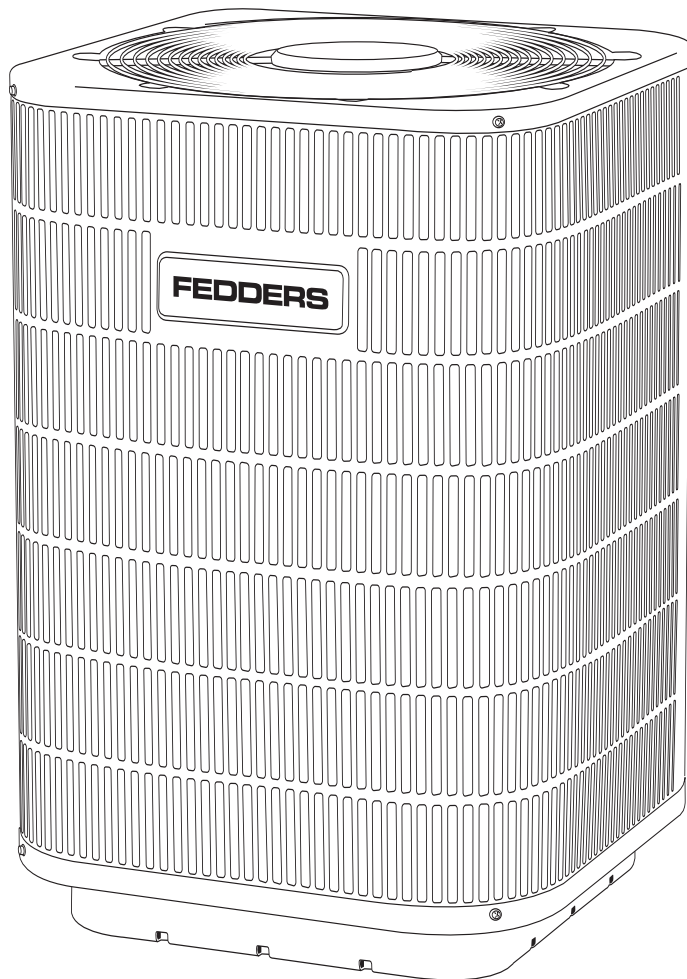


Split System Air Conditioner

1½ thru 5 Tons

208/230 Volt, 1-Phase, 60 Hz

**Performance:**

Efficiency rating of 13 SEER and 14 SEER

Cooling capacities from 1½ to 5 tons

Refrigerant Circuit:

Factory installed liquid line filter drier

Long life copper tubes, aluminum fins

State-of-the-art compressors

Large, wrap-around coil surface

Quality Built:

Galvanized steel exterior cabinet with 1,000-hour salt spray, powder-coated finish

Powder-coated fan guard

Full louvered panel to protect coil

Formed base with 2½" ground clearance

Limited 5-year warranty on parts

Easy To Install:

Factory-charged with R-22 refrigerant

Only three screws to access electrical controls

Easy access to service valves



Rated in Accordance with ARI Standard 210.
Certification Applies Only When Used with
Proper Components as Listed with ARI.
Additional rating information can be found
at www.aridirectory.org



Model Number	Size (tons)	Nominal BTUH	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions H x W x D (inches)	Min. Mounting Pad Size (inches)	Ship / Operating Weight (lbs)
C18ABD1VF	1 ½	18,000	9.1	15	26 ½ X 21 ½ X 21 ½	24 x 24	144 / 138
C24ABD1VF	2	24,000	11.5	15	26 ½ X 21 ½ X 21 ½	24 x 24	142 / 136
C30ABD1VF	2 ½	30,000	14.3	20	32 ½ X 21 ½ X 21 ½	24 x 24	169 / 163
C36ACD1VF	3	36,000	18.7	30	32 ½ X 29 ½ X 29 ½	32 x 32	189 / 180
C42ACD1VF	3 ½	42,000	20.3	35	32 ½ X 29 ½ X 29 ½	32 x 32	213 / 204
C48ACD1VF	4	48,000	23.1	40	32 ½ X 29 ½ X 29 ½	32 x 32	217 / 208
C60ACD1VF	5	60,000	30.1	50	39 X 29 ½ X 29 ½	32 x 32	230 / 220

