

Accessory Options

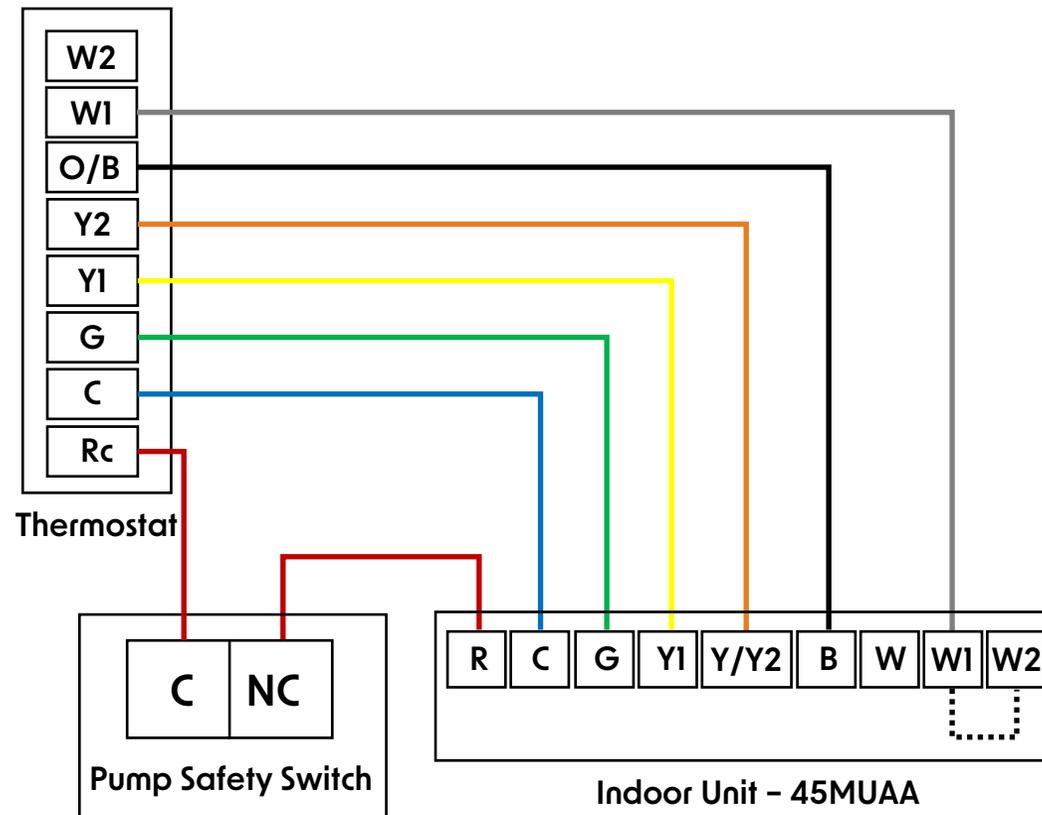
Condensate Pump Connections - 24-Volt Systems

The Normally Closed (N.C.) safety switch should break the "R" wire supplying power to the Thermostat.

24-Volt Systems

Example: 45MUAA

3 Stage Heat & 2 Stage Cool



Accessory Options

Air Handler: 45MBAA, 45MU(A,H)A, D5MUWA

Remote ON/OFF (CN2) (must remove JR1 Jumper)

N.C. contacts – When contacts open a "CP" Code will appear and system will shut down.

UV LED (CN43)

When Fan is ON, 24-Volts are available from contacts to power a pilot relay or other small device.

Alarm Output (CN33)

