

P4CM-Series

4- way Ceiling Cassette Fan Coil Unit



We take care of your climate!

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4-Way Ceiling Cassette

Model: P4CM

General Data

Spec			P4CM-30	P4CM-40	P4CM-50	P4CM-60	P4CM-80	P4CM-100	P4CM-120	P4CM-140	P4CM-170
Nominal Air volume	CFM		300	400	500	600	800	1000	1200	1400	1700
Coil	Copper tube		3/8"(9.52mm)OD seamless copper tube								
	Fins		Hi-efficiency wavy corrugated aluminium blue fins								
	Fins per Inch	FPI	12	12	12	12	12	12	12	12	12
	Coil length	mm	1480	1480	1790	1790	1790	2200	2200	2200	2520
Fan	Coil height	mm	200	200	225	225	225	250	250	250	250
	Fan type		Centrifugal backward curve, ABS wheel, direct driven								
	Qty	pcs	1	1	1	1	1	1	1	1	1
Motor	Voltage		220-240V/1Ph/50-60HZ, 110-127V/1Ph/50HZ								
	Motor speed		3 speed								
	Qty	pcs	1	1	1	1	1	1	1	1	1
Noise level at 1.0m distance	Max power input	W	46	46	73	97	132	184	221	236	330
	H	d B(A)	38	43	46	45	50	51	52	45	58
	M	d B(A)	36	41	44	42	47	49	50	49	52
Water pipe	L	d B(A)	34	38	39	39	44	47	48	47	50
	Cooling coil		3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP
Drain pipe	Heating coil		3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP
	(4 pipes unit)		3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP	3/4"FTP
Package Dimension	L	mm	720	720	850	850	850	1000	1000	1000	1200
	W	mm	720	720	850	850	850	1000	1000	1000	1200
	H	mm	370	370	370	370	370	370	370	370	370
Net Weight	kg	25	25	29	29	29	37	37	37	37	59

Performance Data

The performance data lists regular EU standard, ARI 440 standard and District Cooling. For more conditions, please refer to our selection software.

1. Standard rating

The following rating conditions are used:

Cooling: Entering air temperature: +27°C DB; +19.5°C WB
Water inlet/outlet: +7/12°C

Heating: Entering air temperature: +20°C DB
Water inlet temperature: +50°C

Water flow rate as for the cooling conditions.

2rows, 2pipes

Model			P4CM2-30	P4CM2-40	P4CM2-50	P4CM2-60	P4CM2-80	P4CM2-100	P4CM2-120	P4CM2-140	P4CM2-170
Air flow	H	CFM	320	366	509	667	819	1011	1165	1401	1701
	M		284	304	424	571	619	921	995	1089	1236
	L		181	188	365	437	440	792	836	942	995
Total Cooling Capacity	H	KW	3.66	3.91	5.42	6.75	7.96	10.15	11.37	13.17	16.11
	M		3.32	3.36	4.67	5.95	6.35	9.41	10.02	10.77	12.47
	L		2.27	2.26	4.13	4.79	4.81	8.33	8.70	9.59	10.46
Sensible Cooling Capacity	H	KW	2.44	2.66	3.69	4.63	5.50	6.96	7.83	9.11	11.08
	M		2.21	2.28	3.16	4.07	4.35	6.43	6.86	7.40	8.50
	L		1.49	1.51	2.79	3.25	3.26	5.67	5.93	6.56	7.09
Heating Capacity	H	KW	4.30	4.73	6.54	8.07	9.46	12.00	13.38	15.36	18.51
	M		3.92	4.07	5.64	7.15	7.61	11.18	11.87	12.70	14.57
	L		2.63	2.77	5.01	5.79	5.82	9.95	10.38	11.38	12.32
Water Flow Rate	H	L/S	0.17	0.19	0.26	0.32	0.38	0.48	0.54	63.00	0.77
	M		0.16	0.16	0.22	0.28	0.30	0.45	0.48	0.51	0.60
	L		0.11	0.11	0.20	0.23	0.23	0.40	0.42	0.46	0.50
Water Pressure Drop	H	Kpa	33.89	14.03	15.16	20.58	25.94	29.17	34.22	42.02	63.85
	M		29.57	11.35	12.29	17.27	18.91	26.23	28.62	31.69	44.59
	L		17.33	6.50	10.34	12.71	12.82	22.10	23.50	26.92	34.84

