



**YORK SL
CONVERTIBLE
ECONOMIZERS
I/O/M MANUAL**

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

York 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).

Unit to RTU Conversion	
SL-C	ZE, ZR, XN, XP 036-060, ZF 036-072
SLL-C	ZJ, ZR 180-300; XP 180-240; ZF 210-300
SLU-C	ZF 180

Part Number

EC - 1 - 2 3 4 5 - 6

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

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

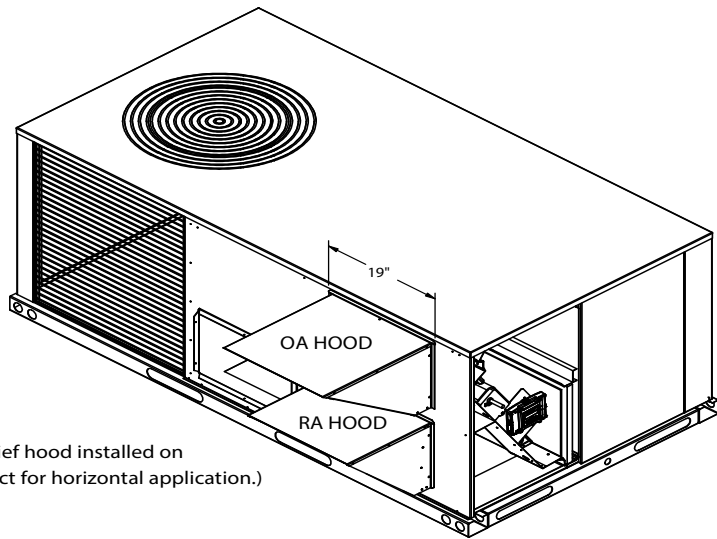
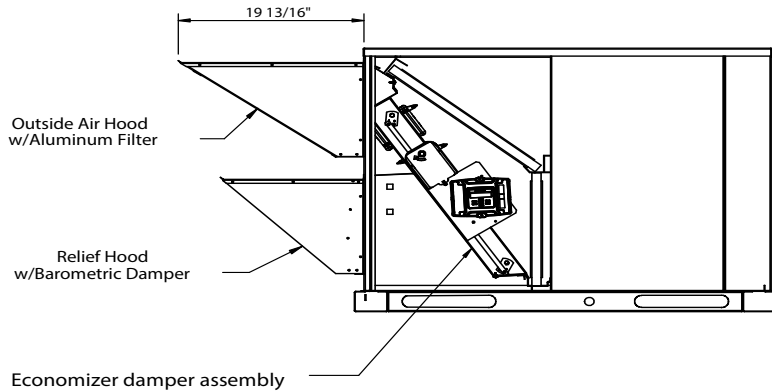
Note: By adding option "D" any powered exhaust will be modulating.

SUB-0027

iAIRE LLC | 2100 Consulate Drive Suite 102, Orlando, FL 32837
www.myultrapure.com | Toll Free 844-348-9168

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SL Convertible Submittal



(Note: relief hood installed on return duct for horizontal application.)

Electrical Data

PART #	WEIGHT
EC-SL-CBA0-*	48lbs.

PART	AMPS	PART	AMPS	TOTAL
ACTUATOR	.29A	CONTROLS	.27A	.56A

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

Features

- **iAIRE Patented Controls Scheme Included**
- Convertible for horizontal and vertical applications
- 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

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.

