



Fan Coil Units

50/60Hz

Air Volume: 110~3300CMH

ZERO Air Conditioning



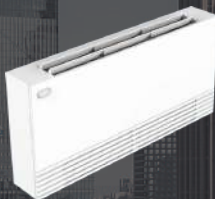
ZFP-DX



ZFP-KM



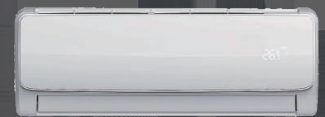
ZFP-KIM



ZFP-CM



ZFP-ZDM



ZFP-BM-C

Conceal duct type FCU: ZFP-DX Series

ZERO's fan coil unit are high performance, low noise, large air volume and cooling capacity, and flexible left and right water connections. Currently there are more than 500 types of models with a wide cooling capacity selection. All fan coils have undergone rigorous testing before leaving the factory. ZERO fan coil continue to lead the market in the air conditioning and refrigeration industry with cutting edge design, precise manufacturing and excellent performance.

• Meticulously Made With High-Quality Materials •

The unit are made using high-quality galvanized steel sheets and are carefully processed by precision CNC machine tools. The structure is compact and beautiful designed. PE insulation strips added to enhance the sealing and shock absorption, allow easy maintenance and detachability.

• Coil •

All coils are of seamless copper tubes, with corrugated hydrophilic coated fin for improved condensed draining and giving excellent heat transfer. The surface design of this "self-cleaning" corrugated fin create a vortex flow which make dust difficult to accumulate, and its heat exchange efficiency will not be affected even after used for a long time. All coil are leak tested at 2.4 MPa air pressure and are suitable for up to 1.6 MPa working pressure. The water inlet and outlet hexagonal connectors are of brass material. The water flow connection are easy to install on site.

• Energy Efficiency •

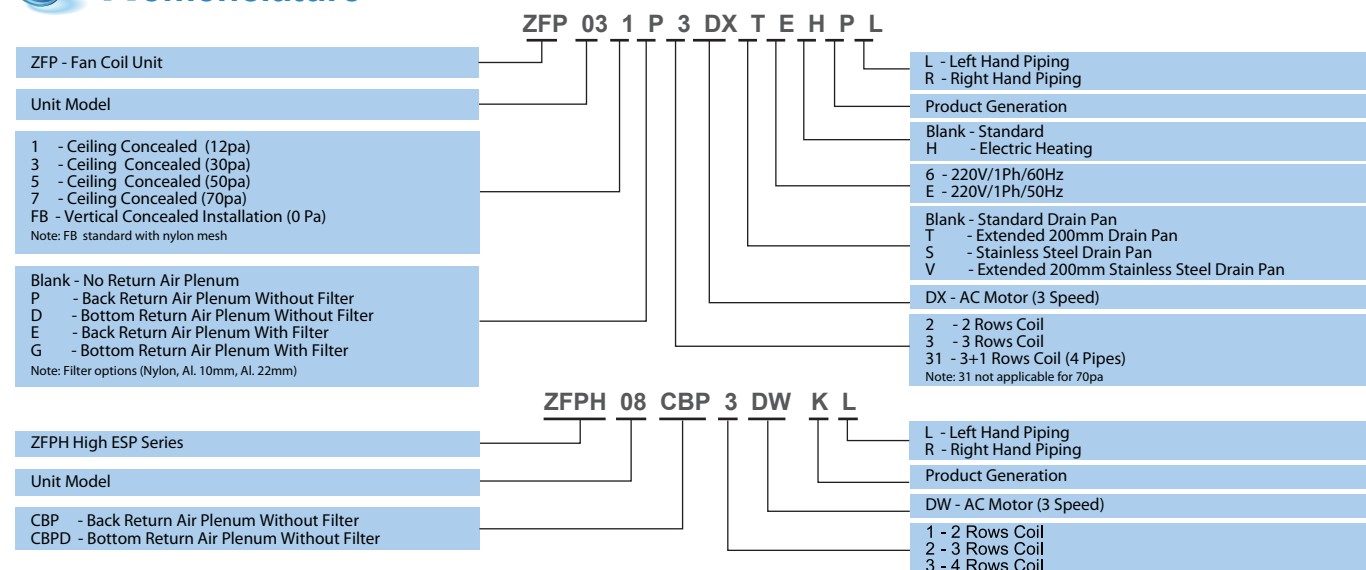
US patented computer selection technology to ensure an efficient operation. The fan coil fan is a forward multi-blade centrifugal fan, which is manufactured by a well-known fan manufacturer who expertly designed according to the aerodynamic principle to ensure the fan is light weight, high efficiency and low noise.

• Options And Accessories •

- 1) Thermostat- LCD or Mechanical
- 2) Filter - Nylon Mesh Filter or Carbon Filter
- 3) 2-way motorized valve (shipped loose)
- 4) Flexible pipe connector - For easy connection, eliminate vibration and reduce noise level
- 5) UV light - Produce germicidal effects to remove airborne bacteria and germs
- 6) Extended Drain Pan



Nomenclature



1. Standard unit coil inlet and outlet are in the same direction as drain pipe. Concealed unit, the water inlet and outlet same direction as the junction box. For exposed unit, the water inlet outlet is opposite direction to the junction box.
2. The unit with return air plenum can be equipped with a filter, and the filter can be based on customer requirements.
3. Static pressure loss for return air plenum with filter is 10Pa.

Conceal duct type FCU: ZFP-DX Series

ZFP-DX (2 Rows)

Model			02	03	04	05	06	07	08
Air Flow m³/h		High Speed	340	510	680	850	1020	1190	1360
		Med. Speed	270	406	518	661	770	893	1016
		Low Speed	176	261	348	447	509	595	687
Total Cooling Capacity (W)			1890	2930	3610	4500	5400	6300	7200
Sensible Cooling Capacity (W)			1350	2070	2590	3220	3870	4520	5160
FCEER (W/W)	12Pa		51	55	54	54	51	49	49
	30Pa		45	47	47	49	47	46	43
	50Pa		38	42	41	43	44	43	40
	70Pa		36	38	37	39	39	37	35
Heating (W)	Entering Water 60°C		3243	4922	6159	7537	8635	10337	12017
	Entering Water 45°C		1988	3013	3774	4610	5286	6328	7358
FCCOP Entering Water 60°C (w/w)	12Pa		88	94	95	94	88	84	86
	30Pa		77	80	84	86	82	79	74
	50Pa		66	72	73	71	75	73	71
	70Pa		61	64	66	68	66	64	61
Noise Level dB(A)	12Pa	High Speed	32.6	36.2	38.3	40.0	44.2	44.7	44.5
		Med. Speed	26.5	29.7	30.5	34.9	37.5	32.8	37.4
		Low Speed	20.7	23.8	24.6	29.7	29.9	25.0	29.1
	30Pa	High Speed	36	39	41	42.6	46	47.5	46
		Med. Speed	32.4	35.8	35.9	37.6	39.7	37.3	38.8
		Low Speed	28.2	29.3	29.3	30.6	32.8	27.4	31.7
	50Pa	High Speed	38.7	43.0	44.0	46.0	48.0	49.0	49.0
		Med. Speed	34.0	36.9	38.5	40.6	42.6	43.5	38.6
		Low Speed	26.3	31.5	31.3	33.9	37.3	36.8	30.5
	70Pa	High Speed	41.4	44.8	45.0	49.6	53.0	54.1	49.5
		Med. Speed	37.2	39.5	40.9	47.9	51.5	51.3	47.2
		Low Speed	30.1	28.8	34.0	44.1	49.1	47.3	43.2
Water Flowrate (l/min)			5.4	9.0	10.8	12.6	14.4	18.0	21.6
Water Pressure Drop (kPa)			10.7	27.4	19.7	30.0	40.0	38.0	34.4
Blower Qty			1	2	2	2	2	2	4
Motor Qty			1	1	1	1	1	1	2
220V/1PH/50Hz Total Power Input (W)		12Pa	36	48	60	74	93	112	128
		30Pa	41	57	70	81	101	121	150
		50Pa	48	64	81	97	110	131	158
		70Pa	52	72	90	104	126	150	184
Unit Weight (kg)	Vertical Concealed		14.7	18	20	21.6	23	26.4	32.6
	Ceiling Concealed W/o R/A Plenum		10.2	12.7	14.2	15.3	16.2	18.5	23.5
	Ceiling Concealed With R/A Plenum		13.2	16.1	18.0	19.4	20.5	23.4	29.1

- Notes:
- 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
 - 2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
 - 3) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.
 - 4) Refer to Total Capacity Correction Factor for other airflow.
 - 5) Noise data is based on high speed under lab testing condition.
 - 6) Motor power will be slightly different due to different motor manufacturers, please refer to the nameplate.

Conceal duct type FCU: ZFP-DX Series



Model			02	03	04	05	06	07	08	10	12	14	
Air Flow m³/h		High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380	
		Med. Speed	260	383	501	623	765	893	1006	1260	1513	1739	
		Low Speed	170	256	339	417	515	595	675	810	988	1190	
Cooling (W)	Total Cooling Capacity (W)	High Speed	2300	3280	4170	5280	6100	7060	8330	9650	11510	13230	
		Med. Speed	1850	2640	3320	4150	5005	5731	6694	7964	9461	10861	
		Low Speed	1320	1540	2430	3058	3718	4334	4934	5720	6890	8203	
	Sensible Cooling Capacity (W)	High Speed	1580	2290	2930	3710	4290	4990	5840	6850	8170	9400	
		Med. Speed	1276	1815	2300	2880	3476	3990	4622	5566	6608	7584	
		Low Speed	880	1298	1660	2079	2530	2948	3353	3916	4760	5631	
FCEER (W/W)		12Pa	59	61	63	62	56	55	56	55	54	49	
		30Pa	51	53	55	58	52	52	49	51	49	46	
		50Pa	45	48	47	48	48	48	47	44	43	41	
		70Pa	41	43	43	46	43	43	41	40	38	\	
Water Flowrate (l/min)			7.2	9.2	12.6	14.9	17.3	19.8	23.7	27.6	31.7	37.5	
Water Pressure Drop (kPa)			22	22	20	30	40	27	40	39	40	49	
Heating (W)		Entering Water 60°C	3590	5100	6820	8300	9540	11340	13300	15610	18200	20860	
		Entering Water 45°C	2200	3120	4170	5110	5840	6950	8160	9570	11270	12800	
FCCOP Entering Water 60°C (W/W)		12Pa	93	99	104	101	91	90	93	94	90	82	
		30Pa	82	84	89	93	84	84	81	84	80	75	
		50Pa	72	76	78	79	78	78	77	72	70	67	
		70Pa	65	68	70	73	69	69	65	66	61	\	
Noise Level dB(A)		12Pa	High Speed	32.6	36.2	38.3	40.0	44.2	44.7	44.5	46.6	49.0	50.0
			Med. Speed	26.5	29.7	30.5	34.9	37.5	32.8	37.4	39.4	43.4	45.2
			Low Speed	20.7	23.8	24.6	29.7	29.9	25.0	29.1	30.6	33.6	35.0
		30Pa	High Speed	36	39	41	42.6	46	47.5	46	49	49.5	52.5
			Med. Speed	32.4	35.8	35.9	37.6	39.7	37.3	38.8	40.2	40.8	49.0
			Low Speed	28.2	29.3	29.3	30.6	32.8	27.4	31.7	31.4	30.5	43.1
		50Pa	High Speed	38.7	43.0	44.0	46.0	48.3	49.0	49.0	50.5	51.0	52.0
			Med. Speed	34.0	36.9	38.5	40.6	42.6	43.5	38.6	45.5	45.1	49.4
			Low Speed	26.3	31.5	31.3	33.9	37.3	36.8	30.5	36.2	36.8	44.5
		70Pa	High Speed	41.4	44.8	45.0	49.6	53.0	54.1	49.5	52.5	53.0	\
			Med. Speed	37.2	39.5	40.9	47.9	51.5	51.3	47.2	49.5	48.3	\
			Low Speed	30.1	28.8	34.0	44.1	49.1	47.3	43.2	45.1	40.9	\
Blower Qty			1	2	2	2	2	4	4	4	4		
Motor Qty			1	1	1	1	1	2	2	2	2		
Total Power Input (W) 220V/1Ph/50Hz		12Pa	36	48	60	74	93	112	128	147	183	221	
		30Pa	41	57	70	81	101	121	150	169	206	245	
		50Pa	48	64	81	97	110	131	158	199	242	279	
		70Pa	52	72	90	104	126	150	184	220	282	\	
Total Power Input (W) 220V/1Ph/60Hz		12Pa	40	58	74	90	107	137	161	216	232	\	
		30Pa	43	72	90	105	127	151	182	225	251	\	
		50Pa	54	84	101	118	145	172	194	256	295	\	
		70Pa	62	89	110	132	156	194	204	266	314	\	
Unit Weight (kg)	Vertical Concealed		15.8	22.8	24.5	26	27.8	30	37.5	39	42.3	47	
	Ceiling Concealed W/o R/A Plenum		11.3	13.2	14.8	16.1	17.1	19.4	24.6	26.8	29.5	32.3	
	Ceiling Concealed With R/A Plenum		14.3	16.6	18.6	20.2	21.4	24.3	30.2	32.6	36.1	39.6	

- Notes: 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
3) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.
4) Refer to Total Capacity Correction Factor for other airflow.
5) Noise data is based on high speed under lab testing condition.
6) Motor power will be slightly different due to different motor manufacturers, please refer to the nameplate.