The following rating conditions are used:

Cooling: Entering air temperature: +27°C DB; +19.5°C WB
Water inlet/outlet: +7/12°C

Heating: Entering air temperature: +20°C DB
Water inlet/outlet: +70°C/60°C

2+1rows, 4pipes

Model			P4CM 21-30	P4CM 21-40	P4CM 21-50	P4CM 21-60	P4CM 21-80	P4CM 21-100	P4CM 21-120	P4CM 21-140	P4CM 21-170
Air flow	H	CFM	320	366	509	667	819	1011	1165	1401	1701
	M		284	304	424	571	619	921	995	1089	1236
	L		181	188	365	437	440	792	836	942	995
Total Cooling Capacity	H	KW	2.92	3.25	4.53	5.59	6.55	8.42	9.40	10.84	13.32
	M		2.66	2.81	3.92	4.95	5.27	7.83	8.32	8.92	10.39
	L		1.82	1.88	3.48	4.01	4.03	6.95	7.26	7.97	8.76
Sensible Cooling Capacity	H	KW	1.90	2.13	2.97	3.70	4.38	5.53	6.20	7.19	8.76
	M		1.73	1.83	2.55	3.26	3.48	5.12	5.45	5.87	6.76
	L		1.26	1.30	2.25	2.62	2.63	4.53	4.73	5.21	5.67
Heating Capacity	H	KW	3.52	3.85	5.41	6.45	7.36	9.31	10.19	11.44	13.80
	M		3.26	3.41	4.79	5.83	6.14	8.76	9.21	9.76	11.28
	L		2.39	2.46	4.33	4.89	4.91	7.95	8.23	8.89	9.81
Cooling Water Flow Rate	H	L/S	0.14	0.15	0.22	0.27	0.31	0.40	0.45	0.52	0.64
	M		0.13	0.13	0.19	0.24	0.25	0.37	0.40	0.43	0.50
	L		0.09	0.09	0.17	0.19	0.19	0.33	0.35	0.38	0.42
Cooling Water Pressure Drop	H	Kpa	15.43	17.93	15.65	21.04	26.29	45.94	53.65	65.44	100.10
	M		13.54	14.62	12.78	17.75	19.39	41.47	45.14	49.82	70.66
	L		8.14	8.53	10.82	13.21	13.32	35.12	37.27	42.49	55.59
Heating Water Flow Rate	H	L/S	0.08	0.09	0.13	0.15	0.18	0.22	0.24	0.27	0.33
	M		0.08	0.08	0.11	0.14	0.15	0.21	0.22	0.23	0.27
	L		0.06	0.06	0.10	0.12	0.12	0.19	0.20	0.21	0.23
Heating Water Pressure Drop	H	Kpa	9.24	10.44	11.55	14.69	17.59	19.87	22.49	26.34	39.02
	M		8.30	8.83	9.78	12.80	13.74	18.30	19.59	21.20	29.60
	L		5.43	5.65	8.52	10.05	10.11	16.02	16.81	18.67	24.45

4-Way Ceiling Cassette

Model: P4CM

Performance Data

2. ARI-440 Standard rating

The following rating conditions are used:

Cooling: Entering air temperature: +80°F DB; +67°F WB
Water inlet/outlet: +45/55°F

Heating: Entering air temperature: +68°F DB
Water inlet temperature: +140°F

Water flow rate as for the cooling conditions.

