

# TABULAR DATA SHEET

## Outdoor Split System Air Conditioner 2 Thru 5 Tons

**MODELS: TCGF24\* THRU 60**  
**14.5 SEER – R-410A, 1 PHASE**

### Physical and Electrical Data

MODEL		TCGF24S41S1	TCGF30S41S1	TCGF36S41S1	TCGF42S41S1	TCGF48S41S1	TCGF60S41S1
Unit Supply Voltage		208-230V, 1 $\phi$ , 60Hz					
Normal Voltage Range <sup>1</sup>		187 to 252					
Minimum Circuit Ampacity		16.8	18.4	19.1	23.9	27.9	35.9
Max. Overcurrent Device Amps <sup>2</sup>		25	30	30	40	45	60
Min. Overcurrent Device Amps <sup>3</sup>		20	20	20	25	30	40
Compressor Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor Amps	Rated Load	12.8	14.1	14.1	17.9	21.1	27.5
	Locked Rotor	58	73	77	112	115	135
Crankcase Heater		No	No	No	No	No	No
Fan Motor Amps	Rated Load	.8	.8	1.5	1.5	1.5	1.5
Fan Diameter Inches		22	22	22	24	24	24
Fan Motor	Rated HP	1/8	1/8	1/4	1/4	1/4	1/4
	Nominal RPM	1075	1075	850	850	850	850
	Nominal CFM	2750	2800	3200	3600	3600	3700
Coil	Face Area Sq. Ft.	13.1	17.4	17.4	20.0	21.4	24.0
	Rows Deep	1	1	1	1	1	1
	Fin / Inches	23	23	23	23	23	23
Liquid Line Set OD (Field Installed)		3/8	3/8	3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)		3/4	3/4	3/4	7/8	7/8	1 1/8
Unit Charge (Lbs. - Oz.) <sup>4</sup>		3 - 2	3 - 7	3 - 10	4 - 4	4 - 9	5 - 9
Charge Per Foot, Oz.		0.62	0.62	0.62	0.67	0.67	0.75
Operating Weight Lbs.		128	130	145	172	180	199

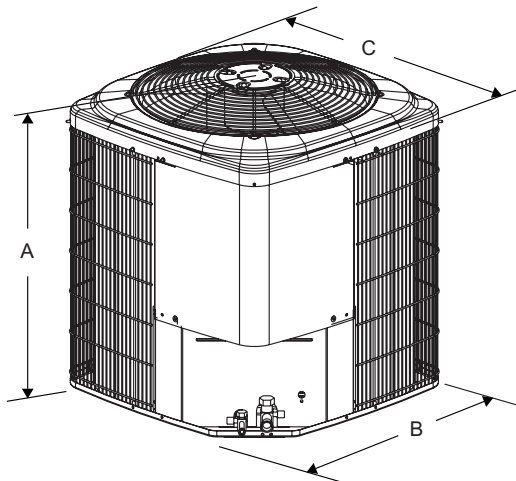
1. Rated in accordance with ARI Standard 110, utilization range "A".

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
24	28	29	29	3/8"	3/4"
30	36	29	29		
36	36	29	29		
42	34	33.6	33.6		7/8"
48	36	33.6	33.6		
60	40	33.6	33.6		

