

ComfortStar®

Air Conditioning & Heating Products



Light Commercial Rooftop Package Unit

208/230V, 3Ph, 60Hz

Model: CRT7-150TT

ComfortStar®

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Submittal Data Sheet

Light Commercial Rooftop Package Unit Capacity:12.5Ton

Model (AC)			CRT7-150TT
Power Supply			208/230V~60HZ,3Ph
Cooling Capacity	KBtu/h		140
	kW		41.0
Power Input	kW		12.73
EER	Btu/h/W		11
Max.input consumption	W		15,200
Max.current	A		50
Indoor fan air flow	CFM		4,000
ESP	in.wg/Pa		0-250
Outdoor Sound Rating(BELS)			8.7
Compressor	Type		Scroll
	Quantity		2
Indoor coil			Micro-channel
Outdoor coil			Micro-channel
Indoor fan	Type		Centrifugal
	Drive type		Belt
	Quantity		1
Outdoor fan	Type		Axial
	Drive type		Direct
	Quantity		2
Refrigerant Type			R454B
Refrigerant Volume	Circle A/B	lbs	6.83/5.07
Filters	Type Furnished		Disposable
	Number Size Recommended		(4)20*20*2
Operation Ambient Temperature		°F	0-125
Net Dimensions(W×H×D)		inch	88.6×48.8×59.1
Packing Dimensions(W×H×D)		inch	89.4×50.2×59.6
Loading Quantity per 20GP/40GP/40HC			3/7/14
Standard motor (weight)			
Unit weight(lb)			1065(483kg)
Shipping Weight(lb)			1127(511kg)
Standard motor (weight)			
Unit weight(lb)			1065(483kg)
Shipping Weight(lb)			1127(511kg)
Oversize motor(weight)			
Unit weight(lb)			1071(486kg)
Shipping Weight(lb)			1133(514kg)

Features:

- Wide operating range:
Cooling Ambient temp.: -0°F~125°F
Heating Ambient temp.: -40°F~86°F
- ETL and AHRI certification
- Dual-stage, High efficiency compressor
- DC outdoor Motor
- VFD+pulley design
- Micro-channel heat exchanger
- High static, Oversize motor model can be customized
- Electric heater optional
- Condensation water flow switch option
- High attitude kit option 7-speed fan control.
- Compatible with local 24V wired controller
- Horizontal/vertical air duct connect
- Multi-function PCB, LED display, Error code showing
- Compatible with field accessory: Curb/Economizer/Hail guard

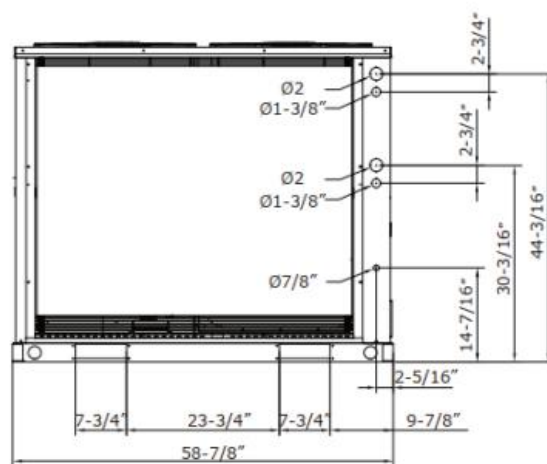
(Unit: in(mm))

