

# any room, any season



Savings  
up to  
**30%**  
on utility bills

**Single-zone Efficiencies** Up To: 33.1 SEER2 / 18 EER2 / 13.4 HSPF2  
**Multi-zone Efficiencies** Up To: 21.5 SEER2 / 13.5 EER2 / 9.6 HSPF2



Revolutionary mini-split heat pumps provide both heating and cooling for year-round comfort in most climates. A simple push of a button on the remote control allows you to switch from heating to cooling (or vice versa) automatically.

quietly revolutionizing  
energy-efficient home comfort

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## Ruud Mini-splits:

### Year-round, Whole-home or Business Energy Efficient Heating and Cooling

#### What is a mini-split?

Mini-splits are ductless systems that eliminate the need for a traditional central system and bulky ductwork by using small tubing that pumps refrigerant directly to discreet wall mounted or concealed units inside. During cold seasons, the same system works in reverse, absorbing heat energy from the outside air and moving it indoors to heat your home. The result? Efficient year-round cooling and heating, zoning flexibility and optimum comfort in any climate.

Available in numerous mix-and-match capacities and configurations, there's a Ruud® mini-split system for even the most difficult to heat and cool areas.

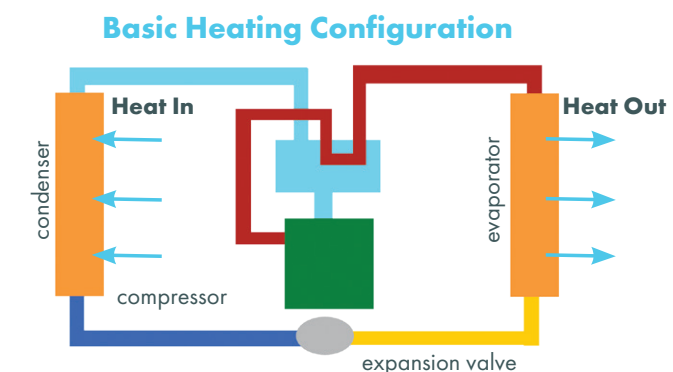
#### How does a mini-split work?

A heat pump uses electricity to pump refrigerant and transfer heat energy from one space to another. In the summer, heat energy from inside is absorbed and released outdoors. In the winter, heat energy is absorbed from the outside air and released inside.



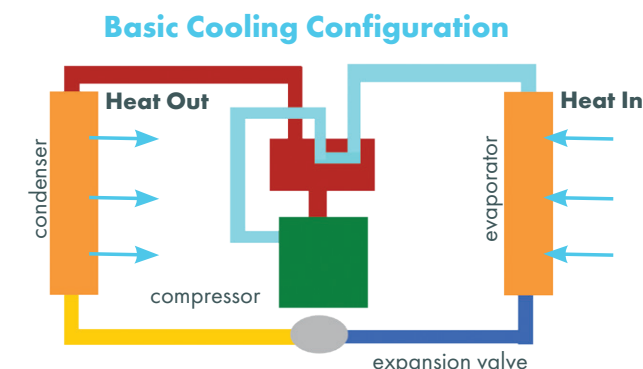
#### Heat pumps provide heat when it's chilly

Because refrigerant is naturally much colder than outdoor temperatures even on a very cold day, it actually absorbs heat from outdoors and transfers the heat to within your home. The refrigerant's physical properties do this naturally. What you provide is the electricity to pump refrigerant via refrigerant lines from outdoors to indoors. Because it moves heat rather than creating it, it can deliver up to four times the heat for the energy consumed compared to electric baseboard heat.

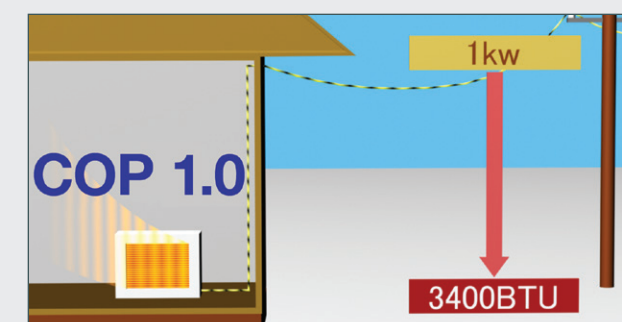


#### Air conditioners provide cooling when it's warm

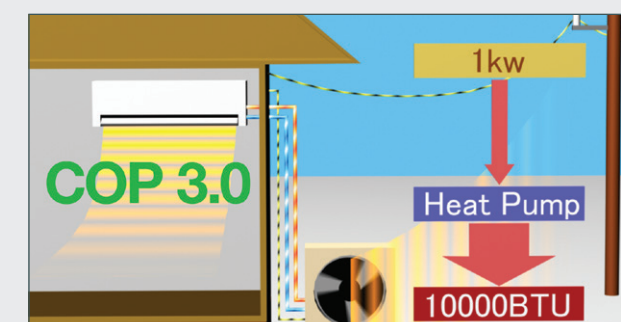
Come spring and summer, simply reverse the process and put the same system into "cooling mode" and transfer heat from indoors to the outside. For many climates, the advanced technology that goes into these units creates a far more cost-effective alternative to either gas- or oil-fired units for heat, or a central ducted system for air conditioning. The Ruud full mini-split line is comprised of heat pumps, which provide both heating and cooling.



#### ELECTRIC HEATERS VS. HEAT PUMPS



An electric heater converts electricity directly to heat. For every kW of electricity used, 3,400 BTU/h of heat are produced.



Heat pumps are more efficient than some other forms of heating because they do not actually create heat—they just move it from one place to another. For example, the output of an efficient 3.0 COP heat pump is triple that of an electric heater with a COP of 1.0.

**NOTE:** COP (Coefficient of Performance) – Rated BTU capacity divided by total kW input.

# Individual Zoning: Personalized Whole-home Comfort

## Multi-zone Mini-split Systems

Ductless Heat Pump Mini-split systems are some of today's most advanced forms of heating and air conditioning. One outdoor unit can operate up to 5 indoor units simultaneously. Ruud® systems are super quiet as well as highly energy efficient.

Indoor units are available in a variety of styles and can:

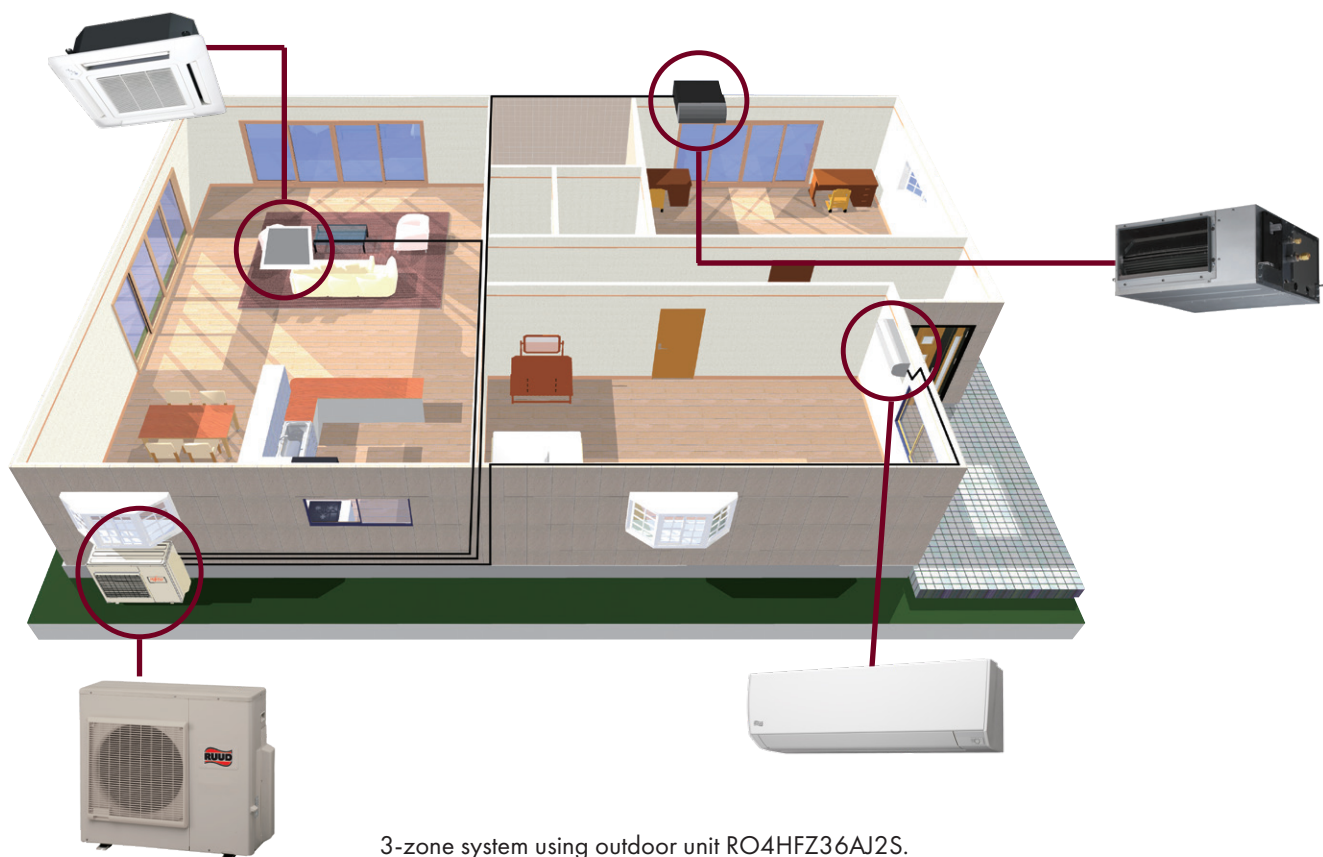
- Operate independently via remote control
- Provide both heating and cooling (not simultaneously)
- Provide high energy efficiencies
- Operate quietly



## Wall Mounted

The mini-split indoor units mount high on a wall, out of sight and do not require ductwork, increasing energy efficiency.

- Quiet operation
- Easy maintenance
- Lower utility bills



3-zone system using outdoor unit RO4HFZ36AJ2S.



## Slim Duct

Slim duct units can be installed horizontally above ceiling or vertically within wall space. They use less ductwork and remain very energy efficient.

- Concealed and out of sight
- Horizontal or vertical installation
- Less ducts = higher efficiency

## Floor Mounted

Floor mount systems are ideal for residential radiator replacements or any room with limited upper wall space, like a kitchen or sunroom.

- Compact size fits easily under a standard window
- Features twin fan design for improved heat delivery and to help those cold feet
- Designer wireless remote control



## Compact Cassette

Cassettes are extremely discreet, with only the grille showing in the ceiling. They use the latest fan technology to distribute the conditioned air evenly.

- Wired or wireless remote control options
- Powerful turbo fan operation
- Fits into a standard 2' x 2' ceiling grid



## Energy Efficient: The Smart Choice in Comfort

Heating and cooling consumes as much as half of the energy used in your home. So, making smart decisions about your home's heating and cooling system can have a big effect on your utility bills—and your comfort.

### Where Does My Money Go?

The high energy efficiencies of ductless mini-split systems slash utility bills by up to 30%. If your average annual utilities are \$4,200, Ruud® products can save you up to \$1,260 annually or \$12,600 over 10 years!\*

\*Savings may vary based on model selected, hours of operation and geographical location. Example given based on 33-SEER2 system versus 14-SEER2 system.

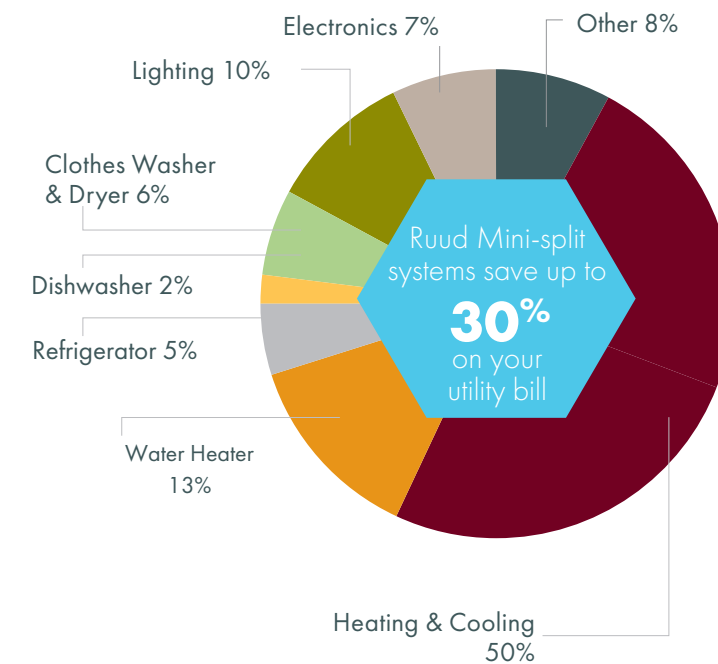
### Rebates

To encourage customers to buy energy-efficient products, many local utility companies offer significant rebates for the purchase of a ductless mini-split system. Check with your utility provider or [Ruud.com/Rebate](http://Ruud.com/Rebate) to see the full list of rebates and offerings on qualifying Ruud mini-splits by zip code as well as a listing of products that qualify for the Inflation Reduction Act (IRA) tax credits.

### ENERGY STAR® Qualified Systems\*

Is your HVAC equipment more than 10 years old and making your house uncomfortable? Then, call a professional HVAC contractor for an evaluation. If it is not performing efficiently or needs upgrading, consider replacing it with a unit that has earned ENERGY STAR® qualification. Installed correctly, high-efficiency heating and cooling systems can save up to 30% on utility costs.

\*Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate indoor components to meet ENERGY STAR criteria. Ask your contractor for details or visit [EnergyStar.gov](http://EnergyStar.gov).



## A Solution for All of Your Comfort Needs

### Ductless Technology

Ruud® Mini-split Systems offer a convenient alternative in areas of the home where traditional duct systems may not be an option—such as attics, home additions, basements or crawlspaces. Since mini-splits have no ducting, they set up quickly, install easily and won't take up closet or attic space. Used in conjunction with a new Ruud HVAC system, our high-efficiency ductless systems make it easy for you to keep spaces more comfortable and energy consumption low, while saving big on utility costs.

### Whole-home or Business Comfort

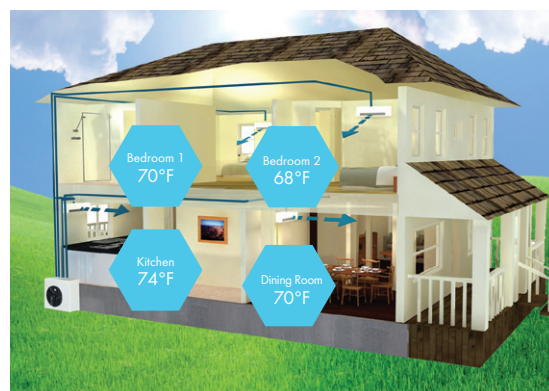
Ruud Ductless Mini-split Systems provide home and business owners just the right amount of heating and cooling needed by installing one to five indoor units connected to one outdoor unit. Indoor units vary by size and each creates its own "zone" of comfort, allowing you to heat or cool individual rooms, hallways and open spaces.

### A Year-round Solution

Revolutionary heat pumps provide both heating and cooling for year-round comfort in most climates. A simple push of a button on the remote control allows you to switch from heating to cooling (or vice versa) automatically.

### Other Applications

The 30AJ2H is specially engineered for spaces which require constant cool temperatures year-round and / or rooms that hold a large number of people (meeting spaces, classrooms, conference rooms).



### Whole Home Comfort

Multi-zone systems provide homeowners just the right amount of heating and cooling needed by installing 2 to 5 indoor units connected to one outdoor unit. Indoor units vary by size and each creates its own "zone" of comfort, allowing the heating or cooling of individual rooms, hallways and open spaces.



Many Ruud systems meet ENERGY STAR®, ENERGY STAR® Cold Climate and ENERGY STAR® Most Efficient ratings in 2023. See product pages for full details on ENERGY STAR® qualified systems.

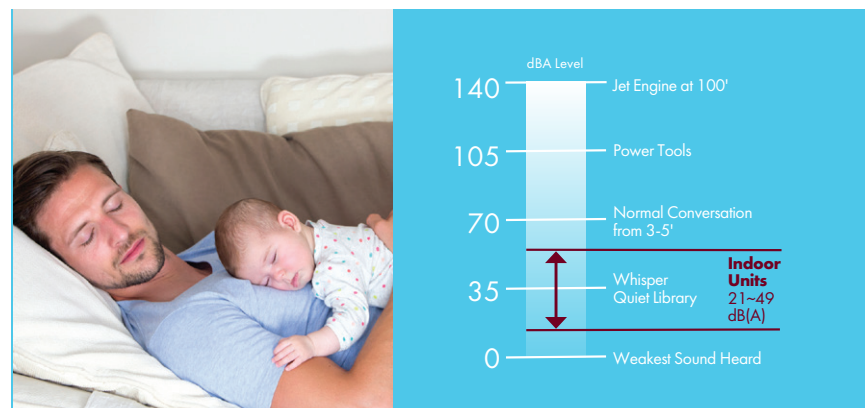


## Comfort and Convenience

### Quiet and Flexible

We believe heating and cooling systems should be felt—not heard. Ruud® Ductless Mini-split Systems are so quiet you won't even know they're on. You can sleep well at night in a comfortable, peaceful environment. Also, our wall mount units feature Quiet Mode—extra-quiet fan speed to ensure you are not disturbed.

To add more convenience, mini-splits offer installation flexibility. They can be suspended from a ceiling, mounted flush behind a drop ceiling, hung on a wall or floor-standing.



### Constant Comfort through Inverter Technology

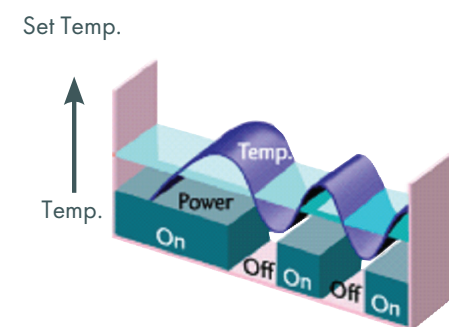
Inverter technology found in Ruud Mini-splits is like cruise control for your heating or cooling system. Compressors only run as fast as they needed to handle the cooling or heating demand. They can handle greater extremes in temperature, are smoother and more stable in operation and precisely maintain the desired temperature through system modulation.

#### Inverter Benefits

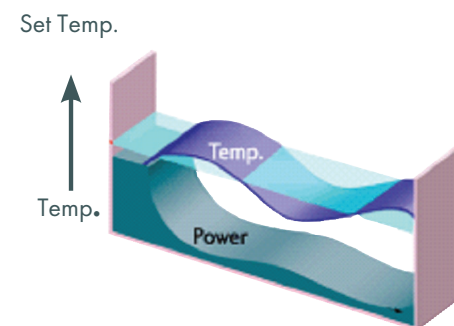
- More heat at lower outdoor temperatures
- Lower RPMs = quieter operation
- Maintains desired temperature
- Up to 30% more efficient
- Stable temperature

### User-friendly Control

Ruud products use ergonomics to expand the use of user-friendly designs such as easy-to-read large LCD displays, easy-to-operate buttons and displays with easily recognizable colors and icons. These control systems provide greater convenience with operability suitable for the application.



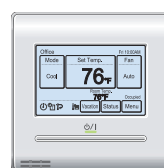
Conventional System



Inverter System



Standard Wireless Remote for select systems



Optional Wired Remote RXRNRUZ Series

## Applications



### Where can Ruud® Mini-splits be used?


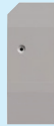
- Convenience stores
- Fast food chains
- Fire houses
- Police stations
- Oil rigs
- Bars
- Sunrooms and additions
- Warehouses
- Nursing homes
- Small offices
- Older homes
- New construction homes
- Schools
- Places of worship
- Hospitals and medical facilities
- Restaurants
- Computer rooms
- Hotels and motels
- Car washes
- ATM vestibules



Just about any place that requires comfort!

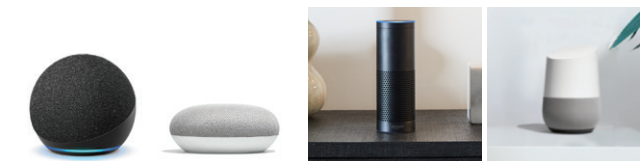


## Ruud® Mini-split Wi-Fi Selection Guide

Wi-Fi Connectable Units & Modules	
	
IR Wireless Module	Wired Module
FJ-IR-WIFI-1NA (Add-on)	FJ-AC-WIFI-1BT (Add-on)
Where Does It Mount?	
Up to 20' away from IDU	On the wall next to IDU
Compatible Units:	
WALL MOUNTS:	WALL MOUNTS:
UIWHGZ 09 / 12 / 15 AJ1S	UIWHGZ 09 / 12 / 15 AJ1S
UIWHHZ 09 / 12 / 18 / 24 AJ2S	UIWHHZ 09 / 12 / 18 / 24 AJ2S
UIWHFZ 18 / 24 AJ2S	UIWHHZ 07 / 09 / 12 / 15 / 18 / 24 / 30 / 36 AJ3S
UIWHFZ30AJ2S	UIWHFZ30AJ2S
UIWHHZ 07 / 09 / 12 / 15 / 18 / 24 / 30 / 36 AJ3S	CASSETTES:
UIWHFZ 9 / 12 AA3S	RICHHZ 07 / 09 / 12 / 18 AJ8S
CASSETTES:	RIGHHZ 18 / 24 / 30 / 36 AJ8S
RIGHHZ 18 / 24 / 30 / 36 AJ8S <sup>1</sup>	RIGHGZ 42 / 48 AJ8S
RIGHGZ 42 / 48 AJ8S <sup>1</sup>	DUCTED:
RICHHZ 07 / 09 / 12 / 18 AJ8S	RIMHGZ 42 / 48 AJ8S
DUCTED:	RIMHHZ 12 / 18 / 24 / 30 / 36 AJ8S
RIDHHZ 07 / 09 / 12 / 18 / 24 AJ8S <sup>2</sup>	RIDHHZ 07 / 09 / 12 / 18 / 24 AJ8S
RIMHHZ 12 / 18 / 24 / 30 / 36 AJ8S <sup>2</sup>	RHMVZ2421MNAUNJ, RHMVZ3021SNAUNJ, RHMVZ3621MNAUAJ, RHMVZ4821SNAUAJ
RIMHGZ 42 / 48 AJ8S <sup>2</sup>	<sup>1</sup> Requires RXLBTUC <sup>2</sup> Requires RXLBTUM <sup>3</sup> Requires RXLBTUH
RHMVZ2421MNAUNJ, RHMVZ3021SNAUNJ, RHMVZ3621MNAUAJ, RHMVZ4821SNAUAJ	
FLOOR MOUNTS:	
RIFHFZ 9 / 12 / 15 AJ2S	
CEILING:	
RISHHZ 18 / 24 / 30 / 36 AJ8S <sup>3</sup>	

Voice control for your Ruud Mini-split system using Amazon Echo or Google Home

All Ruud Mini-split systems can be voice controlled with Amazon Echo or Google Home speakers.



# Low Temperature Heating Operation

Not all heating systems are created equal.

Without the right technology, a system won't work when it's needed most.

## Protection from Winter's Coldest Temperatures

When the temperature drops, you don't want to be left in the cold. It's important to choose a heat pump system rated for the climate you live in. If your system doesn't operate in severe conditions, you and your family could be left without any heat at all.

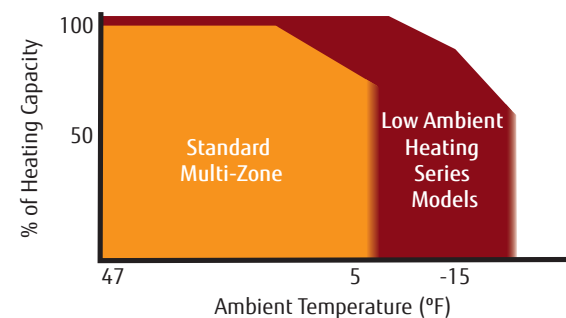
Ruud mini-split heat pumps comes in different sizes, styles and rated outdoor temperatures. The low temperature heating operation series features outdoor condensing units engineered to operate in temperatures down to -15°F.



Without the right technology, condensate freezes to the bottom of the unit and reduces its efficiency and heating output.

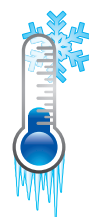
## Improved Heating Capacity

Heating capacity at low outdoor temperatures was improved by adopting a large heat exchanger and a high capacity compressor.



## High Performance Heating

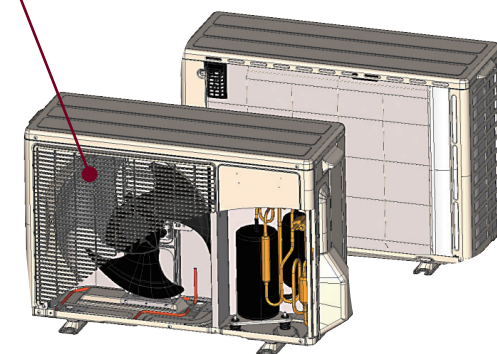
Ruud® low temperature heating operation units feature large heat exchangers and high capacity compressors. This gives our low temperature heating operation heat pumps the ability to extract heat even at very low outdoor temperatures.



Ruud low temperature heating operation systems do not have a low temperature lockout, continuing to heat even below -15°F as conditions allow.

