



Installation Instructions

PART NUMBERS: CRECOMZR028A00, CRECOMZR029A00, CRECOMZR034A00,
 CRECOMZR035A00, CRECOMZR036A00, CRECOMZR037A000


TABLE OF CONTENTS

	PAGE
SAFETY CONSIDERATIONS	1
GENERAL	1
ACCESSORIES	1
INSTALLATION	3-13
Vertical Economizer (CRECOMZR02800, CRECOMZR029A00, CRECOMZR036A00)	3
Horizontal Economizer (CRECOMZR034A00 and CRECOMZR035A00)	6
ECONOMIZER PERFORMANCE	7
CONFIGURING THE <i>COMFORTLINK</i> ® CONTROL	7
TROUBLESHOOTING	14

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with kits or accessories when installing.

Follow all safety codes. Wear safety glasses and work gloves. Use quenching cloth for brazing operations. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions attached to the unit. Consult local building codes and National Electrical Code (NEC) for special requirements.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the unit and in instruction manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components.

Only trained and qualified service personnel should install, repair, or service air-conditioning equipment.

IMPORTANT: Do not adjust the damper assembly. The motor and damper have been pre-set and adjusted for proper operation.

GENERAL

IMPORTANT: Read these instructions completely before attempting to install the accessory economizer.

The accessory economizer package uses microprocessor-based controls to sequence mechanical cooling with cool outdoor air (free cooling) to satisfy the cooling load and minimize energy consumption. Free cooling can be used alone or in conjunction with mechanical cooling.

The accessory economizer also provides outdoor air for space ventilation. Minimum damper position is configurable for this purpose. Additional accessories may be added for demand controlled ventilation (DCV), indoor air quality (IAQ) override control, or outdoor air quality (OAQ) lockout.

The standard economizer uses an outdoor-air temperature (OAT) sensor to sense outdoor-air temperature. When the outdoor-air temperature is between two configurable ambient temperatures, the economizer is allowed to cool. These temperature configurations are Econo Cool Hi Temp Limit (*EHLO*) and Econo Cool Lo Temp Limit (*ELLO*). The economizer will provide cooling when the outdoor temperature is suitable, as defined above by the lockout settings, and if either a thermostat or a space temperature probe has signaled a cooling demand. In addition, if an outdoor enthalpy sensor accessory has been installed, then the enthalpy reading must also be “low” before economizer cooling can occur.

When free cooling is available, the economizer sequences free cooling with mechanical cooling to maintain comfort in the space. When free cooling is not available, the economizer modulates to an adjustable minimum position to maintain a supply of outdoor air entering the building.

A barometric relief damper provides building pressurization control. An optional power exhaust system is available for jobs requiring greater relief capabilities.

If the economizer hood is oriented in the direction of a prevailing wind or if 100% outdoor air operation is expected on size 07-16 units during steady rain, outdoor mist screens are recommended.

ACCESSORIES

The economizer has several field-installed accessories available to optimize performance. Refer to Table 1 for field-installed accessories. See Table 2 for sensor usage.

PACKAGE USAGE

UNIT 48/50PG	PART NUMBER	TYPE
03-07	CRECOMZR028A00	Vertical
03-07	CRECOMZR034A00	Horizontal
08-14	CRECOMZR029A00	Vertical
	CRECOMZR035A00	Horizontal
16	CRECOMZR036A00	Vertical
16	CRECOMZR037A00	Horizontal

PACKAGE CONTENTS

PACKAGE NO.	QTY	CONTENTS
CRECOMZR028A00, CRECOMZR029A00	1	Economizer Assembly
	2	Pivot Brackets
	1	Front Panel/Hood Assembly
	1	Hardware Bag
	1	Economizer Control Board
CRECOMZR034A00, CRECOMZR035A00	1	Economizer Assembly
	1	Front Panel/Hood Assembly
	1	Hardware Bag
	1	Economizer Control Board
CRECOMZR036A00, CRECOMZR037A00	1	Economizer Assembly
	2	Pivot Brackets
	1	Front Panel/Hood Assembly
	1	Hardware Bag
	1	Economizer Control Board

48/50PG03-16

Table 1 — Economizer Field-Installed Accessories

DESCRIPTION	PART NUMBER
48/50PG03 to 07 Power Exhaust, Prop Fan, 208-230 v (Single Ph and 3 Ph)	CRPWREXH032A00
48/50PG03 to 07 Power Exhaust, Prop Fan, 460 v	CRPWREXH037A00
48/50PG03 to 07 Power Exhaust, Prop Fan, 575 v	CRPWREXH048A00
48/50PG08 to 14 Power Exhaust, Prop Fan, 208-230 v	CRPWREXH038A00
48/50PG08 to 14 Power Exhaust, Prop Fan, 460 v	CRPWREXH039A00
48/50PG08 to 14 Power Exhaust, Prop Fan, 575 v	CRPWREXH049A00
48/50PG16 Power Exhaust, Prop Fan, 208/230 v	CRPWREXH046A00
48/50PG16 Power Exhaust, Prop Fan, 460 v	CRPWREXH047A00
48/50PG16 Power Exhaust, Prop Fan, 575 v	CRPWREXH050A00
Return Air Enthalpy Sensor	CRENTDIF002A00
Outdoor Air Enthalpy Control Switch	CRENTSNG002A00
Return Air CO ₂ Sensor	CRCBDIOX001B00
CO ₂ Room Sensor	33ZCSENC02
Aspiration Box for Duct Mount CO ₂ Sensor	33ZCASPC02
Space Temperature and CO ₂ Room Sensor with Override	33ZCT55CO2
Space Temperature and CO ₂ Room Sensor with Override and Set Point	33ZCT56CO2
Outdoor Air Mist Screens (03-07)	CRODAFLT001A00
Outdoor Air Mist Screens (08-14)	CRODAFLT002A00
Outdoor Air Mist Screens (16)	CRODAFLT003A00

Table 2 — Accessory Economizer Sensor Usage — COMFORTLINK™ Controls

DESIRED CHANGEOVER	ECONOMIZER (COMFORTLINK UNIT CONTROL) 4 TO 20 mA ACTUATOR	
	Sensor Provided WITH Economizer	Field-Installed Sensor(s) Required
Outdoor Air Dry Bulb	(1) --HH--79NZ-038	None Required
Differential Dry Bulb	Not Applicable	
Single Enthalpy Control	N/A	(1) CRENTSNG002A00
Differential Enthalpy Control	N/A	(1) CRENTSNG002A00 and (1) CRENTDIF002A00
CO ₂ for DCV Control Wall Mount	N/A	(1) 33ZCSENC02 OR (1) 33ZCCT55CO2 OR (1) 33ACT56CO2
CO ₂ for DCV Control Duct Mount	N/A	33ZCSENC02 and (1) 33ZCASPC02 (Aspirator for Duct Mount) OR (1) CRCBDIOX001B00 (Return Air Stream)

LEGEND

DCV — Demand Control Ventilation

N/A — Not Available

NOTE: CO₂ sensors require Carrier factory or field-installed economizer.

INSTALLATION

⚠ WARNING

ELECTRICAL OPERATION HAZARD

Failure to follow this warning could result in personal injury or death.

Before installing or servicing unit, always turn off all power to unit. There may be more than 1 disconnect switch.

⚠ CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage.

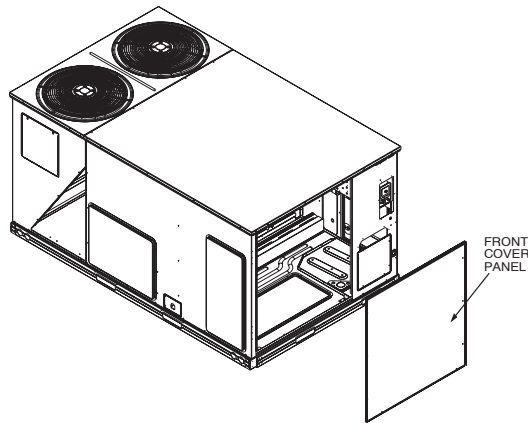
Cover the duct opening as a precaution so objects cannot fall into the return duct opening.

