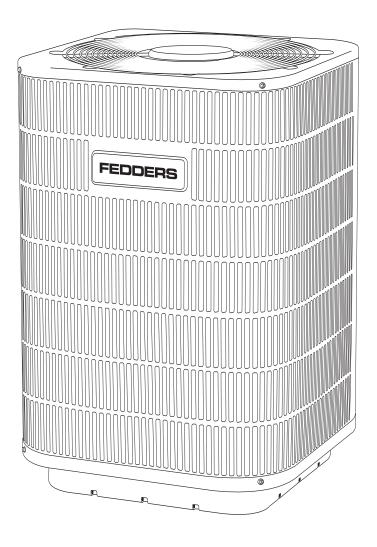
## Split System Air Conditioner

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



210/240 UAC

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

	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
НР	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		Enhance	d Aluminun	n Plate Fin /	/ Rifled Cop	per Tube	
COIL FACE AREA (ft²)	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) <sup>2</sup>	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 <b>FLA</b> (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.

<sup>1.</sup> Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

<sup>2.</sup> Time delay fuses may be used in place of HACR circuit breaker.

		ARI CERTIFIE	D COMBINATION F	PERFORMANCE F	RATINGS		
UNIT			Factory	Cooling Cap	acity (BTUH)		
SIZE	Outdoor Unit	Indoor Unit	Supplied Enhancement	Total	Sensible	SEER <sup>1</sup>	EER
		AC1A024A	TXV	17,500	12,750	13	11.3
18	C18ABD1VF	AFPB24A1	TXV/TDR	17,500	12,750	13	11.3
		AC1A036 + FV80A070-4	TXV/TDR	18,000	13,500	14	12.0
		AC1A024A	TXV	21,600	15,750	13	11.3
24	C24ABD1VF	AFPB24A1	TXV/TDR	21,600	15,750	13	11.3
24	C24ABDTVF	AC1A042A + FV80A070-4	TXV/TDR	21,600	17,000	14	12.2
		AC1A042A + FV80A085-4	TXV/TDR	21,600	17,000	14	12.2
		AC1A030A	TXV	26,600	19,500	13	11.4
		AC1A036A	TXV	26,600	19,500	13	11.4
30	C30ABD1VF	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
		AC1A036A	TXV	34,000	24,750	13	11.4
36	C36ACD1VF	AFPB36A1	TXV/TDR	34,000	24,750	13	11.4
36	CSGACDIVE	AC1A060A + FV80A085-4	TXV/TDR	35,000	25,500	14	11.8
		AC1A060A + FV80A115-4	TXV/TDR	35,000	25,500	14	11.8
		AC1A042A	TXV	40,000	29,250	13	11.5
42	C42ACD1VF	AFPC48A1	TXV/TDR	40,000	29,250	13	11.5
		AC1A060A + FV80A115-5	TXV/TDR	41,500	31,000	14	12.0
48	C49 A CD 1\/F	AC1A060A	TXV	44,000	32,250	13	11.5
48	C48ACD1VF	AFPC48A1	TXV/TDR	44,000	32,250	13	11.5
60	C60ACD1VF	AC1A060A	TXV	53,000	38,750	13	11.5
	COUACDIVE	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

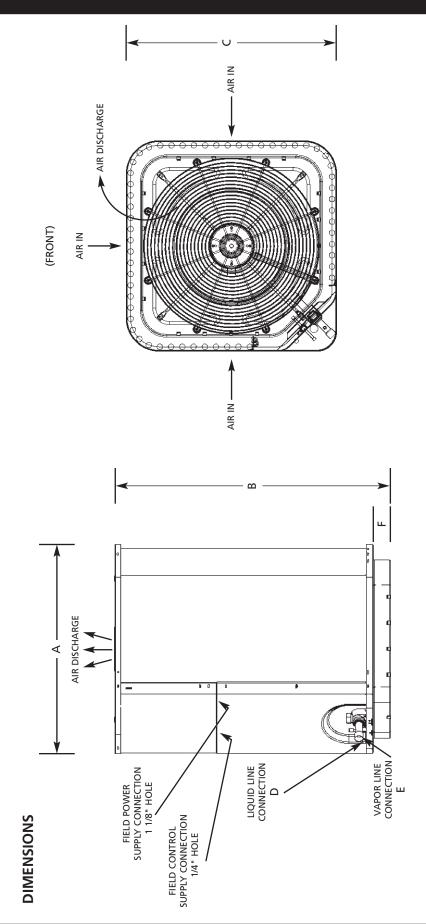
			LINE	SET LENGTH	AND SIZE			
DTIIII		SUCTION	LINE SIZES			LIQUID L	INE SIZES	
BTUH	15 ft.	25 ft.	50 ft.	75 ft.	15 ft.	25 ft.	50 ft.	75 ft.
18	3/4"	3/4"	3/4"	3/4"	3/8"	3/8"	3/8"	3/8"
24	3/4"	3/4"	3/4"	3/4"	3/8"	3/8"	3/8"	3/8"
30	7/8"	7/8"	7/8"	7/8"	3/8"	3/8"	3/8"	3/8"
36	7/8"	7/8"	7/8"	7/8"	3/8"	3/8"	3/8"	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.

