



# **MULTIV**

**WALL-MOUNTED INDOOR UNIT  
ENGINEERING MANUAL**



**Art Cool™ Mirror Wall-Mounted**  
5,500 to 24,200 Btu/h



**Standard Wall-Mounted**  
5,500 to 35,500 Btu/h



**Art Cool™ Gallery**  
9,600 and 12,300 Btu/h

## **PROPRIETARY DATA NOTICE**

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**This document is for design purposes only.**

A summary list of safety precautions is on page 3.

**To access additional technical documentation such as submittals, outdoor unit engineering manuals, installation, service, product data performance, general best practice, and building ventilation manuals, as well as white papers, catalogs, LATS software programs, and more, log in to [www.lghvac.com](http://www.lghvac.com).**

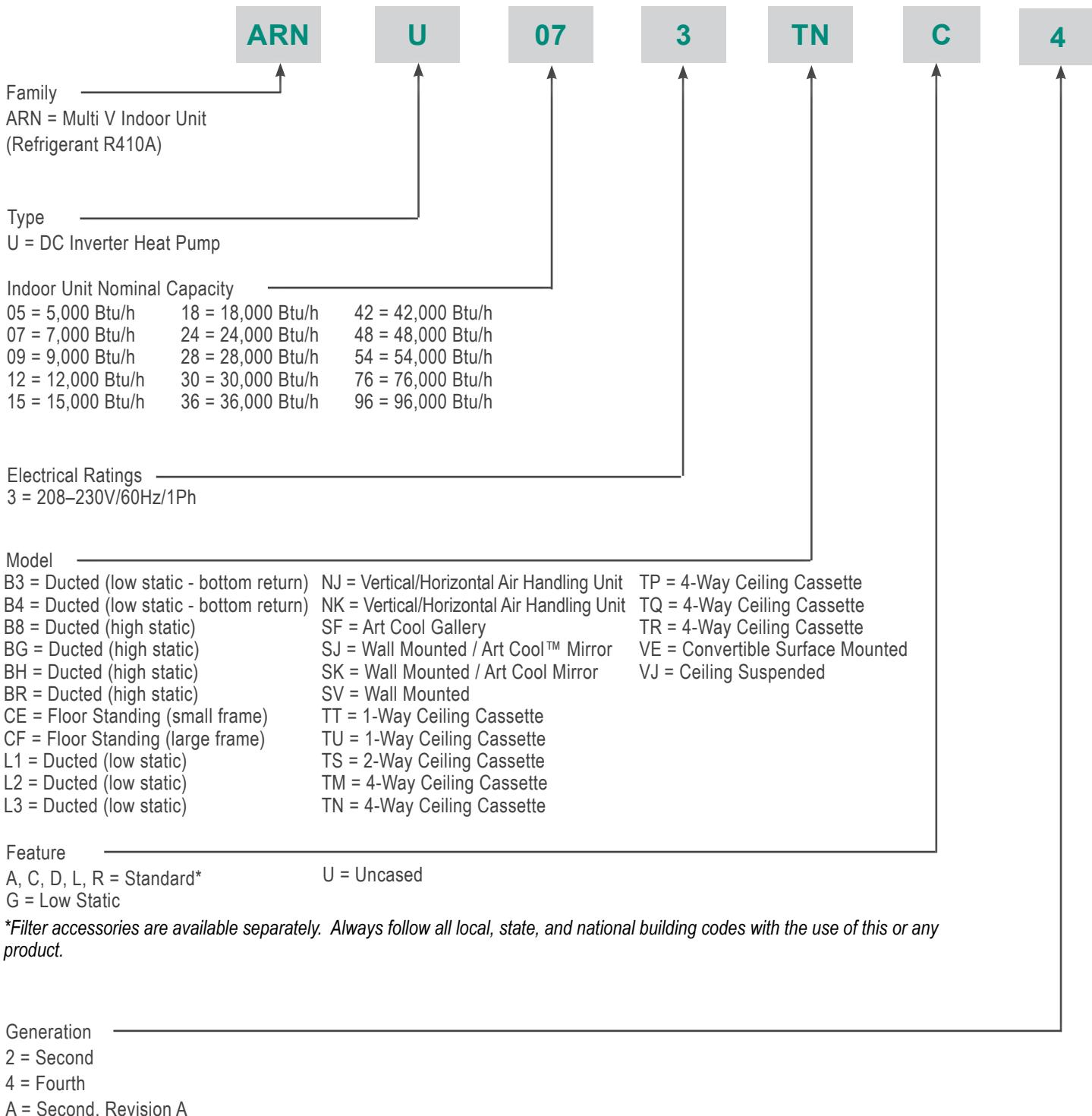
<b>Unit Nomenclature.....</b>	<b>4</b>	<b>Standard Wall-Mounted Indoor Units .....</b>	<b>52-91</b>
<b>LATS Overview .....</b>	<b>5-6</b>	<i>Mechanical Specifications .....</i>	<i>53</i>
<b>Art Cool™ Gallery Indoor Units .....</b>	<b>7-18</b>	<i>General Data .....</i>	<i>54-56</i>
<i>Mechanical Specifications .....</i>	<i>8</i>	<i>Electrical Data .....</i>	<i>57</i>
<i>General Data .....</i>	<i>9</i>	<i>External Dimensions.....</i>	<i>58-60</i>
<i>Electrical Data .....</i>	<i>9</i>	<i>Electrical Wiring Diagram .....</i>	<i>61-62</i>
<i>External Dimensions.....</i>	<i>10</i>	<i>Refrigerant Flow Diagram.....</i>	<i>63</i>
<i>Electrical Wiring Diagram .....</i>	<i>11</i>	<i>Acoustic Data .....</i>	<i>64-67</i>
<i>Refrigerant Flow Diagram.....</i>	<i>12</i>	<i>Air Velocity / Temperature Distribution.....</i>	<i>68-82</i>
<i>Acoustic Data .....</i>	<i>13-14</i>	<i>Capacity Tables .....</i>	<i>83-91</i>
<i>Air Velocity / Temperature Distribution.....</i>	<i>15</i>		
<i>Capacity Tables .....</i>	<i>16-17</i>		
<b>Art Cool™ Mirror Wall-Mounted Indoor Units.....</b>	<b>18-51</b>	<b>Application Guidelines.....</b>	<b>92-100</b>
<i>Mechanical Specifications .....</i>	<i>19</i>	<i>Selecting the Best Location .....</i>	<i>93</i>
<i>General Data .....</i>	<i>21</i>	<i>General Mounting .....</i>	<i>94-95</i>
<i>Electrical Data .....</i>	<i>22</i>	<i>General Drain Piping Information .....</i>	<i>96-97</i>
<i>External Dimensions.....</i>	<i>23-24</i>	<i>Wiring Guidelines .....</i>	<i>98-99</i>
<i>Electrical Wiring Diagram .....</i>	<i>25</i>	<i>Wired Remote Controller Location .....</i>	<i>100</i>
<i>Refrigerant Flow Diagram.....</i>	<i>26</i>		
<i>Acoustic Data .....</i>	<i>27-30</i>	<b>Acronyms .....</b>	<b>101</b>
<i>Air Velocity / Temperature Distribution.....</i>	<i>31-44</i>		
<i>Capacity Tables .....</i>	<i>45-51</i>		

## TABLE OF SYMBOLS

	This symbol indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	This symbol indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	This symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
<b>Note</b>	This symbol indicates situations that may result in equipment or property damage accidents only.
	This symbol indicates an action should not be completed.

# UNIT NOMENCLATURE

MULTI V™



## LG Air Conditioner Technical Solution (LATS) Software

A properly designed and installed refrigerant piping system is critical to the optimal performance of LG air-conditioning systems. To assist engineers, LG offers, free of charge, LG Air Conditioner Technical Solution (LATS) software—a total design solution for LG air conditioning systems.

### Note:

*To reduce the risk of designing an improper applied system or one that will not operate correctly, LG requires that LATS software be used on all projects.*

### Formats

LATS is available to LG customers in three user interfaces: LATS HVAC, LATS CAD2, and LATS REVIT. All three LATS formats are available through [www.myLGHVAC.com](http://www.myLGHVAC.com), or contact an LG Sales Representative.

**LATS HVAC** is a Windows®-based application that aids engineers in designing LG Variable Refrigerant Flow (VRF), Multi F / Multi F MAX, Single-Zone, and Energy Recovery Ventilator (ERV) systems.

\*Windows® is a registered mark of Microsoft® Corporation.

**LATS CAD2** combines the LG LATS program with AutoCAD® software\*\*. It permits engineers to layout and validate LG Multi V Variable Refrigerant Flow (VRF), Multi F / Multi F MAX, Single-Zone, and Energy Recovery Ventilator (ERV) systems directly into CAD drawings.

**LATS Revit** integrates the LG LATS program with Revit® software\*\*. It permits engineers to layout and validate Multi V VRF systems directly into Revit drawings.

\*\*AutoCAD® and Revit® are both registered marks of Autodesk, Inc.

### Features

All LG product design criteria have been loaded into the program, making LATS simple to use: double click or drag and drop the component choices. Build systems in Tree Mode where the refrigerant system can be viewed. Switch to a Schematic diagram to see the electrical and communications wiring.

LATS software permits the user to input region data, indoor and outdoor design temperatures, modify humidity default values, zoning, specify type and size of outdoor units and indoor units, and input air flow and external static pressure (ESP) for ducted indoor units.

The program can also:

- Import building loads from a separate Excel file.
- Present options for outdoor unit auto selection.
- Automatically calculate component capacity based on design conditions for the chosen region.
- Verify if the height differences between the various system components are within system limits.
- Provide the correct size of each refrigerant piping segment and LG Y-Branches and Headers.
- Adjust overall piping system length when elbows are added.
- Check for component piping limitations and flag if any parameters are broken.
- Factor operation and capacity for defrost operation.
- Calculate refrigerant charge, noting any additional trim charge.
- Suggest accessories for indoor units and outdoor units.
- Run system simulation.

### Note:

*Features depend on which LATS program is being used, and the type of system being designed.*

Figure 1: Example of LATS CAD2.



# LG AIR CONDITIONER TECHNICAL SOLUTION (LATS)

## LATS Generates a Complete Project Report

LATS software also generates a report containing project design parameters, cooling and heating design data, system component performance, and capacity data. The report includes system combination ratio and refrigerant charge calculations; and provides detailed bill of material, including outdoor units, indoor units, control devices, accessories, refrigerant pipe sizes segregated by building, by system, by pipe size, and by pipe segments. LATS can generate an Excel GERP report that can imported into the LG SOPS pricing and ordering system.

## Proper Design to Install Procedure

LG encourages a two report design-to-install-procedure. After the design engineer determines building / zone loads and other details, the engineer opens the LATS program and inputs the project's information. When the design is complete, the "Auto Piping" and "System Check" functions should be used to verify piping sizes, limitations, and if any design errors are present. If errors are found, engineers should adjust the design, and run Auto Piping and System Check again. When the design passes the checks, then the engineer prints out a project "Shop Drawing" (LATS Tree Diagram) and provides it to the installing contractor. The contractor should follow the LATS Tree Diagram when building the piping system, but oftentimes the design changes on the building site:

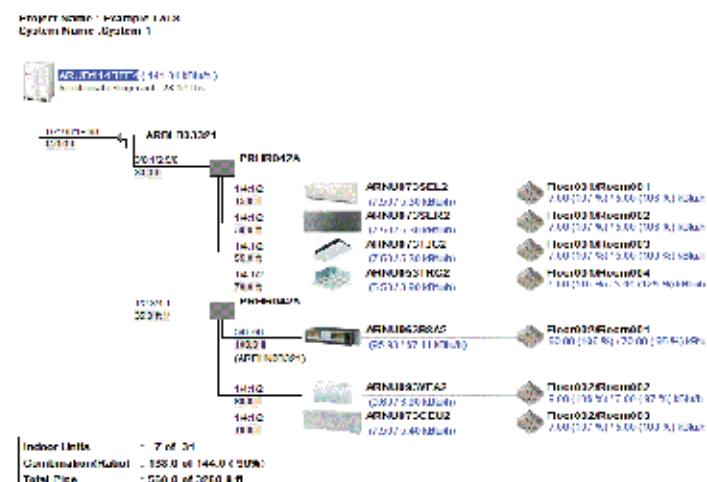
- Architect has changed location and/or purpose of room(s).
- Outdoor unit cannot be placed where originally intended.
- Structural elements prevent routing the piping as planned.
- Air conditioning system conflicts with other building systems (plumbing, gas lines, etc.).

The contractor must mark any deviation from the design on the Shop Drawing, including as-built straight lines and elbows. This "Mark Up" drawing should be returned to the design engineer or Rep, who should input contractor changes into the LATS file. (Copy the original LATS software file, save and rename as a separate file, and modify all piping lengths by double-clicking on each length and editing information.) Like the shop drawing, the Auto Piping and System Check should also be run on this new "As Built" drawing. The design engineer or Rep must then provide the final As Built file to the contractor. The Mark Up version must be compared to the As Built version for:

- Differences in pipe diameter(s). If incorrect diameters have been installed, the piping must be changed out. If pipe diameters have changed, check to see if Y-Branches will also need to be changed.
- Changes to outdoor unit and indoor unit capacities. Capacities changes may impact line length changes.
- Additional refrigerant charge quantity ("Trim Charge"). Trim charge will change if piping lengths and diameters change. The As Built version must reflect installed piping lengths to ensure correct trim charge.

All documents submitted by the contractor, as well as the Shop Drawing and the As Built Drawing files must be provided for commissioning purposes. Model and serial numbers for all system components must also be submitted. If the steps previously detailed are not followed, and all documents are not provided to the commissioning agent, the project runs the risk of not being commissioned and voiding any limited warranty LG offers on the equipment.

Figure 2: Example of a LATS Tree Diagram.



# ART COOL™ GALLERY

**Mechanical Specifications on page 8**

**General Data on page 9**

**Electrical Data on page 9**

**External Dimensions on page 10**

**Electrical Wiring Diagram on page 11**

**Refrigerant Flow Diagrams on page 12**

**Acoustic Data on page 13**

**Air Velocity / Temperature Distribution on page 15**

**Capacity Tables on page 16**



# ART COOL™ GALLERY

## Mechanical Specifications

**MULTI V™**

### Casing

Units are designed to mount on a vertical surface and come complete with an installation mounting guide and a separate hanging bracket. The unit case is manufactured with coated metal. Cold surfaces are covered with a coated polystyrene insulating material.

### Finish

The unit case has a light gray / silver matte finish. The front surface of the unit has a flat glass panel and frame that can accommodate a 20" x 20" photograph, picture or artwork.

### Fan Assembly and Control

The indoor unit has a single, direct-drive, turbo fan. The fan wheel is made of high strength ABS HT-700 polymeric resin. The fan motor is a Brushless Digitally Controlled (BLDC) design with permanently lubricated and sealed ball bearings. The fan motor includes thermal, overcurrent and low RPM protection. The fan/motor assembly is mounted on vibration attenuating rubber grommets. The fan impeller is statically and dynamically balanced. The fan speed is controlled using a microprocessor-based, direct digital control algorithm that provides a high fan speed in cooling thermal ON and low fan speed in cooling thermal OFF, high fan speed in heating thermal ON and fan off in heating thermal OFF. The fan speeds can be field adjusted between low, medium, and high speeds. The fan speed algorithm provides a field selectable, fixed-speed or auto-speed setting that adjusts the fan speed to simulate natural airflow.

### Air Filter

Return air is filtered with a removable, washable filter with anti-fungal treatment. Filter access is from the front of the unit without the use of tools.

### Airflow Guide Vanes

The indoor unit is provided with motorized sweeping guide vanes that automatically change the direction of airflow from side-to-side and up-and-down.

### Microprocessor Control

The unit is provided with an integrated microprocessor controller capable of performing functions necessary to operate the system without the use of a wall-mounted controller. A temperature thermistor is factory mounted in the return air stream. All unit operation parameters, excluding the operating schedule, are stored in non-volatile memory resident on the unit microprocessor. Operating schedules are stored in select models of the optional, wall-mounted, local or central controllers. The field-supplied communication cable between the indoor unit(s) and outdoor unit is to be a minimum of 18 AWG, 2 conductor, stranded, and shielded cable (RS-485), terminated via screw terminals on the control boards. The microprocessor control provides the following functions: auto addressing, self-diagnostics, auto restart following power restoration, test run, and will operate the indoor unit using one of five operation modes:

1. Auto Changeover (Heat Recovery only)
2. Heating
3. Cooling
4. Dry
5. Fan Only

For Heat Recovery systems the Auto Changeover setting automatically switches control of the indoor unit between Cooling and Heating modes based on space temperature conditions. For Heat Pump

systems, heated or cooled air delivery is dependent upon outdoor unit operating mode.

In Heating mode, the microprocessor control will activate indoor unit operation when the indoor room temperature falls below set-point temperature. At which point, a signal is sent to the outdoor unit to begin the heating cycle. The indoor unit fan operation is delayed until coil pipe temperature reaches 76°F. Significant airflow is generated when pipe temperature reaches 80°F. A field-selectable option maintains fan operation for 30 minutes following cooling cycle operations. The unit is equipped with an infrared receiver designed to communicate with an LG wireless remote controller. In lieu of wireless remote or factory return air thermistor, screw terminals on the microprocessor circuit board accommodate various models of wall-mounted local controllers. The unit microprocessor is capable of accepting space temperature readings concurrently or individually from either:

1. Wall-mounted wired controller(s)
2. Factory-mounted return air thermistor

A single indoor unit has the capability of being controlled by up to two local wired controllers. The microprocessor controls space temperature using the value provided by the temperature sensor sensing a space temperature that is farthest away from the temperature set-point. The microprocessor control provides a cooling or heating mode test cycle that operates the unit for eighteen (18) minutes without regard to the space temperature. If the system is provided with an optional wall-mounted local or central controller, displayed diagnostic codes are specific, alpha-numeric, and provide the service technician with a reason for the code displayed.

### Handling Condensate

The unit is designed for gravity draining of condensate. LG provides a factory insulated flexible drain hose. If condensate lift/pumps are needed for the application, they are to be field provided.

### Condensate Drain Pan

The condensate drain pan is constructed of expandable polystyrene resin (EPS).

### Coil

The indoor unit coil is constructed with grooved design copper tubes with slit coil fins, two (2) rows, eighteen (18) fins per inch.

### Controls Features

- Hot start
- Self diagnostics
- Timer (on/off)
- Weekly schedule
- Auto direction/swing (up/down)
- Fan speed control
- Jet cool (fast cooling)
- Auto changeover (Heat Recovery only)
- Auto operation
- Auto clean (coil dry; requires wireless controller)
- External on/off control
- Dual thermistor control
- Dual setpoint control\*
- Filter life and power consumption display\*
- Group control
- Forced operation

\*To enable Generation 4 features, outdoor unit DIP Switch No. 3 must be set to ON. Please refer to the Multi V 5, Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.



Table 1: Art Cool Gallery (SF Frames) Indoor Unit General Data.

Model No.	ARNU093SFA4	ARNU123SFA4
<i>Cooling Mode Performance</i>		
Capacity (Btu/h)	9,600	12,300
Power Input <sup>1</sup> (W)	35	35
<i>Heating Mode Performance</i>		
Capacity (Btu/h)	10,900	13,600
Power Input <sup>1</sup> (W)	35	35
<i>Entering Mixed Air</i>		
Cooling Max (°F WB)	76	76
Heating Min (°F DB)	59	59
<i>Unit Data</i>		
Refrigerant Type <sup>2</sup>	R410A	R410A
Refrigerant Control	EEV	EEV
Sound Pressure <sup>3</sup> dB(A) (H/M/L)	38 / 32 / 27	44 / 38 / 32
Net Unit Weight (lbs.)	33.1	33.1
Shipping Weight (lbs.)	38.1	38.1
Communication Cable <sup>4</sup> (No. x AWG)	2 x 18	2 x 18
<i>Fan</i>		
Type	Turbo Fan	Turbo Fan
Quantity	1	1
Motor/Drive	Brushless Digitally Controlled / Direct	
Airflow Rate H/M/L (CFM)	286 / 222 / 148	328 / 272 / 212
<i>Piping</i>		
Liquid Line (in., O.D.)	1/4 Flare	1/4 Flare
Vapor Line (in., O.D.)	1/2 Flare	1/2 Flare
Condensate Line (in., I.D.)	5/8	5/8

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

All capacities are net with a combination ratio between 95-105%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.  
Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).<sup>1</sup>Power Input is rated at high speed.<sup>2</sup>Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.<sup>3</sup>Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.<sup>4</sup>Communication cable between Master ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.

Table 2: Art Cool Mirror Wall-Mounted Indoor Unit Electrical Data.

Model Number	Voltage Range	MCA	MOP	Rated Amps (A)	Power Supply			Power Input (W)	
					Hz	Volts	Phase	Cooling	Heating
<i>SF Frames</i>									
ARNU093SFA4	187-253	0.4	15	0.3	60	208-230	1	35	35
ARNU123SFA4									

MCA: Minimum Circuit Ampacity.

MOP: Maximum Overcurrent Protection.

Units are suitable for use on an electrical system where voltage supplied to unit terminals is within the listed range limits.

Select wire size based on the larger MCA value.

Instead of a fuse, use the circuit breaker.

# ART COOL™ GALLERY

**MULTI V™**

## External Dimensions

### SF Frame

Figure 3: ARNU093SFA4 and ARNU123SFA4 Dimensions.

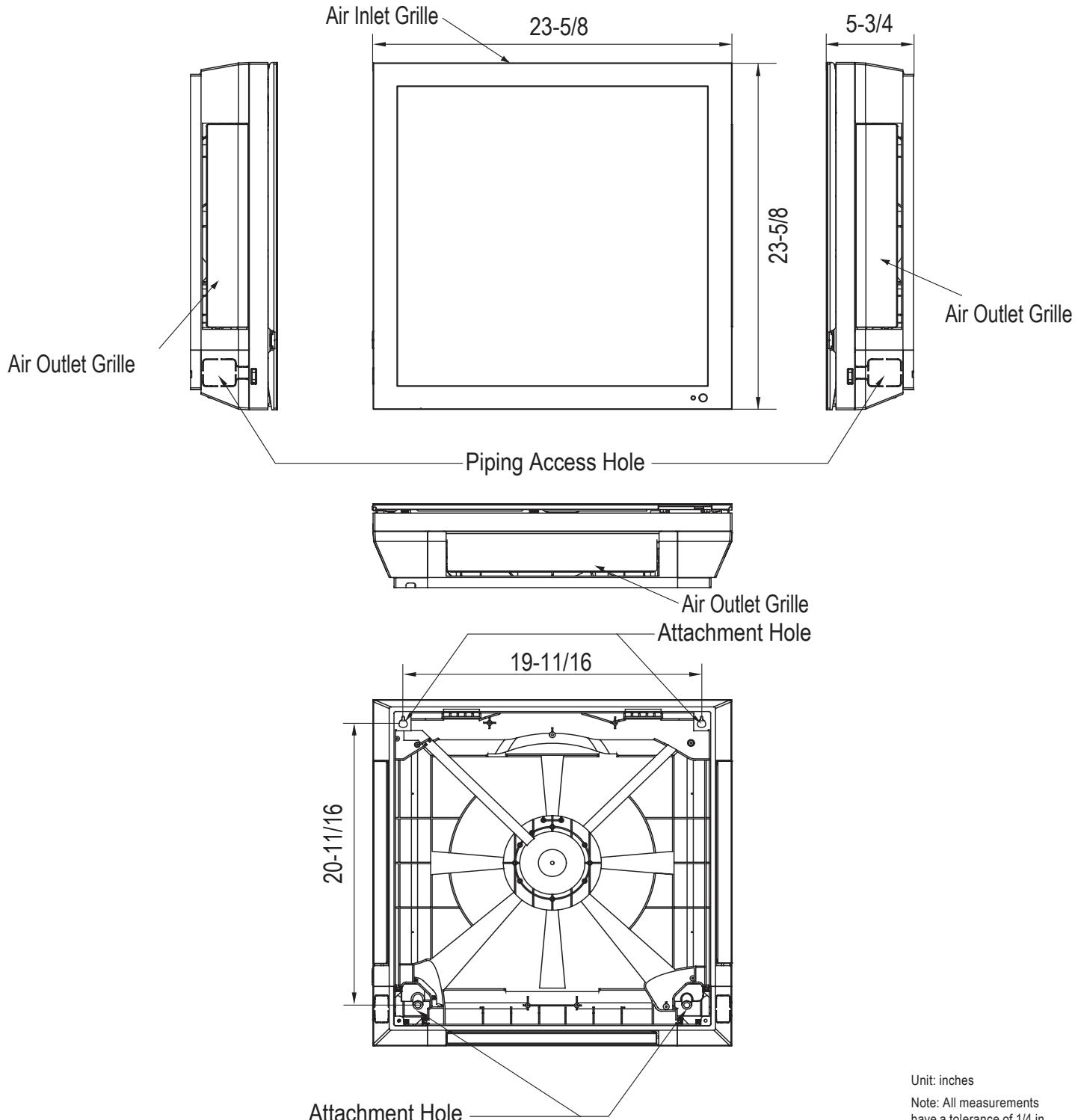


Figure 4: ARNU093SFA4 and ARNU123SFA4 Wiring Diagram.

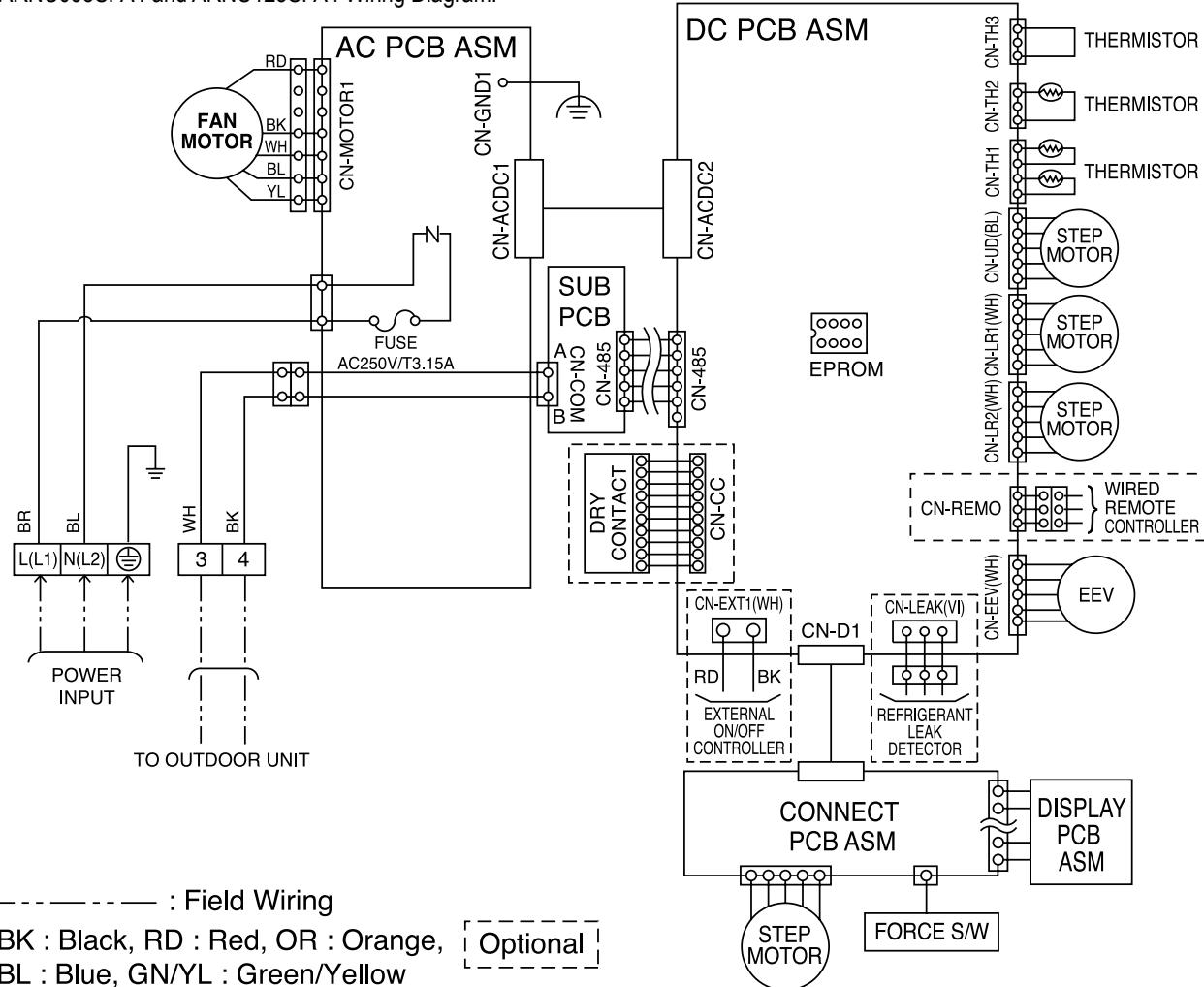


Table 3: SF Frame Wiring Diagram Legend.

PCB Connection	Purpose	Function
CN-TH3	Pipe out thermistor	Pipe out thermistor connection
CN-TH2	Pipe in thermistor	Pipe in thermistor connection
CN-TH1	Return air thermistor	Return air thermistor connection
CN-UD	Step motor	Step motor output
CN-LR1	Step motor	Step motor output
CN-LR2	Step motor	Step motor output
CN-REMO	Wired remote controller	Wired remote controller connection
CN-EEV	EEV output	EEV control output
CN-EXT1	External on/off controller	External on/off controller connection
CN-CC	Dry contact	Dry contact connection
CN-485	Communication	Connection between indoor and outdoor units

\*To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V 5, Multi V IV, Multi V Water IV, Multi V S

Engineering Manual for additional information.

## Refrigerant Flow Diagram

### SF Frame

Figure 5: SF Frame Piping Diagram.

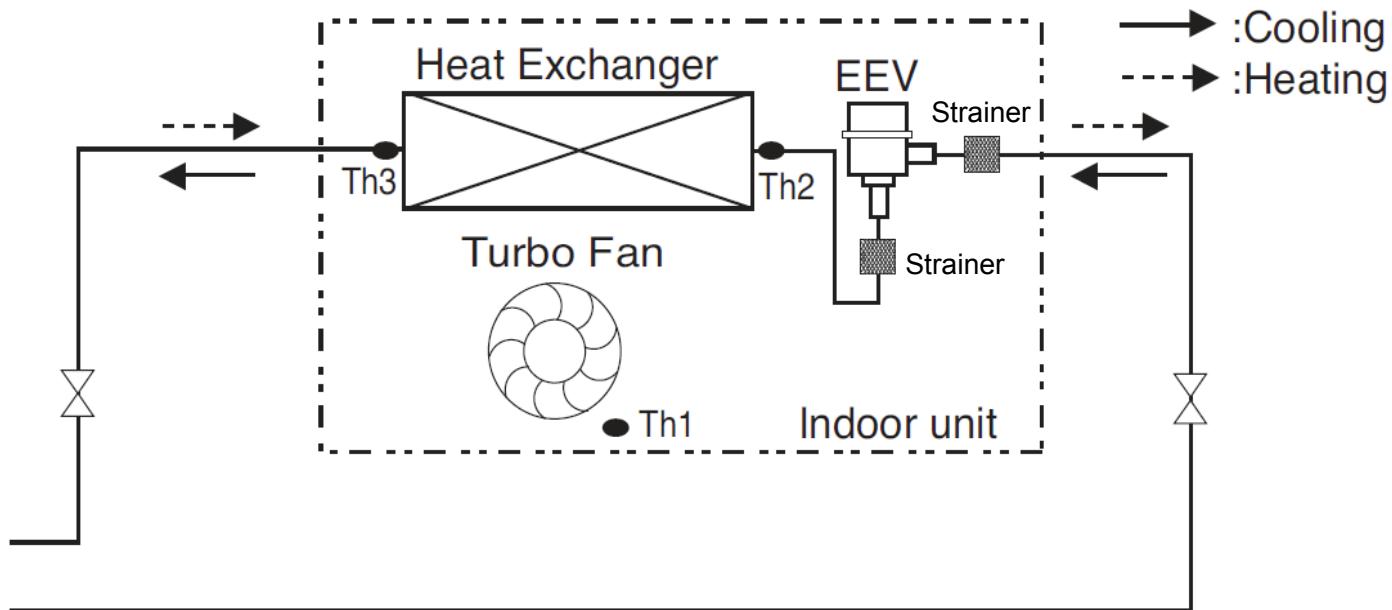


Table 4: SF Frame Refrigerant Pipe Connection Port Diameters.

Model	Liquid (inch)	Vapor (inch)
<i>SF Frames</i>		
ARNU093SFA4	1/4 Flare	1/2 Flare
ARNU123SFA4	1/4 Flare	1/2 Flare

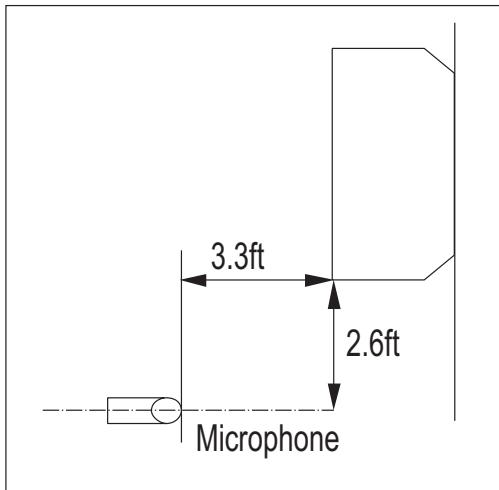
Table 5: SF Frame Thermistors.

Thermistor	Description
TH1	Return air thermistor
TH2	Pipe in thermistor
TH3	Pipe out thermistor

## Acoustic Data

### Sound Pressure Levels

Figure 6: Sound Pressure Measurement Location.



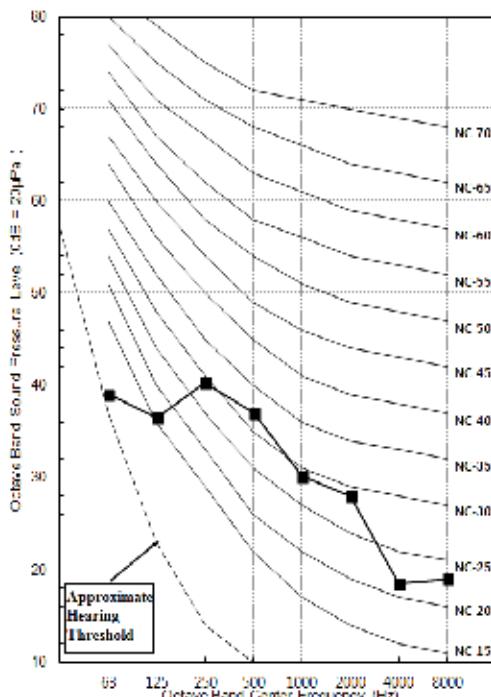
- Measurements are taken 3.3 ft away from the front of the unit.
  - Sound pressure levels are measured in dB(A) with a tolerance of  $\pm 3$ .
  - Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- Operating Conditions:**
- Power source: 220V/60 Hz
  - Sound level will vary depending on a range of factors including the construction (acoustic absorption coefficient) of a particular room in which the unit was installed.

Table 6: Art Cool Gallery Indoor Unit Sound Pressure Levels.

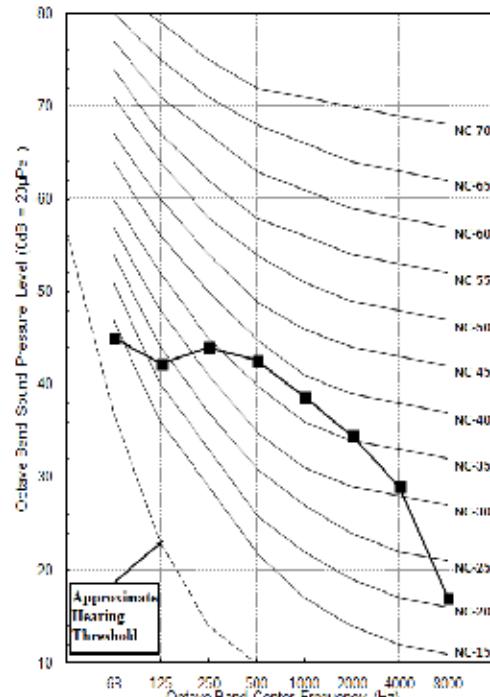
Model	Sound Pressure Levels dB(A)		
	High Fan Speed	Medium Fan Speed	Low Fan Speed
<b>SF Frames</b>			
ARNU093SFA4	38.0	32.0	27.0
ARNU123SFA4	44.0	38.0	32.0

Figure 7: ARNU093SFA4 and ARNU123SFA4 Sound Pressure Level Diagrams.

ARNU093SFA4



ARNU123SFA4



## Acoustic Data

### Sound Power Levels

Table 7: Art Cool Gallery Indoor Unit Sound Power Levels.

Model	Sound Power Levels dB(A)
	High Fan Speed
<i>SF Frames</i>	
ARNU093SFA4	48.0
ARNU123SFA4	54.0

- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB =  $10E-6\mu\text{W/m}^2$

Figure 8: ARNU093SFA4 and ARNU123SFA4 Sound Power Level Diagrams.

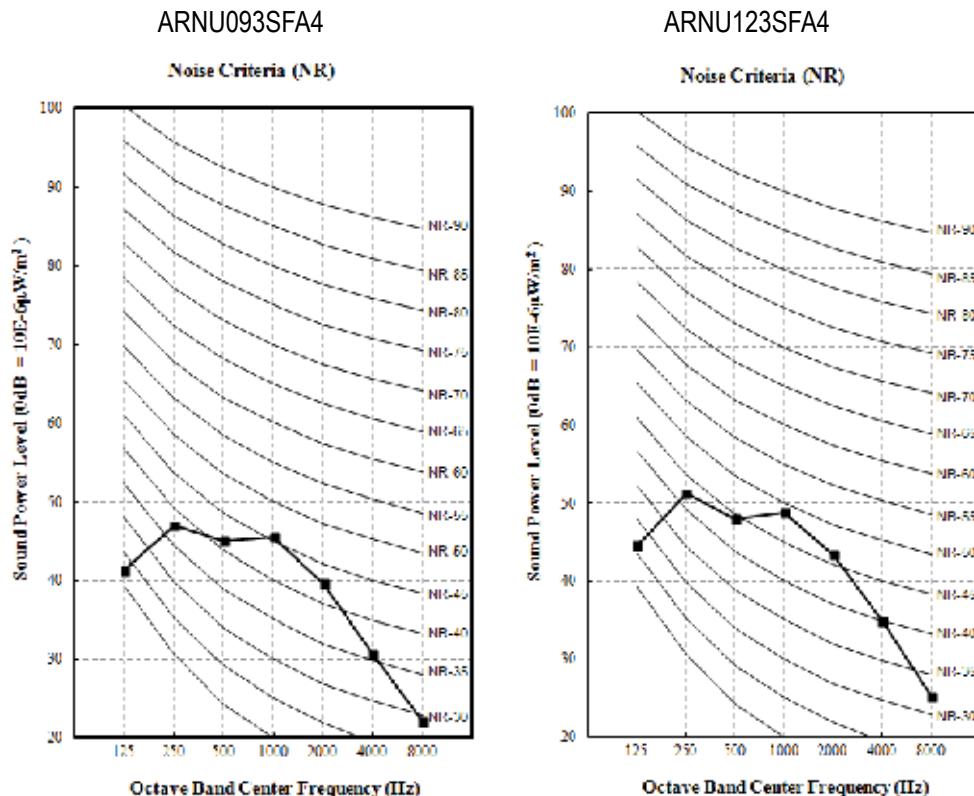
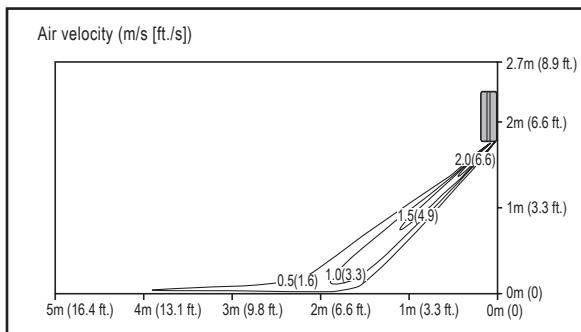


Figure 9: ARNU093SFA4.

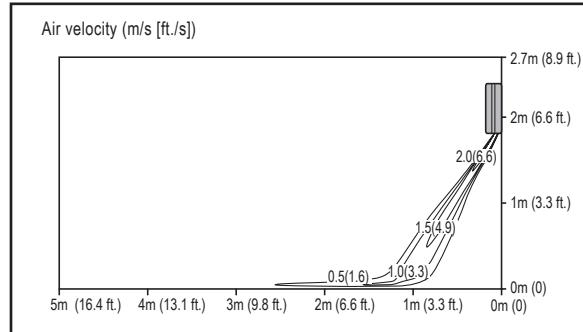
**Cooling**

Discharge angle: 40°

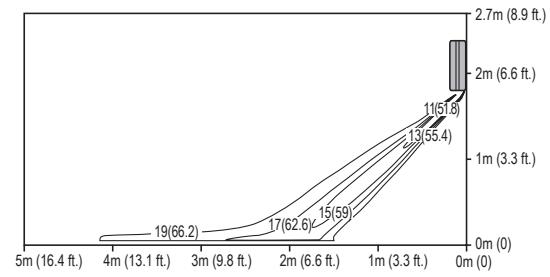


**Heating**

Discharge angle: 50°



Temperature (°C [°F])



Temperature (°C [°F])

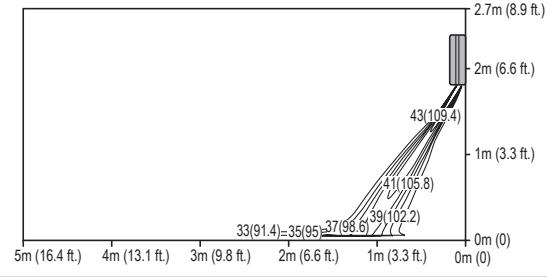
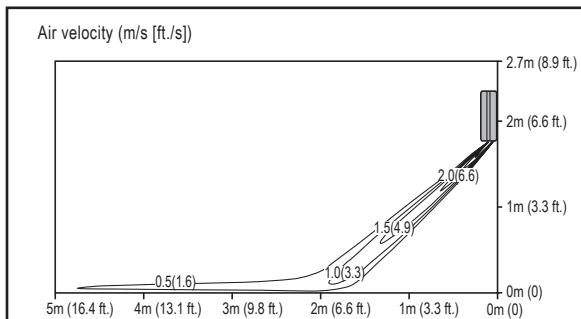


Figure 10: ARNU123SFA4.

