

TAG:		

# **SUBMITTAL**

## 18 SERIES

# **Specifications**

Single Zone Mini-Split Inverter System

M4MLW1809A1N0A M4TLS1809A11NA

MODEL - Heat Pump Only	M4MLW1809A / M4TLS1809A			
RATED Volts/PH	Cooling Heating 208 / 230 / 1			
Frequency (Hz)	60			
Rated Cooling / Heating Capacity (Btu/h): Minimum Cooling Capacity (@95F) (Btu/h): Maximum Cooling Capacity (@95F) (Btu/h): Minimum Cooling Capacity (@95F) (Btu/h):	9200	10000		
Minimum Cooling Capacity (@95F) (Btu/h):	3100	-		
Maximum Cooling Capacity (@95F) (Btu/n):	9600	-		
Minimum Heating Capacity (@47F) (Btu/h):	-	3100		
Maximum Haating Capacity (@47F) (Dtu/II).	-	12000 5800		
Minimum Heating Capacity (@47F) (Btu/h): Maximum Heating Capacity (@47F) (Btu/h): Maximum Heating Capacity (@17F) (Btu/h): Total Capacity (W) (High/Standard/Low): Rated Power Input (W)	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) Dehumidifying Volume (pt./h) EER (Btu/W hr)/COP	540 / 490,	′_410 / 290		
Dehumidifying Volume (pt./h)	1.	.7		
EER (Btu/W nr)/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)
 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

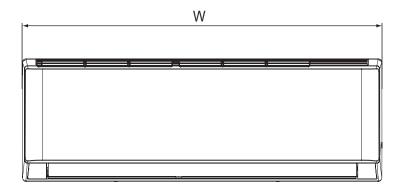
Outdoor Huit	BATI 04000A44N
Outdoor Unit	M4TLS1809A11N
Compressor Type	Rotary
Compressor Oil	RB68EP (POE Oil)
L.R.A. (A)	35.0
Compressor RLA(A)	6.60
Compressor Power Input(W)	<u>1</u> 020
Throttling Method	EEV
Working Temp Range (°F)	0 - 115 -13 - 75
Condenser	Aluminum Fin-Copper Tube
Pipe Diameter (inch)	0.28
Row Fin Gap (inch)	1 - 0.055
Coil length (I)`x depth (D) x coil width (W) (inch) Fan Motor Speed (rpm)	$28 \times 0.7 \times 20$
Fan Motor Speed (rpm)	900
Output of Fan Motor (Ŵ)	30
Fan Motor RLA (A) Air Flow Volume of Outdoor Unit (CFM)	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

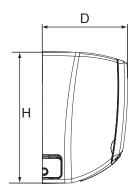
Connection PipeRefrigerant additional charge(oz/ft)0.22Outer Diameter Liquid Pipe (inch)1/4Outer Diameter Gas Pipe (inch)3/8Max Height Distance (ft)66Max Length Distance (ft)98

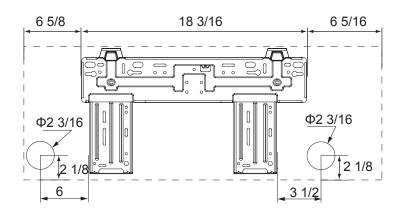
① Sound PRESSURE Level @ 3.3 ft. dB(A)

### **Indoor Unit Dimensions**

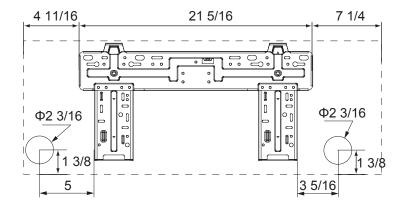
### 9K-12K Indoor Units







09K



12K

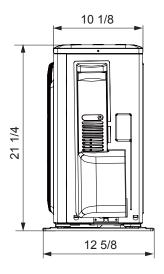
The dimensions in these drawings are rounded according to standard measurement.

