



MMNC-HH-B

Ceiling 1-Way Cassette Heat Pump System

R454b Model



Hyper Heat 1-Way Cassette Mini Split System, with Inverter Technology

1/2 Ton - 1.5 Ton, with Efficiencies up to 24.00 SEER2 and 15.0 EER2



The MMNC-HH is a highly efficient split system, with a 1-way cassette fan coil and an outdoor side discharge heat pump unit. The indoor fan coil can be installed in various locations. This system supplies comfortable cooling and heating performance at low sound levels.

Typical installations for the MMNC-HH include:

- Apartments
- Condominiums
- Independent Care Facilities
- Pre Manufactured Homes
- Single Family Home Additions
- Modular Buildings
- Student Housing
- Offices
- Stores



Features

Highly Efficient / High Performance

- Highly Efficient Inverter Compressor, with Efficiencies up to 24.00 SEER2
- Low Amp Draw DC motor in Outdoor HP

Quiet Operation, Inside and Outside

- Low Sone DC motor in MMNC Fan Coil
- Quiet Inverter Compressor in Outdoor Heat Pump, with low Sound Levels

Heating at Low Ambient Conditions

- Standard Base Pan Heaters
- Hyper Heat (100% Heating Capacity down to 5° F)
- Low Ambient Kit

Controls

- Standard Wireless Remote or Optional Wired Wall Controller
- Optional WiFi Module available

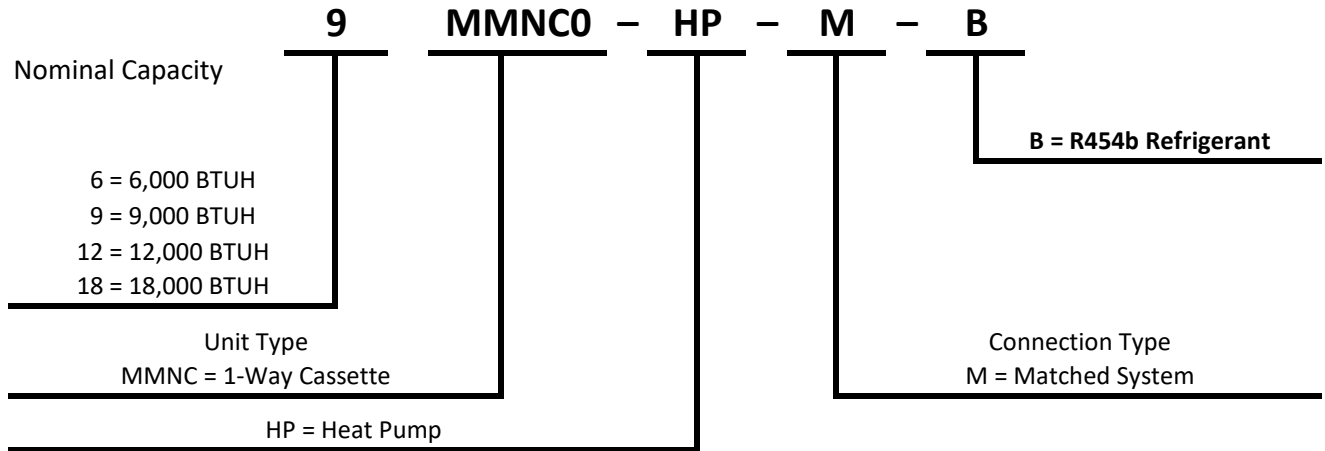
Design

- Gold Fin Coil Protection on Indoor Fan Coil and Outdoor Heat Pump
- Automatic Restart Function
- Follow Me Function with Wireless Remote Control
- Turbo Mode
- Low Refrigerant Pressure Notification
- Environmentally Friendly R454b Refrigerant

