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## M4MHW2209A-SUB-1A

# SUBMITTAL

## **Specifications**

| 15 SERIES                                 |   | Specifications  |
|---|---|---|
|   | MODEL - Heat Pump Only  | M4MHW2209A / M4THS2209A   |
| Single Zone Mini-Split<br>Inverter System | RATED Volts/PH<br>Frequency (Hz)<br>Rated Cooling / Heating Capacity (Btu/h):<br>Minimum Cooling Capacity (@95°F) (Btu/h):<br>Maximum Cooling Capacity (@95°F) (Btu/h):<br>Minimum Heating Capacity (@47°F) (Btu/h):<br>Maximum Heating Capacity (@47°F) (Btu/h):<br>Maximum Heating Capacity (@17°F) (Btu/h):<br>Maximum Heating Capacity (@ 5°F) (Btu/h): | $\begin{array}{ccc} \textbf{Cooling} & \textbf{Heating} \\ & 115 / 1 \\ & 60 \text{Hz} \\ 9000 & 9500 \\ 2500 & 0 \\ 11600 & 0 \\ 0 & 2400 \\ 0 & 2400 \\ 0 & 12900 \\ 0 & xxxx \\ 0 & 5700 \\ \end{array}$ |
| M4MHW2209A9N0A                            | Total Capacity (W) (High/Standard/Low): 3<br>Rated Power Input (W)  | 390 / 2610 / 750 3780 / 2760 / 690<br>680 700   |
|   | Nominal Input Current (A)<br>SEER / HSPF  | 8.2<br>22.0<br>9.8  |
| M41H52209A91NA                            | Air How Volume (CFM) (H/M/L)<br>Dehumidifying Volume (pt./h)<br>EER / COP (@95°€)   | 335 / 282 / 247 / 206<br>1.69<br>13 2 13 6  |
|   |   | 13.2 13.0   |
|   | Fan Motor Speed (r/min) (SH/H/M/L/Q) 129  | 00/1100/950/750 1320/1200/1050/950  |
|   | Fan Motor RLA(A)<br>Evaporator  | 0.3<br>Aluminum Fin-Copper Tube   |
|   | Pipe Diameter (inch)<br>Row Fin Gap (inch)<br>Coil length (L) x depth (D) x coil width (W) (inch)<br>Output of Swing Motor (W)  | 0.28<br>2 - 1/16<br>25.4 x 1 x 10.5<br>2.0<br>3 15  |
|   | Sound Power Level dB (A)(SH/H/M/L)<br>Sound PRESSURE Level dB (A)(SH/H/M/L)<br>Uncrated Dimension (W/H/D) (inch)  | 50 / 47 / 45 / 42<br>40 / 37 / 35 / 32<br>33.3 × 10.8 × 7.1   |
|   | Net Weight /Gross Weight (lbs)  | 36.1 × 10.2 × 14.6<br>20.9 / 27.6   |
|   | Outdoor Unit_   | M4THS2209A91N   |
|   | Compressor Type<br>Compressor Oil<br>Compressor RLA(A)<br>Compressor Power Input(W)<br>Throttling Method  | Variable Speed Rotary<br>RB68EP (POE Oil)<br>14.0<br>942<br>EEV   |
|   | Working Temp Range (°F)<br>Condenser  | 0 - 109 5 - 75<br>Aluminum Fin-Copper Tube  |
|   | Pipe Diameter (inch)<br>Row Fin Gap (inch)  | Ø3/8 - 2 - 1/16   |
|   | Coil length (L) x dépth (D) x coil width (W) (inch)<br>Fan Motor Speed (rpm)  | 29.4 x 1.75 x 20<br>900   |
|   | Output of Fan Motor (W)<br>Fan Motor RLA (A)  | 15<br>0.46  |
|   | Air Flow Volume of Outdoor Unit (CFM)<br>Fan Diameter (inch)  | 1060<br>15.8  |
|   | Defrosting Method<br>Sound Power Level dB (A)   | Automatic Defrosting<br>62  |
|   | Sound PRESSURE Level dB (A) ①<br>Uncrated Dimension (W/H/D) (inch)  | 52<br>33.4 × 21.3 × 12.6  |
|   | Crated Dimension of Þackagé (L/W/H) (inch)<br>Net Weight /Gross Weight (Ibs)  | 34.7 × 14.3 × 23.4<br>73.9 / 82.7   |
|   | Refrigerant Charge (oz)   | 41.3<br>20.0  |
|   | МОР   | 30.0  |
|   | Connection Pipe<br>Gas additional charge(oz/ft)   | 0.2   |
|   | Outer Diameter Liqūid Pipe (inch)<br>Outer Diameter Gas Pipe (inch)   | 1/4<br>3/8  |
|   | Max Height Distance (ft)<br>Max Length Distance (ft)  | 33<br>49  |
|   | ① Sound PRESSURE Level @ 3.3 ft. dB(A)  |   |