Unit:inch

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

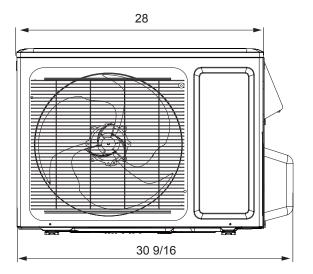
## **Outdoor Unit Dimensions**

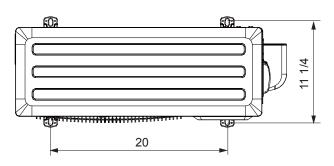
### 9K-12K Outdoor Units



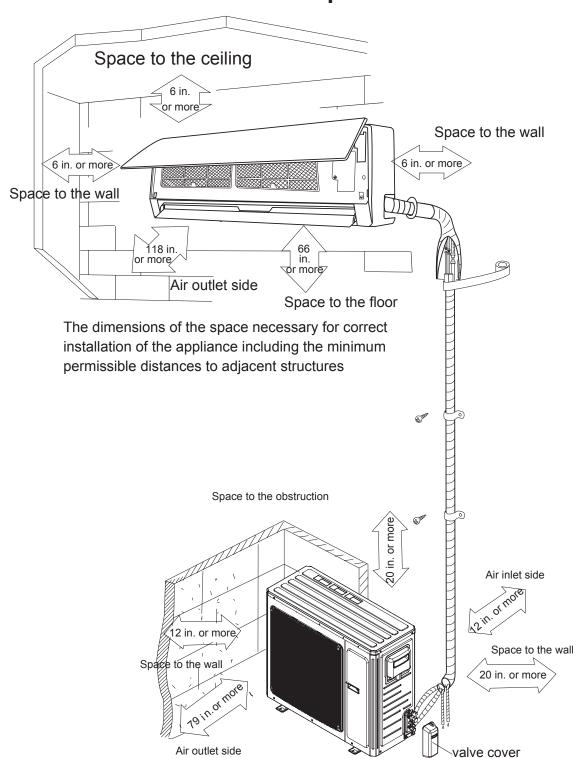
The dimensions in these drawings are rounded according to standard measurement.

Unit:inch





# **Clearance Requirements**



### 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)	Unit: ft. (m)					
Model Cooling Mode Heating Mode						
M4MLW1809A	13.1 (4)	13.1 (4)				

## **Performance Data**

M4TLS1809A1/M4MLW1809A1 - Cooling Mode Performance Data

Outdoor	Indoor Entering Air Temperature (Dry Bulb/Wet Bulb)							
Ambient Air Temperature	68/5	57°F	73/6	51°F	80/6	57°F	82/6	58°F
(°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 Hea	t Capacity						

### M4TLS1809A1/M4MLW1809A1 - Heating Mode Performance Data

Outdoor	Indoor Entering Air Temperature					
Ambient Air Temperature	68°F	73°F	80°F	82°F		
(°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 condensor coil is constructed from aluminum plate fins and copper tubing. The coil provides air flow resistance and efficient heat transfer.

### **Low Ambient Operation**

Matched Ameristar 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 Ameristar 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.







01/18

The manufacturer has a policy of continuous product and product data improvement **and** it reserves the right to change design and specifications without notice.



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# **SUBMITTAL**

## 18 SERIES

# **Specifications**

Single Zone Mini-Split Inverter System

M4MLW1812A1N0A M4TLS1812A11NA

MODEL - Heat Pump Only	M4MLW1812A / M4TLS1812A				
RATED Volts/PH	Cooling Heating 208 / 230 / 1				
Frequency (Hz)	60H				
Rated Cooling / Heating Capacity (Btu/h):	12100	12900			
Minimum Cooling Capacity (@95F) (Btu/h): Maximum 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): Maximum Heating Capacity (@17F) (Btu/h):	-	14000			
Total Capacity (W) (High/Standard/Low):	3664 / 3525 / 1100	8100 4103 / 3810 / 1150			
Rated Power Input (W)	1150	1250			
Nominal Input Currènt (A)	5.1	5.55			
SEER / HSPF	18.5	9.2			
Air Flow Volume (CFM) (H/M/L) Dehumidifying Volume (pt./h) EER (Btu/W hr)/COP	680 / 540 / 410 / 330				
Dehumidifying Volume (pt./h)	3.0				
EER (Btu/W hr)/COP	10.4	3.05			

