



High Wall Mounted  
MHWM-Series

*Let's Conserve Energy*



HVAC (Heating, Ventilation and Air Conditioning) solutions have been the main concern of technology to develop a sustainable life style improvement in today's society; and it could not happen without research and innovation in heating and cooling products.

McMaster as a research and development base in North America provided technical and experimental support to HVAC industry for more than two decades. Development from traditional air and water heating/ cooling technologies to more developed air conditioning technologies.

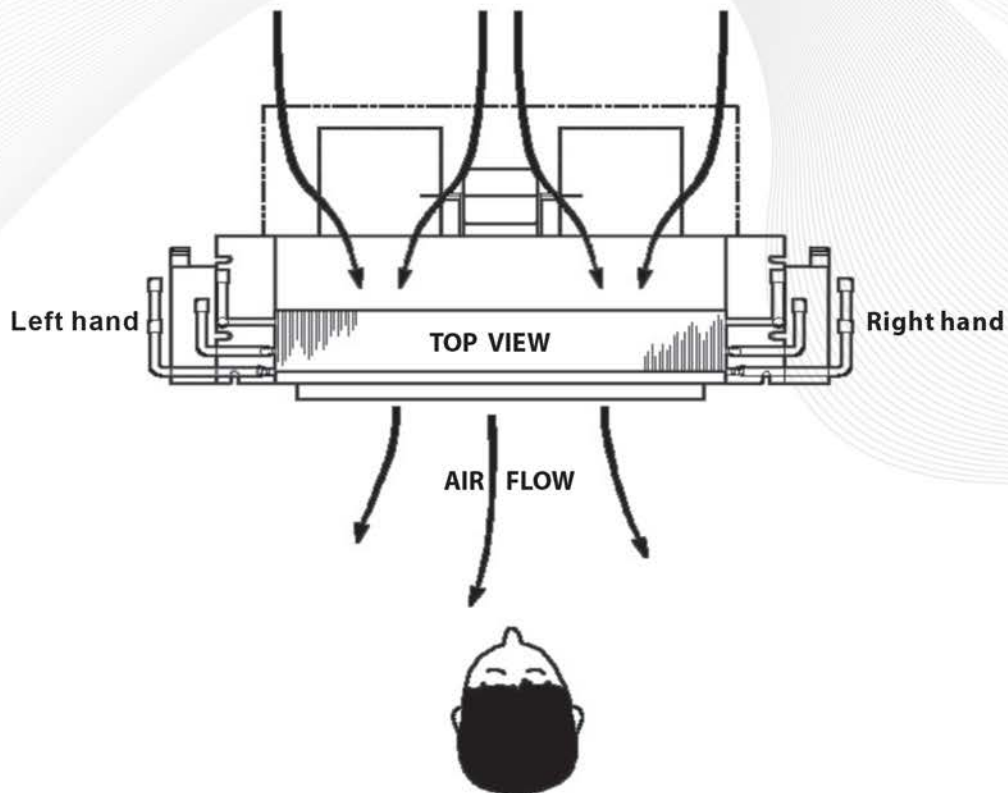
From 2002 McMaster Approach moved toward development of McMaster products in residential and commercial and industrial sectors. McMaster Advantage as a knowledge provider to industry helped to build a healthy relationship with its manufacturing partners in Central America, Europe, and Asia.

All McMaster Products meet or exceed rigorous industry and regulatory standards for quality, reliability, efficiency, and air & water quality. From design and fabrication to finished product assembly, each phase in the manufacturing process is rigorously monitored and measured to ensure the highest quality, durability and operating excellence. McMaster Products are routinely tested and certified by various government and third-party testing labs to ensure quality standards.

McMaster Fan Coil Units are ideally designed for the air condition of residential, commercial, hotels and office buildings. It provides the most comfortable and efficient solutions for heating and cooling needs.

