

INSTRUCTIONS FOR DUAL ENTHALPY SENSOR UPGRADE KIT

Installation

Upgrade single enthalpy economizers (outdoor air enthalpy) to dual enthalpy by adding a return air enthalpy sensor and wiring it to the Honeywell model W7342A1001 Logic Module.

Parts Included

The sensor upgrade kit contains the following:

- (1) Sensor
- (1) Wiring harness
- (2) No. 8-16 x 3/4" PHI/PAN - TEC screws
- (1) Strain relief bushing
- **(Required for 7.5 to 25 ton units only)**
- (1) Sensor mounting bracket
- **(Required for the 3 to 6 and 7.5 Ton units only)**
- (2) No. 10 self-drilling screws (1/2 - inch long)
- (3) Tie wraps

⚠ WARNING: Risk of Electrical Shock.

Disconnect the power supply and install a lockout tag before wiring connections are made to avoid possible electrical shock or damage to the equipment.

Mounting

3 to 6 and 7.5 Ton Vertical

To mount the sensor:

1. Remove four screws holding barometric damper.
2. Mount the bracket to the Economizer damper using the two No. 10 self-drilling screws provided.

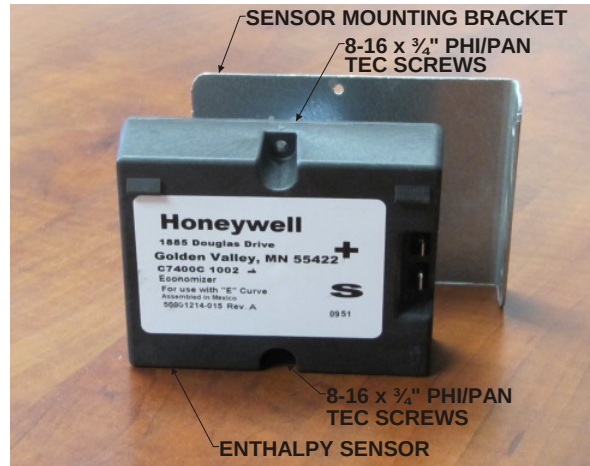


Figure 1: Mounting the Sensor to the Bracket
Mounting for 3 to 6 and 7.5 Ton Economizer

3. Mount the sensor to the mounting bracket (refer to Figure 1 for the proper bracket orientation) using the two No. 6-20 thread-forming screws (provided).

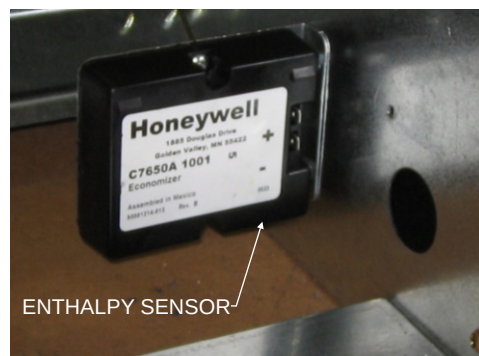
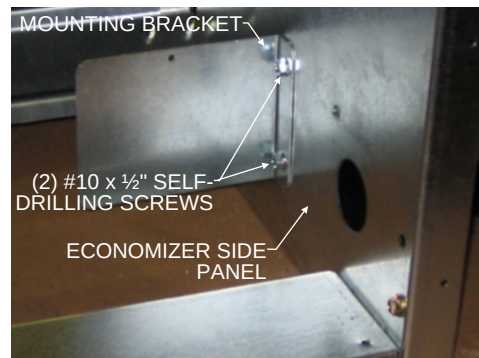
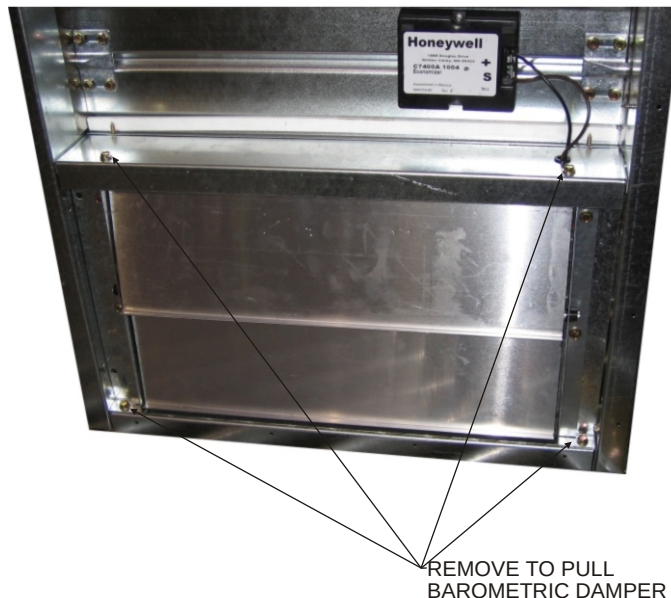


