



TRANE[®]



HFCA

*Chilled Water Fan Coil Units
Concealed Type 400-1,200 CFM
HFCA Series 50 Hz
for District Cooling Plant*



Model Nomenclature

H F C A 0 4 C 0 0 1 0 A
 1 2 3 4 5 6 7 8 9 10 11 12

- Digit 1 - Position
H = Horizontal
- Digit 2 - Unit Type
F = Fan Coil
- Digit 3 - Casing
C = Concealed
- Digit 4 - Development Sequence
A = Development Sequence
- 04 = 400 CFM
06 = 600 CFM
08 = 800 CFM
10 = 1,000 CFM
12 = 1,200 CFM
- Digit 7 - Coil Row, Connection Side
C = 3 Row Cooling, Right Hand
D = 3 Row Cooling, Left Hand
E = 4 Row Cooling, Right Hand
F = 4 Row Cooling, Left Hand
- Digit 8 - Electric Heater
0 = No Electric Heater
- Digit 9 - Motor Size
0 = Standard Motor
1 = Oversized Motor
- Digit 10 - Voltage / Phase / Hertz
1 = 220 / 1 / 50
2 = 220 / 1 / 60
- Digit 11 - Plenum / Filter
0 = Without Return Plenum
A = With Return Plenum
- Digit 12 - Design Sequence
A, B, C, D = Design Sequence

General Data

Product Specification

MODEL		HFCA04	HFCA06	HFCA08	HFCA10	HFCA12
RATED - Volts/Ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
SYSTEM DATA						
Nominal	cfm	400	600	800	1,000	1,200
Cooling Capacity	Btu/h	12,000	18,000	24,000	30,000	36,000
Water Inlet Connection Size	in	5/8	5/8	5/8	5/8	5/8
Water Outlet Connection Size	in	5/8	5/8	5/8	5/8	5/8
Water Connection Size		Brazed	Brazed	Brazed	Brazed	Brazed
INDOOR COIL						
Fin Type	Slit	Louver	Louver	Louver	Louver	Louver
Fins per inch*						
3-Row coil		12	12	15	18	18
4-Row coil		14	15	16	15	15
Drain Connection Size	in	1/2	1/2	1/2	1/2	1/2
FAN						
Fan Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Qty		2	2	2	2	2
Drive Type		Direct	Direct	Direct	Direct	Direct
STANDARD FAN MOTOR						
Qty		1	1	1	1	1
Motor Output Power	W	13	42	59	162	186
No. of Speed		3	3	3	4	4
V/ph/Hz		220/1/50	220/1/50	220/1/50	220/1/50	220/1/50
RLA	A	0.20	0.45	0.55	1.35	1.35
DIMENSION (H x W x D)						
Packing (Shipping)	mm	295 x 1,000 x 498	324 x 1,000 x 498	324 x 1,160 x 498	335 x 1,158 x 565	335 x 1,311 x 565
Packing - with plenum (Shipping)	mm	335 x 1,010 x 565	335 x 1,010 x 565	335 x 1,311 x 565	311 x 1,111 x 641	311 x 1,264 x 641
Unit (Net)	mm	230 x 946 x 445	260 x 946 x 445	260 x 1,098 x 445	258 x 1,098 x 531	258 x 1,251 x 531
Unit - with plenum (Net)	mm	230 x 946 x 510	260 x 946 x 510	260 x 1,251 x 510	300 x 1,098 x 625	300 x 1,251 x 625
WEIGHT						
Unit : 3-row coil (Net)	kg	17	20	23	26	28
Unit : 4-row coil (Net)	kg	18	22	25	28	30
Unit : 3-row coil with plenum (Net)	kg	23	27	32	38	42
Unit : 4-row coil with plenum (Net)	kg	24	29	34	40	44

* Note: 1. 3-Row coil is standard coil
 2. 4-Row coil is optional coil
 3. Return air plenum is optional
 4. Product design and specification are subject to change without notice.



