

# MC SERIES OCCUPANCY SENSOR

## Supplemental Installation Manual for Accessories

MC-C (Ceiling Mount)

MC-W (Wall Mount)



MC-C Ceiling Mount



MC-W Wall Mount

---

<b>1.0 OVERVIEW</b>	<b>3</b>
1.1 SPECIFICATIONS.....	3
<b>2.0 INSTALLATION</b>	<b>4</b>
2.1 MC-C CEILING MOUNT .....	4
2.2 MC-W WALL MOUNT.....	4
<b>3.0 SETTINGS</b>	<b>5</b>
3.1 ADJUSTMENT KNOBS .....	5
3.2 DIP SWITCHES .....	6
<b>4.0 ELECTRICAL</b>	<b>7</b>
4.1 WIRING SCHEMATICS.....	7
<b>5.0 FACTORY ASSISTANCE</b>	<b>11</b>

**TABLE OF ILLUSTRATIONS**

Figure 2.1.0 MC-C Ceiling Mount Installation .....	4
Figure 2.2.0 MC-W Wall Mount Installation.....	4
Figure 3.1.0 Knob Adjustment Table .....	5
Figure 3.1.1 Infrared Range Adjustment.....	5
Figure 3.1.2 Delayed—Off Time Adjustment.....	5
Figure 3.2.0 Dip Switch Setting Table .....	6
Figure 3.2.1 MC-C Dip Switches .....	6
Figure 3.2.2 MC-W Dip Switches .....	6
Figure 4.1.0 EV90, EV90P, EV130, EV200, and EV300 Schematic.....	7
Figure 4.1.1 EV Premium and SL75 Schematic.....	7
Figure 4.1.2 HE1.5IN—Standard Wiring (Non-ECM) Schematic.....	8
Figure 4.1.3 HE1.5IN—Motorized Damper(s) or Independent Blower Control Schematic.....	8
Figure 4.1.4 HE1.5RT—Standard Wiring (Non-ECM or VFD Units) Schematic.....	8
Figure 4.1.5 HE1.5Rt—Motorized Damper(s) or Independent Blower Control Schematic.....	9
Figure 4.1.6 HE2X-8X, LE6X-10X—with Standard Wiring or Motorized Damper(s) Schematic.....	9
Figure 4.1.7 HE1.5—ECM with Terminal Block (Speed 1-Low Speed On/Off) Schematic .....	9
Figure 4.1.8 HE05, HE07, HE10, and HE1.5—ECM with Circuit Board (Speed 1-Low Speed On/ Off) Schematic .....	10
Figure 4.1.9 RH-W Heater Accessory Thermostat Schematic.....	10

## 1.0 OVERVIEW

### 1.1 SPECIFICATIONS

- Passive infrared sensor
- Adjustable time-off delay to 30 minutes
- 24VAC power requirement
- Ceiling mount or directable wall mount
- Coverage floor space
  - Ceiling mount: 1500 sq. ft.
  - Wall mount: 2500 sq. ft.
- Major motion area
  - Ceiling mount: 50 ft. diameter
  - Wall mount: 68 x 50 ft.

Model	Volts	Current	Isolated Relay	Coverage Area	Suggested Mounting Height
MC-C	15-28VAC	30 mA	1 A @ 30 VAC/DC	1500 sq. ft.	8-10 ft.
MC-W	15-28VAC	30 mA	1 A @ 30 VAC/DC	2500 sq. ft.	8-10 ft.

## 2.0 INSTALLATION

### 2.1 MC-C CEILING MOUNT

See the Leviton installation instructions provided in the original box for in-details or for more options.