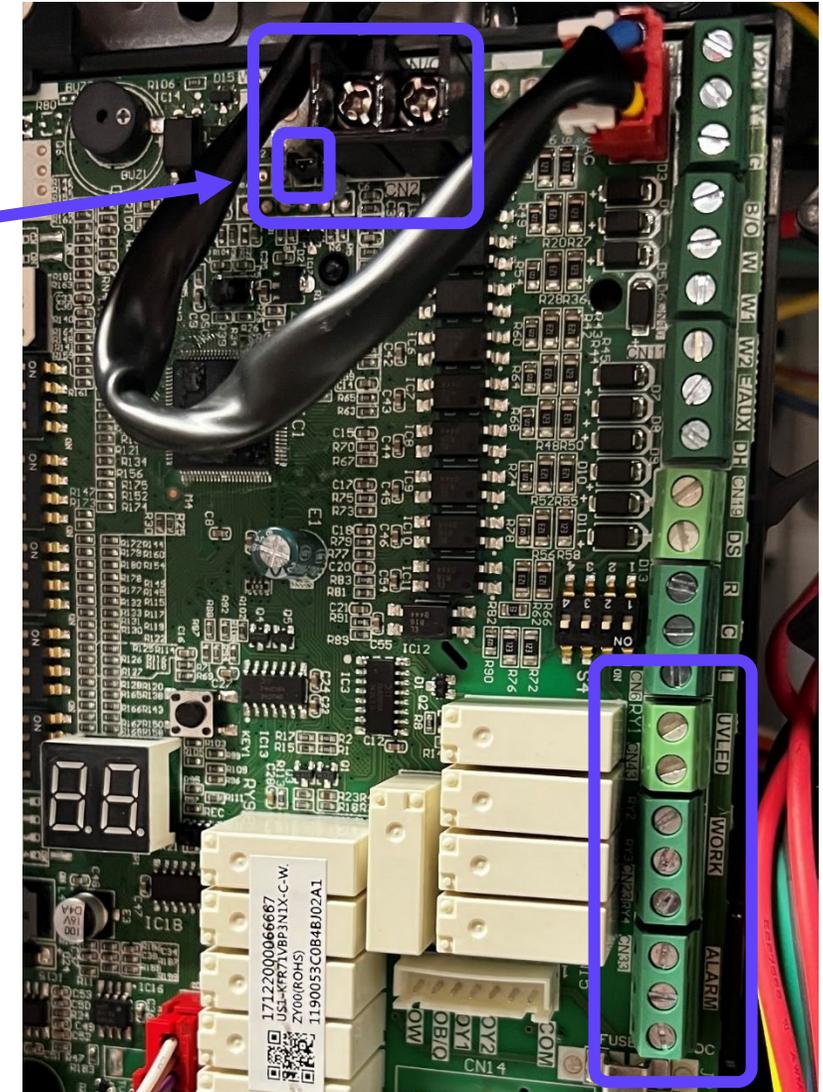
N.O. contacts – Contacts closes on Error.
Contacts rated: 250VAC, 10 Amps max.

Work (CN23)

N.O. contacts – Contacts closes when fan is ON,
Contacts rated: 250VAC, 10 Amps max.

Codes will only appear on the 1401 Wired Controller and/or the Communication PCB only.

Section of Communication PCB



Accessory Options

Air Handler: 45MBAA, 45MU(A,H)A, D5MUWA

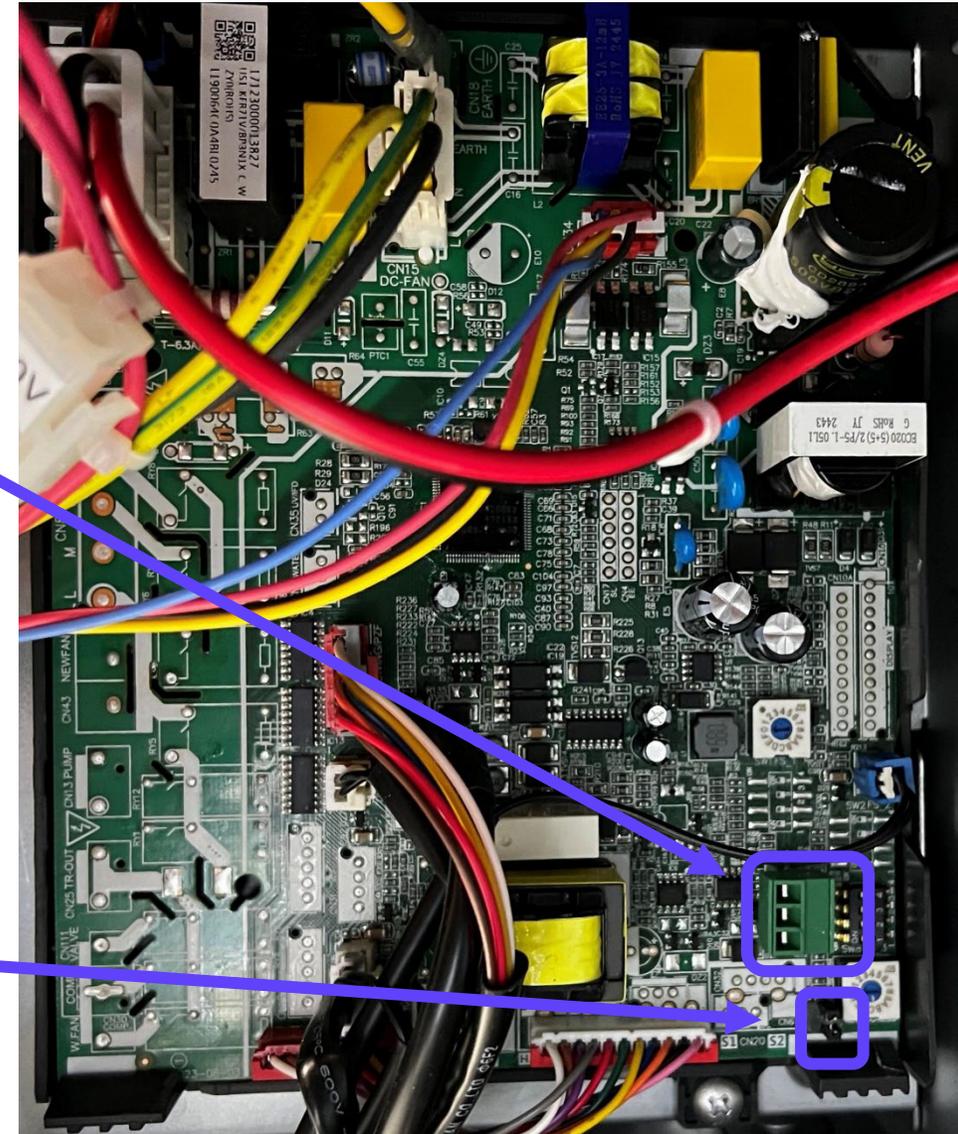
Water (CN23) (must remove J7 Jumper)

