



Rated in accordance with ARI Standard 240. Certification applies only when used with proper components as listed with ARI.



Listed By Underwriters' Laboratories

CONVERTIBLE SINGLE PACKAGE HEAT PUMP

2 THRU 5 TON, SINGLE PHASE

- Efficiency: - **10 SEER.**
- Combination heating and cooling, self-contained for year-round comfort. Systems install on rooftop or at ground level. Units are shipped complete in one carton.

CONSTRUCTION

- Triple-coated steel, consisting of a Polyester top coat, a urethane primer coat preceeded by an oxide pretreatment. One piece weather resistant top. Access panels for easy service. Side by side supply and return. Heavy 16 gauge base with rails.
- Coil Guard to protect condenser coil.

ACCESS PANELS

- Located to provide easy serviceability. The electrical controls are behind the same exterior panel.

CONVERTIBLE DISCHARGE

- Units have side-by-side supply and return air openings for either horizontal or downflow applications. Simply relocate duct cover panels.

COMPRESSOR (Scroll Compressors On All Models)

- The high efficiency compressor has external rubber mounts to help minimize system noise and features an automatic reset current / temperature sensing overload protection system.

COILS

- Both the condenser and evaporator coils have aluminum fins and copper tubes to promote efficient heat transfer. The refrigerant circuit is sealed, tested, and fully charged at the factory.

EXTERNALLY-MOUNTED GAUGE PORTS

- Provides easier servicing and allows for more accurate reading of operating conditions.

EVAPORATOR BLOWER

- All model sizes are equipped with multiple speed direct drive blower motors to provide proper air flow for both heating and cooling requirements.

AIR FILTERS

- Air filters are not supplied with these units. Air filters, provided by the installer, can be used in the return air duct system. Accessory filter kit available.

LOSS OF CHARGE PRESSURE SWITCH

- Low pressure switch on the high side to prevent system damage due to a loss of charge

COIL GUARD

- Standard on all units.

Electric Heat

- 5 to 20 kw

WARRANTY

- Standard five (5) year limited warranty on parts.
- Five (5) year limited warranty on the compressor.

• RESIDENTIAL AND COMMERCIAL SYSTEMS • SPLIT SYSTEMS • PACKAGED AIR CONDITIONERS • COMBINATION GAS / ELECTRIC UNITS • HEAT PUMPS • AIR HANDLERS • MANUFACTURED HOME AIR CONDITIONERS • GAS, OIL AND ELECTRIC FURNACES

International Comfort Products
650 Heil-Quaker Avenue
Lewisburg, Tn. 37091

518 21 1101 06

10/9/03

UNIT SPECIFICATIONS

MODEL NUMBER	Electrical Data			Condenser Data								BELS
				Coil			Fan Motor		Fan			
	208 / 230 Voltage Ph. - Hz.	Maximum Overcurrent Protection	Ampacity	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Dia. (In.)	Horse power	Full Load Amps	Size Diameter (In.)	Number of Blades / Pitch	CFM (Max.)	
PHF024K000	1-60	35 amps.	23.8	11.38	20 / 1	3/8	1/5	1.3	20.3	3 / 21	2250	7.8
PHF030K000	1-60	40 amps.	24.8	11.38	20 / 1	3/8	1/5	1.3	20.3	3 / 21	2250	7.8
PHF036K000	1-60	40 amps.	25.7	11.38	20 / 1	3/8	1/3	1.9	20.3	3 / 27	2800	7.8
PHF042K000	1-60	50 amps.	32.6	11.38	18 / 2	3/8	1/3	1.9	20.3	3 / 27	2800	7.8
PHF048K000	1-60	60 amps.	42.3	14.88	18 / 2	3/8	1/3	1.9	20.3	3 / 27	2800	7.8
PHF060K000	1-60	60 amps	46.1	14.88	18 / 2	3/8	1/3	1.9	20.3	4 / 25	3300	8.0

