

TAG: \_\_\_\_\_

## SUBMITTAL

### 18 SERIES

### Single Zone Mini-Split Inverter System

M4MLW1812A1N0B

M4TLS1812A11NB

### Specifications

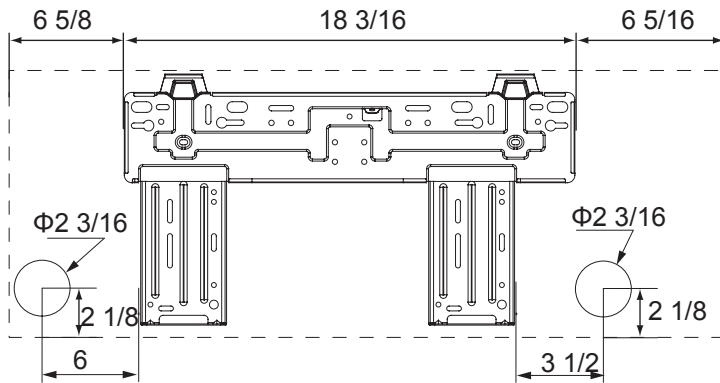
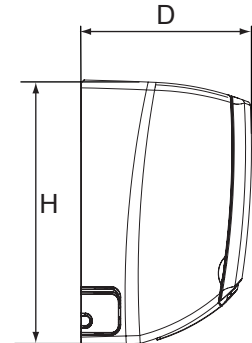
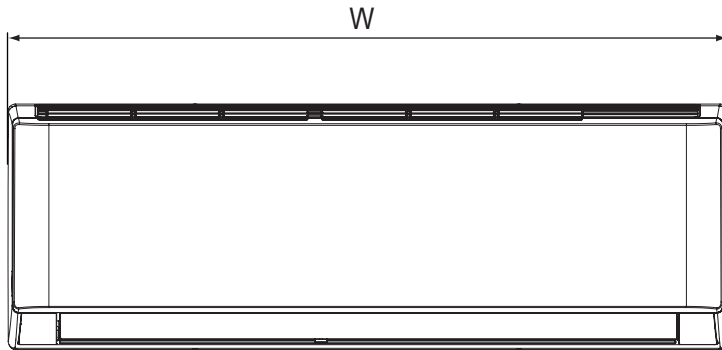
<b>MODEL - Heat Pump Only</b>	<b>M4MLW1812A / M4TLS1812A</b>	
	<b>Cooling</b>	<b>Heating</b>
RATED Volts/PH	208 / 230 / 1	
Frequency (Hz)	60Hz	
Rated Cooling / Heating Capacity (Btu/h):	12100	12900
Minimum Cooling Capacity (@95F) (Btu/h):	3750	-
Maximum Cooling Capacity (@95F) (Btu/h):	12500	-
Minimum Heating Capacity (@47F) (Btu/h):	-	3924
Maximum Heating Capacity (@47F) (Btu/h):	-	14000
Maximum Heating Capacity (@17F) (Btu/h):	-	8100
Total Capacity (W) (High/Standard/Low):	3664 / 3525 / 1100	4103 / 3810 / 1150
Rated Power Input (W)	1150	1250
Nominal Input Current (A)	5.1	5.55
SEER / HSPF	18.5	9.2
Air Flow Volume (CFM) (H/M/L)	680 / 540 / 410 / 330	
Dehumidifying Volume (pt./h)	3.0	
EER (Btu/W hr)/COP	10.4	3.05
<b>Indoor Unit</b>		
	<b>M4MLW1812A1N0</b>	
Fan Motor Speed (r/min) (SH/H/M/L)	1350 / 1200 / 1000 / 800	1350 / 1200 / 1000 / 900
Fan Motor RLA(A)	0.31	
Evaporator	Aluminum Fin-Copper Tube	
Pipe Diameter (inch)	0.2	
Row Fin Gap (inch)	2 - 0.055	
Coil length (L) x depth (D) x coil width (W) (inch)	25.0 x 0.9 x 12.0	
Output of Swing Motor (W)	1.5	
Fuse (A)	3.15	
Sound Power Level dB (A)(SH/H/M/L)	53 / 49 / 45 / 39	
Sound PRESSURE Level dB (A)(SH/H/M/L) ①	43 / 39 / 35 / 29	
Uncrated Dimension (W/H/D) (inch)	33.3 x 11.4 x 8.2	
Crated Dimension of Package (L/W/H) (inch)	36.3 x 11.1 x 14.9	
Net Weight /Gross Weight (lbs)	23.1 / 27.6	
<b>Outdoor Unit</b>		
	<b>M4TLS1812A11N</b>	
Compressor Type	Rotary	
Compressor Oil	RB68EP (POE Oil)	
L.R.A. (A)	35.0	
Compressor RLA(A)	6.60	
Compressor Power Input(W)	1020	
Throttling Method	EEV	
Working Temp Range (°F)	0 - 115	-13 - 75
Condenser	Aluminum Fin-Copper Tube	
Pipe Diameter (inch)	0.28	
Row Fin Gap (inch)	2 - 0.055	
Coil length (l) x depth (D) x coil width (W) (inch)	28 x 1.5 x 20	
Fan Motor Speed (rpm)	900	
Output of Fan Motor (W)	30	
Fan Motor RLA (A)	0.37	
Air Flow Volume of Outdoor Unit (CFM)	1600	
Fan Diameter (inch)	15.7	
Defrosting Method	Automatic Defrosting	
Sound Power Level dB (A)	63	
Sound PRESSURE Level dB (A) ①	53	
Uncrated Dimension (W/H/D) (inch)	30.6 x 21.3 x 12.6	
Crated Dimension of Package (W/L/H) (inch)	32.4 x 14.1 x 23.4	
Net Weight /Gross Weight (lbs)	69.4 / 75.0	
Refrigerant Charge (oz)	31.8	
MCA	9.0	
MOP	15.0	
<b>Connection Pipe</b>		
Refrigerant additional charge(oz/ft)	0.22	
Outer Diameter Liquid Pipe (inch)	1/4	
Outer Diameter Gas Pipe (inch)	3/8	
Max Height Distance (ft)	66	
Max Length Distance (ft)	98	