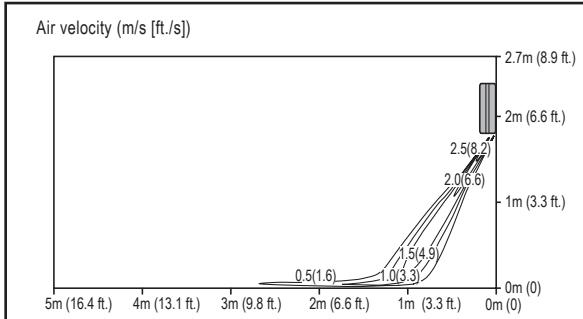
**Cooling**

Discharge angle: 40°

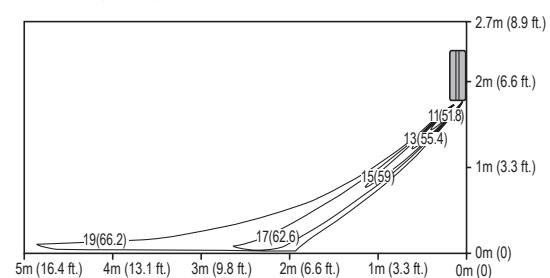


**Heating**

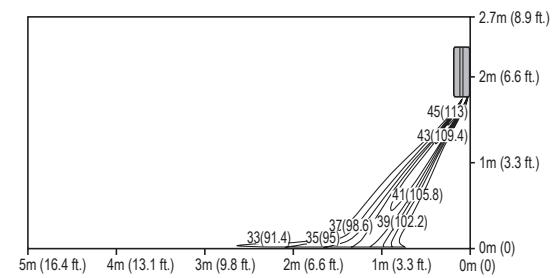
Discharge angle: 50°



Temperature (°C [°F])



Temperature (°C [°F])



# ART COOL™ GALLERY

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## Cooling Capacity Tables

### ARNU093SFA4, ARNU123SFA4

Table 8: ARNU093SFA4, ARNU123SFA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)											
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU093SFA4 / 9.6	23	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	25	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	30	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	35	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	40	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	45	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	50	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	55	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	60	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	65	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	70	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	75	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3
	80	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.1	7.2
	85	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.6	7.3	10.8	6.9
	90	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.5	7.2	10.6	6.8
	95	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.3	7.1	10.5	6.8
	100	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.1	7.0	10.3	6.7
	105	6.3	5.2	7.3	5.7	8.2	6.2	9.2	6.5	9.6	6.5	9.9	6.5
	110	6.2	5.1	6.9	5.4	7.7	5.7	8.6	6.2	9.0	6.2	9.4	6.2
ARNU123SFA4 / 12.3	23	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	25	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	30	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	35	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	40	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	45	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	50	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	55	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	60	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	65	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	70	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	75	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4
	80	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.2	9.4
	85	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.6	9.4	13.8	9.0
	90	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.4	9.3	13.5	8.8
	95	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.2	9.2	13.4	8.8
	100	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	12.9	9.1	13.2	8.7
	105	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	12.7	8.5	12.7	8.4
	110	7.9	6.6	8.9	7.0	9.8	7.4	11.1	8.0	11.6	8.0	12.0	8.0

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

Table 9: ARNU093SFA4, ARNU123SFA4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
	°F DB	°F WB	59	61	64	67	70	73	76	80
			TC	TC	TC	TC	TC	TC	TC	TC
ARNU093SFA4 / 9.6	-4.0	-4.4	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2
	0	-0.4	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4
	5.0	4.5	8.5	8.4	8.3	8.3	8.3	8.3	8.3	8.3
	10.0	9.0	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.7
	15.0	14.0	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.2
	20.0	19.0	9.9	9.9	9.9	9.9	9.7	9.7	9.5	9.4
	25.0	23.0	10.4	10.4	10.4	10.4	10.4	10.1	10.0	9.5
	30.0	28.0	10.6	10.6	10.6	10.6	10.6	10.4	10.0	9.5
	35.0	32.0	10.9	10.9	10.9	10.9	10.8	10.6	10.0	9.5
	40.0	36.0	11.3	11.3	11.3	11.3	10.9	10.6	10.0	9.5
	45.0	41.0	11.8	11.8	11.8	11.4	10.9	10.6	10.0	9.5
	47.0	43.0	12.2	12.1	12.0	11.4	10.9	10.6	10.0	9.5
	50.0	46.0	13.1	12.5	12.0	11.4	10.9	10.6	10.0	9.5
	55.0	51.0	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5
	60.0	56.0	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5
ARNU123SFA4 / 12.3	-4.0	-4.4	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0
	0	-0.4	9.4	9.4	9.4	9.4	9.4	9.2	9.2	9.2
	5.0	4.5	10.6	10.5	10.3	10.3	10.3	10.3	10.3	10.3
	10.0	9.0	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9
	15.0	14.0	11.7	11.7	11.7	11.7	11.7	11.7	11.6	11.4
	20.0	19.0	12.4	12.4	12.4	12.4	12.1	12.1	11.9	11.8
	25.0	23.0	12.9	12.9	12.9	12.9	12.9	12.6	12.5	11.9
	30.0	28.0	13.2	13.2	13.2	13.2	13.2	12.9	12.5	11.9
	35.0	32.0	13.6	13.6	13.6	13.6	13.5	13.2	12.5	11.9
	40.0	36.0	14.1	14.1	14.1	14.1	13.6	13.2	12.5	11.9
	45.0	41.0	14.7	14.7	14.7	14.3	13.6	13.2	12.5	11.9
	47.0	43.0	15.2	15.1	15.0	14.3	13.6	13.2	12.5	11.9
	50.0	46.0	16.3	15.6	15.0	14.3	13.6	13.2	12.5	11.9
	55.0	51.0	16.7	15.8	15.0	14.3	13.6	13.2	12.5	11.9
	60.0	56.0	16.7	15.8	15.0	14.3	13.6	13.2	12.5	11.9

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# ART COOL™ MIRROR WALL-MOUNTED

[Mechanical Specifications on page 19](#)

[General Data on page 21](#)

[Electrical Data on page 22](#)

[External Dimensions on page 23](#)

[Electrical Wiring Diagram on page 25](#)

[Refrigerant Flow Diagram on page 26](#)

[Acoustic Data on page 27](#)

[Air Velocity / Temperature Distribution on page 31](#)

[Capacity Tables on page 45](#)





## Casing

Units are designed to mount on a vertical surface and come complete with an installation mounting guide and a separate hanging bracket. The unit case is manufactured with coated metal. Cold surfaces are covered with a coated polystyrene insulating material.

## Finish

The unit case has a light gray / silver matte finish. The front surface of the unit has an architectural flat panel smoked mirror finish.

## Fan Assembly and Control

The unit has a single, direct-drive, crossflow tangential Sirocco fan made of high strength ABS BSN-7530 polymeric resin. The fan motor is a Brushless Digitally Controlled (BLDC) design with permanently lubricated and sealed ball bearings. The fan motor includes thermal, overcurrent and low RPM protection. The fan / motor assembly is mounted on vibration attenuating rubber grommets. The fan impeller is statically and dynamically balanced. The fan speed is controlled using a microprocessor-based direct digital control algorithm that provides a high fan speed in cooling thermal ON and low fan speed in cooling thermal OFF, high fan speed in heating thermal ON and fan off in heating thermal OFF. The fan speeds can be field adjusted between low, medium, and high speeds. The fan speed algorithm provides a field-selectable fixed-speed or auto-speed setting that changes the fan speed to simulate natural airflow.

## Air Filter

Return air is filtered with a removable, washable filter with anti-fungal treatment. Filter access is from the front of the unit without the use of tools.

## Airflow Guide Vanes

### 5-15 MBh

The indoor unit is provided with a motorized oscillating guide vane that automatically changes the direction of up-and-down airflow. The indoor unit includes factory installed, manually adjustable guide vanes that control the side-to-side direction of supplied airflow.

### 18-24 MBh

The indoor unit is provided with a motorized sweeping guide vane that automatically changes the direction of airflow from side-to-side and up-and-down.

## Microprocessor Control

The unit is provided with an integrated microprocessor controller capable of performing functions necessary to operate the system without the use of a wall-mounted controller. A temperature thermistor is factory mounted in the return air stream. All unit

operation parameters, excluding the operating schedule, are stored in non-volatile memory resident on the unit microprocessor. Operating schedules are stored in select models of the optional, wall-mounted, local or central controllers. The field-supplied communication cable between the indoor unit(s) and outdoor unit is to be a minimum of 18 AWG, 2 conductor, stranded, and shielded cable (RS-485), terminated via screw terminals on the control boards. The microprocessor control provides the following functions: auto addressing, self-diagnostics, auto restart following power restoration, test run, and will operate the indoor unit using one of five operation modes:

1. Auto Changeover (Heat Recovery only)
2. Heating
3. Cooling
4. Dry
5. Fan Only

For Heat Recovery systems the Auto Changeover setting automatically switches control of the indoor unit between Cooling and Heating modes based on space temperature conditions.

For Heat Pump systems, heated or cooled air delivery is dependent upon outdoor unit operating mode. In Heating mode, the microprocessor control will activate indoor unit operation when the indoor room temperature falls below set-point temperature. At which point, a signal is sent to the outdoor unit to begin the heating cycle. The indoor unit fan operation is delayed until coil pipe temperature reaches 76°F. Significant airflow is generated when pipe temperature reaches 80°F. A field-selectable option maintains fan operation for 30 minutes following cooling cycle operations. The unit is equipped with an infrared receiver designed to communicate with an LG wireless remote controller. In lieu of wireless remote or factory return air thermistor, screw terminals on the microprocessor circuit board accommodate various models of wall-mounted local controllers. The unit microprocessor is capable of accepting space temperature readings concurrently or individually from either:

1. Wall-mounted wired controller(s)
2. Factory-mounted return air thermistor

A single indoor unit has the capability of being controlled by up to two local wired controllers. The microprocessor controls space temperature using the value provided by the temperature sensor sensing a space temperature that is farthest away from the temperature set-point. The microprocessor control provides a cooling or heating mode test cycle that operates the unit for 18 minutes without regard to the space temperature. If the system is provided with an optional

# ART COOL™ MIRROR

## Mechanical Specifications

**MULTI V™**

wall-mounted local or central controller, displayed diagnostic codes are specific, alpha-numeric, and provide the service technician with a reason for the code displayed.

Indoor units have built-in Wi-Fi and can be controlled by LG's Smart ThinQ™ app on a smart device. A field-supplied Wi-Fi network and smart device are required. The Smart ThinQ app is free, and is available for Android™ and iOS. (Android is a trademark of Google LLC.)

### Handling Condensate

The unit is designed for gravity draining of condensate. LG provides a factory insulated flexible drain hose. If condensate lift / pumps are needed for the application, they are to be field provided.

### Condensate Drain Pan

The condensate drain pan is constructed of expandable polystyrene resin (EPS).

### Coil

The indoor unit coil is constructed with grooved design copper tubes with slit coil fins, two (2) rows, eighteen (18) fins per inch.

### Controls Features

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto clean (coil dry; requires wireless controller)
- External on/off control
- Dual thermistor control
- Dual setpoint control
- Filter life display
- Group control
- Forced operation
- Hot start
- Self diagnostics
- Timer (on/off)
- Weekly schedule
- Auto direction/swing (up/down)
- Wi-Fi
- Auto Fan
- Leak detection

*\*To enable Generation 4 features, outdoor unit DIP Switch No. 3 must be set to ON. Please refer to the Multi V 5, Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.*

Table 10: Art Cool Mirror Wall-Mounted (SJ, SK Frames) Indoor Unit General Data.

Model No.	ARNU053SJR4	ARNU073SJR4	ARNU093SJR4	ARNU123SJR4	ARNU153SJR4	ARNU183SKR4	ARNU243SKR4
<i>Cooling Mode Performance</i>							
Capacity (Btu/h)	5,500	7,500	9,600	12,300	15,400	19,100	24,200
Power Input <sup>1</sup> (W)	30	30	30	30	30	53	53
<i>Heating Mode Performance</i>							
Capacity (Btu/h)	6,100	8,500	10,900	13,600	17,100	21,500	25,600
Power Input <sup>1</sup> (W)	30	30	30	30	30	53	53
<i>Entering Mixed Air</i>							
Cooling Max (°F WB)	76	76	76	76	76	76	76
Heating Min (°F DB)	59	59	59	59	59	59	59
<i>Unit Data</i>							
Refrigerant Type <sup>2</sup>	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV	EEV	EEV	EEV	EEV
Sound Pressure <sup>3</sup> dB(A) (H/M/L)	30 / 29 / 28	32 / 30 / 28	34 / 32 / 28	37 / 34 / 30	42 / 39 / 32	43 / 39 / 34	46 / 41 / 34
Net Unit Weight (lbs.)	20.2	20.2	20.2	20.2	20.2	29.5	29.5
Shipping Weight (lbs.)	27.7	27.7	27.7	27.7	27.7	38.8	38.8
Communication Cable <sup>4</sup> (No. x AWG)	2 x 18	2 x 18	2 x 18	2 x 18	2 x 18	2 x 18	2 x 18
<i>Fan</i>							
Type	Cross Flow	Cross Flow	Cross Flow	Cross Flow	Cross Flow	Cross Flow	Cross Flow
Quantity	1	1	1	1	1	1	1
Motor / Drive	Brushless Digitally Controlled / Direct						
Airflow Rate H/M/L (CFM)	240 / 230 / 208	254 / 240 / 208	275 / 254 / 208	300 / 254 / 240	371 / 336 / 240	494 / 424 / 371	537 / 449 / 371
<i>Piping</i>							
Liquid Line (in., O.D.)	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare	3/8 Flare
Vapor Line (in., O.D.)	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare	5/8 Flare
Condensate Line (in., I.D.)	5/8	5/8	5/8	5/8	5/8	5/8	5/8

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes. See the next page for detailed electrical data.

This unit comes with a dry nitrogen charge.

All capacities are net with a combination ratio between 95-105%.

Rated capacity is certified under ARI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).<sup>1</sup>Power Input is rated at high speed.<sup>2</sup>Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.<sup>3</sup>Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.<sup>4</sup>Communication cable between Master ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only.  Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.

## Electrical Data

Table 11: Art Cool Mirror Wall-Mounted Indoor Unit Electrical Data.

Model Number	Voltage Range	MCA	MOP	Rated Amps (A)	Power Supply			Power Input (W)	
					Hz	Volts	Phase	Cooling	Heating
<b>SJ Frames</b>									
ARNU053SJR4	187-253	0.31	15	0.25	60	208-230V	1	30	30
ARNU073SJR4		0.31		0.25				30	30
ARNU093SJR4		0.31		0.25				30	30
ARNU123SJR4		0.31		0.25				30	30
ARNU153SJR4		0.31		0.25				30	30
SK Frames									
ARNU183SKR4	187-253	0.65	15	0.52	60	208-230V	1	53	53
ARNU243SKR4		0.65		0.52				53	53

MCA : Minimum Circuit Ampacity.

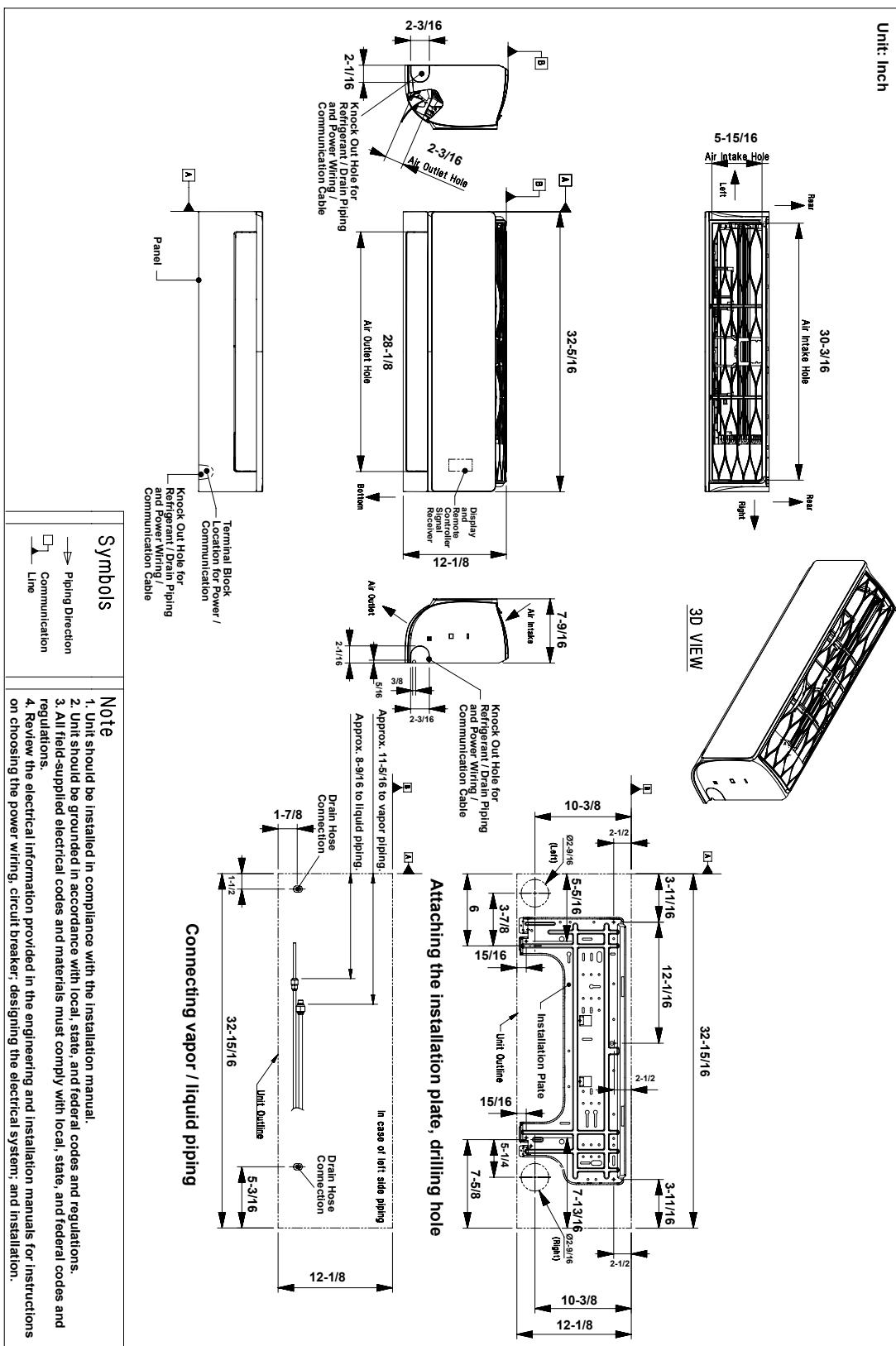
MOP : Maximum Overcurrent Protection.

Units are suitable for use on an electrical system where voltage supplied to unit terminals is within the listed range limits.

Select wire size based on the larger MCA value.

Instead of a fuse, use the circuit breaker.

Figure 11: ARNU053SJR4, ARNU073SJR4, ARNU093SJR4, ARNU123SJR4, ARNU153SJR4 Dimensions.



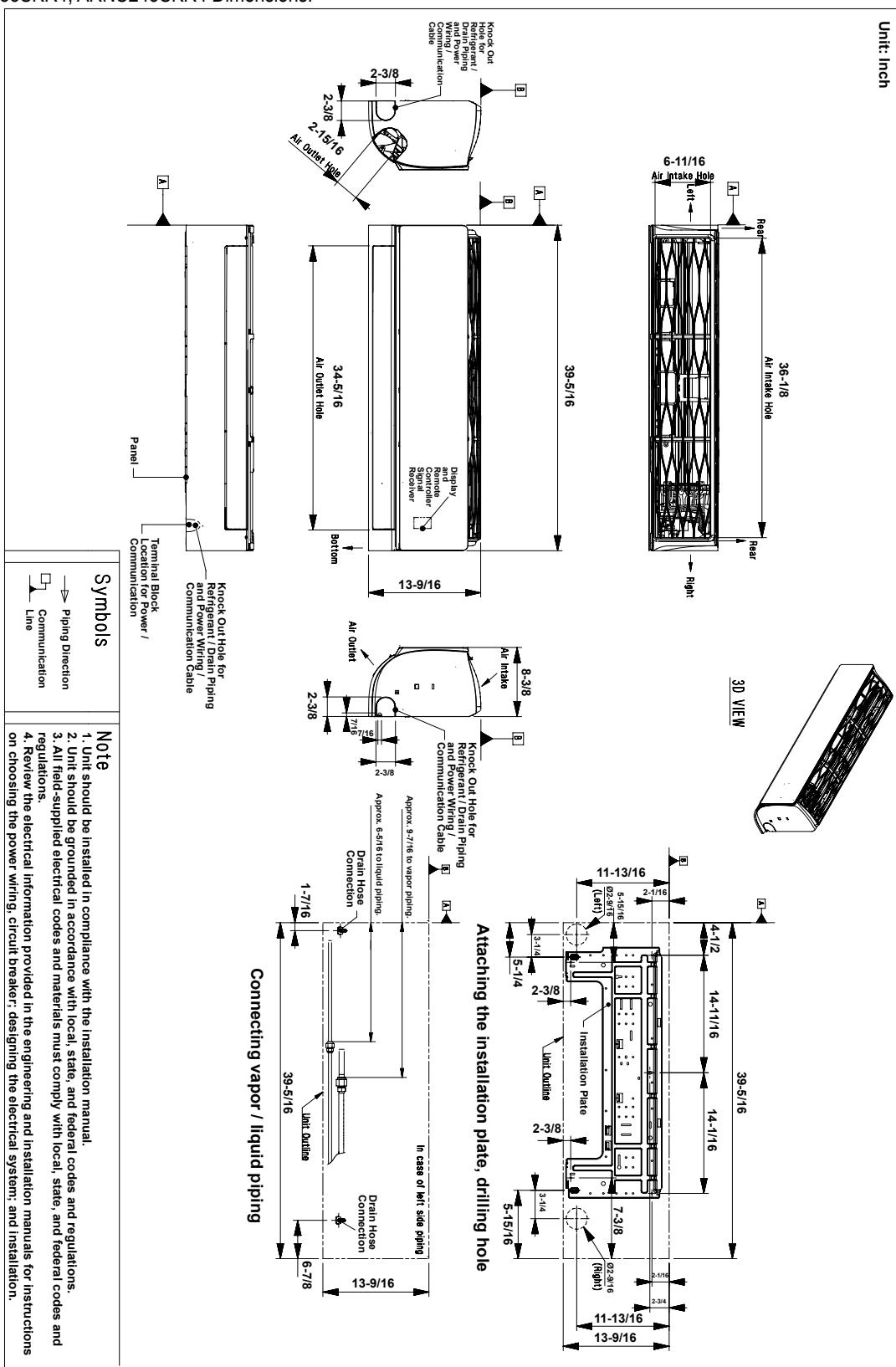
# ART COOL™ MIRROR

MULTI V™

## External Dimensions

### SK Frame

Figure 12: ARNU183SKR4, ARNU243SKR4 Dimensions.



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Figure 13: ARNU053~153SJR4 and ARNU183-243SKR4 Wiring Diagram.

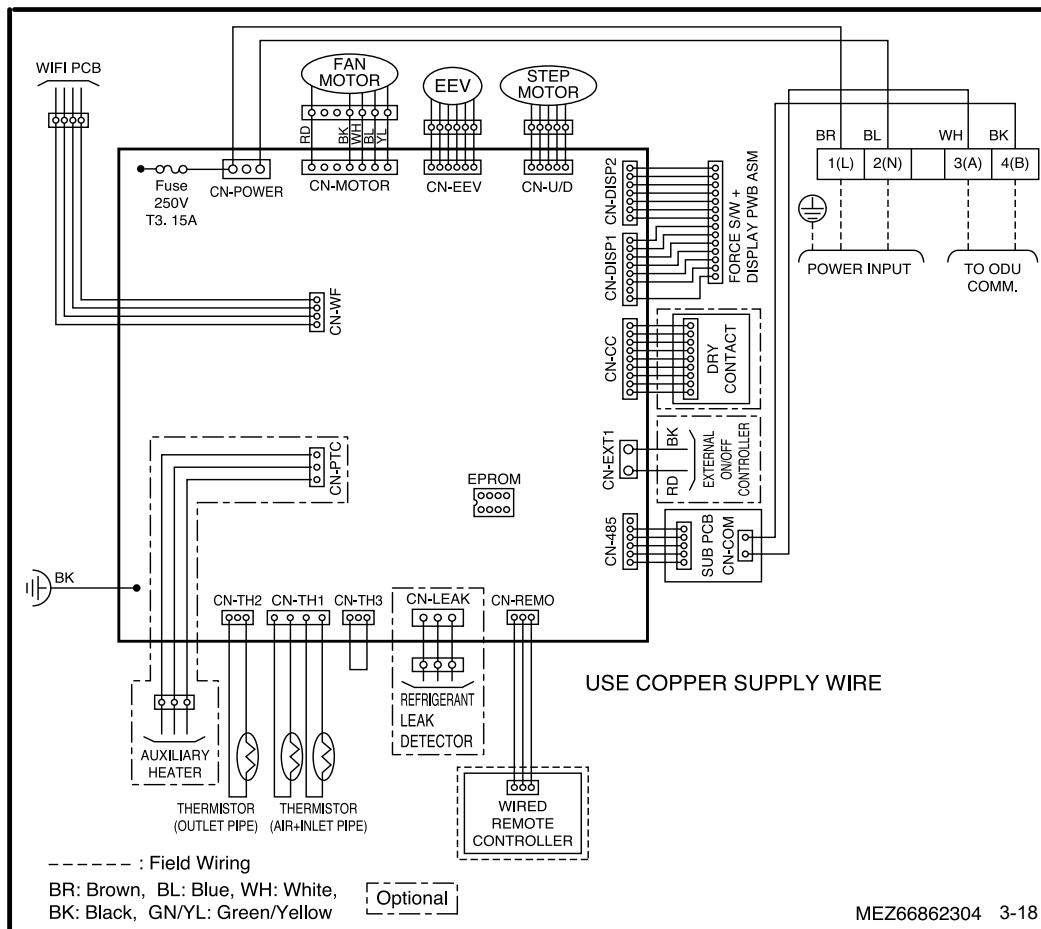


Table 12: SJ and SK Frame Wiring Diagram Legend.

PCB Connection	Purpose	Function
CN-POWER	AC power supply	AC Power line input for indoor controller
CN-MOTOR	Fan motor output	Motor output of BLDC
CN-EEV	EEV output	EEV control output
CN-U/D	Step motor	Step motor output
CN-DISP2	Display	Display of indoor status
CN-DISP1	Display	Display of indoor status
CN-CC	Dry contact	Dry contact connection
CN-EXT1	External ON / OFF controller	External ON / OFF controller connection
CN-485	Communication	Connection between indoor and outdoor units
CN-REMO	Remote controller	Remote control connection
CN-LEAK	Refrigerant leak detector	Refrigerant leak detector connection
CN-TH3	Float switch	Float switch connection
CN-TH1	Return air and inlet pipe thermistor	Return air and inlet pipe thermistor connection
CN-TH2	Outlet pipe thermistor	Outlet pipe thermistor connection
CN-PTC	Auxiliary heater	Auxiliary heater connection
CN-WF	Wi-Fi module	Wi-Fi module connection

\*To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V 5, Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.

# ART COOL™ MIRROR

## Refrigerant Flow Diagram

### SJ and SK Frames

Figure 14: SJ, SK Frame Piping Diagram.

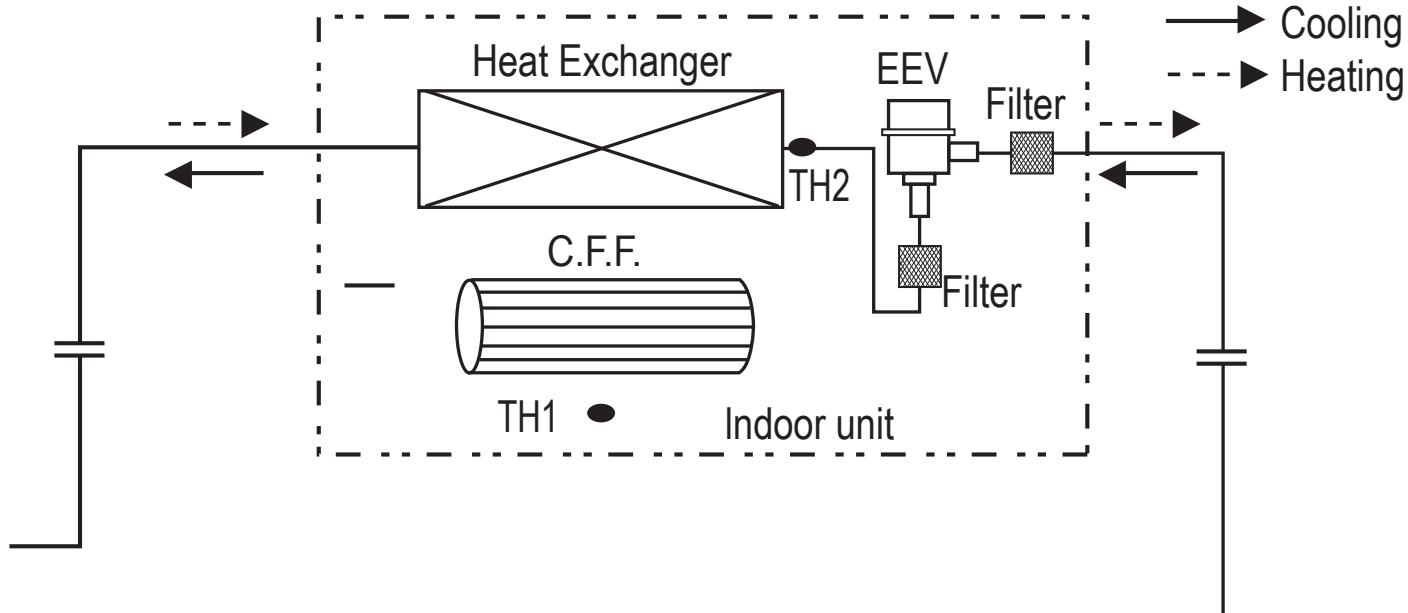


Table 13: SJ, SK Frame Refrigerant Pipe Connection Port Diameters.

Model	Liquid (inch)	Vapor (inch)
<b>SJ Frames</b>		
ARNU053SJR4		
ARNU073SJR4		
ARNU093SJR4	1/4 Flare	1/2 Flare
ARNU123SJR4		
ARNU153SJR4		
<b>SK Frames</b>		
ARNU183SKR4	1/4 Flare	1/2 Flare
ARNU243SKR4	3/8 Flare	5/8 Flare

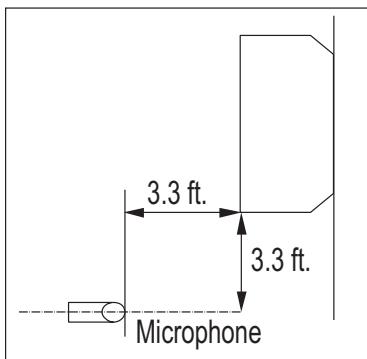
Table 14: SJ, SK Frame Thermistors.

Thermistor	Description
TH1	Return air and pipe in thermistor
TH2	Pipe out thermistor

## Acoustic Data

### Sound Pressure Levels

Figure 15: Sound Pressure Measurement Location.



- Measurements are taken 3.3 ft away from the front of the unit.
- Data is valid under nominal operating conditions.
- Sound pressure levels are measured in dB(A) with a tolerance of  $\pm 3$ .
- Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- Reference acoustic pressure: 0dB = 20 $\mu$ Pa.

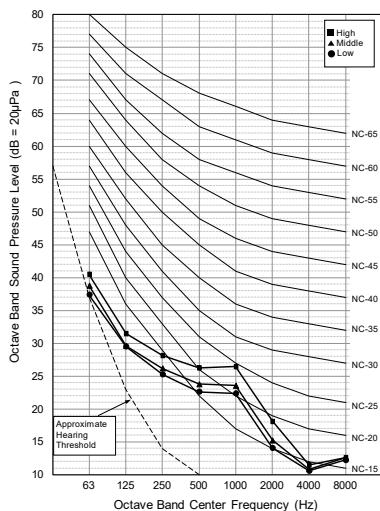
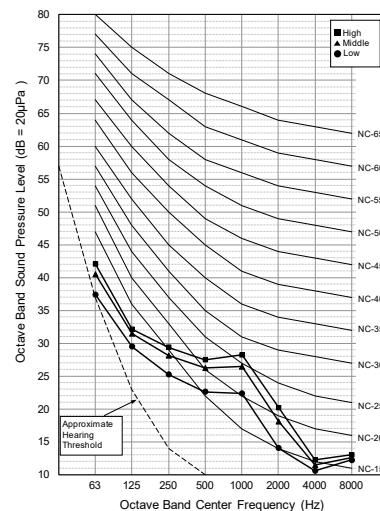
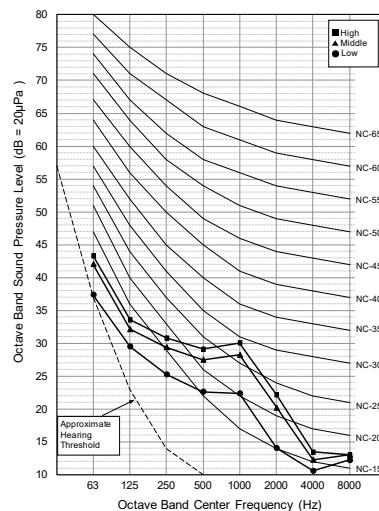
## Operating Conditions:

- Power source: 220V/60 Hz
- Sound level will vary depending on a range of factors including the construction (acoustic absorption coefficient) of a particular room in which the unit was installed.

Table 15: Art Cool Mirror Wall-Mounted Indoor Unit Sound Pressure Levels.

Model	Sound Pressure Levels dB(A)		
	High Fan Speed	Medium Fan Speed	Low Fan Speed
<b>SJ Frames</b>			
ARNU053SJR4	30.0	29.0	28.0
ARNU073SJR4	32.0	30.0	28.0
ARNU093SJR4	34.0	32.0	28.0
ARNU123SJR4	37.0	34.0	30.0
ARNU153SJR4	42.0	39.0	32.0
<b>SK Frames</b>			
ARNU183SKR4	43.0	39.0	34.0
ARNU243SKR4	46.0	41.0	34.0

Figure 16: ARNU053SJR4, ARNU073SJR4, and ARNU093SJR4 Sound Pressure Level Diagrams.

**ARNU053SJR4****ARNU073SJR4****ARNU093SJR4**

# ART COOL™ MIRROR

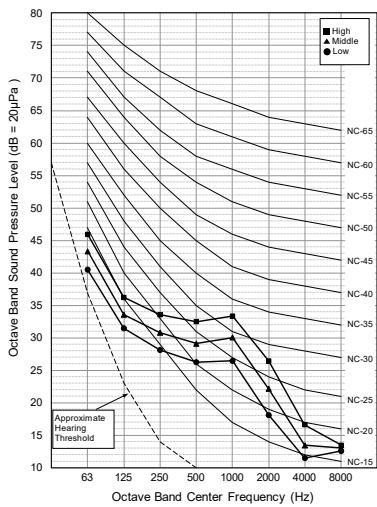
**MULTI V™**

## Acoustic Data

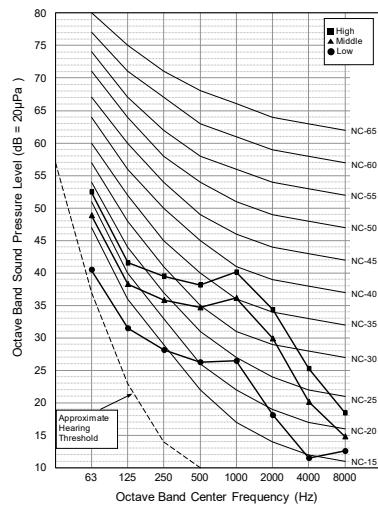
### Sound Pressure Levels

Figure 17: ARNU123SJR4, ARNU153SJR4, and ARNU183SKR4 Sound Pressure Level Diagrams.

**ARNU123SJR4**



**ARNU153SJR4**



**ARNU183SKR4**

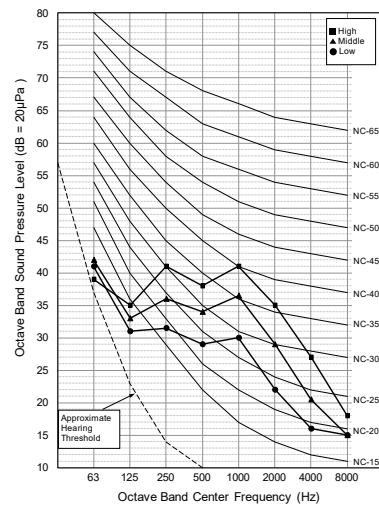
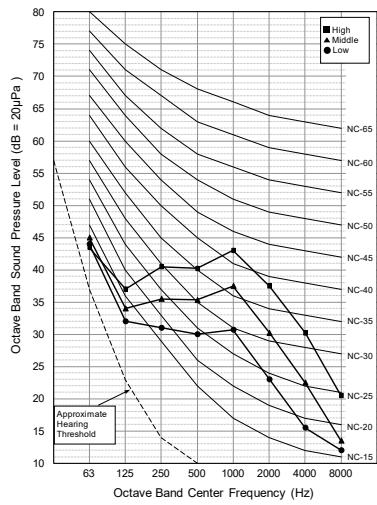


Figure 18: ARNU243SKR4 Sound Pressure Level Diagrams.

**ARNU243SKR4**



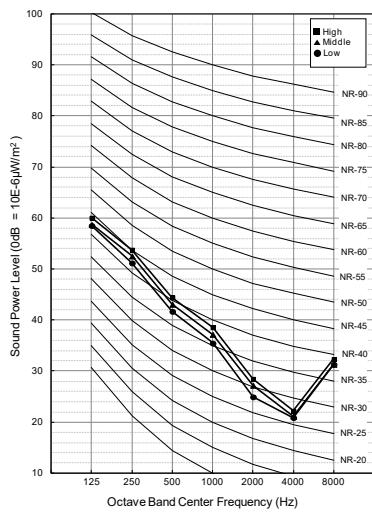
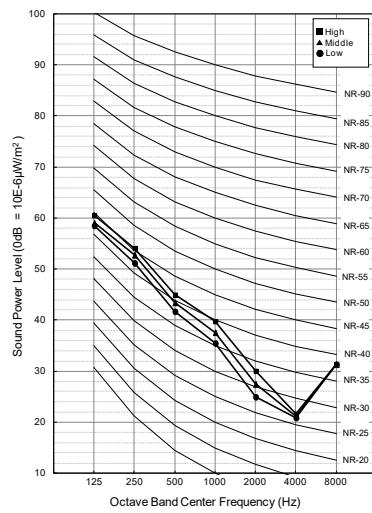
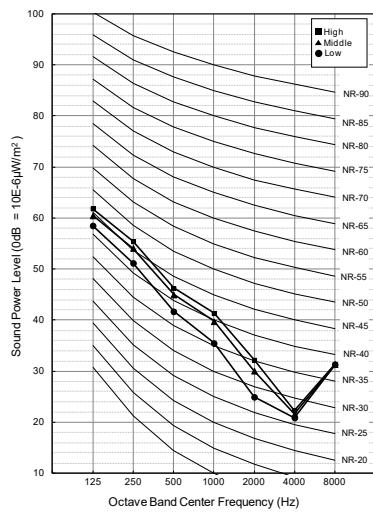
## Acoustic Data Sound Power Levels

Table 16: Art Cool Mirror Wall-Mounted Indoor Unit Sound Power Levels.

Model	Sound Power Levels dB(A)
	High Fan Speed
<i>SJ Frames</i>	
ARNU053SJR4	54.0
ARNU073SJR4	54.0
ARNU093SJR4	55.0
ARNU123SJR4	55.0
ARNU153SJR4	58.0
<i>SK Frames</i>	
ARNU183SKR4	63.0
ARNU243SKR4	65.0

- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB =  $10E-6\mu W/m^2$

Figure 19: ARNU053SJR4, ARNU073SJR4, and ARNU093SJR4 Sound Power Level Diagrams.

**ARNU053SJR4****ARNU073SJR4****ARNU093SJR4**

# ART COOL™ MIRROR

## Acoustic Data

### Sound Power Levels

Figure 20: ARNU123SJR4, ARNU153SJR4, ARNU183SKR4 Sound Power Level Diagrams.

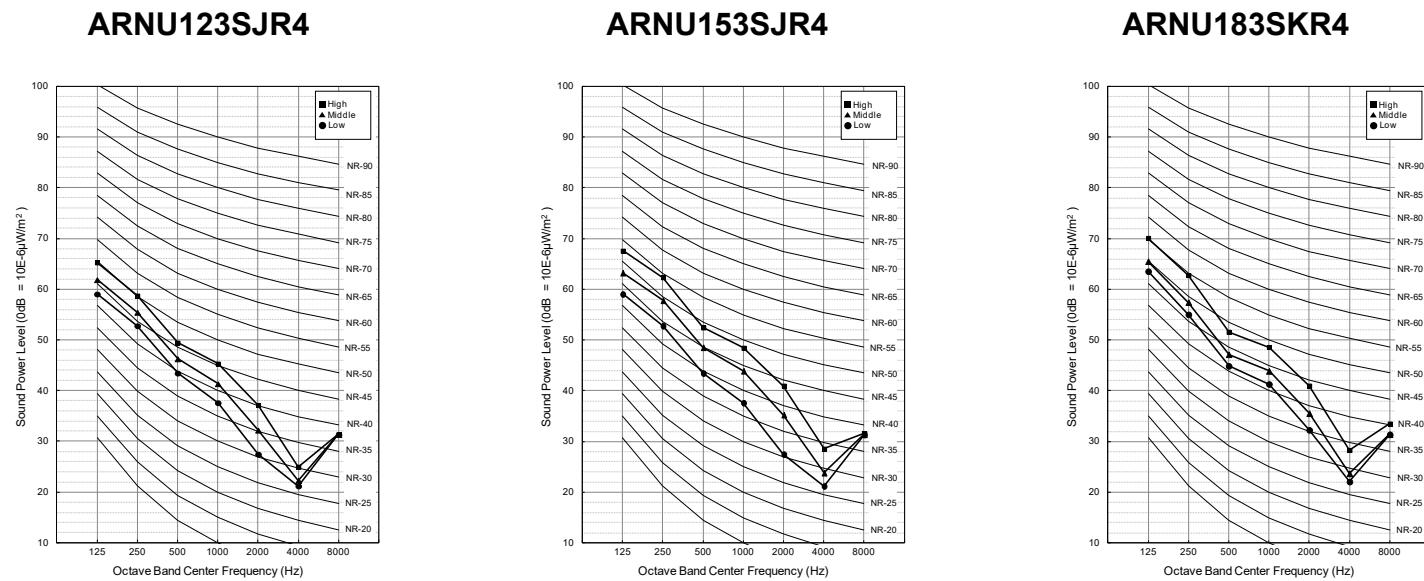
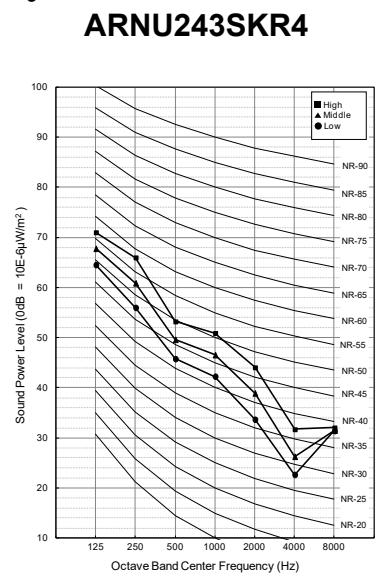
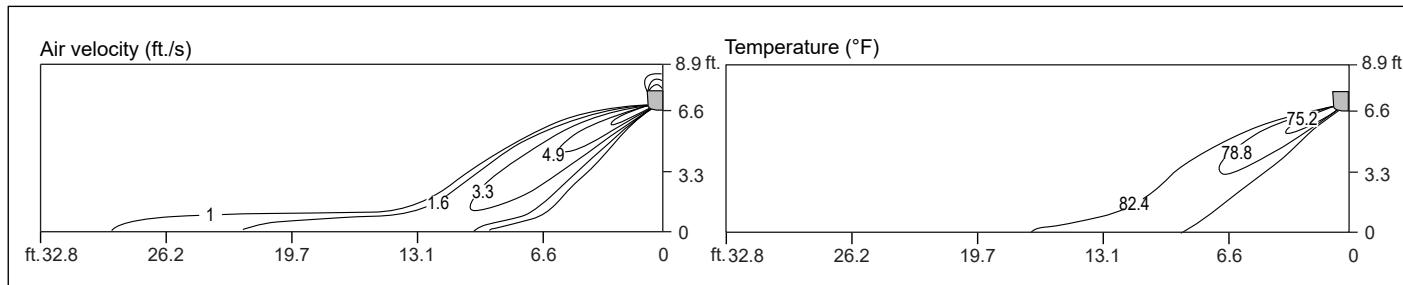


Figure 21: ARNU243SKR4 Sound Power Level Diagrams.