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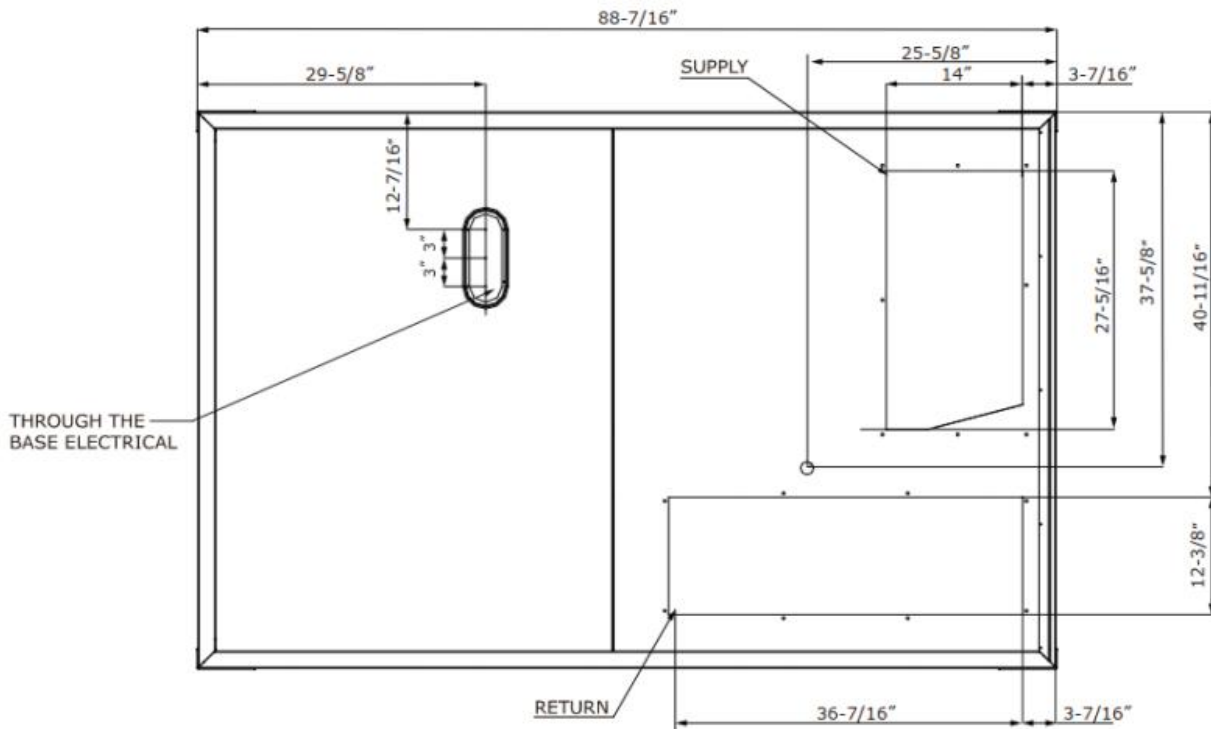
Diagram illustrating the connection of the rear panel and the rear door. The rear panel is shown being attached to the main unit, and the rear door is shown being attached to the rear panel. The diagram includes labels for the rear panel and the rear door.

CONDENSATE DRAIN CONNECTION

Technical drawing of the front view of the GBC unit. The drawing shows a rectangular unit with a control panel on the right side. The overall dimensions are 48-3/4" in height and 88-7/16" in width. The control panel is 6-5/16" high and 23-3/4" wide. The distance from the left edge to the control panel is 37-15/16" (GBC UNIT ONLY). The distance from the control panel to the right edge is 7-3/4". The distance from the left edge to the control panel is 7-3/4". The distance from the control panel to the right edge is 7-3/4".



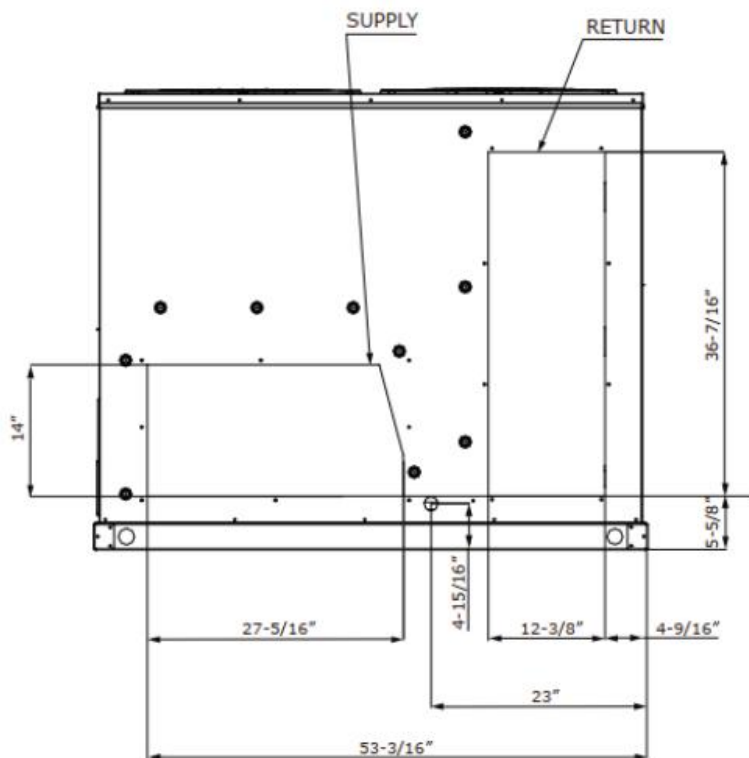
Units — bottom view (in inches)