Performance Data Cooling Capacities

Models HFCA04-12

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

Cooling Capacity for 3-Row Coil

EWT (F)	Unit	Rated Airflow (F) (CFM)	WTR	Entering Air Temp - EDB/EWB (F)											
				72/61				80/67				84/71			
				TC	SC	GPM	PD	TC	SC	GPM	PD	TC	SC	GPM	PD
40	04	400	8	11.71	8.69	2.92	9.29	17.49	11.19	4.35	18.67	21.77	12.33	5.42	27.38
			10	10.61	8.20	2.11	5.28	16.35	10.70	3.26	11.20	20.64	11.84	4.11	16.80
			15	7.52	6.90	1.00	1.43	13.13	9.37	1.74	3.74	17.45	10.55	2.32	6.12
	06	600	8	16.72	12.59	4.16	7.39	25.11	16.23	6.25	14.99	31.34	17.86	7.80	22.08
			10	15.01	11.84	2.99	4.14	23.36	15.48	4.65	8.91	29.58	17.13	5.89	13.45
			15	9.95	9.73	1.32	0.99	18.34	13.44	2.44	2.86	24.61	15.14	3.27	4.76
	08	800	8	22.75	18.97	5.66	15.49	33.67	24.36	8.38	30.69	41.77	26.84	10.40	44.80
			10	20.92	18.03	4.17	9.03	31.67	23.37	6.31	18.58	39.79	25.86	7.93	27.69
			15	15.77	15.50	2.10	2.71	26.30	20.78	3.49	6.56	34.27	23.25	4.55	10.39
	10	1000	8	29.42	24.40	7.32	10.45	43.53	31.20	10.84	20.69	54.30	34.35	13.52	30.47
			10	26.73	23.08	5.33	5.97	40.55	29.78	8.08	12.31	51.12	32.86	10.18	18.44
			15	18.67	18.34	2.48	1.57	32.77	26.25	4.35	4.14	42.77	29.15	5.68	6.58
12	1200	8	35.88	29.56	8.93	17.25	52.15	37.89	12.98	33.16	64.38	41.79	16.03	47.99	
		10	32.92	28.10	6.56	10.01	48.85	36.26	9.73	19.91	60.95	40.11	12.14	29.31	
		15	24.86	24.28	3.30	3.00	40.52	32.35	5.38	7.00	51.81	35.88	6.88	10.74	
43	04	400	8	9.72	7.82	2.42	6.64	15.32	10.27	3.82	14.66	19.59	11.41	4.88	22.51
			10	8.69	7.38	1.73	3.70	14.12	9.77	2.81	8.58	18.40	10.93	3.67	13.60
			15	5.71	5.64	0.76	0.88	11.01	8.55	1.46	2.72	15.01	9.62	1.99	4.66
	06	600	8	13.85	11.34	3.45	5.26	21.95	14.89	5.47	11.72	28.14	16.54	7.01	18.08
			10	12.25	10.67	2.44	2.88	20.12	14.14	4.01	6.79	26.31	15.80	5.24	10.84
			15	7.32	7.22	0.97	0.58	15.25	12.25	2.03	2.06	21.05	13.80	2.80	3.59
	08	800	8	19.01	17.07	4.73	11.20	29.60	22.35	7.37	24.22	37.68	24.84	9.38	36.97
			10	17.28	16.22	3.44	6.40	27.50	21.34	5.48	14.36	35.59	23.85	7.09	22.53
			15	12.41	12.28	1.65	1.77	22.27	18.96	2.96	4.86	29.77	21.24	3.96	8.05
	10	1000	8	24.58	22.05	6.12	7.55	38.17	28.67	9.50	16.26	48.69	31.76	12.13	24.90
			10	22.03	20.84	4.39	4.22	35.23	27.33	7.02	9.53	45.39	30.29	9.04	14.82
			15	14.16	13.93	1.88	0.96	27.58	24.01	3.66	3.04	37.06	26.76	4.92	5.07
12	1200	8	30.05	26.70	7.48	12.51	45.81	34.82	11.41	26.13	57.85	38.66	14.41	39.35	