## **Unit Dimensions**





Unit: inch

| MODEL | W      | Н      | D     |
|-------|--------|--------|-------|
| 09K   | 31 1/9 | 10 5/6 | 7 7/8 |
| 12K   | 33 1/4 | 11 3/8 | 8 2/9 |
|       |        |        |       |







9K

## **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 Velo      | city Patterns for Hi    | gh Wall      |
|---------------|-------------------------|--------------|
|               | Max Horizontal Distance | )            |
| Unit: ft. (m) |                         |              |
| Model         | Cooling Mode            | Heating Mode |
| M4MHW2209A    | 13.1 (4)                | 13.1 (4)     |

| Cooling | 9K      |        |         |        |         |        |         |        |             |          |         |        |         |        |         |        |         |
|---------|---------|--------|---------|--------|---------|--------|---------|--------|-------------|----------|---------|--------|---------|--------|---------|--------|---------|
|         |         |        |         |        |         |        |         | Inc    | door Coil T | emperatu | re      |        |         |        |         |        |         |
| Out     | tdoor   | 65F DE | 3 (18C) | 68F DE | 3 (20C) | 73F DE | 3 (23C) | 79F DE | 3 (26C)     | 80F DE   | 3 (27C) | 82F DE | 3 (28C) | 86F DB | 3 (30C) | 90F DE | i (32C) |
| CC      | oil air | 55F WI | 3 (13C) | 57F WI | B (14C) | 61F WI | B (16C) | 64F WI | B (18C)     | 67F W    | B (19C) | 68F WI | 8 (20C) | 72F WI | B (22C) | 75F WI | 3 (24C) |
| DB (°F) | DB (°C) | ΤC     | SHC     | тс     | SHC     | тс     | SHC     | TC     | SHC         | тс       | SHC     | тс     | SHC     | TC     | SHC     | тс     | SHC     |
| 0       | -18     | 5100   | 4000    | 5600   | 4400    | 5900   | 4700    | 6400   | 5000        | 6700     | 5300    | 6800   | 5300    | 7000   | 5500    | 7600   | 6000    |
| 5       | -15     | 5200   | 4000    | 5800   | 4500    | 6100   | 4800    | 6500   | 5100        | 7100     | 5500    | 7100   | 5600    | 7300   | 5800    | 7900   | 6200    |
| 10      | -12     | 5500   | 4300    | 6000   | 4700    | 6400   | 5000    | 6800   | 5300        | 7400     | 5800    | 7500   | 5900    | 7700   | 6000    | 8200   | 6400    |
| 15      | 6-      | 5900   | 4600    | 6300   | 4900    | 6800   | 5300    | 7200   | 5600        | 7800     | 6100    | 7900   | 6200    | 8200   | 6400    | 8600   | 6800    |
| 20      | -7      | 6600   | 5100    | 7100   | 5500    | 7500   | 5900    | 8000   | 6300        | 8500     | 6600    | 8600   | 6700    | 9100   | 7200    | 9600   | 7500    |
| 25      | -4      | 7200   | 5600    | 7700   | 6000    | 8200   | 6500    | 8700   | 6800        | 9100     | 7100    | 9200   | 7200    | 0066   | 7700    | 10500  | 8200    |
| 30      | -1      | 7700   | 6100    | 8300   | 6500    | 8800   | 6900    | 9200   | 7200        | 9600     | 7500    | 9700   | 7600    | 10300  | 8100    | 11000  | 8600    |
| 35      | 2       | 7900   | 6200    | 8500   | 6600    | 0006   | 7000    | 9400   | 7300        | 9700     | 7600    | 9800   | 7700    | 10400  | 8200    | 11200  | 8800    |