N.C. contacts – When contacts open an "EH0E" Code will appear, and system will shut down.

Codes will only appear on the 1401 Wired Controller and/or the Communication PCB only.



J7 Jumper



Main PCB

These Green Terminal Blocks can be removed for easier wire connections. Always use the outside connections, the middle terminal is not active.

Accessory Options

X, Y, E Terminals

The following units have X, Y, E terminals:

Air Handler – 45MUAA, 45MUHA, D5MUWA



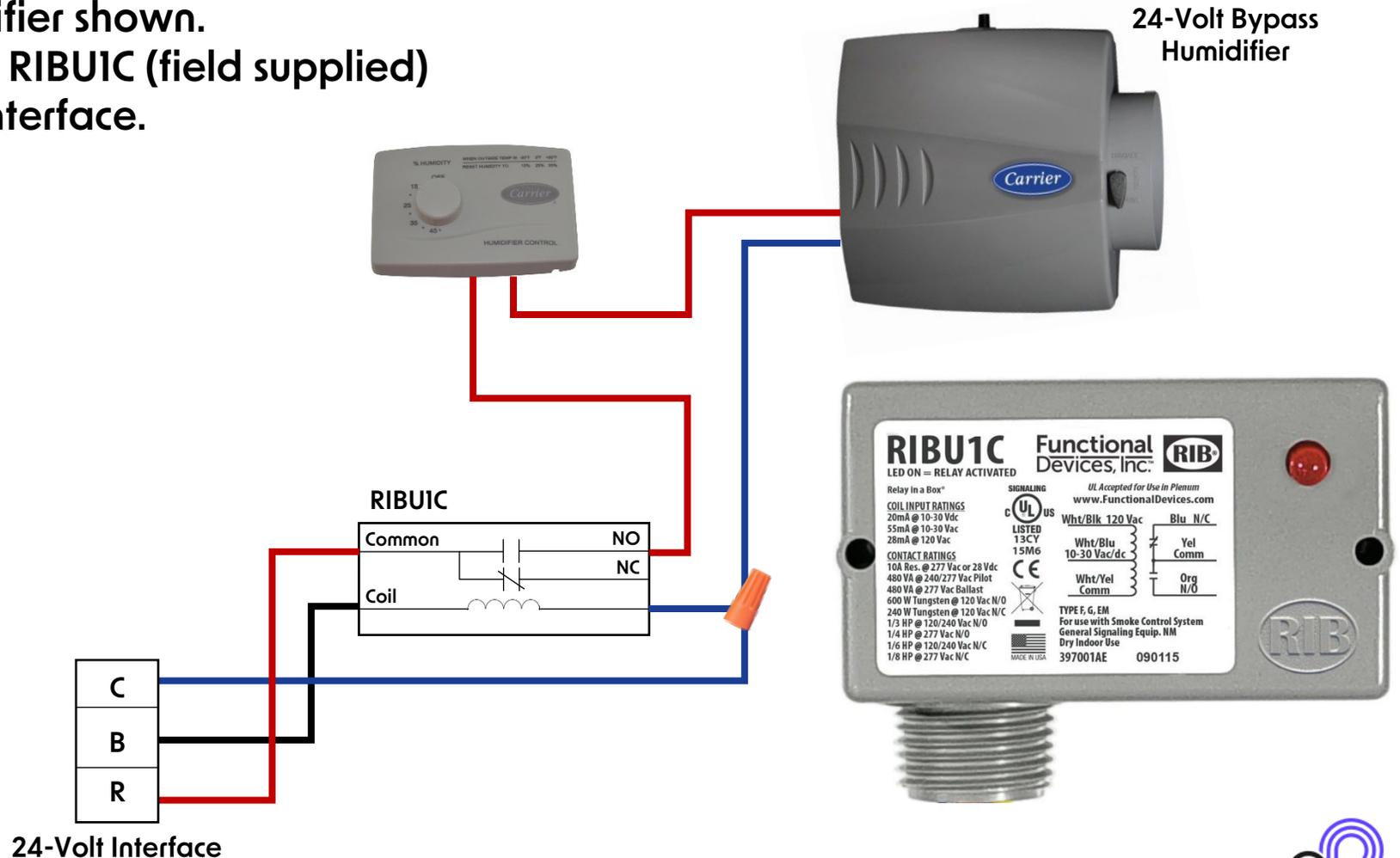
Accessory Options

Air Handlers: 45MBAA / 45MU(A,H)A / D5MUWA

Only additional wiring for Humidifier shown.
We recommend a RIB style Relay RIBU1C (field supplied)
mounted directly to the 24-Volt Interface.



