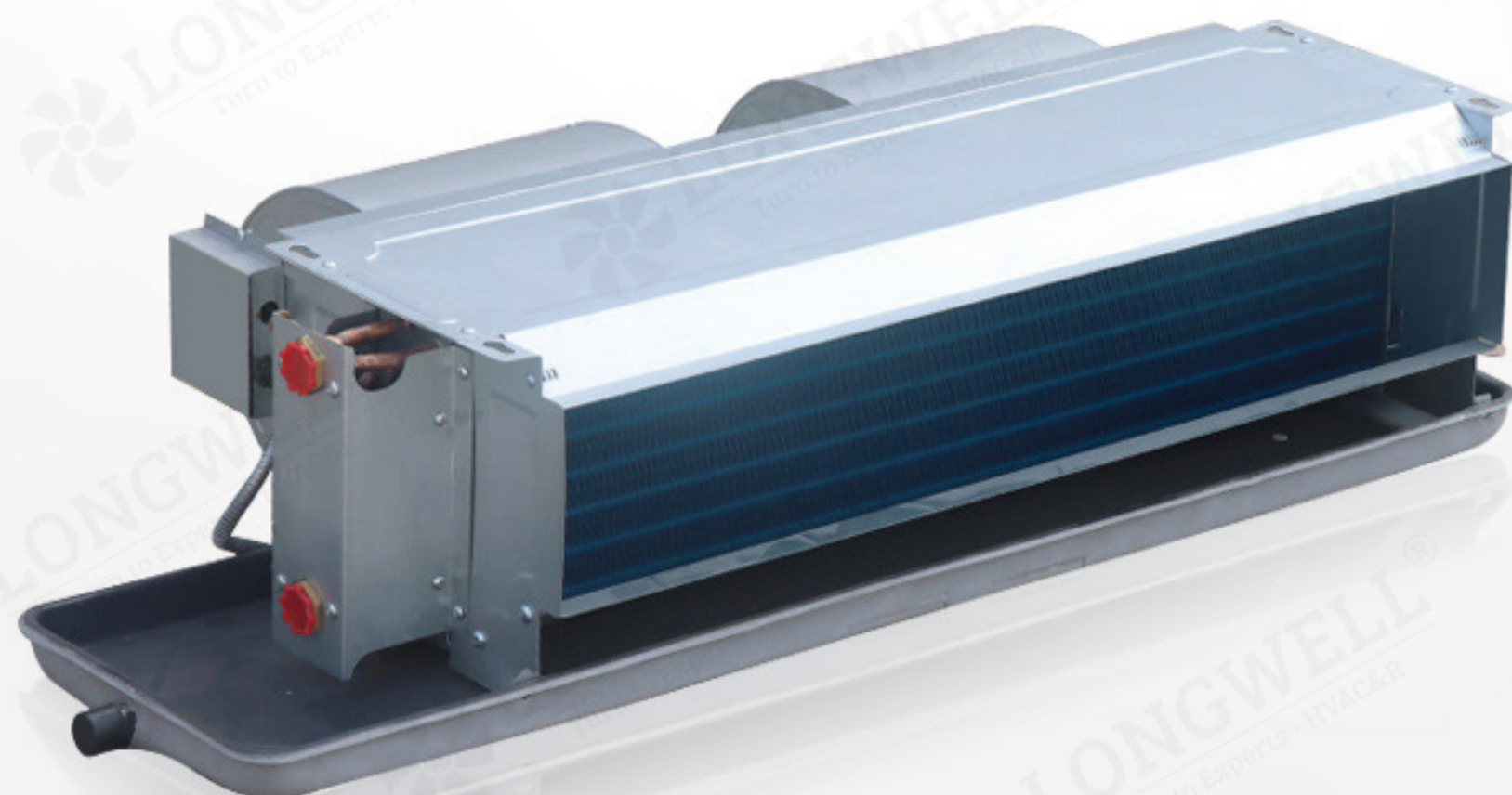


Metal Fan Coil Unit

Professional HVAC Fan & Motors Manufacturer



Type Code

LW FC - 340 - 01 W A



A-Concealed
M-Exposed

W-Horizontal
L-Vertical
K-Cassette

Series number

Air volume

FC-Fan Coil Unit

Longwell

Fan Coil Unit

Features of the fan coil unit

Safe and reliable, with a long service life:

Each coil heat exchanger undergoes pressure leak testing; the inlet and outlet water pipes (water collection head) use brass structures that are reliable and durable; the condensate tray is treated with spray paint to prevent rust; all materials are fireproof; the motor uses ultra-low noise rolling bearings that do not require user oiling or maintenance, and can have a service life of up to 35,000 hours; and the thin and elongated motor shaft undergoes special treatment to prevent corrosion.

High efficiency, with sufficient energy:

The coil uses seamless copper tubes that are wrapped with efficient double-flanged aluminum fins and tightened to form a unit, providing high heat transfer efficiency and sufficient cooling (heating) capacity. Standard coils can meet national standard performance requirements.

Large air volume, low noise:

It uses an ultra-wide-angle casing and a steel plate or ABS multi-blade centrifugal impeller. The impeller and motor can be matched in various ways to meet the needs of different specifications of fan coil units.

Flexible selection:

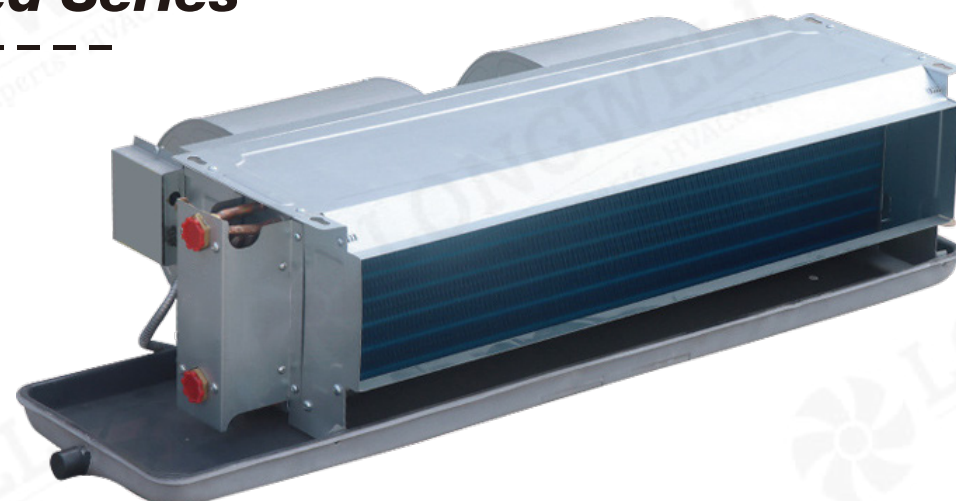
Considering the special characteristics and site restrictions of installation locations on construction sites, Mate provides water trays of different lengths for customers to choose from:

- 1.Standard water trays can reduce the required installation space, making them particularly suitable for places with limited installation space.
- 2.Extended water trays can better accommodate valves and condensate water

Fan coil series product application characteristics and product range

FP-WA Horizontal Concealed Series

This unit has a low height and can be ideally placed in the ceiling. Combined with interior decoration and equipped with air outlets, it is an ideal air conditioning equipment for hotels, restaurants, offices, etc.

