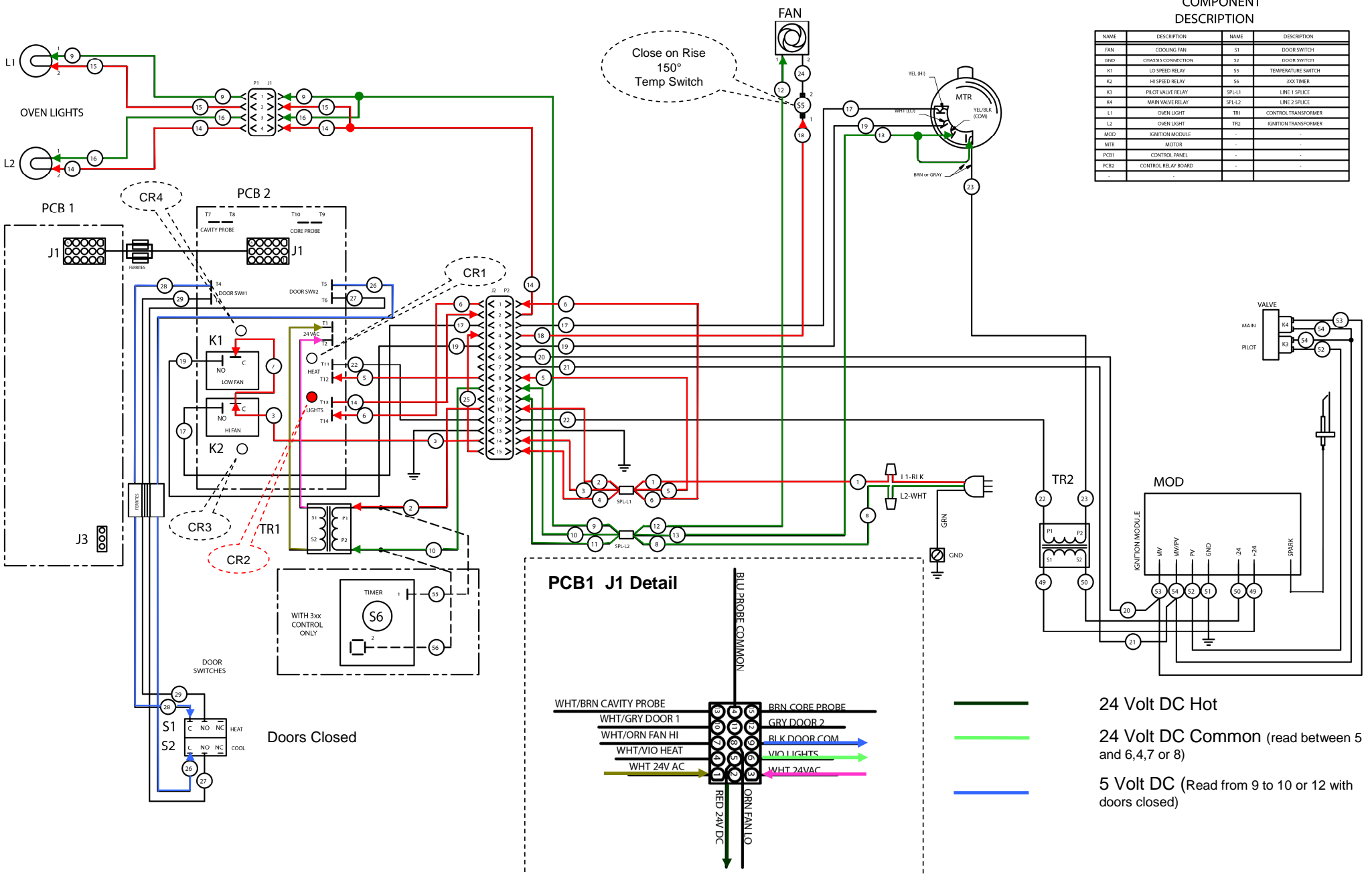
MCO Digital Control Diagram Reading Guide

Constant un-interrupted power shown
 Doors closed, unit off

- 110 Volt AC Hot
- 110 Volt AC Common
- 24 Volt AC Hot
- 24 Volt AC Common

COMPONENT DESCRIPTION

NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S1	DOOR SWITCH
IGND	CHASSIS CONNECTION	S2	DOOR SWITCH
K1	LO SPEED RELAY	S5	TEMPERATURE SWITCH
K2	HI SPEED RELAY	S6	3XX TIMER
K3	PILOT VALVE RELAY	SPL1	LINE 1 SPLICE
K4	MAIN VALVE RELAY	SPL2	LINE 2 SPLICE
L1	OVEN LIGHT	TR1	CONTROL TRANSFORMER
L2	OVEN LIGHT	TR2	IGNITION TRANSFORMER
MOD	IGNITION MODULE	-	-
MTR	MOTOR	-	-
PCB1	CONTROL PANEL	-	-
PCB2	CONTROL RELAY BOARD	-	-
-	-	-	-