Humidifier will only be able to operate during a heating call.

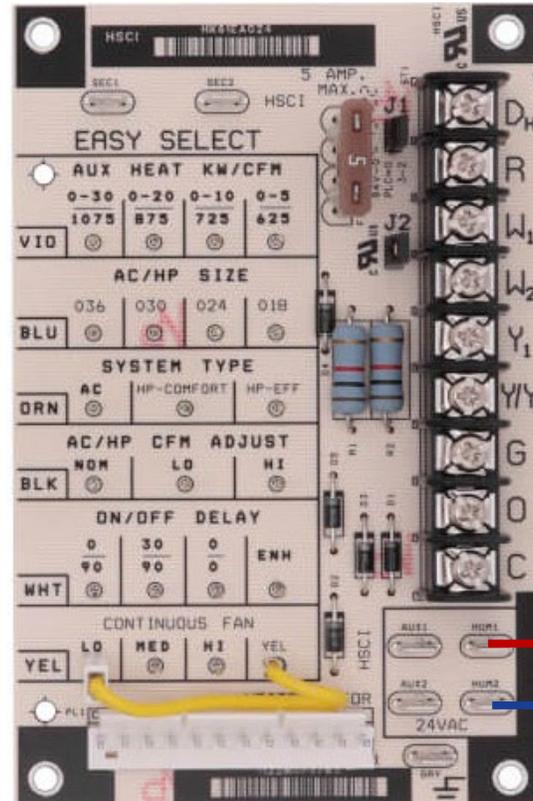


Accessory Options

Crossover & Res. Air Handlers: FT5 / FTG

The Easy Select PCB has 24-Volt "Hum" terminals.
Only additional wiring for Humidifier shown.

