

Model	Description
Honeywell Model H409A	Dew Point Control
Honeywell Model H46N-1005i	Humidistat Control

GENERAL INFORMATION

Kit Application

Both of the controls shown on Page 12 are designed for energy conservation. They supply power to the anti-condensate heaters in the door only when necessary to maintain the surface temperature of the glass doors above the dew point.

The humidistat control is non-adjustable, factory-set to cycle off the door anti-condensate heaters when the store humidity drops to the set point of 35% relative humidity or lower. This control carries a maximum load of 10 Amps (see Table 1, Amperage).

The dew point control is a more versatile control offering six adjustable set-points, with a maximum setting of 40% relative humidity. This control carries maximum load of 16 Amps (see Table 1, Amperage).

The capacity of these controls may be increased by using relays whose coils are wired parallel with the control and the relay contacts connected to power supply. Refer to wiring diagrams for detail.

For a line-up of cases, one case is designated as the master case with the control installed. Note that each narrow island side is wired separately.

All other cases in the line-up are designated as slave cases with a relay energized from the control on the master case (side of an island).

The location of either dew point control or humidistat control must be in an area that reflects the store ambient condition where the merchandiser is located.

All wiring for these controls must comply with NEC and local regulations.

P/N 0387094A
April, 2002

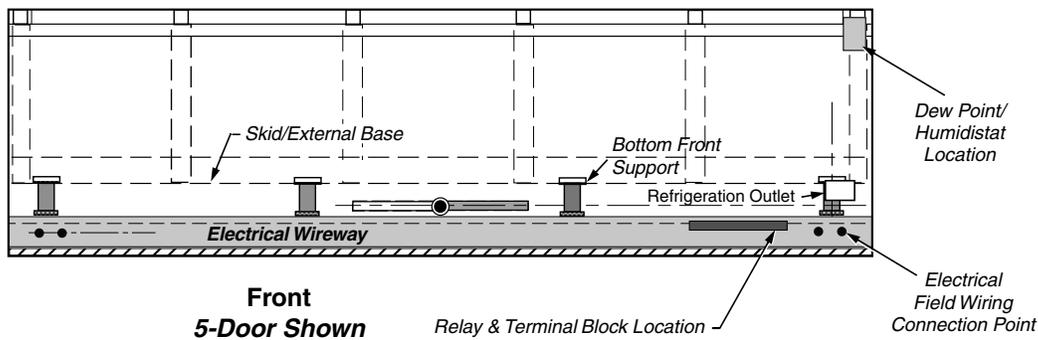
Table 1

Door heater amperages cycable by dew point or humidistat control (120 V).

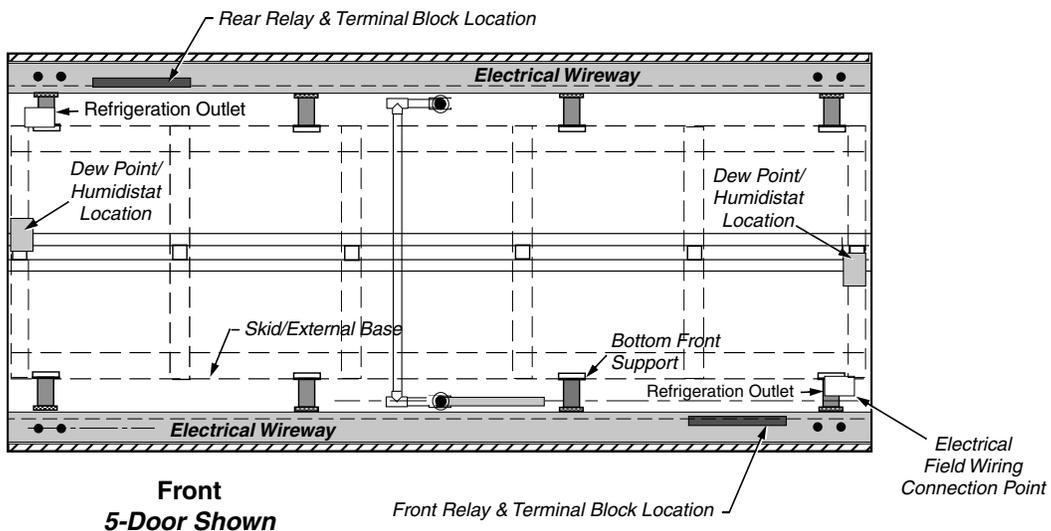
Model	Door Condensate Heater Amps	
	<i>Anthony</i>	<i>Innovator</i>
RL2, RLN2, RLNI2*	2.18	1.5
RL3, RLN3, RLNI3*	3.27	2.31
RL4, RLN4, RLNI4*	4.36	3.08
RL5, RLN5, RLNI5*	5.45	3.86

*RLNI values are per side.