The modular construction allows for a wide variety of options and accessories to be available in all models. It is designed for high safety, energy saving and long product life.

## Determination of Right-hand/Left hand pipe connection





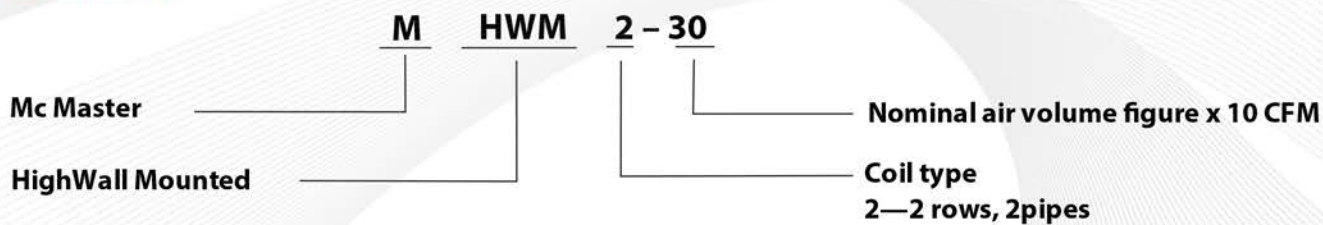
## Introduction

The MHWM fan coil unit delivers a high standard of air quality characteristics in all applications. With the characteristic of extremely quiet, suitable for all public buildings and private house.

Units are standard supplied with remote controller and nylon filter.



## Nomenclature



## Design Features

### Linear air supply design.

Panel with one way air distribution outlet, easy to match with interior decoration

### Quiet Centrifugal fan

High efficiency fan with steel wheels assembly minimizes vibration and 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

# MHWM-Series

## General Data

Spec			MHWM2-20	MHWM2-30	MHWM2-40	MHWM2-50	MHWM2-60
Nominal Air volume		CFM	200	300	400	500	600
Coil	Copper tube		OD 7.00mm seamless copper				
	Fins		Hi-efficiency wavy corrugated aluminum blue fins				
	Fins per Inch	FPI	12	12	12	12	12
	Coil length	mm	720	720	720	770	770
	Coil height	mm	200	200	200	250	250
Fan	Fan type		Cross flow, ABS wheel, direct				
	Qty	PCS	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
	Max power input	W	40	55	62	79	89
Noise level at 1.0m distance	H	d B(A)	36	39	41	44	46
	M	d B(A)	34	35	38	40	42
	L	d B(A)	29	30	30	31	33
Water pipe	Cooling coil		1/2" MTP	1/2" MTP	1/2" MTP	1/2" MTP	1/2" MTP
Drain pipe			1/2" MTP	1/2" MTP	1/2" MTP	1/2" MTP	1/2" MTP
Package Dimension	L	mm	990	990	990	110	110
	W	mm	365	365	365	366	367
	H	mm	265	265	265	266	267
Net Weight		kg	12	12	12	16	16

## 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 condition

### 3rows, 2pipes

Model			MHWM2-20	MHWM2-30	MHWM2-40	MHWM2-50	MHWM2-60
Air flow	H	CFM	200	300	400	500	600
	M		171	247	294	400	406
	L		124	200	224	247	265
Total Cooling Capacity	H	KW	2.10	2.91	3.65	4.58	5.28
	M		1.85	2.49	2.87	3.84	3.88
	L		1.42	2.10	2.31	2.61	2.76
Sensible Cooling Capacity	H	KW	1.42	1.99	2.52	3.17	3.67
	M		1.25	1.70	1.96	2.64	2.67
	L		0.95	1.42	1.56	1.77	1.88
Heating Capacity	H	KW	2.44	3.42	4.32	5.46	6.32
	M		2.14	2.92	3.37	4.54	4.61
	L		1.63	2.44	2.69	3.03	3.22
Water Flow Rate	H	L/S	0.10	0.14	0.17	0.22	0.25
	M		0.09	0.12	0.14	0.18	0.19
	L		0.07	0.10	0.11	0.12	0.13
Water Pressure Drop	H	KPA	32.76	48.12	62.92	43.49	51.48
	M		28.12	40.05	47.22	35.34	35.81
	L		20.57	32.76	36.51	22.41	23.93