Vertical Economizer (CRECOMZR028A00, CRECOMZR029A00, CRECOMZR036A00)

To install the vertical economizer, perform the following:

1. Turn off power supply and install lockout tag.
2. Unscrew and remove the front cover panel on the return end of the unit to expose the return section of the unit. See Fig. 1. Retain screws and discard panel.
3. Locate the 2 economizer pivot brackets provided. Screw the brackets down to the base of the rooftop unit with the no. 10 screws provided. See Fig. 2 and 3.
4. Set the economizer in front of the return air opening. Connect the plug coming from the economizer actuator to the economizer plug in the rooftop unit. See Fig. 2. Be sure that wires will not interfere with moving parts. Secure with wire ties if needed.
5. If an accessory propeller power exhaust has been purchased, install it at this time. Refer to the accessory propeller power exhaust installation instructions for installation information.
6. Slide the economizer assembly into the return air section of the rooftop unit as shown in Fig. 4. The front flanges of the economizer will be flush with the rooftop unit.
7. Attach the economizer to the pivot brackets installed in step 3. Use no. 10 screws provided. This will allow the economizer to pivot out for service, repair, or cleaning.
8. Locate the tether cable hanging from the right side of the economizer. The hanging end of the cable must be attached to the unit to prevent the economizer from falling out of the rooftop unit when it is pivoted out. Screw the tether cable in place. See Fig. 2.

IMPORTANT: If the return duct opening was covered prior to installation, remember to remove the covering so as not to block off the return air to the unit.



C06160

Fig. 1 – Remove Unit Front Cover Panel

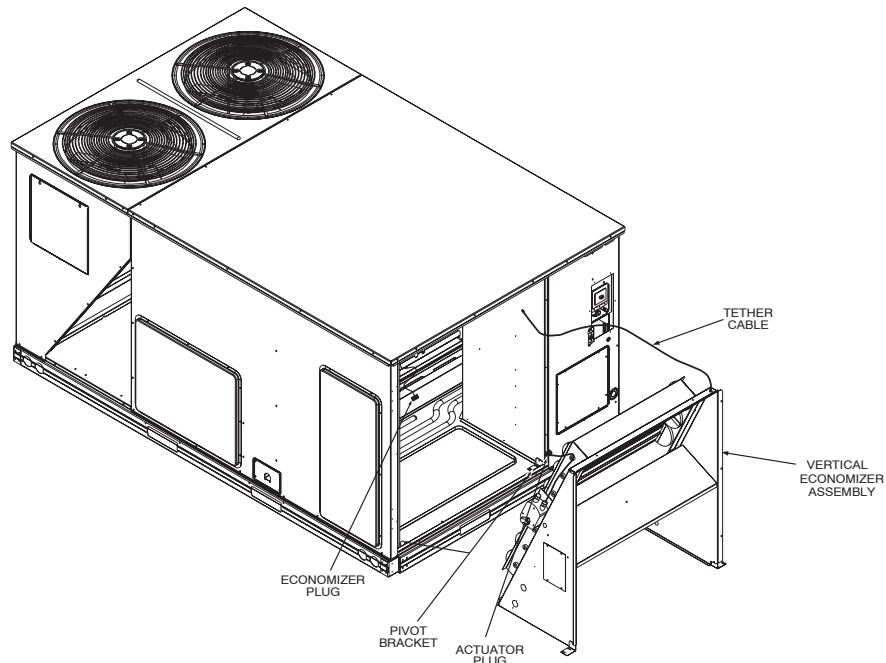


Fig. 2 – Installing Vertical Economizer Assembly

C06161

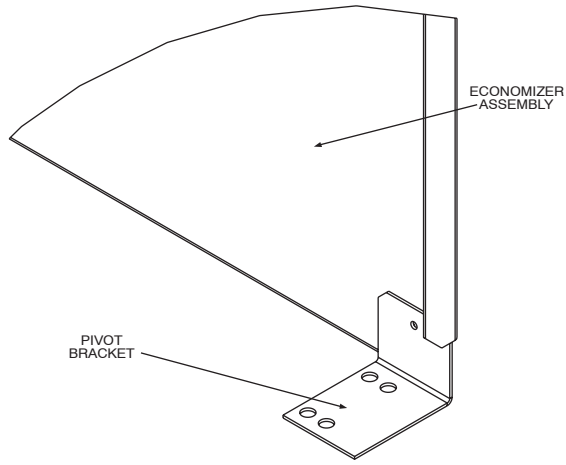


Fig. 3 – Vertical Economizer Pivot Bracket

C06162

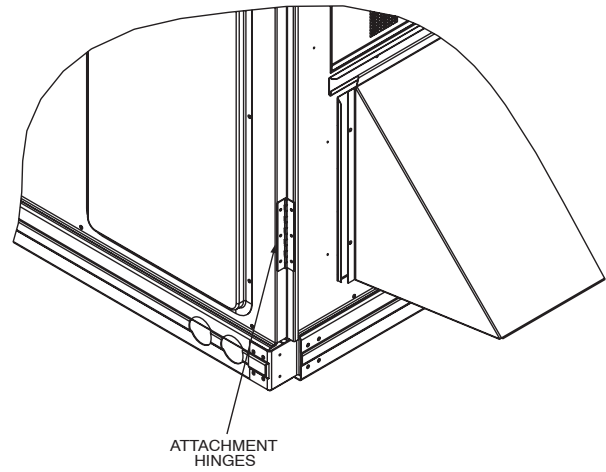


Fig. 6 – Economizer Front Panel Attachment Hinges

C06166

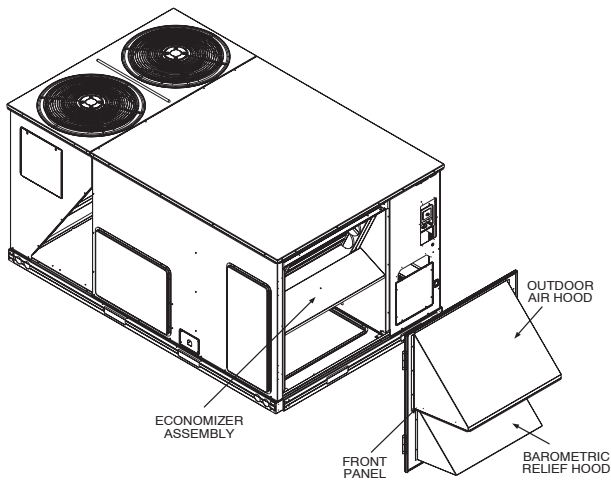


Fig. 4 – Install Vertical Economizer Front Panel

C06164

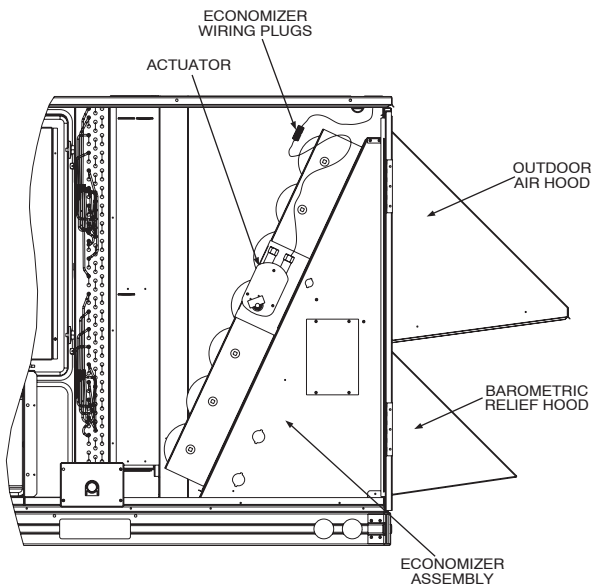


Fig. 5 – Vertical Economizer Installed in Unit (Side View)

C06165

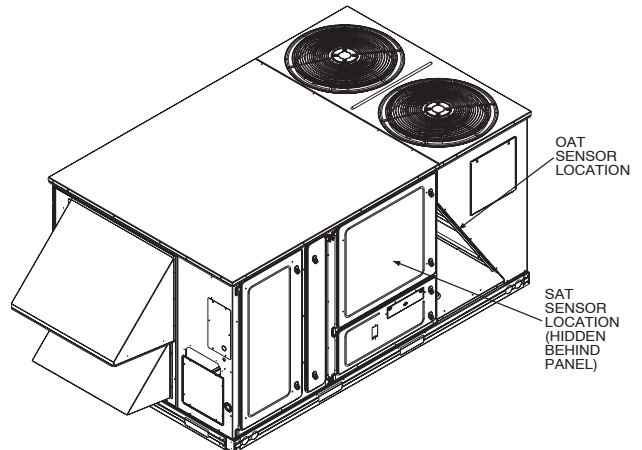


Fig. 7 – OAT and SAT Sensor Locations (48PG08-14 Shown)

C06243

9. The outside air hoods and barometric relief hoods are factory installed on the economizer front panel/hood assembly. Lift the panel in place over the front of the economizer. See Fig. 4 and 5. Attach the panel to the unit with the screws saved from step 2. Use self-drilling screws (provided) to secure hinges on panel to unit. See Fig. 6.
10. Make sure panel and hoods are properly sealed to prevent water and air leakage.
11. The barometric relief damper is screwed in place for shipping purposes. Remove shipping screw to allow for blade movement. The 16 size has 2 dampers.