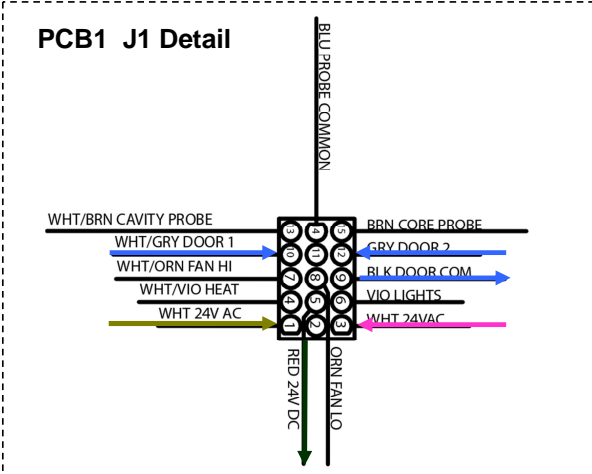
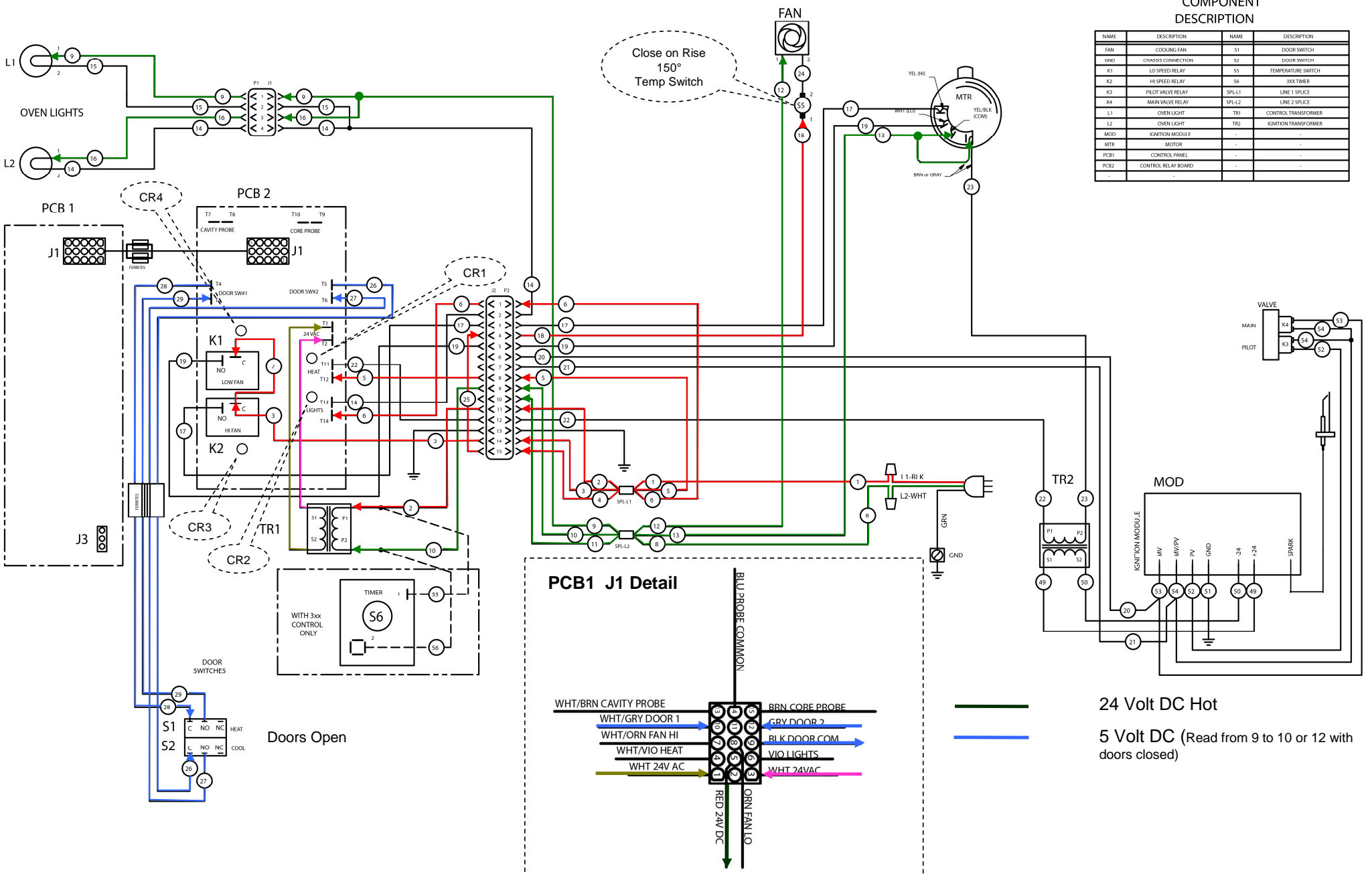


Lights
Doors closed, unit off, Light Switch Activated (One press turns the lights on for 30 seconds)

- Red line: 110 Volt AC Hot
- Green line: 110 Volt AC Common
- Magenta line: 24 Volt AC Hot
- Olive line: 24 Volt AC Common

