THE WORLD'S OBAIR

In the vast global innovation landscape, "Obair" shines like a brilliant star, leading the wave of technological innovation.

We are not just a company, but also advocates and practitioners of the global upgrade in quality of life.

In the world of Obair, technological innovation is not only a driving force but also the soul.

We firmly believe that "Obair" will resonate in every corner of the world, representing excellence, quality, and dreams.

We cross mountains and seas, connecting the five continents, adding a bright color to the global stage of life, becoming a synonym for beauty in the hearts of people around the world, and together writing a glorious chapter in human civilization.

The related products of Oubo have obtained the above certification,
and the specific product certification is detailed in the relevant product certification certificate

Haojin Oubo Technology Co.,Ltd

Address: Oubo Industrial Park, Oubo Road, Oubo Avenue, Ganzhou City, Jiangxi Province
Website: www.oubokt.com
National Free Service Hotline: 400-915-8448

Note: There may be discrepancies between all product descriptions, data, and actual products in this catalog.
Please refer to the actual product. Changes will not be notified separately.

Official WeChat
Public Account

OBAIR

FP |

Fan Coil Unit

OBAIR
Central air conditioning

Version NO.: OB-202507A
Haojin Oubo Technology CO., LTD

OBAIR
Haojin Oubo
Technology CO., LTD

COMPANY PROFILE

Haojin Oubo Technology Co., Ltd. is a large-scale purification central air conditioning national high-tech enterprise integrating research and development, production, sales, and service.

Obair has always adhered to technological innovation, participated in the formulation of national and industry standards as a member unit of China's "Cold Standard Committee", and has obtained multiple invention patents and utility model patents. It has established industry-university-research bases with Nanchang University and Jiangxi University of Science and Technology. It is a key demonstration enterprise for deep integration of informatization and industrialization in Jiangxi Province, a demonstration enterprise for service-oriented manufacturing in Jiangxi Province, and the company has successively won honors such as Jiangxi Province Technology Center, Ganzhou City Industrial Design Center, Jiangxi Famous Brand Product, national green factory, and national specialized and innovative "little giant" enterprise.

Obair currently has two phases in Ganzhou, Jiangxi, using digital park management, with over 120 digital production equipment, achieving an annual production capacity of 100,000 units.

Obair currently has more than 1000 models of high-quality air conditioning products independently developed, and the products have obtained energy-saving certification, CRAA, EU CE certification, American AHRI certification and other authoritative institutions' testing and certification, widely used in hospitals, dust-free workshops, pharmaceutical factories, electronics, tobacco, painting, photovoltaic, new energy, semiconductor, laboratory and other industries, and has the industry reputation of "King of Cleanliness" and "King of Constant Temperature and Humidity Non-standard".

Obair strictly implements the ISO9001/ISO14001/ISO45001 management system, always practices the purpose of "willing to explain the price for a while, but not to apologize for the quality for a lifetime", proposes the "6-hour" on-site service concept for all customers and for all customers, and provides the most professional and high-quality technical support and after-sales service.

From the mission, born for purification!

Obair, your regret-free choice!

170,000 square meters
of complete machine production base

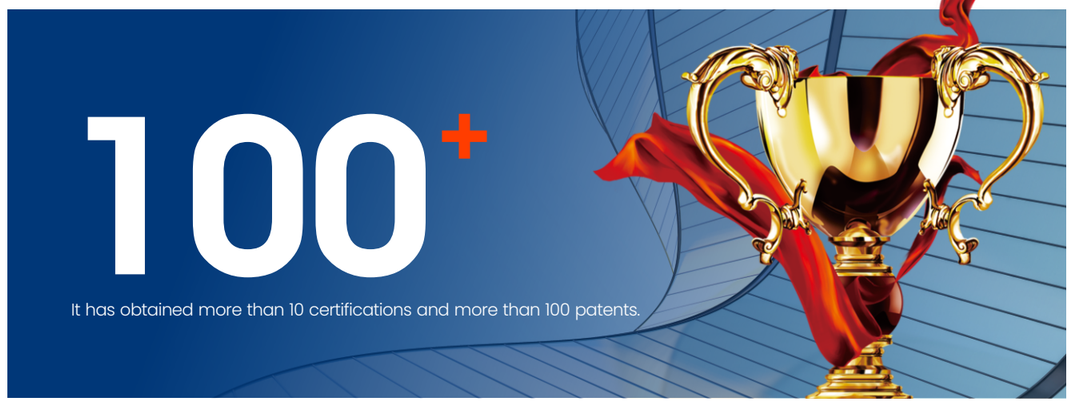
70+
National Service Contact Points

1000+
employees

100,000+
Pilot Project Air Conditioning Solutions

HONORARY QUALIFICATIONS

Advanced equipment, professional technology and strict management have created the high quality of "OBAIR" brand products.
It has successively won dozens of honors such as national high-tech enterprise, China's well-known brand, specialized and special new enterprise, cold standard committee enterprise, provincial service-oriented manufacturing demonstration enterprise, provincial enterprise technology center, Jiangxi famous brand product, etc.
"OBAIR" products are your reliable choice.



National Cold Standard Committee Member Certificate | Engineering Practice Teaching Cooperation Base | Demonstration Enterprise for Development and Upgrading | National Specialized and Innovative "Little Giant" Enterprise

National Green Factory | National High-tech Enterprise | Provincial Demonstration Enterprise for Service-oriented Manufacturing | Top Ten Economic Personalities of the Year

Jiangxi Province Famous Brand Product | Enterprise Technology Center | AHRI Certificate | TUV Certificate

FP | Fan Coil Unit

OBAIR
Haojin Oubo
Technology CO., LTD

Rapid Heating and Cooling
High-efficiency hydrophilic opening fins with a fin width that exceeds industry standards, achieving high thermal efficiency while enhancing corrosion resistance.

Smooth and tranquil
While reducing operational energy consumption, it also minimizes the generation of vortex airflow, ensuring the unit operates smoothly and quietly, allowing you to enjoy a quality life.

Energy-efficient and high-performance
Compliant with the ANSI/AMCA-204 standard electronic balancing machine for two-stage dynamic balance testing, with an internal control precision reaching the G2.5 level, energy-saving and efficient, and operates quietly.

Optional temperature control
Optional mechanical thermostats or LCD touch screen thermostats can be used to control the opening/closing of pipe valve control components such as fan coil pipe valves and other pipeline systems, to connect/interrupt the flow of media like cold and hot water sources in the pipelines, thereby controlling the temperature within the area.

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Product Overview

Fan coil units are the terminal devices of large central air conditioning systems, which are air conditioning devices that integrate fans and heat exchangers. They use cold (hot) water supplied by cold or heat sources to send cold or hot air into air-conditioned rooms. They are suitable for horizontal concealed spaces such as hotels, residences, office buildings, villas, radio stations, airports, and subways.

Auburn fan coil units include: horizontal concealed installation, cassette series, with airflow ranges from 340m³/h to 2380m³/h, and there are three-speed options for high, medium, and low airflow. More differentiated options are also available (such as thermostats, three-speed switches, etc.), to more comprehensively meet user needs in terms of performance parameters, air quality, installation and maintenance, and operational maintenance.

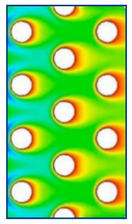
Product Features

Energy-efficient and high-performance, quiet operation, enjoy a comfortable life

Precision-grade stamped large diameter forward multi-blade wheel, Pittsburgh-style helical gear structure, overcoming the traditional spot welding mode's drawbacks of easy air leakage and rusting. The airflow runs streamlined between the blades, reducing pressure loss and vortex noise caused by turbulence. Tested with ANSI/AMCA-204 standard electronic balancing machines at two levels of dynamic balance, with internal control precision reaching G2.5 grade, energy-saving and efficient, quiet operation, and enjoy a comfortable life.

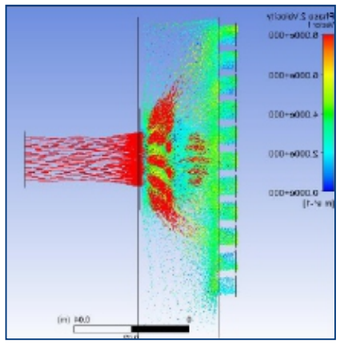
Genuine materials, rapid heating and cooling, enjoy a tech-savvy life

Counterflow cross-circuit design, professional simulation calculation, verified by the national CNAS laboratory, high-efficiency hydrophilic opening fins, fin width exceeding industry peers, achieving high thermal efficiency while enhancing corrosion resistance, genuine materials, rapid heating and cooling, enjoy a tech-savvy life.



Smooth and tranquil, enjoy a quality life

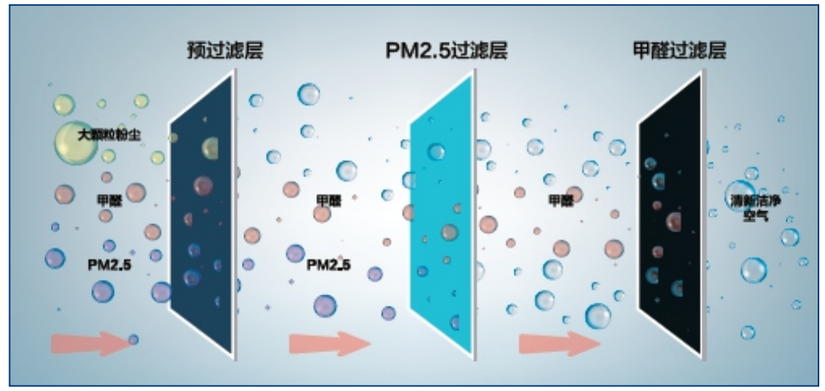
High-quality galvanized steel plate is used to form the water tray by whole stamping, with double-sided spray plastic and an outer layer of seamless B2-grade flame-retardant insulation material. The 8° inclined drainage ensures smooth water flow and prevents condensate from lingering. Professionally optimized ventilation pathways achieve the best aerodynamic performance. While reducing operational energy consumption and minimizing the generation of vortex airflow, the unit operates smoothly and quietly, allowing you to enjoy a quality life.