NOTE: If using the centrifugal power exhaust, the relief hood and relief blade will not be used. Refer to the accessory centrifugal power exhaust instructions for more information.

12. The OAT and SAT (supply air temperature) sensors are factory installed in the rooftop unit even when there is no factory-installed economizer. The OAT sensor is located on the angled edge of the condenser coil. The SAT sensor is located on the side plate of the indoor fan. See Fig. 7.
13. Open the hinged control box compartment on the unit and open the control box cover.
14. Install the economizer board into the control box by engaging the board mounting feet into the slots in the control box. Secure the board using one screw in the pre-drilled hole. See Fig. 8 and 9. It is important that the screw be in place to ground the board. Damage to the board could result if it is not properly grounded.

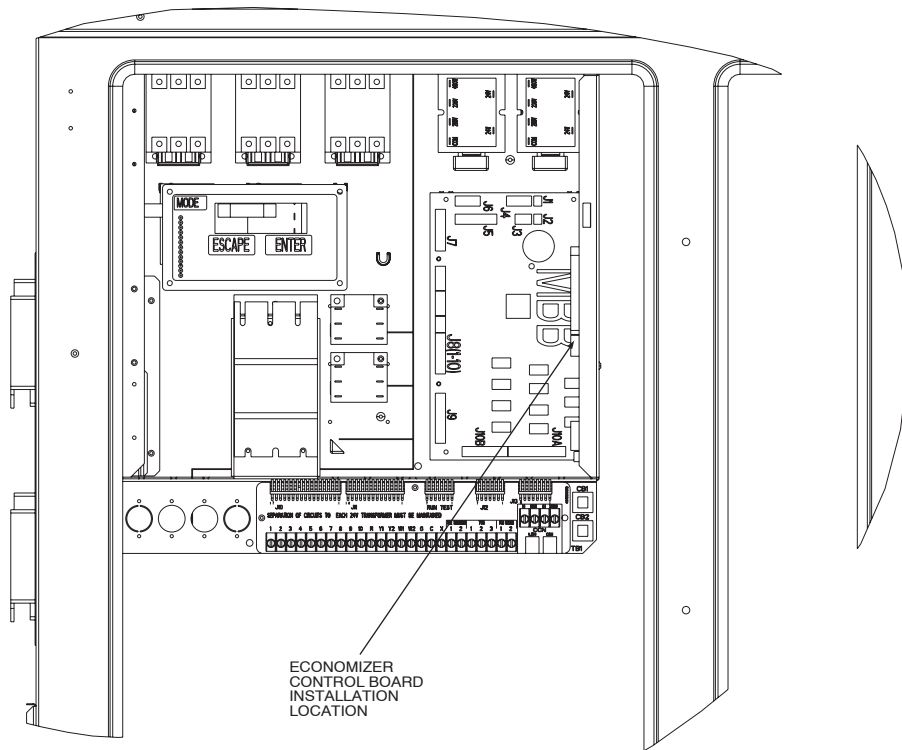
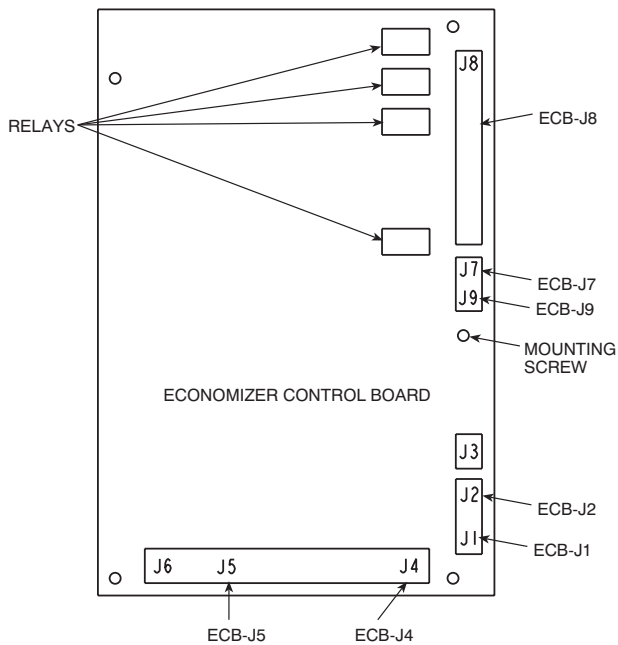


Fig. 8 – Unit Control Box

C06244



C06245

Fig. 9 – Economizer Control Board (ECB)

NOTE: See Fig. 9 and 10 for wiring connections in steps 15 through 18 below.

15. Connect the supplied power wiring harness to the economizer control board plug J1 and the main base board plug J2. Connect the supplied communication wiring harness to the economizer control board plug J2 and the main base board plug J3. Be sure to connect the plugs with the proper orientation. The locking tabs should capture the plug.
16. Connect the air quality plug marked “ECB-J5” from the unit electrical harness into the economizer control board plug J5. Be sure to connect the plug with the proper orientation. The locking tabs should capture the plug.
17. Connect the economizer plugs marked “ECB-J4,” “ECB-J7,” and “ECB-J9” from the unit electrical harness to the economizer control board plugs J4, J7, and J9. Be sure to connect the plugs with the proper orientation. The locking tabs should capture the plug.
18. Connect the power exhaust plug marked “ECB-J8” from the unit electrical harness to the economizer control board plug J8. Be sure to connect the plug with the proper orientation. The locking tabs should capture the plug.
19. Close the control box cover.
20. Install the accessory mist eliminating filters (if purchased) into the outdoor air inlet hood.
21. Inspect the unit to make sure all panels are properly replaced and secured to the unit.
22. Power can now safely be restored to the unit.
23. The *ComfortLink* control must be configured to use the economizer accessory. Go to the Configuring the *ComfortLink* Control section in these installation instructions.