Product Specifications

PHYSICAL DATA							
MODEL SIZE	18	24	30	36	42	48	60
PERFORMANCE DATA							
NOMINAL CAPACITY (BTUH)	18,000	24,000	30,000	36,000	42,000	48,000	60,000
FAN DATA							
FAN MOTOR TYPE	PSC	PSC	PSC	PSC	PSC	PSC	PSC
HP	1/6	1/6	1/5	1/3	1/3	1/3	1/3
DIAMETER	18"	18"	18"	22"	22"	22"	24"
BLADE	3	3	3	3	3	3	3
RPM	1,050	1,050	1,050	1,050	1,050	1,050	950
CFM	1,800	1,800	1,800	3,400	3,400	3,400	4,000
OUTDOOR COIL							
TYPE	Enhanced Aluminum Plate Fin / Rifled Copper Tube						
COIL FACE AREA (ft ²)	9.5	9.5	12.2	18.2	18.2	18.2	22.2
O.D.	7mm	7mm	7mm	7mm	7mm	7mm	7mm
FPI / ROWS	18-2	18-2	18-2	18-1	18-2	18-2	18-3
ELECTRICAL DATA (208/230 – 1-60, VOLTAGE RANGE 197V - 253V)							
MINIMUM CIRCUIT AMPACITY - MCA (amps) ¹	9.1	11.5	14.3	18.7	20.3	23.1	30.1
MAXIMUM OVERCURRENT PROTECTIVE DEVICE - MOCP (amps) ²	15	15	20	30	35	40	50
COMPRESSOR RLA (Rated Load Amps)	6.5	8.4	10.3	13.5	14.8	17	22.1
COMPRESSOR LRA (Locked Rotor Amps)	48	39	61	78	78	86	137
FAN MOTOR FLA (Full Load Amps)	1.0	1.0	1.4	1.8	1.8	1.8	1.9
REFRIGERANT CONNECTIONS							
LIQUID LINE CONNECTION SIZE (In. OD)	3/8	3/8	3/8	3/8	3/8	3/8	1/2
SUCTION LINE CONNECTION SIZE (In. OD)	3/4	3/4	7/8	7/8	7/8	7/8	1 1/8
RECOMMENDED LINE SET LIQUID TUBE DIAMETER (In. OD)	3/8	3/8	3/8	3/8	3/8	3/8	1/2
RECOMMENDED LINE SET SUCTION DIAMETER (In. OD)	3/4	3/4	7/8	7/8	7/8	7/8	1 1/8
FACTORY CHARGE R-22 - OZ.	72	106	91	87	128	150	204

NOTE: Control circuit is 24V on all units and requires external power source. Copper wire must be used from service disconnect to unit. ALL motors/compressors contain internal overload protection.

1. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.
2. Time delay fuses may be used in place of HACR circuit breaker.

