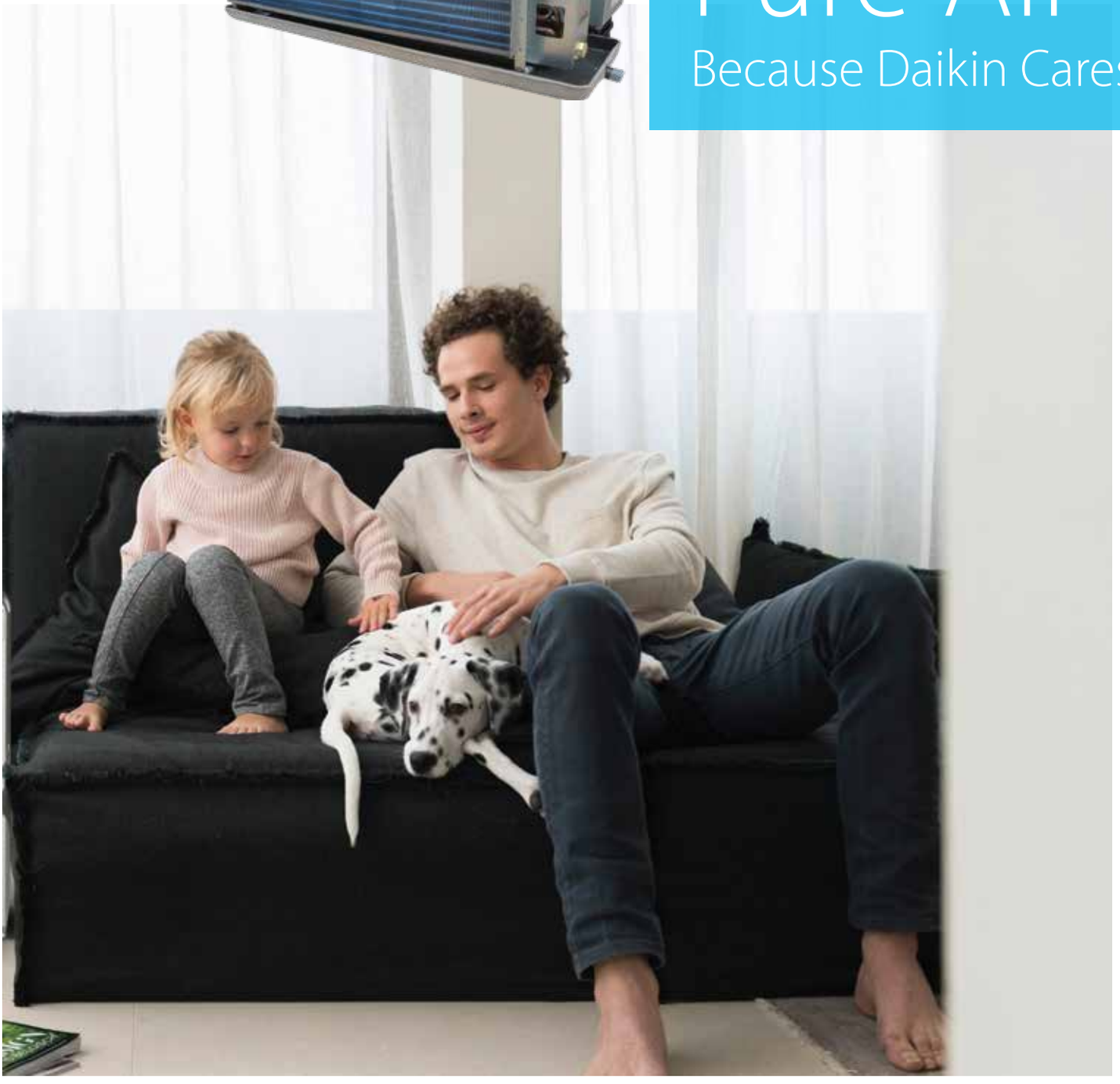
DAIKIN

Pure Air

Because Daikin Cares



Indoor Air Quality Options for Fan Coil Units

We are changing the way you think about

Outdoor and Indoor Air Quality

Pollution levels

We are all aware that outdoor air quality has a great impact on our overall health. What we don't realize is that the level of pollution inside our homes and offices is so much higher than the outdoors.

