

PAF SERIES

THREE PHASE



CONVERTIBLE SINGLE PACKAGE AIR CONDITIONER

3 THRU 5 TON, THREE PHASE

- Efficiency: PAF - **10 SEER.**
- Combination heating and electric cooling, self-contained for year-round comfort. Systems install on rooftop or at ground level. Units are shipped complete in one carton; with only the electric heat requiring mounting at time of installation.

CONSTRUCTION

- Triple-coated steel, consisting of a Polyester top coat, a urethane primer coat preceded 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 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

- The high efficiency compressor has external rubber mounts to help minimize system noise and features an automatic reset current / temperature sensing overload protection system. 3 and 4 ton use reciprocating compressors, 5 ton uses a scroll.

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 supplied with these units.

Electric Heat

- 10 to 20 kw

Transformer

- 65VA
- Resettable circuit breaker.

Economizer

- Factory wired to accept economizer.

WARRANTY

- Standard One (1) 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

513 56 1201 06

5/16/02

UNIT SPECIFICATIONS

MODEL * NUMBER	Electrical Data			Condenser Data								BELS
				Coil			Fan Motor		Fan			
	Voltage Phase - Hz	HACR Breaker / Max. Fuse	Ampacity	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diameter (In.)	HP	Full Load Amps	Size Diameter (In.)	Number Blades / Pitch°	CFM (Max.)	
PAF036H000	208-230-3-60	30 amps.	19.7	11.38	20 / 1	3/8	1/3	1.9	20.3	3 / 27	2800	7.8
PAF036L000	460-3-60	15 amps.	10	11.38	20 / 1	3/8	1/3	.74	20.3	3 / 27	2800	7.8
PAF048H000	208-230-3-60	35 amps.	24.7	10.5	20 / 2	3/8	1/3	1.9	20.3	3 / 27	3000	7.8
PAF048L000	460-3-60	15 amps.	10.4	10.5	20 / 2	3/8	1/3	.74	20.3	3 / 27	3000	7.8
PAF060H000	208-230-3-60	45 amps.	30.6	14.9	20 / 2	3/8	1/3	1.9	20.3	4 / 25	3300	8.0
PAF060L000	460-3-60	20 amps.	13.7	14.9	20 / 2	3/8	1/3	.74	20.3	4 / 25	3300	8.0

MODEL NUMBER	Evaporator Coil								Compressor			Factory Refrigerant Charge R-22 (Oz.)	Ship Weight (Lbs.)
	Coil			Blower H.P. / Type / Speeds	Motor Full Load Amps	Blower			Type	Rated Load Amps	Locked Rotor Amps		
	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diam. (In.)			Type & Size	RPM (Max)	CFM Rated					
PAF036H000	3.67	14 / 3	3/8	1/3 / PSC / 3	3.1	DD10-8A	1100	1250	Recip	11.8	85	87	320
PAF036L000	3.67	14 / 3	3/8	1/2 / PSC / 3	2.0	DD10-8A	1100	1250	Recip	5.8	42	87	320
PAF048H000	5.33	14 / 3	3/8	3/4 / PSC / 3	6.0	DD11-11A	1100	1600	Recip	13.4	91	102	375
PAF048L000	5.33	14 / 3	3/8	1 / PSC / 3	2.1	DD11-11A	1100	1600	Recip	6.1	42	102	375
PAF060H000	5.33	14 / 4	3/8	1 / PSC / 4	6.0	DD11-11A	1100	2000	Scroll	18.2	124	136	380
PAF060L000	5.33	14 / 4	3/8	1 / PSC / 3	2.1	DD11-11A	1100	2000	Scroll	8.7	59.6	136	380

Air Filters - 3 ton use 12 x 25 x 1 (2 ea), 4 & 5 ton use 14 x 25 x 1 (2 ea).

PERFORMANCE DATA: COOLING

MODEL NUMBER	Rated Capacity ¹ BTUH	S / T Ratio	S.E.E.R.	E.E.R. ³	Power Input Watts	Evaporator Rated Airflow (SCFM)	Ext. Static ² Pressure Drop Wet
PAF036	38,000	.75	10.0	8.5	4471	1250	.3
PAF048	45,500	.79	10.0	9.1	5000	1600	.3
PAF060	58,000	.75	10.0	8.7	6629	2000	.3

¹ Rated Capacity @ ARI standard conditions, 95° Amb, 80° DB/67° WB, 230 Volts. For applications at 208 volts deduct 1000 BTU.

