

TABULAR DATA SHEET

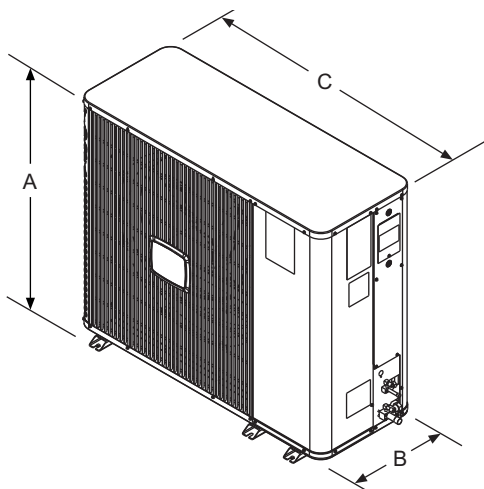
Horizontal Discharge Air Conditioner 1.5 Thru 5 Tons

MODELS: TCHD18* THRU 60
13 SEER – R-410A, 1 PHASE

Physical and Electrical Data

MODEL	TCHD18 S41S3	TCHD24 S41S3	TCHD30 S41S3	TCHD36 S41S3	TCHD48 S41S3	TCHD60 S41S3	
Unit Supply Voltage	208-230V, 1 ϕ , 60Hz						
Normal Voltage Range ¹	187 to 252						
Minimum Circuit Ampacity	11.8	17.4	17.5	23.1	27.1	34.3	
Max. Overcurrent Device Amps ²	20	30	30	40	45	60	
Min. Overcurrent Device Amps ³	15	20	20	25	30	35	
Multi-Stage Compressor	No	No	No	No	No	No	
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	
Compressor Amps	Rated Load	9.0	13.5	12.8	17.3	20.5	26.3
	Locked Rotor	48.0	58.3	64.0	96.7	115.0	134.0
Crankcase Heater	Yes	Yes	Yes	Yes	Yes	Yes	
Fan Diameter Inches	17.5	17.5	23	23	23	23	
Fan Motor	Rated HP	1/8	1/8	1/4	1/4	1/4	1/4
	Rated Load Amps	0.60	0.60	1.45	1.45	1.45	1.45
	Nominal RPM	840	840	850	850	850	850
Coil	Face Area Sq. Ft.	5.76	5.76	11.96	11.96	13.96	13.96
	Rows Deep	1	1	1	1	1	1
	Fins / Inches	23	23	23	23	23	23
Refrigerant Lines ⁴	Max. Length	200	200	200	200	200	200
	Max. Lift	65	65	65	65	65	65
	Max. Drop	150	150	150	150	150	150
	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	3 / 4	7 / 8	7 / 8
Unit Charge (Lbs. - Oz.) ⁵	2 - 14	3 - 5	4 - 0	4 - 8	5 - 5	5 - 6	
Charge Per Foot, Oz.	0.68	0.68	0.68	0.68	0.70	0.70	
Operating Weight Lbs.	130	135	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 ¹	B	C	Liquid	Vapor
18	25-1/8	14-5/8	37	3/8"	3/4"
24	25-1/8	14-5/8	37		
30	37-1/8	17-1/8	44-5/8		
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.

System Charge for Various Matched Systems						
Outdoor Unit	TCHD18S41S3	TCHD24S41S3	TCHD30S41S3	TCHD36S41S3	TCHD48S41S3	TCHD60S41S3
Required Orifice or TXV ¹	1TVM4F1	1TVM4F1	1TVM4G1	1TVM4G1	1TVM4J1	1TVM4K1
Factory Charge, lbs-oz	2 - 14	3 - 5	4 - 0	4 - 8	5 - 5	5 - 6
Indoor Coil^{2,3}	Additional Charge, oz					
AHP24	–	2	–	–	–	–
AHP36	–	–	16	12	–	–
AHP/SHP60	–	–	–	–	11	–
AHX18	0	0	–	–	–	–
AHX24	10	10	–	–	–	–
AHX30	13	14	10	–	–	–
AHX36	–	20	16	12	–	–
AHX42	–	–	27	22	–	–
AHX48	–	–	26	22	11	–
AHX60	–	–	–	27	16	13
AV24	2	2	–	–	–	–
AV36	20	20	16	12	–	–
AV/SV48	–	–	–	22	11	–
AV/SV60	–	–	–	–	11	8
F*FP030	–	2	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	0	–	–	–	–	–
F6FP024	3	3	–	–	–	–
F6FP030	14	15	10	–	–	–
F6FP036	–	15	10	7	–	–
F6FP042	–	–	20	16	–	–
F6FP048	–	–	10	7	11	–
F6FP060	–	–	–	27	16	13
FC/MC/PC18	0	–	–	–	–	–
FC/MC/PC24	0	0	–	–	–	–
FC/MC/PC30	4	4	2	–	–	–
FC/MC/PC32	13	14	10	6	–	–
FC/MC/PC35	13	14	0	6	–	–
FC/MC/PC36	6	6	3	0	–	–
FC/MC/PC37	20	21	16	12	–	–
FC/MC/PC42	–	9	3	1	–	–
FC/MC/PC43	–	20	16	0	–	–
FC/MC/PC48	–	32	27	22	0	–
FC/MC/PC60	–	–	–	–	10	–
FC/MC62	–	–	–	–	16	0
HC18	0	0	–	–	–	–
HC30	10	10	7	–	–	–
HC36	13	14	10	6	–	–
HC42	–	21	16	12	–	–
HC60	–	–	–	7	0	–
HD24	22	17	–	–	–	–
HD36	28	20	14	11	–	–
HD48	–	–	–	33	24	–
HD60	–	–	–	–	30	22

System Charge for Various Matched Systems (Continued)						
Outdoor Unit	TCHD18S41S3	TCHD24S41S3	TCHD30S41S3	TCHD36S41S3	TCHD48S41S3	TCHD60S41S3
Required Orifice or TXV ¹	1TVM4F1	1TVM4F1	1TVM4G1	1TVM4G1	1TVM4J1	1TVM4K1
Factory Charge, lbs-oz	2 - 14	3 - 5	4 - 0	4 - 8	5 - 5	5 - 6
Indoor Coil^{2,3}	Additional Charge, oz					
UC18	1	–	–	–	–	–
UC24	5	5	–	–	–	–
UC30	5	5	3	–	–	–
UC36	7	7	4	1	–	–
UC42	–	9	3	0	–	–
UC48	–	25	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

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545978-UTD-A-0210
Supersedes: Nothing

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