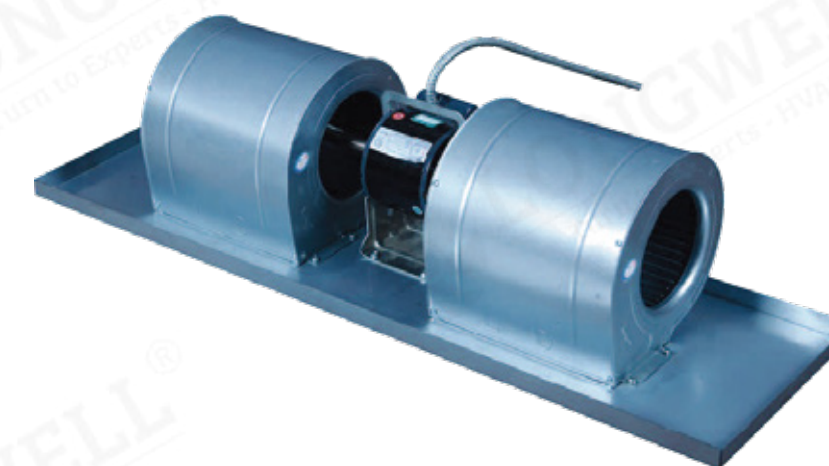
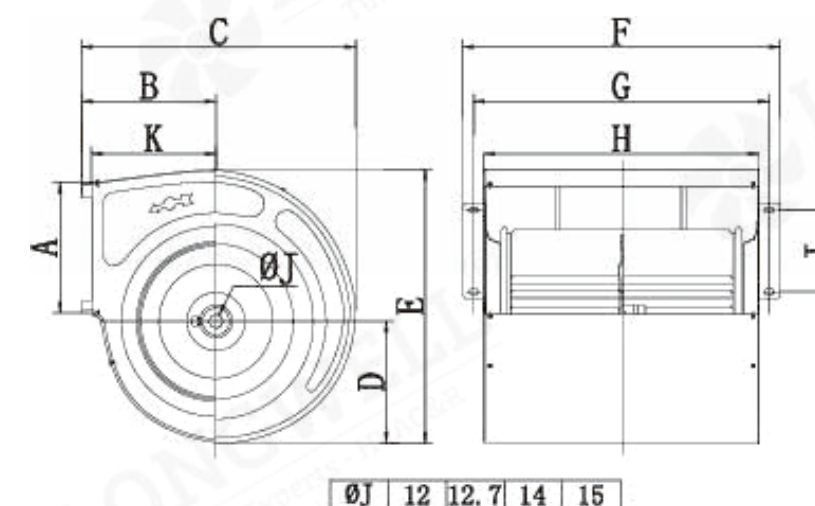


Fan-Coil Blower

Name: Coil Type Blower With Double Impellers

Features: Low Noise; High Efficiency; Lowpower; Small Construction Looking

Used: Central Air-Conditioning Unit, Ventilation Equipments, etc.



Technical Parameters

Model	A	B	C	D	E	F	G	H	I	K	Material
LWFC125×165	83.5	93.5	180.5	73.5	171	213.5	198	184	43.5	85	Plastic impeller
LWFC130×190	85	89	178	76	178.5	248	235	219	51	84.5	Metal
LWFC140×105	86	143	248	83.5	195	165	152	135	46	131.5	Plastic
LWFC140×150	81	108	209	87	19.2	209	196	183	50	100	Metal
LWFC141×180	81	108	209	87	19.2	239.5	226.5	213.5	50	100	Metal
LWFC145×160	111.5	100.5	211	93	216.5	230	214	198	65	95	Metal
LWFC145×190	111.5	100.5	211	93	216.5	254	238	222	65	95	Metal
LWFC150×150	106.5	107	215	94	216	215	199	184	65	100	Metal
LWFC150×200	106.5	107	215	94	216	261	245	230	65	100	Metal
LWFC156×175	118	114.8	223.5	90	210.5	239	223	219	68	114.8	Metal
LWFC160×160	113.5	113	230	105	235	225	207	190	70	105	Plastic
LWFC160×200	113.5	113	230	105	235	268	248	231	70	105	Metal
LWFC180×200	128.5	129	260.4	117	263	265	247	230	75	120	Metal
LWFC200×190	113	150	286.5	125	282	277	254	240	60	150	Metal
LWFC250×250	262	186	378.5	172	387	340	326	300	160	185	Metal

Optional models

DC Brushless Fan Coil:

It uses a DC brushless motor to achieve diversified control of high, medium and low speed, as well as stepless speed regulation. The working speed range is large, which can meet the speed requirements under various air volume modes. As the motor speed decreases, the air volume also changes accordingly, which reduces energy consumption and achieves energy-saving effects.



