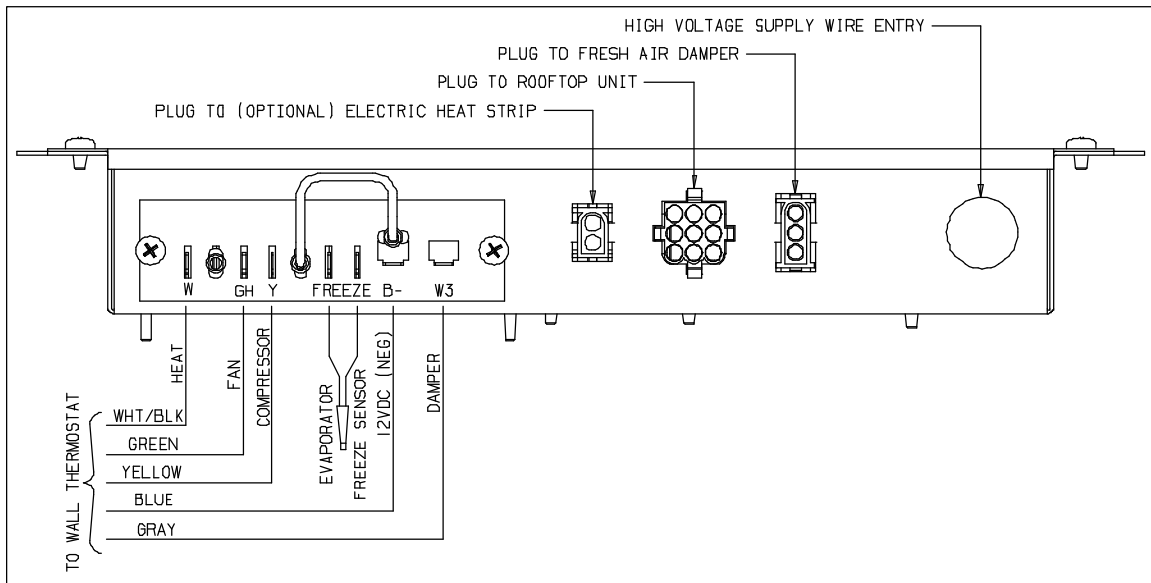


# INSTALLATION INSTRUCTIONS FOR FRESH AIR INTAKE CONTROLS

## Fresh Air Intake Control Box 8350x755 & 8550x755

Plenum Terminal Designation	Thermostat Wire Connection	Function of Low Voltage Terminal Extending From Ceiling Plenum
W	White	Energizes coil on Heat Relay
GL	N/A	No function, Low Speed not available
GH	Green	Energizes coil on High Fan Relay
Y	Yellow	Energizes coil on Compressor Relay
B-	Blue	Completes -12 VDC circuit for all relays
FREEZE	White	Evaporator Freeze Sensor Connections
FREEZE	White	Evaporator Freeze Sensor Connections
W3	Gray	Energizes coil on Fresh Air Intake Damper Relay



## Fresh Air Intake Thermostat 8350x336

Thermostat Wire Designation/Color	Function of Thermostat Wiring
W3/Gray	Fresh Air Intake
W/White	Furnace
Y/Yellow	Compressor
G/Green	High Fan Speed
R/Red	12 VDC Positive
B/Blue	12 VDC Negative

**8350x336 Thermostat Operation Table**

<b>Mode</b>	<b>W3</b>	<b>Fan Mode</b>	<b>Calling</b>	<b>Operation of Unit</b>
Cool	<u>ON Time</u> OFF Time	Auto	No	<u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Nothing is Operating
Cool	<u>ON Time</u> OFF Time	Auto	Yes 1 Degree Above Set Point	Y – Compressor Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Y – Compressor Energized G – Fan Energized
Cool	<u>ON Time</u> OFF Time	On	No	<u>G – Fan &amp; W3 Fresh Air Intake Energized</u> G – Fan Energized
Cool	<u>ON Time</u> OFF Time	On	Yes 1 Degree Above Set Point	Y – Compressor Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Y – Compressor Energized G – Fan Energized
Heat	<u>ON Time</u> OFF Time	Auto or On	No	<u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Nothing is Operating
Heat	<u>ON Time</u> OFF Time	Auto or On	Yes 1 Degree Above Set Point	W – Furnace (White) Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> W – Furnace (White) Energized