Conceal duct type FCU: ZFP-DX Series

ZFP-DX (3+1 Rows)

Model			02	03	04	05	06	07	08	10	12	14
Air Flow m³/h		High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
		Med. Speed	255	372	501	625	766	900	1011	1228	1525	1809
		Low Speed	173	240	329	412	501	595	674	823	1052	1242
Cooling (W)	Total Cooling Capacity (W)	High Speed	2300	3280	4170	5280	6090	7060	8330	9650	11510	13230
		Med. Speed	1850	2640	3320	4150	5005	5731	6694	7810	9461	10861
		Low Speed	1320	1540	2430	3058	3718	4334	4934	5720	6890	8203
	Sensible Cooling Capacity (W)	High Speed	1580	2290	2930	3710	4330	4990	5840	6850	8170	9400
		Med. Speed	1276	1815	2300	2880	3476	3990	4622	5450	6608	7584
		Low Speed	880	1298	1660	2079	2530	2948	3353	3916	4760	5631
FCEER (W/W)	12Pa		56	61	59	62	53	53	52	54	52	49
	30Pa		47	50	51	54	48	48	46	48	47	44
	50Pa		43	46	42	48	44	44	44	42	41	39
Water Flowrate (l/min)			7.2	9.2	12.6	14.9	17.3	19.8	23.7	27.6	31.7	37.5
Water Pressure Drop (kPa)			22	22	20	30	40	27	40	39	40	49
Heating (W)	Entering Water 60°C		2030	2710	3494	4277	5488	5785	6815	7989	9628	10962
	Entering Water 45°C		1290	1725	2233	2726	3488	3683	4335	5089	6119	6958
FCCOP Entering Water 60°C (W/W)	12Pa		52	53	55	53	51	48	47	48	46	44
	30Pa		43	43	46	45	46	43	41	42	42	39
	50Pa		39	40	38	40	42	39	38	36	35	34
Noise Level dB(A)	12Pa	High Speed	36.5	38.7	40.2	42	45	46	46	48	50	52
		Med. Speed	30	31.5	34.2	34.5	39.1	37	37.2	35	35.3	35.3
		Low Speed	23	24	27	27	27.2	27.8	27	25.5	25.3	28
	30Pa	High Speed	39.3	42	42.8	44.9	46.5	48	48	50	51	53.5
		Med. Speed	32	33	34.6	37	41	42.5	41.5	37.5	42.2	49.6
		Low Speed	26	26	26.8	29	33	32.4	32.8	28.5	33	45
	50Pa	High Speed	41.2	43.5	45.8	46.8	48	49.3	50	51.8	51.4	53
		Med. Speed	34	37.3	40.5	42	45	45.5	43.5	46	47.5	50.5
		Low Speed	27.8	30	33	35.6	40.8	39.5	35.5	40.5	43	47.4
Blower Qty			1	2	2	2	2	2	4	4	4	4
Motor Qty			1	1	1	1	1	1	2	2	2	2
Total Power Input (W)	12Pa		36	49	60	74	93	112	130	147	183	221
	30Pa		43	57	70	84	105	121	151	169	206	245
	50Pa		48	64	81	97	114	131	169	204	243	291
Unit Weight (kg)	Ceiling Concealed W/o R/A Plenum		12.1	14.7	16.6	17.1	18.2	20.5	25.9	28.2	31.1	34.1
	Ceiling Concealed With R/A Plenum		15.1	18.1	20.4	21.2	22.5	25.4	31.5	34.0	37.7	41.4

- Notes: 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
3) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.
4) Refer to Total Capacity Correction Factor for other airflow.
5) Noise data is based on high speed under lab testing condition.
6) Motor power will be slightly different due to different motor manufacturers, please refer to the nameplate;

High ESP Concealed duct type FCU: ZFPH Series

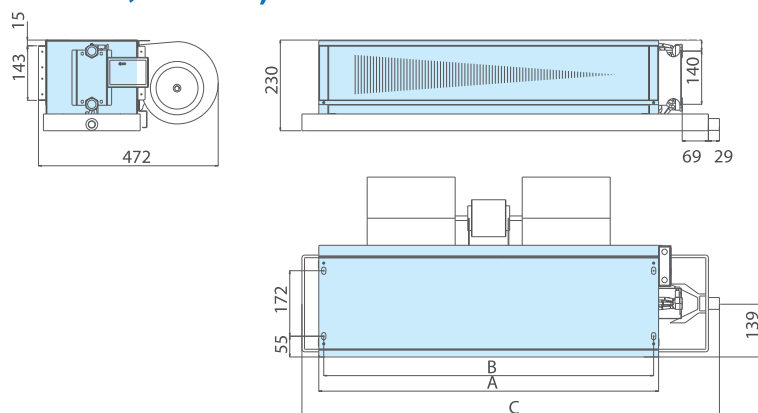


Model		External Static Pressure (Pa)	Air Flow (m³/h)				Noise Level dB(A)	Capacity					Blower Qty	Motor			Unit Net Weight (kg)
			High Speed	Hi Med Speed	Medium Speed	Low Speed		Total Cooling (W)	Sensible Heating (W)	Heating (W)	Water Flowrate (l/min)	Water Pressure Drop (kPa)		Qty	Power Input (W)	Power Output (W)	
2Rows CBP CBPD	08	110	1500	1200	970	-	60	5220	3900	9870	15	6.7	2	1	303	150	38
		80	-	1500	1150	960									287	142	
	14	130	2400	2000	1700	-	62	8320	6150	15350	24	12.4	2	1	502	250	50
		100	-	2400	1900	1700									485	242	
	18	165	3300	2900	2200	-	64	12040	8670	21100	34.2	29	3	2	781	375	65
		125	-	3300	2600	2200									738	354	
3Rows CBP CBPD	08	100	1500	1200	970	-	60	7760	5300	13190	22.2	18.7	2	1	303	150	40
		70	-	1500	1200	960									287	142	
	14	115	2400	2000	1700	-	62	10810	7760	19870	31.2	9.9	2	1	502	250	52
		85	-	2400	1900	1700									485	242	
	18	150	3300	2900	2200	-	64	16030	11130	27450	46.2	24.2	3	2	781	375	69
		110	-	3300	2600	2200									738	354	
4Rows CBP CBPD	08	90	1500	1200	970	-	60	9430	6240	15320	27	34.5	2	1	303	150	43
		60	-	1500	1150	960									287	142	
	14	100	2400	2000	1700	-	62	12660	8910	22940	36.6	8.0	2	1	502	250	55
		70	-	2400	1900	1700									485	242	
	18	135	3300	2900	2200	-	64	17900	12390	31590	51.6	18.2	3	2	781	375	73
		95	-	3300	2600	2200									738	354	

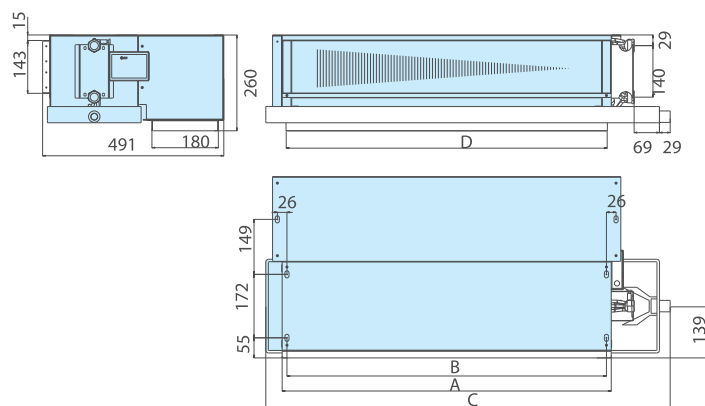
- Notes : 1) Motor is 220V/1Ph/50Hz four speed capacitor motor
2)The high speed air volume is the value when the residual pressure outside the machine is the corresponding pressure
3) Cooling capacity is based on water inlet/outlet temperature of 7°C/ 12°C and entering air temperature 27°C DB/ 19.5°C WB
4) Heating capacity is based on water entering temperature of 60°C and air entering temperature of 21°C.
5) Noise level data is based on nominal air pressure testing condition
6) Customer can opt for 2 rows hot water coil install at unit air outlet.

Conceal duct type FCU: ZFP-DX Series

ZFP-DX (2 Rows, 3 Row)



Model		A	B	C	C*	Air Outlet (mm×mm)
Without Return Air Plenum	ZFP02*2(3)DX	502	476	705	905	502×143
	ZFP03*2(3)DX	632	606	835	1035	632×143
	ZFP04*2(3)DX	732	706	935	1135	732×143
	ZFP05*2(3)DX	832	806	1035	1235	832×143
	ZFP06*2(3)DX	892	866	1190	1290	892×143
	ZFP07*2(3)DX	1068	1042	1270	1470	1068×143
	ZFP08*2(3)DX	1272	1256	1475	1675	1272×143
	ZFP10*3DX	1322	1296	1525	1725	1322×143
	ZFP12*3DX	1552	1526	1755	1955	1552×143
	ZFP14*3DX	1752	1726	1955	2155	1752×143

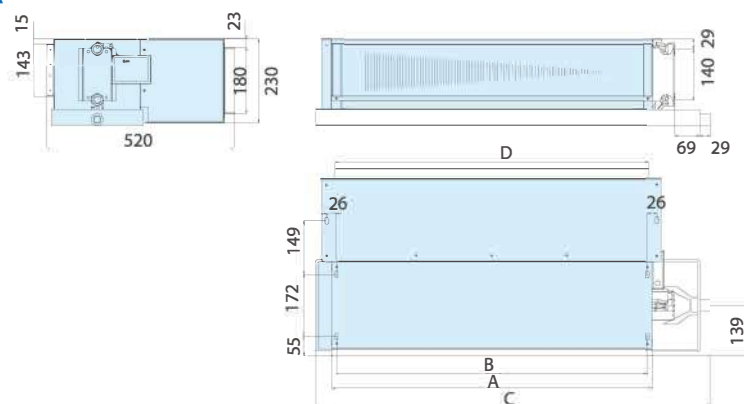


Model		A	B	C	C*	D	Air Outlet (mm×mm)	Air Inlet (mm×mm)
With Bottom Return Air Plenum	ZFP02*D2(3)DX	502	476	705	905	480	502×143	480×180
	ZFP03*D2(3)DX	632	606	835	1035	610	632×143	610×180
	ZFP04*D2(3)DX	732	706	935	1135	710	732×143	710×180
	ZFP05*D2(3)DX	832	806	1035	1235	810	832×143	810×180
	ZFP06*D2(3)DX	892	866	1190	1290	870	892×143	870×180
	ZFP07*D2(3)DX	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*D2(3)DX	1272	1256	1475	1675	1250	1272×143	1250×180
	ZFP10*D3DX	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*D3DX	1552	1526	1755	1955	1530	1552×143	1530×180
	ZFP14*D3DX	1752	1726	1955	2155	1730	1752×143	1730×180

Note: All dimensions are in mm.

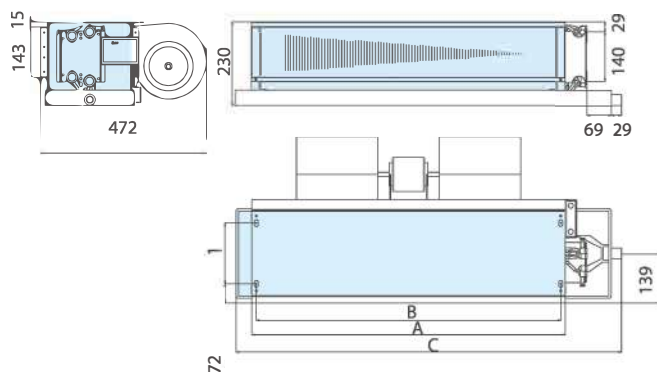
Conceal duct type FCU: ZFP-DX Series

ZFP-DX (2 Rows, 3 Rows)



	Model	A	B	C	C*	D	Air Outlet (mmxmm)	Air Inlet(n (mmxmm)
With Back Return Air Plenum	ZFP02*P2(3)DX	502	476	705	905	480	502×143	480×180
	ZFP03*P2(3)DX	632	606	835	1035	610	632×143	610×180
	ZFP04*P2(3)DX	732	706	935	1135	710	732×143	710×180
	ZFP05*P2(3)DX	832	806	1035	1235	810	832×143	810×180
	ZFP06*P2(3)DX	892	866	1190	1290	870	892×143	870×180
	ZFP07*P2(3)DX	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*P2(3)DX	1272	1256	1475	1675	1250	1272×143	1250×180
	ZFP10*P2DX	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*P2DX	1552	1526	1755	1955	1530	1552×143	1350×180
	ZFP14*P2DX	1752	1726	1955	2155	1730	1752×143	1730×180

ZFP-DX (3+1 Rows)