 Indoor Unit
 M4MLW1812A1N0

 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

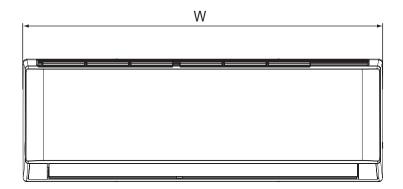
A 11 11 11	
Outdoor Unit	M4TL <u>\$</u> 1812A11N
Compressor Type	Rotary
Compressor Oil	RB68EP (PĎE Oil)
L.R.A. (A)	35.0
Compressor RLA(A)	6.60
Compressor Power Input(W)	1020
Throttling Method	EEV
Working Temp Range (°F)	0 - 115 -13 - 75
Condenser	Aluminum Fin-Copper Tube
Pipe Diameter (inch)	0.28
Row Fin Gap (inch)	2 - 0.055
Coil length (I) x depth (D) x coil width (W) (inch)	28 × 1.5 × 20
Coil length (I) x depth (D) x coil width (W) (inch) Fan Motor Speed (rpm)	900
Output of Fan Motor (W)	30
Fan Motor RI A (A)	0.37
Fan Motor RLA (A) 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	
MOP	9.0
IVIOF	15.0

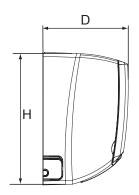
Connection PipeRefrigerant additional charge(oz/ft)0.22Outer Diameter Liquid Pipe (inch)1/4Outer Diameter Gas Pipe (inch)3/8Max Height Distance (ft)66Max Length Distance (ft)98

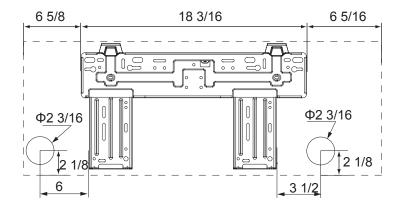
① Sound PRESSURE Level @ 3.3 ft. dB(A)

### **Indoor Unit Dimensions**

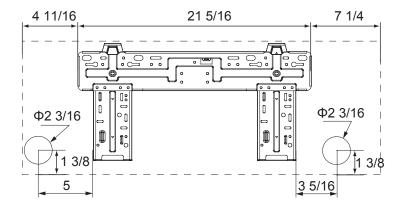
### 9K-12K Indoor Units







09K



12K

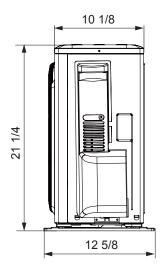
The dimensions in these drawings are rounded according to standard measurement.

### Unit:inch

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

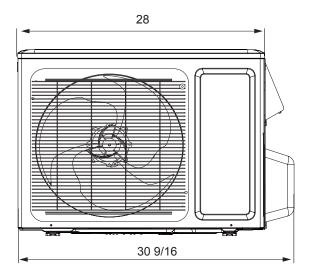
## **Outdoor Unit Dimensions**

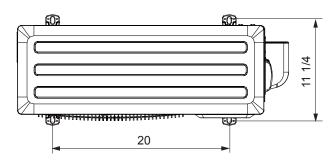
### **9K-12K Outdoor Units**



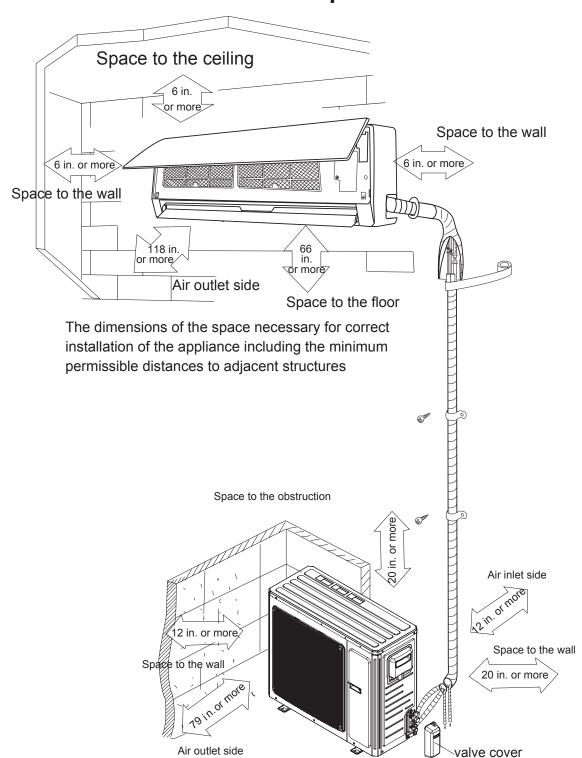
The dimensions in these drawings are rounded according to standard measurement.