Water control system (selection)

Two-way or three-way open/close water control system includes electric actuators, valves and related components. It achieves automatic adjustment of the indoor temperature by controlling the opening and closing of the cold/hot water system.

1. Easy installation: Only need to connect the water pipes and power supply on-site to put it into use.
2. Compact design: Fully utilizing the extended water tray space, there is no need to change the unit size.

Air purification system

1. High-efficiency filtration:

Using HEPA filter to filter PM2.5 and above particles, effectively resisting "haze" weather and ensuring indoor air cleanliness.

2. Photocatalytic purification:

By irradiating with a certain energy level of light, using the extremely strong oxidation ability of chlorine oxygen free radicals generated, it can degrade and kill various microorganisms in the air.

3. Activated carbon purification:

Used for decoration pollution control, adsorbing formaldehyde, heavy metals and other harmful gases that are harmful to human body, as well as suspended bacteria in the air. It has comprehensive functions such as detoxification, deodorization, moisture absorption, mildew prevention, and sterilization.



LWFC-WM Horizontal Exposed

It can be ideally suspended at any position under the ceiling without occupying any indoor space, making it easy to install. The shell is treated with electrostatic spraying to match the interior decoration and is suitable for air conditioning engineering renovation in old buildings, which can reduce pipelines and save costs.



LWFC-LM Vertical Exposed

This unit's surface is treated with electrostatic spraying, with elegant colors and a beautiful appearance. It can be placed directly on the indoor floor, matching the interior decoration and easy to disassemble, maintain, and reliable in performance.



LWFC-LA Vertical Concealed

This model has an ultra-thin body, does not occupy effective space and can be arranged under the window, in the wall, or in the recess with decorative panels. There are two forms of upward and forward air outlets, which are suitable for places such as conference rooms, halls, or stadiums.



LWFC-KM Cassette Unit

This unit can be ideally placed in the ceiling, combined with interior decoration only leaving the air outlet exposed outside the ceiling. The air outlet is beautiful, does not occupy space, and is easy to maintain.

Performance Parameters of Fan Coil Unit (LWFC Series)

Model		340-01	510-01	680-01	850-01	1020-01	1360-01	1700-01	2040-01	2380-01
Air volume (m³/h)	H	360	510	680	850	1020	1360	1700	2040	2380
	M	260	390	510	640	770	1020	1280	1530	1790
	L	170	260	340	430	510	680	850	1020	1190
Cooling capacity(W)	H	1800	2700	3600	4500	5400	7200	9000	10800	12600
Heating capacity(W)	H	2700	4050	5400	6750	8100	10800	13500	16200	18900
Input power (W)	12Pa	H	37	52	62	76	96	134	189	228
	30Pa	H	44	59	72	87	108	174	212	253
	50Pa	H	49	66	84	100	118	210	250	300
Noise [dB(A)]	12Pa	H	37	39	41	43	45	46	48	50
	30Pa	H	40	42	44	46	47	48	50	52
	50Pa	H	42	44	46	47	49	50	52	54
Water flow(Kg/h)		310	470	620	780	930	1240	1550	1860	2170
Water pressure loss(KPa)		≤30	≤30	≤30	≤30	≤40	≤40	≤40	≤40	≤50
Net weight (kg)	WA	11	13.5	15	16.5	17.5	23.5	28	30.5	32.5
	With return air box	13	15.5	18	20	22.5	28.5	33	35.5	38.5
Inlet and outlet water pipes		3/4 inch internal thread								
Condensate drain pipe		3/4 inch external thread								
Maximum allowable working pressure		1.6MPa								
Power supply		AC220V/50HZ								
Remarks		1.The above performance parameters are measured based on the state without a return air box. 2.Cooling capacity working condition parameters: inlet air dry bulb temperature of 27°C, ball temperature of 19.5°C, inlet water temperature of 7°C, and water temperature difference of 5°C. 3.Heating capacity working condition parameters: inlet air dry bulb temperature of 21°C, inlet water temperature of 60°C. 4.The performance parameters comply with the provisions of GB/T19232-2003. If the user has special requirements, please specify them.								