		10	27.33	25.43	5.45	7.16	42.55	33.29	33.29	8.48	54.26	36.99	10.81	23.66	
		15	19.68	19.56	2.62	1.99	34.43	29.65	4.58	5.22	45.15	32.97	6.00	8.36	
45	04	400	8	8.46	7.29	2.11	5.18	13.82	9.65	3.44	12.15	18.08	10.80	4.50	19.42
			10	7.51	6.90	1.50	2.85	12.66	9.18	2.52	7.04	16.85	10.32	3.36	11.58
			15	4.75	4.68	0.63	0.63	9.66	8.04	1.28	2.16	13.41	9.03	1.78	3.81
	06	600	8	12.04	10.59	3.00	4.10	19.75	14.00	4.92	9.68	25.93	15.65	6.46	15.56
			10	10.57	9.98	2.11	2.21	18.00	13.30	3.59	5.56	24.04	14.92	4.79	9.20
			15	6.17	6.09	0.82	0.43	13.31	11.54	1.77	1.61	18.73	12.97	2.49	2.91
	08	800	8	16.61	15.90	4.14	8.79	26.76	21.69	6.67	20.17	34.83	23.51	8.68	31.98
			10	14.99	14.26	2.99	4.97	24.76	20.08	4.94	11.87	32.66	22.52	6.51	19.25
			15	10.36	10.26	1.38	1.29	19.68	17.82	2.62	3.90	26.81	19.97	3.56	6.66
	10	1000	8	21.50	20.60	5.36	5.94	34.55	27.03	8.61	13.56	44.81	30.03	11.16	21.37
			10	19.12	18.53	3.81	3.27	31.70	25.77	6.32	7.87	41.53	28.62	8.28	12.60
			15	11.12	11.00	1.48	0.63	24.26	22.63	3.23	2.42	33.24	25.23	4.42	4.17
12	1200	8	26.33	24.96	6.56	9.87	41.53	32.82	10.34	21.85	53.33	36.56	13.29	33.88	
		10	23.83	23.80	4.75	5.60	38.35	31.38	7.64	12.81	49.72	34.95	9.91	20.17	
		15	16.50	16.46	2.19	1.45	30.52	27.98	4.06	4.20	40.71	31.09	5.41	6.93	
50	04	400	8	5.85	5.58	1.46	2.69	10.19	8.24	2.54	7.02	14.07	9.27	3.51	12.32
			10	5.16	5.09	1.03	1.46	9.21	7.88	1.84	3.98	12.79	8.81	2.55	7.04
			15	3.11	3.06	0.41	0.30	6.72	6.41	0.89	1.13	9.62	7.73	1.28	2.11
	06	600	8	8.36	7.96	2.08	2.14	14.54	11.99	3.63	5.58	20.07	13.45	5.00	9.78
			10	7.22	7.12	1.44	1.12	13.06	11.44	2.61	3.13	18.16	12.77	3.62	5.55
			15	4.20	4.14	0.56	0.22	9.11	8.66	1.21	0.82	13.28	11.11	1.77	1.58
	08	800	8	11.49	11.35	2.86	4.55	19.89	17.92	4.96	11.81	27.28	20.17	6.80	20.49
			10	10.30	10.02	2.06	2.55	18.20	17.19	3.63	6.83	25.04	19.24	4.99	11.90
			15	5.43	5.41	0.72	0.42	13.88	13.84	1.85	2.09	19.60	17.07	2.61	3.80
	10	1000	8	15.04	14.27	3.75	3.14	25.76	23.25	6.42	7.99	34.94	25.91	8.71	13.60
			10	13.21	12.64	2.64	1.70	23.37	22.28	4.66	4.55	31.83	24.67	6.35	7.79
			15	6.02	5.97	0.80	0.22	16.75	15.80	2.23	1.25	24.10	21.73	3.21	2.35
12	1200	8	18.51	18.42	4.61	5.26	31.05	28.20	7.74	12.92	41.75	31.52	10.41	21.69	
		10	16.65	16.60	3.32	2.96	28.39	27.08	5.66	7.46	38.29	30.10	7.64	12.56	
		15	7.08	7.03	0.94	0.33	21.78	21.46	2.90	2.31	30.03	26.83	4.00	4.02	