² Includes a .08 drop for a filter

³ For reference only

UNIT SIZE	Motor Speed	Air Delivery in CFM at ESP (in. W.C.)				ARI Minimum Static Without Filter	Actual Capacity Rating	ARI Minimum Allowable Airflow - 350 CFM/ton**
		0.20	0.30	0.40	0.50	inches of water	BTU/hr	CFM
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
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

Blower Performance is for Horizontal Configuration without Accessories.

Air delivery against shown external static pressures 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

ELECTRICAL DATA: ELECTRIC HEAT ACCESSORY

HEATER MODEL	Used With	Supply Voltage	Nominal Heating BTUH	Supply Circuit No.	Heater Amps	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device (Amps)
AAH10FBHAA	3 - 5 Ton	208-3-60	24,574	L4-L5-L6	20.0	25.0	30
		240-3-60	32,765	L4-L5-L6	23.1	28.9	30
AAH10FBLAA		480-3-60	32,765	L4-L5-L6	11.5	14.4	15
AAH15FBHAA	3 - 5 Ton	208-3-60	36,860	L4-L5-L6	30.0	37.5	40
		240-3-60	49,147	L4-L5-L6	34.6	43.3	45
AAH15FBLAA		480-3-60	49,147	L4-L5-L6	17.3	21.7	25
AAH20FBHAA	3 - 5 Ton	208-3-60	49,147	L4-L5-L6	40.0	50.0	60
		240-3-60	65,530	L4-L5-L6	46.2	57.8	60
AAH20FBLAA		480-3-60	65,530	L4-L5-L6	23.1	28.9	30

Heater Model	Use With	Supply Voltage	KW Rating	Total Heating BTUH	*Temperature Rise °F @ CFM								
					600	800	1000	1200	1400	1600	1800	2000	2200
AAH10	3 - 5 Ton	240-3-60	9.6	32,765	50.6	37.9	30.3	25.3	21.7	19.0	16.9	15.2	13.8
		208-3-60	7.2	24,574	37.9	28.4	22.8	19.0	16.3	14.2	12.6	11.4	10.3
AAH15	3 - 5 Ton	240-3-60	14.4	49,147	---	56.9	45.5	37.9	32.5	28.4	25.3	22.8	20.7
		208-3-60	10.8	36,860	56.9	42.7	34.1	28.4	24.4	21.3	19.0	17.1	15.5
AAH20	3 - 5 Ton	240-3-60	19.2	65,530	---	---	---	50.6	43.3	37.9	33.7	30.3	27.6
		208-3-60	14.4	49,147	---	56.9	45.5	37.9	32.5	28.4	25.3	22.8	20.7

EXPANDED PERFORMANCE DATA (COOLING) - 3 TON (GROSS DATA)