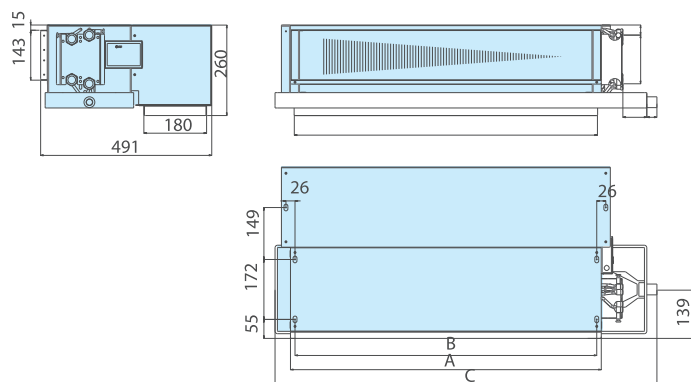
	Model	A	B	C	C*	Air Outlet (mmxmm)
Without Return Air Plenum	ZFP02*31DX	502	476	705	905	502×143
	ZFP03*31DX	632	606	835	1035	632×143
	ZFP04*31DX	732	706	935	1135	732×143
	ZFP05*31DX	832	806	1035	1235	832×143
	ZFP06*31DX	892	866	1190	1290	892×143
	ZFP07*31DX	1068	1042	1270	1470	1068×143
	ZFP08*31DX	1272	1256	1475	1675	1272×143
	ZFP10*31DX	1322	1296	1525	1725	1322×143
	ZFP12*31DX	1552	1526	1755	1955	1552×143
	ZFP14*31DX	1752	1726	1955	2155	1752×143

Note: All dimensions are in mm

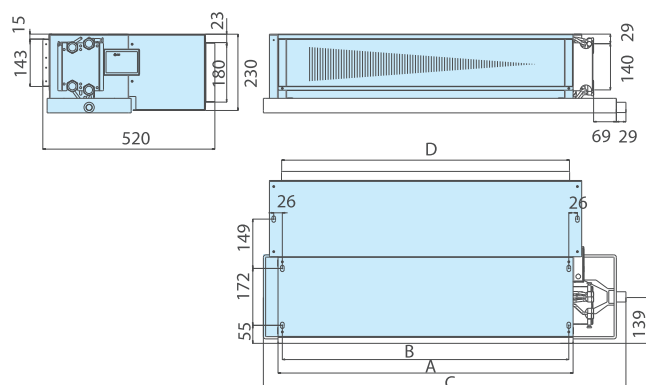
Conceal duct type FCU: ZFP-DX Series



ZFP-DX (3+1 Rows)



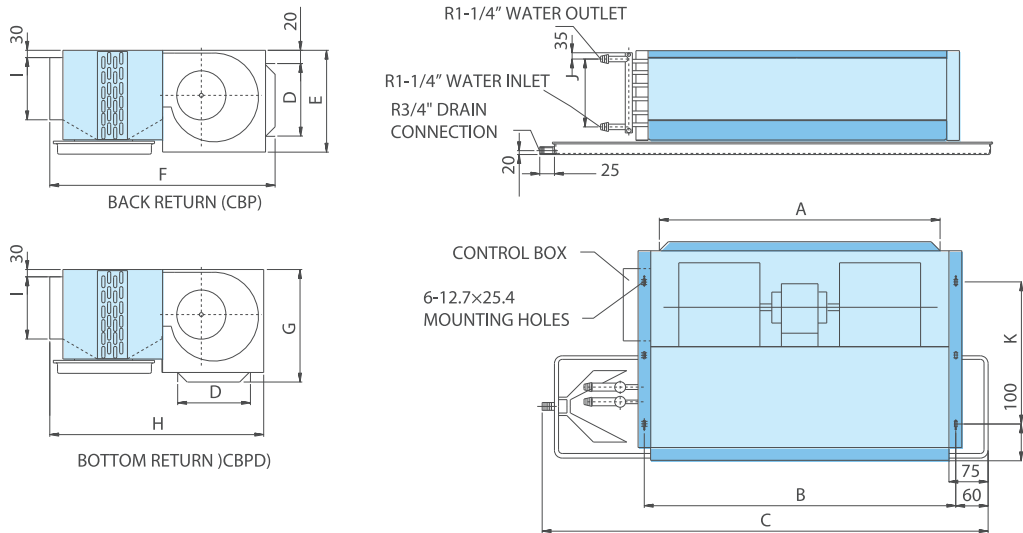
Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Bottom Return Air Plenum	ZFP02*D31DX	502	476	705	905	480	502×143	480×180
	ZFP03*D31DX	632	606	835	1035	610	632×143	610×180
	ZFP04*D31DX	732	706	935	1135	710	732×143	710×180
	ZFP05*D31DX	832	806	1035	1235	810	832×143	810×180
	ZFP06*D31DX	892	866	1190	1290	870	892×143	870×180
	ZFP07*D31DX	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*D31DX	1272	1256	1475	1675	1250	1272×143	1250×180
	ZFP10*D31DX	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*D31DX	1552	1526	1755	1955	1530	1552×143	1530×180
	ZFP14*D31DX	1752	1726	1955	2155	1730	1752×143	1730×180



Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Return Air Plenum	ZFP02*P31DX	502	476	705	905	480	502×143	480×180
	ZFP03*P31DX	632	606	835	1035	610	632×143	610×180
	ZFP04*P31DX	732	706	935	1135	710	732×143	710×180
	ZFP05*P31DX	832	806	1035	1235	810	832×143	810×180
	ZFP06*P31DX	892	866	1190	1290	870	892×143	870×180
	ZFP07*P31DX	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*P31DX	1272	1256	1475	1675	1250	1272×143	1250×180
	ZFP10*P31DX	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*P31DX	1552	1526	1755	1955	1530	1552×143	1530×180
ZFP14*P31DX	1752	1726	1955	2155	1730	1752×143	1730×180	

Note: All dimensions are in mm.

High ESP Concealed duct type FCU: ZFPH Series



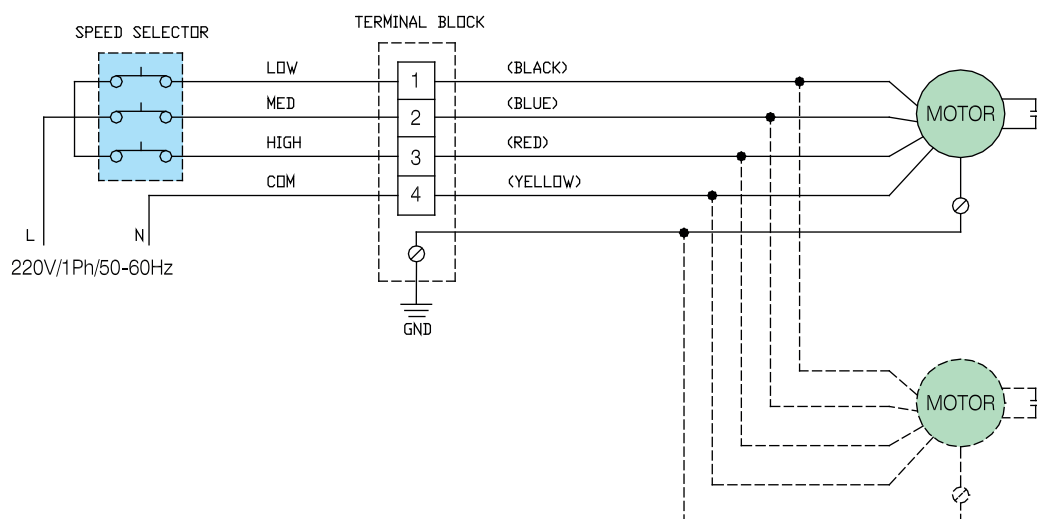
Model	A	B	C	D	E	F	G	H	I	J	K	Air Outlet (mm×mm)	Air Inlet (mm×mm)
08	930	990	1374	270	310	680	320	660	200	180	490	960×200	930×270
14	1120	1180	1544	320	360	730	370	710	250	230	540	1150×250	1120×320
18	1460	1520	1894	320	360	730	370	710	250	230	540	1490×250	1460×320

Note: All dimensions are in mm.

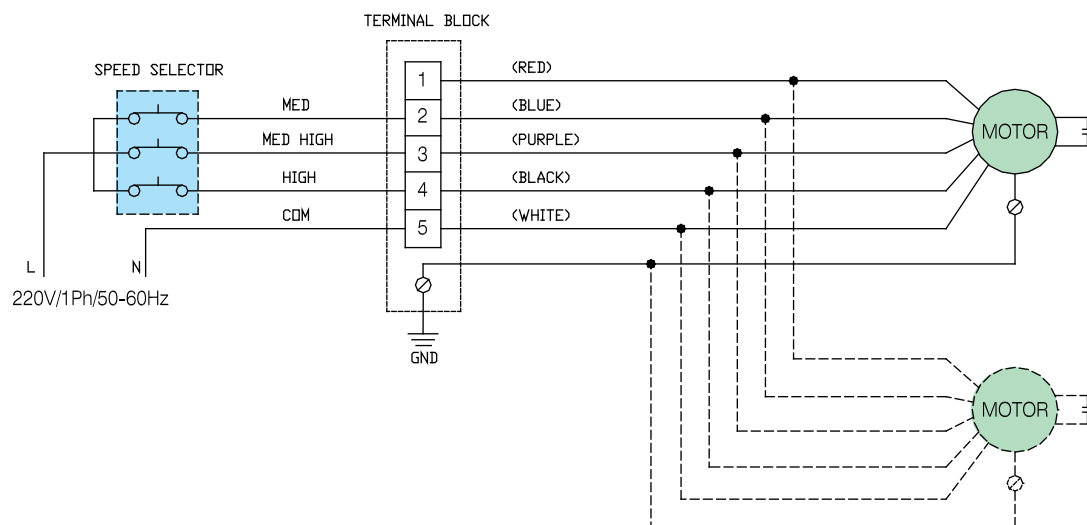
Conceal duct type FCU: Series



ZFP



ZFPH



Note:

Terminal No. 1, 2, 3 for low static pressure of low, medium, high speed connection.

Terminal No. 2, 3, 4 for high static pressure of low, medium, high speed connection.

Terminal No. 2, 3, 4 are standard connection.

Caution: Wrong termination may cause motor damage.

Conceal duct type FCU: ZFP-CX/BX/AX Series

ZERO low noise fan coil unit not only have the advantages of standard fan coil units, it also processes large air volume, high cooling capacity, convenient left and right water pipes connection, ultra quiet operation and high efficiency. These units are widely use in luxury hotels, offices, business centres, hospital, high-end villas, apartments and condominium. With the technology advancement and excellent performance, ZERO Fan Coil Units has been continuously maintaining its leading position in the air-conditioning industry.

● ZFP-AX Variable Speed DC Motor ●

40% less power consumption than conventional AC motors.

Using 0-10V signal control. The controller provides different voltage signals to the motor to adjust the air flow through the room temperature feedback to smoothen the temperature transition and provide comfortable experience for the user.

Indoor temperature requirement can be meet by changing the high and low speeds.



The picture is for reference only. The thermostat design might be different for function.

● ZFP-BX Three Speed DC Motor ●

40% less power consumption than conventional AC motors.

With the analog voltage control method, users can manually select automatic mode or the three speeds high, medium and low speed. When automatic mode is selected, the controller automatically switches between high, middle and low speed through room temperature feedback.

Adjust the airflow by dialing the code to meet the indoor temperature requirements.

Indoor temperature requirement can be meet by changing the airflow using code.



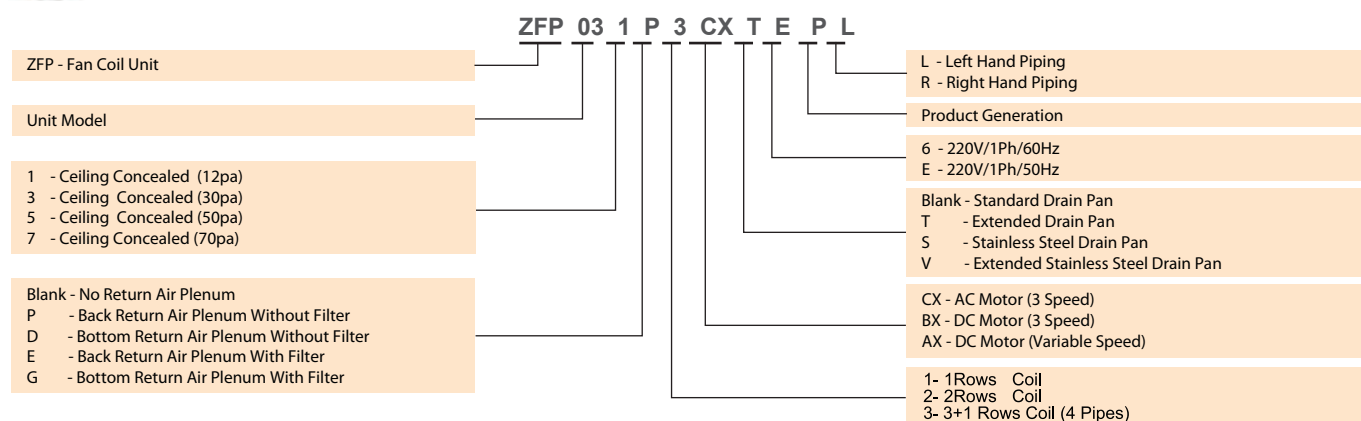
The picture is for reference only. The thermostat design might be different for function.

● Ultra Quiet Operation ●

Ultra-low noise. Specially studies and research to ensure the unit's operating noise is 1-3dB (A) lower than other conventional fan coil unit.