**ARNU053SJR4****Cooling****Side View**

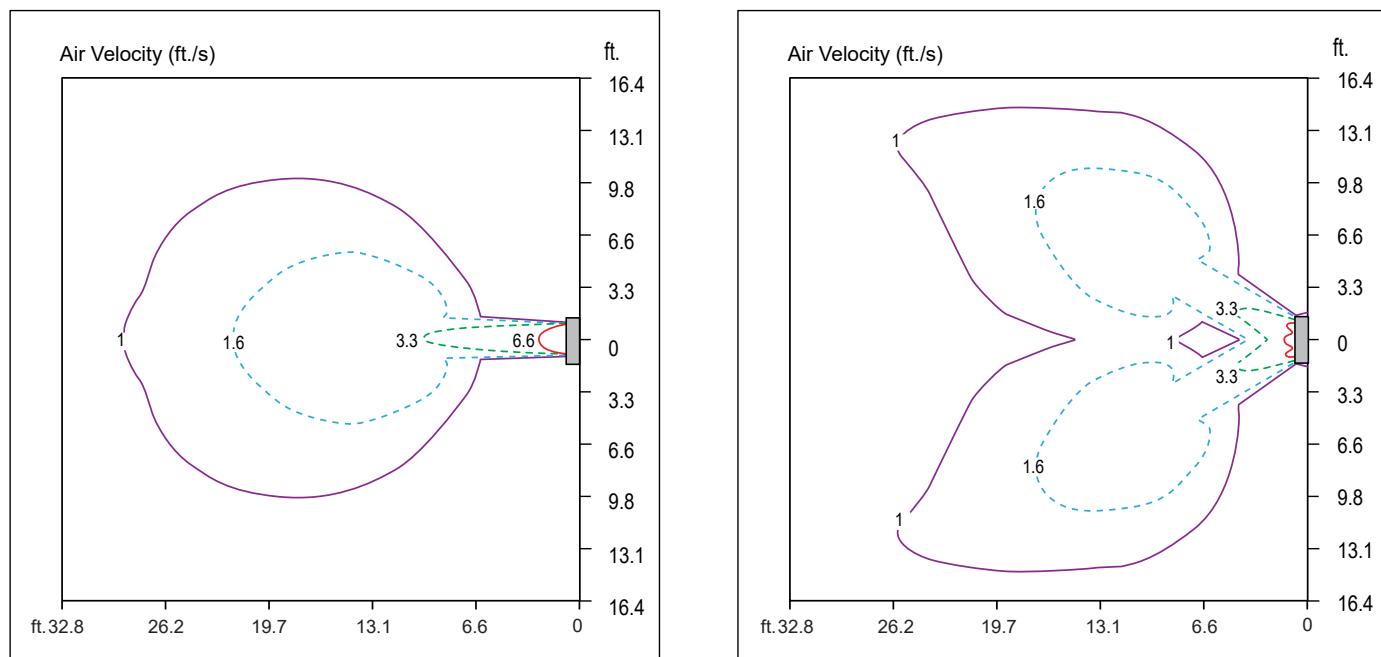
Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

**Top View**

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 29.2 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 26.2 ft.
- Fan Speed : High

# ART COOL™ MIRROR

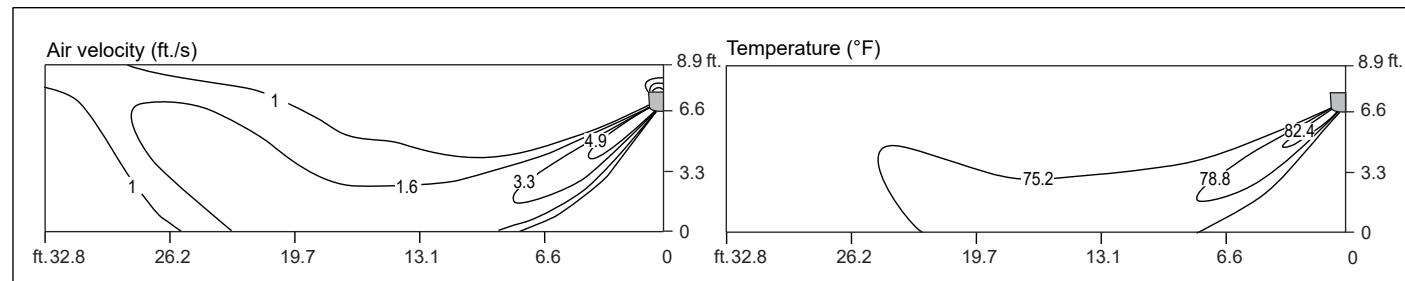
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Air Velocity / Temperature Distribution  
ARNU053SJR4

## Heating

### Side View

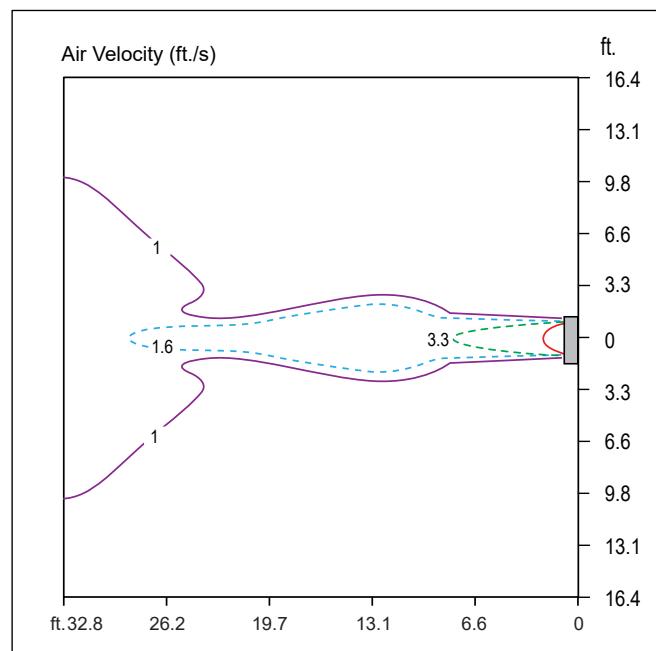
Discharge angle: 55°



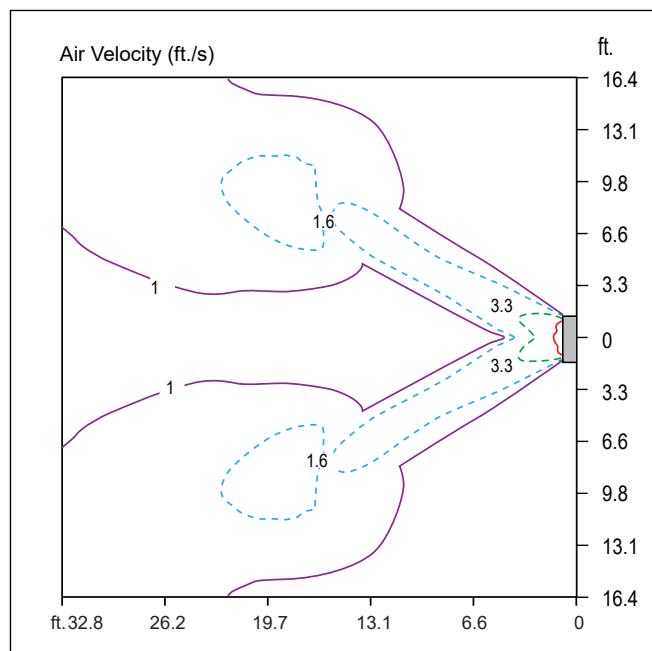
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



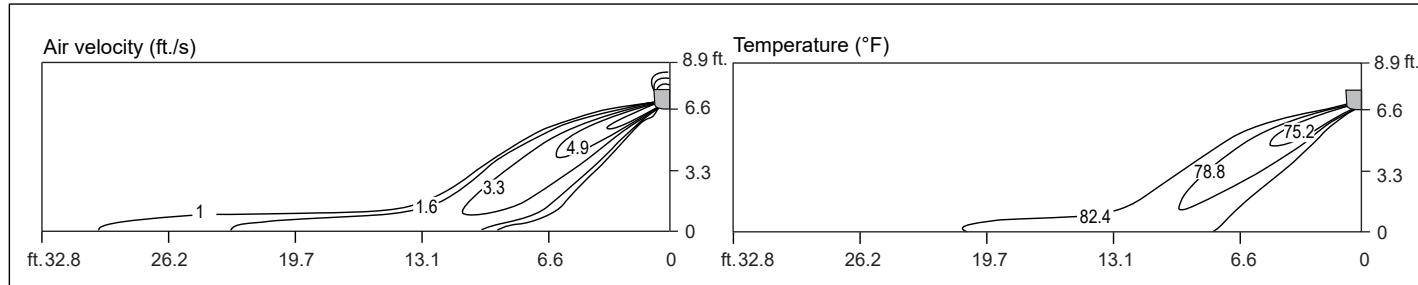
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 39.0 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 41.3 ft.
- Fan Speed : High

**ARNU073SJR4****Cooling****Side View**

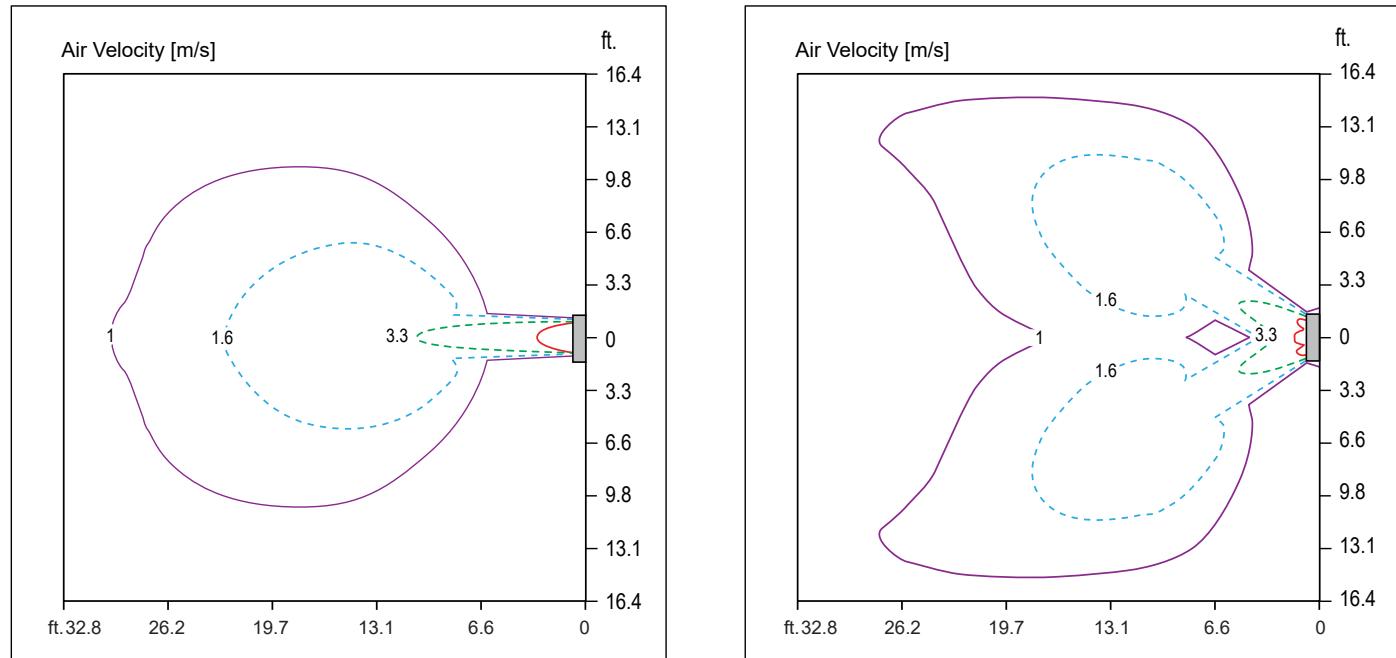
Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

**Top View**

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 30.2 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 27.6 ft.
- Fan Speed : High

# ART COOL™ MIRROR

Air Velocity / Temperature Distribution

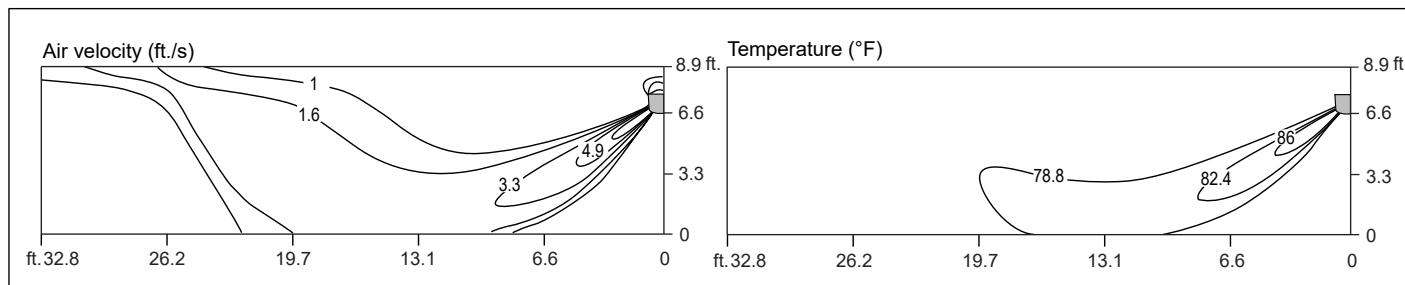
ARNU073SJR4

**MULTI V™**

## Heating

### Side View

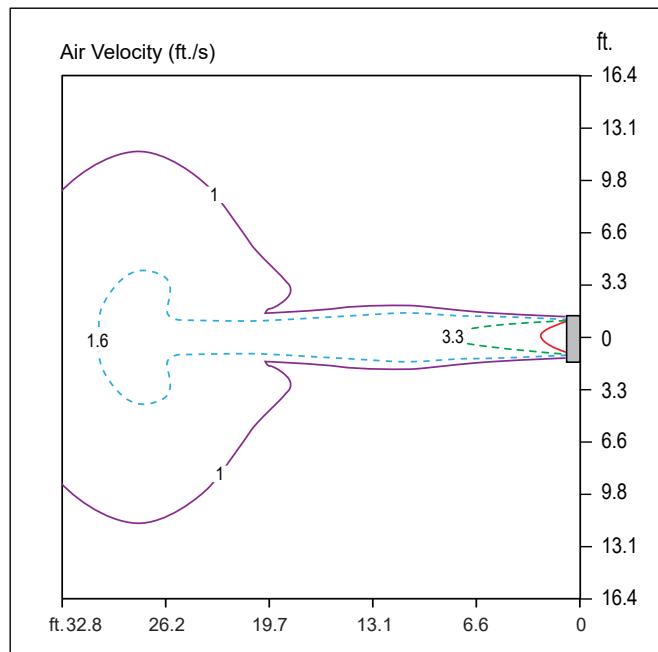
Discharge angle: 55°



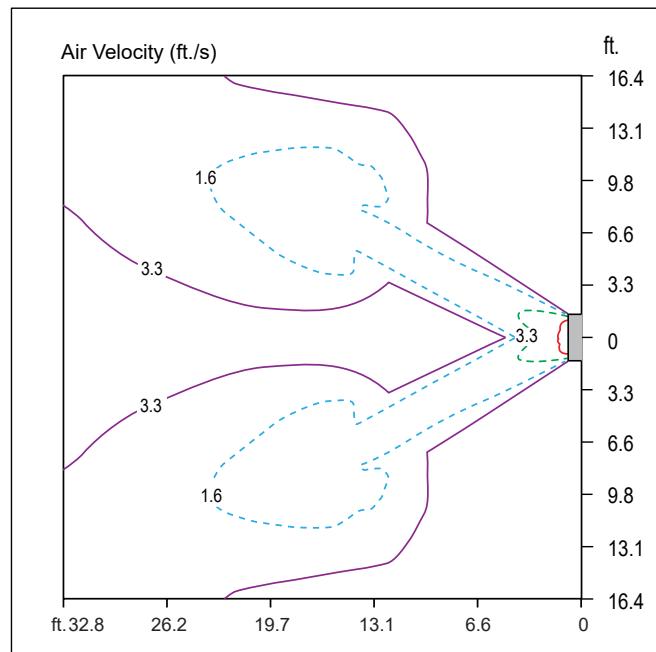
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



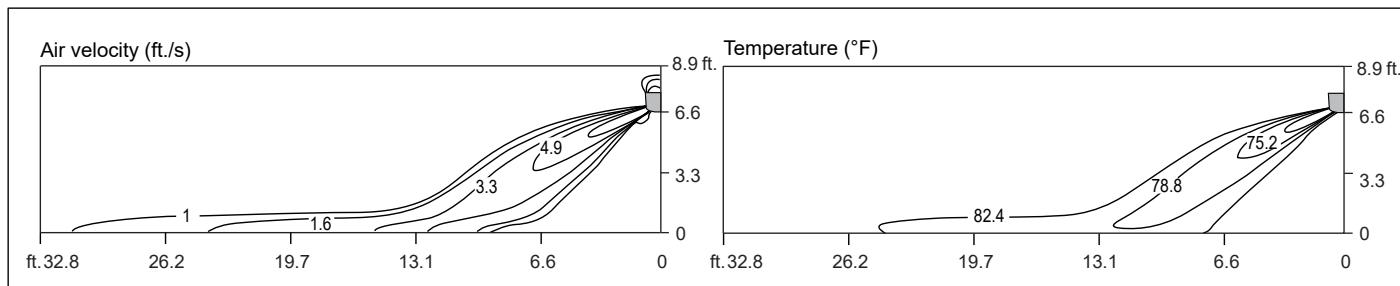
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 36.1 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 43.3 ft.
- Fan Speed : High

**ARNU093SJR4****Cooling****Side View**

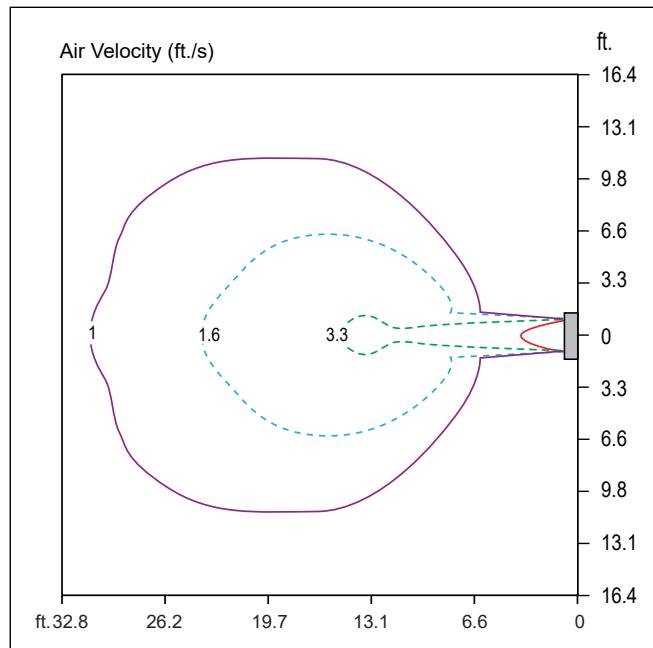
Discharge angle: 35°



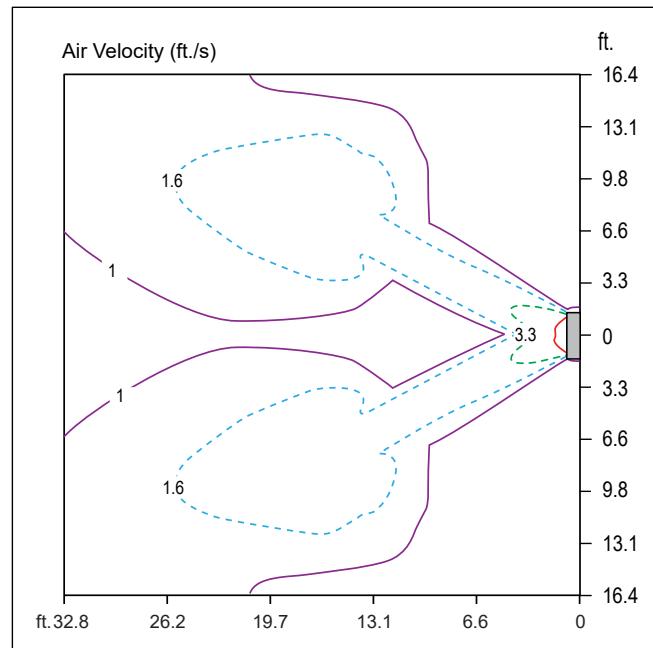
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

**Top View**

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 31.5 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 45.9 ft.
- Fan Speed : High

# ART COOL™ MIRROR

Air Velocity / Temperature Distribution

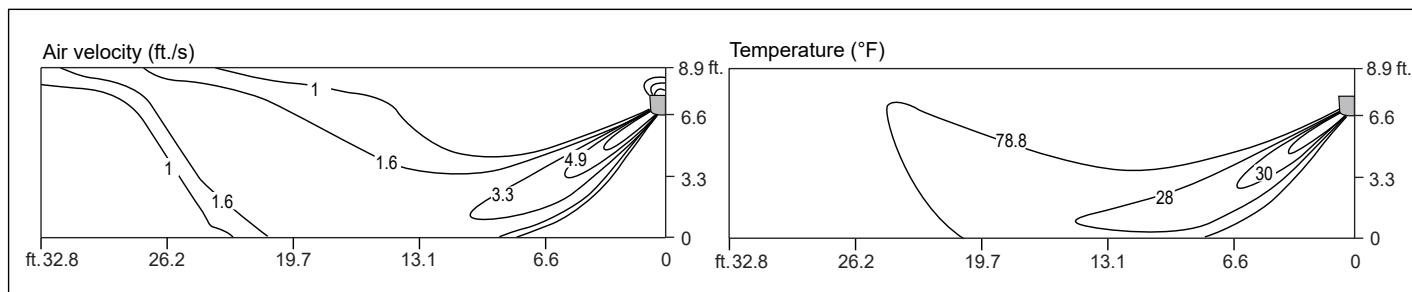
ARNU093SJR4

**MULTI V™**

## Heating

### Side View

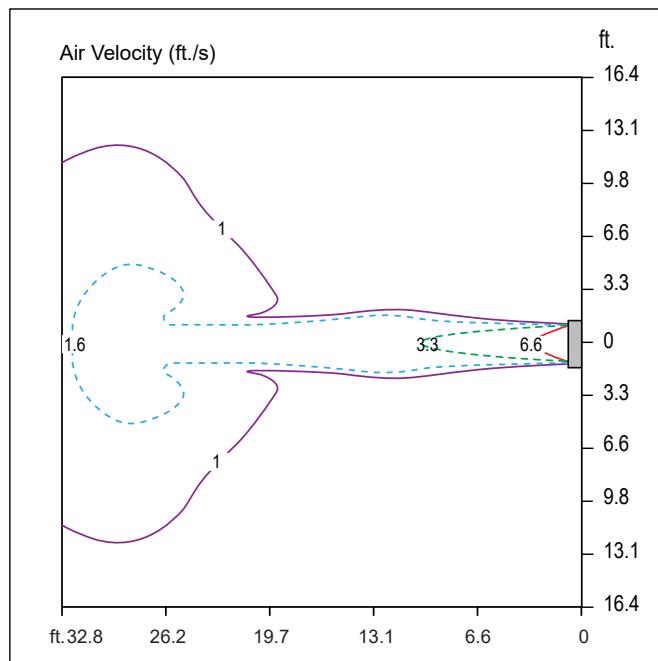
Discharge angle: 55°



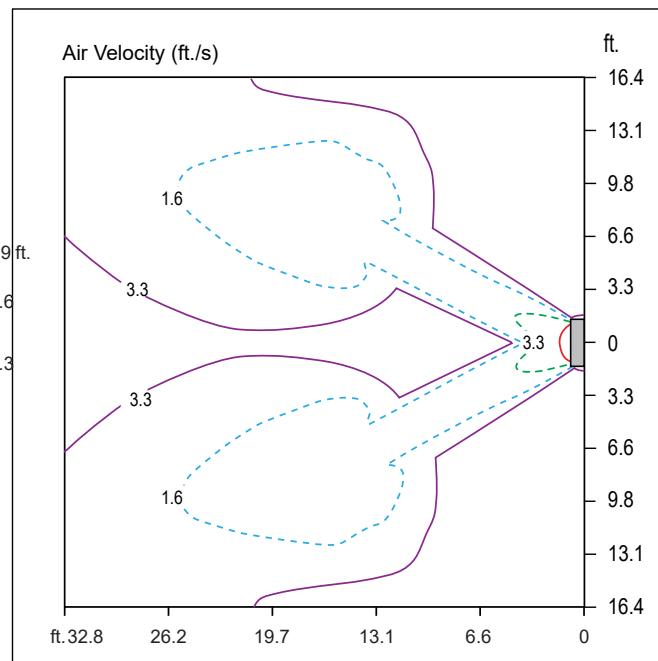
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



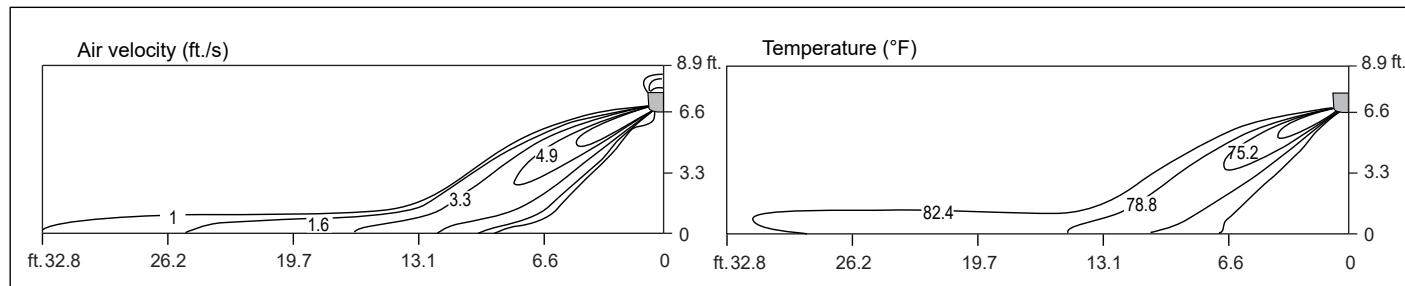
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 38.7 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 45.9 ft.
- Fan Speed : High

**ARNU123SJR4****Cooling****Side View**

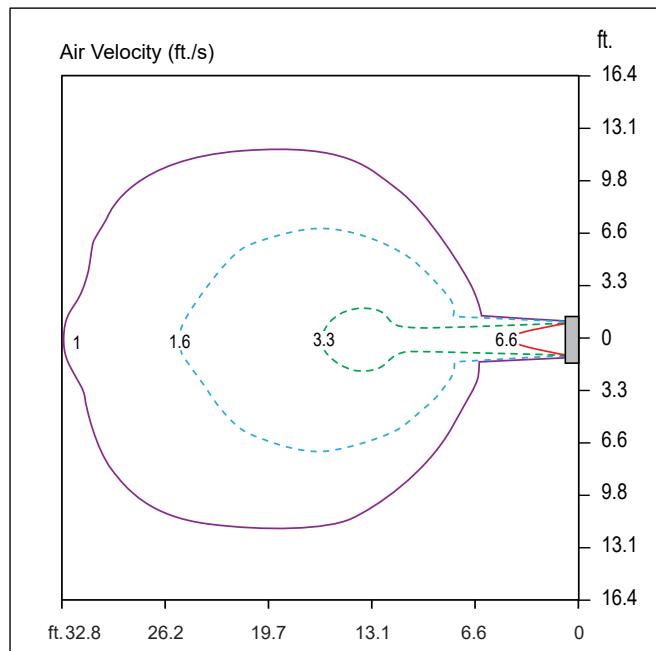
Discharge angle: 35°



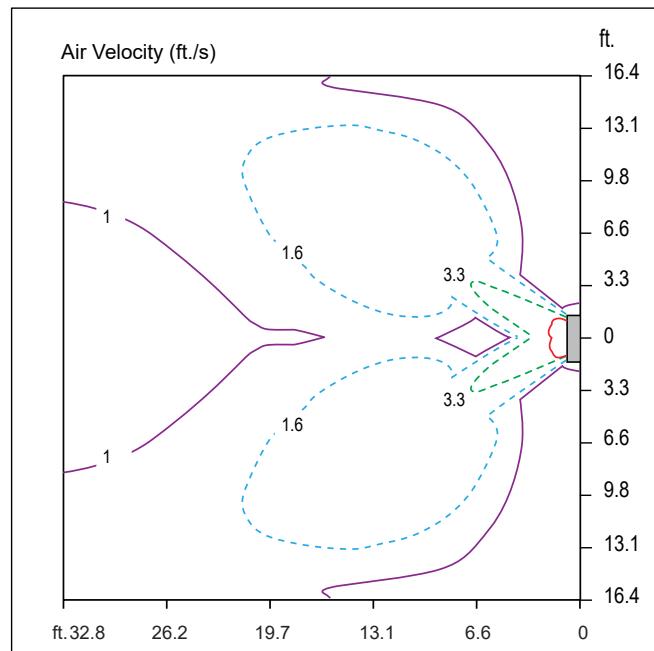
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

**Top View**

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 32.8 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 46.9 ft.
- Fan Speed : High

# ART COOL™ MIRROR

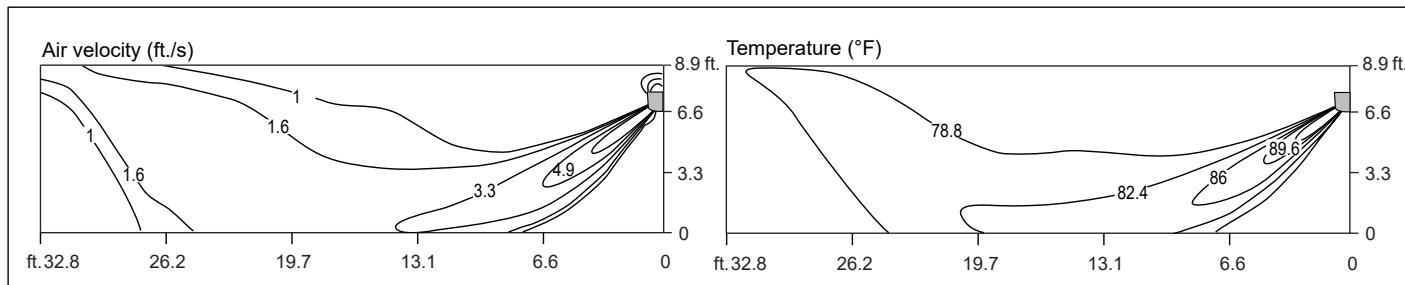
Air Velocity / Temperature Distribution  
ARNU123SJR4

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## Heating

### Side View

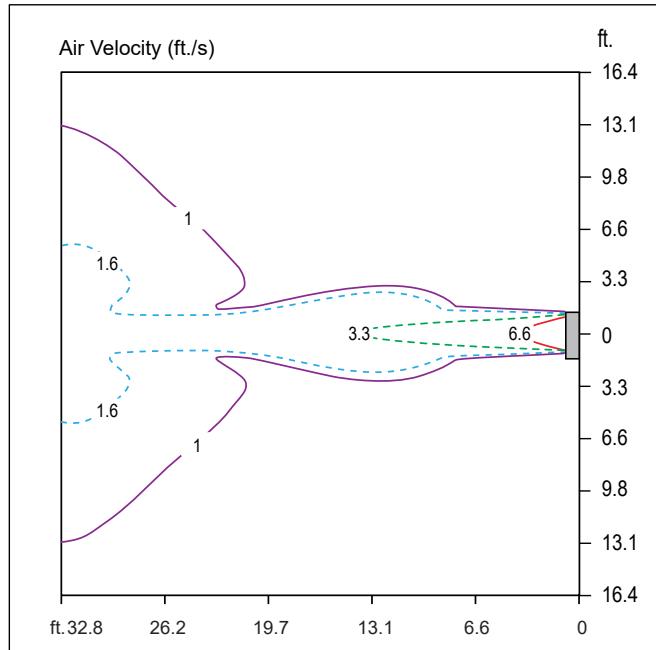
Discharge angle: 55°



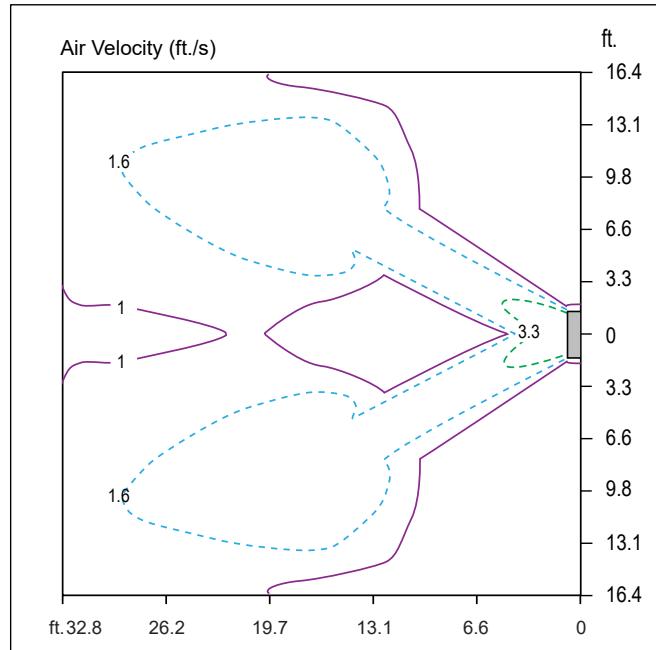
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



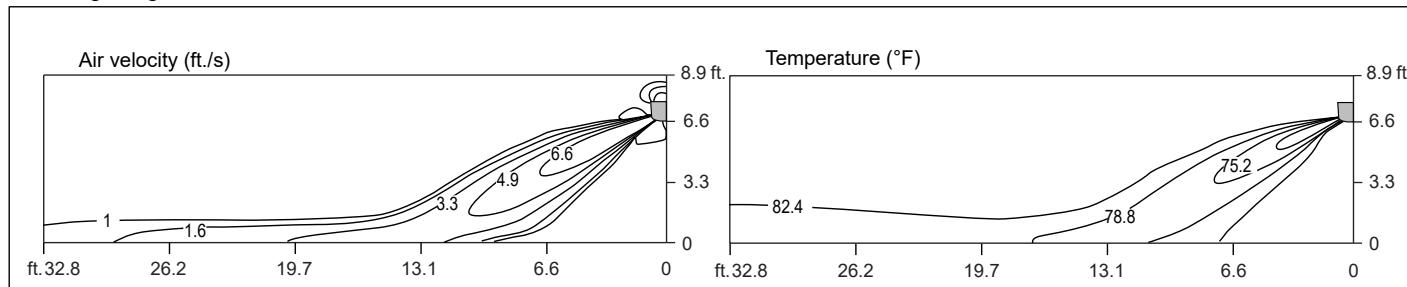
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 42.6 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 46.9 ft.
- Fan Speed : High

**ARNU153SJR4****Cooling****Side View**

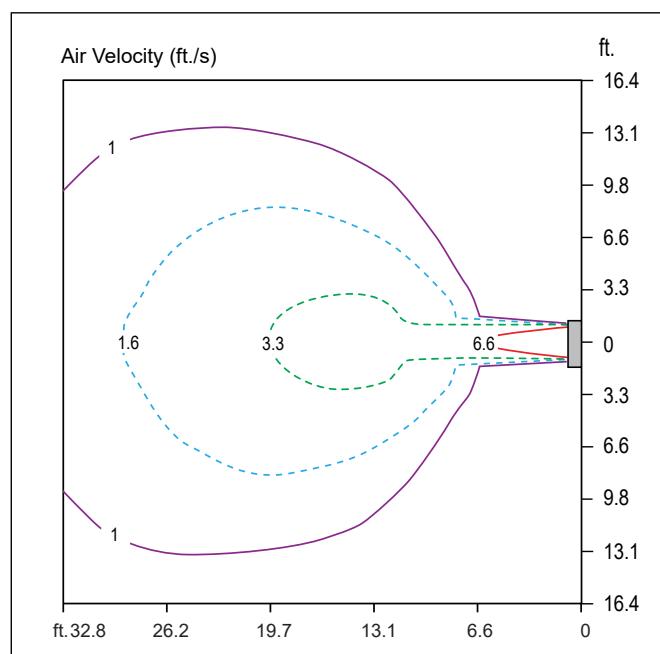
Discharge angle: 35°



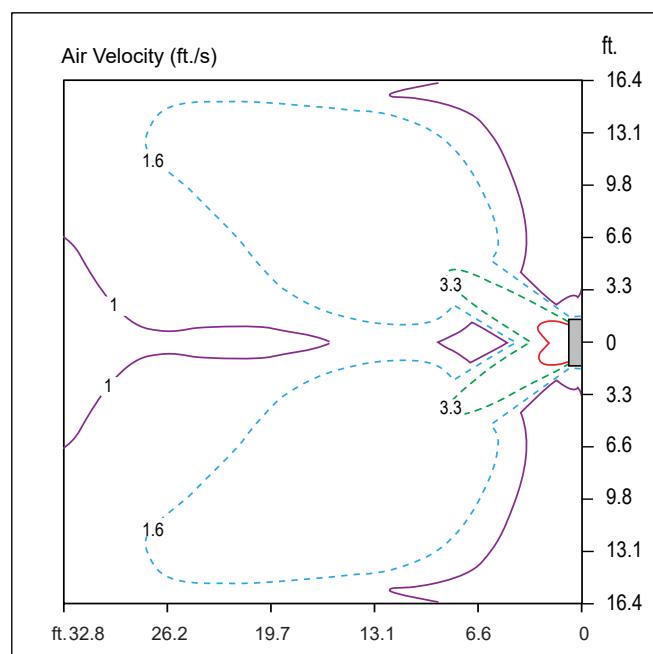
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

**Top View**

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 37.7 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 54.8 ft.
- Fan Speed : High

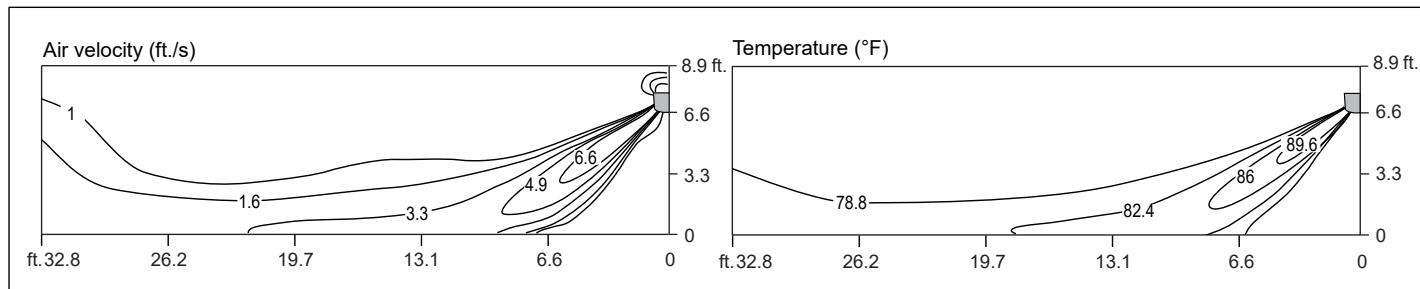
# ART COOL™ MIRROR

Air Velocity / Temperature Distribution  
ARNU153SJR4

## Heating

### Side View

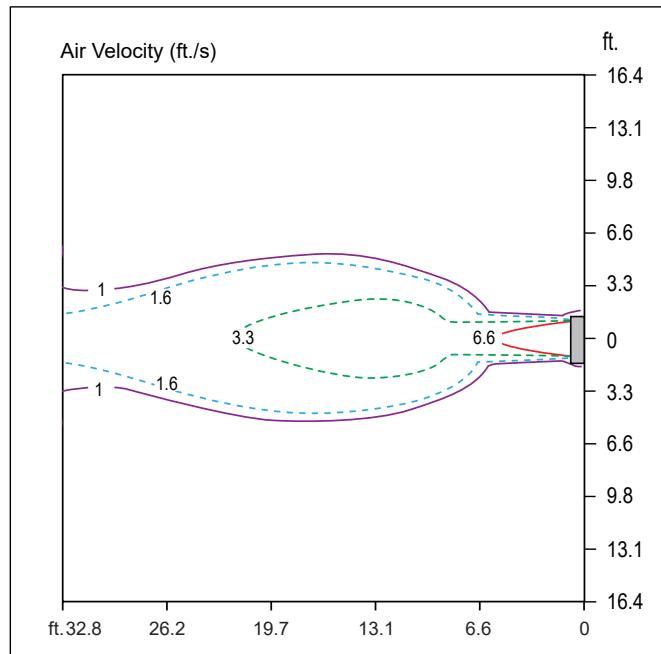
Discharge angle: 55°



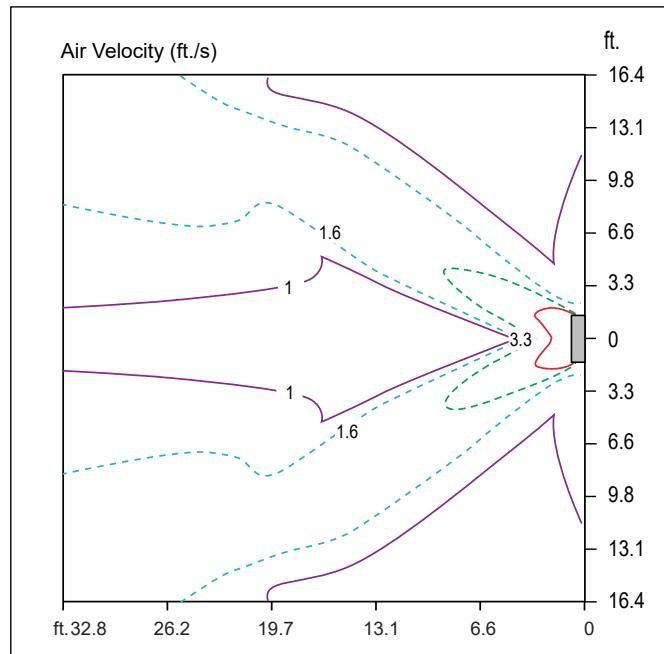
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