COMPONENT DESCRIPTION

NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S1	DOOR SWITCH
IGND	CHASSIS CONNECTION	S2	DOOR SWITCH
K1	LO SPEED RELAY	S5	TEMPERATURE SWITCH
K2	HI SPEED RELAY	S6	3XX TIMER
K3	PILOT VALVE RELAY	SPL1	LINE 1 SPLICE
K4	MAIN VALVE RELAY	SPL2	LINE 2 SPLICE
L1	OVEN LIGHT	TR1	CONTROL TRANSFORMER
L2	OVEN LIGHT	TR2	IGNITION TRANSFORMER
MOD	IGNITION MODULE	-	-
MTR	MOTOR	-	-
PCB1	CONTROL PANEL	-	-
PCB2	CONTROL RELAY BOARD	-	-
-	-	-	-



— 24 Volt DC Hot
— 5 Volt DC (Read from 9 to 10 or 12 with doors closed)

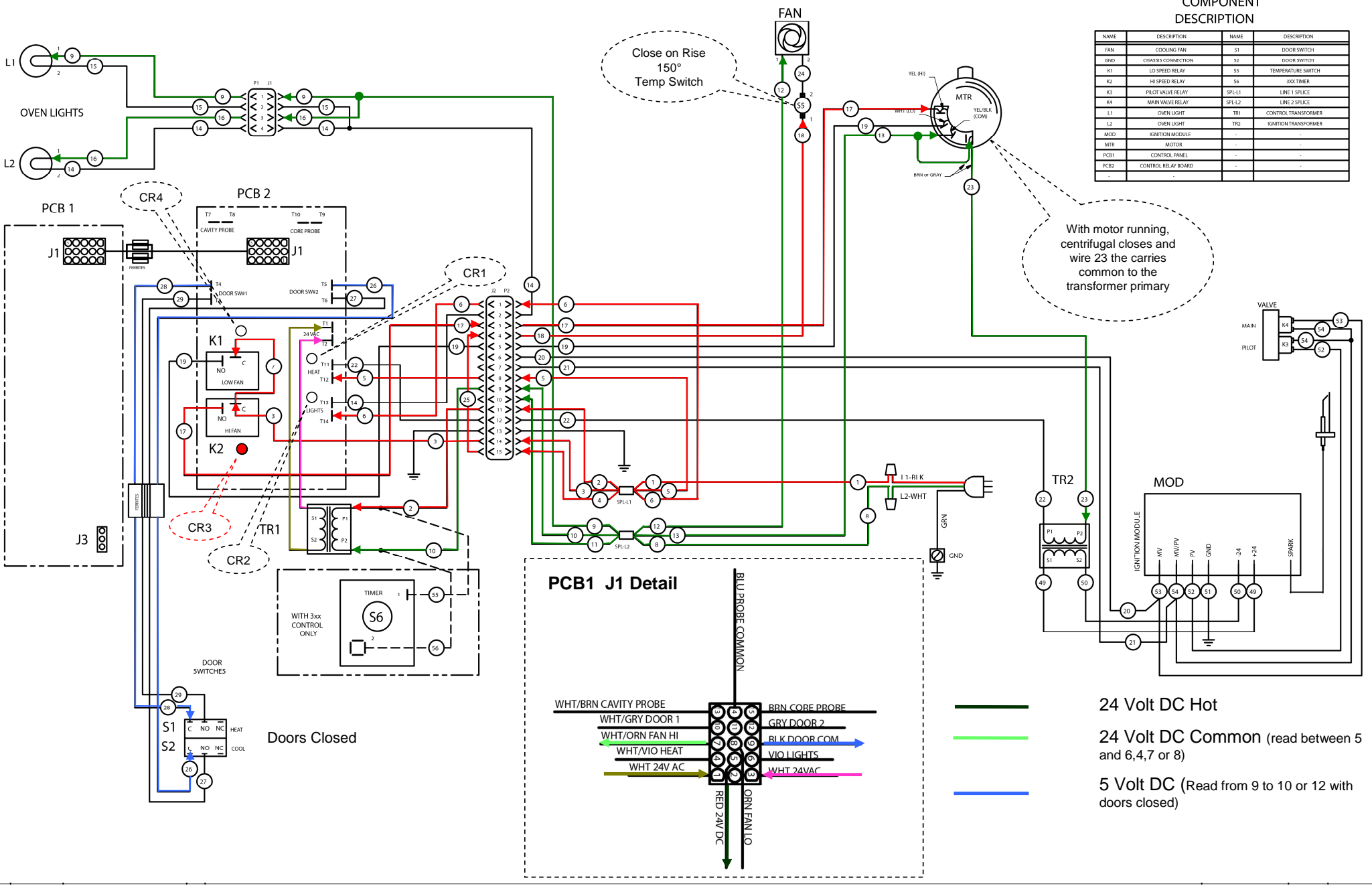
Doors Open

Doors Open, unit on, no call for heat
 (Lights come on for 30 seconds when doors open; unit shown after the 30 seconds have passed)

