



**CARRIER CHAS69
VERTICAL
ECONOMIZERS
I/O/M MANUAL**

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**For information on iAIRE’s Economizer Controls Package,
please refer to IOM-0014**

Carrier Economizer Description

PLEASE NOTE: Our economizer is a low leak, field installed economizer with the iAIRE patented controls packages and actuator, allowing you to reduce the amount of outside air needed from your rooftop HVAC system by up to 2/3 and will improve indoor air quality.

This reduction in system operation creates on-going utility savings. Payback on capital equipment costs with an iAIRE economizer can be realized in fewer than three years. These packages are designed to work directly on existing rooftop HVAC systems.

These economizers are all low leak and meet the IECC 2015 requirement and are Title 24 compliant by meeting section 120.2(i) for the required controls and the efficiency requirements in 140.4(e).

CHAS to RTU Conversion					
CHAS69	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> CHAS6: 48/50LC 14; 48/50HC 17; 48/50TC 17-20; 48/50TCQ 17 </td> <td style="width: 50%; border: none;"> CHAS8: 48/50LC 17-20; 48/50HC 24; 48/50TC 25-28 </td> </tr> <tr> <td style="border: none;"> CHAS7: 48/50HC 20; 48/50TC 21-24; 48/50TCQ 24 </td> <td style="border: none;"> CHAS9: 48/50LC 24-26; 48/50HC 28; 48/50TC 29-30 </td> </tr> </table>	CHAS6: 48/50LC 14; 48/50HC 17; 48/50TC 17-20; 48/50TCQ 17	CHAS8: 48/50LC 17-20; 48/50HC 24; 48/50TC 25-28	CHAS7: 48/50HC 20; 48/50TC 21-24; 48/50TCQ 24	CHAS9: 48/50LC 24-26; 48/50HC 28; 48/50TC 29-30
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Part Number

EC - 1 - 2 3 4 5 - 6

type	unit/ton (1)							
EC - ECONOMIZER	26 712 1525 3050	6075 100 125 150	CHAS12 CHAS34 CHAS5 CHAS69	A-BOX B-BOX C-BOX D-BOX E-BOX F-BOX Lennox	FND35 PACK13 PREC35 PREC48 PREC610	PREC810 VOY12 VOY12HE VOY1525HE Trane	AFF LXS LXL SCS12 SCS34 SCSHE12 SCSHE34 SCL12 York	SCL34 SCLHE12 SCLHE34 PRED PREDS SL SLL SLU

