



# AQUAS

*Chilled Water Fan Coil Unit  
Convertible Type 400-2,000 CFM  
CFEB Series 50Hz*

TRANE  
TECHNOLOGIES





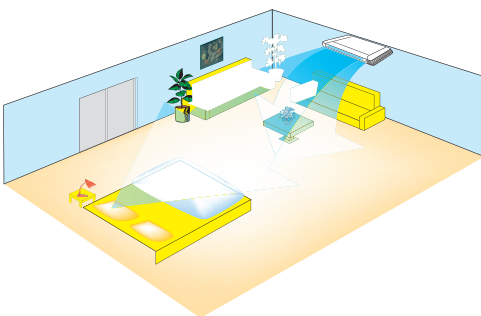
# AQUAS - Richness of Comfort



Trane's new Chilled Water Fan Coil cooling comfort, with luxurious design, state of the art technology and long life durability AQUAS Water Coil with optional digital wired control or LCD wireless control, is easily to use and allows precise room temperature control.

With advanced manufacturing techniques, Trane's AQUAS Chilled Water Fan Coil is the perfect product for your modern lifestyle.

## Vertical Airflow Circulation



### Flexibility

AQUAS's convertible design allows for flexibility in installation. AQUAS may be installed under the ceiling, low on the wall, or on the floor, depending on the space available in your room.

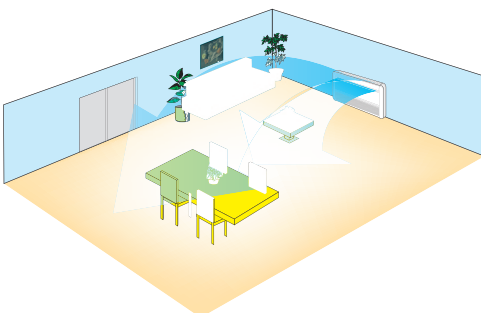
### Quality

All major components are individually inspected and tested, and every unit undergoes a run-test, prior to shipment from the factory.

### Comfort and Reliability

- Full capacity and energy savings.
- Washable filter.
- Low maintenance.
- Attractive style.
- 2-directional air discharge.
- Effective air discharge.
- Low operating noise.
- Power failure recovery saves settings during a power failure and restarts the system automatically when power resumes.

## Horizontal Airflow Circulation



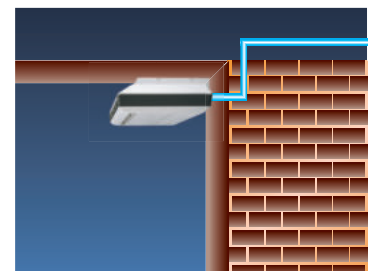
### Trane Mini Condensate Pump (Option)

is designed to be installed with chilled water fan coil in wall-typed, ceiling suspend-typed and floor mount-typed air conditioners. A set consists of pump unit and floating detection unit.



One Touch Control Switch

### Drain Pump Application



\* Water flow rate has to be calculated from the actual distance from the suction head to the discharge head referring to the pump's manual



**New!**

### Trane Unique Control

instantly bring all comfort and convenience to your modern lifestyle.



Wireless remote control  
(Option)

**New!**

best suite your needs with new privileged mode and function, elegant appearance, and simple use.



Digital wired control  
(Option)

**New!**

### Room Thermostat

Room thermostat has the following features:

- Power - On/Off.
- Fan Speed - Low, Medium, High.
- Temperature adjustment between 16-30 °C.
- Compatible to use with on-off type PICV valve only.



Room  
Thermostat  
(Standard)

### Control Features for Wireless Remote and Digital Wired Control Options\*\*\*

- Luminous On/Off Button\***  
makes you easily on/off air conditioner during night time or the dark.
- Send Button\***  
confirm or select unit operation according to LCD display.
- Front Blade Function\*\***  
allows for control of front air flow direction and helps room air circulation.
- Louver Function\*\***  
allows you control 5 levels air flow direction of top discharge.
- Powercool (Turbo) Mode**  
provides quick convenient cooling capacity. (Turbo Mode for digital wired control)
- Sleep Mode**  
provides more comfort with automatically appropriate room temperature adjustment during your rest.
- Econo Mode**  
provides more energy saving with high efficient cooling capacity.
- Dry Mode**  
provides effective humidity reduction with high efficient cooling capacity.
- Sweep Function\*\***  
helps provide better efficient air distribution and circulation.
- Mode of Operation**  
allows you control the operating modes: Fan, Cool, Dry.
- Fan Speed**  
continuously provides cool air flow with 4 fan levels: High, Medium, Low, and Auto.
- Temperature Setting**  
set temperature range is from 15 °C to 30 °C.
- 24 Hours Programmable Timer**  
Users can select on/off time of the unit as real time.