| 40      | 4       | 7900   | 6200    | 8400   | 6600    | 8900   | 7000    | 9300   | 7300        | 9700     | 7600    | 9800   | 7700    | 10400  | 8100    | 11100  | 8700    |
| 45      | 7       | 7800   | 6100    | 8300   | 6500    | 8800   | 6900    | 9200   | 7200        | 9600     | 7500    | 9700   | 7600    | 10300  | 8100    | 11000  | 8600    |
| 50      | 10      | 7700   | 6000    | 8200   | 6400    | 8700   | 6800    | 9100   | 7100        | 9600     | 7500    | 9700   | 7600    | 10200  | 8000    | 10900  | 8600    |
| 55      | 13      | 7500   | 5900    | 8100   | 6300    | 8600   | 6700    | 0006   | 7100        | 9500     | 7400    | 9600   | 7500    | 10100  | 7900    | 10800  | 8500    |
| 60      | 16      | 7400   | 5800    | 8000   | 6200    | 8500   | 6600    | 8900   | 7000        | 9400     | 7300    | 9500   | 7400    | 10100  | 7900    | 10700  | 8400    |
| 65      | 18      | 7300   | 5700    | 7800   | 6100    | 8400   | 6600    | 8800   | 0069        | 9300     | 7300    | 9400   | 7300    | 10000  | 7800    | 10600  | 8300    |
| 70      | 21      | 7200   | 5600    | 7700   | 6000    | 8300   | 6500    | 8700   | 6800        | 9200     | 7200    | 9300   | 7300    | 9900   | 7800    | 10500  | 8200    |
| 75      | 24      | 7100   | 5500    | 7600   | 5900    | 8100   | 6400    | 8600   | 6800        | 0006     | 7100    | 9100   | 7100    | 9800   | 7700    | 10400  | 8100    |
| 80      | 27      | 7000   | 5400    | 7500   | 5900    | 8000   | 6300    | 8500   | 6700        | 8900     | 7000    | 9000   | 7100    | 9700   | 7600    | 10200  | 8000    |
| 85      | 29      | 0069   | 5400    | 7400   | 5800    | 7900   | 6200    | 8400   | 6600        | 8800     | 6900    | 8900   | 7000    | 9600   | 7500    | 10100  | 7900    |
| 06      | 32      | 6800   | 5300    | 7300   | 5700    | 7800   | 6100    | 8300   | 6500        | 8800     | 6900    | 8900   | 7000    | 9500   | 7400    | 10000  | 7900    |
| 95      | 35      | 6600   | 5200    | 7200   | 5600    | 7700   | 6000    | 8200   | 6400        | 8700     | 6800    | 8800   | 6900    | 9400   | 7400    | 0066   | 7800    |
| 100     | 38      | 6500   | 5100    | 7100   | 5500    | 7600   | 6000    | 8100   | 6400        | 8600     | 6700    | 8700   | 6800    | 9300   | 7300    | 9800   | 7700    |
| 105     | 41      | 6400   | 5000    | 7000   | 5500    | 7500   | 5900    | 8000   | 6300        | 8500     | 6700    | 8600   | 6700    | 9200   | 7200    | 9700   | 7600    |
| 110     | 43      | 6300   | 5000    | 0069   | 5400    | 7400   | 5800    | 7900   | 6200        | 8400     | 6600    | 8500   | 6700    | 9100   | 7100    | 9600   | 7500    |
| 115     | 46      | 6200   | 4900    | 6800   | 5300    | 7300   | 5700    | 7800   | 6100        | 8300     | 6500    | 8400   | 6600    | 9000   | 7000    | 9500   | 7400    |
| 120     | 49      | 6100   | 4800    | 6700   | 5200    | 7100   | 5600    | 7700   | 6000        | 8100     | 6400    | 8200   | 6400    | 8800   | 6900    | 9300   | 7300    |
| 122     | 50      | 6100   | 4800    | 6600   | 5200    | 7100   | 5500    | 7600   | 6000        | 8100     | 6300    | 8100   | 6400    | 8700   | 6800    | 9200   | 7200    |