2rows, 2pipes

Model			P4CM2-30	PVHC4-40	P4CM2-50	P4CM2-60	P4CM2-80	P4CM2-100	P4CM2-120	P4CM2-140	P4CM2-170
Air flow	H	CFM	320	366	509	667	819	1011	1165	1401	1701
	M		284	304	424	571	619	921	995	1089	1236
	L		181	188	365	437	440	792	836	942	995
Total Cooling Capacity	H	Btu/h	11809	12492	17372	21536	25359	32424	36280	41946	51468
	M		10717	10751	14949	19010	20273	30103	32014	34403	39966
	L		7338	7270	13242	15324	15427	26690	27850	30649	33584
Sensible Cooling Capacity	H	Btu/h	7952	8635	12014	15017	17816	22594	25393	29522	35973
	M		7201	7406	10273	13208	14130	20888	22287	23993	27645
	L		4881	4915	9044	10546	10614	18430	19283	21297	23072
Heating Capacity	H	Btu/h	19318	21126	29249	36007	42151	53652	59728	68465	82595
	M		17611	18260	25290	31980	34096	49932	53072	56826	65154
	L		12014	12253	22423	25836	26109	44471	46314	50854	55188
Water Flow Rate	H	Gpm	2.38	2.54	3.49	4.28	5.07	6.50	7.29	8.40	10.30
	M		2.22	2.22	3.01	3.80	4.12	6.02	6.50	6.97	8.08
	L		1.43	1.43	2.69	3.01	3.17	5.39	5.55	6.18	6.82
Water Pressure Drop	H	ftH ₂ O	9.17	3.75	4.05	5.48	6.89	7.78	9.14	11.16	17.03
	M		8.01	3.03	3.29	4.61	5.04	7.01	7.64	8.45	11.94
	L		4.48	1.69	2.78	3.41	3.43	5.91	6.29	7.19	9.35

The following rating conditions are used:

Cooling: Entering air temperature: +80°F DB; +67°F WB
Water inlet/outlet: +45/55°F

Heating: Entering air temperature: +68°F DB
Water inlet/outlet: +180°F/+140°F

2+1rows, 4pipes

Model			P4CM 21-30	P4CM 21-40	P4CM 21-50	P4CM 21-60	P4CM 21-80	P4CM 21-100	P4CM 21-120	P4CM 21-140	P4CM 21-170
Air flow	H	CFM	320	366	509	667	819	1011	1165	1401	1701
	M		284	304	424	571	619	921	995	1089	1236
	L		181	188	365	437	440	792	836	942	995
Total Cooling Capacity	H	Btu/h	9249	10273	14335	17611	20615	26656	29727	34198	42185
	M		8430	8908	12423	15632	16621	24813	26348	28226	33004
	L		5802	6007	11058	12696	12765	22082	23038	25256	27884
Sensible Cooling Capacity	H	Btu/h	6143	6860	9591	11946	14096	17850	20034	23208	28328
	M		5597	5904	8259	10546	11229	16553	17645	18976	21911
	L		4061	4232	7304	8464	8498	14642	15324	16860	18362
Heating Capacity	H	Btu/h	11946	13004	18260	21570	24471	31673	34540	38635	47168
	M		11092	11570	16246	19591	20615	29898	31365	33140	38840
	L		8259	8464	14744	16553	16621	27236	28157	30307	33925
Cooling Water Flow Rate	H	Gpm	1.90	2.06	2.85	3.49	4.12	5.39	6.02	6.82	8.56
	M		1.74	1.74	2.54	3.17	3.33	5.07	5.23	5.71	6.66
	L		1.11	1.27	2.22	2.54	2.54	4.44	4.60	5.07	5.55
Cooling Water Pressure Drop	H	ftH ₂ O	4.07	4.72	4.11	5.51	6.86	12.10	14.10	17.17	26.37
	M		3.58	3.85	3.37	4.66	5.08	10.93	11.89	13.11	18.70
	L		2.17	2.27	2.86	3.48	3.51	9.29	9.85	11.21	14.75
Heating Water Flow Rate	H	Gpm	0.63	0.63	0.95	1.11	1.27	1.59	1.74	1.90	2.38
	M		0.48	0.63	0.79	0.95	0.95	1.43	1.59	1.59	1.90
	L		0.48	0.48	0.79	0.79	0.79	1.43	1.43	1.59	1.74
Heating Water Pressure Drop	H	ftH ₂ O	1.03	1.16	1.28	1.61	1.91	2.22	2.51	2.92	4.40
	M		0.93	0.99	1.09	1.41	1.51	2.05	2.19	2.37	3.37
	L		0.62	0.65	0.95	1.12	1.12	1.81	1.89	2.09	2.80