SL - 3 to 6 Ton Unit Convertible Install

Before Starting Installation

Warning

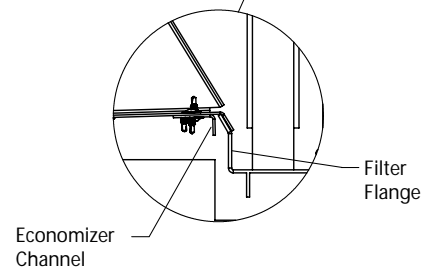
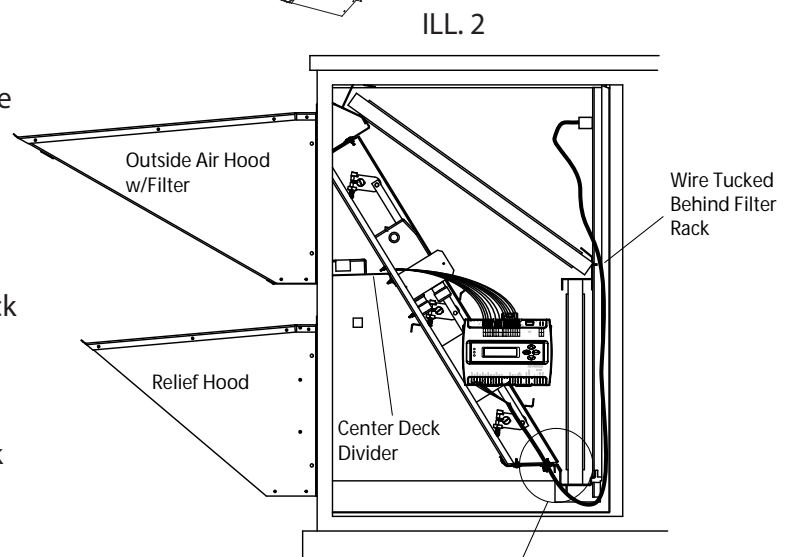
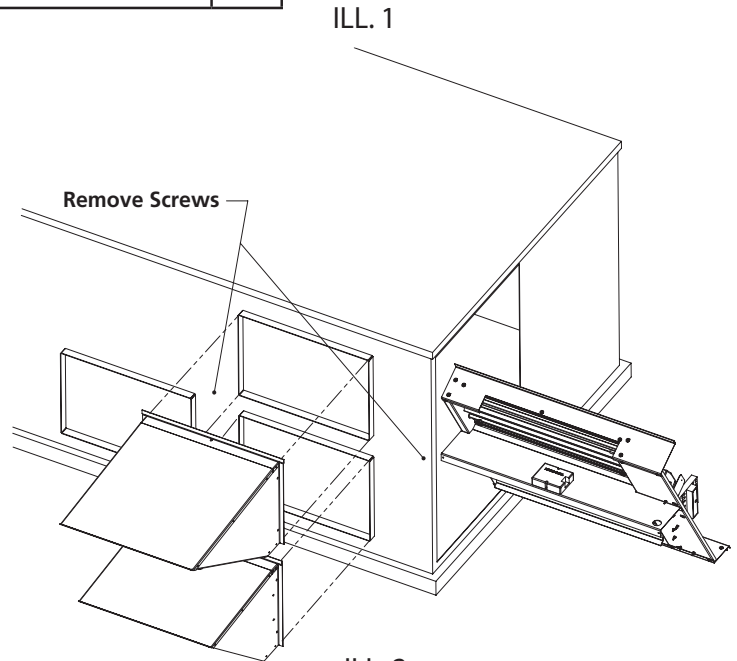
Shut power to unit prior to any work being done. Personal injury or death could result.

Only qualified HVAC service personnel should install, troubleshoot, repair or service HVAC and related HVAC equipment.

Installation Instructions

1. Turn power off to unit being serviced or worked on.
2. Remove horizontal duct panels and filter access panel, saving unit screws for securing economizer hoods. Also, remove filters from unit. This will make economizer easier to install. Filters will be put back at conclusion of economizer installation.
3. Remove the two screws positioned between the horizontal duct covers. These will be used to secure center deck divider of economizer (ILL. 1).
4. Slide economizer into unit as shown (ILL. 2) making sure economizer channel sets over filter rack flange. (Make sure filter rack is set flat in HVAC unit before installing economizer.) Once the economizer is completely into mixed air compartment of unit, flex economizer to get center deck into position. Position should be flush with panel. Prepunched holes will align with the two screw holes removed from previous step. Use these screws to secure economizer.