configuration (2)
0 - NO ECON C - CONVERTIBLE H - HORIZONTAL V - VERTICAL

actuator (3)
0 - NO ACTUATOR A - 20 IN-LB B - 62 IN-LB C - 160 IN-LB

controls (4)
0 - ECON ONLY A - IAQ B - IAQ (NO IONIZATION) D - DCV

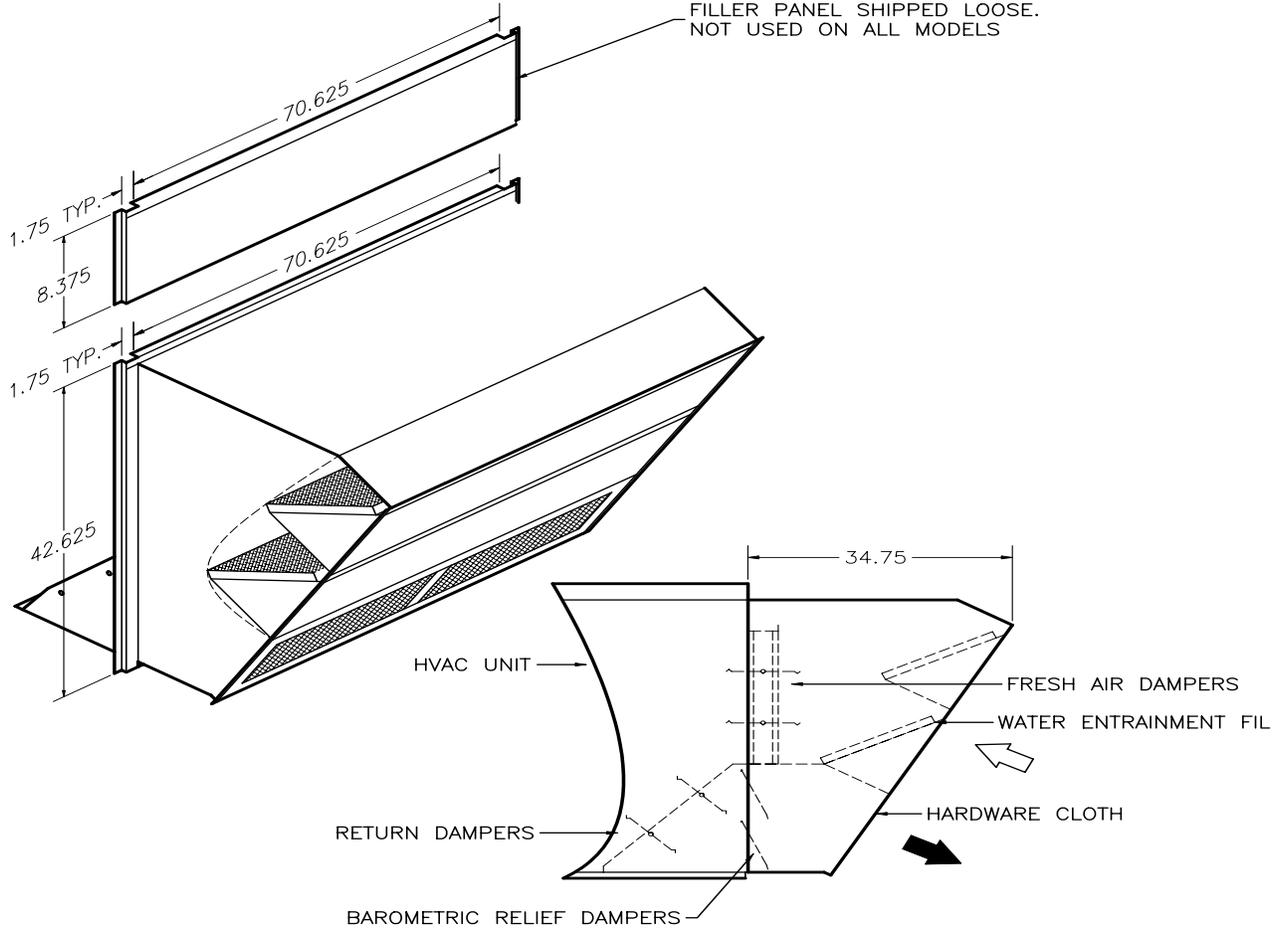
power exhaust (5)
0 - NO POWER EXHAUST A - 208/230V 1Φ FIXED PE B - 208/230V 3Φ FIXED PE C - 460V 3Φ FIXED PE

options (6)
0 - NONE B - HUMIDITY C - BACNET D - BLDG PRESSURE* R - RTU OPEN U - ULTRA LOW LEAK

Note: By adding option "D" any powered exhaust will be modulating.

Chassis 6 through Chassis 9 Vertical Submittal

100 % Barometric Relief - Down Discharge Economizer



Electrical Data

PART #	WEIGHT
EC-CHAS69-VBA0-*	410 lbs.

PART	AMPS	PART	AMPS	TOTAL
ACTUATOR	.29A	CONTROLS	.44A	.73A

Features

- **iAIRE Patented Controls Scheme Included**
- Low Leak Damper Included
- VOC, CO2 and Ionization included
- Heavy Gauge Galvanized Steel Construction
- American Sterling Grey Paint Finish
- One Piece Assembly
- Gear Driven Dampers
- Uses HVAC Unit Filter Access Door
- Capable of Relieving up to 100% of the Outside Air Intake

