

## Chilled Water Fan Coils

From 1.5 to 50 kW



- MF - Vertical
- MWM - Wall mounted
- MCK - Cassette
- MCW - Ceiling concealed
- MCC - Ceiling concealed ducted
- MCM - Ceiling convertible
- MDB - Large ducted



Your climate. We're there



Water Fan Coils represent one of the most cost effective solutions to provide a comfortable environment for both commercial and residential applications.

McQuay offers a wide range of choice for both concealed and exposed type fan coils, providing flexibility in obtaining the right solution, technically and aesthetically.

**McQuay fan coils, together with our standard range of Mini-Chillers and system controls provide the benefit of a total system requirement.**

# Chilled Water Fan Coils



A wide product range



## New Vertical Fan Coil

- 8 models - from 1.2 to 8.3 kW\*
- with cabinet / concealed
- 2 pipe / 4 pipe



## Wall mounted

- 6 models - from 1.4 to 6.2 kW\*



## Casette

- 2 models - from 2.6 to 11.9 kW\*
- 2 pipe / 4 pipe



## Ceiling concealed

- 7 models - from 2.2 to 9.8 kW\*
- 2 pipe / 4 pipe



## Ceiling concealed ducted

- 8 models - from 2.7 to 17.5 kW\*



## Ceiling convertible

- 5 models - from 5.5 to 14.0 kW\*



## Large ducted

- 4 models - from 22.3 to 47.8 kW\*

\* Nominal cooling capacity

# Chilled Water Fan Coils



## Network - NIM

### NIM: Network Interface Module

The NIM module offers the possibility to configure and control the chilled water fan coil system to suit numerous applications including Apartments, Shops, Public and Private Offices, Hotels, Hospitals and many other commercial and residential buildings.

NIM module allows multiple Fan Coil connection for MASTER and SLAVE arrangement, with 1 MASTER being able to provide operating communication signals, via simple network communication BUS, for up to 16 SLAVE Fan Coil units.

All operating settings of the MASTER unit would be via a locally connected controller or by SMART MANAGER (when fully centralised control network is employed), the MASTER unit would transmit settings to all connected SLAVE units.

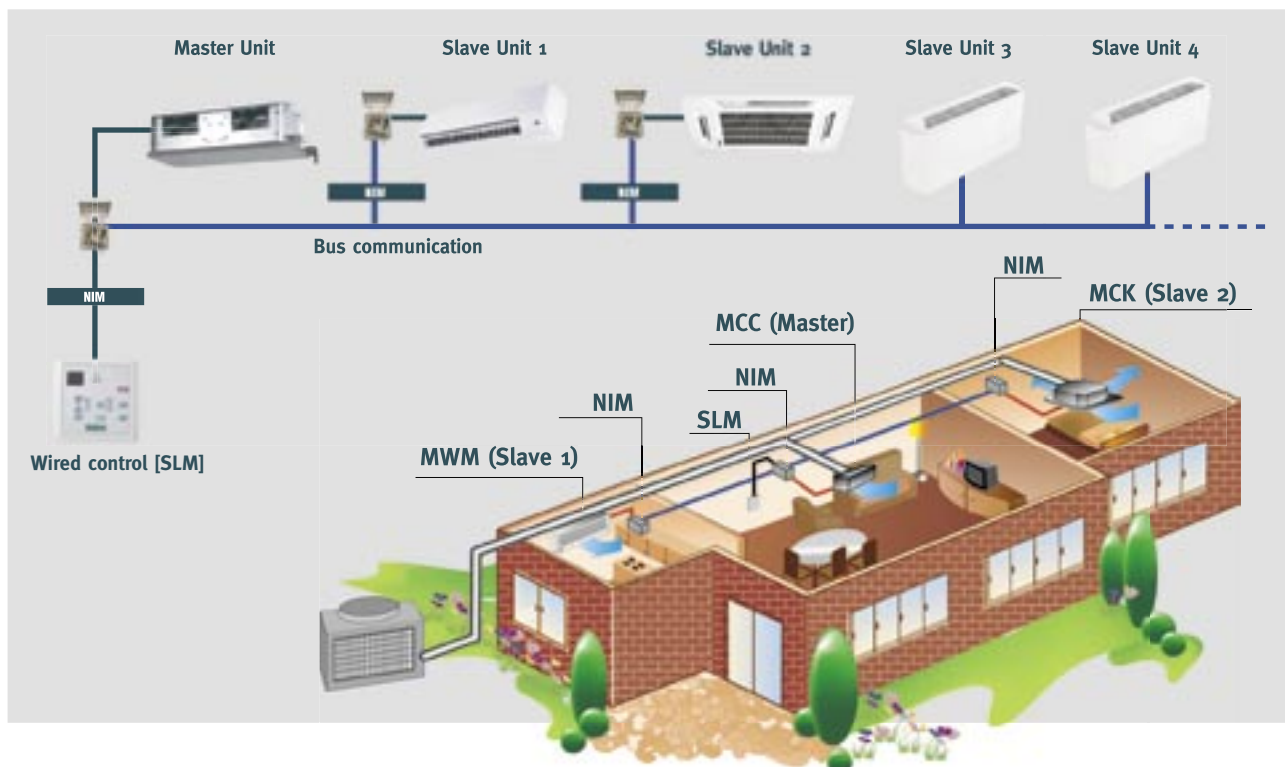
These features allows quick programming of all units, especially when multiple units are installed to condition a single zone.

McQuay Fan Coils compatible with the NIM network and suitable for hydronic systems are:

- MFNew Vertical Fan Coil (NIM module integrated)
- MWM/FW Wall Mounted Fan Coil (board)
- MCK/AW/BW/CW Cassette Fan Coil (board)
- MCC/CW Ceiling Concealed Ducted Fan Coil (board)
- MCW Ceiling Concealed Fan Coil\* (board)
- MCM Ceiling Convertible Fan Coil (board)

\*contact McQuay technical department

### Example of NIM network



# Chilled Water Fan Coils



## Network connections

### Smart Manager

When part of a hydraulic system, all FCU's operations can be managed through Smart Manager. Acting as central controller, Smart Manager allows the user to visualise the status, set operating modes and parameter values for up to 50 Chillers and 256 Fan Coils, by individual unit, by group or by system. A control system through SMART MANAGER represents a flexible solution for many requirements and complex applications in matter "Air Conditioning".

#### Hydronic & DX systems

The Smart Manager offers the flexibility to be applied for just multiple fan coil central control, or just multiple Mini-Chiller central control, or multiple DX fan coil control, or fully integrated control of a complete system containing all of these components.

This flexibility enables Smart Manager to be applied to virtually any commercial or residential application where complete centralised control is required.

The main functions of the SMART MANAGER control are:

- LCD display
- Monitor operating status - global, by group or individual unit
- Parameters value control - global, by group or individual unit
- Chiller running mode setting based on FCU's demand
- 47 types of chiller fault and 6 types of FCU fault
- 20 Alarm histories
- 7 days timer schedule,
- 2 ON/OFF timers each day
- 10 holidays schedules
- Password protection for advance settings



# Chilled Water Fan Coils



## MF - Vertical

### Vertical flow Fan Coil. The new shape of wellness



The new series F of fan coil with vertical air flow is characterised by flexibility in performance and quiet operation to provide total comfort to the conditioned environment. It represents the best solution for apartments, shops, public and private offices, hospitals, residences, hotels and many others.

The series features 8 sizes, with cabinet for floor or wall installation and chassis for concealed installations.