MODEL NUMBER	Evaporator Coil									Compressor		Factory Refrigerant Charge R-22 Oz.	Shlp Weight (Lbs.)
	Coil			Blower H.P. / Type / Speeds	Motor Full Load Amps	Blower			Rated Load Amps	Locked Rotor Amps			
	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diameter (In.)			Type & Size	RPM (Maximum)	CFM Rated					
PHF024K000	3.67	14 / 2	3/8	1/4 / PSC / 3	2.2	DD10-8A	1075	800	16.1	59	77	293	
PHF030K000	4.0	14 / 3	3/8	1/3 / PSC / 3	3.1	DD10-8A	1075	1000	16.3	73	95	313	
PHF036K000	4.0	14 / 3	3/8	1/3 / PSC / 3	3.1	DD10-8A	1075	1200	16.5	93	95	320	
PHF042K000	3.67	14 / 4	3/8	1/2 / PSC / 3	4.0	DD10-8A	1075	1450	21.4	127	130	347	
PHF048K000	5.33	14 / 3	3/8	3/4 / PSC / 3	6.0	DD11-11A	1075	1600	26.2	131	176	392	
PHF060K000	5.33	14 / 4	3/8	1 / PSC / 4	6.0	DD11-11A	1100	2000	30.6	144	176	441	

PERFORMANCE DATA: COOLING

MODEL NUMBER	Rated Capacity ² BTUH Cooling	Rated Capacity ¹ BTUH Heating	S / T Ratio	HSPF	S.E.E.R.	E.E.R. ⁴	Power Input Watts	Evaporator Rated Airflow (SCFM)	Ext. Static Pressure Drop ³ Wet
PHF024K000	23,400	24,000	.76	6.8	10.0	9.1	2629	800	.25
PHF030K000	28,800	29,600	.78	6.8	10.0	8.8	3273	1000	.25
PHF036K000	34,000	32,000	.80	6.8	10.0	8.5	4000	1200	.30
PHF042K000	40,000	40,000	.80	6.8	10.0	8.9	4494	1450	.30
PHF048K000	46,000	48,000	.79	6.8	10.0	8.9	5169	1600	.30
PHF060K000	58,000	60,000	.77	6.8	10.0	8.7	6552	2000	.30

¹ Rated Capacity @ 47° F.

² Rated Capacity @ 230 Volts. For applications at 208 volts deduct 1000 BTU. Contact distributor for availability dates.

³ Includes a .08 drop for a filter.

⁴ For reference only.

ELECTRICAL DATA: ELECTRIC HEAT ACCESSORY

HEATER MODEL	Used With	Supply Voltage	KW Rating	Nominal Heating BTUH	Supply Circuit No.	Heater Amps	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device (Amps)
AAH05FBKAA	2 - 5 Ton	240-1-60	4.8	16,382	L3 - L4	20.0	25.0	30
		208-1-60	3.6	12,287	L3 - L4	17.3	21.6	25
AAH07FBKAA	2 - 5 Ton	240-1-60	7.5	25,598	L3-L4	31.2	39.0	45
		208-1-60	5.6	19,113	L3-L4	26.9	33.6	40
AAH10FBKAA	2 - 5 Ton	240-1-60	9.6	32,765	L3 - L4	40.0	50.0	60
		208-1-60	7.2	24,574	L5 - L6	34.6	43.3	50
AAH15FBKAA	2 1/2 - 5 Ton	240-1-60	14.4	49,147	L3 - L4	40.0	50.0	60
			L5 - L6	20.0	25.0	30		
		208-1-60	10.8	36,860	L3 - L4	34.6	43.3	50
			L5 - L6	17.3	21.6	25		
AAH20FBKAA	3 - 5 Ton	240-1-60	19.2	65,530	L3 - L4	40.0	50.0	60
			L5 - L6	40.0	50.0	60		
		208-1-60	14.4	49,147	L3 - L4	34.6	43.3	50
			L5 - L6	34.6	43.3	50		