As we spend 90% of our time indoors, indoor air quality is worse than it is outdoors.

Sources of indoor air pollutants

- Airborne Particles
- Volatile Organic Compounds (VOCs)
- LivingRoom : Paint, Varnishes, upholstery, furnishing and carpets
- Bedroom : Perfumes, Hairspray, nailpolish, upholstery, furnishing andcarpets
- Laundry Room : Cleaning Products
- Microbial Pathogens
- Bathroom/Laundry Room : Mould, odours, Bacteria and Viruses

Time spent in one area is relative to the increase in air pollution level.

Did you know?

4.2M

deaths worldwide every year are attributed to ambient air pollution

91%

of the world's population live in places exceeding WHO air quality guidelines

Source: World Health Statistics

Improving Air Quality

with innovative solutions for Fan Coil Units

Comfort

- ☑ Breathing clean air is one of the joys of life and is certainly a major health benefit. Clean air delivered at the right humidity and in the right place is a perfect foundation for optimal comfort.

- ☑ Daikin's new technologies filter out particles, allergens and unpleasant odours to deliver clean air for you to breathe and in doing so, optimizing your comfort levels and reducing health risks.

Energy Efficiency

- ☑ It would not be a Daikin product if it had anything less than the highest level of energy efficiency. Like all our products, our systems are highly-efficient.

Reliability

- ☑ Daikin products are renowned for their reliability. You can also rely on our service to match.

UNIQUE DAIKIN OFFERING

Indoor Air Quality Options for FCU

- Photo-Catalytic Oxidation (PCO) Technology
- Electrostatic Filter
- PM2.5 90% Filter

IAQ Options

Photo-Catalytic Oxidation Technology

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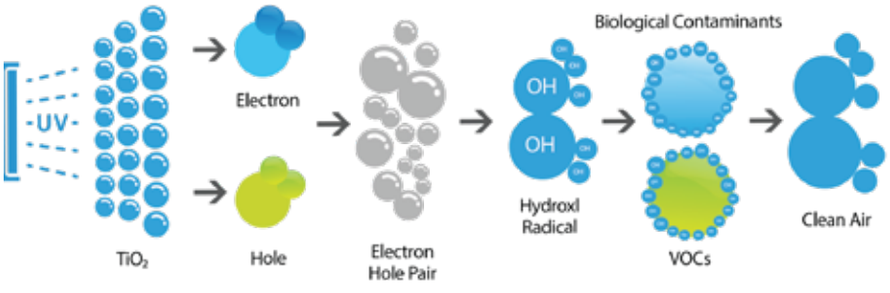
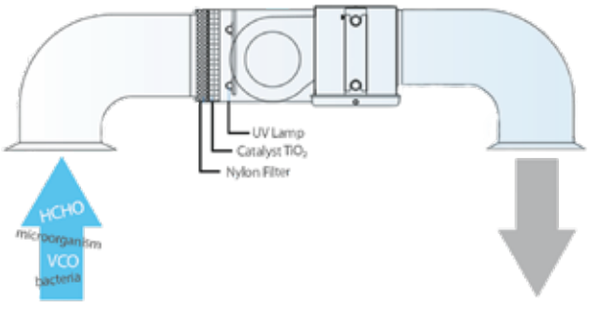
•Photo-catalytic oxidation (PCO) utilizes ultraviolet radiation to create highly reactive hydroxyl radicals and super-oxide ions on the surface of a metal oxide catalyst
•Biological contaminants coming in to contact with the hydroxyl radicals are oxidized and decomposed
•Volatile organic compounds (VOCs) are converted to simpler chemicals, carbon dioxide and water



Current available fan coil unit filters in the market are not able to detect and address VOCs and microbial pathogens.