The units are available in the 2-pipes version with 3 or 4-rows coil (nominal cooling capacity from 1.3 to 8.0 kW; nominal heating capacity from 2.2 to 12.0 kW) or in the 4-pipes version (nominal cooling capacity from 1.2 to 8.0 kW; nominal heating capacity from 2.3 to 13.0 kW); 2-pipes version models can also be equipped with 1 or 2-stage electrical heaters, from 0.8 to 3.0 kW.



The design, elegant and considered in all details, harmonises well with all types of interiors. Cover, grids and cabinet materials have been selected with a special care to grant both the quality of the finishing and the durability of the product.

Cover and grills are manufactured in ABS, RAL103; the cabinet is made of pre-painted sheet metal finished with high quality paint, RAL1013.

The filter, located at the bottom of the unit, is easily accessible and self-locking, therefore no tools are required for removing and re-assembling it.

The filter material grade is G1 and thanks to its pleated surface grants a filtration surface up to 60% greater than traditional filters resulting in lower pressure drop and reduced noise emission.

Units are available with left or right hand water connections, which can be easily switched in the field if required. Connections are equipped with air vents and drainage valves.

#### Accessories

- Valves kit [standard condensate drain panel], 2 or 3 ways
- Electrical heater
- Controls
- Feet (cover and/or support)
- Base module
- Frontal air intake module
- External air intake module

# Chilled Water Fan Coils



## MF - Vertical

### Controls

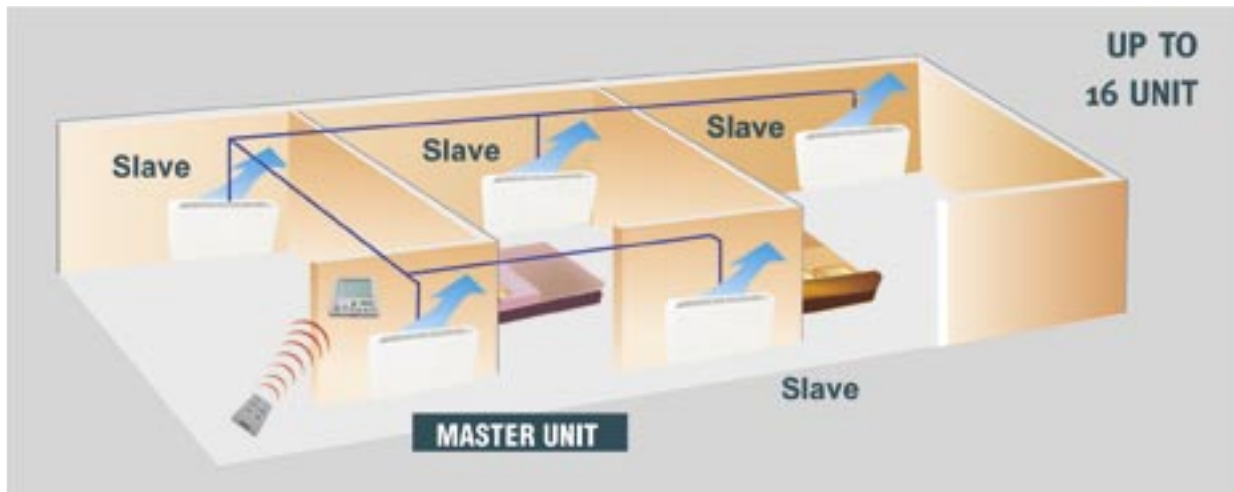


The **AC2800** electronic controller (optional) allows the regulation of all unit functions and operating modes, and is compatible for connection into a network for Master & Slave configuration for up to **16 units**.

The control module has been designed to automatically set up according to the unit configuration:

- cooling or heating for 2-pipes application
- cooling or heating for 2-pipes application with electrical heater
- cooling or heating for 4-pipes application
- with/without 2-way or 3-way ON/OFF regulating valves activating all parameters and routines of regulation which optimise the operation of the unit.

Through the **AC2800** units can also be directly integrated with **Smart Manager**, McQuay solution for the centralised control of the hydronic systems. With reference to Fan Coils, Smart Manager can control and monitor up to **256 units** and **120 zones**.



### Thermostat

#### Mechanical thermostat

- ambient temperature
- fan speed
- on/off

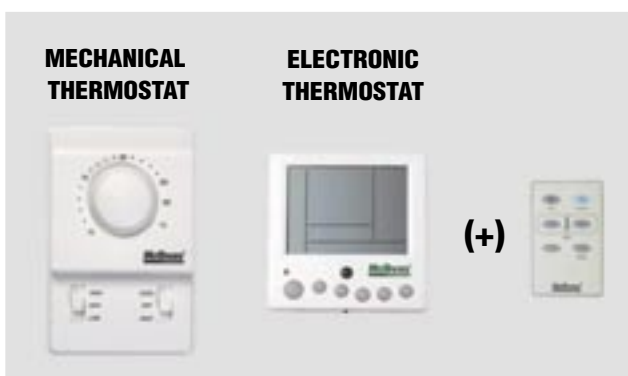
#### Electronic thermostat

Electronic thermostat for wall mounted installation:

DISPLAY LCD: • easy to operate full graphical user interface • allows an easy reading of the operating and auto-diagnosis parameters

KEYBOARD: allows to set parameters as follows:  
• set point temperature • fan speed selection • operating mode summer/winter • on/off • timer with 2 daily setting (14 weekly)

REMOTE CONTROL AC5300: Is available for unit infra-red control, allowing unit settings to be made remotely.



# Chilled Water Fan Coils



## MF - Vertical

### Technical Data

#### 2 - PIPES SYSTEM / 3 - ROWS COIL

MODELS		012 C	020 C	025 C	035 C	050 C	060 C	080 C	090 C
Nominal Air Flow (High, Medium, Low)	m <sup>3</sup> /h	290/245/197	380/296/210	497/349/260	705/565/400	853/695/465	1141/969/705	1360	1500
Available Static Pressure	Pa	--	--	--	--	--	--	--	--
Total Cooling Capacity <sup>1</sup>	kW	1,3	1,8	2,7	3,6	4,8	5,9	6,9	8,0
Total Sensible Capacity <sup>1</sup>	kW	1,0	1,5	1,9	2,6	3,6	4,6		
Heating Capacity <sup>2</sup>	kW	2,2	2,7	3,6	4,8	6,2	8,1	10,5	12,0
Water Flow Rate	l/s	0,063	0,085	0,129	0,170	0,227	0,282		
Water Pressure Drop - Cooling	kPa	4	5	10	16	28	33		
[Lw] Sound Power Level <sup>3</sup>	dB(A)	46/43/40	50/44/40	50/43/40	55/51/47	55/47/39	61/56/49		
Power Supply	V/ph/Hz	220-240/1/50							
Cond. Drain Connections	mm	20	20	20	20	20	20	20	20
Water Connections	inches	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Total Volume	litres	0,792		1,158		1,525			
Weight Concealed Type	kg	20		24		26			
Weight Cabinet Type	kg	22		29		32			