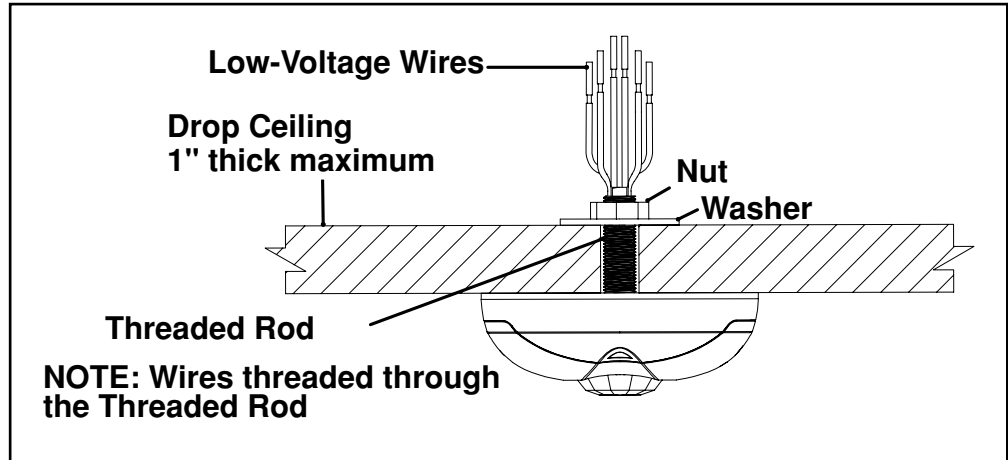


FIGURE 2.1.0 MC-C CEILING MOUNT INSTALLATION

### 2.2 MC-W WALL MOUNT

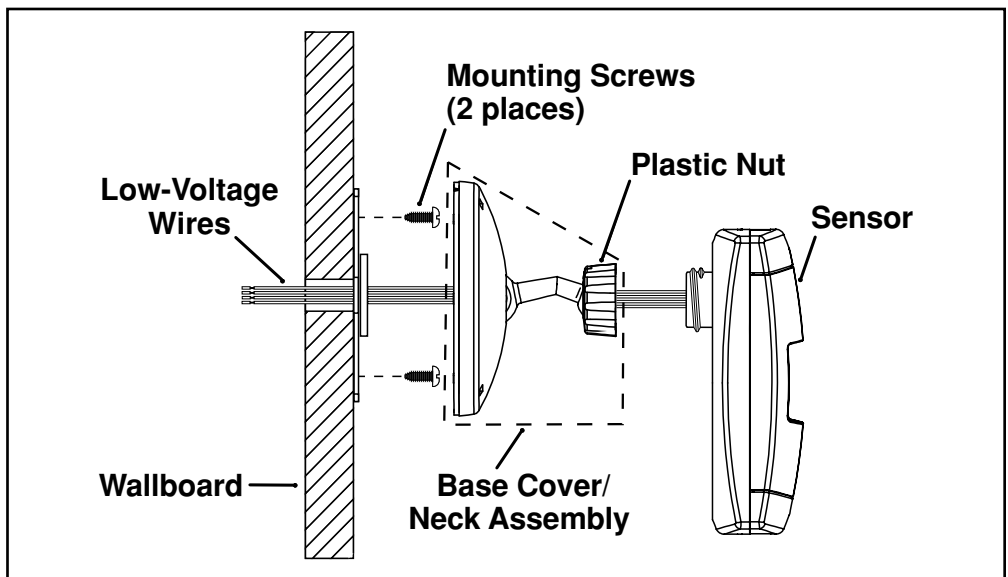


FIGURE 2.2.0 MC-W WALL MOUNT INSTALLATION

### 3.0 SETTINGS

#### 3.1 ADJUSTMENT KNOBS





KNOB COLOR	SYMBOL	FUNCTION	KNOB SETTING	FACTORY DEFAULT SETTING
Red		Sets the infrared range	Range Setting Full CCW = min. (OFF) Full CW = max.	75% 
Black		Delayed-Off Time	Full CCW = min. (30 sec.) Full CW = max. (30 min.)	50% (10 min.) 