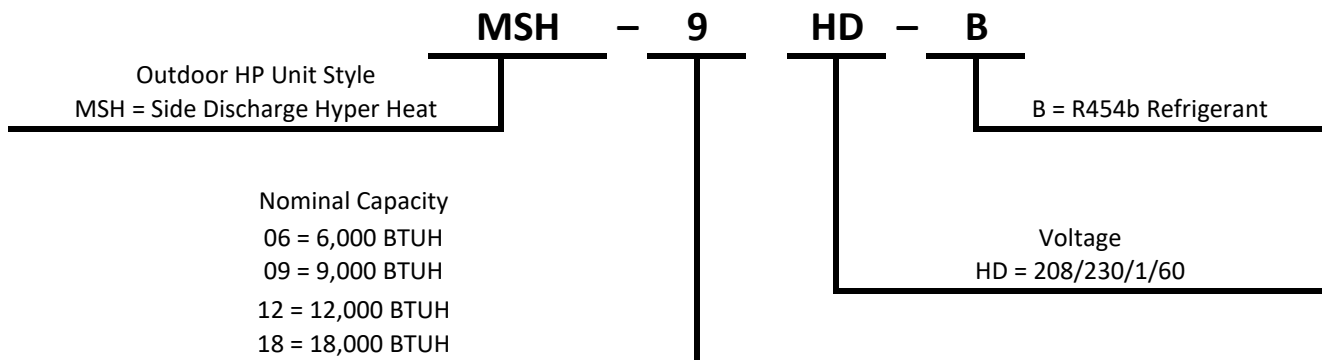


Nomenclature

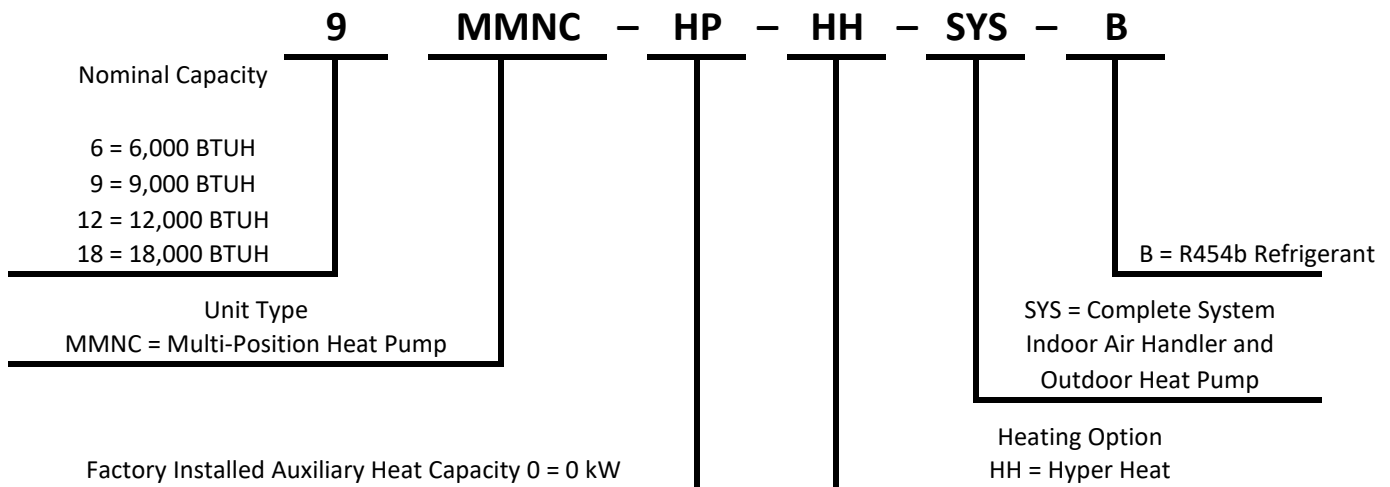
Indoor Unit



Outdoor Unit



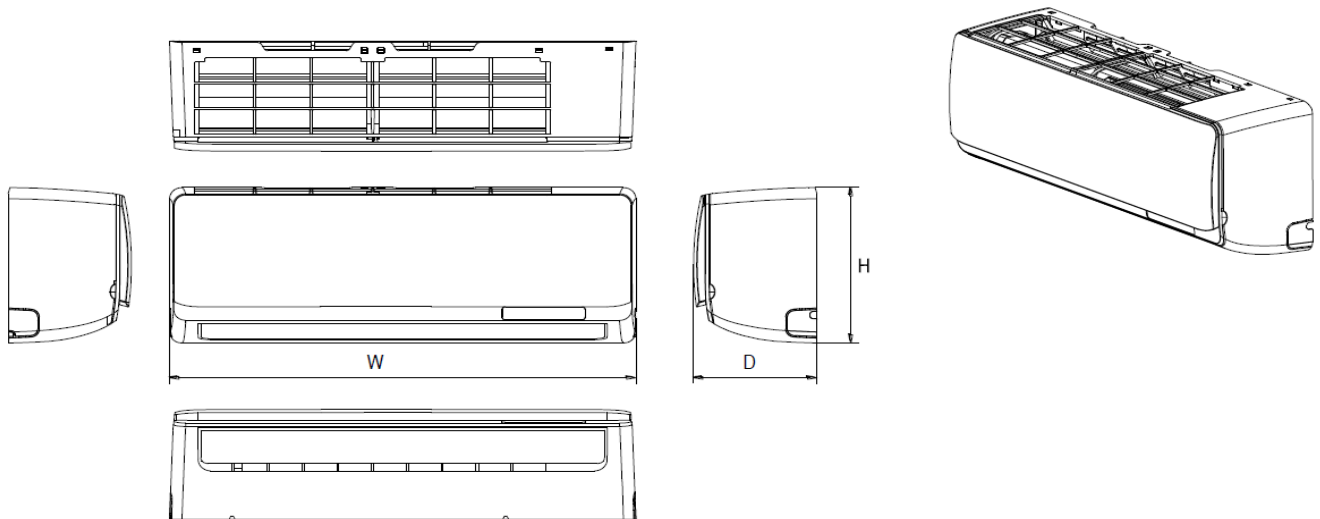
System



MMNC

1/2 ton - 2 1/2 ton High Wall Fan Coil

Dimensional Data



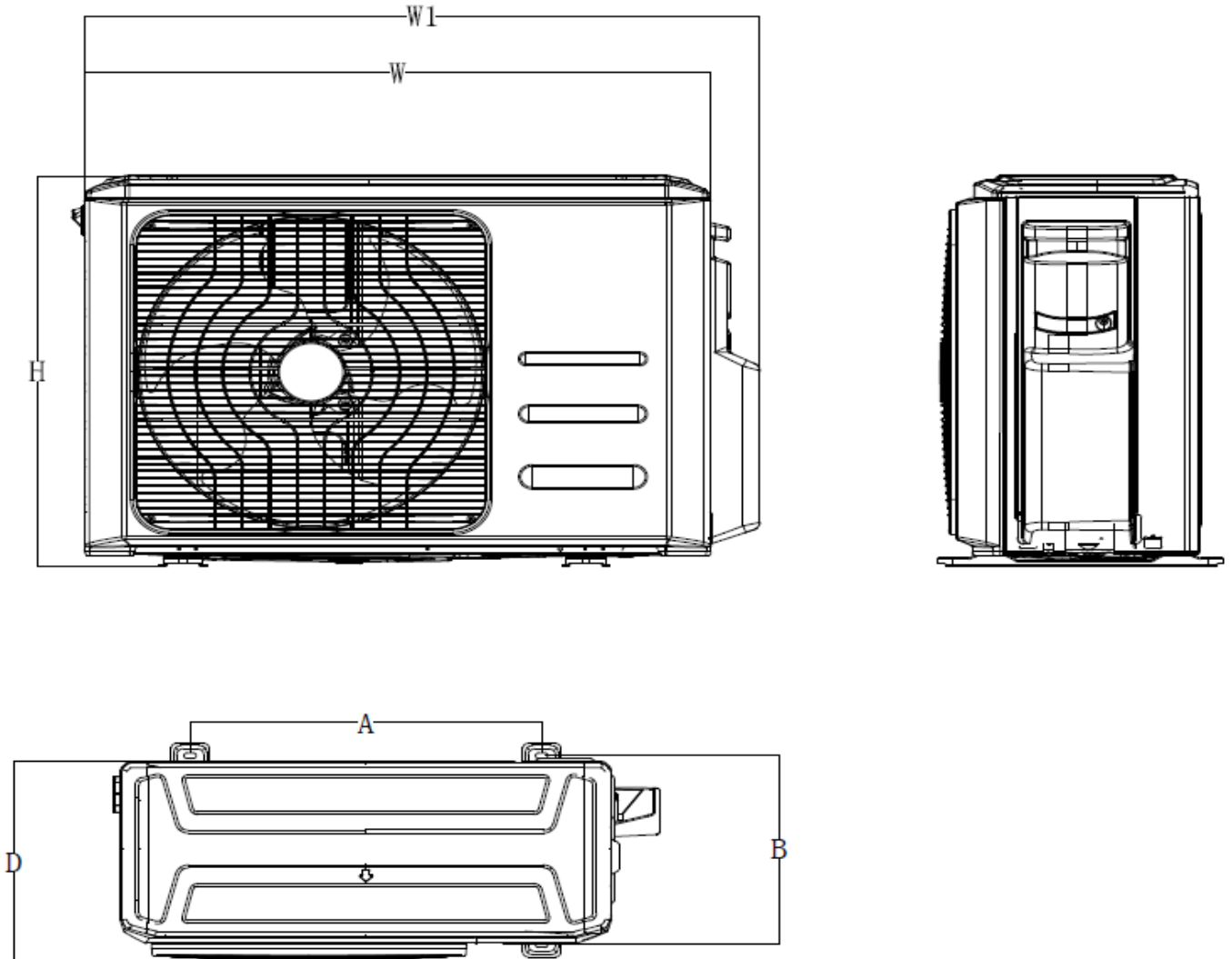
Unit	H	W	D	Weight
6HWMS-M-B	11.76	33.40	9.18	22.7
9HWMS-M-B	11.76	33.40	9.18	22.7
12HWMS-M-B	11.76	33.40	9.18	22.9
18HWMS-M-B	12.60	40.06	9.72	27.1
24HWMS-M-B	14.59	46.85	11.20	43.7
30HWMS-M-B	15.59	47.85	12.20	44.7
Dimensions shown are in Inches				
Weights shown are in lbs				