#### 2 - PIPES SYSTEM / 4 - ROWS COIL

MODELS		412 C	420 C	425 C	435 C	450 C	460 C	480 C	490 C
Nominal Air Flow (High, Medium, Low)	m <sup>3</sup> /h	254/215/176	369/321/240	445/330/250	677/545/380	811/663/456	1068/915/672	1300	1450
Available Static Pressure	Pa	--	--	--	--	--	--	--	--
Total Cooling Capacity <sup>1</sup>	kW	1,5	2,7	3,1	4,6	5,3	6,4	7,1	8,3
Total Sensible Capacity <sup>1</sup>	kW	1,1	1,7	2,1	2,8	3,7	5,0		
Heating Capacity <sup>2</sup>	kW	2,3	2,8	4,2	5,3	6,8	8,4	11,0	12,5
Water Flow Rate	l/s	0,073	0,098	0,149	0,193	0,251	0,304		
Water Pressure Drop - Cooling	kPa	4	5	10	14	21	20		
[Lw] Sound Power Level <sup>3</sup>	dB(A)	46/43/40	50/45/40	49/43/39	55/51/46	55/47/39	61/56/49		
Power Supply	V/ph/Hz	220-240/1/50							
Cond. Drain Connections	mm	20	20	20	20	20	20	20	20
Water Connections	inches	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Total Volume	litres	1,056		1,545		2,033			
Weight Concealed Type	kg	24		28		30			
Weight Cabinet Type	kg	26		31		35			

#### NOTES

- 1 At the following nominal conditions: nominal air flow; 7/12°C inlet/outlet water temperature; 27°C db/19°C wb inlet air temperature; High speed  
 2 At the following nominal conditions: nominal air flow 50°C inlet water temperature; 20°C inlet air temperature; same water flow as for cooling; High speed  
 3 At High/Medium/Low speed; nominal air flow; measured in a room of 100m volume and 0.5 sec. reverberation time ( e.g. office/conference room with carpet on the floor)

#### 4 - PIPES

MODELS		012 H	020 H	025 H	035 H	050 H	060 H	080 H	090 H
Nominal Air Flow (High, Medium, Low)	m <sup>3</sup> /h	254/215/176	369/321/240	445/330/250	677/545/380	811/663/456	1068/915/672	1300	1450
Available Static Pressure	Pa	--	--	--	--	--	--	--	--
Total Cooling Capacity <sup>4</sup>	kW	1,2	1,8	2,5	3,5	4,6	5,7	6,9	8,0
Total Sensible Capacity <sup>4</sup>	kW	0,9	1,4	1,7	2,5	3,4	4,4		
Water Flow Rate	l/s	0,057	0,084	0,118	0,165	0,219	0,271		
Water Pressure Drop - Cooling	kPa	4	5	8	15	26	16		
Heating Capacity <sup>5</sup>	kW	2,3	2,9	4,3	5,6	7,0	8,6	12,0	13,0
Water Flow Rate	l/s	0,057	0,071	0,104	0,137	0,172	0,209		
Water Pressure Drop - Cooling	kPa	11	18	30	18	35	40		
[Lw] Sound Power Level <sup>6</sup>	dB(A)	46/43/40	50/45/40	49/43/39	55/51/46	55/47/39	61/56/49		
Power Supply	V/ph/Hz	220-240/1/50							
Cond. Drain Connections	mm	20	20	20	20	20	20	20	20
Water Connections	inches	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Total Volume	litres	(0,792/0,264)		(1,158/0,386)		(1,525/0,508)			
Weight Concealed Type	kg	24		28		30			
Weight Cabinet Type	KG	26		31		35			

#### NOTES

- 4 At the following nominal conditions: nominal air flow; 7/12°C inlet/outlet water temperature; 27°C db / 19°C wb inlet air temperature; High speed  
 5 At the following nominal conditions: nominal air flow; 70/60 °C inlet/outlet water temperature; 20°C inlet air temperature; High speed  
 6 At High/Medium/Low speed; nominal air flow; measured in a room of 100m volume and 0.5 sec. reverberation time (e.g. office/conference room with carpet on the floor)

MODEL MF		-12	-20	-25	-35	-50	-60	-80	-90
Unit Concealed Type (WxHxD)	mm	704x540x224		904x540x224		1104x540x224		1304x540x224	
Unit Cabinet Type (WxHxD)	mm	910x539x230		1110x539x230		1310x539x230		1510x539x230	

# Chilled Water Fan Coils



## MWM - Wall Mounted



The MWM series delivers a high standard of air quality characteristics in all applications. The automatic control of the airflow direction allows distribution into every corner of the room. The three-stage active filtration, removes dust and particles with diameters down to 0.01 micron. Its ionised filter prevents potential bacteria proliferation and minimises unpleasant smells, maintaining a clean and healthy environment. The use of random-pitched fan blades makes the MWM models extremely quiet. All key components can be accessed by simply removing the front cover, easily facilitating routine service tasks such as grille and filter cleaning. Detection and identification of any potential non-correct operation is signalled by a blinking LED on the remote display.

## Technical Data

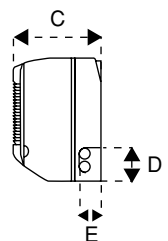
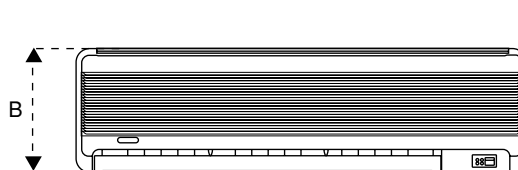
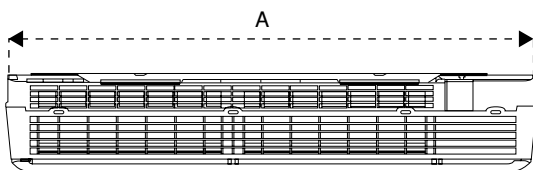
MODEL MWM		005FW	007FW	010FW	015FW	020FW	025FW
Nominal Air Flow (High-Medium-Low)	m <sup>3</sup> /h	340/239/238	340/289/238	460/390/320	510/460/390	820/730/630	990/820/650
Total Cooling Capacity <sup>1</sup>	kW	1,4	2,0	2,8	3,5	5,0	6,2
Sensible Cooling Capacity <sup>1</sup>	kW	1,2	1,5	2,1	2,5	3,7	4,5
Heating Capacity <sup>2</sup>	kW	2,2	2,4	3,5	4,0	5,7	7,0
Water Flow	l/s	0,059	0,084	0,121	0,154	0,233	0,257
Water Pressure Drop -Cooling	kPa	3	6	16	25	27	18
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	37/33/28	38/34/30	38/34/30	38/35/31	45/42/39	47/44/42
Power Input	kW	0,023	0,023	0,025	0,025	0,053	0,057
Current Input	A	0,10	0,10	0,11	0,11	0,23	0,24
Power Supply	V/ph/Hz	220-240/1/50					
Water Connections Diameter	in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate Drain Connection	in	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Weight	kg	10	11	12	12	15	15

### NOTES

- At the following nominal conditions: 7/12°C inlet/outlet water temperature; 27°C db / 19°C wb inlet air temperature; high speed
- At the following nominal conditions: 50°C inlet water temperature; 20°C inlet air temperature; same water flow as for cooling; high speed
- At nominal air flow; high/medium/low fan speed; 1m in front of the unit; 0.8 m below the unit; (according to JIS C9612 standards)

## Dimensions

MODELLO MWM		005FW	007FW	010FW	015FW	020FW	025FW
A	mm	815	815	815	815	1062	1062
B	mm	290	290	290	290	306	306
C	mm	181	181	181	181	202	202
D	mm	70	70	70	70	80	80
E	mm	50	50	50	50	50	50



# Chilled Water Fan Coils



## MCK B/C - Cassette



MCK models feature an elegant design which harmonises well with all types of interiors. Available in eleven sizes, the MCK series distinguishes itself with excellent performance and ease of installation. Four-way air discharge, automatically regulated swing-function and turbo-fan mode allow optimal air distribution and circulation in the room. The three-stage active filtration, removes dust and particles with diameters down to 0.01 micron. Its ionised filter prevents potential bacteria proliferation and minimises unpleasant smells, maintaining a clean and healthy environment. The units have a built-in condensate, 700 mm, lift pump. Detection and identification of any potential non-correct operation is signalled by a blinking LED on the remote display.