FIGURE 3.1.0 KNOB ADJUSTMENT TABLE

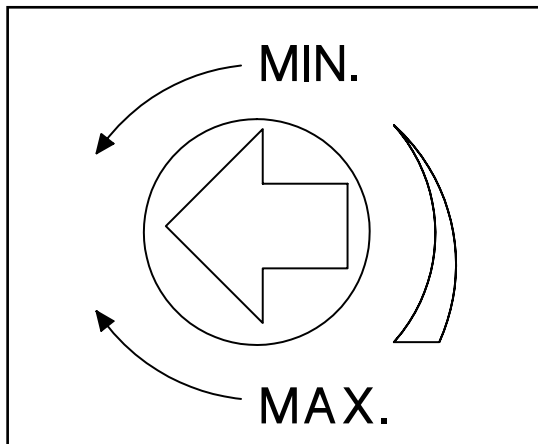


FIGURE 3.1.1 INFRARED RANGE ADJUSTMENT

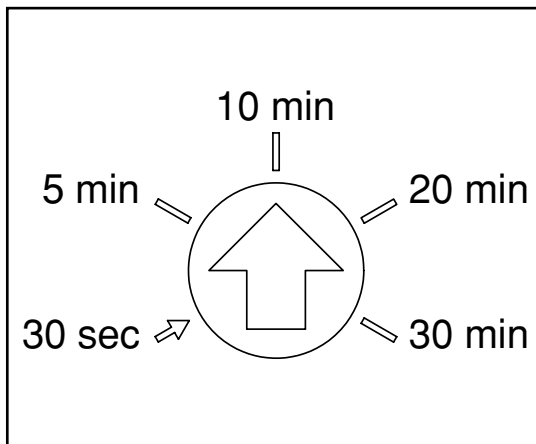


FIGURE 3.1.2 DELAYED—OFF TIME ADJUSTMENT

### 3.2 DIP SWITCHES

Switch	Switch Functions	Switch Settings	
	Bank A	OFF	ON
A1	N/A	N/A	N/A
A2	N/A	N/A	N/A
A3	Manual Mode	Auto Adapting Enabled	Auto Adapting Disabled
A4	Walk-Through Disabled	Walk-Through Enabled	Walk-Through Disabled
	Bank B	OFF	ON
B1	Override to ON	Auto Mode	Lights Forced ON
B2	Override to OFF	Auto Mode	Lights Forced OFF
B3	Test Mode	OFF ꞑ ON ꞑ OFF = Enter/Exit Test Mode	
B4	LEDs Disabled	LEDs Enabled	LEDs Disabled