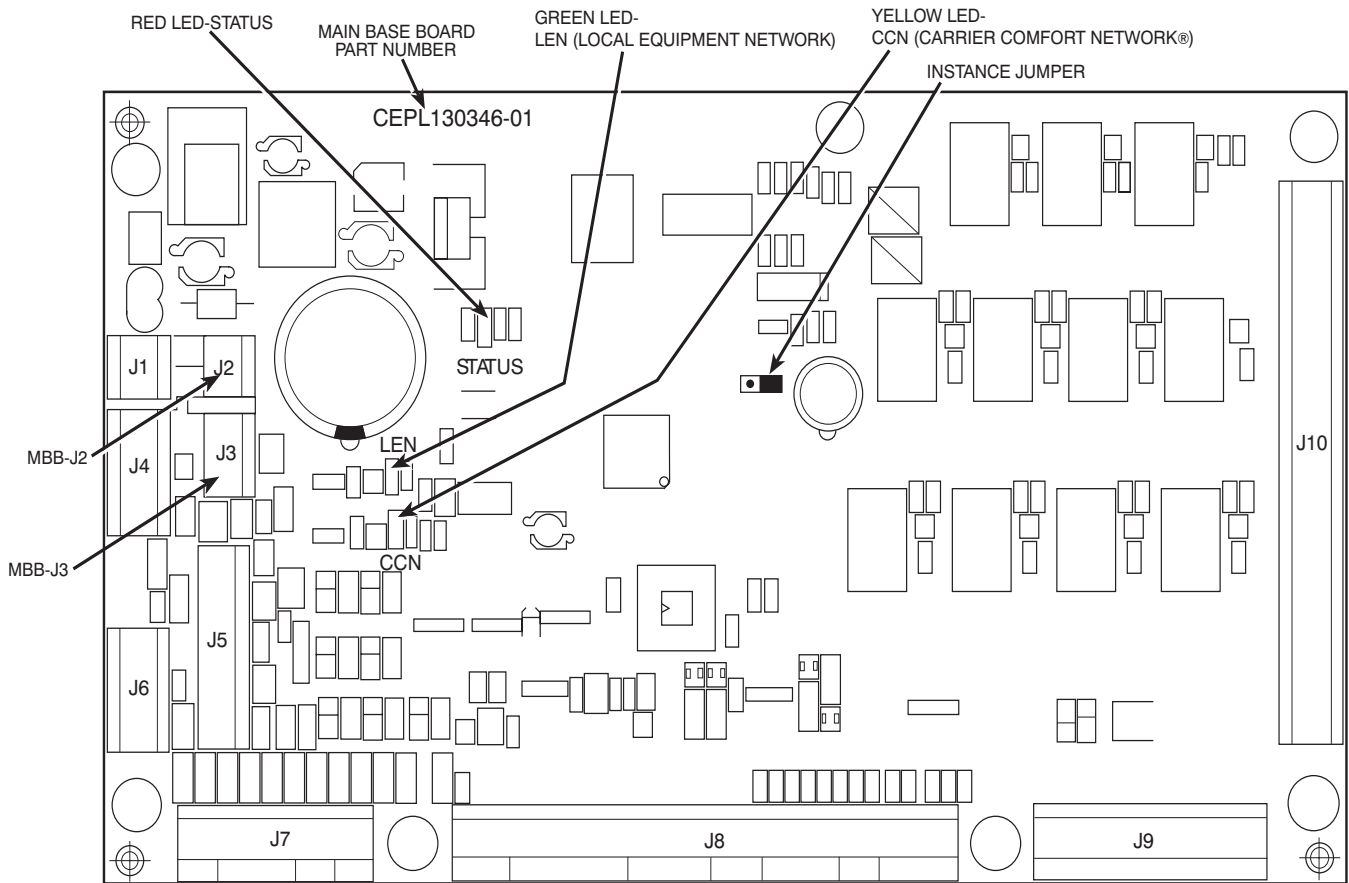


Fig. 10 – Main Base Board (MBB)

C06246

Horizontal Economizer (CRECOMZR034A00, CRECOMZR035A00 and CRECOMZR037A00)

To install the horizontal economizer, perform the following:

1. Turn off power supply and install lockout tag.
2. Unscrew and remove the front cover panel on the return end of the unit to expose the return section of the unit. See Fig. 1. Save the screws for later use. Retain screws and discard panel.

⚠ CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage.

Cover the duct opening as a precaution so objects cannot fall into the return duct opening.

3. Unscrew and remove the cover panel shipped over the rooftop unit horizontal return air opening. See Fig. 11. Reinstall the panel over the vertical air opening in the base of the rooftop unit. Repeat the process for the supply air cover if using the economizer on a horizontal supply application. This step changes the unit configuration from vertical supply and return to horizontal supply and return. Refer to the 48/50PG installation instructions for more information on converting the unit supply/return configuration.
4. Set the economizer in front of the return air opening. Connect the plug coming from the economizer actuator to the economizer plug in the rooftop unit. See Fig. 12. Be

sure that wires will not interfere with moving parts. Secure with wire ties if needed.

5. If an accessory propeller power exhaust has been purchased, install it at this time. Refer to the accessory propeller power exhaust installation instructions for installation information.
6. Slide the economizer assembly into the return air section of the rooftop unit as shown in Fig. 13. The front flanges of the economizer will be flush with the rooftop unit. Angle the return side of the economizer into the unit first. Slide the economizer in until the return damper covers the horizontal return air opening.
7. The outside air hoods and barometric relief hoods are factory installed on the economizer front panel/hood assembly. Lift the panel in place over the front of the economizer. See Fig. 14 and 15. Attach the panel to the unit with the screws saved from step 2. Use self-drilling screws (provided) to secure hinges on panel to unit. See Fig. 6.
8. Make sure panel and hoods are properly sealed to prevent water and air leakage.
9. The barometric relief damper is screwed in place for shipping purposes. Remove shipping screw to allow for blade movement. The 16 size has 2 dampers.

NOTE: If using the centrifugal power exhaust, the relief hood and relief blade will not be used. Refer to the accessory centrifugal power exhaust instructions for more information.

10. The OAT and SAT sensors are factory installed in the rooftop unit even when there is no factory-installed economizer. The OAT sensor is located on the angled edge of the condenser coil. The SAT sensor is located on the side plate of the indoor fan. See Fig. 7.

11. Attach the horizontal return air duct to the horizontal return air opening. Attach the horizontal supply air duct to the horizontal supply air opening. Refer to unit installation instructions for information on attaching ductwork to the unit.
12. Open the hinged control box compartment on the unit and open the control box cover.
13. Install the economizer board into the control box by engaging the board mounting feet into the slots in the control box. Secure the board using one screw in the pre-drilled hole. See Fig. 8. It is important that the screw be in place to ground the board. Damage to the board could result if it is not properly grounded.

NOTE: See Fig. 9 and 10 for wiring connections in steps 14 through 17 below.

14. Connect the supplied power wiring harness to the economizer control board plug J1 and the main base board plug J2. Connect the supplied communication wiring harness to the economizer control board plug J2 and the main base board plug J3. Be sure to connect the plugs with the proper orientation. The locking tabs should capture the plug.
15. Connect the air quality plug marked “ECB-J5” from the unit electrical harness into the economizer control board plug J5. Be sure to connect the plug with the proper orientation. The locking tabs should capture the plug.
16. Connect the economizer plugs marked “ECB-J4,” “ECB-J7,” and “ECB-J9” from the unit electrical harness to the economizer control board plugs J4, J7, and J9. Be sure to connect the plugs with the proper orientation. The locking tabs should capture the plug.
17. Connect the power exhaust plug marked “ECB-J8” from the unit electrical harness to the economizer control board plug J8. Be sure to connect the plug with the proper orientation. The locking tabs should capture the plug.
18. Close the control box cover.
19. Install the accessory mist eliminating filters (if purchased) into the outdoor air inlet hood.
20. Inspect the unit to make sure all panels are properly replaced and secured to the unit.
21. Power can now safely be restored to the unit.
22. The *ComfortLink* control must be configured to use the economizer accessory. Go to the Configuring the *ComfortLink* Control section in these installation instructions.

ECONOMIZER PERFORMANCE

The economizer pressure drops are shown in Fig. 16-21.

CONFIGURING THE *COMFORTLINK*™ CONTROL

The *ComfortLink* control must be configured for economizer operation. The default values are for no economizer and IAQ accessories installed. These configurations are changed through the Scrolling Marquee display or a Carrier network device. The configuration parameters and factory default values for economizer configuration and indoor air quality configuration are shown in Tables 3 and 4.

NOTE: Consult the Controls, Start-Up, Operation, Service and Troubleshooting Instructions for in-depth instructions on using and configuring the *ComfortLink* control. The following instructions are for the Scrolling Marquee display or Navigator™ accessory.

1. The *ComfortLink* control must be configured to use the economizer accessory. A password may be required to edit the configurations depending on previous settings configured in the unit. Default password is “1111.”
2. To configure the *ComfortLink* control, use the arrow keys to scroll the red LED on the display to the “*Configuration*” position and press **ENTER**.
3. Use the arrow keys to scroll down until the display shows “*ECON.*” This is the Economizer Configuration sub-mode. Press **ENTER**.
4. The control will display the Economizer Installed (*EC.EN*) setting. Press **ENTER** once to select the *EC.EN* setting for configuration. Press **ENTER** again for “NO” to begin flashing.
5. Use the arrow keys to change the configuration from “NO” to “YES,” then press **ENTER** and **ESCAPE** to save the setting.
6. If additional economizer control accessories have been added or other configuration parameters are to be changed from the factory defaults, then repeat the following steps:
 - a. Use the arrow keys to scroll up or down to the parameter to change. Press **ENTER** once to select the setting for configuration.
 - b. Press **ENTER** again. The configuration value will flash.
 - c. Use the arrow keys to change the configuration value.
 - d. Press **ENTER** and **ESCAPE** to save the setting.
7. Configuration of the *ComfortLink* control is now complete. Pressing **ESCAPE** multiple times will return the display to the auto-scrolling setting.
8. Close and secure all access doors.