Nomenclature



Notes:

1. Left hand or Right hand piping connection is determined by facing the supply air.
2. Standard unit coil inlet and outlet are in the same direction as drain pipe. Concealed unit, the water inlet and outlet same direction as the junction box. For exposed unit, the water inlet outlet is opposite direction to the junction box.
3. The unit with return air plenum can be equipped with a filter, and the filter can be based on customer requirements.
4. Static pressure loss for return air plenum with filter is 10Pa.

Conceal duct type FCU: ZFP-CX/BX/AX Series



ZFP-CX/ BX/ AX (2 Rows)

Model			02	03	04	05	06	07	08
Air Flow m³/h	High Speed		340	510	680	850	1020	1190	1360
	Med. Speed		270	406	518	661	770	893	1016
	Low Speed		176	261	348	447	509	595	687
Total Cooling Capacity (W)			1890	2930	3610	4500	5400	6300	7200
Sensible Cooling Capacity (W)			1350	2070	2590	3220	3870	4520	5160
FCEER (W/W)	AC Motor	12Pa	51	55	54	56	54	49	49
		30Pa	45	47	47	50	50	46	43
		50Pa	38	42	41	44	45	43	43
		70Pa	36	38	37	41	42	37	38
	DC Motor	12Pa	104	109	109	97	84	81	91
		30Pa	82	86	86	80	76	71	74
		50Pa	67	68	67	67	63	59	62
		70Pa	54	55	54	52	51	43	51
Heating (W)	Entering Water 60°C		3243	4922	6159	7604	9217	10337	12140
	Entering Water 45°C		1988	3013	3774	4655	5645	6328	7452
FCCOP (W/W)	AC Motor	12Pa	88	94	95	92	92	84	82
		30Pa	77	80	84	82	85	79	73
		50Pa	66	72	73	72	76	73	73
		70Pa	61	64	66	68	71	64	64
	DC Motor	12Pa	180	183	188	154	145	139	159
		30Pa	141	144	147	128	127	116	129
		50Pa	115	114	114	109	105	97	107
		70Pa	92	92	92	85	84	84	88
Noise Level dB(A)	12Pa	High Speed	32.2	36.0	38.0	39.5	43.1	44.2	43.8
		Med. Speed	26.5	29.5	30.2	31.1	33.5	32.5	32.0
		Low Speed	20.7	23.5	24.3	27.5	25.8	24.8	26.1
	30Pa	High Speed	36	38.0	40	41.1	43.8	47	43.8
		Med. Speed	32.4	35.5	35.7	35.2	36.5	37.0	35.4
		Low Speed	28.2	29.0	29.0	28.2	29.0	27.0	28.2
	50Pa	High Speed	38.5	42.6	43.0	44.4	45.4	48.5	46.0
		Med. Speed	34.2	36.6	38.2	39.4	39.6	43.1	40.7
		Low Speed	26.5	31.1	31.0	31.0	33.1	36.5	32.4
	70Pa	High Speed	41.0	44.2	44.5	48.0	50.9	53.5	47.8
		Med. Speed	37.0	39.3	40.5	46.2	48.1	51.0	45.1
		Low Speed	30.0	28.5	34.0	41.9	43.6	47.0	40.0
Water Flowrate (l/min)			5.4	9.0	10.8	12.6	16.2	18.0	21.6
Water Pressure Drop (kPa)			10.6	27.4	19.7	18.0	31.5	38.0	37.2
Blower Qty			1	2	2	2	2	2	4
Motor Qty			1	1	1	1	1	1	2
Total Power Input (W)	AC Motor	12Pa	36	48	60	74	93	112	130
		30Pa	41	57	70	84	99	121	151
		50Pa	48	64	81	97	114	131	153
		70Pa	52	72	90	103	122	150	177
	DC Motor	12Pa	17	22	29	41	56	64	66
		30Pa	22	29	38	51	65	73	82
		50Pa	27	38	49	61	80	90	101
		70Pa	34	48	63	81	102	113	126
Unit Weight (kg)	AC Motor	Vertical Concealed	14.7	18	20	23.4	25	26.4	35.6
		Ceiling Concealed W/o R/A Plenum	10.2	12.7	14.2	17.1	18.3	18.5	26.9
		Ceiling Concealed With R/A Plenum	13.2	16.1	18.0	21.4	23.2	23.4	32.7
	DC Motor	Vertical Concealed	15.7	19	21	24.4	26	27.9	37.1
		Ceiling Concealed W/o R/A Plenum	11.2	13.7	15.2	18.1	19.3	20	28.4
		Ceiling Concealed With R/A Plenum	14.2	17.1	19	22.4	24.2	24.9	34.2

Notes: 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.

2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.

3) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.

4) Refer to Page 23: Total Capacity Correction Factor for other airflow.

5) Noise data is based on high speed under lab testing condition.

Conceal duct type FCU: ZFP-CX/BX/AX Series



ZFP-CX/ BX/ AX (3 Rows)

Model			02	03	04	05	06	07	08	10	12	14
Air Flow m³/h		High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
		Med. Speed	260	383	501	630	757	893	1022	1260	1525	1809
		Low Speed	170	256	339	417	503	595	668	823	1052	1242
Cooling (W)	Total Cooling Capacity (W)	High Speed	2300	3280	4170	5300	6150	7060	8290	9650	11510	13230
		Med. Speed	1850	2640	3320	4290	5000	5731	6710	7964	9461	10861
		Low Speed	1320	1540	2430	3140	3620	4334	4920	5720	6890	8203
	Sensible Cooling Capacity (W)	High Speed	1580	2290	2930	3700	4310	4990	5830	6850	8170	9400
		Med. Speed	1276	1815	2300	2950	3460	3990	4650	5566	6608	7584
		Low Speed	880	1298	1660	2120	2460	2948	3350	3916	4760	5631
FCEER (W/W)	AC Motor	12Pa	59	61	63	63	61	55	55	55	54	49
		30Pa	51	53	55	56	57	52	49	51	49	46
		50Pa	45	48	47	49	50	49	49	44	43	41
		70Pa	41	43	43	47	47	43	43	40	38	\
	DC Motor	12Pa	112	125	110	110	84	87	106	86	77	73
		30Pa	90	98	88	89	71	74	86	73	66	64
		50Pa	75	77	70	72	60	63	70	63	56	55
		70Pa	61	62	57	59	53	55	59	53	49	48
			7.20	9.17	12.60	17.40	18.00	19.80	23.50	27.63	31.71	37.45
			22	22	20	30	22	27	30	39	40	49
Heating (W)	Entering Water 60°C		3590	5100	6820	8400	9570	11340	13530	15610	18200	20860
	Entering Water 45°C		2200	3120	4170	5150	5860	6950	8290	9570	11270	12800
FCCOP (W/W) Entering Water 60°C	AC Motor	12Pa	93	99	104	100	98	90	91	94	90	82
		30Pa	82	84	89	89	90	84	78	84	80	75
		50Pa	72	76	78	78	81	78	78	72	70	67
		70Pa	65	68	70	74	76	69	68	66	61	\
	DC Motor	12Pa	179	205	205	173	140	149	178	149	133	120
		30Pa	143	160	157	137	114	122	143	122	110	102
		50Pa	119	125	122	113	96	103	116	105	93	88
		70Pa	96	100	99	92	84	89	97	88	81	76
			32.2	36.0	38.0	39.5	43.1	44.2	43.8	46.2	48.8	49.5
			26.5	29.5	30.2	31.1	33.5	32.5	32.0	39.0	43.0	45.0
			20.7	23.5	24.3	27.5	25.8	24.8	26.1	30.2	33.2	34.8
Noise Level dB(A)	12Pa	High Speed	36.0	38.5	40.0	41.1	43.8	47.0	43.8	48.5	49.0	51.8
		Med. Speed	32.4	35.5	35.7	35.2	36.5	37.0	35.4	40.0	40.6	49.0
		Low Speed	28.2	29.0	29.0	28.2	29.0	27.0	28.2	31.2	30.2	43.0
	30Pa	High Speed	38.5	42.6	43.0	44.4	45.4	48.5	46.0	50.0	50.0	51.5
		Med. Speed	34.2	36.6	38.2	39.4	39.6	43.1	40.7	45.1	45.0	49.0
		Low Speed	26.5	31.1	31.0	31.0	33.1	36.5	32.4	36.0	36.5	44.3
	50Pa	High Speed	41.0	44.2	44.5	48.0	50.9	53.5	47.8	52.0	52.5	\
		Med. Speed	37.0	39.3	40.5	46.2	48.1	51.0	45.1	49.1	48.0	\
		Low Speed	30.0	28.5	34.0	41.9	43.6	47.0	40.0	45.0	40.3	\
	70Pa	High Speed	1	2	2	2	2	2	4	4	4	4
		Med. Speed	1	1	1	1	1	1	2	2	2	2
		Low Speed	1	1	1	1	1	1	2	2	2	2
Total Power Input (W)	AC Motor 220V/1Ph/50Hz	12Pa	36	48	60	74	93	112	130	147	183	221
		30Pa	41	57	70	84	99	121	151	169	206	245
		50Pa	48	64	81	97	114	131	153	199	242	279
		70Pa	52	72	90	103	122	150	177	220	282	\
	AC Motor 220V/1Ph/60Hz	12Pa	40	58	74	91	108	137	160	216	232	\
		30Pa	43	72	90	104	127	151	184	225	251	\
		50Pa	54	84	101	123	145	172	188	256	295	\
		70Pa	62	89	110	133	158	194	198	266	314	\
	DC Motor	12Pa	17	22	29	41	56	64	66	88	114	139
		30Pa	22	29	38	51	65	73	82	101	140	166
		50Pa	27	38	49	61	80	90	101	125	173	206
		70Pa	34	48	63	81	102	113	126	159	206	247
Unit Weight (kg)	AC Motor	Vertical Concealed	15.8	22.8	24.5	27.8	29.8	30	39	39	42.3	47
		Ceiling Concealed W/o R/A Plenum	11.3	13.2	14.8	17.1	19.2	19.4	26.8	26.8	29.5	32.3
		Ceiling Concealed With R/A Plenum	14.3	16.6	18.6	21.4	24.1	24.3	32.6	32.6	36.1	39.6
	DC Motor	Vertical Concealed	16.8	23.8	25.5	28.8	30.8	31	40.5	40.5	43.8	48.5
		Ceiling Concealed W/o R/A Plenum	12.3	14.2	15.8	18.1	20.2	20.4	28.3	28.3	31	33.8
		Ceiling Concealed With R/A Plenum	15.3	17.6	19.6	22.4	25.1	25.3	34.1	34.1	37.6	41.1

- Notes: 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
3) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.
4) Refer to Page 23: Total Capacity Correction Factor for other airflow.
5) Noise data is based on high speed under lab testing condition.

Conceal duct type FCU: ZFP-CX/BX/AX Series



ZFP-CX/ BX/ AX (3+1 Rows)