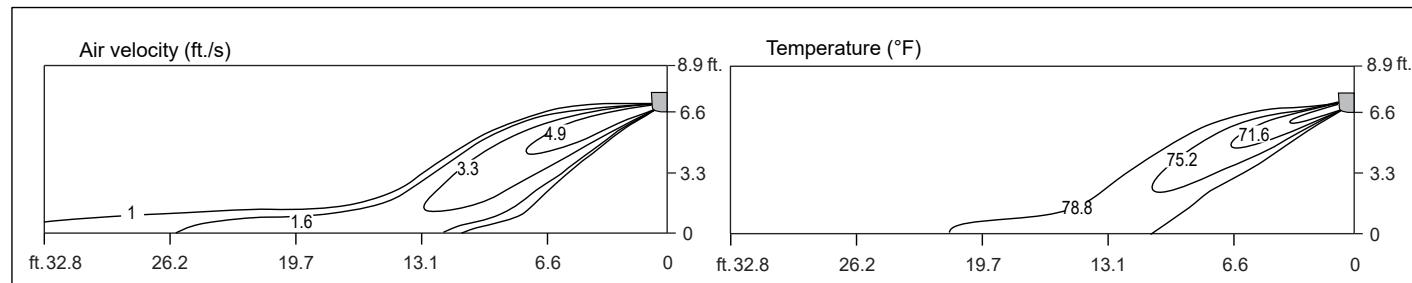
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 59.1 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 61.7 ft.
- Fan Speed : High

**ARNU183SKR4****Cooling****Side View**

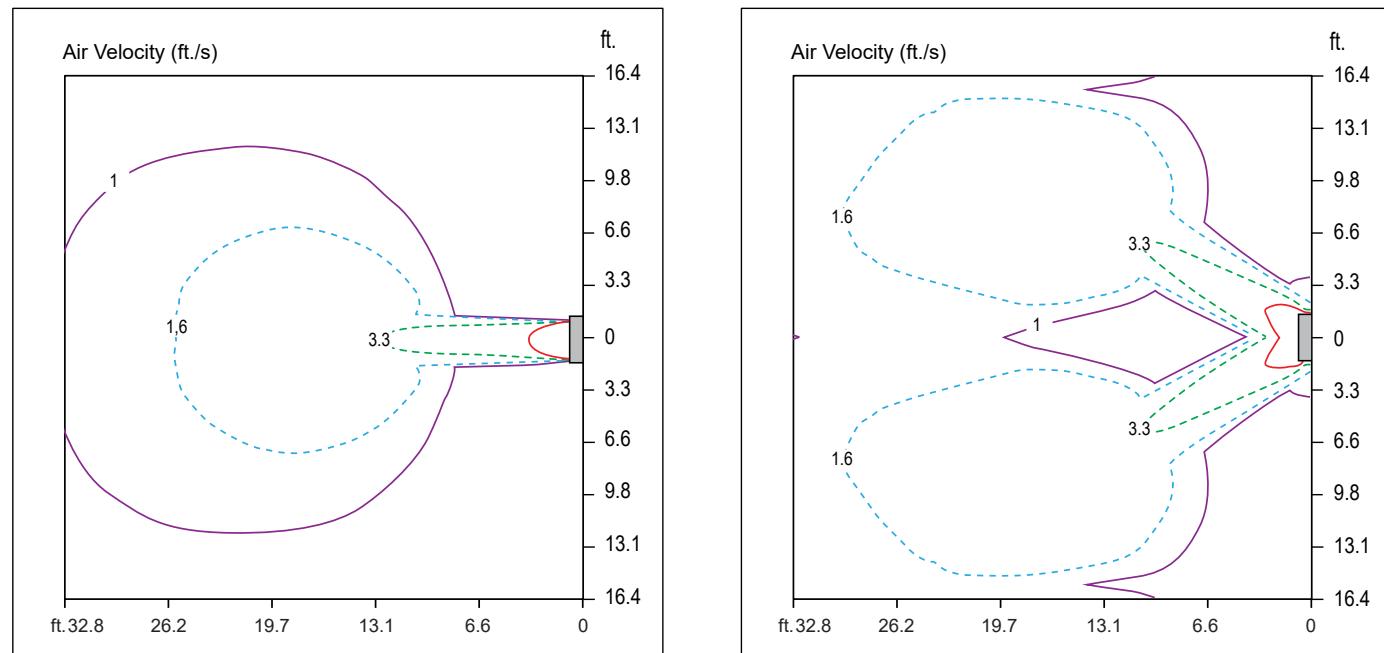
Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

**Top View**

Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 34.1 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 49.9 ft.
- Fan Speed : High

# ART COOL™ MIRROR

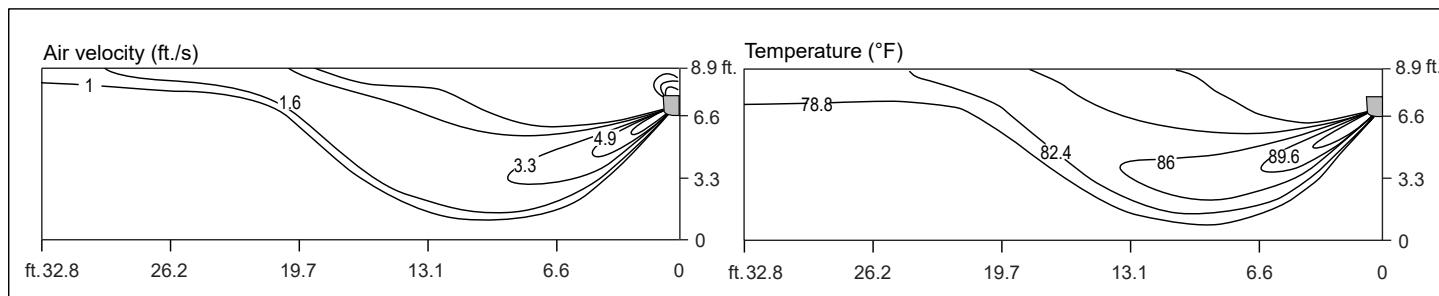
Air Velocity / Temperature Distribution  
ARNU183SKR4

MULTI V™

## Heating

### Side View

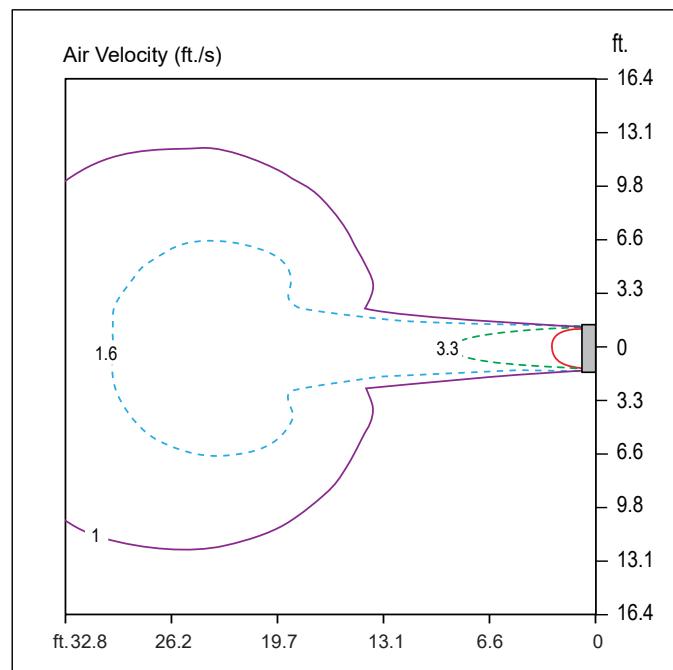
Discharge angle: 45°



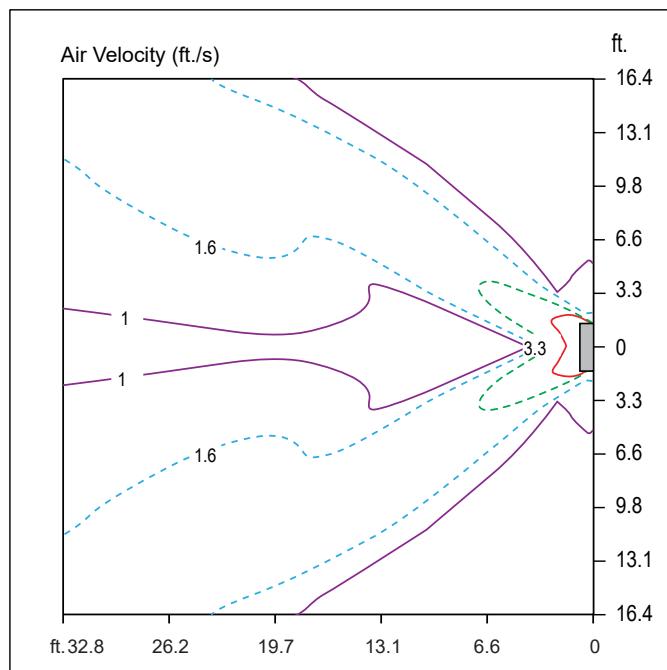
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 45°



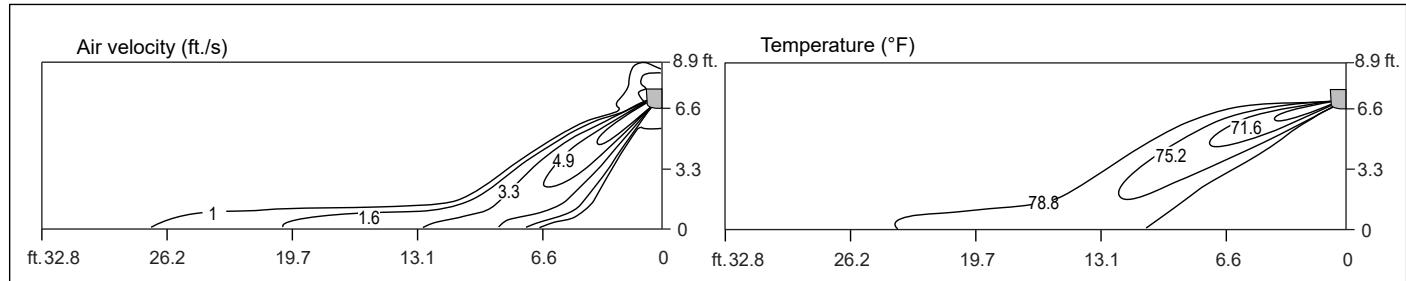
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 38.1 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 59.7 ft.
- Fan Speed : High

**ARNU243SKR4****Cooling****Side View**

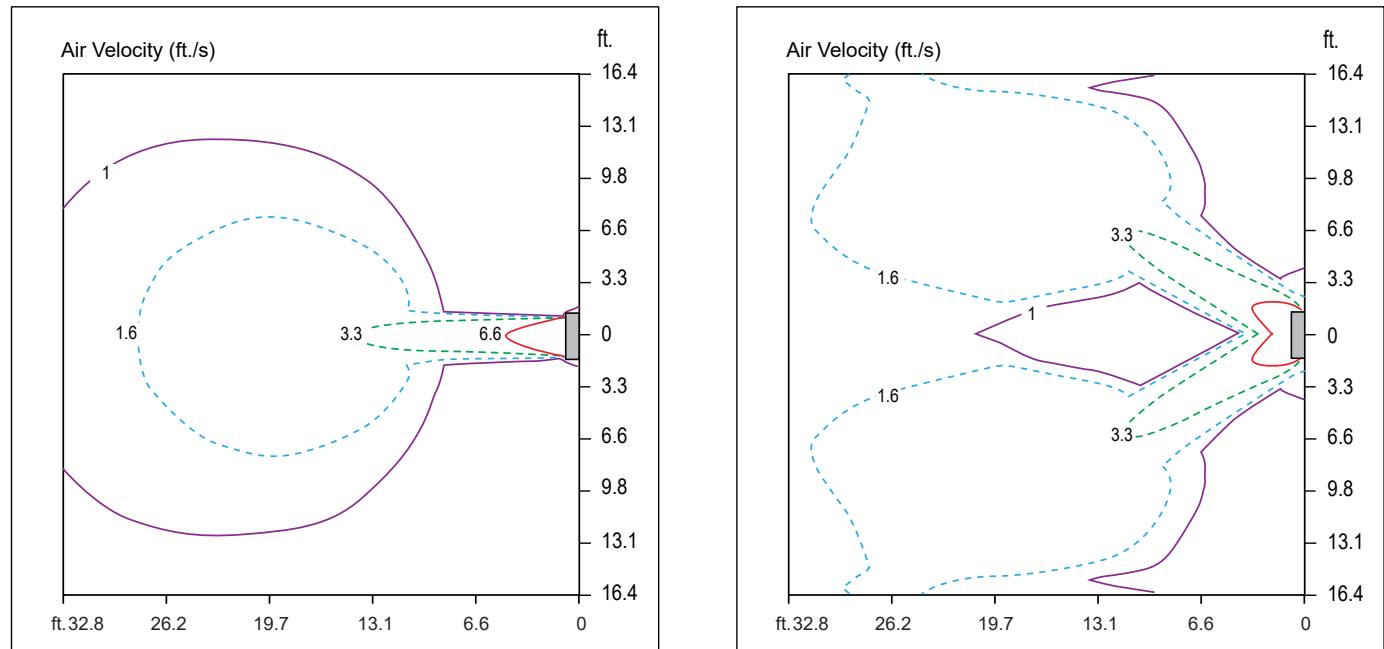
Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

**Top View**

Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 36.7 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 54.1 ft.
- Fan Speed : High

# ART COOL™ MIRROR

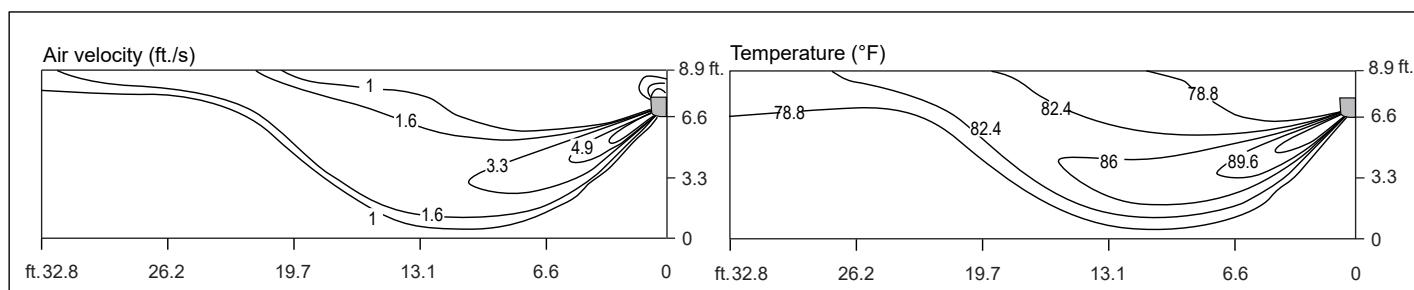
MULTI V™

Air Velocity / Temperature Distribution  
ARNU243SKR4

## Heating

### Side View

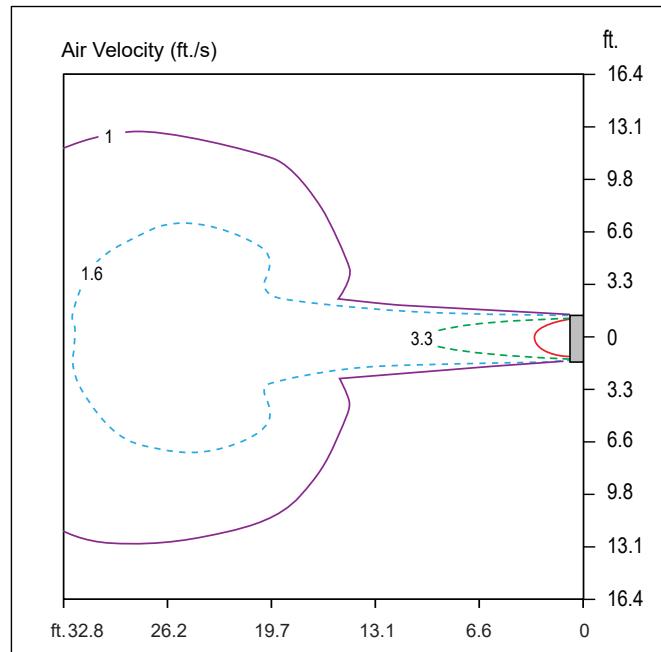
Discharge angle: 45°



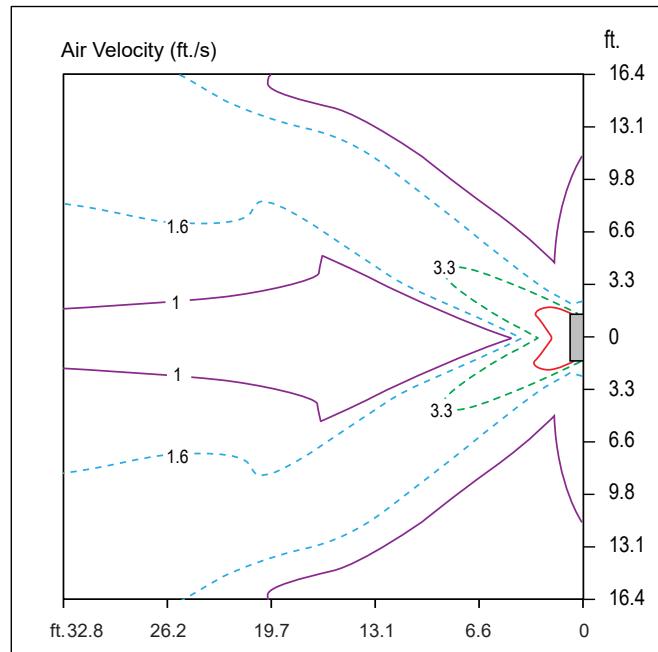
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 45°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 39.7 ft.
- Fan Speed : High



- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 49.9 ft.
- Fan Speed : High

Cooling Capacity Tables  
 ARNU053SJR4, ARNU073SJR4

Table 17: ARNU053SJR4 and ARNU073SJR4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)											
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU053SJR4 / 5.5	-9.9	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	-5	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	0	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	5	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	10	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	14	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	20	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	23	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	25	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	30	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	35	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	40	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	45	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	50	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	55	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	60	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	65	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	70	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	75	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2
	80	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.4	5.2
	85	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.1	5.2	6.2	5.0
	90	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.0	5.1	6.1	4.9
	95	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	5.9	5.1	6.0	4.9
	100	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	5.8	5.0	5.9	4.8
	105	3.7	3.6	4.2	4.1	4.7	4.4	5.3	4.7	5.5	4.7	5.7	4.6
	110	3.6	3.5	4.0	3.9	4.4	4.1	5.0	4.4	5.2	4.4	5.4	4.4
	115	3.5	3.4	3.8	3.7	4.1	3.9	4.7	4.2	4.9	4.2	5.1	4.2
	118	3.4	3.4	3.6	3.5	3.9	3.6	4.5	4.0	4.6	4.0	4.9	4.0
	122	3.3	3.3	3.4	3.3	3.7	3.4	4.2	3.8	4.4	3.8	4.6	3.8
ARNU073SJR4 / 7.5	-9.9	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	-5	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	0	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	5	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	10	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	14	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	20	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	23	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	25	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	30	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	35	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	40	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	45	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	50	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	55	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	60	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	65	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	70	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	75	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5
	80	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.7	6.4
	85	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.3	6.5	8.4	6.2
	90	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.2	6.4	8.3	6.1
	95	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.0	6.3	8.2	5.7
	100	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	7.9	6.2	8.0	6.0
	105	4.9	4.7	5.7	5.1	6.4	5.5	7.2	5.8	7.5	5.8	7.7	5.8
	110	4.8	4.5	5.4	4.8	6.0	5.1	6.8	5.5	7.1	5.5	7.3	5.5
	115	4.7	4.4	5.1	4.6	5.6	4.8	6.3	5.2	6.6	5.2	7.0	5.1
	118	4.6	4.3	4.9	4.4	5.4	4.5	6.1	5.0	6.3	5.0	6.7	5.0
	122	4.5	4.1	4.6	4.1	5.1	4.2	5.8	4.7	6.0	4.7	6.3	4.7

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

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ART COOL™ | 45

# ART COOL™ MIRROR

MULTI V™

## Cooling Capacity Tables

ARNU093SJR4, ARNU123SJR4

Table 18: ARNU093SJR4 and ARNU123SJR4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU093SJR4 / 9.6	-9.9	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	-5	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	0	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	5	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	10	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	14	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	20	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	23	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	25	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	30	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	35	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	40	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	45	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	50	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	55	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	60	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.3	7.7
	65	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.1	7.6
	70	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	11.9	7.4
	75	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	11.6	7.3
	80	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.1	7.7	11.3	7.2
	85	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.6	7.7	10.8	7.4	11.0	6.9
	90	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.5	7.6	10.6	7.2	10.8	6.9
	95	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.3	7.6	10.5	7.2	10.6	6.8
	100	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.1	7.4	10.3	7.1	10.5	6.7
	105	6.3	5.6	7.3	6.1	8.2	6.5	9.2	6.9	9.6	6.9	9.9	6.9	10.2	6.6
	110	6.2	5.4	6.9	5.8	7.7	6.1	8.6	6.5	9.0	6.5	9.4	6.5	9.8	6.4
	115	6.0	5.2	6.6	5.5	7.2	5.7	8.1	6.2	8.5	6.2	8.9	6.2	9.4	6.1
	118	5.9	5.1	6.2	5.2	6.9	5.4	7.8	5.9	8.1	5.9	8.5	5.9	9.0	5.9
	122	5.7	4.9	5.9	4.9	6.5	5.1	7.4	5.6	7.7	5.6	8.1	5.6	8.7	5.6
ARNU123SJR4 / 12.3	-9.9	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	-5	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	0	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	5	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	10	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	14	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	20	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	23	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	25	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	30	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	35	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	40	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	45	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	50	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	55	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	60	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.7	9.2
	65	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.5	9.1
	70	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.3	8.9
	75	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	14.9	8.7
	80	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.2	9.2	14.5	8.7
	85	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.6	9.3	13.8	8.8	14.0	8.4
	90	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.4	9.1	13.5	8.7	13.8	8.3
	95	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.2	9.1	13.4	8.6	13.6	8.2
	100	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	12.9	8.9	13.2	8.5	13.4	8.1
	105	8.1	6.7	9.3	7.3	10.6	7.9	11.8	8.4	12.3	8.4	12.7	8.3	13.0	7.9
	110	7.9	6.5	8.9	6.9	9.8	7.3	11.1	7.9	11.6	7.9	12.0	7.9	12.6	7.7
	115	7.7	6.3	8.4	6.6	9.2	6.9	10.4	7.5	10.9	7.5	11.4	7.5	12.1	7.4
	118	7.5	6.1	8.0	6.2	8.8	6.5	10.0	7.1	10.4	7.1	10.9	7.1	11.6	7.1
	122	7.3	5.9	7.6	5.9	8.3	6.1	9.4	6.7	9.8	6.7	10.3	6.7	11.1	6.7

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

Table 19: ARNU153SJR4 and ARNU183SKR4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)											
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU153SJR4 / 15.4	-9.9	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	-5	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	0	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	5	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	10	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	14	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	20	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	23	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	25	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	30	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	35	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	40	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	45	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	50	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	55	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	60	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	65	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	70	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	75	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	80	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	17.8	11.7
	85	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.1	11.7	17.3	11.2
	90	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	16.8	11.5	16.9	11.0
	95	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	16.5	11.5	16.8	10.9
	100	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	16.2	11.3	16.5	10.8
	105	10.1	8.4	11.7	9.2	13.2	9.9	14.8	10.5	15.4	10.5	15.8	10.4
	110	9.9	8.2	11.1	8.7	12.3	9.2	13.9	9.9	14.5	9.9	15.1	9.9
	115	9.6	8.0	10.5	8.3	11.6	8.7	13.0	9.4	13.6	9.4	14.3	9.4
	118	9.4	7.7	10.0	7.9	11.0	8.2	12.5	9.0	13.0	9.0	13.7	9.0
	122	9.1	7.5	9.5	7.5	10.4	7.7	11.8	8.5	12.3	8.5	12.9	8.5
ARNU183SKR4 / 19.1	-9.9	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	-5	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	0	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	5	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	10	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	14	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	20	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	23	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	25	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	30	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	35	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	40	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	45	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	50	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	55	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	60	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	65	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	70	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	75	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	80	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.1	14.3
	85	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.2	14.4	21.4	13.7
	90	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	20.9	14.2	21.0	13.5
	95	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	20.5	14.1	20.9	13.4
	100	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	20.1	13.9	20.5	13.3
	105	12.6	10.4	14.5	11.4	16.4	12.2	18.3	13.0	19.0	13.0	19.7	12.8
	110	12.3	10.1	13.8	10.7	15.3	11.4	17.2	12.2	18.0	12.2	18.7	12.2
	115	12.0	9.8	13.1	10.2	14.4	10.7	16.2	11.6	16.9	11.6	17.8	11.6
	118	11.7	9.5	12.4	9.7	13.6	10.0	15.5	11.0	16.1	11.0	17.0	11.0
	122	11.3	9.2	11.8	9.2	12.9	9.4	14.7	10.4	15.3	10.4	16.0	10.4

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# ART COOL™ MIRROR

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## Cooling Capacity Tables

### ARNU243SKR4

Table 20: ARNU243SKR4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)											
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU243SKR4 / 24.2	-9.9	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	-5	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	0	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	5	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	10	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	14	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	20	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	23	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	25	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	30	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	35	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	40	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	45	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	50	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	55	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	60	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	65	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	70	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	75	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	80	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	85	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	26.8	18.0	27.1	17.2
	90	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	26.4	17.8	26.6	16.9
	95	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	25.9	17.7	26.4	16.8
	100	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	25.4	17.4	25.9	16.6
	105	15.9	13.0	18.4	14.2	20.8	15.3	23.2	16.2	24.1	16.2	24.9	16.0
	110	15.5	12.6	17.4	13.5	19.4	14.2	21.8	15.3	22.8	15.3	23.7	15.3
	115	15.1	12.2	16.6	12.8	18.2	13.4	20.5	14.5	21.4	14.5	22.5	14.5
	118	14.8	11.9	15.7	12.1	17.3	12.6	19.7	13.8	20.4	13.8	21.5	13.8
	122	14.4	11.5	15.0	11.5	16.3	11.8	18.6	13.1	19.4	13.1	20.3	13.1

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

Table 21: ARNU053SJR4, ARNU073SJR4, ARNU093SJR4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
	°F DB	°F WB	59	61	64	67	70	73	76	80
			TC	TC	TC	TC	TC	TC	TC	TC
ARNU053SJR4 / 5.5	-12.6	-13	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	-7	-7.6	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.9
	-4	-4.4	4.1	4.1	4.1	4.1	4.0	4.0	4.0	4.0
	0	-0.4	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1
	5	4.5	4.8	4.7	4.6	4.6	4.6	4.6	4.6	4.6
	10	9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	15	14	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1
	20	19	5.6	5.6	5.6	5.6	5.4	5.4	5.3	5.3
	25	23	5.8	5.8	5.8	5.8	5.8	5.7	5.6	5.3
	30	28	5.9	5.9	5.9	5.9	5.9	5.8	5.6	5.3
	35	32	6.1	6.1	6.1	6.1	6.0	5.9	5.6	5.3
	40	36	6.3	6.3	6.3	6.3	6.1	5.9	5.6	5.3
	45	41	6.6	6.6	6.6	6.4	6.1	5.9	5.6	5.3
	47	43	6.8	6.8	6.7	6.4	6.1	5.9	5.6	5.3
	50	46	7.3	7.0	6.7	6.4	6.1	5.9	5.6	5.3
	55	51	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.3
	60	56	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.3
ARNU073SJR4 / 7.5	-12.6	-13	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.3
	-7	-7.6	5.5	5.5	5.5	5.5	5.4	5.4	5.4	5.4
	-4	-4.4	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.6
	0	-0.4	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8
	5	4.5	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	10	9	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8
	15	14	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1
	20	19	7.7	7.7	7.7	7.7	7.6	7.6	7.4	7.4
	25	23	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.4
	30	28	8.2	8.2	8.2	8.2	8.2	8.1	7.8	7.4
	35	32	8.5	8.5	8.5	8.5	8.4	8.2	7.8	7.4
	40	36	8.8	8.8	8.8	8.8	8.5	8.2	7.8	7.4
	45	41	9.2	9.2	9.2	8.9	8.5	8.2	7.8	7.4
	47	43	9.5	9.4	9.4	8.9	8.5	8.2	7.8	7.4
	50	46	10.2	9.8	9.4	8.9	8.5	8.2	7.8	7.4
	55	51	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
	60	56	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
ARNU093SJR4 / 9.6	-12.6	-13	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.8
	-7	-7.6	7.1	7.1	7.1	7.1	7.0	7.0	7.0	7.0
	-4	-4.4	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2
	0	-0.4	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4
	5	4.5	8.5	8.4	8.3	8.3	8.3	8.3	8.3	8.3
	10	9	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.7
	15	14	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.2
	20	19	9.9	9.9	9.9	9.9	9.7	9.7	9.5	9.4
	25	23	10.4	10.4	10.4	10.4	10.4	10.1	10.0	9.5
	30	28	10.6	10.6	10.6	10.6	10.6	10.4	10.0	9.5
	35	32	10.9	10.9	10.9	10.9	10.8	10.6	10.0	9.5
	40	36	11.3	11.3	11.3	11.3	10.9	10.6	10.0	9.5
	45	41	11.8	11.8	11.8	11.4	10.9	10.6	10.0	9.5
	47	43	12.2	12.1	12.0	11.4	10.9	10.6	10.0	9.5
	50	46	13.1	12.5	12.0	11.4	10.9	10.6	10.0	9.5
	55	51	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5
	60	56	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# ART COOL™ MIRROR

MULTI V™

## Heating Capacity Tables

ARNU123SJR4, ARNU153SJR4, ARNU183SKR4

Table 22: ARNU123SJR4, ARNU153SJR4, ARNU183SKR4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)						
	°F DB	°F WB	59	61	64	67	70	73	76
			TC	TC	TC	TC	TC	TC	TC
ARNU123SJR4 / 12.3	-12.6	-13	8.6	8.6	8.6	8.6	8.4	8.4	8.4
	-7	-7.6	8.8	8.8	8.8	8.8	8.7	8.7	8.7
	-4	-4.4	9.1	9.1	9.1	9.1	9.0	9.0	9.0
	0	-0.4	9.4	9.4	9.4	9.4	9.4	9.2	9.2
	5	4.5	10.6	10.5	10.3	10.3	10.3	10.3	10.3
	10	9	11.0	11.0	11.0	10.9	10.9	10.9	10.9
	15	14	11.7	11.7	11.7	11.7	11.7	11.7	11.6
	20	19	12.4	12.4	12.4	12.4	12.1	12.1	11.9
	25	23	12.9	12.9	12.9	12.9	12.9	12.6	12.5
	30	28	13.2	13.2	13.2	13.2	13.2	12.9	12.5
	35	32	13.6	13.6	13.6	13.6	13.5	13.2	12.5
	40	36	14.1	14.1	14.1	14.1	13.6	13.2	12.5
	45	41	14.7	14.7	14.7	14.3	13.6	13.2	12.5
	47	43	15.2	15.1	15.0	14.3	13.6	13.2	12.5
	50	46	16.3	15.6	15.0	14.3	13.6	13.2	12.5
	55	51	16.7	15.8	15.0	14.3	13.6	13.2	12.5
	60	56	16.7	15.8	15.0	14.3	13.6	13.2	12.5
ARNU153SJR4 / 15.4	-12.6	-13	10.8	10.8	10.8	10.6	10.6	10.6	10.6
	-7	-7.6	11.1	11.1	11.1	10.9	10.9	10.9	10.9
	-4	-4.4	11.5	11.5	11.5	11.3	11.3	11.3	11.3
	0	-0.4	11.8	11.8	11.8	11.8	11.8	11.6	11.6
	5	4.5	13.3	13.2	13.0	13.0	13.0	13.0	13.0
	10	9	13.9	13.9	13.9	13.7	13.7	13.7	13.7
	15	14	14.7	14.7	14.7	14.7	14.7	14.5	14.4
	20	19	15.6	15.6	15.6	15.6	15.2	15.0	14.8
	25	23	16.2	16.2	16.2	16.2	16.2	15.9	15.0
	30	28	16.6	16.6	16.6	16.6	16.6	16.2	15.0
	35	32	17.1	17.1	17.1	17.1	16.9	16.6	15.0
	40	36	17.8	17.8	17.8	17.8	17.1	16.6	15.0
	45	41	18.5	18.5	18.5	18.0	17.1	16.6	15.0
	47	43	19.2	19.0	18.8	18.0	17.1	16.6	15.0
	50	46	20.5	19.7	18.8	18.0	17.1	16.6	15.0
	55	51	20.9	19.8	18.8	18.0	17.1	16.6	15.0
	60	56	20.9	19.8	18.8	18.0	17.1	16.6	15.0
ARNU183SKR4 / 19.1	-12.6	-13	13.5	13.5	13.5	13.5	13.4	13.4	13.4
	-7	-7.6	14.0	14.0	14.0	14.0	13.8	13.8	13.8
	-4	-4.4	14.4	14.4	14.4	14.4	14.2	14.2	14.2
	0	-0.4	14.8	14.8	14.8	14.8	14.8	14.6	14.6
	5	4.5	16.8	16.6	16.3	16.3	16.3	16.3	16.3
	10	9	17.4	17.4	17.4	17.2	17.2	17.2	17.2
	15	14	18.5	18.5	18.5	18.5	18.5	18.3	18.1
	20	19	19.6	19.6	19.6	19.6	19.1	18.8	18.6
	25	23	20.4	20.4	20.4	20.4	20.4	19.8	18.8
	30	28	20.9	20.9	20.9	20.9	20.4	19.8	18.8
	35	32	21.5	21.5	21.5	21.3	20.9	19.8	18.8
	40	36	22.4	22.4	22.4	21.5	20.9	19.8	18.8
	45	41	23.2	23.2	23.2	22.6	21.5	20.9	18.8
	47	43	24.1	23.9	23.7	22.6	21.5	20.9	18.8
	50	46	25.8	24.7	23.7	22.6	21.5	20.9	18.8
	55	51	26.3	24.9	23.7	22.6	21.5	20.9	18.8
	60	56	26.3	24.9	23.7	22.6	21.5	20.9	18.8

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHR Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

Table 23: ARNU243SKR4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
	°F DB	°F WB	59	61	64	67	70	73	76	80
			TC	TC	TC	TC	TC	TC	TC	TC
ARNU243SKR4 / 24.2	-12.6	-13	16.1	16.1	16.1	16.1	15.9	15.9	15.9	15.9
	-7	-7.6	16.6	16.6	16.6	16.6	16.4	16.4	16.4	16.4
	-4	-4.4	17.2	17.2	17.2	17.2	16.9	16.9	16.9	16.9
	0	-0.4	17.7	17.7	17.7	17.7	17.7	17.4	17.4	17.4
	5	4.5	20.0	19.7	19.5	19.5	19.5	19.5	19.5	19.5
	10	9	20.7	20.7	20.7	20.5	20.5	20.5	20.5	20.5
	15	14	22.0	22.0	22.0	22.0	22.0	22.0	21.8	21.5
	20	19	23.3	23.3	23.3	23.3	22.8	22.8	22.4	22.1
	25	23	24.3	24.3	24.3	24.3	24.3	23.8	23.6	22.4
	30	28	24.8	24.8	24.8	24.8	24.8	24.3	23.6	22.4
	35	32	25.6	25.6	25.6	25.6	25.3	24.8	23.6	22.4
	40	36	26.6	26.6	26.6	26.6	25.6	24.8	23.6	22.4
	45	41	27.6	27.6	27.6	26.9	25.6	24.8	23.6	22.4
	47	43	28.7	28.4	28.2	26.9	<b>25.6</b>	24.8	23.6	22.4
	50	46	30.7	29.4	28.2	26.9	25.6	24.8	23.6	22.4
	55	51	31.4	29.7	28.2	26.9	25.6	24.8	23.6	22.4
	60	56	31.4	29.7	28.2	26.9	25.6	24.8	23.6	22.4

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# **STANDARD WALL-MOUNTED**



**Mechanical Specifications on page 53**

**General Data on page 55**

**Electrical Data on page 57**

**External Dimensions on page 58**

**Electrical Wiring Diagrams on page 61**

**Refrigerant Flow Diagram on page 63**

**Acoustic Data on page 64**

**Air Velocity / Temperature Distribution on page 68**

**Capacity Tables on page 83**



## Casing

Units are designed to mount on a vertical surface and come complete with an installation mounting guide and a separate hanging bracket. The unit case is manufactured with coated metal. Cold surfaces are covered with a coated polystyrene insulating material.

## Finish

The unit case is manufactured using ABS polymeric resin and has a pearl white finish.

## Fan Assembly and Control

The unit has a single, direct-drive, crossflow tangential Sirocco fan made of high strength ABS BSN-7530 polymeric resin. The fan motor is a Brushless Digitally Controlled (BLDC) design with permanently lubricated and sealed ball bearings. The fan motor includes thermal, overcurrent and low RPM protection. The fan/motor assembly is mounted on vibration attenuating rubber grommets. The fan impeller is statically and dynamically balanced. The fan speed is controlled using a microprocessor-based direct digital control algorithm that provides a high fan speed in cooling thermal ON and low fan speed in cooling thermal OFF, high fan speed in heating thermal ON and fan off in heating thermal OFF. The fan speeds can be field adjusted between low, medium, and high speeds. The fan speed algorithm provides a field-selectable fixed-speed or auto-speed setting that changes the fan speed to simulate natural airflow.

## Air Filter

Return air is filtered with a removable, washable filter with anti-fungal treatment. Filter access is from the front of the unit without the use of tools.

## Airflow Guide Vanes

### 5-15 MBh

The indoor unit is provided with a motorized oscillating guide vane that automatically changes the direction of up-and-down airflow. The indoor unit includes factory installed, manually adjustable guide vanes that control the side-to-side direction of supplied airflow.

### 18-36 MBh

The indoor unit is provided with a motorized sweeping guide vane that automatically changes the direction of airflow from side-to-side and up-and-down.

## Microprocessor Control

The unit is provided with an integrated microprocessor controller capable of performing functions necessary to operate the system without the use of a wall-mounted controller. A temperature thermistor is factory mounted in the return air stream. All unit operation param-

eters, excluding the operating schedule, are stored in non-volatile memory resident on the unit microprocessor. Operating schedules are stored in select models of the optional, wall-mounted, local or central controllers. The field-supplied communication cable between the indoor unit(s) and outdoor unit is to be a minimum of 18 AWG, 2 conductor, stranded, and shielded cable (RS-485), terminated via screw terminals on the control boards. The microprocessor control provides the following functions: auto addressing, self-diagnostics, auto restart following power restoration, test run, and will operate the indoor unit using one of five operation modes:

1. Auto Changeover (Heat Recovery only)
2. Heating
3. Cooling
4. Dry
5. Fan Only

For Heat Recovery systems the Auto Changeover setting automatically switches control of the indoor unit between Cooling and Heating modes based on space temperature conditions.

For Heat Pump systems, heated or cooled air delivery is dependent upon outdoor unit operating mode.

In Heating mode, the microprocessor control will activate indoor unit operation when the indoor room temperature falls below set-point temperature. At which point, a signal is sent to the outdoor unit to begin the heating cycle. The indoor unit fan operation is delayed until coil pipe temperature reaches 76°F. Significant airflow is generated when pipe temperature reaches 80°F. A field-selectable option maintains fan operation for 30 minutes following cooling cycle operations. The unit is equipped with an infrared receiver designed to communicate with an LG wireless remote controller. In lieu of wireless remote or factory return air thermistor, screw terminals on the microprocessor circuit board accommodates various models of wall-mounted local controllers. The unit microprocessor is capable of accepting space temperature readings concurrently or individually from either:

1. Wall-mounted wired controller(s)
2. Factory-mounted return air thermistor

A single indoor unit has the capability of being controlled by up to two local wired controllers. The microprocessor controls space temperature using the value provided by the temperature sensor sensing a space temperature that is farthest away from the temperature set-point. The microprocessor control provides a cooling or heating mode test cycle that operates the unit for 18 minutes without regard to the space temperature. If the system is provided with an optional

# STANDARD WALL-MOUNTED

## Mechanical Specifications

wall-mounted local or central controller, displayed diagnostic codes are specific, alpha-numeric, and provide the service technician with a reason for the code displayed.

Indoor units have built-in Wi-Fi and can be controlled by LG's Smart ThinQ™ app on a smart device. A field-supplied Wi-Fi network and smart device are required. The Smart ThinQ app is free, and is available for Android™ and iOS. (Android is a trademark of Google LLC.)

### Handling Condensate

The unit is designed for gravity draining of condensate. LG provides a factory insulated flexible drain hose. If condensate lift/pumps are needed for the application, they are to be field provided.

### Condensate Drain Pan

The condensate drain pan is constructed of expandable polystyrene resin (EPS).

### Coil

The indoor unit coil is constructed with grooved design copper tubes with slit coil fins, two (2) rows, eighteen (18) fins per inch.

### Controls Features

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto clean (coil dry; requires wireless controller)
- External on/off control
- Dual thermistor control
- Dual set-point control
- Filter life display
- Group control
- Forced operation
- Hot start
- Self diagnostics
- Timer (on/off)
- Weekly schedule
- Auto direction/swing (up/down)
- Fan speed control
- Jet cool (fast cooling)
- Wi-Fi
- Auto Fan
- Leak detection

*\*To enable Generation 4 features, outdoor unit DIP Switch No. 3 must be set to ON. Please refer to the Multi V 5, Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.*

Table 24: Standard Wall-Mounted (SJ Frames) Indoor Unit General Data.

Model No.	ARNU053SJA4	ARNU073SJA4	ARNU093SJA4	ARNU123SJA4	ARNU153SJA4
<i>Cooling Mode Performance</i>					
Capacity (Btu/h)	5,500	7,500	9,600	12,300	15,400
Power Input <sup>1</sup> (W)	30	30	30	30	30
<i>Heating Mode Performance</i>					
Capacity (Btu/h)	6,100	8,500	10,900	13,600	17,100
Power Input <sup>1</sup> (W)	30	30	30	30	30
<i>Entering Mixed Air</i>					
Cooling Max (°F WB)	76	76	76	76	76
Heating Min (°F DB)	59	59	59	59	59
<i>Unit Data</i>					
Refrigerant Type <sup>2</sup>	R410A	R410A	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV	EEV	EEV
Sound Pressure <sup>3</sup> dB(A) (H/M/L)	30 / 29 / 28	32 / 30 / 28	34 / 32 / 28	37 / 34 / 30	42 / 39 / 32
Net Unit Weight (lbs.)	18.5	18.5	18.5	18.5	18.5
Shipping Weight (lbs.)	24.9	24.9	24.9	24.9	24.9
Communication Cable <sup>4</sup> (No. x AWG)	2 x 18	2 x 18	2 x 18	2 x 18	2 x 18
<i>Fan</i>					
Type	Cross Flow	Cross Flow	Cross Flow	Cross Flow	Cross Flow
Quantity	1	1	1	1	1
Motor/Drive	Brushless Digitally Controlled / Direct				
Airflow Rate H/M/L (CFM)	240 / 230 / 208	254 / 240 / 208	275 / 254 / 208	300 / 254 / 240	371 / 336 / 240
<i>Piping</i>					
Liquid Line (in., O.D.)	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare
Vapor Line (in., O.D.)	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare
Condensate Line (in., I.D.)	5/8	5/8	5/8	5/8	5/8

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes. See page 57 for detailed electrical data.

This unit comes with a dry nitrogen charge.

All capacities are net with a combination ratio between 95-105%.

Rated capacity is certified under AHR Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).<sup>1</sup>Power Input is rated at high speed.<sup>2</sup>Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.<sup>3</sup>Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.<sup>4</sup>Communication cable between Master ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only.  Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.