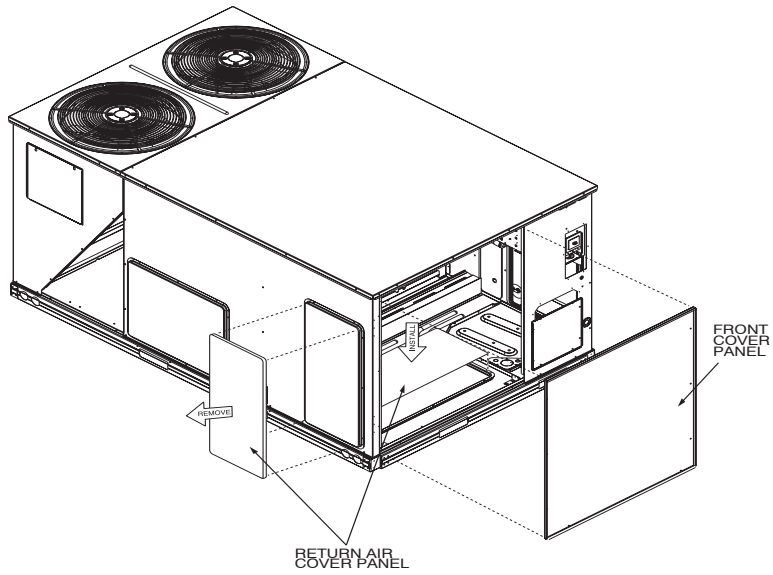


Fig. 11 – Horizontal Return Conversion (8-14 Size Shown)

C06171

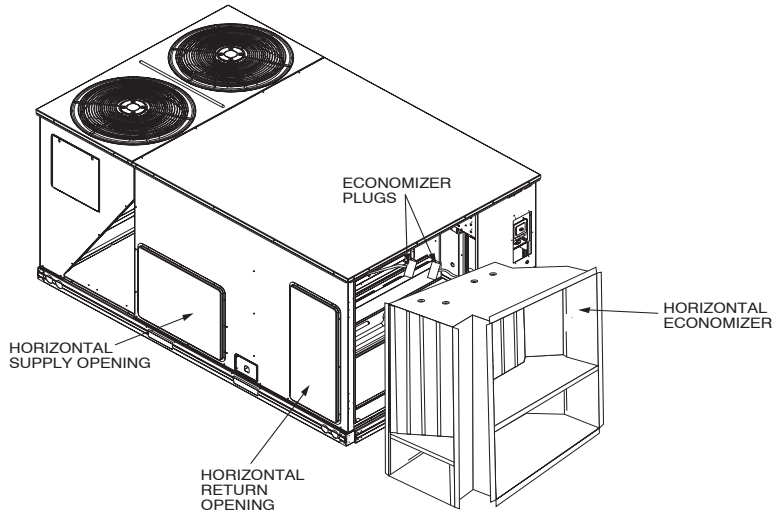


Fig. 12 – Installing Horizontal Economizer Assembly (8-14 Size Shown)

C06172

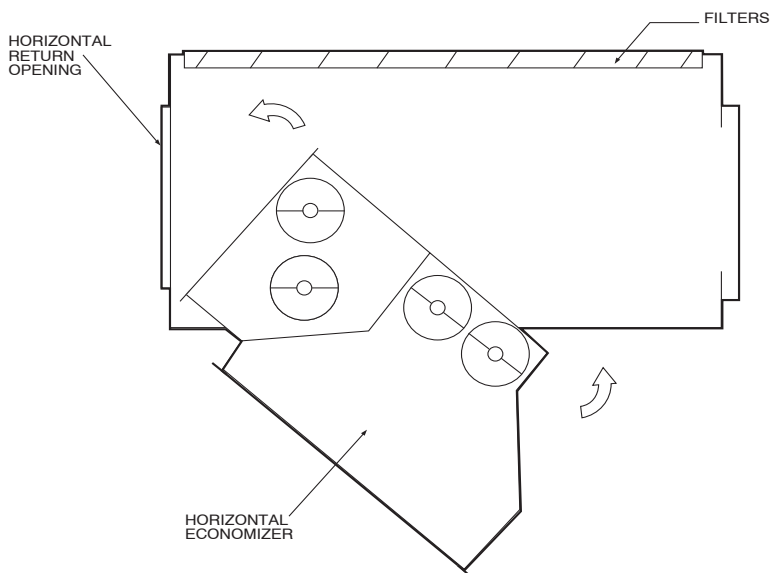


Fig. 13 – Horizontal Economizer Installation (Top View)

C06173

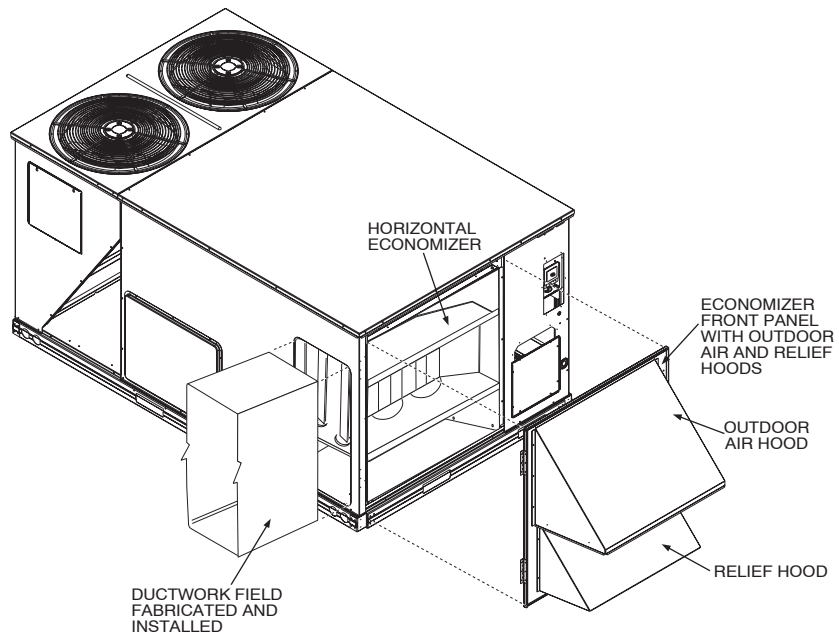


Fig. 14 – Installing Horizontal Economizer Front Panel

C06174

48/50PG03-16

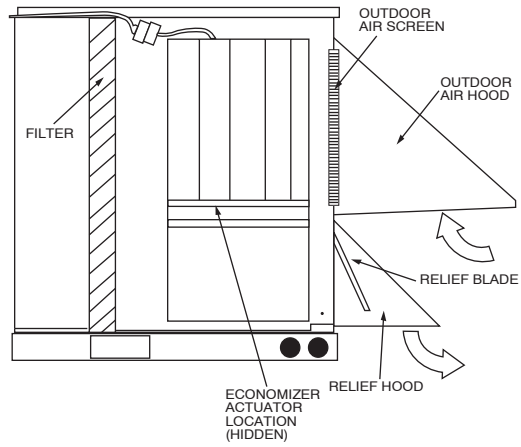
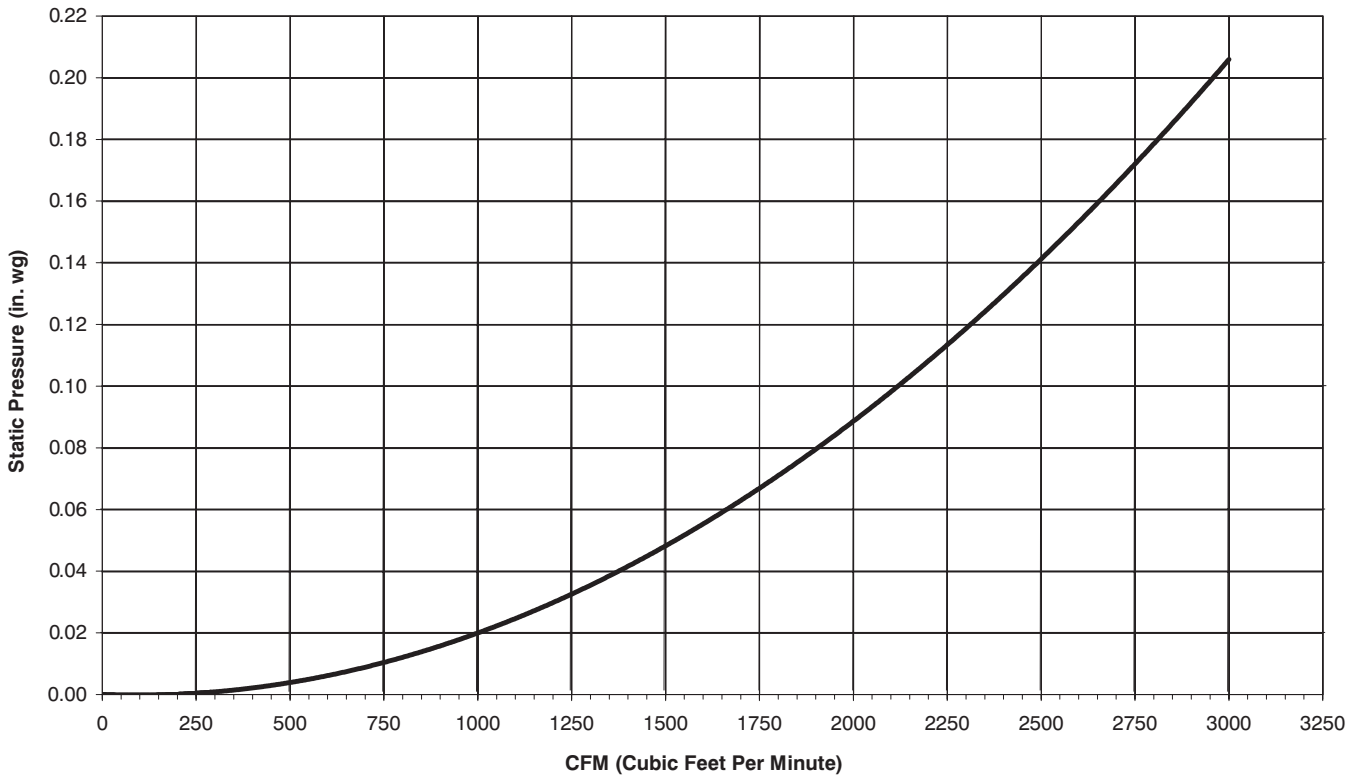