Figure 2: Mounting the Sensor and Bracket in a 3 to 6 and 7.5 Ton Economizer Assembly

7.5 to 25 Ton Vertical and Horizontal

To mount the sensor:

1. Remove the four screws holding the return air sensor mounting plate to the damper (see Figure 3).
2. Mount the sensor to the mounting plate using the two No. 6-20 thread-forming screws (provided).

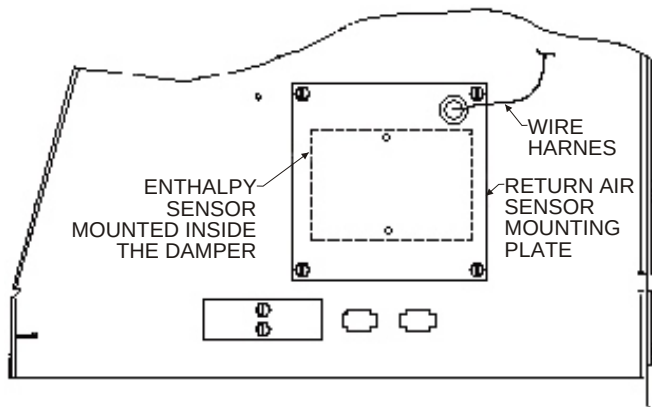
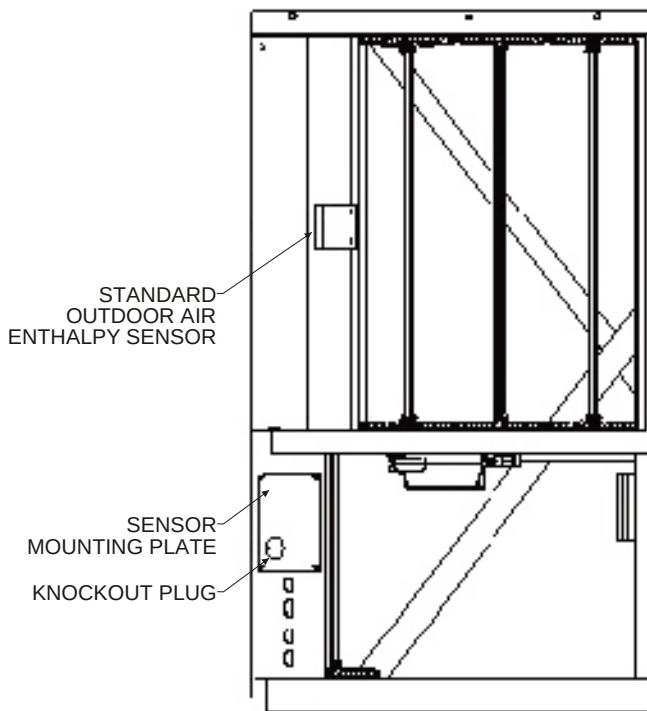


Figure 3: 7.5 to 12.5 and 15 to 25 Ton Vertical Economizer with Enthalpy Sensor Installed



Note: The sensor mounting plate gets installed so that the sensor resides in the return RA air stream.

Figure 4: 7.5 to 12.5 and 15 to 25 Ton Horizontal Economizer Showing the Sensor Mounting Position

Wiring

3 to 6 and 7.5 Ton Vertical

To wire the sensor to the Logic Module:

1. Remove the strain relief from the damper.
2. Feed the wiring Enthalpy harness wires through the opening with the existing control harness and replace the strain relief furnished with the damper originally.
3. Route and attach the wiring harness with the other harnesses on the damper using the tie wraps provided.
4. Wire the sensor and Logic Module (see Figure 5 for wiring).
5. Ensure the barometric relief dampers move freely.
6. Reconnect the electrical power supply.

