

#### CONVERTIBLE SINGLE PACKAGE AIR CONDITIONER

##### 3 THRU 5 TON, THREE PHASE

- Efficiency: APFM - **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 five (1) year limited warranty on parts.
- Five (5) year limited warranty on the compressor.



Rated in accordance  
with ARI Standard 210.



Listed By  
Underwriters'  
Laboratories

## 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.)	
APFM36H000	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
APFM36L000	460-3-60	15 amps.	10	11.38	20 / 1	3/8	1/3	.74	20.3	3 / 27	2800	7.8
APFM48H000	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
APFM48L000	460-3-60	15 amps.	10.4	10.5	20 / 2	3/8	1/3	.74	20.3	3 / 27	3000	7.8
APFM60H000	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
APFM60L000	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	Blower			Type	Rated Load Amps	Locked Rotor Amps		
	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diam. (In.)		Full Load Amps	Type & Size	RPM (Max)	CFM Rated					
APFM36H000	3.67	14 / 3	3/8	1/3 / PSC / 3	3.1	DD10-8A	1100	1250	Recip	11.8	85	87	320
APFM36L000	3.67	14 / 3	3/8	1/2 / PSC / 3	2.0	DD10-8A	1100	1250	Recip	5.8	42	87	320
APFM48H000	5.33	14 / 3	3/8	3/4 / PSC / 3	6.0	DD11-11A	1100	1600	Recip	13.4	91	102	375
APFM48L000	5.33	14 / 3	3/8	1 / PSC / 3	2.1	DD11-11A	1100	1600	Recip	6.1	42	102	375
APFM60H000	5.33	14 / 4	3/8	1 / PSC / 4	6.0	DD11-11A	1100	2000	Scroll	18.2	124	136	380
APFM60L000	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 <sup>1</sup> BTUH	S / T Ratio	S.E.E.R.	E.E.R. <sup>3</sup>	Power Input Watts	Evaporator Rated Airflow (SCFM)	Ext. Static <sup>2</sup> Pressure Drop Wet
APFM36	38,000	.75	10.0	8.5	4471	1250	.3
APFM48	45,500	.79	10.0	9.1	5000	1600	.3
APFM60	58,000	.75	10.0	8.7	6629	2000	.3

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

<sup>2</sup> Includes a .08 drop for a filter

<sup>3</sup> For reference only

## Blower Performance Data in Horizontal Configuration

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





## 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

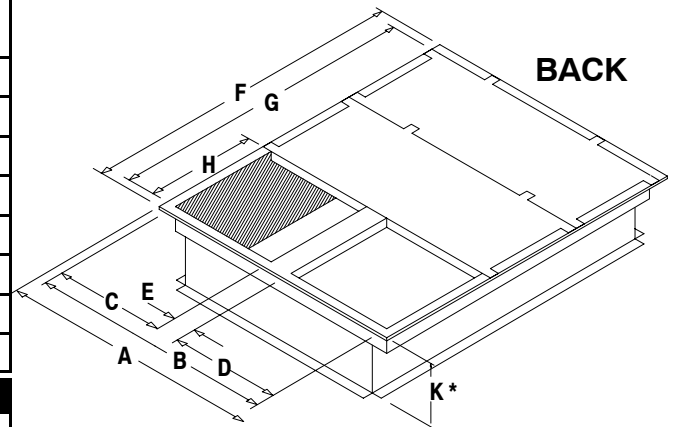
Filters not included in kit, small chassis uses 12 x 25 x 1 (2 ea), large chassis uses 14 x 25 x 1 (2 ea)

