# Your Source for Superior Technology and Integration

VARIABLE REFRIGERANT FLOW SYSTEMS

YORK® VRF


Johnson Controls

YORK VRF

VARIABLE REFRIGERANT FLOW SYSTEMS

# Johnson Controls is Your Trusted Partner

Johnson Controls

# Table of Contents


**Overvew** 3

The Complete Package ....4
YORK® VRF Product Line ....5-7
Innovative Engineering....8-9
Design Flexibility....10
Advanced Performance....11
Next-Generation Control....12

**Selecting the Right System** 13

Heat Recovery or Heat Pump....14
Air-Source or Water-Source....15
Features and Benefits Summary....16-17

**Indoor Units** 19

Overview....20-21
Ducted High Static Unit....22-23
Ducted Medium Static Unit....24-25
Ducted Slim Unit....26
Dedicated Outside Air System....27
EconoFresh Economizer....28
Multi-Position Air Handler....29-31
DX-Kit for General AHU Connection....32
1-Way Cassette Unit....33
2-Way Cassette Unit....34
4-Way Mini Cassette Unit....35
4-Way Cassette Unit....36-37
Wall Mount Unit....38-39
Ceiling Suspended....40
Floor Exposed Unit....41
Floor Concealed Unit....42

**Air-Source Outdoor Units** 43

Overview....44-48
Specifications Tables:
Heat Recovery....49-53
Change-Over Boxes....55
Heat Pump....56-60
Low Ambient Systems....61-65
Mini VRF....66-68

**Water-Source Units** 69

Overview....70-72
Specification Tables:
Unified Heat Pump / Heat Recovery Systems....73-80

**Controllers & Network Adapters** 81

Overview....82
Local Controllers....83
Central Controllers....84
Network Adapters....85-86

**Services & Support** 87

Selection Software....88
World-Class Training....89
Advanced Logistics & Customer Service....90

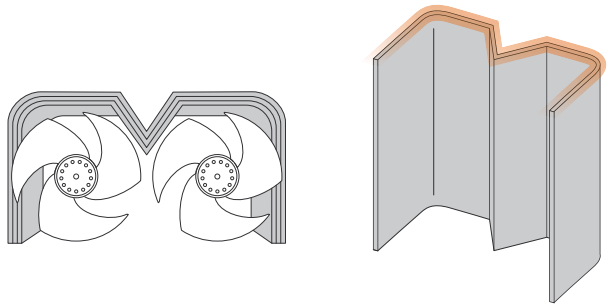
# The Complete Package

## Taking VRF to new places

Meet more application challenges with the newly enhanced and expanded line of YORK VRF equipment. The line, which now includes water-source and 575V units, enables you to bring smart solutions to more projects including high-rise buildings, coastal properties, and Canadian locations.

Your customers can expect years of worry-free, efficient operation with the refreshed YORK VRF line. A patented sigma-shaped heat exchanger that enhances heat exchange and efficiency in the outdoor units is just one of many innovations in our VRF system design. Each development has contributed to making YORK VRF exceptional in both performance and energy efficiency.

**YORK VRF Outdoor Units feature a patented sigma-shaped heat exchanger that improves heat exchange and efficiency.**



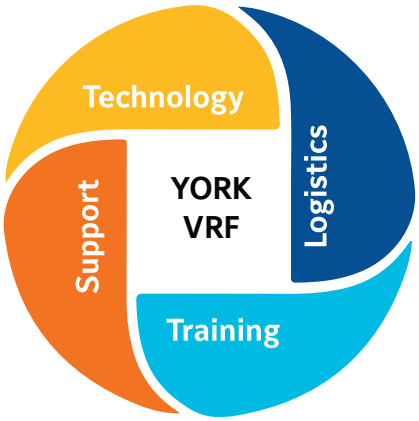
## Built with you in mind

You and your customers will appreciate the smart engineering at the core of all equipment. This includes a unit design that makes installation and maintenance a breeze, decreasing labor and lowering costs.

The complete line of equipment includes a full range of indoor units, controllers and change-over boxes, ensuring a truly customized solution for every customer. When you purchase YORK VRF equipment, though, you get so much more than precisely engineered equipment.

**Innovative technology** solves more application challenges, so you can bring greater comfort and efficiency to more customers than ever before.

Our **dedicated VRF support staff** is available to answer questions and provide guidance throughout the life of a project from design to installation and service.



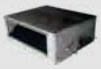

**Ample Inventory, along with advanced order management and logistics systems,** ensures equipment arrives when you need it. And our 99% damage-free work record ensures that when equipment arrives, it's ready for installation.

**World-class training** ensures that your team has the knowledge and skills to confidently design, build and service YORK VRF systems. Classes are offered at four convenient locations, and on-site training is available when needed.

# YORK® VRF Product Line

## Indoor Units

- Units are simple to install, service and maintain
- Exceptionally quiet with sound ratings as low as 24.5 dBA
- Compatible with both air-source and water-source VRF lines as well as YORK® controllers, adapters and gateways

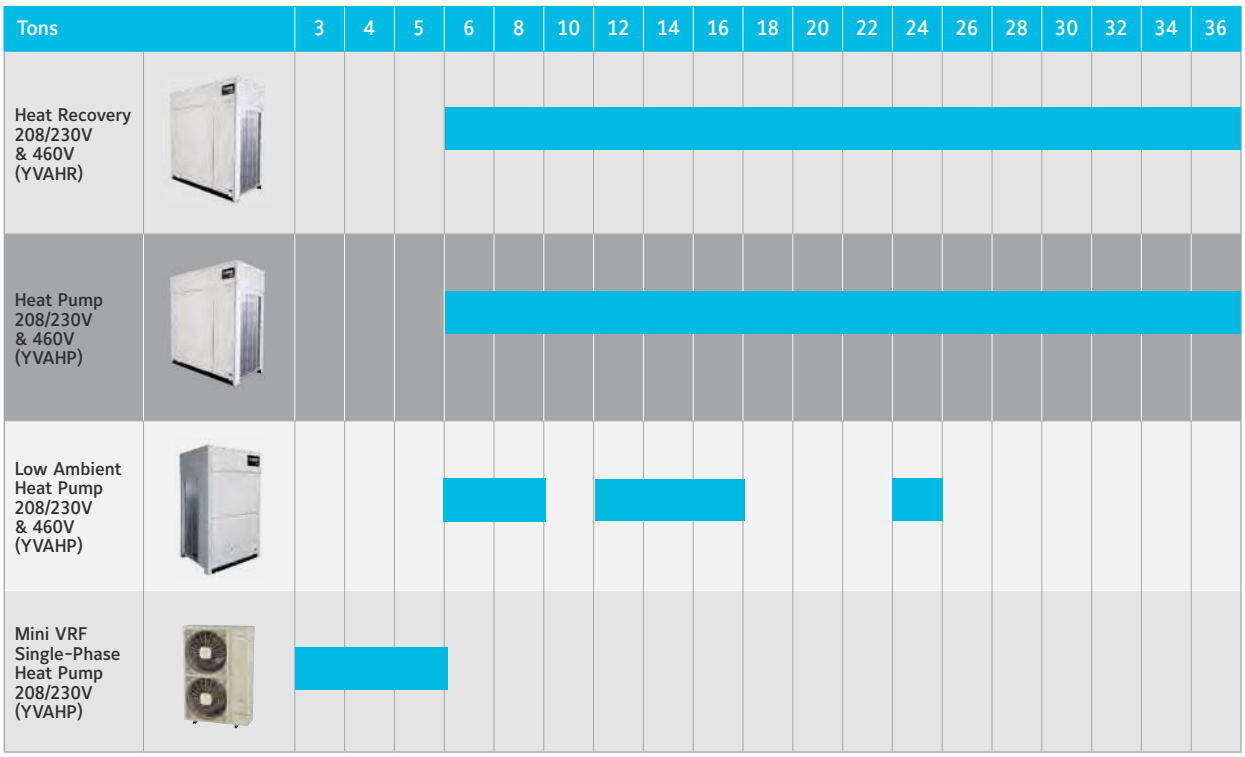
| Ducted Indoor Units \| Tonnage | | 0.5 | 0.7 | 1.0 | 1.3 | 1.5 | 2.0 | 2.3 | 2.5 | 3.0 | 4.0 | 4.5 | 5.0 | 6.0 | 8.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High Static (YIDH) |  | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ |
| Medium Static (YIDM) |  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| Slim (YIDS) |  | ■ | ■ | ■ | ■ | ■ | | | | | | | | | |
| Dedicated Outside Air System (YDOA) |  | | | | | | | | | | | | | | ■ |
| EconoFresh Economizer (YIDM) |  | | | | | | | | ■ | ■ | ■ | ■ | | | |
| Multi-Position Air Handler (YMAH) |  | | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | | |

| Non-Ducted Indoor Units \| Tonnage | | 0.5 | 0.7 | 1.0 | 1.3 | 1.5 | 2.0 | 2.3 | 2.5 | 3.0 | 4.0 | 4.5 | 5.0 | 6.0 | 8.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Way Cassette (YIC1) |  | ■ | ■ | ■ | ■ | | | | | | | | | | |
| 2-Way Cassette (YIC2) |  | | | | | ■ | ■ | | | | | | | | |
| 4-Way Mini Cassette (YICM) |  | | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| 4-Way Cassette (YIC1) |  | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | |
| Ceiling Suspended (YIC4) |  | | | | ■ | | ■ | | ■ | ■ | | | | | |
| Wall Mount (TIWM) |  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | |
| Floor Exposed (YIFE) |  | ■ | ■ | ■ | ■ | ■ | | | | | | | | | |
| Floor Concealed (YIFC) |  | ■ | ■ | ■ | ■ | ■ | | | | | | | | | |

# YORK® VRF Product Line *(continued)*

## Air-Source 208/230V & 460V VRF Outdoor Units

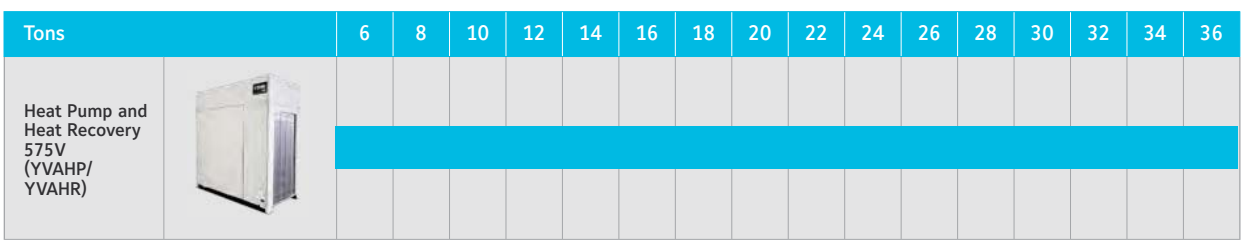
Enjoy the design freedom offered by the complete line of YORK® Air-Source VRF Systems. Modular YORK systems enable you to meet today's capacity needs exactly while facilitating future growth for optimal system performance and long-term cost-savings. Traditional HVAC options simply can't match the combination of flexibility, performance, and energy efficiency of YORK VRF Systems.




## Air-Source 575V VRF Outdoor Units

Deliver the advantages of VRF technology to Canadian customers easily and cost-effectively with YORK 575V Air-Source VRF Systems. The 575V line eliminates the need for a transformer, reduces costs and simplifies installation.

And, for budget-conscious customers, there is a Priorty Cooling Control option that enables heat pump systems to prioritize demand for cooling, automatically switching system operations from heating to cooling for a cost-effective alternative to heat recovery systems.



# YORK® VRF Product Line *(continued)*

## Water-Source VRF Units

Bring the benefits of VRF technology to applications where outdoor conditions or roof lines/weight limits challenge other systems. Best-in-class YORK® Water-Source VRF Systems are ideal for harsh climates, coastal regions or anywhere that roof weight, exterior appearance or external noise concerns are an issue. With modules in capacities from 6 to 48 tons, YORK Water-Source VRF Systems are some of the largest capacity systems on the market.

| Tons | | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heat Pump/Heat Recovery 208/230V & 460V (YVWHP/YVWHR) |  | | | | | | | | | | | | | | | | | | | | | | |

## Change-Over Boxes for Heat Recovery Systems

A full selection of change-over boxes ensures that heat recovery systems meet both current and future needs.

| Single-Port (COBS048B22S/C) | 4 Port (COB04M132B22S) | 8 Port (COB08M264B22S) | 12 Port (COB12M264B22S) |
|---|---|---|---|
|  |  |  |  |

## Controllers

Superior controllers provide unmatched performance and ensure optimal solutions for local and centralized control.

| Simplified Wired Controller (CIS01) | Wired Controller (CIW01) | Wireless Controller (CIR01) | Mini Central Controller (CCM01) | Large Central Controller (CCL01) | VRF Central Touchscreen Controller (CCXL01) |
|---|---|---|---|---|---|
|  |  |  |  |  |  |

## Network Adapters for Integration with BAS

Premium network adapters integrate VRF systems with building automation systems simply, quickly and completely.

| LonWorks® Adapter (CLW01) | VRF Smart Gateway (CBN02) | VRF Cloud Gateway (CMNETS) |
|---|---|---|
|  |  |  |

# Innovative Engineering

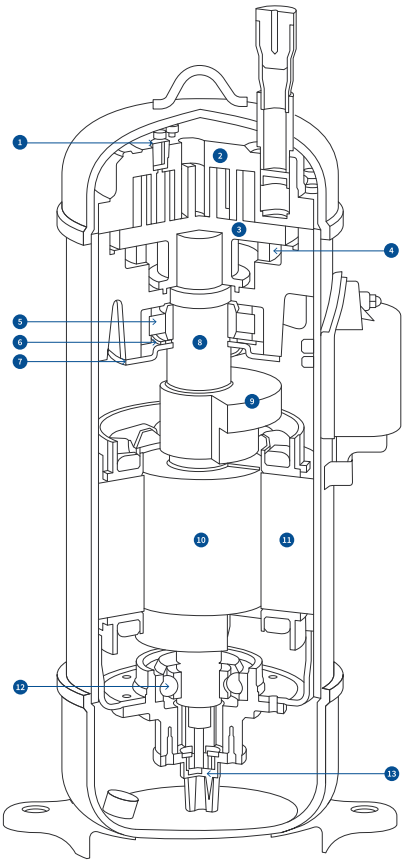
## Advanced compressor and heat exchanger achieve new levels of performance and efficiency

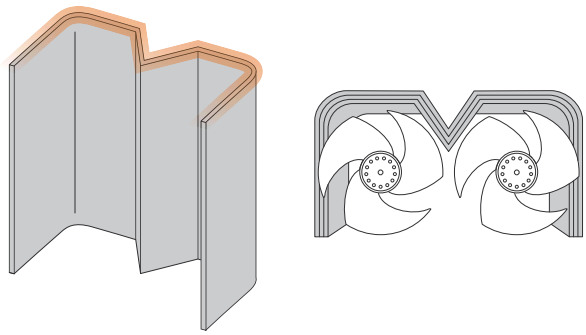
### Compressor

**Precision engineering makes our DC inverter scroll compressor exceptionally reliable, quiet and efficient. Modulating in 0.1 Hz increments, the compressor:**

- Delivers the exact amount of cooling/heating required
- Enables fine control for optimal comfort
- Provides energy savings

| | |
|---|---|
| 1 | Pressure bypass valve |
| 2 | Fixed scroll |
| 3 | Orbiting scroll |
| 4 | Oldham's coupling |
| 5 | Main bearing |
| 6 | Thrust bearing |
| 7 | Frame seal |
| 8 | Crankshaft |
| 9 | Counterweight |
| 10 | Motor rotor |
| 11 | Motor stator |
| 12 | Sub bearing |
| 13 | Oil pump |



### Heat exchanger

**Outdoor units feature our patented sigma-shaped heat exchanger for superior efficiency and an improved heat exchange rate. They also feature:**

**Demand control** which limits power consumption, minimizes equipment wear and tear and reduces noise.

**Load shedding** which turns units on and off and cycles between units for enhanced energy savings and reduced electric load demand.

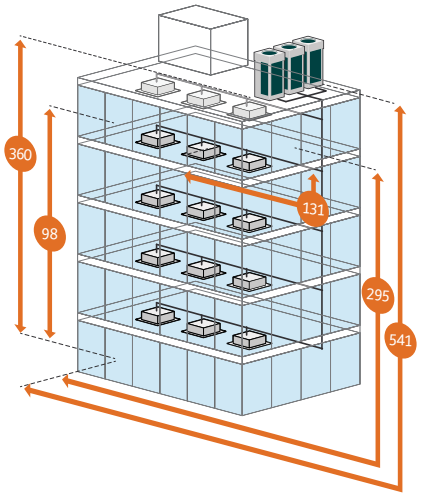
**Longer fan blades** that increase airflow by 25%, resulting in higher static pressure while reducing energy consumption and electric load demand.

# Design Flexibility

## Longer piping lengths provide greater design freedom

**Our vertical piping distance limits extend to 360 feet, providing more layout options.**

| Maximum Distances | HP | HR |
|---|---|---|
| Total piping, one-way | 3,281 ft. | |
| Vertically between OU and IU | 360 ft. | |
| Vertically between IUs | 98 ft. | 49 ft. |
| 1st branch and IU | 295 ft. | |
| Linear Length, OU and IU | 541 ft. | |
| Branch and IU | 131 ft. | |




### Indoor units

**Enjoy exceptional layout flexibility with a wide selection of indoor units that maximize comfort, convenience and savings.**

**Supply air sensors enable remote readings** of air supply temperature (on all YORK VRF Indoor Units).

**Multi Kits reduce installation time and cost** because they don't require 20 inches to each elbow installation as most competitors' systems do.

**GentleCool feature** (available on many units) eliminates the rush of cold air that can occur when air conditioning first comes on.

**The exclusive EconoFresh Economizer** (used with a ducted Medium Static unit) provides outside air/free cooling when conditions permit, saving energy and improving air quality.

**Optional motion sensors eliminate unnecessary operation and save energy** by adjusting supply air temperature to occupancy level and discontinuing operation when room is vacant for extended periods.

### Change-over boxes

Single-Port Change-Over Box

8 Port Change-Over Box

4 Port Change-Over Box

12 Port Change-Over Box

**Single-port boxes and multi-port boxes with 4, 8, and 12 ports feature:**

**Built-in simplicity.** Refrigerant is directed to the desired zone and indoor unit(s), and because our design does not produce condensate, there is no need for a drain in the change-over box.

**Quiet operation.** Each box has an optimal number of valves, eliminating noise and condensation, and increasing layout flexibility.

**Reliable performance.** Valves work according to the cooling and heating demand of each zone, and for added reliability, are protected with a fine mesh strainer in the refrigerant circuit. An optimized box design enables easy service access if required.

# Design Flexibility *(continued)*

## Space-saving solutions

YORK® VRF Outdoor Units are compact and lightweight, making them easy to specify, transport, install and service.

These space-saving solutions reduce installation costs for a true competitive advantage.