Unit:inch





# **Clearance Requirements**



### 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	Indoor Entering Air Temperature (Dry Bulb/Wet Bulb)							
Ambient Air Temperature	68/5	57°F	73/6	51°F	80/6	57°F	82/6	58°F
(°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 Hea	t Capacity						

### M4TLS1812A1/M4MLW1812A1 - Heating Mode Performance Data

Outdoor	Indoor Entering Air Temperature			
Ambient Air Temperature	68°F	73°F	80°F	82°F
(°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			<del></del>	

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

### **Low Ambient Operation**

Matched Ameristar 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 Ameristar 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**

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### **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.







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# SUBMITTAL

## 18 SERIES

# **Specifications**

Single Zone Mini-Split Inverter System

M4MLW1818A1N0A M4TLS1818A11NA

MODEL - Heat Pump Only	M4MLW1818A	/ M4TLS1818A
RATED Volts/PH	Cooling 208/2	
Frequency (Hz) Rated Cooling / Heating Capacity (Btu/h): Minimum Cooling Capacity (@95F) (Btu/h):	17800 3400	20000
Maximum Cooling Capacity (@95F) (Btu/h): Minimum Heating Capacity (@47F) (Btu/h):	20475 -	3400
Maximum Heating Capacity (@47F) (Btu/h): Maximum Heating Capacity (@17F) (Btu/h):	- -	21850 11600
Total Capacity (W) (High/Standard/Low): Rated Power Input (W)	6000 / 5275 / 1000 1820	6400 / 5803 / 1000 2090
Nominal Input Currènt' (A) SEER / HSPF	8.1 18.0	8.5 9.2
Air Flow Volume (CFM) (H/M/L) <u>Dehumidifying Volume</u> (pt./h)	850 / 750 / 3.	
EER (Btu/W hr)/COP	9.9	2.78

Indoor Unit	M4MLW1818A1N0
Fan Motor Speed (r/min) (SH/H/M/L) Fan Motor RLA(A)	1350 / 1200 / 1050 / 900
Fan Motor RLA(A)` ´ `	0.37
Evaporator	Aluminum Fin-Copper Tube
Pipė Diameter (inch)	0.286
Rów Fin Gap (inch)	2 - 0.055
Coil length (L) x dépth (D) x coil width (W) Output of Swing Motor (W)	(inch) $28.0 \times 1.0 \times 12.0$
Output of Swing Motor (W)	2.5
Fuse (A)	3.15
Sound Power Level dB (A)(SH/H/M/L)	57 / 54 / 51 / 45
Sound PRESSURE Level dB (A)(SH/H/M/L)	
Uncrated Dimension (W/H/D) (inch)	38.2 x 11.8 x 8.8
Crated Dimension of Package (L/W/H) (incl	
Net Weight /Gross Weight (Ĭbs)	30.9 / 37.5

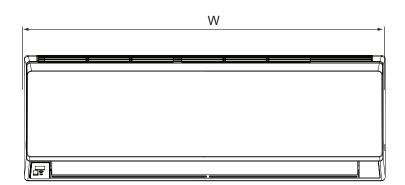
Outdoor Unit	M4TLS1818A11N
Compressor Type	Rotary
Compressor Oil	RB68EB (PĎE Oil)
L.R.Á. (A)	25 ′
Comprèssor RLA(A)	12.08
Compressor Power Input(W)	1440
Throttling Method · ` ` ´	EEV
Working Temp Range (°F)	0 - 115 -13 - 75
Condenser	Aluminum Fin-Copper Tube
Pipe Diameter (inch)	0.37
Rów Fin Gap (inch)	1 - 0.055
Coil length (I)`x depth (D) x coil width (W) (inch) Fan Motor Speed (rpm)	33.6 x 0.9 x 26
Fan Motor Speed (rpm)	800
Output of Fan Motor (W)	60
Fan Motor RLA (A)	0.52
Air Flow Volume of Outdoor Unit (CFM)	3200
Fan Diameter (inch)	20.5
Defrosting Method	Automatic Defrosting
Sound Power Level dB (A)	67
Sound PRESSURE Level dB (A) ①	57
Uncrated Dimension (W/H/D) (inch)	37.6 x 27.6 x 15.6
Crated Dimension of Packagé (W/L/H) (inch) Net Weight /Gross Weight (lbs)	40.5 x 18 x 29.5
Net Weight /Gross Weight (Ibs)	97.0 / 106.9
Refrigerant Charge (oz) ` ` ´	45.9
MCA	16.0
MOP	25.0