FIGURE 3.2.0 DIP SWITCH SETTING TABLE

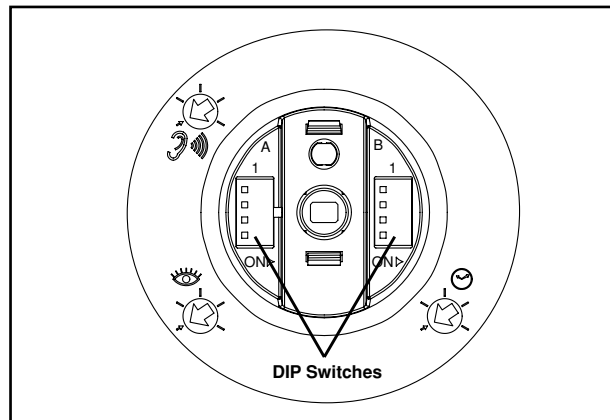


FIGURE 3.2.1 MC-C DIP SWITCHES

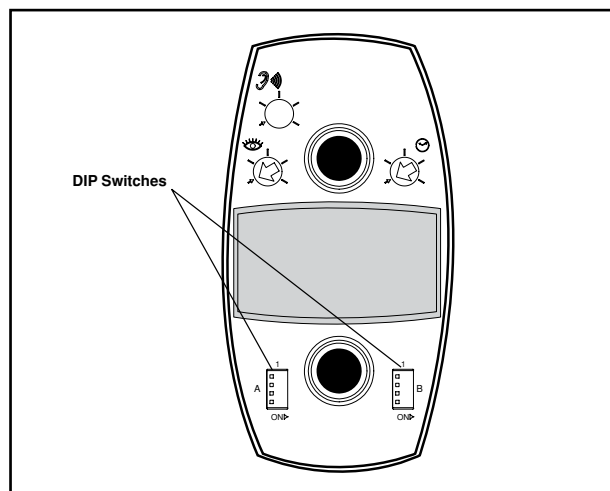


FIGURE 3.2.2 MC-W DIP SWITCHES

## 4.0 ELECTRICAL

### 4.1 WIRING SCHEMATICS

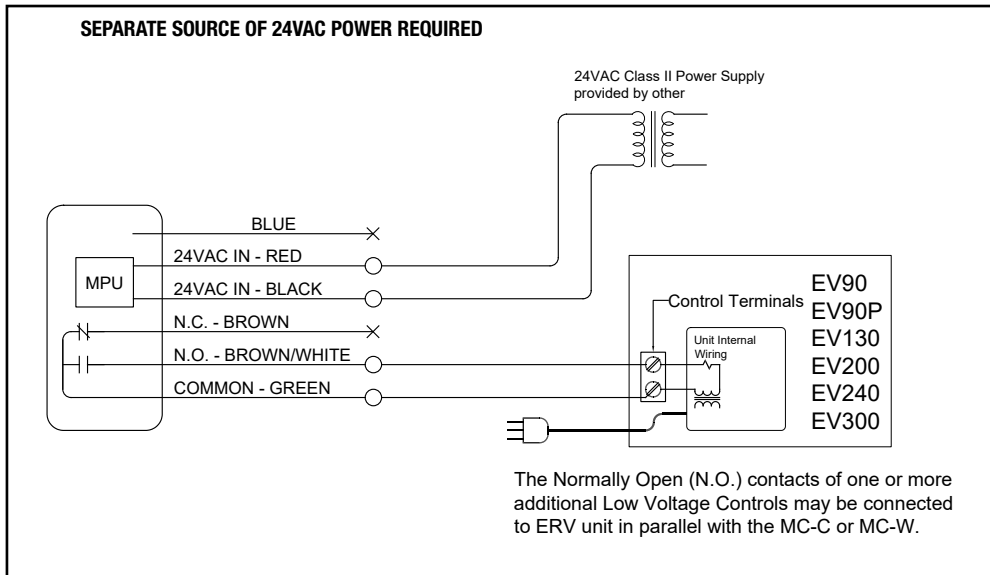


FIGURE 4.1.0 EV90, EV90P, EV130, EV200, AND EV300 SCHEMATIC

In this example, Motion Control Occupancy Sensor turns Energy Recovery Ventilator (ERV) on at High speed when space is occupied.

