

Specialized air conditioning Having custom-made

Fan Coil Units
340m³/h-2380m³/h(50Hz)
Condu Series



Mammoth(Shanghai)Air conditioning Ltd.

Mammoth

CONTENT

- General Features
- Nomenclature
- Performance Data Table
- Wiring Diagram
- Dimensional Drawing
- Optional Parts Introduction



General Features:

Casing: Utilizing high quality galvanized steel with 0.7mm thickness for top and bottom plate. 1mm thick galvanized steel adopted for coil end plate and fan motor deck plate to guarantee unit strength.

Coil: Utilizing seamless copper tube and blue fin expanded together, coil is designed by coil selection software and tested in factory test lab to guarantee the performance. Coil design is counter flow to get higher efficiency.

Coil header: Utilizing high quality brass header with the design of less water pressure resistance. Air vent valve is factory built in on the header part. Protection mounting bracket is factory installed to protect header from damage during piping connection to the header

Fan blower: Blower is forward curve blades centrifugal type, each fan is dynamic and static balance tested.

Motor: Three-speed PSC type motor designed with easy capacitor maintenance, 100% incoming test before they are used.

Plenum: Utilizing high quality galvanized steel with 0.7mm thickness for casing panels. Plenum is optional installed based on client's requirement.

Supply & Return air flange: 0.7mm galvanized steel utilized for all air flanges.

Filter: Filter is optional and the standard filter is 3mm-5mm thick washable nylon type. Other types of filter such as pure aluminum filter or sandwich style filter are also available as options.

Drain pan: Standard drain pan is carbon steel type with painting, the one-time molding process ensures no welding point, and it is fully insulated by 5mm PE at the bottom. Stainless steel drain pan or extended drain pan are also available as options

Nomenclature:

Condu	WA	V	34	C2	L	50	R	F	D20	EH20	CV2
1	2	3	4	5	6	7	8	9	10	11	12

- 1: Condu: Ducted fan coil unit series
2. WA: Factory Version No.
3. V: 2 pipe P: 4 pipe
4. 34: model number, the nominal air flow is 34 x 10m³/h
5. C2: 2 rows cooling coil C3: 3 rows cooling coil C4: 4rows cooling coil
6. L: Left Connection R: Right Connection
7. ESP: 12: 12Pa 30:30Pa 50:50Pa 60:60Pa
8. R: Rear return plenum B: Bottom return plenum
9. F: Filter installed Blank: No filter
10. D20: 20cm extended drain pan
11. EH20: 2 kW electric heater
12. CV2:2way cooling coil valve kits factory built in, CV3: 3 way cooling coil valve kits factory built in, HV2: 2way heating coil valve kits factory built in, HV3:3way heating coil valve kits factory built in

Performance Data Table (2 Rows 2 Pipes)

Condu			34	51	68	85	102	136	170	204	238
Nominal Air Flow	H	m3/h	360	530	700	870	1030	1420	1740	2100	2400
	M		285	420	560	660	820	1120	1380	1600	1850
	L		210	310	420	510	590	790	1000	1180	1450
Cooling Capacity	H	kW	1.95	2.83	3.77	4.55	5.5	7.25	8.59	10.4	11.6
	M		1.7	2.5	3.3	4.0	4.9	6.5	7.5	9.3	10.3
	L		1.4	2.0	2.7	3.3	4.0	5.4	6.1	7.5	8.4
Sensible Cooling Capacity	H	kW	1.4	2.0	2.7	3.2	3.9	5.4	6.2	7.4	8.2
	M		1.2	1.8	2.4	2.9	3.5	4.8	5.5	6.6	7.3
	L		1.0	1.4	2.0	2.3	2.8	3.9	4.4	5.3	5.9
Heating Capacity	H	kW	3.48	4.7	6.3	7.7	9.1	13.6	15.3	18	19
	M		2.9	3.9	4.8	6.4	7.6	10.6	12.1	14.6	16.6
	L		2.2	3.0	3.6	4.9	5.8	8.1	9.2	11.1	12.7
Water Flow		m3/h	0.34	0.49	0.65	0.78	0.95	1.25	1.48	1.79	2.00
Noise Level	12Pa	dB(A)	37	39	41	43	45	46	48	50	52
	30Pa		40	42	44	45	47	48	50	52	54
	50Pa		41	44	46	47	49	50	52	54	55
Power Supply		AC 1N-220V-50Hz									
Power Input	12Pa	W	37	51	62	76	96	140	154	194	228
	30Pa		44	59	72	88	111	156	178	215	257
	50Pa		48	65	84	99	122	174	208	250	300
Current	12Pa	A	0.17	0.23	0.28	0.35	0.44	0.64	0.70	0.88	1.04
	30Pa		0.20	0.27	0.33	0.40	0.50	0.71	0.81	0.98	1.17
	50Pa		0.22	0.30	0.38	0.45	0.55	0.79	0.95	1.14	1.36
Water Resistance		kPa	8	17	26	37	62	30	36	47	65
Drainage		inch	3/4" MPT								
Water Connections	Inlet	3/4" FPT									
	Outlet	3/4" FPT									