Note: Product design and specification are subject to change without notice.

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

Cooling Capacity for 4-Row Coil

EWT (F)	Unit Size	Rated Airflow CFM	WTR (F)	Entering Air Temp - EDB/EWB (F)											
				72/61				80/67				84/71			
				TC	SC	GPM	PD	TC	SC	GPM	PD	TC	SC	GPM	PD
40	04	400	8	15.04	10.61	3.74	18.29	21.97	13.61	5.47	35.45	27.11	15.15	6.75	51.22
			10	14.02	10.14	2.79	10.92	20.91	13.12	4.17	21.91	26.07	14.55	5.19	32.20
			15	11.10	8.84	1.47	3.57	17.92	11.81	2.38	8.17	23.08	13.25	3.07	12.68
	06	600	8	22.34	15.84	5.56	16.83	32.71	20.32	8.14	32.74	40.41	22.60	10.06	47.42
			10	20.75	15.11	4.13	9.99	31.04	19.56	6.18	20.13	38.77	21.69	7.72	29.69
			15	16.14	13.07	2.14	3.16	26.41	17.55	3.51	7.42	34.06	19.67	4.52	11.54
	08	800	8	26.35	22.43	6.56	27.54	38.24	28.65	9.52	52.81	47.05	31.55	11.71	75.98
			10	24.74	21.53	4.93	16.65	36.59	27.74	7.29	32.92	45.44	30.68	9.05	48.10
			15	20.12	18.80	2.67	5.69	31.90	25.01	4.24	12.64	40.72	28.18	5.41	19.33
	10	1000	8	31.64	26.78	7.88	15.86	46.18	34.18	11.50	30.68	57.13	37.62	14.22	44.54
			10	29.34	25.55	5.84	9.38	43.67	32.88	8.70	18.73	54.58	36.31	10.87	27.67
			15	22.58	22.10	3.00	2.91	37.05	29.57	4.92	6.86	47.51	32.67	6.31	10.57
12	1200	8	38.63	32.29	9.62	26.22	55.43	41.27	13.80	49.31	67.88	45.48	16.90	70.40	
		10	36.01	30.91	7.17	15.64	52.60	39.78	10.48	30.28	65.09	44.01	12.96	43.98	
		15	28.90	27.04	3.84	5.22	45.28	35.82	6.02	11.36	57.23	39.84	7.60	17.08	
43	04	400	8	12.65	9.52	3.15	13.37	19.45	12.47	4.85	28.32	24.59	13.89	6.12	42.68
			10	11.64	9.07	2.32	7.82	18.31	11.98	3.65	17.17	23.48	13.42	4.68	26.51
			15	8.87	7.90	1.18	2.39	15.32	10.74	2.04	6.15	20.25	12.09	2.69	9.99
	06	600	8	18.77	14.22	4.68	12.29	28.91	18.63	7.20	26.09	28.97	21.16	7.22	26.16
			10	17.21	13.53	3.43	7.14	27.15	17.86	5.41	15.76	27.46	20.50	5.47	16.06
			15	12.79	11.67	1.70	2.09	22.51	15.95	2.99	5.56	23.61	18.90	3.14	6.03
	08	800	8	22.25	19.95	5.54	20.27	33.96	26.33	8.46	42.42	42.77	29.25	10.65	63.56
			10	20.66	19.09	4.12	12.03	32.16	25.38	6.41	25.98	41.04	28.35	8.18	39.79
			15	16.17	15.86	2.15	3.85	27.43	22.72	3.65	9.61	35.91	25.57	4.77	15.36
	10	1000	8	26.61	23.97	6.63	11.59	40.77	31.40	10.15	24.39	51.61	34.83	12.85	36.87
			10	24.37	22.82	4.86	6.72	38.26	30.15	7.62	14.71	48.91	33.50	9.75	22.58
			15	17.85	17.77	2.37	1.92	31.59	26.97	4.20	5.14	41.69	29.95	5.54	8.33
12	1200	8	32.55	28.89	8.11	19.22	48.98	37.91	12.20	39.27	61.41	42.12	15.29	58.39	
		10	30.06	27.63	5.99	11.29	46.18	36.51	9.20	23.85	58.43	40.64	11.64	36.01	
		15	23.28	22.99	3.09	3.55	38.85	32.69	5.16	8.61	50.38	36.53	6.69	13.53	
45	04	400	8	11.07	8.83	2.76	10.53	17.69	11.72	4.41	23.82	22.83	13.15	5.69	37.20
			10	10.11	8.42	2.02	6.08	16.57	11.24	3.30	14.32	21.66	12.66	4.32	22.87
			15	7.52	7.35	1.00	1.79	13.59	10.06	1.81	4.97	18.35	11.35	2.44	8.36
	06	600	8	16.42	13.20	4.09	9.67	19.03	18.55	4.74	12.47	33.96	19.62	8.46	34.32
			10	14.94	12.56	2.98	5.54	18.36	17.89	3.66	7.92	32.12	18.87	6.40	20.98
			15	12.79	11.67	1.70	2.09	16.38	16.22	2.18	3.18	27.02	16.87	3.59	7.58
	08	800	8	19.52	18.48	4.86	16.01	30.96	24.76	7.71	35.82	39.78	27.71	9.91	55.58
			10	17.99	17.68	3.59	9.39	29.19	23.86	5.82	21.77	37.95	26.80	7.56	34.46
			15	13.75	13.57	1.83	2.89	24.44	21.26	3.25	7.81	32.69	24.01	4.35	12.95
	10	1000	8	23.33	22.29	5.81	9.15	37.10	29.59	9.24	20.53	47.78	32.96	11.90	31.97
			10	21.20	21.11	4.23	5.24	34.61	28.39	6.90	12.26	44.98	31.65	8.96	19.37
			15	14.89	14.83	1.99	1.49	28.01	25.35	3.72	4.15	37.73	28.17	5.02	6.95
12	1200	8	28.57	26.87	7.12	15.20	44.62	35.74	11.12	33.12	56.90	39.88	14.17	50.73	
		10	26.25	25.73	5.23	8.86	41.82	34.37	8.34	19.92	53.79	38.38	10.72	30.94	
		15	19.85	19.76	2.64	2.67	34.63	30.71	4.60	7.00	45.72	34.39	6.08	11.35	