Airflow IDB* CFM		Outdoor Ambient Temperature - Degrees F. Dry Bulb																								
		65				75				85				95				105				115				
		Entering Indoor Temperature - Degrees F. Wet Bulb																								
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	
70	1344	MBh	39.7	41.1	45.1	-	38.8	40.2	44.0	-	37.8	39.2	43.0	-	36.9	38.3	41.9	-	35.1	36.4	39.8	-	32.5	33.7	36.9	-
		S/T	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.86	0.72	0.50	-	0.86	0.72	0.50	-
		KW	3.48	3.55	3.65	-	3.73	3.81	3.92	-	3.95	4.03	4.16	-	4.15	4.23	4.36	-	4.31	4.40	4.54	-	4.45	4.55	4.69	-
	1200	MBh	38.5	39.9	43.8	-	37.6	39.0	42.7	-	36.7	38.1	41.7	-	35.8	37.1	40.7	-	34.1	35.3	38.7	-	31.5	32.7	35.8	-
		S/T	0.72	0.60	0.42	-	0.74	0.62	0.43	-	0.76	0.64	0.44	-	0.79	0.66	0.46	-	0.82	0.68	0.47	-	0.82	0.69	0.48	-
		KW	3.46	3.52	3.63	-	3.70	3.78	3.89	-	3.92	4.00	4.12	-	4.11	4.20	4.33	-	4.28	4.37	4.50	-	4.42	4.51	4.66	-
1056	MBh	36.6	37.9	41.6	-	35.8	37.1	40.6	-	34.9	36.2	39.6	-	34.1	35.3	38.7	-	32.3	33.5	36.7	-	30.0	31.1	34.0	-	
	S/T	0.69	0.57	0.40	-	0.71	0.60	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.79	0.66	0.46	-	
	KW	3.40	3.47	3.57	-	3.65	3.72	3.83	-	3.86	3.94	4.06	-	4.05	4.13	4.26	-	4.21	4.30	4.43	-	4.35	4.44	4.58	-	
75	1344	MBh	40.4	41.6	45.0	48.3	39.4	40.6	43.9	47.2	38.5	39.6	42.9	46.0	37.5	38.7	41.8	44.9	35.7	36.7	39.7	42.7	33.0	34.0	36.8	39.5
		S/T	0.86	0.77	0.58	0.37	0.89	0.79	0.60	0.39	0.91	0.81	0.62	0.40	0.94	0.84	0.64	0.41	0.97	0.87	0.66	0.42	0.98	0.88	0.67	0.43
		KW	3.51	3.58	3.68	3.79	3.76	3.84	3.95	4.07	3.98	4.06	4.19	4.32	4.18	4.27	4.40	4.54	4.35	4.44	4.58	4.73	4.49	4.59	4.73	4.89
	1200	MBh	39.2	40.3	43.7	46.9	38.3	39.4	42.7	45.8	37.4	38.5	41.6	44.7	36.5	37.5	40.6	43.6	34.6	35.7	38.6	41.4	32.1	33.0	35.7	38.4
		S/T	0.82	0.73	0.55	0.36	0.85	0.76	0.57	0.37	0.87	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.93	0.83	0.63	0.40	0.94	0.84	0.63	0.41
		KW	3.48	3.55	3.65	3.76	3.73	3.81	3.92	4.04	3.95	4.03	4.16	4.29	4.15	4.23	4.37	4.50	4.31	4.40	4.54	4.69	4.46	4.55	4.69	4.85
1056	MBh	37.2	38.3	41.5	44.5	36.4	37.4	40.5	43.5	35.5	36.5	39.6	42.5	34.6	35.7	38.6	41.4	32.9	33.9	36.7	39.3	30.5	31.4	34.0	36.4	
	S/T	0.78	0.70	0.53	0.34	0.81	0.73	0.55	0.35	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.89	0.80	0.60	0.39	0.90	0.80	0.61	0.39	
	KW	3.43	3.50	3.60	3.71	3.67	3.75	3.86	3.98	3.89	3.97	4.09	4.22	4.08	4.17	4.30	4.43	4.24	4.33	4.47	4.61	4.38	4.48	4.62	4.77	
80	1344	MBh	41.1	42.0	44.8	47.9	40.1	41.0	43.8	46.8	39.2	40.0	42.8	45.7	38.2	39.0	41.7	44.6	36.3	37.1	39.6	42.4	33.6	34.4	36.7	39.2
		S/T	0.94	0.88	0.72	0.54	1.00	0.91	0.74	0.56	1.00	0.94	0.76	0.57	1.00	0.97	0.79	0.59	1.00	1.00	0.82	0.61	1.00	1.00	0.82	0.62
		KW	3.53	3.60	3.71	3.82	3.79	3.87	3.98	4.11	4.01	4.10	4.22	4.36	4.21	4.30	4.44	4.58	4.38	4.47	4.62	4.76	4.53	4.62	4.77	4.93
	1200	MBh	39.9	40.8	43.5	46.5	39.0	39.8	42.5	45.5	38.0	38.9	41.5	44.4	37.1	37.9	40.5	43.3	35.2	36.0	38.5	41.1	32.6	33.4	35.6	38.1
		S/T	0.90	0.84	0.68	0.51	0.93	0.87	0.71	0.53	0.95	0.89	0.73	0.54	0.98	0.92	0.75	0.56	1.00	0.96	0.78	0.58	1.00	0.96	0.78	0.59
		KW	3.51	3.58	3.68	3.79	3.76	3.84	3.95	4.07	3.98	4.06	4.19	4.32	4.18	4.27	4.40	4.54	4.35	4.44	4.58	4.73	4.49	4.59	4.73	4.89
1056	MBh	37.9	38.7	41.4	44.2	37.0	37.8	40.4	43.2	36.1	36.9	39.4	42.2	35.2	36.0	38.5	41.1	33.5	34.2	36.6	39.1	31.0	31.7	33.9	36.2	
	S/T	0.86	0.80	0.65	0.49	0.89	0.83	0.68	0.51	0.91	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.98	0.92	0.75	0.56	0.99	0.92	0.75	0.56	
	KW	3.46	3.52	3.63	3.74	3.70	3.78	3.89	4.01	3.92	4.00	4.12	4.25	4.11	4.20	4.33	4.47	4.28	4.37	4.50	4.65	4.42	4.51	4.66	4.81	
85	1344	MBh	41.8	42.6	44.6	47.6	40.8	41.6	43.6	46.5	39.9	40.6	42.5	45.4	38.9	39.6	41.5	44.3	36.9	37.6	39.4	42.1	34.2	34.9	36.5	39.0
		S/T	0.98	0.95	0.86	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.76	1.00	1.00	0.98	0.79	1.00	1.00	0.98	0.80
		KW	3.56	3.63	3.74	3.85	3.82	3.90	4.01	4.14	4.04	4.13	4.26	4.39	4.25	4.33	4.47	4.61	4.42	4.51	4.65	4.80	4.56	4.66	4.81	4.97
	1200	MBh	40.6	41.4	43.3	46.2	39.6	40.4	42.3	45.1	38.7	39.4	41.3	44.1	37.7	38.5	40.3	43.0	35.9	36.6	38.3	40.8	33.2	33.9	35.5	37.8
		S/T	0.94	0.91	0.82	0.66	0.97	0.94	0.85	0.69	1.00	0.96	0.87	0.71	1.00	0.99	0.90	0.73	1.00	1.00	0.93	0.76	1.00	1.00	0.94	0.76
		KW	3.53	3.60	3.71	3.82	3.79	3.87	3.98	4.11	4.01	4.10	4.22	4.36	4.21	4.30	4.44	4.58	4.38	4.47	4.62	4.76	4.53	4.62	4.77	4.93
1056	MBh	38.5	39.3	41.2	43.9	37.7	38.4	40.2	42.9	36.8	37.5	39.2	41.9	35.9	36.6	38.3	40.8	34.1	34.7	36.4	38.8	31.6	32.2	33.7	35.9	
	S/T	0.90	0.87	0.78	0.64	0.93	0.90	0.81	0.66	0.96	0.92	0.83	0.68	0.99	0.95	0.86	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.90	0.73	
	KW	3.48	3.55	3.65	3.76	3.73	3.81	3.92	4.04	3.95	4.03	4.16	4.29	4.15	4.23	4.36	4.50	4.31	4.40	4.54	4.69	4.45	4.55	4.69	4.85	