- 110 Volt AC Hot
- 110 Volt AC Common
- 24 Volt AC Hot
- 24 Volt AC Common

COMPONENT DESCRIPTION

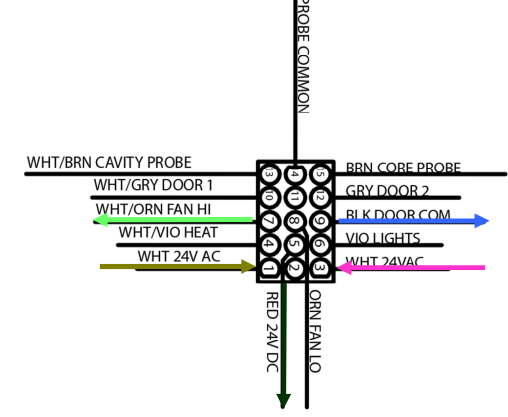
NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S1	DOOR SWITCH
IGND	CHASSIS CONNECTION	S2	DOOR SWITCH
K1	LO SPEED RELAY	S5	TEMPERATURE SWITCH
K2	HI SPEED RELAY	S6	3XX TIMER
K3	PILOT VALVE RELAY	SPL1	LINE 1 SPLICE
K4	MAIN VALVE RELAY	SPL2	LINE 2 SPLICE
L1	OVEN LIGHT	TR1	CONTROL TRANSFORMER
L2	OVEN LIGHT	TR2	IGNITION TRANSFORMER
MOD	IGNITION MODULE	-	-
MTR	MOTOR	-	-
PCB1	CONTROL PANEL	-	-
PCB2	CONTROL RELAY BOARD	-	-



Close on Rise
150°
Temp Switch

With motor running,
centrifugal closes and
wire 23 the carries
common to the
transformer primary

PCB1 J1 Detail



- 24 Volt DC Hot
- 24 Volt DC Common (read between 5 and 6,4,7 or 8)
- 5 Volt DC (Read from 9 to 10 or 12 with doors closed)