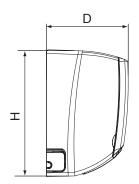
Connection PipeRefrigerant additional charge(oz/ft)0.22Outer Diameter Liquid Pipe (inch)1/4Outer Diameter Gas Pipe (inch)1/2Max Height Distance (ft)66Max Length Distance (ft)98

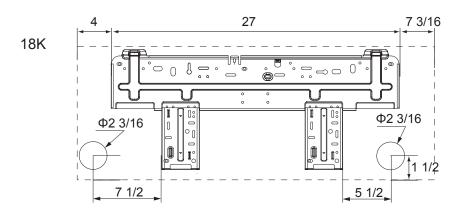
① Sound PRESSURE Level @ 3.3 ft. dB(A)

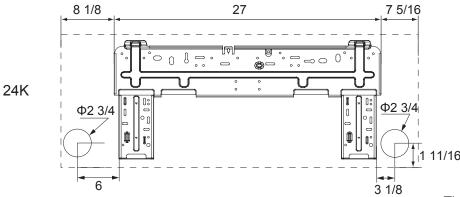
## **Indoor Unit Dimensions, continued**

### 18K-24K Indoor Units









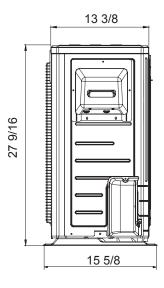
The dimensions in these drawings are rounded according to standard measurement.

Unit: inch

Models	W	Н	D
18K	38 3/16	11 13/16	8 13/16
24K	42 7/16	12 13/16	9 11/16

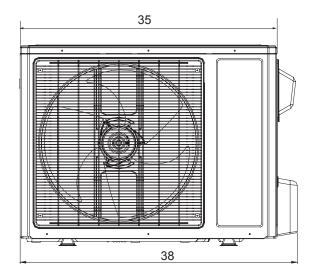
## **Outdoor Unit Dimensions**

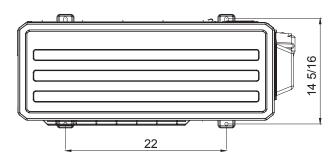
### 18K-24K Outdoor Units



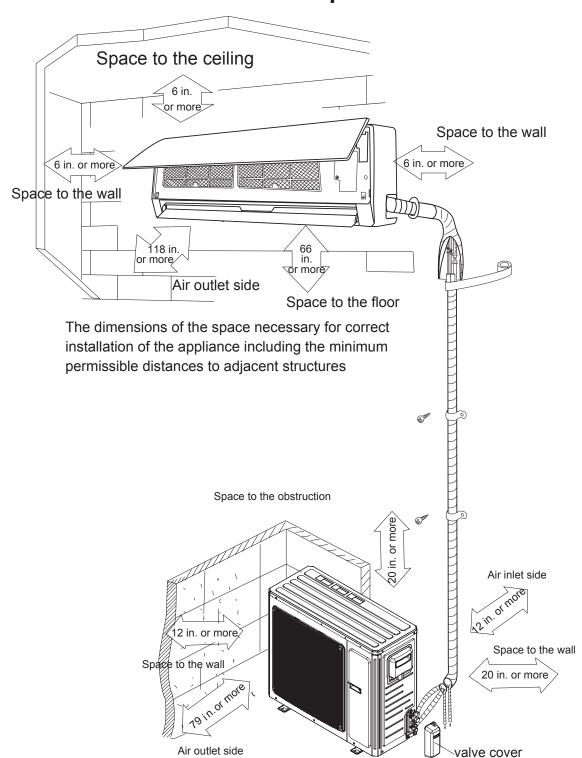
The dimensions in these drawings are rounded according to standard measurement.