# TC = Total Capacity SHC = Sensible Heat Capacity

# **Unit Capacities 9K Cooling**

| Heating       | 9K      |              |              |              |                  |              |              |              |
|---------------|---------|--------------|--------------|--------------|------------------|--------------|--------------|--------------|
|               |         |              |              | Indo         | or Coil Temperat | ture         |              |              |
| no            | utdoor  | 65F DB (18C) | 68F DB (20C) | 73F DB (23C) | 79F DB (26C)     | 80F DB (27C) | 82F DB (28C) | 86F DB (30C) |
| C             | oil air | 55F WB (13C) | 57F WB (14C) | 61F WB (16C) | 64F WB (18C)     | 67F WB (19C) | 68F WB (20C) | 72F WB (22C) |
| (°F) BD       | DB (°C) | TC           | тс           | тс           | тс               | тс           | тс           | TC           |
| -4            | -20     | 5100         | 4900         | 4900         | 4800             | 4800         | 4700         | 4600         |
| 0             | -18     | 5500         | 5400         | 5300         | 5200             | 5200         | 5100         | 2000         |
| 5             | -15     | 5800         | 5600         | 5500         | 5500             | 5500         | 5300         | 5200         |
| 10            | -12     | 6100         | 5900         | 5800         | 5800             | 5700         | 5600         | 2500         |
| 15            | 6-      | 6200         | 6000         | 6000         | 5900             | 5900         | 5800         | 2600         |
| 20            | -7      | 6500         | 6300         | 6300         | 6100             | 6200         | 6000         | 0065         |
| 25            | -4      | 7200         | 7000         | 0069         | 6800             | 6800         | 6700         | 0099         |
| 30            | -1      | 7700         | 7500         | 7400         | 7300             | 7300         | 7200         | 7100         |
| 35            | 2       | 8200         | 8000         | 7900         | 7800             | 7800         | 7700         | 2600         |
| 40            | 4       | 8700         | 8500         | 8400         | 8300             | 8300         | 8200         | 8100         |
| 45            | 7       | 9500         | 9200         | 9200         | 0006             | 0006         | 8900         | 8700         |
| 50            | 10      | 10000        | 9700         | 9600         | 9500             | 9400         | 9200         | 0006         |
| 55            | 13      | 10100        | 9800         | 9700         | 9600             | 9500         | 9400         | 9100         |
| 60            | 16      | 10300        | 10000        | 9900         | 9800             | 9700         | 9500         | 0086         |
| 65            | 18      | 10500        | 10200        | 10100        | 10000            | 0066         | 9700         | 0056         |
| 70            | 21      | 10700        | 10400        | 10300        | 10200            | 10100        | 9900         | 0096         |
| 75            | 24      | 10800        | 10500        | 10400        | 10300            | 10200        | 10000        | 9800         |
| 78            | 26      | 10900        | 10600        | 10500        | 10400            | 10300        | 10100        | 0066         |
| TC = Total Ca | apacity |              |              |              |                  |              |              |              |

# **Unit Capacities 9K Heating**

## **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**

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 air flow resistance and efficient heat transfer. The coil is protected by the casing.

## Low Ambient Cooling

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

02/17

Units shall have the capability to be controlled remotely through wall-mounted wired options as well as a wireless remote option.