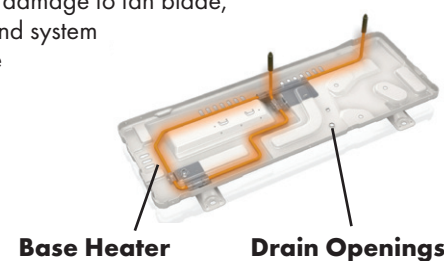
## Metal Fan Guard

While other models have a plastic fan guard, low temperature heating operation models use metal, which is most capable of withstanding the colder elements.



## Base Pan Heater

- Equipped with a heater that prevents condensate from freezing
- Contoured base design discharges melted water through drain holes
- Without a heater, freezing condensate can cause noise, damage to fan blade, condenser and system performance



# Feature Explanation

## Energy saving

- SEER / SEER2**  
Seasonal Energy Efficiency Rating. Used to express efficiency of an AC or Heat Pump. A higher rating means a more efficient system.
- HSPF / HSPF2**  
Heating Seasonal Performance Factor measures the efficiency of the heating portion of your heat pump.
- Economy Mode**  
Thermostat setting automatically changes according to the temperature to avoid unnecessary cooling and heating.
- Energy Saver**  
Keeps room cool enough for comfort by using a relaxed thermostat setting reducing power consumption.
- Energy Saving Program (ESP)**  
When the zone is unoccupied for 20 minutes, the ESP function is enabled to reduce energy consumption until occupied once again. Function is not available in multi-zone installations.
- ENERGY STAR® Qualified**  
Qualified products and practices help you save money and reduce greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.
- Minimum Heat Mode**  
Sets room temperature to 50°F, keeping temperatures above freezing and reducing power consumption.

## Comfort

- Auto Changeover (heating to cooling or vice-versa)\***  
Automatically alternates between heating or cooling if the room temperature falls 4°F below the set temperature when cooling or rises 4°F above set temperature when heating.
- Auto Fan Mode**  
System starts in high fan speed and automatically adjusts downward as room begins to reach set temperature.
- Auto Louver: 4-Way**  
Redirects airflow automatically with up / down and left / right motion.
- Auto Louver: Up / Down**  
Redirects airflow automatically with seven position up and down motion which can be set to auto swing.
- Auto Restart**  
Following a power failure, systems will automatically restart in the same operating mode as before, once power has been restored.
- Dry Mode**  
This mode gives priority to reducing the level of humidity in the room, in conjunction with lowering the temperature.
- Fresh Air Intake**  
Outside air can be introduced by attaching field-supplied flexible duct to fresh air knockouts.
- Outdoor Unit Low Noise+**  
Limits compressor and fan speed during high speed operation for noise reduction purposes.
- Powerful Operation**  
20 minutes of continuous operation at maximum airflow and maximum compressor speed. Rapid cooling and heating makes the room comfortable quickly.
- Quiet Mode (Indoor Unit)**  
An extra quiet fan speed to make sure you are not disturbed.

\*Auto Changeover is *not* designed to provide rapid changes between heating and cooling operation or simultaneous heating and cooling. Areas with dissimilar conditioning requirements should be independently zoned.  
+ Function is bypassed during defrost and at low speed operation. This feature may limit cooling / heating capacity during high / low ambient conditions and increase energy consumption as system may need to operate longer due to reduced compressor speed.

**Standard Warranty**  
Ruud systems come standard with a 7 Year Compressor / 5 Year Parts warranty.

**Extended Warranty**  
Ruud offers 10-year compressor, 10-year parts warranty when registered within 90 days of installation in a residence. See full product warranty for details.

## Convenience

- 24 Hour Timer**  
Allows for one on / off cycle during a 24 hour period.
- Sleep Timer**  
Automatically adjusts the temperature while you sleep to make you more comfortable.
- Weekly Timer**  
Allows you to set on / off time twice a day and a different on / off time by day.

## Performance

- Apple Catechin Filter (polyphenol ingredient from apples)**  
Dust, mold spores and microorganisms are absorbed onto the filter by static electricity and growth is inhibited. 3-12 month life expectancy.
- Cold Air Prevention**  
Indoor coil will warm prior to fan operating, preventing cold air during heating mode.
- Expanded Heating Performance**  
Delivers 100% of rated heating capacity at +5°F (-15°C).
- High Ceiling Mode**  
Temperature at the top of a high ceiling room may be warmer than the space occupied; this mode adjusts for this difference.
- Ion Deodorizing Filter**  
Deodorizes by decomposing absorbed odors using the oxidizing and reducing effects of ions generated by fine ceramic particles. 3 year life expectancy. Wash to restore surface action.
- Pump Down Operation**  
Collects all refrigerant in system back into the outdoor unit if the unit needs to be relocated. Eliminates costly refrigerant recovery procedures.
- Remote Temperature Sensor**  
Room temperature sensor is located in optional wired remote control only.
- Third Party Device Control**  
Interlock system with 3rd party device such as humidifier, exhaust fan, door switch, etc.
- 0°F Low Ambient Cooling**  
Can operate in cooling mode with outdoor temperatures as low as 0°F. Cooling performance beyond published temperature ratings is not guaranteed.
- 5°F Low Ambient Cooling**  
Can operate in cooling mode with outdoor temperatures down to -5°F. Cooling performance beyond published temperature ratings is not guaranteed.

## Installation

- Base Pan Heater**  
Prevents condensate from freezing on the outdoor unit.
- Blue Fin Coating**  
Blue Fin treatment to the outdoor unit's heat exchanger improves corrosion resistance.
- Hydro Fin Coating**  
Clear hydrophilic treatment added to the outdoor unit's heat exchanger improves corrosion resistance.
- Branch Duct Capable**  
Systems are capable of attaching field-supplied branch ducts providing up to 38% of the cooling up to 16 feet away.
- Built-In Condensate Pump**  
Integrated into the indoor unit.
- Daisy Chain**  
Ability to connect up to 16 identical style indoor units to one wired remote.
- Long Piping Length**  
Long piping lengths between equipment offers flexible outdoor unit location options.
- Slender Fit**  
Cassette body can be moved downward into the room 1-3/8" to accommodate limited ceiling space.





# Single-zone and Multi-zone Systems Lineup

★ : ENERGY STAR® Qualified    ■ : Minimum Ambient Cooling Temperature    ■ : Minimum Ambient Heating Temperature

SINGLE-ZONE WALL MOUNTED MINI-SPLITS		9,000	12,000	15,000	18,000	24,000	30,000	36,000	42,000	48,000
BTU										
Ultra™ Series Wall Mount		★ 14°F -5°F UIWHGZ09AJ1S / RO1HGZ09AJ1S	★ 14°F -5°F UIWHGZ12AJ1S / RO1HGZ12AJ1S	★ 14°F -5°F UIWHGZ15AJ1S / RO1HGZ15AJ1S						
Ultra™ Series Wall Mount Low Temp Htg. Op.		★ 14°F -15°F UIWHGZ09AJ1S / RO1HGZ09AJ1H	★ 14°F -15°F UIWHGZ12AJ1S / RO1HGZ12AJ1H	★ 14°F -15°F UIWHGZ15AJ1S / RO1HGZ15AJ1H						
Achiever Plus® Series Wall Mount		★ 14°F 5°F UIWHHZ09AJ2S / RO1HHZ09AJ2S	★ 14°F 5°F UIWHHZ12AJ2S / RO1HHZ12AJ2S		★ 14°F 5°F UIWHHZ18AJ2S / RO1HHZ18AJ2S		★ 14°F 5°F UIWHHZ24AJ2S / RO1HHZ24AJ2S			
Achiever Plus® Series Wall Mount Low Temp Htg. Op.		★ 14°F -15°F UIWHHZ09AJ2S / RO1HHZ09AJ2H	★ 14°F -15°F UIWHHZ12AJ2S / RO1HHZ12AJ2H		★ -5°F -15°F UIWHHZ18AJ2S / RO2HFZ18AJ2H		★ -5°F -15°F UIWHFZ24AJ2S / RO1HFZ24AJ2H	★ -5°F -15°F UIWHFZ30AJ2S / RO1HGZ30AJ2H		
Achiever® Series Wall Mount 115V		15°F 15°F UIWHFZ09AA3S / RO1HFZ09AA3S	15°F 15°F UIWHFZ12AA3S / RO1HFZ12AA3S							
Achiever® Series Wall Mount		14°F 5°F UIWHHZ09AJ3S / RO1HHZ09AJ3S	★ 14°F 5°F UIWHHZ12AJ3S / RO1HHZ12AJ3S		★ 14°F 5°F UIWHHZ18AJ3S / RO1HHZ18AJ3S		★ 14°F 5°F UIWHHZ24AJ3S / RO1HHZ24AJ3S	★ 14°F 5°F UIWHHZ30AJ3S / RO1HHZ30AJ3S	★ 14°F 5°F UIWHHZ36AJ3S / RO1HHZ36AJ3S	

SINGLE-ZONE NON-WALL MOUNTED MINI-SPLITS		9,000	12,000	15,000	18,000	24,000	30,000	36,000	42,000	48,000
Achiever Plus® Series Floor Mount		★ 14°F -5°F RIFHFZ9AJ2S / RO1HGZ9AJ2S	★ 14°F -5°F RIFHFZ12AJ2S / RO1HGZ12AJ2S	★ 14°F -5°F RIFHFZ15AJ2S / RO1HGZ15AJ2S						
Achiever Plus® Series Floor Mount Low Temp Htg. Op.		★ 14°F -15°F RIFHFZ9AJ2S / RO1HGZ9AJ2H	★ 14°F -15°F RIFHFZ12AJ2S / RO1HGZ12AJ2H	★ 14°F -15°F RIFHFZ15AJ2S / RO1HGZ15AJ2H						
Achiever Plus® Series Compact Cassette		★ 14°F -5°F RICHHZ09AJ8S / RO1HHZ09AJ8S	★ 14°F -5°F RICHHZ12AJ8S / RO1HHZ12AJ8S		★ 14°F -5°F RICHHZ18AJ8S / RO1HHZ18AJ8S					
Achiever Plus® Series Medium-static Ducted			★ 14°F -5°F RIMHHZ12AJ8S / RO1HHZ12AJ8S		★ -5°F -5°F RIMHHZ18AJ8S / RO1HHZ18AJ8S		★ -5°F -5°F RIMHHZ24AJ8S / RO1HHZ24AJ8S	★ -5°F -5°F RIMHHZ30AJ8S / RO1HHZ30AJ8S	★ -5°F -5°F RIMHHZ36AJ8S / RO1HHZ36AJ8S	★ -5°F -5°F RIMHGZ42AJ8S / RO1HGZ42AJ8S
Sound & Space Heat Pump & Multi-position Air Handler						★ -5°F -5°F RHMVZ2421MNAUNJ / RP1724HJVXA	★ -5°F -5°F RHMVZ3021SNAUNJ / RP1730HJVXA	★ -5°F -5°F RHMVZ3621MNAUJ / RP1736HJVXA		★ -5°F -5°F RHMVZ4821SNAUJ / RP1748HJVXA
Sound & Space Heat Pump & Multi-position Air Handler Low Temp Htg. Op.							★ -5°F -15°F RHMVZ3021SNAUNJ / RD16AZ30AJHUA	★ -5°F -15°F RHMVZ3621MNAUJ / RD16AZ36AJHUA		★ -5°F -15°F RHMVZ4821SNAUJ / RD16AZ48AJHUA
Ceiling Suspended					★ -5°F 14°F RISHHZ18AJ8S / RO1HHZ18AJ8S		★ -5°F -5°F RISHHZ24AJ8S / RO1HHZ24AJ8S	★ -5°F -5°F RISHHZ30AJ8S / RO1HHZ30AJ8S	★ -5°F -5°F RISHHZ36AJ8S / RO1HHZ36AJ8S	
Large Cassette Circular Flow					★ -5°F -5°F RIGHHZ18AJ8S / RO1HHZ18AJ8S		★ -5°F -5°F RIGHHZ24AJ8S / RO1HHZ24AJ8S	★ -5°F -5°F RIGHHZ30AJ8S / RO1HHZ30AJ8S	★ -5°F -5°F RIGHHZ36AJ8S / RO1HHZ36AJ8S	★ -5°F -5°F RIGHGZ42AJ8S / RO1HGZ42AJ8S

MULTI-ZONE DUCTLESS HEAT PUMPS — INDOOR UNITS							
Achiever® Series Wall Mount (Compact, Large)		UIWHHZ07AJ3S	UIWHHZ09AJ3S	UIWHHZ12AJ3S	UIWHHZ15AJ3S	UIWHHZ18AJ3S	UIWHHZ24AJ3S
Achiever Plus® Series Slim Duct		RIDHHZ07AJ8S	RIDHHZ09AJ8S	RIDHHZ12AJ8S		RIDHHZ18AJ8S	RIDHHZ24AJ8S
Achiever Plus® Series Compact Cassette		RICHHZ07AJ8S	RICHHZ09AJ8S	RICHHZ12AJ8S		RICHHZ18AJ8S	
Achiever Plus® Series Floor Mount			RIFHFZ9AJ2S	RIFHFZ12AJ2S	RIFHFZ15AJ2S		

MULTI-ZONE DUCTLESS HEAT PUMPS — OUTDOOR UNITS				
BTU	18,000 (2 Indoor Units)	24,000 (2-3 Indoor Units)	36,000 (2-4 Indoor Units)	45,000 (2-5 Indoor Units)
ULTRA™ SERIES	 ★ 14°F -15°F RO2HFZ18AJ1H	 ★ 14°F -15°F RO3HFZ24AJ1H	 ★ 14°F -15°F RO4HFZ36AJ1H	
ACHIEVER PLUS® SERIES	 ★ 14°F 5°F RO2HFZ18AJ2S	 ★ 14°F 5°F RO3HFZ24AJ2S	 ★ 14°F 5°F RO4HFZ36AJ2S	 ★ 14°F 5°F RO5HFZ45AJ2S

+ For ENERGY STAR® qualified combinations, see page 56 and page 58.

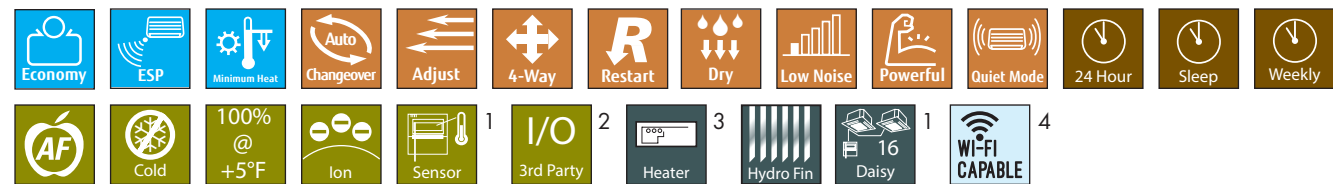
# Single-zone Mini-split Systems

Making the hottest places cool and the coolest places more comfortable



- Extensive lineup from 9,000 to 48,000 BTU
- 58 different systems available in seven indoor unit styles
- Energy efficient systems with SEER2 ratings as high as 33.1 and HSPF2 as high as 14.2
- 39 ENERGY STAR® qualified systems
- Inverter technology is used in all systems
- All systems feature environmentally friendly R-410A refrigerant
- Quiet operation with indoor units as low as 19dB(A) and outdoor units as low as 46dB(A)

## 9, 12, 15,000 BTU/h Wall Mount Heat Pumps



1 Available only with optional wired remote control and optional communication kit.  
 2 Available only with optional external input / output PCB kit.  
 3 Low temperature heating operation models only.  
 4 See page 13 for details.

### Energy Saving Program

These Ruud® systems know how to save you money even when you forget. If you leave the room without turning the unit off, ESP knows that you left and 20 minutes later, set temperature is increased by 4°F when cooling and reduced by 8°F when heating.

When you come back to the room, it returns to previous operating mode. This prevents wasteful operation to save energy without you having to think about it. This feature can be deactivated if chosen.

### High Performance Heating

The AJ1S / AJ1H systems can operate down to -5°F. The AJ1S systems can operate efficiently down to -15°F. See the full low temperature heating operation story on page 14.

### Optional Accessories

- Wired Remote Controller..... RXRNRUZ Series
- Simple Remote Controller..... RXRSRY / RXRHRY
- 24V Thermostat Interface ..... RXTRXZ1
- Modbus Converter..... RXVMSX
- Communication Kit..... RXTWXZ2
- Dry Contact Wire Kit..... RXXWZXZ5

# Systems

09AJ1S, 12AJ1S, 15AJ1S

# High Heat Systems

09AJ1H, 12AJ1H, 15AJ1H

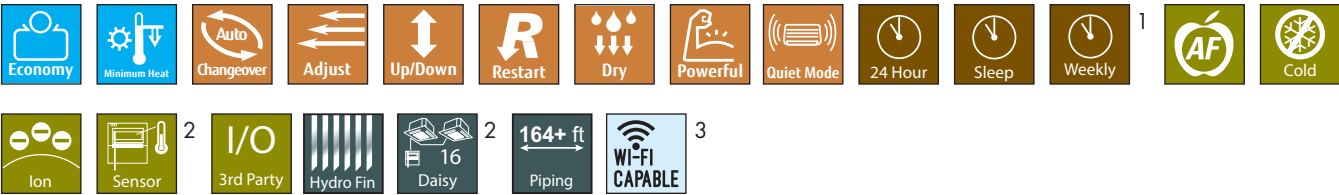
UP TO 33.1 SEER2		09AJ1S		12AJ1S		15AJ1S		09AJ1H		12AJ1H		15AJ1H		
<b>Performance</b>														
Rated Cooling	BTU/h	9,000		12,000		14,500		9,000		12,000		14,500		
Min.-Max. Cooling	BTU/h	3,100-12,000		3,100-13,600		3,100-18,400		3,100-12,000		3,100-13,600		3,100-18,400		
Rated Heating	BTU/h	12,000		16,000		18,000		12,000		16,000		18,000		
Min.-Max. Heating	BTU/h	3,100-22,000		3,100-22,100		3,100-23,900		3,100-22,000		3,100-22,100		3,100-23,900		
SEER	SEER2	BTU/hW	33.1	33.1	29.4	29.4	25.3	25.3	33.1	33.1	29.4	29.4	25.3	
HSPF	HSPF2	BTU/hW	14.2	13.4	14.0	12.9	13.4	12.8	14.0	13.3	13.8	12.7	13.3	
EER	EER2	BTU/hW	18.0	18.0	15.2	15.2	13.9	13.9	18.0	18.0	15.2	15.2	13.9	
ENERGY STAR® Rating*			ES, ESCE, ESME		ES, ESCE, ESME		ES, ESCE, ESME		ES, ESCE, ESME		ES, ESCE, ESME		ES, ESCE, ESME	
Clg. Operating Range	°F (°C)	14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		
Htg. Operating Range	°F (°C)	-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		
Moisture Removal	Pt./h (l/h)	2.5 (1.2)		2.7 (1.3)		4.0 (1.9)		2.5 (1.2)		2.7 (1.3)		4.0 (1.9)		
Max Htg % of Nominal Capacity at +5°F (-15°C)^		171%		138%		140%		171%		138%		140%		
Max Htg % of Nominal Capacity at -5°F (-21°C)^		163%		125%		124%		156%		125%		124%		
Max Htg % of Nominal Capacity at -15°F (-26°C)^		--		--		--		123%		98%		109%		
<b>Fan (Cooling Mode)</b>														
Air Circulation: Hi	CFM (m3/h)	542 (920)		542 (920)		583 (990)		542 (920)		542 (920)		583 (990)		
Medium	CFM (m3/h)	406 (690)		406 (690)		459 (780)		406 (690)		406 (690)		459 (780)		
Low	CFM (m3/h)	312 (530)		312 (530)		312 (530)		312 (530)		312 (530)		312 (530)		
Quiet	CFM (m3/h)	206 (350)		206 (350)		241 (410)		206 (350)		206 (350)		241 (410)		
<b>Fan Speed Stages</b>														
		4+Auto		4+Auto		4+Auto		4+Auto		4+Auto		4+Auto		
<b>Sound Levels (Clg / Htg)</b>														
Indoor: Hi	dB(A)	43 / 43		43 / 43		45 / 45		43 / 43		43 / 43		45 / 45		
Medium	dB(A)	37 / 36		37 / 36		40 / 39		37 / 36		37 / 36		40 / 39		
Low	dB(A)	31 / 31		31 / 31		32 / 32		31 / 31		31 / 31		32 / 32		
Quiet	dB(A)	23 / 23		23 / 23		26 / 26		23 / 23		23 / 23		26 / 26		
Outdoor	dB(A)	46 / 47		47 / 47		49 / 50		46 / 47		47 / 47		49 / 50		
<b>Electrical</b>														
Voltage / Frequency / Phase		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1		
Circuit Breaker	Amps	15		15		20		15		15		20		
Current Rated / Max: Clg.	Amps	2.5 / 9.4		3.8 / 9.4		4.8 / 9.9		2.5 / 9.4		3.8 / 9.4		4.8 / 9.9		
Current Rated / Max: Htg.	Amps	3.3 / 10.9		4.7 / 10.9		5.2 / 13.4		3.3 / 11.9		4.7 / 11.9		5.2 / 14.4		
Power Use Rated / Max: Clg.	kW	0.50 / 0.85		0.79 / 0.99		1.04 / 1.56		0.50 / 0.85		0.79 / 0.99		1.04 / 1.56		
Power Use Rated / Max: Htg.	kW	0.66 / 1.93		1.01 / 1.94		1.15 / 2.19		0.66 / 1.93		1.01 / 1.94		1.15 / 2.19		
<b>Size &amp; Weight</b>														
Net Weight	lbs. (kg)	29 (13)	84 (38)	29 (13)	84 (38)	29 (13)	86 (39)	29 (13)	86 (39)	29 (13)	86 (39)	29 (13)	88 (40)	
Dimensions: Height		11	24-7/8	11	24-7/8	11	24-7/8	11	24-7/8	11	24-7/8	11	24-7/8	
	mm	280	632	280	632	280	632	280	632	280	632	280	632	
Width		38-9/16	31-7/16	38-9/16	31-7/16	38-9/16	31-7/16	38-9/16	31-7/16	38-9/16	31-7/16	38-9/16	31-7/16	
	mm	980	799	980	799	980	799	980	799	980	799	980	799	
Depth		9-7/16	11-7/16	9-7/16	11-7/16	9-7/16	11-7/16	9-7/16	11-7/16	9-7/16	11-7/16	9-7/16	11-7/16	
	mm	240	290	240	290	240	290	240	290	240	290	240	290	
Refrigerant		R-410A		R-410A		R-410A		R-410A		R-410A		R-410A		
<b>Additional Data</b>														
Air Direction: Horiz.		Automatic		Automatic		Automatic		Automatic		Automatic		Automatic		
Vertical		Automatic		Automatic		Automatic		Automatic		Automatic		Automatic		
Air Filter Type		Washable		Washable		Washable		Washable		Washable		Washable		
Min. Lineset Length	ft (m)	16 (5)		16 (5)		16 (5)		16 (5)		16 (5)		16 (5)		
Max. Lineset Length	ft (m)	66 (20)		66 (20)		66 (20)		66 (20)		66 (20)		66 (20)		
		(pre-charge: 49')		(pre-charge: 49')		(pre-charge: 49')		(pre-charge: 49')		(pre-charge: 49')		(pre-charge: 49')		
Max. Vertical Diff.	ft (m)	49 (15)		49 (15)		49 (15)		49 (15)		49 (15)		49 (15)		
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 1/2	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 1/2	Liq. 1/4	
^ Based on nominal capacity (e.g. 09AJ1S based on 9,000 BTU/h) @ 70°F indoor setpoint. Refer to the Design & Technical Manual for more heating capacity data.														
		Indoor UIWHGZ09AJ1S	Outdoor RO1HGZ09AJ1S	Indoor UIWHGZ12AJ1S	Outdoor RO1HGZ12AJ1S	Indoor UIWHGZ15AJ1S	Outdoor RO1HGZ15AJ1S	Indoor UIWHGZ09AJ1H	Outdoor RO1HGZ09AJ1H	Indoor UIWHGZ12AJ1H	Outdoor RO1HGZ12AJ1H	Indoor UIWHGZ15AJ1H	Outdoor RO1HGZ15AJ1H	



# 9, 12, 18, 24,000 BTU/h Wall Mount Heat Pumps

# Systems

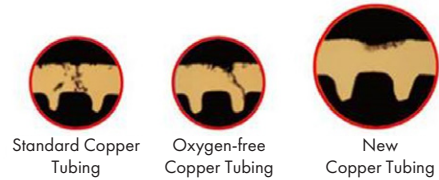
09AJ2S, 12AJ2S, 18AJ2S, 24AJ2S



1 Available only with optional wired remote control.  
 2 Available only with optional wired remote control and optional communication kit.  
 3 See page 13 for details.

## Product Features

- Indoor unit with HCRC (High Corrosion Resistant Copper) coils. HCRC coils have higher resistance to corrosion compared with standard or oxygen-free copper coils.