### Combination of modules

**Air-Source Equipment Line**

| Rated Capacity (Ton) | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of Modules | 1 | | | | | | 2 | | | | | | | 3 | | |
| Capacity of Module(s) (Ton) | 6 | 8 | 10 | 12 | 14 | 16 | 12<br>6 | 10<br>10 | 12<br>10 | 12<br>12 | 14<br>12 | 16<br>12 | 16<br>14 | 12<br>10<br>10 | 12<br>12<br>10 | 12<br>12<br>12 |

**Water-Source Equipment Line**

| Rated Capacity (Ton) | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of Modules | 1 | | | | | | | 2 | | | | | | | | |
| Capacity of Module(s) (Ton) | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 10<br>10 | 12<br>10 | 12<br>12 | 14<br>12 | 14<br>14 | 16<br>14 | 16<br>16 | 18<br>16 | 18<br>18 |

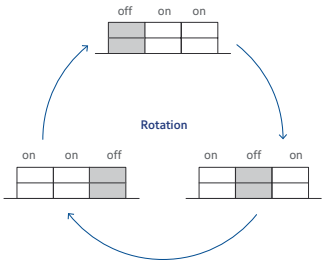
| Rated Capacity (Ton) | 38 | 40 | 42 | 44 | 46 | 48 |
|---|---|---|---|---|---|---|
| Number of Modules | 3 | | | | | |
| Capacity of Module(s) (Ton) | 14<br>12<br>12 | 14<br>14<br>12 | 14<br>14<br>14 | 16<br>14<br>14 | 16<br>16<br>14 | 16<br>16<br>16 |

# Advanced Performance

## Reliability with simple installation & maintenance

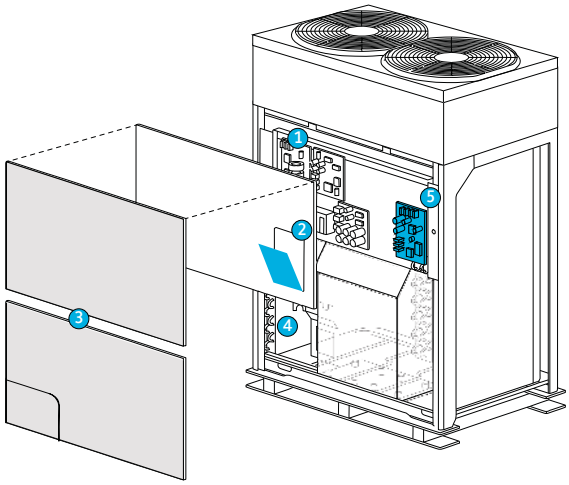
### Built to be dependable

YORK VRF equipment is engineered for reliability. In the unlikely event of a unit failure, the automatic backup system ensures uninterrupted operation by distributing the load to other units in the module. This exceptional performance is built into a compact, smartly designed cabinet that makes installation and maintenance a breeze.




### Rotational Operation

Compressors in systems with multiple units operate on programmed sequence, equalizing runtime. If one unit fails, remaining units continue operating to safeguard occupant comfort.



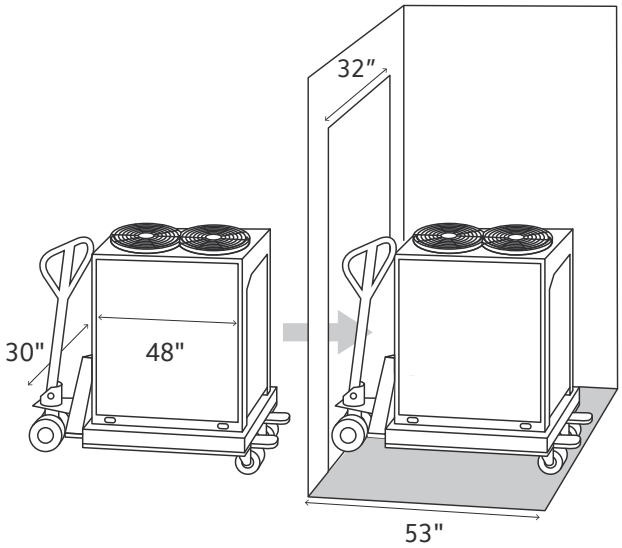

### Maintenance is Fast and Simple

Systems need little maintenance beyond the changing of filters and cleaning of coils. Removal of a single panel on the outdoor unit provides easy access to control boards, electrical connections, compressor and piping.

| | |
|---|---|
| 1 | Upper section allows easy access to PCBs |
| 2 | New access window for 7-segment display |
| 3 | Independently detachable upper and lower panels |
| 4 | Lower section allows access to compressors and valves |
| 5 | New dip switch setting for refrigerant evacuation |

### Install with Ease

Small, light outdoor units can be easily transported on pallets.



# Next-Generation Control

## A choice to suit every application

### Choose from several control options

- **Multiple control options are available,** from simple units with on/off, set point, load and speed settings, to programmable units that enable scheduling. Wireless units are available to provide remote control of zone space conditions. All options enable precise control of indoor units through intuitive user interfaces.
- **Central station controllers for larger projects** provide remote control and scheduling of the entire system from one or more control points.
- **Our leading-edge VRF Smart Gateway provides comprehensive control of** all YORK® VRF technology through building automation systems (BAS) such as *Metasys*® BAS .
- **The new VRF Cloud Gateway integrates our VRF systems with smart devices,** tablets and home automation system controllers for comprehensive control of all home systems through one device. The VRF Cloud Gateway works as a stand-alone solution to enable HVAC system control over the web through a smartphone, tablet or PC.

### Game-changing gateway for unprecedented control

Johnson Controls' revolutionary VRF Smart Gateway achieves what competitive products only approximate: complete integration of VRF system data with building automation systems such as *Metasys*® BAS. Unlike other BACnet® adapters, the VRF Smart Gateway makes integration fast and simple. No special programming or expensive technician time is required because VRF system data is automatically discovered and imported into your BAS:

Quick, easy integration of all detailed data with automatic formatting

- All data conforms to your BAS conventions
- Detailed data available for every component across system
- 24/7 control from a laptop, tablet or smartphone

This breakthrough product makes it possible to install an energy-efficient YORK VRF HVAC System without incurring high integration costs or sacrificing data access or equipment control. So, you are free to choose a YORK VRF System based on merit alone.


### Integration at an Elite Level

The VRF Smart Gateway provides complete data integration for absolute control of YORK VRF equipment through a building automation system.

# Selecting the Right System

## A Choice to Suit Every Space

The YORK® VRF line offers several system choices, so how do you know which to choose for a particular project? The following pages provide an overview of each system's advantages. The optimal choice for a specific application will depend upon customer requirements and influencing factors such as budget, location, and project type. For guidance with a particular project, contact your local YORK VRF expert.

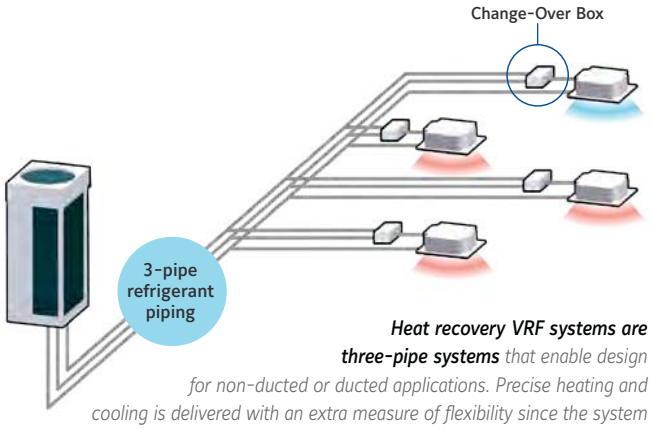
Heat Recovery or Heat Pump? ..... 14
Air-Source or Water-Source? ..... 15
Features & Benefits Summary ..... 16-17

# Heat Recovery or Heat Pump?

## Heat recovery

Three-pipe systems deliver simultaneous heating and cooling to multiple zones for ultimate flexibility and personalized comfort by transferring excess energy from one zone to another.
Heat recovery systems offer:

- customized comfort – each zone controls its own temperature
- consistent temperature in large zones
- energy savings
- heating operation down to -13°F standard

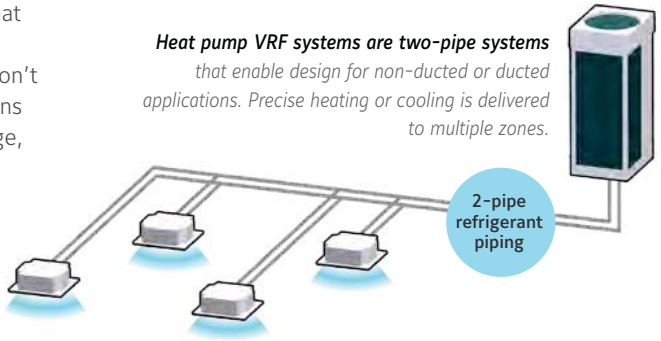



***Heat recovery VRF systems are three-pipe systems*** *that enable design for non-ducted or ducted applications. Precise heating and cooling is delivered with an extra measure of flexibility since the system can provide simultaneous heating and cooling while transferring any excess heat or cooling from one zone to another.*

## Heat pump

Two-pipe systems are simple, cost-effective systems that deliver either heating or cooling to multiple zones. Heat pump systems are a good choice for applications that don't require simultaneous heating or cooling, such as locations where seasons are clearly defined, or buildings with large, open-plan spaces.

***Heat pump VRF systems are two-pipe systems*** *that enable design for non-ducted or ducted applications. Precise heating or cooling is delivered to multiple zones.*

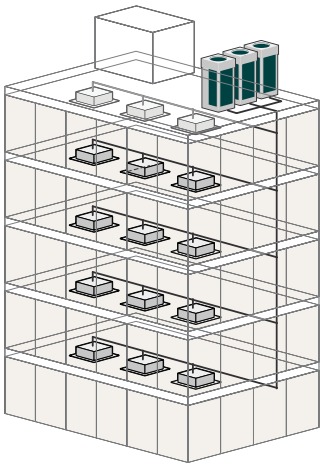



Your YORK® technical expert can help you to select the most suitable system for your application.

# Air-Source or Water-Source?

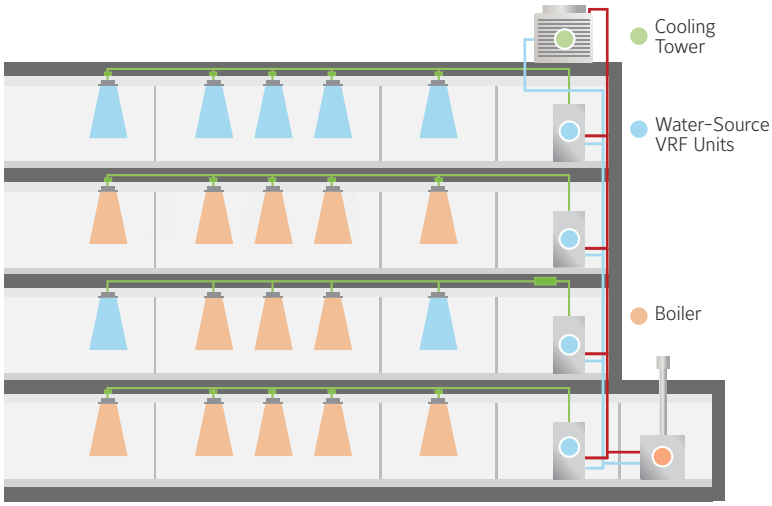
## Air-source VRF systems

Air-source systems provide a solution that is quick and easy to install and has very low maintenance costs. Units are available in capacities up to 36 tons, and each unit can be connected to up to 64 indoor units. Learn more about YORK® VRF air-source systems beginning on page 45.



## Water-source VRF systems

Water-source systems are an excellent choice for any application where outdoor equipment placement is problematic as all equipment is located indoors. Units are available in capacities up to 48 tons, and each unit can be connected to up to 64 indoor units. Learn more about YORK® VRF water-source systems beginning on page 70.



# Features and Benefits Summary

| | FEATURES | ADVANTAGES | BENEFITS |
|---|---|---|---|
| ARCHITECT / SYSTEM DESIGNER | **Pipe runs up to 3,281 feet. Vertical piping distance between Outdoor Unit and Indoor Unit is now up to 360 feet.** | · Suitable for short or long runs; accommodates nearly all projects | · Provides exceptional design freedom |
| | **Compact footprint** | · Requires less space than conventional systems | · Provides more placement options and enables use even within tight lot lines. |
| | **Modular components** | · Provides flexibility to customize systems to each project's needs | · Simplifies design process<br>· Allows easy updates as space is reconfigured or expanded |
| | **Low Ambient Outdoor Units** | · Effectively heat down to -13°F | · Provides efficient and reliable cold-climate heating performance |
| | **Non-ducted systems** | · Ultimate in design flexibility<br>· Reduces clearance between building floors | · Reduces system costs<br>· Saves space<br>· Ideal for historic renovations |
| | **Ducted systems** | · Accommodates retrofits by making use of existing duct infrastructure<br>· New fan design increases static pressure.<br>· Suits unique buildings that include ducted and non-ducted areas | · Reduces overall construction costs |
| | **EconoFresh Economizer** | · Provides energy-saving free cooling (or outside air to maintain good indoor air quality) | · Saves energy and maintains good indoor air quality |
| | **Heat Pump Systems** | · Precisely heats or cools multiple zones | · Provides extreme system design flexibility |
| | **Heat Recovery Systems** | · Allows simultaneous heating/cooling<br>· Allows transfer of excess heat/cooling from one zone to another space | · Maximizes comfort and efficiency<br>· Maximizes design flexibility<br>· Increases occupant comfort to specified zones |
| | **Comprehensive training** | · Modules tailored to specific job functions | · Enables effective equipment selection and specification |
| | **Web-based system selection software** | · Intuitive functionality that simplifies and speeds designs<br>· Accessible from any computer or tablet | · Allows confident selection and right-sizing of systems |
| | **Multi-Port Change-Over Boxes (COBs) available with 4, 8, and 12 ports** | · Multi-port COBs provide multiple layout options and accommodate future growth | · Provides exceptional design flexibility |

| | FEATURES | ADVANTAGES | BENEFITS |
|---|---|---|---|
| MECHANICAL CONTRACTOR / INSTALLER | **Installation simplicity** | · Outdoor unit piping can be connected from front, back or underneath.<br>· Small and light indoor units are easy to handle without heavy equipment<br>· Outdoor units are smaller and lighter than previous generation | · Reduces installation time and cost<br>· Provides more placement options |
| | **Comprehensive training** | · Modules tailored to specific job functions | · Enables professional, high-quality, timely installation |
| | **Consistent, reliable product delivery** | · Ensures correct delivery to job sites on time | · Enhances installation efficiency<br>· Allows efficient labor scheduling |
| | **Easy maintenance access** | · All components accessible via removal of one panel on outdoor unit | · Speeds up time spent on maintenance, repair, and troubleshooting, if required. |
| | **Easy access to product information** | · All product information is available on the web portal | · Simplifies and speeds up maintenance, troubleshooting and repairs |
| | **Refrigerant check** | · Automatically checks that system is charged with the correct amount of refrigerant to meet requirements. | · Helps contractor and installer adjust for optimum efficiency and performance |

# Features and Benefits Summary

| | | FEATURES | ADVANTAGES | BENEFITS |
|---|---|---|---|---|
| BUILDING OWNER | System | **Rotational outdoor unit operation** | · In multiple-unit applications at partial load, outdoor units operate alternately so that operating hours are shared equally. | · Optimizes efficiency<br>· Extends service life<br>· Increases reliability |
| | | **Backup operation function** | · Allows one outdoor unit to be taken off-line for maintenance while remaining units keep operating. | · Avoids system downtime<br>· Protects occupant comfort |
| | | **Efficiency optimized for part-load operation** | · Certified efficiency among industry's highest for VRF systems | · Saves energy |
| | | **Optimum individualized comfort** | · Heat recovery systems deliver simultaneous heating and cooling | · Efficient heating/cooling<br>· Maximizes occupant comfort |
| | | **Noise reduction preference mode** | · Lets users choose from three settings for a "not to exceed" sound level | · Extremely quiet (sound ratings as low as 51 dBA for outdoor units; 26 dBA for indoor units)<br>· Ideal where outdoor units are positioned on side of building or in locations where there are noise restrictions |
| | Compressor | **DC inverter-driven scroll compressor** | · Redesigned to deliver the optimum efficiency at normal load conditions<br>· Multiple inverter compressors are standard in 8-ton and larger outdoor units for increased efficiency | · Among industry's most efficient VRF systems:<br>· Highest IEER<br>· Highest SCHE<br>· Highest COP |
| | | **Compressor modulation in small increments** | · Smoothly delivers exact amount of heating or cooling needed | · Allows fine control for optimum comfort<br>· Saves energy |
| | Outdoor Units | **Demand control** | · Users can select from a wide variety of power settings from 100% to 60% and program "not to exceed" a given power level | · Limits electric demand charges<br>· Limits equipment runtime<br>· Reduces noise |
| | | **Load shedding** | · Allows programming to turn units on/off in rotation at 10- to 20-minute intervals | · Saves energy<br>· Limits demand charges |
| | | **Dual fan design** | · Dual fan design increases airflow over previous generation - up to 23% - and decreases sound | · Reduces noise<br>· Extends motor life<br>· Increases airflow |
| | | **Dual heat exchanger** | · Newly designed dual heat exchanger in Outdoor Units provides 10% more surface area | · Increases capacity<br>· Improves efficiency |
| | Indoor Units | **As high as 1.2 in. WG static pressure in ducted systems** | · Offers adjustable speeds to match any site-specific static pressure requirement | · Flexibility to accommodate long or short ductwork runs |
| | | **Optional motion and radiant sensors** | · Sets back temperature when space is unoccupied, increasing efficiency even further | · Saves energy |
| | Controls | **H-Link II Protocol** | · Controls multiple indoor and outdoor units from one control point<br>· Adds versatility to connect various central control options | · Maximizes indoor comfort<br>· Saves energy<br>· Improves system management |
| | | **Temperature control** | · Adjusts in 1° Fahrenheit increments<br>· Adjustable fan speeds | · Auto-adjusts for daylight saving time<br>· Provides options to satisfy multiple projects/buildings |
| | | **VRF Smart Gateway** | · Enables control of VRF systems by way of a building management system (such as *Metasys*®) for almost unlimited control in a building or campus enterprise. | · Automatic data formatting reduces integration time and expense<br>· Full BMS capabilities enable superior control of all system components<br>· Wi-Fi accessibility enables 24/7 monitoring and control from laptops, tablets and smartphones |

YORK VRF

# VARIABLE REFRIGERANT FLOW SYSTEMS

Johnson Controls

# Indoor Units

## A Choice to Suit Every Space

YORK® VRF ducted and non-ducted units deliver both style and performance. Whisper-quiet units have sound ratings as low as 26 dBA and are available in styles and capacities to fit any application. Best of all, they are easy to install, service and maintain.

Overview ..... 20-21

**Ducted Units Specification Tables**

High Static ..... 22-23
Medium Static ..... 24-25
Slim ..... 26
Dedicated Outside Air System (DOAS) ..... 27
EconoFresh Economizer ..... 28
Multi-Position Air Handler and DX-Kit .. 29-31
DX-Kit for General AHU Connection ..... 32

**Non-Ducted Units Specification Tables**

1-Way Cassette Unit ..... 33
2-Way Cassette Unit ..... 34
4-Way Mini Cassette Unit ..... 35
4-Way Cassette Unit ..... 36-37
Wall Mount Unit ..... 38-39
Ceiling Suspended Unit ..... 40
Floor Exposed Unit ..... 41
Floor Concealed Unit ..... 42

DUCTED INDOOR UNITS

# Overview

## Ducted High Static Indoor Unit

This unit now features multiple fan speeds, bottom access for ease of service, and a high-efficiency DC motor.

## Dedicated Outside Air System (DOAS)

This unit enables fresh air to be brought into the VRF system for a healthier, more comfortable indoor environment.

## Ducted Medium Static Indoor Unit

With a high-efficiency DC fan motor, this unit has multiple fan speeds and bottom access for ease of service.

## EconoFresh Economizer Indoor Unit

This unit combines a ducted medium static unit with an Economizer Kit to provide outside air/free cooling when conditions permit.

## Ducted Slim Indoor Unit

This slim-line unit features a high-efficiency DC fan motor, multiple fan speeds and bottom access for ease of service.

## Multi-Position Air Handler Unit

This flexible unit with multiple installation positions is ideal both for residential and light commercial applications.

## 1-Way Cassette Indoor Unit

This slim and stylish yet inexpensive unit is ideal for spaces that only require one-way airflow.

## Ceiling Suspended Indoor Unit

This unit, with its sleek design, operates quietly and efficiently while evenly distributing airflow.

## 2-Way Cassette Indoor Unit

Providing bi-directional airflow, this exceptionally quiet unit is a good choice for many different spaces.

## Wall Mount Indoor Unit

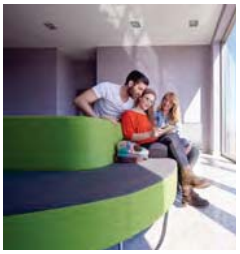
With wide-angle louvers, this unit distributes air comfortably throughout a room for an even temperature.

## 4-Way Mini Cassette Indoor Unit

This versatile unit is quiet, energy-efficient and compact, making it a great choice for many applications.

## Floor Exposed Indoor Unit

This slim-design unit leaves design options open and is ideal for perimeter conditioning of air.



