



DWHA

Chilled Water

Double-Wall Air Handling Units

2,000-8,000 CFM 50Hz

TRANE
TECHNOLOGIES

TT Air Engineering



Performance Data - Cooling Capacities

Model DWHA

Cooling Capacity for 3-Row Coil

TC = Total Capacity, MBH
 SC = Sensible Capacity, MBH
 GPM = Water Flow Rate, gpm
 PD = Water Pressure Drop, Ft of Water
 EWT = Entering Water Temperature
 WTR = Water Temperature Rise

EWT (F)	Unit Size	Rated Airflow CFM	WTR (F)	Entering Air Temp - EDB/EWB (F)															
				72/61				74/63				80/67				84/71			
				TC	SC	GPM	PD	TC	SC	GPM	PD	TC	SC	GPM	PD	TC	SC	GPM	PD
40	20	2000	8	57.16	42.51	14.23	8.21	66.59	45.55	16.58	10.71	86.70	55.20	21.59	16.98	108.70	61.09	27.06	25.23
			10	51.09	39.84	10.18	4.56	60.02	42.68	11.95	6.03	80.18	52.41	15.97	9.98	102.10	58.31	20.35	15.23
			12	44.55	37.06	7.40	2.61	53.17	39.80	8.83	3.54	73.21	49.52	12.15	6.17	95.30	55.51	15.82	9.76
	25	2500	8	69.39	52.00	17.27	12.73	80.71	55.66	20.09	16.57	104.80	67.35	26.09	26.18	131.10	74.38	32.65	38.80
			10	62.65	49.04	12.48	7.18	73.10	52.35	14.56	9.40	97.19	64.07	19.36	15.44	123.50	71.15	24.60	23.48
			12	55.79	46.09	9.26	4.26	65.77	49.23	10.92	5.66	89.15	60.71	14.80	9.61	115.50	67.87	19.17	15.11
	34	3400	8	93.94	71.64	23.39	12.85	108.00	76.77	27.10	16.61	140.00	93.22	34.85	25.79	173.80	103.29	43.27	37.70
			10	84.83	67.55	16.90	7.25	98.71	72.23	19.66	9.44	130.00	88.72	25.88	15.25	163.80	98.87	32.63	22.87
			12	75.15	63.30	12.47	4.26	88.61	67.84	14.71	5.67	119.30	84.11	19.81	9.51	153.40	94.33	25.46	14.74
	40	4000	8	113.70	87.06	28.31	9.88	131.40	93.09	32.71	12.71	169.00	113.01	42.00	19.74	209.90	125.08	52.24	28.84
			10	102.50	82.07	20.42	5.57	119.30	87.71	23.76	7.24	156.70	107.55	31.22	11.65	197.37	119.65	39.37	17.48
			12	90.30	76.73	14.99	3.24	106.70	82.24	17.71	4.32	144.00	101.99	23.90	7.28	184.90	114.14	30.69	11.25
50	5000	8	149.70	112.35	37.26	10.84	172.80	120.38	43.02	13.93	221.00	145.82	55.03	21.41	273.30	161.45	68.05	31.06	
		10	136.00	106.17	27.09	6.19	158.00	113.65	31.47	8.04	206.60	139.26	41.15	12.82	259.10	154.99	51.61	19.04	
		12	121.20	99.60	20.12	3.68	142.70	106.93	23.69	4.88	191.20	132.42	31.74	8.11	244.10	148.37	40.52	12.42	
60	6000	8	172.40	130.85	42.91	15.23	198.60	139.83	49.45	19.51	253.70	169.06	63.16	29.93	313.00	186.54	78.04	43.38	
		10	157.60	124.21	31.39	8.79	182.20	132.48	36.29	11.31	237.40	161.71	47.28	17.94	297.30	179.35	59.21	26.60	
		12	142.40	117.51	23.64	5.34	166.10	125.38	27.57	6.98	220.10	154.16	36.53	11.38	280.30	171.93	46.53	17.36	
70	7000	8	198.00	151.06	49.29	13.41	228.30	161.39	56.82	17.18	292.10	195.19	72.71	26.44	361.20	215.47	89.93	38.40	
		10	180.50	143.17	35.95	7.70	208.90	152.74	41.61	9.93	272.70	186.53	54.31	15.79	342.00	206.96	68.11	23.47	
		12	161.90	135.04	26.88	4.62	189.50	144.23	31.46	6.08	252.20	177.65	41.87	9.98	321.80	198.23	53.42	15.27	
80	8000	8	224.80	170.91	55.96	17.20	259.50	182.80	64.61	22.11	332.10	221.17	82.67	34.04	410.80	244.34	102.30	49.46	
		10	205.00	161.97	40.84	9.88	237.30	172.82	47.27	12.74	310.20	211.36	61.78	20.33	389.00	234.71	77.49	30.24	
		12	185.20	153.20	30.74	6.00	216.10	163.53	35.87	7.84	287.00	201.20	47.63	12.85	366.30	224.81	60.80	19.67	
43	20	2000	8	47.19	38.19	11.75	5.81	55.74	40.88	13.88	7.77	75.69	50.54	18.85	13.24	97.59	56.44	24.30	20.66
			10	41.51	35.81	8.27	3.14	49.55	38.32	9.87	4.27	68.84	47.74	13.72	7.56	90.76	53.69	18.08	12.25