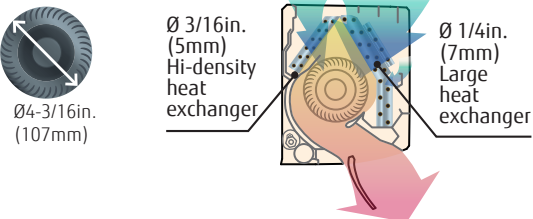


- Compatible with 2-wire wired remote controllers
- Revamped controls platform, featuring two communication (UART) ports, simultaneous connection of wired controller, WI-FI adapter and 3rd-party devices (such as field-supplied auxiliary heater, humidifier, etc.)
- Service monitoring menu through RXRNRUZ5 simplifies system and sensor monitoring and troubleshooting
- High efficiency, ENERGY STAR® rated systems with state of the art coil design and increased fan performance
- Washable filter, factory provided with IDU
- Large cross-flow fan – New and improved fan design that delivers high performance with lower energy consumption and whisper-quiet operation with sound pressure levels as low as 19dB(A)

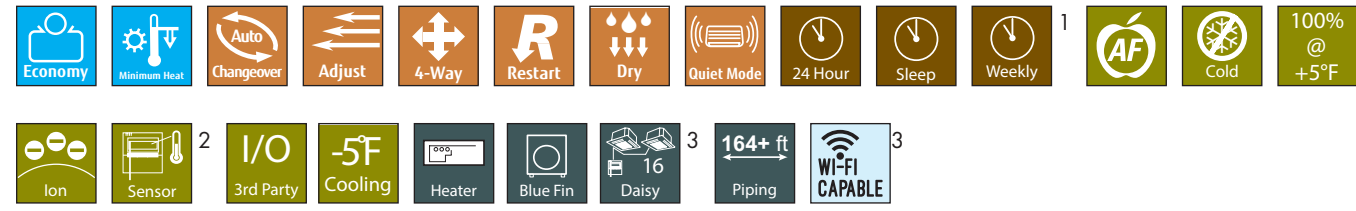
## Optional Accessories

- Wired Remote Controller..... RXRNRUZ Series
- Simple Remote Controller..... RXRSRY / RXRHRY
- 24V Thermostat Interface ..... RXTRXZ1
- Modbus Converter ..... RXVMSX
- Communication Kit ..... RXTWRXZ2
- Dry Contact Wire Kit..... RXXWZXZ5
- Wire Kit ..... RXXWZX

UP TO 26.5 SEER2		09AJ2S		12AJ2S		18AJ2S		24AJ2S	
<b>Performance</b>									
Rated Cooling	BTU/h	9,000		12,000		18,000		22,000	
Min.-Max. Cooling	BTU/h	3,400-10,900		3,400-13,300		7,000-20,000		9,100-27,300	
Rated Heating	BTU/h	12,000		14,000		21,600		25,200	
Min.-Max. Heating	BTU/h	2,800-15,000		2,800-19,100		8,000-29,000		8,200-37,000	
SEER	SEER2	BTU/hW	26.5	26.5	--	23.0	21.1	21.1	22.5
HSPF	HSPF2	BTU/hW	13.0	12.6	--	11.1	12.5	11.5	12.0
EER	EER2	BTU/hW	14.3	14.3	--	12.5	13.0	13.0	12.5
<b>ENERGY STAR® Rating*</b>									
Clg. Operating Range	°F (°C)	14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)	
Htg. Operating Range	°F (°C)	5 to 75 (-15 to 24)		5 to 75 (-15 to 24)		5 to 75 (-15 to 24)		5 to 75 (-15 to 24)	
Moisture Removal	Pt./h (l/h)	2.7 (1.3)		3.8 (1.8)		4.0 (1.9)		6.3 (3.0)	
<b>Fan (Cooling Mode)</b>									
Air Circulation: Hi	CFM (m3/h)	453 (770)		453 (770)		577 (980)		647 (1,100)	
Medium	CFM (m3/h)	353 (600)		353 (600)		489 (830)		530 (900)	
Low	CFM (m3/h)	265 (450)		265 (450)		377 (640)		436 (740)	
Quiet	CFM (m3/h)	147 (250)		147 (250)		300 (510)		371 (630)	
<b>Fan Speed Stages</b>									
		4+Auto		4+Auto		4+Auto		4+Auto	
<b>Sound Levels (Clg / Htg)</b>									
Indoor: Hi	dB(A)	43 / 43		43 / 43		46 / 46		46 / 48	
Medium	dB(A)	36 / 38		36 / 38		41 / 41		42 / 38	
Low	dB(A)	30 / 33		30 / 33		35 / 35		37 / 34	
Quiet	dB(A)	19 / 21		19 / 21		30 / 30		33 / 30	
Outdoor	dB(A)	46 / 48		49 / 50		49 / 50		52 / 54	
<b>Electrical</b>									
Voltage / Frequency / Phase		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1	
Circuit Breaker		15		15		20		20	
Current Rated / Max. Clg.	Amps	3.1 / 6.4		4.7 / 6.9		6.2 / 13.4		7.8 / 15.4	
Current Rated / Max. Htg.	Amps	4.0 / 7.9		4.8 / 9.4		7.0 / 13.9		8.3 / 15.9	
Power Use Rated / Max. Clg.	kW	0.63 / 0.92		0.96 / 1.27		1.38 / 1.86		1.76 / 2.63	
Power Use Rated / Max. Htg.	kW	0.84 / 1.61		0.99 / 1.67		1.58 / 2.82		1.87 / 3.53	
<b>Size &amp; Weight</b>									
Net Weight	lbs. (kg)	22 (10)	68 (31)	22 (10)	71 (32)	29 (13.0)	117 (53)	36 (16.5)	117 (53)
Dimensions: Height	in	10-5/8	21-5/16	10-5/8	21-5/16	11	31	13-6/16	31
	mm	270	542	270	542	280	788	340	788
Width	in	32-13/16	31-7/16	32-13/16	31-7/16	38-9/16	37	45-1/4	37
	mm	834	799	834	799	980	940	1,150	940
Depth	in	8-3/4	11-7/16	8-3/4	11-7/16	9-7/16	12-5/8	11	12-5/8
	mm	222	290	222	290	240	320	280	320
Refrigerant		R-410A		R-410A		R-410A		R-410A	
<b>Additional Data</b>									
Air Direction: Horiz.		Manual		Manual		Manual		Manual	
Vertical		Automatic		Automatic		Automatic		Automatic	
Air Filter Type		Washable		Washable		Washable		Washable	
Min. Lineset Length	ft (m)	16 (5)		16 (5)		16 (5)		16 (5)	
Max. Lineset Length	ft (m)	66 (20) (pre-charge: 49')		66 (20) (pre-charge: 49')		164 (50) (pre-charge: 49')		164 (50) (pre-charge: 66')	
Max. Vertical Diff.	ft (m)	49 (15)		49 (15)		98 (30)		98 (30)	
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 5/8	Liq. 3/8	Gas 5/8	Liq. 3/8
		Indoor UIWHHZ09AJ2S	Outdoor RO1HHZ09AJ2S	Indoor UIWHHZ12AJ2S	Outdoor RO1HHZ12AJ2S	Indoor UIWHHZ18AJ2S	Outdoor RO1HHZ18AJ2S	Indoor UIWHHZ24AJ2S	Outdoor RO1HHZ24AJ2S



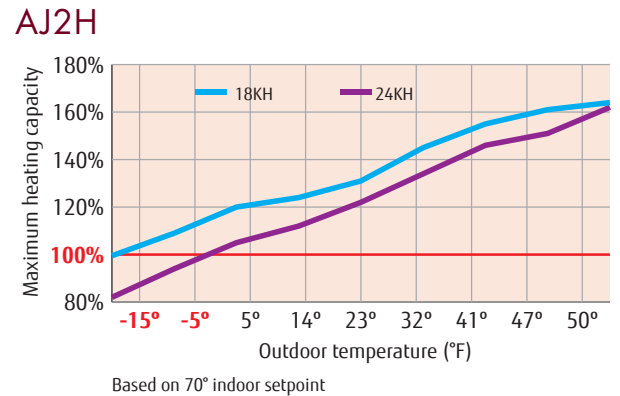
# 9, 12, 18, 24,000 BTU/h Wall Mount Heat Pumps



1 Systems require optional wired remote control.  
 2 Available only with optional wired remote control and optional communication kit (9 & 12k IDUs).  
 3 See page 13 for details.

## High Performance Heating Capacity

Stay comfortable at low ambient temperatures. The AJ2H model can operate down to -15°F. See the full low temperature heating operation story on page 14.



## Optional Accessories (18AJ2H – 24AJ2H)

- Wired Remote Control..... RXRNUM / RXRNUM
- Simple Remote Control..... RXRHRY
- 24V Thermostat Interface..... RXTTRXZ1
- Wire Kit..... RXXWZX

## Optional Accessories (09AJ2H – 12AJ2H)

- Wired Remote Controller..... RXRNRUZ Series
- Simple Remote Controller..... RXRSRY / RXRHRY
- 24V Thermostat Interface..... RXTTRXZ1
- BACnet Gateway..... FJ-AC-BAC-1L
- Modbus Converter..... RXVMSX
- Communication Kit..... RXTWRXZ2
- External Input and Output PCB..... RXXCSXZ1
- Dry Contact Wire Kit..... RXXWZXZ5
- Wire Kit..... RXXWZX

# High Heat Systems 09AJ2H, 12AJ2H

# High Heat Systems 18AJ2H, 24AJ2H

UP TO 26.5 SEER2		09AJ2H		12AJ2H		18AJ2H		24AJ2H	
Performance		low temperature heating operation		low temperature heating operation		low temperature heating operation		low temperature heating operation	
Rated Cooling	BTU/h	9,000		12,000		18,000		22,000	
Min.-Max. Cooling	BTU/h	3,400-11,500		3,400-13,300		7,000-23,000		9,900-27,300	
Rated Heating	BTU/h	12,000		14,000		21,600		25,200	
Min.-Max. Heating	BTU/h	2,800-16,000		2,800-19,100		7,000-29,000		7,500-36,200	
SEER	SEER2 BTU/hW	26.5	26.5	--	23	20	20	19.5	19.5
HSPF	HSPF2 BTU/hW	13	12.3	--	11	10.4	10	10.5	10.5
EER	EER2 BTU/hW	15.4	15.4	--	12.5	13.3	13.3	12.5	12.5
ENERGY STAR® Rating*		ES, ESCC, ESME		ES, ESCC, ESME		ES, ESCC, ESME		ES, ESCC, ESME	
Clg. Operating Range	°F (°C)	14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		-5 to 115 (-20 to 46)		-5 to 115 (-20 to 46)	
Htg. Operating Range	°F (°C)	-15 to 75 (-26 to 24)		-15 to 75 (-26 to 24)		-15 to 75 (-26 to 24)		-15 to 75 (-26 to 24)	
Moisture Removal	Pt./h (l/h)	2.7 (1.3)		3.8 (1.8)		5.9 (2.8)		6.3 (3.0)	
Max Htg % of Nominal Capacity at +5°F (-15°C)^		105%		89%		120%		105%	
Max Htg % of Nominal Capacity at -5°F (-21°C)^		85%		72%		109%		94%	
Max Htg % of Nominal Capacity at -15°F (-26°C)^		61%		52%		100%		82%	
Fan (Cooling Mode)									
Air Circulation: Hi	CFM (m3/h)	453 (770)		453 (770)		542 (920)		659 (1,120)	
Medium	CFM (m3/h)	353 (600)		353 (600)		436 (740)		530 (900)	
Low	CFM (m3/h)	265 (450)		265 (450)		365 (620)		436 (740)	
Quiet	CFM (m3/h)	147 (250)		147 (250)		306 (520)		365 (620)	
Fan Speed Stages		4+Auto		4+Auto		4+Auto		4+Auto	
Sound Levels (Clg / Htg)									
Indoor: Hi	dB(A)	43 / 43		43 / 43		43 / 44		49 / 49	
Medium	dB(A)	36 / 38		36 / 38		37 / 37		42 / 42	
Low	dB(A)	30 / 33		30 / 33		33 / 33		37 / 37	
Quiet	dB(A)	19 / 21		19 / 21		28 / 28		33 / 33	
Outdoor	dB(A)	46 / 48		49 / 50		47 / 50		54 / 55	
Electrical									
Voltage / Frequency / Phase		208-230 / 60 / 1		20-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1	
Circuit Breaker	Amps	15		15		20		30	
Current Rated / Max: Clg.	Amps	3 / 6.9		4.7 / 6.9		6.2 / 13.5		7.9 / 15	
Current Rated / Max: Htg.	Amps	3.9 / 9.4		4.8 / 9.4		7.8 / 14.5		8.6 / 15.5	
Power Use Rated/Max: Clg.	kW	0.585 / 1.27		0.96 / 1.27		1.35 / 3.01		1.76 / 3.42	
Power Use Rated/Max: Htg.	kW	0.79 / 1.67		0.99 / 1.67		1.75 / 3.23		1.94 / 3.53	
Size & Weight									
Net Weight	lbs. (kg)	22 (10)	73 (33)	22 (10)	73 (33)	31 (14)	134 (61)	31 (14)	134 (61)
Dimensions: Height	in	10-5/8	21-5/16	10-5/8	21-5/16	12-5/8	32-11/16	12-5/8	32-11/16
	mm	270	542	270	542	320	830	320	830
Width	in	32-13/16	31-7/16	32-13/16	31-7/16	39-5/16	35-7/16	39-5/16	35-7/16
	mm	834	799	834	799	998	900	998	900
Depth	in	8-3/4	11-7/16	8-3/4	11-7/16	9	13	9	13
	mm	222	290	222	290	228	330	228	330
Refrigerant		R-410A		R-410A		R-410A		R-410A	
Additional Data									
Air Direction: Horiz.		Manual		Manual		Manual		Manual	
Vertical		Automatic		Automatic		Automatic		Automatic	
Air Filter Type		Washable		Washable		Washable		Washable	
Min. Lineset Length	ft (m)	16 (5)		16 (5)		16 (5)		16 (5)	
Max. Lineset Length	ft (m)	66 (20) (pre-charge: 49')		66 (20) (pre-charge: 49')		164 (50) (pre-charge: 49')		164 (50) (pre-charge: 66')	
Max. Vertical Diff.	ft (m)	49 (15)		49 (15)		98 (30)		98 (30)	
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 5/8	Liq. 3/8	Gas 5/8	Liq. 3/8

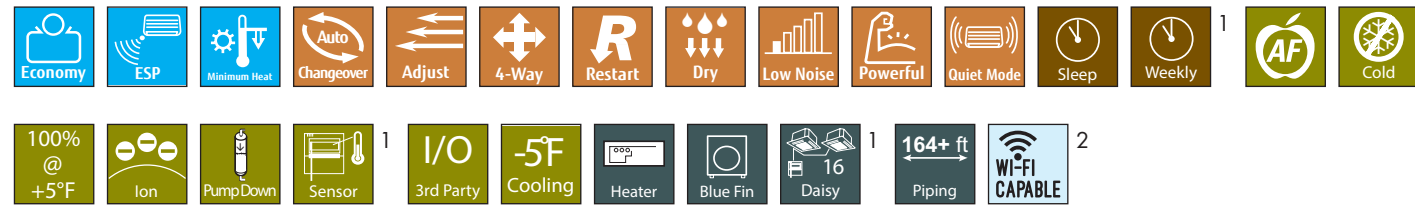
\* Based on nominal capacity (e.g. 09AJ2H based on 9,000 BTU/h) @ 70°F indoor setpoint. Refer to the Design & Technical Manual for more heating capacity data.



# High Heat Systems

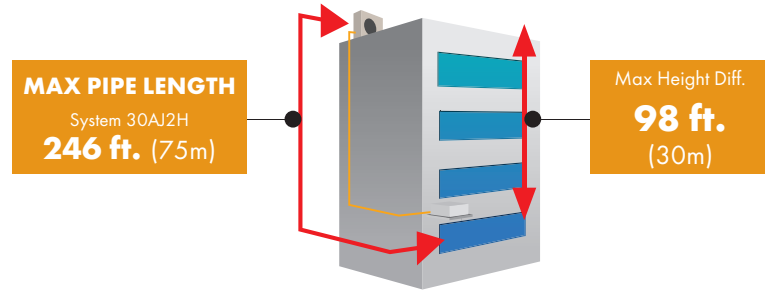
## 30AJ2H

# 30,000 BTU/h Wall Mount Heat Pump



1 Available only with optional wired remote control.  
2 See page 13 for details.

The 30AJ2H is specially engineered for applications that require cooling year-round and / or rooms with large heat loads such as classrooms and conference rooms.



### Extended Line Set

Long allowed piping lengths between indoor and outdoor units provide flexibility and increased applications.

### Lead-lag Function

Lead-lag function provides a redundant cooling system by pairing two 30AJ2H systems together delivering a unique solution for many applications.

Lead-lag function provides the following operation modes:

- Alternative Operation – Units alternate operation, so neither unit is running at the same time
- Emergency Operation – If an error occurs on one unit, the second unit will turn on\*
- Supporting Operation – If the setpoint cannot be reached with one unit alone, the second unit will come on to satisfy the demand for cooling

### Lock Out Function

This feature can be set by the contractor on behalf of the commercial property owner to prevent either cooling or heating operation from occurring.

\*Power loss to one of the two units will disengage the lead lag function.

### High Performance Heating Capacity

The AJ2H model can operate efficiently down to -15°F. See the full low temperature heating operation story on page 14.

### Additional Applications That May Require Low Ambient Cooling:

- Conference / meeting / training rooms
- Social gathering spots
- Places of worship

### Optional Accessories

- Wired Remote Controller.....RXRNRUZ Series
- Simple Remote Controller.....RXRSRY / RXRHRY
- 24V Thermostat Interface .....RXTRXZ1
- BACnet Gateway.....FJ-AC-485-1L
- Modbus Converter .....RXVMSX
- External Input and Output PCB .....RXXCSXZ1Z1 + URXGXXB
- Outdoor Unit Input / Output Connector .....RXXWZXZ3



The 30AJ2H is specially engineered for applications that require constant cool temperatures year round, and/or rooms with large heat loads such as classrooms and conference rooms.

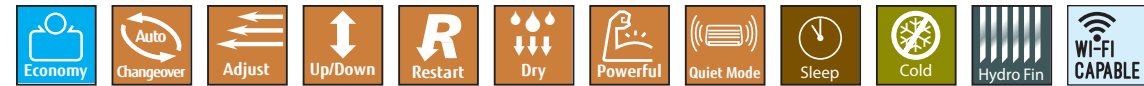
UP TO 18.7 SEER2

30AJ2H

Performance		low temperature heating operation	
Rated Cooling	BTU/h	3,0000	
Min.-Max. Cooling	BTU/h	9,900 to 32,400	
Rated Heating	BTU/h	3,2000	
Min.-Max. Heating	BTU/h	8,000 to 36,200	
SEER	SEER2	BTU/hW	18.7
HSPF	HSPF2	BTU/hW	10
EER	EER2	BTU/hW	12.5
ENERGY STAR® Rating*			
Clg. Operating Range	°F (°C)	-5 to 115 (-20 to 46)	
Htg. Operating Range	°F (°C)	-15 to 75 (-26 to 24)	
Moisture Removal	Pt./h (l/h)	9.7 (4.6)	
Max Htg % of Nominal Capacity at +5 °F (-15 °C)^		107%	
Max Htg % of Nominal Capacity at -5 °F (-21 °C)^		91%	
Max Htg % of Nominal Capacity at -15 °F (-26 °C)^		76%	
Fan (Cooling Mode)			
Air Circulation: Hi	CFM (m3/h)	812 (1,380)	
Medium	CFM (m3/h)	665 (1,130)	
Low	CFM (m3/h)	536 (910)	
Quiet	CFM (m3/h)	418 (710)	
Fan Speed Stages		4+Auto	
Sound Levels (Clg / Htg)			
Indoor: Hi	dB(A)	50 / 49	
Medium	dB(A)	45 / 44	
Low	dB(A)	38 / 38	
Quiet	dB(A)	32 / 32	
Outdoor	dB(A)	53 / 54	
Electrical			
Voltage / Frequency / Phase		208-230 / 60 / 1	
Circuit Breaker	Amps	30	
Current Rated / Max: Clg.	Amps	10.6 / 20.5	
Current Rated / Max: Htg.	Amps	12 / 20.5	
Power Use Rated / Max: Clg.	kW	2.40 / 3.83	
Power Use Rated / Max: Htg.	kW	2.74 / 4.28	
Size & Weight			
Net Weight	lbs. (kg)	40 (18)	205 (93)
Dimensions: Height	in	13-3/8	50-13/16
	mm	340	1,290
Width	in	45-1/4	35-7/16
	mm	1150	900
Depth	in	11	13
	mm	280	330
Refrigerant		R-410A	
Additional Data			
Air Direction: Horiz.		Manual	
Vertical		Automatic	
Air Filter Type		Washable	
Minimum Lineset Length	ft (m)	16 (5)	
Maximum Lineset Length	ft (m)	246 (75) (pre-charge: 66')	
Max. Vertical Diff.	ft (m)	98 (30)	
Lineset Size	in	Gas 5/8	Liq. 3/8
^ Based on model # capacity class (e.g. 30AJ2H based on 30,000 BTU/h) @ 70°F indoor setpoint. Refer to the Design & Technical Manual for more heating capacity data.			
		Indoor UIWHFZ30AJ2S	Outdoor RO1HGZ30AJ2H



# 9 and 12,000 BTU/h, 115V, Wall Mount Heat Pumps



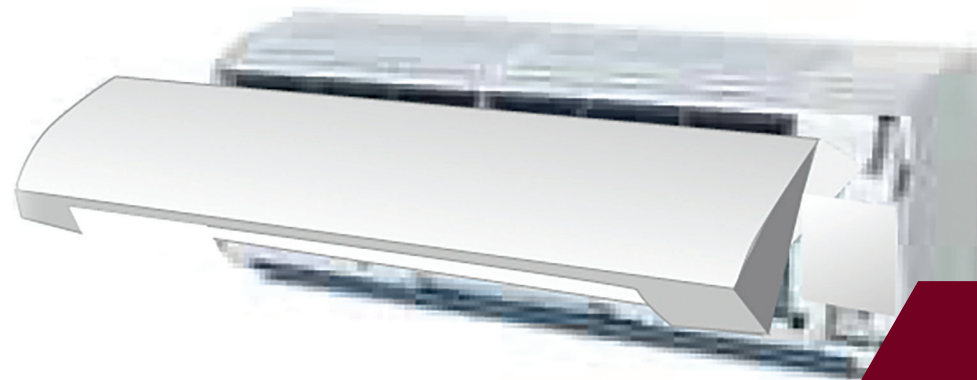
1 See page 13 for details.

## Function

Stylish, slim and elegant, these popular wall mounted units are designed for single rooms. Indoor units have a clean, aesthetic design and are small but mighty and shorter in length than competing units, helping them blend into any room.

## Applications

This category of equipment is ideal when the installation calls for 115V service or the demand for ultra high efficiency is not present. Do you have a warm or cool spot in your home? Ruud mini-splits can provide extra cooling or heating capacity for those hard to cool areas. Commercially, their small size makes them ideal for small offices, providing individual temperature control.



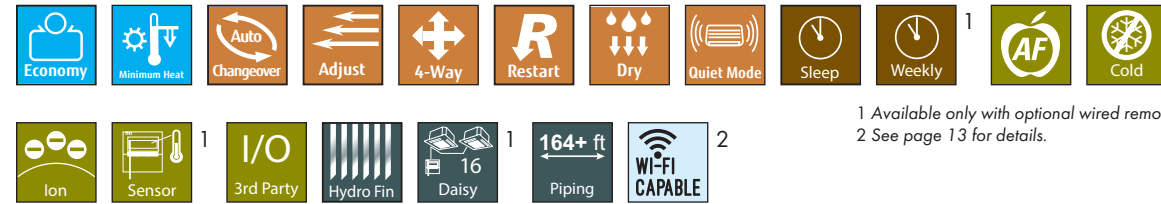
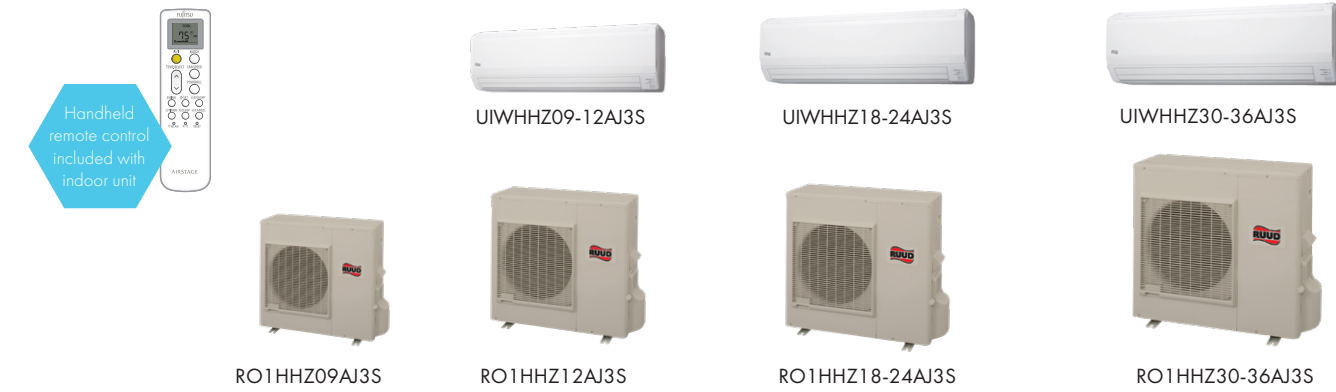
**Easy Maintenance**  
Front panel is easily removed for cleaning.