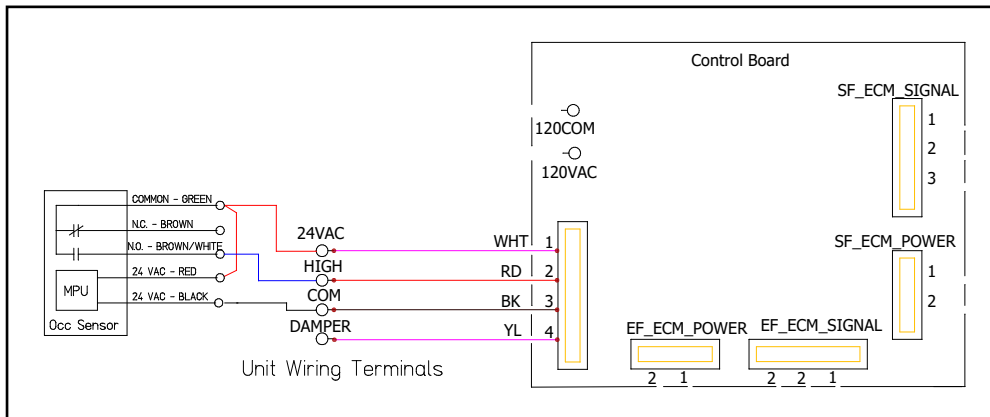


FIGURE 4.1.1 EV PREMIUM AND SL75 SCHEMATIC

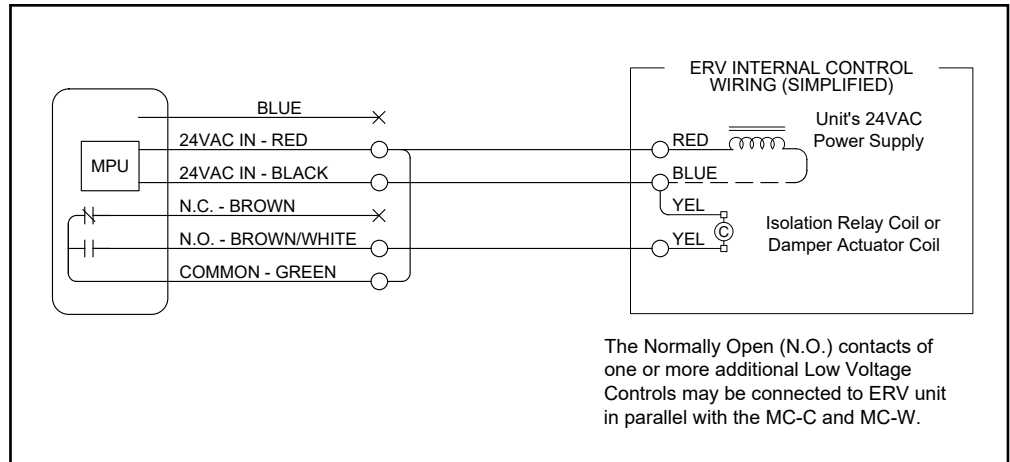


FIGURE 4.1.2 HE1.5IN—STANDARD WIRING (NON-ECM) SCHEMATIC

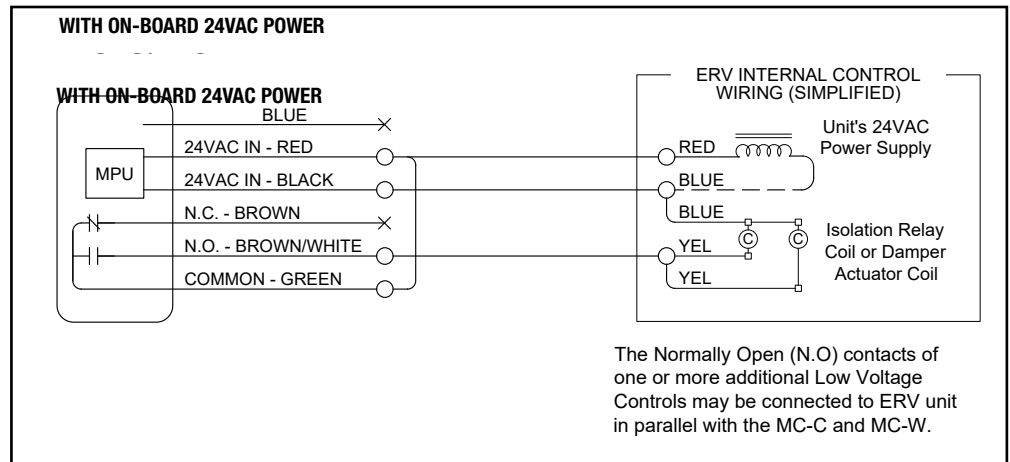


FIGURE 4.1.3 HE1.5IN—MOTORIZED DAMPER(S) OR INDEPENDENT BLOWER CONTROL SCHEMATIC