Notes:

1. The above cooling capacities are based on 27°C DB/19.5 °C WB entering air and 7°C/12 °C entering / leaving water;
2. The above heating capacities are based on 21°C DB entering air and 60°C entering water, water flow and air flow rate defined the same as cooling mode;
3. The above noise levels are tested at acoustical room with 17dB (A) background noise;
4. MPT - Male Pipe Thread; FPT - Female Pipe Thread;

Performance Data Table (3Rows 2 Pipes)

Condu			34	51	68	85	102	136	170	204	238
Nominal Air Flow	H	m3/h	340	510	680	850	1020	1360	1700	2040	2380
	M		270	400	540	670	810	1080	1360	1630	1900
	L		200	300	400	510	610	810	1000	1220	1430
Cooling Capacity	H	kW	2.15	3.26	4	4.85	5.8	7.32	9.48	11.5	12.95
	M		1.9	2.8	3.4	4.3	4.8	6.4	8.0	9.6	11.3
	L		1.5	2.2	2.7	3.5	3.9	5.2	6.5	7.8	9.1
Sensible Cooling Capacity	H	kW	1.5	2.2	2.7	3.4	3.8	5.1	6.4	7.7	9.0
	M		1.3	2.0	2.4	3.1	3.4	4.5	5.7	6.8	8.0
	L		1.1	1.6	1.9	2.5	2.8	3.7	4.6	5.5	6.5
Heating Capacity	H	kW	3.5	5	6.68	8.03	9.39	13	15.92	19	20.52
	M		3.0	4.4	5.0	6.6	7.8	10.2	12.6	15.1	18.1
	L		2.3	3.4	3.8	5.0	6.0	7.8	9.6	11.5	13.8
Water Flow		m3/h	0.37	0.56	0.69	0.83	1.0	1.26	1.63	1.98	2.23
Noise Level	12Pa	dB(A)	36	38	40.5	42	45	46	48	49	51
	30Pa		38.5	40	43	44	46	47	49	51	52
	50Pa		41	43	45	46	49	50	51	53	54
Power Supply			AC 1N-220V-50Hz								
Power Input	12Pa	W	35	48	61	75	94	134	152	189	226
	30Pa		42	57	71	84	108	150	172	210	252
	50Pa		46	63	80	96	118	170	200	245	295
Current	12Pa	A	0.16	0.22	0.27	0.34	0.41	0.57	0.66	0.81	0.94
	30Pa		0.19	0.26	0.32	0.38	0.49	0.68	0.78	0.95	1.15
	50Pa		0.21	0.29	0.36	0.44	0.54	0.77	0.91	1.11	1.34
Water Resistance		kPa	12	23	16	24	30	25	19	30	40
Drainage		inch	3/4" MPT								
Water Connections	Inlet		3/4" FPT								
	Outlet		3/4" FPT								

Notes:

1. The above cooling capacities are based on 27°C DB/19.5 °C WB entering air and 7°C/12 °C entering / leaving water;
2. The above heating capacities are based on 21°C DB entering air and 60°C entering water, defined water flow and air flow rate are the same as cooling mode;
3. The above noise levels are tested at acoustical room with 17dB (A) background noise;
4. MPT - Male Pipe Thread; FPT - Female Pipe Thread;

Performance Data Table (4 Rows 2 Pipes)