1. Including Fan Guard.

2. Adapter fitting required for 1-1/8" line set.

## R-410A SYSTEM CHARGING PROCEDURE

Additional R-410A Charge / Orifice Size for Various Matched Systems						
Outdoor Unit	TCGF24S41S1	TCGF30S41S1	TCGF36S41S1	TCGF42S41S1	TCGF48S41S1	TCGF60S41S1
Required Orifice or TXV <sup>1</sup>	1TVM902	1TVM903	1TVM903	1TVM903	1TVM905	1TVM906
Factory Charge, lbs-oz	3 - 2	3 - 7	3 - 10	4 - 4	4 - 9	5 - 9
Indoor Coil <sup>2,3,4</sup>	Additional Charge, Oz					
FC/MC/PC24A3X	5	-	-	-	-	-
FC/MC/PC24B3X	5	-	-	-	-	-
FC/MC/PC30A3X	12	2	-	-	-	-
FC/MC/PC30B3X	12	2	-	-	-	-
FC/MC/PC32A3X	16	10	-	-	-	-
FC/MC/PC35B3X	16	10	-	-	-	-
FC/MC/PC35C3X	16	10	-	-	-	-
FC/MC/PC36A3X	8	4	-	-	-	-
FC/MC/PC36B3X	8	4	8	-	-	-
FC/MC/PC36C3X	8	4	1	-	-	-
FC/MC/PC37A3X	24	19	15	-	-	-
FC/MC/PC43B3X	24	19	15	5	-	-
FC/MC/PC43C3X	24	19	15	5	-	-
FC/MC/PC48C3X	40	32	15	17	16	-
FC/MC/PC48D3X	40	32	27	17	16	-
FC/MC/PC60D3X	-	-	-	17	16	0
FC/MC62D3X	-	-	-	25	26	18
UC24A3X	8	-	-	-	-	-
UC24B3X	8	-	-	-	-	-
UC30A3X	8	4	-	-	-	-
UC30B3X	8	4	-	-	-	-
UC36A3X	-	-	-	-	-	-
UC36B3X	-	-	-	-	-	-
UC36C3X	-	-	-	-	-	-
UC42B3X	-	-	-	-	-	-
UC42C3X	-	-	-	-	-	-
UC48C3X	-	-	-	-	-	-
UC48D3X	-	-	-	-	-	-
UC60C3X	-	-	12	-	-	-
UC60D3X	-	-	12	-	-	-
HC18A3X	-	-	-	-	-	-
HC30A3X	10	-	-	-	-	-
HC36B3X	16	11	8	-	-	-
HC42C3X	25	19	15	6	-	-
HC60D3X	-	-	-	0	0	0
HD24*3X	16	-	-	-	-	-
HD36*3X	18	-	-	-	-	-
HD48*3X	51	42	36	24	25	-
HD60*3X	-	-	-	-	24	-
AHP18B3X	-	-	-	-	-	-
AHP24B3X	3	-	-	-	-	-
AHP30B3X	16	-	-	-	-	-
AHP36C3X	-	19	15	-	-	-

## R-410A SYSTEM CHARGING PROCEDURE

<b>Additional R-410A Charge / Orifice Size for Various Matched Systems (Continued)</b>						
Outdoor Unit	TCGF24S41S1	TCGF30S41S1	TCGF36S41S1	TCGF42S41S1	TCGF48S41S1	TCGF60S41S1
<b>Required Orifice or TXV <sup>1</sup></b>	1TVM902	1TVM903	1TVM903	1TVM903	1TVM905	1TVM906
<b>Factory Charge, lbs-oz</b>	3 - 2	3 - 7	3 - 10	4 - 4	4 - 9	5 - 9
Indoor Coil <sup>2,3,4</sup>	Additional Charge, Oz					
AHP42C3X	-	-	-	-	-	-
AHP/SHP60D3X	-	-	-	-	1	-
AV24B3X	3	-	-	-	-	-
AV36C3X	25	19	15	-	-	-
AV/SV48D3X	-	-	9	0	1	-
AV/SV60D3X	-	-	-	0	1	0
F4FP024 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	0	-	-	-	-	-
F4FP030 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	3	0	-	-	-	-
F4FP036 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	-	8	5	-	-	-
F4FP040 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	-	12	8	-	-	-
F4FP042 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	-	-	8	0	-	-
F4FP045 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	-	-	9	2	-	-
F5FP048 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	-	-	20	10	11	-
F5FP060 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	-	-	20	10	11	-
F4FV060 <span style="border: 1px solid black; padding: 1px;">See Caution below</span>	-	-	9	10	1	-

### FOOTNOTES:

1. Systems matched with furnace or air handlers not equipped with blower-off delays may require blower Time Delay Kit 2FD06700224.
2. PC coils cannot be used in downflow or horizontal applications. FC coils cannot be used in horizontal applications.
3. A TXV kit must be used with these coils to obtain system performance. Note: If a TXV is factory installed on the coil, it must be replaced with the listed TXV
4. Refer to Technical Guide for actual system performance and matches.

### PROCEDURES:

1. Unit factory charge listed on the unit nameplate includes refrigerant for the condenser, the smallest evaporator and 15 feet of inter-connecting line tubing.
2. Verify the TXV or orifice and additional charge required for specific evaporator coil in the system using the above table.
3. Add additional charge for the amount of interconnecting line tubing greater than 15 feet at the rate specified in Physical and Electrical Data Table.
4. For TXV match charge weight needs to be weighed in for specific coil match and lineset length.
5. Permanently mark the unit nameplate with the total system charge. Total System Charge = Base Charge (as shipped) + adder for evaporator + adder for line set.

## **CAUTION**

If the F\*FP Air Handler used has a with a factory installed R-22 TXV it **MUST BE CHANGED OUT** to a R-410A TXV or a orifice for proper operation. If the TXV is not changed out system damage will occur.

# NOTES

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