## 4-Way Cassette Indoor Unit

Compact and lightweight, this unit with 4-way airflow is easy to install even in tight spaces.

## Floor Concealed Indoor Unit

This unit has a compact design which enables installation in many spaces where perimeter conditioning of air is needed.

## DUCTED INDOOR UNITS

# Ducted High Static

Capacities: 15,000 to 96,000 Btu/hr

These indoor units now feature higher static pressure capabilities:
Up to 0.8" for 1.3 – 4.5 ton units and up to 1.16" for 6 and 8 ton units.

**Controller Options**


MODEL CIR01


MODEL CIS01


MODEL CIW01

| Tonnage | | | 1.3 | | 1.5 | | 2.0 | | 2.3 | | 2.5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ducted High Static Indoor Unit Model # | | | YIDH015B22S | | YIDH018B22S | | YIDH024B22S | | YIDH027B22S | | YIDH030B22S | |
| Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 15,000 | | 18,000 | | 24,000 | | 27,000 | | 30,000 | |
| | | (kW) | (4.4) | | (5.3) | | (7.1) | | (8.0) | | (8.8) | |
| Nominal Heating Capacity [1] | | Btu/h | 17,000 | | 20,000 | | 27,000 | | 30,000 | | 34,000 | |
| | | (kW) | (5.0) | | (5.9) | | (8.0) | | (8.8) | | (10.0) | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 41-38-35-32 | | 37-35-32-30 | | 40-37-34-32 | | 40-37-34-32 | | 40-37-34-32 | |
| Outer Dimensions | Height | in.(mm) | 11-13/16 | (300) | 11-13/16 | (300) | 11-13/16 | (300) | 11-13/16 | (300) | 11-13/16 | (300) |
| | Width | in.(mm) | 27-9/16 | (700) | 41-5/16 | (1050) | 41-5/16 | (1050) | 41-5/16 | (1050) | 55-1/8 | (1400) |
| | Depth | in.(mm) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) |
| Net Weight | | lbs.(kg) | 64 | (29) | 84 | (38) | 84 | (38) | 84 | (38) | 106 | (48) |
| Refrigerant | | | R410A | | | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 512-459-388-335 | | 653-582-512-424 | | 759-671-582-494 | | 759-671-582-494 | | 1059-935-812-706 | |
| | | ($m^3$/min) | (14.5-13-11-9.5) | | (18.5-16.5-14.5-12) | | (21.5-19-16.5-14) | | (21.5-19-16.5-14) | | (30-26.5-23-20) | |
| External Pressure [3] Std (High1 - High2) | | in. W.G. | 0.2 (0.4-0.8) | | 0.2 (0.4-0.8) | | 0.2 (0.4-0.8) | | 0.2 (0.4-0.8) | | 0.2 (0.4-0.8) | |
| | | (Pa) | (50 (100-200)) | | (50 (100-200)) | | (50 (100-200)) | | (50 (100-200)) | | (50 (100-200)) | |
| Motor Nominal Output | | W | 157 | | 190 | | 190 | | 190 | | 259 | |
| Connections | | | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | | | |
| | Liquid Line | in.(mm) | 1/4 | (6.35) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 1/2 | (12.7) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) |
| Condensate Drain | OU | in. (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

| Ducted High Static | | | | |
|---|---|---|---|---|
| Compatible Accessories | YIDH015B22S | YIDH018-027B22S | YIDH030-054B22S | YIDH072-096B21S |
| Filter Box for Long-Life Filter | B-56LI | B-90LI | B-160LI | – |
| Infrared (IR) Receiver Kit | CWDIRK01 | CWDIRK01 | CWDIRK01 | CWDIRK01 |
| Long-Life Filter | F-56LI | F-90LI | F-160LI | – |
| 3-Pin Connector Cable | PCC-1A | PCC-1A | PCC-1A | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-6A | PCC-6A | PCC-6A | PCC-CN1925-H |
| Relay and 3-Pin Connector Kit | PSC-5RA | PSC-5RA | PSC-5RA | PSC-5RA |
| Motion Sensor Kit (for Ducted Indoor Units) | SOR-NEZ | SOR-NEZ | SOR-NEZ | – |
| Seismic Suspension Bracket | – | – | – | SSB-IDH01 |
| Remote Sensor (Control) | THM-R2A | THM-R2A | THM-R2A | THM-R2A |

# Ducted High Static *(continued)*

## Key Features

- High-efficiency DC fan motor
- Multiple fan speed settings
- Bottom access for easy service
- Built-in condensate pump
- Auxiliary/emergency heater control
- Sensor enables remote reading of air supply temperature
- Cooling and heating auto-changeover dual-setpoint control
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling.

| Tonnage | | | 3.0 | | 4.0 | | 4.5 | | 6.0 | | 8.0 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ducted High Static Indoor Unit Model # | | | YIDH036B22S | | YIDH048B22S | | YIDH054B22S | | YIDH072B21S | | YIDH096B21S | |
| Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 36,000 | | 48,000 | | 54,000 | | 72,000 | | 96,000 | |
| | | (kW) | (10.6) | | (14.1) | | (15.8) | | (21.1) | | (28.2) | |
| Nominal Heating Capacity [1] | | Btu/h | 40,000 | | 54,000 | | 60,000 | | 81,000 | | 108,000 | |
| | | (kW) | (11.8) | | (15.8) | | (17.6) | | (23.8) | | (31.7) | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) [(Hi-Lo) (208/230V) for 6.0, 8.0 Ton] | | dB | 42-39-36-33 | | 44-40-37-34 | | 44-40-37-34 | | 47-43/50-47 | | 51-46/54-50 | |
| Outer Dimensions | Height | in.(mm) | 11-13/16 | (300) | 11-13/16 | (300) | 11-13/16 | (300) | 18-3/8 | (466) | 18-3/8 | (466) |
| | Width | in.(mm) | 55-1/8 | (1400) | 55-1/8 | (1400) | 55-1/8 | (1400) | 49-3/16 | (1250) | 49-3/16 | (1250) |
| | Depth | in.(mm) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 44-1/8 | (1120) | 44-1/8 | (1120) |
| Net Weight | | lbs.(kg) | 106 | (48) | 106 | (48) | 106 | (48) | 258 | (117) | 258 | (117) |
| Refrigerant | | | R410A | | | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 1183-1041-918-777 | | 1271-1112-971-847 | | 1271-1112-971-847 | | 2047-1765 | | 2542-2189 | |
| | | (m3/min) | (33.5-29.5-26-22) | | (36-31.5-27.5-24) | | (36-31.5-27.5-24) | | (58.0-50.0) | | (72.0-62.0) | |
| External Pressure [3] Std (High1-High2) [(Std (High)) (208/230V) for 6.0, 8.0 Ton] | | in. W.G. | 0.2 (0.4-0.8) | | 0.2 (0.4-0.8) | | 0.2 (0.4-0.8) | | 0.28/0.64 (0.88/1.16) | | 0.32/0.64 (0.88/1.16) | |
| | | (Pa) | (50 (100-200)) | | (50 (100-200)) | | (50 (100-200)) | | (70/160 (220/290)) | | (80/160 (220/240)) | |
| Motor Nominal Output | | W | 259 | | 259 | | 259 | | 840 (420x2pcs) | | 1240 (620x2pcs) | |
| Connections | | | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | Brazed | | Brazed | |
| | Liquid Line | in.(mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 3/4 | (19.05) | 7/8 | (22.20) |
| Condensate Drain | OU | in. (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard.
   Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions:
   4.9 ft. (1.5m) beneath the unit.
   The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
3. The data for external pressure 3 indicates Standard Pressure Setting (High Pressure Setting 1 - High Pressure Setting 2) values when a filter is not used. The sound pressure level is based on the Standard Pressure Setting.

DUCTED INDOOR UNITS

# Ducted Medium Static

Capacities: 6,000 to 54,000 Btu/hr

These indoor units feature higher static pressure capabilities: up to 0.6" for Medium Static Indoor Units.

**Controller Options**


MODEL CIR01


MODEL CIS01


MODEL CIW01

| Tonnage | | | 0.5 | | 0.7 | | 1.0 | | 1.3 | | 1.5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ducted Medium Static Indoor Unit Model # | | | YIDM006B22S | | YIDM008B22S | | YIDM012B22S | | YIDM015B22S | | YIDM018B22S | |
| Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 6,000 | | 8,000 | | 12,000 | | 15,000 | | 18,000 | |
| | | (kW) | (1.8) | | (2.4) | | (3.6) | | (4.4) | | (5.3) | |
| Nominal Heating Capacity [1] | | Btu/h | 6,700 | | 9,000 | | 13,500 | | 17,000 | | 20,000 | |
| | | (kW) | (2.0) | | (2.7) | | (4.0) | | (5.0) | | (5.9) | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 32-30-28-27 | | 33-31-29-28 | | 38-35-32-30 | | 40-37-34-31 | | 37-35-33-31 | |
| Outer Dimensions | Height | in. (mm) | 9-13/16 | (250) | 9-13/16 | (250) | 9-13/16 | (250) | 9-13/16 | (250) | 9-13/16 | (250) |
| | Width | in. (mm) | 27-9/16 | (700) | 27-9/16 | (700) | 27-9/16 | (700) | 27-9/16 | (700) | 41-5/16 | (1050) |
| | Depth | in. (mm) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) |
| Net Weight | | lbs. (kg) | 57 | (26) | 57 | (26) | 60 | (27) | 60 | (27) | 79 | (36) |
| Refrigerant | | | R410A | | | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 300-265-229-194 | | 335-300-265-229 | | 459-406-353-300 | | 512-459-388-335 | | 653-582-494-424 | |
| | | ($m^3$/min) | (8.5-7.5-6.5-5.5) | | (9.5-8.5-7.5-6.5) | | (13-11.5-10-8.5) | | (14.5-13-11-9.5) | | (18.5-16.5-14-12) | |
| External Pressure [3] Std (High1-High2) | | in. W.G. | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | |
| | | (Pa) | (50 (100-150)) | | (50 (100-150)) | | (50 (100-150)) | | (50 (100-150)) | | (50 (100-150)) | |
| Motor Nominal Output | | W | 157 | | 157 | | 157 | | 157 | | 190 | |
| Connections | | | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | | | |
| | Liquid Line | in. (mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 3/8 | (9.52) |
| | Gas Line | in. (mm) | 1/2 | (12.7) | 1/2 | (12.7) | 1/2 | (12.7) | 1/2 | (12.7) | 5/8 | (15.88) |
| Condensate Drain | OU | in. (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

| Ducted Medium Static | | | |
|---|---|---|---|
| Compatible Accessories | YIDM006-015B22S | YIDM018-027B22S | YIDM030-054B22S |
| Filter Box for Long-Life Filter | B-56LI | B-90LI | B-160LI |
| Infrared (IR) Receiver Kit | CWDIRK01 | CWDIRK01 | CWDIRK01 |
| Long-Life Filter | F-56LI | F-90LI | F-160LI |
| 3-Pin Connector Cable | PCC-1A | PCC-1A | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-6A | PCC-6A | PCC-6A |
| Relay and 3-Pin Connector Kit | PSC-5RA | PSC-5RA | PSC-5RA |
| Motion Sensor Kit (for Ducted Indoor Units) | SOR-NEZ | SOR-NEZ | SOR-NEZ |
| Remote Sensor (Control) | THM-R2A | THM-R2A | THM-R2A |

# Ducted Medium Static *(continued)*

## Key Features

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to 0.6 in. WG static pressure
- Bottom access for easy service and troubleshooting
- Built-in condensate pump
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling.

| Tonnage | | | 2.0 | | 2.3 | | 2.5 | | 3.0 | | 4.0 | | 4.5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ducted Medium Static Indoor Unit Model # | | | YIDM024B22S | | YIDM027B22S | | YIDM030B22S | | YIDM036B22S | | YIDM048B22S | | YIDM054B22S | |
| Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 24,000 | | 27,000 | | 30,000 | | 36,000 | | 48,000 | | 54,000 | |
| | | (kW) | (7.1) | | (8.0) | | (8.8) | | (10.6) | | (14.1) | | (15.8) | |
| Nominal Heating Capacity [1] | | Btu/h | 27,000 | | 30,000 | | 34,000 | | 40,000 | | 54,000 | | 60,000 | |
| | | (kW) | (8.0) | | (8.8) | | (10.0) | | (11.8) | | (15.8) | | (17.6) | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 39-37-34-32 | | 39-37-34-32 | | 40-38-35-32 | | 42-39-36-34 | | 43-40-37-34 | | 43-40-37-34 | |
| Outer Dimensions | Height | in.(mm) | 9-13/16 | (250) | 9-13/16 | (250) | 9-13/16 | (250) | 9-13/16 | (250) | 9-13/16 | (250) | 9-13/16 | (250) |
| | Width | in.(mm) | 41-5/16 | (1050) | 41-5/16 | (1050) | 55-1/8 | (1400) | 55-1/8 | (1400) | 55-1/8 | (1400) | 55-1/8 | (1400) |
| | Depth | in.(mm) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) | 31-1/2 | (800) |
| Net Weight | | lbs.(kg) | 79 | (36) | 79 | (36) | 97 | (44) | 97 | (44) | 97 | (44) | 97 | (44) |
| Refrigerant | | | R410A | | | | | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 759-671-582-494 | | 759-671-582-494 | | 1059-935-812-706 | | 1183-1041-918-777 | | 1271-1112-971-847 | | 1271-1112-971-847 | |
| | | ($m^3$/min) | (21.5-19-16.5-14) | | (21.5-19-16.5-14) | | (30-26.5-23-20) | | (33.5-29.5-26-22) | | (36-31.5-27.5-24) | | (36-31.5-27.5-24) | |
| External Pressure [3] Std (High1-High2) | | in. W.G. | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | | 0.2 (0.4-0.6) | |
| | | (Pa) | (50 (100-150)) | | (50 (100-150)) | | (50 (100-150)) | | (50 (100-150)) | | (50 (100-150)) | | (50 (100-150)) | |
| Motor Nominal Output | | W | 190 | | 190 | | 259 | | 259 | | 259 | | 259 | |
| Connections | | | | | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | | | | | |
| | Liquid Line | in.(mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) |
| Condensate Drain | OU | in. (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions:4.9 ft. (1.5m) beneath the unit. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
3. The data for external pressure 3 indicates Standard Pressure Setting (High Pressure Setting 1 - High Pressure Setting 2) values when a filter is not used. The sound pressure level is based on the Standard Pressure Setting.

DUCTED INDOOR UNITS

# Ducted Slim

Capacities: 6,000 to 18,000 Btu/hr

## Key Features

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to .20 in. WG static pressure
- Bottom access for easy service and troubleshooting
- Built-in condensate pump
- Setback temperature control
- Auxiliary/emergency heater control

**Controller Options**

MODEL CIR01 MODEL CIS01 MODEL CIW01

- Cooling and heating auto-changeover dual-setpoint control
- Sensor enables remote reading of air supply temperature

| Tonnage | | | 0.5 | | 0.7 | | 1.0 | | 1.3 | | 1.5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ducted Slim Indoor Unit Model # | | | YIDS006B21S | | YIDS008B21S | | YIDS012B21S | | YIDS015B21S | | YIDS018B21S | |
| Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 6,000 | | 8,000 | | 12,000 | | 15,000 | | 18,000 | |
| | | (kW) | (1.8) | | (2.3) | | (3.5) | | (4.4) | | (5.3) | |
| Nominal Heating Capacity [1] | | Btu/h | 6,700 | | 9,000 | | 13,500 | | 17,000 | | 20,000 | |
| | | (kW) | (2.0) | | (2.6) | | (4.0) | | (5.0) | | (5.9) | |
| Sound Pressure Level (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 32-30-29-27 | | 32-30-29-27 | | 34-33.5-33-32 | | 36-35-33-32 | | 40-38-36-34 | |
| Outer Dimensions | Height | in.(mm) | 7-9/16 | (192) | 7-9/16 | (192) | 7-9/16 | (192) | 7-9/16 | (192) | 7-9/16 | (192) |
| | Width | in.(mm) | 35-3/4 | (908) | 35-3/4 | (908) | 35-3/4 | (908) | 46-3/8 | (1178) | 46-3/8 | (1178) |
| | Depth | in.(mm) | 17-19/32 | (447) | 17-19/32 | (447) | 17-19/32 | (447) | 17-19/32 | (447) | 17-19/32 | (447) |
| Net Weight | | lbs.(kg) | 44 | (20) | 44 | (20) | 46 | (21) | 57 | (26) | 57 | (26) |
| Refrigerant | | | R410A | | | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 318-289-244-205 | | 318-289-244-205 | | 346-318-300-268 | | 512-477-441-381 | | 582-530-494-424 | |
| | | ($m^3$/min) | (9-8-7-6) | | (9-8-7-6) | | (10-9-9-8) | | (15-14-13-11) | | (17-15-14-12) | |
| External Pressure[2] Std (High-Low) | | in. W.G. | 0.04 (0.12-0.00) | | 0.04 (0.12-0.00) | | 0.04 (0.12-0.00) | | 0.04 (0.20-0.00) | | 0.04 (0.20-0.00) | |
| | | (Pa) | (10 (30-0)) | | (10 (30-0)) | | (10 (30-0)) | | (10 (50-0)) | | (10 (50-0)) | |
| Motor Nominal Output | | W | 40 | | 40 | | 40 | | 60 | | 60 | |
| Connections | | | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | | | |
| | Liquid Line | in.(mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 5/8 | (15.88) |
| Condensate Drain | OU | in.(mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Data values when a filter is not used.

| Ducted Slim | | |
|---|---|---|
| Compatible Accessories | YIDS006-012B21S | YIDS015-018B21S |
| Infrared (IR) Receiver Kit | CWDIRK01 | CWDIRK01 |
| Air Filter | KW-PP5Q | KW-PP6Q |
| 3-Pin Connector Cable | PCC-1A | PCC-1A |
| Connector Cable for Auxiliary Heater Control | PCC-CN8-H | PCC-CN8-H |
| Relay and 3-Pin Connector Kit | PSC-5RA | PSC-5RA |
| Remote Sensor (Control) | THM-R2A | THM-R2A |

# Dedicated Outside Air System (DOAS)

Capacity: 96,000 Btu/hr

Introduce and condition fresh air into a VRF system with the Dedicated Outside Air System indoor unit to create a more comfortable and healthy indoor environment.