3. District Cooling Standard rating

The following rating conditions are used:

Cooling: Entering air temperature: +24.4°C DB; +17.2°C WB
Water inlet/outlet: +5.5/14.4°C

2rows, 2pipes

Model			P4CM2-30	PVHC4-40	P4CM2-50	P4CM2-60	P4CM2-80	P4CM2-100	P4CM2-120	P4CM2-140	P4CM2-170
Air flow	H	CFM	320	366	509	667	819	1011	1165	1401	1701
	M		284	304	424	571	619	921	995	1089	1236
	L		181	188	365	437	440	792	836	942	995
Total Cooling Capacity	H	KW	2.44	2.42	3.37	4.10	4.76	6.24	6.92	7.91	9.90
	M		1.56	1.47	2.94	3.66	3.88	5.82	6.16	6.59	7.83
	L		1.42	1.62	2.63	3.01	3.02	5.21	5.42	5.92	6.66
Sensible Cooling Capacity	H	KW	2.00	2.11	2.94	3.66	4.32	5.52	6.19	7.18	8.80
	M		1.81	1.82	2.53	3.23	3.45	5.12	5.45	5.86	6.80
	L		1.24	1.22	2.24	2.59	2.61	4.52	4.73	5.21	5.70
Water Flow Rate	H	L/S	0.07	0.06	0.09	0.11	0.13	0.17	0.19	0.21	0.27
	M		0.06	0.06	0.08	0.10	0.10	0.16	0.17	0.18	0.21
	L		0.04	0.04	0.07	0.08	0.08	0.14	0.15	0.16	0.18
Water Pressure Drop	H	Kpa	8.57	3.19	3.46	4.56	5.63	6.56	7.59	9.15	14.38
	M		7.54	2.63	2.86	3.89	4.23	5.96	6.45	7.08	10.34
	L		4.58	1.59	2.44	2.95	2.97	5.10	5.39	6.10	8.25

4-Way Ceiling Cassette

Model: P4CM

Introduction

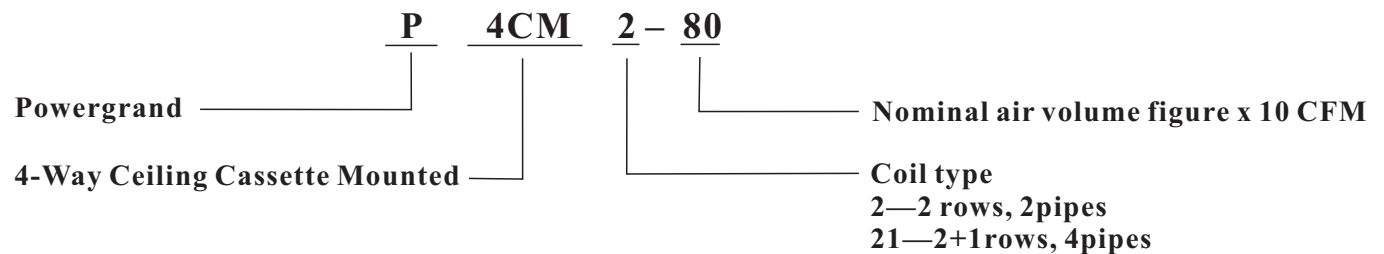


P4CM 4-way ceiling cassette fan coil units use square panel design, 4-way air outlet, distribute air equally, run steady with low noise, suitable for office building, meeting room, and restaurant.



Units are standard supplied with remote controller, drain pump and nylon filter.