Unit: inch





# **Clearance Requirements**



### 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				
M4MLW1818A 30.2 (9.2) 21.3 (6.5)				

## **Performance Data**

M4TLS1818A1/M4MLW1818A1 - Cooling Mode Performance Data

Outdoor	Indoor Entering Air Temperature (Dry Bulb/Wet Bulb)							
Ambient Air Temperature	68/5	57°F	73/6	51°F	79/0	64°F	80/6	57°F
(°F)	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
0	9000	6800	9500	7200	10500	7900	11600	8100
10	10700	8300	11300	8800	12300	9600	13300	10200
20	12200	9500	13000	10100	14300	11200	15000	11800
30	12900	10100	13800	10800	15400	12000	16000	12600
40	13500	10500	14400	11300	16100	12400	16800	13100
50	14100	11000	15100	11700	17200	13000	16500	12700
55	14700	11500	15800	12300	17300	13300	17500	13500
60	15500	12100	16600	13000	17700	13800	18400	14400
65	16700	13000	17800	13900	18600	14500	19400	15100
70	17300	13500	18400	14400	19200	15000	19900	15600
75	17200	13400	18300	14300	19000	14800	19800	15500
80	12400	13200	18000	14000	18800	14600	19600	15500
85	4400	12800	17500	13600	18600	14400	19200	15500
90	8400	12400	16600	13000	18100	14100	18700	15000
95	15400	12000	15700	12300	17600	13700	18200	14400
100	15000	11700	15300	11900	16800	13500	17500	13900
105	14500	11300	14900	11600	16100	13200	16900	13400
110	14100	11000	14600	11400	15400	12800	16200	12700
115	13700	10700	14300	11100	14800	12500	15500	12100
*Total Capacity **Sensible Heat Capacity								

### M4TLS1818A1/M4MLW1818A1 - Heating Mode Performance Data

Outdoor	Indoor Entering Air Temperature			ature
Ambient Air Temperature	68°F	73°F	80°F	82°F
(°F)	TC*	TC	TC	TC
-13	9800	9700	9200	9100
-10	10400	10100	9800	9700
-5	11000	10600	10400	10300
0	12000	11500	11300	11200
5	12500	12000	11800	11700
10	13100	12600	12300	12200
15	13400	12900	12600	12500
20	14000	13500	13200	13100
25	15300	14800	14500	14400
30	16400	15800	15500	15400
35	17400	16900	16600	16400
40	18500	17900	17600	17400
45	19900	19400	19000	18800
50	20800	20200	19800	19600
55	21100	20400	20000	19800
60	21500	20800	20400	20200
65	21900	21200	20800	20600
70	22200	21500	21100	20900
75	22500	21800	21400	21200
*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 condensor coil is constructed from aluminum plate fins and copper tubing. The coil provides air flow resistance and efficient heat transfer.

### **Low Ambient Operation**

Matched Ameristar 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 Ameristar 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.







01/18

The manufacturer has a policy of continuous product and product data improvement **and** it reserves the right to change design and specifications without notice.



TAG:		

# **SUBMITTAL**

## 18 SERIES

# **Specifications**

Single Zone Mini-Split Inverter System

M4MLW1824A1N0A M4TLS1824A11NA

MODEL - Heat Pump Only	M4MLW1824A	/ M4TLS1824A
RATED Volts/PH	<b>Cooling</b> 208 / 2	
Frequency (Hz) Rated Cooling / Heating Capacity (Btu/h): Minimum Cooling Capacity (@95E) (Btu/h):	60I 22800 8600	25000
Minimum Cooling Capacity (@95F) (Btu/h): Maximum Cooling Capacity (@95F) (Btu/h): Minimum Heating Capacity (@47F) (Btu/h): Maximum Heating Capacity (@47F) (Btu/h):	24000 -	8600
Maximum Heating Capacity (@47F) (Btu/h): Maximum Heating Capacity (@17F) (Btu/h):	- <del>-</del>	26000 16000
Maximum Heating Capacity (@17F) (Btu/h): Total Capacity (W) (High/Standard/Low): Rated Power Input (W)	7034 / 6450 / 2500 2010	7600 / 7034 / 2500 2130
Nominal Input Currènt' (A) SEER / HSPF Air Flow Volume (CFM) (H/M/L)	8.92 18.4 1200 / 1050	9.45 10.5
Dehumidifying Volume (pt./h) EER (Btu/W hr)/COP	11.0	

Indoor Unit	M4MLW1824A1N0
Fan Motor Speed (r/min) (SH/H/M/L)	1300 / 1150 / 1000 / 850
Fan Motor RLA(A)	0.32
Evaporator	Aluminum Fin-Copper Tube
Pipė Diameter (inch)	0.286 ' '
Rów Fin Gap (inch)	2 - 0.059
Coil length (L) x depth (D) x coil width (W) (	inch) 33.25 x 1.0 x 13.5
Output of Swing Motor (W)	2.5
Fuse (A)	3.15
Sound Power Level dB (A)(SH/H/M/L)	63 / 59 / 56 / 52
Sound PRESSURE Level dB (A)(SH/H/M/L)	
Uncrated Dimension (W/H/D) (inch)	42.4 x 12.8 x 9.7
Crated Dimension of Package (L/W/H) (inch	) 45.2 x 16.3 x 13.8
Net Weight /Gross Weight (lbs)	37.5 / 45.2