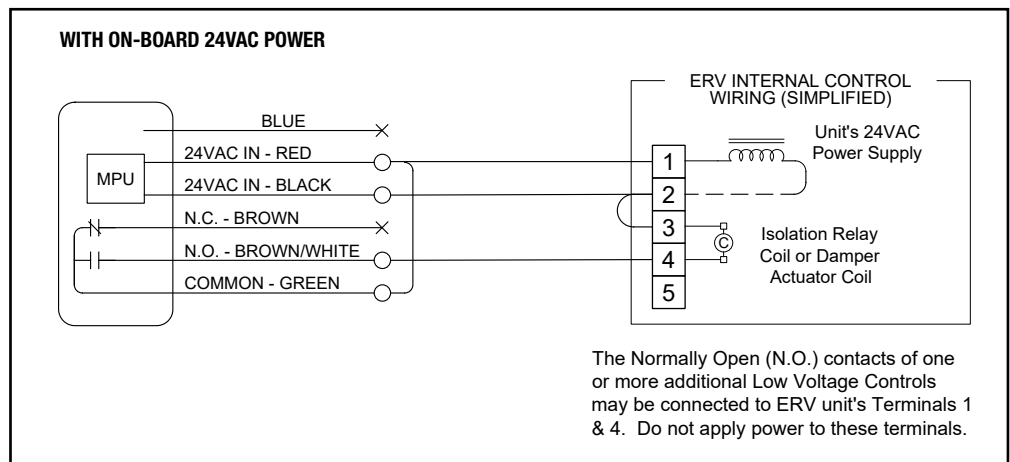


FIGURE 4.1.4 HE1.5RT—STANDARD WIRING (NON-ECM OR VFD UNITS) SCHEMATIC



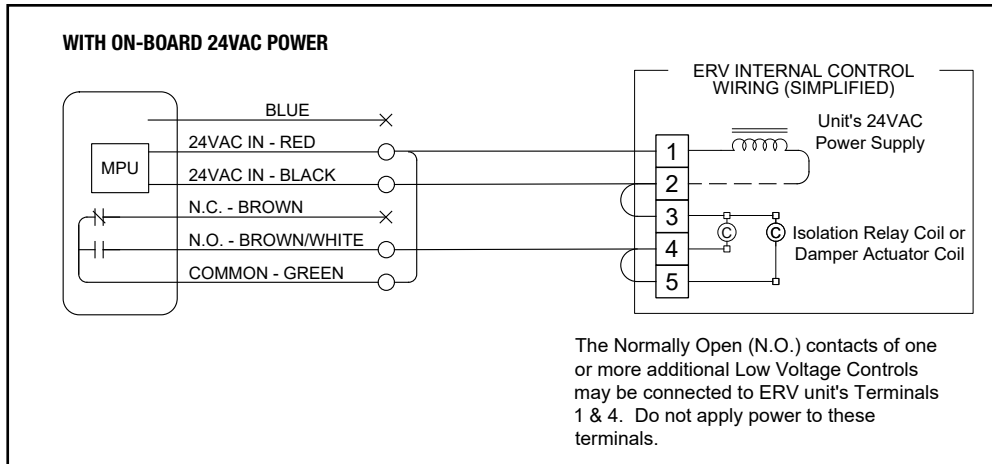


FIGURE 4.1.5 HE1.5RT—MOTORIZED DAMPER(S) OR INDEPENDENT BLOWER CONTROL SCHEMATIC

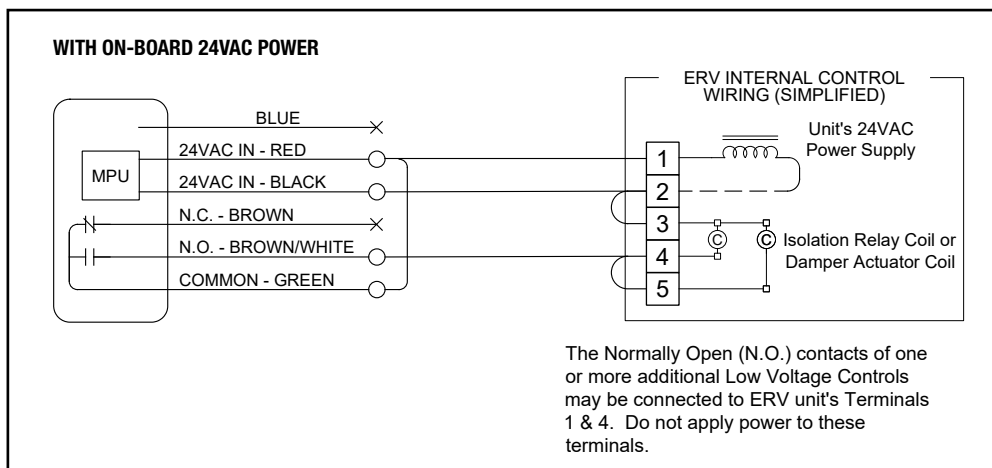


