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SUBMITTAL

18 SERIES

Single Zone Mini-Split Inverter System

M4MHW1812A1N0B
M4THS1812A11NB

Specifications - IP

MODEL - Heat Pump Only	M4MHW1812A1N0B / M4THS1812A11NB	
	Cooling	Heating
RATED Volts/PH	208 / 230 / 1	
Frequency (Hz)	60Hz	
Rated Cooling / Heating Capacity (Btu/h):	12000	13000
Minimum Cooling Capacity (@95°F) (Btu/h): ②	3100	-
Maximum Cooling Capacity (@95°F) (Btu/h): ②	13000	-
Minimum Heating Capacity (@47°F) (Btu/h): ②	-	2400
Maximum Heating Capacity (@47°F) (Btu/h): ②	-	14000
Rated Heating Capacity (@17°F) (Btu/h): ②	-	7100
Total Capacity (W) (High/Standard/Low):	3810/3517/908	4103/3810/703
Nominal Power Input (W)	960	1100
Nominal Input Current (A)	4.5	5.5
SEER / HSPF	18.0	10.2
EER / COP (Btu/h)/W	12.5	11.8
Air Flow Volume (CFM) (H//M/L/QUIET)	400/275/225/175	
Dehumidifying Volume (pt./h)	3.0	

Indoor Unit	M4MHW1812A1N0B	
Fan Motor Speed (r/min) (H//M/L/QUIET)	1400/1200/1050/800	1400/1200/1000/900
Fan Motor RLA(A)	0.09	
Evaporator	Aluminum Fin-Copper Tube	
Pipe Diameter (inch)	0.28	
Rows - Fin Gap (inch)	2.0 - 0.06	
Coil length (L) x depth (D) x coil width (W) (inch)	25 × 0.9 × 12.1	
Output of Swing Motor (W)	1.5	
Fuse (A)	3.15	
Sound PRESSURE Level dB (A)(H//M/L/QUIET) ①	45/39/35/29	
Uncrated Dimension (W/H/D) (inch)	33.3 × 11.4 × 8.2	
Crated Dimension of Package (L/W/H) (inch)	36.3 × 11.1 × 14.9	
Net Weight /Gross Weight (lbs)	22 / 26.5	

Outdoor Unit	M4THS1812A11NB	
Compressor Type	Swing	
Compressor Oil Type	DAPHNE FVC50K (PVE Oil)	
Compressor RLA(A)	4.0	
Compressor Power Input(W)	845	
Throttling Method	EEV	
Working Temp Range (°F)	0 ~ 115	-4 ~ 75
Condenser	Aluminum Fin-Copper Tube	
Pipe Diameter (inch)	0.38	
Rows - Fin Gap (inch)	2 - 0.06	
Coil length (L) x depth (D) x coil width (W) (inch)	29.4 × 1.7 × 22	
Fan Motor Speed (rpm)	900	
Output of Fan Motor (W)	30	
Fan Motor RLA (A)	0.36	
Air Flow Volume of Outdoor Unit (CFM)	693	
Fan Diameter (inch)	15.8	
Defrosting Method	Automatic Defrosting	
Sound PRESSURE Level dB (A)①	54	
Uncrated Dimension (W/H/D) (inch)	33.4 × 23.3 × 12.6	
Crated Dimension of Package (L/W/H) (inch)	34.7 × 14.3 × 25.4	
Net Weight /Gross Weight (lbs)	85.6 / 92.6	
Refrigerant Charge (oz)	48	
MCA	9	
MOP	15	

Connection Pipe	
Gas additional charge(oz/ft)	0.22
Outer Diameter Liquid Pipe (inch)	1/4
Outer Diameter Gas Pipe (inch)	1/2
Max Height Distance (ft)	55
Max Length Distance (ft)	100

① Sound PRESSURE Level @ 3.3 ft. dB(A)
② Capacities based on fixed compressor speed AHRI validation testing

Specifications - SI

MODEL - Heat Pump Only	M4MHW1812A1N0B / M4THS1812A11NB	
	Cooling	Heating
RATED Volts/PH	208 / 230 / 1	
Frequency (Hz)	60Hz	
Rated Cooling / Heating Capacity (Btu/h):	12000	13000
Minimum Cooling Capacity (@35°C) (Btu/h): ②	3100	-
Maximum Cooling Capacity (@35°C) (Btu/h): ②	13000	-
Minimum Heating Capacity (@8.3°C) (Btu/h): ②	-	2400
Maximum Heating Capacity (@8.3°C) (Btu/h): ②	-	14000
Rated Heating Capacity (@-8.3°C) (Btu/h): ②	-	7100
Total Capacity (W) (High/Standard/Low):	3810/3517/908	4103/3810/703
Nominal Power Input (W)	960	1100
Nominal Input Current (A)	4.5	5.5
SEER / HSPF	18.0	10.2
EER / COP (Btu/h)/W	12.5	11.8
Air Flow Volume (m^3/h) (H//M/L/QUIET)	680/490/410/290	
Dehumidifying Volume (L/h)	1.4	