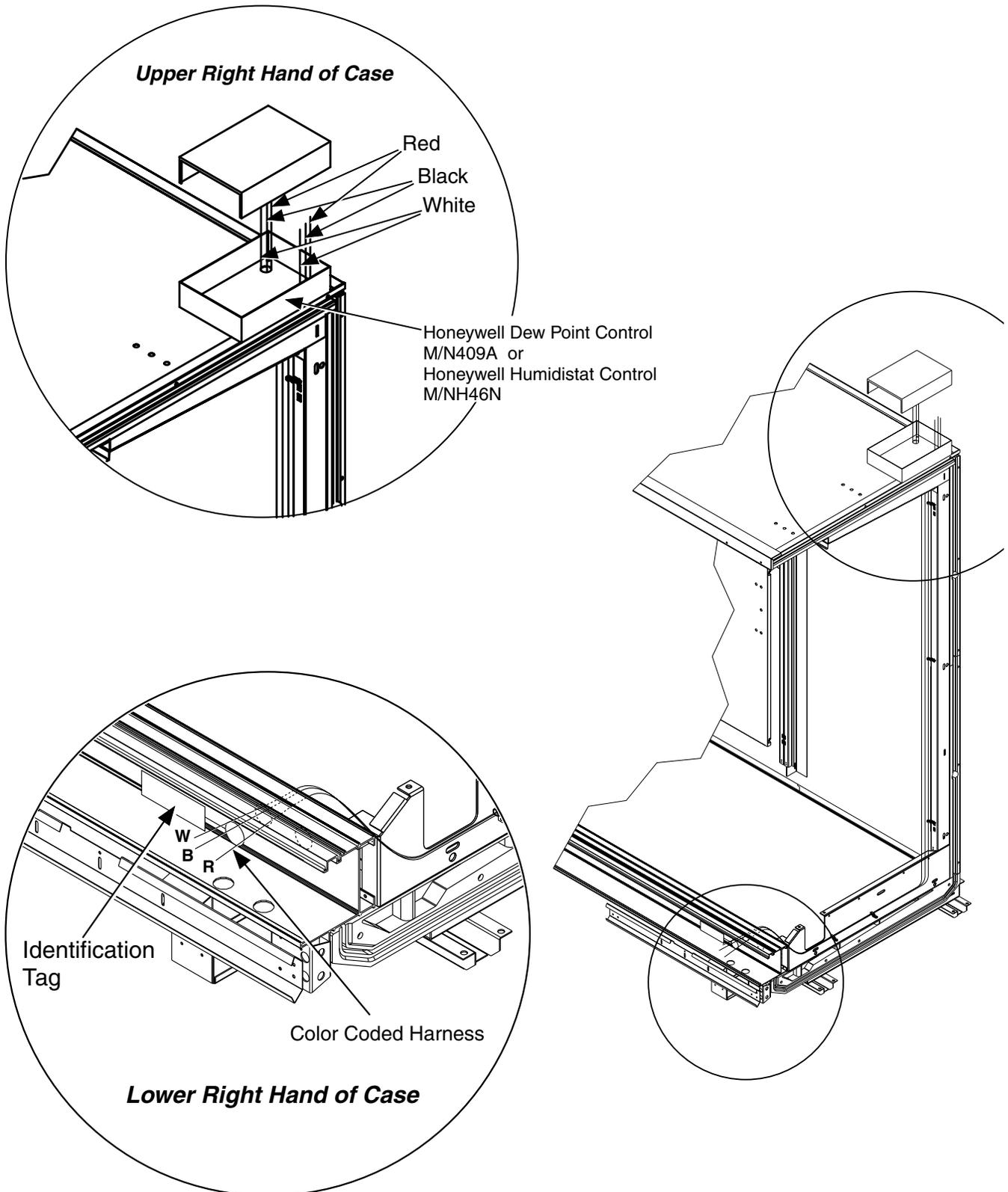
Control Location — Reach-in and Narrow Reach-in