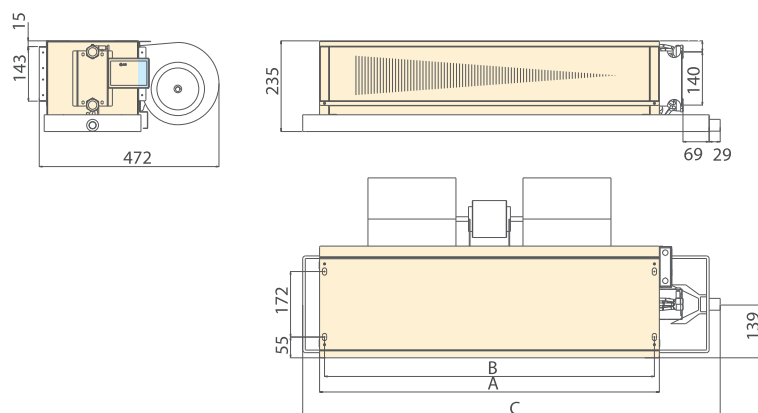
Model			02	03	04	05	06	07	08	10	12	14
Air Flow m³/h		High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
		Med. Speed	255	372	501	630	757	900	1022	1228	1513	1739
		Low Speed	173	240	329	417	503	595	668	810	988	1190
Cooling (W)	Total Cooling Capacity (W)	High Speed	2300	3280	4170	5300	6150	7060	8290	9650	11510	13230
		Med. Speed	1850	2640	3320	4290	5000	5731	6710	7810	9461	10861
		Low Speed	1320	1540	2430	3140	3620	4334	4920	5720	6890	8203
	Sensible Cooling Capacity (W)	High Speed	1580	2290	2930	3700	4310	4990	5830	6850	8170	9400
		Med. Speed	1276	1815	2300	2950	3460	3990	4650	5450	6608	7584
		Low Speed	880	1298	1660	2120	2460	2948	3350	3916	4760	5631
FCEER (W/W)	AC Motor	12Pa	56	61	59	60	58	53	54	54	52	49
		30Pa	47	50	51	54	51	48	47	48	47	44
		50Pa	43	46	42	48	47	44	44	42	41	39
	DC Motor	12Pa	112	125	110	103	94	87	106	86	77	73
		30Pa	90	98	88	85	78	74	86	73	66	64
		50Pa	75	77	70	70	65	63	70	63	56	55
Water Flowrate (l/min)			7.20	9.17	12.60	17.40	18.00	19.80	23.50	27.63	31.71	37.45
Water Pressure Drop (kPa)			22	22	20	30	22	27	30	39	40	49
Heating (W)	Entering Water 60°C		2030	2710	3494	4423	5596	5785	6931	7989	9628	10962
	Entering Water 45°C		1290	1725	2233	2813	3565	3683	4408	5089	6119	6958
FCCOP (W/W) Entering Water 60°C	AC Motor	12Pa	52	53	55	54	54	48	48	48	46	44
		30Pa	43	43	46	48	48	43	41	42	42	39
		50Pa	39	40	38	42	44	39	38	36	35	34
	DC Motor	12Pa	111	111	114	97	86	84	95	83	73	68
		30Pa	87	87	87	77	70	69	76	68	61	58
		50Pa	71	67	67	62	58	57	61	57	51	50
Noise Level dB(A)	12Pa	High Speed	35.5	37.7	39.2	40.5	44.0	45.3	44.0	47.5	49.0	51.0
		Med. Speed	29.5	30.9	33.6	34.4	38.1	36.6	29.5	34.2	34.8	34.5
		Low Speed	22.7	23.6	26.5	26.0	28.8	27.3	23.0	25.1	24.9	27.2
	30Pa	High Speed	38.3	41.1	41.8	41.9	44.2	47.4	46.8	49.4	49.8	52.6
		Med. Speed	31.2	32.6	34.0	33.6	40.5	42.1	34.2	37.1	41.6	49.1
		Low Speed	26.0	25.5	26.2	26.9	31.2	31.9	26.2	28.1	32.6	44.6
	50Pa	High Speed	40.2	42.6	44.7	44.5	46.6	48.3	48.4	50.8	50.5	52.0
		Med. Speed	33.4	36.7	39.6	39.6	40.4	44.7	43.2	45.6	47.0	50.0
		Low Speed	27.1	29.4	32.4	33.3	31.5	39.3	36.2	39.7	42.3	47.0
Blower Qty			1	2	2	2	2	2	4	4	4	4
Motor Qty			1	1	1	1	1	1	2	2	2	2
Total Power Input (W)	AC Motor	12Pa	36	49	60	74	93	112	130	147	183	221
		30Pa	43	57	70	84	105	121	151	169	206	245
		50Pa	48	64	81	97	114	131	169	204	243	291
	DC Motor	12Pa	17	22	29	41	58	64	64	88	114	139
		30Pa	22	29	38	52	65	73	82	101	140	166
		50Pa	27	38	50	65	80	90	101	125	173	206
Unit Weight (kg)	AC Motor	Ceiling Concealed W/o R/A Plenum	12.1	14.7	16.6	18.1	20.3	20.5	28.2	28.2	31.1	34.1
		Ceiling Concealed With R/A Plenum	15.1	18.1	20.4	22.4	25.2	25.4	34.0	34.0	37.7	41.4
	DC Motor	Ceiling Concealed W/o R/A Plenum	13.1	15.7	17.6	19.1	21.3	21.5	29.7	29.7	32.6	35.6
		Ceiling Concealed With R/A Plenum	16.1	19.1	21.4	23.4	26.2	26.4	35.5	35.5	39.2	42.9

- Notes: 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
3) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.
4) Refer to Page 23: Total Capacity Correction Factor for other airflow.
5) Noise data is based on high speed under lab testing condition.

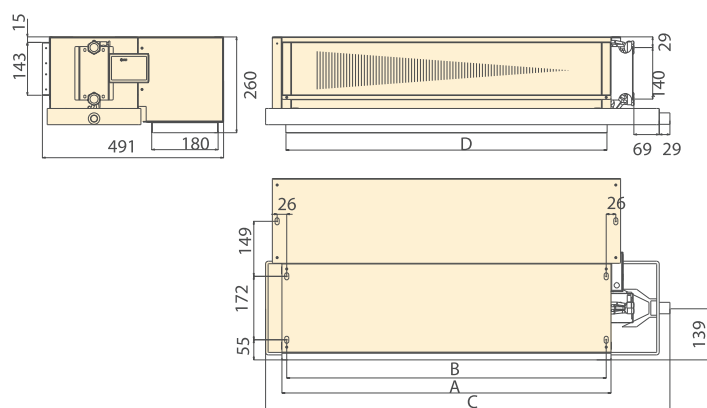
Conceal duct type FCU: ZFP-CX/BX/AX Series



ZFP-CX/ BX/ AX



		A	B	C	C*	Air Outlet (mm×mm)
Without Return Air Plenum	ZFP02*2(3)	502	476	705	905	502×143
	ZFP03*2(3)	632	606	835	1035	632×143
	ZFP04*2(3)	732	706	935	1135	732×143
	ZFP05*2(3)	892	866	1190	1290	892×143
	ZFP06*2(3)	1068	1042	1270	1470	1068×143
	ZFP07*2(3)	1068	1042	1270	1470	1068×143
	ZFP08*2(3)	1322	1296	1525	1725	1322×143
	ZFP10*3	1322	1296	1525	1725	1322×143
	ZFP12*3	1552	1526	1755	1955	1552×143
	ZFP12*3	1752	1726	1955	2155	1752×143



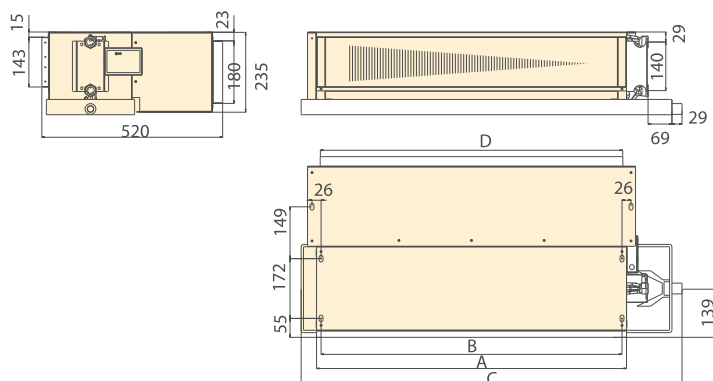
Model		A	B	C	C*	D	Air Outlet (mm×mm)	Air Inlet (mm×mm)
With Bottom Return Air Plenum	ZFP02*D2(3)	502	476	705	905	480	502×143	480×180
	ZFP03*D2(3)	632	606	835	1035	610	632×143	610×180
	ZFP04*D2(3)	732	706	935	1135	710	732×143	710×180
	ZFP05*D2(3)	892	866	1190	1290	870	892×143	870×180
	ZFP06*D2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP07*D2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*D2(3)	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP10*D3	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*D3	1552	1526	1755	1955	1530	1552×143	1530×180
	ZFP12*D3	1752	1726	1955	2155	1730	1752×143	1730×180

Note: All dimensions are in mm.

Conceal duct type FCU: ZFP-CX/BX/AX Series



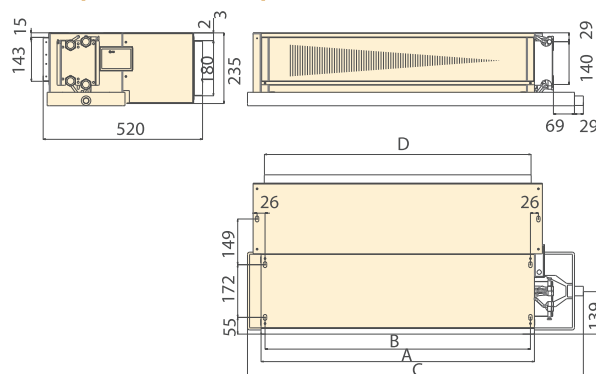
ZFP-CX/ BX/ AX



Model		A	B	C	C*	D	Air Outlet (mm×mm)	Air Inlet (mm×mm)
With Back Return Air Plenum	ZFP02*P2(3)	502	476	705	905	480	502×143	480×180
	ZFP03*P2(3)	632	606	835	1035	610	632×143	610×180
	ZFP04*P2(3)	732	706	935	1135	710	732×143	710×180
	ZFP05*P2(3)	892	866	1190	1290	870	892×143	870×180
	ZFP06*P2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP07*P2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*P2(3)	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP10*P3	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*P3	1552	1526	1755	1955	1530	1552×143	1530×180
ZFP14*P3	1752	1726	1955	2155	1730	1752×143	1730×180	



ZFP-CX/ BX/ AX (3+1 Rows)

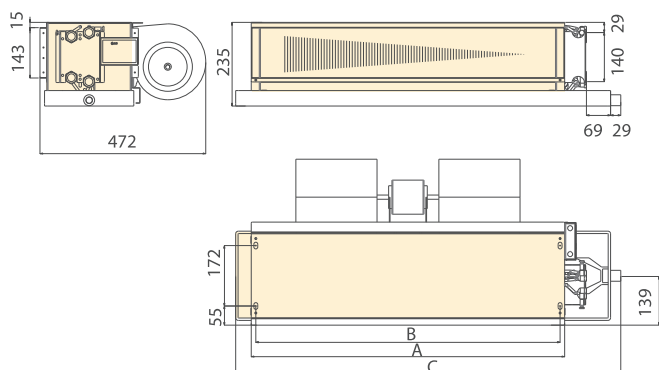


Model		A	B	C	C*	D	Air Outlet （mm×mm）	Air Inlet （mm×mm）
With Back Return Air Plenum	ZFP02*P31	502	476	705	905	480	502×143	480×180
	ZFP03*P31	632	606	835	1035	610	632×143	610×180
	ZFP04*P31	732	706	935	1135	710	732×143	710×180
	ZFP05*P31	892	866	1190	1290	870	892×143	870×180
	ZFP06*P31	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP07*P31	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*P31	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP10*P31	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*P31	1552	1526	1755	1955	1530	1552×143	1530×180
ZFP14*P31	1752	1726	1955	2155	1730	1752×143	1730×180	

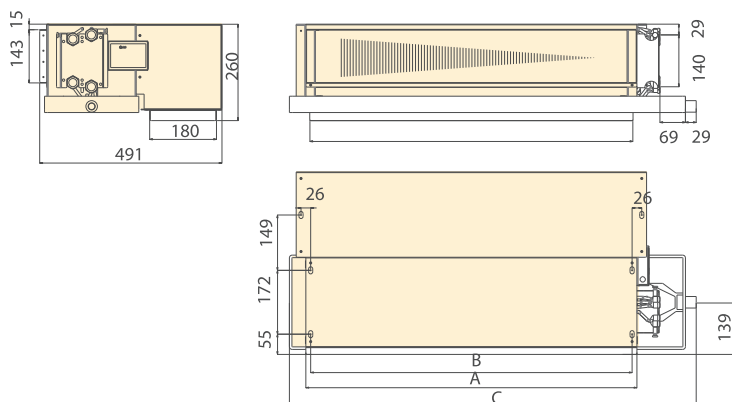
Conceal duct type FCU: ZFP-CX/BX/AX Series



ZFP-CX/ BX/ AX (3+1 Rows)



Model		A	B	C	C*	Air Outlet (mm×mm)
Without Return Air Plenum	ZFP02*31	502	476	705	905	502×143
	ZFP03*31	632	606	835	1035	632×143
	ZFP04*31	732	706	935	1135	732×143
	ZFP05*31	892	866	1190	1290	892×143
	ZFP06*31	1068	1042	1270	1470	1068×143
	ZFP07*31	1068	1042	1270	1470	1068×143
	ZFP08*31	1322	1296	1525	1725	1322×143
	ZFP10*31	1322	1296	1525	1725	1322×143
	ZFP12*31	1552	1526	1755	1955	1552×143
	ZFP14*31	1752	1726	1955	2155	1752×143

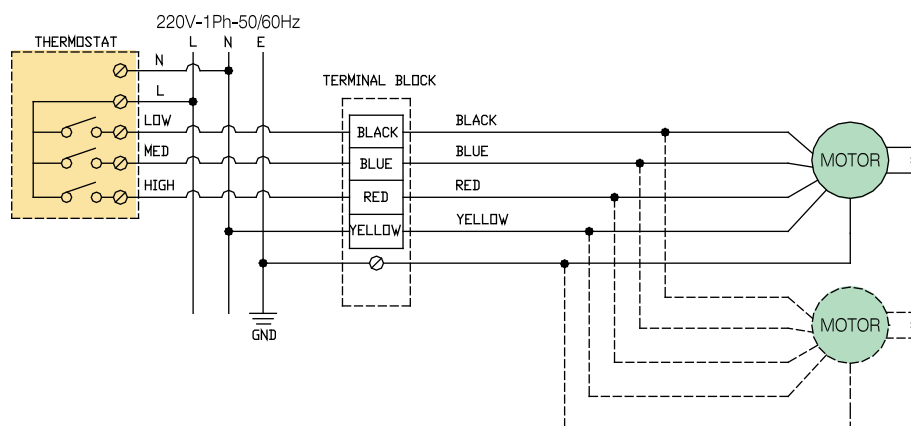


Model		A	B	C	C*	D	Air Outlet (mm×mm)	Air Inlet (mm×mm)
With Bottom Return Air Plenum	ZFP02*D31	502	476	705	905	480	502×143	480×180
	ZFP03*D31	632	606	835	1035	610	632×143	610×180
	ZFP04*D31	732	706	935	1135	710	732×143	710×180
	ZFP05*D31	892	866	1190	1290	870	892×143	870×180
	ZFP06*D31	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP07*D31	1068	1042	1270	1470	1046	1068×143	1046×180
	ZFP08*D31	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP10*D31	1322	1296	1525	1725	1300	1322×143	1300×180
	ZFP12*D31	1552	1526	1755	1955	1530	1552×143	1530×180
	ZFP14*D31	1752	1726	1955	2155	1730	1752×143	1730×180

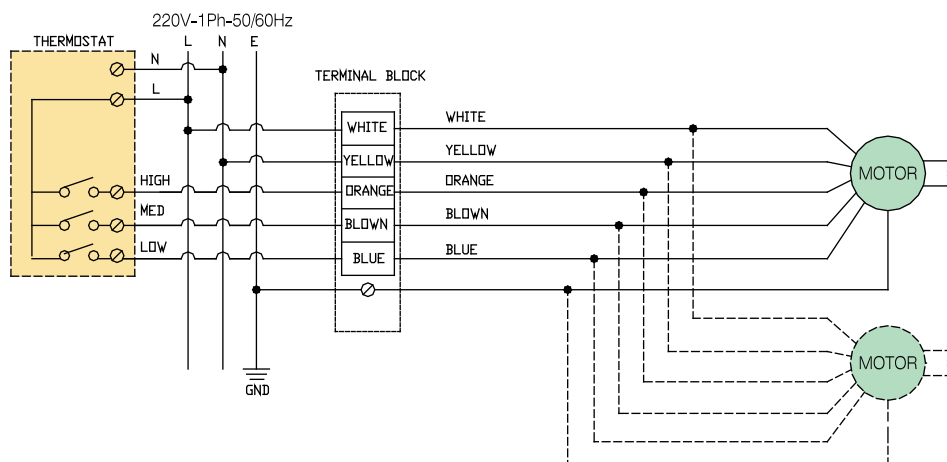
Note: All dimensions are in mm.