**Controller Options**


MODEL CIR01


MODEL CIS01


MODEL CIW01

| Tonnage | | | 8.0 | |
|---|---|---|---|---|
| Dedicated Outside Air System (DOAS) Unit Model # | | | YDOA096B21S | |
| Power Supply | | | AC 1 Phase, 208/230V, 60Hz | |
| Outlet Air Temperature Control [1] | Nominal Cooling Capacity | Btu/h | 96,000 | |
| | | (kW) | (28.2) | |
| | Nominal Heating Capacity | Btu/h | 60,000 | |
| | | (kW) | (17.6) | |
| Indoor Temperature Control [2] | Nominal Cooling Capacity | Btu/h | 96,000 | |
| | | (kW) | (28.2) | |
| | Nominal Heating Capacity | Btu/h | 83,600 | |
| | | (kW) | (24.5) | |
| Sound Pressure Level [3] (Overall A Scale) (208/230V) | | dB | 50/51 | |
| Outer Dimensions | Height | in.(mm) | 19-1/8 | (486) |
| | Width | in.(mm) | 50 | (1270) |
| | Depth | in.(mm) | 44-1/8 | (1120) |
| Net Weight | | lbs.(kg) | 247 | (112) |
| Refrigerant | | | R410A | |
| Indoor Fan | Air Flow Rate4 | cfm | 1236 | |
| | | ($m^3$/min) | (35.0) | |
| External Pressure [4] (208/230V) | | in. W.G. (Pa) | 1.06/1.24 (265/310) | |
| Motor Nominal Output | | W | 402 (201 x 2pcs) | |
| Connections | | | | |
| Refrigerant Piping | | | Brazed | |
| | Liquid Line | in.(mm) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 7/8 | (22.20) |
| Condensate Drain | OU | in.(mm) | 1-1/4 | (32) |

## Key Features

- 8 ton unit
- Pre-installed condensate pump
- Nominal airflow of 1,236CFM
- High external static pressure up to 1.24 in. WG (at 230V) enables design flexibility
- Sensor enables remote reading of air supply temperature
- Seamlessly integrates with the VRF heat pump system controls and piping
- Multiple control modes for optimizing comfort and energy efficiency include:
  - » Outlet Air Temperature Control
  - » Indoor Temperature Control
  - » Remote Sensor
  - » Sensor in Optional Programmable Wired Zone Controller

| Dedicated Outdoor Air System | |
|---|---|
| Compatible Accessories | YDOA096B21S |
| Infrared (IR) Receiver Kit | CWDIRK01 |
| 3-Pin Connector Cable | PCC-1A |
| Relay and 3-Pin Connector Kit | PSC-5RA |
| Seismic Suspension Bracket | SSB-IDH01 |
| Remote Sensor (Control) | THM-R2A |

NOTES:

1. Outlet Air Temperature Control
   A control system to bring the outlet temperature closer to the set point temperature of the wired controller, using an outlet air thermistor of the unit. Nominal capacity (outlet air temperature control) is based on combination with VRF system and following conditions:

| COOLING OPERATION CONDITIONS | | HEATING OPERATION CONDITIONS | |
|---|---|---|---|
| Outdoor Temperature: | 91°F DB (33.0°C DB)<br>82°F WB (28.0°C WB) | Outdoor Temperature: | 32°F DB (0°C DB)<br>27F WB (-2.9°C WB) |
| Discharge Set Temperature: | 61°F DB (16.0°C DB) | Discharge Set Temperature: | 72 F DB (22.0°C DB) |
| Piping Length: | 24.6ft (7.5m) | Piping Lift: | 0ft (0m) |

2. Indoor Temperature Control
   A control system to bring the room atmosphere temperature closer to the set point temperature of the wired controller, using a temperature sensor (remote sensor or thermistor in wired controller) mounted to any place in the room. Nominal capacity (indoor temperature control) is based on combination with VRF system and following conditions:

| COOLING OPERATION CONDITIONS | | HEATING OPERATION CONDITIONS | |
|---|---|---|---|
| Outdoor Temperature: | 91°F DB (33.0°C DB)<br>82°F WB (28.0°C WB) | Outdoor Temperature: | 32°F DB (0°C DB)<br>27°F WB (-2.9°C WB) |
| Indoor Temperature: | 81°F DB (27.0°C DB) | Indoor Temperature: | 68°F DB (20.0°C DB) |
| Piping Length: | 24.6ft (7.5m) | Piping Lift: | 0ft (0m) |

3. The sound pressure level is based on the following conditions.
   4.9 ft. (1.5m) beneath the units.
   The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
4. Data values when a filter is not used.

DUCTED INDOOR UNITS

# EconoFresh Economizer

The EconoFresh unit includes the Economizer Kit and a ducted Medium Static unit in a choice of three capacities: 30,000, 36,000 or 48,000 Btu/hr.

The exclusive EconoFresh unit is a combination of a ducted Medium Static unit paired with an Economizer Kit to provide up to 100% outside air/free cooling when conditions are favorable. Seamlessly integrating with VRF systems, the unit contributes to energy savings and improves air quality.

**Controller Options**


MODEL CIR01


MODEL CIS01


MODEL CIW01

| Tonnage | | | 2.5 | | 3.0 | | 4.0 | |
|---|---|---|---|---|---|---|---|---|
| EconoFresh (Economizer Kit + a ducted Medium Static indoor unit) - Model # | | | YIDM030B21E | | YIDM036B21E | | YIDM048B21E | |
| Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | |
| Nominal Cooling Capacity * | | Btu/h | 30,000 | | 36,000 | | 48,000 | |
| | | (kW) | (8.8) | | (10.5) | | (14.1) | |
| Nominal Heating Capacity * | | Btu/h | 34,000 | | 40,000 | | 54,000 | |
| | | (kW) | (10.0) | | (11.7) | | (15.8) | |
| Sound Pressure Level (Overall A Scale) (Hi-Me-Lo) | | dB | 38-35-32 | | 39-35-33 | | 40-36-33 | |
| Outer Dimensions | Height | in.(mm) | 10-7/8 | (275) | 10-7/8 | (275) | 10-7/8 | (275) |
| | Width | in.(mm) | 58-1/16 | (1474) | 58-1/16 | (1474) | 58-1/16 | (1474) |
| | Depth | in.(mm) | 23-5/8 | (600) | 23-5/8 | (600) | 23-5/8 | (600) |
| Net Weight | | lbs.(kg) | 106 | (48) | 106 | (48) | 106 | (48) |
| Refrigerant | | | R410A | | | | | |
| Indoor Fan | Air Flow Rate[2] (Hi-Me-Lo) | cfm | 1059-953-847 | | 1236-1094-988 | | 1271-1130-1024 | |
| | | (m3/min) | (30-27-24) | | (35-31-28) | | (36-32-29) | |
| External Pressure[2] (High-Med-Low) | | in. W.G. | 0.17-0.12-0.10 | | 0.16-0.11-0.10 | | 0.12-0.10-0.08 | |
| | | (Pa) | (43-30-25) | | (40-28-25) | | (30-25-20) | |
| Motor Nominal Output | | W | 250 | | 250 | | 250 | |
| Connections | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | |
| | Liquid Line | in.(mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) |
| Condensate Drain | OU | in.(mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |
| Adaptable EconoFresh Kit Model | | | EF-456NE | | | | | |
| | Height | in. (mm) | 10 (254) | | | | | |
| | Width | in. (mm) | 55-1/2 (1410) | | | | | |
| | Depth | in. (mm) | 12-3/16 (270) | | | | | |
| | Net Weight | lbs. (kg) | 28 (12.5) | | | | | |

## Key Features

- Excellent for applications with cooling demand during mid seasons and winter.
- Inputs for optional $CO_2$ and enthalpy sensors are available for control based on indoor air quality or temperature/humidity.
- Remote control setting of the outside air damper opening to ensure minimum outside airflow requirements are met.
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- Sensor enables remote reading of air supply temperature

| EcoFresh | |
|---|---|
| Compatible Accessories | YIDM030-048B21E |
| Infrared (IR) Receiver Kit | CWDIRK01 |
| Air Filter | KW-PP456E |
| 3-Pin Connector Cable | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-CN8-H |
| Relay and 3-Pin Connector Kit | PSC-5RA |
| Remote Sensor (Control) | THM-R2A |

NOTES:
1. Nominal capacity condition is based on AHRI standard. See www.ahrinet.org for more information.
2. Data values when a filter is not used.

# Multi-Position Air Handler


Multi-Position Air Handler
Capacities: 18,000 to 60,000 Btu/hr

Fully field installed integrated DX-Kit.

## Key Features

- **RC2** – Rigid Case Construction interior endoskeleton for structural support, flush side, and to lock in insulation.
- **Powder Painted** – G30 galvanized steel case provides a coated edge that resists corrosion and rust creep.
- **MaxAlloy™ Coil** – Long life aluminum coils built to deliver lasting performance, efficiency and reliability.
- **Quality Construction** – Structural components are made of aluminum or G90 galvanized steel to prevent corrosion.
- **Improved Insulation Design** – Single piece with no external screws to reduce thermal transmission paths to prevent sweating. Foil faced insulation for ease of cleaning.
- **Case Depth** – Models are 20.5" deep which enables easy access even in tight applications.
- **Thermoset Condensate Pan** – Positive slope for condensate to reduce potential for mold or contaminants.
- **Factory Sealed** – Achieves 2% or less total airflow leakage rate at duct leakage test conditions in positive and negative pressure for system airflow verification.
- **Enhanced Filter Rack** – All models have integrated internal filter racks provided for use with 1" thick standard size filters.
- **Electric Heat Kits** – Field installed electric heat kits are available for installation-friendly and easy service applications.
- **Blowers** – All models use direct-drive, multi-speed motors.
- **Fully connected** to the VRF system through the DX-Kit.
- **Sensor enables remote reading** of air supply temperature

## DUCTED INDOOR UNITS

# Multi-Position Air Handler *(continued)*

| Multi-Position Air Handler with DX-Kit | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tonnage | | | 1.5 Ton | | 2.0 Ton | | 2.5 Ton | | 3.0 Ton | | | |
| Model # | | | YMAHP18B21S | | YMAHP24B21S | | YMAHP30B21S | | YMAHP36B21S | | YMAHP36C21S | |
| Adaptable Air Handler Model # | | | AP18BX21 | | AP24BX21 | | AP30BX21 | | AP36BX21 | | AP36CX21 | |
| Indoor Unit Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 18,000 | | 24,000 | | 30,000 | | 36,000 | | 36,000 | |
| | | (kW) | (5.3) | | (7.0) | | (8.8) | | (10.5) | | (10.5) | |
| Nominal Heating Capacity [1] | | Btu/h | 20,000 | | 27,000 | | 34,000 | | 40,000 | | 40,000 | |
| | | (kW) | (5.9) | | (7.9) | | (10.0) | | (11.7) | | (11.7) | |
| Outer Dimensions | Height | in. (mm) | 41 | (1041) | 41 | (1041) | 47-1/2 | (1207) | 47-1/2 | (1207) | 51-1/2 | (1308) |
| | Width | in. (mm) | 17-1/2 | (445) | 17-1/2 | (445) | 17-1/2 | (445) | 17-1/2 | (445) | 21 | (533) |
| | Depth | in. (mm) | 27-7/16 | (545) | 27-7/16 | (545) | 27-7/16 | (545) | 27-7/16 | (545) | 27-7/16 | (545) |
| Net Weight | | lbs (kg) | 85 | (39) | 87 | (40) | 113 | (51) | 113 | (51) | 114 | (52) |
| Refrigerant | | | R410A | | | | | | | | | |
| Indoor Fan (208/230V) | Air Flow Rate [2] (Hi-Lo) | cfm | 576-382 / 687-500 | | 713-457 / 778-605 | | 843-677 / 917-769 | | 1108-968 / 1178-1057 | | 1110-877 / 1186-974 | |
| | | ($m^3$/min) | (16-11) / (19-14) | | (20-13) / (22-17) | | (24-19) / (26-22) | | (31-27) / (33-30) | | (31-25) / (34-28) | |
| External Pressure [2] | | in. W.G. | 0.4 | | 0.7 | | 0.7 | | 0.7 | | 0.7 | |
| | | (Pa) | (99) | | (174) | | (174) | | (174) | | (174) | |
| Refrigerant Piping | Liquid Line | in. (mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line [3] | in. (mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) |
| Condensate Drain | OU | in. (mm) | 1-1/16 | (26.7) | 1-1/16 | (26.7) | 1-1/16 | (26.7) | 1-1/16 | (26.7) | 1-1/16 | (26.7) |
| | IU | in. (mm) | 13/16 | (20.9) | 13/16 | (20.9) | 13/16 | (20.9) | 13/16 | (20.9) | 13/16 | (20.9) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Hi and Lo setting on the wired controller. (Hi = Air Handler's High tap and Lo = Air Handler's Medium tap). Make sure both the external pressure and air flow rate match the specification.
3. Gas connection piping diameter of the air handler is changed by using the reducer (accessory of DX-Kit) to connect to VRF system.

| Tonnage | | | 1.5 Ton | | 2.0 Ton | | 2.5 Ton | | 3.0 Ton | |
|---|---|---|---|---|---|---|---|---|---|---|
| Adaptable DX-Kit Model # | | | EXV-018E | | EXV-024E | | EXV-030E | | EXV-036E | |
| Control Box | | | | | | | | | | |
| Power Supply | | - | AC208/230V, 1Ph, 60Hz | | | | | | | |
| Outer Dimensions | | | | | | | | | | |
| Height | | in. (mm) | 3-3/16 | (81) | 3-3/16 | (81) | 3-3/16 | (81) | 3-3/16 | (81) |
| Width | | in. (mm) | 12-5/8 | (320) | 12-5/8 | (320) | 12-5/8 | (320) | 12-5/8 | (320) |
| Depth | | in. (mm) | 7-3/8 | (187) | 7-3/8 | (187) | 7-3/8 | (187) | 7-3/8 | (187) |
| Net Weight | | lbs. (kg) | 6.57 | (2.98) | 6.57 | (2.98) | 6.57 | (2.98) | 6.57 | (2.98) |
| Expansion Valve Box Part | | | | | | | | | | |
| Power Supply | | – | DC 12V | | | | | | | |
| Outer Dimensions | | | | | | | | | | |
| Height | | in. (mm) | 4-5/16 | (109) | 4-5/16 | (109) | 4-5/16 | (109) | 4-5/16 | (109) |
| Width | | in. (mm) | 17-1/16 | (433) | 17-1/16 | (433) | 17-1/16 | (433) | 17-1/16 | (433) |
| Depth | | in. (mm) | 5-5/16 | (151) | 5-5/16 | (151) | 5-5/16 | (151) | 5-5/16 | (151) |
| Net Weight | | lbs. (kg) | 8.84 | (4.01) | 8.84 | (4.01) | 8.84 | (4.01) | 8.84 | (4.01) |
| Refrigerant | | – | R410A | | | | | | | |
| Refrigerant Piping | | | | | | | | | | |
| Liquid Line In | | in. (mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| Liquid Line Out | | in. (mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |

# Multi-Position Air Handler *(continued)*

| Multi-Position Air Handler with DX-Kit | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tonnage | | | 4.0 Ton | | | | 5.0 Ton | | | | | |
| Model # | | | YMAHP48C21S | | YMAHP48D21S | | YMAHP60C21S | | YMAHP60D21S | | YMAHP60D22S | |
| Adaptable Air Handler Model # | | | AP48CX21 | | AP48DX21 | | AP60CX21 | | AP60DX21 | | AP60DX22 | |
| Indoor Unit Power Supply | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 48,000 | | 48,000 | | 60,000 | | 60,000 | | 60,000 | |
| | | (kW) | (14.1) | | (14.1) | | (17.6) | | (17.6) | | (17.6) | |
| Nominal Heating Capacity [1] | | Btu/h | 54,000 | | 54,000 | | 64,000 | | 64,000 | | 64,000 | |
| | | (kW) | (15.8) | | (15.8) | | (18.8) | | (18.8) | | (18.8) | |
| Outer Dimensions | Height | in. (mm) | 51-1/2 | (1308) | 55-1/2 | (1410) | 55-3/4 | (1416) | 55-1/2 | (1410) | 55-1/2 | (1410) |
| | Width | in. (mm) | 21 | (533) | 24-1/2 | (622) | 21 | (533) | 24-1/2 | (622) | 24-1/2 | (622) |
| | Depth | in. (mm) | 27-7/16 | (545) | 27-7/16 | (545) | 27-7/16 | (545) | 27-7/16 | (545) | 27-7/16 | (545) |
| Net Weight | | lbs (kg) | 150 | (68) | 153 | (69) | 146 | (66) | 170 | (77) | 170 | (77) |
| Refrigerant | | | R410A | | | | | | | | | |
| Indoor Fan (208/230V) | Air Flow Rate [2] (Hi-Lo) | cfm | 1062-971 / 1190-1059 | | 1391-1139 / 1481-1258 | | 1680-1562 / 1739-1659 | | 1701-1590 / 1779-1694 | | 1757-1639 / 1829-1735 | |
| | | ($m^3$/min) | (30-28) / (34-30) | | (39-32) / (42-36) | | (48-44) / (49-47) | | (48-45) / (50-48) | | (50-46) / (52-49) | |
| External Pressure [2] | | in. W.G. | 0.7 | | 0.7 | | 0.4 | | 0.4 | | 0.4 | |
| | | (Pa) | (174) | | (174) | | (99) | | (99) | | (99) | |
| Refrigerant Piping | Liquid Line | in. (mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line [3] | in. (mm) | 5/8 | (15.88) | 5/8 | (15.88) | 3/4 | (19.05) | 3/4 | (19.05) | 3/4 | (19.05) |
| Condensate Drain | OU | in. (mm) | 1-1/16 | (26.7) | 1-1/16 | (26.7) | 1-1/16 | (26.7) | 1-1/16 | (26.7) | 1-1/16 | (26.67) |
| | IU | in. (mm) | 13/16 | (20.9) | 13/16 | (20.9) | 13/16 | (20.9) | 13/16 | (20.9) | 13/16 | (20.9) |

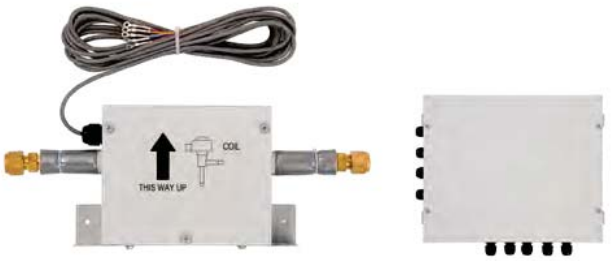
NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Hi and Lo setting on the wired controller. (Hi = Air Handler's High tap and Lo = Air Handler's Medium tap). Make sure both the external pressure and air flow rate match the specification.
3. Gas connection piping diameter of the air handler is changed by using the reducer (accessory of DX-Kit) to connect to VRF system.

| Tonnage | | 4.0 Ton | | 5.0 Ton | |
|---|---|---|---|---|---|
| Adaptable DX-Kit Model # | | EXV-048E | | EXV-060E | |
| Control Box | | | | | |
| Power Supply | - | AC208/230V, 1Ph, 60Hz | | | |
| Outer Dimensions | | | | | |
| Height | in. (mm) | 3-3/16 | (81) | 3-3/16 | (81) |
| Width | in. (mm) | 12-5/8 | (320) | 12-5/8 | (320) |
| Depth | in. (mm) | 7-3/8 | (187) | 7-3/8 | (187) |
| Net Weight | lbs. (kg) | 6.57 | (2.98) | 6.57 | (2.98) |
| Expansion Valve Box Part | | | | | |
| Power Supply | – | DC 12V | | | |
| Outer Dimensions | | | | | |
| Height | in. (mm) | 4-5/16 | (109) | 4-5/16 | (109) |
| Width | in. (mm) | 17-1/16 | (433) | 17-1/16 | (433) |
| Depth | in. (mm) | 5-5/16 | (151) | 5-5/16 | (151) |
| Net Weight | lbs. (kg) | 8.84 | (4.01) | 11.05 | (5.01) |
| Refrigerant | – | R410A | | | |
| Refrigerant Piping | | | | | |
| Liquid Line In | in. (mm) | 3/8 | (9.52) | 3/8 | (9.52) |
| Liquid Line Out | in. (mm) | 3/8 | (9.52) | 3/8 | (9.52) |

| Multi-Position Air Handler | |
|---|---|
| Compatible Accessories | YMAHP 018-060 (B,C,D)2(1,2)S |
| Electric Heater Kit | 6HK Series (UPG) |
| Infrared (IR) Receiver Kit | CWDIRK01 |
| 3-Pin Connector Cable | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-CN1925 |
| Relay and 3-Pin Connector Kit | PSC-5RA |
| Remote Sensor (Control) | THM-R2A |

DUCTED INDOOR UNITS

# DX-Kit for General AHU Connection




The DX-Kit seamlessly connects YORK® VRF equipment with third-party air handling units (AHU). The kit consists of a control box and expansion valve box.