Fig. 15 – Horizontal Economizer Installed in Unit (Side View)

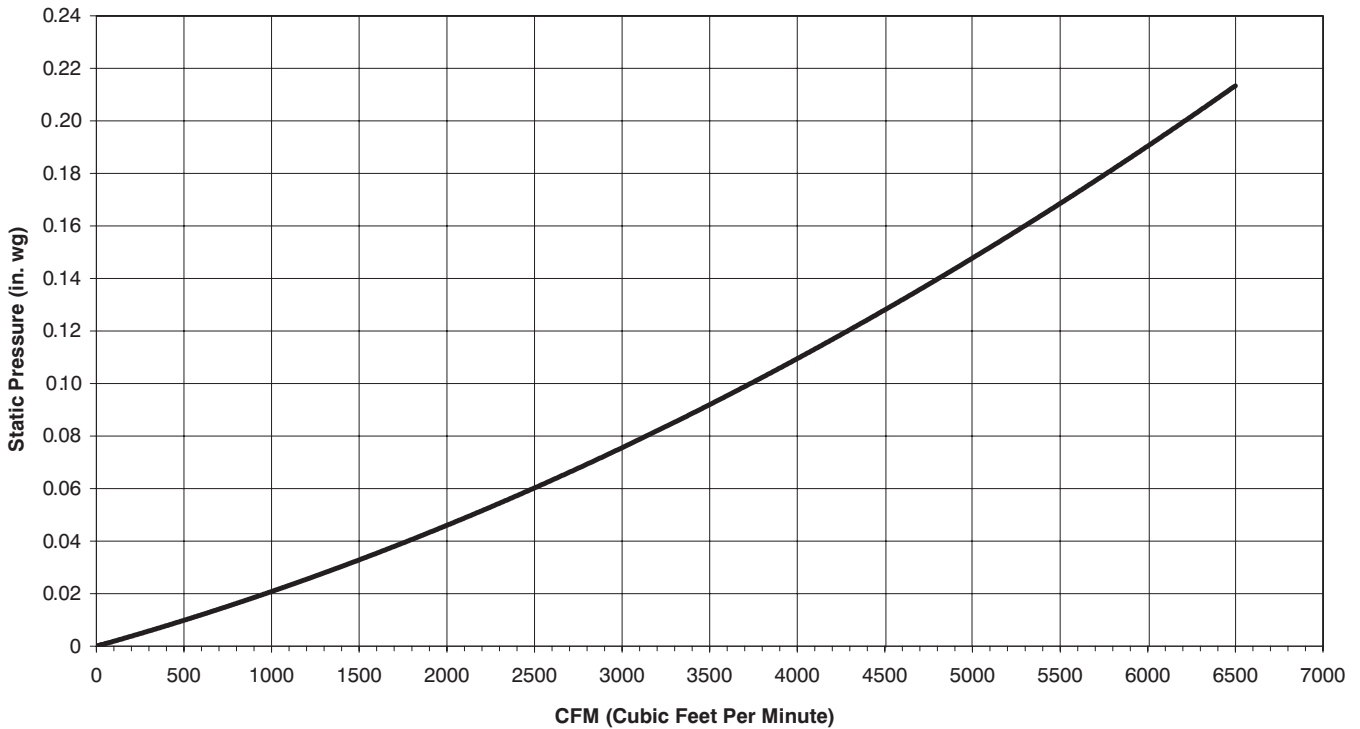
C06175



C06247

NOTE: Economizer damper pressure drop is with outdoor air damper totally closed and return air damper fully open.

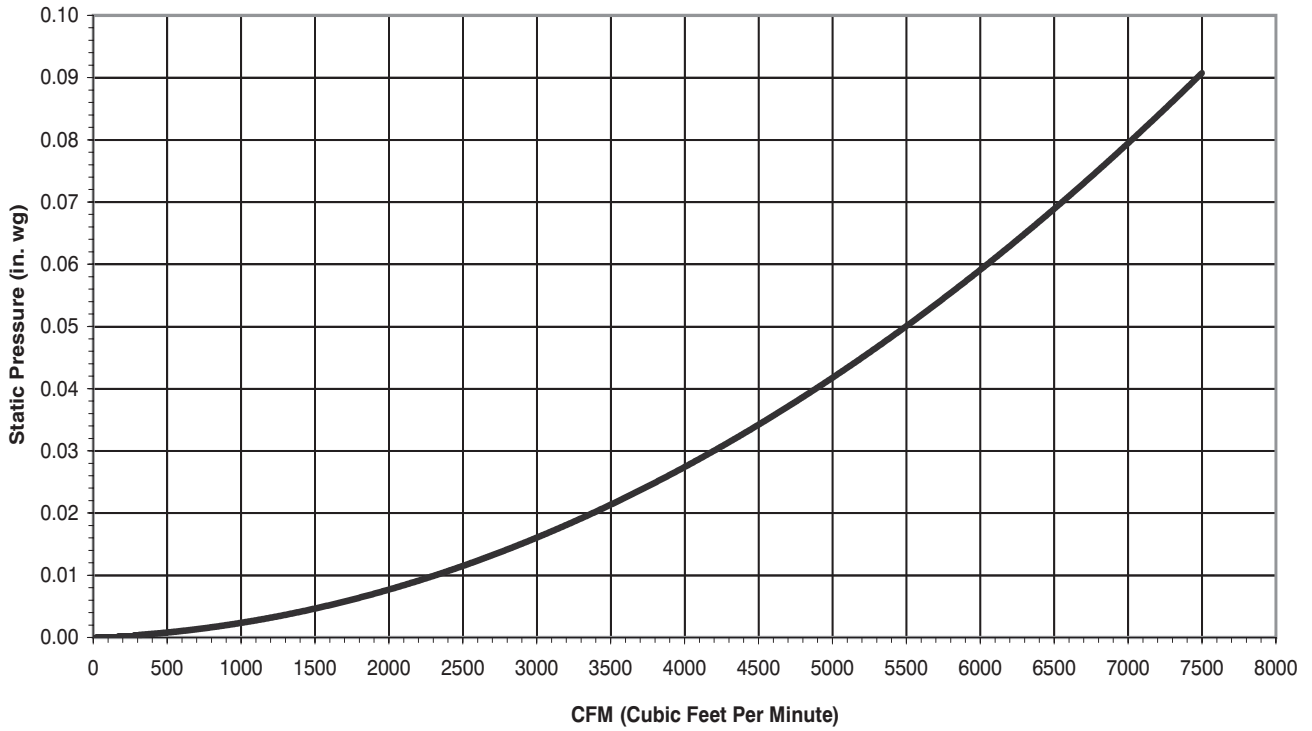
Fig. 16 – 48/50PG03-07 Pressure Drop for Vertical Economizer



C06248

NOTE: Economizer damper pressure drop is with outdoor air damper totally closed and return air damper fully open.