FIGURE 4.1.6 HE2X-8X, LE6X-10X—WITH STANDARD WIRING OR MOTORIZED DAMPER(S) SCHEMATIC

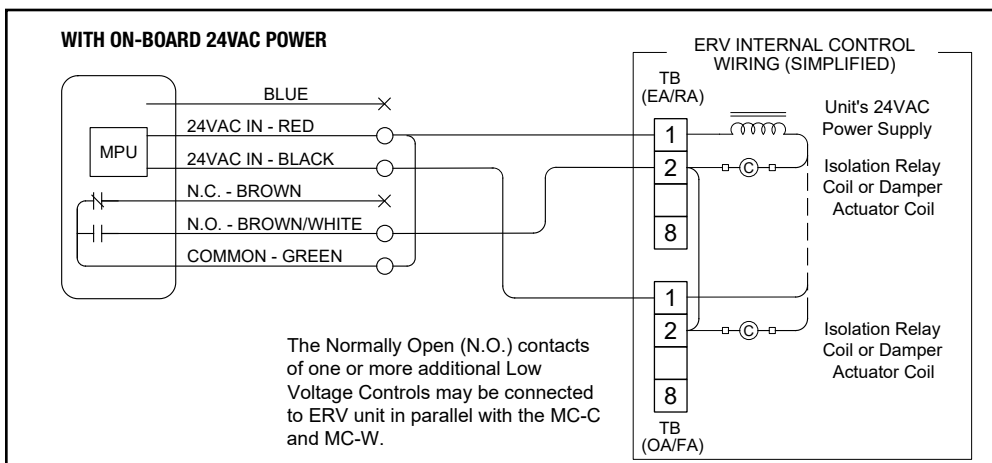


FIGURE 4.1.7 HE1.5—ECM WITH TERMINAL BLOCK (SPEED 1-LOW SPEED ON/OFF) SCHEMATIC

In this example, Motion Control Occupancy Sensor turns the ERV on at speed set by potentiometers when space is occupied.

