

# TABULAR DATA SHEET

## Outdoor Split System Air Conditioner 1 Thru 5 Tons

MODELS: TCGD12\* THRU 60

13 SEER – R-22, 1 PHASE

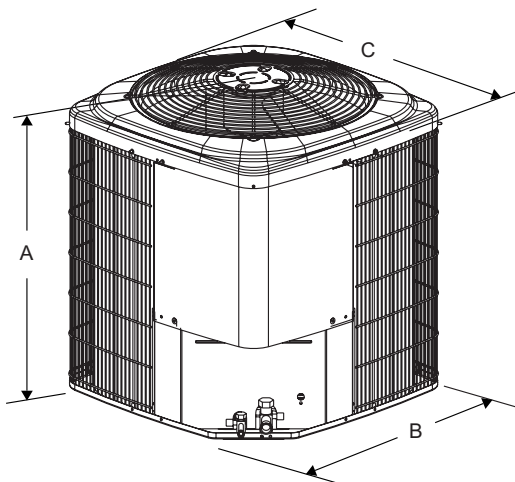
### Physical and Electrical Data

MODEL	TCGD12 S21S2(H)	TCGD18 S21S2(H)	TCGD24 S21S2(H)	TCGD30 S21S2(H)	TCGD36 S21S2(H)	TCGD42 S21S2(H)	TCGD48 S21S2(H)	TCGD60 S21S2	
Unit Supply Voltage	208-230V, 1 $\phi$ , 60Hz								
Normal Voltage Range <sup>1</sup>	187 to 252								
Minimum Circuit Ampacity	6.5	9.0	11.3	14.0	18.2	19.9	22.7	33.5	
Max. Overcurrent Device Amps <sup>2</sup>	15	15	15	20	30	30	35	50	
Min. Overcurrent Device Amps <sup>3</sup>	15	15	15	15	20	20	25	35	
Compressor Type	Rotary	Rotary	Rotary	Recip	Recip	Recip	Recip	Scroll	
Compressor Amps	Rated Load	4.8	6.8	8.4	10.6	13.4	14.7	17.0	25.6
	Locked Rotor	26.0	40.0	47.0	61.0	78.0	78.0	86.0	150.0
Crankcase Heater	No	No	No	No	No	No	No	No	
Fan Motor Amps	Rated Load	0.50	0.50	0.80	0.80	1.4	1.5	1.5	1.5
	Fan Diameter Inches	18	18	18	18	18	22	22	22
Fan Motor	Rated HP	1/12	1/12	1/8	1/8	1/4	1/4	1/4	1/4
	Nominal RPM	1100	1100	1075	1075	1100	850	850	850
	Nominal CFM	1350	1550	1850	1950	2400	3000	3000	3300
Coil	Face Area Sq. Ft.	8.1	9.7	9.7	11.3	12.1	16.5	16.5	19.75
	Rows Deep	1	1	1	1	1	1	1	1
	Fin / Inches	23	23	23	23	23	23	23	23
Liquid Line Set OD (Field Installed)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	
Vapor Line Set OD (Field Installed)	5/8	5/8	3/4	3/4	3/4	7/8	7/8	1-1/8	
Unit Charge (Lbs. - Oz.) <sup>4</sup>	3 - 2	3 - 0	3 - 13	3 - 7	3 - 15	4 - 2	4 - 5	5 - 4	
Charge Per Foot, Oz.	0.66	0.66	0.68	0.68	0.68	0.70	0.70	0.76	
Operating Weight Lbs.	96	110	130	150	160	175	176	200	

Models with "H" on the end of the model number have a factory installed start kits.

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
12	24	23-1/2	23-1/2	3/8"	3/4"
18	28	23-1/2	23-1/2		
24	28	23-1/2	23-1/2		
30	32	23-1/2	23-1/2		
36	34	23-1/2	23-1/2		
42	34	29	29		7/8"
48	34	29	29	7/8" <sup>2</sup>	
60	40	29	29		