Heater Model	Use With	Supply Voltage	KW Rating	Total Heating BTUH	*Temperature Rise °F @ CFM								
					600	800	1000	1200	1400	1600	1800	2000	2200
AAH05FBKAA	2 - 5 Ton	240-1-60	4.8	16,382	25.3	19.0	15.2	12.6	10.8	9.5	8.4	7.6	---
		208-1-60	3.6	12,287	19.0	14.2	11.4	9.5	8.1	7.1	6.3	5.7	---
AAH07FBKAA	2 - 5 Ton	240-1-60	7.5	25,598	39.5	29.6	23.7	19.8	16.9	14.8	13.2	11.9	10.8
		208-1-60	5.6	19,113	29.5	22.1	17.7	14.7	12.6	11.1	9.8	8.8	8.0
AAH10FBKAA	2 - 5 Ton	240-1-60	9.6	32,765	50.6	37.9	30.3	25.3	21.7	19.0	16.9	15.2	13.8
		208-1-60	7.2	24,574	37.9	28.4	22.8	19.0	16.3	14.2	12.6	11.4	10.3
AAH15FBKAA	2 1/2 - 5 Ton	240-1-60	14.4	49,147	---	56.9	45.5	37.9	32.5	28.4	25.3	22.8	20.7
		208-1-60	10.8	36,860	56.9	42.7	34.1	28.4	24.4	21.3	19.0	17.1	15.5
AAH20FBKAA	3 - 5 Ton	240-1-60	19.2	65,530	---	---	---	50.6	43.3	37.9	33.7	30.3	27.6
		208-1-60	14.4	49,147	---	56.9	45.5	37.9	32.5	28.4	25.3	22.8	20.7

* Temperature Rise Must Not Exceed 60° F (Electric Heat Only) .

Blower Performance Data in Horizontal Configuration						ARI Minimum Static Without Filter inches of water	Actual Capacity Rating BTU/hr	ARI Minimum Allowable Airflow - 350 CFM/ton** CFM
UNIT SIZE	Motor Speed	Air Delivery in CFM at ESP *						
		0.20	0.30	0.40	0.50			
2 TON	HI	1063	1066	1064	1049	0.18	23800	694
	MD	738	756	761	754	0.18	23800	694
	LO	n/a	n/a	n/a	n/a	0.18	23800	694
2 1/2 TON	HI	1621	1570	1513	1445	0.23	28800	840
	MD	1332	1304	1269	1237	0.23	28800	840
	LO	1004	1009	996	980	0.23	28800	840
3 TON	HI	1606	1534	1459	1382	0.23	34200	998
	MD	1384	1326	1271	1213	0.23	34200	998
	LO	1084	1053	1024	n/a	0.23	34200	998
3 1/2 TON	HI	1741	1705	1643	1605	0.23	39600	1155
	MD	1360	1357	1344	1318	0.23	39600	1155
	LO	n/a	n/a	n/a	n/a	0.23	39600	1155
4 TON	HI	2607	2564	2440	2354	0.28	45600	1330
	MD	1987	1978	1940	1879	0.28	45600	1330
	LO	1594	1596	1580	1556	0.28	45600	1330
5 TON	HI	2441	2362	2240	2169	0.28	58600	1709
	MD HI	2392	2313	2219	2124	0.28	58600	1709
	MD LO	2253	2188	2107	2009	0.28	58600	1709
	LO	2178	2108	2046	1946	0.28	58600	1709

* Air delivery against shown external static pressure taken with 230V to unit and dry coil. For wet coil subtract approximately 25 CFM. Add .08 static for internal filters.