Nomenclature



Design Features

Elegant design

The design, elegant and considered in all details, harmonizes well with all type of interiors

C-shape Coil

The unit is equipped with C-shape coil, big exchange area, distribute air equally, high efficiency.

Quite centrifugal fan

Quite centrifugal fan, with ABS fan wheel, high efficiency and low noise.

Service-Friendly Manual Air Vent

Air vent hand valve is conveniently located over the drain pan and does not require any tools to vent the coil

High quality drain pump

Unit ship standard with high quality drain pump, 0.7m lift high.

Fresh air and branch air duct connection

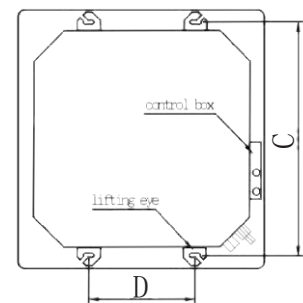
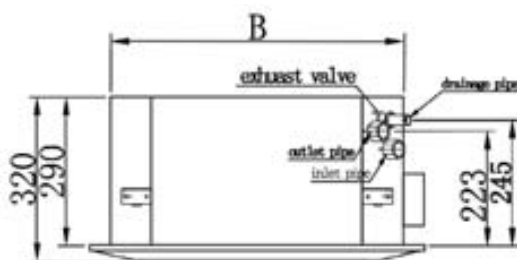
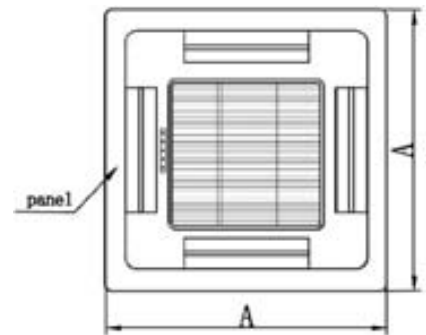
Prepared fresh air duct and branch air duct interface, customers can see the convenience to connect fresh air and branch air duct at site.