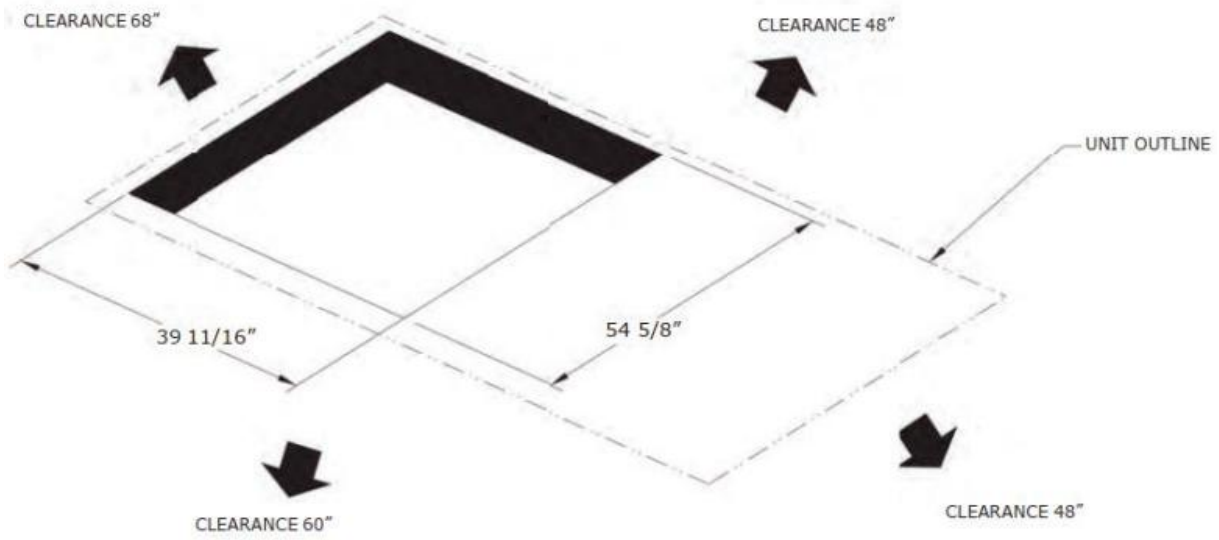
NOTES:

1. THROUGH THE BASE GAS AND ELECTRICAL IS NOT STANDARD ON ALL UNITS.
2. VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH INSTALLER DOCUMENTS BEFORE INSTALLATION.

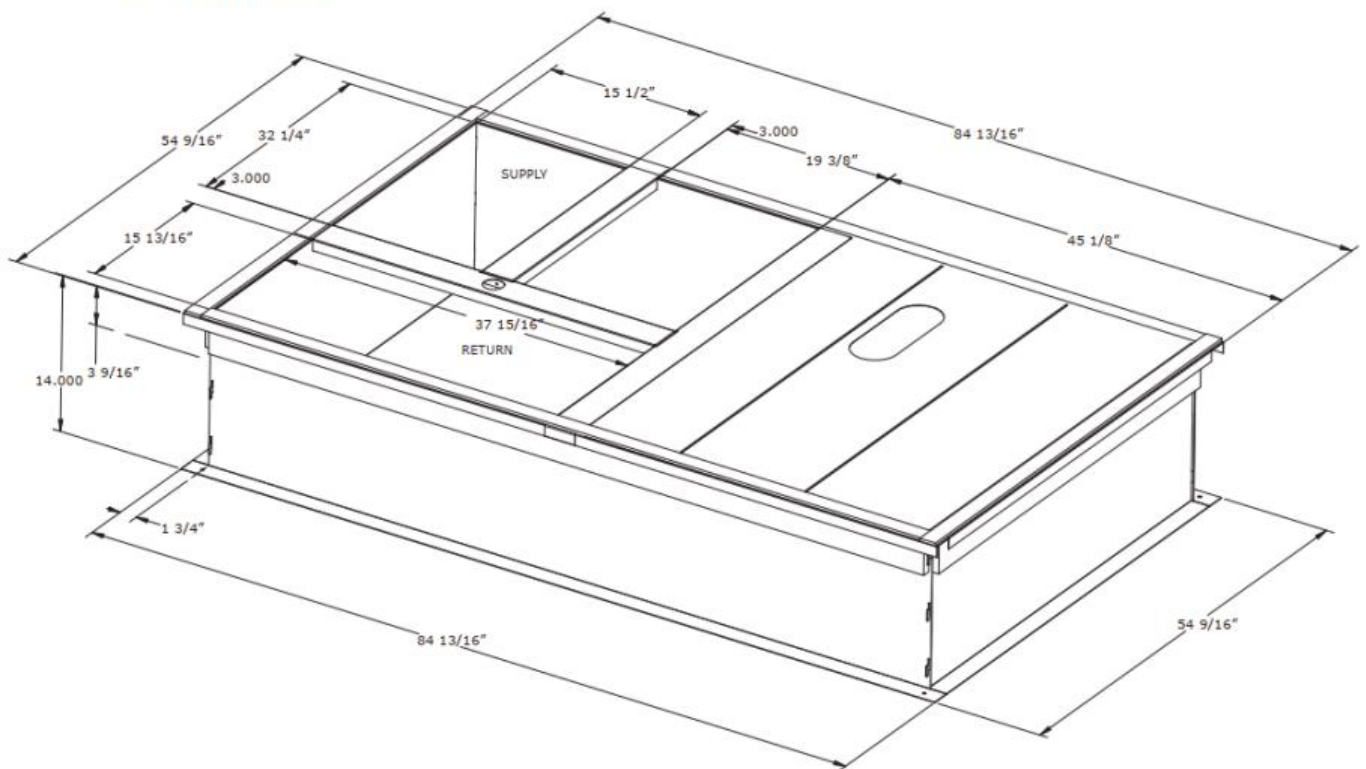
Foundation units — back view (horizontal configuration) (in inches)