** Applied to the actual capacity rating

ACCESSORIES

ROOF CURBS, TRANSITION AND DUCT KITS

Used on (Unit Size)	8" Curb	14" Curb	24" Curb	Square to Round Transition Kit	Round Duct Size (Inches)	Concentric Grill Flush Mount	Concentric Grill Step Down
2 - 3 1/2 Ton	ACL01FB0A *	ACM01FB0A *	ACH01FB0A *	ACT01FB0A	16	AXB020CFA	AXB020CSA
	AXB020CLA **	AXB020CMA **	AXB020CHA **	AXB020CTA	16	AXB020CFA	AXB020CSA
4 - 5 Ton	ACL01FB0A *	ACM01FB0A *	ACH01FB0A *	ACT11FB0A	18	AXB030CFA	AXB030CSA
	AXB020CLA **	AXB020CMA **	AXB020CHA **	ACT22FB0A	18	AXB030CFA	AXB030CSA

ROOF CURB DIMENSIONS (AC SERIES)

Model No.	A	B	C	D	E	F	G	H	K (ACL)	K (ACM)	K (ACH)
AC(L,M,H)01FB0A	42-1/2	39-1/2	16	21-1/2	2	45-3/4	42-3/4	20	8	14	24

ROOF CURB DIMENSIONS (AX SERIES)

Model No.	A	B	C	D	E	F	G	H	K (CLA)	K (CMA)	K (CHA)
AXB020C(L,M,H)A**	42-3/4	39-3/4	18	18	3-3/4	42-3/4	39-3/4	18	8	14	24

* Full Perimeter Curbs

** AXB curbs are not full perimeter curbs. There will be a 3 inch overhang on the control access panel end of the unit. There will be some supply air blockage but, this does not affect the performance of the unit.

ECONOMIZERS

Description	Mainline Model Number	Used on
Fully Modulating Horizontal	AHE01FB0A	2 to 3-1/2 Ton
Fully Modulating Horizontal	AHE02FB0A	4 to 5 Ton
Fully Modulating Downflow	AEM01FB0A	2 to 3-1/2 Ton
Fully Modulating Downflow	AEM03FB0A	4 Ton
3 Position Horizontal	AHP01FB0A	2 to 3-1/2 Ton
3 Position Horizontal	AHP02FB0A	4 to 5 Ton
3 Position Downflow	AEP01FB0A	2 to 3-1/2 Ton
3 Position Downflow	AEP03FB0A	4 Ton

FRESH AIR DAMPERS

Description	Mainline Model Number	Used on
35% Manual Fresh Air Damper	AFA01FB0A	2 to 3-1/2 Ton
35% Manual Fresh Air Damper	AFA02FB0A	4 to 5 Ton
35% Motorized Fresh Air Damper	AFM01FB0A	2 to 3-1/2 Ton
35% Motorized Fresh Air Damper	AFM02FB0A	4 to 5 Ton

RETURN AIR FILTER KIT

Description	Mainline Model Number	Used on
Return Air Filter Kit	AKF12FB0A	ALL

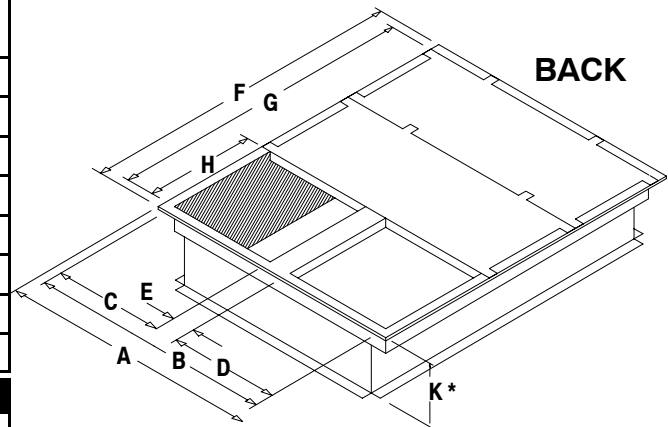
Filters not included in kit, small chassis uses 12 x 25 x 1 (2 ea), large chassis uses 14 x 25 x 1 (2 ea)

HAIL GUARD

Description	Mainline Model Number	Used on
Hail Guard	AGH01FB0A	2 to 3-1/2 Ton
	AGH02FB0A	4 to 5 Ton

OUTDOOR THERMOSTAT KIT

Description	Mainline Model Number	Used on
Outdoor Thermostat Kit	AMA0010TB	2 to 5 Ton

