

INSTALLATION INSTRUCTIONS FOR MODEL AEM03FB0B & AEP03FB0B ECONOMIZER

AEM03FB0B & AEP03FB0B Economizers are used with 13 SEER models PGF/PAF/PHF 330-360 units for automatic sensor-controlled introduction of outdoor air into the system through an electro-mechanically controlled damper.

Additional models that these economizers support are 3 phase 10 and 12 SEER models (PGF036-060, PHF048-060, and PAF048-060) (GPFM36-60, HPFM48-60, and APFM48-60). These units **require** the additional component of a field installed interchange harness (**AEP001A**) between unit wiring plug and economizer plug. This item is purchased separately.

Step 1:

Check for correct number of parts. See list below.

- 1 Economizer Assembly
- 1 Outdoor Air Hood (Attached to Economizer)
- 1 Internal Divider
- 1 Wire Harness
- 1 Wiring Diagram Sticker
- 6 #10 16 x ½ Hex Screws (Self-tapping)

Step 2:

Remove mixed air sensor and wire harness from Economizer.

Step 3:

Disconnect all power to unit.

Step 4:

Remove the return air access panel and both return air duct covers. See Figure 2.

Step 5:

Remove electrical access panel.

Step 6:

Remove the screws on the unit top and disconnect plug from the fan motor to the electric compartment of unit, then remove top of unit.

Step 7:

Route the cable through the unit as shown. **See Figure 3.** The short gray wires will be used for the discharge air sensor. Then wire the harness into the low voltage of unit per diagram.

Step 8:

Install the mixed air sensor in blower section of the unit. Drill a hole in the divider wall and mount the sensor as shown in **Figure 3**.

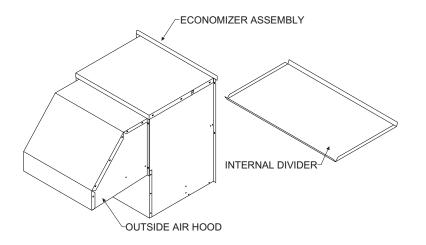


Figure 1

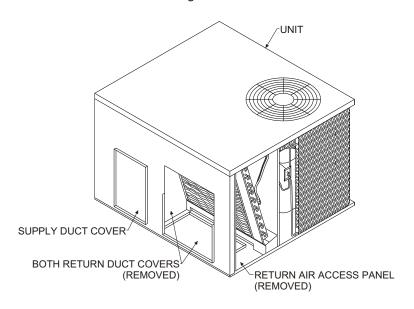


Figure 2

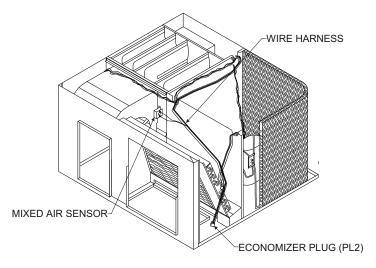


Figure 3



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Step 9:

Place the adhesive backed wiring diagram on the electrical access door by the unit diagram.

Step 10:

Insert Economizer Divider through return access panel and place over bottom return opening as shown in **Figure 4**.

Step 11:

Then mount economizer assembly over horizontal return duct opening. Align holes in top flange with holes in unit. Then using the self-tapping screws provided to secure to face of unit.

Step 12:

Slide S-clip over middle divider and internal divider.

Step 13:

Make the connection of the Economizer plug to the unit Economizer plug. See the enclosed Honeywell specification data for operation and check out.

Step 14:

Install all removed panels. Being sure to plug fan motor back in the unit low voltage compartment.

Step 15:

Turn power back on to the unit.

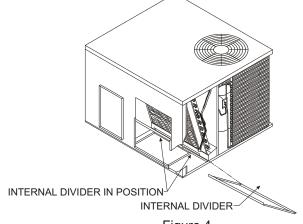


Figure 4

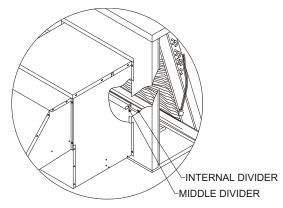


Figure 5

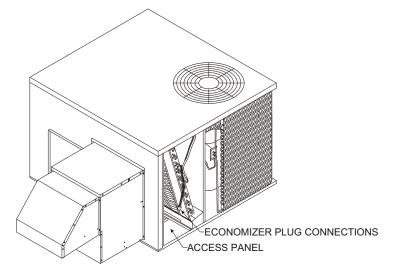
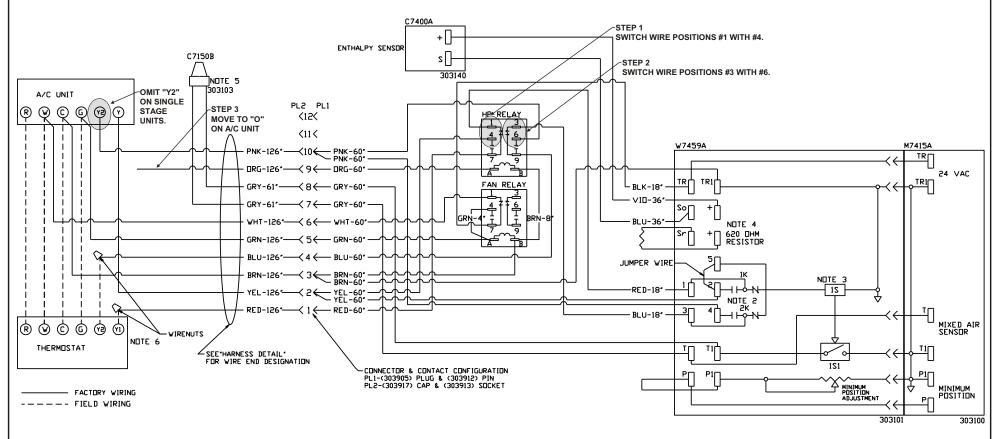