Condu			34	51	68	85	102	136	170	204	238
Nominal Air Flow	H	m3/h	320	490	650	810	980	1310	1630	1980	2300
	M		250	380	520	640	780	1040	1300	1570	1840
	L		190	290	380	490	590	780	960	1180	1380
Cooling Capacity	H	kW	2.72	4.12	5.05	6.13	7.33	9.25	11.97	14.52	16.36
	M		2.36	3.48	4.25	5.43	6.07	8.09	10.12	12.14	14.28
	L		1.91	2.82	3.44	4.39	4.91	6.55	8.18	9.82	11.55
Sensible Cooling Capacity	H	kW	1.9	2.8	3.4	4.3	4.8	6.5	8.1	9.7	11.4
	M		1.7	2.5	3.0	3.9	4.3	5.7	7.2	8.6	10.1
	L		1.4	2.0	2.4	3.1	3.5	4.6	5.8	7.0	8.2
Heating Capacity	H	kW	4.02	5.74	7.67	9.22	10.78	14.92	18.28	21.81	23.56
	M		3.43	5.08	5.79	7.52	8.97	11.76	14.49	17.39	20.73
	L		2.62	3.87	4.41	5.73	6.83	8.96	11.04	13.25	15.80
Water Flow		m3/h	0.47	0.70	0.87	1.05	1.26	1.59	2.06	2.50	2.81
Noise Level	12Pa	dB(A)	35	36	39	41	43	44	46	48	50
	30Pa		37	38	41	43	44	45	47	48	51
	50pa		39	41	42	44.5	46	47	49	51	53
Power Supply			AC 1N-220V-50Hz								
Power Input	12Pa	W	35	48	59	74	90	126	146	178	207
	30Pa		42	54	67	84	103	146	168	200	245
	50Pa		46	60	80	96	110	165	200	235	285
Current	12Pa	A	0.16	0.22	0.27	0.34	0.41	0.57	0.66	0.81	0.94
	30Pa		0.19	0.25	0.30	0.38	0.47	0.66	0.76	0.91	1.11
	50Pa		0.21	0.27	0.36	0.44	0.5	0.75	0.91	1.07	1.30
Water Resistance		kPa	22.7	15.9	29.4	19.7	29.9	19.3	32.3	19.9	28.16
Drainage		inch	3/4" MPT								
Water Connections	Inlet		3/4" FPT								
	Outlet		3/4" FPT								

Notes:

1. The above cooling capacities are based on 27°C DB/19.5 °C WB entering air and 7°C/12 °C entering / leaving water;
2. The above heating capacities are based on 21°C DB entering air and 60°C entering water, defined water flow and air flow rate are the same as cooling mode;
3. The above noise levels are tested at acoustical room with 17dB (A) background noise;
4. MPT - Male Pipe Thread; FPT - Female Pipe Thread;

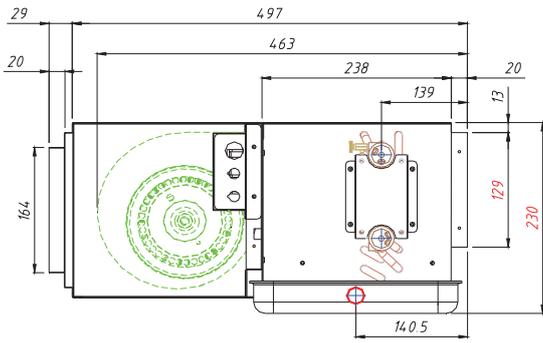
Performance Data Table (4 Rows 4 Pipes)