16.0 SEER2		9AA3S		12AA3S	
<b>Performance</b>					
Rated Cooling	BTU/h	9,000		12,000	
Min.-Max. Cooling	BTU/h	1,700-10,700		3,100-12,500	
Rated Heating	BTU/h	10,000		14,000	
Min.-Max. Htg.	BTU/h	1,700-12,000		3,100-16,000	
SEER	SEER2	BTU/hW	16	16	16
HSPF	HSPF2	BTU/hW	9	9	9
EER	EER2	BTU/hW	10.8	10.8	10
Clg. Operating Range		°F (°C)		14 to 115 (-10 to 46)	
Htg. Operating Range		°F (°C)		14 to 75 (-10 to 24)	
Moisture Removal	Pt./h (l/h)	2.7 (1.3)		3.8 (1.8)	
<b>Fan (Cooling Mode)</b>					
Air Circulation: Hi	CFM (m3/h)	424 (720)		424 (720)	
Medium	CFM (m3/h)	353 (600)		353 (600)	
Low	CFM (m3/h)	247 (420)		250 (425)	
Quiet	CFM (m3/h)	191 (325)		191 (325)	
Fan Speed Stages		4 + Auto		4 + Auto	
<b>Sound Levels (Clg / Htg)</b>					
Indoor: Hi	dB(A)	43 / 44		43 / 44	
Medium	dB(A)	38 / 38		38 / 38	
Low	dB(A)	33 / 33		33 / 33	
Quiet	dB(A)	23 / 23		23 / 23	
Outdoor	dB(A)	47 / 48		51 / 51	
<b>Electrical</b>					
Voltage / Frequency / Phase		115 / 60 / 1		115 / 60 / 1	
Circuit Breaker	Amps	15		20	
Current Rated / Max: Clg.	Amps	7.5 / 13.0		10.9 / 13.0	
Current Rated / Max: Htg.	Amps	7.0 / 13.5		11.0 / 15.0	
Power Use Rated / Max: Clg.	kW	0.83 / 1.44		1.2 / 1.44	
Power Use Rated / Max: Htg.	kW	0.77 / 1.49		1.21 / 1.66	
<b>Size &amp; Weight</b>					
Net Weight	lbs. (kg)	15 (7)	64 (29)	15 (7)	68 (31)
Dimensions: Height	in	10-5/16	21-1/4	10-5/16	21-1/4
	mm	262	540	262	540
Width	in	32-5/16	26	32-5/16	26
	mm	820	660	820	660
Depth	in	8-1/8	11-11/32	8-1/8	11-11/32
	mm	206	290	206	290
Refrigerant		R-410A		R-410A	
<b>Additional Data</b>					
Air Direction: Horizontal		Manual		Manual	
Vertical		Automatic		Automatic	
Air Filter Type		Washable		Washable	
Min. Lineset Length	ft (m)	10 (3)		10 (3)	
Max. Lineset Length	ft (m)	66 (20) (pre-charge: 49')		66 (20) (pre-charge: 49')	
Max. Vertical Diff.	ft (m)	49 (15)		49 (15)	
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4
		Indoor UIWHFZ9AA3S	Outdoor RO1HGZ9AA3S	Indoor UIWHFZ12AA3S	Outdoor RO1HGZ12AA3S

# 9, 12, 18, 24, 30, 36,000 BTU/h Wall Mount Heat Pumps

# Systems

09AJ3S, 12AJ3S, 18AJ3S, 24AJ3S, 30AJ3S, 36AJ3S



1 Available only with optional wired remote control.  
2 See page 13 for details.

## Product Features

- Energy efficient – Up to 20.0 SEER2 and up to 11.0 HSPF2, these systems save money on utility bills and can qualify for rebates
- Revamped controls platform, featuring two communication (UART) ports allowing simultaneous connection of wired controller, Wi-Fi adapter and 3rd party devices (such as field-supplied auxiliary heater, humidifier, etc.)
- Service monitoring menu through RXRNRUZ5 simplifies system and sensor monitoring and troubleshooting
- Indoor unit with HCRC (High Corrosion Resistant Copper) coils. HCRC coils have higher resistance to corrosion compared with standard or oxygen-free copper coils
- High voltage electronic components are coated with silicon for protection
- Compact outdoor unit and extended line set lengths add

- flexibility and simplifies the installation process
- Washable filter factory provided with IDU
- Unique fan design provides whisper-quiet operation with sound pressure levels as low as 19dB(A)
- Compatible with 2-wire wired remote controllers
- Lower power consumption enables installers to use smaller circuit size.

## Optional Accessories

- Wired Remote Controller..... RXRNRUZ Series
- Simple Remote Controller..... RXRSRY / RXRHRY
- 24V Thermostat Interface ..... RXTTRXZ1
- Modbus Converter ..... RXVMSX
- Communication Kit ..... RXTWRXZ2
- External Input and Output PCB..... RXXCSXZ1
- Dry Contact Wire Kit..... RXXWZXZ5
- Wire Kit ..... RXXWZX



UP TO 20.0 SEER2		09AJ3S		12AJ3S		18AJ3S		24AJ3S		30AJ3S		36AJ3S	
<b>Performance</b>													
Rated Cooling	BTU/h	9,000		12,000		18,000		24,000		30,000		33,000	
Min.-Max. Cooling	BTU/h	3,300–10,800		3,400–12,700		4,000–19,000		4,000–24,400		9,900–32,400		9,900–34,100	
Rated Heating	BTU/h	10,000		14,000		18,000		24,000		30,000		34,000	
Min.-Max. Heating	BTU/h	2,600–12,500		3,100–17,000		2,800–24,000		2,900–29,000		8,700–33,000		8,700–35,000	
SEER	SEER2	20.0		20.0		20.0		20.0		19.0		18	
HSPF	HSPF2	11.0		10.5		11.0		10.5		11.0		9.8	
EER	EER2	12.5		12.5		11.0		12.0		9.2		9.8	
ENERGY STAR® Rating*		--		ESCC		ES, ESCC, ESME		ESCC		ESCC		ESCC	
Clg. Operating Range	°F (°C)	14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)	
Htg. Operating Range	°F (°C)	5 to 75 (-15 to 24)		5 to 75 (-15 to 24)		5 to 75 (-15 to 24)		5 to 75 (-15 to 24)		5 to 75 (-15 to 24)		5 to 75 (-15 to 24)	
Moisture Removal	Pt./h (l/h)	2.7 (1.3)		3.8 (1.8)		4.0 (1.9)		6.3 (3.0)		9.7 (4.6)		10.1 (4.8)	
<b>Fan (Cooling Mode)</b>													
Air Circulation: Hi	CFM (m <sup>3</sup> /h)	412 (700)		453 (770)		530 (900)		642 (1,090)		812 (1,380)		812 (1,380)	
Medium	CFM (m <sup>3</sup> /h)	330 (560)		353 (600)		471 (800)		471 (800)		665 (1,130)		665 (1,130)	
Low	CFM (m <sup>3</sup> /h)	253 (430)		265 (450)		377 (640)		377 (640)		536 (910)		536 (910)	
Quiet	CFM (m <sup>3</sup> /h)	159 (270)		147 (250)		241 (410)		306 (520)		418 (710)		418 (710)	
Fan Speed Stages		4+Auto		4+Auto		4+Auto		4+Auto		4+Auto		4+Auto	
<b>Sound Levels (Clg / Htg)</b>													
Indoor: Hi	dB(A)	40 / 42		43 / 43		44 / 43		49 / 47		50 / 49		50 / 49	
Medium	dB(A)	34 / 36		36 / 38		42 / 39		42 / 43		45 / 44		45 / 44	
Low	dB(A)	29 / 31		30 / 33		37 / 34		37 / 37		38 / 38		38 / 38	
Quiet	dB(A)	19 / 21		19 / 21		26 / 28		31 / 32		32 / 32		32 / 32	
Outdoor	dB(A)	47 / 48		47 / 48		50 / 50		53 / 54		52 / 54		53 / 54	
<b>Electrical</b>													
Voltage / Frequency / Phase		208–230 V / 60 / 1		208–230 V / 60 / 1		208 / 230 V ~ 60 Hz		208 / 230 V ~ 60 Hz		208 / 230 V ~ 60 Hz		208 / 230 V ~ 60 Hz	
Circuit Breaker	Amps	15		15		15		20		30		30	
Current Rated/Max: Clg.	Amps	3.5 / 6.4		4.9 / 6.9		6.7 / 9.9		11.4 / 14.4		13.4 / 18.9		17.8 / 18.9	
Current Rated/Max: Htg.	Amps	3.7 / 7.9		4.9 / 7.9		5.9 / 11.9		9.1 / 13.9		10.9 / 18.9		13.5 / 18.9	
Power Use Rated / Max: Clg.	kW	0.72 / 1.18		1.09 / 1.33		1.50 / 1.90		2.60 / 3.20		3.07 / 4.03		4.08 / 4.29	
Power Use Rated / Max: Htg.	kW	0.74 / 1.23		1.10 / 1.61		1.33 / 2.10		2.07 / 3.10		2.46 / 3.15		3.09 / 3.32	
<b>Size &amp; Weight</b>													
Net Weight	lbs. (kg)	21 (9.5)	51 (23)	22 (10.0)	68 (31)	29 (13)	86 (39)	29 (13)	86 (39)	39 (17.5)	117 (53)	39 (17.5)	117 (53)
Dimensions: Height	in	10-5/8	21-5/16	10-5/8	21-5/16	11	24-7/8	11	24-7/8	13-3/8	31	13-3/8	31
	mm	270	541	270	542	280	632	280	632	340	788	340	788
Width	in	32-13/16	26-1/8	32-13/16	31-7/16	38-9/16	31-7/16	38-9/16	31-7/16	45-1/4	37	45-1/4	37
	mm	834	663	834	799	980	799	980	799	1,150	940	1,150	940
Depth	in	8-3/4	11-7/16	8-3/4	11-7/16	9-7/16	11-7/16	9-7/16	11-7/16	11	12-5/8	11	12-5/8
	mm	222	290	222	290	240	290	240	290	280	320	280	320
Refrigerant		R-410A		R-410A		R-410A		R-410A		R-410A		R-410A	
<b>Additional Data</b>													
Air Direction: Horiz.		Manual		Manual		Manual		Manual		Manual		Manual	
Vertical		Automatic		Automatic		Automatic		Automatic		Automatic		Automatic	
Air Filter Type		Washable		Washable		Washable		Washable		Washable		Washable	
Min. Lineset Length	ft (m)	16 (5)		16 (5)		16 (5)		16 (5)		16 (5)		16 (5)	
Max. Lineset Length	ft (m)	66 (20)		66 (20)		66 (20)		66 (20)		164 (50)		164 (50)	
Max. Vertical Diff.	ft (m)	49 (15)		49 (15)		49 (15)		49 (15)		98 (30)		98 (30)	
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 1/2	Liq. 1/4	Gas 1/2	Liq. 1/4	Gas 5/8	Liq. 3/8	Gas 5/8	Liq. 3/8
		Indoor UIWHHZ09AJ3S	Outdoor RO1HHZ09AJ3S	Indoor UIWHHZ12AJ3S	Outdoor RO1HHZ12AJ3S	Indoor UIWHHZ18AJ3S	Outdoor RO1HHZ18AJ3S	Indoor UIWHHZ24AJ3S	Outdoor RO1HHZ24AJ3S	Indoor UIWHHZ30AJ3S	Outdoor RO1HHZ30AJ3S	Indoor UIWHHZ36AJ3S	Outdoor RO1HHZ36AJ3S





# 9, 12, 15,000 BTU/h Floor Mount Heat Pumps



**Features:** Economy, Minimum Heat, Changeover, Adjust, Up/Down, Restart, Dry, Powerful, Quiet Mode, 24 Hour, Sleep, Weekly, AF, Cold.

**Optional Accessories:** 100% @ +5°F, Ion, Sensor, I/O 3rd Party, Heater, Hydro Fin, Daisy, Wi-Fi CAPABLE.

1 Available with optional wired remote control.  
2 AJ2H models only.  
3 See page 13 for details.

## Ideal Radiator Replacement



At less than 24" high and 30" wide, floor mount models fit easily under a standard window and can replace a radiator twice its size while producing more capacity.

## Base Pan Heater (AJ2H Models)

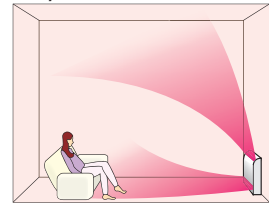
AJ2S models can operate down to -5°F. AJ2H models can operate down to -15°F. See the full Low Temperature Heating Operation story on page 14.

## Optional Accessories

- Wired Remote Control..... RXRNUM / RXRNUM
- Simple Remote Control..... RXRHRY
- 24V Thermostat Interface..... RXTRXZ1
- Dry Contact Wire Kit..... RXXWZXZ5

## Two Fans and Wide Airflow

Having both upper and lower airflow quickly warms or cools the entire room. Floor mount can be set in "Upward Airflow Only" when occupants wish not to have feet warmed or cooled.



**Cooling**

- Upon startup, both top and bottom louvers open.
- As the room temperature nears the setpoint, only the top louver stays open to help prevent cold air from falling.

**Heating**

- Upon startup, both top and bottom louvers open.
- Closer to setpoint, only the top louver stays open to help prevent cold drafts from windows.

## Flexible and Easy Installation

**Beneath standard window:** 23-5/8" height, 27-9/16" depth, 29-1/8" width, 7-7/8" depth.

**Standard concave installation:** Min. 27-9/16" height, Min. 37" width.

**Low Wall Mount:** Max. 5-7/8" height.

**Partially concealed\*:** Min. 23-1/4" height, Max. 3-1/8" depth.

\*Field-supplied insulation required

# Systems

9AJ2S, 12AJ2S, 15AJ2S

# High Heat Systems

9AJ2H, 12AJ2H, 15AJ2H

UP TO 26 SEER2		9AJ2S	12AJ2S	15AJ2S	9AJ2H	12AJ2H	15AJ2H
<b>Performance</b>					<b>low temperature heating operation</b>	<b>low temperature heating operation</b>	<b>low temperature heating operation</b>
Rated Cooling	BTU/h	9,000	12,000	14,200	9,000	12,000	14,200
Min.-Max. Cooling	BTU/h	3,100-13,000	3,100-14,300	3,100-17,700	3,100-13,000	3,100-14,300	3,100-17,700
Rated Heating	BTU/h	12,000	16,000	18,000	12,000	16,000	18,000
Min.-Max. Heating	BTU/h	3,100-18,800	3,100-19,500	3,100-20,800	3,100-18,800	3,100-19,500	3,100-20,800
SEER	SEER2 BTU/hW	26	22.7	22.7	26	22.7	22.7
HSPF	HSPF2 BTU/hW	12.6	11.8	11.6	11.2	11.2	10.7
EER	EER2 BTU/hW	16	13.1	13.1	12.5	12.5	12.5
<b>ENERGY STAR® Rating*</b>		ES, ESCC, ESME	ES, ESCC, ESME	ES, ESCC, ESME	ES, ESCC, ESME	ES, ESCC, ESME	ES, ESCC, ESME
Clg. Operating Range	°F (°C)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)
Htg. Operating Range	°F (°C)	-5 to 75 (-21 to 24)	-5 to 75 (-21 to 24)	-5 to 75 (-21 to 24)	-15 to 75 (-26 to 24)	-15 to 75 (-26 to 24)	-15 to 75 (-26 to 24)
Moisture Removal	Pt./h (l/h)	2.7 (1.3)	3.8 (1.8)	4.4 (2.1)	2.75 (1.3)	3.8 (1.8)	4.44 (2.1)
Max Htg % of Nominal Capacity at +5°F (-15°C)^		158%	125%	126%	149%	125%	118%
Max Htg % of Nominal Capacity at -5°F (-21°C)^		140%	111%	117%	130%	111%	107%
Max Htg % of Nominal Capacity at -15°F (-26°C)^		--	--	--	115%	100%	96%
<b>Fan (Cooling Mode)</b>							
Air Circulation: Hi	CFM (m3/h)	336 (570)	336 (570)	383 (650)	336 (570)	336 (570)	383 (650)
Medium	CFM (m3/h)	271 (460)	271 (460)	306 (520)	271 (460)	271 (460)	306 (520)
Low	CFM (m3/h)	212 (360)	212 (360)	235 (400)	212 (360)	212 (360)	235 (400)
Quiet	CFM (m3/h)	159 (270)	159 (270)	159 (270)	159 (270)	159 (270)	159 (270)
Fan Speed Stages		4+Auto	4+Auto	4+Auto	4+Auto	4+Auto	4+Auto
<b>Sound Levels (Clg / Htg)</b>							
Indoor: Hi	dB(A)	40 / 40	40 / 40	44 / 43	40 / 40	40 / 40	44 / 43
Medium	dB(A)	35 / 35	35 / 35	38 / 37	35 / 35	35 / 35	38 / 37
Low	dB(A)	29 / 29	29 / 29	31 / 29	29 / 29	29 / 29	31 / 29
Quiet	dB(A)	23 / 23	23 / 23	23 / 23	23 / 23	23 / 23	23 / 23
Outdoor	dB(A)	49 / 50	53 / 52	54 / 54	49 / 50	53 / 52	54 / 54
<b>Electrical</b>							
Voltage / Frequency / Phase		208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Circuit Breaker	Amps	15	15	20	15	15	20
Current Rated / Max: Clg.	Amps	2.9 / 9.3	4.2 / 9.3	5.1 / 9.8	2.9 / 10.3	4.2 / 10.3	5.1 / 10.8
Current Rated/Max: Htg.	Amps	4.1 / 10.8	6.7 / 10.8	7 / 13.8	4.1 / 11.8	6.7 / 11.8	7 / 14.8
Power Use Rated / Max: Clg.	kW	0.56 / 2.05	0.97 / 2.05	1.13 / 2.16	0.56 / 2.05	0.91 / 2.05	1.13 / 2.16
Power Use Rated / Max: Htg.	kW	0.88 / 2.62	1.44 / 2.62	1.58 / 3.30	0.88 / 2.62	1.44 / 2.62	1.58 / 3.30
<b>Size &amp; Weight</b>							
Net Weight	lbs. (kg)	31 (14)	84 (38)	31 (14)	86 (39)	31 (14)	88 (40)
Dimensions: Height	in	23-5/8	24-7/16	23-5/8	24-7/16	23-5/8	24-7/16
	mm	600	620	600	620	600	620
Width	in	29-1/8	31-1/8	29-1/8	31-1/8	29-1/8	31-1/8
	mm	740	790	740	790	740	790
Depth	in	7-7/8	11-7/16	7-7/8	11-7/16	7-7/8	11-7/16
	mm	200	290	200	290	200	290
Refrigerant		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
<b>Additional Data</b>							
Air Direction: Horizontal		Manual	Manual	Manual	Manual	Manual	Manual
Vertical		Auto	Auto	Auto	Auto	Auto	Auto
Air Filter Type		Washable	Washable	Washable	Washable	Washable	Washable
Min. Lineset Length	ft (m)	10 (3)	10 (3)	10 (3)	10 (3)	10 (3)	10 (3)
Max. Lineset Length	ft (m)	66 (20) (pre-charge: 49')	66 (20) (pre-charge: 49')	66 (20) (pre-charge: 49')	66 (20) (pre-charge: 49')	66 (20) (pre-charge: 49')	66 (20) (pre-charge: 49')
Max. Vertical Diff.	ft (m)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4

\*Based on nominal capacity (e.g. 09AJ2S based on 9,000 BTU/h) @ 70°F indoor setpoint. Refer to the Design & Technical Manual for more heating capacity data.



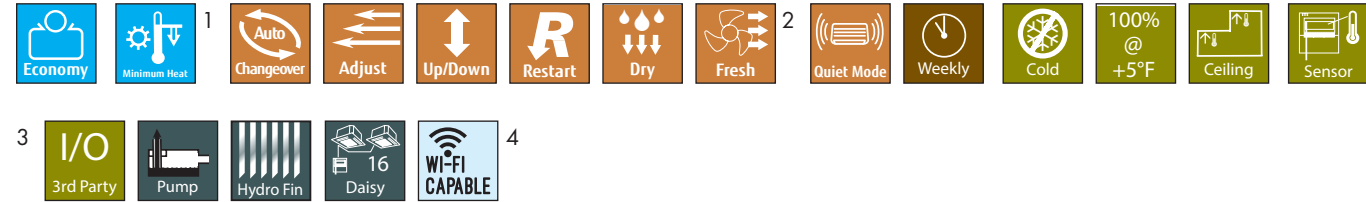
# 9, 12, 18,000 BTU/h Compact Cassette Heat Pumps

# Systems

09AJ8S, 12AJ8S, 18AJ8S



**Compact Cassette Grille RXCCGFGA shown is sold separately and must be ordered with each compact cassette.**



- 1 Available only with optional wireless remote control.
- 2 Requires Ruud's Optional Fresh Air Kit part #RXVXAA. Allows for a 4-inch duct connection. Requires a field-supplied duct booster fan capable of 60 CFM at .2" W.C. or 90 CFM at .4" W.C. For fan static pressure requirements, see installation manual.
- 3 Available only with optional wired remote control.
- 4 See page 13 for details.

## Product Features:

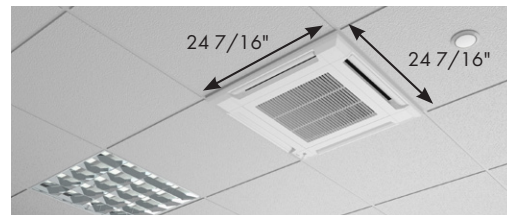
- Works with Amazon Alexa and Google Home\*
- Compatible with 2-wire wired remote controllers
- Revamped controls platform, featuring two communication ports allows, simultaneous connection of wired controller, Wi-Fi adapter and 3rd party devices (such as field-supplied auxiliary heater, humidifier etc.)
- Service menu through RXRNRUZ5 simplifies system and sensor monitoring and troubleshooting
- Extended piping length for 18k systems
- Built-in condensate drain pump

\*Wi-Fi module required.

## Flexible Installation

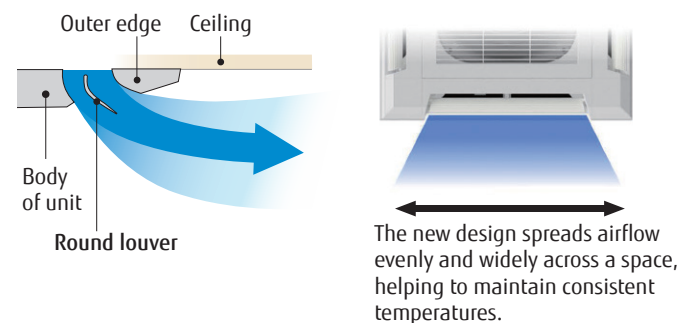
Since this panel fits into a standard ceiling grid, it can be installed in various locations. For example, you can install it next to recessed ceiling light fixtures.

- Compact outdoor unit and extended line set lengths add flexibility and simplifies the installation process.
- Washable filter factory provided with grille (RXCCGFGA). Sold separately.
- Unique fan design (laminar wing design) provides whisper-quiet operation with sound pressure levels as low as 27dB.



## Consistent Airflow Distribution

- The louver design maintains uniform room temperature by evenly spreading air throughout the space.
- Compact and stylish design of the cassette grille fits perfectly into a standard 24" square ceiling grid, without overlapping of adjacent ceiling tiles (Grille sold separately).