## Key Features

- Combines VRF system with third-party AHU
- Provides three types of AHU temperature control:
  - » Inlet air
  - » Outlet air
  - » External signal control
- Compatible with multiple AHU types including return air, return air/outside air mix, and heat recovery
- Flexible installation for expansion valve box and control box with IP54 Enclosure rating

| Indoor Unit Type | | | DX-Kit for General AHU Connection | | | | | |
|---|---|---|---|---|---|---|---|---|
| Tonnage | | | 1.3 Ton | 2.5 Ton | 4.0 Ton | 8.0 Ton[2] | 16.0 Ton[2] | 24.0 Ton[2] |
| Model # | | | DXF-015A1 | DXF-030A1 | DXF-048A1 | DXF-096A1 | DXF-192A1 | DXF-288A1 |
| Control Box | | | | | | | | |
| Power Supply | | - | AC208/230V, 1Ph, 60Hz | | | | | |
| Height | | in. (mm) | 4-7/16 (112) | | | | | |
| Width | | in. (mm) | 17-1/8 (435) | | | | | |
| Depth | | in. (mm) | 13-3/4 (349) | | | | | |
| Weight | | lbs (kg) | 11.5 (5.2) | | | | | |
| Quantity | | Qty | 1 | | | | | |
| Expansion Valve Box | | | | | | | | |
| Height | | in. (mm) | 2-3/8 (61) | | | | | |
| Width | | in. (mm) | 17-3/16 (437) | | | | | |
| Depth | | in. (mm) | 6-9/16 (166) | | | | | |
| Weight | | lbs (kg) | 3.7 (1.7) | | | | | |
| Liquid Pipe Size | | in. (mm) | φ 1/4 (6.35) | φ 3/8 (9.52) | | | φ 1/2 (12.7) | |
| Quantity | | Qty | 1 | | | | | 2 |
| Acceptable AHU | | | | | | | | |
| Nominal Heat Exchanger Capacity [1] | | MBH | 15 | 30 | 48 | **72/96** | **108/120/144/168/192** | **204/216/240/264/288** |
| Suction Temperature Range | Cooling | °F (°C) | DB: 69 to 89 (21 to 32), WB: 59 to 73 (15 to 23) | | | | | |
| | Heating | °F (°C) | DB: 59 to 80 (15 to 27) | | | | | |
| Connection Ratio | | - | 1 OU to 1 AHU: 100% or less, 1 OU to Multiple AHU: 100% or less, 1 OU to AHUs and IUs: 100% or less | | | | | |

1. DIP-switch on the PCB of DX-Kit must be set to the nominal heat exchanger capacity of the AHU. Refer to the installation manual for detail.
2. Can use multiple capacities.

# 1-Way Cassette

Capacities 6,000 to 15,000 Btu/hr

**Controller Options**

MODEL CIR01

MODEL CIS01

MODEL CIW01

Ceiling-mounted one-way cassettes offer compact designs and a choice of corner-mounted, one-way discharge or two-way discharge (from the front and downward).

## Key Features

- Sensor enables remote reading of air supply temperature
- Automatic swing louver distributes airflow evenly for uniform temperature
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling.
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy

| Tonnage | | | | 0.5 | | 0.7 | | 1.0 | | 1.3 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Way Cassette Indoor Unit Model # | | | | YIC1006B21S | | YIC1008B21S | | YIC1012B21S | | YIC1015B21S | |
| Power Supply | | | | AC 1 Phase, 208/230V, 60Hz | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu / h | (kW) | 6000 | (1.8) | 8000 | (2.3) | 12000 | (3.5) | 15000 | (4.4) |
| Nominal Heating Capacity [1] | | Btu / h | (kW) | 6700 | (2.0) | 9000 | (2.6) | 13500 | (4.0) | 17000 | (5.0) |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | | 34-32-29-27 | | 36-34-31-28 | | 40-37-33-31 | | 42-38-35-31 | |
| Outer Dimensions | Height | in. | (mm) | 9-1/4 | (235) | 9-1/4 | (235) | 9-1/4 | (235) | 9-1/4 | (235) |
| | Width | in. | (mm) | 35-7/16 | (900) | 35-7/16 | (900) | 35-7/16 | (900) | 35-7/16 | (900) |
| | Depth | in. | (mm) | 27-15/16 | (710) | 27-15/16 | (710) | 27-15/16 | (710) | 27-15/16 | (710) |
| Net Weight | | lbs. | (kg) | 55 | (25) | 55 | (25) | 57 | (26) | 57 | (26) |
| Refrigerant | | | | R410A | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | | 300-265-229-212 | | 335-300-265-229 | | 459-406-353-300 | | 512-459-388-335 | |
| | | (m3/min) | | (8.5-7.5-6.5-6) | | (9.5-8.5-7.5-6.5) | | (13-11.5-10-8.5) | | (14.5-13-11-9.5) | |
| Motor Nominal Output | | W | | 50 | | 50 | | 50 | | 50 | |
| Connections | | | | | | | | | | | |
| Refrigerant Piping | | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | |
| | Liquid LIne | in. | (mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) |
| | Gas Line | in. | (mm) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) |
| Condensate Drain | OU | in. | (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |
| Adjustable Panel Model Name | | | | P-AP36CNA | | | | P-AP56CNA | | | |
| Applicable Indoor Unit Model | | | | YIC1006B21S and YIC1008B21S | | | | YIC1012B21S and YIC1015B21S | | | |
| Color | | | | Neutral White | | | | | | | |
| Dimension | Height | in. | (mm) | 1-3/8 (35) | | | | | | | |
| | Width | in. | (mm) | 43-5/16 (1100) | | | | | | | |
| | Depth | in. | (mm) | 31-1/2 (800) | | | | | | | |
| Net Weight | | lbs. | (kg) | 10 (4.5) | | | | | | | |

NOTES:
1. Nominal capacity conditions are based on AHRI standard.
   Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units.
   The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

| 1-Way Cassette | | | |
|---|---|---|---|
| Compatible Accessories | YIC1006-015B21S | Compatible Accessories | YIC1006-015B21S |
| Infrared (IR) Receiver Kit | C1IRK01 | Air Outlet Shuttler Plate | PIS-56LS |
| Grille for Front Discharge | DG-56SW1 | Relay and 3-Pin Connector Kit | PSC-5RA |
| 3-Pin Connector Cable | PCC-1A | Motion Sensor Kit (for 1-Way Cassette) | SOR-NES |
| Connector Cable for Auxiliary Heater | PCC-CN8-H | Remote Sensor (Control) | THM-R2A |
| Duct Adapter | PD-100 | | |

NON-DUCTED INDOOR UNITS

# 2-Way Cassette

Capacities 18,000 to 24,000 Btu/hr

**Controller Options**

MODEL CIR01

MODEL CIS01

MODEL CIW01

With a sound level down to 33 dB(A), this unit is among the quietest on the market. Individual louver control with auto-swing or fixed air exhaust angles brings conditioned comfort to a variety of room layouts.

## Key Features

- Nominal capacity of 18 or 24 MBH
- Compact design - requires only 11-3/4" height
- Energy-efficient DC fan motor
- Standard integrated condensate DC drain pump with 33-7/16 inch lift height
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling
- Sensor enables remote reading of air supply temperature
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy
- Optional air filter box

| Tonnage | | | | 1.5 | | 2.0 | |
|---|---|---|---|---|---|---|---|
| 2-Way Cassette Indoor Unit Model # | | | | YIC2018B21S | | YIC2024B21S | |
| Power Supply | | | | AC 1 Phase, 208/230V, 60Hz | | | |
| Nominal Cooling Capacity [1] | | Btu/h | (kW) | 18,000 | (5.3) | 24,000 | (7.0) |
| Nominal Heating Capacity [1] | | Btu/h | (kW) | 20,000 | (5.9) | 27,000 | (7.9) |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | | 42-39-36-33 | | 46-43-39-34 | |
| Outer Dimensions | Height | in. | (mm) | 11-3/4 | (298) | 11-3/4 | (298) |
| | Width | in. | (mm) | 33-7/8 | (860) | 33-7/8 | (860) |
| | Depth | in. | (mm) | 24-13/16 | (630) | 24-13/16 | (630) |
| Net Weight | | lbs. | (kg) | 55.1 | (25) | 55.1 | (25) |
| Refrigerant | | | | R410A | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | | 653-582-512-441 | | 777-688-582-459 | |
| | | (m3/min) | | (18.5-16.5-14.5-12.5) | | (22-19.5-16.5-13) | |
| Motor Nominal Output | | W | | 57 | | 57 | |
| Connections | | | | | | | |
| Refrigerant Piping | | | | Flare-Nut Connection (with Flare Nuts) | | | |
| | Liquid Line | in. | (mm) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line | in. | (mm) | 5/8 | (15.88) | 5/8 | (15.88) |
| Condensate Drain | OU | in. | (mm) | 1-1/4 | (32) | 1-1/4 | (32) |
| Adaptable Panel Model | | | | P-AP90DNA | | | |
| Color | | | | Neutral White | | | |
| Outer Dimensions | Height | in. | (mm) | 1-3/16 | | (30) | |
| | Width | in. | (mm) | 43-5/16 | | (1,100) | |
| | Depth | in. | (mm) | 27-15/16 | | (710) | |
| Net Weight | | in. | (mm) | 16.5 | | (7.5) | |

| 2-Way Cassette | |
|---|---|
| Compatibility Accessories | YIC2018-024B21S |
| Filter Box | B-90HD |
| IR Receiver Kit | C2IRK01 |
| 3-Pin Connector Cable | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-CN8-H |
| Duct Adapter | PD-150D |
| Relay and 3-Pin Connector Kit | PSC-5RA |
| Motion Sensor Kit (for 2-Way Cassette) | SOR-NED |
| Remote Sensor (Control) | THM-R2A |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

# 4-Way Mini Cassette

Capacities 8,000 to 18,000 Btu/hr

**Controller Options**

MODEL CIR01

MODEL CIS01

MODEL CIW01

Mini-cassette indoor units are designed to meet a variety of building requirements in energy-efficient, quiet packages. Compact size enables installation in tight spaces.

## Key Features

- High-performance and high-efficiency heat exchanger
- Efficient turbo fan for low-noise performance
- Wide range of air flow settings
- Motorized 2-, 3- or 4-channel air flow louvers with louver kit
- Auxiliary/emergency heater control
- Cooling and heating auto-changeover dual-setpoint control
- Setback temperature control
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling.
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy.

| Tonnage | | | | 0.7 | | 1.0 | | 1.3 | | 1.5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-Way Mini-Cassette Indoor Unit Model # | | | | YICM008B21S | | YICM012B21S | | YICM015B21S | | YICM018B21S | |
| Power Supply | | | | AC 1Phase, 208/230V, 60Hz | | | | | | | |
| Nominal Cooling Capacity[1] | | Btu / h | (kW) | 8,000 | (2.3) | 12,000 | (3.5) | 15,000 | (4.4) | 18,000 | (5.3) |
| Nominal Heating Capacity[1] | | Btu / h | (kW) | 9,000 | (2.6) | 13,500 | (4.0) | 17,000 | (5.0) | 20,000 | (5.9) |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | | 38-34-30-24.5 | | 41-37-33-27.5 | | 45-39-35-31 | | 47-43-39-35 | |
| Outer Dimensions | Height | in. | (mm) | 11-1/4 | (285) | 11-1/4 | (285) | 11-1/4 | (285) | 11-1/4 | (285) |
| | Width | in. | (mm) | 22-7/16 | (570) | 22-7/16 | (570) | 22-7/16 | (570) | 22-7/16 | (570) |
| | Depth | in. | (mm) | 22-7/16 | (570) | 22-7/16 | (570) | 22-7/16 | (570) | 22-7/16 | (570) |
| Net Weight | | lbs. | (kg) | 35 | (16) | 35 | (16) | 37 | (17) | 37 | (17) |
| Refrigerant | | | | R410A | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | | 424-353-300-212 | | 459-388-335-247 | | 530-424-353-282 | | 565-494-424-353 | |
| | | ($m^3$/min) | | (12-10-8.5-6) | | (13-11-9.5-7) | | (15-12-10-8) | | (16-14-12-10) | |
| Motor Nominal Output | | W | | 57 | | 57 | | 57 | | 57 | |
| Connections | | | | | | | | | | | |
| Refrigerant Piping | | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | |
| | Liquid Line | in. | (mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 3/8 | (9.52) |
| | Gas Line | in. | (mm) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 5/8 | (15.88) |
| Condensate Drain | OU | in. | (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |
| Adaptable Panel Model | | | | P-AP56NAM | | | | | | | |
| Color | | | | Neutral White | | | | | | | |
| Outer Dimensions | Height | in. | (mm) | 1-3/16 | | | | (30) | | | |
| | Width | in. | (mm) | 24-13/32 | | | | (620) | | | |
| | Depth | in. | (mm) | 24-13/32 | | | | (620) | | | |
| Net Weight | | lbs. | (kg) | 6 | | | | (3) | | | |

| 4-Way Mini Cassette | | | |
|---|---|---|---|
| Compatible Accessories | YICM008-018B21S | Compatible Accessories | YICM008-018B21S |
| IR Receiver Kit | CMIRK01 | Relay and 3-Pin Connector Kit | PSC-5RA |
| Connector Cable for Auxiliary Heater | PCC-CN8-H | Motion Sensor Kit (for Mini 4-Way Cassette) | SOR-NEC |
| 3-Pin Connector Cable | PCC-1A | Remote Sensor (Control) | THM-R2A |
| Duct Adaptor | PD-75C | | |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

NON-DUCTED INDOOR UNITS

# 4-Way Cassette Indoor Unit

Capacities: 8,000 to 48,000 Btu/hr

**Controller Options**


MODEL CIR01


MODEL CIS01


MODEL CIW01

Ceiling-mounted 4-way cassettes measuring 33 x 33 inch (84 x 84 cm) are offered with standard decorative panels. Compact, thin and lightweight, they are easy to install even in tight spaces.

| Tonnage | | | 0.7 | | 1.0 | | 1.3 | | 1.5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-Way Cassette Indoor Unit Model # | | | YIC4008B21S | | YIC4012B21S | | YIC4015B21S | | YIC4018B21S | |
| Power Supply | | | AC 1Phase, 208/230V, 60Hz | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 8,000 | | 12,000 | | 15,000 | | 18,000 | |
| | | (kW) | (2.3) | | (3.5) | | (4.4) | | (5.3) | |
| Nominal Heating Capacity [1] | | Btu/h | 9,000 | | 13,500 | | 17,000 | | 20,000 | |
| | | (kW) | (2.6) | | (4.0) | | (5.0) | | (5.8) | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 33-30-28-27 | | 35-31-30-27 | | 37-32-30-27 | | 42-36-32-28 | |
| Outer Dimensions | Height | in. (mm) | 9-3/4 | (248) | 9-3/4 | (248) | 9-3/4 | (248) | 9-3/4 | (248) |
| | Width | in. (mm) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) |
| | Depth | in. (mm) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) |
| Net Weight | | lbs. (kg) | 44 | (20) | 46 | (21) | 46 | (21) | 48 | (22) |
| Refrigerant | | | R410A | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 530-459-388-318 | | 741-600-494-388 | | 777-600-494-388 | | 953-777-635-494 | |
| | | ($m^3$/min) | (15-13-11-9) | | (21-17-14-11) | | (22-17-14-11) | | (27-22-18-14) | |
| Motor Nominal Output | | W | 57 | | 57 | | 57 | | 57 | |
| Connections | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | |
| | Liquid Line | in.(mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 5/8 | (15.88) |
| Condensate Drain | OU | in.(mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

| 4-Way Cassette | |
|---|---|
| Compatible Accessories | YIC4008-48B21S |
| Filter Box | B-160H3 |
| IR Receiver Kit | C4IRK01 |
| Fresh Air Intake Kit (for 4-Way Cassette) | OACI-160K3 |
| 3-Pin Connector Cable | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-CN8-H |
| Duct Adapter | PD-75A |
| Air Outlet Shutter Plate | PI-160LS2 |
| Relay and 3-Pin Connector Kit | PSC-5RA |
| Remote Sensor (Control) | THM-R2A |
| T-Tube Connecting Kit | TKCI-160K |

# 4-Way Cassette Indoor Unit *(continued)*

## Key Features

- Multiple fan speed settings
- Air filter included
- Four air volume settings including Ultra Hi for higher ceilings
- 4-way airflow standard but can be configured for 2-way or 3-way
- Integrated condensate pumps in all units
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling.
- Sensor enables remote reading of air supply temperature
- Motorized 2-, 3- or 4-channel air flow louvers with louver kit
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy
- Optional fresh air kit available

| Tonnage | | | 2.0 | | 2.5 | | 3.0 | | 4.0 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-Way Cassette Indoor Unit Model # | | | YIC4024B21S | | YIC4030B21S | | YIC4036B21S | | YIC4048B21S | |
| Power Supply | | | AC 1Phase, 208/230V, 60Hz | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 24,000 | | 30,000 | | 36,000 | | 48,000 | |
| | | (kW) | (7.0) | | (8.8) | | (10.5) | | (14.1) | |
| Nominal Heating Capacity [1] | | Btu/h | 27,000 | | 34,000 | | 40,000 | | 54,000 | |
| | | (kW) | (7.9) | | (10.0) | | (11.7) | | (15.8) | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 42-36-32-28 | | 48-43-39-33 | | 48-45-40-35 | | 48-46-41-37 | |
| Outer Dimensions | Height | in. (mm) | 11-3/4 | (298) | 11-3/4 | (298) | 11-3/4 | (298) | 11-3/4 | (298) |
| | Width | in. (mm) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) |
| | Depth | in. (mm) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) | 33-1/16 | (840) |
| Net Weight | | lbs. (kg) | 57 | (26) | 57 | (26) | 57 | (26) | 57 | (26) |
| Refrigerant | | | R410A | | | | | | | |
| Indoor Fan | Air Flow Rate | cfm | 953-812-635-494 | | 1306-1094-847-706 | | 1306-1165-918-741 | | 1306-1236-988-777 | |
| | (Hi2-Hi-Me-Lo) | ($m^3$/min) | (27-23-18-14) | | (37-31-24-20) | | (37-33-26-21) | | (37-35-28-22) | |
| Motor Nominal Output | | W | 57 | | 127 | | 127 | | 127 | |
| Connections | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | |
| | Liquid Line | in.(mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line | in.(mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) |
| Condensate Drain | OU | in.(mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units.
   The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

| Adaptable Panel Model (applies to all models) | | | P-AP160NA2 (without Motion and Radiant Heat Sensors) | | P-AP160NAE1 (with Motion and Radiant Heat Sensors) | |
|---|---|---|---|---|---|---|
| Color | | | Neutral White | | | |
| Outer Dimensions | Height | in.(mm) | 1-9/16 | (40) | 1-9/16 | (40) |
| | Width | in.(mm) | 37-3/8 | (950) | 37-3/8 | (950) |
| | Depth | in.(mm) | 37-3/8 | (9 (950) 50) | 37-3/8 | (950) |
| Net Weight | | lbs(kg) | 14 | (6.5) | 14 | (6.5) |

NON-DUCTED INDOOR UNITS

# Wall Mount Indoor Unit

Capacities: 6,000 to 30,000 Btu/hr

**Controller Options**

MODEL CIR01 MODEL CIS01 MODEL CIW01

Wall Mount indoor units include wide-angle louvers that distribute airflow comfortably. An auto-swing function ensures efficient air distribution and uniform temperature throughout the conditioned space. Condensate piping can be connected at the right, left or rear of the unit for ease of installation.