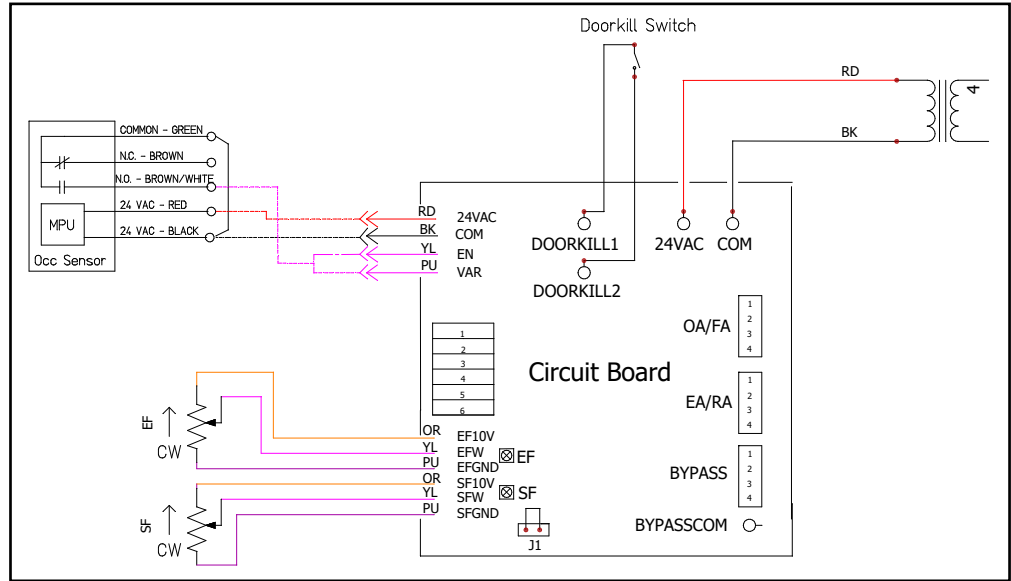


FIGURE 4.1.8 HE05, HE07, HE10, AND HE1.5—ECM WITH CIRCUIT BOARD (SPEED 1-LOW SPEED ON/OFF) SCHEMATIC

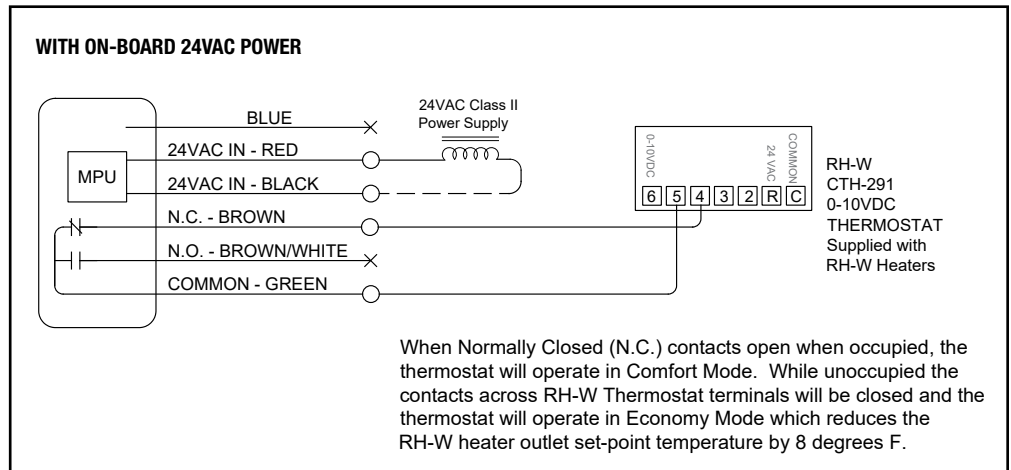


FIGURE 4.1.9 RH-W HEATER ACCESSORY THERMOSTAT SCHEMATIC

## 5.0 FACTORY ASSISTANCE

In the unlikely event that you need assistance from the factory for a specific issue, make sure that you have the information called for in the Unit Records page in the Owner Information section of the unit manual. The person you speak with at the factory will need that information to properly identify the unit and the installed options.

**To contact RenewAire Customer Service:**

**Call 800-627-4499**

**Email: [RenewAireSupport@RenewAire.com](mailto:RenewAireSupport@RenewAire.com)**



## About RenewAire

For over 40 years, **RenewAire has been a pioneer in enhancing indoor air quality (IAQ)** in commercial and residential buildings of every size. This is achieved while maximizing sustainability through our fifth-generation, static-plate, enthalpic-core **Energy Recovery Ventilators (ERVs) that optimize energy efficiency**, lower capital costs via load reduction and decrease operational expenses by minimizing equipment needs, resulting in significant energy savings. Our ERVs are competitively priced, simple to install, easy to use and maintain and have a quick payback. They also enjoy the industry's best warranty with the lowest claims due to long-term reliability derived from innovative design practices, expert workmanship and **Quick Response Manufacturing (QRM)**.

As the pioneer of static-plate core technology in North America, RenewAire is the largest ERV producer in the USA. We're **committed to sustainable manufacturing** and lessening our environmental footprint, and to that end our Waunakee, WI plant is 100% powered by wind turbines. The facility is also one of the few buildings worldwide to be LEED and Green Globes certified, as well as having achieved ENERGY STAR Building status. In 2010, RenewAire joined the Soler & Palau (S&P) Ventilation Group in order to provide direct access to the latest in energy-efficient air-moving technologies. For more information, visit: [renewaire.com](http://renewaire.com)

201 Raemisch Road | Waunakee, WI | 53597 | 800.627.4499 | [RenewAire.com](http://RenewAire.com)