Control Locations — Narrow Island Reach-in

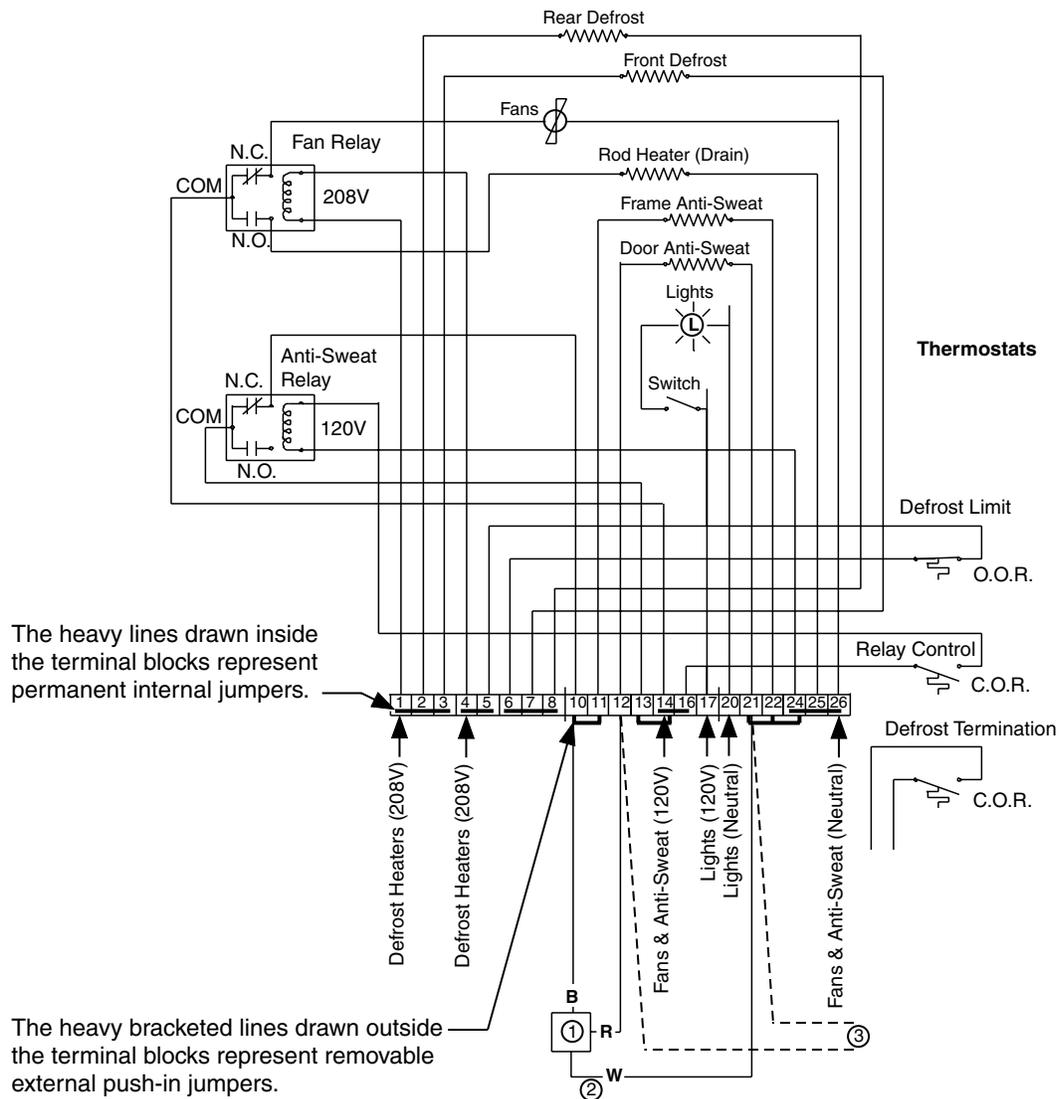


COMPONENT LOCATION FOR DEW POINT / HUMIDISTAT CONTROL



RL Wiring Diagram for Dew Point or Humidistat Control
 Fans and Anti-Condensate Heaters on Common Power Circuit.
 Only Cycles Door Anti-Condensate Heater.
 (Electric Defrost)

Kits FL28 and FL29
 Diagrams 0423658 and 0423689



The heavy lines drawn inside the terminal blocks represent permanent internal jumpers.

The heavy bracketed lines drawn outside the terminal blocks represent removable external push-in jumpers.

Notes:

- ① Dew point or Humidistat Anti-sweat control.
- ② White wire not used on Humidistat control.
- ③ Field wiring for slave case relay coil(s).

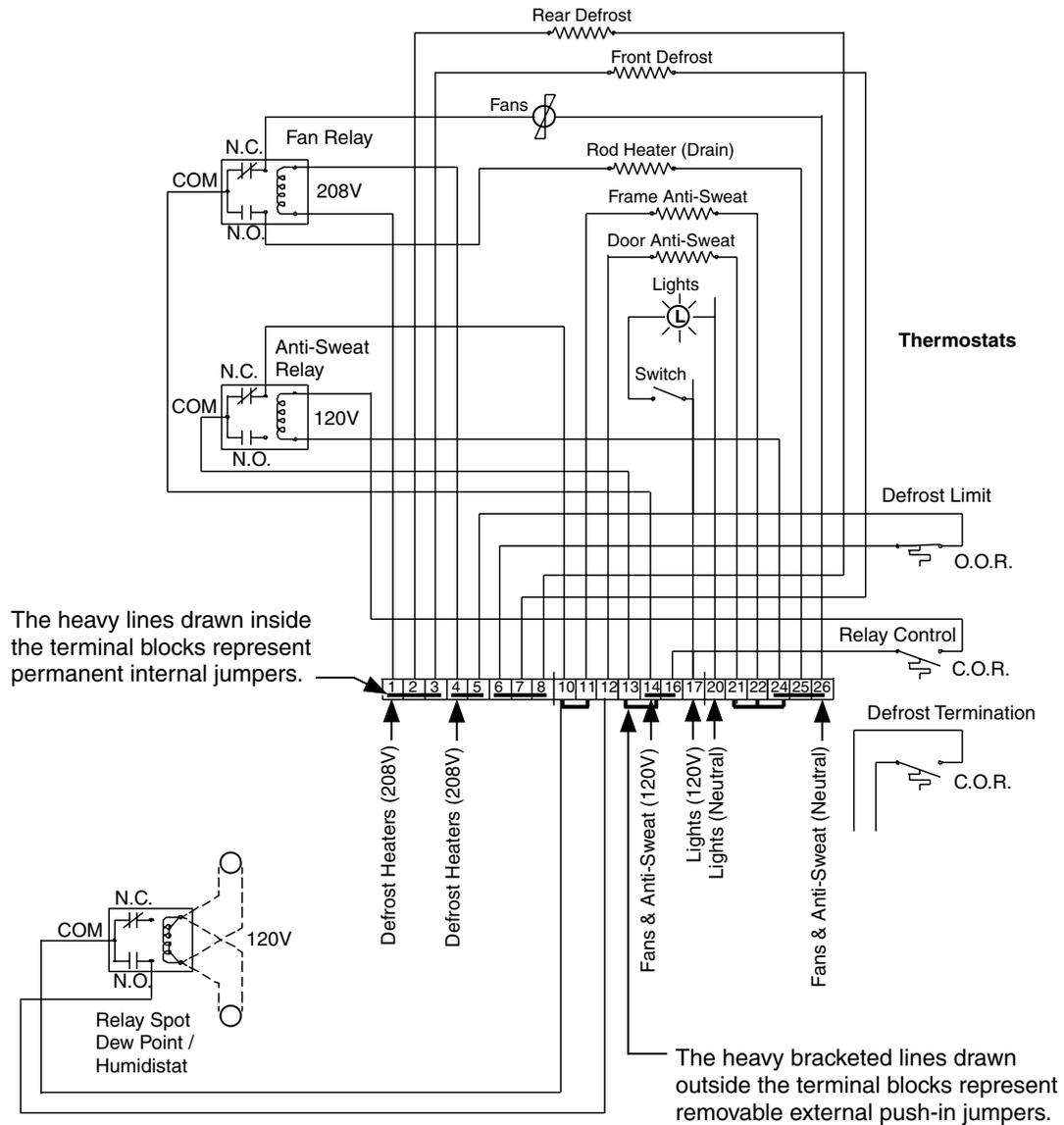
- Yellow terminals 1 through 8 are 208V Defrost Circuit.
- Terminals 1 through 3 are internally jumpered.
- Terminals 4 and 5 are internally jumpered.
- Terminals 6 through 8 are internally jumpered.