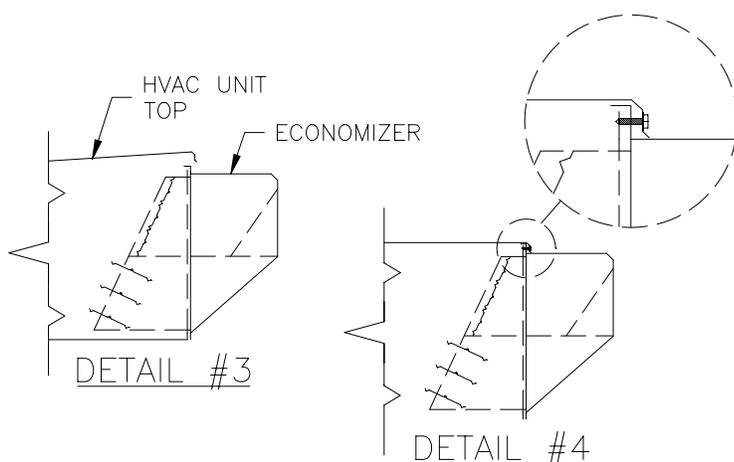
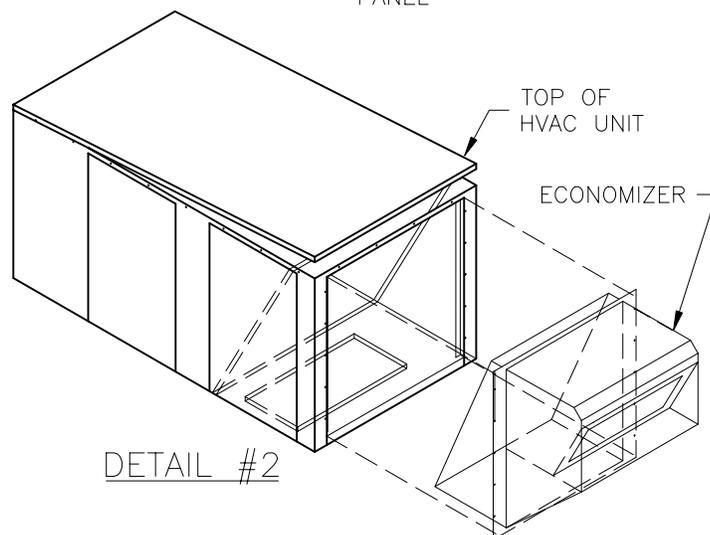
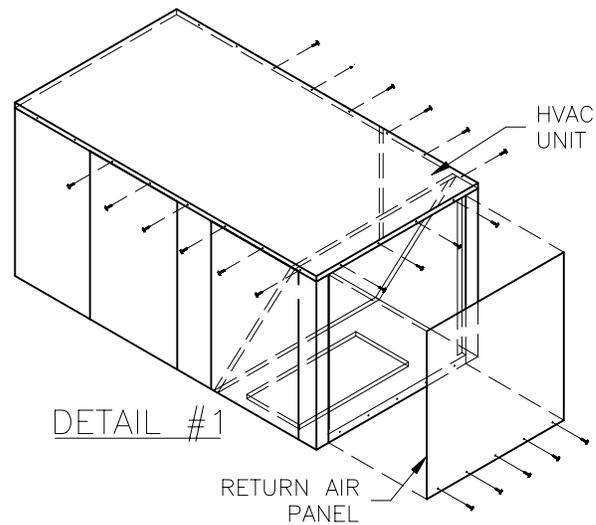
*OPTIONS

0 - No Options
B - Humidity/Enthalpic
C - BACNet

Economizers with Indoor Air Quality control are Title 24 compliant by meeting section 120.2(i) for the required controls and the efficiency requirements in 140.4(e). They also meet California ozone emissions requirements to be CARB certified.