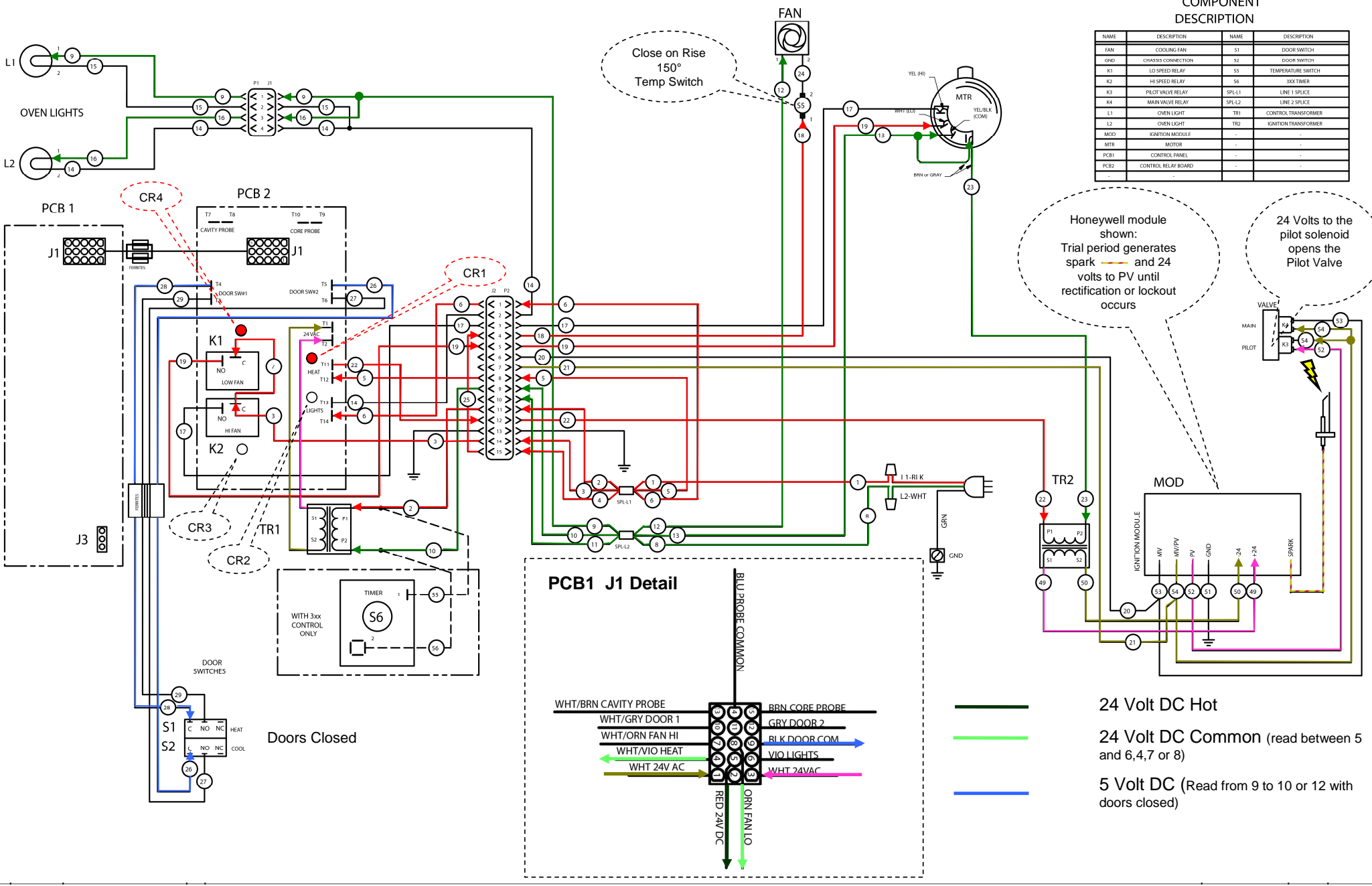
High Fan, No Call For Heat

Doors Closed, unit on, no call for heat, fan in High

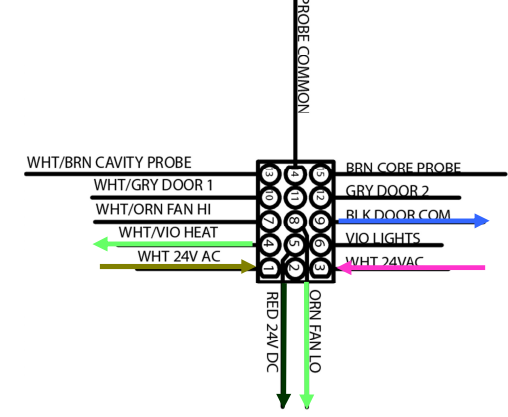
- 110 Volt AC Hot
- 110 Volt AC Common
- 24 Volt AC Hot
- 24 Volt AC Common

COMPONENT DESCRIPTION

NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S1	DOOR SWITCH
IGN	CHASSIS CONNECTION	S2	DOOR SWITCH
K1	LO SPEED RELAY	S5	TEMPERATURE SWITCH
K2	HI SPEED RELAY	S6	3XX TIMER
K3	PILOT VALVE RELAY	SPL1	LINE 1 SPLICE
K4	MAIN VALVE RELAY	SPL2	LINE 2 SPLICE
L1	OVEN LIGHT	TR1	CONTROL TRANSFORMER
L2	OVEN LIGHT	TR2	IGNITION TRANSFORMER
MOD	IGNITION MODULE	-	-
MTR	MOTOR	-	-
PCB1	CONTROL PANEL	-	-
PCB2	CONTROL RELAY BOARD	-	-



PCB1 J1 Detail



- 24 Volt DC Hot
- 24 Volt DC Common (read between 5 and 6,4,7 or 8)
- 5 Volt DC (Read from 9 to 10 or 12 with doors closed)

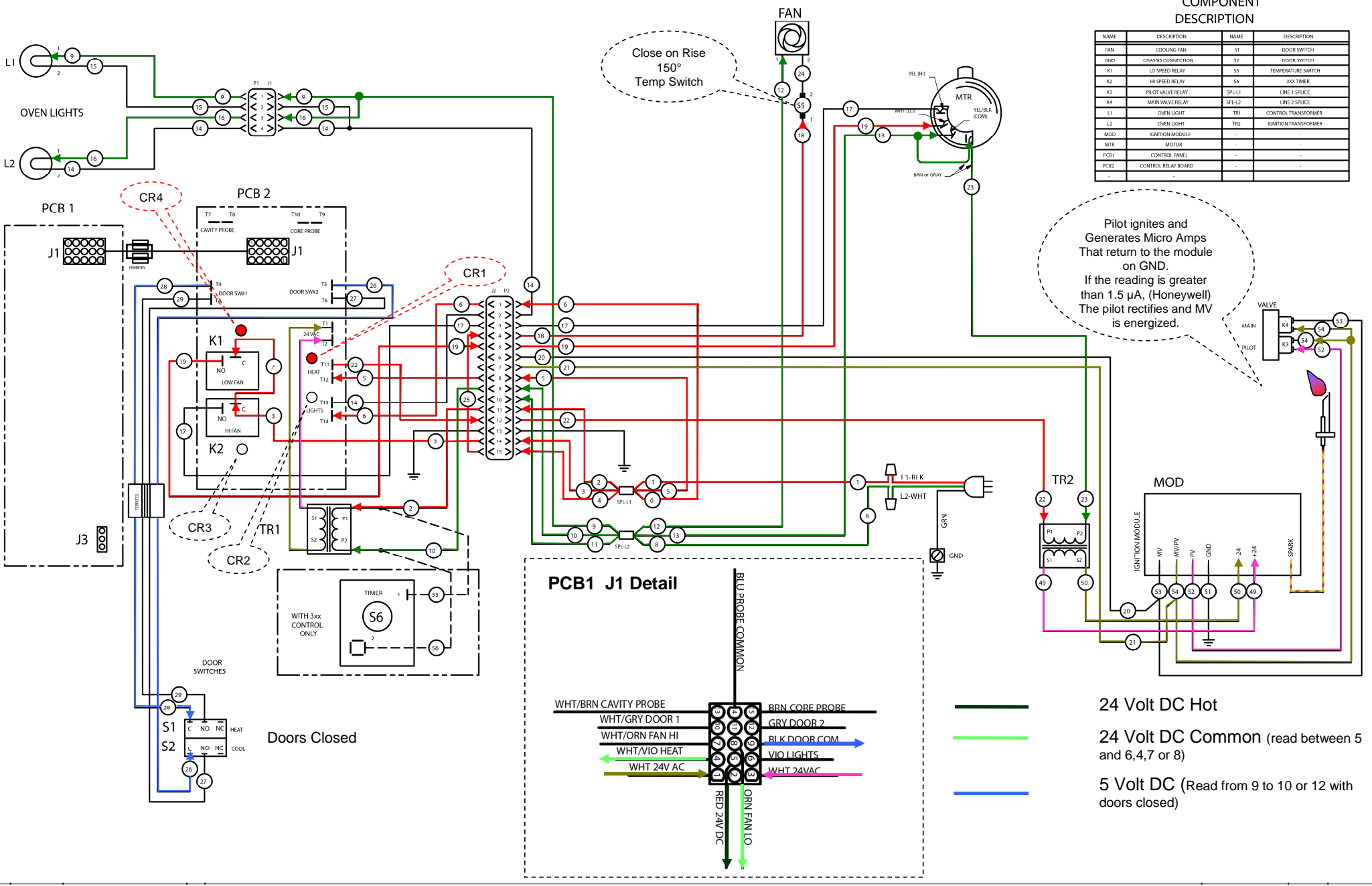
Low Fan, Heat Relay Closed, Trial for Ignition