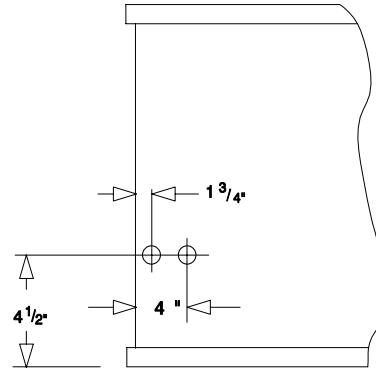
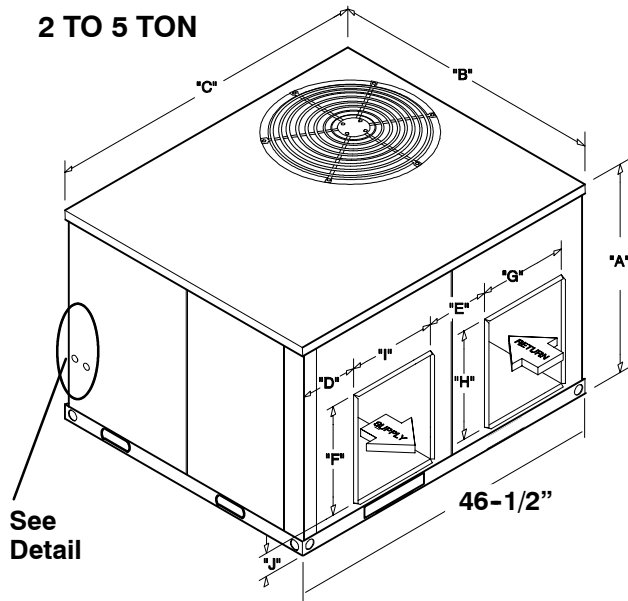


Curb Dimensions

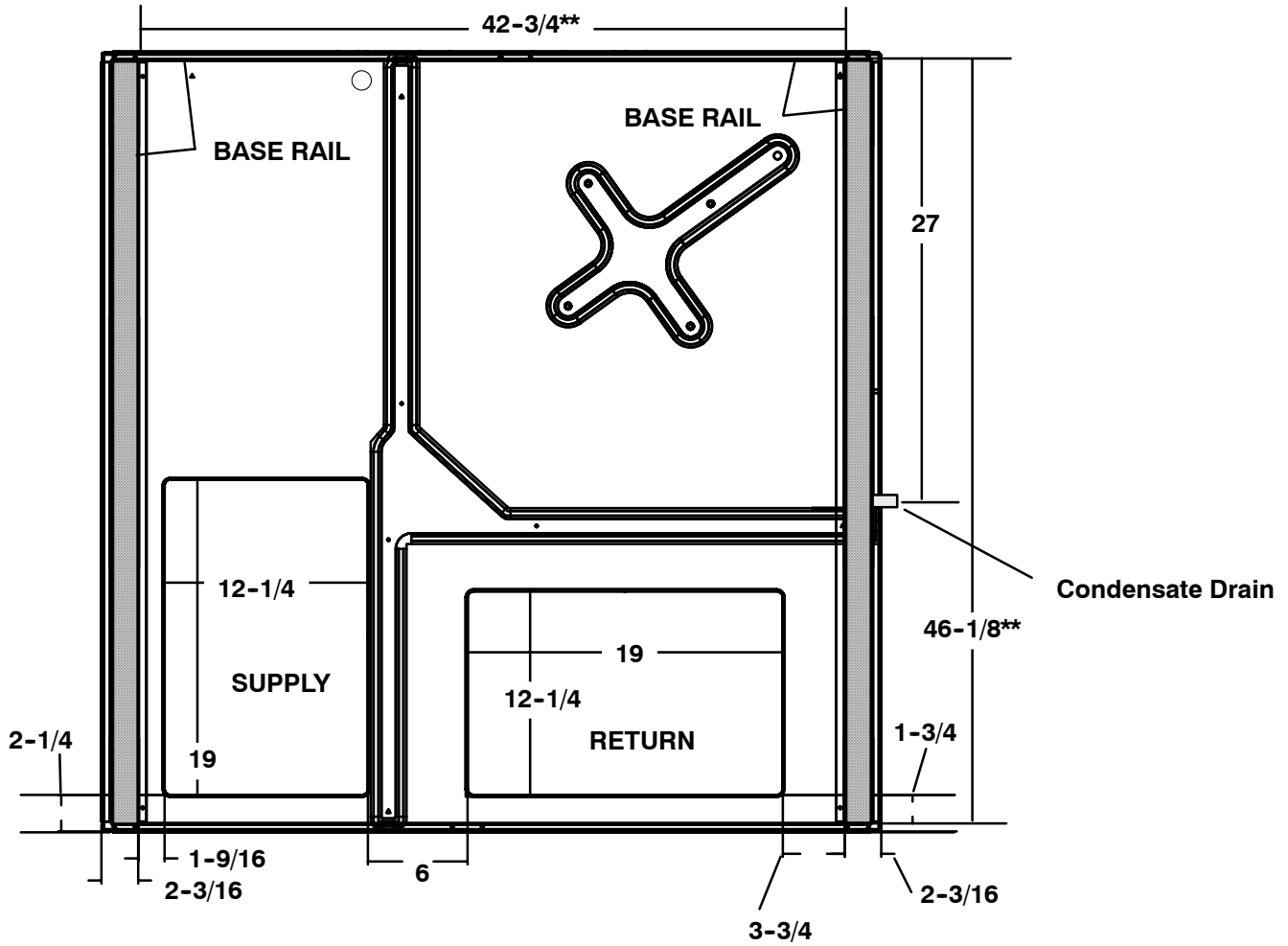
Roof Curbs available in 8", 14" and 24" Heights (K Dimensions)