## Performance Data

### 2. ARI-440 Standard rating

The following rating conditions are used:

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

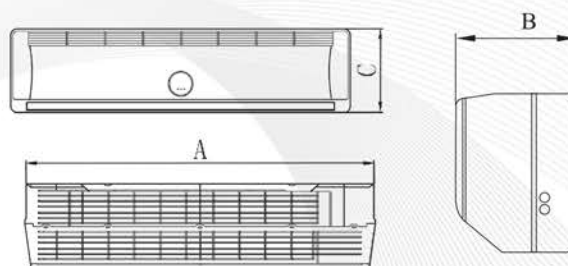
**Heating:** Entering air temperature: +68 °C DB  
Water inlet temperature: +140 °C  
Water flow rate as for the cooling conditions.

#### 3 rows, 2 pipes

Model		MHWM2-20	MHWM2-30	MHWM2-40	MHWM2-50	MHWM2-60
Air flow	H	200	300	400	500	600
	M	171	247	294	400	406
	L	124	200	224	247	265
Total Cooling Capacity	H	6758	9317	11672	14574	16792
	M	5939	7986	9181	12253	12389
	L	4573	6758	7406	8362	8840
Sensible Cooling Capacity	H	4642	6451	8157	10273	11877
	M	4061	5529	6348	8567	8669
	L	3106	4642	5085	5768	6109
Heating Capacity	H	10990	15290	19318	24403	28089
	M	9625	13004	15085	20341	20546
	L	7304	10990	11946	13652	14369
Water Flow Rate	H	1.43	1.90	2.38	3.01	3.33
	M	1.27	1.59	1.90	2.54	2.54
	L	0.95	1.43	1.43	1.74	1.74
Water Pressure Drop	H	9.11	13.33	17.39	11.99	14.16
	M	7.84	11.12	13.08	9.76	9.89
	L	5.75	9.11	10.14	6.22	6.64

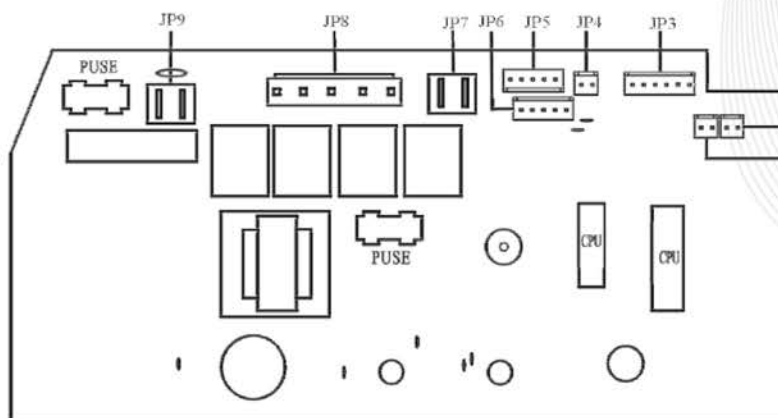
#### Dimensional Data

SPEC	A	B	C
MHWM-20	890	230	310
MHWM-30	890	230	310
MHWM-40	890	230	310
MHWM-50	1010	230	310
MHWM-60	1010	230	310



## Wiring Diagrams

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



#### Instructions:

JP1-Room temperature sensor  
JP2-Water coil temperature sensor  
JP3-Remote controller receiver  
JP4-Test button  
JP5-Step motor for airflow swining

JP6-Step motor for airflow swining  
JP7-Water motorized valve  
JP8-Fan  
JP9-Power supply (220-240v 50Hz)