Condu			34	51	68	85	102	136	170	204	238	
Nominal Air Flow	H	m3/h	320	490	650	810	980	1310	1630	1980	2300	
	M		250	380	520	640	780	1040	1300	1570	1840	
	L		190	290	380	490	590	780	960	1180	1380	
Cooling Capacity	H	kW	2.15	3.26	4	4.85	5.8	7.32	9.48	11.5	12.95	
	M		1.9	2.8	3.4	4.3	4.8	6.4	8.0	9.6	11.3	
	L		1.5	2.2	2.7	3.5	3.9	5.2	6.5	7.8	9.1	
Sensible Cooling Capacity	H	kW	1.5	2.2	2.7	3.4	3.8	5.1	6.4	7.7	9.0	
	M		1.3	2.0	2.4	3.1	3.4	4.5	5.7	6.8	8.0	
	L		1.1	1.6	1.9	2.5	2.8	3.7	4.6	5.5	6.5	
Heating Capacity(1 Row Coil)	H	kW	1.88	2.75	3.57	4.25	5.41	6.45	8.62	10.5	12.1	
	M		1.6	2.3	3.0	3.6	4.5	5.4	7.2	8.8	10.2	
	L		1.2	1.8	2.3	2.7	3.5	4.1	5.5	6.7	7.7	
Cooling Water Flow			m3/h	0.37	0.56	0.69	0.83	1.0	1.26	1.63	1.98	2.23
Cooling Coil Water Resistance			kPa	12	23	16	24	30	25	19	30	40
Noise Level	12Pa	dB(A)	36	38	40.5	42	45	46	48	49	51	
	30Pa		38.5	40	43	44	46	47	49	51	52	
	50Pa		41	43	45	46	49	50	51	53	54	
	70Pa		42	44	45	48	50	51	53	55	57	
Power Supply			AC 1N-220V-50Hz									
Power Input	12Pa	W	35	48	61	75	94	134	152	189	226	
	30Pa		42	57	71	84	108	150	172	210	252	
	50Pa		46	63	80	96	118	170	200	245	295	
	70Pa		57	77	97	117	134	194	266	310	374	
Current	12Pa	A	0.16	0.22	0.27	0.34	0.41	0.57	0.66	0.81	0.94	
	30Pa		0.19	0.26	0.32	0.38	0.49	0.68	0.78	0.95	1.15	
	50Pa		0.21	0.29	0.36	0.44	0.54	0.77	0.91	1.11	1.34	
	70Pa		0.26	0.35	0.44	0.53	0.61	0.88	1.21	1.41	1.70	
Drainage			inch	3/4" MPT								
Water Connections	Inlet		3/4" FPT									
	Outlet		3/4" FPT									

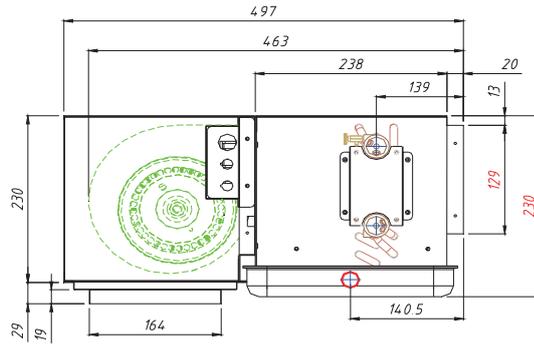
Notes:

1. The above cooling capacities are based on 27°C DB/19.5 °C WB entering air and 7°C/12 °C entering / leaving water;
2. The above heating capacities are based on 21°C DB entering air and 60°C entering water, defined water flow and air flow rate are the same as cooling mode;
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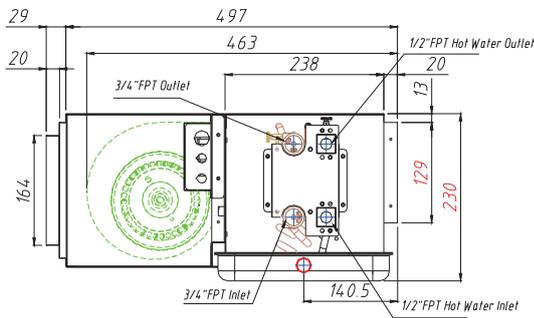
Dimensional Drawing