Unit Configuration



Applicable Models:
FWW-VC/C/F/H/DA

Power Supply:
220-240V/1Ph/50Hz & 60 Hz

•Effective against biological contaminants and volatile organic compounds
•Equipped with multiple high-power UV lamps and metal plate TiO_2 filter to ensure effective purification
•As a photocatalytic raw material, TiO_2 adopts high-temperature film-forming coating technology to give full play to its photocatalytic effect
•The accessory does not load or become consumed and does not require the periodic replacement, replacement or maintenance required for UV lamps only
•No additional pressure drop due to PCO filters, hence, no change in motor power

PCO Retrofit Kit Option

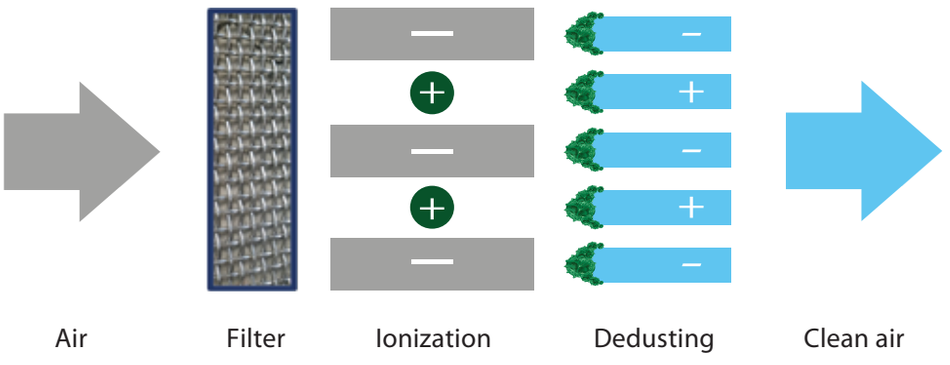
available for existing installation

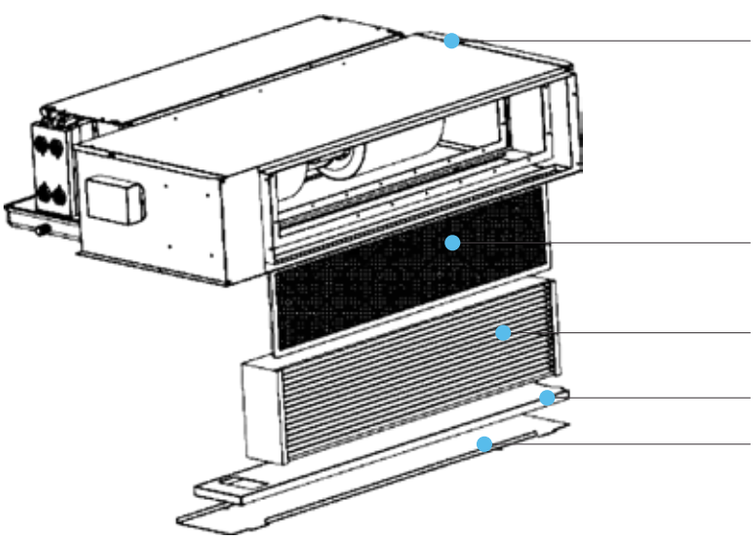
Advantages

•Remove the existing filter and mount the PCO retrofit kit on the return flange
•Minor modification on the unit wiring

Electrostatic Filter

- Washable metal mesh pre-filter which traps large dust particles.
- Remaining particles, as small as 0.01 microns pass through ionizing section where the particulate receives an electrical charge
- Charged particles then pass through a dedusting chamber made up of a series of equally spaced parallel plates
- Each alternate plate is charged with the same polarity as the particles, which repel. While the interleaving plates are grounded, which attract and collect.