Conceal duct type FCU: ZFP-CX/BX/AX Series

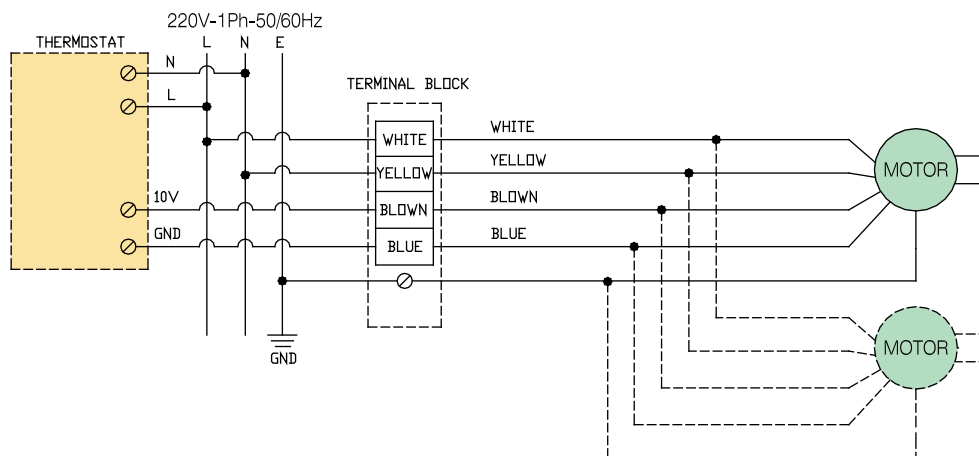
AC Motor (3 Speed)



DC Motor (3 Speed)



DC Motor (Variable Speed)

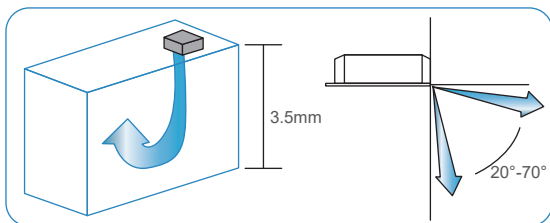


One-way Cassette type FCU

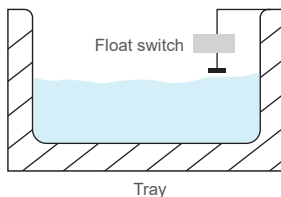
Characteristic

- 1-way air flowing, which is easy to be installed in the side of ceiling
- Thin design unit which can be installed in a limit ceiling (the thickness of unit is only 235mm)
- Remote controller is standard and wire controller is optional
- Auto swing, Wide air flowing range

Wide air flowing range, the Max. height of space can be 3.5m, the flowing angle is Max. 50 degrees

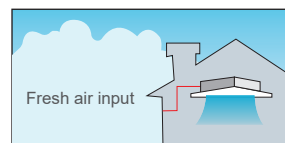


5. High lift water drained pump(750mm), easy to plan the condensate drained pipe
6. Float switch inside to prevent from leaking



After the water raising to a certainly position, the float switch will act and alarm, then the unit will cut off the water valve or stop the fan motor.

7. Fresh air can be input from outside



Fresh air can be input
• The unit offer a connection to input fresh air from outside, will be improve the indoor environment

8. Easy to be installed, Low installation cost

Comparing to the ceiling conceal ducted FCU, we do not need to install the air inlet and outlet, and also the ducted connection and insulation.

9. Fan and Fan motor is easy to maintain

10. Easily interfaced with most widely used Mod-bus and proprietary supervisory system based on Mod-Bus protocol.

11. 4-tube system is optional



There are both cooling and heating water circle coil inside the unit, so the unit can deal with cooling or heating at the same time. 4-pipe system is always used in the place where need to deal with heating and cooling by refrigeration system at the same time. For example, a room need heating and another need cooling. 5-star hotel always use this kind of FCU.

12. Water valve can be installed inside the unit.

Water valve is used to control the on/off water flowing to the unit, we installed the valve into the unit, so the user do not need to install it by themselves.

One-way cassette FCU performance (2 tube system)

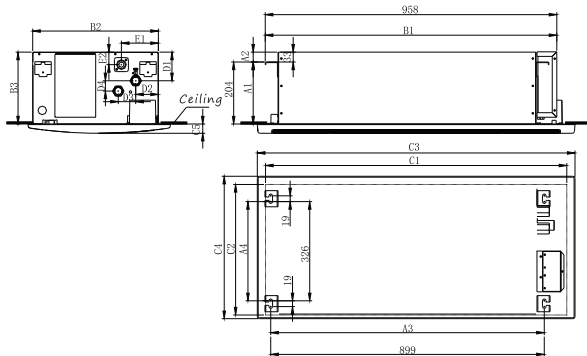
Model(2-tube system)				ZFP-34K1M-Q1AA1	ZFP-51K1M-Q1AA1	ZFP-68K1M-Q1AA1	ZFP-85K1M-Q1AA1
Panel Type				ZB-SA11A1			
Power supply				220V,50Hz,1Ph			
Air volume		H	m³/h	340	510	680	850
		M		280	380	515	660
		L		180	260	340	430
Static pressure			Pa	0	0	0	0
Cooling capacity	TH	H	W	1800	2700	3600	4500
			BTU/h	6142	9212	12283	15354
		SH	W	1300	1970	2700	3185
			BTU/h	4436	6722	9212	10867
	TH	M	W	1500	2460	3000	3715
			W	1000	1555	1995	2420
	TH	L	W	1390	2057	2479	2920
			W	823	1200	1530	1825
Heating capacity	H		W	2700	4050	5400	6750
	M		W	1950	2770	3935	4900
	L		W	1290	1774	2800	3505
Noise		High speed	dB(A)	43	45	46	47
Power input		High speed	W	37	50	62	73
Waterflow volume		High speed	m³/h	0.31	0.46	0.62	0.77
Pressure dropping			kPa	16	18	20	22
Water tube connection(inlet)				ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"
Water tube connection(outlet)				ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"
Coil		Type	Hydrophilic aluminum fin to wear copper tube				
Max.working pressure		MPa	1.6	1.6	1.6	1.6	
Condensing water pipemm			mm	ø26	ø26	ø26	ø26
Net dimension	Unit	L×W×H	mm	958×413×236	958×413×236	958×413×236	958×413×236
	Pane			1044×468×31			
Net weight	Unit	kg		19.4	19.4	20.5	20.5
	Pane	kg		4			

One-way cassette FCU performance (4 tube system)

Model(4 -tube system)			ZFP-34K1M4-Q1AA1	ZFP-51K1M4-Q1AA1	ZFP-68K1M4-Q1AA1	ZFP-85K1M4-Q1AA1	
Panel Type			ZB-SA11A1				
Power supply			220V,50Hz,1Ph				
Air volume	H	m³/h	340	510	680	850	
	M		280	380	515	660	
	L		180	260	340	430	
Static pressure		Pa	0	0	0	0	
Cooling capacity	TH	H	W	1350	2030	2700	3380
			BTU/h	4606	6926	9212	11533
	SH	H	W	1000	1520	2080	2450
			BTU/h	3412	5186	7097	8359
	TH	M	W	1130	1850	2250	2790
			W	770	1200	1540	1860
	TH	L	W	1040	1540	1860	2190
			W	630	920	1180	1410
Heating capacity	H		W	1080	1620	2160	2700
	M		W	780	1108	1574	1960
	L		W	516	710	1120	1402
Noise		High speed	dB(A)	43	45	46	47
Power input		High speed	W	37	50	62	73
Waterflow volume	High speed	Cooling coil	m³/h	0.23	0.35	0.46	0.58
		Heating coil		0.09	0.14	0.19	0.23
Pressure dropping	Cooling tube		kPa	20	20	20	20
	Heating tube			10	10	10	10
Water tube connection(inlet)			ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	
Water tube connection(outlet)			ZG1/2"	ZG1/2"	ZG1/2"	ZG1/2"	
Coi		Type	Hydrophilic aluminum fin to wear copper tube				
Max,working pressure MPa			1.6	1.6	1.6	1.6	
Condensing water pipemm		mm	ø26	ø26	ø26	ø26	
Net dimensior	Unit	L×W×H	mm	958×413×236	958×413×236	958×413×236	958×413×236
	Pane			1044×468×31			
Net weight	Unit	kg	21	21	22	22	
	Pane	kg	4				

Installation dimension

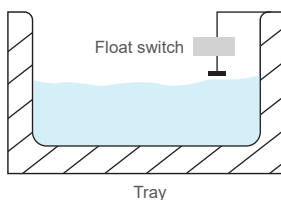
Left side water connection



Four-way Cassette type FCU

Characteristic

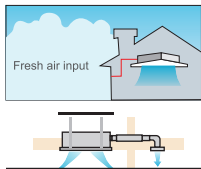
1. Specially design to avoid the air-short flowing;
2. Thin design unit which can be installed in a limit ceiling (the Min. thickness is 240mm)
3. Easy to be installed, Low installation cost
Comparing to the ceiling conceal ducted FCU, we do not need to install the air inlet and outlet, and also the ducted connection and insulation.
4. Remote controller is standard and wire controller is optional
5. Auto swing
Using advanced 3D software to design the centrifugal fan with streamline and big diameter turbine.
6. Quiet running
The efficiency of airflow rate, heavy wind volume and low noise is excellent, Because the ventilator wheel is processed to sine strip seam, which enhances its flexibility, and drops the vibration of ventilator during revolving in large scale, simultaneously reduced the motor noise caused by ventilator swinging.
7. High lift water drained pump (750mm), easy to plan the condensate drained pipe
8. Float switch inside to prevent from leaking



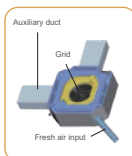
After the water raising to a certainly position, the float switch will act and alarm, then the unit will cut off the water valve or stop the fan motor.

9. Fresh air can be input from outside

Fresh air inlet can import some fresh wind from outside, and ensure the quality of indoor air. Thus, the consumer can share the fresh and clean air to lessen illness caused by air condition.



- The unit offer a connection to input fresh air from outside, will be improve the indoor environment
- Auxiliary duct To send part of air to other place



10. Auxiliary duct is available to send part of air to other place, in order to improve indoor temperature and air quality
11. The water remain in the tray is easy to be drained by manual.

The water remain in the tray is easy to be drained by manual.

There are a rubber plug on the water collecting tray, we can drain out the dirty water by manual.

Because the water remained inside the tray will keep for a long time, then there will be very dirty and there might be lots of bacteria inside too, draining out the dirty water is benefit to the health and also reduce the possible of pump blocking.

12. Square panels, which can choose the direction of inlet/outlet water connection freely

13. Fan and fan motor is easy to maintain

After take out the air grid of the panel, we can easily take out the electric box, then the fan

14. The dimension of M1 unit is only 590 x 590mm, which can be installed in a standard ceiling opening.

15. Easily interfaced with most widely used BMS and proprietary supervisory system based on Mod-Bus protocol.

16. Water valve can be installed outside the unit (optional).

Water valve is used to control the on/off water flowing to the unit, we installed the valve outside the unit, so the user do not need to install it by themselves.

17. 4-tube system is optional

There are both cooling and heating water circle coil inside the unit, so the unit can deal with cooling or heating at the same time. 4-pipe system is always used in the place where need to deal with heating and cooling by refrigeration system at the same time. For example, a room need heating and another need cooling. 5-star hotel always use this kind of FCU.



DC motor is optional

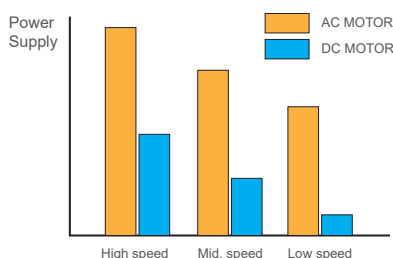
Excellent performance--

Optional brushless DC motor, high efficiency and energy saving

Panasonic brushless plastic package DC motor is optional. High working efficiency, but energy efficiency is over 50% lower than the average motor.