Easy Select Board



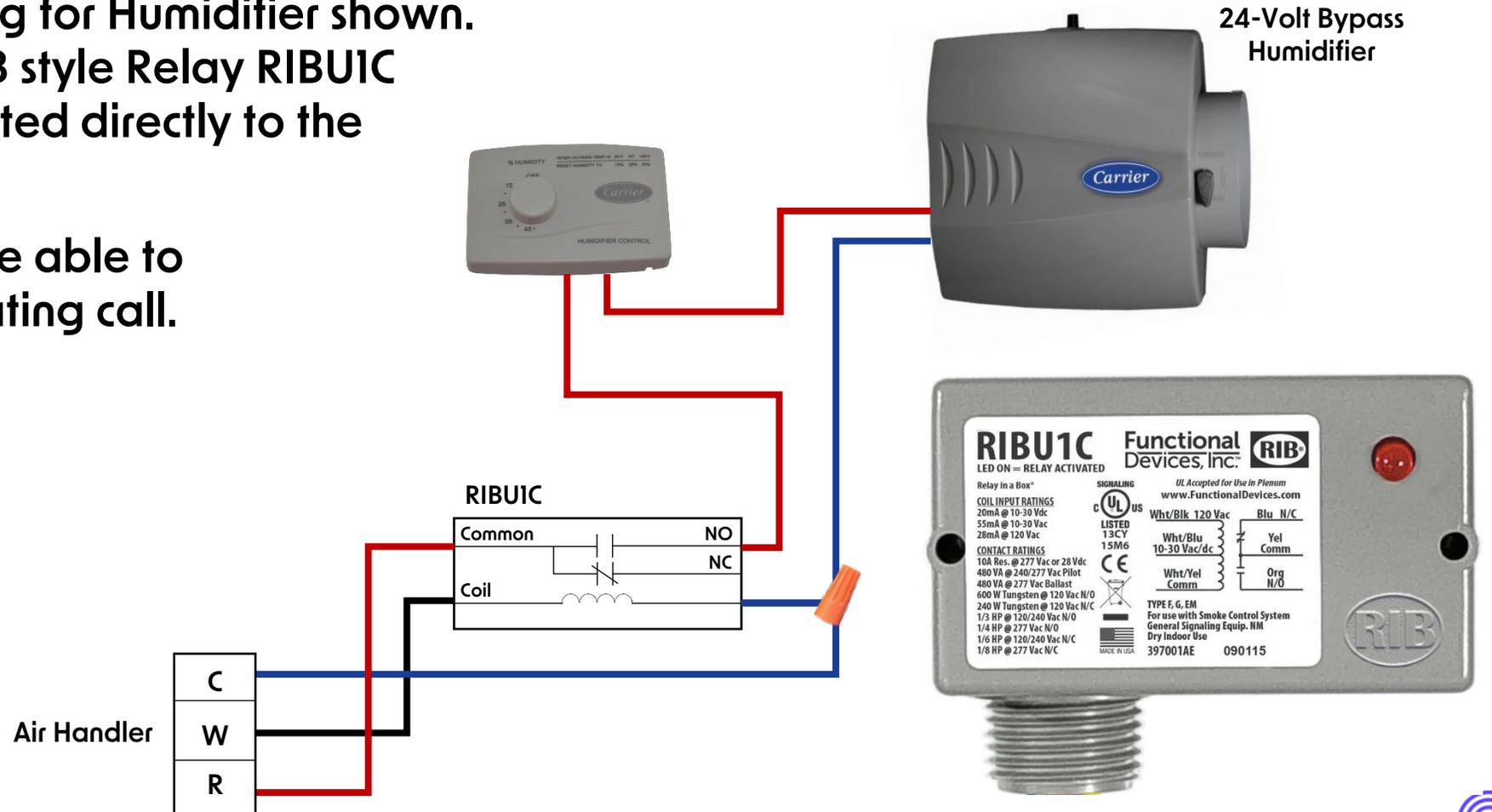
24-Volt Bypass Humidifier

Accessory Options

Crossover Ductless & Res. Air Handlers: F55

Only additional wiring for Humidifier shown.
We recommend a RIB style Relay RIBU1C
(field supplied) mounted directly to the
24-Volt Interface.

Humidifier will only be able to
operate during a heating call.

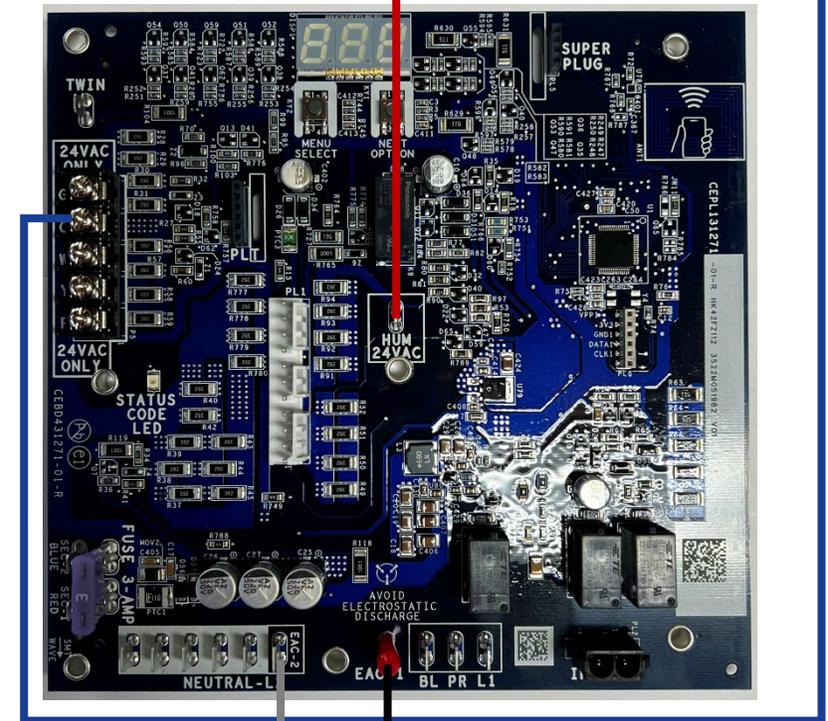
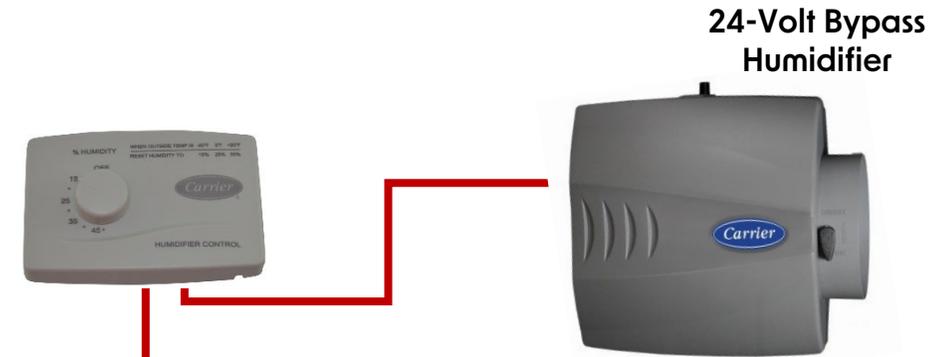


Accessory Options

Crossover & Gas Furnace/Coil

Only additional wiring for Humidifier & Electronic Air Cleaner shown.

Most carrier and Bryant furnaces have "Hum" & "EAC" terminals.