① Sound PRESSURE Level @ 3.3 ft. dB(A)

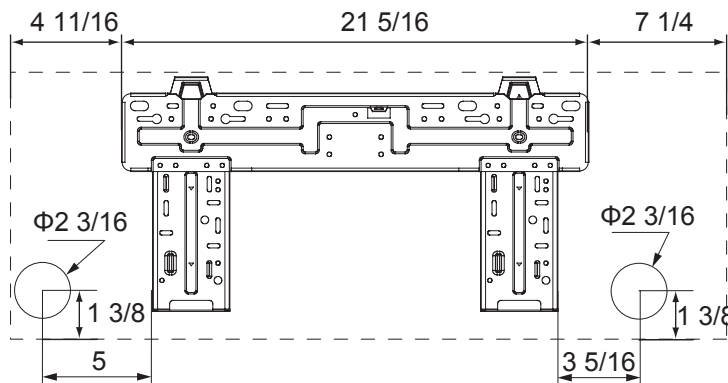
# Unit Dimensions

## Indoor Unit Dimensions

### 9K-12K Indoor Units



09K



12K

The dimensions in these drawings are rounded according to standard measurement.

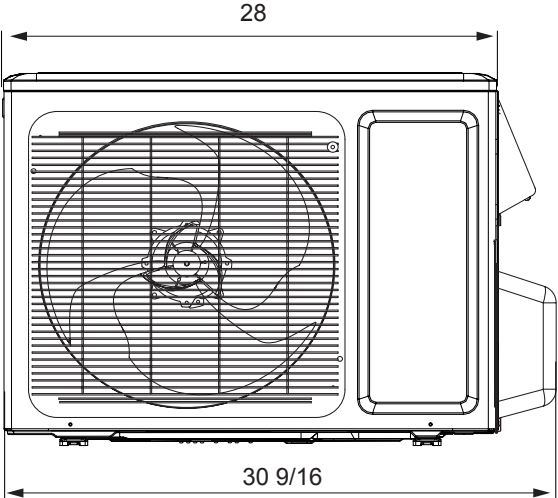
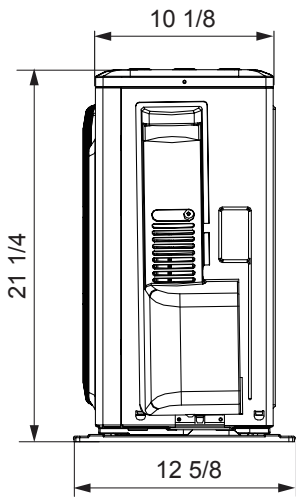
Unit:inch