MSH

1/2 ton - 2 1/2ton Hyper Heat HP Outdoor Units

Dimensional Data



Unit	Unit Width (W)	Unit Depth (D)	Unit Height (H)	W1	Bracket Width (A)	Bracket Depth (B)	Weight
MSH-06HD-B	30.12	11.88	21.88	32.88	17.75	11.25	62
MSH-09HD-B	32.13	13.00	21.75	34.38	20.13	12.50	73
MSH-12HD-B	32.13	13.00	21.75	34.38	20.13	12.50	73
MSH-18HD-B	35.25	13.50	26.50	37.63	26.13	13.25	100
Dimensions shown are in Inches							
Weights shown are in lbs							

HWMS-HH-B

1/2 ton - 1 1/2 ton Hyper Heat HP

System Specifications

System Model			6HWMS0-HH-SYS-B	9HWMS0-HH-SYS-B	12HWMS0-HH-SYS-B	18HWMS0-HH-SYS-B
Indoor Model			6HWMS-M-B	9HWMS-M-B	12HWMS-M-B	18HWMS-M-B
Outdoor Model			MSH-06HD-B	MSH-09HD-B	MSH-12HD-B	MSH-18HD-B
Power supply		V/Hz/Ph	208/230/60/1	208/230/60/1	208/230/60/1	208/230/60/1
Cooling	Capacity	Btu/h	6000	9000	12000	18000
	Input	W	375	600	910	1384
	Rated current	A	3.1	4.0	4.1	9.0
	EER2	Btu/W	16.0	15.0	13.2	13.0
	SEER2		25.30	26.00	24.00	21.70
Heating	Capacity	Btu/h	7000	12000	12000	18000
	Input	W	540	970	907	1490
	Rated current	A	4.00	4.30	4.30	9.50
	COP	W/W	3.8	3.6	3.6	3.5
	HSPF2		14.6	12.5	10.5	10.8
Fan Coil Power Supply			Fan Coil Powered from Outdoor Heat Pump			
Min Circuit Ampacity		A	12.0	15.0	15.0	19.0
MAX.FUSE		A	15.0	15.0	15.0	20.0
Indoor air flow (Turbo/Hi/Med/Lo)		CFM	294/235/177/141	383/294/194/153	383/294/194/153	759/500/441/371
Indoor noise level (Hi/Med/Lo)		dB(A)	37.0/32.0/24.0	39.5/33.0/24.0	39.5/33.0/24.0	45.0/40.0/24.5
Outdoor air flow		CFM	1235	1470	1470	1765
Outdoor noise level		dB(A)	53.0	56.0	56.0	59.0
Refrigerant		Type	R454B	R454B	R454B	R454B
Ref Precharge		oz	32.45	35.27	35.27	55.38
Refrigerant precharge		ft	25	25	25	25
Additional charge / ft		oz	0.16	0.16	0.16	0.16
Design pressure		PSIG	550 / 340	550 / 340	550 / 340	550 / 340
Drain Line Diameter		inch	ODΦ1	ODΦ1	ODΦ1	ODΦ1
Ref Piping	Liquid / Suction	inch	1/4 / 3/8	1/4 / 3/8	1/4 / 3/8	1/4 / 1/2
	Max. Pipe Length	ft	82	82	82	98
	Max. Pipe Lift	ft	49	49	49	66
Connection wiring			14AWG*4 Stranded, Shielded			
Thermostat Type			Wireless Remote Control or Wired Wall Controller			
Room Temp	Indoor Cooling	°F	60~90	60~90	60~90	60~90
	Indoor Heating	°F	32~86	32~86	32~86	32~86
	Outdoor Cooling	°F	-22~122	-22~122	-22~122	-22~122
	Outdoor Heating	°F	-22~75	-22~75	-22~75	-22~75