Doors Closed, unit on, call for heat, fan in Low

- 110 Volt AC Hot
- 110 Volt AC Common
- 24 Volt AC Hot
- 24 Volt AC Common

COMPONENT DESCRIPTION

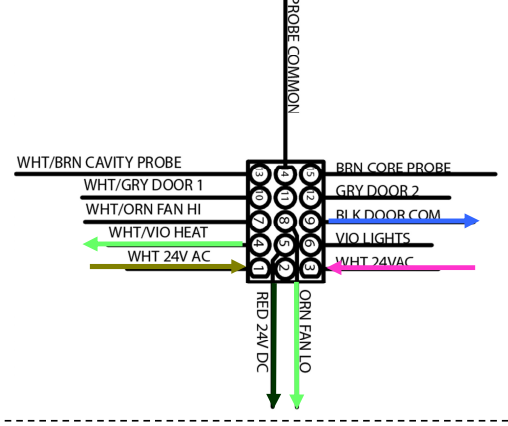
NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S1	DOOR SWITCH
IGND	CHASSIS CONNECTION	S2	DOOR SWITCH
K1	LO SPEED RELAY	S5	TEMPERATURE SWITCH
K2	HI SPEED RELAY	S6	3XX TIMER
K3	PILOT VALVE RELAY	SPL1	LINE 1 SPLICE
K4	MAIN VALVE RELAY	SPL2	LINE 2 SPLICE
L1	OVEN LIGHT	TR1	CONTROL TRANSFORMER
L2	OVEN LIGHT	TR2	IGNITION TRANSFORMER
MOD	IGNITION MODULE	-	-
MTR	MOTOR	-	-
PCB1	CONTROL PANEL	-	-
PCB2	CONTROL RELAY BOARD	-	-



Close on Rise
150°
Temp Switch

Pilot ignites and
Generates Micro Amps
That return to the module
on GND.
If the reading is greater
than 1.5 µA, (Honeywell)
The pilot rectifies and MV
is energized.

PCB1 J1 Detail



- 24 Volt DC Hot
- 24 Volt DC Common (read between 5 and 6,4,7 or 8)
- 5 Volt DC (Read from 9 to 10 or 12 with doors closed)