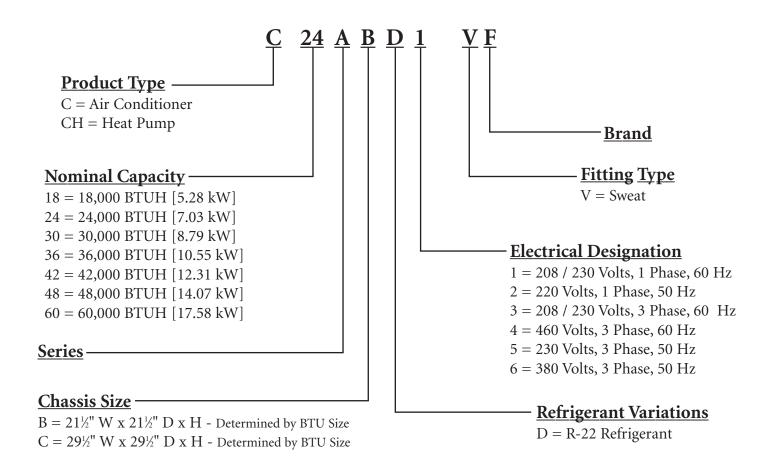
			EXT	TENDED C	OOLING CA	APACITIE	S						
OUTDOOR UNIT MODEL	INDOOR UNIT	l	RATINGS ARD COM	AT IDITIONS		CON	DENSER	ENTERI	NG AIR	TEMPE	RATURE	DEGRE	S (F)
OINIT WIODEL		BTUH	SEER*	CFM		80	85	90	95	100	105	110	115
	AC1A024A	17.500	13	650	TOTAL	19,100	18,550	18,025	17,500	16,800	16,150	15,550	14,850
C18ABD1VF	ACTA024A	17,500	15	650	SENSIBLE	13,900	13,550	13,150	12,750	12,250	11,800	11,300	10,850
CIOADDIVI	AC1A036A + FV80A070-4	18.000	14	640	TOTAL	19,700	19,100	18,600	18,000	17,400	16,900	16,300	15,800
	ACTA030A + 1 V80A070-4	18,000	14	040	SENSIBLE	14,300	14,000	13,800	13,500	13,200	12,900	12,500	12,100
	AC1A024A	21,600	13	810	TOTAL	23,700	22,900	22,150	21,600	20,700	19,950	19,150	18,400
C24ABD1VF	ACTA024A	21,000	13	810	SENSIBLE	17,300	16,750	16,200	15,750	15,100	14,550	14,000	13,500
CZ4ADDIVI	AC1A042A + FV80A070-4 /	21,600	14	810	TOTAL	24,000	23,200	22,400	21,600	20,600	19,800	19,000	18,200
	AC1A042A + FV80A085-4	21,000	14	810	SENSIBLE	17,900	17,600	17,300	17,000	16,600	16,300	16,000	15,700
	AC1A030A	26,600	13	1,000	TOTAL	29,150	28,300	27,500	26,600	25,650	24,750	23,850	23,000
C30ABD1VF	ACIA030A	20,000	13	1,000	SENSIBLE	21,300	20,750	20,100	19,500	18,750	18,100	17,500	16,800
CSUADDIVI	AC1A060A + FV80A085-4 /	28,000	14	1,000	TOTAL	31,000	30,000	29,000	28,000	27,000	26,000	25,000	24,200
	AC1A060A + FV80A115-5	20,000	1-7	1,000	SENSIBLE	22,200	21,800	21,400	21,000	20,600	20,200	19,800	19,400
	AC1A036A	34.000	13	1,150	TOTAL	37,000	36,200	35,150	34,000	32.900	31,800	30,700	29,650
C36ACD1VF	ACIA030A	34,000	15	1,150	SENSIBLE	27,000	26,450	25,650	24,750	24,000	23,250	22,500	21,650
COUACDIVI	AC1A060A + FV80A085-4 /	35.000	14	1,150	TOTAL	39,000	37,600	36,400	35,000	34,000	33,000	31,800	30,600
	AC1A060A + FV80A115-5	33,000	14	1,130	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
C4ZACDIVI	ACIAUTZA	40,000	13	1,550	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
CHOACDIVI	ACIAUTUA	44,000	15	1,330	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
COUACDIVI	ACIAVUA	33,000	13	1,750	SENSIBLE	41,250	40,500	39,550	38,750	37,850	36,950	36,150	35,500

<sup>\*</sup>TDR required to obtain SEER rating.



					<b>JIMENSION</b>	DIMENSIONS IN INCHES	S	
			ALL DIMENSIONS	SNOISN			MINIMIM	SINCISMEMIC DINIGETICS
MODELS	۷	B	U	D	Е	ш	MOUNTING PAD SIZE	H × W × D
C18ABD1VF	21 1/2	2/1 97	21 1/2	3/8	3/4	2 1/2	24 × 24	27 x 23 x 23
C24ABD1VF	21 1/2	2/1 97	21 1/2	3/8	3/4	2 1/2	24 × 24	27 × 23 × 23
C30ABD1VF	21 1/2	32 1/2	21 1/2	3/8	7/8	2 1/2	24 × 24	33 x 23 x 23
C36ACD1VF	29 1/2	32 1/2	29 1/2	3/8	2//8	2 1/2	32 x 32	33 x 31 x 31
C42ACD1VF	29 1/2	32 1/2	29 1/2	3/8	7/8	2 1/2	32 x 32	33 x 31 x 31
C48ACD1VF	29 1/2	32 1/2	29 1/2	3/8	7/8	2 1/2	32 x 32	33 x 31 x 31
C60ACD1VF	29 1/2	39	29 1/2	1/2	1 1/8	2 1/2	32 x 32	39 ½ x 31 x 31

# Residential & Light Commercial AC Condensing Units Model Number Identification



Fedders Corporation 505 Martinsville Rd. Liberty Corner, NJ 07938 (908) 604-8686 Form No. F-C13

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