

# TABULAR DATA SHEET

## Outdoor Split System Air Conditioner 1.5 – 5 Tons

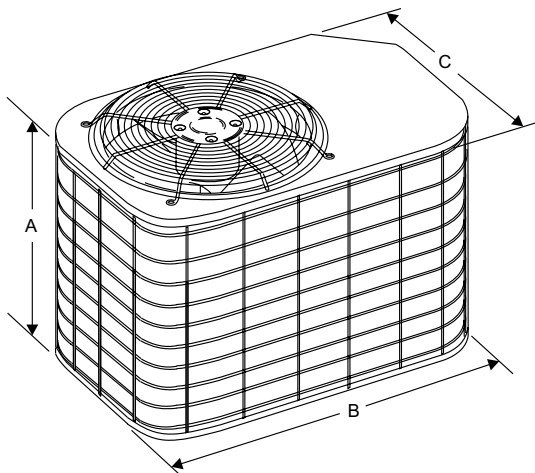
FRCS018\* Thru 060\*  
All 14 SEER – R-22

### Physical and Electrical Data

MODEL	FRCS0181BA	FRCS0241BH	FRCS0301BF	FRCS0361CD	FRCS0421CE	FRCS0481CE	FRCS0601BG
Unit Supply Voltage	208-230V, 1 $\phi$ , 60Hz						
Normal Voltage Range <sup>1</sup>	187 to 252						
Minimum Circuit Ampacity	8.5	10.5	16.9	18.1	17.8	20.6	33.5
Max. Overcurrent Device Amps <sup>2</sup>	15	15	25	25	30	35	50
Min. Overcurrent Device Amps <sup>3</sup>	15	15	20	20	20	25	35
Compressor Type	Recip	Recip	Recip	Scroll	Scroll	Scroll	Scroll
Compressor Amps	Rated Load	6.4	8.0	12.8	13.5	13.2	25.6
	Locked Rotor	36	40.5	68	73	95	150
Crankcase Heater	No	No	No	No	No	No	No
Fan Motor Amps	Rated Load	0.5	0.5	0.8	1.5	1.5	1.5
Fan Diameter Inches	22	22	22	22	24	24	24
Fan Motor	Rated HP	1/15	1/15	1/8	1/4	1/4	1/4
	Nominal RPM	830	830	1075	850	850	850
	Nominal CFM	2,100	2,000	2,800	3,300	3,300	3,600
Coil	Face Area Sq Ft	15.71	15.71	23.58	23.58	22.50	27.00
	Rows Deep	1	1	1	1	2	2
	Fin /Inch	22	22	22	18	18	18
Liquid Line Set OD (Field Installed)	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)	3/4	3/4	7/8	7/8	1 1/8	1 1/8	1 1/8
Unit Charge (Lbs - Oz) <sup>4</sup>	5 - 9	6 - 0	8 - 2	9 - 14	14 - 15	15 - 5	16 - 5
Charge Per Foot, oz.	0.68	0.68	0.70	0.68	0.76	0.76	0.76
Operating Weight Lbs	170	181	193	219	240	264	279

1. Rated in accordance with ARI Standard 110, utilization range "A".
2. Dual element fuses or HACR circuit breaker. Maximum allowable overcurrent protection.
3. Dual element fuses or HACR circuit breaker. Minimum recommended overcurrent protection.
4. The Unit Charge is correct for the outdoor unit, matched indoor coil and 15 feet of refrigerant tubing. For tubing lengths other than 15 feet, add or subtract the amount of refrigerant, using the difference in length multiplied by the per foot value.

All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.



Unit Model	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	A <sup>1</sup>	B	C	Liquid	Vapor
018	27	37	27	3/8	3/4
024	27	37	27		
030	39	37	27		7/8
036	39	37	27		
042	32	43	32		1-1/8
048	38	43	32		
060	38	43	32		7/8*