## Key Features

- Removable front panel for easy cleaning.
- Built-in wireless sensor for use with optional wireless zone controller.
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling.
- Sensor enables remote reading of air supply temperature
- Optional condensate pump

| Tonnage | | | 0.5 | | 0.7 | | 1.0 | | 1.3 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wall Mount Indoor Unit Model # | | | TIWM006B2(1,2)S | | TIWM008B2(1,2)S | | TIWM012B2(1,2)S | | TIWM015B21S | | TIWM015B22S | |
| Power Supply | | | AC 1Phase, 208/230V, 60Hz | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 6,000 | | 8,000 | | 12,000 | | 15,000 | | | |
| | | (kW) | (1.8) | | (2.3) | | (3.5) | | (4.4) | | | |
| Nominal Heating Capacity [1] | | Btu/h | 6,700 | | 9,000 | | 13,500 | | 17,000 | | | |
| | | (kW) | (2.0) | | (2.6) | | (4.0) | | (5.0) | | | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 39-35-32-30 | | 39-35-32-30 | | 46-40-36-33 | | 42-40-38-33 | | 40-37-34-31 | |
| Outer Dimensions | Height | in.(mm) | 11-13/16 | (300) | 11-13/16 | (300) | 11-13/16 | (300) | 13-1/8 | (333) | 11-13/16 | (300) |
| | Width | in.(mm) | 31-1/8 | (790) | 31-1/8 | (790) | 35-7/16 | (900) | 45-1/4 | (1150) | 43-5/16 | (1100) |
| | Depth | in.(mm) | 9-1/16 | (230) | 9-1/16 | (230) | 9-1/16 | (230) | 9-5/8 | (245) | 10-1/4 | (260) |
| Net Weight | | lbs.(kg) | 22 | (10) | 22 | (10) | 24 | (11) | 35 | (16) | 32 | (15) |
| Refrigerant | | | R410A | | | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 353-282-247-229 | | 353-282-247-229 | | 494-388-318-265 | | 530-494-459-353 | | 512-459-388-335 | |
| | | ($m^3$/min) | (10-8-7-6.5) | | (10-8-7-6.5) | | (14-11-9-7.5) | | (15-14-13-10) | | (14.5-13-11-9.5) | |
| Motor Nominal Output | | W | 38 | | 38 | | 38 | | 38 | | | |
| Connections | | | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | | | |
| | Liquid Line | in.(mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) |
| | Gas Line | in.(mm) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) |
| Condensate Drain | OU | in.(mm) | 7/8 | (22) | 7/8 | (22) | 7/8 | (22) | 7/8 | (22) | 7/8 | (22) |
| | IU | in.(mm) | 5/8 | (16) | 5/8 | (16) | 5/8 | (16) | 5/8 | (16) | 5/8 | (16) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 3.3ft (1m) Front of the Unit and 3.3ft (1m) Below the Unit.
   The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

| Wall Mount Indoor Unit | | |
|---|---|---|
| Compatible Accessories | TIWM006-015B22S | TIWM018-030B22S |
| Infrared (IR) Receiver Kit | CWDIRK01 | CWDIRK01 |
| Strainer Kit | MSF-NP63A | MSF-NP112A |
| 3-Pin Connector Cable | PCC-1A | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-CN8-H | PCC-CN8-H |
| Relay and 3-Pin Connector Kit | PSC-5RA | PSC-5RA |
| Remote Sensor (Control) | THM-R2A | THM-R2A |

# Wall Mount Indoor Unit *(continued)*

Capacities: 6,000 to 30,000 Btu/hr

| Tonnage | | | 1.5 | | | | 2.0 | | | | 2.5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wall Mount Indoor Unit Model # | | | TIWM018B21S | | TIWM018B22S | | TIWM024B21S | | TIWM024B22S | | TIWM030B21S | | TIWM030B22S | |
| Power Supply | | | AC 1Phase, 208/230V, 60Hz | | | | | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu/h | 18,000 | | | | 24,000 | | | | 30,000 | | | |
| | | (kW) | (5.3) | | | | (7.0) | | | | (8.8) | | | |
| Nominal Heating Capacity [1] | | Btu/h | 20,000 | | | | 27,000 | | | | 34,000 | | | |
| | | (kW) | (5.8) | | | | (7.9) | | | | (10.0) | | | |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | 49-43-40-36 | | 45-42-38-35 | | 51-49-46-41 | | 49-46-42-38 | | 51-49-46-41 | | 51-48-44-39 | |
| Outer Dimensions | Height | in.(mm) | 13-1/8 | (333) | 11-13/16 | (300) | 13-1/8 | (333) | 11-13/16 | (300) | 13-1/8 | (333) | 11-13/16 | (300) |
| | Width | in.(mm) | 45-1/4 | (1150) | 43-5/16 | (1100) | 45-1/4 | (1150) | 43-5/16 | (1100) | 45-1/4 | (1150) | 43-5/16 | (1100) |
| | Depth | in.(mm) | 9-5/8 | (245) | 10-1/4 | (260) | 9-5/8 | (245) | 10-1/4 | (260) | 9-5/8 | (245) | 10-1/4 | (260) |
| Net Weight | | lbs.(kg) | 37 | (17) | 33 | (15) | 37 | (17) | 33 | (15) | 37 | (17) | 33 | (15) |
| Refrigerant | | | R410A | | | | | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | cfm | 671-600-494-424 | | 653-582-494-423 | | 777-671-600-530 | | 759-670-582-494 | | 777-671-600-530 | | 812-706-618-512 | |
| | | ($m^3$/min) | (19-17-14-12) | | (18.5-16.5-14-12) | | (22-19-17-15) | | (21.5-19-16.5-14) | | (22-19-17-15) | | (23-20-17.5-14.5) | |
| Motor Nominal Output | | W | 38 | | | | 38 | | | | 38 | | | |
| Connections | | | | | | | | | | | | | | |
| Refrigerant Piping | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | | | | | |
| | Liquid Line | in.(mm) | 3/8 (9.52) | | | | 3/8 (9.52) | | | | 3/8 (9.52) | | | |
| | Gas Line | in.(mm) | 5/8 (15.88) | | | | 5/8 (15.88) | | | | 5/8 (15.88) | | | |
| Condensate Drain | OU | in.(mm) | 7/8 (22) | | | | 7/8 (22) | | | | 7/8 (22) | | | |
| | IU | in.(mm) | 5/8 (16) | | | | 5/8 (16) | | | | 5/8 (16) | | | |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 3.3ft (1m) Front of the Unit and 3.3ft (1m) Below the Unit. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

NON-DUCTED INDOOR UNITS

# Ceiling Suspended Indoor Unit

Capacities 15,000 to 36,000 Btu/hr

**Controller Options**


MODEL CIR01


MODEL CIS01


MODEL CIW01

Ceiling Suspended indoor units have a stylized design and color that make them among the most elegant units on the market. Units are equipped with an automatic swing louver to ensure even air distribution.

## Key Features

- New fan design for high efficiency and low noise
- Flexible installation for high ceilings
- Cooling and heating auto-changeover dual-setpoint control
- Setback temperature control
- Auxiliary/emergency heater control
- Sensor enables remote reading of air supply temperature
- GentleCool: feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling.
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy

| Tonnage | | | | 1.3 | | 2.0 | | 2.5 | | 3.0 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ceiling Suspended Indoor Unit Model # | | | | YICS015B21S | | YICS024B21S | | YICS030B21S | | YICS036B21S | |
| Power Supply | | | | AC 1Phase, 208/230V, 60Hz | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu / h | (kW) | 15,000 | (4.4) | 24,000 | (7.0) | 30,000 | (8.8) | 36,000 | (10.5) |
| Nominal Heating Capacity [1] | | Btu / h | (kW) | 17,000 | (5.0) | 27,000 | (7.9) | 34,000 | (10.0) | 40,000 | (11.7) |
| Sound Pressure Level [2] (Overall A Scale) (Hi2-Hi-Me-Lo) | | dB | | 38-35-31-28 | | 43-40-36-31 | | 44-42-37-32 | | 48-45-41-35 | |
| Outer Dimensions | Height | in. | (mm) | 9-1/4 | (235) | 9-1/4 | (235) | 9-1/4 | (235) | 9-1/4 | (235) |
| | Width | in. | (mm) | 37-13/16 | (960) | 50 | (1270) | 62-3/16 | (1580) | 62-3/16 | (1580) |
| | Depth | in. | (mm) | 27-3/16 | (690) | 27-3/16 | (690) | 27-3/16 | (690) | 27-3/16 | (690) |
| Net Weight | | lbs. | (kg) | 59 | (27) | 77 | (35) | 90 | (41) | 90 | (41) |
| Refrigerant | | | | R410A | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi2-Hi-Me-Lo) | | cfm | 530-459-388-318 | | 847-741-635-512 | | 1059-935-777-600 | | 1236-1094-900-706 | |
| | | | (m3/min) | (15-13-11-9) | | (24-21-18-14.5) | | (30-26.5-22-17) | | (35-31-25.5-20) | |
| Motor Nominal Output | | | W | 50 | | 80 | | 160 | | 160 | |
| Connections | | | | | | | | | | | |
| Refrigerant Piping | | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | |
| | Liquid Line | | in. (mm) | 1/4 | (6.35) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |
| | Gas Line | | in. (mm) | 1/2 | (12.70) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) |
| Condensate Drain | OU | | in. (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

| Ceiling Suspended | | | |
|---|---|---|---|
| Compatible Accessories | YICS015B21S | YICS024B21S | YICS030-036B21S |
| Filter Box | B-56MP | B-90MP | B-160MP |
| IR Receiver Kit | CSIRK01 | CSIRK01 | CSIRK01 |
| Condensate Pump Kit | DUPC-63K1 | DUPC-160K1 | DUPC-160K1 |
| 3-Pin Connector Cable | PCC-1A | PCC-1A | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-CN8-H | PCC-CN8-H | PCC-CN8-H |
| Duct Adapter | PD-100 | PD-100 | PD-100 |
| Relay and 3-Pin Connector Kit | PSC-5RA | PSC-5RA | PSC-5RA |
| Motion Sensor Kit (for Ceiling Suspended) | SOR-NEP | SOR-NEP | SOR-NEP |
| Remote Sensor (Control) | THM-R2A | THM-R2A | THM-R2A |

# Floor Exposed Indoor Unit

Capacities 6,000 to 15,000 Btu/hr

**Controller Options**

MODEL CIR01

MODEL CIS01

MODEL CIW01

Floor Exposed indoor units have a slim-line design compatible with the style of the room.

## Key Features

- 8.7-inch (220 mm) depth preserves room space
- 24.8-inch height leaves ample window space
- Ideal for perimeter zone air conditioning
- Setback temperature control
- Sensor enables remote reading of air supply temperature
- Auxiliary/emergency heater control
- Cooling and heating auto-changeover dual-setpoint control

| Tonnage | | | | 0.5 | | 0.7 | | 1.0 | | 1.3 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Floor Exposed Indoor Unit Model # | | | | YIFE006B21S | | YIFE008B21S | | YIFE012B21S | | YIFE015B21S | |
| Indoor Unit Power Supply | | | | AC 1Phase, 208/230V, 60Hz | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu / h | (kW) | 6,000 | (1.8) | 8,000 | (2.3) | 12,000 | (3.5) | 15,000 | (4.4) |
| Nominal Heating Capacity [1] | | Btu / h | (kW) | 6,700 | (2.0) | 9,000 | (2.6) | 13,500 | (4.0) | 17,000 | (5.0) |
| Sound Pressure Level [2] (Overall A Scale) (Hi-Me-Lo) | | dB | | 39-33-29 | | 39-33-29 | | 43-35-32 | | 48-43-36 | |
| Outer Dimensions | Height | in. | (mm) | 24-13/16 | (630) | 24-13/16 | (630) | 24-13/16 | (630) | 24-13/16 | (630) |
| | Width | in. | (mm) | 41-1/8 | (1045) | 41-1/8 | (1045) | 46-1/16 | (1170) | 55-7/8 | (1420) |
| | Depth | in. | (mm) | 8-11/16 | (220) | 8-11/16 | (220) | 8-11/16 | (220) | 8-11/16 | (220) |
| Net Weight | | lbs. | (kg) | 61 | (28) | 61 | (28) | 68 | (31) | 79 | (36) |
| Refrigerant | | | | R410A | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi-Me-Lo) | | cfm | 300-247-212 | | 300-247-212 | | 424-353-318 | | 565-494-388 | |
| | | | (m3 /min) | (8.5-7-6) | | (8.5-7-6) | | (12-10-9) | | (16-14-11) | |
| Motor Nominal Output | | | W | 20 | | 20 | | 28 | | 45 | |
| Connections | | | | | | | | | | | |
| Refrigerant Piping | | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | |
| | Liquid Line | in. | (mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) |
| | Gas Line | in. | (mm) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) |
| Condensate Drain | OU | in. | (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

| Floor Exposed | |
|---|---|
| Compatible Accessories | YIFE006-015B21S |
| Infrared (IR) Receiver Kit | CWDIRK01 |
| 3-Pin Connector Cable | PCC-1A |
| Connector Cable for Auxiliary Heater | PCC-CN1925-H |
| Relay and 3-Pin Connector Kit | PSC-5RA |
| Remote Sensor (Control) | THM-R2A |

NON-DUCTED INDOOR UNITS

# Floor Concealed Indoor Unit

Capacities 6,000 to 15,000 Btu/hr

**Controller Options**


MODEL CIR01


MODEL CIS01


MODEL CIW01

Floor Concealed indoor units are ideal for installation in areas such as the wall beneath windows in a hallway to provide complete comfort with a clean design.

## Key Features

- Compact design for limited spaces
- Provides compatibility with interior designs
- Ideal for perimeter zone air conditioning
- Setback temperature control
- Auxiliary/emergency heater control
- Sensor enables remote reading of air supply temperature
- Cooling and heating auto-changeover dual-setpoint control

| Tonnage | | | | 0.5 | | 0.7 | | 1.0 | | 1.3 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Floor Concealed Indoor Unit Model # | | | | YIFC006B21S | | YIFC008B21S | | YIFC012B21S | | YIFC015B21S | |
| Indoor Unit Power Supply | | | | AC 1Phase, 208/230V, 60Hz | | | | | | | |
| Nominal Cooling Capacity [1] | | Btu / h | (kW) | 6,000 | (1.8) | 8,000 | (2.3) | 12,000 | (3.5) | 15,000 | (4.4) |
| Nominal Heating Capacity [1] | | Btu / h | (kW) | 6,700 | (2.0) | 9,000 | (2.6) | 13,500 | (4.0) | 17,000 | (5.0) |
| Sound Pressure Level [2] (Overall A Scale) (Hi-Me-Lo) | | dB | | 39-33-29 | | 39-33-29 | | 43-35-32 | | 48-43-36 | |
| Outer Dimensions | Height | in. | (mm) | 24-7/16 | (620) | 24-7/16 | (620) | 24-7/16 | (620) | 24-7/16 | (620) |
| | Width | in. | (mm) | 33-3/8 | (848) | 33-3/8 | (848) | 38-5/16 | (973) | 48-1/8 | (1223) |
| | Depth | in. | (mm) | 8-11/16 | (220) | 8-11/16 | (220) | 8-11/16 | (220) | 8-11/16 | (220) |
| Net Weight | | lbs. | (kg) | 52 | (24) | 52 | (24) | 57 | (26) | 68 | (31) |
| Refrigerant | | | | R410A | | | | | | | |
| Indoor Fan | Air Flow Rate (Hi-Me-Lo) | | cfm | 300-247-212 | | 300-247-212 | | 424-353-318 | | 565-494-388 | |
| | | | (m3 / min) | (8.5-7-6) | | (8.5-7-6) | | (12-10-9) | | (16-14-11) | |
| Motor Nominal Output | | | W | 20 | | 20 | | 28 | | 45 | |
| Connections | | | | | | | | | | | |
| Refrigerant Piping | | | | Flare-Nut Connection (with Flare Nuts) | | | | | | | |
| | Liquid Line | in. | (mm) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) | 1/4 | (6.35) |
| | Gas Line | in. | (mm) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) | 1/2 | (12.70) |
| Condensate Drain | OU | in. | (mm) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) | 1-1/4 | (32) |

NOTES:
1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

| Floor Concealed | |
|---|---|
| Compatible Accessories | YIFC006-015B21S |
| Infrared (IR) Receiver Kit | CWDIRK01 |
| 3-Pin Connector Cable | PCC-1A |
| Connector Cable for Auxiliary Heater Control | PCC-CN1925-H |
| Relay and 3-Pin Connector Kit | PSC-5RA |
| Remote Sensor (Control) | THM-R2A |

# Air-Source Outdoor Units

## Smart Solutions for Discerning Customers

Reliable, quiet YORK® VRF outdoor units are available in capacities to fit multiple applications and operate multiple indoor units. Heat pump and heat recovery units provide flexibility of design for a variety of building spaces and ambient conditions. Units operate quietly with sound ratings as low as 51 dBA.

Overview ..... 44-48

**Heat Recovery Outdoor Units**

Heat Recovery Specifications ..... 49-53

Change-Over Boxes Specifications ..... 55

**Heat Pump Outdoor Units**

Heat Pump Specifications ..... 56-60

**Low Ambient Heat Pump Outdoor Units**

Low Ambient Specifications ..... 61-65

**Mini VRF Outdoor Units**

Mini VRF Overview ..... 66-67

Mini VRF Specifications ..... 68

YORK® VRF

VARIABLE REFRIGERANT FLOW SYSTEMS

# 208/230V | 460V | 575V Air-Source Outdoor Units

Enjoy the freedom of working with YORK® Air-Source VRF Systems. Compact, quiet units solve multiple design challenges. And systems can be sized to meet application needs precisely as capacity expansion is as simple as adding modules.

Johnson Controls

# YORK® VRF Outdoor Units

**The YORK outdoor unit line features:**

- **A wide operating range** to suit a range of climates
- **Connection ratios up to 150%** and vertical piping lift up to 360 feet for ultimate design flexibility
- **Capacities from 6 to 36 tons** to meet diverse application requirements
- **Dual inverter driven compressors** (in 8, 10, 12, 14 and 16 ton modules) for increased efficiency
- **Compact design** for easy installation and design flexibility
- **Higher capacities** at low and high ambient temperatures
- **Smooth drive control** for improved comfort and efficiency

YORK VRF Air-Source Outdoor Units, in capacities from 3.0 (Mini VRF) to 36 tons with modular system combinations, include heat pump and heat recovery units.

Heat pump units can either heat or cool spaces while heat recovery units enable simultaneous heating and cooling of different zones.

**All 6-ton or greater outdoor units feature:**

- **Long refrigerant piping lengths** – up to 3,281 feet total pipe run and vertical distance of 360' when outdoor unit is above indoor unit.
- **Continuous heating during defrost operation** for multi-module heat recovery systems.
- **Ability to operate up to 64 indoor units** on a single piping network
- **Power-saving demand control** for reduced peak load and energy savings
- **Automatic judgement system** for refrigerant amount to verify refrigerant charge is correct
- **Diagnostics and malfunction codes** available at push of a button

AIR-SOURCE OUTDOOR UNITS

# Overview

***YORK® VRF outdoor units provide maximum flexibility for modular design.***

## HEAT RECOVERY MODELS 208/230V

**6-16 Ton Single Unit Systems**

| | |
|---|---|
| 6 Ton YVAHR072B32S | 12 Ton YVAHR144B32S |
| 8 Ton YVAHR096B32S | 14 Ton YVAHR168B32S |
| 10 Ton YVAHR120B32S | 16 Ton YVAHR192B32S |

**18-30 Ton Double Unit Systems**

| | |
|---|---|
| 18 Ton YVAHR216B32S | 26 Ton YVAHR312B32S |
| 20 Ton YVAHR240B32S | 28 Ton YVAHR336B32S |
| 22 Ton YVAHR264B32S | 30 Ton YVAHR360B32S |
| 24 Ton YVAHR288B32S | |

**32-36 Ton Triple Unit Systems**

| |
|---|
| 32 Ton YVAHR384B32S |
| 34 Ton YVAHR408B32S |
| 36 Ton YVAHR432B32S |

## HEAT RECOVERY MODELS 460V

**6-16 Ton Single Unit Systems**

| | |
|---|---|
| 6 Ton YVAHR072B42S | 12 Ton YVAHR144B42S |
| 8 Ton YVAHR096B42S | 14 Ton YVAHR168B42S |
| 10 Ton YVAHR120B42S | 16 Ton YVAHR192B42S |

**18-30 Ton Double Unit Systems**

| | |
|---|---|
| 18 Ton YVAHR216B42S | 26 Ton YVAHR312B42S |
| 20 Ton YVAHR240B42S | 28 Ton YVAHR336B42S |
| 22 Ton YVAHR264B42S | 30 Ton YVAHR360B42S |
| 24 Ton YVAHR288B42S | |

**32-36 Ton Triple Unit Systems**

| |
|---|
| 32 Ton YVAHR384B42S |
| 34 Ton YVAHR408B42S |
| 36 Ton YVAHR432B42S |

## HEAT PUMP MODELS 208/230V

**6-16 Ton Single Unit Systems**

| | |
|---|---|
| 6 Ton YVAHP072B32S | 12 Ton YVAHP144B32S |
| 8 Ton YVAHP096B32S | 14 Ton YVAHP168B32S |
| 10 Ton YVAHP120B32S | 16 Ton YVAHP192B32S |

**18-30 Ton Double Unit Systems**

| | |
|---|---|
| 18 Ton YVAHP216B32S | 26 Ton YVAHP312B32S |
| 20 Ton YVAHP240B32S | 28 Ton YVAHP336B32S |
| 22 Ton YVAHP264B32S | 30 Ton YVAHP360B32S |
| 24 Ton YVAHP288B32S | |

**32-36 Ton Triple Unit Systems**

| |
|---|
| 32 Ton YVAHP384B32S |
| 34 Ton YVAHP408B32S |
| 36 Ton YVAHP432B32S |