* Entering Indoor Temperature - Degrees F. Dry Bulb 40.5 Standard 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
3 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. 3 ton units will have 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	3 Ton
Fully Modulating Horizontal	AHE02FB0A	4 to 5 Ton
Fully Modulating Downflow	AEM01FB0A	3 Ton
Fully Modulating Downflow	AEM03FB0A	4 Ton
3 Position Horizontal	AHP01FB0A	3 Ton
3 Position Horizontal	AHP02FB0A	4 to 5 Ton
3 Position Downflow	AEP01FB0A	3 Ton
3 Position Downflow	AEP03FB0A	4 Ton

FRESH AIR DAMPERS

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

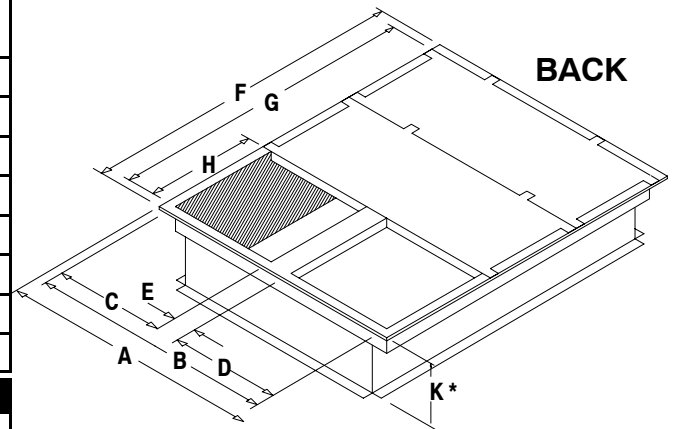
Filters not included in kit, small chassis uses 12 x 25 x 1 (2 ea), large chassis uses 14 x 25 x 1 (2 ea)

HAIL GUARD

Description	Mainline Model Number	Used on
Hail Guard	AGH01FB0A	3 Ton
	AGH02FB0A	4 to 5 Ton