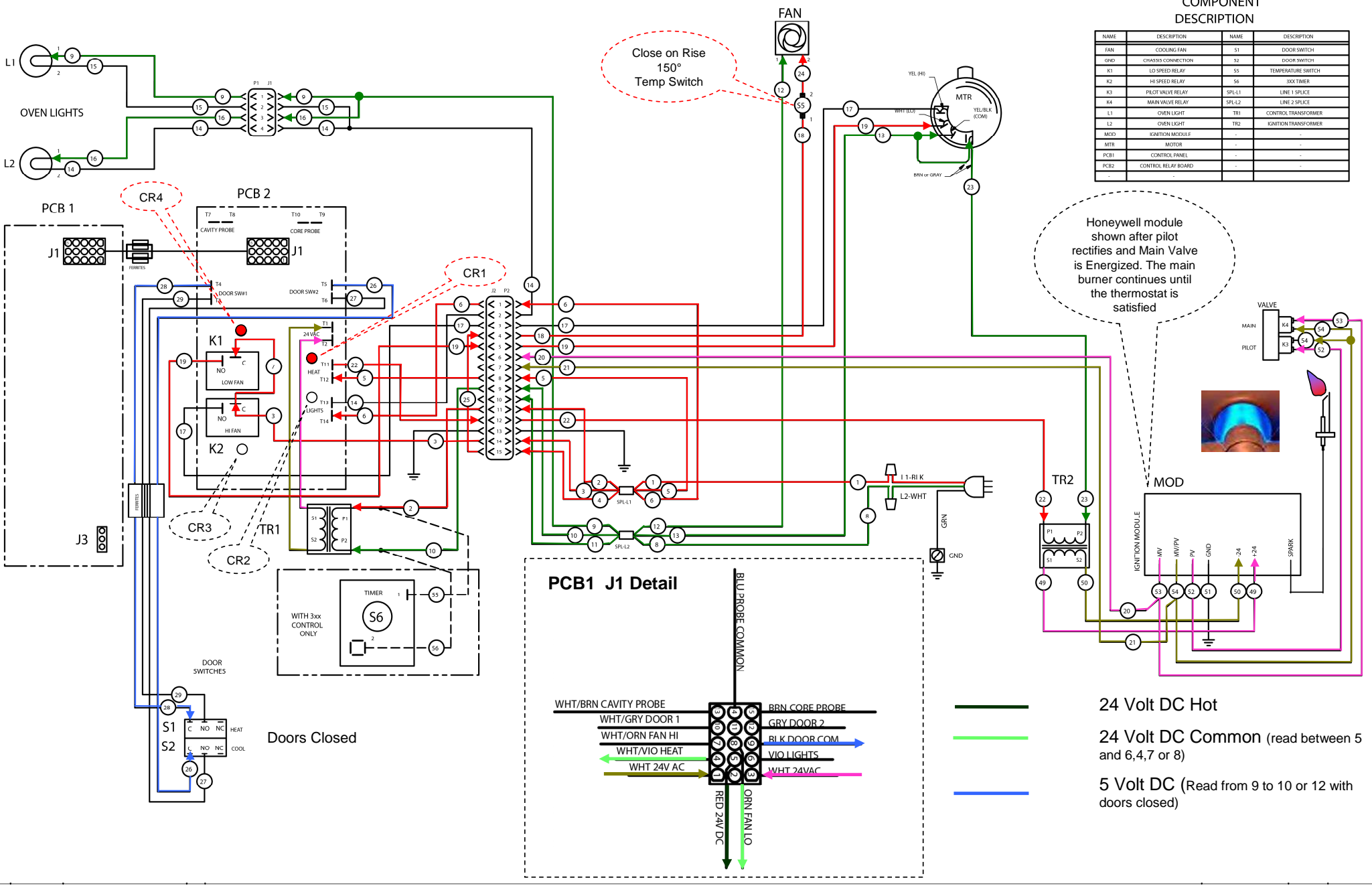
Low Fan, Pilot Lights and Rectifies

Doors Closed, unit on, call for heat, fan in Low

- 110 Volt AC Hot
- 110 Volt AC Common
- 24 Volt AC Hot
- 24 Volt AC Common

COMPONENT DESCRIPTION

NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S1	DOOR SWITCH
IGND	CHASSIS CONNECTION	S2	DOOR SWITCH
K1	LO SPEED RELAY	S5	TEMPERATURE SWITCH
K2	HI SPEED RELAY	S6	3XX TIMER
K3	PILOT VALVE RELAY	SPL1	LINE 1 SPLICE
K4	MAIN VALVE RELAY	SPL2	LINE 2 SPLICE
L1	OVEN LIGHT	TR1	CONTROL TRANSFORMER
L2	OVEN LIGHT	TR2	IGNITION TRANSFORMER
MOD	IGNITION MODULE	-	-
MTR	MOTOR	-	-
PCB1	CONTROL PANEL	-	-
PCB2	CONTROL RELAY BOARD	-	-



Honeywell module shown after pilot rectifies and Main Valve is Energized. The main burner continues until the thermostat is satisfied