A variety of choices for an exciting life

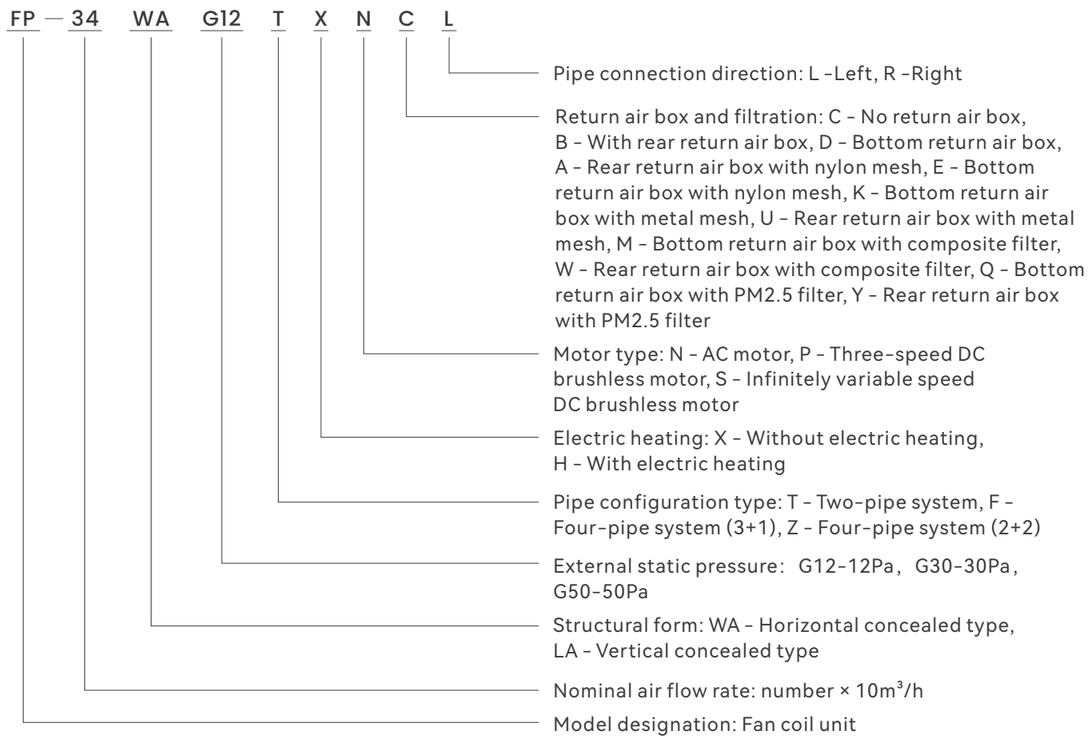
Optional electrostatic dust removal devices and nano photocatalytic air purification devices can effectively reduce indoor PM2.5 levels, creating a fresh and clean indoor environment.

Optional mechanical thermostats or LCD touch screen thermostats can be used to control the opening and closing of fan coil unit pipeline valve control components to connect or block the flow of media such as cold and hot water sources, thereby controlling the temperature within the area.

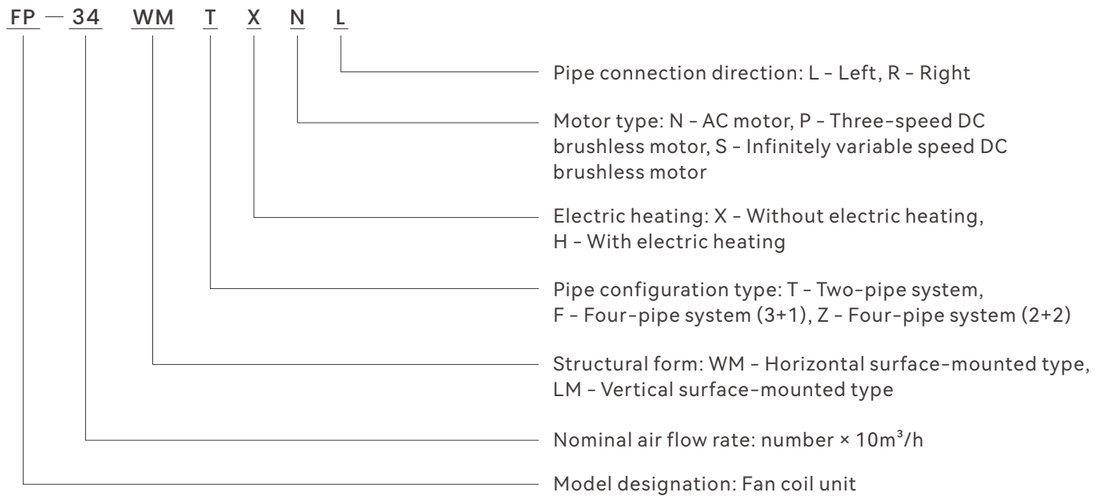


Model Description

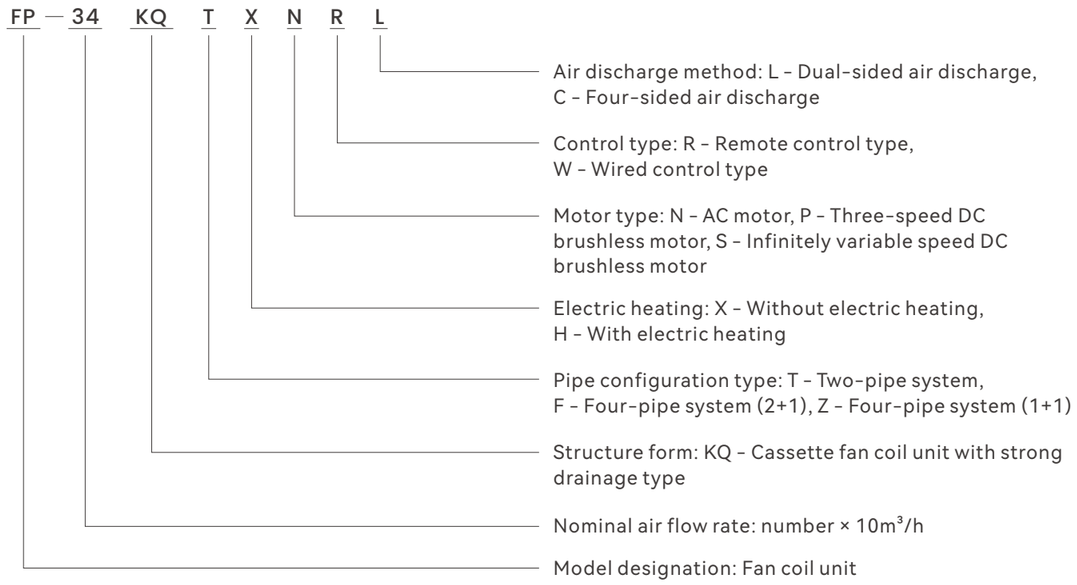
Horizontal concealed installation and vertical concealed installation fan coil units



Horizontal surface-mounted, vertical surface-mounted fan coil units



Cassette Fan Coil Unit



Ordering Instructions

1. When placing an order, customers must specify the model, specifications, and quantity, as well as the operating conditions and installation requirements, and also indicate the direction of the water inlet and outlet pipes.

2. Pipe direction: Take the fan coil unit's air outlet as the reference, if the pipe is on the left side, it is considered a left machine, and vice versa for a right machine (the image above is a right machine).

3. This product is available with a return air box (in two forms: rear return air and bottom return air).

4. Our company also offers electric two-way valves and three-speed switches, TC series thermostats, and other temperature control components that can be used with the fan coil units for purchase by customers; simply specify when ordering.

5. Our company also offers four-pipe system compatible coils (3 rows for cooling plus 1 row for heating) and direct expansion coils for selection.

Performance Parameters

Model FP-		34	51	68	85	102	119	136	170	204	238
Rated Airflow m^3/h	High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
	Medium Speed	270	380	510	640	780	890	1030	1290	1540	1975
	Low Speed	190	280	340	450	560	650	740	890	1040	1255
Cooling Capacity W	High Speed	2440	3600	4510	5510	6670	7780	8690	10350	12380	14370
	Medium Speed	1915	3160	3740	4340	5400	6220	6810	8710	10200	11600
	Low Speed	1665	2290	2875	3245	4255	5055	5760	6325	8920	9200
Heating CapacityW	High Speed	3620	5150	6500	7895	9370	10930	12550	15300	17300	20600
Fan	Type	Front-curved Multi-blade Galvanized Steel Plate Centrifugal Double-suction Fan									
	Quantity	1	2	2	2	2	2	3	4	4	4
Motor	Type	Single-phase Capacitor Run Motor									
	Insulation Class	B									
	Power Supply	220V/1~50Hz									
	Quantity	1	1	1	1	1	1	2	2	2	2
High Speed Input Power W	Low Static Pressure(12Pa)	35	45	58	73	93	102	129	147	183	221
	30Pa Static Pressure	40	56	68	83	103	120	146	169	206	245
	50Pa Static Pressure	45	66	80	94	114	130	163	199	230	285
Heat Exchanger	Structural Form	Copper tubes with high-efficiency flanged aluminum fins, tightly expanded into a single unit									
	Working Pressure Mpa	1.6									
	Inlet and Outlet Pipe Diameters	Rc 3/4(Conical Internal Thread)									
	Water Flow Rate kg/h	419	618	776	947	1147	1338	1495	1779	2128	2472
	Water Resistance kPa	20	23	29	26	40	31	30	30	40	48
Cooling Energy Efficiency Ratio FCEER	Low Static Pressure(12Pa)	64	72	68	67	61	66	60	62	58	54
	30Pa Static Pressure	57	59	59	60	56	57	53	55	52	50
	50Pa Static Pressure	51	51	51	53	51	54	48	47	47	44
Heating Energy Efficiency Ratio FCCOP (60℃ inlet water)	Low Static Pressure(12Pa)	91	98	93	92	80	88	82	87	76	73
	30 PaStatic Pressure	81	81	81	82	74	77	74	77	69	67
	50 PaStatic Pressure	73	70	71	74	68	72	67	67	63	59
High-Speed Noise dB(A)	Low Static Pressure(12Pa)	36.0	38.0	39.5	42.0	45.0	46.0	46.0	47.0	49.0	51.0
	30Pa Static Pressure	39.0	40.5	43.0	44.5	46.0	47.0	47.0	49.0	51.0	52.0
	50Pa Static Pressure	42.0	43.0	45.0	47.0	48.5	49.0	50.0	52.0	53.0	53.0
Condensate Pipe		R_1 3/4(Conical External Thread)									

Note:

1. Cooling: Supply and return water temperature 7/12°C; Air return conditions: Inlet air dry bulb temperature 27°C; Wet bulb temperature 19.5°C;
2. Heating: Water supply temperature 60°C; Air return conditions: Inlet air dry bulb temperature 21°C;
3. The airflow in the table is measured under dry operation conditions; at a dry bulb temperature of 20°C;
4. The noise in the table is measured inside a semi-anechoic chamber with a background noise level of 11.5dB(A);
5. Specifications and parameters are subject to change without notice due to product improvements.