Typical Furnace PCB



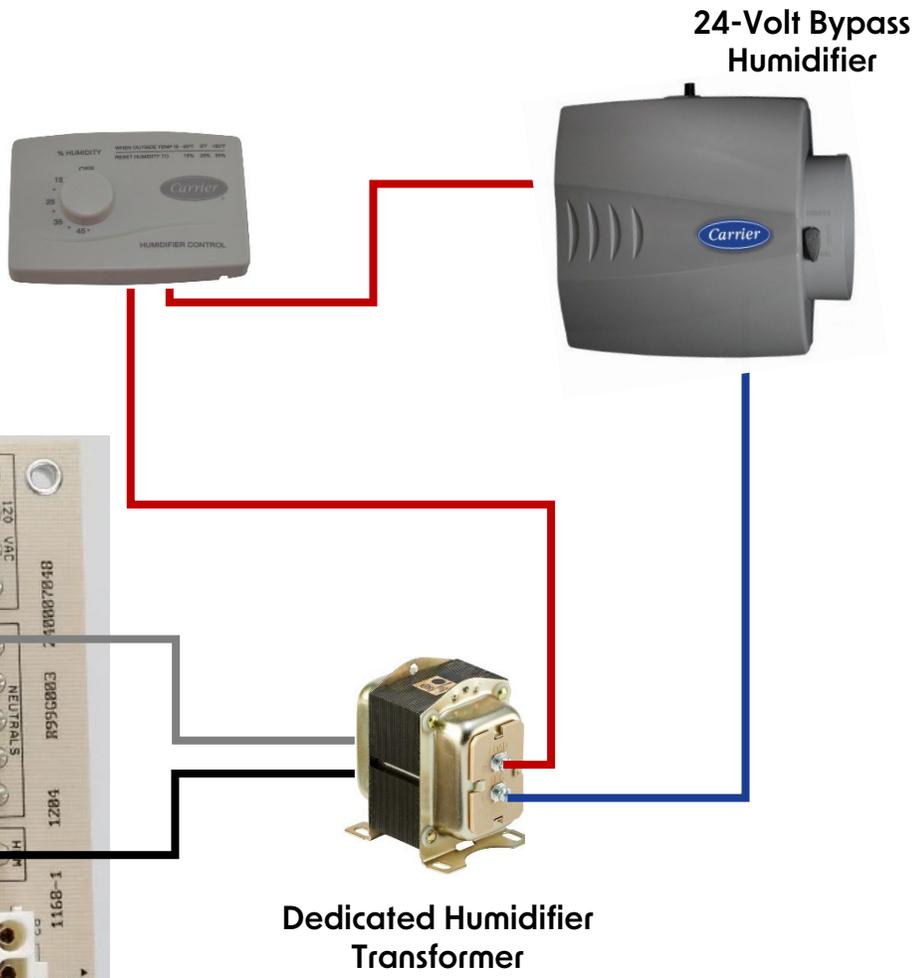
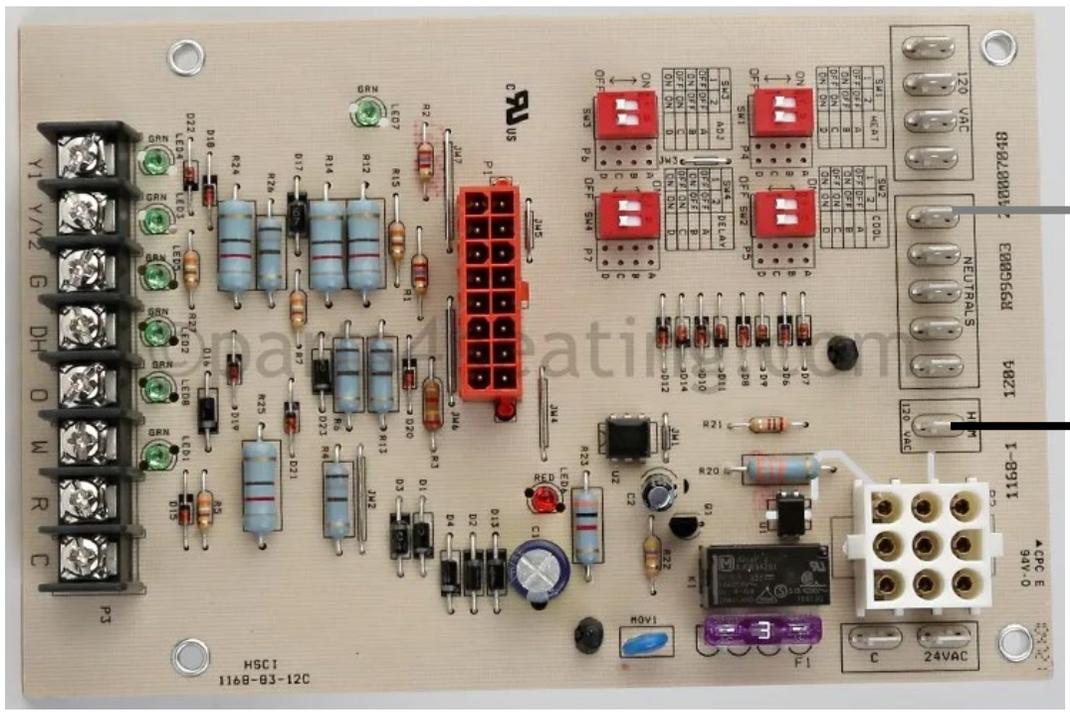
Accessory Options

Crossover & Oil Furnace/Coil

Only additional wiring for Humidifier shown.
The below furnaces all have a 120VAC "Hum" terminal.