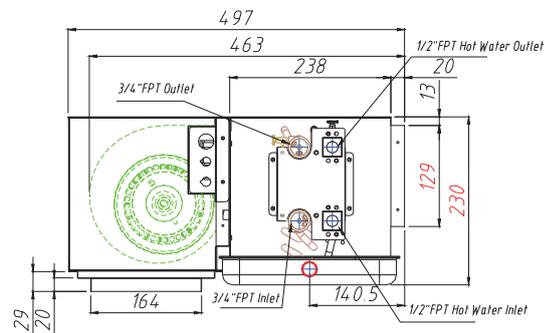
2 Pipes Rear Return



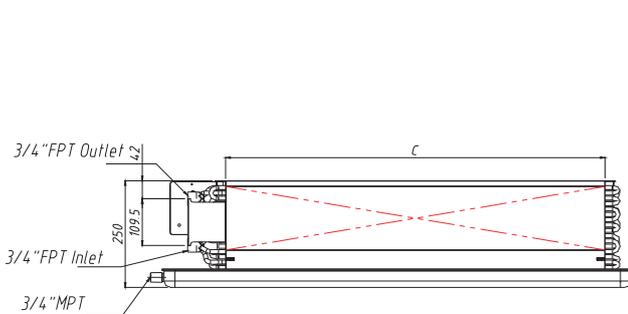
2 Pipes Down Return



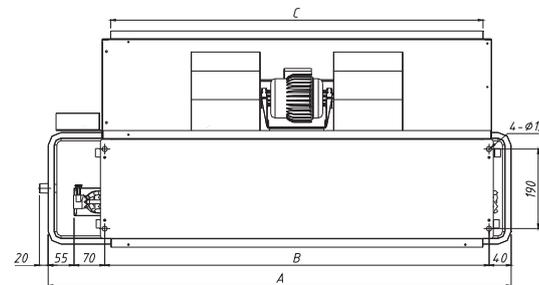
4 Pipes Rear Return



4 Pipes Down Return



Front View



Top View

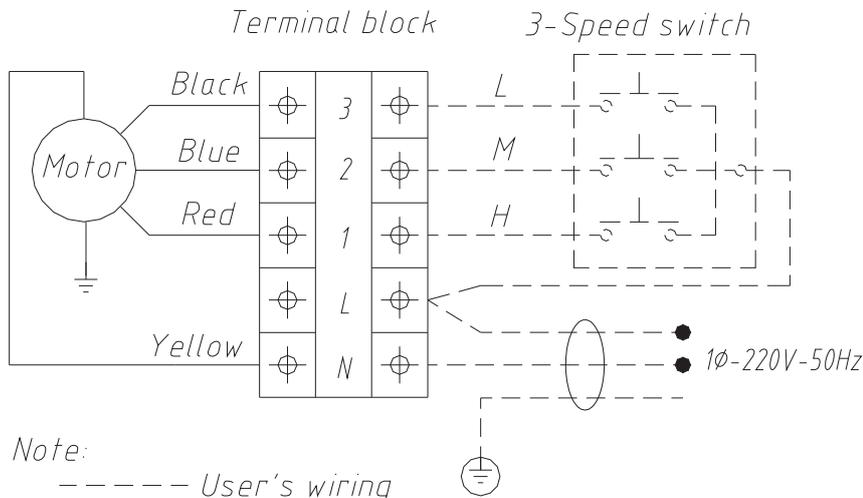
WA	A	B	C
34	635	470	442
51	755	590	562
68	865	700	672
85	945	780	752
102	1055	890	862
136	1325	1160	1132
170	1515	1350	1322
204	1635	1470	1442
238	1795	1630	1602

Unit Dimensions

WA	L	W (Standard)	W (Down Return)	H (Standard)	H (Rear Return)
34	675	250	275	500	540
51	795	250	275	500	540
68	905	250	275	500	540
85	985	250	275	500	540
102	1095	250	275	500	540
136	1365	250	275	500	540
170	1555	250	275	500	540
204	1675	250	275	500	540
238	1835	250	275	500	540

Packing Dimensions

Wiring Diagram



Optional Parts Introduction

Thermostat:



- 107DA:** Control motorized valve and 3-speed fan, when the temperature reaches the set-point, it will close the motorized valve with the fan still running.
- 107DB:** Control motorized valve and 3-speed fan, when the temperature reaches the set-point, it will close the motorized valve and fan both.
- 107FCV2:** Control 4-pipe fan coil units, control two motorized valves and 3-speed fan, when the temperature reaches the set-point, it will close the motorized valves with the fan still running.



HR2008 Series thermostats are available for individual room temperature control in residential, industrial and business buildings. Matched with 2-pipe or 4-pipe fan coil unit.

HR2008 adopts digital control technology with large LCD display, It shows the following items: working status (cool, heat or ventilation), the fan speed, room temperature, set-point. There are following keys on the panel: On/Off "⏻", mode (cool, heat or ventilation) "M", timer "⌚", fan speed (high, medium, low or auto) "🌀", temperature setting "▲" and "▼".

For other kinds of thermostat, please contact Mammoth for further information



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ISO9001

ISO14001

OHSAS18001

Due to continuous product improvements, we reserve the right to change design and specifications without notice.

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P-FCU-1504-v1.0-a

Printed in China