- Gray terminals 10 through 17 are 120V Power.
- Terminals 14 and 16 are internally jumpered.
- Terminals 10 and 11 are jumpered with a removable push-in jumper.
- Terminals 13 and 14 are jumpered with a removable push-in jumper.

- Blue terminals 20 through 26 are 120V Neutral
- Terminals 24 through 26 are internally jumpered.
- Terminals 21 through 24 are jumpered with a removable push-in jumper.

RL Wiring Diagram for Dew Point or Humidistat Slave Relay
Fans and Anti-Condensate Heaters on Common Power Circuit.
Only Cycles Door Anti-Condensate Heater.
(Electric Defrost)

Kit BF53
Diagrams 0423658 and 0423689

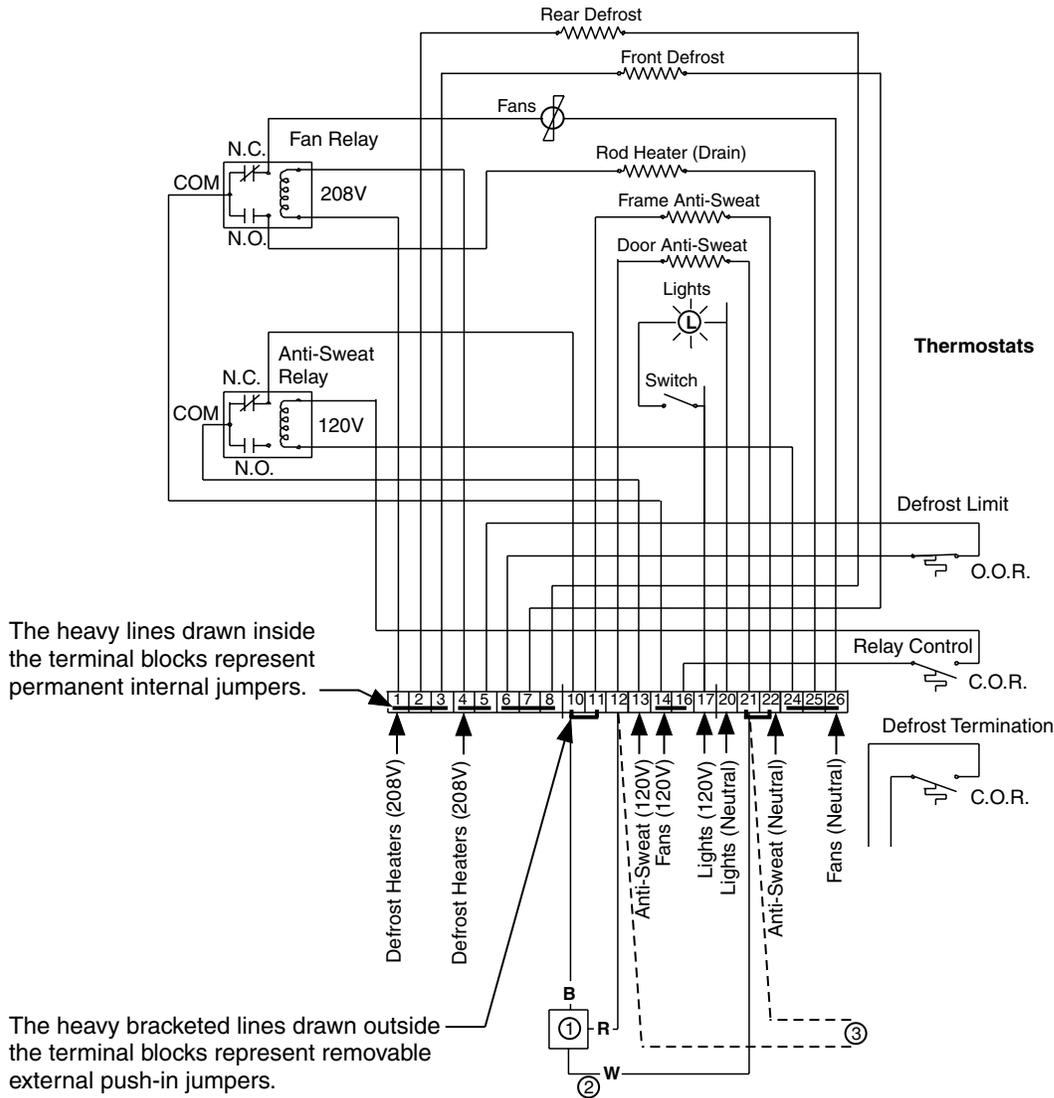


Notes:

- ① Field wiring from the dew point/humidistat master case Terminals 12 & 21.
- ② Field wiring from an adjoining slave case anti-sweat relay coil.
- Yellow terminals 1 through 8 are 208V Defrost Circuit.
- Terminals 1 through 3 are internally jumpered.
- Terminals 4 and 5 are internally jumpered.
- Terminals 6 through 8 are internally jumpered.
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- Blue terminals 20 through 26 are 120V Neutral
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RL Wiring Diagram for Dew Point or Humidistat Control
 Fans and Anti-Condensate Heaters on Separate Power Circuits.
 Only Cycles Door Anti-Condensate Heater.
 (Electric Defrost)

Kits FL44 and FL45
 Diagrams 0423665 and 0423689



Notes:

- ① Dew point or Humidistat Anti-sweat control.
- ② White wire not used on Humidistat control.
- ③ Field wiring for slave case relay coil(s).