Total Cooling (QT) Capacity Ratio Table

Air Volume Ratio	Total Cooling (QT) Capacity Ratio	Air Volume Ratio	Total Cooling (QT) Capacity Ratio
0.2	0.37	0.75	0.87
0.3	0.5	0.8	0.9
0.4	0.6	0.9	0.975
0.5	0.7	1.0	1.0
0.6	0.75		

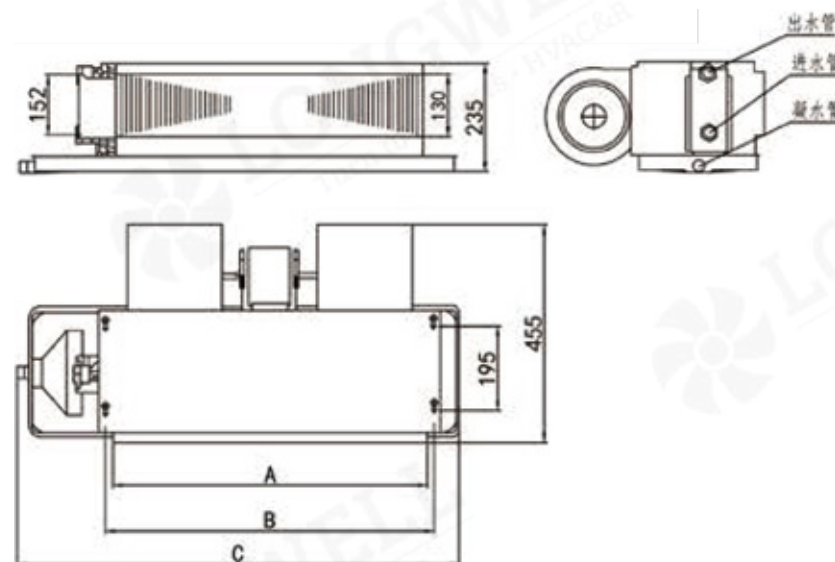
Heating and Sensible Cooling (QS) Capacity Ratio Table

Air Volume Ratio	Total Cooling (QS) Capacity Ratio	Air Volume Ratio	Total Cooling (QS) Capacity Ratio
0.2	0.3	0.75	0.8
0.3	0.4	0.8	0.825
0.4	0.5	0.9	0.98
0.5	0.6	1.0	1.0
0.6	0.7		

Performance Parameters of Dry Fan Coil Unit (LWFC Series)

Model		340-02	510-02	680-02	850-02	1020-02	1360-02	1700-02	2040-02	2380-02
Air volume (m³/h)	H	340	510	680	850	1020	1360	1700	2040	2380
	M	260	390	510	640	770	1020	1280	1530	1790
	L	170	260	340	430	510	680	850	1020	1190
Cooling capacity (W)	H	680	1020	1360	1700	2040	2720	3400	4080	4750
Heating capacity (W)	H	1240	1860	2480	3100	3720	4960	6200	7440	8680
Input power (W)	Low static pressure	H	37	52	62	76	96	134	189	228
	30Pa	H	44	59	72	87	108	156	174	212
	50Pa	H	49	66	84	100	118	174	210	250
Noise [dB(A)]	Low static pressure	H	37	39	41	43	45	46	48	50
	30Pa	H	40	42	44	46	47	48	50	52
	50Pa	H	42	44	46	47	49	50	52	54
Water flow (Kg/h)		120	180	240	300	350	470	590	710	820
Water pressure loss (KPa)		≤30	≤30	≤30	≤30	≤40	≤40	≤40	≤40	≤50
Net weight (kg)		11.5	14	15.5	17	18.5	25	29	32	35
Inlet and outlet water pipes		3/4 inch internal thread								
Condensate drain pipe		3/4 inch internal thread								
Maximum allowable working pressure		1.6MPa								
Power supply		AC220V/50HZ								
Remarks		1.The performance parameters above are measured without air return box. 2.Cooling capacity working condition parameters: Inlet air dry bulb temperature at 26°C, wet bulb t emperature at 18.7°C, inlet water temperature at 16°C with a water temperature difference of 5°C. 3.Heating capacity working condition parameters: Inlet air dry bulb temperature at 21°C, inlet water temperature at 40°C. 4.The performance parameters conform to the requirements of JB/T11524-2013. If users have special requirements, please specify them.								