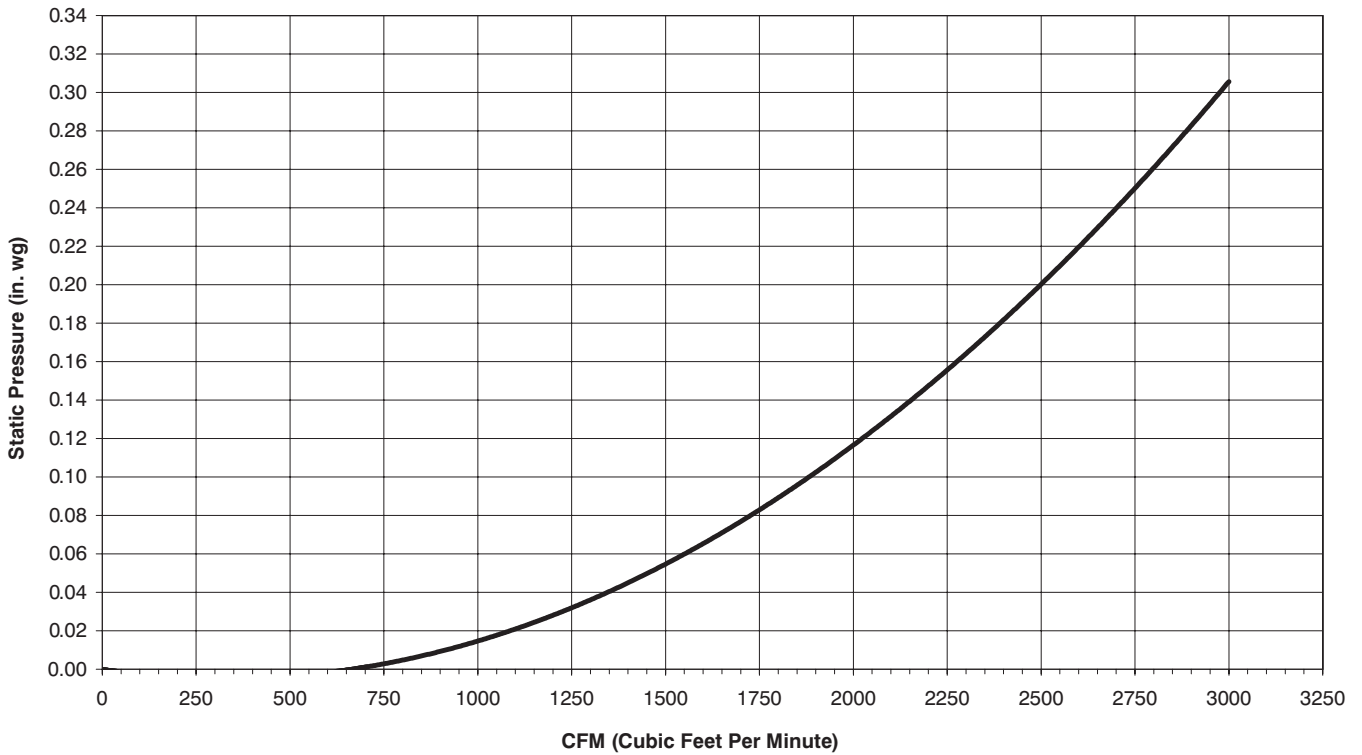
Fig. 17 – 48/50PG08-14 Pressure Drop for Vertical Economizer



C06249

NOTE: Economizer damper pressure drop is with outdoor air damper totally closed and return air damper fully open.

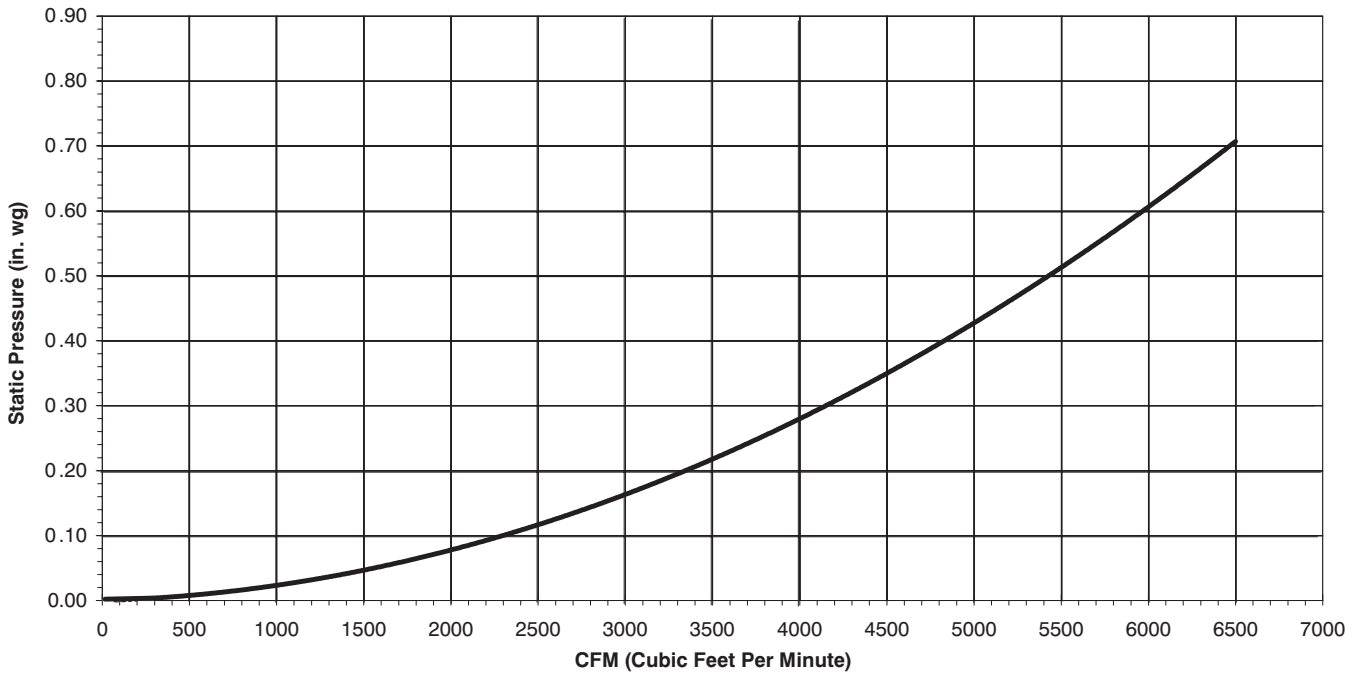
Fig. 18 - 48/50PG16 Pressure Drop for Vertical Economizer



C06250

NOTE: Economizer damper pressure drop is with outdoor air damper totally closed and return air damper fully open.

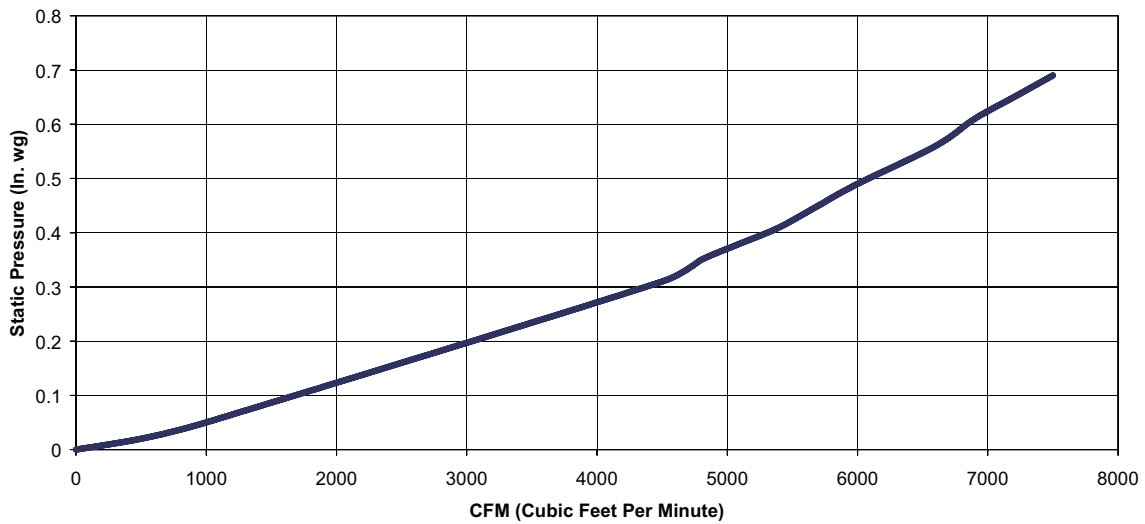
Fig. 19 - 48/50PG03-07 Pressure Drop for Horizontal Economizer



C06251

NOTE: Economizer damper pressure drop is with outdoor air damper totally closed and return air damper fully open.