Product Specifications

ARI CERTIFIED COMBINATION PERFORMANCE RATINGS							
UNIT SIZE	Outdoor Unit	Indoor Unit	Factory Supplied Enhancement	Cooling Capacity (BTUH)		SEER ¹	EER
				Total	Sensible		
18	C18ABD1VF	AC1A024A	TXV	17,500	12,750	13	11.3
		AFPB24A1	TXV/TDR	17,500	12,750	13	11.3
		AC1A036 + FV80A070-4	TXV/TDR	18,000	13,500	14	12.0
24	C24ABD1VF	AC1A024A	TXV	21,600	15,750	13	11.3
		AFPB24A1	TXV/TDR	21,600	15,750	13	11.3
		AC1A042A + FV80A070-4	TXV/TDR	21,600	17,000	14	12.2
		AC1A042A + FV80A085-4	TXV/TDR	21,600	17,000	14	12.2
30	C30ABD1VF	AC1A030A	TXV	26,600	19,500	13	11.4
		AC1A036A	TXV	26,600	19,500	13	11.4
		AFPB36A1	TXV/TDR	26,600	19,500	13	11.4
		AC1A060A + FV80A085-4	TXV/TDR	28,000	21,000	14	12.0
		AC1A060A + FV80A115-5	TXV/TDR	28,000	21,000	14	12.0
36	C36ACD1VF	AC1A036A	TXV	34,000	24,750	13	11.4
		AFPB36A1	TXV/TDR	34,000	24,750	13	11.4
		AC1A060A + FV80A085-4	TXV/TDR	35,000	25,500	14	11.8
		AC1A060A + FV80A115-4	TXV/TDR	35,000	25,500	14	11.8
42	C42ACD1VF	AC1A042A	TXV	40,000	29,250	13	11.5
		AFPC48A1	TXV/TDR	40,000	29,250	13	11.5
		AC1A060A + FV80A115-5	TXV/TDR	41,500	31,000	14	12.0
48	C48ACD1VF	AC1A060A	TXV	44,000	32,250	13	11.5
		AFPC48A1	TXV/TDR	44,000	32,250	13	11.5
60	C60ACD1VF	AC1A060A	TXV	53,000	38,750	13	11.5
		AFPC60A1	TXV/TDR	53,000	38,750	13	11.5

1. TDR required to obtain SEER rating

Notes:

- a. Fedders coils include factory installed TXV. Fedders gas furnaces and air handlers contain the TDR as standard equipment.
- b. TDR kit available as accessory. Part Number TDR001A.
- c. Tested outdoor and indoor combinations have been tested in accordance with DOE test procedures for central air conditioners.
- d. Above ratings based on 80°F (27°C) DB and 67°F (19°C) WB indoor entering air temperature and 95°F (35°C) DB air entering outdoor unit.

- EER - Energy Efficiency Ratio
- SEER - Seasonal Energy Efficiency Ratio
- TDR - Time-Delay Relay
- TXV - Thermostatic Expansion Valve

Product Specifications

LINE SET LENGTH AND SIZE								
BTUH	SUCTION LINE SIZES				LIQUID LINE SIZES			
	15 ft.	25 ft.	50 ft.	75 ft.	15 ft.	25 ft.	50 ft.	75 ft.
18	3/4"	3/4"	3/4"	3/4"	3/8"	3/8"	3/8"	3/8"
24	3/4"	3/4"	3/4"	3/4"	3/8"	3/8"	3/8"	3/8"
30	7/8"	7/8"	7/8"	7/8"	3/8"	3/8"	3/8"	3/8"
36	7/8"	7/8"	7/8"	7/8"	3/8"	3/8"	3/8"	3/8"
42	7/8"	7/8"	7/8"	1 1/8"	3/8"	3/8"	3/8"	3/8"
48	7/8"	7/8"	7/8"	1 1/8"	3/8"	3/8"	3/8"	3/8"
60	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1/2"	1/2"	1/2"	1/2"