UNIT DIMENSIONS

2 TO 5 TON



BASE PAN - CHASSIS



UNIT SIZE	A	B	C	D	E	F	G	H	I	J
2 TO 3-1/2 Ton	29-1/2	47-1/2	47-1/2	3	9-1/2	12	14	12	14	4-1/2
4 TO 5 Ton	37-1/2	47-1/2	47-1/2	4	6-1/2	19	19	12	12	4-1/2

** Measured from inside to inside on base rails.

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER	P	H	F	024	K	000
P = Single Package						
HEAT PUMP						
F = STANDARD SERIES			ELECTRICAL CHARACTERISTICS K = 208 / 230-1-60			
			COOLING CAPACITY (NOMINAL BTUH)			
			24 = 2 Ton 30 = 2-1/2 Ton, 36 = 3 ton 42 = 3-1/2 Ton 48 = 4 Ton 60 = 5 Ton			

GUIDE SPECIFICATION

CABINET

The cabinet is made of triple-coated steel, consisting of a Polyester top coat, a urethane primer coat preceded by an oxide pretreatment. One piece weather resistant top. The base rails are 16 gauge steel with fork lift slots and holes provided for lifting shackles. The unit is designed with convertible airflow for either horizontal or downflow applications with conversion accomplished by re-locating two panels. Indoor blower compartment interior cabinet surfaces are insulated with a minimum 1/2" thick, flexible glass insulation, coated on the air side.

COOLING SECTION

The unit is factory charged and operationally ready upon delivery. The unit refrigerant circuit has a high efficiency scroll compressor with internal overload protection, and copper tube / aluminum fin evaporator and condenser coils. The unit is designed for cooling operation to 40° F and will be capable of being wired for field installed economizer type accessories.

COILS

The evaporator and condenser coils are fabricated with aluminum fins mechanically bonded to copper tubing. Both coils are pressure tested prior to assembly into the unit and electronically leak tested after assembly into the unit.