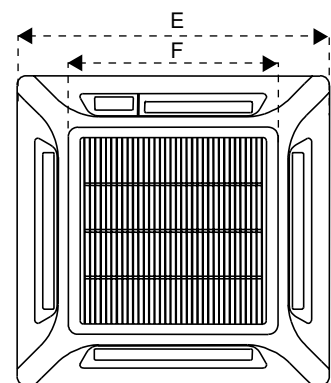
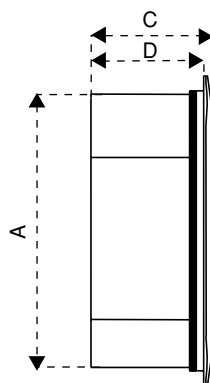
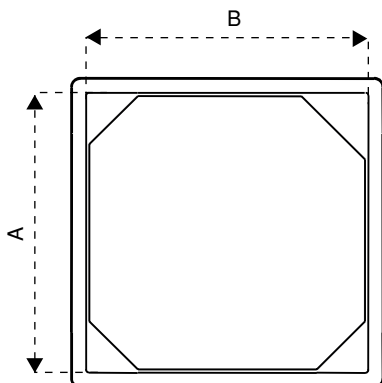
## Technical Data

MODEL MCK		010CW	015CW	020CW	015BW*	020BW*	025BW*
Nominal Air Flow (High-Medium-Low)	m <sup>3</sup> /h	692/662/630	698/662/612	763/731/695	730/630/527	730/630/527	850/765/665
Total Cooling Capacity <sup>1</sup>	kW	2.6	4.5	4.9	3.7	5.0	5.9
Total Sensible Capacity <sup>1</sup>	kW	2.1	3.3	3.6	2.9	3.5	4.1
Heating Capacity <sup>2</sup>	kW	3.5	5.6	6.0	4.4	5.5	6.4
Water Flow Rate	l/s	0.123	0.215	0.233	0.178	0.238	0.280
Water Pressure Drop - Cooling	kPa	13	7	8	28	49	82
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	44/43/42	44/42/41	47/46/44	41/38/36	42/40/37	45/42/39
Power Input <sup>4</sup>	kW	0.056	0.063	0.074	0.072	0.072	0.079
Current Input <sup>4</sup>	A	0.24	0.28	0.31	0.31	0.31	0.33
Power Supply	V/ph/Hz	220-240/1/50					
Water Connections Diameter	inches	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate Drain Connection	inches	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Weight (Unit + Panel)	kg	22+2	23+2	23+2	30+3	30+3	31+3

### NOTES

- At the following nominal conditions: 7/12°C inlet/outlet water temperature; 27°C dB/19°C WB inlet air temperature; high speed
- At the following nominal conditions: 50°C inlet water temperature; 20°C inlet air temperature; same water flow as for cooling; high speed
- At nominal air flow; high/medium/low fan speed; 1.4 m below the unit (according to JIS C9612 standards); MCK030BW: 1.5 m below the unit (according to JIS B8615)
- At high speed; nominal air flow

\* While stock last



## Dimensions

MODEL MCK		CW	BW
A	mm	570	650
B	mm	570	650
C	mm	295	345
D	mm	275	323
E	mm	640	727
F	mm	408	489

# Chilled Water Fan Coils



## MCK A - Cassette

### Technical Data

#### 2 - PIPE

MODEL		020AW	025AW	030AW	040AW	050AW
Nominal Air Flow (High-Medium-Low)	m <sup>3</sup> /h	1310/1105/1070	1380/1190/1070	1560/1320/1190	1740/1530/1340	1840/1680/1550
Total Cooling Capacity <sup>1</sup>	kW	7.2	8.4	9.6	10.7	11.9
Total Sensible Capacity <sup>2</sup>	kW	5.3	6.1	6.8	7.7	8.4
Heating Capacity <sup>2</sup>	kW	8.2	9.2	10.4	11.5	12.2
Water Flow Rate - Cooling	l/s	0.344	0.399	0.454	0.511	0.567
Water Pressure Drop - Cooling	kPa	38	51	65	80	97
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	42/39/37	45/42/40	49/45/43	51/48/46	53/52/50
Power Input <sup>4</sup>	kW	0.127	0.151	0.164	0.192	0.253
Current Input <sup>4</sup>	A	0.5	0.7	0.7	0.8	1.1
Power Supply	V/ph/Hz	220-240/1/50				
Water Connections Diameter	inches	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate Drain Connection	inches	3/4"	3/4"	3/4"	3/4"	3/4"
Weight (unit + panel)	kg	31+4	32+4	35+4	38+4	40+4

#### NOTES

- At the following nominal conditions: 7/12°C inlet/outlet water temperature; 27°C db / 19°C wb inlet air temperature; high speed
- At the following nominal conditions: 50°C inlet water temperature; 20°C inlet air temperature; same water flow as for cooling; high speed
- At nominal air flow; high/medium/low fan speed; MCK020-025: 1.4 m below the unit (according JIS C9612); MCK030-050: 1.5 m below the unit (according to JIS B8615).
- High speed, nominal air flow.

#### 4 - PIPE

MODEL		020AW	025AW	030AW	040AW	050AW
Nominal Air Flow (High-Medium-Low)	m <sup>3</sup> /h	1307/1105/1069	1375/1174/1069	1562/1307/1206	1750/1530/1343	1836/1681/1548
Total Cooling capacity <sup>1</sup>	kW	3.5	4.1	4.8	5.1	5.3
Total Sensible capacity <sup>1</sup>	kW	3.2	3.6	4.2	4.5	4.6
Heating capacity <sup>2</sup>	kW	10.0	11.0	12.5	13.5	13.9
Water Flow Rate (Cooling)	l/s	0.164	0.195	0.227	0.240	0.252
Water Pressure Drop (Cooling)	kPa	3	4	5	6	6
Water Flow Rate (Heating)	l/s	0.252	0.486	0.565	0.623	0.633
Water Pressure Drop (Heating)	kPa	5	5	7	8	9
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	42/39/37	45/42/40	49/45/43	51/48/46	53/52/50
Power input <sup>4</sup>	kW	0.127	0.144	0.160	0.192	0.242
Current input <sup>4</sup>	A	0.5	0.6	0.7	0.8	1.0
Power supply	V/ph/Hz	220-240/1/50				
Condensate Drain Connection	inches	3/4"	3/4"	3/4"	3/4"	3/4"
Water Connections Diameter	inches	3/4"	3/4"	3/4"	3/4"	3/4"
Weight (Unit + Panel)	kg	31 + 4	32 + 4	35 + 4	38 + 4	40 + 4

#### NOTES

- At the following nominal conditions: 7/12°C inlet/outlet water temperature; 27°C db/19°C wb inlet air temperature; high speed
- At the following nominal conditions: 70/60°C inlet/outlet water temperature; 20°C inlet air temperature; high speed
- At nominal air flow; high/medium/low fan speed; 0.8 m below the unit (according to JIS C9612 standards)
- At high speed; nominal air flow