# STANDARD WALL-MOUNTED

## General Data

Table 25: Standard Wall-Mounted (SK and SV Frames) Indoor Unit General Data.

Model No.	ARNU183SKA4	ARNU243SKA4	ARNU303SVA4	ARNU363SVA4
<i>Cooling Mode Performance</i>				
Capacity (Btu/h)	19,100	24,200	30,000	35,500
Power Input <sup>1</sup> (W)	53	53	67.0	104.0
<i>Heating Mode Performance</i>				
Capacity (Btu/h)	21,500	25,600	32,000	37,000
Power Input <sup>1</sup> (W)	53	53	67.0	104.0
<i>Entering Mixed Air</i>				
Cooling Max (°F WB)	76	76	76	76
Heating Min (°F DB)	59	59	59	59
<i>Unit Data</i>				
Refrigerant Type <sup>2</sup>	R410A	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV	EEV
Sound Pressure <sup>3</sup> dB(A) (H/M/L)	43 / 39 / 34	46 / 41 / 34	49 / 44 / 42	52 / 47 / 43
Net Unit Weight (lbs.)	26.9	26.9	37	37
Shipping Weight (lbs.)	35.3	35.3	48	48
Communication Cable <sup>4</sup> (No. x AWG)	2 x 18	2 x 18	2 x 18	2 x 18
<i>Fan</i>				
Type	Cross Flow	Cross Flow	Cross Flow	Cross Flow
Quantity	1	1	1	1
Motor/Drive	Brushless Digitally Controlled / Direct			
Airflow Rate H/M/L (CFM)	494 / 424 / 371	537 / 449 / 371	812 / 706 / 600	918 / 812 / 671
<i>Piping</i>				
Liquid Line (in., O.D.)	1/4 Flare	3/8 Flare	3/8 Flare	3/8 Flare
Vapor Line (in., O.D.)	1/2 Flare	5/8 Flare	5/8 Flare	5/8 Flare
Condensate Line (in., I.D.)	5/8	5/8	5/8	5/8?

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes. See page 57 for detailed electrical data.

This unit comes with a dry nitrogen charge.

All capacities are net with a combination ratio between 95-105%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

<sup>1</sup>Power Input is rated at high speed.

<sup>2</sup>Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

<sup>3</sup>Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

<sup>4</sup>Communication cable between Master ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.

Table 26: Standard Wall-Mounted Indoor Unit Electrical Data.

Model Number	Voltage Range	MCA	MOP	Rated Amps (A)	Power Supply			Power Input (W)	
					Hz	Volts	Phase	Cooling	Heating
<b>SJ Frames</b>									
ARNU053SJA4	187-253	0.31	15	0.25	60	208-230	1	30	30
ARNU073SJA4		0.31		0.25				30	30
ARNU093SJA4		0.31		0.25				30	30
ARNU123SJA4		0.31		0.25				30	30
ARNU153SJA4		0.31		0.25				30	30
<b>SK Frames</b>									
ARNU183SKA4	187-253	0.65	15	0.52	60	208-230	1	53	53
ARNU243SKA4		0.65		0.52				53	53
<b>SV Frames</b>									
ARNU303SVA4	187-253	0.64	15	0.51	60	208-230	1	67.0	67.0
ARNU363SVA4		1.02		0.81				104.0	104.0

MCA : Minimum Circuit Ampacity.

MOP : Maximum Overcurrent Protection.

Units are suitable for use on an electrical system where voltage supplied to unit terminals is within the listed range limits.

Select wire size based on the larger MCA value.

Instead of a fuse, use the circuit breaker.

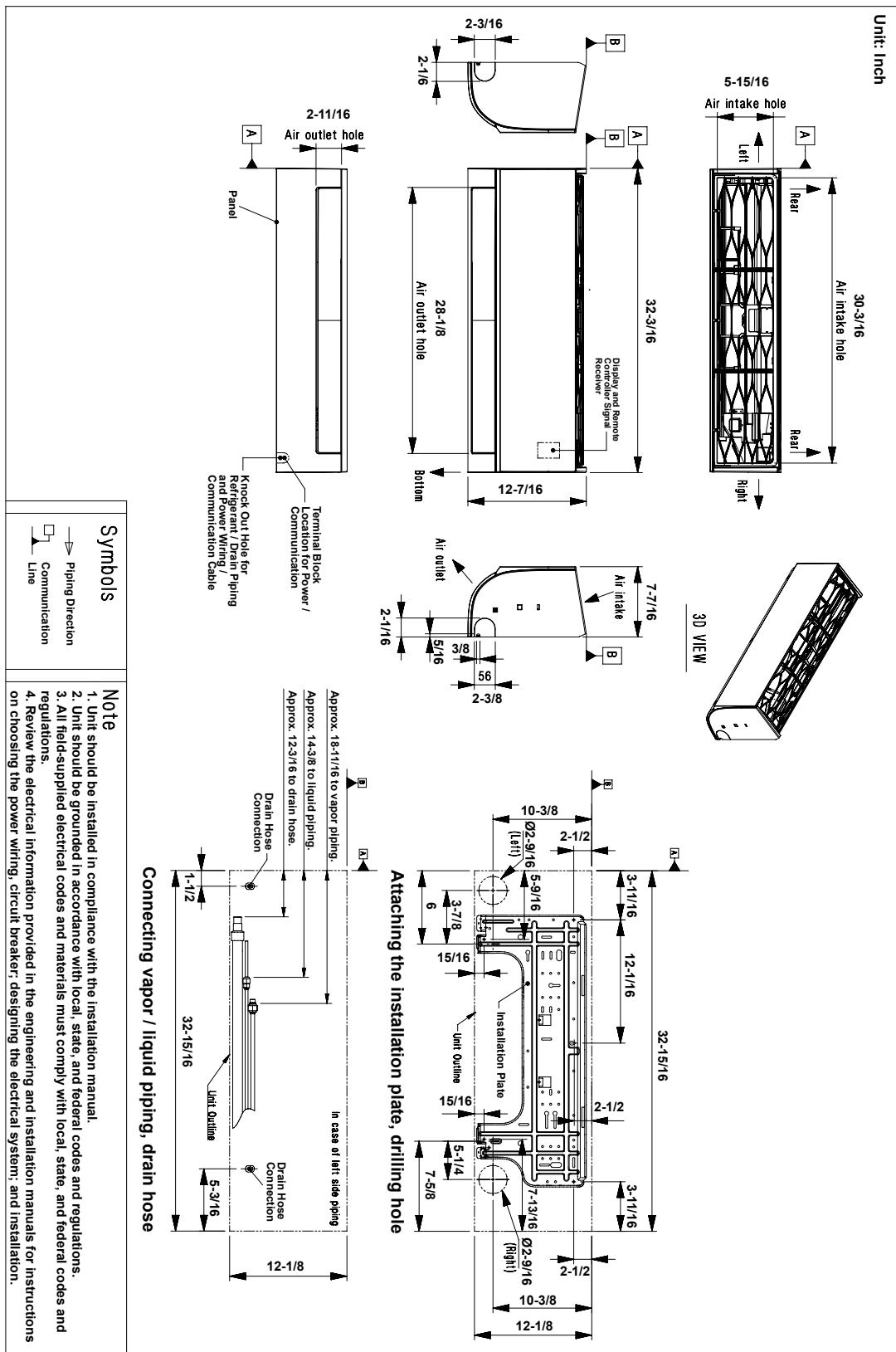
# STANDARD WALL-MOUNTED

MULTI V™

## External Dimensions

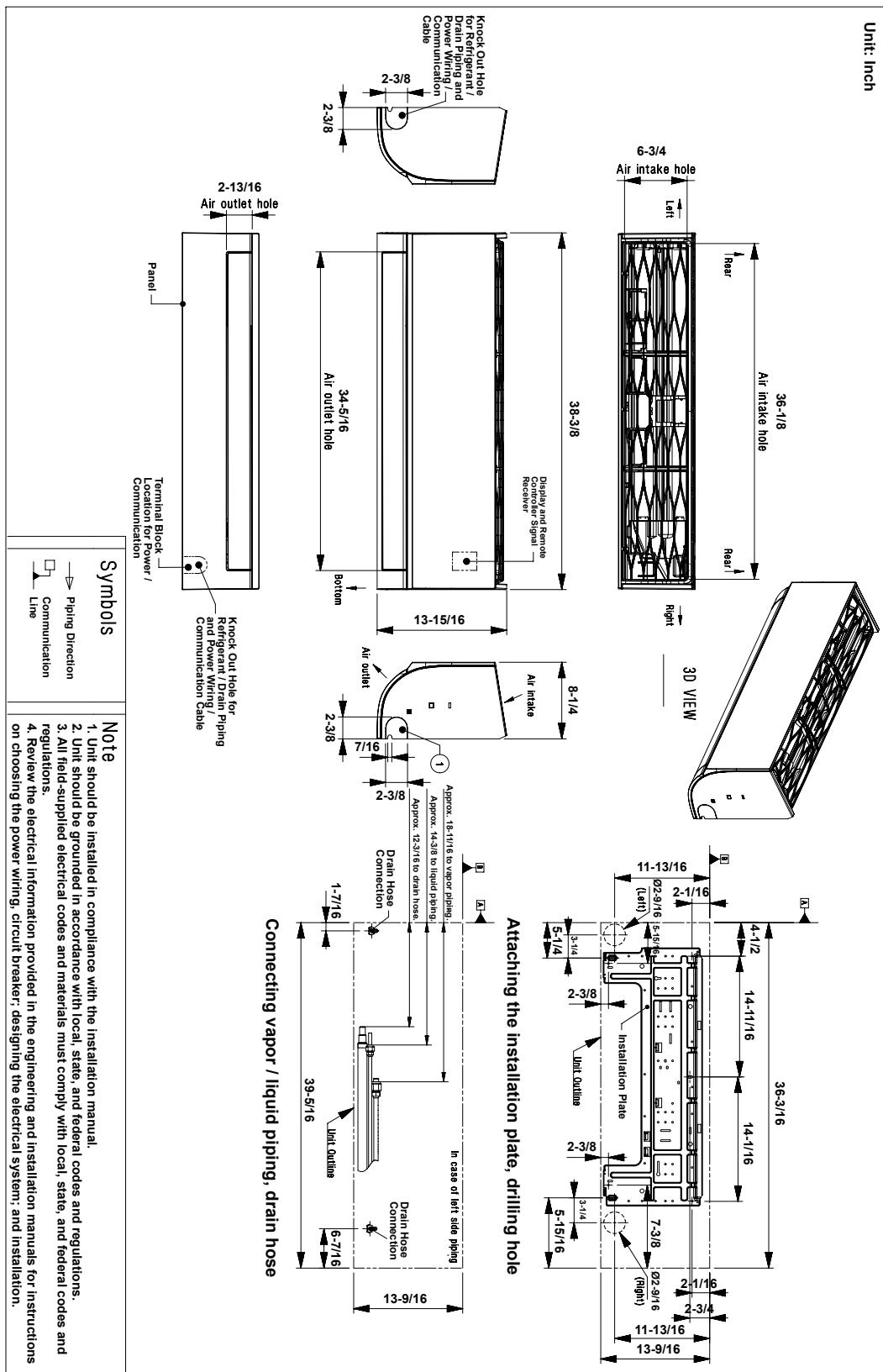
### SJ Frame

Figure 22: ARNU053SJA4, ARNU073SJA4, ARNU093SJA4, ARNU123SJA4, ARNU153SJA4 Dimensions.



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Figure 23: ARNU183SKA4, ARNU243SKA4 Dimensions.

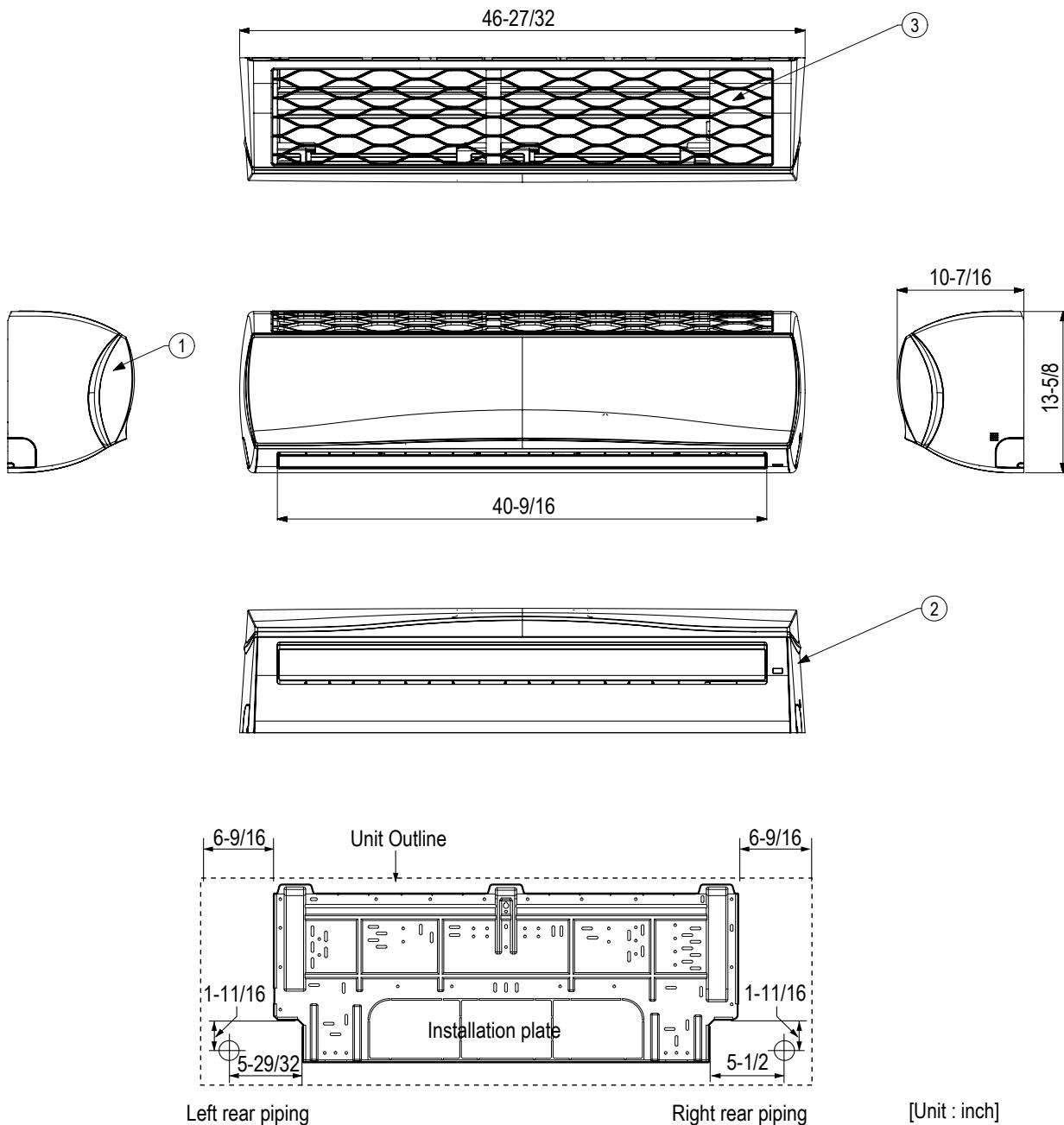


# STANDARD WALL-MOUNTED

## External Dimensions

### SV Frame

Figure 24: ARNU303SVA4, ARNU363SVA4 Dimensions.



#### Note:

1. Unit should be installed in compliance with the installation manual in the product box.
2. Unit shall be grounded in accordance with the local regulations or applicable national codes.
3. The Unit is powered from the outdoor unit. Therefore power cable should be connected with the outdoor unit.

Item No.	Part Name	Remark
1	Front Panel	
2	Display & Signal Receiver	
3	Air Suction Grille	
4	Installation Plate	

Figure 25: ARNU053~153SJA4 and ARNU183-243SKA4 Wiring Diagram.

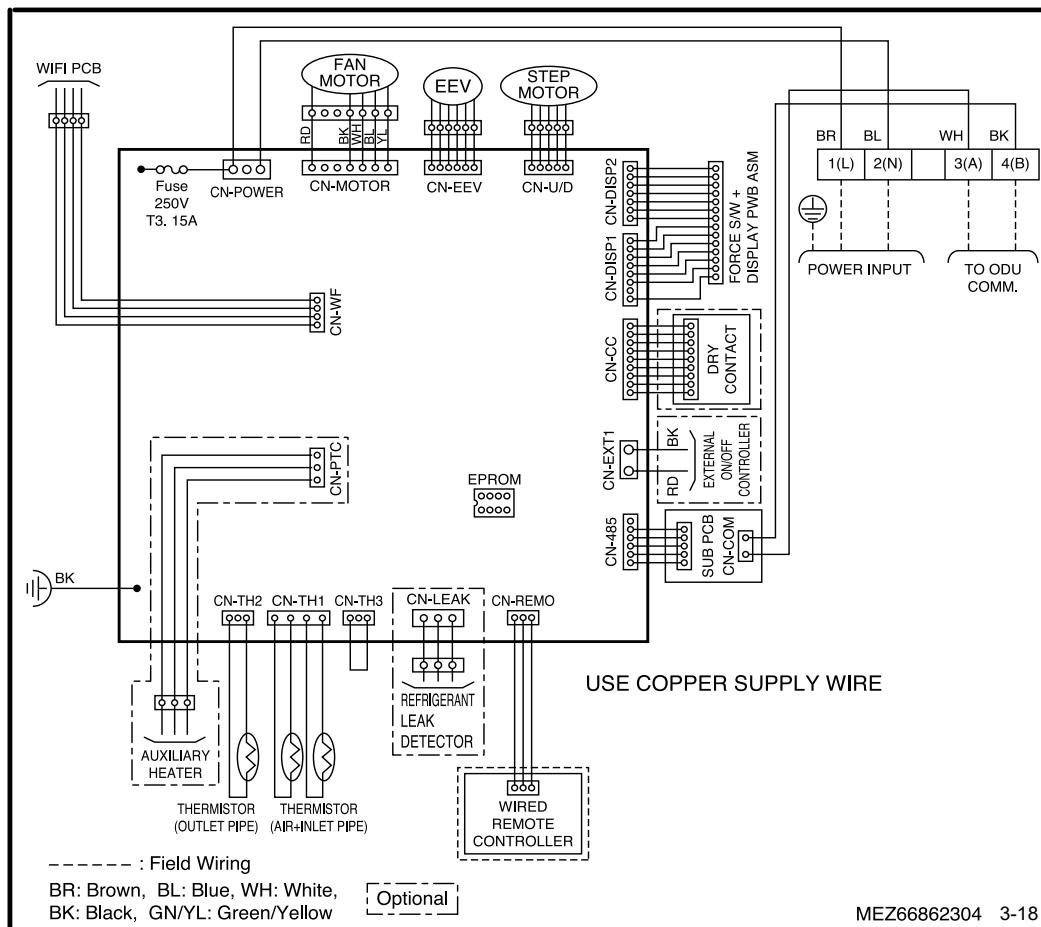


Table 27: SJ and SK Frame Wiring Diagram Legend.

PCB Connection	Purpose	Function
CN-POWER	AC power supply	AC Power line input for indoor controller
CN-MOTOR	Fan motor output	Motor output of BLDC
CN-EEV	EEV output	EEV control output
CN-U/D	Step motor	Step motor output
CN-DISP2	Display	Display of indoor status
CN-DISP1	Display	Display of indoor status
CN-CC	Dry contact	Dry contact connection
CN-EXT1	External ON / OFF controller	External ON / OFF controller connection
CN-485	Communication	Connection between indoor and outdoor units
CN-REMO	Remote controller	Remote control connection
CN-LEAK	Refrigerant leak detector	Refrigerant leak detector connection
CN-TH3	Float switch	Float switch connection
CN-TH1	Return air and inlet pipe thermistor	Return air and inlet pipe thermistor connection
CN-TH2	Outlet pipe thermistor	Outlet pipe thermistor connection
CN-PTC	Auxiliary heater	Auxiliary heater connection
CN-WF	Wi-Fi module	Wi-Fi module connection

\*To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V 5, Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.

# STANDARD WALL-MOUNTED

MULTI V™

## Electrical Wiring Diagram SV Frames

Figure 26: ARNU303SVA4 and ARNU363SVA4 Wiring Diagram.

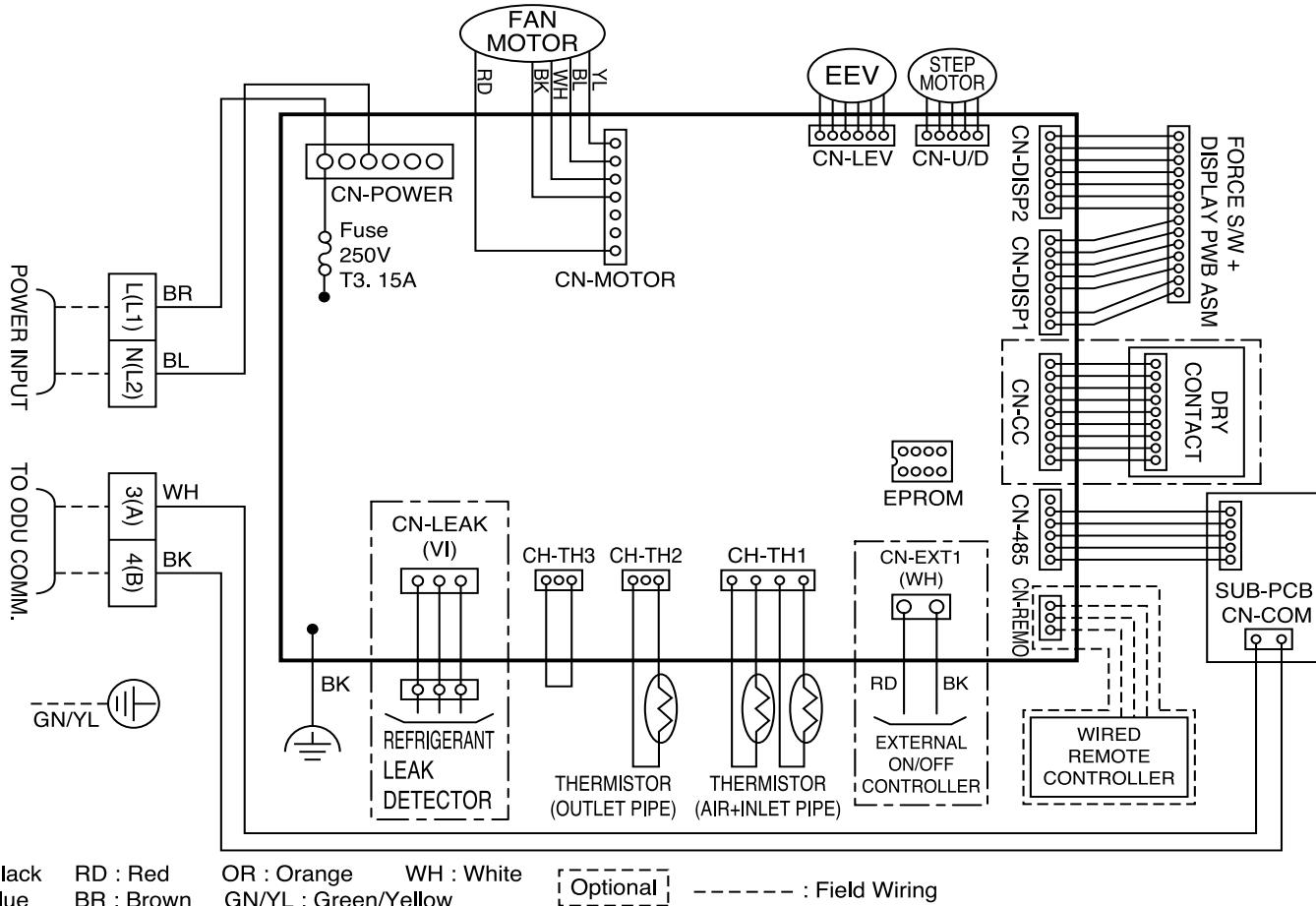


Table 28: SV Frame Wiring Diagram Legend.

PCB Connection	Purpose	Function
CN-POWER	AC Power supply	AC Power line input for indoor controller
CN-MOTOR	Fan motor output	Motor output of BLDC
CN-LEV	EEV output	EEV control output
CN-U/D	Step motor	Step motor output
CN-DISP2	Display	Display of indoor status
CN-DISP1	Display	Display of indoor status
CN-CC	Dry contact	Dry contact connection
CN-485	Communication	Connection between indoor and outdoor units
CN-REMO	Remote controller	Remote control connection
CN-EXT1	External ON / OFF controller	External ON / OFF controller connection
CN-TH1	Return air and inlet pipe thermistor	Return air and inlet pipe thermistor connection
CN-TH2	Outlet pipe thermistor	Outlet pipe thermistor connection
CN-TH3	Float switch	Float switch connection

\*To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V 5, Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.

Figure 27: SJ, SK, and SV Frame Piping Diagram.

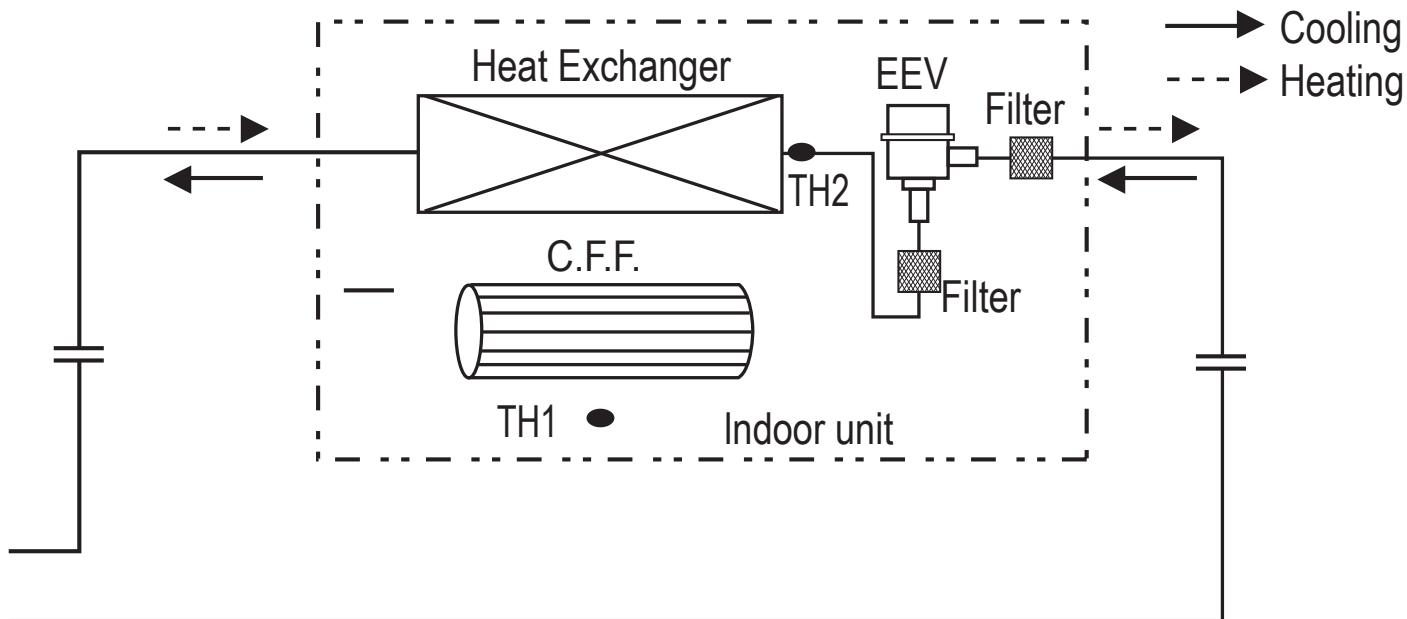


Table 29: SJ, SK, and SV Frame Refrigerant Pipe Connection Port Diameters.

Model	Liquid (inch)	Vapor (inch)
<b>SJ Frames</b>		
ARNU053SJA4		
ARNU073SJA4		
ARNU093SJA4	1/4 Flare	1/2 Flare
ARNU123SJA4		
ARNU153SJA4		
<b>SK Frames</b>		
ARNU183SKA4	1/4 Flare	1/2 Flare
ARNU243SKA4	3/8 Flare	5/8 Flare
<b>SV Frames</b>		
ARNU303SVA4	3/8 Flare	5/8 Flare
ARNU363SVA4		

Table 30: SJ, SK, and SV Frame Thermistors.

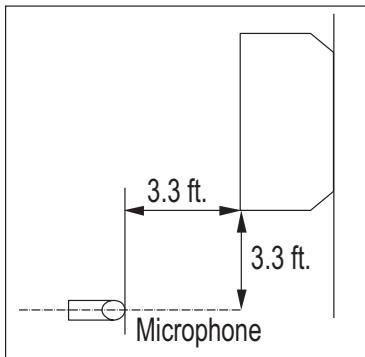
Thermistor	Description
TH1	Return air and pipe in thermistor
TH2	Pipe out thermistor

# STANDARD WALL-MOUNTED

## Acoustic Data

### Sound Pressure Levels

Figure 28: Sound Pressure Measurement Location.



- Measurements are taken 3.3 ft away from the front of the unit.
- Data is valid under nominal operating conditions.
- Sound pressure levels are measured in dB(A) with a tolerance of  $\pm 3$ .
- Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- Reference acoustic pressure: 0dB = 20 $\mu$ Pa.

#### Operating Conditions:

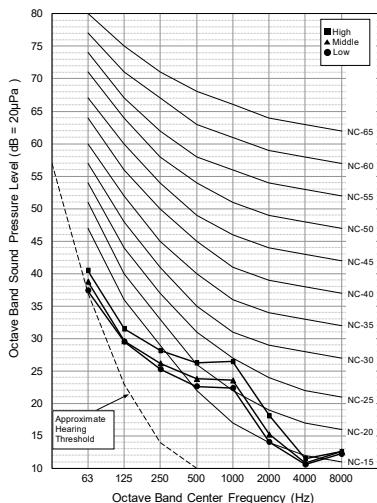
- Power source: 220V/60 Hz
- Sound level will vary depending on a range of factors including the construction (acoustic absorption coefficient) of a particular room in which the unit was installed.

Table 31: Standard Wall-Mounted Sound Pressure Levels.

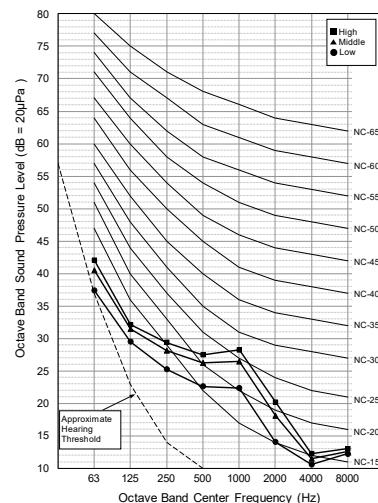
Model	Sound Pressure Levels dB(A)		
	High Fan Speed	Medium Fan Speed	Low Fan Speed
<b>SJ Frames</b>			
ARNU053SJA4	30.0	29.0	28.0
ARNU073SJA4	32.0	30.0	28.0
ARNU093SJA4	34.0	32.0	28.0
ARNU123SJA4	37.0	34.0	30.0
ARNU153SJA4	42.0	39.0	32.0
<b>SK Frames</b>			
ARNU183SKA4	43.0	39.0	34.0
ARNU243SKA4	46.0	41.0	34.0
<b>SV Frames</b>			
ARNU303SVA4	49.0	44.0	42.0
ARNU363SVA4	52.0	47.0	43.0

Figure 29: ARNU053SJA4, ARNU073SJA4, and ARNU093SJA4 Sound Pressure Level Diagrams.

**ARNU053SJA4**



**ARNU073SJA4**



**ARNU093SJA4**

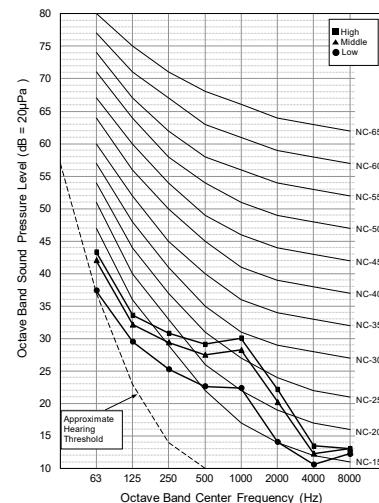


Figure 30: ARNU123SJA4, ARNU153SJA4, and ARNU183SKA4 Sound Pressure Level Diagrams.

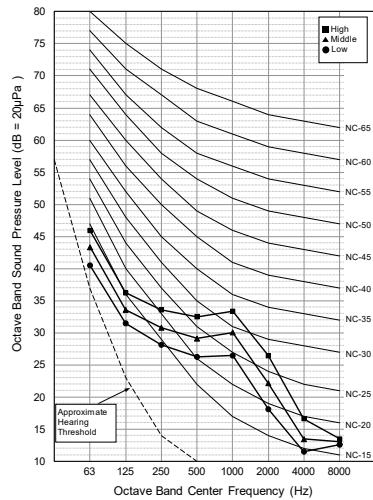
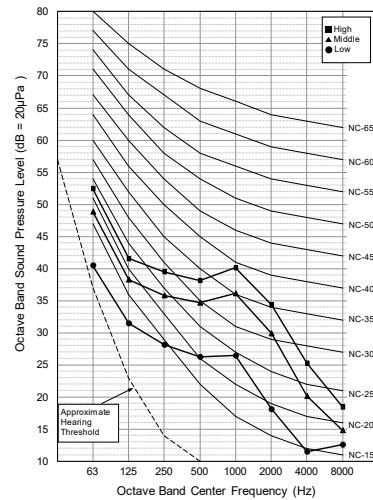
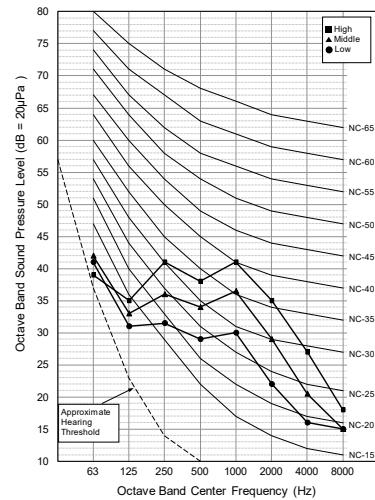
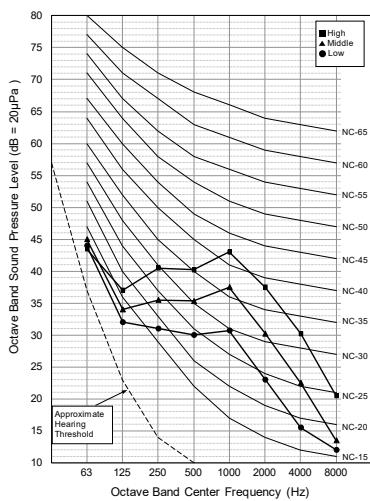
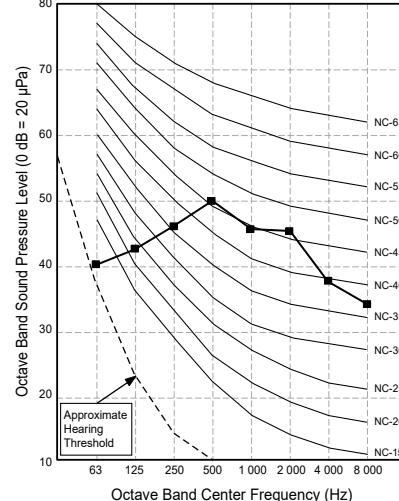
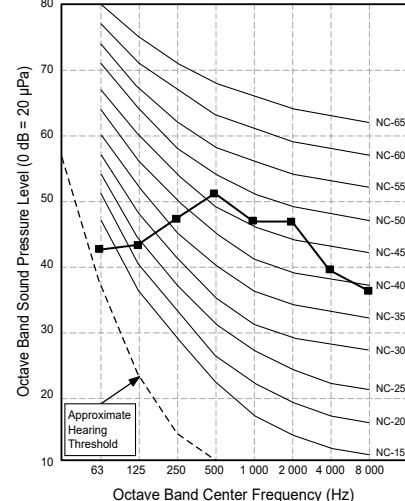
**ARNU123SJA4****ARNU153SJA4****ARNU183SKA4**

Figure 31: ARNU243SKA4, ARNU303SVA4, and ARNU363SVA4 Sound Pressure Level Diagram.

**ARNU243SKA4****ARNU303SVA4****ARNU363SVA4**

# STANDARD WALL-MOUNTED

## Acoustic Data

### Sound Power Levels

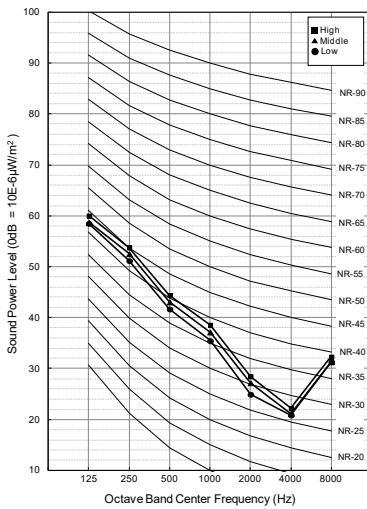
Table 32: Standard Wall-Mounted Indoor Unit Sound Power Levels.

Model	Sound Power Levels dB(A)
	High Fan Speed
<i>SJ Frames</i>	
ARNU053SJA4	54.0
ARNU073SJA4	54.0
ARNU093SJA4	55.0
ARNU123SJA4	55.0
ARNU153SJA4	58.0
<i>SK Frames</i>	
ARNU183SKA4	63.0
ARNU243SKA4	65.0
<i>SV Frames</i>	
ARNU303SVA4	61.0
ARNU363SVA4	63.0

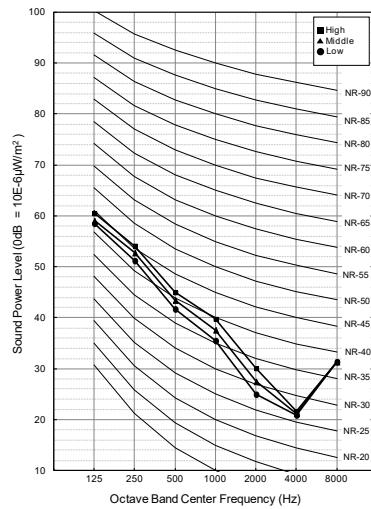
- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB =  $10E-6\mu W/m^2$

Figure 32: ARNU053SJA4, ARNU073SJA4, and ARNU093SJA4 Sound Power Level Diagrams.

**ARNU053SJA4**



**ARNU073SJA4**



**ARNU093SJA4**

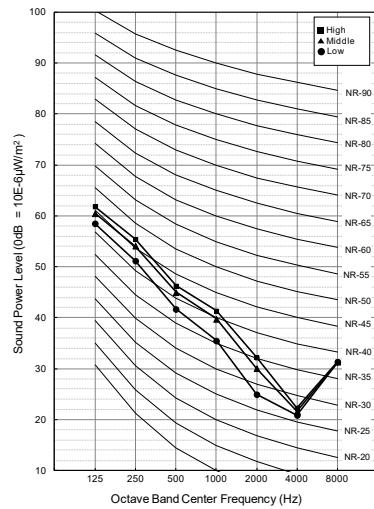
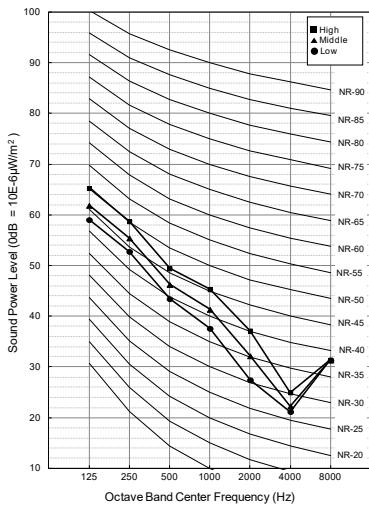
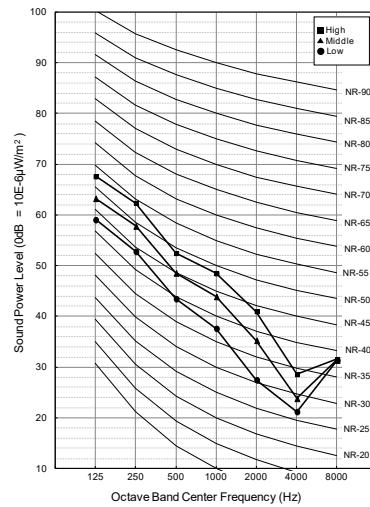


Figure 33: ARNU123SJA4, ARNU153SJA4, and ARNU183SKA4 Sound Power Level Diagrams.

ARNU123SJA4



ARNU153SJA4



ARNU183SKA4

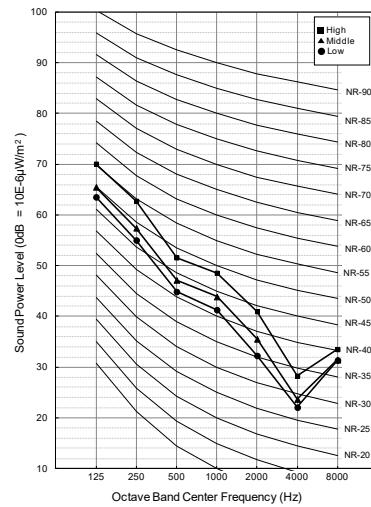
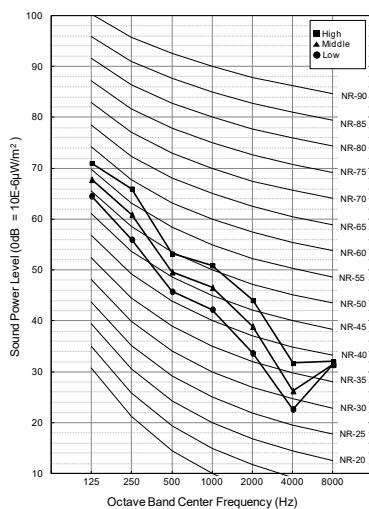
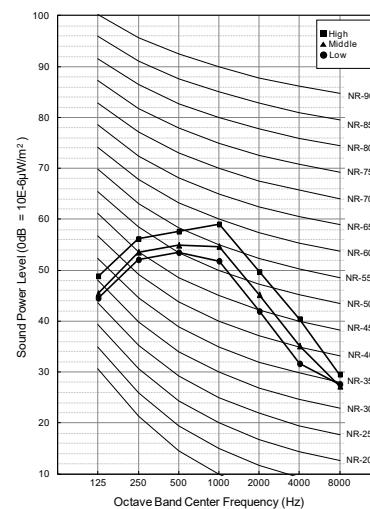


Figure 34: AARNU243SKA4, ARNU303SVA4, and ARNU363SVA4 Sound Power Level Diagrams.