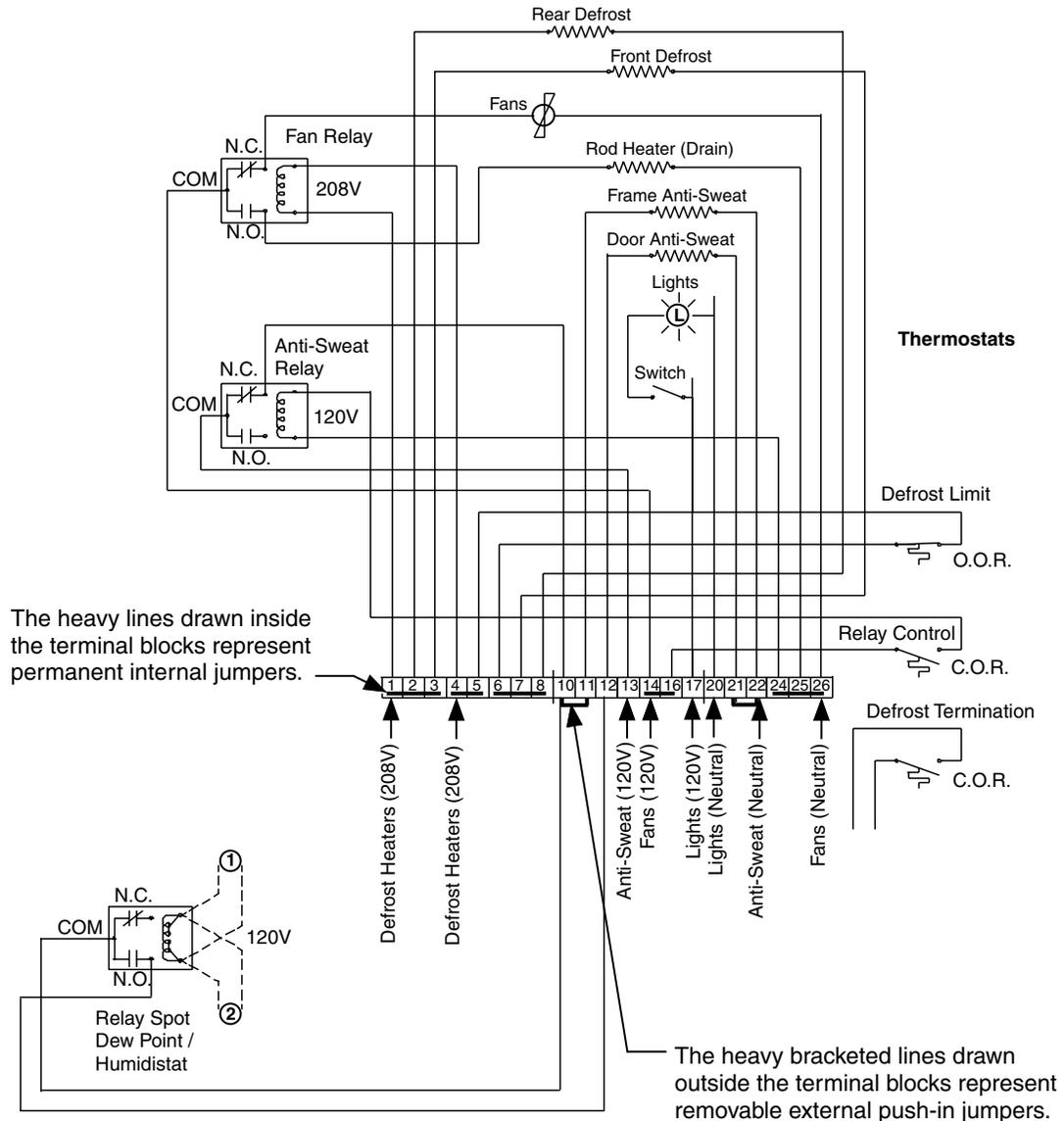
- Yellow terminals 1 through 8 are 208V Defrost Circuit.
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- Terminals 4 and 5 are internally jumpered.
- Terminals 6 through 8 are internally jumpered.

- Gray terminals 10 through 17 are 120V Power.
- Terminals 14 and 16 are internally jumpered.
- Terminals 10 and 11 are jumpered with a removable push-in jumper.

- Blue terminals 20 through 26 are 120V Neutral
- Terminals 24 through 26 are internally jumpered.
- Terminals 21 and 22 are jumpered with a removable push-in jumper.

RL Wiring Diagram for Dew Point or Humidistat Slave Relay
Fans and Anti-Condensate Heaters on Separate Power Circuits.
Only Cycles Door Anti-Condensate Heater.
(Electric Defrost)

Kit FL43
Diagrams 0423665 and 0423689



Notes:

- ① Field wiring from the dew point/humidistat master case Terminals 12 & 21.
- ② Field wiring from an adjoining slave case anti-sweat relay coil.