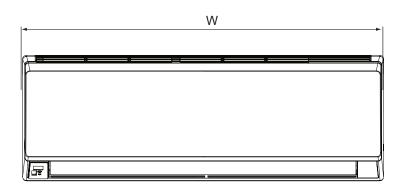
Outdoor Unit	M4TLS1824A11N
Compressor Type	Rotary
Compressor Oil	RB68EB (PÓE Oil)
L.R.Á. (A)	25`.0 ´
Comprèssor RLA(A)	12.18
Compressor Power Input(W)	1440
Throttling Method	EEV
Working Temp Range (°F)	0 - 115 -13 - 75
Condenser	Aluminum Fin-Copper Tube
Pipe Diameter (inch)	0.28
Row Fin Gap (inch)	1 - 0.055
Coil length (I) x depth (D) x coil width (W) (inch)	36.8 x 1.5 x 26
Fan Motor Speed (rpm)	800
Output of Fan Motòr (W)	60
Fan Motor RLA (A)	0.40
Fan Motor RLA (A) Air Flow Volume of Outdoor Unit (CFM)	3200
Fan Diameter (inch)	20.5
Defrosting Method	Automatic Defrosting
Sound Power Level dB (A)	68
Sound PRESSURE Level dB (A) ① Uncrated Dimension (W/H/D) (inch)	58
Uncrated Dimension (W/H/D) (inch)	37.6 x 27.6 x 15.6
Crated Dimension of Package (W/L/H) (inch)	40.5 x 18 x 29.5
Net Weight /Gross Weight (lbs)	103.6 / 113.5
Refrigerant Charge (oz)	56.4
MCA	16.0
MOP	25.0

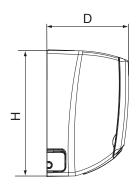
Connection PipeRefrigerant additional charge(oz/ft)0.54Outer Diameter Liquid Pipe (inch)1/4Outer Diameter Gas Pipe (inch)5/8Max Height Distance (ft)66Max Length Distance (ff)100

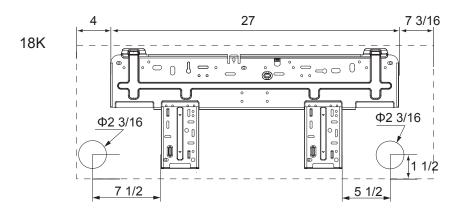
① Sound PRESSURE Level @ 3.3 ft. dB(A)

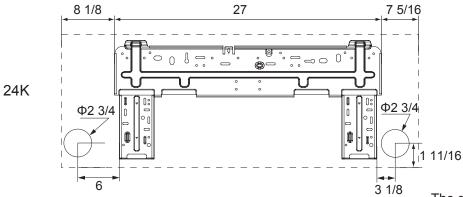
## **Indoor Unit Dimensions, continued**

### 18K-24K Indoor Units









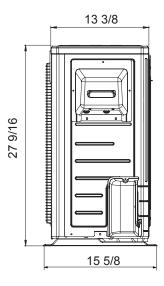
The dimensions in these drawings are rounded according to standard measurement.