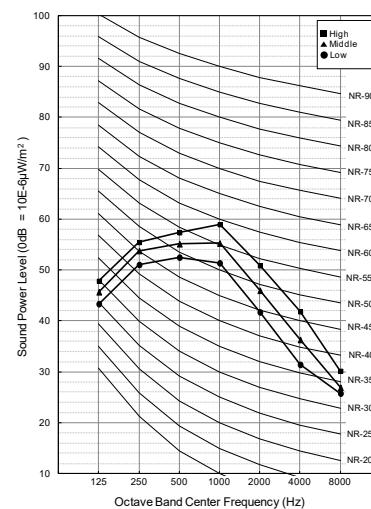
ARNU243SKA4



ARNU303SVA4



ARNU363SVA4



# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

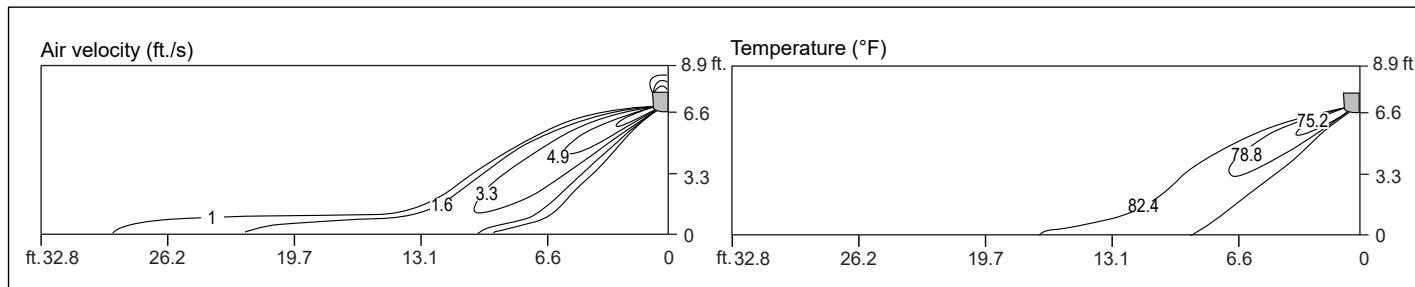
ARNU053SJA4

## ARNU053SJA4

### Cooling

#### Side View

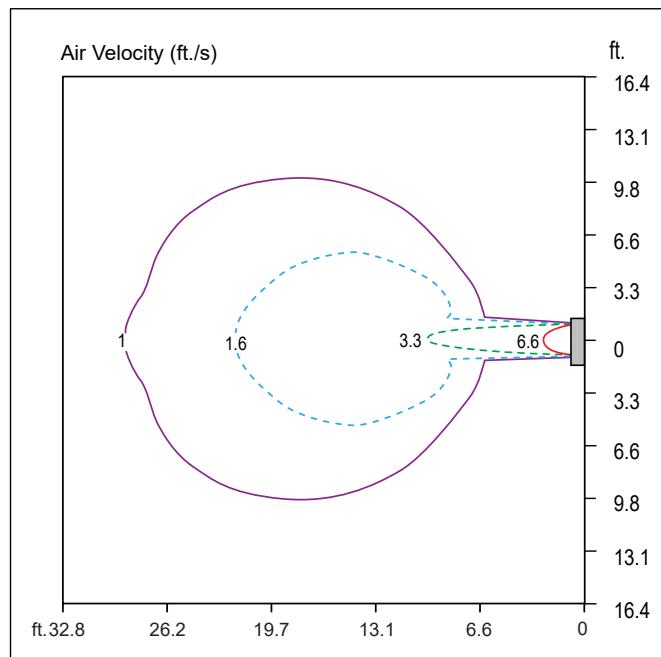
Discharge angle: 35°



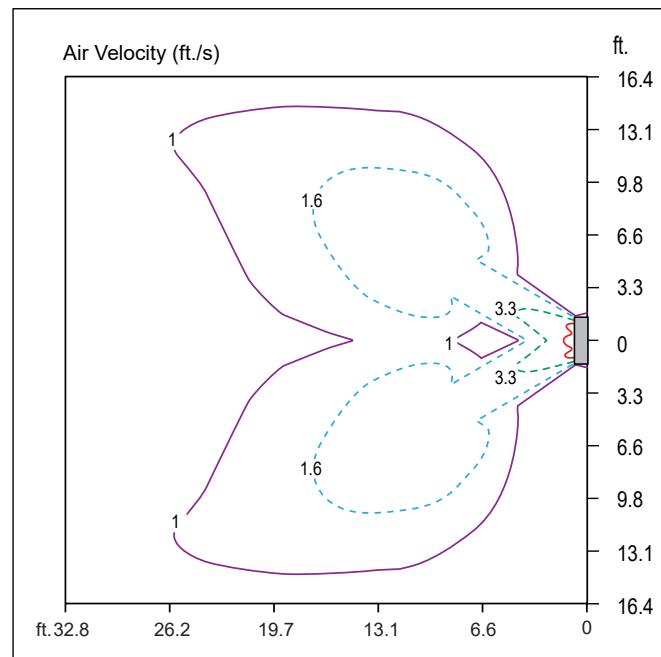
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

#### Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 29.2 ft.
- Fan Speed : High

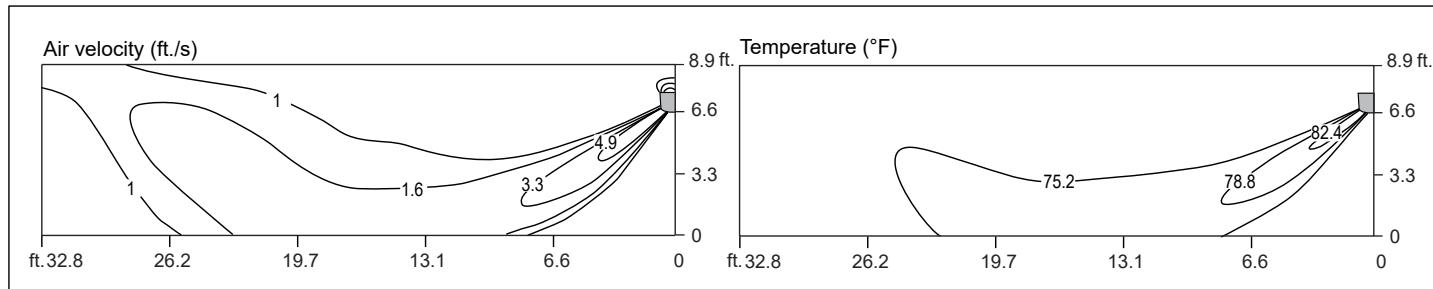


- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 26.2 ft.
- Fan Speed : High

## Heating

### Side View

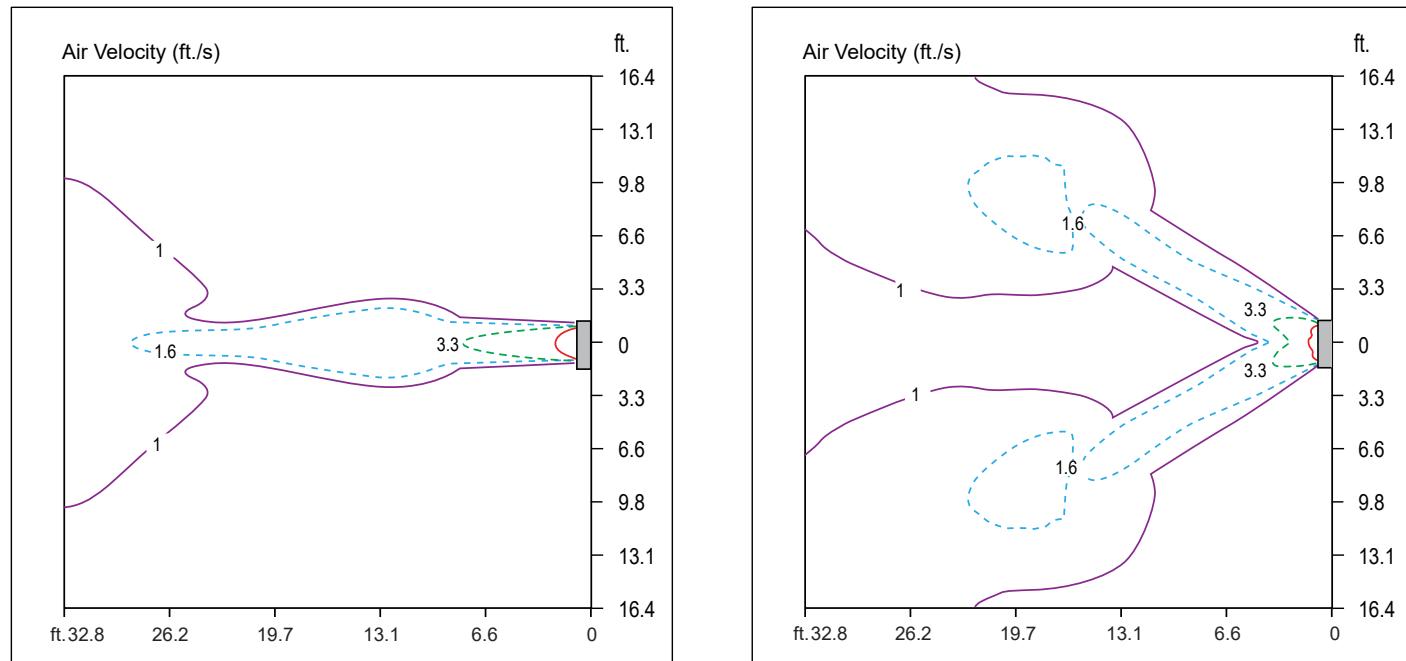
Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 39.0 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 41.3 ft.
- Fan Speed : High

# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

ARNU073SJA4

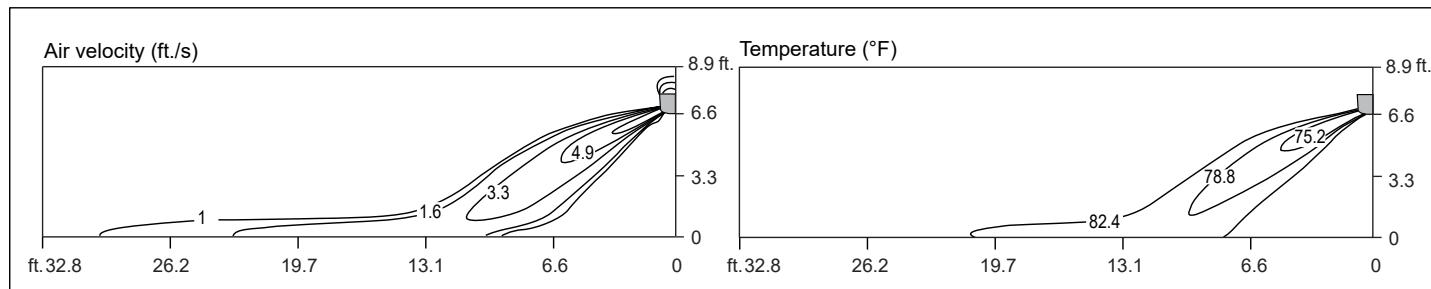
**MULTI V™**

## ARNU073SJA4

### Cooling

#### Side View

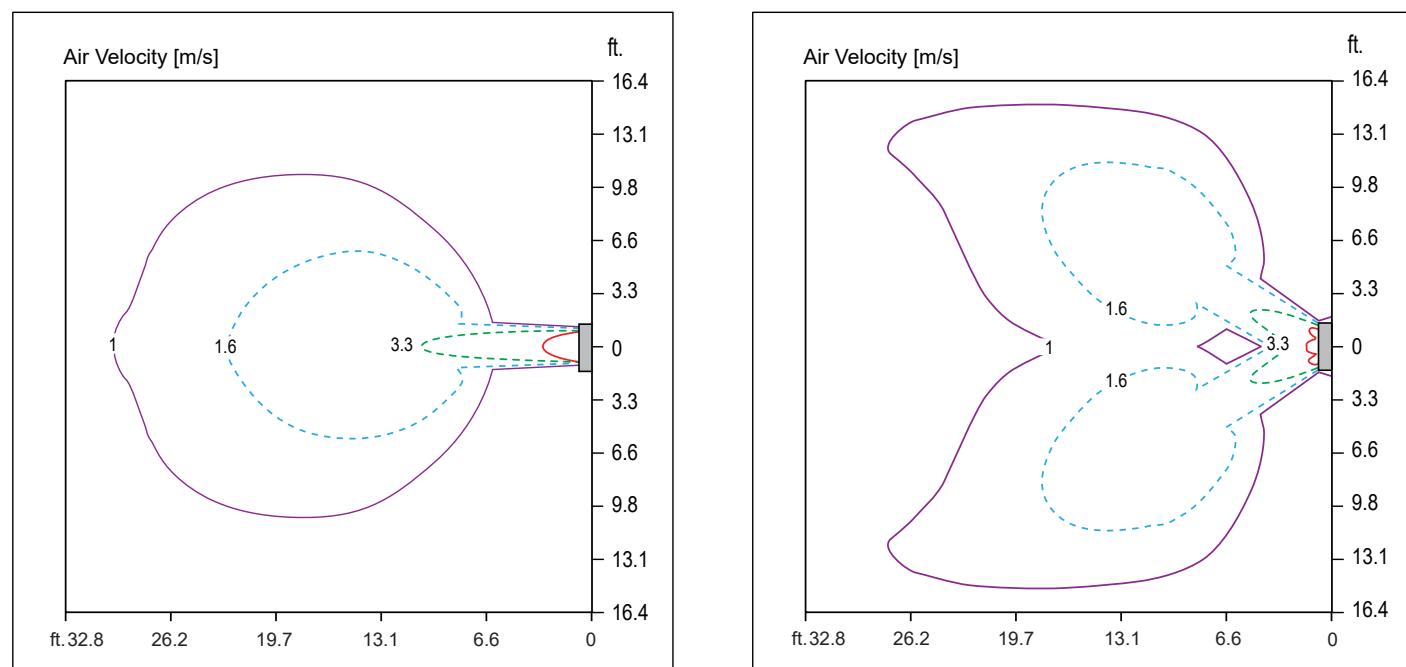
Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

#### Top View

Discharge angle: 35°



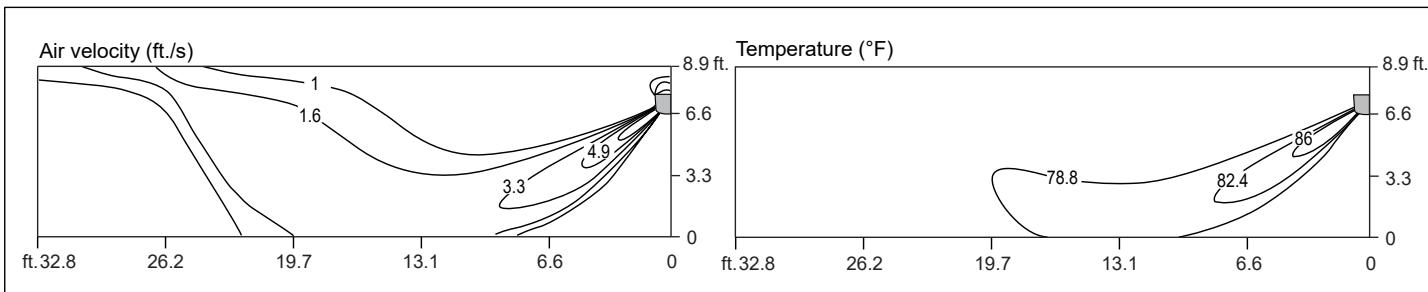
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 30.2 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 27.6 ft.
- Fan Speed : High

## Heating

### Side View

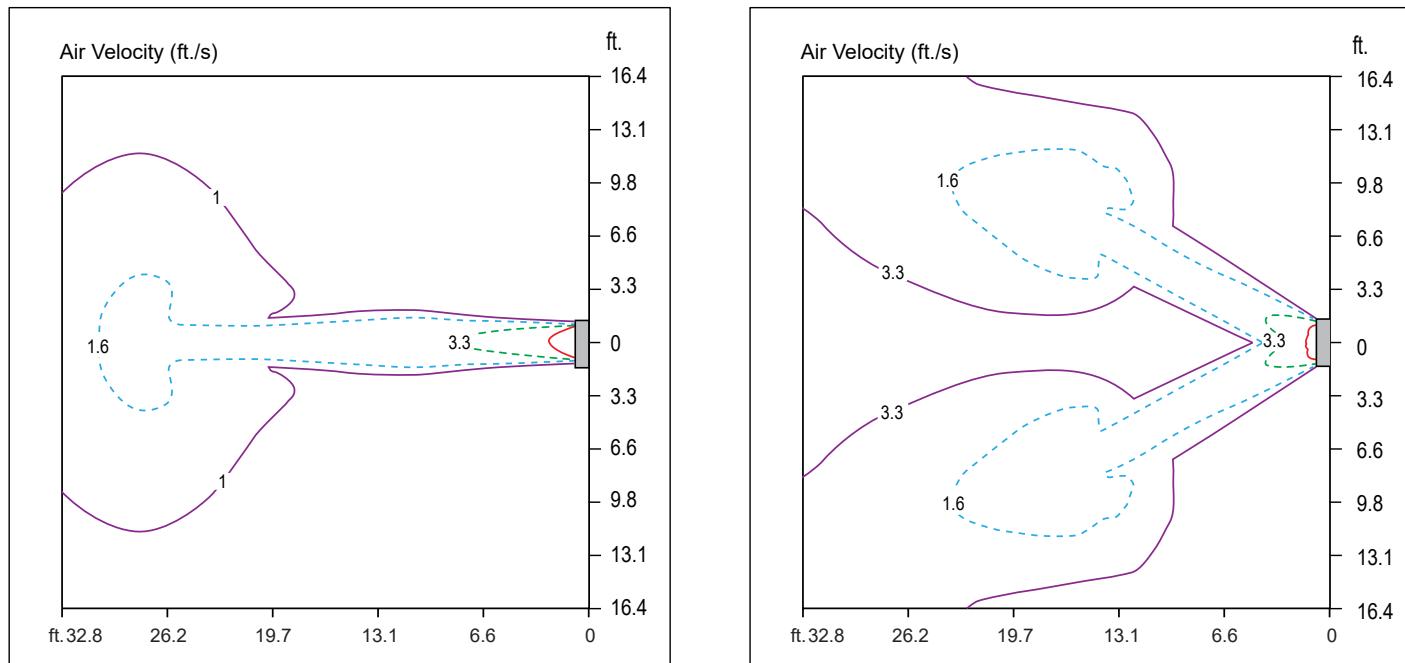
Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 36.1 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 43.3 ft.
- Fan Speed : High

# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

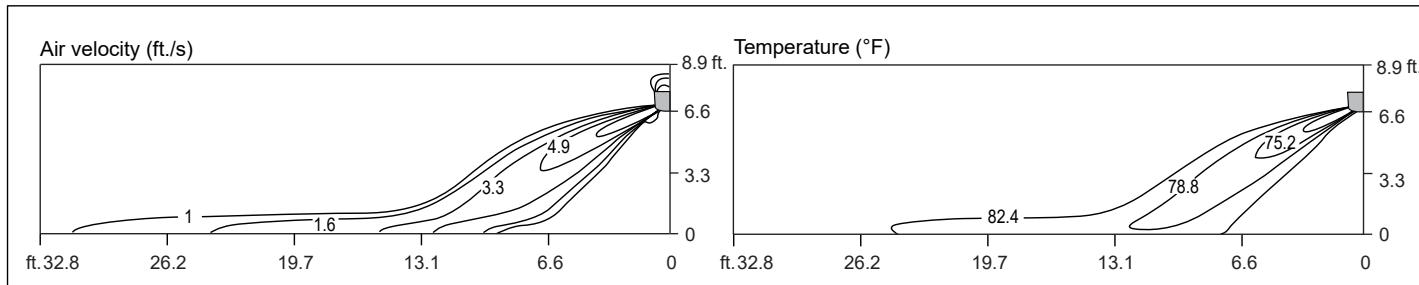
ARNU093SJA4

## ARNU093SJA4

### Cooling

#### Side View

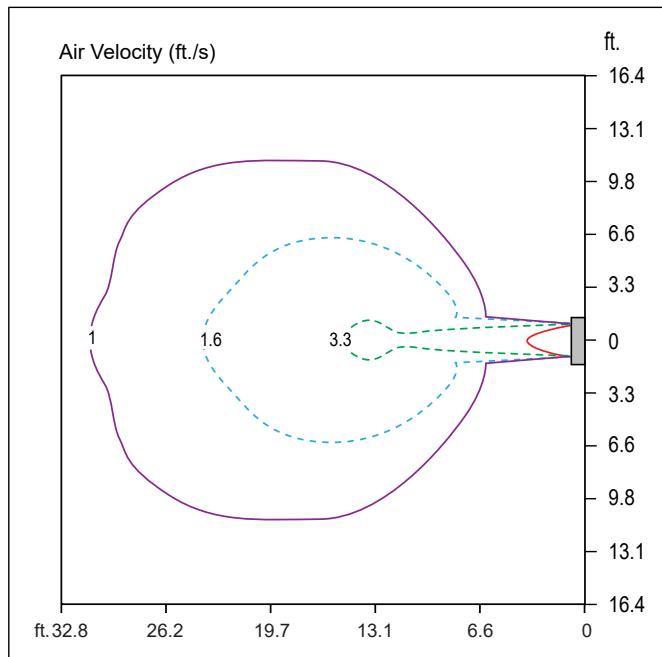
Discharge angle: 35°



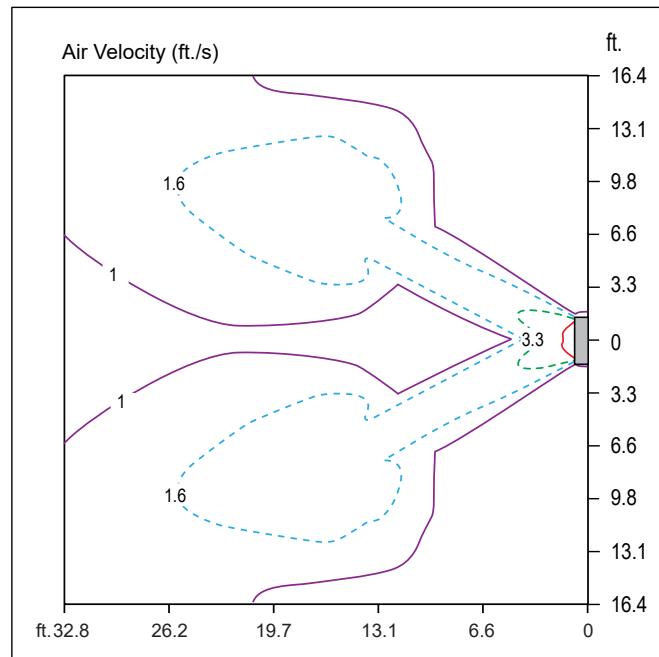
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

#### Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 31.5 ft.
- Fan Speed : High

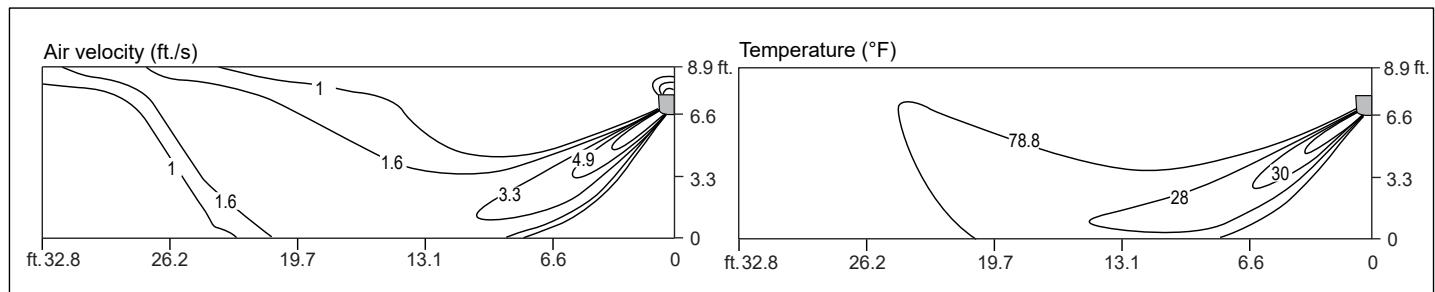


- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 45.9 ft.
- Fan Speed : High

## Heating

### Side View

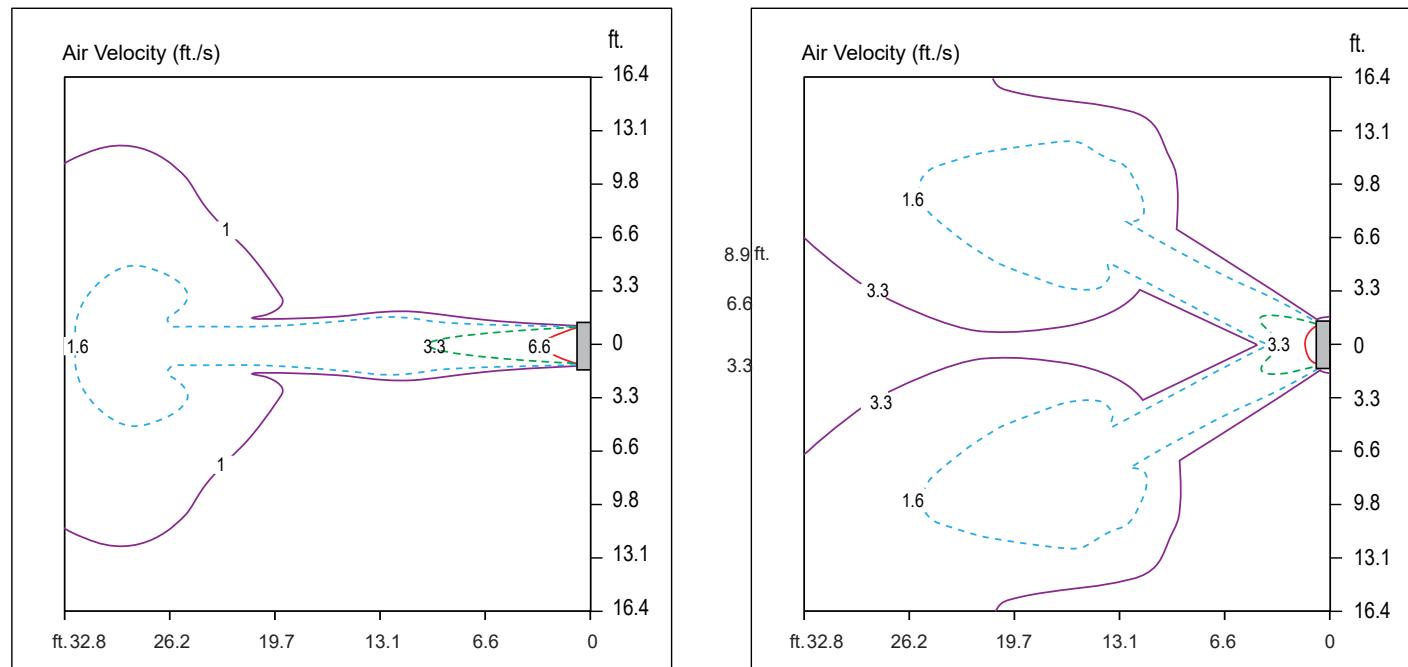
Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 38.7 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 45.9 ft.
- Fan Speed : High

# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

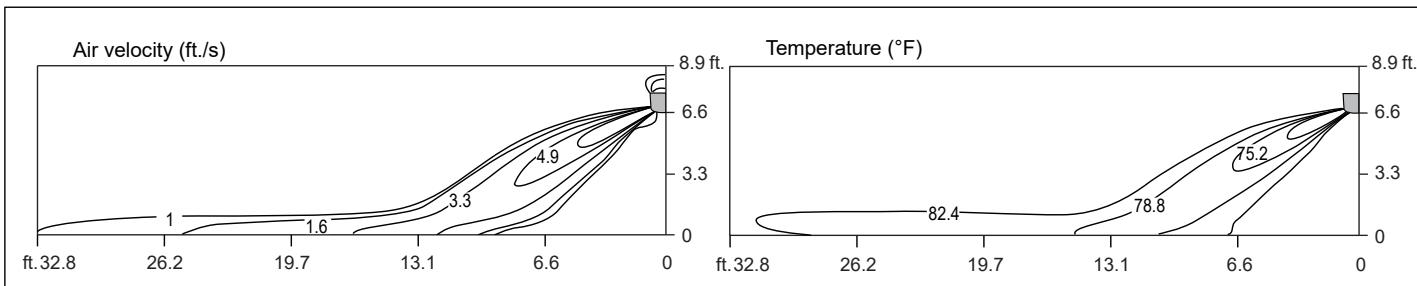
ARNU123SJA4

**ARNU123SJA4**

## Cooling

### Side View

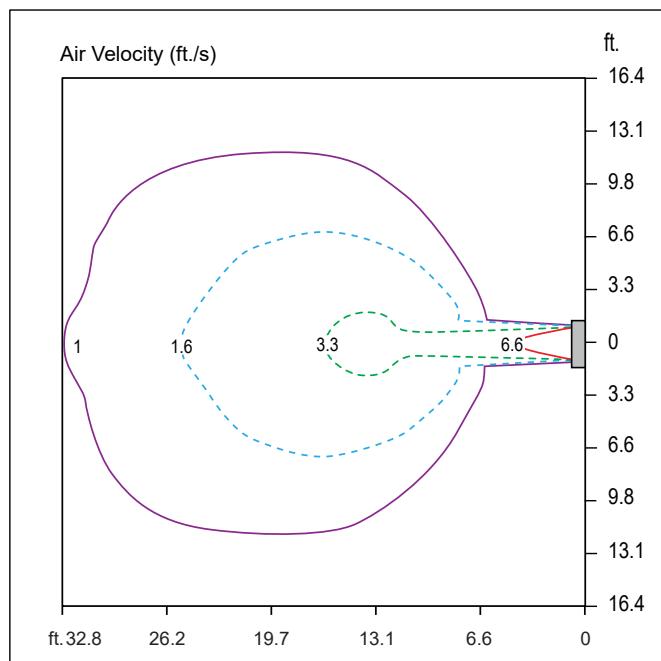
Discharge angle: 35°



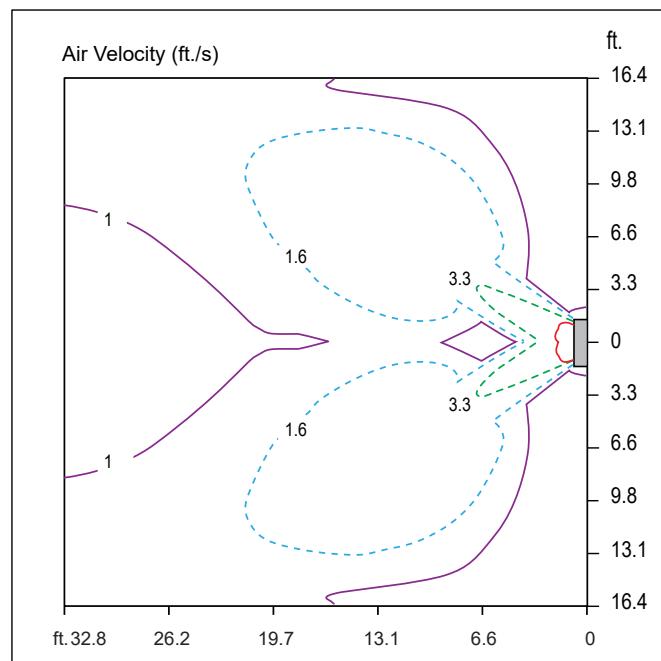
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 32.8 ft.
- Fan Speed : High

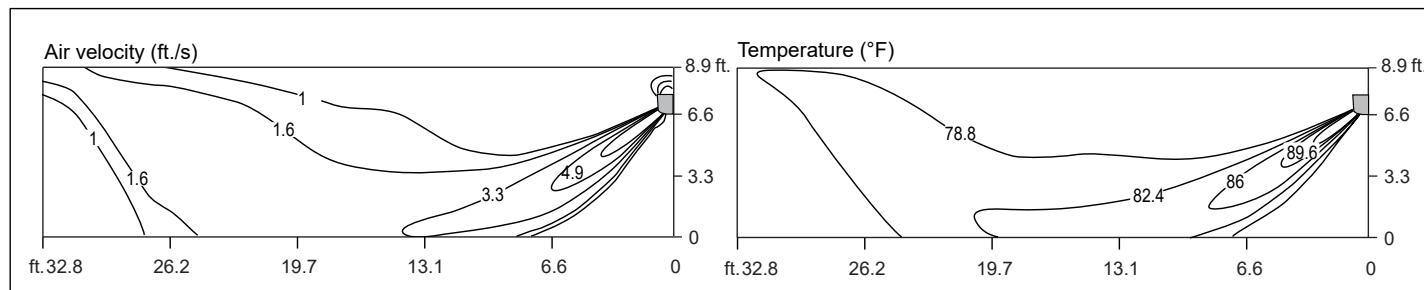


- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 46.9 ft.
- Fan Speed : High

## Heating

### Side View

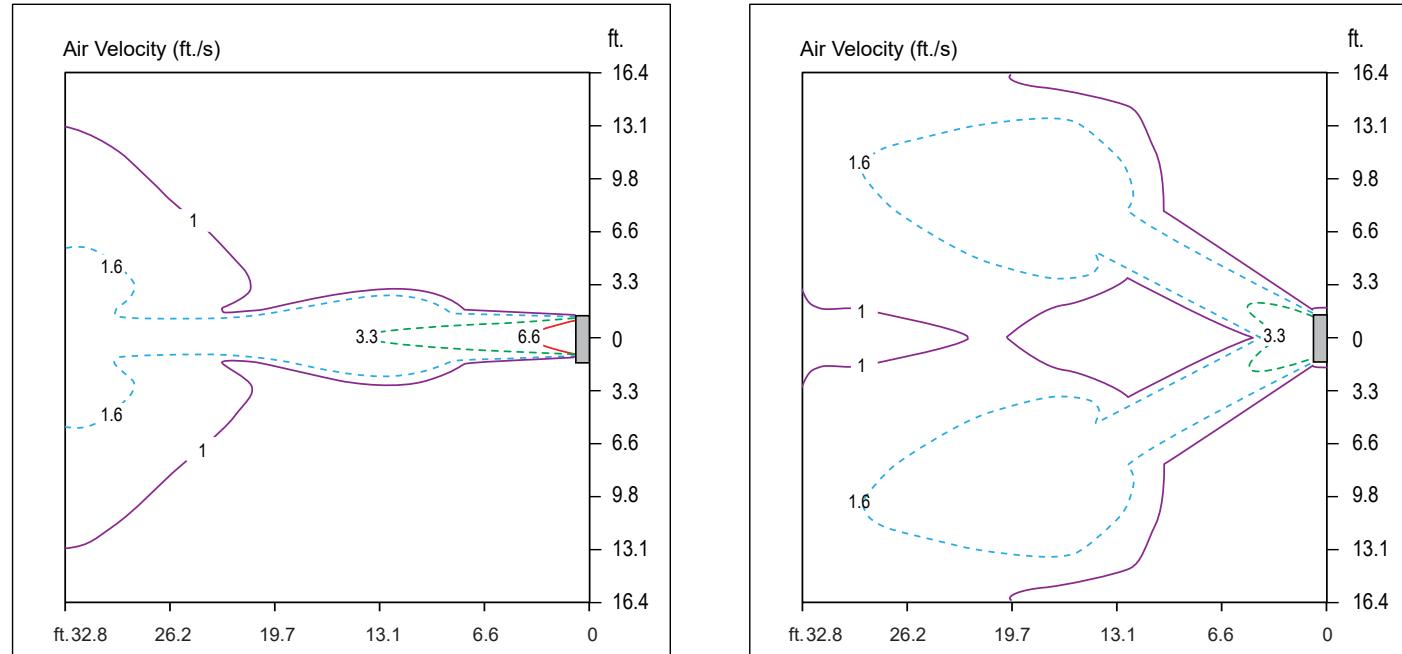
Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 42.6 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 46.9 ft.
- Fan Speed : High

# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

ARNU153SJA4

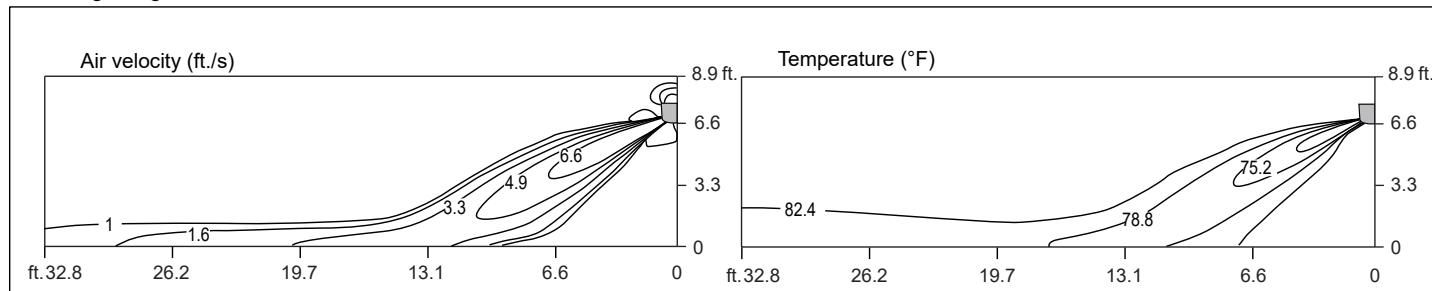
**MULTIV**™

## ARNU153SJA4

### Cooling

#### Side View

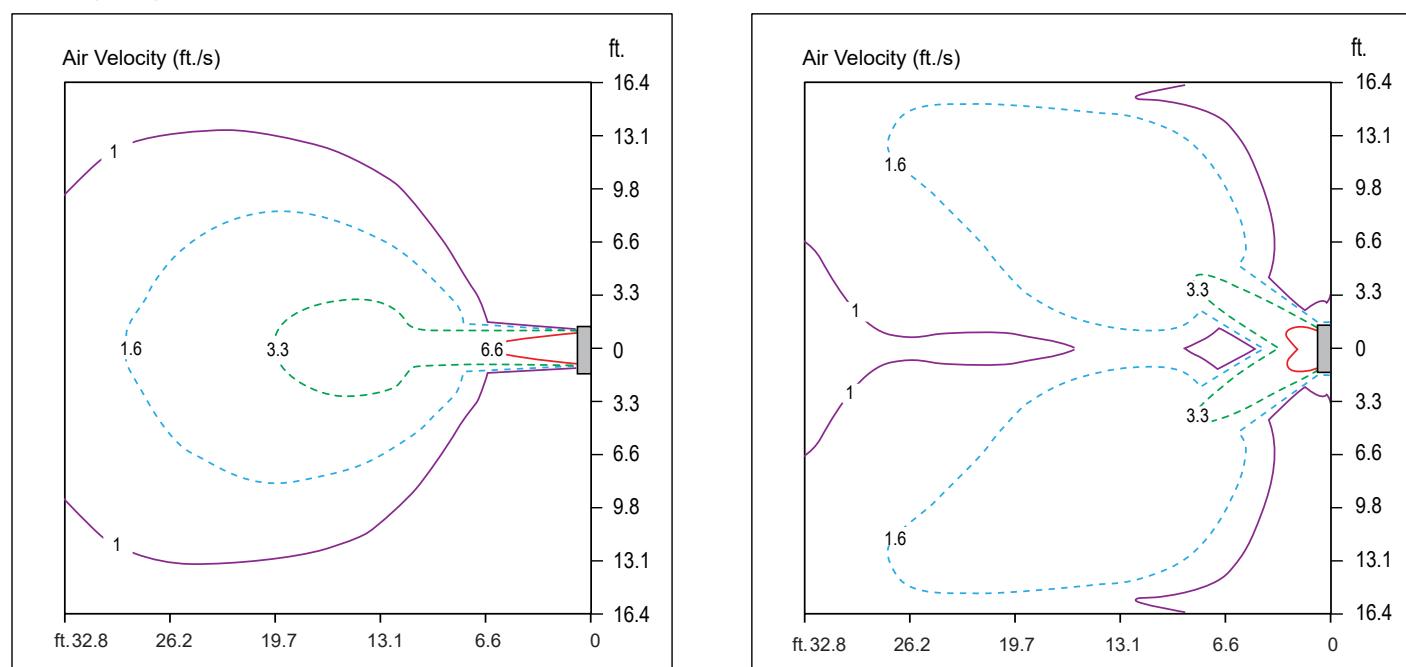
Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

#### Top View

Discharge angle: 35°



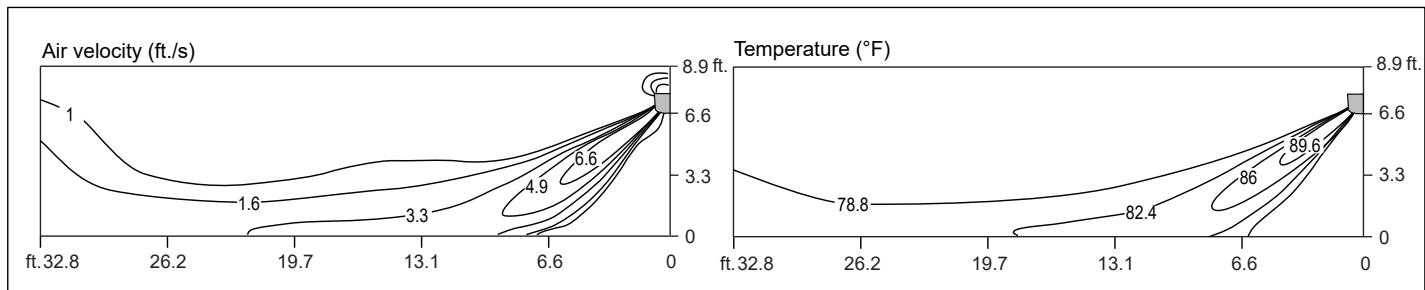
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 37.7 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 54.8 ft.
- Fan Speed : High

## Heating

### Side View

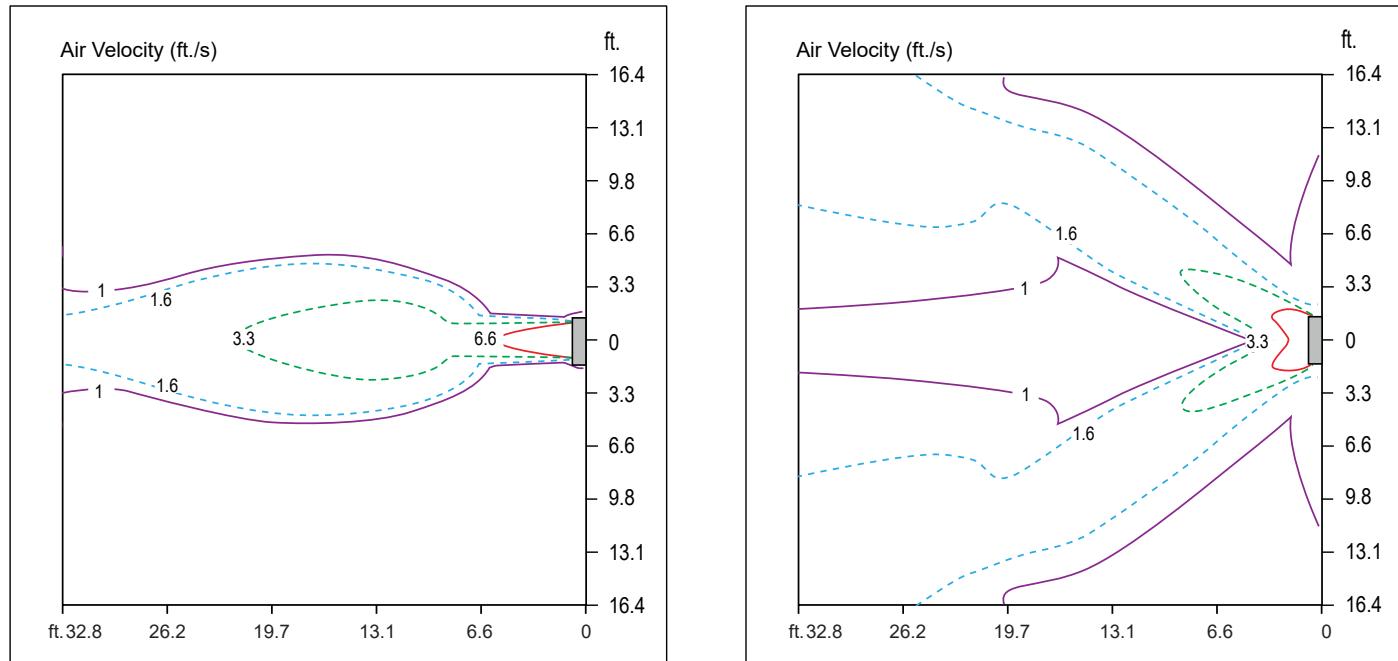
Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 59.1 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 61.7 ft.
- Fan Speed : High

# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

ARNU183SKA4

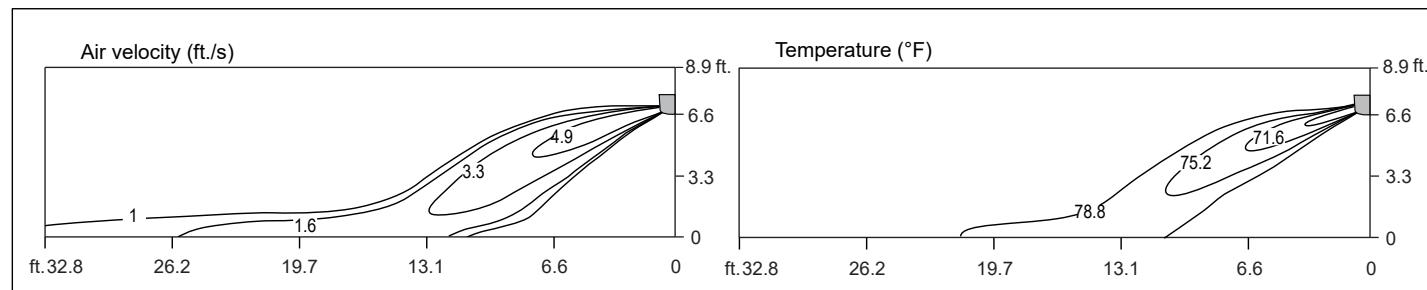
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## ARNU183SKA4

### Cooling

#### Side View

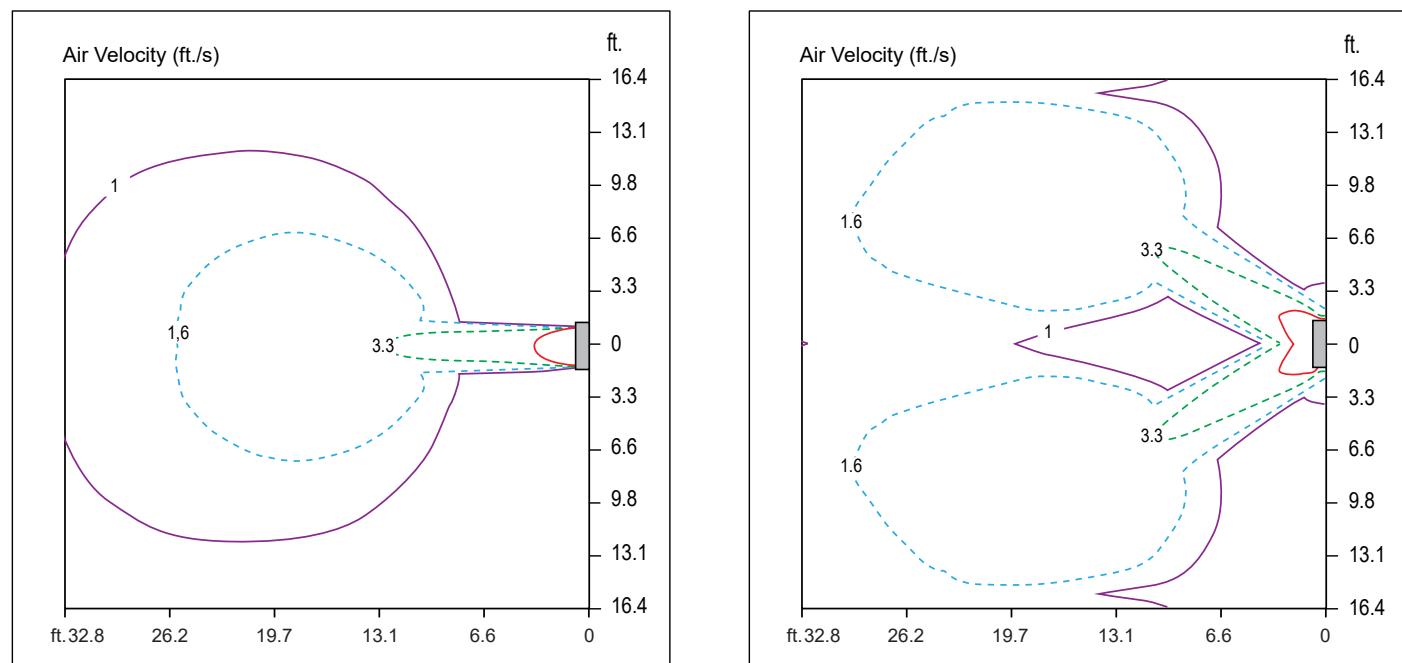
Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

#### Top View

Discharge angle: 25°



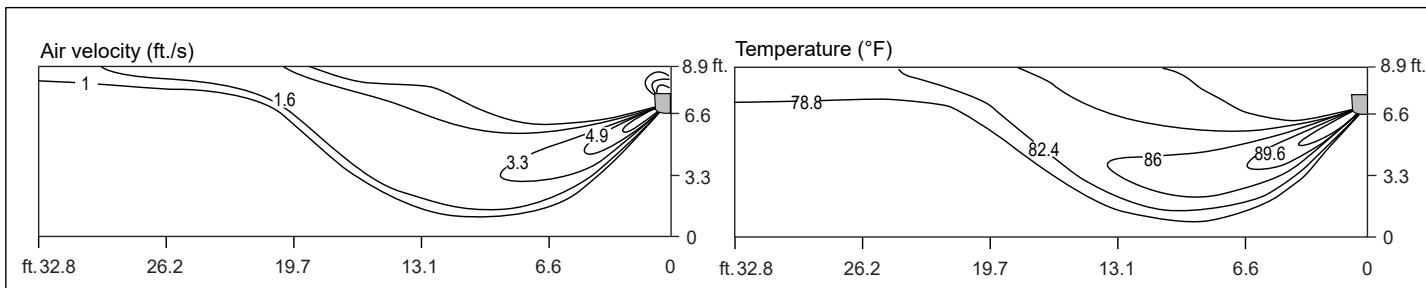
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 34.1 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 49.9 ft.
- Fan Speed : High

## Heating

### Side View

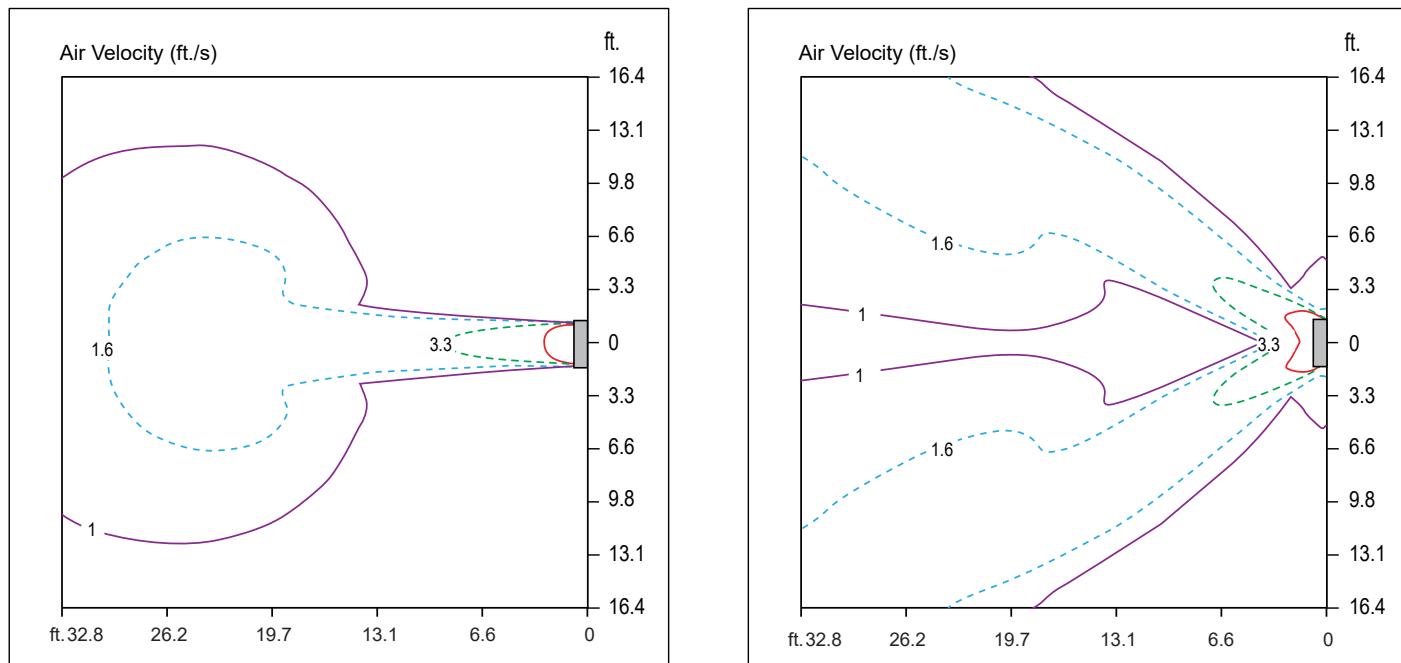
Discharge angle: 45°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 45°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 38.1 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 59.7 ft.
- Fan Speed : High

# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

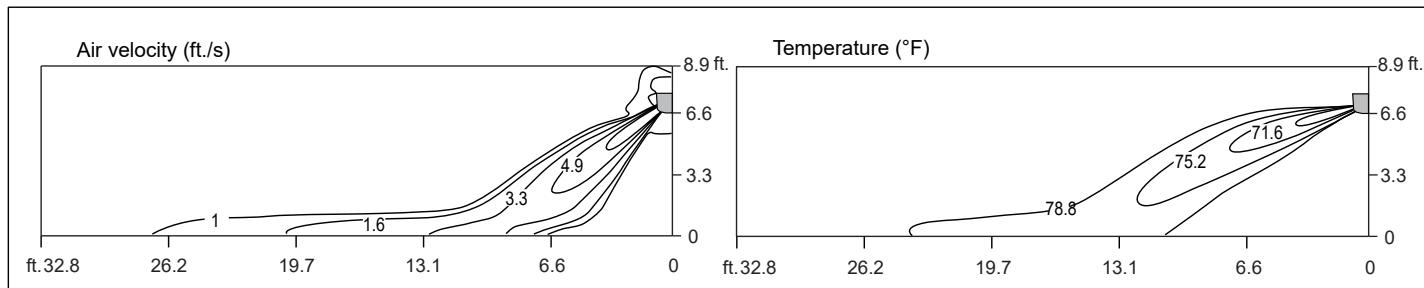
ARNU243SKA4

## ARNU243SKA4

### Cooling

#### Side View

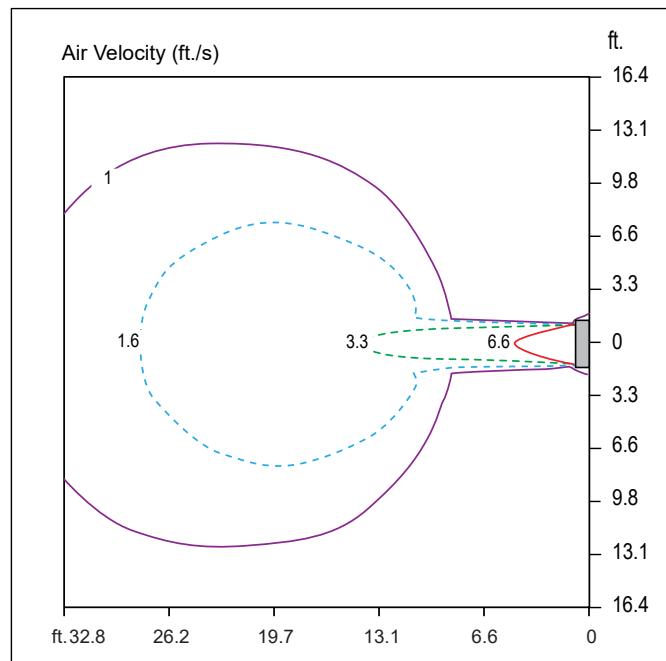
Discharge angle: 25°



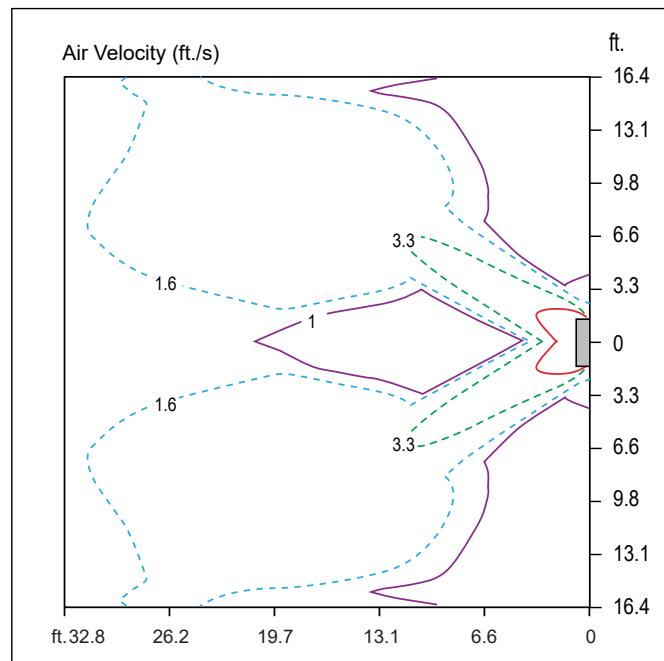
- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

#### Top View

Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 36.7 ft.
- Fan Speed : High

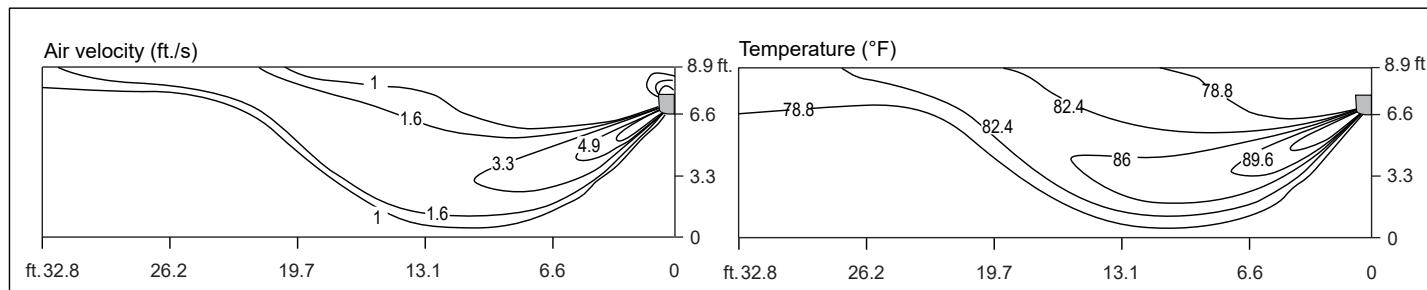


- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 54.1 ft.
- Fan Speed : High

## Heating

### Side View

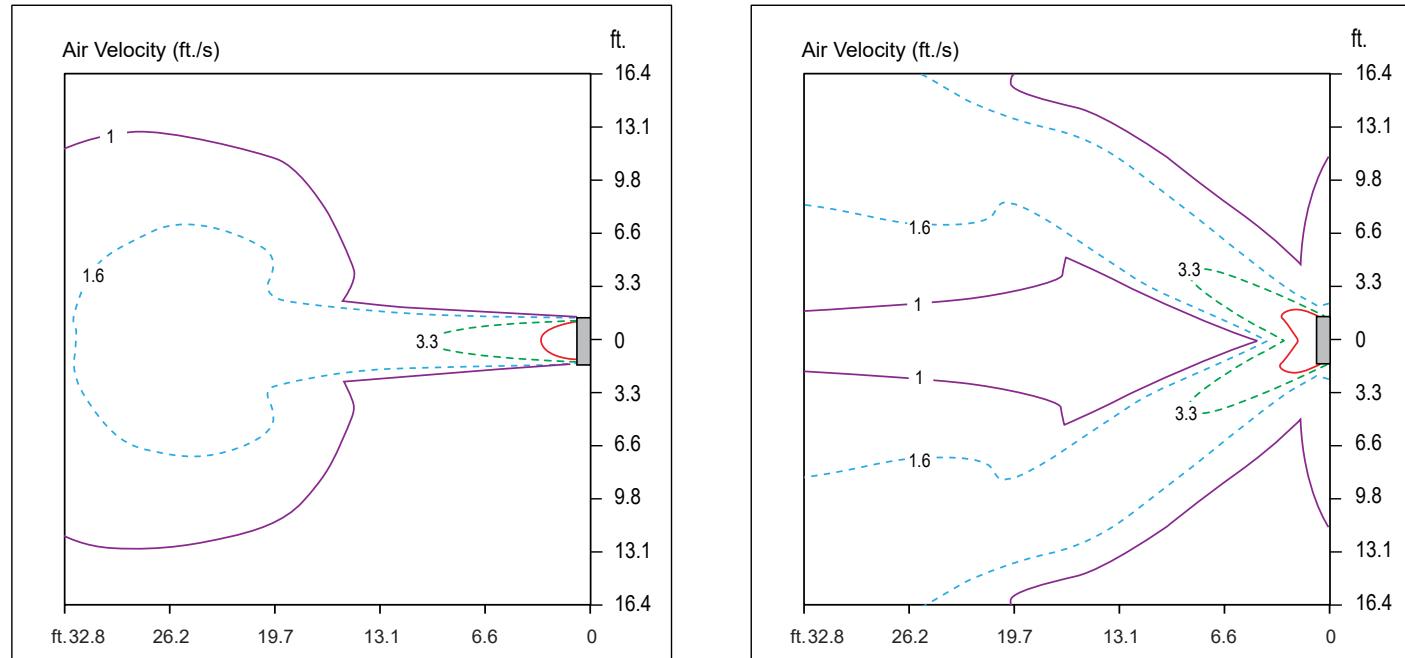
Discharge angle: 45°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Fan Speed : High

### Top View

Discharge angle: 45°



- Vertical Louver : Center
- Vertical Louver Angle : 0°
- Air Speed 1 ft./s Range : 39.7 ft.
- Fan Speed : High

- Vertical Louver : Left and Right
- Vertical Louver Angle : 50°
- Air Speed 1 ft./s Range : 49.9 ft.
- Fan Speed : High

# STANDARD WALL-MOUNTED

Air Velocity / Temperature Distribution

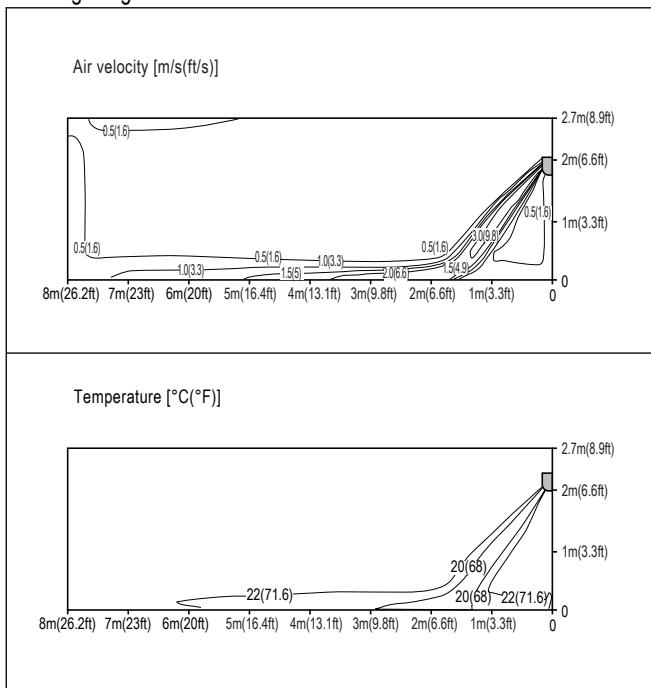
ARNU303SVA4, ARNU363SVA4

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## ARNU303SVA4

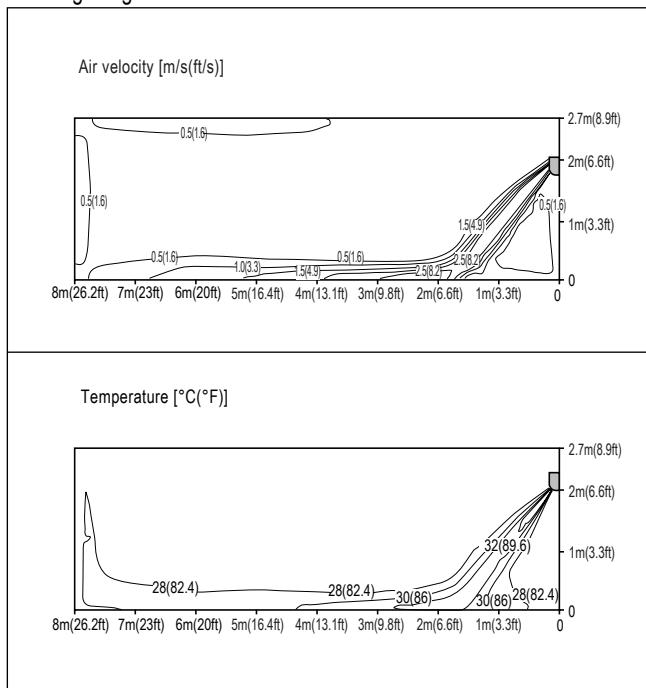
### Cooling

Discharge angle: 25°



### Heating

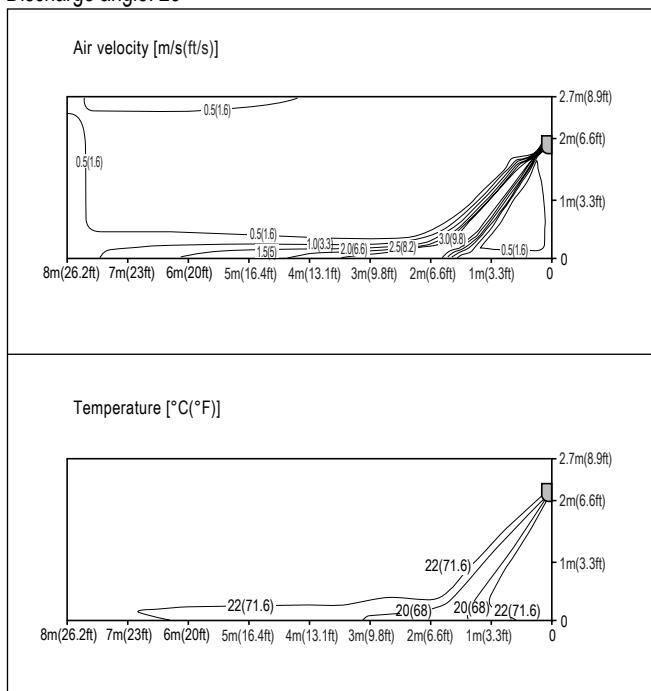
Discharge angle: 35°



## ARNU363SVA4

### Cooling

Discharge angle: 25°



### Heating

Discharge angle: 35°

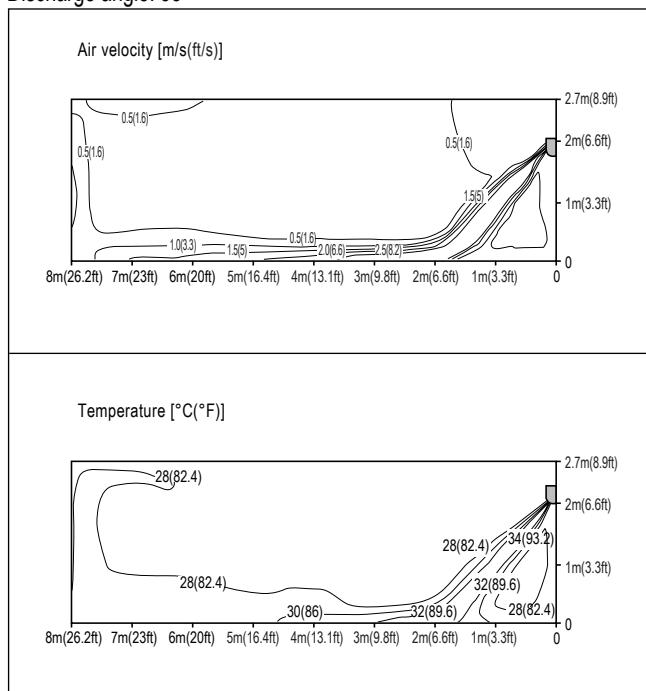


Table 33: ARNU053SJA4 and ARNU073SJA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU053SJA4 / 5.5	-9.9	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	-5	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	0	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	5	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	10	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	14	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	20	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	23	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	25	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	30	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	35	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	40	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	45	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	50	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	55	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.1	5.2
	60	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	7.0	5.2
	65	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	6.9	5.1
	70	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	6.8	5.0
	75	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.6	5.2	6.6	4.9
	80	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.2	5.3	6.4	5.2	6.5	4.9
	85	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.1	5.2	6.2	5.0	6.3	4.7
	90	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	6.0	5.1	6.1	4.9	6.2	4.6
	95	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	5.9	5.1	6.0	4.9	6.1	4.6
	100	3.7	3.6	4.4	4.3	5.0	4.6	5.5	4.9	5.8	5.0	5.9	4.8	6.0	4.5
	105	3.7	3.6	4.2	4.1	4.7	4.4	5.3	4.7	5.5	4.7	5.7	4.6	5.8	4.4
	110	3.6	3.5	4.0	3.9	4.4	4.1	5.0	4.4	5.2	4.4	5.4	4.4	5.6	4.3
	115	3.5	3.4	3.8	3.7	4.1	3.9	4.7	4.2	4.9	4.2	5.1	4.2	5.4	4.1
	118	3.4	3.4	3.6	3.5	3.9	3.6	4.5	4.0	4.6	4.0	4.9	4.0	5.2	4.0
	122	3.3	3.3	3.4	3.3	3.7	3.4	4.2	3.8	4.4	3.8	4.6	3.8	5.0	3.8
ARNU073SJA4 / 7.5	-9.9	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	-5	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	0	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	5	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	10	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	14	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	20	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	23	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	25	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	30	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	35	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	40	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	45	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	50	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	55	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.7	6.5
	60	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.6	6.4
	65	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.4	6.3
	70	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.3	6.2
	75	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.9	6.5	9.1	6.1
	80	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.4	6.6	8.7	6.4	8.8	6.1
	85	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.3	6.5	8.4	6.2	8.6	5.8
	90	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.2	6.4	8.3	6.1	8.4	5.8
	95	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	8.0	6.3	8.2	6.0	8.3	5.7
	100	4.9	4.7	6.0	5.4	6.8	5.7	7.5	6.1	7.9	6.2	8.0	6.0	8.2	5.7
	105	4.9	4.7	5.7	5.1	6.4	5.5	7.2	5.8	7.5	5.8	7.7	5.8	7.9	5.5
	110	4.8	4.5	5.4	4.8	6.0	5.1	6.8	5.5	7.1	5.5	7.3	5.5	7.7	5.4
	115	4.7	4.4	5.1	4.6	5.6	4.8	6.3	5.2	6.6	5.2	7.0	5.2	7.4	5.1
	118	4.6	4.3	4.9	4.4	5.4	4.5	6.1	5.0	6.3	5.0	6.7	5.0	7.1	4.9
	122	4.5	4.1	4.6	4.1	5.1	4.2	5.8	4.7	6.0	4.7	6.3	4.7	6.8	4.7

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# STANDARD WALL-MOUNTED

## Cooling Capacity Tables

ARNU093SJA4, ARNU123SJA4



Table 34: ARNU093SJA4 and ARNU123SJA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU093SJA4 / 9.6	-9.9	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	-5	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	0	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	5	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	10	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	14	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	20	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	23	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	25	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	30	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	35	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	40	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	45	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	50	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	55	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.4	7.7
	60	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.3	7.7
	65	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	12.1	7.6
	70	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	11.9	7.4
	75	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	11.6	7.3
	80	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.8	7.8	11.4	7.7	11.3	7.2
	85	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.6	7.7	10.8	7.4	11.0	6.9
	90	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.5	7.6	10.6	7.2	10.8	6.9
	95	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.3	7.6	10.5	7.2	10.6	6.8
	100	6.3	5.6	7.7	6.4	8.6	6.8	9.6	7.3	10.1	7.4	10.3	7.1	10.5	6.7
	105	6.3	5.6	7.3	6.1	8.2	6.5	9.2	6.9	9.6	6.9	9.9	6.9	10.2	6.6
	110	6.2	5.4	6.9	5.8	7.7	6.1	8.6	6.5	9.0	6.5	9.4	6.5	9.8	6.4
	115	6.0	5.2	6.6	5.5	7.2	5.7	8.1	6.2	8.5	6.2	8.9	6.2	9.4	6.1
	118	5.9	5.1	6.2	5.2	6.9	5.4	7.8	5.9	8.1	5.9	8.5	5.9	9.0	5.9
	122	5.7	4.9	5.9	4.9	6.5	5.1	7.4	5.6	7.7	5.6	8.1	5.6	8.7	5.6
ARNU123SJA4 / 12.3	-9.9	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	-5	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	0	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	5	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	10	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	14	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	20	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	23	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	25	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	30	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	35	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	40	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	45	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	50	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	55	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.9	9.3
	60	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.7	9.2
	65	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.5	9.1
	70	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	15.3	8.9
	75	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.7	9.3	14.9	8.7
	80	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.8	9.4	14.2	9.2	14.5	8.7
	85	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.6	9.3	13.8	8.8	14.0	8.4
	90	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.4	9.1	13.5	8.7	13.8	8.3
	95	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	13.2	9.1	13.4	8.6	13.6	8.2
	100	8.1	6.7	9.8	7.7	11.1	8.2	12.3	8.7	12.9	8.9	13.2	8.5	13.4	8.1
	105	8.1	6.7	9.3	7.3	10.6	7.9	11.8	8.4	12.3	8.4	12.7	8.3	13.0	7.9
	110	7.9	6.5	8.9	6.9	9.8	7.3	11.1	7.9	11.6	7.9	12.0	7.9	12.6	7.7
	115	7.7	6.3	8.4	6.6	9.2	6.9	10.4	7.5	10.9	7.5	11.4	7.5	12.1	7.4
	118	7.5	6.1	8.0	6.2	8.8	6.5	10.0	7.1	10.4	7.1	10.9	7.1	11.6	7.1
	122	7.3	5.9	7.6	5.9	8.3	6.1	9.4	6.7	9.8	6.7	10.3	6.7	11.1	6.7

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).



# STANDARD WALL-MOUNTED

## Cooling Capacity Tables

ARNU153SJA4, ARNU183SKA4

Table 35: ARNU153SJA4 and ARNU183SKA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)											
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU153SJA4 / 15.4	-9.9	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	-5	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	0	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	5	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	10	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	14	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	20	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	23	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	25	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	30	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	35	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	40	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	45	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	50	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	55	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	60	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	65	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	70	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	75	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	18.4	11.7
	80	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.3	11.8	17.8	11.7
	85	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	17.1	11.7	17.3	11.2
	90	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	16.8	11.5	16.9	11.0
	95	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	16.5	11.5	16.8	10.9
	100	10.1	8.4	12.3	9.7	13.9	10.4	15.4	11.0	16.2	11.3	16.5	10.8
	105	10.1	8.4	11.7	9.2	13.2	9.9	14.8	10.5	15.4	10.5	15.8	10.4
	110	9.9	8.2	11.1	8.7	12.3	9.2	13.9	9.9	14.5	9.9	15.1	9.9
	115	9.6	8.0	10.5	8.3	11.6	8.7	13.0	9.4	13.6	9.4	14.3	9.4
	118	9.4	7.7	10.0	7.9	11.0	8.2	12.5	9.0	13.0	9.0	13.7	9.0
	122	9.1	7.5	9.5	7.5	10.4	7.7	11.8	8.5	12.3	8.5	12.9	8.5
ARNU183SKA4 / 19.1	-9.9	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	-5	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	0	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	5	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	10	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	14	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	20	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	23	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	25	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	30	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	35	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	40	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	45	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	50	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	55	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	60	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	65	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	70	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	75	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	80	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.4	14.6	22.8	14.4
	85	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	21.2	14.4	21.4	13.7
	90	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	20.9	14.2	21.0	13.5
	95	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	20.5	14.1	20.9	13.4
	100	12.6	10.4	15.3	12.0	17.2	12.7	19.1	13.6	20.1	13.9	20.5	13.3
	105	12.6	10.4	14.5	11.4	16.4	12.2	18.3	13.0	19.0	13.0	19.7	12.8
	110	12.3	10.1	13.8	10.7	15.3	11.4	17.2	12.2	18.0	12.2	18.7	12.2
	115	12.0	9.8	13.1	10.2	14.4	10.7	16.2	11.6	16.9	11.6	17.8	11.6
	118	11.7	9.5	12.4	9.7	13.6	10.0	15.5	11.0	16.1	11.0	17.0	11.0
	122	11.3	9.2	11.8	9.2	12.9	9.4	14.7	10.4	15.3	10.4	16.0	10.4

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# STANDARD WALL-MOUNTED

## Cooling Capacity Tables

### ARNU243SKA4



Table 36: ARNU243SKA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)											
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU243SKA4 / 24.2	-9.9	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	-5	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	0	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	5	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	10	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	14	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	20	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	23	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	25	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	30	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	35	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	40	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	45	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	50	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	55	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	60	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	65	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	70	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	75	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	80	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	27.1	18.2	28.8	18.0
	85	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	26.8	18.0	27.1	17.2
	90	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	26.4	17.8	26.6	16.9
	95	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	25.9	17.7	26.4	16.8
	100	15.9	13.0	19.4	15.0	21.8	15.9	24.2	17.0	25.4	17.4	25.9	16.6
	105	15.9	13.0	18.4	14.2	20.8	15.3	23.2	16.2	24.1	16.2	24.9	16.0
	110	15.5	12.6	17.4	13.5	19.4	14.2	21.8	15.3	22.8	15.3	23.7	15.3
	115	15.1	12.2	16.6	12.8	18.2	13.4	20.5	14.5	21.4	14.5	22.5	14.5
	118	14.8	11.9	15.7	12.1	17.3	12.6	19.7	13.8	20.4	13.8	21.5	13.8
	122	14.4	11.5	15.0	11.5	16.3	11.8	18.6	13.1	19.4	13.1	20.3	13.1

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

Table 37: ARNU303SVA4 and ARNU363SVA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73			
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh		
ARNU303SVA4 / 30.0	23	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	25	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	30	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	35	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	40	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	45	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	50	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	55	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.8	22.9
	60	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	38.4	22.8
	65	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	37.8	22.4
	70	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	37.3	22.1
	75	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	35.8	22.9	36.3	21.6
	80	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.6	23.2	34.8	22.8	35.4	21.5
	85	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	33.3	22.9	33.6	21.8	34.3	20.6
	90	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	32.8	22.6	33.0	21.5	33.6	20.4
	95	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	32.1	22.4	32.8	21.4	33.3	20.1
	100	19.8	16.5	24.0	19.1	27.0	20.3	30.0	21.6	31.5	22.1	32.1	21.1	32.8	20.0
	105	19.8	16.5	22.8	18.1	25.8	19.4	28.8	20.6	29.9	20.6	30.9	20.4	31.8	19.5
	110	19.3	16.0	21.6	17.1	24.0	18.1	27.0	19.4	28.3	19.4	29.4	19.4	30.6	18.9
ARNU363SVA4 / 36.2	23	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	25	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	30	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	35	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	40	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	45	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	50	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	55	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.9	27.5
	60	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	45.4	27.4
	65	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	44.7	26.9
	70	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	44.1	26.5
	75	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	42.3	27.5	42.9	25.9
	80	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.8	41.1	27.4	41.9	25.8
	85	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	39.8	27.5	39.8	26.2	40.5	24.8
	90	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	38.8	27.1	39.1	25.8	39.8	24.5
	95	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	38.0	26.9	38.8	25.6	39.3	24.2
	100	23.4	19.8	28.4	22.9	32.0	24.3	35.5	25.9	37.3	26.5	38.0	25.3	38.8	24.0
	105	23.4	19.8	26.9	21.7	30.5	23.3	34.0	24.8	35.4	24.8	36.5	24.5	37.6	23.4
	110	22.8	19.2	25.6	20.5	28.4	21.7	32.0	23.3	33.4	23.3	34.8	23.3	36.2	22.7

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Cooling range with the Low Ambient Baffle Kit (sold separately) installed on the outdoor unit(s) is -9.9°F to +122°F, and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

The System Combination Ratio must be between 50–130%.