MODEL	W	H	D
09K	31 1/8	10 7/8	7 7/8
12K	33 1/4	11 3/8	8 1/4

# Unit Dimensions

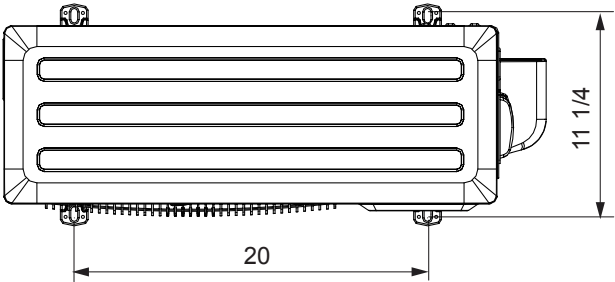
## Outdoor Unit Dimensions

### 9K-12K Outdoor Units

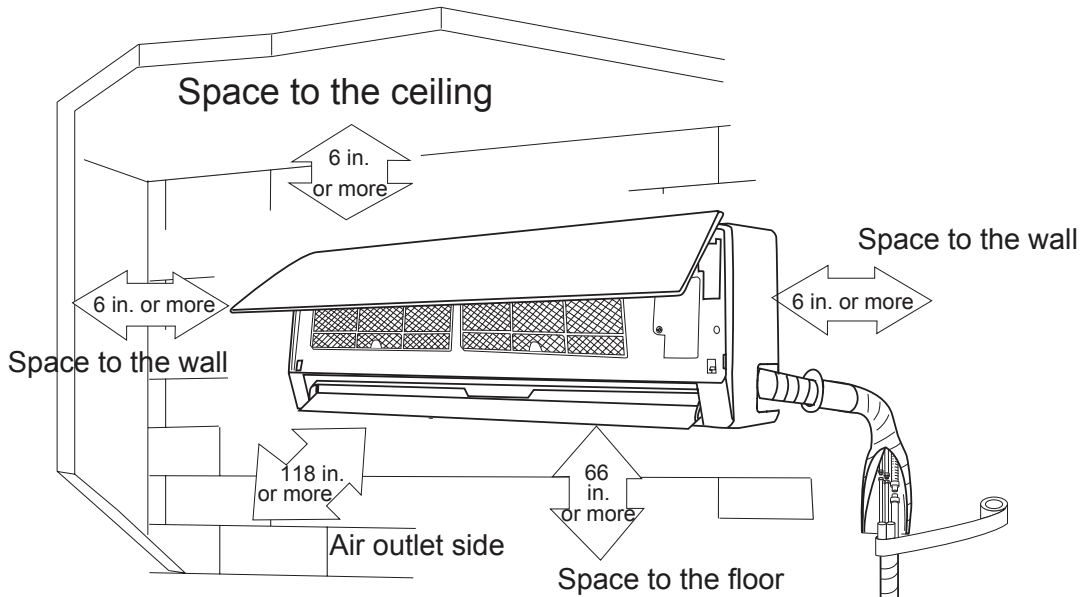


The dimensions in these drawings are rounded according to standard measurement.

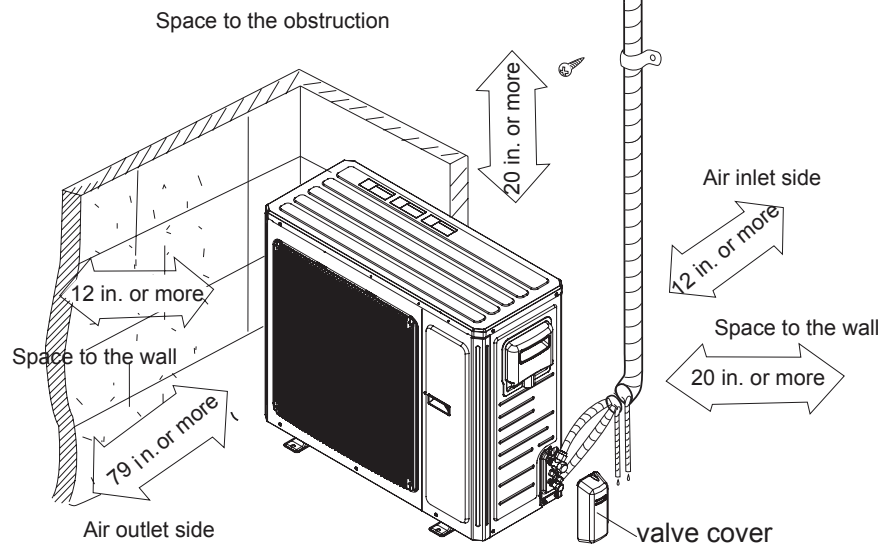
Unit:inch



# Clearance Requirements



The dimensions of the space necessary for correct installation of the appliance including the minimum permissible distances to adjacent structures