Indoor Unit	M4MHW1812A1N0B	
Fan Motor Speed (r/min) (H//M/L/QUIET)	1400/1200/1050/800	1400/1200/1000/900
Fan Motor RLA(A)	0.09	
Evaporator	Aluminum Fin-Copper Tube	
Pipe Diameter (mm)	ϕ 7	
Rows - Fin Gap (mm)	2 - 1.4	
Coil length (L) x depth (D) x coil width (W) (mm)	635×22.8×306.3	
Output of Swing Motor (W)	1.5	
Fuse (A)	3.15	
Sound PRESSURE Level dB (A)(H//M/L/QUIET) ①	45/39/35/29	
Uncrated Dimension (W/H/D) (mm)	845×289×209	
Crated Dimension of Package (L/W/H) (mm)	921×281×379	
Net Weight /Gross Weight (kg)	10 / 12	

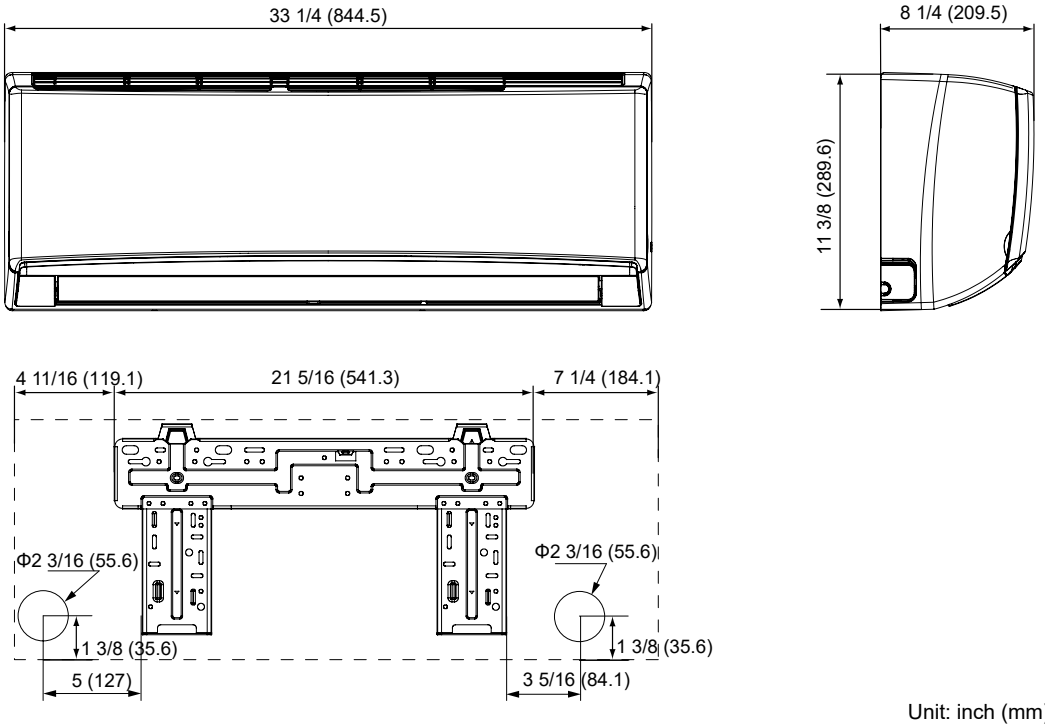
Outdoor Unit	M4THS1812A11NB	
Compressor Type	Swing	
Compressor Oil Type	DAPHNE FVC50K (PVE Oil)	
Compressor RLA(A)	4.0	
Compressor Power Input(W)	845	
Throttling Method	EEV	
Working Temp Range (°C)	-18 ~ 46	-20 ~ 24
Condenser	Aluminum Fin-Copper Tube	
Pipe Diameter (mm)	ϕ 9.5	
Rows - Fin Gap (mm)	3 - 1.4	
Coil length (L) x depth (D) x coil width (W) (mm)	747×44×559	
Fan Motor Speed (rpm)	900	
Output of Fan Motor (W)	30	
Fan Motor RLA (A)	0.36	
Air Flow Volume of Outdoor Unit (m^3h)	1177	
Fan Diameter (mm)	400	
Defrosting Method	Automatic Defrosting	
Sound PRESSURE Level dB (A)①	54	
Uncrated Dimension (W/H/D) (mm)	848×592×320	
Crated Dimension of Package (L/W/H) (mm)	881×363×645	
Net Weight /Gross Weight (kg)	39 / 42	
Refrigerant Charge (kg)	1.35	
MCA	9	
MOP	15	