### 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



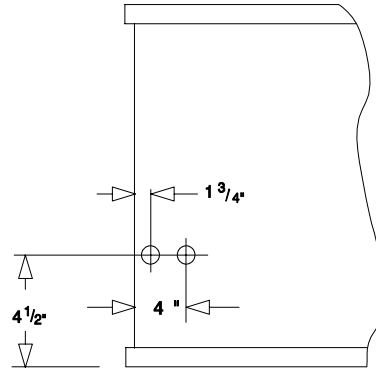
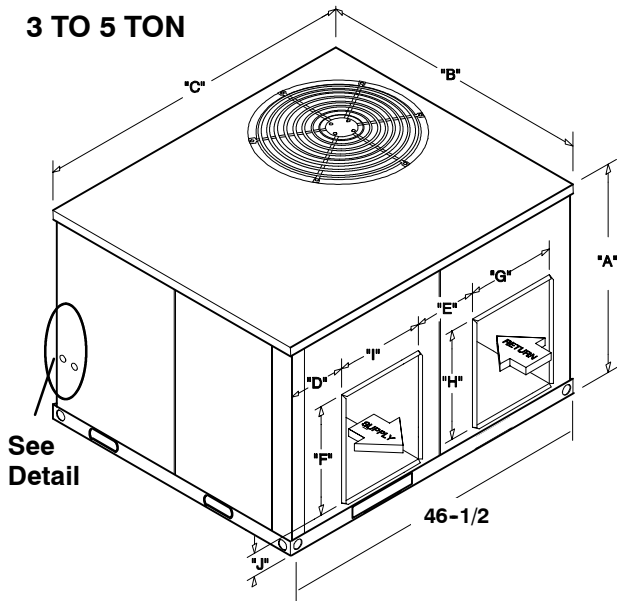
**Curb Dimensions**