Figure 6

INTERNATIONAL COMFORT PRODUCTS

651 HEIL-QUAKER BLVD P.O. BOX 128 LEWISBURG, TENNESSEE 37091 PHONE (931) 359-3511 FAX (931) 270-4199

HARNESS DETAIL	COMPONENT CODE	WIRE COLOR CODE	Revision Change Date
E# = WIRE END DESIGNATION E3 Female ¼ Quick Disc. E6 Wire Nut E6 — GRN- 126" E6 — RED- 126" E6 — BLU - 126" E6 — ORG- 126" E6 — YEL - 126" E6 — PNK - 126" E6 — WHT- 126" E6 — BRN- 126"	C7150B Mixed Air Sensor C7400A Fresh Air Enthalpy Sensor M7415A Damper Actuator 24v PL1 Economizer Plug (Male) PL2 Economizer Plug (Female) W7459A Logic Module	BLK Black BLU Blue BRN Brown GRN Green GRY Gray ORG Orange PNK Pink RED Red VIO Violet WHT White YEL Yellow	



Notes:

- 1. Unit wiring shown as reference only. Check unit wiring for actual unit wiring.
- 2. Relays 1K and 2K actuate when the Outdoor Air Enthalpy is higher than the Return Air Enthalpy.
- 3. 1S is an electronic switch which closes when powered by a 24 VAC input.
- 4. Factory installed resistor should be removed only if C7400 Differential Enthalpy Sensor is added.
- 5. Connect mixed air sensor gray to "T" and gray to "T1".
- 6. Y2 must be energized for the compressor to operate.
- 7. To switch from PGX/PAX models to a PHX/PDX models follow steps 1 -3.
- 8. To convert from two stage to single stage remove "Y2" on A/C unit and thermostat.

Modulating Economizer w/ Enthalpy Sensor Model# AEM03FB0B

Int'l Comfort Products 651 Heil-Quaker Blvd P.O. Box 128 Lewisburg, TN 37091 Phone (931) 359-3511 Fax (931) 270-4199 Date: April 18, 2006

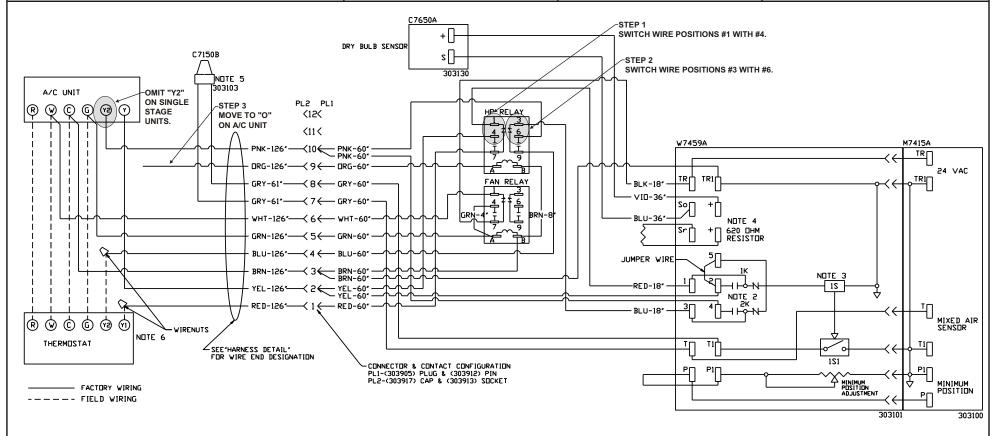
Supercedes: 03-28-06

Drawn by:

Unit # 45-424-08B

Diagram# 4542408BW

HARNESS DETAIL	COMPONENT CODE	WIRE COLOR CODE	Revision Change Date
E# = WIRE END DESIGNATION E3 Female ¼ Quick Disc. E6 Wire Nut E6 GRY-61" E6 GRY-61" E6 GRN-126" E6 GRD-126" E6 BLU - 126" E6 ORG-126" E6 OPK-126" E6 PNK-126" E6 WHT-126" E6 BRN-126"	C7150B Mixed Air Sensor C7650A Fresh Air Dry Bulb Sensor M7415A Damper Actuator 24v PL1 Economizer Plug (Male) PL2 Economizer Plug (Female) W7459A Logic Module	BLK Black BLU Blue BRN Brown GRN Green GRY Gray ORG Orange PNK Pink RED Red VIO Violet WHT White YEL Yellow	



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- 6. Y2 must be energized for the compressor to operate.
- 7. To switch from PGX/PAX models to a PHX/PDX models follow steps 1 -3.
- 8. To convert from two stage to single stage remove "Y2" on A/C unit and thermostat.

Modulating Economizer w/ Dry Bulb Sensor Model# AEP03FB0B

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Date: April 18, 2006 Supercedes: 03-28-06

Drawn by: Unit # 45-424-08BD

Diagram# 4542408BDW