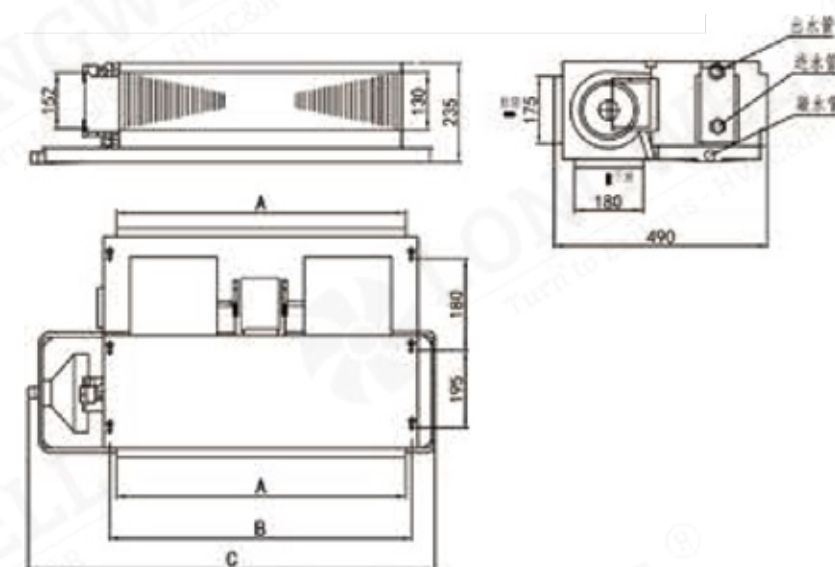
Horizontal Concealed Standard Fan Coil Unit Dimensional Diagram



Model	A (mm)	B (mm)	C (mm)
LWFC-340WA	460	490	750
LWFC-510WA	580	610	850
LWFC-680WA	650	680	950
LWFC-850WA	780	810	1050
LWFC-1020WA	900	930	1150

Model	A (mm)	B (mm)	C (mm)
LWFC-1360WA	1100	1130	1350
LWFC-1700WA	1360	1390	1650
LWFC-2040WA	1560	1590	1850
LWFC-2380WA	1760	1790	2050

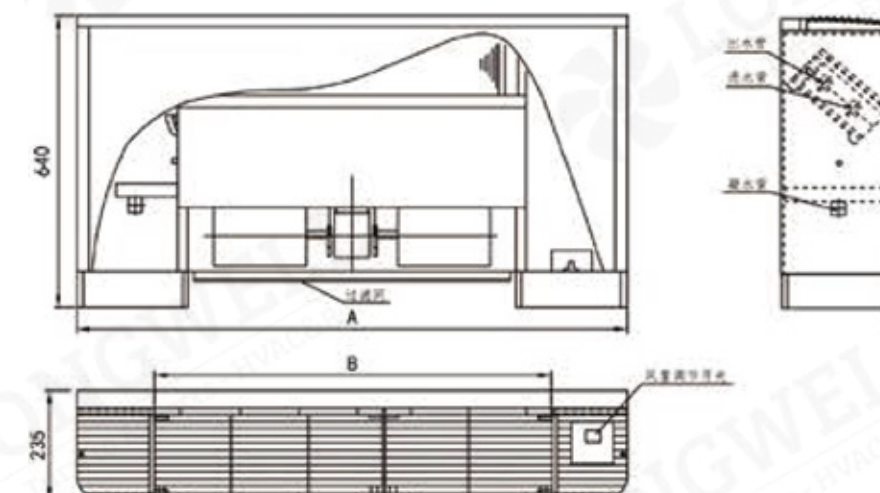
Horizontal Concealed Fan Coil Unit with Return Air Box Dimensional Diagram