Cooling Expanded Ratings

Model	Cooling			Outdoor DB							
	Indoor			55F (12.8C)	65F (18.3C)	75F (24C)	85F (29.4C)	95F (35C)	105F (40.5C)	115F (46C)	122F (50C)
	DB	WB									
6HWMS-HH-SYS	65F	54F	TC								
			SC								
	70F	59F	TC								
			SC								
	75F	63F	TC								
			SC								
	80F	67F	TC								
			SC								
9HWMS-HH-SYS	65F	54F	TC								
			SC								
	70F	59F	TC								
			SC								
	75F	63F	TC								
			SC								
	80F	67F	TC								
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12HWMS-HH-SYS	65F	54F	TC								
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			SC								
	80F	67F	TC								
			SC								
30HWMS-HH-SYS	65F	54F	TC								
			SC								
	70F	59F	TC								
			SC								
	75F	63F	TC								
			SC								
	80F	67F	TC								
			SC								

LEGEND

DB --- Dry Bulb

TC --- Total Net Capacity (1000 Btu/hour)

Input --- Total Power (kW)

WB --- Wet Bulb

SC --- Sensible Capacity (1000 Btu/hour)

Heating Expanded Ratings

Model	Heating		Outdoor conditions (DB)														
	Indoor DB		-22F	-13F	-5F	0F	5F	17F	19.4F	24.8F	32F	35F	39.2F	44.6F	47F	53.6F	57F
6HWMS-HH-SYS	60F	TC															
		Input															
	65F	TC															
		Input															
	70F	TC															
		Input															
75F	TC																
	Input																
	9HWMS-HH-SYS	60F	TC														
			Input														
		65F	TC														
			Input														
70F		TC															
		Input															
75F	TC																
	Input																
	12HWMS-HH-SYS	60F	TC														
			Input														
		65F	TC														
			Input														
70F		TC															
		Input															
75F	TC																
	Input																
	18HWMS-HH-SYS	60F	TC														
			Input														
		65F	TC														
			Input														
70F		TC															
		Input															
75F	TC																
	Input																
	24HWMS-HH-SYS	60F	TC														
			Input														
		65F	TC														
			Input														
70F		TC															
		Input															
75F	TC																
	Input																
	30HWMS-HH-SYS	60F	TC														
			Input														
		65F	TC														
			Input														
70F		TC															
		Input															
75F	TC																
	Input																

LEGEND

DB --- Dry Bulb

WB --- Wet Bulb

TC --- Total Net Capacity (1000 Btu/hour)

Input --- Total Power (kW)

COP --- W/W

Control Options

Part Number	Description
MWRC2	Wireless infrared remote controller with timer, sleep function, follow me and turbo function.
SWC120LR	Standard wired wall controller with operation mode control, timer and follow me functions.
DWC120X2	Deluxe wired wall controller with programmable weekly timer, auto-restart, child lock, and follow me functions. The DWC120X2 also functions as a receiver for the MWRC remote controller.
WIFI-DWC120X2	Deluxe wired wall controller with WFI and app, with programmable weekly timer, auto-restart, child lock, Turbo function, follow me function and more. The WIFI-DWC120X2 also functions as a receiver for the MWRC remote controller.
24VMI-B	Mini 24V interface, to allow the use of many 24V thermostats. This interface requires a field install 24V fan center.
WFI-C	Wifi Smart Kit that will allow the system to connect to WiFi.



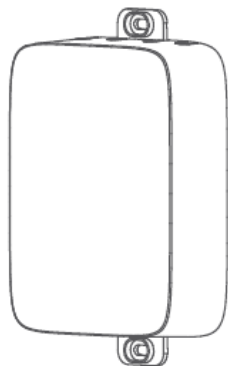
MWRC2
Wireless
Remote
Controller



SWC120LR
Standard Wired
Wall Controller



WIFI-DWC120X2
WIFI Deluxe Wired
Wall Controller



24VMI-B
Mini 24V
Interface



WFI-C
WiFi Interface
Module



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