Note : Product design and specification are subject to change without notice.

Product Specifications and Options

Standard HFCA Unit



HFCA unit with factory-installed Motorized Valve (Option)

GENERAL

HFCA : Ceiling Concealed Models Designed specifically to meet many various requirements demanded for concealed type installation. Commonly used for low static (free blow or short duct) application within the closets of hotels, motels and apartments. Available in 400-1,200 cfm sizes.

FAN

Fans are double width, double inlet multiblade centrifugal type. All fans are statically and dynamically balanced.

MOTOR

Single-phase motors are suitable for 220/1/50. All motors have 10 percent voltage utilization range and wired to unit terminal box. Motors are designed for long life.

DRAIN PAN

3-layer drain pan is integrally attached to coil casings and ended with drain hose. All pans are galvanized for corrosion resistance and cover the entire coil.

WATER COIL

Coils are 3-row as standard design together with 4-row design as option. High efficient aluminum fins are mechanically bonded to seamless copper tubes. All coil are specifically designed and circuited for water use. All coils are tested at 380 psi.

CASING

Casings are constructed of heavy gauge steel. Interior surface of unit panels are acoustically and thermally insulated with Polyethylene foam. Units are furnished as standard with a 1 inch duct collar to facilitate connection of the supply air duct.



MOTORIZED VALVE (OPTION)

The valve is driven by synchronous motor with spring to keep the room temperature with the setting range. It is selectable to be provided separately or to be installed by Trane factory.

- Motorized valve (separated).
- Factory-installed motorized valve.

ROOM THERMOSTAT (OPTION)

Room thermostat has the following features:

- Power - On/Off
- Speeds Fan - Low, Medium, High.
- Temperature adjustment between 16-30°C.

RETURN AIR PLENUM (OPTION)

The unit shall be factory installed return air plenum that enclose the fan section of the unit. No field fabrication is required. Filter should be accessible from return air grille. The return air arrangement is adaptable between bottom or rear return of the plenum.



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ทราน (ประเทศไทย)

เลขที่ 112/2 ชั้น 30-31 อาคารวานิช 2 ถนนพหลโยธินใหม่ แขวงมักกะสัน เขตราชเทวี กรุงเทพฯ 10400

☎ 0-2761-1111