# LINERTEK





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

#### **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 available for all units. (Sold separately)

#### **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.



## M4MHW2212A-SUB-1A

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

# SUBMITTAL

## **Specifications**

| 22 SERIES   |  | Specifications   |
|---|--|--|
|   | MODEL - Heat Pump Only   | M4MHW2212A9 / M4THS2212A9  |
| Single Zone Mini-Split<br>Inverter System<br>M4MHW2212A9N0A<br>M4THS2212A91NA | RATED Volts/PH<br>Frequency (Hz)<br>Rated Cooling / Heating Capacity (Btu/h):<br>Minimum Cooling Capacity (@95°F) (Btu/h):<br>Maximum Heating Capacity (@95°F) (Btu/h):<br>Maximum Heating Capacity (@47°F) (Btu/h):<br>Maximum Heating Capacity (@47°F) (Btu/h):<br>Maximum Heating Capacity (@5°F) (Btu/h):<br>Total Capacity (W) (High/Standard/Low):<br>Rated Power Input (W)<br>Nominal Input Current (A)<br>SEER / HSPF<br>Air Flow Volume (CFM) (H/M/L)<br>Dehumidifying Volume (pt./h)<br>EER / COP (@95°F)  | $\begin{array}{c cccc} & & & & & & & & & & & & & & & & & $   |
|   | Indoor Unit<br>Fan Motor Speed (r/min) (SH/H/M/L/Q)<br>Fan Motor RLA(A)<br>Evaporator<br>Pipe Diameter (inch)<br>Row Fin Gap (inch)<br>Coil length (L) x depth (D) x coil width (W) (inch)<br>Output of Swing Motor (W)<br>Fuse (A)<br>Sound Power Level dB (A)(SH/H/M/L)<br>Sound PRESSURE Level dB (A)(SH/H/M/L) ①<br>Uncrated Dimension (W/H/D) (inch)<br>Crated Dimension of Package (L/W/H) (inch)<br>Net Weight /Gross Weight (lbs)  | $\begin{array}{r} \textbf{M4MHW2212A9N0} \\ 1290/1100/950/750 & 1320/1200/1050/950 \\ & 0.3 \\ Aluminum Fin-Copper Tube \\ & 0.28 \\ & 2 - 1/16 \\ & 25.4 \times 1 \times 10.5 \\ & 2.0 \\ & 3.15 \\ & 52 / 49 / 46 / 43 \\ & 42 / 39 / 36 / 33 \\ & 33.3 \times 10.8 \times 7.1 \\ & 36.1 \times 10.2 \times 14.6 \\ & 20.9 / 27.6 \end{array}$   |
|   | Outdoor Unit   Compressor Type   Compressor Oil   Compressor RLA(A)   Compressor Rever Input(W)   Throttling Method   Working Temp Range (°F)   Condenser   Pipe Diameter (inch)   Row Fin Gap (inch)   Coil length (L) x depth (D) x coil width (W) (inch)   Fan Motor Speed (rpm)   Output of Fan Motor (W)   Fan Motor RLA (A)   Air Flow Volume of Outdoor Unit (CFM)   Fan Diameter (inch)   Defrosting Method   Sound Power Level dB (A)   Sound PRESSURE Level dB (A) ①   Uncrated Dimension of Package (L/W/H) (inch)   Net Weight /Gross Weight (lbs)   Refrigerant Charge (oz)   MCA   MOP | $\begin{array}{c} \textbf{M4THS2212A91N} \\ \hline Variable Speed Rotary \\ RB68EP (POE Oil) \\ 15.0 \\ 942 \\ EEV \\ 0 - 109 \\ 5 - 75 \\ \hline Aluminum Fin-Copper Tube \\ \emptyset 3/8 \\ 2 - 1/16 \\ 29.4 \times 1.75 \times 22 \\ 900 \\ 15 \\ 0.46 \\ 1177 \\ 15.8 \\ \hline Automatic Defrosting \\ 62 \\ 52 \\ 33.4 \times 23.3 \times 12.6 \\ 34.7 \times 14.3 \times 25.4 \\ 76.1 / 84.9 \\ 45.9 \\ 20.0 \\ 30.0 \\ \end{array}$ |
|   | Connection Pipe<br>Gas additional charge(oz/ft)<br>Outer Diameter Liquid Pipe (inch)<br>Outer Diameter Gas Pipe (inch)<br>Max Height Distance (ft)<br>Max Length Distance (ft)   | 0.2<br>1/4<br>3/8<br>33<br>66  |