**NOTE:**

The maximum recommended height from the floor to the bottom of the indoor unit is 11.5 ft. (3.5 m).

Air Velocity Patterns for High Wall		
Max Horizontal Distance		
Unit: ft. (m)		
Model	Cooling Mode	Heating Mode
M4MLW1812A	29.5 (9)	19.7 (6)

# Performance Data

## M4TLS1812A1/M4MLW1812A1 - 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
0	6800	5400	7200	5700	7600	6400	7700	6700
10	7500	5900	7900	6300	8800	7100	8900	7200
20	8200	6500	8800	6900	10000	7800	10100	7900
30	9100	6900	9300	7500	11300	8400	11500	8600
40	9700	7300	10000	8000	11700	8800	12000	9100
50	10000	7800	10600	8400	11900	9200	12200	9600
55	10100	7900	10800	8500	12000	9300	12300	9700
60	10400	8100	11100	8700	12100	9500	12500	9800
65	11000	8600	11700	9100	12500	9700	12700	10200
70	11400	8900	12100	9400	12800	9900	12900	10400
75	11400	8900	12100	9400	12900	10100	13200	10400
80	11100	8800	11900	9300	12900	10100	13200	10300
85	10700	8500	11700	9100	12700	9900	13000	10200
90	10500	8300	11400	8900	12400	9700	12800	10000
95	10300	8100	11100	8700	12100	9500	12500	9800
100	10100	7900	10800	8500	12000	9400	12300	9700
105	9800	7800	10600	8300	11800	9300	12200	9500
110	9600	7600	10300	8100	11600	9100	11900	9300
115	9300	7400	10100	7900	11300	8900	11600	9100

\*Total Capacity \*\*Sensible Heat Capacity

## M4TLS1812A1/M4MLW1812A1 - 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
-13	4500	4400	4300	4300
-10	5500	5300	5200	5200
-5	6400	6300	6100	6100
0	7300	7200	7000	7000
5	7700	7500	7300	7300
10	8100	7900	7700	7700
15	8300	8100	7900	7900
20	8700	8500	8300	8200
25	9600	9400	9200	9100
30	10300	10100	9900	9800
35	11000	10800	10600	10500
40	11700	11500	11300	11200
45	12600	12400	12100	12100
50	13200	12900	12600	12600
55	13400	13100	12800	12700
60	13700	13300	13000	13000
65	13900	13600	13300	13200
70	14200	13800	13500	13400
75	14400	14000	13700	13600

\*Total Capacity

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

# Mechanical Specifications

## Mini-Split Outdoor Unit

### General

This unit is fully charged from the factory for up to 25 feet of piping. This unit is designed to operate at outdoor ambient temperatures as high as 115°F. 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 is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint.

### Refrigerant Controls

The compressor motor and condenser fan motor are controlled and monitored by an integrated electronic module. Additionally, the same module monitors sensors to control refrigerant flow through the sealed system as well as air flow.

### 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 condenser coil is constructed from aluminum plate fins and copper tubing. The coil provides air flow resistance and efficient heat transfer.

### Low Ambient Operation

Matched ductless products, have cooling capabilities at outdoor ambient temperatures as low as 0° F and heating capabilities at outdoor ambient temperatures as low as -13° F.

## Mini-Split 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 an 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 through wall-mounted wired options (**sold separately**) as well as a wireless remote option.

### Remote Controller

The unit shall have a wireless infrared remote controller with easy reading 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 an active carbon and catechin filter with the unit. The filters need to be cleaned at least once a year.

## About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit [www.trane.com](http://www.trane.com) or [www.americanstandardair.com](http://www.americanstandardair.com)



The AHRI Certified mark indicates company participation in the AHRI Certification program. For verification of individual certified products, go to [ahridirectory.org](http://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.