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SUBMITTAL

18 SERIES

Single Zone Mini-Split Inverter System

M4MLW1809A1N0B

M4TLS1809A11NB

Specifications

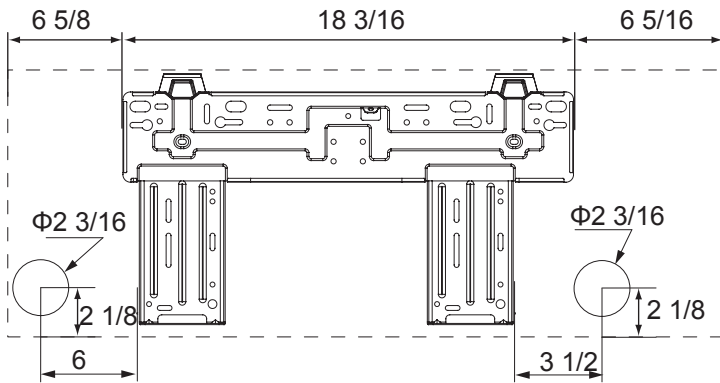
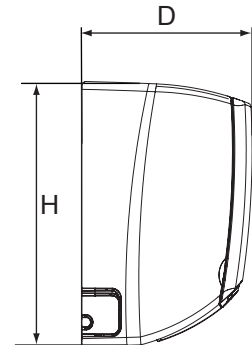
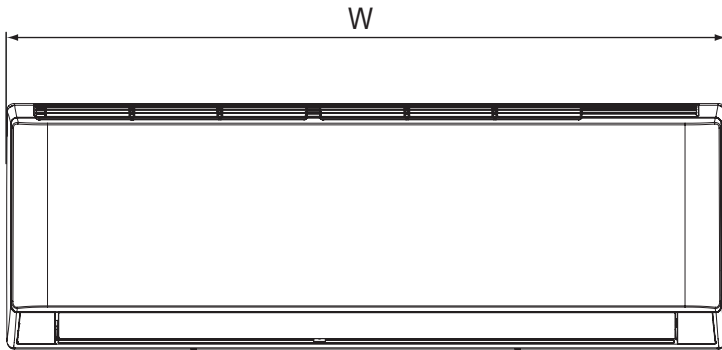
MODEL - Heat Pump Only	M4MLW1809A / M4TLS1809A	
	Cooling	Heating
RATED Volts/PH	208 / 230 / 1	
Frequency (Hz)	60Hz	
Rated Cooling / Heating Capacity (Btu/h):	9200	10000
Minimum Cooling Capacity (@95F) (Btu/h):	3100	-
Maximum Cooling Capacity (@95F) (Btu/h):	9600	-
Minimum Heating Capacity (@47F) (Btu/h):	-	3100
Maximum Heating Capacity (@47F) (Btu/h):	-	12000
Maximum Heating Capacity (@17F) (Btu/h):	-	5800
Total Capacity (W) (High/Standard/Low):	2814 / 2625 / 908	3517 / 2784 / 909
Rated Power Input (W)	850	850
Nominal Input Current (A)	4.0	3.8
SEER / HSPF	18.5	10.2
Air Flow Volume (CFM) (H/M/L)	540 / 490 / 410 / 290	
Dehumidifying Volume (pt./h)	1.7	
EER (Btu/W hr)/COP	10.6	3.28
Indoor Unit		
M4MLW1809A1N0		
Fan Motor Speed (r/min) (SH/H/M/L)	1350 / 1200 / 1050 / 750 1350 / 1200 / 1050 / 850	
Fan Motor RLA(A)	0.22	
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)	23.0 x 0.9 x 10.5	
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 / 38 / 34 / 28	
Uncrated Dimension (W/H/D) (inch)	31.1 x 10.8 x 7.9	
Crated Dimension of Package (L/W/H) (inch)	34.1 x 10.7 x 14.4	
Net Weight /Gross Weight (lbs)	20.9 / 25.4	
Outdoor Unit		
M4TLS1809A11N		
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)	1 - 0.055	
Coil length (l) x depth (D) x coil width (W) (inch)	28 x 0.7 x 20	
Fan Motor Speed (rpm)	900	
Output of Fan Motor (W)	30	
Fan Motor RLA (A)	0.36	
Air Flow Volume of Outdoor Unit (CFM)	1600	
Fan Diameter (inch)	15.7	
Defrosting Method	Automatic Defrosting	
Sound Power Level dB (A)	62	
Sound PRESSURE Level dB (A) ①	52	
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 13.3 x 23.4	
Net Weight /Gross Weight (lbs)	63.9 / 69.4	
Refrigerant Charge (oz)	24.7	
MCA	9.0	
MOP	15.0	
Connection Pipe		
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)