Downflow unit clearance (in inches)

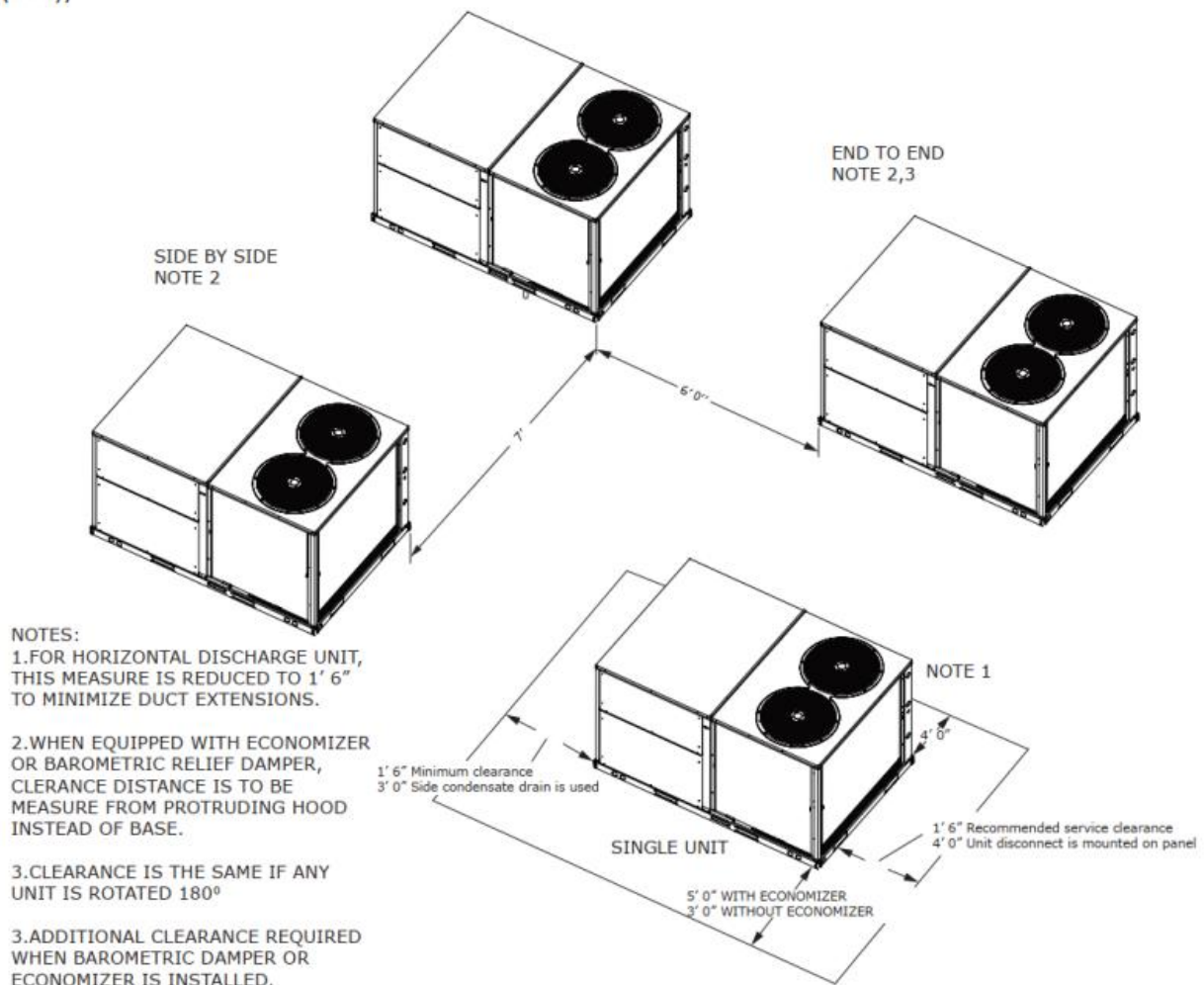


Roof curb (in inches)