4-Way Ceiling Cassette

Model: P4CM

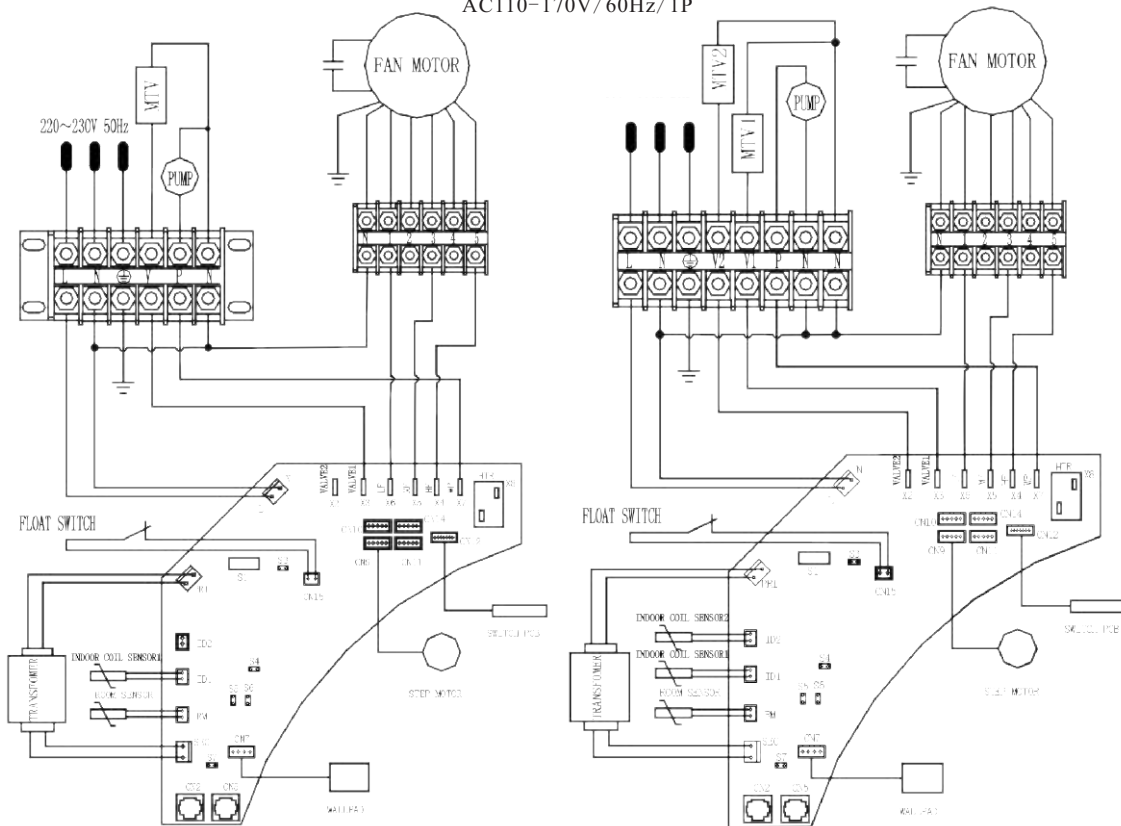
Dimensional Data

Model	A	B	C	D
P4CM-30	680	580	614	424
P4CM-40	680	580	614	424
P4CM-50	830	705	737	338
P4CM-60	830	705	737	338
P4CM-80	830	705	737	338
P4CM-100	980	832	864	416
P4CM-120	980	832	864	416
P4CM-140	980	832	864	416
P4CM-170	1140	960	992	488



Wiring Diagrams

AC220-240V/50-60Hz/1P
AC110-170V/60Hz/1P



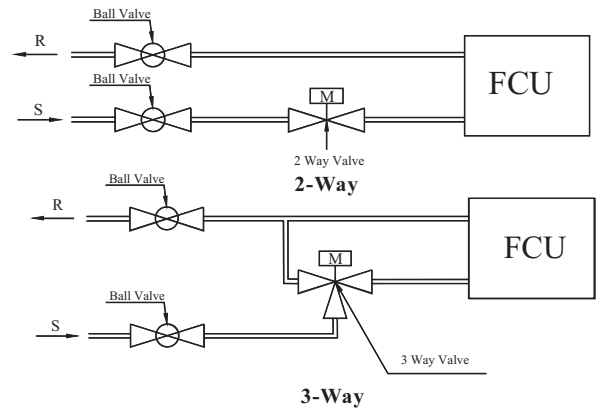
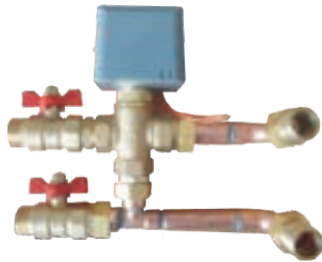
2-pipe

4-pipe

Option Accessories

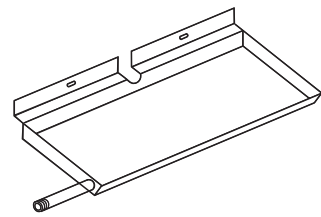
1. Valve packages

Factory installed 2-way or 3-way valves for 2-pipe and 4-pipe system. Basic package includes ball valve, motorized valve, and connector.



2. Auxiliary drain pan

Auxiliary is especially for condensate water from valve package; powder coating housing with insulation.



3. Electric Heater

- Electric Heater made of PTC material. High safety (with the rising of temperature, the current is decreasing)
- Internal wiring rated at 105°C , automatic rest
- Silent solid state relays
- Manual rest secondary limits is for option



6. Motorized Valve

- Conform with the European pressure equipment directive PED 97/23/EC
- Actuators conform with the protection requirements of council directive 89/336/EEC
- Forging brass body
- Efficient power consumption and less noise



Vb5471 (2-Way)



Vb5871(3-Way)

7. Spring hanger

Use for hanger the FCU to the ceiling. Rubber and spring composed together to absorb vibration of the FCU. Reduce the noise effectively.



Model: SHF