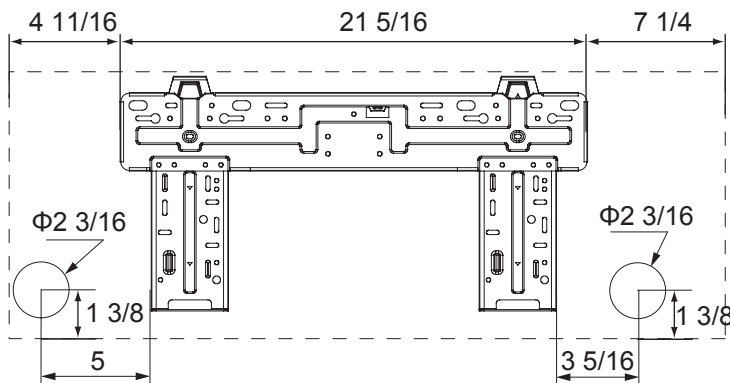
Unit Dimensions

Indoor Unit Dimensions

9K-12K Indoor Units



09K



12K

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

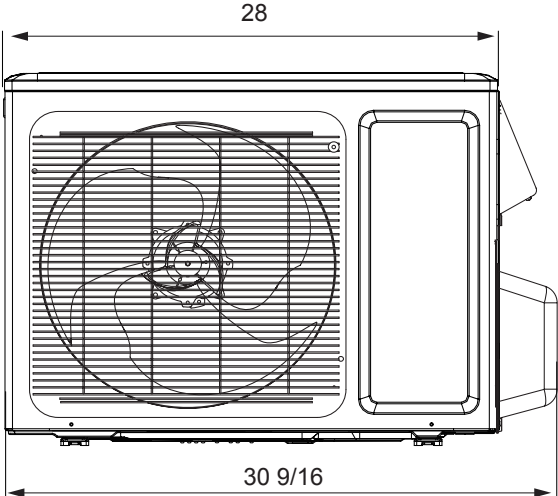
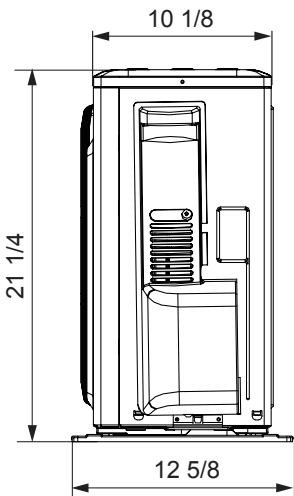
Unit:inch