Connection Pipe	
Gas additional charge(g/m)	20
Outer Diameter Liquid Pipe (mm)	ϕ 6
Outer Diameter Gas Pipe (mm)	ϕ 12
Max Height Distance (m)	17
Max Length Distance (m)	30

① Sound PRESSURE Level @ 1m dB(A)
② Capacities based on fixed compressor speed
AHRI validation testing

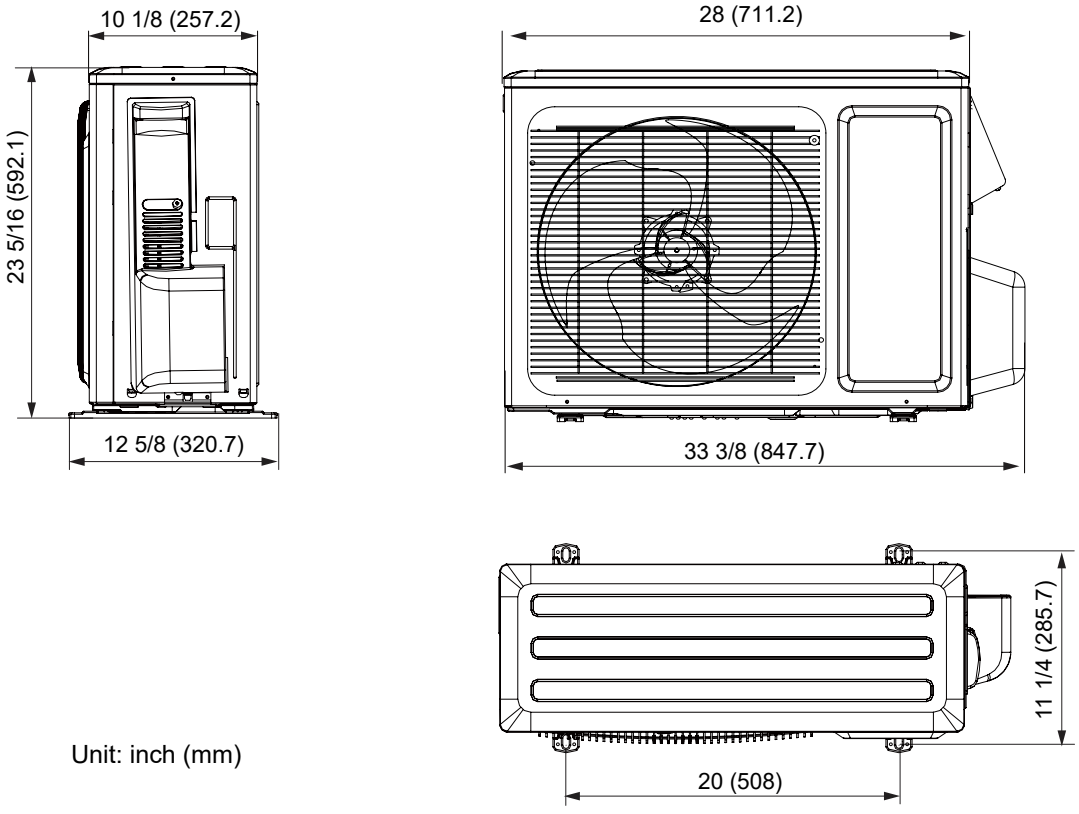
Unit Dimensions

12K Indoor Units



Unit: inch (mm)

12K Outdoor Units



Unit: inch (mm)