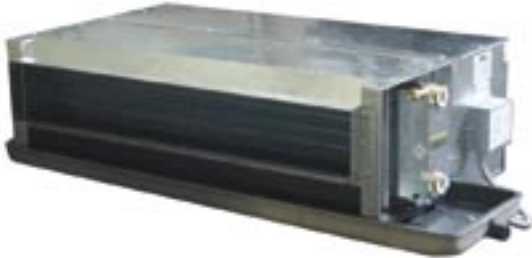
### Dimensions

MODEL MCK		AW
A	mm	820
B	mm	820
C	mm	363
D	mm	335
E	mm	930
F	mm	624

# Chilled Water Fan Coils



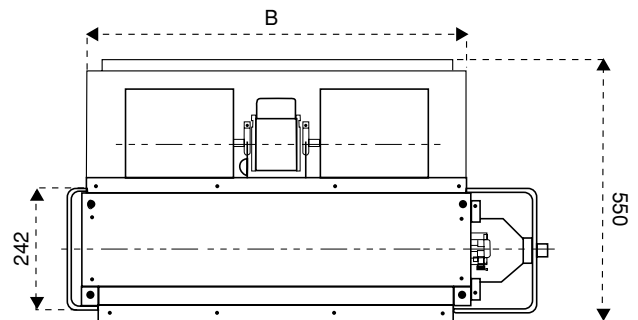
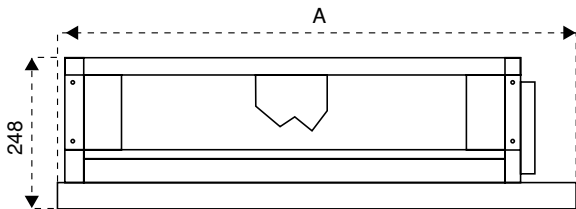
## MCW - Ceiling Concealed



With available external static pressure values up to 60 Pa, MCW models are suitable both for ducted and free discharge installations. Their compact dimensions and particularly low height, make units ideal for false ceiling installation even in vintage buildings with narrow ceiling spaces.

Units are standard supplied with suction plenum and air filter.

It is possible to field change connection side, for both 2 and 4 pipe versions, adding to the units flexibility and ease of installation.



## Dimensions

MODEL MCW C/H		200	300	400	600	800	1000	1200
A	mm	714	884	1014	1214	1464	1564	1824
A (Extended Drain Pan)*	mm	814	984	1114	1314	1564	1664	1924
B	mm	505	675	805	1005	1255	1355	1615

\* Standard



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## MCW - Ceiling Concealed

### Technical Data

2 - PIPE

MODEL		200C	300C	400C	600C	800C	1000C	1200C
Nominal Air Flow (S.High-High-Medium-Low)	m <sup>3</sup> /h	327/307 269/246	572/456 363/325	710/541 475/445	1000/785 691/663	1264/1018 863/717	1436/1234 1115/805	1785/1500 1298/1106
Available External Static Pressure	Pa	30	30	30	30	30	30	30
Total Cooling Capacity <sup>1</sup>	kW	2.2	3.4	4.2	6.1	7.1	8.2	9.8
Total Sensible Capacity <sup>1</sup>	kW	1.5	2.5	3.3	4.7	5.6	6.5	7.7
Heating Capacity <sup>2</sup>	kW	2.4	4.1	5.4	7.3	8.8	10.2	12.2
Water Flow Rate	l/s	0.106	0.162	0.201	0.288	0.337	0.388	0.464
Water Pressure Drop (Cooling)	kPa	13	13	19	34	15	15	26
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	38/36/32/31	42/40/37/35	41/37/33/32	43/40/38/36	43/40/38/36	46/43/41/39	46/44/41/39
Power Supply	V/Ph/Hz	220-240/1/50						
Water Connections Diameter	in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate Drain Connection	in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Weight	kg	20	23	28	33	44	48	50

#### NOTES

1. At the following nominal conditions: nominal air flow; 7/12°C inlet/outlet water temperature; 27°C db/19°C wb inlet air temperature; S.High speed
2. At the following nominal conditions: nominal air flow 50°C inlet water temperature; 20°C inlet air temperature; same water flow as for cooling; S.High speed
3. At Super H./High/Medium/Low speed; nominal air flow; with plenum and filter

4 - PIPE

MODEL		200H	300H	400H	600H	800H	1000H	1200H
Nominal Air Flow (Super High-High-Medium-Low)	m <sup>3</sup> /h	314/290 257/241	529/422 338/298	671/536 494/460	1004/811 725/653	1194/963 856/700	1346/1154 1039/743	1674/1406 1200/1069
Available External Static Pressure	Pa	30	30	30	30	30	30	30
Total Cooling Capacity <sup>1</sup>	kW	2.2	3.2	4.1	6.1	6.8	7.8	9.4
Total Sensible Capacity <sup>1</sup>	kW	1.4	2.4	3.1	4.7	5.4	6.1	7.3
Heating Capacity <sup>2</sup>	kW	2.7	4.1	5.3	7.7	8.5	9.5	11.7
Water Flow Rate - Cooling	l/s	0.102	0.153	0.194	0.289	0.324	0.373	0.446
Water Pressure Drop - Cooling	kPa	12	11	18	34	14	14	24
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	38/35/33/31	42/40/37/35	41/38/34/33	43/40/38/36	44/40/38/36	46/43/41/39	47/44/42/40
Power Supply	V/Ph/Hz	220-240/1/50						
Water Connections Diameter	in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate Drain Connection	in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Weight (With Plenum)	kg	22	27	31	36	48	52	56

#### NOTES

1. At the following nominal conditions: nominal air flow; 7/12°C inlet/outlet water temperature; 27°C db / 19°C wb inlet air temperature; S.High speed
2. At the following nominal conditions: nominal air flow; 70/60 °C inlet/outlet water temperature; 20°C inlet air temperature; S.High speed
3. At Super H./High/Medium/Low speed; nominal air flow; with plenum and filter

# Chilled Water Fan Coils



## MCC - Ceiling Concealed Ducted



Available in 8 sizes, MCC line offers a wide range of solutions to air distribution problems applicable on both new and refurbished buildings.

The robust construction is of corrosion-proof galvanised aluminium.