Fig. 20 – 48/50PG08-14 Pressure Drop for Horizontal Economizer



C06181

NOTE: Economizer damper pressure drop is with outdoor air damper totally closed and return air damper fully open.

Fig. 21 – 48/50PG16 Pressure Drop for Horizontal Economizer

Table 3 — Economizer Configuration Table

ITEM	EXPANSION	RANGE	UNITS	DEFAULT	CCN TABLE/ SUB-TABLE	CCN POINT
ECON	Economizer Configuration				ECON_CFG	
EC.EN	Economizer Installed	Yes/No		No: no FIOP Yes: FIOP		ECONO
E.CTL	Economizer Control Type	1=Digital, Position Feedback 2=Digital, Command Feedback 3=Analog Control		1		ECON_CTL
EC.MN	Econo Minimum Position	0 to 100	%	30		ECONOMIN
EC.MX	Econo Cool Max Position	0 to 100	%	100		ECONOMAX
EH.LO	Econo Cool Hi Temp Limit	40 to 100	dF	65		OATLECLH
EL.LO	Econo Cool Lo Temp Limit	-30 to 50	dF	0		OATLECLL
UEFC	Unoccupied Free Cooling	0=Disabled 1=Entire Unoccupied Period 2=PreOccupancy Time		2		UEFC_CFG
FC.TM	Free Cool PreOcc Time	1 to 9999	min	120		UEFCTIME
FC.LO	Free Cool Low Temp Limit	0 to 70	dF	50		OATLUEFC
PE.EN	Power Exhaust Installed	Yes/No		No: no FIOP Yes: FIOP		PE_ENABL
PE.1	PE Stage1 Econo Position	10 to 100	%	40		PE1_POS
PE.2	PE Stage2 Econo Position	10 to 100	%	75		PE2_POS
EN.SW	Enthalpy Switch	0=No Switch 1=Normally Open 2=Normally Closed		0: no FIOP 1: FIOP		ENTHLCFG
E.TRV	Economizer Travel Time	5 to 300	sec	150		ECONOTRV
E.MXB	Bottom Stage Max Econo	0 to 100	%	50		ECONMAXB
E.MXM	Middle Stage Max Econo	1 to 100	%	35		ECONMAXM
E.MXT	Top Stage Max Econo	0 to 100	%	25		ECONMAXT
E.DBD	Economizer PID Deadband	0 to 25	%	3		ECONBAND
EC.P	Economizer PID — kP	0.0 to 99.9	sec	2.5		ECONO_P
EC.I	Economizer PID — kI	0.0 to 99.9	sec	0.1		ECONO_I
EC.D	Economizer PID — kD	0.0 to 99.9	sec	1		ECONO_D
EC.DT	Economizer PID — rate	10.0 to 180.0	sec	15		ECONO_DT

LEGEND

FIOP — Factory-Installed Option

Table 4 — Air Quality Configuration Table

ITEM	EXPANSION	RANGE	UNITS	DEFAULT	CCN TABLE/ SUB-TABLE	CCN POINT
AIR.Q	Air Quality Configuration				IAQ_CFG	
IA.CF	IAQ Analog Input Config	0=No IAQ 1=Demand Ventilation 2=Econ Position Override 3=Econ Min Position Control		0: no FIOP 1: FIOP		IAQANCFG
IA.FN	IAQ Analog Fan Config	0=Never 1=Only While Occupied 2=Always		0		IAQANFAN
II.CF	IAQ Switch Input Config	0=No IAQ 1=DCV Normally Open 2=DCV Normally Closed 3=Override Normally Open 4=Override Normally Closed		0		IAQINCFG
II.FN	IAQ Switch Fan Config	0=Never 1=Only While Occupied 2=Always		0		IAQINFAN
AQ.MN	Econo Min IAQ Position	0 to 100		10		IAQMNP
EC.MN	Econo Minimum Position	0 to 100		30		ECONOMIN
OVR.P	IAQ Override Position	0 to 100		100		IAQOVPOS
OA.CF	OAQ Analog Input Cfg	0=No OAQ 1=Demand Ventilation 2=Outdoor Air Lockout		0		OAQANCFG
OAQ.L	OAQ Lockout Limit	0 to 5000		600		OAQLOCK
AQD.L	AQ Differential Low	0 to 5000		100		DAQ_LOW
AQD.H	AQ Differential High	0 to 5000		700		DAQ_HIGH
DF.ON	Fan On AQ Differential	0 to 5000		600		DAQFNON
DF.OF	Fan Off AQ Differential	0 to 5000		200		DAQFNOFF
I.4M	IAQ Sensor Value at 4mA	0 to 5000		0		IAQ_4MA
I.20M	IAQ Sensor Value at 20mA	0 to 5000		2000		IAQ_20MA
O.4M	OAQ Sensor Value at 4mA	0 to 5000		0		OAQ_4MA
O.20M	OAQ Sensor Value at 20mA	0 to 5000		2000		OAQ_20MA
H.4M	RH Sensor Value at 4mA	0 to 50	%	0		RH_4MA
H.20M	RH Sensor Value at 20mA	60 to 100	%	100		RH_20MA

LEGEND

FIOP — Factory-Installed Option

48/50PG03 — 16

TROUBLESHOOTING

Refer to the Controls, Start-Up, Operation, Service and Troubleshooting Instructions for more information on the

following topics: Service Test, Diagnostic Alarm Codes and Possible Causes, Economizer Troubleshooting, and Economizer Adjustment. See Table 5 for general economizer service analysis.

Table 5 — Economizer Service Analysis

PROBLEM	POSSIBLE CAUSE	REMEDY
Damper Does Not Move.	Indoor Fan is off.	Check for proper thermostat connection.
		Unit is not configured for continuous fan operation and the thermostat is not calling for heating or cooling.
		Unit is in Unoccupied mode and there is no call for heating or cooling.
		Blown fuse (FU1, FU2).
		Tripped circuit breaker (CB1, CB2, CB3).
		No power to the unit.
		Unit is off via CCN command.
		Actuator is unplugged at motor or at economizer board.
	Unit is not configured for economizer.	Configure unit for economizer per the instructions.
	Outdoor-air temperature is above economizer high temperature lockout.	Adjust the high temperature lockout setting if it is incorrect, otherwise, economizer is operating correctly.
	Outdoor-air temperature is below economizer low temperature lockout.	Adjust the low temperature lockout setting if it is incorrect, otherwise, economizer is operating correctly.
	Communication loss to economizer board.	Check wiring connections.
	Damper is jammed.	Identify the obstruction and safely remove.
Economizer Operation is Limited to Minimum Position.	Minimum position is set incorrectly.	Adjust minimum position setting.
	Outdoor-air temperature is above economizer high temperature lockout.	Adjust the high temperature lockout setting if it is incorrect, otherwise, economizer is operating correctly.
	Outdoor-air temperature is below economizer low temperature lockout.	Adjust the low temperature lockout setting if it is incorrect, otherwise, economizer is operating correctly.
	Outdoor-air thermistor is faulty.	Replace outdoor-air thermistor.
	Low suction pressure problem with a compressor.	Economizer is operating correctly, identify compressor problem.
Economizer Position is Less Than Minimum Position.	IAQ is controlling minimum damper position.	Adjust the IAQ settings if incorrect, otherwise, economizer is operating correctly.
	Unit is in Unoccupied mode.	Adjust unit occupied schedule if incorrect, otherwise, economizer is operating correctly.
Economizer Does Not Return to Minimum Position.	Unit is operating under free cooling.	Economizer is operating correctly.
Outdoor Damper Not Fully Closed at 0% Commanded Position or Not Fully Open at 100%.	Economizer actuator is out of calibration.	Enter Service Test mode and run the Calibrate Economizer (Service Test → INDP → E.CAL) procedure.
Damper Does Not Close on Power Loss.	Damper is jammed.	Identify the obstruction and safely remove.

LEGEND

CCN — Carrier Comfort Network®
IAQ — Indoor Air Quality

48/50PG03-16