## Optional Accessories

- Wired Remote Controller..... RXRNRUZ Series
- Simple Remote Controller..... RXRSRY / RXRHRY
- Wireless Remote Controller..... RXLNTU
- 24V Thermostat Interface ..... RXTTRXZ1
- Modbus Converter ..... RXVMSX
- External Input and Output PCB..... RXXCSXZ1 + RXGXEA
- External Connect Kit ..... RXXWZXZG
- Fresh Air Intake Kit..... RXVXAA
- Air Outlet Shutter Plate ..... RXYDZB
- Insulation Kit..... RXXKXGC

UP TO 22.5 SEER2		09AJ8S		12AJ8S		18AJ8S		
<b>Performance</b>								
Rated Cooling	BTU/h	9,000		12,000		17,100		
Min.-Max. Cooling	BTU/h	3,100-11,000		3,100-13,600		3,100-20,100		
Rated Heating	BTU/h	12,000		16,000		21,600		
Min.-Max. Heating	BTU/h	3,100-16,000		3,100-19,400		3,100-23,900		
SEER	SEER2	BTU/hW	22.5	23.5	22.1	23	20.8	21.5
HSPF	HSPF2	BTU/hW	12.5	11.8	12.2	11.3	11.6	11.2
EER	EER2	BTU/hW	13.6	13.6	12.8	12.8	12.5	12.5
ENERGY STAR® Rating*		ES, ESCC, ESME		ES, ESCC, ESME		ES, ESCC, ESME		
Cooling Operating Range	°F (°C)	14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		14 to 115 (-10 to 46)		
Heating Operating Range	°F (°C)	-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		
Moisture Removal	Pt./h (l/h)	1.3 (.06)		2.5 (1.2)		4.6 (2.2)		
<b>Fan (Cooling Mode)</b>								
Air Circulation: Hi	CFM (m3/h)	318 (540)		359 (610)		436 (740)		
Medium	CFM (m3/h)	288 (490)		312 (530)		341 (580)		
Low	CFM (m3/h)	259 (440)		277 (470)		288 (490)		
Quiet	CFM (m3/h)	230 (390)		241 (410)		241 (410)		
Fan Speed Stages		4+auto		4+auto		4+auto		
<b>Sound Levels (Clg / Htg)</b>								
Indoor: Hi	dB(A)	33 / 34		37 / 37		42 / 44		
Medium	dB(A)	32 / 32		33 / 33		36 / 40		
Low	dB(A)	29 / 29		31 / 31		32 / 36		
Quiet	dB(A)	28 / 27		28 / 28		28 / 30		
Outdoor	dB(A)	44 / 48		48 / 49		52 / 55		
<b>Electrical</b>								
Voltage / Frequency / Phase		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1		
Circuit Breaker	Amps	15		15		20		
Current Rated / Max: Clg.	Amps	3.3 / 6.8		4.2 / 9.8		6.1 / 11.8		
Current Rated / Max: Htg.	Amps	4.6 / 9.3		6.4 / 11.3		8.1 / 14.8		
Power Use Rated / Max: Clg.	kW	0.66 / 1.05		0.94 / 1.79		1.37 / 2.35		
Power Use Rated / Max: Htg.	kW	0.93 / 1.72		1.44 / 1.79		1.81 / 2.50		
<b>Size &amp; Weight</b>								
Net Weight	lbs. (kg)	33 (15)	71 (32)	33 (15)	84 (38)	33 (15)	86 (39)	
Dimensions: Height	in	9-5/8	21-5/16	9-5/8	24-7/8	9-5/8	24-7/8	
	mm	245	542	245	632	245	632	
Width	in	22-7/16	31-7/16	22-7/16	31-7/16	22-7/16	31-7/16	
	mm	570	799	570	799	570	799	
Depth	in	22-7/16	11-7/16	22-7/16	11-7/16	22-7/16	11-7/16	
	mm	570	290	570	290	570	290	
Refrigerant		R-410A		R-410A		R-410A		
<b>Additional Data</b>								
Air Direction: Vertical		Automatic		Automatic		Automatic		
Air Filter Type		Washable		Washable		Washable		
Min. Lineset Length	ft (m)	16 (5)		16 (5)		16 (5)		
Max. Lineset Length	ft (m)	66 (20) [pre-charge: 49']		66 (20) [pre-charge: 49']		98 (30) [pre-charge: 66']		
Max. Vertical Diff.	ft (m)	49 (15)		49 (15)		49 (15)		
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 1/2	Liq. 1/4	
		Indoor RICHHZ09AJ8S	Outdoor RO1HHZ09AJ8S	Indoor RICHHZ12AJ8S	Outdoor RO1HHZ12AJ8S	Indoor RICHHZ18AJ8S	Outdoor RO1HHZ18AJ8S	

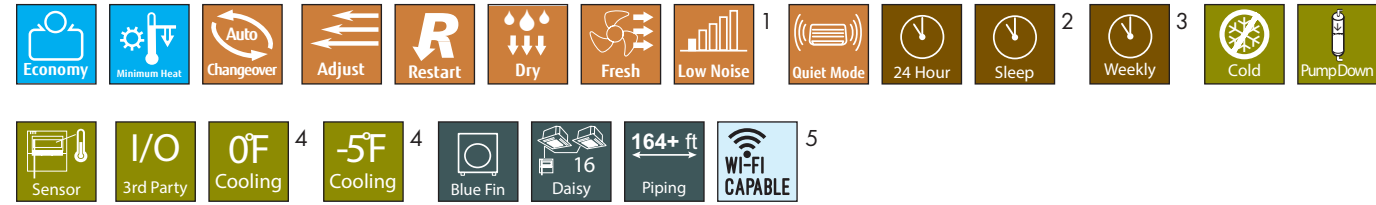
Grille: RXCCGFGA		
Dimensions	in	mm
Height	1-15/16	49
Width	24-7/16	620
Depth	24-7/16	620





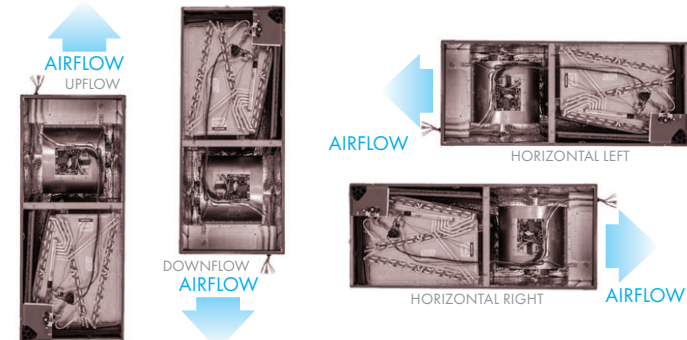
# 24, 30, 36, 48,000 BTU/h Multi-position Air Handler Units

Leveraging our cutting edge inverter technology, Ruud® Air Handlers combine our revolutionary side discharge outdoor units with a modular design indoor unit. The result: high efficiency, space saving and quiet single-zone systems with no compromise.



1 Does not apply to 24AJ2S and 30AJ2S.  
 2 Available only with optional wireless remote control.  
 3 Available only with optional wired remote control.  
 4 Does not apply to systems 36AJVUA and 48AJVUA.  
 5 See page 13 for details.

## System Features



- **True Multi-position Design** — Up flow, down flow and horizontal
- **High Energy Saving** — Inverter driven heat pump, high efficiency ECM motor and all-aluminum indoor unit coil

## Significantly Quieter

Experience peace and tranquility using cutting-edge technology. Mini-splits offer remarkably quiet operation, ensuring a serene ambiance in any setting.



## Outdoor Unit Features

- Fully communicating heat pump with conventional multi-position air handler. Ideal solution for installations with limited space
- Variable speed inverter-driven compressor for optimum system operation and comfort
- Outdoor sound levels as low as 52 dBA
- High efficiency DC motor

## Optional Accessories

- Wired Remote Controller.....RXRNRUZ Series
- Simple Remote Controller.....RXRSRY / RXRHRY
- IR Receiver Kit & Remote .....RXLTUM
- 24V Thermostat Interface .....RXTRXZ1
- Modbus Converter .....RXVMSX
- External Input and Output PCB.....RXXSXZ1 + RXGXRA
- Remote Sensor Kit.....RXXSZXZ1
- External Connect Kit .....RXXWZXZG
- MP AHU Wire Kit .....RXXWZXZJ

## Indoor Unit Features

- All-aluminum indoor unit coil
- High static pressure, up to 1.0 inWG
- Indoor sound levels as low as 24 dBA
- Adaptive fan motor control — Optimum indoor comfort
- Minimal clearance on three sides. Only 24 in clearance on the front for service.
- Downflow and Horizontal Right kits provided with each AHU at no additional cost
- Factory provided and field installed electric heat kit - Up to 15.5kW (Optional)
- External Input / Output Interface — Interlock with 3rd party systems. (Optional)
- (Optional) Fully communicating zoning kit

## Systems

24HJVXA, 30HJVXA, 36HJVXA, 48HJVXA

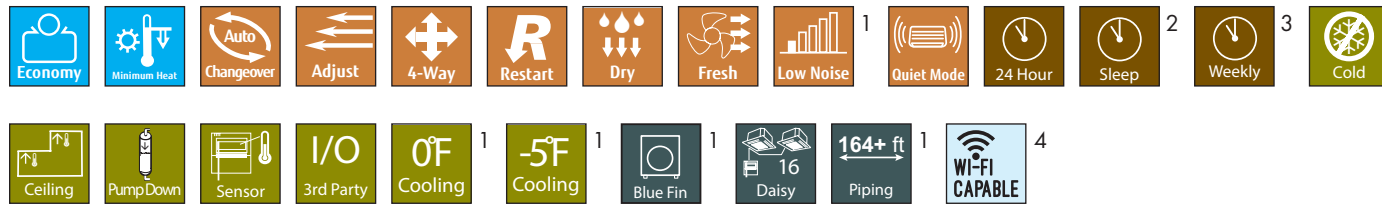
## High Heat Systems

30JHUA, 36JHUA, 48JHUA

UP TO 19 SEER2		24HJVXA	30HJVXA	36HJVXA	48HJVXA	30AJHUA	36AJHUA	48AJHUA	
<b>Performance</b>									
Rated Cooling	BTU/h	24,000	30,000	36,000	45,600	28,600	33,000	45,500	
Min.–Max. Cooling	BTU/h	5,400–28,000	9,600–35,000	13,000–38,000	13,000–48,000	9,600–35,000	13,000–39,000	13,000–50,000	
Rated Heating	BTU/h	27,000	32,000	42,000	53,000	32,000	38,000	51,000	
Min.–Max. Heating	BTU/h	5,400–32,000	9,200–38,000	11,000–52,000	11,000–54,000	9,200–39,000	15,000–52,000	15,000–55,000	
SEER	SEER2	BTU/hW	-- 18.8	-- 18.5	17 17.1	17 16.2	19.1 18.8	17.3 17.1	16.3 16.6
HSPF	HSPF2	BTU/hW	-- 10	-- 9.5	10.2 8.8	10.2 9.2	10.5 9.7	11 10.4	10.2 10
EER	EER2	BTU/hW	-- 11.7	-- 10	11.3 10.7	8.2 8.2	12 11.7	11.5 11	9.1 8.8
ENERGY STAR® Rating*		ES, ESCC		ESCC		ESCC		ESCC	
Clg. Operating Range	°F (°C)	-5 to 115 (-21 to 46)		14 to 115 (-10 to 46)		-5 to 115 (-21 to 46)		-5 to 115 (-21 to 46)	
Htg. Operating Range	°F (°C)	-5 to 75 (-21 to 24)		-4 to 75 (-20 to 24)		-15 to 75 (-26 to 24)		-15 to 75 (-26 to 24)	
Moisture Removal	Pt./h (l/h)	5.5 (2.6)		8.2 (3.9)		7.2 (3.4)		9.3 (4.4)	
<b>Fan (Cooling Mode)</b>									
Air Circulation: Hi	CFM (m <sup>3</sup> /h)	800 (1,359)		870 (1,478)		1,200 (2,039)		1,640 (2,786)	
Medium	CFM (m <sup>3</sup> /h)	670 (1,138)		730 (1,240)		740 (1,257)		1,020 (1,733)	
Low	CFM (m <sup>3</sup> /h)	590 (1,002)		590 (1,002)		820 (1,393)		590 (1,002)	
Quiet	CFM (m <sup>3</sup> /h)	310 (527)		310 (527)		490 (833)		590 (1,002)	
Fan Speed Stages		4 + Auto		4 + Auto		4+Auto		4+Auto	
<b>Sound Levels (Clg / Htg)</b>									
Indoor: Hi	dB(A)	40 / 37		42 / 39		41 / 40		48 / 47	
Medium	dB(A)	34 / 33		37 / 36		30 / 35		36 / 37	
Low	dB(A)	32 / 31		33 / 36		27 / 28		31 / 32	
Quiet	dB(A)	26 / 25		28 / 25		24 / 26		25 / 29	
Outdoor	dB(A)	52 / 54		53 / 55		53 / 54		54 / 55	
<b>Electrical</b>									
Voltage / Frequency / Phase		208–230 / 60 / 1		208–230 / 60 / 1		208–230 / 60 / 1		208–230 / 60 / 1	
Circuit Breaker	Amps	20		25		40		35	
Current Rated/Max. Clg.	Amps	9.1 / 15.8		13.4 / 18.3		14.8 / 32.4		24.4 / 32.4	
Current Rated/Max. Htg.	Amps	10.3 / 15.8		12.5 / 18.3		17 / 32.4		23.8 / 32.4	
Power Use Rated/Max. Clg.	kW	2.05 / 2.96		3 / 4.08		3.36 / 3.52		5.56 / 5.94	
Power Use Rated/Max. Htg.	kW	2.31 / 3.15		2.82 / 4.21		3.85 / 5.39		5.43 / 5.42	
<b>Size &amp; Weight</b>									
Net Weight	lbs. (kg)	104 (47.0) 117 (53)		104 (47.0) 139 (63)		132 (60) 198 (90)		132 (60) 198 (90)	
Dimensions: Height	in	42-1/2 31		42-1/2 39-5/16		57 39-5/16		57 39-5/16	
	mm	1,080 788		1,080 998		1,448 998		1,448 998	
Width	in	21 37		21 37		21 38-3/16		21 38-3/16	
	mm	533 940		533 940		533 970		533 970	
Depth	in	21-11/16 12-5/8		21-11/16 12-5/8		21-11/16 14-9/16		21-11/16 14-9/16	
	mm	551 320		551 320		551 370		551 370	
Refrigerant		R-410A		R-410A		R-410A		R-410A	
<b>Additional Data</b>									
Static Pressure Range	inWG(Pa)	0.08 to 1.00 (20 to 250)		0.08 to 1.00 (20 to 250)		0.08 to 1 (20 to 250)		0.08 to 1 (20 to 250)	
Min. Lineset Length	ft (m)	16 (5)		16 (5)		16 (5)		16 (5)	
Max. Lineset Length	ft (m)	164 (50) (pre-charge 66')		164 (50) (pre-charge 66')		230 (70) (pre-charge 98')		230 (70) (pre-charge 98')	
Max. Vertical Diff.	ft (m)	98 (30)		98 (30)		98 (30)		98 (30)	
Lineset Size	in	Gas 5/8 Liq. 3/8		Gas 5/8 Liq. 3/8		Gas 5/8 Liq. 3/8		Gas 5/8 Liq. 3/8	
		Indoor RHMVZ2421 MNAUNJ	Outdoor RD16AZ24AJVUA	Indoor RHMVZ3021 SNAUNJ	Outdoor RD16AZ30AJHUA	Indoor RHMVZ3621 MNAUAJ	Outdoor RD16AZ36AJHUA	Indoor RHMVZ4821 SNAUNJ	Outdoor RD16AZ48AJHUA

**NOTE:** Figures are based on 230 Volts.

# 18, 24, 30, 36,000 BTU/h Ceiling Suspended Heat Pumps



1 Does not apply to 18AJ8S.  
 2 Available only with optional wireless remote control.  
 3 Available only with optional wired remote control.  
 4 See page 13 for details.

## Applications

Introducing the new ceiling suspended 18-36AJ8S units, the perfect solution for those looking for an efficient and stylish way to control the temperature in their space. These models are designed to be installed on the ceiling, providing optimal air circulation and satisfying your heating or cooling needs. The sleek and modern design of these models blend seamlessly into any decor, making it a stylish addition to any room with high ceilings up to 14 ft. The ceiling suspended models offer a range of features to ensure maximum comfort, including adjustable airflow and temperature settings, programmable timers and energy-saving modes. With its quiet operation, you'll hardly notice it's even there.

## Optional Accessories

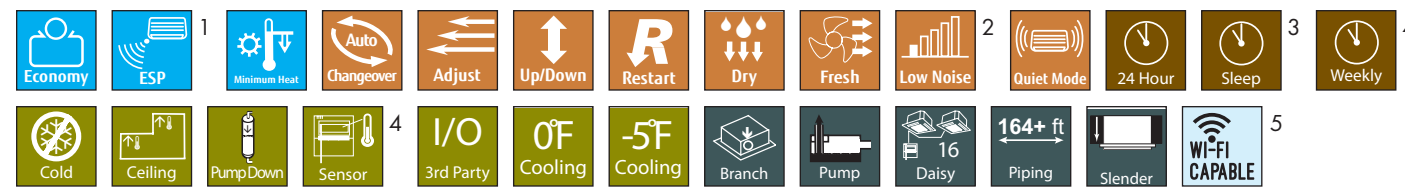
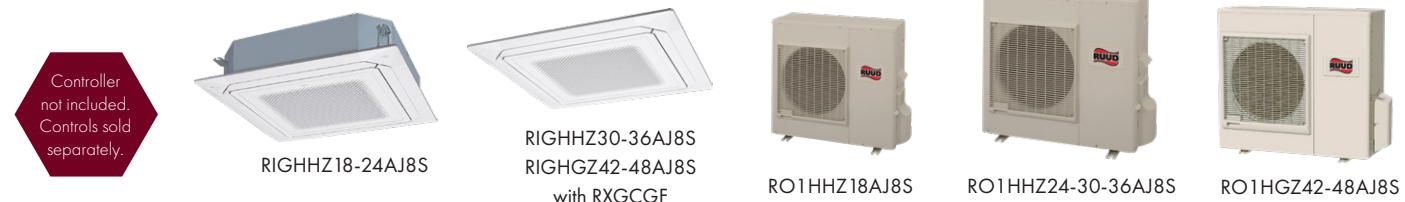
Wired Remote Controller..... RXRNRUZ Series  
 Simple Remote Controller..... RXRSRY / RXRHRY  
 IR Receiver Kit & Remote ..... RXLBTUH  
 24V Thermostat Interface ..... RXTRXZ1  
 Modbus Converter ..... RXVMSX  
 External Input and Output PCB..... RXXCSXZ1 + RXGXE  
 External Connect Kit ..... RXXWZXZG  
 Drain Pump Unit..... RXPUIEBB



UP TO 22.5 SEER2		18AJ8S	24AJ8S	30AJ8S	36AJ8S				
<b>Performance</b>									
Rated Cooling	BTU/h	18,000	24,000	30,000	36,000				
Min.-Max. Cooling	BTU/h	3,100-20,100	5,400-28,000	9,600-35,000	9,600-39,000				
Rated Heating	BTU/h	21,600	27,000	32,000	38,000				
Min.-Max. Heating	BTU/h	3,100-25,600	5,400-32,000	9,200-38,000	9,200-43,000				
SEER2	BTU/hW	22.5	21.5	20	19.5				
HSPF2	BTU/hW	10.6	10.5	10.5	10				
EER2	BTU/hW	12.5	12.3	10.8	9.6				
ENERGY STAR® Rating*		ES, ESCC, ESME	ES, ESCC, ESME	ESCC	ESCC				
Clg. Operating Range	°F (°C)	14 to 115 (-10 to 46)	-5 to 115 (-21 to 46)	-5 to 115 (-21 to 46)	-5 to 115 (-21 to 46)				
Htg. Operating Range	°F (°C)	-5 to 75 (-21 to 24)	-5 to 75 (-21 to 24)	-5 to 75 (-21 to 24)	-5 to 75 (-21 to 24)				
Moisture Removal	Pt./h (l/h)	4.9 (2.3)	6.1 (2.9)	8.2 (3.9)	7.8 (3.7)				
<b>Fan (Cooling Mode)</b>									
Air Circulation: Hi	CFM (m3/h)	494 (840)	724 (1,230)	824 (1,400)	494 (840)				
Medium	CFM (m3/h)	465 (790)	583 (990)	659 (1,120)	465 (790)				
Low	CFM (m3/h)	418 (710)	506 (860)	577 (980)	418 (710)				
Quiet	CFM (m3/h)	383 (650)	412 (700)	471 (800)	383 (650)				
Fan Speed Stages		4 + Auto	4 + Auto	4 + Auto	4 + Auto				
<b>Sound Levels (Clg/Htg)</b>									
Indoor: Hi	dB(A)	38 / 38	41 / 41	45 / 45	38 / 38				
Medium	dB(A)	36 / 36	36 / 36	40 / 40	36 / 36				
Low	dB(A)	33 / 33	32 / 32	35 / 35	33 / 33				
Quiet	dB(A)	31 / 31	29 / 29	32 / 32	31 / 31				
Outdoor	dB(A)	52 / 55	52 / 54	53 / 55	54 / 56				
<b>Electrical</b>									
Voltage / Frequency / Phase		208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1				
Circuit Breaker	Amps	20	20	25	25				
Current Rated/Max. Clg.	Amps	6.4 / 11.8	8.7 / 15.8	12.3 / 18.3	16.5 / 19.8				
Current Rated/Max. Htg.	Amps	8.8 / 14.8	9 / 15.8	11 / 18.3	13 / 19.8				
Power Use Rated/Max. Clg.	kW	1.44 / 2.01	1.95 / 2.82	2.78 / 3.63	3.75 / 4.22				
Power Use Rated/Max. Htg.	kW	1.98 / 2.86	2.04 / 3.0	2.48 / 3.83	2.96 / 4.13				
<b>Size &amp; Weight</b>									
Net Weight	lbs. (kg)	53 (24)	86 (39)	68 (31)	117 (53)	68 (31)	139 (63)	57 (26)	139 (63)
Dimensions: Height	in	9-1/4	24-7/8	9-1/4	31	9-1/4	39-5/16	11-5/16	39-5/16
	mm	235	632	235	788	235	998	288	998
Width	in	42-1/2	31-7/16	54-3/4	37	54-3/4	37	33-1/16	37
	mm	1,080	799	1,390	940	1,390	940	840	940
Depth	in	27-3/4	11-7/16	27-3/4	12-5/8	27-3/4	12-5/8	33-1/16	12-5/8
	mm	705	290	705	320	705	320	840	320
Refrigerant		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
<b>Additional Data</b>									
Min. Lineset Length	ft (m)	16 (5)	16 (5)	16 (5)	16 (5)				
Max. Lineset Length	ft (m)	98 (30) Precharge 66'	164 (50) Precharge 66'	164 (50) Precharge 66'	164 (50) Precharge 66'				
Max. Vertical Diff.	ft (m)	49 (15)	98 (30)	98 (30)	98 (30)				
Lineset Size	in	Gas 1/2	Liq. 1/4	Gas 5/8	Liq. 3/8	Gas 5/8	Liq. 3/8	Gas 5/8	Liq. 3/8
		Indoor RISHHZ18AJ8S	Outdoor RO1HHZ18AJ8S	Indoor RISHHZ24AJ8S	Outdoor RO1HHZ24AJ8S	Indoor RISHHZ30AJ8S	Outdoor RO1HHZ30AJ8S	Indoor RISHHZ36AJ8S	Outdoor RO1HHZ36AJ8S



# 18, 24, 30, 36, 42, 48,000 BTU/h Large Cassette Circular Flow Heat Pumps



1 Available only with optional part RXSHZXC.  
2 42, 48,000 BTU/h systems only.  
3 Available only with optional wireless remote control.  
4 Available only with optional wired remote control.  
5 See page 13 for details.

## Better Air Distribution Using 360-Degree Louvers

Circular flow design allows conditioned air to reach every corner of a room.



## Grilles

**NOTE:** AJ8S Large Cassette grilles are sold separately.

Circular flow cassette grilles must be ordered with each cassette.

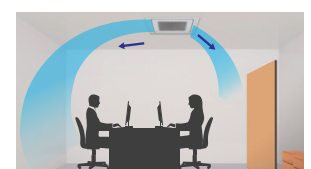


## Individual Louver Control

Each louver can be positioned individually to deliver comfortable air exactly where you want it in any room configuration. To take advantage of this feature use Wired Remote Control (Touch Panel) RXRNRUZ Series.



Individual louvers can be programmed separately. Adjust vertical airflow and louver position with RXRNRUZ Series Wired Remote Control.



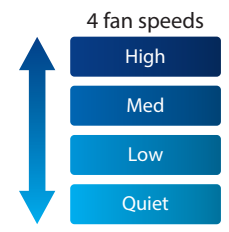
Airflow fan speed can be customized depending on room layout.

## Optional Accessories

- Wired Remote Controller..... RXRNRUZ Series
- Simple Remote Controller..... RXRSRY / RXRHRY
- IR Receiver Kit & Remote ..... RXLBTUC
- 24V Thermostat Interface ..... RXTRRXZ1
- Modbus Converter ..... RXVMSX
- External Input and Output PCB..... RXXCSXZ1 + RXGXRA
- Human Sensor Kit..... RXSHZXC
- External Connect Kit ..... RXXWZXZG
- Fresh Air Intake Kit..... RXKHRS940-25
- Fresh Air Kit..... UTZ-VXRA
- Air Outlet Shutter Plate ..... RXYZDK
- Wide Panel ..... RXAKXA-W
- Panel Spacer..... RXBKXA-W

## Quiet Operation and Four Fan Speed Control

With the new airflow structure, sound levels are drastically reduced. Circular flow cassette models operate at whisper quiet sound levels. Choose from four different fan speeds.