Model	A (mm)	B (mm)	C (mm)
LWFC-340WA	460	490	750
LWFC-510WA	580	610	850
LWFC-680WA	650	680	950
LWFC-850WA	780	810	1050
LWFC-1020WA	900	930	1150

Model	A (mm)	B (mm)	C (mm)
LWFC-1360WA	1100	1130	1350
LWFC-1700WA	1360	1390	1650
LWFC-2040WA	1560	1590	1850
LWFC-2380WA	1760	1790	2050

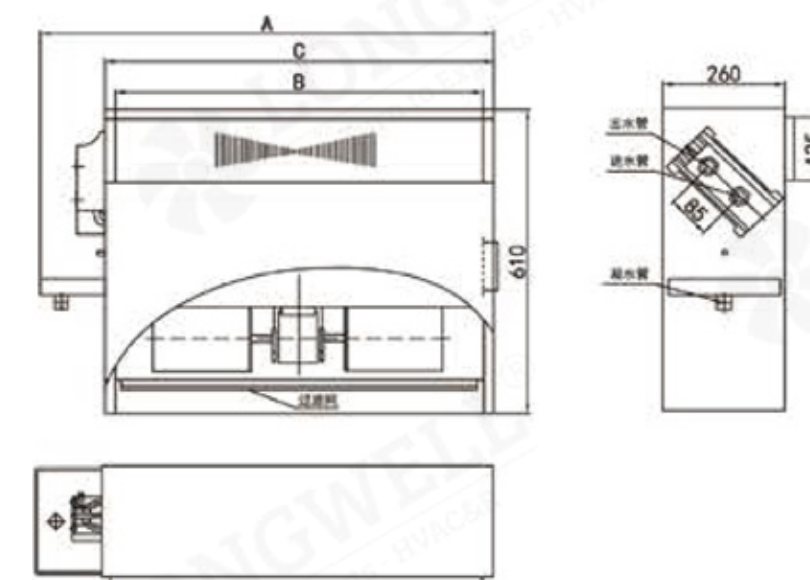
Vertical Exposed Series Dimensional Diagram



Model	A (mm)	B (mm)
LWFC-340LM	790	460
LWFC-510LM	940	580
LWFC-680LM	980	650
LWFC-850LM	1100	780
LWFC-1020LM	1260	900

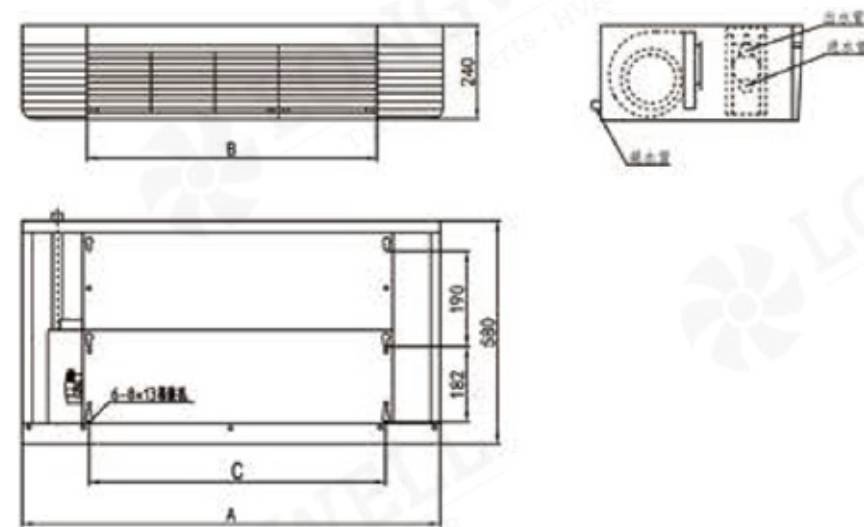
Model	A (mm)	B (mm)
LWFC-1360LM	1410	1100
LWFC-1700LM	1680	1360
LWFC-2040LM	1880	1560
LWFC-2380LM	2080	1760