MCC range is completed with a wide range of accessories, such as:

- plenum with supply grille
- discharge adaptor
- return bracket adaptor
- return grille with filter
- Y-joint
- insulating aluminium pipes
- supply grille

## Technical Data

MODEL MCC		010CW	015CW	020CW	025CW	030CW	040CW	050CW	060CW
Nominal Air Flow (Superhigh/High/Medium/Low)	m <sup>3</sup> /h	510/475/ 410	730/630/ 460	1050/1000/ 850	1430/1340/ 1090	(1700)/1610/ 1530/1480	(2210)/1960/ 1870/1780	(2640)/2550/ 2510/2300	(3060)/2900/ 2800/2250
Available External Static Pressure	Pa	50	50	50	50	150	150	150	150
Total Cooling Capacity <sup>1</sup>	kW	2.7	4.8	6.0	7.3	8.8	11.3	14.5	17.5
Total Sensible Capacity <sup>1</sup>	kW	2.0	3.5	4.4	5.3	6.5	8.5	10.7	12.8
Heating Capacity <sup>2</sup>	kW	3.3	5.2	6.4	7.9	9.7	12.8	16.3	19.3
Water Flow Rate	l/s	0.126	0.228	0.286	0.345	0.418	0.538	0.692	0.834
Water Pressure Drop - Cooling	kPa	14	45	86	125	86	79	56	81
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	33/30/26	37/34/29	38/36/24	40/39/36	(49)/46/42/38	(51)/49/45/41	(53)/52/50/47	(55)/53/50/47
Power Input	kW	0.071	0.102	0.148	0.173	0.421	0.550	0.670	0.748
Current Input	A	0.30	0.43	0.65	0.74	1.90	2.60	2.90	3.20
Power Supply	V/ph/Hz	220-240/1/50							
Water Connections Diameter	in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate drain connection	in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Weight	kg	17	21	22	25	39	42	54	62

### NOTES

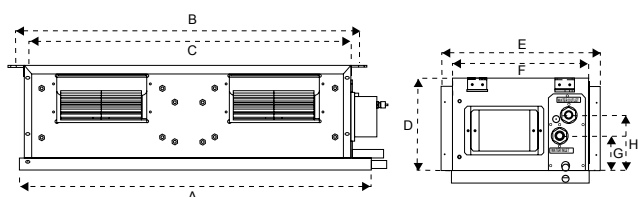
1. At the following nominal conditions: 7/12°C inlet/outlet water temperature; 27°C db / 19°C wb inlet air temperature; high speed

2. At the following nominal conditions: 50°C inlet water temperature; 20°C inlet air temperature; same water flow as for cooling; high speed

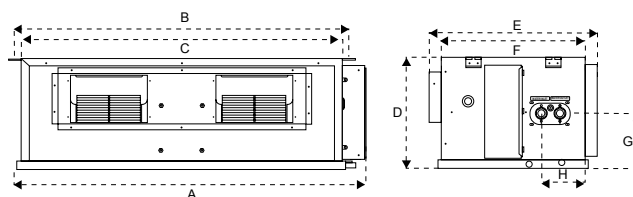
3. At nominal air flow; (superhigh)/high/medium/low fan speed; 1.4 m below the centre of the unit; 2 m length duct at the air discharge outlet and air return inlet (according to GB/D17758)

## Dimensions

MODEL MCC		010CW	015CW	020CW	025CW	030CW	040CW	050CW	060CW
A	mm	765	905	1005	1200	999	1115	1369	1564
B	mm	741	881	1041	1176	956	1072	1326	1526
C	mm	702	841	1002	1137	917	1033	1287	1487
D	mm	261	261	261	261	378	378	378	378
E	mm	411	411	411	411	541	541	541	541
F	mm	351	349	349	349	462	462	462	462
G	mm	171	171	174	171	187	187	187	187
H	mm	118	118	128	118	142	142	134	134



MCC 010/015/020/025CW



MCC 030/040/050/060CW

Number of fan and connections area are only indicative

# Chilled Water Fan Coils



## Accessories

1. Delivery plenum assembly



2. Adaptor



3. Return adaptor with bracket



4. Return grille with adaptor and filter



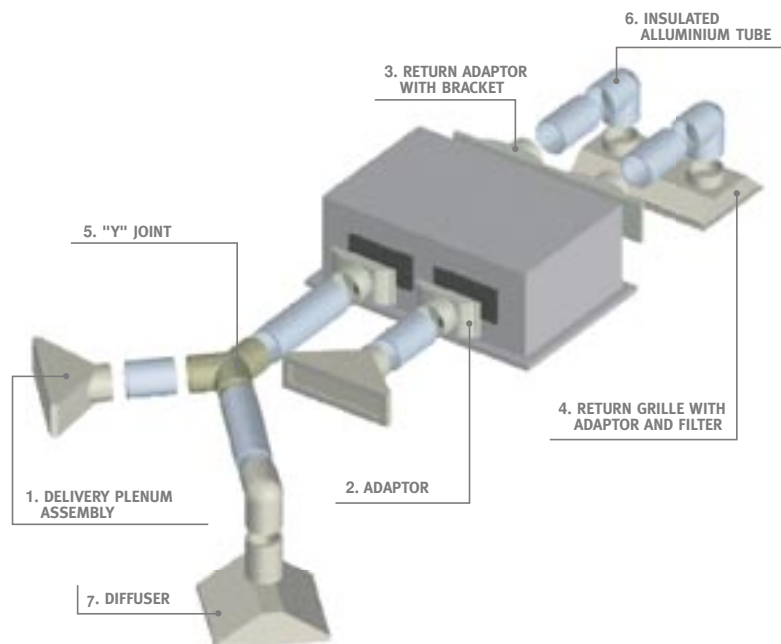
5. "Y" joint



6. Insulated aluminium tube



7. Diffuser



# Chilled Water Fan Coils



## MCM - Ceiling Convertible



The MCM series combines an attractive design with flexibility in satisfying application needs.

The two-way air discharge coupled with the air swing function, provides excellent air distribution into the conditioned space. The three-stage active filtration, removes dust and particles with diameters down to 0.01 micron. Its ionised filter prevents potential bacteria proliferation and minimises unpleasant smells, maintaining a clean and healthy environment. Air filter and unit components can be easily accessed from the bottom side thus facilitating servicing tasks.

## Technical Data

MODEL MCM		020DW*	025DW*	030DW*	040DW*	050DW*
Nominal Air Flow (High-Medium-Low)	m <sup>3</sup> /h	1000/900/710	1130/1110/990	1240/1220/1160	1700/1620/1580	1890/1820/1700
Total Cooling Capacity <sup>1</sup>	kW	5.9	6.5	7.6	11.1	14.1
Total Sensible Capacity <sup>1</sup>	kW	4.4	4.5	5.2	7.5	9.3
Heating Capacity <sup>2</sup>	kW	8.8	9.6	11.1	18.6	19.6
Water Flow Rate - Cooling	l/s	0.250	0.275	0.325	0.475	0.600
Water Pressure Drop - Cooling	kPa	17	20	18	9	13
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	50/47/40	54/53/50	51/50/48	54/53/52	54/53/52
Power Input <sup>4</sup>	kW	0.096	0.130	0.132	0.240	0.240
Current Input <sup>4</sup>	A	0.4	0.6	0.6	1.0	1.0
Power Supply	V/ph/Hz	220-240/1/50				
Water Connections Diameter	in	3/4"	3/4"	3/4"	3/4"	3/4"
Condensate Drain Connection	in	3/4"	3/4"	3/4"	3/4"	3/4"
Weight (unit + panel)	kg	43	43	45	70	70

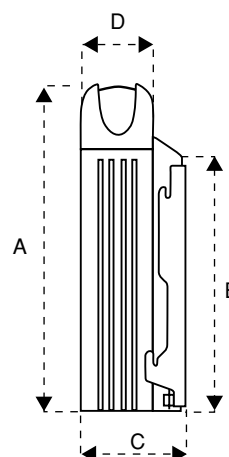
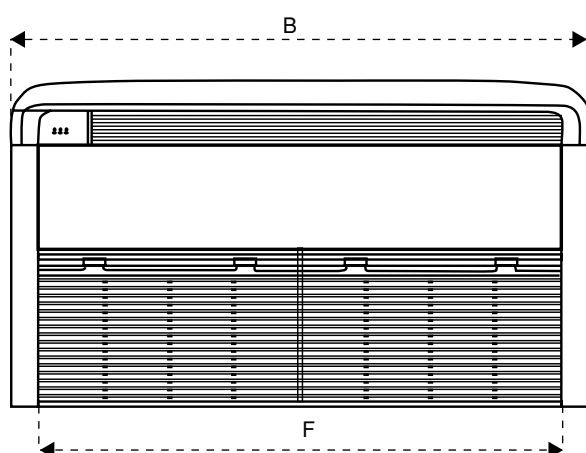
### NOTES

- At the following nominal conditions: 7.2/12.8 °C inlet/outlet water temperature; 27.7°C dB / 19.4°C wb inlet air temperature; high speed
- At the following nominal conditions: 60°C inlet water temperature; 21.1°C inlet air temperature; same water flow as for cooling; high speed
- At nominal air flow; high/medium/low fan speed; MCM020-025: 1 m in front of the unit & 0.8 m below the unit (according to JIS C9612 standards); MCM030-050: 1 m in front of the unit & 1 m below the unit (according to JIS B8615 standards).
- High speed; nominal air flow.