OVL
OVM

Oil Furnace PCB



Dedicated Humidifier Transformer

Accessory Options

ecobee

An ecobee ACC+/ACC- terminals can be used to control a humidifier, dehumidifier or ventilator.

- You can use 1-wire (common power supply) or 2-wires (separate power supplies) to the ACC+/ACC- terminals.
- ecobee thermostats can only support one device connected to ACC+/ACC- at a time.
- ecobee3 lite does not have accessory terminals.

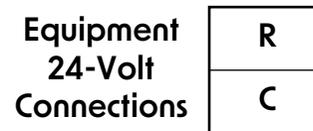
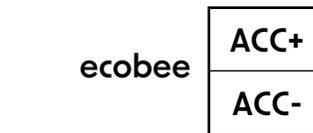


Accessory Options

ecobee (cont.)

1-Wire hook up, system and humidifier using same 24-Volt power supply.

When configuring thermostat, the humidifier option must be selected.



Humidistat is not needed, humidifier can be controlled by ecobee

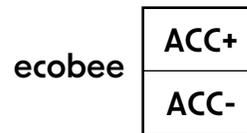


Accessory Options

ecobee (cont.)

2-Wire hook up, system and humidifier using different 24-Volt power supplies.

When configuring thermostat, the humidifier option must be selected.



Humidistat is not needed, humidifier can be controlled by ecobee



24-Volt Bypass Humidifier



Dedicated Humidifier Transformer

Accessory Options

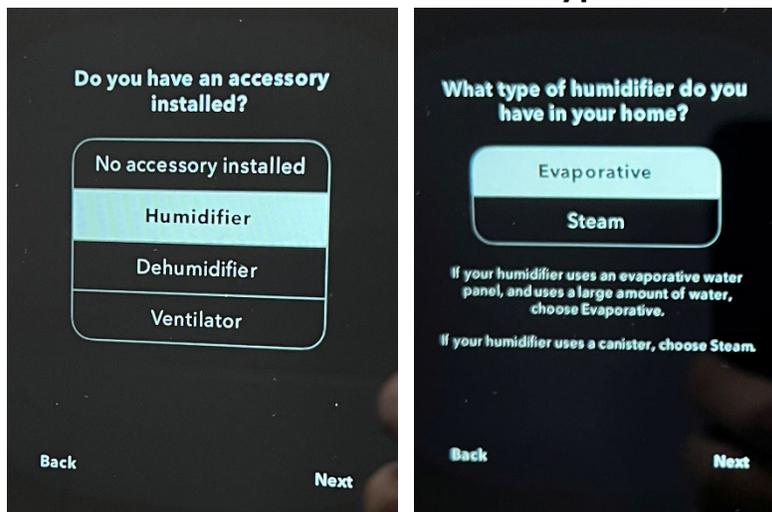


ecobee (cont.)

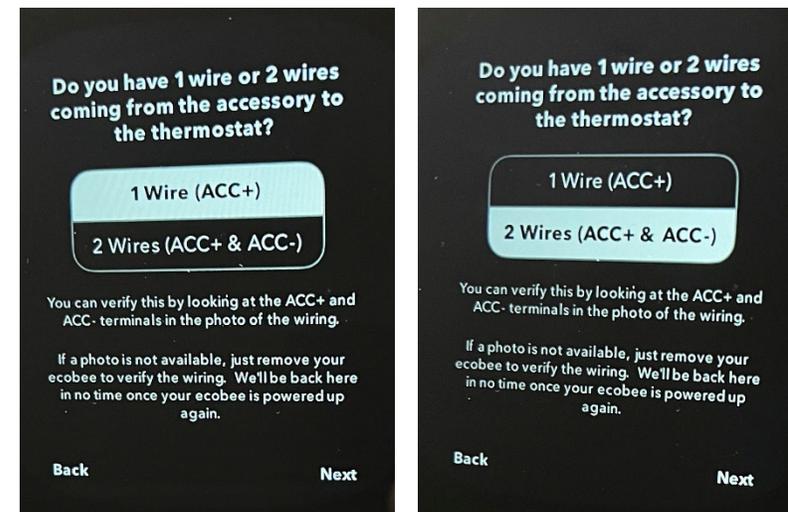
ecobee Humidifier Control Setup

- During the initial setup of the thermostat, you will be asked about installed accessories.
- If adding to an already setup ecobee stat, you will need to reconfigure equipment and start the initial setup over.
- You can only select one of the options shown.
- The below screen shots are from a few of the settings worked into all initial settings, they are not necessarily in order of appearance.