\* Functions and buttons above are available only for Wireless remote control.

\*\* Front Blade, Louver and Sweep functions are available for only model CFEB04-12

\*\*\* Compatible to use with on-off type PICV valve only.



PICV Valve  
(Option)



Motorized Valve Spring Return  
(Option)



Motorized Valve Electric Return  
(Option)

### PICV Pressure Independent Control Valve (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 Motorized Valve/ Spring or Electric Return (1 Year Warranty)** is used to open/close the chilled water piping system to control the room temperature according to the thermostat's set point. Recommend to use with Trane Thermostat for precise temperature control.

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

# Performance Data

## CFEB04-20

		Water Temperature Rise (°F)															
Unit Size	EWT (°F)	8				10				12				15			
		TC	SC	GPM	PD	TC	SC	GPM	PD	TC	SC	GPM	PD	TC	SC	GPM	PD
04	40	16.58	10.99	4.13	32.31	15.55	10.53	3.10	19.49	14.41	10.03	2.39	12.38	12.53	9.23	1.67	6.56
	45	13.14	9.48	3.27	21.13	12.04	9.03	2.40	12.27	10.94	8.58	1.82	7.53	9.21	7.90	1.22	3.77
	50	9.67	8.09	2.41	12.19	8.75	7.73	1.75	6.93	7.83	7.38	1.30	4.15	6.38	6.32	0.85	1.97
06	40	24.87	16.39	6.19	32.35	23.35	15.69	4.65	19.53	21.65	14.93	3.59	12.42	18.76	13.70	2.49	6.53
	45	19.75	14.11	4.92	21.20	18.06	13.41	3.60	12.26	16.36	12.72	2.72	7.49	13.71	11.67	1.82	3.73
	50	14.47	11.97	3.61	12.13	13.05	11.43	2.60	6.86	11.64	10.89	1.94	4.09	9.43	9.34	1.26	2.26
08	40	34.00	22.32	8.46	48.90	32.15	16.10	6.40	29.87	30.16	20.58	5.01	19.36	26.93	19.17	3.58	10.71
	45	27.14	19.27	6.76	32.35	25.09	18.41	5.00	18.82	23.15	17.60	3.85	11.99	20.20	16.43	2.69	6.39
	50	20.04	16.36	5.00	18.71	18.39	15.72	3.67	10.88	16.78	15.11	2.79	6.74	14.36	14.21	1.91	3.48
10	40	42.25	27.84	10.52	32.89	39.65	26.66	7.90	1.85	36.73	25.37	6.10	12.60	31.70	23.22	4.21	6.58
	45	33.53	23.99	8.35	21.56	30.69	22.81	6.12	12.48	27.76	21.61	4.61	7.61	22.97	19.73	3.05	3.70
	50	24.62	20.37	6.14	12.37	22.18	19.43	4.43	6.98	36.73	25.37	6.10	12.60	15.43	15.27	2.05	1.83
12	40	50.18	32.72	12.49	41.60	47.48	31.47	9.46	25.46	44.58	30.15	7.40	16.53	39.39	27.94	5.25	9.03
	45	40.14	28.21	10.00	27.63	37.11	26.93	7.40	16.26	34.01	25.65	5.65	10.14	29.31	23.76	3.90	5.29
	50	29.50	23.83	7.35	15.86	26.93	22.82	5.37	9.15	24.38	21.86	4.05	5.59	20.47	20.40	2.72	2.79
14	40	57.67	38.08	14.36	47.63	54.32	36.56	10.82	28.90	50.77	34.98	8.43	18.60	45.05	32.54	5.98	10.18
	45	45.86	32.87	11.42	31.30	42.25	31.37	8.42	18.30	38.85	29.99	6.45	11.46	33.63	27.90	4.47	6.02
	50	33.80	27.98	8.43	18.05	30.93	26.87	6.17	10.45	28.12	25.81	4.68	6.42	23.75	23.70	3.16	3.24
16	40	68.23	45.08	16.99	46.90	64.28	43.28	12.80	28.47	60.06	41.42	9.97	18.32	53.39	38.56	7.09	10.05
	45	54.26	38.92	13.51	30.82	50.09	37.19	9.98	18.08	46.11	35.55	7.66	11.35	39.87	33.09	5.30	5.59
	50	40.13	33.17	10.00	17.89	36.76	31.87	7.33	10.37	33.40	30.61	5.55	6.37	28.08	27.93	3.74	3.19
20	40	82.62	54.40	20.57	45.75	77.82	52.21	15.50	27.77	72.69	49.93	12.07	17.87	64.01	46.18	8.50	9.65
	45	65.74	46.92	16.38	30.11	60.50	44.72	12.06	17.57	55.39	42.64	9.20	10.93	47.31	39.43	6.29	5.61
	50	48.35	39.84	12.05	17.31	44.08	38.19	8.79	9.95	39.76	36.54	6.61	6.04	32.83	32.53	4.37	2.93