Installation Space Requirements:

(Unit: inch)



Motorized 2-Position Outside Air Hood Assembly, with Filter

Accessory Submittal | 7.5–12.5 Ton CRT7 Rooftop Units

Job Name: _____

Submitted To: _____

Approved By: _____

Date: _____

PART NUMBER	APPLICATION	WEIGHT
COA2-75125	7.5–12.5 Ton CRT7 Rooftop Units	50 lb

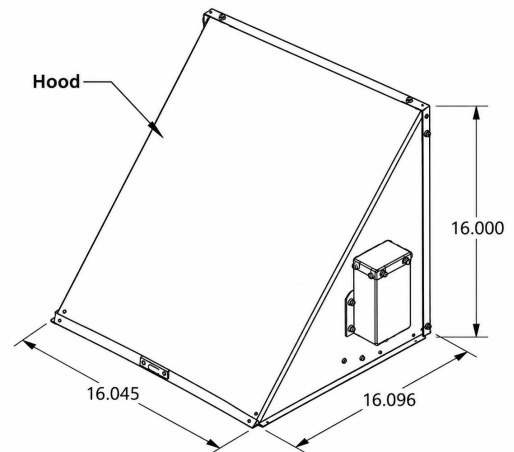
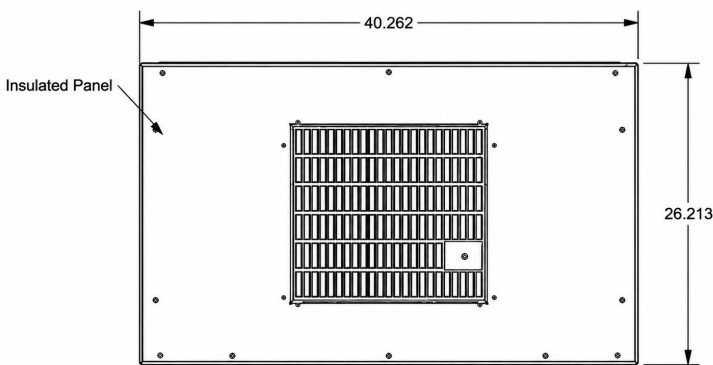
COMPATIBLE MODELS

CRT7-90TT / CRT7-102TT / CRT7-120TT / CRT7-150TT

FEATURES

- 25% Motorized Outside Air Damper — field-adjustable to 50%, 75%, or 100% blade-stopper positions
- Aluminum water-entrainment filter, removable for service
- Fully insulated hood and access panel construction

ASSEMBLY DIAGRAM



Panel: 40.262" W x 26.213" H | Hood: 16.045" x 16.096" x 16.000"

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Installation Instructions — General Information

Outside Air Damper for 7.5–12.5 Ton CRT7 Rooftop Units

Attention Installing Personnel

As a professional installer, you have an obligation to know the product, all safety precautions and related items before installation. Prior to installation, thoroughly familiarize yourself with these instructions. Pay special attention to all safety warnings. Installation and service work can place personnel in hazardous situations if proper procedures are not followed.

This accessory is intended for field installation on compatible 7.5–12.5 ton CRT7 commercial rooftop units. Installation must comply with national codes and prevailing local codes and regulations.

Safety Considerations

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 this equipment. Follow all safety codes and use appropriate personal protective equipment.

WARNING. Only personnel trained to install, adjust, service, or repair the equipment should perform this work. Improper installation, adjustment, servicing, or repair may result in product damage, property damage, personal injury, or death.

HIGH VOLTAGE. Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Parts List and Packing

COA2-75125 - 7.5-12.5 Ton Outside Air Damper

Item No.	Part Number	Description	Qty.
1	9000-0749	Carton, 41.5" x 18" x 28"	1
2	9100-F7	Crate Label	2
3	9908-2900	Parts Bag, COA2-75125	1
4	COA2-75125	2-Position Hood Assembly, with Filter	1