- Low pressure drop(≤10Pa)
- Washable Electrostatic Filter incorporated with Prefilter
- Efficiency of PM2.5 is ≥90%

Applicable Models:
FWW-VC

Power Supply:
220-240V/1Ph/50Hz

IAQ Options

PM2.5 90% Filter

UNIQUE DAIKIN OFFERING

- Anti-microbial treated media
- High dust-holding capacity
- Low depth and lightweight
- Efficiency PM2.5 90%

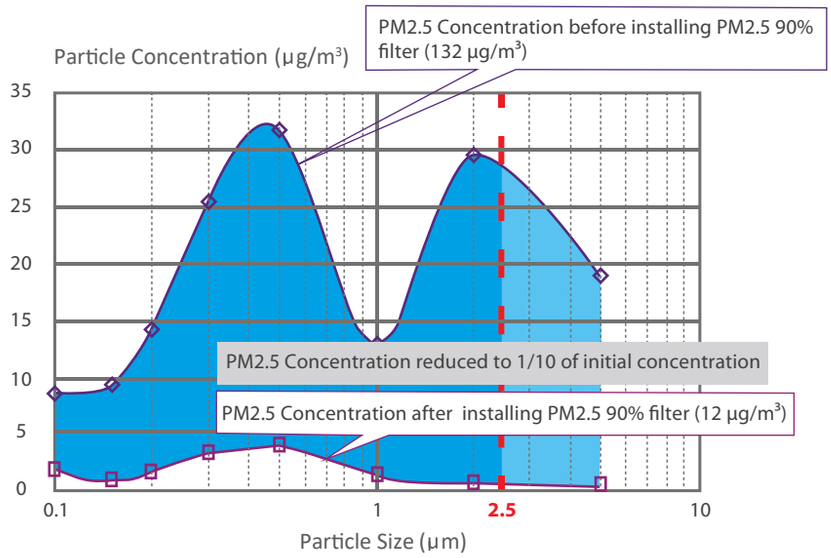
Applicable Models:
FWW-C/F/DA

Power Supply:
220-240V/1Ph/50Hz & 60 Hz

Note: There will be an increase in air pressure drop. Please contact your local Daikin representative for product selection.

Indoor PM concentration measurement data after using PM2.5 filter

- The highest mass of particles in the air comes from particles in the range of 100nm – 2,5µm (PM1 - PM2.5).
- The lighter and smaller a particle is, the longer it stays in the air
- Prolonged exposure causes a constant inflammatory state and may also work as carriers of viruses.