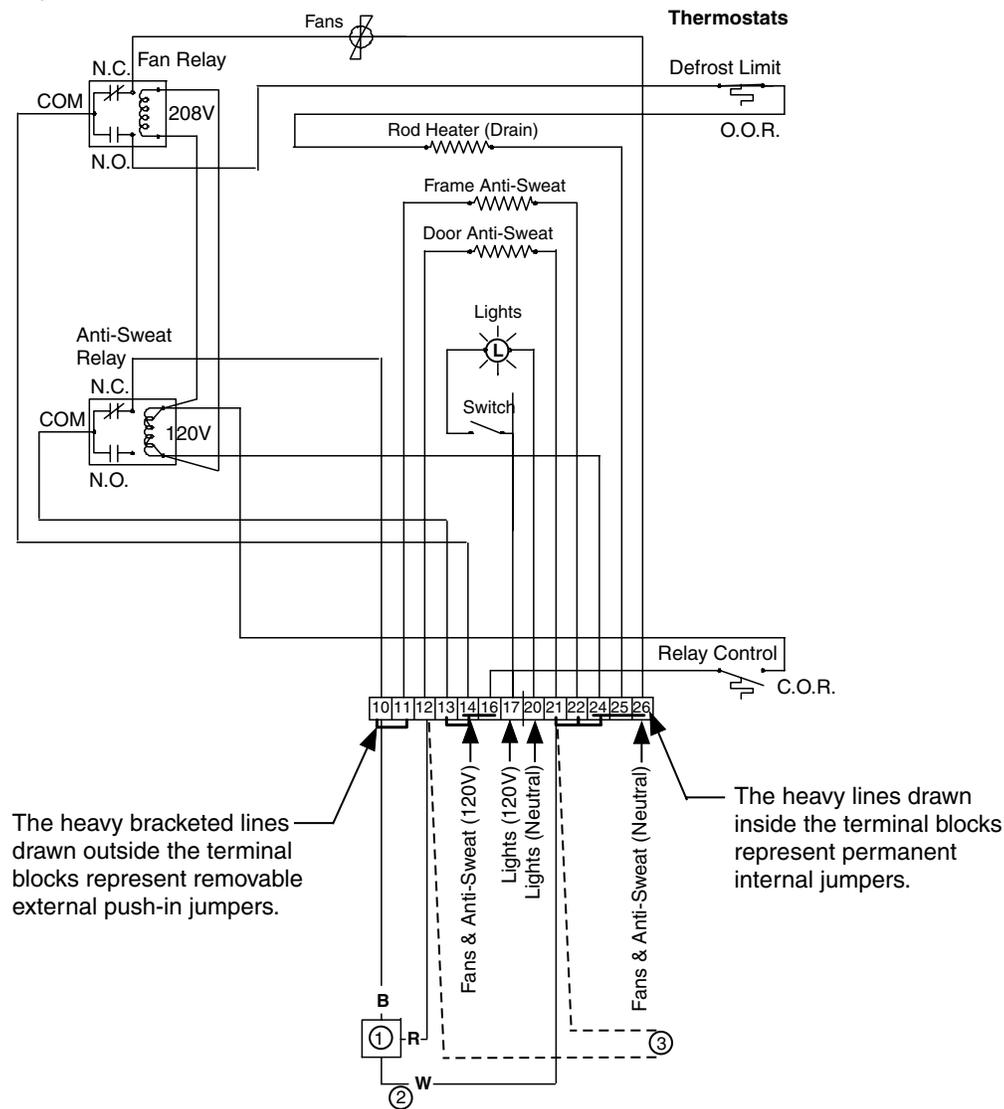
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RL Wiring Diagram for Dew Point or Humidistat Control
Fans and Anti-Condensate Heaters on Common Power Circuit.
Only Cycles Door Anti-Condensate Heater.
(Gas Defrost)

Kits FL28 and FL29
Diagrams 0423677 and 0423689



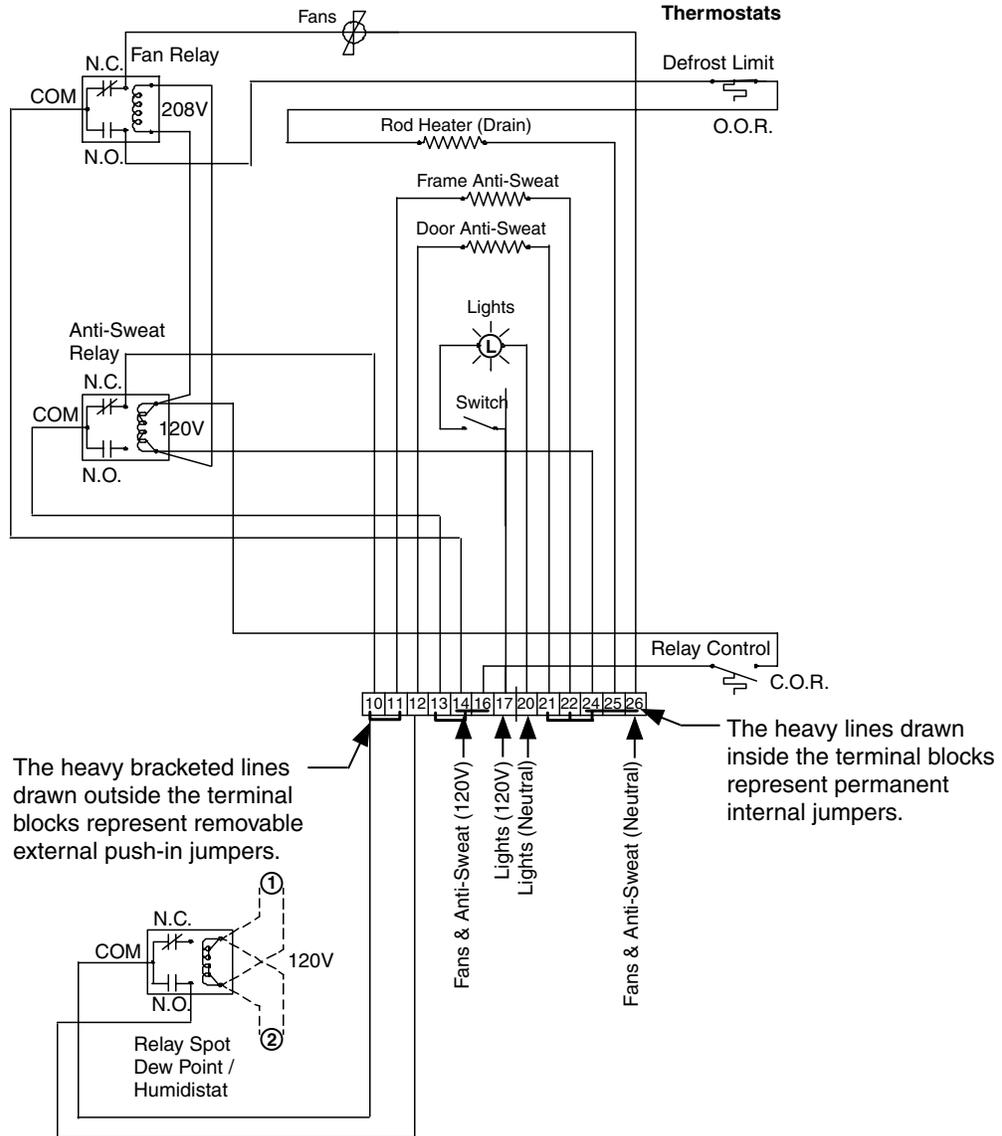
Notes:

- ① Dew point or Humidistat Anti-sweat control.
- ② White wire not used on Humidistat control.
- ③ Field wiring for slave case relay coil(s).

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RL Wiring Diagram for Dew Point or Humidistat Slave Relay
Fans and Anti-Condensate Heaters on Common Power Circuit.
Only Cycles Door Anti-Condensate Heater.
(Gas Defrost)

Kits BF53
Diagrams 0423677 and 0423689



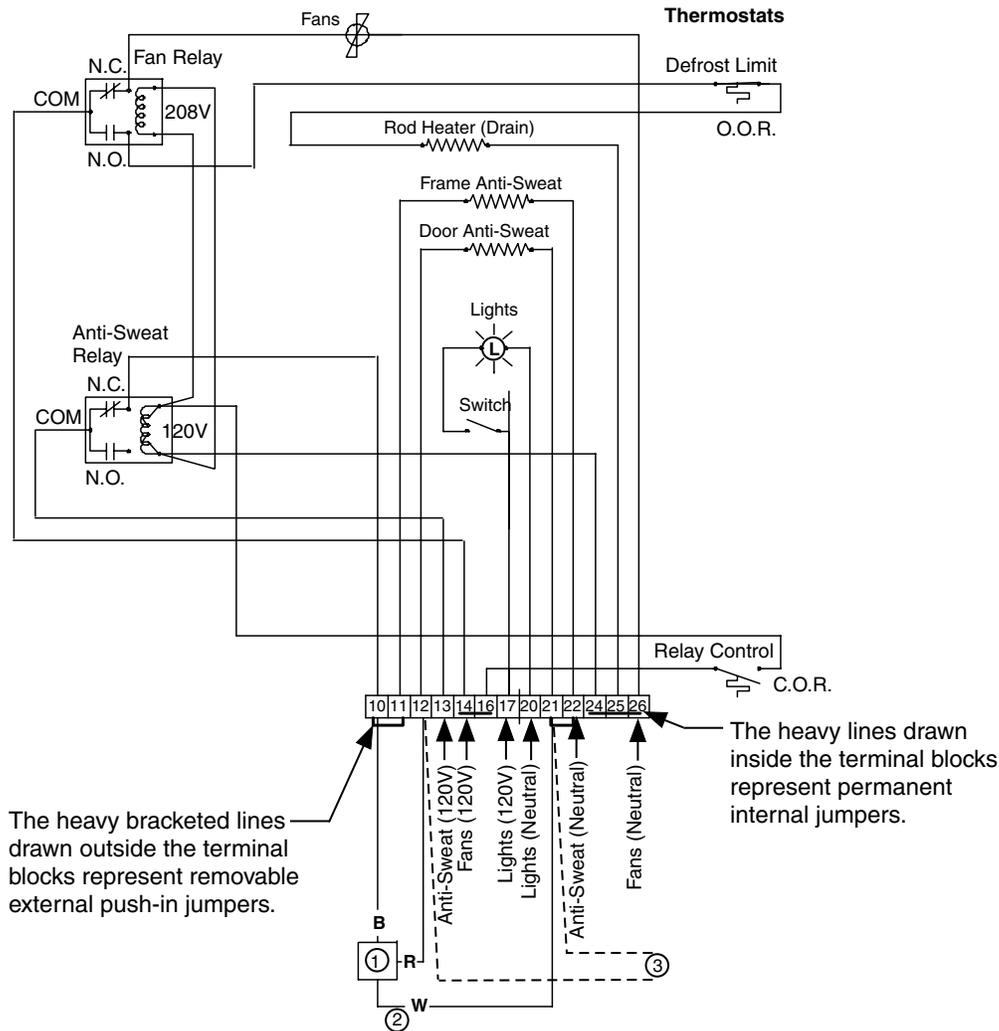
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RL Wiring Diagram for Dew Point or Humidistat Control
Fans and Anti-Condensate Heaters on Separate Power Circuits.
Only Cycles Door Anti-Condensate Heater.
(Gas Defrost)