Table 1 - 7.5-12.5 Ton Motorized Outside Air Hood Assembly Contents

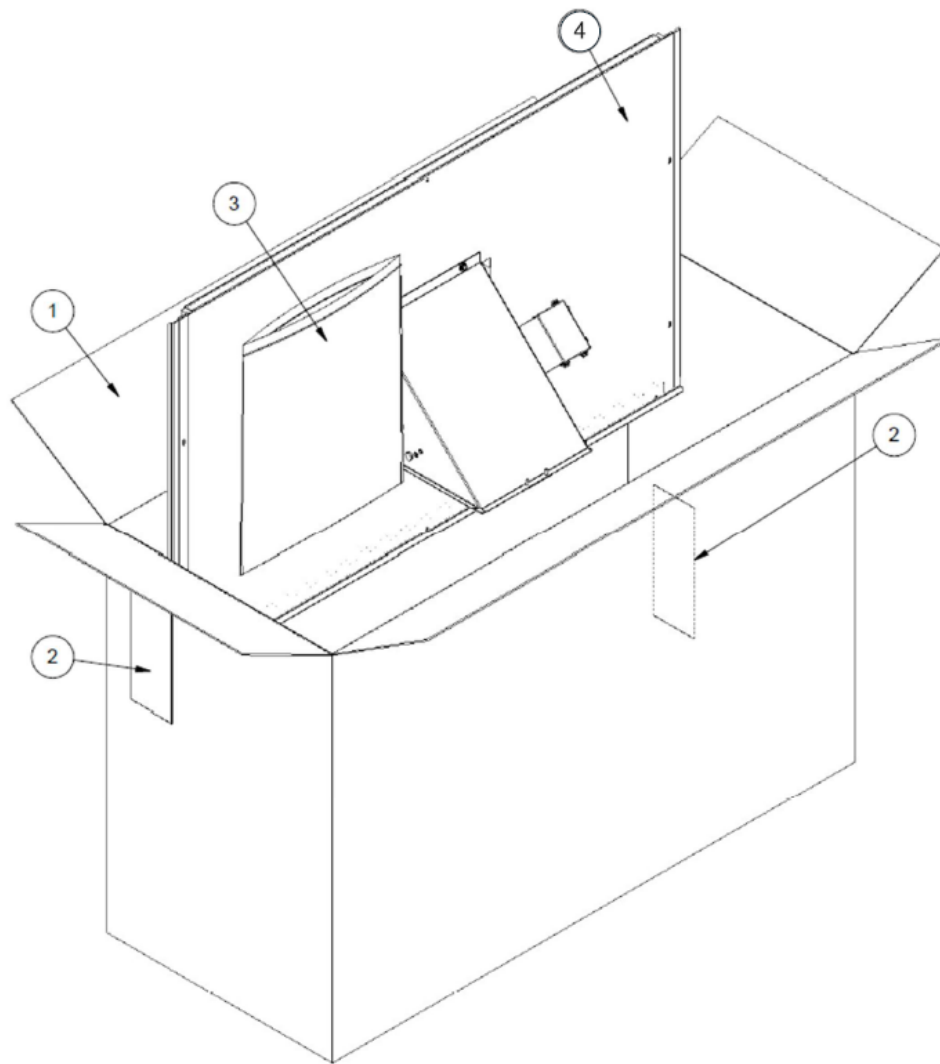


Figure 1 — 7.5–12.5 Ton Outside Air Damper Packing

Outside Air Damper Installation

COA2-75125 / CA-OA2-75125

PART IDENTIFICATION

Part Number: **COA2-75125** | Accessory Part Number: **CA-OA2-75125**

1. Open carton and inspect contents for damaged or missing parts.
2. Remove the filter access panel from the unit. Retain this panel for reinstallation after accessory installation is complete.
3. Remove the lower panel from the return-air section of the unit. This panel can be discarded.
4. Detach the sensor from the horizontal bar.
5. Remove the horizontal bar. This bar can be discarded.
6. Connect the female connectors on the wiring harness supplied in the parts bag to the male connectors on the outside-air damper actuator.
7. Connect the wiring harness from the previous step to the plug in the rooftop unit.
8. Install the outside-air damper on the return-air section using the screws supplied in the parts bag. The holes in the rooftop unit should align with the holes in the damper assembly.
9. The blade stopper is factory set at the 50% opening position. If necessary, remove the blade-stopper bolt and nut and reinstall them in the 75% or 100% opening position.