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

## **Unit Dimensions**

## Indoor Unit







Unit: inch

## **Outdoor Unit**







|       |        |         | Unit: inch |
|-------|--------|---------|------------|
| Model | W      | Н       | D          |
| 09K   | 33 3/8 | 21 1/4  | 12 5/8     |
| 12K   | 33 3/8 | 23 5/16 | 12 5/8     |

## **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 Velo      | city Patterns for Hi    | gh Wall      |
|---------------|-------------------------|--------------|
|               | Max Horizontal Distance | 9            |
| Unit: ft. (m) |                         |              |
| Model         | Cooling Mode            | Heating Mode |
| M4MHW2212A9   | 29.5 (9)                | 19.7 (6)     |

| Cooling | 12K     |        |         |        |         |        |         |        |            |           |         |        |         |        |         |        |         |
|---------|---------|--------|---------|--------|---------|--------|---------|--------|------------|-----------|---------|--------|---------|--------|---------|--------|---------|
|         |         |        |         |        |         |        |         | Ind    | oor Coil T | emperatui | re      |        |         |        |         |        |         |
| Out     | tdoor   | 65F DE | 3 (18C) | 68F DE | s (20C) | 73F DB | : (23C) | 79F DB | (26C)      | 80F DB    | s (27C) | 82F DB | : (28C) | 86F DB | (30C)   | 90F DB | (32C)   |
| CO      | il air  | 55F WI | 8 (13C) | 57F WI | 3 (14C) | 61F WE | 3 (16C) | 64F WB | 8 (18C)    | 67F WI    | 3 (19C) | 68F WE | 3 (20C) | 72F WE | 3 (22C) | 75F WE | : (24C) |
| DB (°F) | DB (°C) | TC     | SHC     | TC     | SHC     | TC     | SHC     | TC     | SHC        | тс        | SHC     | тс     | SHC     | тс     | SHC     | тс     | SHC     |
| 0       | -18     | 5900   | 4600    | 6500   | 5100    | 6800   | 5300    | 7300   | 5700       | 7700      | 6000    | 7800   | 6100    | 8000   | 6300    | 8700   | 6800    |
| 5       | -15     | 6200   | 4800    | 6800   | 5300    | 7200   | 5600    | 7700   | 6000       | 8100      | 6300    | 8200   | 6500    | 8400   | 6600    | 9100   | 7100    |
| 10      | -12     | 6600   | 5200    | 7200   | 5700    | 7600   | 6000    | 8200   | 6400       | 8600      | 6800    | 8800   | 6900    | 9000   | 7000    | 9700   | 7600    |
| 15      | 6-      | 7000   | 5500    | 7700   | 6000    | 8100   | 6400    | 8700   | 6800       | 9200      | 7200    | 9400   | 7300    | 9600   | 7500    | 10400  | 8100    |
| 20      | -7      | 7500   | 5900    | 8100   | 6300    | 8600   | 6800    | 9200   | 7200       | 9800      | 7700    | 10000  | 7800    | 10300  | 8000    | 10900  | 8600    |
| 25      | -4      | 7800   | 6100    | 8400   | 6600    | 0006   | 7100    | 9600   | 7500       | 10300     | 8100    | 10500  | 8200    | 10800  | 8500    | 11400  | 8900    |
| 30      | -1      | 8100   | 6300    | 8700   | 6800    | 9300   | 7300    | 0066   | 7700       | 10600     | 8300    | 10800  | 8500    | 11100  | 8700    | 11700  | 9200    |
| 35      | 2       | 8300   | 6500    | 8900   | 7000    | 9500   | 7500    | 10200  | 8000       | 10900     | 8600    | 11100  | 8700    | 11400  | 8900    | 12000  | 9400    |