Refrigeration Performance Variation Table

Model	Water Flow Rate kg/h	Water Resistance kPa	Inlet Air Temperature DB24℃ WB17.5℃														
			Inlet Water Temperature (℃)														
			5			6			7			8			9		
			Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃
34	140	2	1075	1075	11.6	1042	1042	12.4	1189	1189	14.3	961	961	13.9	863	863	14.3
	279	9	1720	1531	10.3	1622	1444	11.0	1947	1733	13.0	1330	1184	12.1	1298	1155	13.0
	419	20	2193	1689	9.5	1901	1464	9.9	2437	1876	12.0	1657	1276	11.4	1608	1206	12.3
	558.7	36	2339	1707	8.6	2144	1565	9.3	2469	1876	10.8	1754	1280	10.7	1689	1233	11.6
51	206	3	1677	1677	12.0	1485	1485	12.2	1845	1845	14.7	1509	1509	14.3	1414	1414	14.9
	412	10	2827	2516	10.9	2635	2345	11.5	3115	2772	13.5	2204	1962	12.6	1965	1749	13.1
	618	23	3378	2567	9.7	3163	2436	10.4	3594	2803	12.0	2588	1993	11.6	2444	1821	12.4
	824	41	3546	2589	8.7	3450	2519	9.6	4121	3008	11.3	2875	2099	11	2492	1844	11.6
68	259	3	2078	2078	11.9	2018	2018	12.7	2319	2319	14.7	1868	1868	14.2	1777	1777	14.9
	517	13	3488	3104	10.8	3247	2890	11.4	3848	3425	13.4	2706	2408	12.5	2525	2247	13.2
	776	29	4152	3197	9.6	3881	2988	10.3	4513	3475	12.0	3249	2502	11.6	2978	2263	12.3
	1035	52	4452	3250	8.7	4212	3075	9.5	4934	3602	11.1	3490	2548	10.9	3129	2284	11.6
85	316	3	2499	2499	11.8	2462	2462	12.7	2793	2793	14.6	2279	2279	14.2	2168	2168	14.9
	631	12	4257	3789	10.8	3963	3527	11.4	4697	4180	13.4	3302	2939	12.5	3082	2681	13.2
	947	26	5067	3902	9.6	4736	3647	10.3	5507	4240	12.0	3965	3053	11.6	3525	2714	12.2
	1263	46	5434	3967	8.7	5140	3752	9.5	6021	4395	11.1	4259	3109	10.9	3965	2894	11.7
102	382	4	2843	2843	11.4	2799	2799	12.3	3154	3154	14.1	2532	2532	13.7	2399	2399	14.4
	765	18	4716	4197	10.3	4360	3880	10.9	5249	4672	12.9	3559	3168	12	3381	3009	12.8
	1147	40	5603	4314	9.2	5203	4006	9.9	6670	4936	12.0	4269	3287	11.2	4002	3022	12.0
	1529	71	6048	4415	8.4	5514	4025	9.1	7115	5194	11.0	4625	3376	10.6	4091	3048	11.3
119	446	3	3424	3424	11.6	3372	3372	12.5	3475	3475	13.7	3060	3060	13.9	2905	2905	14.6
	892	14	5758	5125	10.6	5343	4755	11.2	5602	4986	12.4	4409	3924	12.25	4098	3647	13.0
	1338	31	6769	5212	9.4	6302	4853	10.05	7158	5512	11.6	5213	4014	11.35	4746	3654	12.1
	1784	55	7366	5377	8.6	6743	4922	9.3	7573	5528	10.7	5706	4165	10.75	5083	3711	11.5
136	498	3	3939	3939	11.8	3881	3881	12.7	3649	3649	13.3	3533	3533	14.1	3359	3359	14.8
	997	13	6725	5985	10.8	6262	5573	11.4	5682	5057	11.9	5218	4644	12.5	4754	4088	13.1
	1495	30	7824	6024	9.5	7303	5623	10.2	7303	5550	11.2	6086	4686	11.5	5390	4150	12.1
	1993	53	8578	6262	8.7	7882	5754	9.4	7651	5585	10.3	6723	4908	10.9	6028	4400	11.6
170	593	3	4483	4483	11.5	4414	4414	12.4	4345	4345	13.3	4069	4069	13.9	3793	3793	14.5
	1186	13	7587	6601	10.5	7035	6120	11.1	6483	5770	11.7	5793	5156	12.2	5518	4580	13.0
	1779	30	8690	6691	9.2	8069	6213	9.9	7656	5895	10.7	6828	5258	11.3	6000	4650	11.9
	2372	53	9932	7250	8.6	8828	6444	9.2	8276	6041	10.0	7725	5639	10.8	6897	5035	11.5
204	709	4	5442	5442	11.6	5360	5360	12.5	5113	5113	13.2	4865	4865	13.9	4618	4618	14.6
	1419	18	9077	7806	10.5	8417	7154	11.1	7922	6734	11.8	7262	6463	12.4	6436	5535	12.9
	2128	40	10147	7915	9.1	9405	7336	9.8	8662	6843	10.5	8415	6480	11.4	7177	5598	11.9
	2837	71	11880	8672	8.6	10890	8168	9.3	9900	7227	10.0	8910	6504	10.7	8250	6023	11.5
238	824	5	6613	6613	11.9	6421	6421	12.7	6133	6133	13.4	5750	5750	14	5558	5558	14.8
	1648	21	10925	9723	10.7	10159	9042	11.3	9392	8359	11.9	8434	7506	12.4	7859	6759	13.1
	2472	48	12938	9962	9.5	12075	9298	10.2	10925	8412	10.8	10063	7749	11.5	8913	6863	12.1
	3296	85	13800	10074	8.6	13034	9515	9.4	11884	8675	10.1	10734	7836	10.8	9584	6996	11.5

Refrigeration Performance Variation Table

Model	Water Flow Rate kg/h	Water Resistance kPa	Inlet Air Temperature DB25℃ WB18℃														
			Inlet Water Temperature（℃）														
			5			6			7			8			9		
			Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃
34	140	2	1124	1124	11.9	1124	1124	12.9	1058	1058	13.5	1026	1026	14.3	977	977	15.0
	279	9	1947	1694	11.0	1850	1610	11.7	1687	1468	12.2	1525	1327	12.7	1395	1214	13.3
	419	20	2388	1815	9.9	2242	1704	10.6	2047	1535	11.2	1803	1352	11.7	1706	1297	12.5
	558.7	36	2534	1850	8.9	2404	1731	9.7	2144	1565	10.3	1949	1423	11	1819	1310	11.8
51	206	3	1773	1773	12.4	1725	1725	13.2	1677	1677	14.0	1605	1605	14.7	1509	1509	15.3
	412	10	3134	2727	11.5	2875	2501	12.0	2683	2334	12.6	2492	2168	13.2	2252	1959	13.7
	618	23	3759	2857	10.2	3450	2622	10.8	3234	2458	11.5	3019	2294	12.2	2659	2021	12.7
	824	41	4025	2898	9.2	3833	2760	10.0	3546	2553	10.7	3258	2346	11.4	2971	2139	12.1
68	259	3	2199	2199	12.3	2139	2139	13.1	2078	2078	13.9	1988	1988	14.6	1898	1898	15.3
	517	13	3848	3348	11.4	3608	3139	12.0	3307	2877	12.5	3067	2668	13.1	2826	2459	13.7
	776	29	4513	3430	10.0	4242	3224	10.7	3971	3018	11.4	3610	2744	12	3339	2538	12.7
	1035	52	4934	3552	9.1	4573	3293	9.8	4212	3033	10.5	3971	2859	11.3	3610	2599	12.0
85	316	3	2683	2683	12.3	2573	2573	13	2499	2499	13.8	2426	2426	14.6	2315	2315	15.3
	631	12	4697	4086	11.4	4403	3831	12.0	4036	3511	12.5	3743	3256	13.1	3449	3001	13.7
	947	26	5507	4185	10.0	5177	3935	10.7	4846	3683	11.4	4406	3349	12	4075	3097	12.7
	1263	46	6021	4335	9.1	5580	4018	9.8	5140	3701	10.5	4846	3489	11.3	4406	3172	12.0
102	382	4	3021	3021	11.8	2932	2932	12.6	2799	2799	13.3	2666	2666	14	2532	2532	14.7
	765	18	5160	4489	10.8	4894	4160	11.5	4538	3948	12.1	4093	3561	12.6	3737	3251	13.2
	1147	40	6137	4664	9.6	5603	4258	10.2	5470	4103	11.1	4936	3702	11.7	4402	3302	12.3
	1529	71	6581	4738	8.7	6048	4355	9.4	5692	4212	10.2	5158	3714	10.9	4625	3330	11.6
119	446	3	3631	3631	12.0	3553	3553	12.85	3372	3372	13.5	3242	3242	14.25	3060	3060	14.9
	892	14	6277	5461	11.1	5913	5144	11.7	5498	4783	12.3	5032	4378	12.85	4565	3972	13.4
	1338	31	7470	5677	9.8	6847	5204	10.4	6536	4902	11.2	5991	4493	11.85	5369	4080	12.5
	1784	55	8092	5826	8.9	7470	5378	9.6	6951	5074	10.4	6328	4556	11.05	5706	4108	11.8
136	498	3	4170	4170	12.2	4112	4112	13.1	3881	3881	13.7	3765	3765	14.5	3533	3533	15.1
	997	13	7305	6355	11.3	6841	5952	11.9	6378	5549	12.5	5914	5145	13.1	5334	4641	13.6
	1495	30	8694	6607	10.0	7998	6078	10.6	7477	5683	11.3	6955	5286	12	6260	4758	12.6
	1993	53	9505	6844	9.1	8810	6343	9.8	8114	5842	10.5	7419	5342	11.2	6723	4841	11.9
170	593	3	4800	4800	12.0	4690	4690	12.8	4483	4483	13.5	4276	4276	14.2	4138	4138	15.0
	1186	13	8276	7200	11.0	7862	6683	11.7	7173	6241	12.2	6621	5760	12.8	5793	5040	13.2
	1779	30	9518	7234	9.6	8897	6762	10.3	8690	6518	11.2	7656	5819	11.7	6828	5189	12.3
	2372	53	10759	7746	8.9	9932	7151	9.6	9104	6646	10.3	8552	6157	11.1	7725	5562	11.8
204	709	4	5690	5690	11.9	5690	5690	12.9	5442	5442	13.6	5195	5195	14.3	4948	4948	15.0
	1419	18	10067	8758	11.1	9242	8041	11.6	8747	7435	12.3	7922	6892	12.8	6932	6031	13.2
	2128	40	11632	8840	9.7	10642	8088	10.3	9652	7529	10.9	9405	7148	11.8	8167	6207	12.3
	2837	71	12870	9266	8.9	12210	8791	9.7	11220	8078	10.4	10230	7366	11.1	9240	6653	11.8
238	824	5	6900	6900	12.2	6804	6804	13.1	6421	6421	13.7	6133	6133	14.4	5942	5942	15.2
	1648	21	12075	10505	11.3	11309	9839	11.9	10542	9172	12.5	9584	8338	13	8817	7671	13.6
	2472	48	14088	10707	9.9	13225	10051	10.6	12363	9396	11.3	11213	8522	11.9	10350	7866	12.6
	3296	85	15334	11040	9.0	14567	10488	9.8	13417	9660	10.5	12267	8832	11.2	11117	8004	11.9