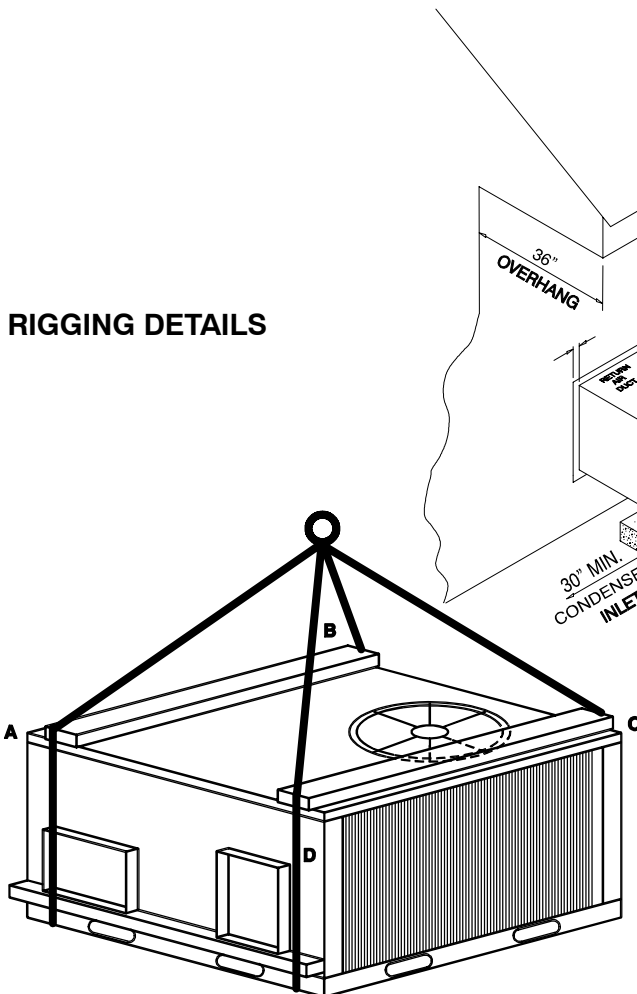
CONDENSER FAN

The unit has a single direct-drive propeller-fan / motor assembly. The assembly is mounted directly to a vertical-discharge grille that is easily removed for service. Motors are 1100 RPM with sleeve or ball bearings and internal overload protection.

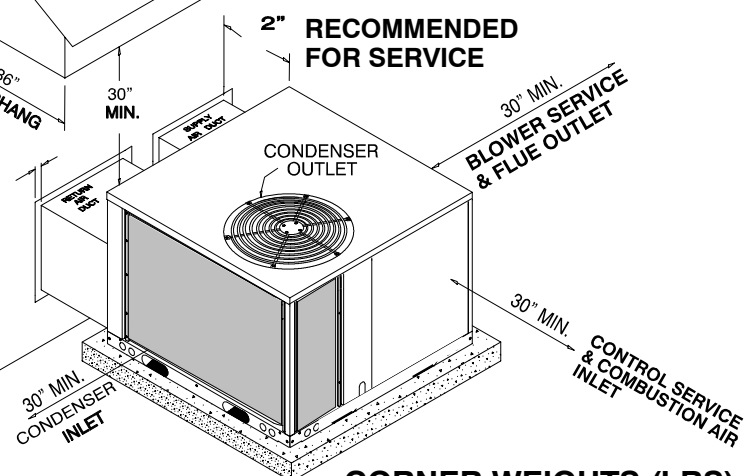
EVAPORATOR BLOWER

All units have a direct-drive evaporator blower motor as a standard. The direct-drive evaporator blower motor has sleeve bearings and internal overload protection.

RIGGING DETAILS



INSTALLATION CLEARANCES



CORNER WEIGHTS (LBS)

UNIT SIZE	A	B	C	D	OPERATING WEIGHT TOTAL
2 TON	68	85	119	68	340
2-1/2 TON	70	88	122	70	350
3 TON	72	90	126	72	360
3-1/2 TON	77	98	131	77	380
4 TON	98	123	171	98	490
5 TON	100	125	175	100	500