| 40      | 4       | 8500   | 6700    | 9200   | 7200    | 9800   | 7700    | 10400  | 8200       | 11200     | 8800    | 11400  | 9000    | 11700  | 9200    | 12400  | 9700    |
| 45      | 7       | 8800   | 0069    | 9400   | 7400    | 10100  | 7900    | 10700  | 8400       | 11500     | 9000    | 11700  | 9200    | 12000  | 9400    | 12700  | 10000   |
| 50      | 10      | 0006   | 7000    | 9700   | 7600    | 10300  | 8100    | 11000  | 8600       | 11900     | 9300    | 12000  | 9400    | 12400  | 9700    | 13000  | 10200   |
| 55      | 13      | 9200   | 7200    | 0066   | 7800    | 10600  | 8300    | 11300  | 8900       | 11900     | 9300    | 12000  | 9400    | 12700  | 0066    | 13400  | 10500   |
| 60      | 16      | 9600   | 7500    | 10300  | 8000    | 11000  | 8600    | 11700  | 9100       | 12000     | 9400    | 12200  | 9600    | 13100  | 10200   | 13800  | 10800   |
| 65      | 18      | 10300  | 8100    | 11000  | 8600    | 11700  | 9200    | 12300  | 9600       | 12600     | 9900    | 12900  | 10100   | 13600  | 10700   | 14500  | 11400   |
| 70      | 21      | 10700  | 8400    | 11400  | 9000    | 12200  | 9500    | 12600  | 0066       | 13000     | 10200   | 13200  | 10400   | 14000  | 10900   | 14900  | 11700   |
| 75      | 24      | 10600  | 8300    | 11400  | 8900    | 12100  | 9500    | 12600  | 9900       | 12900     | 10100   | 13200  | 10300   | 13900  | 10900   | 14900  | 11600   |
| 80      | 27      | 10400  | 8200    | 11100  | 8700    | 11900  | 9300    | 12400  | 9700       | 12800     | 10000   | 13000  | 10200   | 13700  | 10700   | 14700  | 11500   |
| 85      | 29      | 10100  | 7900    | 10800  | 8500    | 11600  | 9100    | 12100  | 9500       | 12600     | 9900    | 12800  | 10000   | 13500  | 10600   | 14400  | 11300   |
| 90      | 32      | 9800   | 7700    | 10500  | 8200    | 11200  | 8800    | 11900  | 9300       | 12300     | 9600    | 12500  | 9800    | 13300  | 10400   | 14100  | 11000   |
| 95      | 35      | 9500   | 7400    | 10200  | 8000    | 10900  | 8500    | 11600  | 9100       | 12000     | 9400    | 12200  | 9500    | 13100  | 10200   | 13800  | 10800   |
| 100     | 38      | 9200   | 7200    | 0066   | 7800    | 10600  | 8300    | 11300  | 8900       | 11800     | 9200    | 12000  | 9400    | 12800  | 10000   | 13500  | 10600   |
| 105     | 41      | 8900   | 7000    | 9600   | 7600    | 10400  | 8100    | 11100  | 8700       | 11600     | 9100    | 11800  | 9200    | 12500  | 9800    | 13200  | 10300   |
| 110     | 43      | 8600   | 6800    | 9400   | 7300    | 10100  | 7900    | 10800  | 8500       | 11300     | 8900    | 11500  | 9000    | 12200  | 9600    | 12900  | 10100   |
| 115     | 46      | 8400   | 6600    | 9100   | 7200    | 9800   | 7700    | 10500  | 8300       | 11100     | 8700    | 11200  | 8800    | 12000  | 9400    | 12700  | 0066    |
| 120     | 49      | 8300   | 6500    | 9000   | 7100    | 9600   | 7500    | 10300  | 8100       | 10800     | 8500    | 11000  | 8600    | 11700  | 9200    | 12400  | 9700    |
| 122     | 50      | 8200   | 6400    | 9000   | 7000    | 9600   | 7500    | 10300  | 8000       | 10800     | 8400    | 10900  | 8600    | 11700  | 9100    | 12300  | 9600    |