\*Compatible Remote Controller is as follows:  
RXRNRUZ2 / RXRSRY / RXRHRY / RXLBTUC

UP TO 22.5 SEER2		18AJ8S	24AJ8S	30AJ8S	36AJ8S	42AJ8S	48AJ8S
<b>Performance</b>							
Rated Cooling	BTU/h	18,000	24,000	30,000	36,000	42,000	48,000
Min.-Max. Cooling	BTU/h	3,100-20,100	5,400-28,000	9,600-35,000	9,600-39,000	17,100-45,000	17,100-50,000
Rated Heating	BTU/h	21,600	27,000	32,000	38,000	47,000	53,000
Min.-Max. Heating	BTU/h	3,100-25,600	5,400-32,000	9,200-38,000	9,200-43,000	18,000-51,000	18,000-55,000
SEER	SEER2	--	23.5	--	23	--	21.5
HSPF	HSPF2	--	11.2	--	11	--	10.6
EER	EER2	--	13	--	12.6	--	11.7
ENERGY STAR® Rating*		ES, ESCC, ESME		ES, ESCC, ESME		ESCC	
Clg. Operating Range	°F (°C)	14 to 115 (-10 to 46)		-5 to 115 (-21 to 46)		-5 to 115 (-21 to 46)	
Htg. Operating Range	°F (°C)	-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)		-5 to 75 (-21 to 24)	
Moisture Removal	Pt./h (l/h)	3.6 (1.7)		6.1 (2.9)		6.3 (3.0)	
<b>Fan (Cooling Mode)</b>							
Air Circulation: Hi	CFM (m3/h)	618 (1,050)		677 (1,150)		942 (1,600)	
Medium	CFM (m3/h)	565 (960)		618 (1,050)		848 (1,440)	
Low	CFM (m3/h)	530 (900)		577 (980)		771 (1,310)	
Quiet	CFM (m3/h)	459 (780)		512 (870)		677 (1,150)	
Fan Speed Stages		4 + Auto		4 + Auto		4 + Auto	
<b>Sound Levels (Clg / Htg)</b>							
Indoor: Hi	dB(A)	34 / 34		36 / 36		40 / 40	
Medium	dB(A)	32 / 32		34 / 34		38 / 38	
Low	dB(A)	31 / 31		33 / 33		36 / 36	
Quiet	dB(A)	28 / 28		30 / 30		33 / 33	
Outdoor	dB(A)	52 / 55		52 / 54		53 / 55	
<b>Electrical</b>							
Voltage / Frequency / Phase		208-230 / 60 / 1		208-230 / 60 / 1		208-230 / 60 / 1	
Circuit Breaker	Amps	20		25		30	
Current Rated / Max: Clg.	Amps	6.1 / 11.8		8.4 / 15.8		11.3 / 18.3	
Current Rated / Max: Htg.	Amps	7.8 / 14.8		9.2 / 15.8		10.4 / 18.3	
Power Use Rated / Max: Clg.	kW	1.38 / 1.94		1.9 / 2.82		2.56 / 3.69	
Power Use Rated / Max: Htg.	kW	1.76 / 2.7		2.08 / 2.9		2.36 / 3.61	
<b>Size &amp; Weight</b>							
Net Weight	lbs. (kg)	53 (24) / 86 (39)		53 (24) / 117 (53)		57 (26) / 139 (63)	
Dimensions: Height	in	9-11/16 / 24-7/8		9-11/16 / 31		11-5/16 / 39-5/16	
	mm	246 / 632		246 / 788		288 / 998	
Width	in	33-1/16 / 31-7/16		33-1/16 / 37		33-1/16 / 37	
	mm	840 / 799		840 / 940		840 / 940	
Depth	in	33-1/16 / 11-7/16		33-1/16 / 12-5/8		33-1/16 / 12-5/8	
	mm	840 / 290		840 / 320		840 / 320	
Refrigerant		R-410A		R-410A		R-410A	
<b>Additional Data</b>							
White Grille (RXGCGF) or Black Grille (UTG-LCGVCB) Sold Separately							
Min. Lineset Length	ft (m)	16 (5)		16 (5)		16 (5)	
Max. Lineset Length	ft (m)	98 (30)		164 (50)		164 (50)	
Max. Vertical Diff.	ft (m)	49 (15)		98 (30)		98 (30)	
Lineset Size	in	Gas 1/2	Liq. 1/4	Gas 5/8	Liq. 3/8	Gas 5/8	Liq. 3/8
		Indoor RIGHHZ18AJ8S	Outdoor RO1HHZ18AJ8S	Indoor RIGHHZ24AJ8S	Outdoor RO1HHZ24AJ8S	Indoor RIGHHZ30AJ8S	Outdoor RO1HHZ30AJ8S
		Indoor RIGHHZ36AJ8S	Outdoor RO1HHZ36AJ8S	Indoor RIGHHZ42AJ8S	Outdoor RO1HHZ42AJ8S	Indoor RIGHGZ48AJ8S	Outdoor RO1HGZ48AJ8S



## MULTI-ZONE MINI-SPLIT SYSTEMS

- Operate as few as one indoor unit or all indoor units
- Choose from four indoor unit styles—wall mount, slim duct, compact cassette and floor mount
- Many combinations are ENERGY STAR® qualified
- Create hundreds of combinations based on indoor type and BTU/h
- Connect 2 to 5 indoor units, depending on model
- Connect 14,000 to 54,000 BTU/h

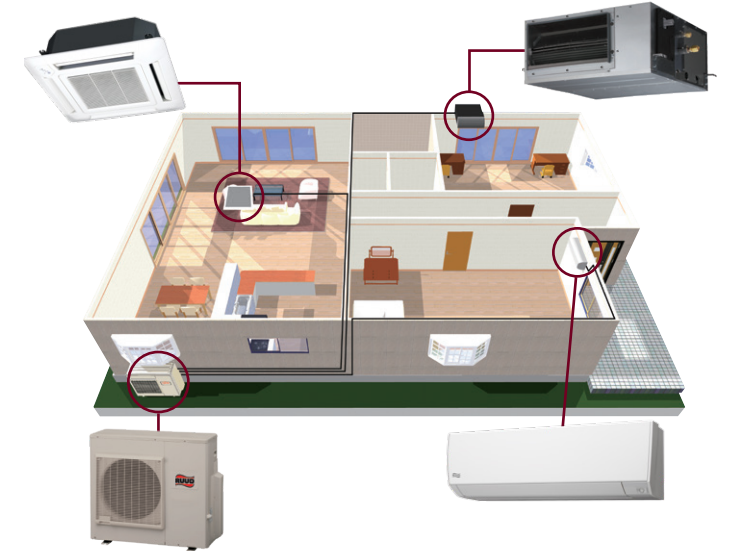
## MULTI-ZONE LOW TEMPERATURE HEATING OPERATION

- Connect 2 to 4 indoor units, depending on model
- Connect 14,000 to 39,000 BTU
- Low temp heating operation down to -15°F outdoor temps



## YEAR-ROUND, WHOLE-HOME OR BUSINESS COMFORT

Ductless systems are one of today's most advanced forms of heating and cooling. Multi-zone outdoor units can operate from 2 to 5 indoor units simultaneously. Ruud® Mini-split systems are super quiet as well as highly energy efficient.



## MULTI-ZONE AND LOW TEMPERATURE HEATING OPERATION SYSTEMS

18, 24, 36 and 45,000 BTU/h

RO2HFZ18AJ2S	RO3HFZ24AJ2S	RO4HFZ36AJ2S	RO5HFZ45AJ2S
RO2HFZ18AJ1H	RO3HFZ24AJ1H	RO4HFZ36AJ1H	

### Connectable Capacity

This allows connectable indoor units' total capacity to exceed outdoor unit capacity. See Allowable Combination Table on page 60.

If all indoor units are cooling or heating at the same time, the system will limit their capacity so that their total matches the outdoor unit capacity. When a zone meets a desired set temperature it requires less capacity. The unused capacity is then distributed to the remaining indoor units, increasing their capacity.

### For Example

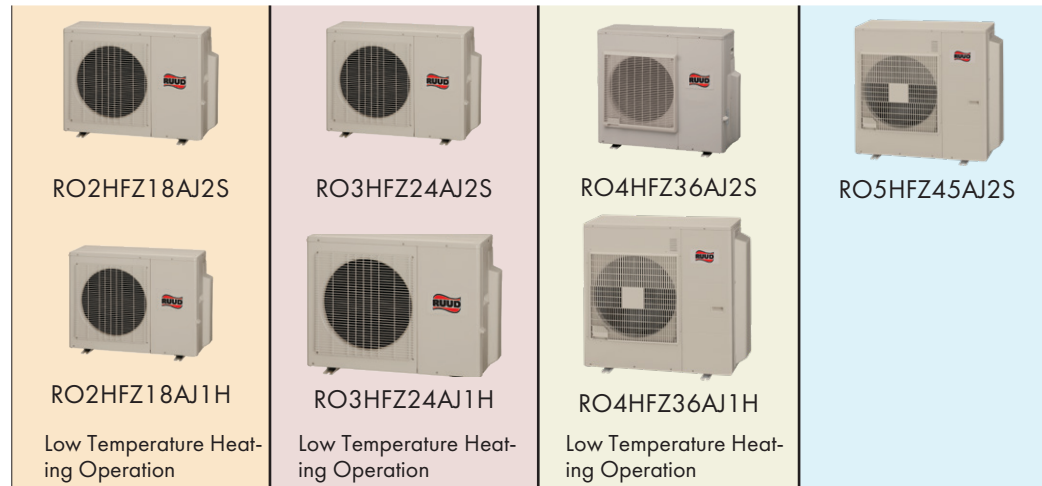
The load on a 3-bedroom home with a living room and kitchen downstairs and 3 bedrooms upstairs is 39,000 BTU/h (21,000 BTU downstairs and 18,000 BTU upstairs). However, typically a family isn't upstairs and downstairs at the same time, therefore not all units will be running simultaneously, allowing 100% heating or cooling to occupied spaces. This can be achieved by our RO4HFZ36AJ2S outdoor unit.



## Mix-and-Match Flexibility

Ruud® Multi-zone Mini-splits give you the ability to create the **right** combinations, the **right** quantity (up to 5 zones), the **right** style indoor units and the **right** capacity. It's the **RIGHT** choice for your home or business.

MULTI-ZONE OUTDOOR UNITS



MULTI-ZONE INDOOR UNITS

WALL MOUNTS				
UIWHHZ07, 09, 12AJ3S	✓	✓	✓	✓
UIWHHZ15AJ3S		✓	✓	✓
UIWHHZ18AJ3S		✓	✓	✓
UIWHHZ24AJ3S			✓	✓
FLOOR MOUNTS				
RIFHFZ9, 12AJ2S	✓	✓	✓	✓
RIFHFZ15AJ2S		✓	✓	✓
SLIM DUCTS				
RIDHHZ07, 09, 12AJ8S	✓	✓	✓	✓
RIDHHZ18AJ8S		✓	✓	✓
RIDHHZ24AJ8S			✓	✓
COMPACT CASSETTES				
RICHHZ07, 09, 12AJ8S	✓	✓	✓	✓
RICHHZ18AJ8S		✓	✓	✓

## Individual Zoning: Personalized Whole-home Comfort

### Wall Mounted

They mount high on a wall, out of sight and do not require ductwork, increasing energy efficiency.

- Quiet operation
- Easy maintenance
- Lower utility bills



### Slim Duct

Slim ducts are mounted in a ceiling or in a framed enclosure below a ceiling. They use minimal ductwork and remain very energy efficient.

- Concealed and out of sight
- Look of central air with the efficiency of a mini-split
- Less ducts = higher efficiency



### Compact Cassette

Cassettes are extremely discreet, with only the grille showing in the ceiling. They use the latest fan technology to distribute the conditioned air evenly.

- Wired remote control (wireless is optional)
- Powerful turbo fan operation
- Fits into a standard 2' x 2' ceiling grid



### Floor Mounted

Floor mount systems are ideal for residential radiator replacements or any room with limited upper wall space, like a kitchen or sunroom.

- Compact size fits easily under a standard window
- Features twin airflow for improved heat delivery
- Designer wireless remote control



# 7, 9, 12, 15, 18, 24,000 BTU/h Wall Mount

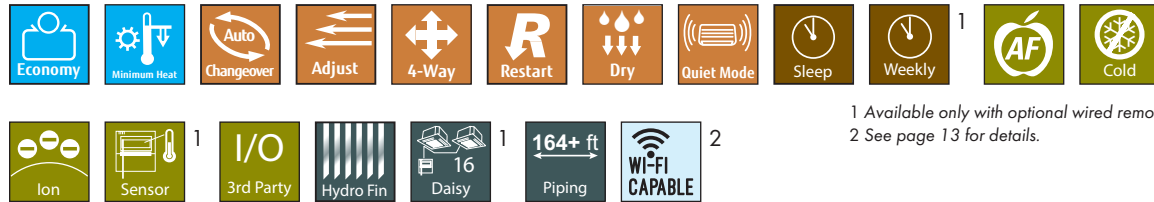
Multi-zone Indoor



UIWHHZ07-09-12-15AJ3S



UIWHHZ18-24AJ3S



1 Available only with optional wired remote control.  
2 See page 13 for details.



## Built-In Filtration

LONG-LIFE ION DEODORIZATION FILTER



The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic. The filter can be used for approximately 3 years if it is washed with water when dirty to restore its surface action.

APPLE-CATECHIN FILTER



Dust, mold spores and micro-organisms are absorbed onto the filter by static electricity so growth is inhibited and deactivated.

# UIWHHZ07AJ3S, UIWHHZ09AJ3S, UIWHHZ12AJ3S, UIWHHZ15AJ3S, UIWHHZ18AJ3S, UIWHHZ24AJ3S

		UIWHHZ07AJ3S	UIWHHZ09AJ3S	UIWHHZ12AJ3S	UIWHHZ15AJ3S	UIWHHZ18AJ3S	UIWHHZ24AJ3S
<b>Performance</b>							
Rated Cooling	BTU/h	7,000	9,000	12,000	14,000	18,000	24,000
Rated Heating	BTU/h	7,500	9,600	12,800	16,000	19,200	25,600
<b>Fan (Cooling Mode)</b>							
Air Circulation: Hi	CFM (m3/h)	383 (650)	412 (700)	412 (700)	453 (770)	530 (900)	642 (1,090)
Medium	CFM (m3/h)	318 (540)	330 (560)	330 (560)	353 (600)	471 (800)	530 (900)
Low	CFM (m3/h)	253 (430)	253 (430)	253 (430)	265 (450)	377 (640)	471 (800)
Quiet	CFM (m3/h)	188 (320)	188 (320)	182 (310)	182 (310)	241 (410)	306 (520)
Fan Speed Stages		4+Auto	4+Auto	4+Auto	4+Auto	4+Auto	4+Auto
<b>Sound</b>							
Indoor Level (Clg/Htg): Hi	dB(A)	38 / 41	40 / 42	40 / 42	43 / 44	44 / 43	49 / 47
Medium	dB(A)	33 / 35	34 / 36	35 / 38	36 / 39	42 / 39	44 / 43
Low	dB(A)	29 / 31	29 / 31	30 / 33	30 / 33	37 / 34	42 / 37
Quiet	dB(A)	21 / 22	21 / 22	21 / 22	21 / 24	26 / 28	31 / 32
<b>Electrical</b>							
Voltage / Frequency / Phase		208 / 230 V 60 Hz	208 / 230 V ~ 60 Hz	208 / 230 V ~ 60 Hz	208 / 230 V ~ 60 Hz	208 / 230 V ~ 60 Hz	208 / 230 V ~ 60 Hz
Current Rated/Max: Cooling	Amps	0.18 / 0.23	0.20 / 0.25	0.24 / 0.3	0.35 / 0.44	0.32 / 0.40	0.46 / 0.58
Current Rated/Max: Heating	Amps	0.18 / 0.23	0.20 / 0.25	0.24 / 0.3	0.35 / 0.44	0.32 / 0.40	0.46 / 0.58
Input Power	W	18	22	26	42	34	55
<b>Size &amp; Weight</b>							
Net Weight	lbs. (kg)	21 (9.5)	21 (9.5)	22 (10.0)	22 (10.0)	29 (13)	29 (13)
Dimensions: Height	in	10-5/8	10-5/8	10-5/8	10-5/8	11	11
	mm	270	270	270	270	280	280
Width	in	32-13/16	32-13/16	32-13/16	32-13/16	38-9/16	38-9/16
	mm	834	834	834	834	980	980
Depth	in	8-3/4	8-3/4	8-3/4	8-3/4	9-7/16	9-7/16
	mm	222	222	222	222	240	240
Refrigerant		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
<b>Additional Data</b>							
Air Direction: Horizontal		Manual	Manual	Manual	Manual	Manual	Manual
Air Direction: Vertical		Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Air Filter Type		Washable	Washable	Washable	Washable	Washable	Washable
Ion Deodorizing Filter		Disposable	Disposable	Disposable	Disposable	Disposable	Disposable
Apple-Catechin Filter		Disposable	Disposable	Disposable	Disposable	Disposable	Disposable
Lineset Size	in	Gas 3/8   Liq. 1/4	Gas 3/8   Liq. 1/4	Gas 3/8   Liq. 1/4	Gas 1/2   Liq. 1/4	Gas 1/2   Liq. 1/4	Gas 5/8*   Liq. 1/4

\* Use the attached adapter to change the pipe size from 1/2 in (12.7 mm) to 5/8 in (15.88 mm)

# 7, 9, 12, 18, 24,000 BTU/h Slim Duct

Multi-zone Indoor

Controller not included. Controls sold separately.



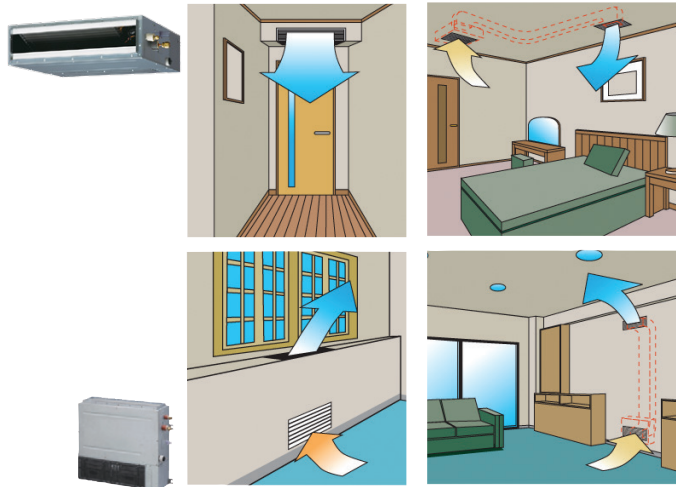
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2

1 Available only with optional wireless remote control.  
2 See page 13 for details.

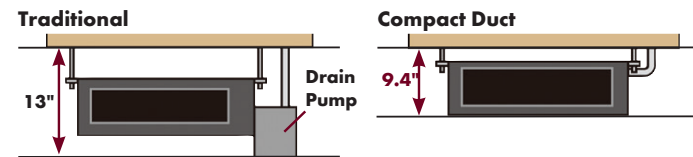
## Flexible Installation

Horizontal or vertical installation. When installed vertically, condensate drain is by gravity only.



## Slim Duct

Excellent to use when ceiling cavity is small and there is no slope for drain.



## Field-supplied Filters

Filters are sized to keep velocities and static pressure loss low. This will ensure sufficient static pressure is available for ductwork, fittings and supply and return grilles. Alternative filter sizes with equivalent face areas can be used.

	RIDHHZ07AJ8S	RIDHHZ09AJ8S	RIDHHZ12AJ8S	RIDHHZ18AJ8S	RIDHHZ24AJ8S
CFM	323	353	383	554	785
Typical Filter Size	12 x 20	12 x 20	12 x 20	14 x 25	18 x 30
Velocity, FPM	194	212	230	228	209
Unit External SP, in. W.C.	0.36	0.36	0.36	0.36	0.20
<b>1" Fiberglass Filter</b>					
*SP Loss, in. W.C.	0.04	0.04	0.05	0.04	0.04
^Available Static Pressure	0.32	0.32	0.31	0.32	0.16
<b>1" MERV 8 Pleated Filter</b>					
*SP Loss, in. W.C.	0.10	0.12	0.14	0.14	0.12
^Available Static Pressure	0.26	0.24	0.22	0.22	0.08
<b>2" MERV 8 Pleated Filter</b>					
*SP Loss, in. W.C.	0.06	0.07	0.08	0.08	0.07
^Available Static Pressure	0.30	0.29	0.28	0.28	0.13

\*Typical filter pressure drop.

^Available Static Pressure factors in filter pressure loss only.

# RIDHHZ07AJ8S, RIDHHZ09AJ8S, RIDHHZ12AJ8S, RIDHHZ18AJ8S, RIDHHZ24AJ8S

		RIDHHZ07AJ8S	RIDHHZ09AJ8S	RIDHHZ12AJ8S	RIDHHZ18AJ8S	RIDHHZ24AJ8S					
<b>Performance</b>											
Rated Cooling	BTU/h	7,000	9,000	12,000	18,000	24,000					
Rated Heating	BTU/h	7,500	9,600	12,800	19,200	25,600					
<b>Fan (Cooling Mode)</b>											
Air Circulation: Hi	CFM (m3/h)	324 (550)	353 (600)	382 (650)	553 (940)	783 (1,330)					
Medium	CFM (m3/h)	288 (490)	324 (550)	353 (600)	518 (880)	730 (1,240)					
Low	CFM (m3/h)	277 (470)	294 (500)	324 (550)	483 (820)	647 (1,100)					
Quiet	CFM (m3/h)	259 (440)	265 (450)	283 (480)	441 (750)	606 (1,030)					
Fan Speed Stages		4 + Auto	4+auto	4+auto	4+auto	4 + Auto					
<b>Sound</b>											
Indoor Level (Clg / Htg): Hi	dB(A)	28 / 28	28 / 28	29 / 29	32 / 33	33 / 35					
Medium	dB(A)	26 / 26	27 / 26	28 / 28	31 / 32	32 / 34					
Low	dB(A)	25 / 25	26 / 25	27 / 27	30 / 31	30 / 32					
Quiet	dB(A)	24 / 24	25 / 24	26 / 24	29 / 29	29 / 29					
<b>Electrical</b>											
Voltage / Frequency / Phase		208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1					
Static Pressure	W.C.	0 to 0.36	0 to 0.36	0 to 0.36	0 to 0.36	0 to 0.2					
Current Rated/Max: Cooling	Amps	0.3 / 0.38	0.3 / 0.38	0.35 / 0.44	0.44 / 0.55	0.66 / 0.83					
Current Rated/Max: Heating	Amps	0.3 / 0.38	0.3 / 0.38	0.35 / 0.44	0.44 / 0.55	0.66 / 0.83					
Input Power	W	33	49	58	73	111					
<b>Size &amp; Weight</b>											
Net Weight	lbs. (kg)	35 (16)	37 (17)	37 (17)	44 (20)	53 (24)					
Dimensions: Height	in	7-13/16	7-13/16	7-13/16	7-13/16	7-13/16					
	mm	198	198	198	198	198					
Width	in	27-9/16	27-9/16	27-9/16	35-7/16	43-5/16					
	mm	700	700	700	900	1,100					
Depth	in	24-7/16	24-7/16	24-7/16	24-7/16	24-7/16					
	mm	620	620	620	620	620					
Supply Duct Flange Dimensions: Height	in	5-15/16	5-15/16	5-15/16	5-15/16	5-15/16					
	mm	151	151	151	151	151					
Width	in	25-9/16	25-9/16	25-9/16	33-7/16	41-11/32					
	mm	650	650	650	850	1,050					
Depth	in	3/4	3/4	3/4	3/4	3/4					
	mm	19	19	19	19	19					
Return Duct Dimensions: Height	in	6-7/8	6-7/8	6-7/8	6-7/8	6-7/8					
	mm	175	175	175	175	175					
Width	in	22-5/8	22-5/8	22-5/8	30-1/2	37-3/4					
	mm	575	575	575	775	959					
Depth	in	3/4 Flat	3/4 Flat	3/4 Flat	3/4 Flat	3/4 Flat					
	mm	19 Flat	19 Flat	19 Flat	19 Flat	19 Flat					
Refrigerant		R-410A	R-410A	R-410A	R-410A	R-410A					
<b>Additional Data</b>											
Air Filter Type		Washable		Washable		Washable		Washable		Washable	
Lineset Size	in	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 3/8	Liq. 1/4	Gas 1/2	Liq. 1/4	Gas 5/8	Liq. 1/4

# 7,9,12,18,000 BTU/h Compact Cassettes

Multi-zone Indoor

Controller not included. Controls sold separately.



RICHHZ07-09-12-18AJ8S

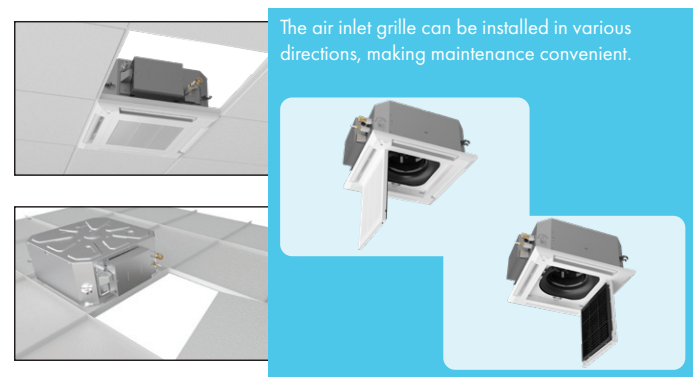


- 1 Available only with optional wireless remote control.
- 2 Requires Ruud's Optional Fresh Air Kit part #RXVXAA. Allows for a 4-inch duct connection. Requires a field-supplied duct booster fan capable of 60 CFM at .2" W.C. or 90 CFM at .4" W.C. For fan static pressure requirements, see installation manual. Add hood, filter and duct losses for fan total static pressure

- 3 Available only with optional wired remote control.
- 4 See page 13 for details.

## Easy Maintenance

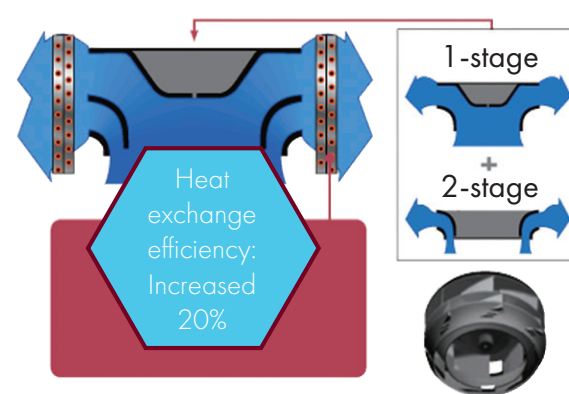
Maintenance is made simple by removing the ceiling panel next to the grille. Working on the cassette unit from an adjoining ceiling tile keeps disruption and construction costs down.



The air inlet grille can be installed in various directions, making maintenance convenient.

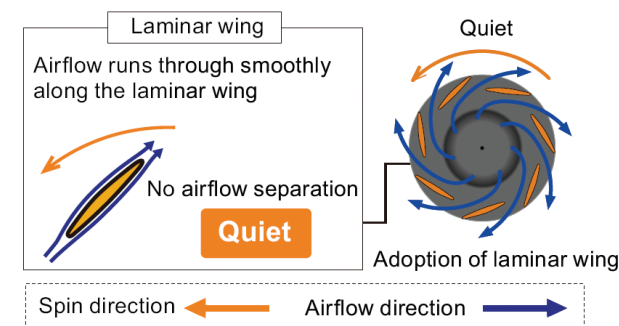
## 2-Stage Efficient Fan

Air distribution is evenly spread across the heat exchanger by the 2 stage fan which produces two separate airflow streams.



## Quiet Operation

Optimization of wing form (laminar wing design) and number of wings (7 blades) enables sound levels as low as 27dB.