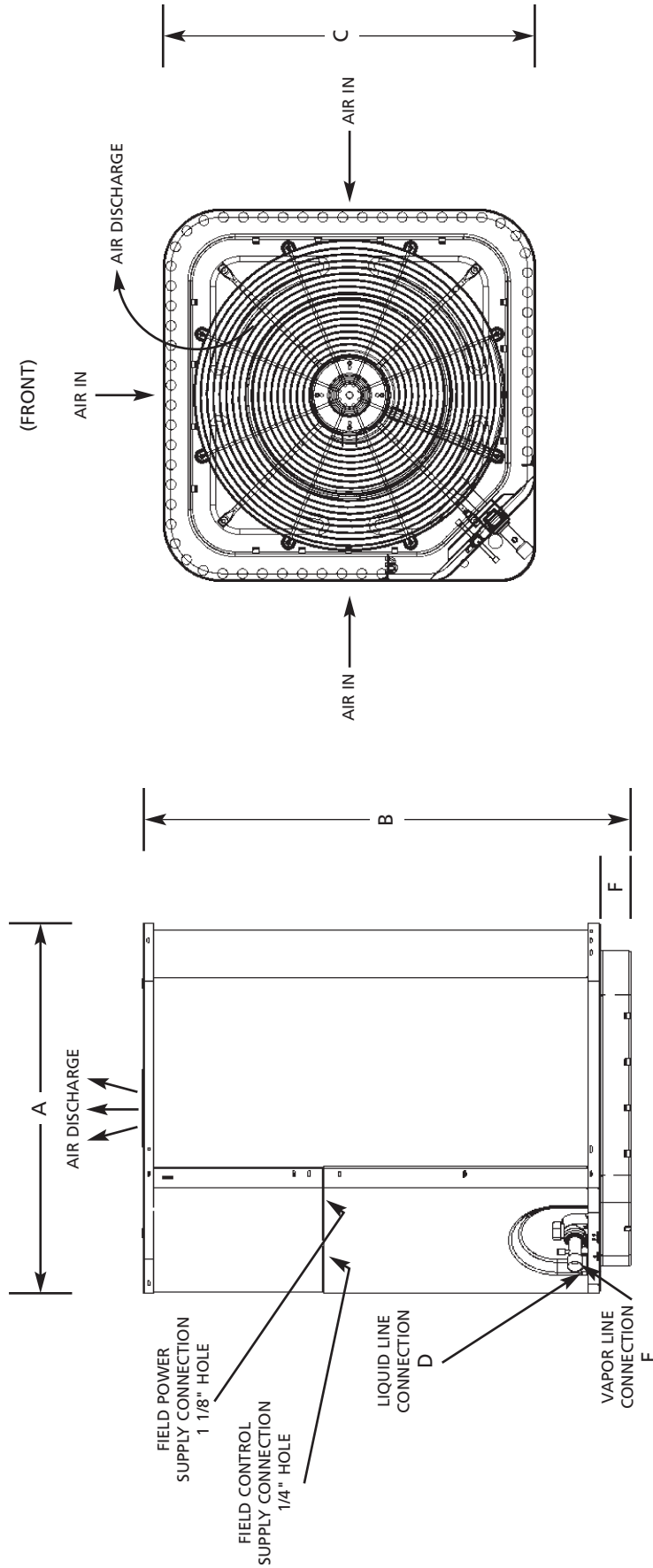
Recommended liquid and suction tube line size is for standard installations. The unit charge is correct for the outdoor unit, matched indoor coil and 15 feet of refrigerant tubing. For tubing length other than 15 feet, add or subtract the amount of refrigerant, using the difference in length multiplied by the per foot value. These recommendations do not apply to Long Line Length Installations that exceed 75 feet or where there is more than 40 feet vertical separation between indoor and outdoor units. (Lengths in excess of 75 feet or more than 40 feet vertical separation are not recommended.)
Note: See unit installation instructions for proper installation.