Refrigeration Performance Variation Table

Model	Water Flow Rate kg/h	Water Resistance kPa	Inlet Air Temperature DB26℃ WB19℃														
			Inlet Water Temperature（℃）														
			5			6			7			8			9		
			Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃
34	140	2	1221	1221	12.5	1172	1172	13.2	1124	1124	13.9	1091	1091	14.7	1042	1042	15.4
	279	9	2109	1729	11.5	2012	1650	12.2	1850	1517	12.7	1720	1410	13.3	1622	1330	14.0
	419	20	2534	1850	10.2	2437	1779	11	2290	1672	11.7	2047	1494	12.2	1949	1423	13.0
	558.7	36	2664	1865	9.1	2599	1819	10.0	2534	1774	10.9	2274	1637	11.5	2144	1501	12.3
51	206	3	1845	1845	12.7	1797	1797	13.5	1725	1725	14.2	1581	1581	14.6	1485	1485	15.2
	412	10	3354	2750	12.0	3163	2594	12.6	2971	2436	13.2	2731	2239	13.7	2540	2083	14.3
	618	23	4097	2991	10.7	3809	2781	11.3	3522	2571	11.9	3306	2413	12.6	3019	2204	13.2
	824	41	4408	3086	9.6	4121	2885	10.3	3929	2750	11.1	3642	2549	11.8	3354	2348	12.5
68	259	3	2350	2350	12.8	2289	2289	13.6	2199	2199	14.3	2109	2109	15	2018	2018	15.7
	517	13	4149	3402	11.9	3908	3205	12.5	3668	3008	13.1	3427	2810	13.7	3127	2564	14.2
	776	29	4964	3624	10.5	4693	3426	11.2	4332	3162	11.8	4061	2965	12.5	3700	2701	13.1
	1035	52	5415	3791	9.5	5054	3538	10.2	4693	3285	10.9	4332	3032	11.6	4091	2864	12.4
85	316	3	2830	2830	12.7	2756	2756	13.5	2646	2646	14.2	2536	2536	14.9	2426	2426	15.6
	631	12	4990	4092	11.8	4697	3852	12.4	4403	3610	13.0	4183	3430	13.7	3816	3129	14.2
	947	26	6058	4422	10.5	5727	4181	11.2	5287	3860	11.8	4956	3618	12.5	4516	3297	13.1
	1263	46	6608	4626	9.5	6168	4318	10.2	5727	4009	10.9	5287	3701	11.6	4993	3495	12.4
102	382	4	3243	3243	12.3	3154	3154	13.1	3021	3021	13.8	2888	2888	14.5	2710	2710	15.1
	765	18	5694	4669	11.4	5338	4377	12.0	4894	4013	12.5	4627	3794	13.2	4271	3502	13.8
	1147	40	6804	4967	10.1	6403	4674	10.8	5870	4285	11.4	5603	4090	12.2	5069	3700	12.8
	1529	71	7293	5105	9.1	6759	4731	9.8	6225	4358	10.5	5870	4109	11.3	5336	3735	12.0
119	446	3	3916	3916	12.6	3787	3787	13.3	3605	3605	14.0	3450	3450	14.65	3268	3268	15.3
	892	14	6899	5657	11.7	6484	5317	12.3	6017	4934	12.8	5602	4594	13.4	5187	4253	14.0
	1338	31	8248	6021	10.3	7703	5623	10.95	7158	5154	11.6	6692	4885	12.3	6147	4487	13.0
	1784	55	8818	6173	9.3	8300	5810	10.0	7677	5451	10.7	7158	5011	11.45	6536	4575	12.2
136	498	3	4518	4518	12.8	4344	4344	13.5	4112	4112	14.1	3939	3939	14.8	3765	3765	15.5
	997	13	8001	6561	11.9	7537	6180	12.5	7073	5800	13.1	6494	5325	13.6	6030	4945	14.2
	1495	30	9563	6981	10.5	8868	6474	11.1	8346	6093	11.8	7651	5585	12.4	7129	5204	13.1
	1993	53	10201	7141	9.4	9737	6816	10.2	9042	6329	10.9	8346	5842	11.6	7651	5356	12.3
170	593	3	5104	5104	12.4	4966	4966	13.2	4759	4759	13.9	4552	4552	14.6	4345	4345	15.3
	1186	13	8966	7352	11.5	8552	7013	12.2	7862	6447	12.7	7449	6108	13.4	6759	5542	13.9
	1779	30	10552	7703	10.1	9725	7099	10.7	9311	6797	11.5	8483	6193	12.1	7862	5739	12.8
	2372	53	11863	8304	9.3	11035	7725	10.0	10207	7145	10.7	9380	6566	11.4	8828	6180	12.2
204	709	4	6185	6185	12.5	6020	6020	13.3	5772	5772	14.0	5525	5525	14.7	5277	5277	15.4
	1419	18	10892	8931	11.6	10232	8390	12.2	9572	7849	12.8	8912	7308	13.4	7922	6496	13.8
	2128	40	12375	9034	10.0	11632	8491	10.7	10890	7950	11.4	10642	7769	12.3	9157	6685	12.7
	2837	71	14190	9933	9.3	13200	9240	10.0	12540	8778	10.8	11550	8085	11.5	10560	7392	12.2
238	824	5	7475	7475	12.8	7188	7188	13.5	6900	6900	14.2	6613	6613	14.9	6229	6229	15.5
	1648	21	13225	10845	11.9	12459	10216	12.5	11500	9430	13.0	10734	8802	13.6	9967	8173	14.2
	2472	48	15525	11333	10.4	14375	10494	11	13513	9864	11.7	12650	9235	12.4	11500	8395	13.0
	3296	85	16867	11807	9.4	15717	11002	10.1	14950	10465	10.9	13800	9660	11.6	12650	8855	12.3

Refrigeration Performance Variation Table

Model	Water Flow Rate kg/h	Water Resistance kPa	Inlet Air Temperature Db27℃ WB19.5℃														
			Inlet Water Temperature（℃）														
			5			6			7			8			9		
			Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃
34	140	2	1286	1247	12.9	1237	1218	13.6	1189	1165	14.3	1156	1133	15.1	1124	1090	15.9
	279	9	2207	1755	11.8	2044	1656	12.3	1947	1616	13.0	1817	1490	13.6	1687	1383	14.2
	419	20	2680	1849	10.5	2534	1774	11.2	2440	1732	12.0	2242	1592	12.6	2095	1571	13.3
	558.7	36	2924	1959	9.5	2664	1812	10.1	2469	1802	10.8	2339	1754	11.6	2209	1613	12.4
51	206	3	1989	1929	13.3	1917	1792	14	1845	1845	14.7	1773	1773	15.4	1677	1677	16.0
	412	10	3546	2819	12.4	3306	2678	12.9	3115	2585	13.5	2923	2426	14.1	2683	2227	14.6
	618	23	4241	2926	10.9	4025	2818	11.6	3600	2592	12.0	3522	2536	12.9	3234	2328	13.5
	824	41	4600	3082	9.8	4313	2933	10.5	4121	2802	11.3	3833	2606	12	3546	2411	12.7
68	259	3	2470	2396	13.2	2410	2374	14	2319	2319	14.7	2229	2229	15.4	2139	2139	16.1
	517	13	4389	3489	12.3	4089	3312	12.8	3848	3194	13.4	3608	2995	14	3307	2745	14.5
	776	29	5144	3549	10.7	4874	3412	11.4	4510	3247	12.0	4242	3054	12.7	3971	2859	13.4
	1035	52	5656	3790	9.7	5295	3601	10.4	4934	3355	11.1	4573	3110	11.8	4332	2946	12.6
85	316	3	2977	2888	13.1	2903	2859	13.9	2793	2793	14.6	2683	2683	15.3	2609	2609	16.1
	631	12	5284	4201	12.2	4990	4042	12.8	4697	3899	13.4	4330	3594	13.9	4036	3350	14.5
	947	26	6278	4332	10.7	5948	4164	11.4	5510	3967	12.0	5177	3727	12.7	4846	3489	13.4
	1263	46	6902	4624	9.7	6462	4394	10.4	6021	4094	11.1	5580	3794	11.8	5140	3495	12.5
102	382	4	3377	3276	12.6	3288	3239	13.4	3154	3154	14.1	3066	3066	14.9	2932	2932	15.6
	765	18	5961	4739	11.7	5605	4540	12.3	5249	4357	12.9	4894	4062	13.5	4449	3693	14.0
	1147	40	7070	4878	10.3	6804	4763	11.1	6670	4802	12.0	5603	4090	12.2	5203	3746	12.9
	1529	71	7648	5124	9.3	7115	4838	10.0	6937	4925	10.9	6048	4113	11.4	5692	3871	12.2
119	446	3	4072	3950	12.9	3942	3883	13.6	3787	3787	14.3	3657	3657	15.05	3553	3553	15.9
	892	14	7210	5732	12.0	6795	5504	12.6	6380	5295	13.2	5913	4908	13.7	5550	4385	14.4
	1338	31	8559	5906	10.5	8170	5719	11.25	7780	5602	12.0	6925	4986	12.45	6458	4650	13.2
	1784	55	9233	6186	9.5	8715	5926	10.2	8300	5644	11.0	7470	5080	11.6	6951	4935	12.4
136	498	3	4692	4551	13.1	4518	4450	13.8	4344	4344	14.5	4170	4170	15.2	4112	4112	16.1
	997	13	8349	6637	12.2	7885	6387	12.8	7421	6159	13.4	6841	5678	13.9	6610	5486	14.7
	1495	30	9911	6839	10.7	9389	6572	11.4	8690	6257	12.0	8172	5884	12.7	7651	5509	13.4
	1993	53	10664	7145	9.6	10201	6937	10.4	9505	6463	11.1	8810	5991	11.8	8114	5599	12.5
170	593	3	5311	5152	12.7	5242	5163	13.6	5035	5035	14.3	4828	4828	15	4621	4621	15.7
	1186	13	9518	7567	11.9	8828	7151	12.4	8276	6869	13.0	7587	6297	13.5	7173	5954	14.2
	1779	30	10966	7567	10.3	10345	7242	11	10350	7452	12.0	8897	6406	12.3	8276	6041	13.0
	2372	53	12414	8317	9.5	11587	7879	10.2	11311	7691	11.1	9932	6754	11.6	9104	6191	12.3
204	709	4	6514	6319	12.9	6349	6254	13.7	6102	6102	14.4	5855	5855	15.1	5690	5690	15.9
	1419	18	11553	8665	12.0	10892	8496	12.6	10232	8493	13.2	9407	7808	13.7	8417	6818	14.1
	2128	40	12870	8880	10.2	12127	8731	10.9	12380	8914	12.0	11880	8554	12.8	9652	6949	12.9
	2837	71	14520	9728	9.4	13860	9425	10.2	13200	8976	11.0	12870	8752	11.9	11220	7630	12.4
238	824	5	7859	7623	13.2	7475	7363	13.8	7284	7284	14.6	7092	7092	15.4	6804	6804	16.1
	1648	21	13800	10281	12.2	13034	10558	12.8	12075	10022	13.3	11309	9386	13.9	10350	8591	14.4
	2472	48	14375	10422	10.0	15238	10667	11.3	14370	10346	12.0	13225	9522	12.6	12363	8901	13.3
	3296	85	17634	11815	9.6	16484	11209	10.3	15717	10688	11.1	14567	9906	11.8	13417	9124	12.5