1. Included Fan Guard.
- \* Adapter fitting required for 1-1/8" line set.

## R-22 SYSTEM CHARGING PROCEDURE

Additional R-22 Charge / Orifice Size for Various Matched Systems							
Outdoor Unit	FRCS0181BA	FRCS0241BH	FRCS0301BF	FRCS0361CD	FRCS0421CE	FRCS0481CE	FRCS0601BG
Required TXV <sup>1</sup>	1TVM2A1	1TVM2A1	1TVM2A1	1TVM702	1TVM703	1TVM703	1TVM2C1
Factory Charge, lbs-oz	5 - 9	6 - 0	8 - 2	9 - 14	14 - 15	15 - 5	16 - 5
Indoor Coil <sup>2,3</sup>	TXV <sup>4</sup> + Charge Adder, Oz						
FC/MC/PC24A2A	0	-	-	-	-	-	-
FC/MC/PC24B2A	0	-	-	-	-	-	-
FC/MC/PC30A2A	0	-	-	-	-	-	-
FC/MC/PC30B2A	0	-	-	-	-	-	-
FC/MC/PC32A2A	-	0	-	-	-	-	-
FC/MC/PC35B2A	-	0	-	-	-	-	-
FC/MC/PC35C2A	-	0	-	-	-	-	-
FC/MC/PC36A2A	-	-	0	-	-	-	-
FC/MC/PC36B2A	-	-	0	-	-	-	-
FC/MC/PC36C2A	-	-	0	-	-	-	-
FC/PC60C2C	-	-	-	-	-	-	0*
FC/MC/PC60D2C	-	-	-	-	-	-	0*
MC61D2C	-	-	-	-	-	-	0
FC/MC62D2C	-	-	-	-	-	-	0
HC30A2A	0	-	-	-	-	-	-
HC36B2A	-	0	0	-	-	-	-
HC60D2C	-	-	-	-	-	-	0*
HD24A2A	-	-	-	-	-	-	-
HD36B2A	-	0	0	-	-	-	-
HD60D2C	-	-	-	-	-	-	0*
UC24A2A	0	-	-	-	-	-	-
UC24B2A	0	-	-	-	-	-	-
UC30A2A	0	-	-	-	-	-	-
UC30B2A	0	-	-	-	-	-	-
UC36A2A	-	-	0	-	-	-	-
UC36B2A	-	-	0	-	-	-	-
UC36C2A	-	-	0	-	-	-	-
UC60C2C	-	-	-	-	-	-	0*
UC60D2C	-	-	-	-	-	-	0*
AHP24B2A	0	-	-	-	-	-	-
AHP30B2A	-	0	0	-	-	-	-
AHP/SHP60D2C	-	-	-	-	-	-	0
AV24B2A	0	-	-	-	-	-	-
AV36C2A	-	0	0	-	-	-	-
AV/SV60D2C	-	-	-	-	-	-	0
FC/MC/PC24A3X	2A + 0	-	-	-	-	-	-
FC/MC/PC24B3X	2A + 0	-	-	-	-	-	-
FC/MC/PC30A3X	2A + 0	-	-	-	-	-	-
FC/MC/PC30B3X	2A + 0	-	-	-	-	-	-
FC/MC/PC35B3X	-	2A + 0	-	-	-	-	-
FC/MC/PC35C3X	-	2A + 0	-	-	-	-	-
FC/MC/PC36A3X	-	-	2A + 0	-	-	-	-
FC/MC/PC36B3X	-	-	2A + 0	-	-	-	-
FC/MC/PC36C3X	-	-	2A + 0	-	-	-	-
FC/MC/PC37C3X	-	-	-	702 + 9	-	-	-
FC/MC/PC42B3X	-	-	-	702 + 0	-	-	-
FC/MC/PC42X3X	-	-	-	702 + 0	-	-	-
FC/MC/PC43B3X	-	-	-	702 + 9	-	-	-
FC/MC/PC43C3X	-	-	-	702 + 9	-	-	-
FC/MC/PC48C3X	-	-	-	702 + 12	703 + 9*	-	-
FC/MC/PC48D3X	-	-	-	702 + 12	703 + 9*	-	-
FC/PC60C3X	-	-	-	-	703 + 13	703 + 6*	2C + 0*