Vertical Concealed Series Dimensional Diagram



Model	A (mm)	B (mm)	C (mm)
LWFC-340LA	620	460	500
LWFC-510LA	760	580	620
LWFC-680LA	830	650	690
LWFC-850LA	960	780	820
LWFC-1020LA	1080	900	940

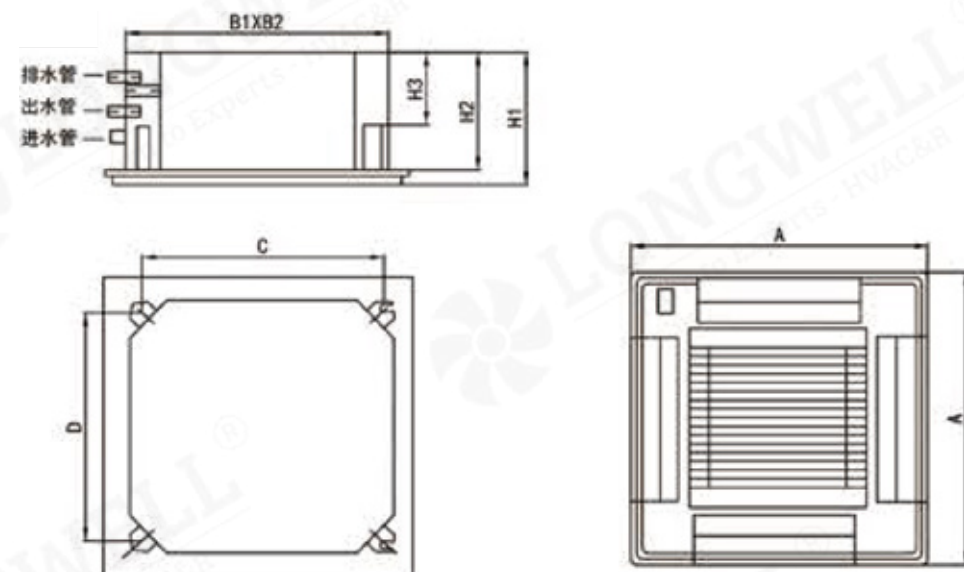
Model	A (mm)	B (mm)	C (mm)
LWFC-1360LA	1280	1100	1140
LWFC-1700LA	1520	1360	1400
LWFC-2040LA	1740	1560	1600
LWFC-2380LA	1880	1760	1800



**Horizontal Exposed Series
Dimensional Diagram**

Model	A (mm)	B (mm)	C (mm)
LWFC-340WM	790	460	440
LWFC-510WM	940	580	590
LWFC-680WM	980	650	660
LWFC-850WM	1100	780	810
LWFC-1020WM	1260	900	890

Model	A (mm)	B (mm)	C (mm)
LWFC-1360WM	1410	1100	1100
LWFC-1700WM	1680	1360	1320
LWFC-2040WM	1880	1560	1540
LWFC-2380WM	2080	1760	1690



**Cassette Exposed Series
Dimensional Diagram**

Model	A (mm)	B1*B2 (mm)	C (mm)	D (mm)	H1 (mm)	H2 (mm)	H3 (mm)
LWFC-340KM	650	580*570	612	650	320	275	90
LWFC-510KM	650	580*570	612	650	320	275	90
LWFC-510KM	650	580*570	612	650	320	275	90
LWFC-850KM	800	710*710	687	800	385	310	165
LWFC-1020KM	800	710*710	687	800	385	310	165

Model	A (mm)	B1*B2 (mm)	C (mm)	D (mm)	H1 (mm)	H2 (mm)	H3 (mm)
LWFC-1360KM	800	710*710	687	800	385	310	165
LWFC-1700KM	950	832*832	698	950	375	315	170
LWFC-2040KM	950	832*832	698	950	375	315	170
LWFC-2380KM	950	832*832	698	950	375	315	170