Refrigeration Performance Variation Table

Model	Water Flow Rate kg/h	Water Resistance kPa	Inlet Air Temperature DB27℃ WB20℃														
			Inlet Water Temperature（℃）														
			5			6			7			8			9		
			Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃
34	140	2	1303	1238	13.0	1254	1191	13.7	1221	1160	14.5	1205	1145	15.4	1156	1098	16.1
	279	9	2304	1797	12.1	2174	1696	12.7	2044	1594	13.3	1947	1519	14	1817	1417	14.6
	419	20	2826	1922	10.8	2680	1822	11.5	2485	1690	12.1	2437	1657	13	2193	1491	13.5
	558.7	36	3054	2016	9.7	2794	1844	10.3	2664	1758	11.1	2599	1715	12	2339	1544	12.6
51	206	3	2013	1912	13.4	1917	1821	14	1845	1753	14.7	1773	1684	15.4	1701	1616	16.1
	412	10	3690	2878	12.7	3450	2691	13.2	2779	2168	12.8	3019	2355	14.3	2827	2205	14.9
	618	23	4384	2981	11.1	4169	2835	11.8	3953	2688	12.5	3666	2493	13.1	3378	2297	13.7
	824	41	4792	3163	10.0	4504	2973	10.7	4217	2783	11.4	4025	2657	12.2	3738	2467	12.9
68	259	3	2560	2432	13.5	2440	2318	14.1	2350	2233	14.8	2259	2146	15.5	2169	2061	16.2
	517	13	4630	3611	12.7	4329	3377	13.2	4089	3189	13.8	3848	3001	14.4	3548	2767	14.9
	776	29	5505	3743	11.1	5235	3560	11.8	4874	3314	12.4	4603	3130	13.1	4242	2885	13.7
	1035	52	6017	3971	10.0	5656	3733	10.7	5295	3495	11.4	4934	3256	12.1	4573	3018	12.8
85	316	3	3050	2898	13.3	2903	2758	13.9	2793	2653	14.6	2683	2549	15.3	2573	2444	16.0
	631	12	5431	4236	12.4	5211	4065	13.1	4844	3778	13.6	4550	3549	14.2	4257	3320	14.8
	947	26	6719	4569	11.1	6168	4194	11.6	5837	3969	12.3	5507	3745	13	5067	3446	13.6
	1263	46	7196	4749	9.9	6755	4458	10.6	6315	4168	11.3	5874	3877	12	5434	3586	12.7
102	382	4	3465	3292	12.8	3332	3165	13.5	3154	2996	14.1	3066	2913	14.9	2932	2785	15.6
	765	18	6228	4858	12.0	5872	4580	12.6	5427	4233	13.1	5160	4025	13.8	4716	3678	14.3
	1147	40	7471	5080	10.6	7070	4808	11.3	6804	4627	12.1	6137	4173	12.6	5736	3900	13.3
	1529	71	8004	5283	9.5	7471	4931	10.2	6937	4717	10.9	6581	4343	11.7	6048	3992	12.4
119	446	3	4150	3943	13.0	3994	3794	13.7	3787	3598	14.3	3683	3499	15.1	3527	3351	15.8
	892	14	7521	5866	12.3	7107	5543	12.9	6588	5139	13.4	6225	4856	14	5758	4491	14.6
	1338	31	8948	6085	10.8	8481	5767	11.45	8092	5503	12.2	7392	5027	12.75	6847	4656	13.4
	1784	55	9648	6368	9.7	9130	6026	10.4	8507	5615	11.1	7988	5272	11.85	7366	4862	12.6
136	498	3	4749	4512	13.2	4576	4347	13.9	4344	4127	14.5	4228	4017	15.3	4054	3851	16.0
	997	13	8697	6784	12.5	8233	6422	13.1	7653	5969	13.6	7189	5607	14.2	6725	5246	14.8
	1495	30	10259	6976	10.9	9737	6621	11.6	9215	6266	12.3	8520	5794	12.9	7824	5320	13.5
	1993	53	11128	7344	9.8	10664	7038	10.6	9969	6580	11.3	9273	6120	12	8578	5661	12.7
170	593	3	5449	5177	12.9	5242	4980	13.6	5035	4783	14.3	4828	4587	15	4621	4390	15.7
	1186	13	9794	7639	12.1	9242	7209	12.7	8690	6778	13.3	7862	6132	13.7	7449	5810	14.4
	1779	30	11380	7738	10.5	10759	7316	11.2	10552	7175	12.1	9311	6331	12.5	8690	5909	13.2
	2372	53	12966	8558	9.7	12139	8012	10.4	11311	7465	11.1	10483	6919	11.8	9656	6373	12.5
204	709	4	6597	6267	13.0	6267	5954	13.6	6102	5797	14.4	5937	5640	15.2	5690	5406	15.9
	1419	18	11718	9140	12.1	11058	8625	12.7	10232	7981	13.2	9572	7466	13.8	8912	6862	14.4
	2128	40	13612	9256	10.5	12870	8752	11.2	11880	8078	11.8	11137	7573	12.5	10395	7069	13.2
	2837	71	15510	10237	9.7	14190	9365	10.3	13860	9148	11.2	12870	8494	11.9	11880	7841	12.6
238	824	5	7954	7556	13.3	7571	7192	13.9	7188	6829	14.5	6996	6646	15.3	6709	6374	16.0
	1648	21	14375	11213	12.5	13417	10465	13.0	12650	9867	13.6	11941	9314	14.23	10925	8522	14.7
	2472	48	16963	11535	10.9	16100	10948	11.6	14950	10166	12.2	14088	9580	12.9	12938	8798	13.5
	3296	85	18400	12144	9.8	17250	11385	10.5	16100	10626	11.2	15334	10120	12	14184	9361	12.7