\* Contact McQuay Customer Service

## Dimensions

MODEL MCM		020DW	025DW	030DW	040DW	050DW
A	mm	670	670	670	670	670
B	mm	1214	1214	1214	1714	1714
C	mm	214	214	249	249	249
D	mm	156	156	156	156	156
E	mm	517	517	517	517	517



# Chilled Water Fan Coils



## MDB - Large Ducted



The MDB models are characterised by compact dimensions and robust structure.

With an available static pressure ranging from 100 to 200Pa and both horizontal and vertical (125-150) configuration, MDB series can adapt with extreme versatility to any type of installation.

## Technical Data

MODEL MDB		075BW*	100BW*	125BW*	150BW*
Nominal Air Flow	m <sup>3</sup> /h	4250	5440	7140	7820
Available External Static Pressure	Pa	150	100	200	150
Total Cooling Capacity <sup>1</sup>	kW	22.3	28.7	38.1	47.8
Total Sensible Capacity <sup>1</sup>	kW	15.8	21.0	27.4	33.9
Heating Capacity <sup>2</sup>	kW	36.3	46.6	61.2	76.2
Water Flow Rate	l/s	0.950	1.225	1.625	2.037
Water Pressure Drop - Cooling	kPa	50	15	20	16
Lp (Sound Pressure Level) <sup>3</sup>	dB(A)	58	59	57	50
Power Input	kW	810	1010	2730	3370
Current Input	A	3.7	4.2	3.4	3.4
Power Supply	V/ph/Hz	220-240/1/50			
Water Connections Diameter	in	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Condensate Drain Connection	in	1"	1"	1"	1"
Weight (unit + panel)	kg	60	60	60	60

### NOTES

- At the following nominal conditions: 7.2/12.8 °C inlet/outlet water temperature; 26.7°C db / 19.4°C wb inlet air temperature; high speed
- At the following nominal conditions: 60°C inlet water temperature; 2.10°C inlet air temperature; same water flow as for cooling; high speed
- At nominal air flow; MDB075-125: 1.5 m in front of the unit & ducted discharge; MDB150: 1.5 m below the unit & discharge ducted to adjacent room

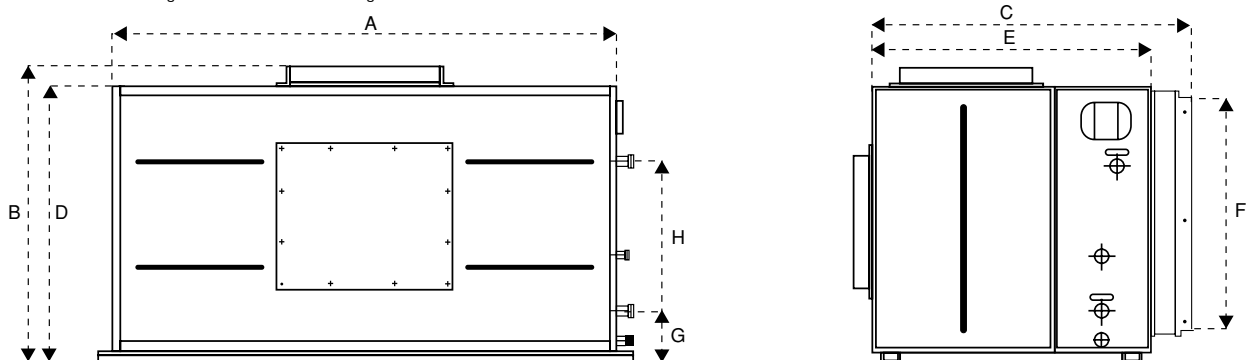
\* Contact McQuay Customer Service

## Dimensions

MODEL MDB		075BW(H)	100BW(H)	125BW(V)	125BW(H)	150BW(V)	150BW(H)
A	mm	1402	1402	1540	1540	1540	1540
B	mm	572	572	945	885	945	885
C	mm	701	701	980	980	980	980
D	mm	537	537	885	885	885	885
E	mm	605	605	850	850	850	850
F	mm	437	437	747	747	747	747
G	mm	117.6	117.6	127	127	127	127
H	mm	302	289	968.5	968.5	468.5	468.5
I	mm	96	100	140	140	145	145

### NOTES

V: Vertical Air Discharge - H: Horizontal Air Discharge



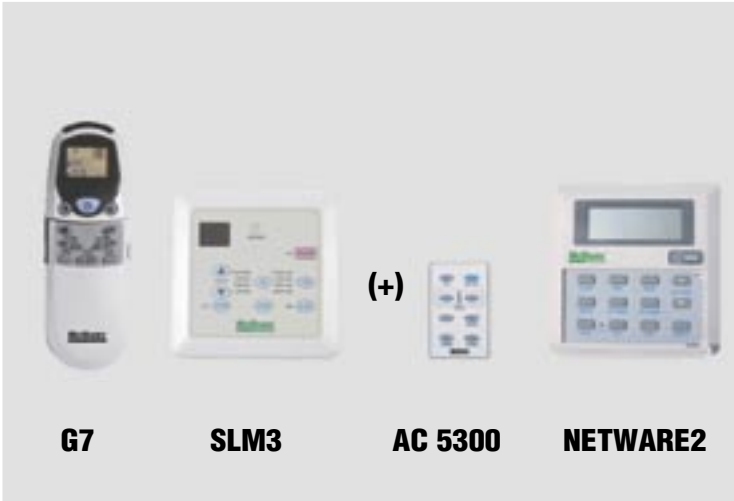
Discharge configuration and connections area are only indicative