Long working life:

With plastic package, the humidity and dust will not easily access to the inner motor. High electrical efficiency, low temperature rise and slow aging of internal components.

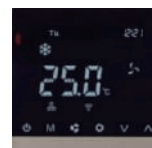


Remarkable energy conservation

The input power of high speed is about 50% of the constant speed motor.
The input power of medium speed is about 30% of the constant speed motor.
The input power of low speed is about 20% of the constant speed motor.

More controller is optional:

0-10V stepless thermostat can be connected
3 speed thermostat can be connected



0-10V
thermostat



3 speed
thermostat

Four-way cassette FCU performance (2 tube system)

Model(2-tube system)			ZFP-34KM4-(Q)MM1	ZFP-51KM4-(Q)MM1	ZFP-68KM4-(Q)MM1	ZFP-85KM4-(Q)MM1	ZFP-102KM4-(Q)MM1	ZFP-136KM4-(Q)MM1	ZFP-170KM4-(Q)MM1	ZFP-204KM4-(Q)MM1	ZFP-238KM4-(Q)MM1	ZFP-272KM4-(Q)MM1		
Panel Type			ZB-SD11M1			ZB-SD11M2			ZB-SD11M3			ZB-SD11M4		
Power supply			220V,50Hz,1Ph											
Air volume	H	m³/h	380	550	680	880	1050	1380	1750	2050	2200	2720		
	M		300	440	540	700	840	1100	1400	1640	1760	2040		
	L		230	330	410	530	630	830	1050	1230	1320	1360		
Static pressure		Pa	0	0	0	0	0	0	0	0	0	0		
Codling apacity	TH	H	W	2000	3000	3800	4900	5800	7500	9800	11000	12000	15000	
			BTU/h	6824	10236	12966	16719	19790	25590	33438	37532	40944	51180	
			W	1400	2200	2850	3500	4250	5500	7150	8250	9100	11175	
	SH	H	BTU/h	4777	7506	9724	11942	14501	18766	24396	28149	31049	38129	
			W	1700	2550	3250	4150	4950	6400	8350	9350	10200	12450	
			W	1150	1800	2350	2850	3500	4550	5950	6850	7650	9560	
	TH	M	W	1400	2050	2600	3400	4000	5200	6750	7600	8300	10300	
			W	950	1400	1850	2300	2800	3600	4700	5450	6000	8400	
			SH	L	W	3100	4700	5900	7600	9000	11600	15200	17100	18600
W	2650	4000			5000	6450	7650	9850	12900	14550	15800	19900		
W	2100	3150			3950	5100	6050	7750	10200	11450	12450	15200		
Noise		dB(A)	38	40	42	42	44	46	47	50	51	53		
Power input		High speed	W	40	50	58	70	95	130	160	190	210	230	
Waterflow volume		m³/h	0.34	0.51	0.65	0.83	0.99	1.28	1.67	1.87	2.04	2.55		
Pressure dropping		kPa	11	13	22	18	25	23	28	33	42	45		
Water tube connection(inlet)			ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"		
Water tube connection(outlet)			ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"		
Coi		Type	Hydrophilic aluminum fin to wear copper tube											
Max,working pressure			MPa	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6		
Condensing water pipemm			mm	Ø26	Ø26	Ø26	Ø26	Ø26	Ø26	Ø26	Ø26	Ø26		
Net dimension	Drained by pump	LxWxH mm	590×590×242			750×750×242			840×840×242			840×840×292		946×946×292
	Panel		650×650×40			850×850×40			950×950×40			1050×1050×40		
Net weight	Drained by pump	kg	17	18	18	22	23	29	26	27	27	32		
	Panel		2.2			4.2			5			6		

Four-way cassette FCU performance (4 tube system)

Model(4-tube system)			ZFP-34KM-(Q)MM	ZFP-51KM-(Q)MM	ZFP-68KM-(Q)MM	ZFP-85KM-(Q)MM	ZFP-102KM-(Q)MM	ZFP-136KM-(Q)MM	ZFP-170KM-(Q)MM	ZFP-204KM-(Q)MM	ZFP-238KM-(Q)MM	ZFP-272KM-(Q)MM			
Panel Type			ZB-SD11M1			ZB-SD11M2			ZB-SD11M3			ZB-SD11M4			
Power supply			220V,50Hz,1Ph												
Air volume		H	m³/h	360	520	650	840	1000	1320	1660	1950	2090	2720		
		M		290	420	510	670	800	1050	1330	1560	1670	2040		
		L		220	310	390	500	600	790	1000	1170	1250	1360		
Static pressure			Pa	0	0	0	0	0	0	0	0	0	0		
Coding apacity	TH	H	W	1950	2950	3700	4800	5700	7350	9600	10800	11750	13200		
			BTU/h	6700	10050	12700	16400	19400	25100	32750	36800	40150	45040		
			SH	W	1350	2150	2800	3450	4150	5400	7000	8100	8900	10000	
				BTU/h	4700	7350	9550	11700	14200	18400	23900	27600	30450	34120	
	TH	M		W	1650	2500	3200	4050	4850	6250	8200	9150	10000	11000	
				W	1150	1750	2300	2800	3450	4450	5850	6700	7500	37532	
			SH	L	W	1350	2000	2550	3350	3900	5100	6600	7450	8150	9100
					W	950	1350	1800	2250	2750	3550	4600	5350	5900	6600
Heating capacity	H	W			1950	3000	3750	4850	5750	7400	9700	10900	11850	13500	
	M	W			1700	2550	3200	4100	4850	6250	8200	9250	10050	11200	
	L	W	1350	2000	2500	3250	3850	4950	6500	7300	7950	8750			
Noise		Highspeed	dB(A)	39	41	43	43	45	46	48	51	52	53		
Power input			W	40	50	58	70	95	130	160	190	210	230		
Waterflow volume	High speed	Cool	m³/h	0.33	0.5	0.64	0.81	0.97	1.25	1.64	1.83	2	2.2		
		Heat		0.22	0.33	0.42	0.54	0.64	0.82	1.08	1.21	1.32	1.5		
Pressure dropping		Cool	kPa	11	13	22	18	25	23	28	33	42	42		
		Heat		7	8	13	11	15	15	19	23	26	30		
Water tube connection(inlet)			Cooling and heating coi	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"		
Water tube connection(outlet)				ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"	ZG3/4"		
Coi			Type	Hydrophilic aluminum fin to wear copper tube"											
Max,working pressure			MPa	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6		
Condensing water pipemm			mm	ø26	ø26	ø26	ø26	ø26	ø26	ø26	ø26	ø26	ø26		
Net dimension	Drained by pump	LxWxH mm	590×590×242			750×750×242			840×840×242		840×840×292				
	Panel		650×650×40			850×850×40			950×950×40			1050×1050×40			
Net weight	Drained by pump	kg	19	20	20	24.5	25.5	27.5	29.5	29.5	30	33			
	Panel		2.2			4.2			5			6			

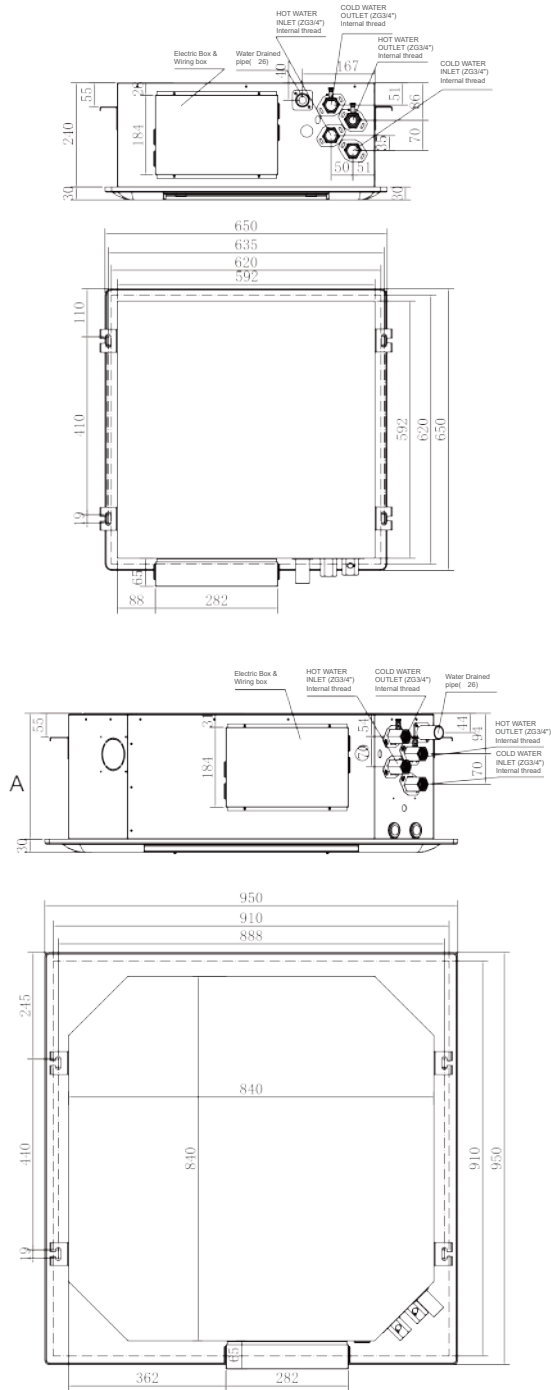
Installation dimension

Model

ZFP-34KM(4)-Q2MM1

ZFP-51KM(4)-Q2MM1

ZFP-68KM(4)-Q2MM1

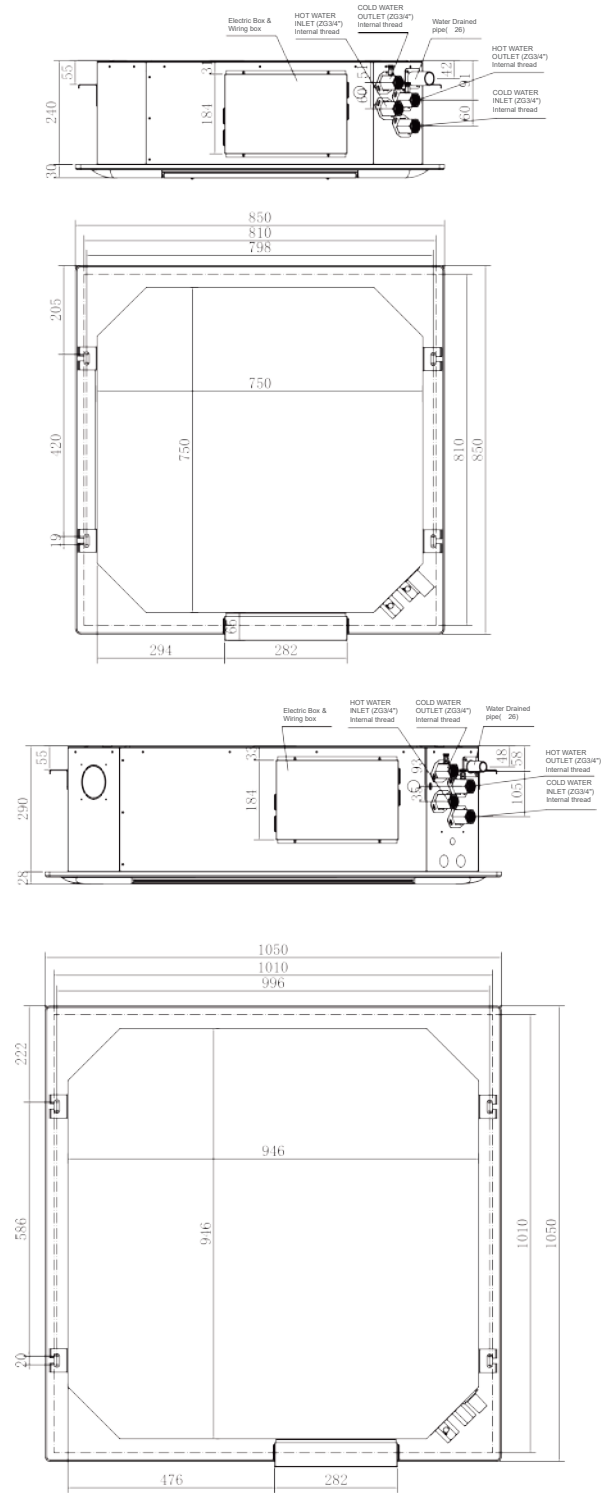


Model	A
ZFP-136KM(4)-Q2MM3	240
ZFP-170KM(4)-Q2MM3	290
ZFP-204KM(4)-Q2MM3	290
ZFP-238KM(4)-Q2MM3	290

Model

ZFP-85KM(4)-Q2MM2

ZFP-102KM(4)-Q2MM2



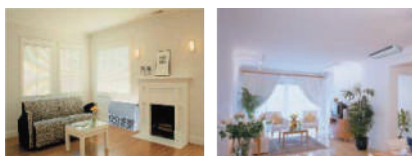
Model

ZFP-272KM(4)-Q2MM4

Ceiling Floor type FCU

Characteristic

1. Classical elegant design
2. Can be installed by ceiling mounted, floor standing or wall mounted



3. Remote controller is standard and wire controller is optional
4. Wide air flowing range
5. Auto swing
6. Quiet running

7. Stainless steel hose can be installed as inlet/outlet water connection(optional)

8. Easily interfaced with most widely used BMS and proprietary supervisory system based on mod Bus protocol.

9. Water valve can be installed inside the unit(optional).

Water valve is used to control the on/off water flowing to the unit, we installed the valve into the unit, so the user do not need to installed it by themself.