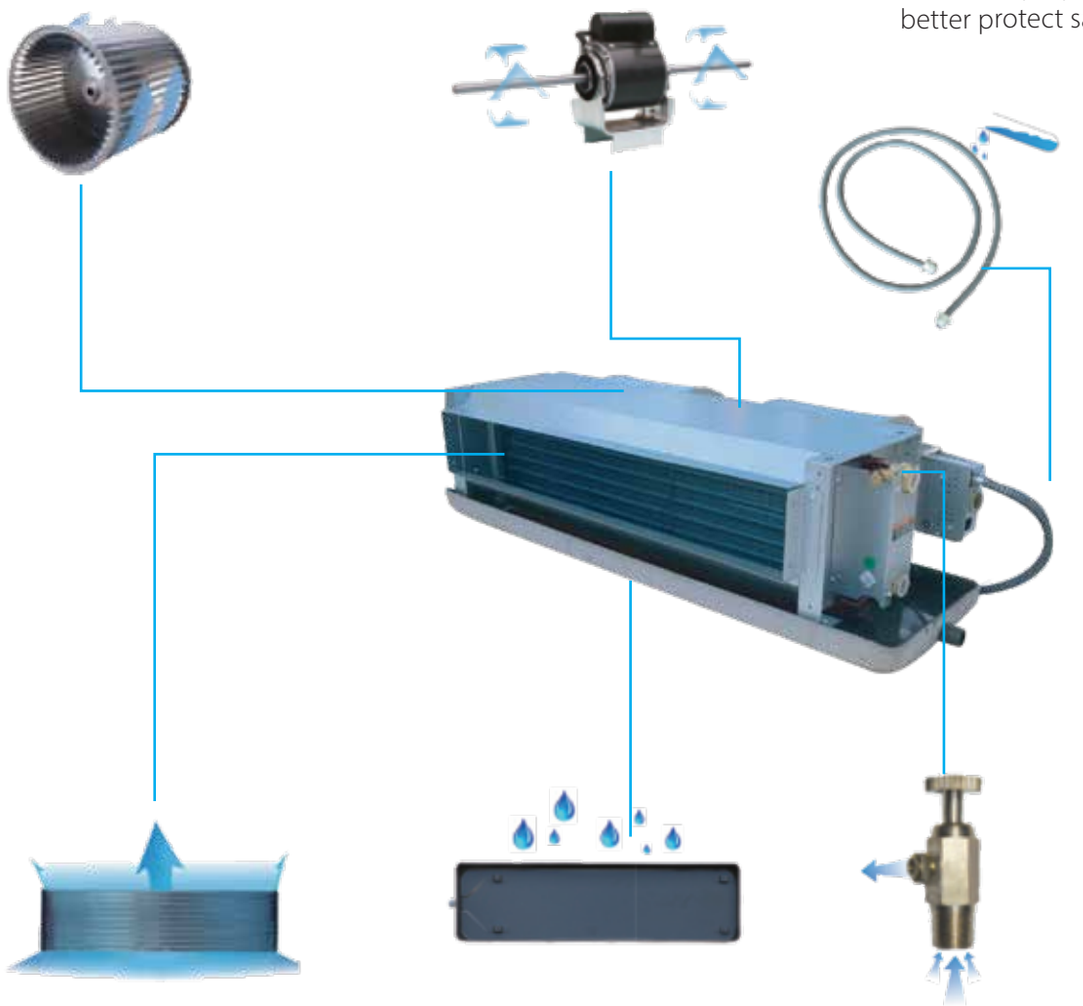
After installing the PM2.5 filter , average concentration of PM2.5 particles reduced to1/10th

FCU Product Features

Centrifugal impeller
The centrifugal double-suction fan featuring high-efficiency wide-impeller and forward-curved multi-blade is adopted to implement low speed, large air flow and low noise.

High-efficiency motor
High efficiency and energy saving, powerful, stable and quite operation; configuration of the international brand NSK bearing, ensuring efficient, safe and maintenance-free operation.
**Optional EC motor*

Plastic-coated metal hose
The cable protection pipe for the motor uses plastic-coated metal hose; the plastic-coated metal hose is light in weight and well flexible, with outstanding barrier property; The hose is resistant to corrosion, wear and high temperature; it has good insulation property and can better protect safety in use.



High-efficiency heat exchanger
Formed using high quality copper tubes and highly efficient hydrophilic aluminum fins through mechanical expansion joint to reduce heat resistance; Quasi counterflow fan coil design enables thorough heat exchange between air and water to guarantee high efficiency in heat exchange.

New self-slope drain pan
The self-slope structure design ensures quick drainage of condensate water; with spray on both sides for anti-corrosion, the tray surface is cleaner; the integrated design is adopted to avoid cold bridges.

Manual air vent valve
The unit is configured with manual air vent valve for convenient operation, quicker discharge, and easier installation. The valve is placed at the highest point to guarantee thorough discharging of air in the system and ensure the heat exchange effect.