# Chilled Water Fan Coils



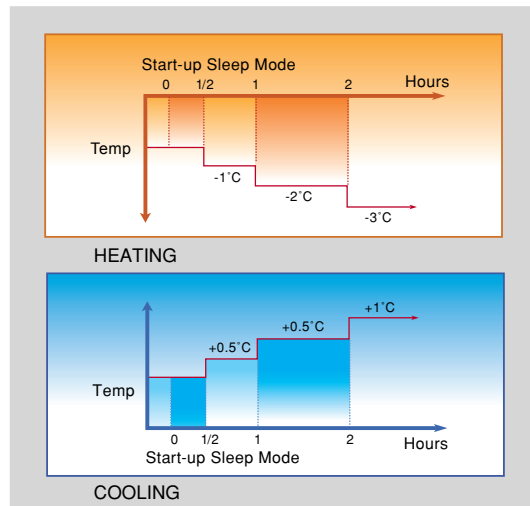
## Controls Features

### Remote and Wired Controls

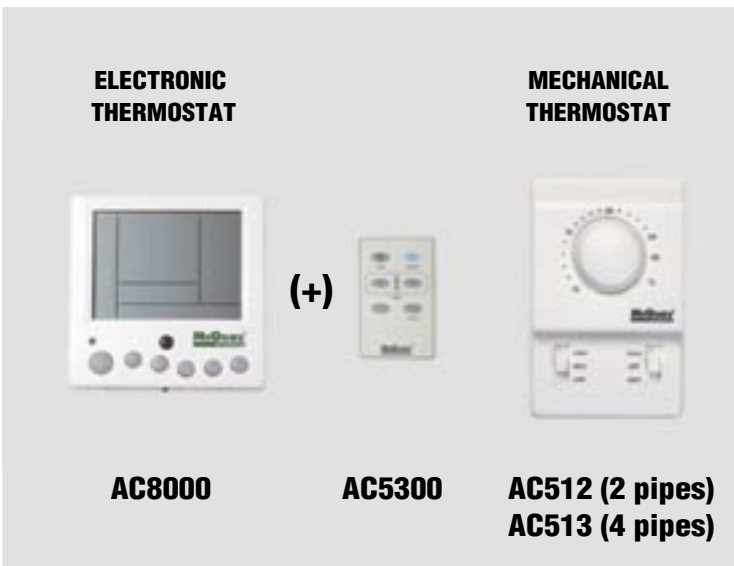


controls series	G6	SLM3	NETWORK2	AC5300
<b>MWM</b>	STD	OPZ	OPT	OPT
<b>MCK</b>	STD	OPZ	OPT	OPT
<b>MCC</b>	--	STD	OPT	OPT
<b>MCM</b>	STD	OPT	OPT	OPT
<b>MDB</b>	--	--	--	--

- Three selectable fan speeds and automatic setting of airflow based on the indoor room conditions
- Dehumidification, to decrease the ambient moisture content when the discomfort is generated by a too high level of humidity
- Auto Swing, with automatic vertical movement of the louvers
- Sleep Mode, automatically adjust of the temperature value to optimise conditions for a comfortable rest
- Auto-random restart and parameters memory set in case of power failure
- Self-Diagnosis System



### Wired controls (optional) - MCW

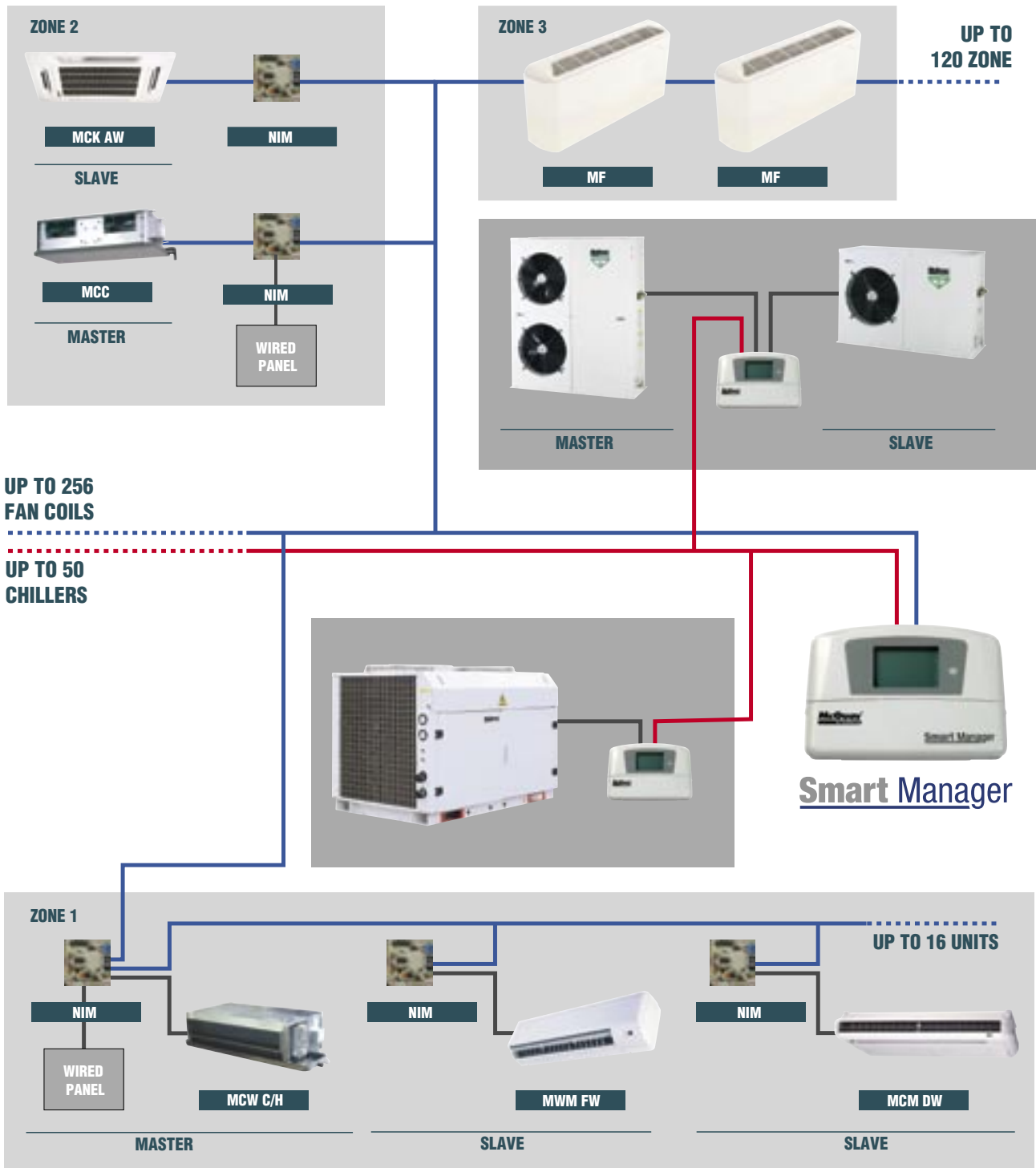


- Three selectable fan speeds and automatic setting of airflow based on the indoor room conditions
- LCD display (AC8000)
- Self-Diagnosis System (AC8000)
- Auto-random restart and parameters memory set in case of power failure (AC8000)
- Weekly timer setting (AC8000)
- Combination with the remote control AC5300

# Chilled Water Fan Coils



## Example



### LEGEND

- **BUS CABLE - CHILLERS**  
2-wire, 0.5 mm<sup>2</sup>, shielded
- **BUS CABLE - FCU**  
2-wire, 0.5 mm<sup>2</sup>, shielded
- **COMMUNICATION CABLE**  
4-wire, 0.5 mm<sup>2</sup>, shielded

### COMPONENTS

- |  |  |
|--|--|
| <p><b>FAN COILS</b></p> <ul style="list-style-type: none"> <li>- Universal Board U1.4/W1V3 [standard]</li> <li>- Wireless or wired control Netware2/SLM3 [standard]</li> <li>- Network Interface Module - NIM</li> </ul> | <p><b>CHILLERS</b></p> <ul style="list-style-type: none"> <li>- Board MC01 [standard]</li> <li>- Control Panel [standard]</li> </ul> |
|--|--|



[www.mcquayeurope.com](http://www.mcquayeurope.com)

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