1. Including Fan Guard.
2. Expander fitting required for 1-1/8" lineset.

System Charge for Various Matched Systems								
Outdoor Unit	TCGD12 S21S2(H)	TCGD18 S21S2(H)	TCGD24 S21S2(H)	TCGD30 S21S2(H)	TCGD36 S21S2(H)	TCGD42 S21S2(H)	TCGD48 S21S2(H)	TCGD60 S21S2
Required Orifice or TXV <sup>1,2</sup>	0.041/2A	0.052/2A	0.059/0.061/2A	0.065/2A	0.073/2A	0.081/2C	0.084/2C	0.096/2C
Factory R-22 Charge, lbs-oz	3 - 2	3 - 0	3 - 13	3 - 7	3 - 15	4 - 2	4 - 5	5 - 4
Indoor Coil <sup>3,4</sup>	Additional Charge, oz							
AHP18	0	0	-	-	-	-	-	-
AHP24	-	0	-	-	-	-	-	-
AHP30	-	-	61 + 3	4	-	-	-	-
AHP36	-	-	-	-	4	-	-	-
AHP42	-	-	-	-	4	0	-	-
AHP48	-	-	-	-	-	-	0	-
AHP/SHP60	-	-	-	-	-	-	0	-
AHX18	-	0	-	-	-	-	-	-
AHX30	-	-	61 + 3	4	-	-	-	-
AHX36	-	-	61 + 7	12	4	-	-	-
AHX42	-	-	-	-	4	5	-	-
AHX48	-	-	-	-	-	-	0	-
AHX60	-	-	-	-	-	-	-	0
AV*24	-	2	-	-	-	-	-	-
AV*36	-	-	61 + 7	12	4	-	-	-
AV/SV*48	-	-	-	-	-	-	0	-
F4FP024	-	0	-	-	-	-	-	-
F4FP036	-	-	61 + 1	-	-	-	-	-
F4FP040	-	-	-	0	-	-	-	-
F4FV060	-	-	-	-	-	-	0	-
F5FP048	-	-	-	-	0	5	2	-
F5FP060	-	-	-	-	-	-	0	-
F6FP018	-	0	-	-	-	-	-	-
F6FP030	-	-	61 + 3	4	-	-	-	-
F6FP036	-	-	61 + 3	4	-	-	-	-
F6FP042	-	-	-	-	4	5	-	-
F6FP048	-	-	-	-	-	-	0	-
F6FP060	-	-	-	-	-	-	-	0
FC/MC/PC18	0	0	-	-	-	-	-	-
FC/MC/PC18	0	0	-	-	-	-	-	-
FC/MC/PC24	-	2	-	-	-	-	-	-
FC/MC/PC24	-	2	-	-	-	-	-	-
FC/MC/PC32	-	-	61 + 3	4	-	-	-	-
FC/MC/PC35	-	-	61 + 3	4	-	-	-	-
FC/MC/PC35	-	-	61 + 3	4	-	-	-	-
FC/MC/PC36	-	-	59 + 0	-	-	-	-	-
FC/MC/PC36	-	-	59 + 0	-	-	-	-	-
FC/MC/PC36	-	-	59 + 0	-	-	-	-	-
FC/MC/PC37	-	-	61 + 7	12	4	-	-	-
FC/MC/PC43	-	-	61 + 7	12	4	0	-	-
FC/MC/PC43	-	-	61 + 7	12	4	0	-	-
FC/MC/PC48	-	-	-	-	4	5	2	-
FC/MC/PC48	-	-	-	-	4	5	2	-
FC/MC62	-	-	-	-	-	-	-	0
HC18	0	0	-	-	-	-	-	-
HC30	-	-	59 + 0	-	-	-	-	-
HC36	-	-	61 + 3	4	-	-	-	-

System Charge for Various Matched Systems (Continued)								
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Factory R-22 Charge, lbs-oz	3 - 2	3 - 0	3 - 13	3 - 7	3 - 15	4 - 2	4 - 5	5 - 4
Indoor Coil <sup>3,4</sup>	Additional Charge, oz							
HC42	-	-	61 + 7	12	4	0	-	-
UC18	0	0	-	-	-	-	-	-
UC24	-	2	-	-	-	-	-	-
UC36	-	-	0	-	-	-	-	-
UC48	-	-	-	-	4	5	2	-

**FOOTNOTES:**

1. For applications requiring a TXV use 1TVM series kit.
2. Approved orifice shipped with outdoor unit.
3. Systems matched with furnace or air handlers not equipped with blower-off delays may require blower Time Delay Kit 2FD06700224.
4. PC coils cannot be used in downflow or horizontal applications. FC coils cannot be used in horizontal applications.

**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 Physical and Electrical Data Table.
4. For orifice or TXV matches requiring additional charge, the refrigerant 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.

**IMPORTANT**

**Models 12-48 require start kits for TXV matches. Models with "H" on the end of the model number have factory installed start kits. For models without an "H" refer to tech guide for kit number reference.**

# NOTES