Performance Data

M4THS1812A11NB/M4MHW1812A1N0B - Cooling Mode Performance Data

Outdoor Ambient Air Temperature (°F)	Indoor Entering Air Temperature (Dry Bulb/Wet Bulb)							
	68/57°F		73/61°F		80/67°F		82/68°F	
	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
5	7200	5700	7700	6000	8300	6500	8400	6600
15	7900	6200	8400	6600	9500	7400	9600	7500
25	8700	6800	9300	7300	10600	8300	10800	8500
35	9200	7200	9800	7700	11100	8700	11300	8900
45	9700	7600	10400	8100	11600	9100	11800	9300
55	10200	8000	10900	8600	12000	9400	12400	9700
65	11200	8800	11900	9300	12900	10100	13200	10400
75	11500	9100	12300	9600	13200	10400	13500	10600
85	11100	8700	11800	9300	12900	10100	13200	10400
95	10500	8200	11200	8800	12300	9600	12700	9900
105	10000	7800	10700	8400	12000	9400	12300	9600
115	9400	7400	10100	7900	11300	8900	11600	9100
125	8600	6800	9000	7100	10200	8000	10500	8200

*Total Capacity **Sensible Heat Capacity

M4THS1812A11NB/M4MHW1812A1N0B- Heating Mode Performance Data

Outdoor Ambient Air Temperature (°F)	Indoor Entering Air Temperature			
	68°F	73°F	80°F	82°F
	TC*	TC	TC	TC
-5	6400	6300	6200	6100
0	7400	7200	7100	7000
5	7700	7600	7400	7400
10	8100	7900	7800	7700
15	8300	8100	8000	7900
20	8700	8500	8300	8300
25	9600	9400	9200	9200
30	10300	10100	9900	9900
35	11000	10800	10600	10600
40	11700	11500	11400	11300
45	12700	12500	12200	12200
50	13300	13000	12700	12600
55	13500	13200	12900	12800
60	13800	13400	13100	13000
65	14000	13700	13400	13300
70	14300	13900	13600	13500
75	14500	14100	13800	13700
80	14700	14300	14000	13900

*Total Capacity

Capacities in these performance tables reflect normal operation at the temperatures indicated. See specification tables above for certified values under prescribed test conditions.

Application Area/Air Throw for High Wall			
Model	Application Area	Cooling Mode	Heating Mode
M4MHW1812	172-258 sf. (16-24 m²)	29.5 (9)	23 (7)
			Unit: ft. (m)

Mechanical Specifications

Single Zone Outdoor Unit

General

This unit shall be fully charged from the factory for 25 feet (7.6m) of piping. This unit is designed to operate at outdoor ambient temperatures as high as 115°F (46°C). Cooling capacities with the mini-split air handler shown in the catalog are AHRI certified. The unit is ETL listed for outdoor application.

Unit Casing

The unit casing shall be constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint.

Refrigerant Controls

Refrigeration system controls include condenser fan and compressor relay. High and low pressure controls are inherent to the compressor. A suction line multi function service valve is standard

Compressor

The compressor features internal over temperature and pressure protection; total dipped hermetic motor windings. Other features include: centrifugal oil pump and low vibration and noise.

Condenser Coil

The coil shall consist of aluminum finned coils brazed to copper tubing. The coil provides airflow resistance and efficient heat transfer. The coil is protected by the casing.

Low Ambient Cooling

Matched 18 Series Energy Star® ductless products, have a cooling capability to 0°F (-18°C) and heating capability to -4° F (-20°C).

Single Zone Indoor High Wall

General

The High Wall mounted type air handler shall be completely factory assembled including coil, condensate drain pan, fan motor, washable filter, air purifying filter and electric controls to be used with a wireless remote controller. Unit shall be shipped with a unit mounting plate. Unit shall be matched with a 18 Series Energy Star® outdoor unit, rated and tested in accordance with AHRI standard. Unit shall be ETL listed.

Unit Casing

Casing shall be provided with knockouts on the right, and left of the unit to facilitate piping and electrical connection on either side of the unit. An electrical service cover shall be provided to permit easy access to the electrical terminal strip.

Discharge Airflow and Distribution System

Unit shall have auto swing, dual horizontal blades to optimize the aperture outlet for vertical airflow and air distribution. Blade shall close automatically when the air conditioner is turned off to minimize dust entering the unit. Five-Step preset program on the remote controller shall be available to control the blade angle.

Manually adjusted wide-angle louvers shall be provided to adjust the coverage and direction of airflow.

Controls

Units shall have the capability to be controlled remotely.

Remote Controller

The unit shall have an optional wireless infrared remote controller with an easily readable digital display panel to start, stop and regulate the air conditioner from a distance.

The wireless controller is included with all units. .

Healthy Filters

The unit shall have one combined active carbon and catechin filter with the unit. The filter needs to be cleaned at least once a year.

About Trane and American Standard Heating and Air Conditioning
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The AHRI Certified mark indicates company participation in the AHRI Certification program. For verification of individual certified products, go to ahridirectory.org.

The manufacturer has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

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