ACCESSORIES: LOW AMBIENT CONTROL

Model Number	Kit Number	Used on
ALA12CU0A	1085493	ALL



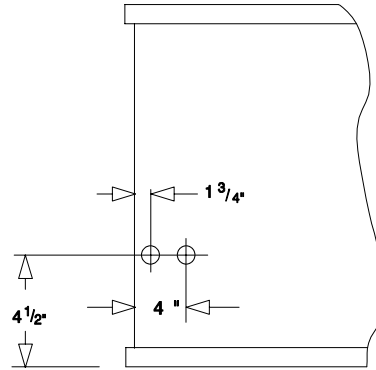
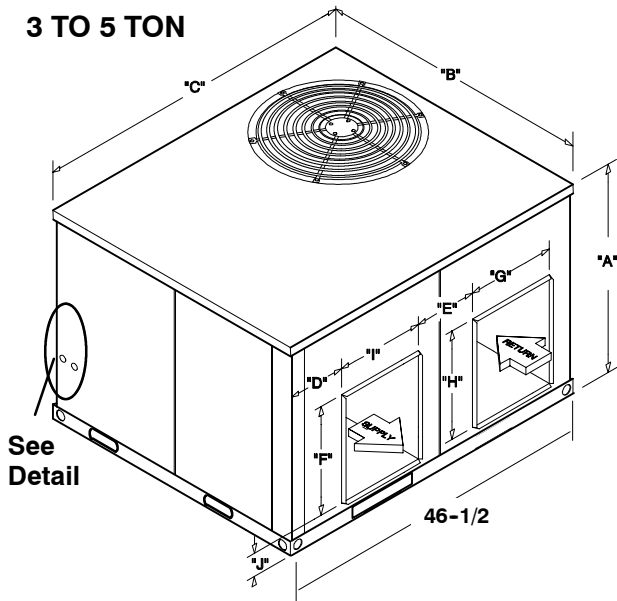
Curb Dimensions