			12	35.44	33.33	5.89	1.73	42.95	35.67	7.13	2.42	62.22	45.14	10.33	4.60	83.55	50.89	13.87	7.68
	25	2500	8	57.44	46.79	14.30	9.05	67.65	50.02	16.85	12.04	91.55	61.71	22.80	20.42	117.80	68.79	29.33	31.77
			10	51.37	44.24	10.24	5.03	60.72	47.14	12.10	6.73	83.54	58.43	16.65	11.72	109.80	65.56	21.87	18.90
			12	45.08	41.64	7.49	2.91	53.79	44.32	8.93	3.95	76.05	55.44	12.63	7.21	101.40	62.28	16.84	11.90
	34	3400	8	77.82	64.48	19.58	9.15	91.30	69.02	22.74	12.08	122.40	85.40	30.47	20.14	158.20	97.29	38.89	30.90
			10	69.42	60.87	13.83	5.06	81.98	65.04	16.33	6.76	111.80	80.90	22.28	11.60	145.80	91.08	29.04	18.43
			12	60.35	57.07	10.02	2.88	72.22	60.98	11.99	3.93	101.90	76.80	16.91	7.14	134.80	86.54	22.38	11.63
	40	4000	8	94.37	78.51	23.50	7.06	110.50	83.85	27.51	9.29	147.60	103.55	36.76	15.40	188.40	115.70	46.93	23.62
			10	83.87	74.00	16.71	3.88	99.10	79.03	19.74	5.19	135.00	98.26	26.91	8.89	175.70	110.28	35.00	14.07
			12	72.29	69.14	12.00	2.18	86.78	73.91	14.41	2.99	123.00	93.27	20.43	5.47	162.20	104.77	26.94	8.86
50	5000	8	124.40	101.01	30.97	7.76	145.70	108.17	36.28	10.22	199.90	133.62	48.28	16.83	246.20	149.30	61.32	25.58	
		10	111.40	95.37	22.20	4.33	131.60	102.15	26.23	5.78	178.60	127.00	35.58	9.83	231.30	142.84	46.08	15.44	
		12	97.53	89.51	16.20	2.49	116.60	95.86	19.37	3.40	163.70	120.76	27.18	6.12	215.40	136.17	35.76	9.87	
60	6000	8	143.60	118.03	35.75	10.94	167.60	126.03	41.73	14.33	222.40	152.40	55.37	23.49	282.10	172.71	70.24	35.65	
		10	130.10	112.17	25.91	6.22	152.40	119.52	30.37	8.20	205.30	147.84	40.90	13.77	265.10	165.55	52.83	21.53	
		12	115.90	106.24	19.25	3.70	137.00	113.08	22.75	4.94	189.10	141.07	31.40	8.64	247.20	158.13	41.05	13.78	
70	7000	8	164.80	136.41	41.04	9.63	192.40	145.52	47.91	12.61	255.70	179.17	63.67	20.71	324.80	199.44	80.88	31.51	
		10	148.60	129.34	29.61	5.43	174.50	137.85	34.77	7.18	235.60	170.58	46.93	12.10	304.70	190.94	60.71	18.96	
		12	131.10	121.98	21.77	3.17	155.70	130.03	25.86	4.27	216.40	162.61	35.94	7.56	283.40	182.20	47.06	12.10	
80	8000	8	199.35	153.98	46.54	12.32	218.50	164.57	54.42	16.18	290.80	202.94	72.43	26.68	369.50	226.20	92.02	40.61	
		10	169.10	146.26	33.70	6.98	198.20	155.89	39.49	9.20	267.80	193.04	53.35	15.55	346.80	216.48	74.45	24.84	
		12	150.60	138.53	25.01	4.14	178.10	147.47	29.57	5.54	245.90	183.93	40.84	9.71	322.80	206.58	53.60	15.60	
45	20	2000	8	40.92	35.57	10.19	4.50	48.77	38.00	12.15	6.11	68.01	47.41	16.94	10.90	89.99	53.34	22.39	17.76
			10	35.70	33.44	7.11	2.40	42.88	35.63	8.55	3.30	61.49	44.85	12.25	6.17	82.82	50.60	16.51	10.37
			12	30.03	28.67	4.99	1.29	36.64	33.20	6.09	1.82	55.07	42.38	1.95	3.69	75.33	47.78	12.51	6.36
	25	2500	8	50.02	43.67	12.46	7.06	59.28	46.55	14.77	9.49	82.33	57.94	20.51	16.83	108.50	65.05	27.02	27.31
			10	44.49	41.42	8.87	3.89	52.88	43.97	10.54	5.25	75.21	54.90	15.04	9.57	100.20	61.85	19.98	16.01
			12	38.69	36.97	6.43	2.22	46.38	41.39	7.70	3.03	67.63	52.19	11.23	5.83	91.53	58.54	15.20	9.88
	34	3400	8	67.76	60.17	16.88	7.13	80.05	64.23	19.94	9.54	110.10	80.20	27.42	16.62	143.90	90.31	35.85	26.58
			10	60.00	56.92	11.96	3.90	71.31	60.57	14.21	5.26	100.30	76.03	19.94	9.48	133.20	85.88	26.54	15.62
			12	51.48	50.13	8.55	2.17	62.02	56.85	10.30	3.00	90.52	72.23	15.04	5.77	121.70	81.34	20.22	9.67
	40	4000	8	82.22	73.30	20.48	5.51	97.00	78.16	24.16	7.35	132.80	97.30	33.08	12.71	173.60	109.41	43.91	20.30
			10	72.43	69.18	14.44	2.99	86.16	73.65	17.17	4.04	121.00	92.44	24.12	7.29				