Additional R-22 Charge / Orifice Size for Various Matched Systems (Continued)							
Outdoor Unit	FRCS0181BA	FRCS0241BH	FRCS0301BF	FRCS0361CD	FRCS0421CE	FRCS0481CE	FRCS0601BG
Required TXV <sup>1</sup>	1TVM2A1	1TVM2A1	1TVM2A1	1TVM702	1TVM703	1TVM703	1TVM2C1
Factory Charge, lbs-oz	5 - 9	6 - 0	8 - 2	9 - 14	14 - 15	15 - 5	16 - 5
Indoor Coil <sup>2,3</sup>	TXV <sup>4</sup> + Charge Adder, Oz						
FC/MC/PC60D3X	-	-	-	-	703 + 13	703 + 6*	2C + 0*
MC61D3X	-	-	-	-	-	703 + 13	2C + 0
FC/MC62D3X	-	-	-	-	-	703 + 13	2C + 0
HC30A3X	2A + 0	-	-	-	-	-	-
HC36B3X	-	2A + 0	2A + 0	-	-	-	-
HC42C3X	-	-	-	702 + 9	703 + 6*	-	-
HC60D3X	-	-	-	-	703 + 13	703 + 6*	2C + 0*
HD24A3X	-	-	-	-	-	-	-
HD36B3X	-	2A + 0	2A + 0	702 + 5	-	-	-
HD48C3X	-	-	-	-	703 + 0*	703 + 0*	-
HD60D3X	-	-	-	-	-	-	2C + 0*
UC24A3X	2A + 0	-	-	-	-	-	-
UC24B3X	2A + 0	-	-	-	-	-	-
UC30A3X	2A + 0	-	-	-	-	-	-
UC30B3X	2A + 0	-	-	-	-	-	-
UC36A3X	-	-	2A + 0	-	-	-	-
UC36B3X	-	-	2A + 0	-	-	-	-
UC36C3X	-	-	2A + 0	-	-	-	-
UC42B3X	-	-	-	702 + 0	-	-	-
UC42C3X	-	-	-	702 + 0	-	-	-
UC48C3X	-	-	-	702 + 12	703 + 9*	-	-
UC48D3X	-	-	-	702 + 12	703 + 9*	-	-
UC60C3X	-	-	-	-	703 + 13	703 + 6*	2C + 0*
UC60D3X	-	-	-	-	703 + 13	703 + 6*	2C + 0*
AHP24B3X	2A + 0	-	-	-	-	-	-
AHP30B3X	-	2A + 0	2A + 0	-	-	-	-
AHP42C3X	-	-	-	702 + 9	-	-	-
AHP/SHP48D3X	-	-	-	-	703 + 13	703 + 6*	-
AHP/SHP60D3X	-	-	-	702 + 17	703 + 13	703 + 6	2C + 0
AV24B3X	2A + 0	-	-	-	-	-	-
AV36C3X	-	2A + 0	2A + 0	702 + 9	-	-	-
AV/SV48D3X	-	-	-	-	703 + 13	703 + 6	-
AV/SV60D3X	-	-	-	-	703 + 13	703 + 6	2C + 0
MH30S2A	2A + 0	2A + 0	2A + 0	-	-	-	-
MH36S2A	-	-	-	-	-	-	-
MH42S2A	-	-	-	-	-	-	-
F*FP040	-	-	2A + 0	-	-	-	-
F4FV060H06T2C	-	-	-	-	-	703 + 6	0

**FOOTNOTES:**

1. A TXV kit must be used with these coils to obtain system performance (2A, 2C, 702, and 703 indicate 1TVM series).
  2. Systems matched with furnace or air handlers not equipped with blower-off delays may require blower Time Delay Kit 2FD06700224.
  3. PC coils cannot be used in downflow or horizontal applications. FC coils cannot be used in horizontal applications.
  4. If no TXV is listed, the indoor coil has the correct valve factory installed.
- \* Does not achieve 14 SEER with PSC furnaces. For ratings, see technical guide or visit [www.aridirectory.org/ari/unitary.html](http://www.aridirectory.org/ari/unitary.html)

**PROCEDURES:**

1. Unit factory charge listed on the unit nameplate includes refrigerant for the condenser, the smallest evaporator and 15 feet of interconnecting line tubing.
2. Verify the TXV and additional charge required for specific evaporator coil in the system using the above table.
3. Additional charge for the amount of interconnecting line tubing greater than 15 feet at the rate specified in the table above.
4. Permanently mark the unit nameplate with the total system charge. Total System Charge = Base charge (as shipped) + adder for evaporator + adder for line set.

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331415-BTD-C-0208  
Supersedes: 331415-BTD-B-0507

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