Unit: inch

Models	W	Н	D
18K	38 3/16	11 13/16	8 13/16
24K	42 7/16	12 13/16	9 11/16

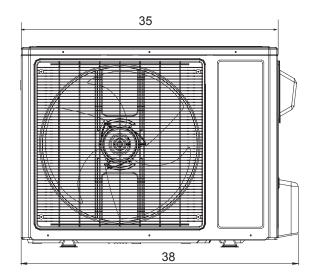
## **Outdoor Unit Dimensions**

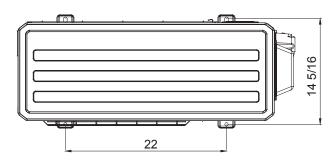
### 18K-24K Outdoor Units



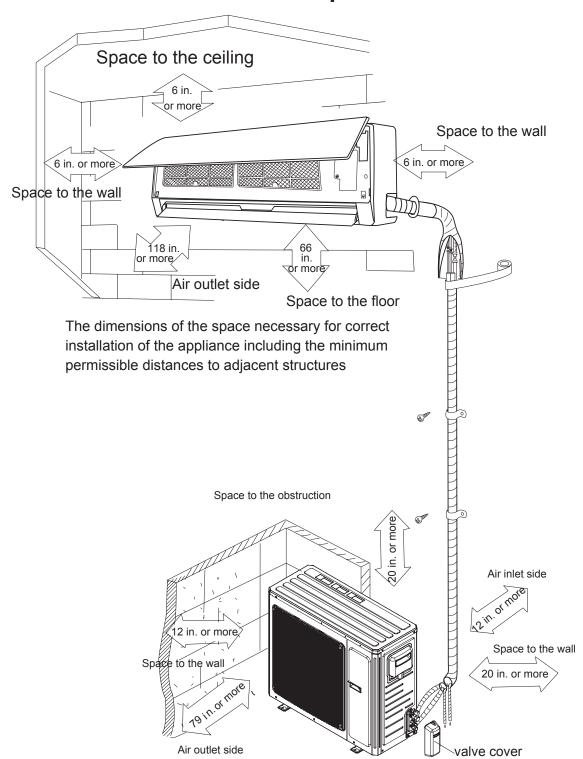
The dimensions in these drawings are rounded according to standard measurement.

Unit: inch





# **Clearance Requirements**



### 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			
M4MLW1824A	31.2 (9.5)	23 (7)			

## **Performance Data**

M4TLS1824A1/M4MLW1824A1 - Cooling Mode Performance Data

Outdoor	Indoor Entering Air Temperature (Dry Bulb/Wet Bulb)							
Ambient Air Temperature	68/5	3/57°F 73/61°F		79/64°F		80/67°F		
(°F)	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
0	16400	12900	17500	13700	20000	15700	20400	16000
10	17400	13700	18500	14500	21000	16400	21700	17000
20	18100	14200	19300	15100	22000	17200	22900	18000
30	19100	15000	20500	16100	23300	18300	24500	19200
40	20400	16000	22000	17200	24600	19300	26300	20600
50	20400	16000	21900	17200	24300	19100	26200	20600
55	20400	16000	21800	17100	24000	18800	26100	20500
60	20400	16000	21800	17100	23800	18600	25900	20300
65	20500	16100	21800	17100	23500	18400	25400	19900
70	20400	16000	21700	17000	23200	18200	24900	19600
75	19900	15600	21200	16600	23000	18000	24600	19300
80	19600	15400	20800	16300	22700	17800	24400	19100
85	19300	15200	20600	16200	22500	17600	24100	18900
90	19100	14900	20400	16000	22200	17400	24000	18800
95	18800	14700	20100	15800	22000	17300	24000	18800
100	18400	14400	19700	15500	21800	17100	23700	18600
105	18100	14200	19400	15200	21700	17000	23400	18300
110	17800	14000	19100	15000	21400	16800	23100	18100
115	17500	13800	18900	14800	21100	16600	22800	17900
*Total Capacity **Sensible Heat Capacity								

M4TLS1824A1/M4MLW1824A1 - Heating Mode Performance Data

Outdoor	Indoor Entering Air Temperature			
Ambient Air Temperature	68°F	73°F	80°F	82°F
(°F)	TC*	TC	TC	TC
-13	14100	13900	13600	13300
-10	15000	14700	14500	14100
-5	15900	15600	15300	15000
0	17400	17100	16800	16400
5	18200	17900	17600	17200
10	19100	18800	18400	18000
15	19600	19300	18900	18500
20	20300	20000	19600	19200
25	21400	21100	20700	20300
30	21800	21500	21100	20700
35	22100	21800	21500	21100
40	22500	22200	21900	21500
45	23700	23400	23000	22500
50	24400	23900	23500	22900
55	24700	24200	23800	23200
60	25100	24700	24200	23600
65	25700	25200	24700	24100
70	26100	25600	25100	24500
75	26400	26000	25400	24800
*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 condensor coil is constructed from aluminum plate fins and copper tubing. The coil provides air flow resistance and efficient heat transfer.

### **Low Ambient Operation**

Matched Ameristar ductless products, have cooling capabilities at outdoor ambient temperatures as low as  $0^{\circ}$  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 Ameristar 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.







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