**8550x335 Fresh Air Intake Thermostat**

<b>Thermostat Wire Designation/Color</b>	<b>Function of Thermostat Wiring</b>
WHP/White-Black	Heat Pump
W3/Gray	Fresh Air Intake
WF/White	Furnace
Y/Yellow	Compressor
G/Green	High Fan Speed
R/Red	12 VDC Positive
B/Blue	12 VDC Negative

**8550x335 Thermostat Operation Table**

<b>Mode</b>	<b>W3</b>	<b>Fan Mode</b>	<b>Calling</b>	<b>Operation of Unit</b>
Cool	<u>ON Time</u> OFF Time	Auto	No	<u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Nothing is Operating
Cool	<u>ON Time</u> OFF Time	Auto	Yes 1 Degree Above Set Point	Y – Compressor Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Y – Compressor Energized G – Fan Energized
Cool	<u>ON Time</u> OFF Time	On	No	<u>G – Fan &amp; W3 Fresh Air Intake Energized</u> G – Fan Energized
Cool	<u>ON Time</u> OFF Time	On	Yes 1 Degree Above Set Point	Y – Compressor Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Y – Compressor Energized G – Fan
Gas Heat	<u>ON Time</u> OFF Time	Auto or On	No	<u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Nothing is Operating
Gas Heat	<u>ON Time</u> OFF Time	Auto or On	Yes 1 Degree Below Set Point	WF – Furnace (White) Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> WF – Furnace (White) Energized
Elec Heat	<u>ON Time</u> OFF Time	Auto or On	No	<u>G – Fan &amp; W3 Fresh Air Intake Energized</u> Nothing is Operating
Elec Heat	<u>ON Time</u> OFF Time	Auto or On	Yes 1 Degree Below Set Point	WHP – Heat Pump (White/Black) Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> WHP – Heat Pump (White/Black) Energized
Elec Heat	<u>ON Time</u> OFF Time	Auto or On	Yes Backup Heat 5 Degree Below Set Point	WHP – Heat Pump (White/Black) Energized WF – Furnace (White) Energized <u>G – Fan &amp; W3 Fresh Air Intake Energized</u> WHP – Heat Pump (White/Black) Energized WF – Furnace (White) Energized

## Heat Pump and Backup Heat Example To Call For Gas Furnace

Setpoint	Indoor Temperature	Operation
70	70+	No functions occur
	69	Heat Pump turns on (primary heat source)
	71	Heat Pump turns off (thermostat satisfied)
	69	Heat Pump turns on
	65	Gas Furnace turns on (Heat Pump not able to satisfy thermostat) (First strike for backup heat counter)
	71	Gas Furnace turns off , Heat Pump turns off (thermostat satisfied)
	69	Heat Pump turns on
	65	Gas Furnace turns on (Heat Pump not able to satisfy thermostat) (Second strike for backup heat counter)
	71	Gas Furnace turns off, Heat Pump turns off (thermostat satisfied)
	69	Heat Pump turns on
	65	Gas Furnace turns on (Heat Pump is again unable to satisfy thermostat) (backup heat counter reaches 3rd strike and Heat Pump is locked out for 2 hours)
		Backup heat counter is reset if Heat Pump is running for more than 20 minutes and does not call for backup heat
	71	Gas Furnace turns off (thermostat satisfied)
	69	Gas Furnace turns on (becomes primary heat source)
	71	Gas Furnace turns off (thermostat satisfied)
		After 2 hour lockout
	69	Heat Pump turns on (resumes as primary heat source)
	65	Gas Furnace turns on, Heat Pump turns off (becomes primary heat source) (Heat Pump is locked out for 2 hours)
	71	Gas Furnace turns off (thermostat satisfied)
		After 2 hour lockout
	69	Heat Pump turns on (resumes as primary heat source)
	71	Heat pump turns off (thermostat satisfied)
		Backup heat counter is reset any time Heat Pump satisfies thermostat setpoint and does not need gas furnace
Note: The word "DIFF" will display on LCD when backup heat is operating		

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