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

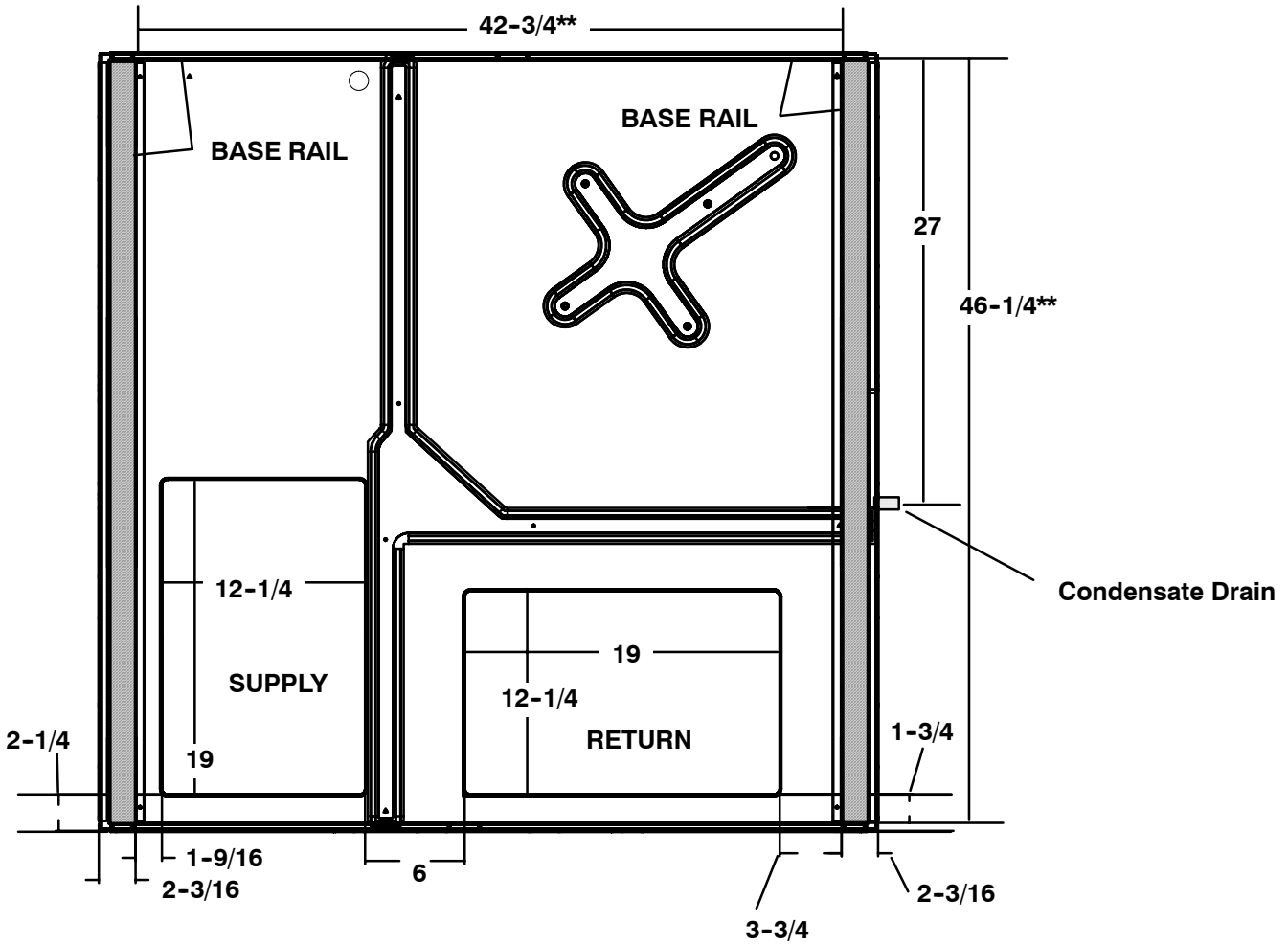
**UNIT DIMENSIONS**

**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	A	P	F	M24	H	000
AIR CONDITIONER						
P = Single Package						
F = STANDARD SERIES				ELECTRICAL CHARACTERISTICS		
				H = 208 / 230-3-60, L = 460-3-60		
				COOLING CAPACITY (NOMINAL BTUH) M used on 5 ton and below.		
				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.

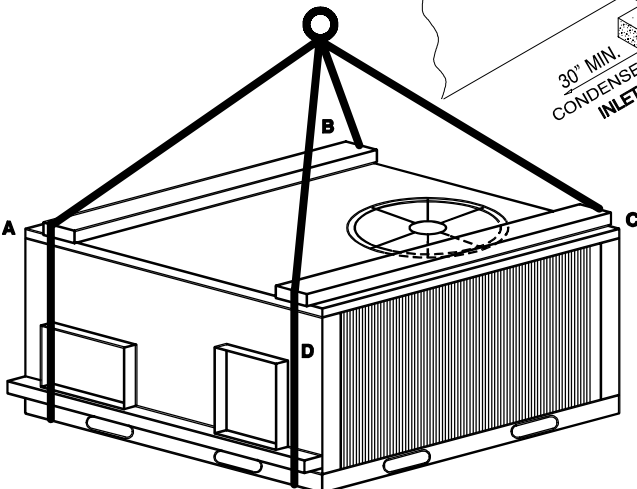
### CONDENSER FAN

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.

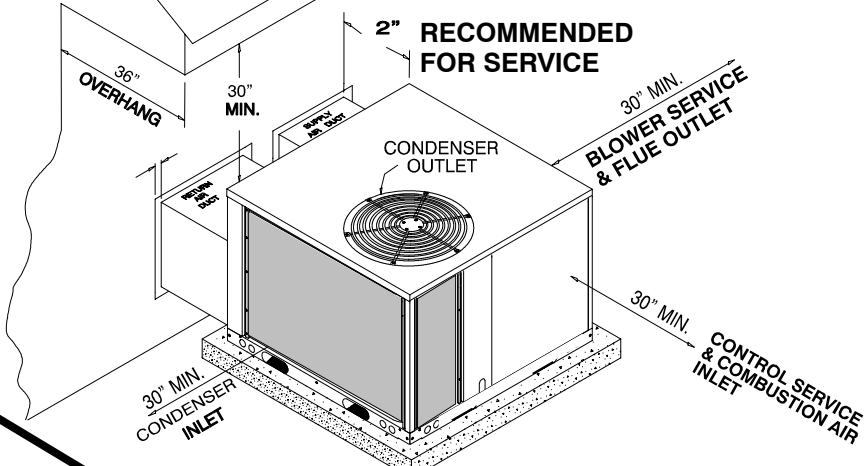
### EVAPORATOR BLOWER

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