## Optional Accessory

**Fresh Air Kit**  
RXVXAA  
Permits limited introduction of outdoor air into the cassette unit for ventilation purposes. Additional items required. (see footnote #4, above)



# RICHHZ07AJ8S, RICHHZ09AJ8S, RICHHZ12AJ8S, RICHHZ18AJ8S

		RICHHZ07AJ8S	RICHHZ09AJ8S	RICHHZ12AJ8S	RICHHZ18AJ8S
<b>Performance</b>					
Rated Cooling	BTU/h	7,000	9,000	12,000	18,000
Rated Heating	BTU/h	7,500	9,600	12,800	19,200
<b>Fan (Cooling Mode)</b>					
Air Circulation: Hi	CFM (m3/h)	318 (540)	318 (540)	359 (610)	441 (750)
Medium	CFM (m3/h)	288 (490)	288 (490)	312 (530)	359 (610)
Low	CFM (m3/h)	259 (440)	259 (440)	277 (470)	306 (520)
Quiet	CFM (m3/h)	230 (390)	230 (390)	241 (410)	241 (410)
Fan Speed Stages		4+auto	4+auto	4+auto	4+auto
<b>Sound</b>					
Indoor Level (Clg / Htg): Hi	dB(A)	33 / 34	33 / 34	37 / 37	42 / 44
Medium	dB(A)	31 / 32	31 / 32	33 / 33	37 / 40
Low	dB(A)	29 / 29	29 / 29	31 / 31	33 / 37
Quiet	dB(A)	27 / 27	27 / 27	28 / 28	29 / 30
<b>Electrical</b>					
Voltage / Frequency / Phase		208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Current Rated / Max: Cooling	Amps	0.15 / 0.19	0.15 / 0.19	0.19 / 0.24	0.30 / 0.38
Current Rated / Max: Heating	Amps	0.15 / 0.19	0.15 / 0.19	0.19 / 0.24	0.30 / 0.38
Input Power	W	18	18	23	39
<b>Size &amp; Weight</b>					
Net Weight	lbs. (kg)	33 (15)	33 (15)	33 (15)	33 (15)
Dimensions: Height	in	9-5/8	9-5/8	9-5/8	9-5/8
	mm	245	245	245	245
Width	in	22-7/16	22-7/16	22-7/16	22-7/16
	mm	570	570	570	570
Depth	in	22-7/16	22-7/16	22-7/16	22-7/16
	mm	570	570	570	570
Refrigerant		R-410A	R-410A	R-410A	R-410A
<b>Additional Data</b>					
Air Direction: Vertical		Automatic	Automatic	Automatic	Automatic
Air Filter Type		Washable	Washable	Washable	Washable
Front Grille:		RXCCGFGA*			
Grille Dim: Height	in (mm)	1-15/16 (49)	1-15/16 (49)	1-15/16 (49)	1-15/16 (49)
Width	in (mm)	24-7/16 (620)	24-7/16 (620)	24-7/16 (620)	24-7/16 (620)
Depth	in (mm)	24-7/16 (620)	24-7/16 (620)	24-7/16 (620)	24-7/16 (620)
Lineset Size	in	Gas 3/8   Liq. 1/4	Gas 3/8   Liq. 1/4	Gas 3/8   Liq. 1/4	Gas 1/2   Liq. 1/4

\*Compact Cassette Grille RXCCGFGA sold separately. Must order one with each compact cassette.

# 9, 12, 15,000 BTU/h Floor Mount

Multi-zone Indoor



Handheld remote control included with indoor unit

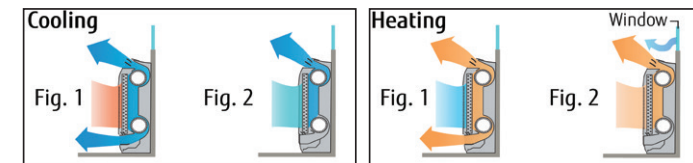
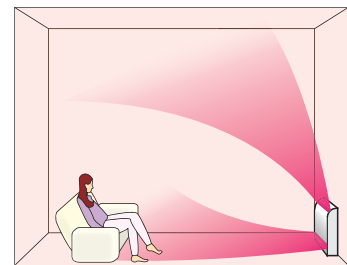
RIFHFZ9-12-15AJ2S



1 Available with optional wired remote control.  
2 Low temperature heating operation outdoor models only.  
3 See page 13 for details.

## 2-Fan and Wide Airflow

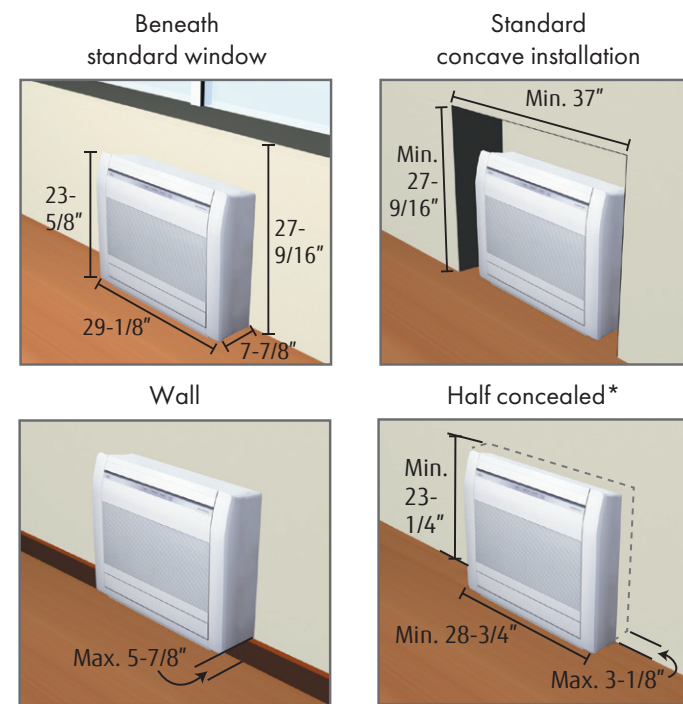
Having both upper and lower airflow quickly warms or cools the entire room. Floor mount can be set in "Upward Airflow Only" when occupants wish not to have feet warmed or cooled.



**Cooling**  
Fig. 1: Upon startup, both top and bottom louvers open.  
Fig. 2: As the room temperature nears the setpoint, only the top louver stays open to help prevent cold air from falling.

**Heating**  
Fig. 1: Upon startup, both top and bottom louvers open.  
Fig. 2: Closer to setpoint, only the top louver stays open to help prevent cold drafts from windows.

## Flexible and Easy Installation



\*Field-supplied insulation required

# RIFHFZ9AJ2S, RIFHFZ12AJ2S, RIFHFZ15AJ2S

		RIFHFZ9AJ2S	RIFHFZ12AJ2S	RIFHFZ15AJ2S
<b>Performance</b>				
Rated Cooling	BTU/h	9,000	12,000	14,000
Rated Heating	BTU/h	9,600	12,800	16,000
<b>Fan (Cooling Mode)</b>				
Air Circulation: Hi	CFM (m3/h)	312 (530)	353 (600)	383 (650)
Medium	CFM (m3/h)	259 (440)	288 (490)	306 (520)
Low	CFM (m3/h)	212 (360)	224 (380)	235 (400)
Quiet	CFM (m3/h)	159 (270)	159 (270)	159 (270)
Fan Speed Stages		4+Auto	4+Auto	4+Auto
<b>Sound</b>				
Indoor Level (Clg / Htg): Hi	dB(A)	39 / 39	42 / 42	44 / 44
Medium	dB(A)	34 / 35	36 / 38	38 / 39
Low	dB(A)	28 / 30	30 / 32	31 / 33
Quiet	dB(A)	22 / 22	22 / 22	22 / 22
<b>Electrical</b>				
Voltage / Frequency / Phase		208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Current Rated/Max: Cooling	Amps	0.15 / 0.33	0.18 / 0.33	0.2 / 0.38
Current Rated/Max: Heating	Amps	0.15 / 0.33	0.18 / 0.33	0.2 / 0.38
Input Power	W	16	20	23
<b>Size &amp; Weight</b>				
Net Weight	lbs. (kg)	31 (14)	31 (14)	31 (14)
Dimensions: Height	in	23-5/8	23-5/8	23-5/8
	mm	600	600	600
Width	in	29-1/8	29-1/8	29-1/8
	mm	740	740	740
Depth	in	7-7/8	7-7/8	7-7/8
	mm	200	200	200
Refrigerant		R-410A	R-410A	R-410A
<b>Additional Data</b>				
Air Direction: Horizontal		Manual	Manual	Manual
Air Direction: Vertical		Auto	Auto	Auto
Apple Catechin Filter		Washable	Washable	Washable
Ion Deodorizing Filter		Yes	Yes	Yes
Connection Method		Yes	Yes	Yes
Lineset Size	in	Gas 3/8    Liq. 1/4	Gas 3/8    Liq. 1/4	Gas 1/2    Liq. 1/4

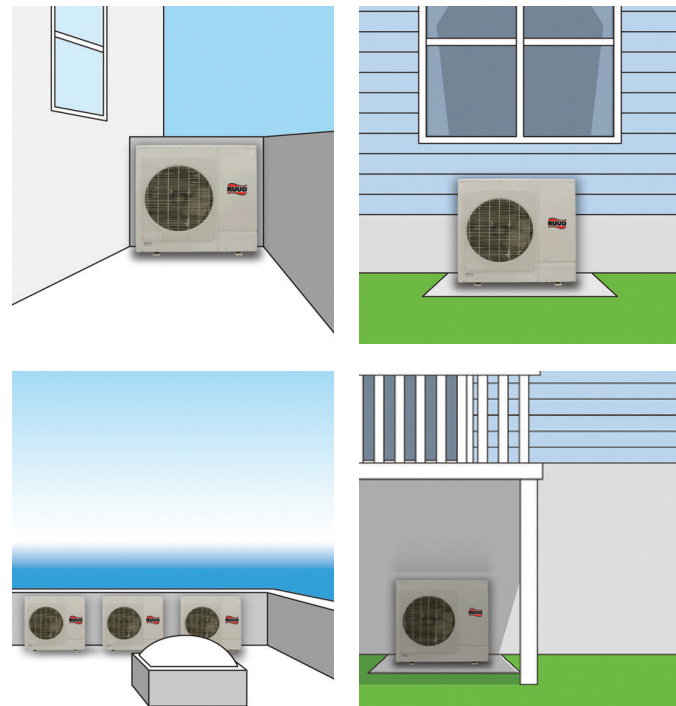
# 18, 24, 36, 45,000 BTU/h Multi-zone Outdoor Units

# RO2HFZ18AJ2S, RO3HFZ24AJ2S, RO4HFZ36AJ2S, RO5HFZ45AJ2S



## Compact Size

The compact size of the outdoor units allows for many installation opportunities.



Contractors can select either an 18, 24, 36 or 45,000 BTU outdoor unit combined with wall mounted, slim duct, compact cassette or floor mount type indoor units. Mix-and-match flexibility of evaporator type and capacity allows you to choose the indoor unit that best fits the application, whether it be hidden or showcased. These systems are ideal for nursing homes, doctor's offices, condominiums, apartments and residences—any place where individual cooling or heating is needed.

## DC Twin Rotary Compressor

A high performance, low noise, large capacity DC twin rotary compressor is used.



## Multi-zone Efficiency

Model	Type	SEER2	HSPF2	EER2	COP2	ENERGY STAR® Rating*
RO2HFZ18AJ2S	Non Ducted	18	8.7	12.5	3.44	ES, ESME
	Ducted	16.3	8.7	12.1	3.52	ES
	Mixed	17.15	8.7	12.3	3.48	--
RO3HFZ24AJ2S	Non Ducted	18.5	8.8	12.5	4.04	ES, ESME
	Ducted	16	8.5	10.6	3.42	ES
	Mixed	17.25	8.6	11.55	3.79	--
RO4HFZ36AJ2S	Non Ducted	19	9	10	3.56	--
	Ducted	17	8.2	9	3.32	--
	Mixed	18	8.6	9.5	3.44	--
RO5HFZ45AJ2S	Non Ducted	20	9.2	10.5	3.6	--
	Ducted	18.2	8.3	9.8	3.46	--
	Mixed	19.1	8.8	10.3	3.53	--

ENERGY STAR® Rated Combination

## Service Valves

RO2HFZ18AJ2S / RO3HFZ24AJ2S / RO4HFZ36AJ2S

The above units have (2) service valves for each zone.

### BENEFITS:

- Installation – Allows for reduced installation time
- Service – Allows for refrigerant isolation of each zone, if necessary
- Add Ons – Ease of additional add-ons

The RO5HFZ45AJ2S does not have this feature.

	RO2HFZ18AJ2S	RO3HFZ24AJ2S	RO4HFZ36AJ2S	RO5HFZ45AJ2S
	UIWHFZ9 + UIWHFZ9	UIWHFZ9 + UIWHFZ7 + UIWHFZ7	UIWHFZ9 x 4	UIWHFZ9 x 5

Performance					
Connectable Indoor Units		2	2 to 3	2* to 4	2 to 5
Connectable Unit Capacity Class	BTU/h	14,000 to 21,000	14,000 to 27,000	27,000 to 39,000	34,000 to 54,000
Rated Capacity Cooling / Heating	BTU/h	18,000 / 22,000	22,000 / 24,000	35,200 / 36,400	45,000 / 48,000
Cooling Operating Range	°F (°C)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)
Heating Operating Range	°F (°C)	5 to 75 (-15 to 24)	5 to 75 (-15 to 24)	5 to 75 (-15 to 24)	5 to 75 (-15 to 24)
Electrical					
Rated Input Power Clg / Htg	kW	1.44 / 1.87	1.76 / 1.73	3.52 / 3.00	4.28 / 3.88
Voltage / Frequency / Phase		208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Maximum Total Current	Amps	10.0	13.7	20.3	23.8
Minimum Circuit Ampacity	Amps	13.0	17.0	24.6	28.9
Maximum Circuit Breaker	Amps	15	20	30	30
Fan: Type x Quantity		Propeller x 1	Propeller x 1	Propeller x 1	Propeller x 1
Sound Pressure Level Cooling	dB(A)	49	51	53	53
Sound Pressure Level Heating	dB(A)	49	52	55	55
Lineset Requirements					
Minimum Lineset Length Each	ft (m)	16 (5)	16 (5)	16 (5)	16 (5)
Maximum Lineset Length Each	ft (m)	82 (25)	82 (25)	82 (25)	82 (25)
Minimum Lineset Length Total	ft (m)	49 (15)	49 (15)	66 (20)	49 (15)
Maximum Lineset Length Total	ft (m)	164 (50)	164 (50)	230 (70)	262 (80)
Pre-Charge Length Total	ft (m)	98 (30)	98 (30)	164 (50)*	164 (50)
Max. Lineset Height Difference Btwn Outdoor Unit & Furthest Indoor Unit	ft (m)	49 (15)	49 (15)	49 (15)	49 (15)
Max. Lineset Height Difference Btwn Indoor Units	ft (m)	33 (10)	33 (10)	33 (10)	33 (10)
Lineset Diameter	in	Liq. 1/4 x 2 Gas 3/8 x 2	Liq. 1/4 x 3 Gas 1/2 x 1, 3/8 x 2	Liq. 1/4 x 4 Gas 1/2 x 1, 3/8 x 3	Liq. 1/4 x 5 Gas 1/2 x 2, 3/8 x 3
Size & Weight					
Net Weight	lbs. (kg)	119 (54)	124 (56)	150 (68)	205 (93)
Dimensions: Height	in	27-9/16	27-9/16	32-11/16	39-5/16
	mm	700	700	830	998
Width	in	35-7/16	35-7/16	35-7/16	38-3/16
	mm	900	900	900	970
Depth	in	13	13	13	14-9/16
	mm	330	330	330	370
Refrigerant		R-410A	R-410A	R-410A	R-410A

\*When RO4HFZ36AJ2S is paired with two 18,000-Btu indoor units, you have to purchase optional part RXX9FZ1818 (UTP-MU36A2) kit. [Its pre-charge length is 66 ft (20 m)].

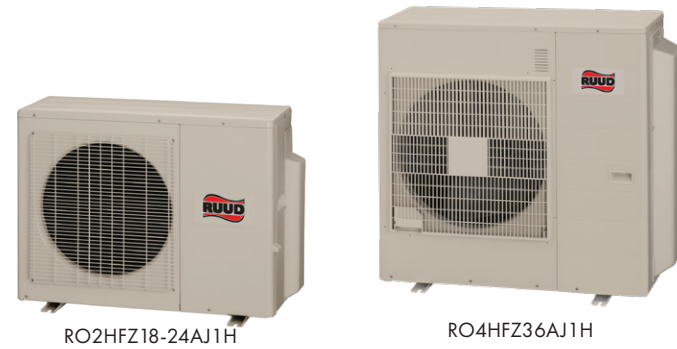


# 18, 24, 36,000 BTU/h Low Temperature Heating Operation Multi-zone Outdoor Units

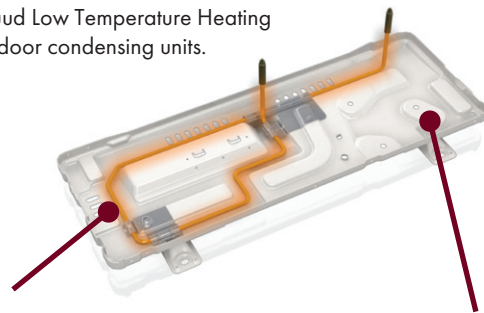
# High Heat Systems RO2HFZ18AJ1H, RO3HFZ24AJ1H, RO4HFZ36AJ1H

## Ambient Heating Temperature Down To -15°F

Other models may go as low as -5°F, however they do not include a base heater and other advancements found in low temperature heating operation models. See the full story on page 14.



The base of Ruud Low Temperature Heating Operation outdoor condensing units.



Base Heater

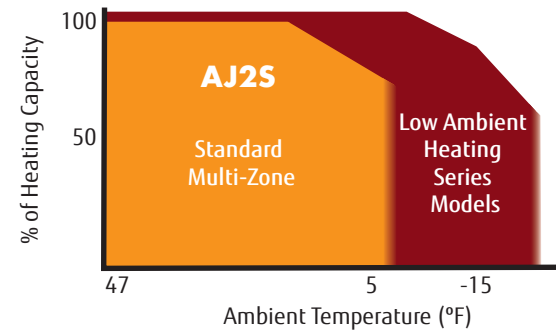
When temperatures reach 36°F, a built-in heater turns on so that any condensation doesn't freeze. Without a heater, freezing condensate can cause noise, damage to the outdoor unit and decrease system performance.

Base Drainage Holes

The contoured base design discharges melted water through multiple holes located at the bottom of the unit.

## Improved Heating Capacity

Heating capacity at low outdoor temperatures improved by adopting a large heat exchanger and a high capacity compressor.



## Multi-zone Efficiency

Model	Type	SEER2	HSPF2	EER2	COP2	ENERGY STAR® Rating*
RO2HFZ18AJ1H	Non Ducted	21.5	9.6	13.5	3.8	ES, ESCC, ESME
	Ducted	19	9	12.4	3.6	ES, ESCC, ESME
	Mixed	20.25	9.3	13	3.7	
RO3HFZ24AJ1H	Non Ducted	20	10	13.3	4.04	ES, ESCC, ESME
	Ducted	17.8	9.2	12.1	3.88	ES, ESCC, ESME
	Mixed	18.9	9.6	12.7	3.96	
RO4HFZ36AJ1H	Non Ducted	20.5	9.5	13	4	ES, ESCC, ESME
	Ducted	18	8.7	12	3.88	ES, ESCC, ESME
	Mixed	19.3	9.1	12.5	3.94	

ENERGY STAR® Rated Combination

## Service Valves

RO2HFZ18AJ1H / RO3HFZ24AJ1H

The above units have (2) service valves for each zone.

BENEFITS:

- Installation – Allows for reduced installation time
- Service – Allows for refrigerant isolation of each zone, if necessary
- Add Ons – Ease of additional add-ons

The RO4HFZ36AJ1H does not have this feature.

	RO2HFZ18AJ1H	RO3HFZ24AJ1H	RO4HFZ36AJ1H
	UIWHFZ9 + UIWHFZ9	UIWHFZ9 + UIWHFZ7 + UIWHFZ7	UIWHFZ9 x 4
Performance	low temperature heating operation		
Connectable Indoor Units	2	2 to 3	2 to 4
Connectable Unit Capacity Class	BTU/h 14,000 to 21,000	14,000 to 27,000	27,000 to 39,000
Rated Capacity Cooling / Heating	BTU/h 18,000 / 22,000	22,000 / 25,000	35,200 / 36,400
Cooling Operating Range	°F (°C) 14 to 115 (-10 to 46)	14 to 115 (-10 to 46)	14 to 115 (-10 to 46)
Heating Operating Range	°F (°C) -15 to 75 (-26 to 24)	-15 to 75 (-26 to 24)	-15 to 75 (-26 to 24)
Electrical	low temperature heating operation		
Rated Input Power Clg / Htg	kW 1.33 / 1.70	1.65 / 1.81	2.70 / 2.67
Voltage / Frequency / Phase	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Maximum Total Current	Amps 16.4	20.8	26.0
Minimum Circuit Ampacity	Amps 19.7	25.1	31.5
Maximum Circuit Breaker	Amps 20	30	40
Fan: Type x Quantity	Propeller x 1	Propeller x 1	Propeller x 1
Sound Pressure Level Cooling	dB(A) 48	50	53
Sound Pressure Level Heating	dB(A) 50	52	55
Lineset Requirements	low temperature heating operation		
Minimum Lineset Length Each	ft (m) 16 (5)	16 (5)	16 (5)
Maximum Lineset Length Each	ft (m) 82 (25)	82 (25)	82 (25)
Minimum Lineset Length Total	ft (m) 49 (15)	49 (15)	49 (15)
Maximum Lineset Length Total	ft (m) 164 (50)	229 (70)	230 (70)
Pre-Charge Length Total	ft (m) 98 (30)	98 (30)	164 (50)
Maximum Lineset Height Difference Btwn Outdoor Unit & Furthest Indoor Unit	ft (m) 49 (15)	49 (15)	49 (15)
Maximum Lineset Height Difference Btwn Indoor Units	ft (m) 33 (10)	33 (10)	33 (10)
Lineset Diameter	in Liq. 1/4 x 2 Gas 3/8 x 2	Liq. 1/4 x 3 Gas 1/2 x 1, 3/8 x 2	Liq. 1/4 x 4 Gas 1/2 x 1, 3/8 x 3
Size & Weight	low temperature heating operation		
Net Weight	lbs. (kg) 134 (61)	146 (66)	205 (93)
Dimensions: Height	in 32-11/16	32-11/16	39-5/16
	mm 830	830	998
Width	in 35-7/16	35-7/16	38-3/16
	mm 900	900	970
Depth	in 13	13	14-9/16
	mm 330	330	370
Refrigerant	R-410A	R-410A	R-410A









# Controls

## Wired Remote (Touch Panel) **Group Control**

RXRNRUZ5 Series  
2-Wire  
Features a large backlit LCD display and displays the room temperature. Provides full feature access to property managers, building owners and facility maintenance, as well as providing basic comfort features to tenants, employees and teachers.



## Wired Remote (Touch Panel) **Group Control**

RXRNRUZ5 Series  
2-Wire  
Features a large backlit LCD display and displays the room temperature. Provides full feature access to property managers, building owners and facility maintenance, as well as providing basic comfort features to tenants, employees and teachers. RXRSRY, 2-Wire



## Simple Remote Control **Group Control**

RXRHRY  
2-Wire  
Backlit 2-wire remote with built in temperature sensor. Offers set point adjustment in 1 °F increments. Concentrates on basic functions such as start / stop, fan control and temperature setting.



## Wired Remote Control **Group Control**

RXRNNUM\*  
3-Wire  
The wired remote control with its unique lock function and sleek design provides full feature access to property managers, building owners and facility maintenance, as well as providing basic comfort features to tenants, employees and teachers.



## Wired Remote Control **Group Control**

RXRNVNUM  
3-Wire  
Features a large backlit LCD display and displays the room temperature. Provides full feature access to property managers, building owners and facility maintenance, as well as providing basic comfort features to tenants, employees and teachers.



## Simple Remote Control **Group Control**

RXRHRY  
3-Wire  
Suitable when only basic operations are required for hotels, offices and other places where there is frequent arrival and departure of occupants. Remote does not allow any timer settings.



## Wireless Remote Control

RXLNTU  
For compact cassettes.



## Central Controller **Group Control**

RXDMMUM  
3-Wire  
This remote controls up to 5 individual indoor units. Set temperatures on timers to best meet individuals needs. Includes a large backlit LCD and 4-way navigation pad. Remote connects to 3 wire control terminals in the RO5HFZ45 outdoor unit.



## Remote Sensor **Group Control**

RXXSZX  
Wall mounted room temperature sensor for slim duct, medium static duct and multi position AHU models. Replaces room temperature sensor in the return when installed while still allowing for temperature correction.



## IR Receiver Kit **Group Control**

RXLBTUM  
For medium static duct, slim duct and multi position AHU units. Includes a wireless remote control and receiver.



## IR Receiver Kit **Group Control**

RXLBTUC  
For large circular flow Cassettes. Includes a wireless remote control and receiver.



## IR Receiver Kit **Group Control**

RXLBTUH  
For ceiling suspended. Includes a wireless remote control and receiver.



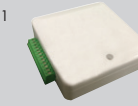
**Group Control:** With this feature, multiple evaporators can be daisy-chained together on one single remote control. With multiple, single-zone systems, Group Control provides the ability of all indoor units to be operated from a single remote control. Group Control may be used on a single, multizone system, however multiple, multi-zone system indoor units cannot be grouped together. Single- and multi-zone systems cannot be combined for a single Group Control. For additional information, see Engineering Bulletin #036 and/or #037.

\*Wall mounted UIWH07, 9 and UIWH12 require accessory interface kit (Part RXXCBXZ2) in order to connect this device to them.

# Additional Controls

## 24V Thermostat Interface

RXTTRXZ1  
Control H-Series products<sup>1</sup> using a third-party thermostat. Up to 16 indoor units can be connected as a group to one thermostat convertor.



## Modbus Converter

RXVMSX  
Control and monitor systems over Modbus RTU.



<sup>1</sup>NOT compatible with models RIUH18-24AXJ, RIUH36ASXJ, RICH18-24-36-42AXCJ.

# Interface Kits

## Human Sensor Kit

RXSHZXC  
For large circular cassette.