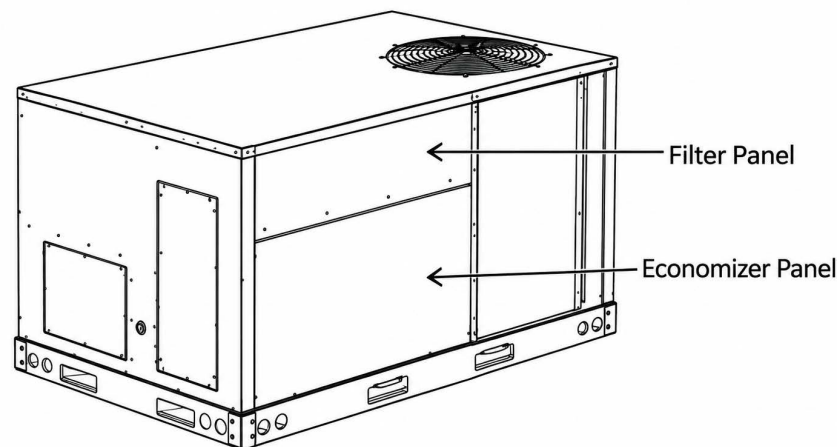


Figure 2 — Remove Panels

Blade Stopper Position	Outside Air (% of Total Airflow)
100% open	25%
75% open	18.75%
50% open (factory default)	12.5%

NOTE: Too much outside air could trigger high- or low-indoor-coil temperature protection.