EXTENDED COOLING CAPACITIES													
OUTDOOR UNIT MODEL	INDOOR UNIT	RATINGS AT STANDARD CONDITIONS				CONDENSER ENTERING AIR TEMPERATURE DEGREES (F)							
		BTUH	SEER*	CFM		80	85	90	95	100	105	110	115
C18ABD1VF	AC1A024A	17,500	13	650	TOTAL	19,100	18,550	18,025	17,500	16,800	16,150	15,550	14,850
					SENSIBLE	13,900	13,550	13,150	12,750	12,250	11,800	11,300	10,850
	AC1A036A + FV80A070-4	18,000	14	640	TOTAL	19,700	19,100	18,600	18,000	17,400	16,900	16,300	15,800
					SENSIBLE	14,300	14,000	13,800	13,500	13,200	12,900	12,500	12,100
C24ABD1VF	AC1A024A	21,600	13	810	TOTAL	23,700	22,900	22,150	21,600	20,700	19,950	19,150	18,400
					SENSIBLE	17,300	16,750	16,200	15,750	15,100	14,550	14,000	13,500
	AC1A042A + FV80A070-4 / AC1A042A + FV80A085-4	21,600	14	810	TOTAL	24,000	23,200	22,400	21,600	20,600	19,800	19,000	18,200
					SENSIBLE	17,900	17,600	17,300	17,000	16,600	16,300	16,000	15,700
C30ABD1VF	AC1A030A	26,600	13	1,000	TOTAL	29,150	28,300	27,500	26,600	25,650	24,750	23,850	23,000
					SENSIBLE	21,300	20,750	20,100	19,500	18,750	18,100	17,500	16,800
	AC1A060A + FV80A085-4 / AC1A060A + FV80A115-5	28,000	14	1,000	TOTAL	31,000	30,000	29,000	28,000	27,000	26,000	25,000	24,200
					SENSIBLE	22,200	21,800	21,400	21,000	20,600	20,200	19,800	19,400
C36ACD1VF	AC1A036A	34,000	13	1,150	TOTAL	37,000	36,200	35,150	34,000	32,900	31,800	30,700	29,650
					SENSIBLE	27,000	26,450	25,650	24,750	24,000	23,250	22,500	21,650
	AC1A060A + FV80A085-4 / AC1A060A + FV80A115-5	35,000	14	1,150	TOTAL	39,000	37,600	36,400	35,000	34,000	33,000	31,800	30,600
					SENSIBLE	27,200	26,600	26,200	25,500	25,000	24,600	24,200	23,600
C42ACD1VF	AC1A042A	40,000	13	1,350	TOTAL	43,450	42,300	41,150	40,000	38,800	37,650	36,550	35,500
					SENSIBLE	31,750	30,850	30,100	29,250	28,350	27,500	26,700	25,950
C48ACD1VF	AC1A048A	44,000	13	1,550	TOTAL	47,650	46,400	45,250	44,000	42,700	41,550	40,330	39,200
					SENSIBLE	34,750	33,850	33,100	32,250	31,200	30,500	29,400	28,650
C60ACD1VF	AC1A060A	53,000	13	1,750	TOTAL	56,600	55,400	54,150	53,000	51,800	50,600	49,500	48,600
					SENSIBLE	41,250	40,500	39,550	38,750	37,850	36,950	36,150	35,500

*TDR required to obtain SEER rating.

Product Specifications

DIMENSIONS



DIMENSIONS IN INCHES

MODELS	ALL DIMENSIONS						SHIPPING DIMENSIONS H x W x D
	A	B	C	D	E	F	
C18ABD1VF	21 1/2	26 1/2	21 1/2	3/8	3/4	2 1/2	27 x 23 x 23
C24ABD1VF	21 1/2	26 1/2	21 1/2	3/8	3/4	2 1/2	27 x 23 x 23
C30ABD1VF	21 1/2	32 1/2	21 1/2	3/8	7/8	2 1/2	33 x 23 x 23
C36ACD1VF	29 1/2	32 1/2	29 1/2	3/8	7/8	2 1/2	33 x 31 x 31
C42ACD1VF	29 1/2	32 1/2	29 1/2	3/8	7/8	2 1/2	33 x 31 x 31
C48ACD1VF	29 1/2	32 1/2	29 1/2	3/8	7/8	2 1/2	33 x 31 x 31
C60ACD1VF	29 1/2	39	29 1/2	1/2	1 1/8	2 1/2	39 1/2 x 31 x 31

Residential & Light Commercial AC Condensing Units Model Number Identification