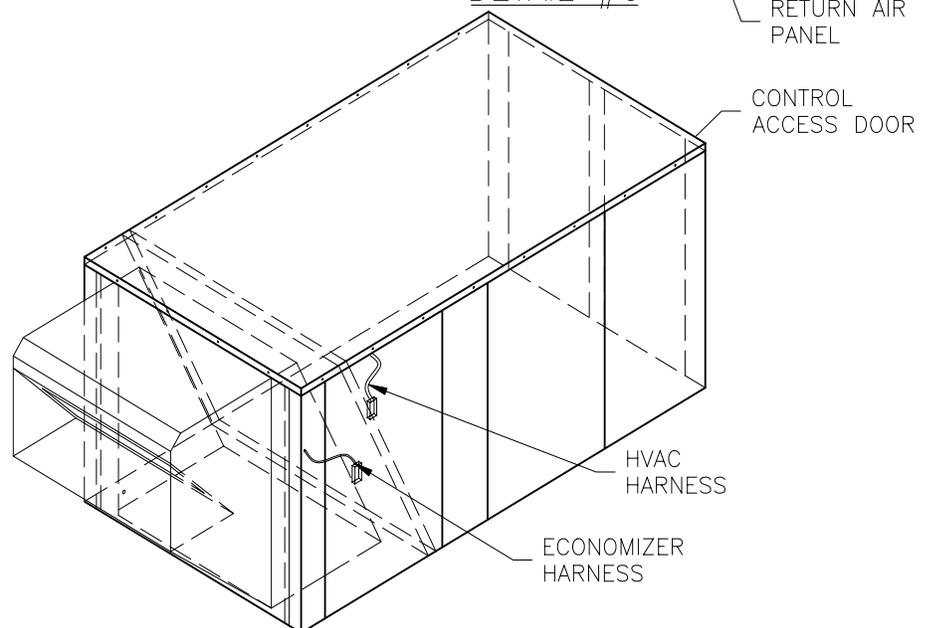
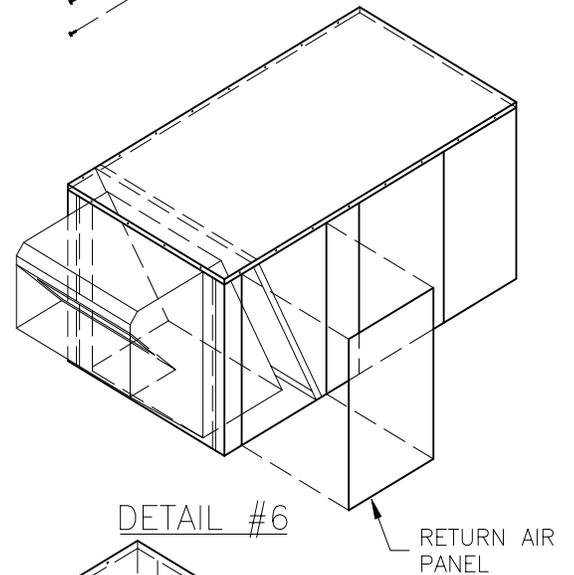
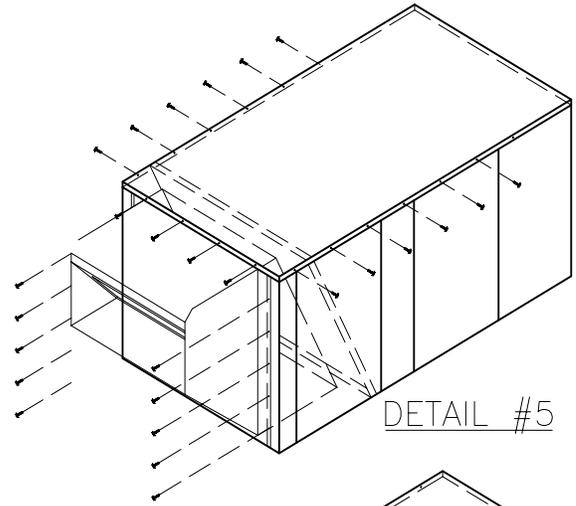
Chassis 6 Through Chassis 9 - Vertical Install

1. Remove return air compartment panel from back of HVAC unit. (See detail #1)
2. Remove screws on back of HVAC unit fastening the top down. (See detail #1)
3. Lift and prop up the top of the unit with supports. (See detail #2)
4. Slide economizer assembly into the HVAC unit. Make sure the left and right side flanges of the economizers slide into the side grooves of the HVAC unit. (See detail #2 & #3)
5. Remove supports used to prop the top of the HVAC unit. Supports used from step 3. **Note:** The top of the HVAC unit hooks over the top flange of economizer. (See detail #4)



Chassis 6 through Chassis 9 Vertical Install (cont'd)

6. Secure top of the economizer to the HVAC unit by using screws removed in step 2. Also, screw along the side flanges of the economizer using #12 x 1 screws provided with economizer package. (See detail #5)
7. Replace all screws along the sides of the top of the HVAC unit removed in Step 2. (See detail #5)
8. Remove return air compartment panel located on the right side of the HVAC unit. (See detail #6)
9. Plug economizer harness into the HVAC unit economizer harness. Note: Harness will be inside upper corner of the return air compartment. (See detail #7)
10. Refer to page 5 in IOM-0014 Economizer Controls Installation Manual for installation of the various sensors and actuators. Connect wires according to the wiring diagram on pg 8.



Carrier Economizer Install Notes

Additional Notes

1. Motor Spring>Returns closed when unit is not running.
2. Ensure that equipment transformer is sized to handle the extra load of the economizer and actuator.
3. When using a heat with defrost feedback, add an isolation relay between O and C. (Field provided and installed).