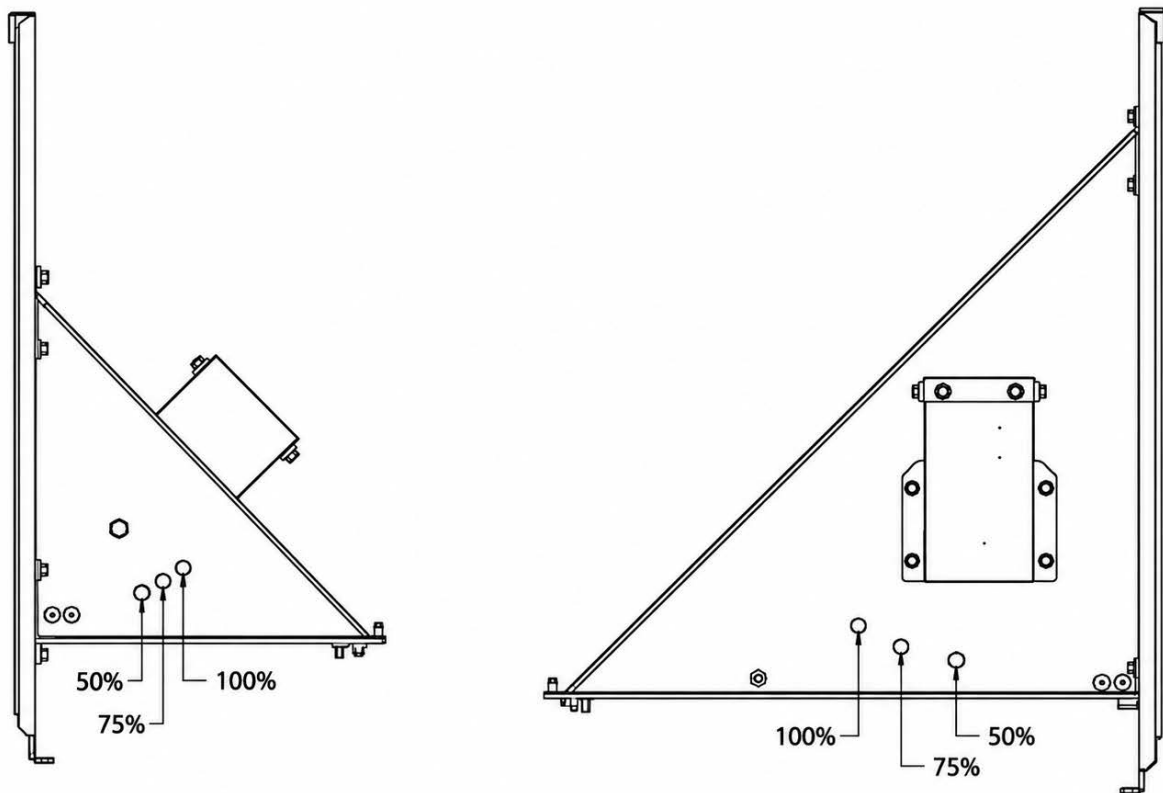


Figure 3 — 7.5–12.5 Ton Blade Stopper Holes

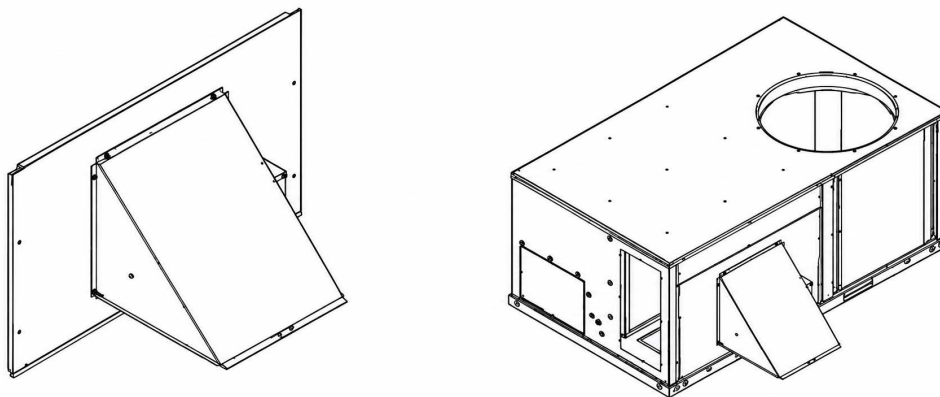


Figure 4 — 7.5–12.5 Ton Outside Air Damper

Installation Check

- ☐ Damper is seated flush against the return-air section.
- ☐ All mounting screws are installed and tightened.
- ☐ Actuator wiring harness is fully connected.
- ☐ Blade stopper is positioned for the required outdoor-air percentage.
- ☐ Filter and hood are clear of shipping material and obstruction.
- ☐ Filter access panel is reinstalled after completion.

2-Position Wiring Harness

Harness Reference: 9962-0560

Use the supplied harness to connect the outside-air damper actuator to the designated rooftop-unit plug.

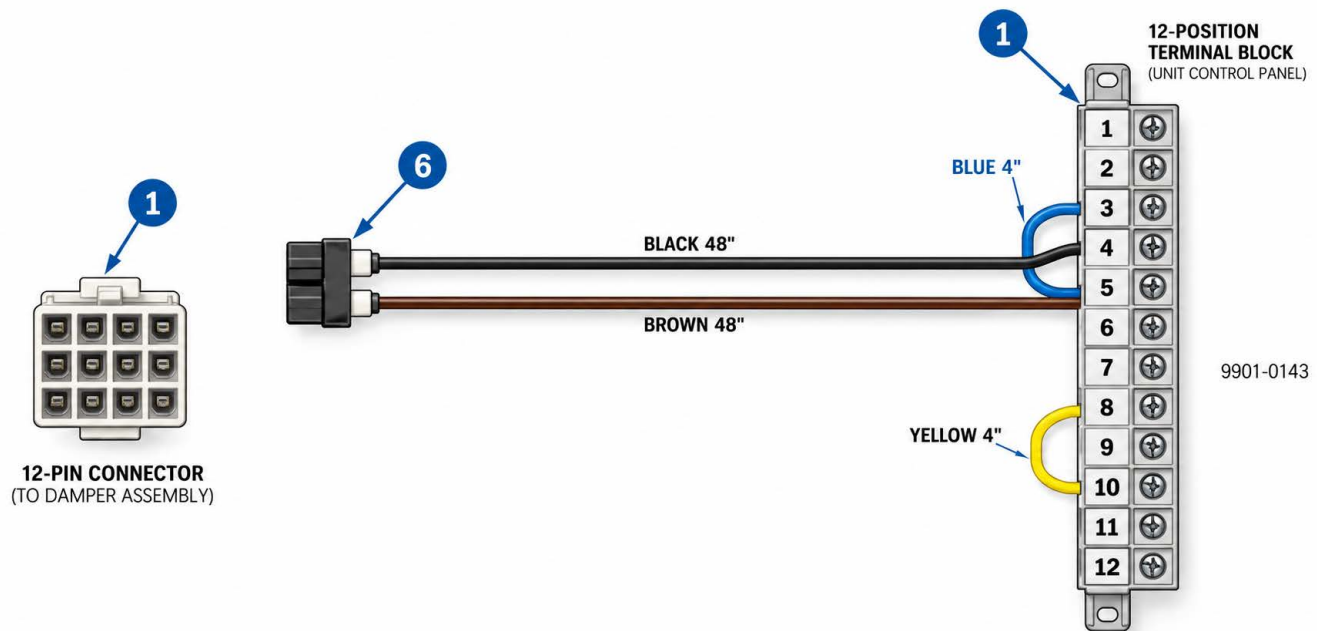


Figure 4 — 2-Position Harness Schematic

Item	Part Number	Description	Length	Qty.
10	9968-0054	Blue wire, 18 GA	4 in	1
9	9968-0009	Yellow wire, 18 GA	4 in	1
8	9968-0006	Brown wire, 18 GA	48 in	1
7	9968-0016	Black wire, 18 GA	48 in	1
6	9901-0862	Terminal, 1/4 in male, red	—	2
5	9901-0505	Female plug terminal	—	6
1	9901-0143	Power connector	—	1