## Communication Kit

RXTWRXZ2  
Required to connect UIWHHZ09-12-18-24AJ2S, UIWHGZ09-12-15AJ1S and UIWHHZ07-09-12-15-18-24-30-36AJ3S to wired remotes, RXRNRUZ5 Series, RXRSRY, RXRHRY, RXTTRXZ1 24V thermostat interface.



# Fresh Air Intake Kits

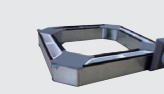
## High Humidity Insulation Kit

RXXGCG  
Compatible with compact cassette. Additional insulation may be needed when cassettes are installed in high humidity areas.



## Fresh Air Intake Kit

RXTWRXZ2  
RXVXAA  
Fresh air kit for compact cassette units. Mixes room air then passes it through a heat exchanger. Allows for a 4-inch flex duct connection. Requires a field supplied duct booster fan capable of 60 CFM at .2"W.C. or 90 CFM at .4"W.C. For fan static pressure requirements, see installation manual.



## Fresh Air Intake Kit

RXXHRS940-25  
Fresh air relay kit. Compatible with all systems. Kit contains current sensor with built-in relay and switching power supply. Requires field supplied ductwork and a fan capable of generating 15 CFM at a static pressure of approximately 0.26" WC.



## Air Outlet Shutter Plate

RXYDZK  
Compatible with large cassette. Install in a single outlet, to provide a 3-way airflow pattern. Only one supply air outlet can be blocked at a time.



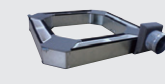
## Air Outlet Shutter Plate

RXYDZB  
Compatible with compact cassette. In a 3-way air flow configuration an air outlet shutter plate kit is required to block air flow of 1 louver.



## Fresh Air Kit

RXXVRA  
For large cassette units. Mixes room air then passes it through a heat exchanger. Allows for a 4-inch flex duct connection. Allows up to 10% of high airflow volume.



# Miscellaneous

**18+18 Combo Fittings Kit**  
 RXK9FZ1818  
 Allows two 18k indoor units to be used on an outdoor O4HFZ36AJ2S. Requires special piping; limited to only 18,000 BTU models. Total BTU capacity is limited to 31,600 BTU in cooling. The kit upsizes linesets to 3/8" and 1/2".



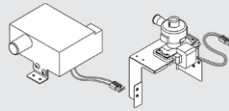
**R-410A Swivel Adapter**  
 K9R-410A55  
 In order to minimize incorrect charging of systems with R-410A, Ruud uses a different access port. Contractors will need this 55-degree swivel access fitting. Not compatible with RO5HFZ45AJ2S.



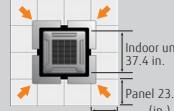
**Adapter Kit**  
 RXMU45A2  
 For 2 unit combination system. Changes liquid pipe size from 1/4" to 3/8". Used for specific UIWVHZ24AJ3S multi-zone combinations. Reference combination tables (pg 62) for details.



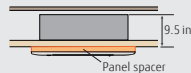
**Condensate Pump**  
 RXPU1EBB  
 OEM design plugs into factory harness for ease of installation. Rated for 11.8" of vertical lift. Compatible with ceiling suspended indoor units RO1HHZ\*\*AJ8S.



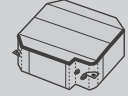
**Wide Panel**  
 RXAKXA-W  
 Compatible with large cassette. Hides the gap between the ceiling hole and the cassette grille.



**Panel Spacer**  
 RXBKXA-W  
 Compatible with large cassette. If there is not enough height in the ceiling space, by inserting this spacer between the cassette grille and the ceiling surface, the height of the body goes into the ceiling space becomes 2 in. (50mm) lower.



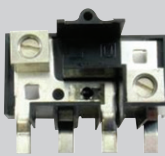
**High Humidity Insulation Kit**  
 RXXKRA  
 Compatible with large cassette. Install when the under-roof humidity is over 80% and the temperature is over 86 °F (30 °C)



**Electric Heater Kit**  
 Compatible with RHMVZ2421MNAUNJ, RHMVZ3021SNAUNJ, RHMVZ3621MNAUAJ and RHMVZ4821SNAUAJ. Reference multi-position AHU documentation for compatibility.

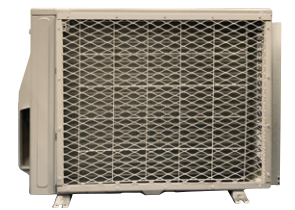


**Electric Heater Jumper Bar**  
 RXBJ-A21  
 Required for electric heater kit 13kW and above.



# Wind Baffles, Snow Hoods, Hail Guards

Protect your equipment investment from the ravages of severe weather.



Wind Baffle Compatible Units

Models	Group	Wind baffles		
RO1HGZ9AA3S	C	UTZ-DUWBCA		
RO1HGZ12AA3S				
ROSH09BFWJ	G2	UTZ-DUWBG2A		
ROSH12BFWJ				
RO1HHZ09AJ2S				
RO1HHZ09AJ2H				
RO1HHZ09AJ8S				
RO1HHZ12AJ3S				
RO1HHZ12AJ2S				
RO1HHZ12AJ2H				
RO1HGZ09AJ1S	G3	UTZ-DUWBG3A		
RO1HGZ12AJ1S				
RO1HGZ15AJ1S				
RO1HGZ09AJ1H				
RO1HGZ12AJ1H				
RO1HGZ15AJ1H				
RO1HHZ12AJ8S				
RO1HHZ18AJ8S				
RO1HHZ18AJ3S				
RO1HHZ24AJ3S				
RO2HFZ18AJ2S			V	UTZ-DUWBVWA
RO3HFZ24AJ2S				
ROSH18AXFWJ	W	UTZ-DUWBVWA		
ROSH24AXFWJ				
RO1HFZ18AJ2H				
RO1HFZ24AJ2H				
ROSH30AXJ				
ROSH36AXJ				
RO2HFZ18AJ1H				
RO3HFZ24AJ1H				
RO4HFZ36AJ2S	U	UTZ-DUWBUA		
RO5HFZ45AJ2S				
RO4HFZ36AJ1H				
RP17AZ36AJVUA				
RP17AZ48AJVUA				
RD16AZ30AJHUA	Y	UTZ-DUWBYA*		
RO1HGZ30AJ2H				
RO1HGZ42AJ8S				
RO1HGZ48AJ8S	T	UTZ-DUWBTA*		
RD16AZ36AJHUA				
RD16AZ48AJHUA				

Snow Hood Compatible Units

Models	Group	Snow Hoods		
RO1HGZ9AA3S	C	UTZ-DUSHCA		
RO1HGZ12AA3S				
ROSH09BFWJ	G2	UTZ-DUSHG2A		
ROSH12BFWJ				
RO1HHZ09AJ2S				
RO1HHZ09AJ2H				
RO1HHZ09AJ8S				
RO1HHZ12AJ3S				
RO1HHZ12AJ2S				
RO1HHZ12AJ2H				
RO1HGZ09AJ1S	G3	UTZ-DUSHG3A		
RO1HGZ12AJ1S				
RO1HGZ15AJ1S				
RO1HGZ09AJ1H				
RO1HGZ12AJ1H				
RO1HGZ15AJ1H				
RO1HHZ12AJ8S				
RO1HHZ18AJ8S				
RO1HHZ18AJ3S				
RO1HHZ24AJ3S				
RO2HFZ18AJ2S			V	UTZ-DUSHVA
RO3HFZ24AJ2S				
ROSH18AXFWJ	W	UTZ-DUSHWA		
ROSH24AXFWJ				
RO1HFZ18AJ2H				
RO1HFZ24AJ2H				
RO2HFZ18AJ1H				
RO3HFZ24AJ1H				
ROSH36AXJ				
RO5HFZ45AJ2S			U	UTZ-DUSHUA
RO4HFZ36AJ1H				
RP17AZ36AJVUA				
RP17AZ48AJVUA				
RD16AZ30AJHUA				
RO1HGZ30AJ2H	Y	UTZ-DUSHYA		
RO1HGZ42AJ8S				
RO1HGZ48AJ8S				
RD16AZ36AJHUA	T	UTZ-DUSHTA		
RD16AZ48AJHUA				

Hail Guard Compatible Units

Models	Group	Hail Guards		
RO1HGZ9AA3S	C	UTZ-DUHGCA		
RO1HGZ12AA3S				
ROSH09BFWJ	G2	UTZ-DUHGG2A		
ROSH12BFWJ				
RO1HHZ09AJ2S				
RO1HHZ09AJ2H				
RO1HHZ09AJ8S				
RO1HHZ12AJ3S				
RO1HHZ12AJ2S				
RO1HHZ12AJ2H				
RO1HGZ09AJ1S	G3	UTZ-DUHGG3A		
RO1HGZ12AJ1S				
RO1HGZ15AJ1S				
RO1HGZ09AJ1H				
RO1HGZ12AJ1H				
RO1HGZ15AJ1H				
RO1HHZ12AJ8S				
RO1HHZ18AJ8S				
RO1HHZ18AJ3S				
RO1HHZ24AJ3S				
RO2HFZ18AJ2S			V	UTZ-DUHGVA
RO3HFZ24AJ2S				
ROSH18AXFWJ	W	UTZ-DUHGWA		
ROSH24AXFWJ				
RO1HFZ18AJ2H				
RO1HFZ24AJ2H				
RO2HFZ18AJ1H				
RO3HFZ24AJ1H				
ROSH36AXJ				
RO5HFZ45AJ2S			U	UTZ-DUHGUA
RO4HFZ36AJ1H				
RP17AZ36AJVUA				
RP17AZ48AJVUA				
RD16AZ30AJHUA				
RO1HGZ30AJ2H	Y	UTZ-DUHGYA		
RO1HGZ42AJ8S				
RO1HGZ48AJ8S				
RD16AZ36AJHUA	T	UTZ-DUHGTA		
RD16AZ48AJHUA				

\*Item consists of 2 wind baffles.

## Line Set Sizes and Lengths – Single-zone

\*Always refer to D&T for final sizing

Single-zone Systems																								
Wall Mounted																								
Gas x Liquid Size (in)	09AA3S	09AJ3S	09AJ2S	RO1HHZ09AJ2H	09AJ1S	09AJ1S	12AA3S	12AJ3S	12AJ2S	12AJ2H	12AJ1S	12AJ1S	15AJ1S	15AJ1S	18AJ3S	18AJ2S	18AJ2H	24AJ3S	24AJ2S	24AJ2H	30AJ3S	30AJ2H	36AJ3S	
3/8" x 1/4"	•	•	•	•	•	•	•	•	•	•	•	•												
1/2" x 1/4"													•	•	•			•						
5/8" x 3/8"																•	•		•	•	•	•	•	•
Total System																								
Max. Combined Pipe Length ft (m)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	164 (50)	164 (50)	66 (20)	164 (50)	164 (50)	164 (50)	246 (75)	164 (50)	
Max. Pre-charge Lineset length ft (m)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	66 (20)	49 (15)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	
Min. Lineset Length ft (m)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	

Single-zone Systems																	
Gas x Liquid Size (in)	Floor Mount						Compact Cassette			Medium Static Ducted							
	09AJ2S	09AJ2H	12AJ2H	12AJ2H	15AJ2S	15AJ2H	09AJ8S	12AJ8S	18AJ8S	12AJ8S	18AJ8S	24AJ8S	30AJ8S	30AJHUA	36AJ8S	42AJ8S	48AJ8S
3/8" x 1/4"	•	•	•	•			•	•		•							
1/2" x 1/4"					•	•			•								
5/8" x 3/8"											•	•	•	•	•	•	•
Total System																	
Max. Combined Pipe Length ft (m)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	98 (30)	66 (20)	98 (30)	164 (50)	164 (50)	246 (75)	164 (50)	246 (75)	246 (75)
Max. Pre-charge Lineset length ft (m)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	49 (15)	66 (20)	49 (15)	66 (20)	66 (20)	66 (20)	98 (30)	66 (20)	98 (30)	98 (30)	
Min. Lineset Length ft (m)	10 (3)	10 (3)	10 (3)	10 (3)	10 (3)	10 (3)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	

Single-zone Systems																		
Gas x Liquid Size (in)	Multi-position Air Handler							Ceiling Suspended				Circular Flow Large Cassette						
	24AJ2S	30AJVUA	30AJHUA	36AJVUA	36AJHUA	48AJVUA	48AJHUA	18AJ8S	24AJ8S	30AJ8S	36AJ8S	18AJ8S	24AJ8S	30AJ8S	36AJ8S	42AJ8S	48AJ8S	
3/8" x 1/4"																		
1/2" x 1/4"								•				•						
5/8" x 3/8"	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Total System																		
Max. Combined Pipe Length ft (m)	164 (50)	164 (50)	246 (75)	230 (70)	246 (75)	230 (70)	246 (75)	98 (30)	164 (50)	164 (50)	164 (50)	98 (30)	164 (50)	164 (50)	246 (75)	246 (75)		
Max. Pre-charge Lineset length ft (m)	66 (20)	66 (20)	98 (30)	98 (30)	98 (30)	98 (30)	98 (30)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	66 (20)	98 (30)	98 (30)		
Min. Lineset Length ft (m)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)	16 (5)		

## Line Set Sizes and Lengths – Multi-zone

\*Always refer to D&T for final sizing

Gas x Liquid Size (in)	Multi / Flex Zone Models - Indoor Units																
	Wall Mounted				Floor Mount			Slim Duct				Compact Cassette					
	UIWHHZ07AJ3S	UIWHHZ09AJ3S	UIWHHZ12AJ3S	UIWHHZ15AJ3S	UIWHHZ18AJ3S	UIWHHZ24AJ3S	RIHFZ09AJ2S	RIHFZ12AJ2S	RIHFZ15AJ2S	RIDHHZ07AJ8S	RIDHHZ12AJ8S	RIDHHZ18AJ8S	RIDHHZ24AJ8S	RICHHZ07AJ8S	RICHHZ09AJ8S	RICHHZ12AJ8S	RICHHZ18AJ8S
3/8" x 1/4"	•	•	•				•	•		•	•			•	•	•	
1/2" x 1/4"				•	•				•		•						•
5/8" x 1/4"						•						•					
Each Indoor Unit	Minimum and maximum pipe lengths for multi-zone units are found on page 57 and page 59.																

Gas x Liquid Size (in)	Multi / Flex Zone Models – Outdoor Units						
	RO2HFZ18AJ2S	RO2HFZ18AJ1H	RO3HFZ24AJ1H	RO3HFZ24AJ1H	RO4HFZ36AJ2S*	RO4HFZ36AJ1H^	RO5HFZ45AJ2S^
3/8" x 1/4"	•	•	•	•	•	•	•
1/2" x 1/4"							
5/8" x 3/8"							
Total System							
Max. Lineset Length ft (m) (Total)	164 (50)	164 (50)	164 (50)	230 (70)	230 (70)	230 (70)	262 (80)
Max. lineset length (Pre-charge) ft (m)	98 (30)	98 (30)	98 (30)	98 (30)	164 (50)	164 (50)	164 (50)
Min. Lineset Length ft (m) (Total)	49 (15)	49 (15)	49 (15)	49 (15)	66 (20)	49 (15)	49 (15)

\* 18 + 18 indoor unit combination allowed with RO4HFZ36AJ2S requires kit RXX9FZ1818. Use lineset size 3/8" x 1/2".

^ In some cases, RXMU45A2 is required to connect UIWHHZ24AJ3S to outdoor unit. Reference RXMU45A2 Installation Manual. Use lineset size 3/8" x 5/8".

## Ruud Model Nomenclature

“Next Generation” models

Outdoor Model	R	O	I	H	H	Z	09	A	J	2	S
	Brand	Product Category	Number of Heads	Heat Pump	Generation of System	Refrigerant	Capacity	Major Series	Voltage	Tier	Type
R – Ruud											S – Standard H – Low Temp. Heating Op.
O – Outdoor Unit											
1 – Single Zone 2 – Two Heads 3 – Three Heads 4 – Four Heads 5 – Five Heads											1 – High Tier 2 – Mid Tier 3 – Base Tier 8 – Mid Tier (non-wall)
H – Heat Pump											A – 115 / 1 / 60 J – 208 / 230 / 1 / 60
F – Generation F G – Generation G H – Generation H											A – 1 <sup>st</sup> Design B – 2 <sup>nd</sup> Design
											09 – 9,000 12 – 12,000 15 – 15,000 18 – 18,000 24 – 24,000 30 – 30,000 36 – 36,000 45 – 45,000
											Z – R-410A V – R-32

Indoor Model	R	I	W	H	H	Z	09	A	J	2	S
	Brand	Product Category	Product Category 2	Heat Pump	Generation of System	Refrigerant	Capacity	Major Series	Voltage	Tier	Type
R – Ruud U – Ruud (wall mount only)											S – Standard
I – Indoor Unit											
C – Compact Cassette D – Slim Ducted F – Floor Mount G – Large Cassette M – Mid Static Ducted S – Ceiling Suspended W – Wall Mount											1 – High Tier 2 – Mid Tier 3 – Base Tier 8 – Mid Tier (non-wall)
H – Heat Pump											A – 115 / 1 / 60 J – 208 / 230 / 1 / 60
F – Generation F G – Generation G H – Generation H											A – 1 <sup>st</sup> Design B – 2 <sup>nd</sup> Design
											09 – 9,000 12 – 12,000 15 – 15,000 18 – 18,000 24 – 24,000 30 – 30,000 36 – 36,000 45 – 45,000
											Z – R-410A V – R-32

## Things To Know Before You Buy a Ruud Mini-split System

### Complete System Warranty

Standard warranties vary depending on model:

7 Year Compressor / 5 Year Parts warranty.

Extended warranties include:

10 Year Compressor / Parts warranty for Ruud mini-split systems that have been installed by a licensed contractor and the online Product Registration\* has been submitted.

Systems must be registered within 60 days of installation for extended warranty.

10-Year warranties exclude: R22 models, IAQ models, UIWH30AXJ, RIUH18AXJ, RIUH24AXJ, RIUH36ASXJ, RICH18AXCJ, RICH24AXCJ, RICH36AXCJ, RICH42AXCJ

\*Residents of California and Quebec are not required to register the System in order to obtain all of the rights and remedies applicable to this Warranty. Beginning July 1, 2023, Warranty is transferable from original owner to new owner in the State of Florida for residentially installed systems that are registered online.

For full details, see Warranty Statement.

### Trademarks

The Ruud® logo is a registered trademark of Rheem Manufacturing.

ENERGY STAR® is a registered trademark of the EPA and DOE.

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### Non-Internet Retail Policy

Internet sales are strictly prohibited and unauthorized. Any HVAC systems purchased on the Internet, from an online retailer or any similar e-tailing website, OR where the original factory serial numbers have been removed, defaced, or replaced in any way WILL NOT BE COVERED BY WARRANTY.

### Note

- Condensing units come pre-charged from factory. Additional refrigerant may be required, be sure to check installation manual for more details.
- Cooling capacity is based on the following conditions:  
Indoor temperature: 80°F DB / 67°F WB (26.7°C DB / 19.4°C WB)  
Outdoor temperature: 95°F DB / 75°F WB (35°C DB / 23.9°C WB)
- Heating capacity is based on the following conditions:  
Indoor temperature: 70°F DB (21.1°C DB) / 60°F WB (15.56°C WB)  
Outdoor temperature: 47°F DB / 43°F WB (8.3°C DB / 6.1°C WB)

## Things To Know Before You Install a Ruud Mini-split System

### Warning

Always use a licensed installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion. Use only parts and accessories supplied or specified by Ruud. Ask a licensed contractor to install parts and accessories. Use of unauthorized or improper installation of parts and accessories can result in injury or property damage. Read the owner's operation manual carefully before using this product. The owners operation manual provides important safety instructions and warnings which should be followed closely. For any questions or concerns, please contact Rheem Manufacturing. Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).

### Heat Pump Disclaimer

In most climates a heat pump will handle all of your heating needs. However, this system sometimes requires some other additional source of heat to satisfy heating requirements in the coldest environments. All Ruud heat pumps use inverter technology and as such offer a wider operating range and more heat capacity than a standard heat pump but will not provide adequate heating if improperly sized or operated outside of its operating range. Specifications vary by model; please consult your contractor before choosing a heat pump as your only source of heat.

Systems will maintain temperature up to +/-4 degrees relative to set temperature. To increase energy efficiency on multi-zone systems, you should turn off the evaporators when heating or cooling is not needed.

### Disclaimer

Ruud products are subject to continuous improvements. Rheem reserves the right to modify product design, specifications and information in this brochure without notice and without incurring any obligations.

## Certifications

### ISO

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) related to environmental management systems. Ruud General America, Inc. has been acknowledged by an internationally accredited compliance organization as having an appropriate program of environmental protection procedures and activities to meet the requirements of ISO 14001. The air conditioners manufactured by Ruud have received ISO 9001 series certification for quality assurance.



Intertek

- ISO 9001

- ISO 14001

### AHRI Energy Guide® Program (U.S.)

To view AHRI numbers or Energy Guide labels, please go to [www.ahridirectory.org](http://www.ahridirectory.org).



### ASTM

Our outdoor units shall withstand 1,000 hours of salt spray tested per procedure ASTM B117.

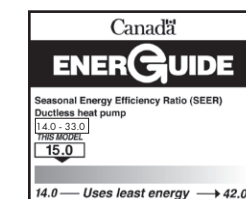
### RoHS COMPLIANT

Ruud participates in the RoHS Directive, which is the Restriction of Hazardous Substances in electrical and electronic equipment. It is an EU directive intended protect the environment by forcing manufacturers to eliminate or severely curtail the use of cadmium, hexavalent chromium and lead in all products from automobiles to consumer electronics.



### HRAI EnerGuide® Program (Canada)

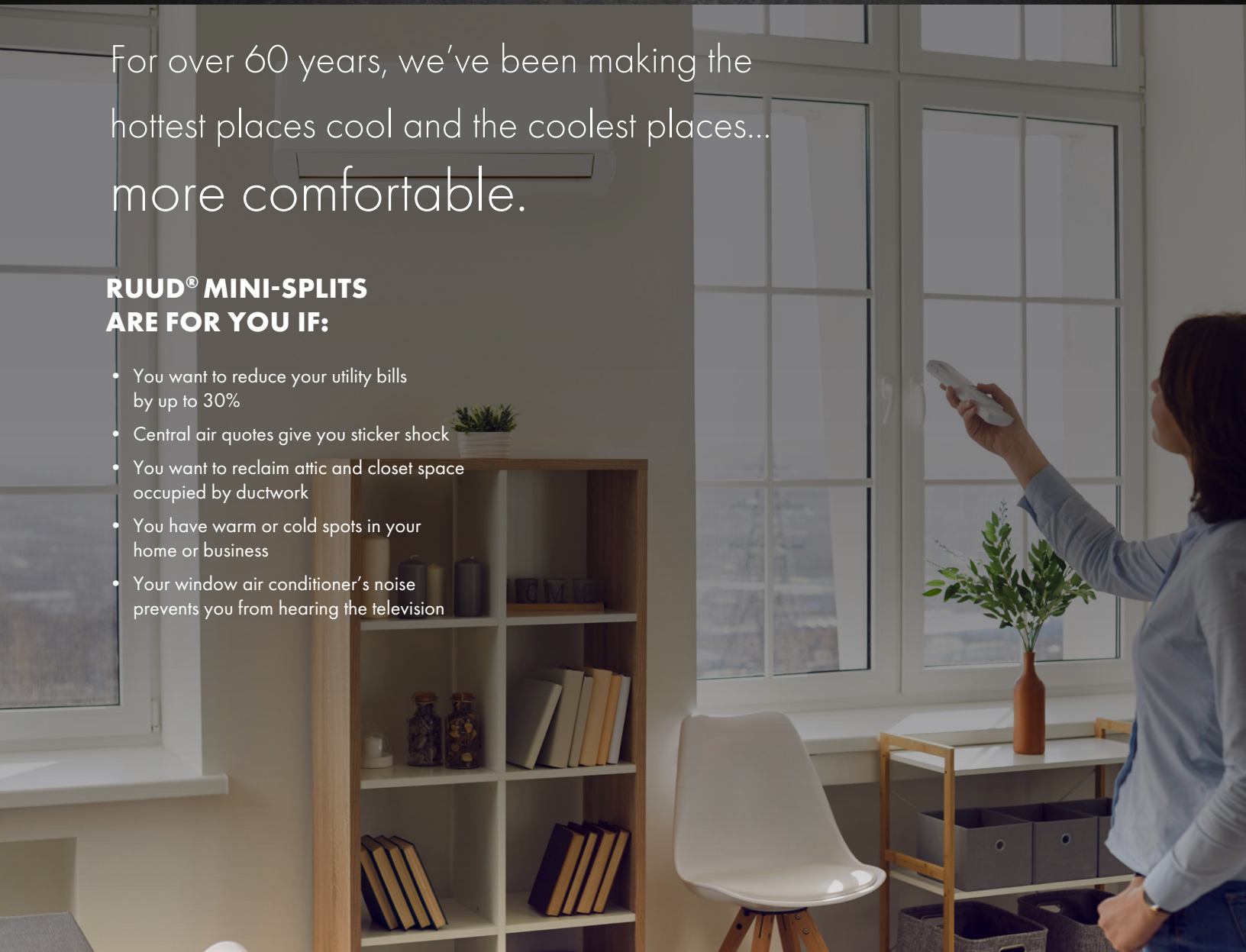
Samples:



For over 60 years, we've been making the  
hottest places cool and the coolest places...  
more comfortable.

**RUUD® MINI-SPLITS  
ARE FOR YOU IF:**

- You want to reduce your utility bills by up to 30%
- Central air quotes give you sticker shock
- You want to reclaim attic and closet space occupied by ductwork
- You have warm or cold spots in your home or business
- Your window air conditioner's noise prevents you from hearing the television



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