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

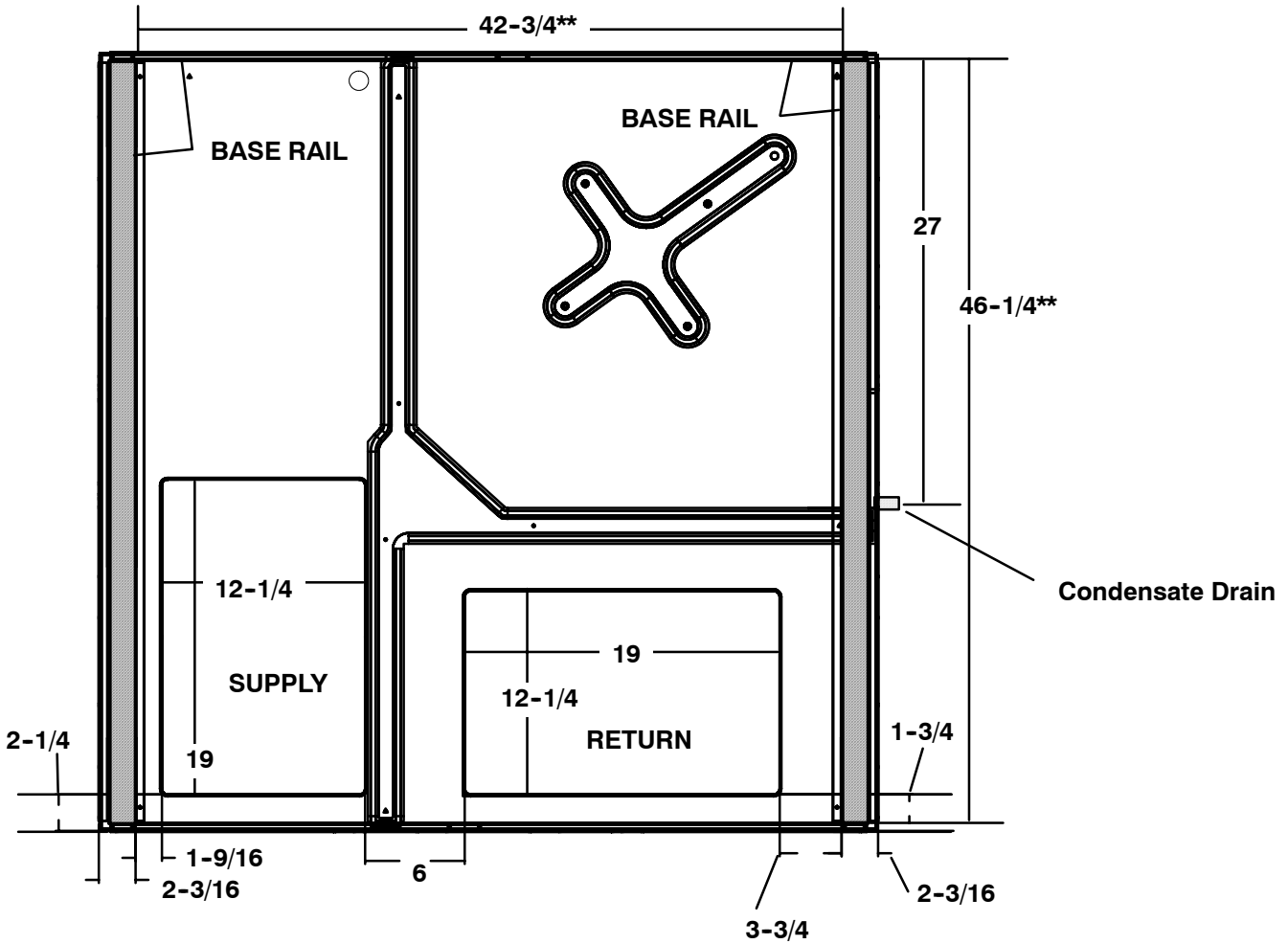
UNIT DIMENSIONS

3 TO 5 TON

All Dimensions In Inches



BASE PAN - CHASSIS



UNIT SIZE	A	B	C	D	E	F	G	H	I	J
3 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	A	F	036	H	000	
P = Single Package						ELECTRICAL CHARACTERISTICS	
Air Conditioner						H = 208/230 - 3 - 60, L = 460 - 3 - 60 S = 575 - 3 - 60	
F = STANDARD SERIES						COOLING CAPACITY (NOMINAL BTUH)	
						36 = 3 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 fully reciprocating compressor (5 ton has 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.

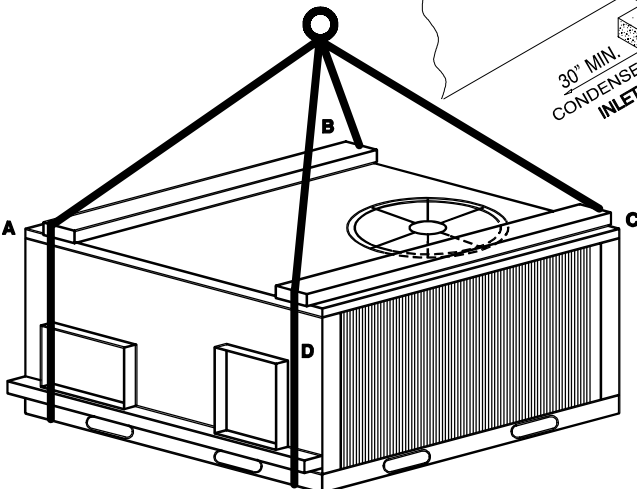
CONDENSER FAN

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.

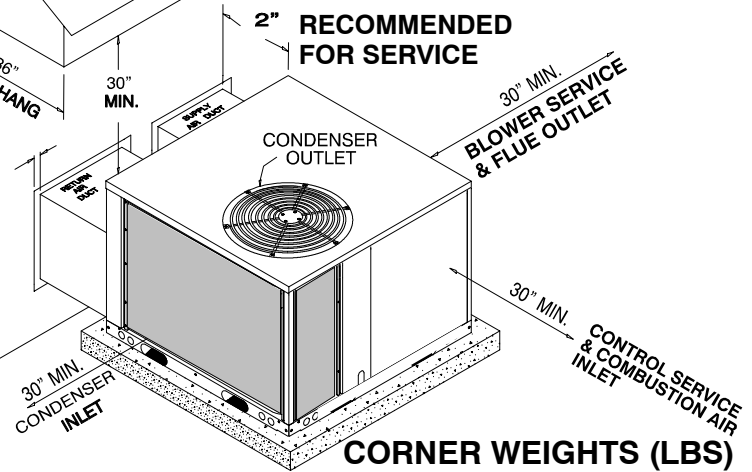
EVAPORATOR BLOWER

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
3 TON	72	90	126	72	360
4 TON	98	123	171	98	490
5 TON	100	125	175	100	500