7 to 25 Ton Vertical and Horizontal

To wire the sensor to the Logic Module:

1. Remove the knockout plug from the mounting plate (see Figure 4).
2. Feed the wiring harness wires through the knockout opening and insert the strain relief provided to secure the wires.
3. Route and attach the wiring harness with the other harnesses on the damper using the tie wraps provided.
4. Wire the sensor and Logic Module (see Figure 5 for wiring).
5. Mount the sensor to the mounting plate using (2) 6-20 x $\frac{7}{8}$ " screws. Secure mounting plate back to the damper using the four screws removed in Step 1 of the 7 to 25 Ton Vertical and Horizontal section.
6. Reconnect the electrical power supply.

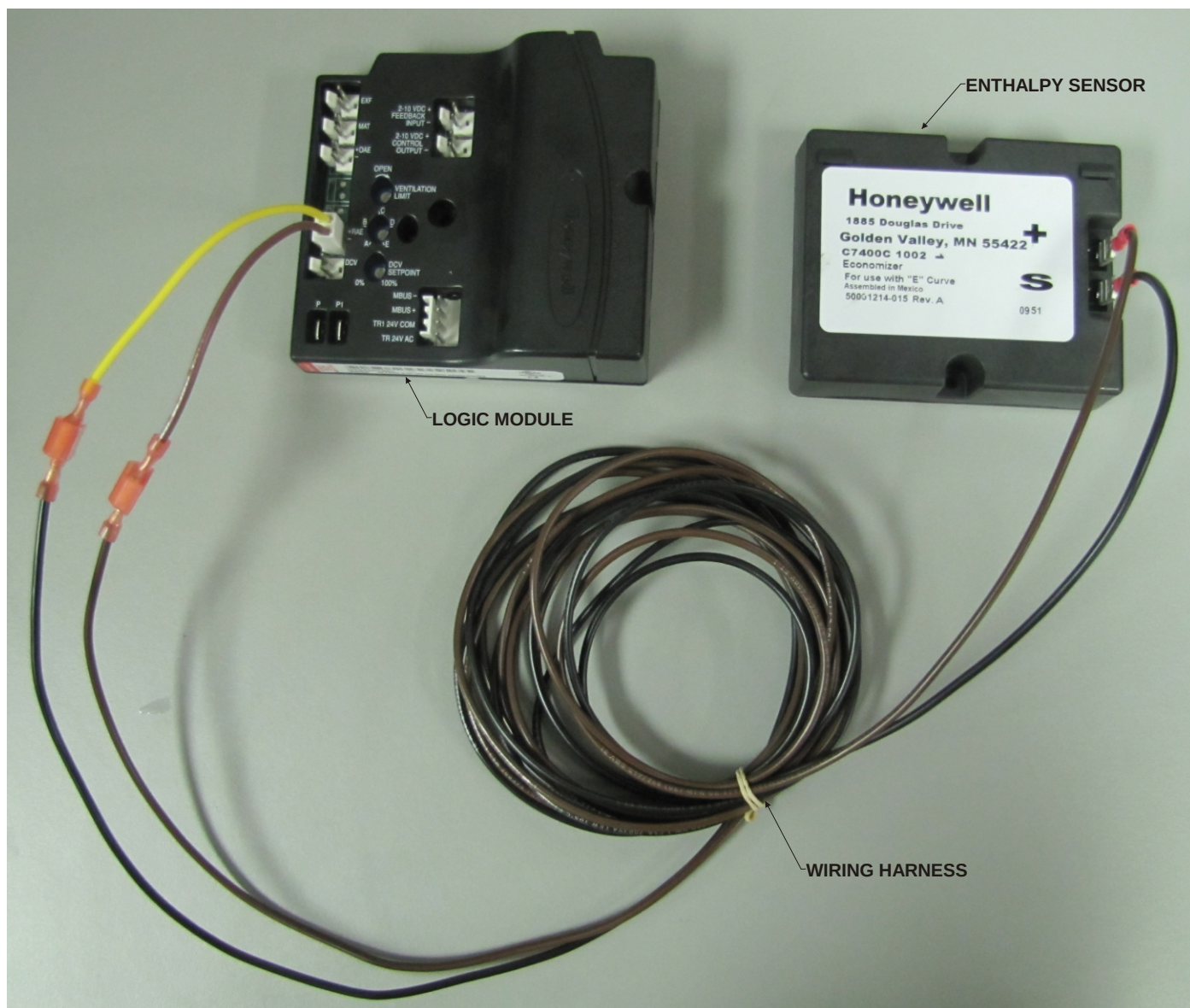


Figure 5: Enthalpy Sensor Wiring Diagram