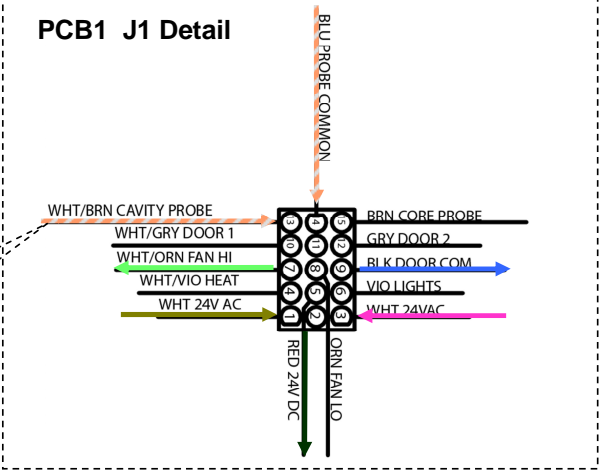
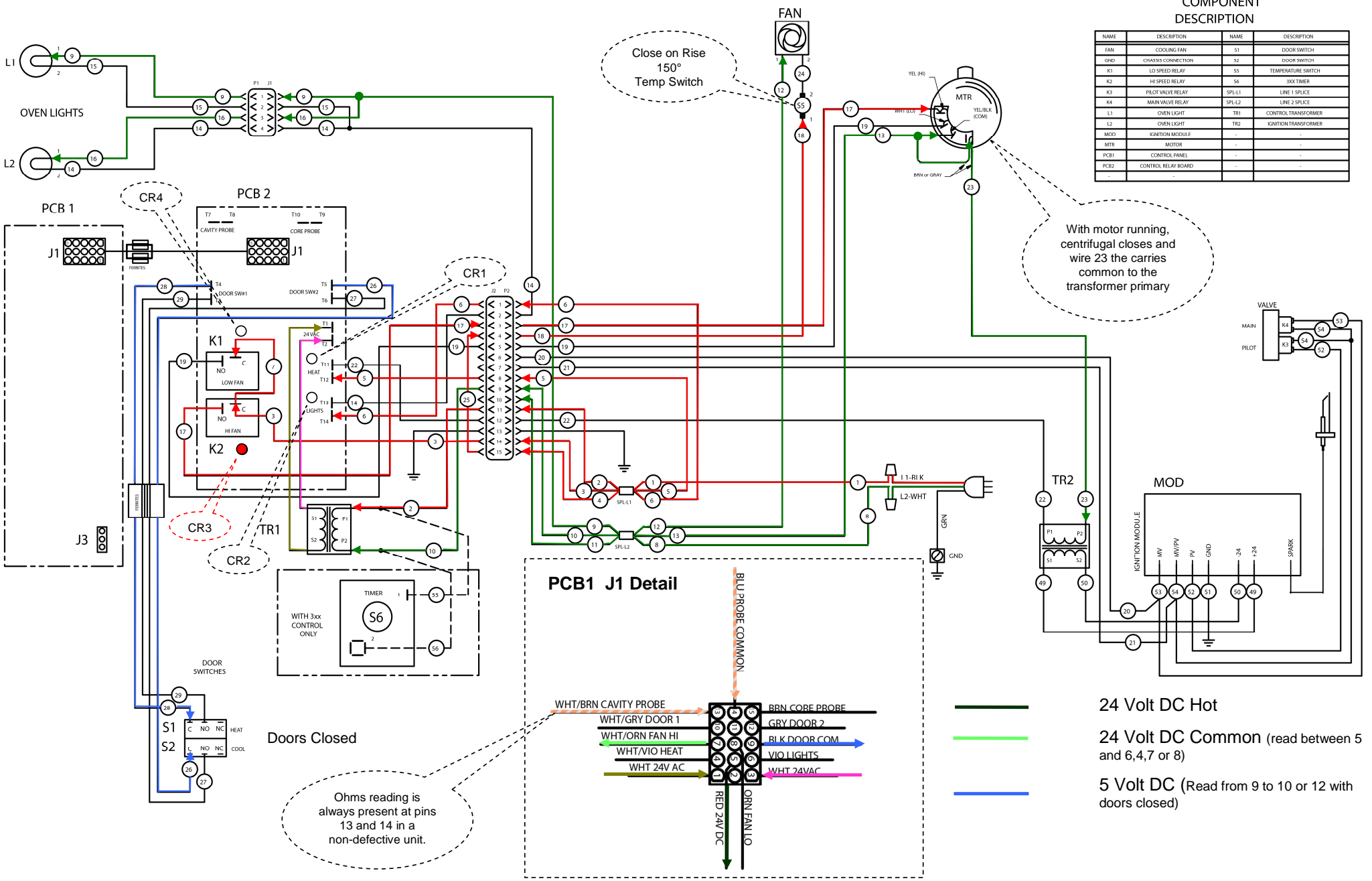
Low Fan, Pilot Rectified, Main Burner On
Doors Closed, unit on, call for heat, fan in Low

- 110 Volt AC Hot
- 110 Volt AC Common
- 24 Volt AC Hot
- 24 Volt AC Common

- 24 Volt DC Hot
- 24 Volt DC Common (read between 5 and 6,4,7 or 8)
- 5 Volt DC (Read from 9 to 10 or 12 with doors closed)

COMPONENT DESCRIPTION

NAME	DESCRIPTION	NAME	DESCRIPTION
FAN	COOLING FAN	S3	DOOR SWITCH
IGND	CHASSIS CONNECTION	S5	TEMPERATURE SWITCH
K1	LO SPEED RELAY	S6	3XX TIMER
K2	HI SPEED RELAY	SPL1	LINE 1 SPLICE
K3	PILOT VALVE RELAY	SPL2	LINE 2 SPLICE
K4	MAIN VALVE RELAY	TR1	CONTROL TRANSFORMER
L1	OVEN LIGHT	TR2	IGNITION TRANSFORMER
L2	OVEN LIGHT	MOD	IGNITION MODULE
MOD	IGNITION MODULE	MTR	MOTOR
MTR	MOTOR	PCB1	CONTROL PANEL
PCB1	CONTROL PANEL	PCB2	CONTROL RELAY BOARD
PCB2	CONTROL RELAY BOARD		



- 24 Volt DC Hot
- 24 Volt DC Common (read between 5 and 6,4,7 or 8)
- 5 Volt DC (Read from 9 to 10 or 12 with doors closed)

Auto Cool Down

Doors Closed, unit off, internal temperature above 150 °, display reads “Auto” and cool down occurs until Temp is below 150°

- 110 Volt AC Hot
- 110 Volt AC Common
- 24 Volt AC Hot
- 24 Volt AC Common

(The Cavity Probe continuously reports the oven temperature to the control through Pins 14 and 15 and can be measured using Ohms. See the Probe ohms chart to identify a correct temperature to Ohms reading.)

Ohms reading is always present at pins 13 and 14 in a non-defective unit.

Doors Closed

With motor running, centrifugal closes and wire 23 the carries common to the transformer primary

Close on Rise 150° Temp Switch