Features and Benefits



DWHA with access door



Proportional Thermostat (Option)



PICV Valve (Otipon)



Trane Control Valve (Option)



AHU Starter Panel (Option)

Specialized Design

Trane DWHA Air Handlers are compact horizontal draw-through units for tight ceiling space. This is the latest attractive commercial solution for new and replacement buildings. And it is designed for use in offices, department stores, schools, hospitals and other applications where cooling is required in the limited space.

Ease of Service

Hinged doors allow easy access for fan(s), motor and belt maintenance.

General

Air handler units shall be completely factory assembled including coil, condensate drain pan, fan motor(s), filters in an insulated casing dedicated for horizontal application of DWHA model. Unit shall be rated in accordance with ARI Standard 210.

Unit Casing

Unit casing shall be constructed of 25 mm double-wall panels injected with polyurethane foam to provide a rigid, sturdy and easily cleaned enclosure. This double-wall construction keeps the insulation out of the air stream and contributes to improved. The panels shall be constructed of baked polyester powder painted steel sheet on exterior wall and galvanizes sheet on the inner wall.

Fans

Fans are double width, double inlet, multiblade centrifugal type. All fans statically and dynamically balanced and tested after being installed on properly sized hollow or solid shafts. Fan shafts do not passthrough their first critical speed as unit comes up to rated rpm.

Fan housings constructed with deformed, streamlined inlets and side sheets. Fan bearings are grease lubricated ball bearings selected for 200,000 hours average life.

Coils

Configured aluminium fin surface shall be mechanically bonded to internally enhanced copper tube and factory pressure and leak tested at 380 psig. Coil is arranged for draw through airflow and shall provide polyester powder painted drain pan constructed of galvanized steel with rubber insulator. All coil parts must stand inside the drain pan to prevent any condensation out of the drain pan.

Filter

1-inch, washable aluminium filter shall be standard on air handlers. Filters shall be accessible from the side coil panel.

Fan Motor

Motor bearings shall be permanently lubricated. oversized motor shall be available as an option for high static application.

Optional Accessories Oversized Motor

Field installed oversized motors shall be available for high static pressure applications.

Discharge Plenum

Accessory discharge plenum shall be available for free blow. For motor will be specially selected to property math with Free Blower Application.

Trane Proportional Thermostat

monitors the adjustable control valve by 0-10 Vdc signal, 5 °C - 34 °C temperature setting and connectable with external sensor.

"PICV" Pressure Independent Control Valves (Option-5 Years Warranty)

combines a differential pressure regulator with a 2-way control valve which supplies a specific constant flow for each degree of valve opening regardless of pressure variation in the system. Recommend to use with Trane Thermostat for precise temperature control.

Trane Control Valve

controls the opening and closing of the pipe in the HVAC system for room temperature monitor. Recommend to use with Trane Thermostat for precise temperature control.

*Control valve option cannot be factory installed inside unit. It will be provided separately.

Trane AHU Starter Panel

particularly controls the HVAC system. Integrated with motor and compressor protection system, reliable according to UL/IEC/NEMA standard and easy to install.



ทราน (ประเทศไทย)

เลขที่ 1126/2 ชั้น 30-31 อาคารวานิช 2 ด.เพชรบุรีตัดใหม่ แขวงมักกะสัน เขตราชเทวี กรุงเทพฯ 10400

☎ 0-2761-1111

©2021 Trane. All Rights Reserved.

CFH-DS-1T Nov 05, 2021