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

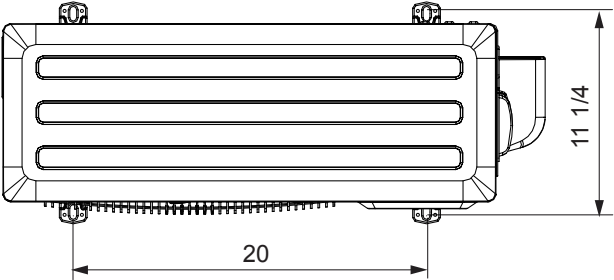
Outdoor Unit Dimensions

9K-12K Outdoor Units

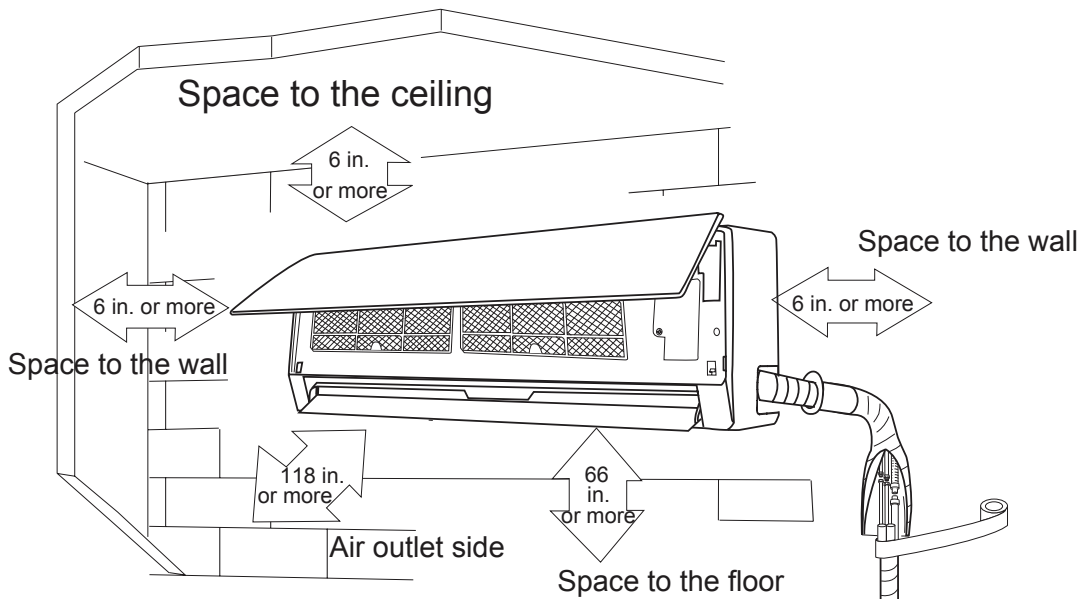


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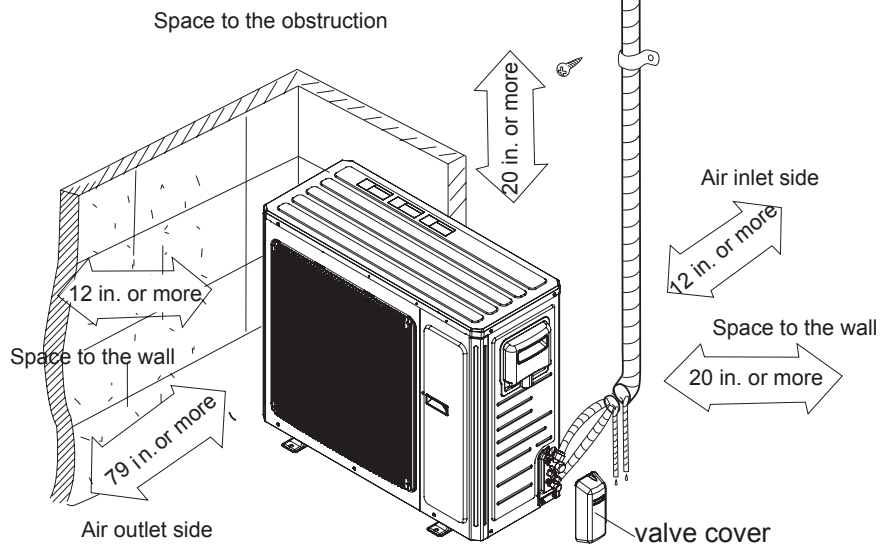
Unit:inch



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
M4MLW1809A	13.1 (4)	13.1 (4)

Performance Data

M4TLS1809A1/M4MLW1809A1 - 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	4500	3600	4800	3800	5400	4300	5600	4500
10	5400	4300	5700	4600	6400	5100	6700	5300
20	6100	4900	6500	5300	7400	6000	7700	6200
30	6500	5200	6900	5500	7800	6200	8100	6500
40	6700	5400	7100	5700	8000	6400	8400	6700
50	7000	5600	7400	5900	8400	6700	8700	7000
60	7700	6300	8300	6700	9000	7300	9800	8000
65	8300	6800	8800	7200	9500	7800	10300	8400
70	8600	7100	9200	7500	9800	8000	10500	8600
75	8600	7000	9100	7500	9700	8000	10400	8500
80	8400	6900	8900	7400	9600	7900	10300	8500
85	8200	6800	8700	7200	9500	7900	10200	8400
90	7900	6600	8500	7100	9300	7700	10000	8300
95	7700	6500	8200	6900	9000	7600	9800	8300
100	7500	6300	8000	6700	8900	7500	9600	8100
105	7300	6100	7800	6600	8700	7300	9400	7900
110	7100	6000	7600	6400	8500	7200	9200	7800
115	6900	5800	7400	6300	8300	7100	9000	7700

*Total Capacity **Sensible Heat Capacity

M4TLS1809A1/M4MLW1809A1 - 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	4200
-5	4900	4800	4700	4600
0	5300	5300	5200	5000
5	5600	5500	5400	5300
10	5900	5800	5700	5500
15	6000	5900	5800	5700
20	6300	6200	6100	6000
25	7000	6900	6700	6600
30	7500	7400	7300	7100
35	8100	8000	7800	7700
40	8700	8600	8500	8300
45	9600	9500	9300	9100
50	9800	9600	9400	9200
55	10000	9800	9600	9400
60	10200	10000	9800	9600
65	10300	10200	10000	9700
70	10500	10300	10100	9800
75	10600	10400	10200	9900

*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

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