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# STANDARD WALL-MOUNTED

MULTI V™

## Heating Capacity Tables

ARNU053SJA4, ARNU073SJA4, ARNU093SJA4

Table 38: ARNU053SJA4, ARNU073SJA4, ARNU093SJA4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
	°F DB	°F WB	59	61	64	67	70	73	76	80
			TC	TC	TC	TC	TC	TC	TC	TC
ARNU053SJA4 / 5.5	-12.6	-13	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	-7	-7.6	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.9
	-4	-4.4	4.1	4.1	4.1	4.1	4.0	4.0	4.0	4.0
	0	-0.4	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1
	5	4.5	4.8	4.7	4.6	4.6	4.6	4.6	4.6	4.6
	10	9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	15	14	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1
	20	19	5.6	5.6	5.6	5.6	5.4	5.4	5.3	5.3
	25	23	5.8	5.8	5.8	5.8	5.8	5.7	5.6	5.3
	30	28	5.9	5.9	5.9	5.9	5.9	5.8	5.6	5.3
	35	32	6.1	6.1	6.1	6.1	6.0	5.9	5.6	5.3
	40	36	6.3	6.3	6.3	6.3	6.1	5.9	5.6	5.3
	45	41	6.6	6.6	6.6	6.4	6.1	5.9	5.6	5.3
	47	43	6.8	6.8	6.7	6.4	6.1	5.9	5.6	5.3
	50	46	7.3	7.0	6.7	6.4	6.1	5.9	5.6	5.3
	55	51	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.3
	60	56	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.3
ARNU073SJA4 / 7.5	-12.6	-13	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.3
	-7	-7.6	5.5	5.5	5.5	5.5	5.4	5.4	5.4	5.4
	-4	-4.4	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.6
	0	-0.4	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8
	5	4.5	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	10	9	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8
	15	14	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1
	20	19	7.7	7.7	7.7	7.7	7.6	7.6	7.4	7.4
	25	23	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.4
	30	28	8.2	8.2	8.2	8.2	8.2	8.1	7.8	7.4
	35	32	8.5	8.5	8.5	8.5	8.4	8.2	7.8	7.4
	40	36	8.8	8.8	8.8	8.8	8.5	8.2	7.8	7.4
	45	41	9.2	9.2	9.2	8.9	8.5	8.2	7.8	7.4
	47	43	9.5	9.4	9.4	8.9	8.5	8.2	7.8	7.4
	50	46	10.2	9.8	9.4	8.9	8.5	8.2	7.8	7.4
	55	51	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
	60	56	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
ARNU093SJA4 / 9.6	-12.6	-13	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.8
	-7	-7.6	7.1	7.1	7.1	7.1	7.0	7.0	7.0	7.0
	-4	-4.4	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2
	0	-0.4	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4
	5	4.5	8.5	8.4	8.3	8.3	8.3	8.3	8.3	8.3
	10	9	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.7
	15	14	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.2
	20	19	9.9	9.9	9.9	9.9	9.7	9.7	9.5	9.4
	25	23	10.4	10.4	10.4	10.4	10.4	10.1	10.0	9.5
	30	28	10.6	10.6	10.6	10.6	10.6	10.4	10.0	9.5
	35	32	10.9	10.9	10.9	10.9	10.8	10.6	10.0	9.5
	40	36	11.3	11.3	11.3	11.3	10.9	10.6	10.0	9.5
	45	41	11.8	11.8	11.8	11.4	10.9	10.6	10.0	9.5
	47	43	12.2	12.1	12.0	11.4	10.9	10.6	10.0	9.5
	50	46	13.1	12.5	12.0	11.4	10.9	10.6	10.0	9.5
	55	51	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5
	60	56	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

Table 39: ARNU123SJA4, ARNU153SJA4, ARNU183SKA4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
	°F DB	°F WB	59	61	64	67	70	73	76	80
			TC	TC	TC	TC	TC	TC	TC	TC
ARNU123SJA4 / 12.3	-12.6	-13	8.6	8.6	8.6	8.6	8.4	8.4	8.4	8.4
	-7	-7.6	8.8	8.8	8.8	8.8	8.7	8.7	8.7	8.7
	-4	-4.4	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0
	0	-0.4	9.4	9.4	9.4	9.4	9.4	9.2	9.2	9.2
	5	4.5	10.6	10.5	10.3	10.3	10.3	10.3	10.3	10.3
	10	9	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9
	15	14	11.7	11.7	11.7	11.7	11.7	11.7	11.6	11.4
	20	19	12.4	12.4	12.4	12.4	12.1	12.1	11.9	11.8
	25	23	12.9	12.9	12.9	12.9	12.9	12.6	12.5	11.9
	30	28	13.2	13.2	13.2	13.2	13.2	12.9	12.5	11.9
	35	32	13.6	13.6	13.6	13.6	13.5	13.2	12.5	11.9
	40	36	14.1	14.1	14.1	14.1	13.6	13.2	12.5	11.9
	45	41	14.7	14.7	14.7	14.3	13.6	13.2	12.5	11.9
	47	43	15.2	15.1	15.0	14.3	13.6	13.2	12.5	11.9
	50	46	16.3	15.6	15.0	14.3	13.6	13.2	12.5	11.9
	55	51	16.7	15.8	15.0	14.3	13.6	13.2	12.5	11.9
	60	56	16.7	15.8	15.0	14.3	13.6	13.2	12.5	11.9
ARNU153SJA / 15.3	-12.6	-13	10.8	10.8	10.8	10.8	10.6	10.6	10.6	10.6
	-7	-7.6	11.1	11.1	11.1	11.1	10.9	10.9	10.9	10.9
	-4	-4.4	11.5	11.5	11.5	11.5	11.3	11.3	11.3	11.3
	0	-0.4	11.8	11.8	11.8	11.8	11.8	11.6	11.6	11.6
	5	4.5	13.3	13.2	13.0	13.0	13.0	13.0	13.0	13.0
	10	9	13.9	13.9	13.9	13.7	13.7	13.7	13.7	13.7
	15	14	14.7	14.7	14.7	14.7	14.7	14.7	14.5	14.4
	20	19	15.6	15.6	15.6	15.6	15.2	15.2	15.0	14.8
	25	23	16.2	16.2	16.2	16.2	16.2	15.9	15.7	15.0
	30	28	16.6	16.6	16.6	16.6	16.6	16.2	15.7	15.0
	35	32	17.1	17.1	17.1	17.1	16.9	16.6	15.7	15.0
	40	36	17.8	17.8	17.8	17.8	17.1	16.6	15.7	15.0
	45	41	18.5	18.5	18.5	18.0	17.1	16.6	15.7	15.0
	47	43	19.2	19.0	18.8	18.0	17.1	16.6	15.7	15.0
	50	46	20.5	19.7	18.8	18.0	17.1	16.6	15.7	15.0
	55	51	20.9	19.8	18.8	18.0	17.1	16.6	15.7	15.0
	60	56	20.9	19.8	18.8	18.0	17.1	16.6	15.7	15.0
ARNU183SKA4 / 19.1	-12.6	-13	13.5	13.5	13.5	13.5	13.4	13.4	13.4	13.4
	-7	-7.6	14.0	14.0	14.0	14.0	13.8	13.8	13.8	13.8
	-4	-4.4	14.4	14.4	14.4	14.4	14.2	14.2	14.2	14.2
	0	-0.4	14.8	14.8	14.8	14.8	14.8	14.6	14.6	14.6
	5	4.5	16.8	16.6	16.3	16.3	16.3	16.3	16.3	16.3
	10	9	17.4	17.4	17.4	17.2	17.2	17.2	17.2	17.2
	15	14	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.1
	20	19	19.6	19.6	19.6	19.6	19.1	19.1	18.8	18.6
	25	23	20.4	20.4	20.4	20.4	20.4	20.0	19.8	18.8
	30	28	20.9	20.9	20.9	20.9	20.9	20.4	19.8	18.8
	35	32	21.5	21.5	21.5	21.5	21.3	20.9	19.8	18.8
	40	36	22.4	22.4	22.4	22.4	21.5	20.9	19.8	18.8
	45	41	23.2	23.2	23.2	22.6	21.5	20.9	19.8	18.8
	47	43	24.1	23.9	23.7	22.6	21.5	20.9	19.8	18.8
	50	46	25.8	24.7	23.7	22.6	21.5	20.9	19.8	18.8
	55	51	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
	60	56	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# STANDARD WALL-MOUNTED

## Heating Capacity Tables

ARNU243SKA4

Table 40: ARNU243SKA4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
	°F DB	°F WB	59	61	64	67	70	73	76	80
			TC	TC	TC	TC	TC	TC	TC	TC
ARNU243SKA4 / 24.2	-12.6	-13	16.1	16.1	16.1	16.1	15.9	15.9	15.9	15.9
	-7	-7.6	16.6	16.6	16.6	16.6	16.4	16.4	16.4	16.4
	-4	-4.4	17.2	17.2	17.2	17.2	16.9	16.9	16.9	16.9
	0	-0.4	17.7	17.7	17.7	17.7	17.7	17.4	17.4	17.4
	5	4.5	20.0	19.7	19.5	19.5	19.5	19.5	19.5	19.5
	10	9	20.7	20.7	20.7	20.5	20.5	20.5	20.5	20.5
	15	14	22.0	22.0	22.0	22.0	22.0	22.0	21.8	21.5
	20	19	23.3	23.3	23.3	23.3	22.8	22.8	22.4	22.1
	25	23	24.3	24.3	24.3	24.3	24.3	23.8	23.6	22.4
	30	28	24.8	24.8	24.8	24.8	24.8	24.3	23.6	22.4
	35	32	25.6	25.6	25.6	25.6	25.3	24.8	23.6	22.4
	40	36	26.6	26.6	26.6	26.6	25.6	24.8	23.6	22.4
	45	41	27.6	27.6	27.6	26.9	25.6	24.8	23.6	22.4
	47	43	28.7	28.4	28.2	26.9	25.6	24.8	23.6	22.4
	50	46	30.7	29.4	28.2	26.9	25.6	24.8	23.6	22.4
	55	51	31.4	29.7	28.2	26.9	25.6	24.8	23.6	22.4
	60	56	31.4	29.7	28.2	26.9	25.6	24.8	23.6	22.4

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHR Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

Table 41: ARNU303SVA4 and ARNU363SVA4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
	°F DB	°F WB	59	61	64	67	70	73	76	80
			TC	TC	TC	TC	TC	TC	TC	TC
ARNU303SVA4 / 30.0	-4.0	-4.4	21.4	21.4	21.4	21.4	21.1	21.1	21.1	21.1
	0	-0.4	22.1	22.1	22.1	22.1	22.1	21.8	21.8	21.8
	5.0	4.5	25.0	24.6	24.3	24.3	24.3	24.3	24.3	24.3
	10.0	9.0	25.9	25.9	25.9	25.6	25.6	25.6	25.6	25.6
	15.0	14.0	27.5	27.5	27.5	27.5	27.5	27.5	27.2	26.9
	20.0	19.0	29.1	29.1	29.1	28.5	28.5	28.0	27.7	
	25.0	23.0	30.4	30.4	30.4	30.4	29.8	29.4	28.0	
	30.0	28.0	31.0	31.0	31.0	31.0	30.4	29.4	28.0	
	35.0	32.0	32.0	32.0	32.0	31.7	31.0	29.4	28.0	
	40.0	36.0	33.3	33.3	33.3	32.0	31.0	29.4	28.0	
	45.0	41.0	34.6	34.6	34.6	32.0	31.0	29.4	28.0	
	47.0	43.0	35.8	35.5	35.2	33.6	32.0	29.4	28.0	
	50.0	46.0	38.4	36.8	35.2	33.6	32.0	29.4	28.0	
	55.0	51.0	39.2	37.1	35.2	33.6	32.0	29.4	28.0	
	60.0	56.0	39.2	37.1	35.2	33.6	32.0	29.4	28.0	
ARNU363SVA4 / 36.2	-4.0	-4.4	24.8	24.8	24.8	24.4	24.4	24.4	24.4	24.4
	0	-0.4	25.5	25.5	25.5	25.5	25.2	25.2	25.2	25.2
	5.0	4.5	28.9	28.5	28.1	28.1	28.1	28.1	28.1	28.1
	10.0	9.0	30.0	30.0	29.6	29.6	29.6	29.6	29.6	29.6
	15.0	14.0	31.8	31.8	31.8	31.8	31.8	31.5	31.1	
	20.0	19.0	33.7	33.7	33.7	32.9	32.9	32.4	32.0	
	25.0	23.0	35.2	35.2	35.2	35.2	34.4	34.0	32.4	
	30.0	28.0	35.9	35.9	35.9	35.9	35.2	34.0	32.4	
	35.0	32.0	37.0	37.0	37.0	36.6	35.9	34.0	32.4	
	40.0	36.0	38.5	38.5	38.5	37.0	35.9	34.0	32.4	
	45.0	41.0	40.0	40.0	40.0	38.9	37.0	34.0	32.4	
	47.0	43.0	41.4	41.1	40.7	38.9	37.0	34.0	32.4	
	50.0	46.0	44.4	42.6	40.7	38.9	37.0	34.0	32.4	
	55.0	51.0	45.3	42.9	40.7	38.9	37.0	34.0	32.4	
	60.0	56.0	45.3	42.9	40.7	38.9	37.0	34.0	32.4	

TC: Total Capacity (MBh).

The System Combination Ratio must be between 50–130%.

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice.

Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).For outdoor unit performance data, see the respective outdoor unit performance data manuals on [www.lg-vrf.com](http://www.lg-vrf.com).

# APPLICATION GUIDELINES

**Selecting the Best Location on page 93**

**General Mounting on page 94**

**General Drain Piping Information on page 96**

**Wiring Guidelines on page 98**

**Wired Remote Controller Location on page 100**

**Acronyms on page 101**

## Selecting the Best Location

### Do's

- Place the unit where air circulation will not be blocked.
- Place the unit where drainage can be obtained easily.
- Place the unit where noise prevention is taken into consideration.
- Ensure there is sufficient space from the ceiling and floor.
- Ensure there is sufficient maintenance space.
- Locate the indoor unit in a location where it can be easily connected to the outdoor unit / heat recovery unit.

### Don'ts

- Avoid installing the unit near high-frequency generators.
- Do not install the unit near a doorway.
- The unit should not be installed near a heat or steam source, or where considerable amounts of oil, iron powder, or flour are used. (These materials may generate condensate, cause a reduction in heat exchanger efficiency, or the drain to malfunction. If this is a potential problem, install a ventilation fan large enough to vent out these materials.)

## WARNING

The unit should not be installed where sulfuric acid and flammable or corrosive gases are generated, vented into, or stored. There is risk of fire, explosion, and physical injury or death.

**The unit may be damaged, may malfunction, and / or will not operate as designed if installed in any of the conditions listed.**

### Note:

- Indoor units (IDUs) should not be placed in an environment where the IDUs may be exposed to harmful volatile organic compounds (VOCs) or in environments where there is improper air make up or supply or inadequate ventilation. If there are concerns about VOCs in the environment where the IDUs are installed, proper air make up or supply and/or adequate ventilation should be provided. Additionally, in buildings where IDUs will be exposed to VOCs, consider a third party factory-applied epoxy coating to the fan coils for each IDU where the entire coil is dipped, not sprayed..
- If the unit is installed near a body of water, the installation parts are at risk of corroding. Appropriate anti-corrosion methods should be taken for the unit and all installation parts.

## Installing in an Area Exposed to Unconditioned Air

In some installation applications, areas (floors, walls) in some rooms may be exposed to unconditioned air (room may be above or next to an unheated garage or storeroom). To countermeasure:

- Verify that carpet is or will be installed (carpet may increase the temperature by three [3] degrees).
- Add insulation between the floor joists.
- Install radiant heat or another type of heating system to the floor.

Figure 35: Minimum Clearance Requirements for SF Frame Gallery Indoor Units.

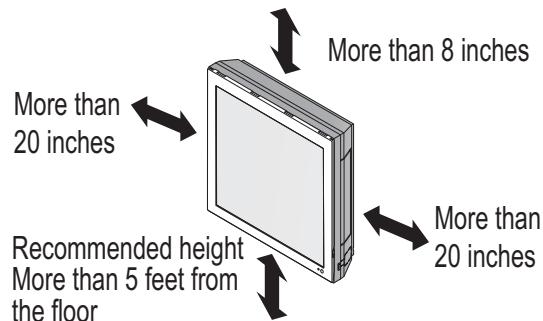


Figure 36: Minimum Clearance Requirements for SJ, SK, SV Frame Wall-Mounted Indoor Units.

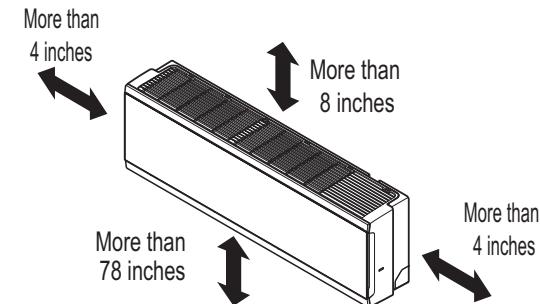
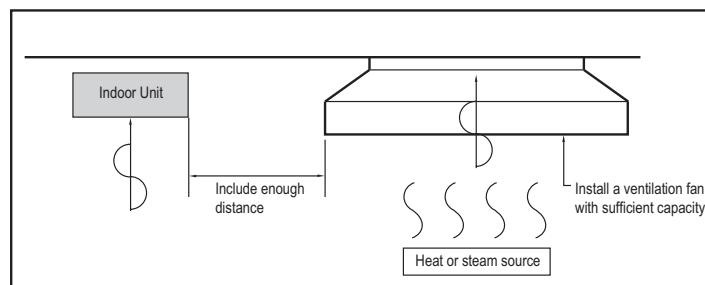


Figure 37: Installing Near a Heat or Steam Source.



# APPLICATION GUIDELINES

## General Mounting

### General Mounting - Gallery

#### Using the Installation Guide

1. Choose an appropriate location for the indoor unit. To hang the installation guide, verify that it is level and plumb, and then tape it to the wall.
2. Drill four (4) 1/4-inch diameter holes with a depth of 1-3/16 to 1-3/8 inches for the mounting screws. Drill one (1) two (2) inch-diameter hole for the field-installed refrigerant and drain piping.
3. Insert a plastic anchor into each of the mounting holes.
4. Screw the top two (2) screws into the wall. Do not flush them to the wall; leave a 7/16 inch space for hanging the indoor unit.

#### Preparing the Gallery Indoor Unit Refrigerant and Drain Piping Connections

1. Depending on the installation requirements, there is a choice of routing the Gallery indoor unit refrigerant piping and drain hose to the left, right, or rear of the frame. If installing piping on the right side of the Gallery indoor unit frame, first press on the top of the clamp, and then slowly guide the piping downward. Then, bend the piping to the right side of the indoor unit frame.

#### Note:

*Do not bend the piping / drain hose from side to side, it may damage the components.*

2. Bundle the piping and drain hose with tape where they meet near the indoor unit frame. Position the drain hose at the bottom of the bundle (positioning the drain hose at the top of the bundle may cause the drain pan to overflow inside the indoor unit).

#### Hanging the Gallery Indoor Unit Frame

1. Remove the installation guide and hang the indoor unit on the top two (2) screws. Verify the indoor unit is hanging securely on the screws.
2. Align the holes at the bottom of the indoor unit to the mounting holes. Tighten first the top screws, then tighten the bottom screws.
3. Verify that the indoor unit is completely secured to the wall by gently shaking it up and down.

Figure 38: Using the SF Frame Gallery Indoor Unit Installation Guide.

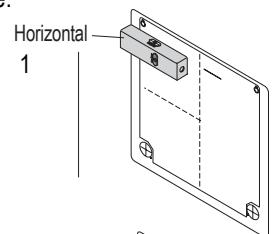


Figure 39: SF Frame Gallery Indoor Unit Right Side Piping Access.

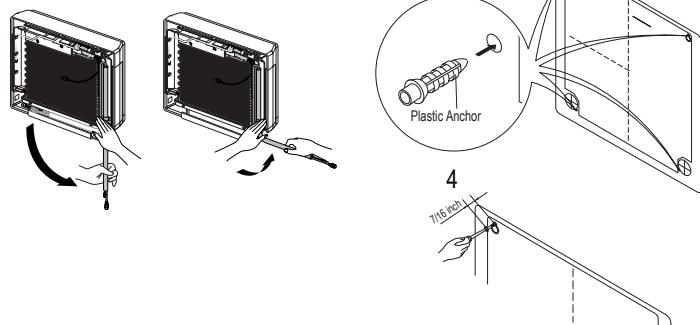
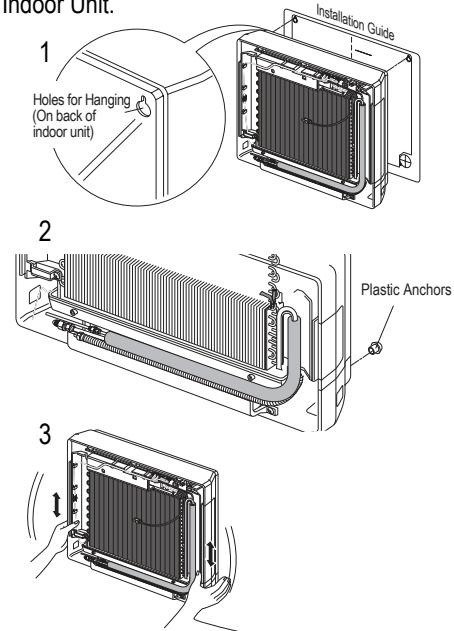


Figure 40: Hanging the SF Frame Gallery Indoor Unit.



## General Mounting - Wall-Mounted

Wall-mounted indoor units have several options on how the piping and wiring can be routed (see figures below). Whichever way the piping and wiring are routed out of the indoor units, the mounting wall on which the indoor unit is installed should be strong and solid enough to protect it from vibration.

- Mount the installation plate on the wall using the Type "A" screws. If mounting the unit on concrete, consider using anchor bolts.
- Always mount the installation plate horizontally. Measure the wall and mark the centerline using thread and a level.

Figure 41: Choice of SJ and SK Frame Wall-Mounted Indoor Unit Piping / Wiring Routes.

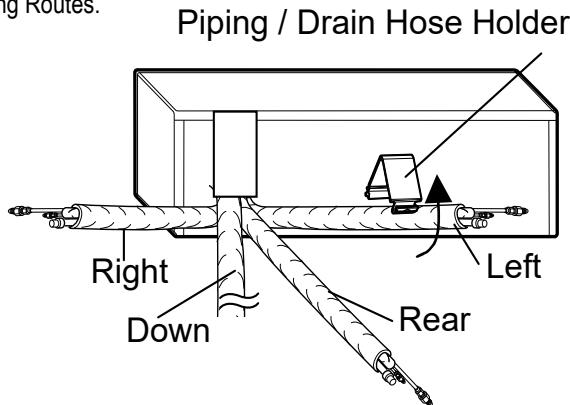


Figure 43: SJR Art Cool and SJA Standard Frame Wall-Mounted Installation Plates.

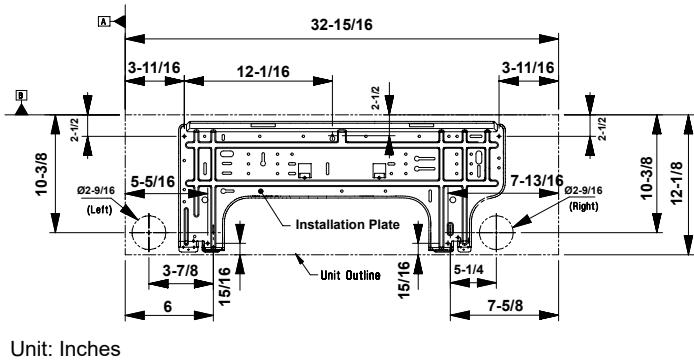


Figure 45: SKA Standard Frame Wall-Mounted Installation Plates.

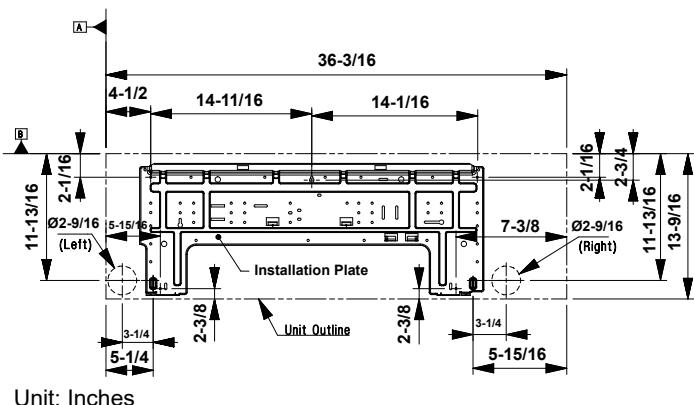


Figure 42: Choice of SV Frame Wall-Mounted Indoor Unit Piping / Wiring Routes.

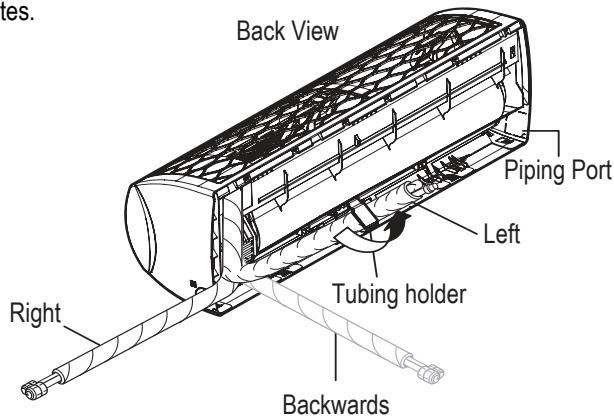


Figure 44: SKR Art Cool Frame Wall-Mounted Installation Plates.

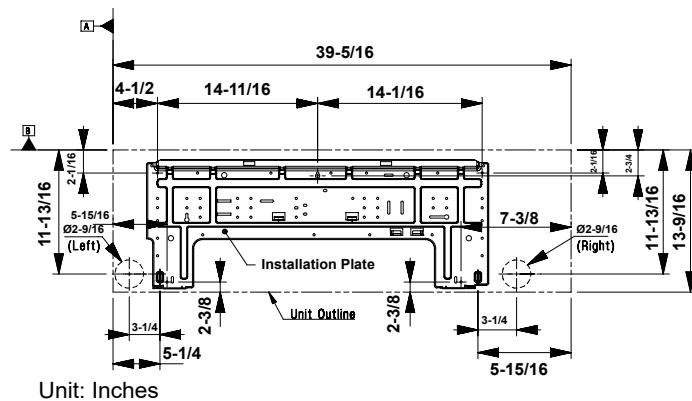
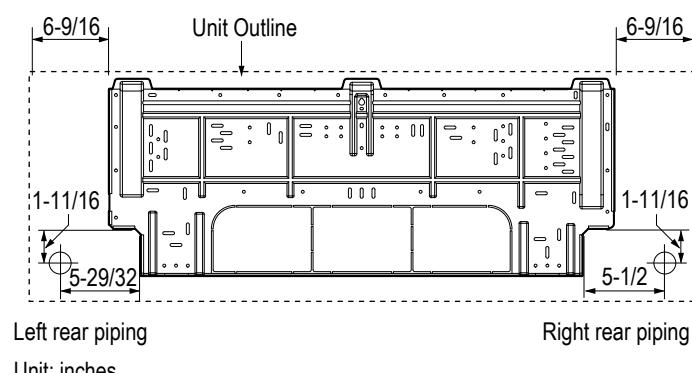


Figure 46: SV Frame Wall-Mounted Installation Plates.

### SV Frame Wall-Mounted Indoor Unit



# APPLICATION GUIDELINES

## General Drain Piping Information

### General Drain Piping Information

All Gallery and Wall-mounted indoor units generate water during cooling operation, therefore, properly handling this condensation must be considered. Gallery and Wall-mounted indoor units apply the gravity drain method, but a field-supplied condensate pump can be installed (optional, sold separately). Depending on the location of the indoor unit, condensation can be drained directly to the outside of the building, or a common indoor unit drainage piping system can be installed.

#### Drain Hose

Gallery and Wall-mounted indoor units have a built-in drain hose. If necessary, the drain hose can be extended. When the bottom surface of the indoor unit is at an elevation below the receiving building drain line connection, install an inverted trap at the top of the condensate pump discharge riser before connection to the building drain pipe.

When the receiving drain line is mounted horizontal, connect the inverted trap to the top half of the pipe. The connection point of the inverted trap to the building drain pipe should always be to the top half of the pipe and should never be over 45° either side of the upper most point of the horizontal building drain line.

If connecting to a vertical drain line or plumbing system vent line, connect the IDU condensate pump discharge line using a Y-45 fitting with the double end of the Y-45 fitting facing up. When connecting to a vertical drain line include an inverted trap at the top of the IDU condensate pump discharge riser before connection to the Y-45 fitting.

#### Drain Piping

- Drain piping must have down slope (1/50 to 1/100).
- Any holes through the ceilings, walls, etc., must be large enough to accommodate the drain piping and insulation.
- To prevent reversal flow, do not provide up and down slope.
- Do not exert extra force on the drain port on the indoor unit during drain piping connection.

#### Drain Leak Test

A leak test should be performed 24 hours after the drainage system has been installed.

#### Drain Pipe Insulation

To prevent condensate from forming on the drain piping, field-supplied 5/16 inch thick polyethylene insulation should be properly installed.

#### Note:

Ensure the indoor unit, refrigerant piping, power wiring / communication cables, and drain piping is properly supported with anchor bolts and clamp hangers positioned at 3.3 to 4.9 foot intervals.

Figure 47: Diagram of an Indoor Unit with a Gravity Drain.

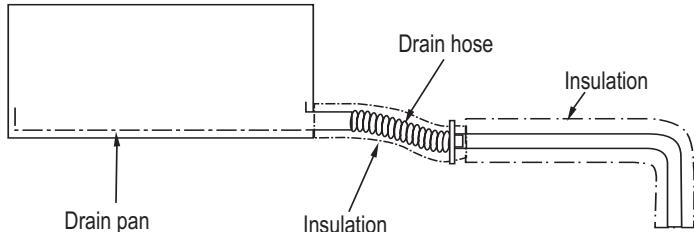


Table 42: Indoor Unit Drain Piping Specifications.

Indoor Unit	Drain Type	Drain Pipe Diameter (ID, in.)
SF Frame Gallery	Gravity	$\varnothing 5/8$
SJ Frame Wall-Mounted		
SK Frame Wall-Mounted		
SV Frame Wall-Mounted		

Figure 49: Drain Piping Slope.

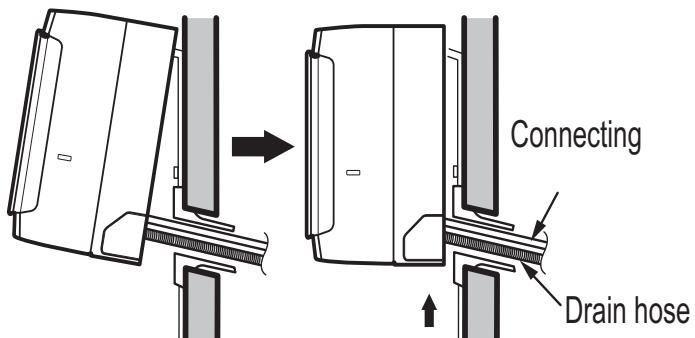
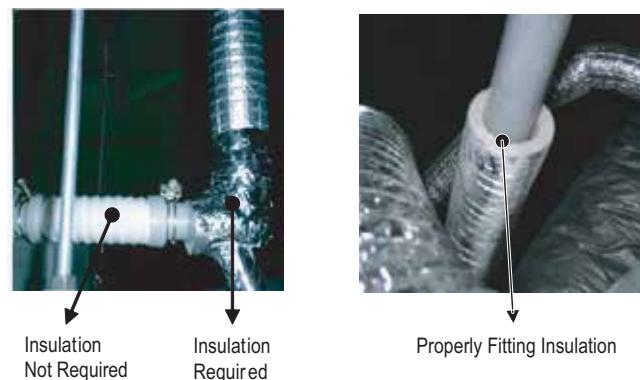


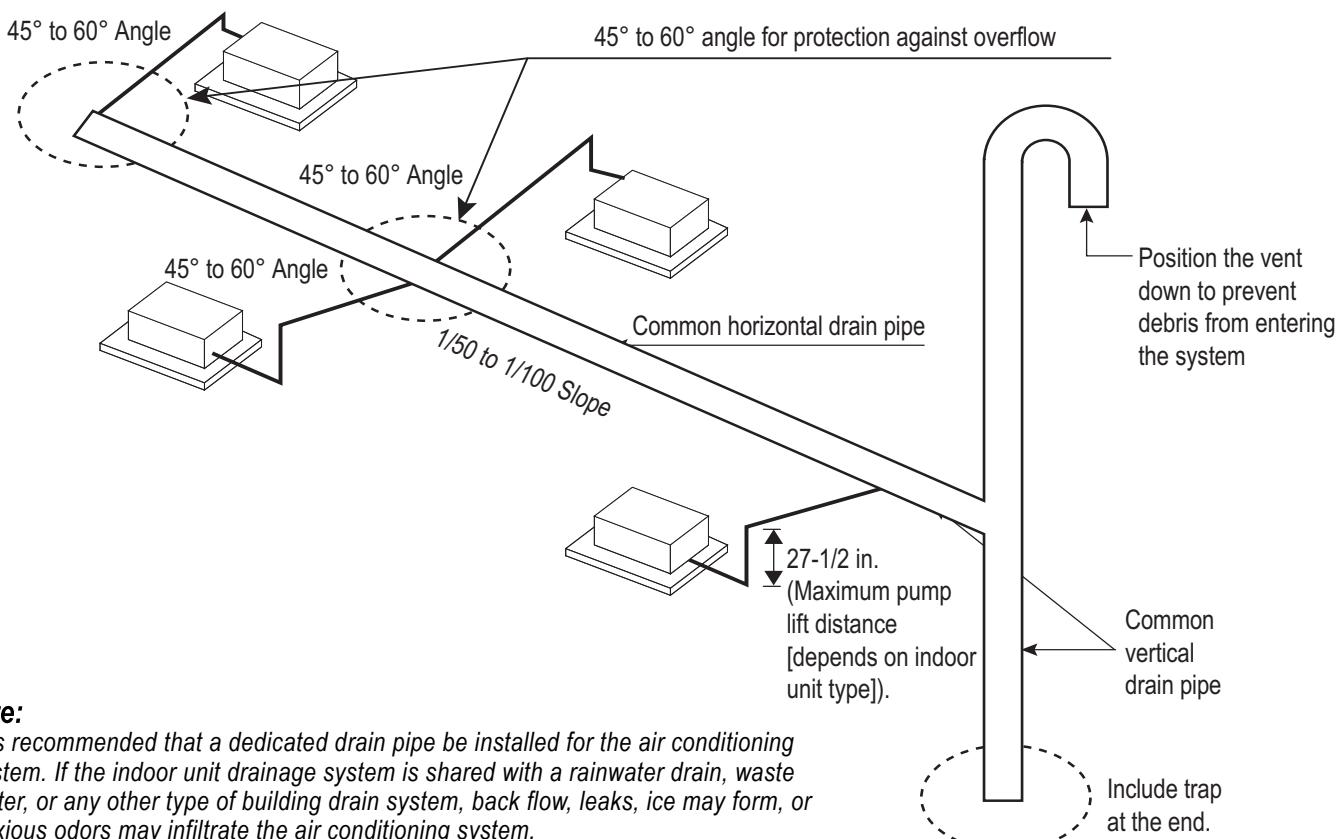
Figure 48: Properly Insulating the Drainage Piping.



### Common Indoor Unit Drainage System

It is usual work practice to connect individual indoor unit drain pipes to one common indoor unit drainage system. The diameter of the common vertical drain pipe should be as large as necessary. The diameter of the horizontal pipe should be the same or larger than the vertical drain pipe. To avoid property damage in the event of the primary drain becoming clogged, and to optimize drain system performance, it may be prudent to install a secondary drain line. Design the drain system to plan for winter operation (condensate line may freeze up if condensate does not properly drain away). Drain all generated condensate from the external condensate pan to an appropriate area. Install a trap in the condensate lines as near to the indoor unit coil as possible. To prevent overflow, the outlet of each trap should be positioned below its connection to the condensate pan. All traps should be primed, insulated, and leak tested if located above an inhabited space.

Figure 50: Example of a Common Indoor Unit Drainage System.



#### Note:

- It is recommended that a dedicated drain pipe be installed for the air conditioning system. If the indoor unit drainage system is shared with a rainwater drain, waste water, or any other type of building drain system, back flow, leaks, ice may form, or noxious odors may infiltrate the air conditioning system.
- Install a trap if the drain access to the outside faces an undesirable location (i.e., sewer), otherwise, noxious odors may infiltrate the air conditioning system.

## Wiring Guidelines

### General Power Wiring / Communications Cable Guidelines

- Follow manufacturer's circuit diagrams displayed on the inside of the control box cover.
- Have a separate power supply for the indoor units.
- Provide a circuit breaker switch between the power source and the indoor unit.
- Confirm power source specifications.
- Confirm that the electrical capacity is sufficient.
- Starting current must be maintained  $\pm 10$  percent of the rated current marked on the name plate.
- Confirm wiring / cable thickness specifications:
  - Power wiring is field supplied. Wire size is selected based on the larger MCA value, and must comply with the applicable local and national codes.
  - Communication cable between Master ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. ☺Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.
- It is recommended that a circuit breaker is installed, especially if conditions could become wet or moist.
- Include a disconnect in the power wiring system, add an air gap contact separation of at least 1/8 inch in each active (phase) conductor.
- Any openings where the field wiring enters the cabinet must be completely sealed.

### **WARNING**

- Terminal screws may loosen during transport. Properly tighten the terminal connections during installation or risk electric shock, physical injury or death.
- Loose wiring may cause unit the wires to burnout or the terminal to overheat and catch fire. There is a risk of electric shock, physical injury or death.

### **Note:**

- Terminal screws may loosen during transport. Properly tighten the terminal connections during installation or risk equipment malfunction or property damage.
- Loose wiring may cause unit malfunction, the wires to burnout or the terminal to overheat and catch fire. There is a risk of equipment malfunction or property damage.

A voltage drop may cause the following problems:

- Magnetic switch vibration, fuse breaks, or disturbance to the normal function of an overload protection device.
- Compressor will not receive the proper starting current.

## Power Wiring and Communications Cable Connections

1. Insert the power wiring / communications cable from the outdoor unit or heat recovery unit (Heat Recovery systems only) through the access hole of the indoor unit (ground wire should be longer than the other wires / cables) and to the control board using the designated path. If a control board cover is present, detach it.
2. Connect each wire to its appropriate terminal on the indoor unit control board. Verify that the color and terminal numbers from the outdoor unit or heat recovery unit (Heat Recovery systems only) wiring match the color and terminal numbers on the indoor unit.
3. Secure the power wiring / communications cable to the control board. If a control board cover is present, reattach it.

Figure 51: Location of Power Wiring / Communications Cable Terminals in SF Frame Gallery Indoor Units.

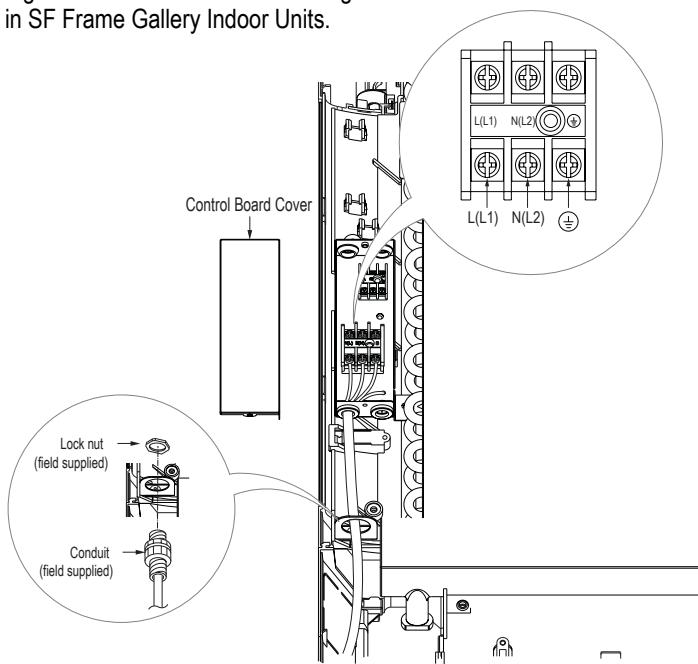


Figure 52: Location of Power Wiring / Communications Cable Terminals in SJ and SK Frame Wall-Mounted Indoor Units.

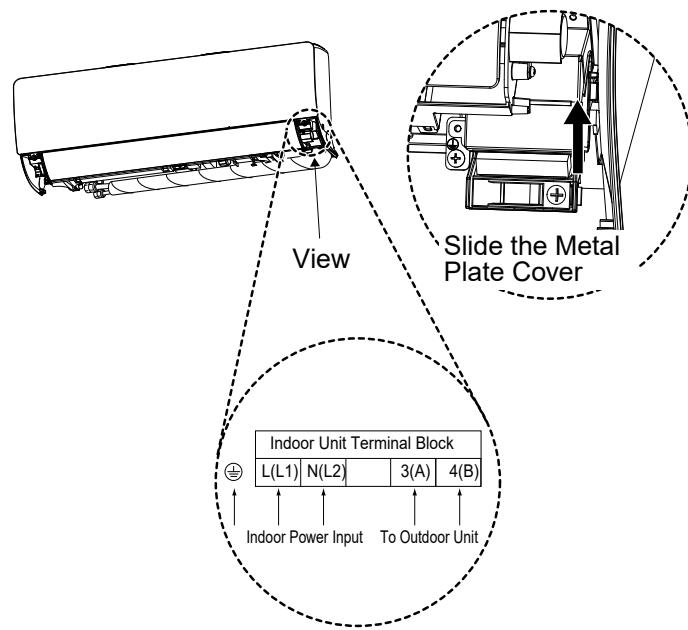
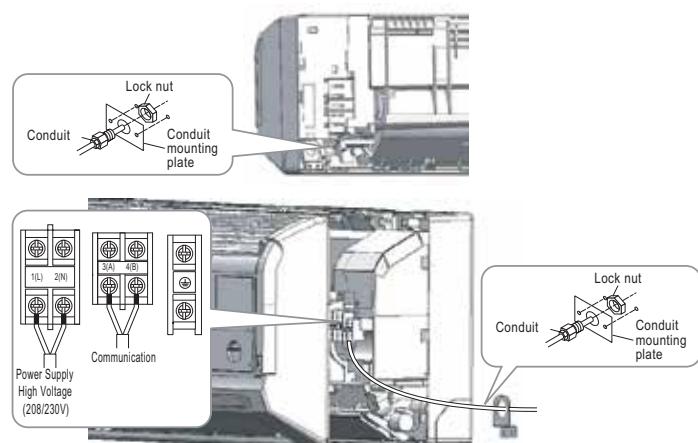


Figure 53: Location of Power Wiring / Communications Cable Terminals in SV Frame Wall-Mounted Indoor Units.



# APPLICATION GUIDELINES

## Wiring Guidelines

Figure 54: Simplified View of Indoor Unit Terminal Connections—SF Gallery Frames.

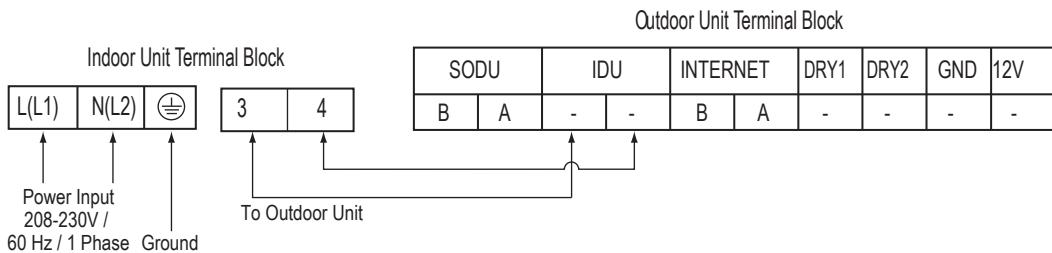


Figure 55: Simplified View of Indoor Unit Terminal Connections—SJ and SK Wall-Mounted Frames.

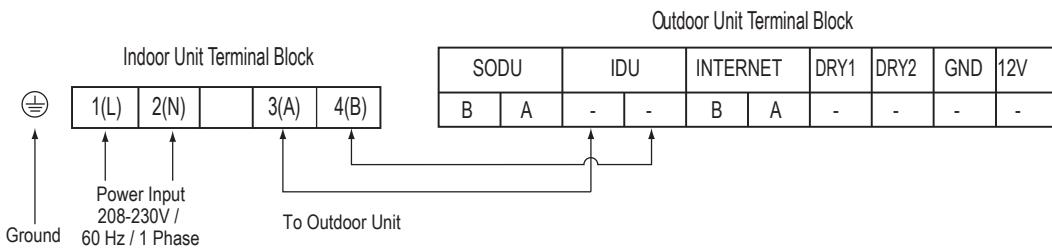
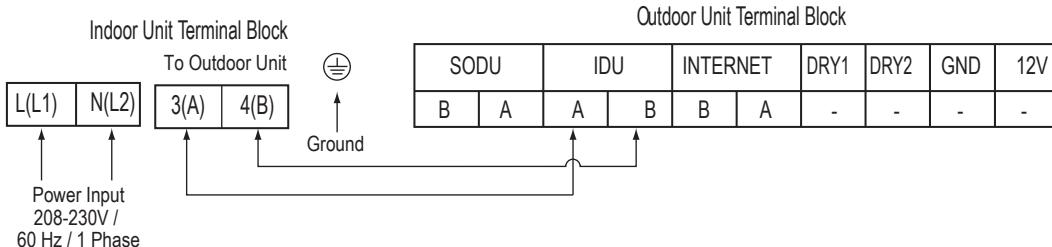


Figure 56: Simplified View of Indoor Unit Terminal Connections—SV Wall-Mounted Frames.



## Wired Controller Placement

Gallery and Wall-mounted indoor units can be used with various wired controllers (optional; sold separately). Wired controllers include a sensor to detect room temperature. To maintain comfort levels in the conditioned space, the wired controller must be installed in a location away from direct sunlight, high humidity, and where it could be directly exposed to cold air. Controller must be installed four (4) to five (5) feet above the floor where its LED display can be read easily, in an area with good air circulation, and where it can detect an average room temperature.

Do not install the wired controller near or in:

- Drafts or dead spots behind doors and in corners
- Hot or cold air from ducts
- Radiant heat from the sun or appliances
- Concealed pipes and chimneys
- An area where temperatures are uncontrolled, such as an outside wall

Figure 57: Proper Location for the Wired Controller.

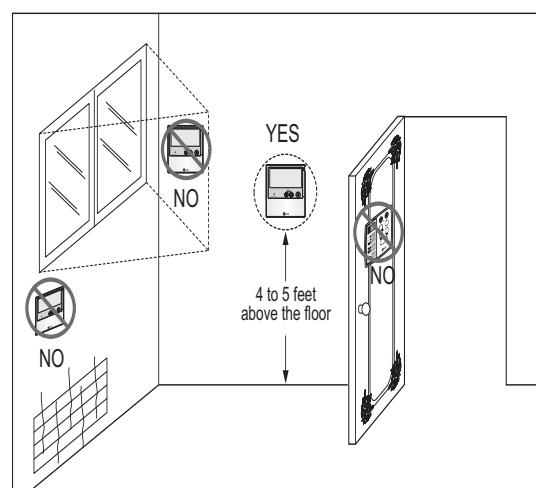


Table 43: Acronym Table.

ABS	Acrylonitrile Butadiene Styrene	IDU	Indoor Unit
AC	Air Conditioner/Alternate Current	kW	Kilowatts
ACP	Advanced Control Platform	in Aq	inches water
AHU	Air Handling Unit	ISO	International Standards Organization
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning	LATS	LG Air Conditioning Technical Solution software
ASTM	American Society for Testing and Materials	LED	Light Emitting Diode
AWG	American Wire Gauge	LEED	Leadership in Energy and Environmental Design
AWHP	Air-to-Air Water Heat Pump	MBh	Thousands BTUs per hour
BLDC	Brushless Digitally-Controlled	MCA	Minimum Circuit Ampacity
BTL	BACnet® Testing Laboratories	mm	Millimeter
Btu/h	British Thermal Unit per Hour	MOP	Maximum Overcurrent Protection
CAA	Clean Air Act	OD	Outside Diameter
CFM	Cubic Feet per Minute	ODU	Outdoor Unit
CFR	Code of Federal Regulations	PI	Power Input
DB	Dry Bulb	PTAC	Packaged Terminal Air Conditioner
dB(A)	Decibels with "A" frequency weighting	SHC	Sensible Heat Capacity
DPST	Double-Pole Single Throw	SMACNA	Sheet Metal & Air Conditioning Contractors' National Association
DX	Direct expansion	RPM	Revolutions per Minute
EEV	Electric Expansion valve	TC	Total Capacity
EPDM	Ethylene Propylene Diene M-Class Rubber	USD	United States Dollar
EMF	Electromagnetic Field	UL	Underwriters Laboratories
ESP	External Static Pressure	V	Voltage
ETL	Electric Testing Laboratories	VAV	Variable Air Volume
GND	Ground	VRF	Variable Refrigerant Flow
H/M/L	High/Medium/Low	W	Watts
HVAC	Heating, Ventilating and Air Conditioning	WB	Wet Bulb
Hz	Hertz	wg	Water Gauge
ID	Inside Diameter		

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