## HEAT PUMP MODELS 460V

**6-16 Ton Single Unit Systems**

| | |
|---|---|
| 6 Ton YVAHP072B42S | 12 Ton YVAHP144B42S |
| 8 Ton YVAHP096B42S | 14 Ton YVAHP168B42S |
| 10 Ton YVAHP120B42S | 16 Ton YVAHP192B42S |

**18-30 Ton Double Unit Systems**

| | |
|---|---|
| 18 Ton YVAHP216B42S | 26 Ton YVAHP312B42S |
| 20 Ton YVAHP240B42S | 28 Ton YVAHP336B42S |
| 22 Ton YVAHP264B42S | 30 Ton YVAHP360B42S |
| 24 Ton YVAHP288B42S | |

**32-36 Ton Triple Unit Systems**

| |
|---|
| 32 Ton YVAHP384B42S |
| 34 Ton YVAHP408B42S |
| 36 Ton YVAHP432B42S |

## HEAT RECOVERY MODELS 575V

**6-16 Ton Single Unit Systems**

| | |
|---|---|
| 6 Ton YVAHR072B52S | 12 Ton YVAHR144B52S |
| 8 Ton YVAHR096B52S | 14 Ton YVAHR168B52S |
| 10 Ton YVAHR120B52S | 16 Ton YVAHR192B52S |

**18-30 Ton Double Unit Systems**

| | |
|---|---|
| 18 Ton YVAHR216B52S | 26 Ton YVAHR312B52S |
| 20 Ton YVAHR240B52S | 28 Ton YVAHR336B52S |
| 22 Ton YVAHR264B52S | 30 Ton YVAHR360B52S |
| 24 Ton YVAHR288B52S | |

**32-36 Ton Triple Unit Systems**

| |
|---|
| 32 Ton YVAHR384B52S |
| 34 Ton YVAHR408B52S |
| 36 Ton YVAHR432B52S |

## HEAT PUMP MODELS 575V

**6-16 Ton Single Unit Systems**

| | |
|---|---|
| 6 Ton YVAHP072B52S | 12 Ton YVAHP144B52S |
| 8 Ton YVAHP096B52S | 14 Ton YVAHP168B52S |
| 10 Ton YVAHP120B52S | 16 Ton YVAHP192B52S |

**18-30 Ton Double Unit Systems**

| | |
|---|---|
| 18 Ton YVAHP216B52S | 26 Ton YVAHP312B52S |
| 20 Ton YVAHP240B52S | 28 Ton YVAHP336B52S |
| 22 Ton YVAHP264B52S | 30 Ton YVAHP360B52S |
| 24 Ton YVAHP288B52S | |

**32-36 Ton Triple Unit Systems**

| |
|---|
| 32 Ton YVAHP384B52S |
| 34 Ton YVAHP408B52S |
| 36 Ton YVAHP432B52S |

** High efficiency configurations.*

## LOW AMBIENT HEAT PUMP MODELS 208/230V

| 6-8 Ton Single Module Systems | | 12-16 Ton Double Module Systems | | 24 Ton Systems Triple Module Systems | |
|---|---|---|---|---|---|
| 6 Ton | YVAHP072B31CW | 12 Ton | YVAHP144B31CW | 24 Ton | YVAHP288B31CW |
| 8 Ton | YVAHP096B31CW | 14 Ton | YVAHP168B31CW | | |
| | | 16 Ton | YVAHP192B31CW | | |

## LOW AMBIENT HEAT PUMP MODELS 460V

| 6-8 Ton Single Module Systems | | 12-16 Ton Double Module Systems | | 24 Ton Systems Triple Module Systems | |
|---|---|---|---|---|---|
| 6 Ton | YVAHP072B41CW | 12 Ton | YVAHP144B41CW | 24 Ton | YVAHP288B41CW |
| 8 Ton | YVAHP096B41CW | 14 Ton | YVAHP168B41CW | | |
| | | 16 Ton | YVAHP192B41CW | | |

## MINI VRF HEAT PUMP MODELS 208/230V

| 3-5 Ton Single Module Systems | |
|---|---|
| 3 Ton | YVAHP036B21S |
| 4 Ton | YVAHP048B21S |
| 5 Ton | YVAHP060B21S |

AIR-SOURCE OUTDOOR UNITS

# Summary Tables

| Heat Pump and Heat Recovery Units 208/230V & 460V | | Heat Recovery VRF | Heat Pump VRF |
|---|---|---|---|
| Capacity | | 6 to 36 Tons | 6 to 36 Tons |
| Maximum connectable indoor unit quantity | | 64 | 64 |
| Connection ratio OU / IU | | As low as 55% and up to 150% | |
| Total piping length | ft (m) | 3,281 (1000) | 3,281 (1000) |
| Maximum piping length between OU and IU | ft (m) | 541 (165) | 541 (165) |
| Maximum piping length between 1st branch and IU | ft (m) | 295 (90) | 295 (90) |
| Maximum height difference between OU and IU (when OU is higher than IU) | ft (m) | 360 (110) | 360 (110) |
| Maximum height difference between OU and IU (when IU is higher than OU) | ft (m) | 360 (110) | 360 (110) |
| Maximum height difference between IU and IU | ft (m) | 49 (15) | 98 (30) |
| Cooling Operation Range* | °F (°C) | -10 to 122 (-23 to 50) | -10 to 122 (-23 to 50) |
| Heating Operation Range* | °F (°C) | -13 to 59 (-25 to 15) | -13 to 59 (-25 to 15) |

| Low-Ambient Heat Pump Units 208/230V & 460V | | Heat Pump VRF |
|---|---|---|
| Capacity | | 6 to 24 Tons |
| Maximum connectable indoor unit quantity | | 50 |
| Connection ratio OU / IU | | As low as 60% and up to 130% |
| Total piping length | ft (m) | 1,640 (500) |
| Maximum piping length between OU and IU | ft (m) | 541 (165) |
| Maximum piping length between 1st branch and IU | ft (m) | 295 (90) |
| Maximum height difference between OU and IU (when OU is higher than IU) | ft (m) | 164 (50) |
| Maximum height difference between OU and IU (when IU is higher than OU) | ft (m) | 131 (40) |
| Maximum height difference between IU and IU | ft (m) | 98 (30) |
| Cooling Operating Range* | °F (°C) | 14 to 118 (-10 to 48) |
| Heating Operating Range* | °F (°C) | -13 to 59 (-25 to 15) |

| Mini VRF 208/230V Heat Pump Units | | | 3 Ton | 4 Ton | 5 Ton |
|---|---|---|---|---|---|
| Mini VRF Outdoor Unit Model | | | YVAHP036B21S | YVAHP048B21S | YVAHP060B21S |
| Performance | Rated Cooling Capacity | Btu/h | 36,000 | 48,000 | 60,000 |
| | Rated Heating Capacity | Btu/h | 40,000 | 54,000 | 64,000 |
| | Operating Range* – Cooling | °F (°C) | 23 to 118 (-5 to 48) | | |
| | Operating Range* – Heating | °F (°C) | -4 to 59 (-20 to 15) | | |
| | Power Supply | (V/ph/Hz) | 208-230 / 1 / 60 | | |
| Configurations | Number Of Indoor Units | | 1 to 6 | 1 to 8 | 1 to 8 |
| Refrigerant Piping | Maximum Piping Length | ft (m) | 492 (150) | | |
| | Maximum Total Piping Length | ft (m) | 984 (300) | | |
| | Maximum Vertical Distance, IU to OU – OU above IU / OU below IU | ft (m) | 164 / 131 (50/40) | | |
| | Maximum Vertical Distance Between Indoor Units | ft (m) | 49 (15) | | |
| Dimensions | H x W x D | in (mm) | 54 5/16 x 37 3/8 x 14 9/16 (1380 x 950 x 370) | | |

* For more details and limitations, please consult YORK® sales team or refer to product manuals

# Heat Recovery Outdoor Units

## 208/230V | 460V | 575V | 6-16 TON SYSTEMS

| 6-16 Ton Systems | Type | Single Unit Systems | | | | | |
|---|---|---|---|---|---|---|---|
| | Tonnage | 6 Ton | 8 Ton | 10 Ton | 12 Ton | 14 Ton | 16 Ton |
| Model # | 208/230V, 3PH, 60Hz | YVAHR072B32S | YVAHR096B32S | YVAHR120B32S | YVAHR144B32S | YVAHR168B32S | YVAHR192B32S |
| | 460V, 3PH, 60Hz | YVAHR072B42S | YVAHR096B42S | YVAHR120B42S | YVAHR144B42S | YVAHR168B42S | YVAHR192B42S |
| | 575V, 3PH, 60Hz | YVAHR072B52S | YVAHR096B52S | YVAHR120B52S | YVAHR144B52S | YVAHR168B52S | YVAHR192B52S |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Nominal Capacity | Cooling | Btu/h | 72,000 | 96,000 | 120,000 | 144,000 | 168,000 | 192,000 |
| | Heating | Btu/h | 81,000 | 108,000 | 135,000 | 162,000 | 189,000 | 216,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity [1] | Btu/h | 69,000 | 92,000 | 114,000 | 138,000 | 160,000 | 184,000 |
| | EER | Btu/Wh | 14.9 / 12.2 | 12.4 / 12.4 | 12.7 / 12.4 | 10.9 / 11.2 | 11.6 / 11.8 | 10.6 / 11.1 |
| | IEER | Btu/Wh | 26.5 / 21.1 | 23.9 / 22.1 | 24.4 / 21.7 | 23.9 / 21.2 | 23.4 / 21.4 | 21.4 / 20.8 |
| | Rated Heating Capacity [1] | Btu/h | 77,000 | 103,000 | 129,000 | 154,000 | 180,000 | 206,000 |
| | COP | W/W | 4.25 / 3.54 | 3.77 / 3.65 | 3.84 / 3.55 | 3.42 / 3.4 | 3.65 / 3.56 | 3.32 / 3.38 |
| | SCHE | Btu/Wh | 26.7 / 24.3 | 30.3 / 27.5 | 29.9 / 27.2 | 30.9 / 28.1 | 30.7 / 27.9 | 32.2 / 29.3 |
| | Sound Pressure | dB(A) | 60 | 63 | 63 | 65 | 64 | 66 |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | | | | | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | | | | | |
| Refrigerant | Type | | R410A | | | | | |
| | Factory Charge Amount | lb. [kg] | 15.9 [7.2] | 19.6 [8.9] | 21.8 [9.9] | 23.6 [10.7] | 24.9 [11.3] | 25.6 [11.6] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 1/2 [12.7] | 1/2 [12.7] | 1/2 [12.7] | 5/8 [15.88] | 5/8 [15.88] | 5/8 [15.88] |
| | High/Low Pressure Gas Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] | 7/8 [22.2] | 7/8 [22.2] | 7/8 [22.2] | 7/8 [22.2] |
| | Low Pressure Gas Pipe | in. [mm] | 7/8 [22.2] | 7/8 [22.2] | 1-1/8 [28.58] | 1-1/8 [28.58] | 1-1/8 [28.58] | 1-1/8 [28.58] |
| Connection Ratio | Connection Ratio Range [5] | % | 70 ~ 130(150) | 65 ~ 130(150) | 60 ~ 130(150) | 55 ~ 130(150) | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 8 / 15 | 8 / 20 | 8 / 26 | 10 / 26 | 12 / 36 | 14 / 40 |
| Electrical | Minimum Circuit Amps, MCA (208V/230V/460V/575V) | A | 29 / 26 / 15 / 12 | 39 / 35 / 22 / 16 | 46 / 42 / 24 / 19 | 58 / 52 / 30 / 24 | 65 / 59 / 34 / 27 | 76 / 68 / 39 / 32 |
| | Maximum Overcurrent Protection, MOP (208V/230V/460V/575V) | A | 40 / 40 / 20 / 15 | 50 / 50 / 30 / 25 | 60 / 60 / 30 / 25 | 70 / 70 / 35 / 30 | 80 / 80 / 40 / 35 | 90 / 90 / 50 / 40 |
| Compressor | Compressor Type | | Inverter | | | | | |
| | Operation Range | % | 10 ~ 100 | 8 ~ 100 | 7 ~ 100 | 6 ~ 100 | 5 ~ 100 | |
| Fan | Fan Type | | Propeller Fan x1 | Propeller Fan x2 | | | | |
| | Airflow Rate | cfm [$m^3$/min] | 6707 [190] | 8437 [239] | 9037 [256] | | 11614 [329] | 12284 [348] |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 38-3/8 x 30-1/2 [1683 x 975 x 774] | 66-1/4 x 48-5/8 x 30-1/2 [1683 x 1235 x 774] | | | 66-1/4 x 64 x 30-1/2 [1683 x 1625 x 774] | |
| | Weight (208,230V/460V/575V) | lb. [kg] | 527 / 534 / 534 [239 / 242 / 242] | 598 / 611 / 611 [271 / 277 / 277] | 730 / 734 / 734 [331 / 333 / 333] | 732 / 737 / 737 [332 / 334 / 334] | 860 / 860 / 860 [390 / 390 / 390] | |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

AIR-SOURCE OUTDOOR UNITS

# Heat Recovery Outdoor Units

## 208/230V | 460V | 575V | 18-22 TON SYSTEMS

| 18-22 Ton Systems | Type | | Double Module Systems | | |
|---|---|---|---|---|---|
| | Tonnage | | 18 Ton | 20 Ton | 22 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHR216B32S | YVAHR240B32S | YVAHR264B32S |
| | 460V, 3PH, 60Hz | | YVAHR216B42S | YVAHR240B42S | YVAHR264B42S |
| | 575V, 3PH, 60Hz | | YVAHR216B52S | YVAHR240B52S | YVAHR264B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHR144B32S | YVAHR120B32S | YVAHR144B32S |
| | | Unit B | YVAHR072B32S | YVAHR120B32S | YVAHR120B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHR144B42S | YVAHR120B42S | YVAHR144B42S |
| | | Unit B | YVAHR072B42S | YVAHR120B42S | YVAHR120B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHR144B52S | YVAHR120B52S | YVAHR144B52S |
| | | Unit B | YVAHR072B52S | YVAHR120B52S | YVAHR120B52S |

| | | | | | |
|---|---|---|---|---|---|
| **Nominal Capacity** | Cooling | Btu/h | 216,000 | 240,000 | 264,000 |
| | Heating | Btu/h | 243,000 | 270,000 | 297,000 |
| **Performance [2] (Non-duct / Duct)** | Rated Cooling Capacity [1] | Btu/h | 206,000 | 228,000 | 252,000 |
| | EER | Btu/Wh | 10.9 / 11.2 | 11.1 / 10.6 | 10.0 / 10.5 |
| | IEER | Btu/Wh | 20.9 / 20.7 | 20.8 / 21.0 | 21.1 / 20.8 |
| | Rated Heating Capacity [1] | Btu/h | 232,000 | 258,000 | 282,000 |
| | COP | W/W | 3.82 / 3.51 | 3.67 / 3.51 | 3.70 / 3.56 |
| | SCHE | Btu/Wh | 29.4 / 26.7 | 29.0 / 26.4 | 30.1 / 27.4 |
| | Sound Pressure | dB(A) | 66 | | 67 |
| **Operating [4] Temperature Range** | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | | |
| **Refrigerant** | Type | | R410A | | |
| | Factory Charge Amount | lb. [kg] | 23.6+15.9 [10.7+7.2] | 21.8+21.8 [9.9+9.9] | 23.6+21.8 [10.7+9.9] |
| **Refrigerant Piping** | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] | 3/4 [19.05] |
| | High/Low Pressure Gas Pipe | in. [mm] | 7/8 [22.2] | 1-1/8 [28.58] | 1-1/8 [28.58] |
| | Low Pressure Gas Pipe | in. [mm] | 1-1/8 [28.58] | 1-3/8 [34.93] | 1-3/8 [34.93] |
| **Connection Ratio** | Connection Ratio Range [5] | % | 60 ~ 130 (150) | | 55 ~ 130 (150) |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 18 / 46 | 18 / 52 | 20 / 56 |
| **Electrical** | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V/230V/460V/575V) | A | 58+29 / 52+26 / 30+15 / 24+12 | 46+46 / 42+42 / 24+24 / 19+19 | 58+46 / 52+42 / 30+24 / 24+19 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V/230V/460V/575V) | A | 70+40 / 70+40 / 35+20 / 30+15 | 60+60 / 60+60 / 30+30 / 25+25 | 70+60 / 70+60 / 35+30 / 30+25 |
| **Compressor** | Compressor Type | | Inverter | | |
| | Operation Range | % | 4 ~ 100 | | 3 ~ 100 |
| **Fan** | Fan Type | | Propeller Fan x3 | Propeller Fan x4 | |
| | Airflow Rate | cfm [$m^3$/min] | 9037+6707 [256+190] | 9037+9037 [256+256] | |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | | |
| **Unit** | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 87-13/16 x 30-1/2 [1683 x 2230 x 774] | 66-1/4 x 98-1/16 x 30-1/2 [1683 x 2490 x 774] | |
| | Weight (Unit A + Unit B) (208,230V/460V/575V) | lb. [kg] | 732+527 / 737+534 / 737+534 [332+239 / 334+242 / 334+242] | 730+730 / 734+734 / 734+734 [331+331 / 333+333 / 333+333] | 732+730 / 737+734 / 737+734 [332+331 / 334+333 / 334+333] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

# Heat Recovery Outdoor Units

## 208/230V | 460V | 575V | 24-26 TON SYSTEMS

| 24-26 Ton Systems | Type | | Double Module Systems | |
|---|---|---|---|---|
| | Tonnage | | 24 Ton | 26 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHR288B32S | YVAHR312B32S |
| | 460V, 3PH, 60Hz | | YVAHR288B42S | YVAHR312B42S |
| | 575V, 3PH, 60Hz | | YVAHR288B52S | YVAHR312B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHR144B32S | YVAHR168B32S |
| | | Unit B | YVAHR144B32S | YVAHR144B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHR144B42S | YVAHR168B42S |
| | | Unit B | YVAHR144B42S | YVAHR144B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHR144B52S | YVAHR168B52S |
| | | Unit B | YVAHR144B52S | YVAHR144B52S |

| | | | | |
|---|---|---|---|---|
| Nominal Capacity | Cooling | Btu/h | 288,000 | 312,000 |
| | Heating | Btu/h | 324,000 | 351,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity [1] | Btu/h | 276,000 | 298,000 |
| | EER | Btu/Wh | 9.5 / 9.9 | 9.7 / 10.0 |
| | IEER | Btu/Wh | 19.4 / 20.7 | 20.3 / 19.5 |
| | Rated Heating Capacity [1] | Btu/h | 308,000 | 334,000 |
| | COP | W/W | 3.42 / 3.42 | 3.37 / 3.31 |
| | SCHE | Btu/Wh | 30.7 / 27.9 | 27.2 / 24.7 |
| | Sound Pressure | dB(A) | 68 | |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | |
| Refrigerant | Type | | R410A | |
| | Factory Charge Amount | lb. [kg] | 23.6+23.6 [10.7+10.7] | 24.9+23.6 [11.3+10.7] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-1/8 [28.58] | 1-1/8 [28.58] |
| | Low Pressure Gas Pipe | in. [mm] | 1-3/8 [34.93] | 1-3/8 [34.93] |
| Connection Ratio | Connection Ratio Range [5] | % | 55 - 130(150) | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 20 / 59 | 22 / 64 |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V/230V/460V/575V) | A | 58+58 / 52+52 / 30+30 / 24+24 | 65+58 / 59+52 / 34+30 / 27+24 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V/230V/460V/575V) | A | 70+70 / 70+70 / 35+35 / 30+30 | 80+70 / 80+70 / 40+35 / 35+30 |
| Compressor | Compressor Type | | Inverter | |
| | Operation Range | % | 3 ~ 100 | |
| Fan | Fan Type | | Propeller Fan x4 | |
| | Airflow Rate | cfm [$m^3$/min] | 9037+9037 [256+256] | 11614+9037 [329+256] |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 98-1/16 x 30-1/2 [1683 x 2490 x 774] | 66-1/4 x 113-3/8 x 30-1/2 [1683 x 2880 x 774] |
| | Weight (Unit A + Unit B) (208,230V/460V/575V) | lb. [kg] | 732+732 / 737+737 / 737+737 [332+332 / 334+334 / 334+334] | 860+732 / 860+737 / 860+737 [390+332 / 390+334 / 390+334] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