Kits FL44 and FL45
Diagrams 0423679 and 0423689



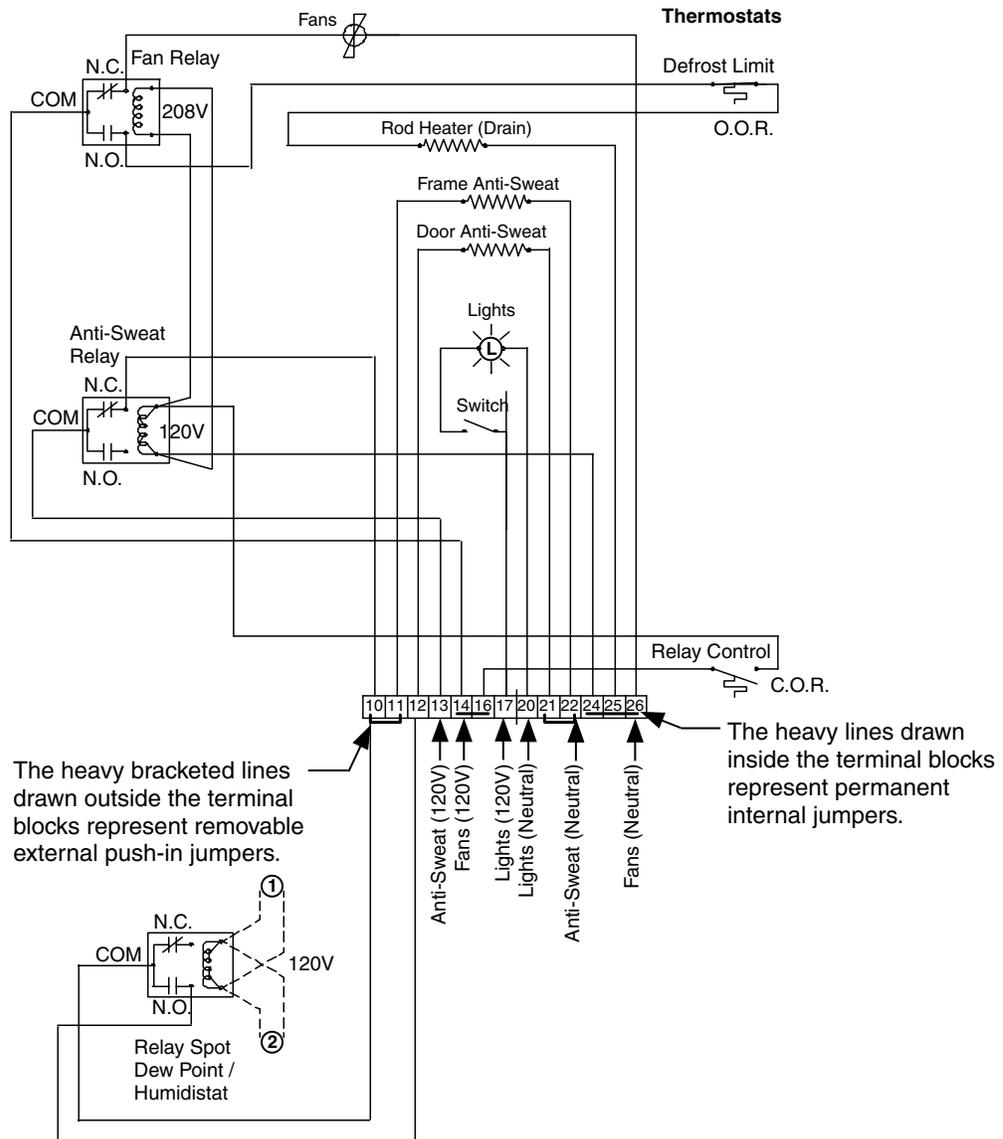
Notes:

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- ② White wire not used on Humidistat control.
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RL Wiring Diagram for Dew Point or Humidistat Slave Relay
Fans and Anti-Condensate Heaters on Separate Power Circuits.
Only Cycles Door Anti-Condensate Heater.
(Gas Defrost)

Kits FL43
Diagrams 0423679 and 0423689



Notes:

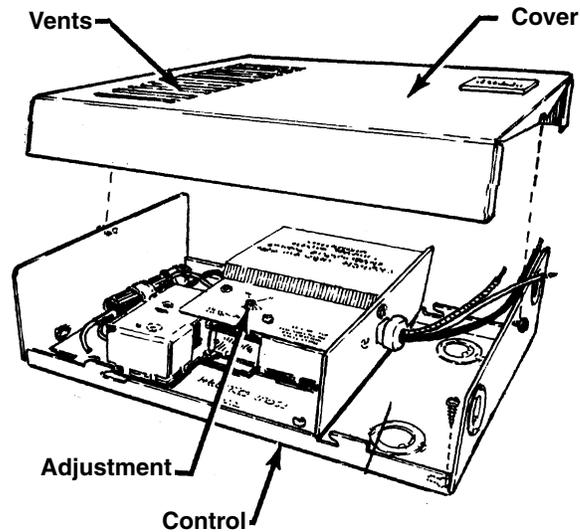
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- Terminals 21 and 22 are jumpered with a removable push-in jumper.

DEW POINT CONTROL HONEYWELL MODEL #H409A

NOTE: When replacing the cover on the control, be sure the cover's vents are located over the control as shown.



HUMIDISTAT CONTROL