- Note:
- All capacities are gross and have not considered indoor fan heat.
  - Air Entering Coil Conditions are 84°F DB / 71°F WB.
  - Cooling capacities are rated at nominal CFM (High Fan Speed).
  - EWT = Entering Water Temperature (°F).

- TC = Total Gross Cooling Capacity, MBH  
 SC = Sensible Heat Capacity, MBH  
 GPM = Condensing Water Flow Rate  
 kW = Compressor Power Input, Kilowatt

## Product Specifications

UNIT MODELS		CFEB04	CFEB06	CFEB08	CFEB10	CFEB12	CFEB14	CFEB16	CFEB20
POWER CONNECTION	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
MCA <sup>1</sup>	A	0.50	0.48	0.78	1.04	1.04	1.67	1.71	1.71
SYSTEM DATA									
Nominal Airflow <sup>2</sup>	cfm	400	600	800	1,000	1,200	1,400	1,600	2,000
Water Outlet Connection Size	in	1/2	1/2	3/4	3/4	3/4	3/4	3/4	3/4
Water Inlet Connection Size	in	1/2	1/2	3/4	3/4	3/4	3/4	3/4	3/4
Water Connection Type		Male adapter	Male adapter	Male adapter	Male adapter	Male adapter	Male adapter	Male adapter	Male adapter
COIL									
Fins per inch		12	16	14	16	16	16	15	16
Drain Connection Size	in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
FAN									
Fan Type		FCC	FCC	FCC	FCC	FCC	FCC	FCC	FCC
Qty		2	2	2	4	4	4	4	4
Drive Type		Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
MOTOR									
Motor Type		PSC	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Qty		1	1	1	2	2	2	2	2
No. of Speed		3	3	3	3	3	3	3	3
V/ph/Hz		220/1/50	220/1/50	220/1/50	220/1/50	220/1/50	220/1/50	220/1/50	220/1/50
RLA	A	0.40	0.40	0.62	0.46	0.46	0.74	0.76	0.76
DIMENSION (HxWxD)									
Packing (Shipping)	mm	692 x 1,143 x 278	692 x 1,143 x 278	692 x 1,391 x 278	692 x 1,641 x 278	692 x 1,641 x 278	692 x 1,886 x 278	692 x 2,137 x 278	692 x 2,137 x 278
Unit (Net)	mm	627 x 1,074 x 234	627 x 1,074 x 234	627 x 1,324 x 234	627 x 1,574 x 234	627 x 1,574 x 234	627 x 1,824 x 234	627 x 2,074 x 234	627 x 2,074 x 234
WEIGHT									
Packing (Shipping)	kg	34	37	45	59	61	68	82	86
Unit (Net)	kg	31	34	40	54	56	61	75	78

<sup>1</sup> MCA - Minimum Circuit Ampacity; calculated as follow : 125% of the fan motor R.L Amps.  
<sup>2</sup> CFM is rated with standard air-dry coil.



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