PARTS INCLUDED	QTY.
Discharge Air Sensor	1
Male Wire Connectors	2

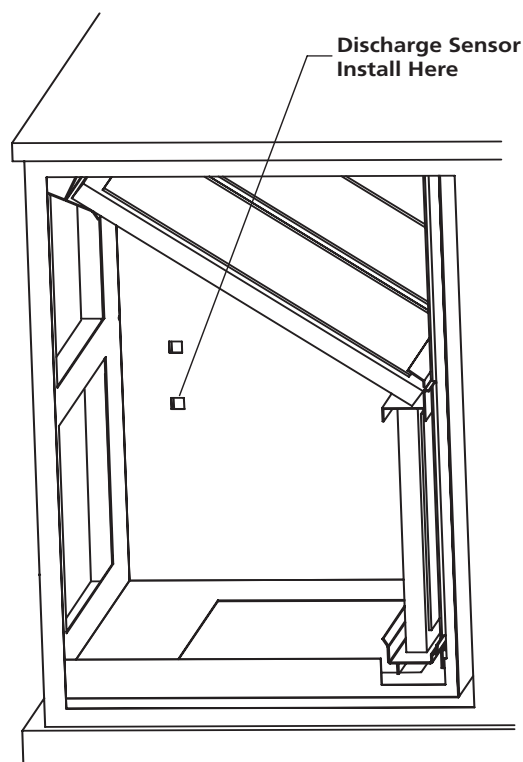


SL 3 to 6 Ton Unit - Convertible Install (cont'd)

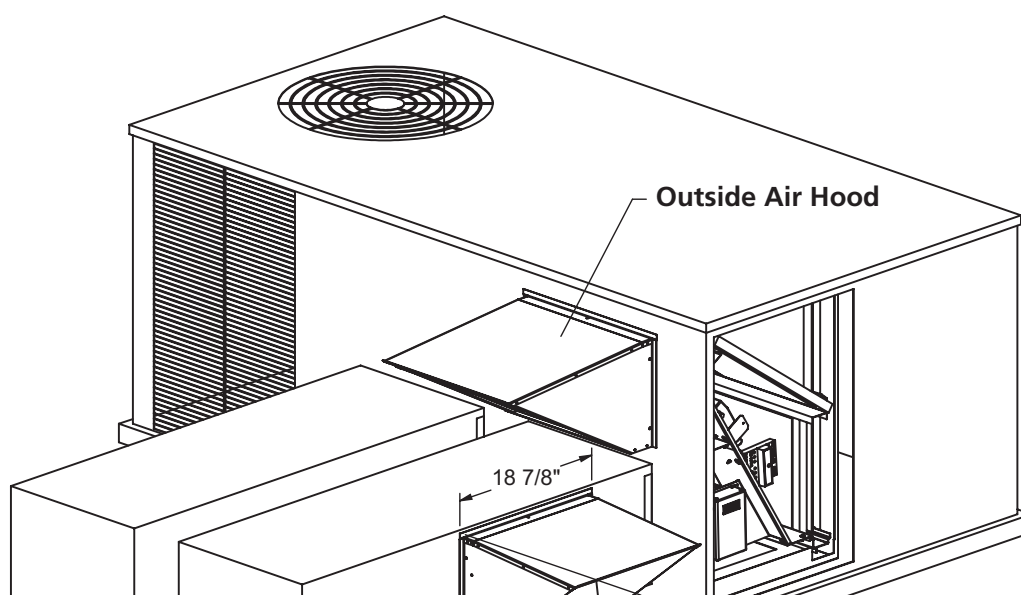
5. Feed wire with 9 pin Molex behind center filter rack (between filter rack and black foam backing), making sure enough slack is provided to have access to lower filter rack (for filter removal and install). Unplug Molex in unit and plug economizer Molex, keeping removed plug for future use.
6. Remove discharge sensor from box in instruction packet and crimp to male wire connectors attached to the black and white wires positioned under the center deck of the economizer. Push sensor through opening in evaporator partition and secure (ILL. 3). (For easier installation, access through lower horizontal opening.)
7. With screws from duct panels removed prior, install hoods provided with economizer. The outside air hood with metal filter is mounted on top. For horizontal return duct designed systems, relief hood needs to be positioned on return duct (ILL. 3).

For wiring information refer to page 8 in IOM-0014.

ILL. 3



ILL. 4



York Economizer Install Notes

Additional Notes

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