Refrigeration Performance Variation Table

Model	Water Flow Rate kg/h	Water Resistance kPa	Inlet Air Temperature DB28℃ WB21℃														
			Inlet Water Temperature (℃)														
			5			6			7			8			9		
			Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃	Total Cooling W	Sensible Cooling W	Outlet Water Temp.℃
34	140	2	1417	1318	13.7	1351	1256	14.3	1286	1196	14.9	1254	1166	15.7	1205	1121	16.4
	279	9	2499	1899	12.7	2369	1800	13.3	2207	1677	13.8	2109	1603	14.5	1947	1480	15.0
	419	20	3021	2024	11.2	2875	1926	11.9	2680	1796	12.5	2534	1698	13.2	2437	1633	14.0
	558.7	36	3249	2112	10.0	3054	1985	10.7	2859	1858	11.4	2664	1732	12.1	2534	1647	12.9
51	206	3	2204	2050	14.2	2108	1960	14.8	1989	1850	15.3	1893	1760	15.9	1797	1671	16.5
	412	10	3977	3023	13.3	3786	2877	13.9	3546	2695	14.4	3354	2549	15	3115	2367	15.5
	618	23	4744	3178	11.6	4528	3034	12.3	4241	2841	12.9	4025	2697	13.6	3809	2552	14.3
	824	41	5175	3364	10.4	4888	3177	11.1	4696	3052	11.9	4408	2865	12.6	4121	2679	13.3
68	259	3	2771	2577	14.2	2651	2465	14.8	2530	2353	15.4	2380	2213	15.9	2289	2129	16.6
	517	13	4991	3793	13.3	4750	3610	13.9	4450	3382	14.4	4209	3199	15	3908	2970	15.5
	776	29	5957	3991	11.6	5596	3749	12.2	5325	3568	12.9	4964	3326	13.5	4693	3144	14.2
	1035	52	6498	4224	10.4	6137	3989	11.1	5776	3754	11.8	5415	3520	12.5	5054	3285	13.2
85	316	3	3308	3076	14.0	3161	2940	14.6	3014	2803	15.2	2830	2632	15.7	2720	2530	16.4
	631	12	5944	4517	13.1	5651	4295	13.7	5284	4016	14.2	4990	3792	14.8	4697	3570	15.4
	947	26	7159	4797	11.5	6719	4502	12.1	6388	4280	12.8	5948	3985	13.4	5617	3763	14.1
	1263	46	7783	5059	10.3	7343	4773	11.0	6902	4486	11.7	6462	4200	12.4	6021	3914	13.1
102	382	4	3776	3512	13.5	3599	3347	14.1	3421	3182	14.7	3243	3016	15.3	3110	2892	16.0
	765	18	6673	5071	12.5	6406	4869	13.2	6050	4598	13.8	5605	4260	14.3	5249	3989	14.9
	1147	40	8138	5452	11.1	7604	5095	11.7	7204	4827	12.4	6804	4559	13.1	6137	4112	13.6
	1529	71	8716	5665	9.9	8182	5318	10.6	7648	4971	11.3	7115	4625	12	6581	4278	12.7
119	446	3	4513	4197	13.7	4305	4004	14.3	4098	3811	14.9	3916	3642	15.55	3735	3474	16.2
	892	14	8092	6150	12.8	7729	5874	13.5	7314	5559	14.1	6795	5164	14.55	6380	4849	15.2
	1338	31	9726	6516	11.3	9181	6151	11.9	8637	5787	12.6	8170	5474	13.25	7470	5005	13.8
	1784	55	10582	6878	10.1	9959	6473	10.8	9337	6069	11.5	8715	5665	12.2	8092	5260	12.9
136	498	3	5155	4794	13.9	4923	4578	14.5	4692	4364	15.1	4518	4202	15.8	4286	3986	16.4
	997	13	9392	7138	13.1	8929	6786	13.7	8465	6433	14.3	7885	5993	14.8	7421	5640	15.4
	1495	30	11128	7456	11.4	10606	7106	12.1	9911	6640	12.7	9389	6291	13.4	8694	5825	14.0
	1993	53	12287	7987	10.3	11592	7535	11.0	10896	7082	11.7	10201	6631	12.4	9505	6178	13.1
170	593	3	5931	5516	13.6	5655	5259	14.2	5449	5068	14.9	5104	4747	15.4	4897	4554	16.1
	1186	13	10759	8177	12.8	10207	7757	13.4	9518	7234	13.9	8966	6814	14.5	8276	6290	15.0
	1779	30	12414	8317	11.0	11794	7902	11.7	11173	7486	12.4	10345	6931	13	9725	6516	13.7
	2372	53	14070	9146	10.1	13242	8607	10.8	12414	8069	11.5	11587	7532	12.2	10759	6993	12.9
204	709	4	7257	6749	13.8	6927	6442	14.4	6597	6135	15.0	6267	5828	15.6	6020	5599	16.3
	1419	18	12708	9658	12.7	11883	9031	13.2	11388	8655	13.9	10892	8278	14.6	9902	7526	15.0
	2128	40	14602	9783	10.9	13860	9286	11.6	13117	8788	12.3	12870	8623	13.2	11385	7628	13.6
	2837	71	16500	10725	10.0	15840	10296	10.8	15180	9867	11.6	13860	9009	12.2	13200	8580	13.0
238	824	5	8625	8021	14.0	8242	7665	14.6	7763	7220	15.1	7379	6862	15.7	7092	6596	16.4
	1648	21	15525	11799	13.1	14759	11217	13.7	13800	10488	14.2	13034	9906	14.8	12075	9177	15.3
	2472	48	18400	12328	11.4	17538	11750	12.1	16388	10980	12.7	15525	10402	13.4	14375	9631	14.0
	3296	85	19934	12957	10.2	18784	12210	10.9	18017	11711	11.7	16867	10964	12.4	15717	10216	13.1

Note: The cooling capacity in the above table is for high-speed airflow; for medium and low-speed airflow, the cooling capacity is the parameter in the table multiplied by the correction factor (see page 12 for the medium and low-speed cooling capacity correction factor table).

Medium and Low-grade Cooling Capacity Correction Factor

Model FP-		34	51	68	85	102	119	136	170	204	238
Medium Speed	Total Heat	0.89	0.87	0.86	0.84	0.87	0.86	0.85	0.88	0.87	0.90
	Sensible Heat	0.87	0.84	0.83	0.82	0.85	0.84	0.83	0.86	0.84	0.85
Low Speed	Total Heat	0.73	0.72	0.70	0.66	0.73	0.72	0.71	0.68	0.67	0.66
	Sensible Heat	0.65	0.68	0.67	0.62	0.69	0.68	0.67	0.64	0.62	0.61

Medium Speed Heating Capacity Correction Factor

Model FP-		34	51	68	85	102	119	136	170	204	238
Medium Speed	Total Heat	0.84	0.83	0.80	0.79	0.83	0.82	0.81	0.83	0.82	0.85
	Sensible Heat	0.66	0.66	0.60	0.57	0.64	0.63	0.61	0.59	0.58	0.62

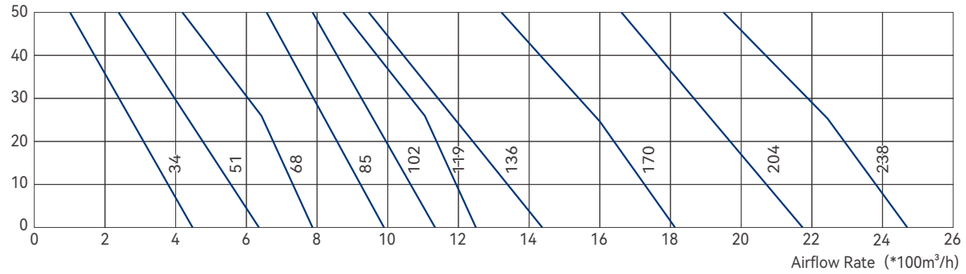
Heating Performance Variation Table

Model	Water Flow Rate kg/h	Water Resistance kPa	Inlet Water Temperature																	
			40		45		50		55		60		65		70		75		80	
			Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃	Heat Quantity W	Outlet Water Temp.℃
34	140	2	1221	32.5	1579	35.3	1889	38.4	2312	40.8	2719	43.3	3143	45.7	3485	48.6	3924	50.9	4201	54.2
	279	9	1395	35.7	2207	38.2	2888	41.1	3212	45.1	3407	49.5	3894	53.0	4218	57.0	4446	61.3	4997	64.6
	419	20	1706	36.5	2485	39.9	3168	43.5	3314	48.2	3620	52.6	4630	55.5	4824	60.1	5214	64.3	5799	68.1
	558.67	36	1884	37.1	2859	40.6	3379	44.8	3964	48.9	4483	53.1	4678	57.8	4938	62.4	5458	66.6	6238	70.4
51	206	3	2013	31.6	2659	33.9	3306	36.2	3833	39.0	4361	41.8	4902	44.5	5702	46.2	6397	48.3	6972	50.9
	412	10	2875	34.0	3402	37.9	4217	41.2	4696	45.2	5079	49.4	5606	53.3	6661	56.1	7859	58.6	8673	61.9
	618	23	3450	35.2	4600	38.6	5175	42.8	6110	46.5	5150	52.6	6900	55.4	7331	59.8	7978	63.9	8913	67.6
	824	41	3929	35.9	4888	39.9	5654	44.1	6421	48.3	6709	53.0	7092	57.6	7667	62.0	8338	66.3	9679	69.9
68	259	3	2621	31.3	3253	34.2	4006	36.7	5000	38.4	5663	41.2	6296	44.1	7380	45.5	7892	48.8	8826	50.7
	517	13	3488	34.2	3848	38.6	4750	42.1	6314	44.5	6314	49.5	7396	52.7	8358	56.1	9380	59.4	10944	61.8
	776	29	3881	35.7	4783	39.7	5866	43.5	6679	47.6	6500	52.7	8484	55.6	8755	60.3	10289	63.6	11643	67.1
	1035	52	4693	36.1	5054	40.8	6258	44.8	6980	49.2	8303	53.1	9025	57.5	9868	61.8	11191	65.7	12635	69.5
85	316	3	3161	31.4	4300	33.3	4962	36.5	5586	39.8	6432	42.5	7130	45.6	8416	47.1	9335	49.6	9997	52.8
	631	12	4550	33.8	5137	38.0	5651	42.3	7192	45.2	7779	49.4	8513	53.4	10128	56.2	11449	59.4	12770	62.6
	947	26	4956	35.5	5617	39.9	6719	43.9	7820	47.9	7895	52.8	9803	56.1	11345	59.7	12887	63.3	13768	67.5
	1263	46	5580	36.2	5874	41.0	7196	45.1	8664	49.1	9986	53.2	10867	57.6	12042	61.8	13658	65.7	14539	70.1
102	382	4	3554	32.0	4932	33.9	5687	37.2	6487	40.4	7420	43.3	8975	44.8	9730	48.1	11285	49.6	11818	53.4
	765	18	5072	34.3	5783	38.5	6495	42.7	8364	45.6	9075	49.8	10232	53.5	12100	56.4	13880	59.4	14681	63.5
	1147	40	5736	35.7	6403	40.2	7871	44.1	9605	47.8	9370	52.9	11206	56.6	12540	60.6	15608	63.3	15208	68.6
	1529	71	6225	36.5	6581	41.3	8182	45.4	9605	49.6	11562	53.5	11917	58.3	13696	62.3	16364	65.8	16542	70.7
119	446	3	4254	31.8	5576	34.3	6847	36.8	8014	39.6	8922	42.8	10608	44.6	11905	47.1	13461	49.1	14239	52.6
	892	14	5706	34.5	6951	38.3	8248	42.1	9648	45.7	10478	49.9	12605	52.9	14317	56.2	16236	59.4	17377	63.3
	1338	31	6380	35.9	7781	40.0	9337	44.0	10971	48.0	10930	52.8	13305	56.5	14939	60.4	17740	63.6	18518	68.1
	1784	55	6951	36.7	8092	41.1	9959	45.2	11516	49.5	13279	53.6	14109	58.2	16288	62.2	18674	66.0	19296	70.7
136	498	3	4865	31.6	6024	34.6	7877	36.4	9441	38.7	10252	42.3	11989	44.3	13901	46.0	15349	48.5	16391	51.7
	997	13	6146	34.7	8001	38.1	9972	41.4	10668	45.8	12175	49.5	14842	52.2	16234	56.0	18205	59.3	19713	63.0
	1495	30	6781	36.1	9042	39.8	10606	43.9	11997	48.1	12550	52.7	15127	56.3	17040	60.2	19300	63.9	21561	67.6
	1993	53	7419	36.8	9505	40.9	11592	45.0	13215	49.3	14606	53.7	15997	58.1	18547	62.0	20402	66.2	21561	70.7
170	593	3	5655	31.8	6828	35.1	8966	37.0	10414	39.9	12139	42.4	13725	45.1	15587	47.4	16966	50.4	18208	53.6
	1186	13	6897	35.0	8966	38.5	10759	42.2	12828	45.7	14208	49.7	16139	53.3	18484	56.6	20553	60.1	21105	64.7
	1779	30	7242	36.5	9311	40.5	11173	44.6	13242	48.6	15300	52.6	17173	56.7	19035	60.8	21105	64.8	22967	68.9
	2372	53	9104	36.7	9932	41.4	12414	45.5	14070	49.9	16277	54.1	18484	58.3	20691	62.5	22346	66.9	24829	71.0
204	709	4	7009	31.5	8741	34.4	10225	37.6	12699	39.6	14266	42.7	15997	45.6	18966	47.0	20450	50.2	21440	54.0
	1419	18	8747	34.7	10562	38.6	12543	42.4	15018	45.9	14523	51.2	18979	53.5	22940	56.1	24591	60.1	27396	63.4
	2128	40	11137	35.5	10642	40.7	12870	44.8	15097	48.9	17300	52.9	19057	57.3	23512	60.5	24997	64.9	28215	68.6
	2837	71	11880	36.4	12540	41.2	15180	45.4	17820	49.6	20130	53.9	22770	58.1	25080	62.4	27720	66.6	31350	70.5
238	824	5	7954	31.7	10159	34.4	12363	37.1	14663	39.7	16867	42.4	19167	45.0	21467	47.6	23767	50.2	26067	52.8
	1648	21	9967	34.8	12459	38.5	15142	42.1	18017	45.6	19550	49.8	23384	52.8	26067	56.4	28751	60.0	31626	63.5
	2472	48	10638	36.3	13513	40.3	16388	44.3	19263	48.3	20600	52.8	25013	56.3	27888	60.3	30763	64.3	33638	68.3
	3296	85	13800	36.4	13800	41.4	16867	45.6	19934	49.8	22617	54.1	25684	58.3	28751	62.5	31817	66.7	34884	70.9