TC = Total Capacity SHC = Sensible Heat Capacity

# **Unit Capacities 12K Cooling**

| Heating       | 12K   |              |              |              |                  |              |              |              |
|---------------|---|--------------|--------------|--------------|------------------|--------------|--------------|--------------|
|               |   |              |              | Indo         | or Coil Temperat | ture         |              |              |
| ō             | utdoor  | 65F DB (18C) | 68F DB (20C) | 73F DB (23C) | 79F DB (26C)     | 80F DB (27C) | 82F DB (28C) | 86F DB (30C) |
| C             | oil air   | 55F WB (13C) | 57F WB (14C) | 61F WB (16C) | 64F WB (18C)     | 67F WB (19C) | 68F WB (20C) | 72F WB (22C) |
| DB (°F)       | DB (°C)   | TC           | TC           | тс           | TC               | тс           | тс           | TC           |
| -4            | -20   | 6800         | 6700         | 6600         | 6800             | 6800         | 0069         | 00E9         |
| 0             | -18   | 7300         | 7300         | 7100         | 7400             | 7400         | 7500         | 0069         |
| 5             | -15   | 7700         | 7600         | 7500         | 7700             | 7700         | 2800         | 7200         |
| 10            | -12   | 8100         | 8000         | 0062         | 8100             | 8100         | 8200         | 7500         |
| 15            | 6-  | 8300         | 8200         | 8100         | 8300             | 8400         | 8400         | 0022         |
| 20            | -7  | 8700         | 8600         | 8400         | 8700             | 8800         | 0068         | 8100         |
| 25            | -4  | 0096         | 9500         | 9300         | 0096             | 0026         | 0086         | 0006         |
| 30            | -1  | 10300        | 10200        | 10000        | 10300            | 10400        | 10500        | 0026         |
| 35            | 2   | 11000        | 10900        | 10700        | 11100            | 11100        | 11200        | 10400        |
| 40            | 4   | 11700        | 11600        | 11400        | 11800            | 11900        | 12000        | 11100        |
| 45            | 7   | 12700        | 12600        | 12400        | 12800            | 12800        | 13000        | 11900        |
| 50            | 10  | 13300        | 13100        | 12900        | 13300            | 13400        | 13500        | 12400        |
| 55            | 13  | 13400        | 13300        | 13100        | 13500            | 13600        | 13700        | 12500        |
| 60            | 16  | 13700        | 13600        | 13300        | 13700            | 13800        | 14000        | 12800        |
| 65            | 18  | 14000        | 13800        | 13600        | 14000            | 14100        | 14300        | 13000        |
| 70            | 21  | 14200        | 14100        | 13800        | 14200            | 14300        | 14500        | 13200        |
| 75            | 24  | 14400        | 14300        | 14000        | 14400            | 14500        | 14700        | 13400        |
| 78            | 26  | 14500        | 14400        | 14100        | 14600            | 14700        | 14800        | 13500        |
| TC - Total Ca | and the second se |              |              |              |                  |              |              |              |

TC = Total Capacity

# **Unit Capacities 12K Heating**

## **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**

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 air flow resistance and efficient heat transfer. The coil is protected by the casing.

## Low Ambient Cooling

Matched Ameristar ductless products, have cooling capabilities at outdoor ambient temperatures as low as  $0^{\circ}$  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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Units shall have the capability to be controlled remotely through wall-mounted wired options as well as a wireless remote option.

## c Lister Intertek





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

### **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 available for all units. (Sold separately)

#### **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.