Select Humidifier and Type



You will be asked how it was wired.

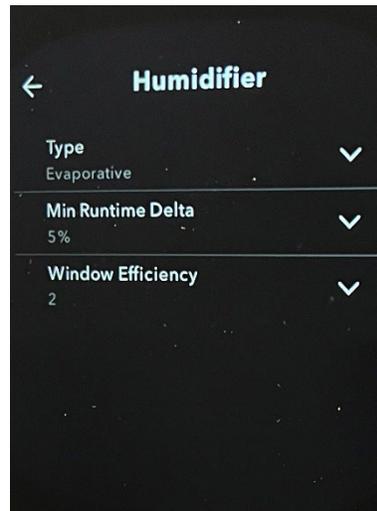
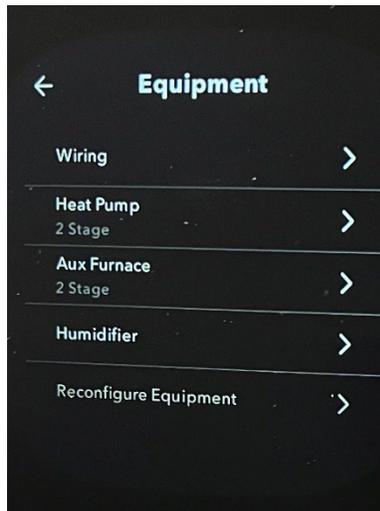


Accessory Options

ecobee (cont.)

ecobee Humidifier Control Setup

- After Initial setup of ecobee you will need to navigate to the Installation Settings for the Humidifier before operating.
- Here you will set three times: Type, Min Runtime Delta and Window Efficiency.
- Suggested Humidity design is Winter 35% vs. Summer 50%.
- If unsure, start at Min Runtime set to 3% & Window Efficiency set to 4. These can be changed at any time.



Goto:

- "Main Menu" (three lines top right of screen)
- "Gear" (lower right of screen)
- "Installation Settings" (scroll down)
- "Equipment"
- "Humidifier"



- Humidifier Type: Evaporative humidifiers are design to work with a heating cycle to aid in the evaporation of water whereas a Steam humidifier only requires air flow from the furnace fan. A Steam setup can operate independent of heating cycle.
- Min Runtime Delta (2-10%): to reduce short cycling, the humidifier will run beyond the desired humidity by the selected amount (%). Default is 5%.
- Window Efficiency: The humidifier frost Control setting uses this efficiency rating to compute the desired humidity within the range of 15% to 50%. The chosen setting will determine the maximum indoor humidity permitted.

Accessory Options



Goto:

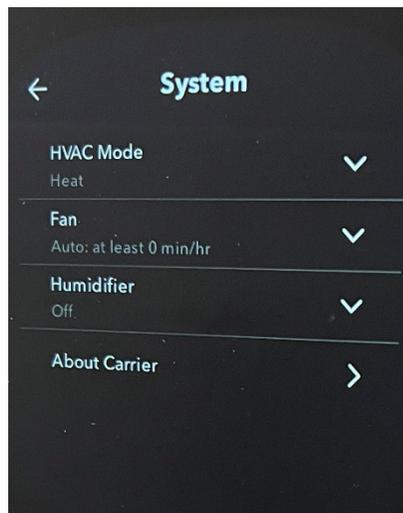
- "Main Menu" (three lines top right of screen)
- "System"
- "Humidifier"

ecobee (end)

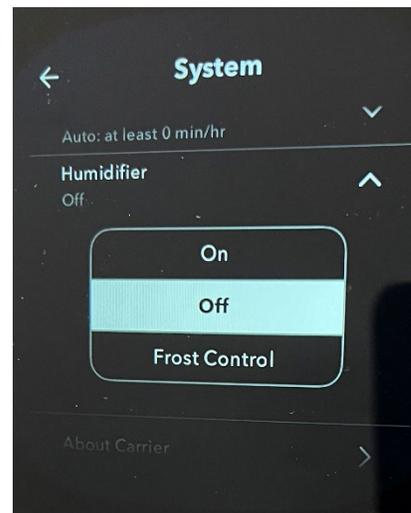
ecobee Humidifier Operation

- To operative access the System Menu and select Humidifier.
- From here you have two choices:
 - On: Manually set % at one setting no matter what the outdoor temp is
 - Frost Control: Auto sets % based on outdoor temp

Goto: Humidifier



Select On of Frost Control



On:

Requires a preferred humidity level (%) to be manually set. If the actual RH% is below this setpoint the humidifier will be turned on.

Frost Control:

Will optimize the humidity level to 50% based on the outdoor temperature, indoor temperature, and window efficiency. Use this setting to dynamically adjust the humidity level to avoid excessive condensation forming on windows when outdoor weather is very cold.