Quick Selection Guide

Ducted Chilled Water FCU
FWW-DA with PCO Filter

High Delta

Model	AIR FLOW		ESP	SPEED	ON COIL		CHILLED WATER TEMPERATURE		COOLING CAPACITY		WATER FLOW	POWER INPUT	DIMENSION		
													LENGT	DEPTH	HEIGHT
	CFM	L/S	PA		DB °C	WB °C	IN °C	OUT °C	TOTAL KW	SENSIBLE KW	L/S	WATT	MM	MM	MM
FWW02DA	218	103	50	Medium	24.4	17.2	5.5	14.5	1.90	1.54	0.05	59	675	569	243
FWW03DA	288	136	50	Medium	24.4	17.2	5.5	14.5	2.02	1.61	0.05	83	675	569	243
FWW04DA	365	172	50	Medium	24.4	17.2	5.5	14.5	2.93	2.29	0.08	107	825	569	243
FWW05DA	441	208	50	Medium	24.4	17.2	5.5	14.5	3.61	2.82	0.09	114	925	569	243
FWW06DA	583	275	50	Medium	24.4	17.2	5.5	14.5	4.33	3.57	0.11	142	995	569	243
FWW07DA	671	317	50	Medium	24.4	17.2	5.5	14.5	5.00	4.10	0.13	159	1095	569	243
FWW08DA	689	325	50	Medium	24.4	17.2	5.5	14.5	5.06	4.20	0.13	167	1095	569	243
FWW10DA	877	414	50	Medium	24.4	17.2	5.5	14.5	6.77	5.55	0.18	285	1425	569	243
FWW12DA	1018	481	50	Medium	24.4	17.2	5.5	14.5	7.86	6.44	0.21	253	1525	569	243
FWW14DA	1095	517	50	Medium	24.4	17.2	5.5	14.5	8.17	6.79	0.22	298	1525	569	243
FWW16DA	1230	581	50	Medium	24.4	17.2	5.5	14.5	9.01	7.63	0.24	436	1425	639	297
FWW18DA	1489	703	50	Medium	24.4	17.2	5.5	14.5	10.85	9.20	0.29	558	1525	639	297
FWW20DA	1848	872	50	Medium	24.4	17.2	5.5	14.5	13.40	11.34	0.36	635	1825	639	297

Notes:
1. Airflow at dry coil condition
2. Power Supply 220-240V/1Ph/50Hz

Ducted Chilled Water FCU
FWW-DA with PCO Filter

Standard Delta

Model	AIR FLOW		ESP	SPEED	ON COIL		CHILLED WATER TEMPERATURE		COOLING CAPACITY		WATER FLOW	POWER INPUT	DIMENSION		
													LENGT H	DEPTH	HEIGHT
	CFM	L/S	PA		DB °C	WB °C	IN °C	OUT °C	TOTAL KW	SENSIBLE KW	L/S	WATT	MM	MM	MM
FWW02DA	218	103	50	Medium	24.4	17.2	7.2	12.7	2.01	1.58	0.09	59	675	569	243
FWW03DA	288	136	50	Medium	24.4	17.2	7.2	12.7	2.17	1.67	0.09	83	675	569	243
FWW04DA	365	172	50	Medium	24.4	17.2	7.2	12.7	3.07	2.34	0.13	107	825	569	243
FWW05DA	441	208	50	Medium	24.4	17.2	7.2	12.7	3.77	2.88	0.16	114	925	569	243
FWW06DA	583	275	50	Medium	24.4	17.2	7.2	12.7	4.60	3.68	0.20	142	995	569	243
FWW07DA	671	317	50	Medium	24.4	17.2	7.2	12.7	5.23	4.19	0.23	159	1095	569	243
FWW08DA	689	325	50	Medium	24.4	17.2	7.2	12.7	5.33	4.31	0.23	167	1095	569	243
FWW10DA	877	414	50	Medium	24.4	17.2	7.2	12.7	7.15	5.71	0.31	285	1425	569	243
FWW12DA	1018	481	50	Medium	24.4	17.2	7.2	12.7	8.33	6.62	0.36	253	1525	569	243
FWW14DA	1095	517	50	Medium	24.4	17.2	7.2	12.7	8.55	6.94	0.37	298	1525	569	243
FWW16DA	1230	581	50	Medium	24.4	17.2	7.2	12.7	9.44	7.81	0.41	436	1425	639	297
FWW18DA	1489	703	50	Medium	24.4	17.2	7.2	12.7	11.44	9.44	0.49	558	1525	639	297
FWW20DA	1848	872	50	Medium	24.4	17.2	7.2	12.7	13.87	11.53	0.60	635	1825	639	297

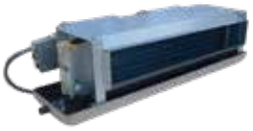
Notes:
1. Airflow at Dry coil condition
2. Power Supply 220-240V/1Ph/50Hz