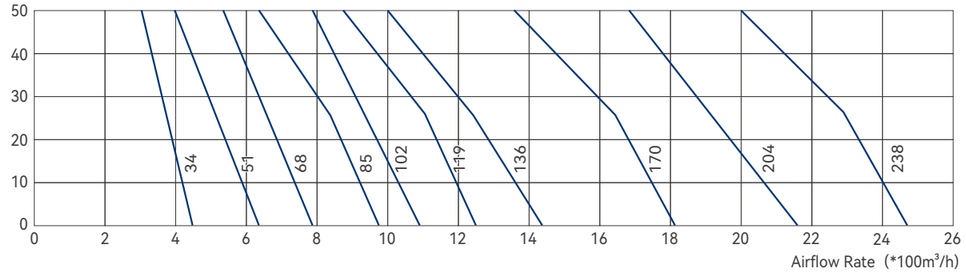
Note: The heating capacity in the above table is for high-speed airflow; for medium and low-speed airflow, the heating capacity is the parameter in the table multiplied by the correction factor (see page 12 for the medium and low-speed heating capacity correction factor table).

Performance Curve Chart

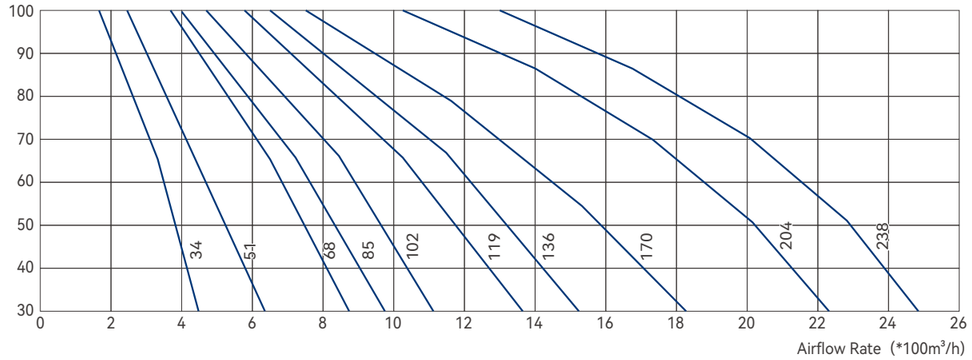
12Pa Unit Static Pressure and Airflow Characteristics



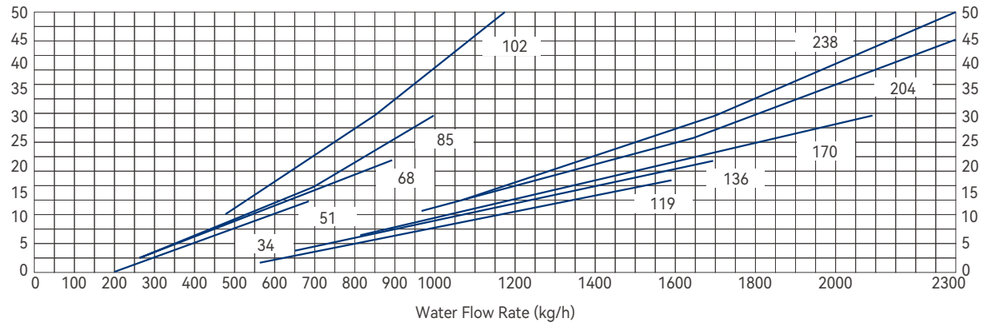
30Pa Unit Static Pressure and Airflow Characteristics



50Pa Unit Static Pressure and Airflow Characteristics



Water Flow Rate vs. Water Resistance Curve



Cassette Fan Coil Unit Parameters Table

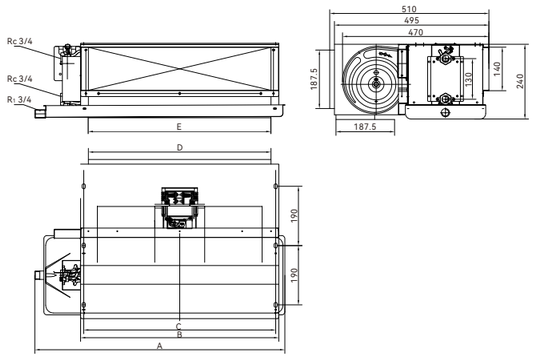
Model FP-		34KQ	51KQ	68KQ	85KQ	102KQ	136KQ	170KQ	204KQ	238KQ
Rated Air Flow m^3/h	High	340	510	680	850	1020	1360	1700	2040	2380
	Medium	280	390	520	640	790	1030	1290	1500	1800
	Low	180	260	350	430	520	690	860	1030	1200
Cooling Capacity W	High	2160	3220	3970	5380	6030	7780	10690	11660	13610
	Medium	1650	2279	2814	3750	4322	5534	7512	8088	9681
	Low	1068	1519	1984	2519	2854	3500	5008	5554	6454
Heating Capacity W	High	3000	4070	5450	6800	8160	10800	13700	16200	18900
	Medium	2474	3520	4210	5121	6315	8179	10200	12353	14521
	Low	1590	2150	2790	3200	4140	5479	6535	8482	9681
Fan	Quantity	1	1	1	1	1	1	1	1	1
Motor	Power Supply	220V/1~50Hz								
	Input Power W	34	50	58	72	92	126	128	152	198
Heat Exchanger	Configuration	Copper tubes with high-efficiency flanged aluminum fins, mechanically expanded and tightened								
	Working Pressure MPa	1.6								
	Inlet /Outlet Water Pipe Diameter	Rc3/4 (Tapered pipe internal threads)								
	Water Flow Rate kg/h	371	553	683	924	1036	1337	1838	2005	2340
	Water Resistance kPa	14	14	16	18	22	25	39	43	46
Cooling Energy Efficiency Ratio FCEER Limit Value (W/W)		60	61	64	69	60	56	69	63	57
Heating Energy Efficiency Coefficient FCCOP Limit Value (W/W)		84	77	88	87	81	78	89	88	79
Noise dB(A)	High	37	39	41	43	45	46	47	49	52
	Medium	36	37	39	40	43	44	45	46	48
	Low	34	35	37	39	40	41	41	43	44
Condensate Drain Pipe		ϕ26								

Note:

1. Cooling: Supply and return water temperature 7/12°C; return air condition: entering air dry bulb temperature 27°C, wet bulb temperature 19.5°C;
2. Heating: Supply water temperature 60°C; return air condition: entering air dry bulb temperature 21°C;
3. The air volume in the table is measured when the unit is operating in a dry state, at a dry bulb temperature of 20°C;
4. The noise in the table is measured inside a semi-anechoic chamber with a background noise of 11.5dB(A);
5. Specifications and parameters are subject to change without notice due to product improvements; please refer to the nameplate on the unit for the most accurate information.

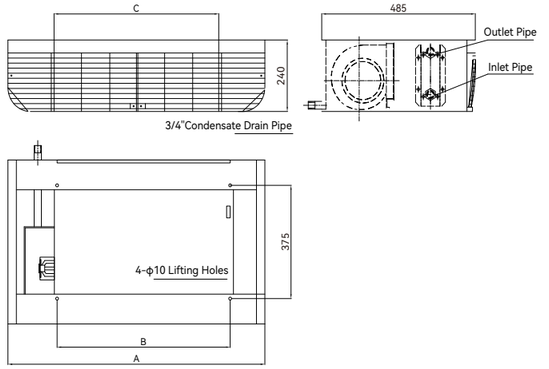
Structure and Main Dimensions

Horizontal Recessed Fan Coil Unit



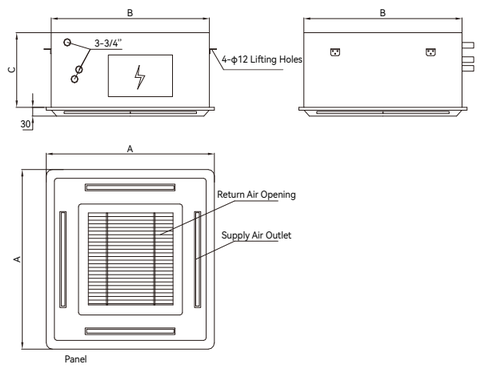
Model	External Dimensions (mm)				
	A	B	C	D	E
FP-34WA	650	485	465	437	437
FP-51WA	800	635	615	587	587
FP-68WA	880	715	695	667	667
FP-85WA	940	775	755	727	727
FP-102WA	1040	875	855	827	827
FP-119WA	1140	975	955	927	927
FP-136WA	1420	1255	1235	1207	1207
FP-170WA	1470	1305	1285	1257	1257
FP-204WA	1720	1555	1535	1507	1507
FP-238WA	1970	1805	1785	1757	1757