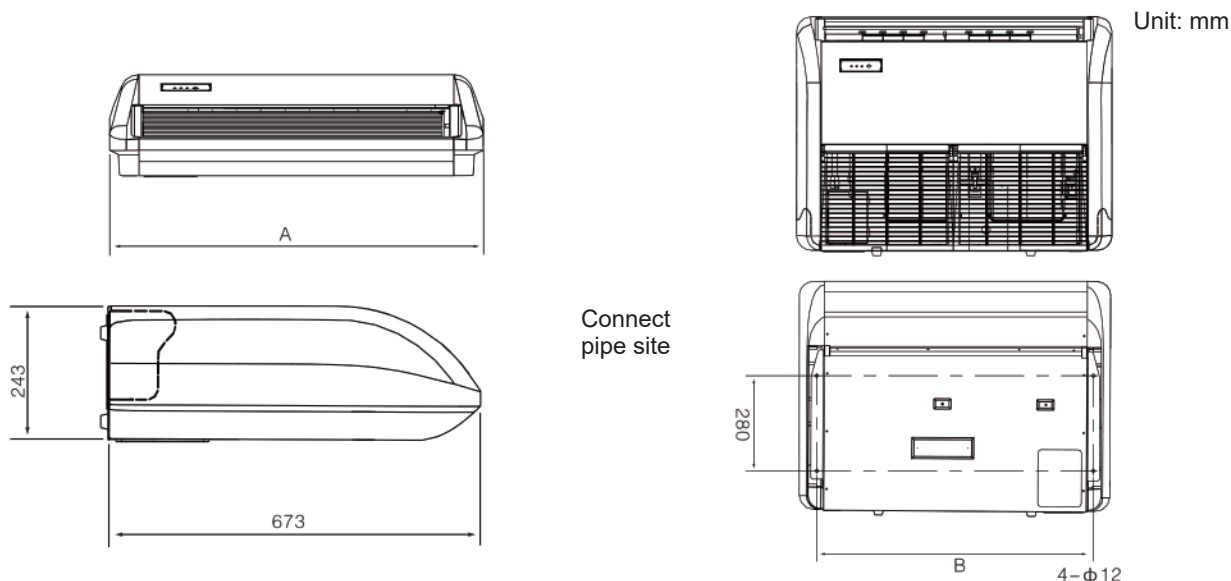


10. 4-tube system is optional

Ceiling & Floor type FCU (2-tube system)

Model(2-tube system)			ZFP-51ZDM	ZFP-68ZDM	ZFP-85ZDM	ZFP-102ZDM	ZFP-136ZDM	ZFP-170ZDM	ZFP-204ZDM	ZFP-238ZDM	
Power supply			220V,50Hz,1Ph								
Air volume	H	m³/h	510	680	850	1020	1360	1700	2040	2380	
	M		380	515	660	765	1040	1280	1550	1800	
	L		260	340	430	530	710	860	1050	1280	
Static pressure		Pa	0	0	0	0	0	0	0	0	
Cooling capacity	TH	H	W	2700	3600	4500	5400	7200	9000	10800	12600
			BTU/h	9212	12283	15354	18425	24566	30708	36850	42991
			W	1990	2730	3174	4261	5385	6746	8109	9062
			BTU/h	6790	9315	10830	14539	18374	23017	27668	30920
	SH	M	W	2485	3030	3752	4467	6499	7926	9389	10605
			W	1571	2015	2450	3071	4278	5447	6669	7262
	TH	L	W	2078	2504	2950	3831	5660	7295	8619	8989
			W	1212	1545	1844	2397	3317	4460	5300	5555
"Heating capacity"		H	W	4050	5400	6750	8100	10800	13500	16200	18900
		M		2792	3970	4941	5740	7987	10557	13101	14011
		L		1788	2801	3533	3907	5464	7048	8714	9778
Noise	High speed	dB(A)	39	41	43	45	46	48	50	51	
Power input	High speed	W	52	62	76	96	134	152	189	228	
Waterflow volume	Hgh speed	m³/h	0.46	0.62	0.77	0.93	1.23	1.54	1.85	2.16	
Pressure dropping		kPa	11.8	13.6	21	23	25	32	33	38	
Watertube connection(inlet)			ZG3/4"	ZG3/4'	ZG3/4"	ZG3/4'	ZG3/4"	ZG3/4'	ZG3/4"	ZG3/4'	
Water tube connection(outlet)			ZG3/4"	ZG3/4'	ZG3/4"	ZG3/4'	ZG3/4"	ZG3/4'	ZG3/4"	ZG3/4'	
Coi		Type	Hydrophilic aluminum fin to wear copper tube								
Maximumworking pressur		MPa	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
Condensation pipe size (diameter)		mm	Ø26	Ø26	Ø26	Ø26	Ø26	Ø26	Ø26	Ø26	
Net dimension	LxWxH	mm	905×673×243			1288×673×243		1672×673×243			
Net weight		kg	26	28	30	38	40	42	45	45	

Installation dimension



Model	ZFP-51/68/85/ZDM	ZFP-102/136/ZDM	ZFP-170/204/238/ZDM
A	905	1288	1672
B	801	1184	1568

Ultra thin floor ceiling type FCU

Characteristic

1. Ultra thin design the width of the body is only 130mm;
2. Modern industrial style design, exquisite manufacturing technology and elegant surface. It is cater to modern decoration style;
3. Using the cross flow fan, optimization of pipeline design. Strong wind and quiet running.
4. The wind guide strip is installed with damping. Can manually adjust the angle of the wind.
5. Hidden intelligent LED temperature controller which is elegant appearance and easy to use.
6. Cold wind protection system. It can stop the cold wind blow out when the water temperature in the pipe is too cold.
7. Left- right water pipe and electric control box can be changed to both side.
Easy for installing work and reduce the dependence on inventory.
8. The side metal plate can be remove before installation which make pipe connection easier.
9. The filter of this product is easy to change.
10. 2-way valve and 3-way valve is optional which can decrease the cost of installation.
11. Can installed by floor standing with leg ,or hanging on the wall withoutleg.

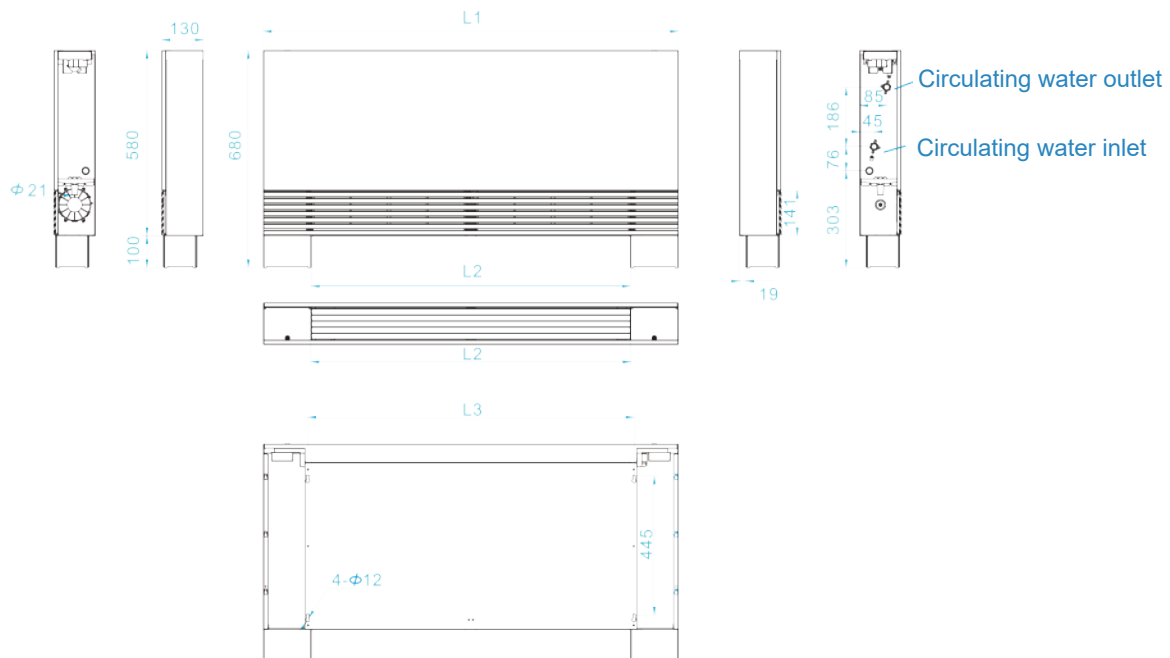
DC ultra thin floor ceiling type FCU (2-tube system) characteristic

1. Touch screen controller is standard for DC style;
2. Auto swing function is standard and the swing range is wide;
3. Remote controller is also standard;

Ultra thin floor ceiling type FCU (2-tube system)

Model(2-tube system)			ZFP-20CM	ZFP-30CM	ZFP-40CM	ZFP-50CM
Power supply			220V,50Hz,1Ph			
Air volume	H	m³/h	200	300	400	500
	M		150	220	300	380
	L		110	160	230	290
Static pressure		Pa	0	0	0	0
Cooling capacity	TH	H	W	1000	1800	2400
			BTU/h	3412	6142	8189
			W	713	1283	1711
			BTU/h	2433	4379	5839
	SH	M	W	800	1440	1920
			W	555	999	1330
	TH	L	W	650	1170	1560
			W	430	770	1025
"Heating capacity"	H	W	1600	2900	3850	4800
	M		1280	2320	3080	3840
	L		830	1510	2000	2500
Noise	High speed	dB(A)	38	39	40	41
Power input	High speed	W	15	18	20	26
Waterflow volume	Hgh speed	m³/h	0.17	0.26	0.34	0.43
Pressure dropping		kPa	4	6	8	10
Watertube connection(inlet)			ZG1/2"	ZG1/2	ZG1/2"	ZG1/2'
Water tube connection(outlet)			ZG1/2"	ZG1/2*	ZG1/2"	ZG1/2'
Coi		Type	Hydrophilic aluminum fin to wear copper tube			
Maximum working pressure		MPa	1.6	1.6	1.6	1.6
Condensation pipe size (diameter)		mm	Ø26	Ø26	Ø26	Ø26
Net dimension	LxWxH	mm	700×130×681	900×130×681	1100×130×681	1300×130×681
Net weight		kg	14.5	18.5	21.5	24

Installation dimension



Item	Model	ZFP-20CM	ZFP-30CM	ZFP-40CM	ZFP-50CM
L1		700	900	1100	1300
L2		400	600	800	1000
L3		422	622	822	1022

Unit: mm

High wall mounted type FCU

Characteristic

1. Digital display panel
2. Remote controller
3. Stainless steel hose, let the water connection easily (optional)
4. Power down memory function



High wall mounted FCU standard type

Model(2-tube system)			ZFP-34BM-C	ZFP-51BM-C	ZFP-68BM-C	ZFP-85BM-C	ZFP-102BM-C	ZFP-136BM-C	
Power supply			220V,50Hz,1Ph						
Air volume	H	m³/h	340	510	680	850	1020	1360	
	M		260	380	515	650	765	1010	
	L		180	260	340	43	520	700	
Static pressure		Pa	0	0	0	0	0	0	
Cooling capacity	TH	H	W	1800	2700	3600	4500	5400	7200
			BTU/h	6142	9212	12283	15354	18425	24566
			W	1350	2025	2700	3375	4050	5400
			BTU/h	4606	6909	9212	11516	13819	18424
	TH	M	W	1476	2214	2952	3690	4428	5904
			W	978	1399	1963	2409	3044	3926
	TH	L	W	1098	1647	2196	2745	3294	4392
			W	649	960	1355	1715	2060	2710
"Heating capacity"		H	W	2700	4050	5400	6750	8100	10800
		M		2146	3219	4293	5366	6439	8586
		L		1512	2268	3024	3780	4536	6048
Noise	High speed	dB(A)	0.31	46	0.62	0.77	0.93	1.24	
Power input	High speed	W	12	14	17	18	22.5	23.5	
Waterflow volume	Hgh speed	m³/h	57	67	74	82	55	65	
Pressure dropping		kPa	86	100	110	122	83	97	
Watertube connection(inlet)			ZG1/2'	ZG1/2'	ZG1/2	ZG1/2'	ZG1/2°	ZG1/2'	
Water tube connection(outlet)			ZG1/2'	ZG1/2'	ZG1/2	ZG1/2'	ZG1/2"	ZG1/2'	
Coi		Type	Hydrophilic aluminum in to wear copper tube						
Maximumworking pressur		MPa	1.6	1.6	1.6	1.6	1.6	1.6	
Condensation pipe size (diameter)		mm	∅16	∅16	∅16	∅16	∅16	∅16	
Net dimension	LxWxH	mm	850X300X198	850X300X198	970X315X235	970X315X235	1100X330X235	1100X330X235	
Net weight		kg	11	11	15	15	20	20	