Ducted Chilled Water FCU
FWW-C with PCO Filter

Standard Delta

Model	AIR FLOW		ESP	SPEED	ON COIL		CHILLED WATER TEMPERATURE		COOLING CAPACITY		WATER FLOW	POWER INPUT	DIMENSION		
													LENGTH	DEPTH	HEIGHT
	CFM	L/S	PA		DB °C	WB °C	IN °C	OUT °C	TOTAL KW	SENSIBLE KW	L/S	WATT	MM	MM	MM
FWW200C	183	86	50	Medium	24.4	17.2	7.2	12.7	1.45	1.27	0.06	70	714	570	251
FWW300C	252	119	50	Medium	24.4	17.2	7.2	12.7	1.98	1.71	0.09	89	884	570	251
FWW400C	340	161	50	Medium	24.4	17.2	7.2	12.7	2.83	2.42	0.12	108	1014	570	251
FWW600C	488	231	50	Medium	24.4	17.2	7.2	12.7	3.74	3.21	0.16	156	1214	570	251
FWW800C	632	298	50	Medium	24.4	17.2	7.2	12.7	4.65	4.18	0.20	218	1464	570	251
FWW1000C	704	332	50	Medium	24.4	17.2	7.2	12.7	5.32	4.62	0.23	242	1564	570	251
FWW1200C	912	430	50	Medium	24.4	17.2	7.2	12.7	6.41	5.52	0.28	304	1824	570	251
FWW1400C	1172	553	50	Medium	24.4	17.2	7.2	12.7	8.22	7.45	0.36	288	1195	788	345
FWW1600C	1380	651	50	Medium	24.4	17.2	7.2	12.7	9.22	8.29	0.40	522	1295	788	345
FWW1800C	1584	747	50	Medium	24.4	17.2	7.2	12.7	10.77	9.72	0.47	729	1445	788	345

Notes:
1. Airflow at dry coil condition
2. Power Supply 208-230V/1Ph/60Hz



Ducted Chilled Water FCU
FWW-F with PCO Filter

Standard Delta

Model	AIR FLOW		ESP	SPEED	ON COIL		CHILLED WATER TEMPERATURE		COOLING CAPACITY		WATER FLOW	POWER INPUT	DIMENSION		
													LENGTH	DEPTH	HEIGHT
	CFM	L/S	PA		DB °C	WB °C	IN °C	OUT °C	TOTAL KW	SENSIBLE KW	L/S	WATT	MM	MM	MM
FWW200C	176	83	50	Medium	24.4	17.2	7.2	12.7	1.72	1.37	0.08	70	714	570	251
FWW300C	240	113	50	Medium	24.4	17.2	7.2	12.7	2.16	1.76	0.09	89	884	570	251
FWW400C	331	156	50	Medium	24.4	17.2	7.2	12.7	3.50	2.64	0.15	108	1014	570	251
FWW600C	484	228	50	Medium	24.4	17.2	7.2	12.7	4.38	3.59	0.19	156	1214	570	251
FWW800C	626	295	50	Medium	24.4	17.2	7.2	12.7	5.16	4.37	0.22	218	1464	570	251
FWW1000C	686	324	50	Medium	24.4	17.2	7.2	12.7	6.28	5.08	0.27	242	1564	570	251
FWW1200C	893	421	50	Medium	24.4	17.2	7.2	12.7	7.76	6.52	0.34	304	1824	570	251
FWW1400C	1139	538	50	Medium	24.4	17.2	7.2	12.7	9.11	7.91	0.39	277	1195	788	345
FWW1600C	1338	631	50	Medium	24.4	17.2	7.2	12.7	10.27	8.92	0.44	521	1295	788	345
FWW1800C	1545	729	50	Medium	24.4	17.2	7.2	12.7	11.96	10.39	0.52	709	1445	788	345

Notes:
1. Airflow at dry coil condition
2. Power Supply 208-230V/1Ph/60Hz

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