

# TABULAR DATA SHEET

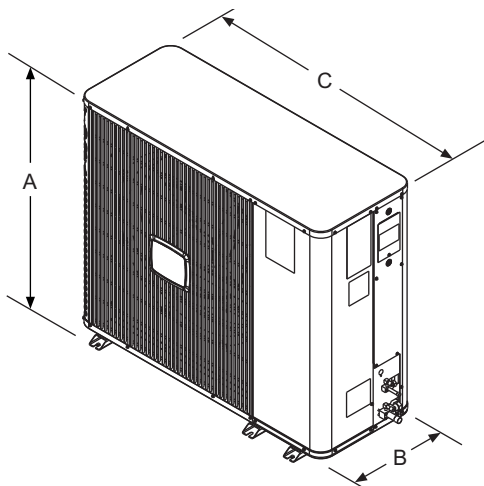
## Horizontal Discharge Air Conditioner 2.5 Thru 5 Tons

MODELS: TCHD30\* THRU 60  
13 SEER – R-410A, 3 PHASE

### Physical and Electrical Data

MODEL	TCHD30 S43S3	TCHD36 S43S3	TCHD48 S43S3	TCHD60 S43S3	TCHD30 S44S3	TCHD36 S44S3	TCHD48 S44S3	TCHD60 S44S3	
Unit Supply Voltage	208-230V, 3 $\phi$ , 60Hz				460V, 3 $\phi$ , 60Hz				
Normal Voltage Range <sup>1</sup>	187 to 252				432 to 532				
Minimum Circuit Ampacity	11.9	17.5	21.5	21.0	7.2	8.8	10.4	10.5	
Max. Overcurrent Device Amps <sup>2</sup>	20	30	35	35	15	15	15	15	
Min. Overcurrent Device Amps <sup>3</sup>	15	20	25	25	15	15	15	15	
Multi-Stage Compressor	No	No	No	No	No	No	No	No	
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	
Compressor Amps	Rated Load	8.4	12.8	16.0	15.7	5.2	6.4	7.7	7.8
	Locked Rotor	58.0	95.0	120.0	110.0	28.0	45.0	50.0	52.0
Crankcase Heater	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Fan Diameter Inches	23	23	23	23	23	23	23	23	
Fan Motor	Rated HP	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	
	Rated Load Amps	1.45	1.45	1.45	1.45	0.80	0.80	0.80	
	Nominal RPM	850	850	850	850	850	850	850	
Coil	Face Area Sq. Ft.	11.96	11.96	13.96	13.96	11.96	11.96	13.96	
	Rows Deep	1	1	1	1	1	1	1	
	Fins / Inches	23	23	23	23	23	23	23	
Refrigerant Lines <sup>4</sup>	Max. Length	200	200	200	200	200	200	200	
	Max. Lift	65	65	65	65	65	65	65	
	Max. Drop	150	150	150	150	150	150	150	
	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	3 / 4	3 / 4	7 / 8	
Unit Charge (Lbs. - Oz.) <sup>5</sup>	4 - 0	4 - 8	5 - 5	5 - 6	4 - 0	4 - 8	5 - 5	5 - 6	
Charge Per Foot, Oz.	0.68	0.68	0.70	0.70	0.68	0.68	0.70	0.70	
Operating Weight Lbs.	195	215	240	250	195	215	240	250	

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. When more than 50 feet of interconnecting tubing and more than 30 feet of vertical lift is used, consult the Application Data (part number 247077). For long-line applications, interconnecting lines over 100 feet must be installed with liquid line solenoid.
5. 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
30	37-1/8	17-1/8	44-5/8	3/8"	3/4"
36	37-1/8	17-1/8	44-5/8		
48	43-1/8	17-1/8	44-5/8		7/8"
60	43-1/8	17-1/8	44-5/8		

1. Including Fan Guard.

<b>System Charge for Various Matched Systems</b>				
<b>Outdoor Unit</b>	TCHD30S4(3,4)S3	TCHD36S4(3,4)S3	TCHD48S4(3,4)S3	TCHD60S4(3,4)S3
<b>Required Orifice or TXV <sup>1</sup></b>	1TVM4G1	1TVM4G1	1TVM4J1	1TVM4J1
<b>Factory Charge, lbs-oz</b>	4 - 0	4 - 8	5 - 5	5 - 6
<b>Indoor Coil<sup>2,3</sup></b>	<b>Additional Charge, oz</b>			
AHP24	–	–	–	–
AHP36	16	12	–	–
AHP/SHP60	–	–	11	–
AHX18	–	–	–	–
AHX24	–	–	–	–
AHX30	10	–	–	–
AHX36	16	12	–	–
AHX42	27	22	–	–
AHX48	26	22	11	–
AHX60	–	27	16	13
AV24	–	–	–	–
AV36	16	12	–	–
AV/SV48	–	22	11	–
AV/SV60	–	–	11	8
F*FP030	0	–	–	–
F*FP036	8	4	–	–
F*FP040	10	7	–	–
F*FP042	–	7	–	–
F*FP048	–	16	11	–
F*FP060	–	–	16	–
F*FV060	–	8	11	8
F6FP018	–	–	–	–
F6FP024	–	–	–	–
F6FP030	10	–	–	–
F6FP036	10	7	–	–
F6FP042	20	16	–	–
F6FP048	10	7	11	–
F6FP060	–	27	16	13
FC/MC/PC18	–	–	–	–
FC/MC/PC24	–	–	–	–
FC/MC/PC30	2	–	–	–
FC/MC/PC32	10	6	–	–
FC/MC/PC35	0	6	–	–
FC/MC/PC36	3	0	–	–
FC/MC/PC37	16	12	–	–
FC/MC/PC42	3	1	–	–
FC/MC/PC43	16	0	–	–
FC/MC/PC48	27	22	0	–
FC/MC/PC60	–	–	10	–
FC/MC62	–	–	16	0
HC18	–	–	–	–
HC30	7	–	–	–
HC36	10	6	–	–
HC42	16	12	–	–
HC60	–	7	0	–
HD24	–	–	–	–
HD36	14	11	–	–
HD48	–	33	24	–
HD60	–	–	30	22

<b>System Charge for Various Matched Systems (Continued)</b>				
<b>Outdoor Unit</b>	TCHD30S4(3,4)S3	TCHD36S4(3,4)S3	TCHD48S4(3,4)S3	TCHD60S4(3,4)S3
<b>Required Orifice or TXV <sup>1</sup></b>	1TVM4G1	1TVM4G1	1TVM4J1	1TVM4J1
<b>Factory Charge, lbs-oz</b>	4 - 0	4 - 8	5 - 5	5 - 6
<b>Indoor Coil<sup>2,3</sup></b>	<b>Additional Charge, oz</b>			
UC18	–	–	–	–
UC24	–	–	–	–
UC30	3	–	–	–
UC36	4	1	–	–
UC42	3	0	–	–
UC48	21	17	6	–
UC60	–	–	11	–

**FOOTNOTES:**

1. For applications requiring a TXV use 1TVM series kit.
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.

**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 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.

# NOTES