Horizontal Surface-mounted Fan Coil Unit



Model	External Dimensions (mm)		
	A	B	C
FP-34WM	790	490	470
FP-51WM	940	610	620
FP-68WM	980	680	660
FP-85WM	1100	810	780
FP-102WM	1250	930	930
FP-136WM	1410	1130	1090
FP-170WM	1640	1390	1320
FP-204WM	1840	1590	1520
FP-238WM	1920	1790	1600

Cassette Fan Coil Unit

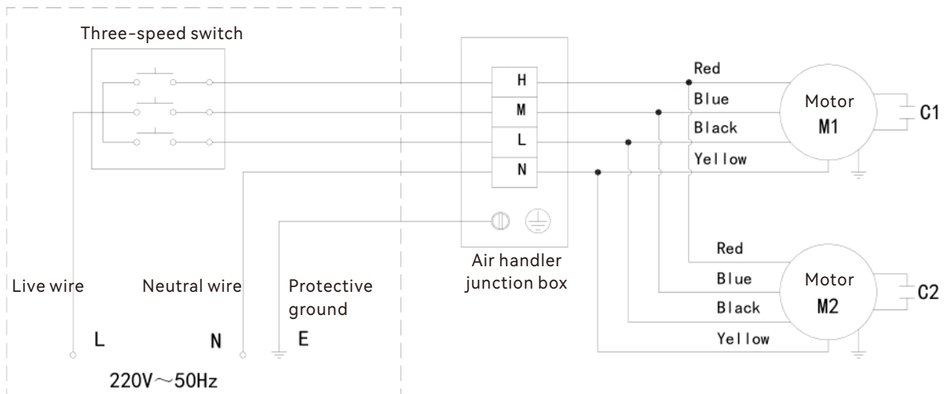


Strong Drainage Unit Size Table
(Two-pipe System with Four Air Outlets)

Model	External Dimensions (mm)			Net Weight (kg)
	A	B	C	
FP-34KQ	650	620	290	18
FP-51KQ	650	620	290	19
FP-68KQ	650	620	290	20
FP-85KQ	800	760	290	26
FP-102KQ	800	760	290	27
FP-136KQ	800	760	290	28
FP-170KQ	950	890	290	33
FP-204KQ	950	890	290	34
FP-238KQ	950	890	290	35

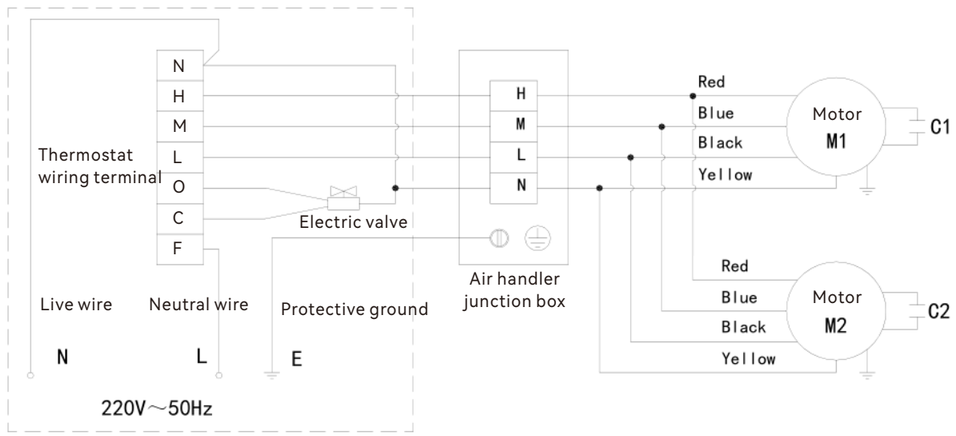
Wiring Schematic Diagram（Concealed units）

Equipped with a three-speed switch



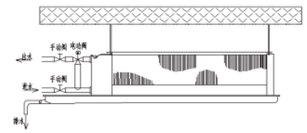
Note: The dashed box indicates customer wiring. If a three-speed switch or thermostat is required, please specify when placing the order.

Equipped with an LCD thermostat

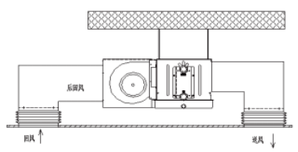


Note: The dashed box indicates customer wiring. If a three-speed switch or thermostat is required, please specify when placing the order.

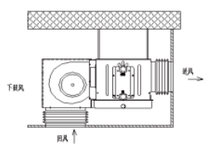
Unit Installation and Maintenance



Schematic diagram of water pipe installation



Rear air return pipe
connection diagram



Bottom air return pipe
connection diagram

To ensure smooth installation and operation of the unit, please pay attention to the following matters during installation:

- Check if there is sufficient space for installation and maintenance of the unit.
- Inspect the lifting structure; the lifting points of the unit should be secure and have enough strength to withstand the weight of the unit and vibrations during operation.
- Confirm the positions of the water supply and return, condenser water pipes, and electrical connections.
- Ensure the unit is installed level; otherwise, it may cause condensate water to overflow.
- Prevent debris from entering the fan wheel, motor, and heat exchanger during installation, and ensure that the drainage end is at least 3-5mm lower than the other end to ensure condensate water is drained.
- Check if the length of the duct connected to the unit matches the external static pressure of the machine to avoid excessive noise due to excessive airflow or performance degradation due to insufficient airflow.
- A filter should be installed in the water system pipes to prevent equipment coil blockage.
- The unit uses 220V~50HZ power supply with power fluctuations ≤±10%. Wiring should be done according to the circuit diagram, and it is strictly prohibited to connect any of the high, medium, or low taps to the neutral wire. The unit's junction box has a grounding nut for connection to the grounding system during installation. Note: It is strictly forbidden to use one thermostat to control multiple fan coil units to prevent motor burnout.
- Before the initial operation, please remove any foreign objects from the water pan, fan casing, and around the coil, check the water pipes and electrical connections, and ensure they are correct. Use a three-speed switch to adjust, preferably starting from the high speed and then selecting other speeds.
- Before the initial operation, close the unit's water supply and return valves, clean the chilled water pipe system, and then open the unit's water supply and return valves.
- Before the initial operation, open the air vent on the return water pipe to expel all the air from the coil and pipes.

01. The unit's water supply requirements are chilled water >3℃, hot water <65℃, and the water quality should be clean and softened.

02. The unit should be handled with care during transportation, and it is strictly forbidden to carry the unit by holding the fan wheel or casing. If serious damage, fan casing deformation, condensate water pan deformation, or motor and fan detachment are found before installation, please contact service personnel for handling.

03. Keep the unit level during installation for smooth drainage from the built-in water pan; when lifting the unit, it should only bear its own weight and not bear the force of ducts, pipes, or other objects. Please reserve enough space for maintenance during installation.

04. Please add a filter net at the return air opening to prevent dust from clogging the heat exchanger fins and ensure the cold and hot effects of the coil.

05. The unit's water pipes are bottom in and top out, and flexible connectors should be used for water supply and return pipes. Be careful not to twist the connectors too tightly to avoid damaging the heat exchanger. The water supply and return pipes should be insulated, and thread connections should be sealed with PTFE tape. The drainage pipe should maintain a sufficient slope to drain condensate water.

06. The unit's outlet pipe is equipped with a manual air vent valve. Each time water is passed through, the vent valve should be opened to expel all the air from the coil and pipes before closing it. Failure to do so will affect the unit's cold and hot effects.

07. The heat exchanger should be regularly cleaned to maintain good heat transfer performance; the filter mesh should be regularly washed to ensure smooth airflow, and it is strictly forbidden to operate the unit for long periods without the filter mesh.

08. When the unit is to be out of service for a long time, the coil should be filled with water to reduce corrosion of the pipes.

09. To prevent condensation on the surface of the unit when it is stopped, an electric valve interlocked with a thermostat should be used in the design, or a cold water bypass should be adopted; otherwise, only the manual closing of the water inlet valve can be used to solve the problem.

10. The unit should be maintained and repaired by professionals who are familiar with the product.

11. The duct should be connected to the unit with canvas flexible hoses to effectively isolate vibrations and noise.

When the unit is pressure tested for leaks or out of service in winter with environmental temperatures below 0℃, anti-freezing measures should be taken to prevent the coil and supply and return water pipes from freezing and cracking.

Routine Maintenance and Care

Air conditioning is a specialized piece of equipment, and it is recommended that users keep records of the daily operating data and perform regular maintenance and care.

1. Before the equipment is put into use for the first time, it is necessary to check whether the terminal equipment and other components of the water system are functioning normally.

2. During the use of the equipment, we recommend that users adopt the following maintenance and care methods:

Unit Maintenance Content	Standard Maintenance Cycle			Notes
	Month	Quarter	Half-year	
1. Inspect the power supply cable (from the distribution cabinet to the unit) for any looseness or damage.			★	
2. Check if the condensate drainage is functioning properly.		☆	★	Whether it is installed as required, whether there is any blockage due to dirt, whether the drainage is smooth, and whether there is any overflow.
3. Check if there are any abnormal noises during the unit's operation.	☆	☆	★	Such as sharp unit friction sounds, whistling, obvious impact noises, or resonance, significant electromagnetic noise (which can cause discomfort to people), and other abnormal noises.

Note:

① ★ - Items that must be maintained or replaced; ☆ - Items for which maintenance is decided based on actual conditions.

② Daily and monthly inspection items should be executed and recorded by the customer.

③ The replacement of consumable parts and materials is determined by the unit's service life or operating time. For units used year-round or for process purposes, operating time is considered; for normal use or comfort purposes, service life is considered.

④ It is recommended that a comprehensive maintenance and care should be conducted every 1 year of use or after approximately 1000 hours of operation.

3. For equipment that will not be used for a long period, we recommend the following maintenance and care methods:

When the unit is not operating for a long time or not running in winter, it is necessary to drain all the water from the system and then turn off the power supply.Before restarting the unit, check for any looseness or damage to the power supply cable (from the distribution cabinet to the unit), and conduct a comprehensive inspection of the unit. Only after confirming everything is normal should you start the unit. If necessary, you can follow the maintenance and care methods before the equipment is put into use.

For specific operations on unit installation, use, and maintenance, please refer to the included "Installation and Use Manual" and "Electrical Operation Manual".

Note: As OBAIR products are continuously improved and innovated, changes to product models, specifications, and parameters shown in this material will not be notified separately. Your understanding is appreciated.