AIR-SOURCE OUTDOOR UNITS

# Heat Recovery Outdoor Units

## 208/230V | 460V | 575V | 28-30 TON SYSTEMS

| 28-30 Ton Systems | Type | | Double Module Systems | |
|---|---|---|---|---|
| | Tonnage | | 28 Ton | 30 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHR336B32S | YVAHR360B32S |
| | 460V, 3PH, 60Hz | | YVAHR336B42S | YVAHR360B42S |
| | 575V, 3PH, 60Hz | | YVAHR336B52S | YVAHR360B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHR192B32S | YVAHR192B32S |
| | | Unit B | YVAHR144B32S | YVAHR168B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHR192B42S | YVAHR192B42S |
| | | Unit B | YVAHR144B42S | YVAHR168B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHR192B52S | YVAHR192B52S |
| | | Unit B | YVAHR144B52S | YVAHR168B52S |

| | | | | |
|---|---|---|---|---|
| Nominal Capacity | Cooling | Btu/h | 336,000 | 360,000 |
| | Heating | Btu/h | 378,000 | 405,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity [1] | Btu/h | 320,000 | 344,000 |
| | EER | Btu/Wh | 9.5 / 9.8 | 9.5 / 10.2 |
| | IEER | Btu/Wh | 20.8 / 19.1 | 19.8 / 19.5 |
| | Rated Heating Capacity [1] | Btu/h | 360,000 | 382,000 |
| | COP | W/W | 3.27 / 3.32 | 3.27 / 3.20 |
| | SCHE | Btu/Wh | 27.8 / 25.3 | 26.6 / 24.2 |
| | Sound Pressure | dB(A) | 69 | 68 |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | |
| Refrigerant | Type | | R410A | |
| | Factory Charge Amount | lb. [kg] | 25.6+23.6 [11.6+10.7] | 25.6+24.9 [11.6+11.3] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-1/8 [28.58] | 1-1/8 [28.58] |
| | Low Pressure Gas Pipe | in. [mm] | 1-3/8 [34.93] | 1-3/8 [34.93] |
| Connection Ratio | Connection Ratio Range [5] | % | 55 ~ 130(150) | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 24/64 | 28/64 |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V/230V/460V/575V) | A | 76+58 / 68+52 / 39+30 / 32+24 | 76+65 / 68+59 / 39+34 / 32+27 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V/230V/460V/575V) | A | 90+70 / 90+70 / 50+35 / 40+30 | 90+80 / 90+80 / 50+40 / 40+35 |
| Compressor | Compressor Type | | Inverter | |
| | Operation Range | % | 3 ~ 100 | |
| Fan | Fan Type | | Propeller Fan x4 | |
| | Airflow Rate | cfm [$m^3$/min] | 12284+9037 [348+256] | 12284+11614 [348+329] |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 113-3/8 x 30-1/2 [1683 x 2880 x 774] | 66-1/4 x 128-3/4 x 30-1/2 [1683 x 3270 x 774] |
| | Weight (Unit A + Unit B) (208,230V/460V/575V) | lb. [kg] | 860+732 / 860+737 / 860+737 [390+332 / 390+334 / 390+334] | 860+860 / 860+860 / 860+860 [390+390 / 390+390 / 390+390] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

# Heat Recovery Outdoor Units

## 208/230V | 460V | 575V | 32-36 TON SYSTEMS

| 32-36 Ton Systems | Type | | Triple Module Systems | | |
|---|---|---|---|---|---|
| | Tonnage | | 32 Ton | 34 Ton | 36 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHR384B32S | YVAHR408B32S | YVAHR432B32S |
| | 460V, 3PH, 60Hz | | YVAHR384B42S | YVAHR408B42S | YVAHR432B42S |
| | 575V, 3PH, 60Hz | | YVAHR384B52S | YVAHR408B52S | YVAHR432B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHR144B32S | YVAHR144B32S | YVAHR144B32S |
| | | Unit B | YVAHR120B32S | YVAHR144B32S | YVAHR144B32S |
| | | Unit C | YVAHR120B32S | YVAHR120B32S | YVAHR144B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHR144B42S | YVAHR144B42S | YVAHR144B42S |
| | | Unit B | YVAHR120B42S | YVAHR144B42S | YVAHR144B42S |
| | | Unit C | YVAHR120B42S | YVAHR120B42S | YVAHR144B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHR144B52S | YVAHR144B52S | YVAHR144B52S |
| | | Unit B | YVAHR120B52S | YVAHR144B52S | YVAHR144B52S |
| | | Unit C | YVAHR120B52S | YVAHR120B52S | YVAHR144B52S |

| | | | | | |
|---|---|---|---|---|---|
| Nominal Capacity | Cooling | Btu/h | 384,000 | 408,000 | 432,000 |
| | Heating | Btu/h | 432,000 | 459,000 | 486,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity [1] | Btu/h | 366,000 | 380,000 | 400,000 |
| | EER | Btu/Wh | 9.6 / 9.5 | 9.5 / 9.5 | 9.5 / 9.6 |
| | IEER | Btu/Wh | 19.6 / 18.6 | 19.3 / 19.2 | 19.5 / 19.0 |
| | Rated Heating Capacity [1] | Btu/h | 410,000 | 435,000 | 460,000 |
| | COP | W/W | 3.37 / 3.33 | 3.34 / 3.37 | 3.21 / 3.35 |
| | SCHE | Btu/Wh | 28.6 / 26.0 | 28.9 / 26.3 | 30.1 / 27.4 |
| | Sound Pressure | dB(A) | 69 | | 70 |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | | |
| Refrigerant | Type | | R410A | | |
| | Factory Charge Amount | lb. [kg] | 23.6+21.8+21.8 [10.7+9.9+9.9] | 23.6+23.6+21.8 [10.7+10.7+9.9] | 23.6+23.6+23.6 [10.7+10.7+10.7] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] | 3/4 [19.05] |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-1/8 [28.58] | 1-1/8 [28.58] | 1-1/8 [28.58] |
| | Low Pressure Gas Pipe | in. [mm] | 1-5/8 [41.28] | 1-5/8 [41.28] | 1-5/8 [41.28] |
| Connection Ratio | Connection Ratio Range [5] | % | 55 ~ 130(150) | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 30 / 64 | | |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B + Unit C) (208V/230V/460V/575V) | A | 58+46+46 / 52+42+42 / 30+24+24 / 24+19+19 | 58+58+46 / 52+52+42 / 30+30+24 / 24+24+19 | 58+58+58 / 52+52+52 / 30+30+30 / 24+24+24 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B + Unit C) (208V/230V/460V/575V) | A | 70+60+60 / 70+60+60 / 35+30+30 / 30+25+25 | 70+70+60 / 70+70+60 / 35+35+30 / 30+30+25 | 70+70+70 / 70+70+70 / 35+35+35 / 30+30+30 |
| Compressor | Compressor Type | | Inverter | | |
| | Operation Range | % | 2 ~ 100 | | |
| Fan | Fan Type | | Propeller Fan x6 | | |
| | Airflow Rate | cfm [$m^3$/min] | 9037+9037+9037 [256+256+256] | | |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 147-7/16 x 30-1/2 [1683 x 3745 x 774] | | |
| | Weight (Unit A + Unit B + Unit C) (208,230V/460V/575V) | lb. [kg] | 732+730+730 / 737+734+734 / 737+734+734 [332+331+331 / 334+333+333 / 334+333+333] | 732+732+730 / 737+737+734 / 737+737+734 [332+332+331 / 334+334+333 / 334+334+333] | 732+732+732 / 737+737+737 / 737+737+737 [332+332+332 / 334+334+334 / 334+334+334] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

YORK® VRF

# VARIABLE REFRIGERANT FLOW SYSTEMS

# Change-Over Boxes

## Multi-port change-over boxes provide multiple benefits:

- Provide unprecedented design freedom
- Reduce costs, including material and labor, with more efficient designs
- Eliminate concerns around condensate
- Easily accommodate future expansion

Single Port
Change-Over Box

4 Port
Change-Over Box

8 Port
Change-Over Box

12 Port
Change-Over Box

| Change-Over Box Type | | | Single Port | | Multiple Port | | |
|---|---|---|---|---|---|---|---|
| Model # | | | COBS048B22S/C | COBS096B22S/C | COB04M132B22S | COB08M264B22S | COB12M264B22S |
| Power Supply | | | 1 Phase, 208/230V, 60Hz | | | | |
| Number of Ports | | | 1 | 1 | 4 | 8 | 12 |
| Single Indoor Unit Per Port | Maximum Total Capacity of All Connected Indoor Units | MBH | ≤48 | ≤96 | ≤132 | ≤264 | ≤264 |
| | Maximum Total Capacity of Connected Indoor Units Per Port | MBH | ≤48 | ≤96 | ≤96 | ≤96 | ≤96 |
| Multiple Indoor Units Per Port | Maximum Number of Connected Indoor Units Per Port | - | 7 | 8 | 6 | 6 | 6 |
| | Maximum Total Capacity of All Connected Indoor Units | MBH | ≤41 | ≤71 | ≤114 | ≤216 | ≤216 |
| | Maximum Total Capacity of Connected Indoor Units Per Port | MBH | ≤41 | ≤71 | ≤41 | ≤41 | ≤41 |
| Dimensions | Height | in. (mm) | 7-1/2 (191) | 7-1/2 (191) | 10-1/4 (260) | 10-1/4 (260) | 10-1/4 (260) |
| | Width | in. (mm) | 11-7/8 (301) | 11-7/8 (301) | 11-15/16 (303) | 21-3/8 (543) | 30-13/16 (783) |
| | Depth | in. (mm) | 8-7/16 (214) | 8-7/16 (214) | 13-7/8 (352) | 13-7/8 (352) | 13-7/8 (352) |
| Net Weight | | lbs. (kg) | 13 (6) | 13 (6) | 31 (14) | 56 (25) | 80 (36) |
| Refrigerant | | - | R410A | | | | |
| Power Consumption | | W | 5 | 5 | 11.2 | 22.4 | 33.6 |
| Minimum Circuit Ampacity | | A | 0.1 | 0.1 | 0.2 | 0.4 | 0.6 |
| Recommended Fuse/Breaker Size | | A | 15 | 15 | 15 | 15 | 15 |
| Refrigerant Piping (Outdoor Unit) | Gas Line (High/Low Pressure) | in. (mm) | 5/8 (15.88) | 5/8 (15.88) | 7/8 (22.2) | 7/8 (22.2) | 1 (25.4) |
| | Gas Line (Low Pressure) | in. (mm) | 3/4 (19.05) | 3/4 (19.05) | 1 (25.4) | 1-1/8 (28.58) | 1-1/8 (28.58) |
| | Liquid Line | in. (mm) | - | - | 1/2 (12.7) | 1/2 (12.7) | 5/8 (15.88) |
| Refrigerant Piping (Indoor Unit) | Gas Line | in. (mm) | 5/8 (15.88) | 3/4 (19.05) | 5/8 (15.88) | 5/8 (15.88) | 5/8 (15.88) |
| | Liquid Line | in. (mm) | - | - | 3/8 (9.53) | 3/8 (9.53) | 3/8 (9.53) |

## AIR-SOURCE OUTDOOR UNITS

# Heat Pump Outdoor Units

## 208/230V | 460V | 575V | 6-16 TON SYSTEMS

| 6-16 Ton Systems | Type | | Single Unit Systems | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Tonnage | | 6 Ton | 8 Ton | 10 Ton | 12 Ton | 14 Ton | 16 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHP072B32S | YVAHP096B32S | YVAHP120B32S | YVAHP144B32S | YVAHP168B32S | YVAHP192B32S |
| | 460V, 3PH, 60Hz | | YVAHP072B42S | YVAHP096B42S | YVAHP120B42S | YVAHP144B42S | YVAHP168B42S | YVAHP192B42S |
| | 575V, 3PH, 60Hz | | YVAHP072B52S | YVAHP096B52S | YVAHP120B52S | YVAHP144B52S | YVAHP168B52S | YVAHP192B52S |
| Nominal Capacity | Cooling | Btu/h | 72,000 | 96,000 | 120,000 | 144,000 | 168,000 | 192,000 |
| | Heating | Btu/h | 81,000 | 108,000 | 135,000 | 162,000 | 189,000 | 216,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity [1] | Btu/h | 69,000 | 92,000 | 114,000 | 138,000 | 160,000 | 184,000 |
| | EER | Btu/Wh | 14.9 / 12.2 | 12.4 / 12.4 | 12.7 / 12.4 | 10.9 / 11.2 | 11.6 / 11.8 | 10.6 / 11.1 |
| | IEER | Btu/Wh | 26.5 / 21.1 | 23.9 / 22.1 | 24.4 / 21.7 | 23.9 / 21.2 | 23.4 / 21.4 | 21.4 / 20.8 |
| | Rated Heating Capacity [1] | Btu/h | 77,000 | 103,000 | 129,000 | 154,000 | 180,000 | 206,000 |
| | COP | W/W | 4.25 / 3.54 | 3.77 / 3.65 | 3.84 / 3.55 | 3.42 / 3.4 | 3.65 / 3.56 | 3.32 / 3.38 |
| | Sound Pressure | dB(A) | 60 | 63 | 63 | 65 | 64 | 66 |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | | | | | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | | | | | |
| Refrigerant | Type | | R410A | | | | | |
| | Factory Charge Amount | lb. [kg] | 15.9 [7.2] | 19.6 [8.9] | 21.8 [9.9] | 23.6 [10.7] | 24.9 [11.3] | 25.6 [11.6] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 1/2 [12.7] | 1/2 [12.7] | 1/2 [12.7] | 5/8 [15.88] | 5/8 [15.88] | 5/8 [15.88] |
| | Gas Pipe | in. [mm] | 7/8 [22.2] | 7/8 [22.2] | 1-1/8 [28.58] | 1-1/8 [28.58] | 1-1/8 [28.58] | 1-1/8 [28.58] |
| Connection Ratio | Connection Ratio Range [5] | % | 70 ~ 130 (150) | 65 ~ 130(150) | 60 ~ 130(150) | 55 ~ 130(150) | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 8 / 15 | 8 / 20 | 8 / 26 | 10 / 26 | 12 / 36 | 14 / 40 |
| Electrical | Minimum Circuit Amps, MCA (208V/230V/460V/575V) | A | 29 / 26 / 15 / 12 | 39 / 35 / 22 / 16 | 46 / 42 / 24 / 19 | 58 / 52 / 30 / 24 | 65 / 59 / 34 / 27 | 76 / 68 / 39 / 32 |
| | Maximum Overcurrent Protection, MOP (208V/230V/460V/575V) | A | 40 / 40 / 20 / 15 | 50 / 50 / 30 / 25 | 60 / 60 / 30 / 25 | 70 / 70 / 35 / 30 | 80 / 80 / 40 / 35 | 90 / 90 / 50 / 40 |
| Compressor | Compressor Type | | Inverter | | | | | |
| | Operation Range | % | 10 ~ 100 | 8 ~ 100 | 7 ~ 100 | 6 ~ 100 | 5 ~ 100 | |
| Fan | Fan Type | | Propeller Fan x1 | Propeller Fan x2 | | | | |
| | Airflow Rate | cfm [$m^3$/min] | 6707 [190] | 8437 [239] | 9037 [256] | | 11614 [329] | 12284 [348] |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 38-3/8 x 30-1/2 [1683 x 975 x 774] | 66-1/4 x 48-5/8 x 30-1/2 [1683 x 1235 x 774] | | | 66-1/4 x 64 x 30-1/2 [1683 x 1625 x 774] | |
| | Weight (208,230V/460V/575V) | lb. [kg] | 516 / 523 / 523 [234 / 237 / 237] | 591 / 604 / 604 [268 / 274 / 274] | 721 / 725 / 725 [327 / 329 / 329] | 723 / 728 / 728 [328 / 330 / 330] | 849 / 849 / 849 [385 / 385 / 385] | |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

# Heat Pump Outdoor Units

## 208/230V | 460V | 575V | 18-22 TON SYSTEMS

| 18-22 Ton Systems | Type | | Double Module Systems | | |
|---|---|---|---|---|---|
| | Tonnage | | 18 Ton | 20 Ton | 22 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHP216B32S | YVAHP240B32S | YVAHP264B32S |
| | 460V, 3PH, 60Hz | | YVAHP216B42S | YVAHP240B42S | YVAHP264B42S |
| | 575V, 3PH, 60Hz | | YVAHP216B52S | YVAHP240B52S | YVAHP264B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHP144B32S | YVAHP120B32S | YVAHP144B32S |
| | | Unit B | YVAHP072B32S | YVAHP120B32S | YVAHP120B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHP144B42S | YVAHP120B42S | YVAHP144B42S |
| | | Unit B | YVAHP072B42S | YVAHP120B42S | YVAHP120B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHP144B52S | YVAHP120B52S | YVAHP144B52S |
| | | Unit B | YVAHP072B52S | YVAHP120B52S | YVAHP120B52S |

| | | | | | |
|---|---|---|---|---|---|
| Nominal Capacity | Cooling | Btu/h | 216,000 | 240,000 | 264,000 |
| | Heating | Btu/h | 243,000 | 270,000 | 297,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity[1] | Btu/h | 206,000 | 228,000 | 252,000 |
| | EER | Btu/Wh | 10.9 / 11.2 | 11.1 / 10.6 | 10.0 / 10.5 |
| | IEER | Btu/Wh | 20.9 / 20.7 | 20.8 / 21.0 | 21.1 / 20.8 |
| | Rated Heating Capacity [1] | Btu/h | 232,000 | 258,000 | 282,000 |
| | COP | W/W | 3.82 / 3.51 | 3.67 / 3.51 | 3.70 / 3.56 |
| | Sound Pressure | dB(A) | 66 | | 67 |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | | |
| Refrigerant | Type | | R410A | | |
| | Factory Charge Amount | lb. [kg] | 23.6+15.9 [10.7+7.2] | 21.8+21.8 [9.9+9.9] | 23.6+21.8 [10.7+9.9] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] | 3/4 [19.05] |
| | Gas Pipe | in. [mm] | 1-1/8 [28.58] | 1-3/8 [34.93] | 1-3/8 [34.93] |
| Connection Ratio | Connection Ratio Range [5] | % | 60 ~ 130(150) | | 55 ~ 130(150) |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 18 / 46 | 18 / 52 | 20 / 56 |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V/230V/460V/575V) | A | 58+29 / 52+26 / 30+15 / 24+12 | 46+46 / 42+42 / 24+24 / 19+19 | 58+46 / 52+42 / 30+24 / 24+19 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V/230V/460V/575V) | A | 70+40 / 70+40 / 35+20 / 30+15 | 60+60 / 60+60 / 30+30 / 25+25 | 70+60 / 70+60 / 35+30 / 30+25 |
| Compressor | Compressor Type | | Inverter | | |
| | Operation Range | % | 4 ~ 100 | | 3 ~ 100 |
| Fan | Fan Type | | Propeller Fan x3 | Propeller Fan x4 | |
| | Airflow Rate | cfm [$m^3$/min] | 9037+6707 [256+190] | 9037+9037 [256+256] | |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 87-13/16 x 30-1/2 [1683 x 2230 x 774] | 66-1/4 x 98-1/16 x 30-1/2 [1683 x 2490 x 774] | |
| | Weight (Unit A + Unit B) (208,230V/460V/575V) | lb. [kg] | 723+516 / 728+523 / 728+523 [328+234 / 330+237 / 330+237] | 721+721 / 725+725 / 725+725 [327+327 / 329+329 / 329+329] | 723+721 / 728+725 / 728+725 [328+327 / 330+329 / 330+329] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

AIR-SOURCE OUTDOOR UNITS

# Heat Pump Outdoor Units

## 208/230V | 460V | 575V | 24-26 TON SYSTEMS

| 24-26 Ton Systems | Type | | Double Module Systems | |
|---|---|---|---|---|
| | Tonnage | | 24 Ton | 26 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHP288B32S | YVAHP312B32S |
| | 460V, 3PH, 60Hz | | YVAHP288B42S | YVAHP312B42S |
| | 575V, 3PH, 60Hz | | YVAHP288B52S | YVAHP312B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHP144B32S | YVAHP168B32S |
| | | Unit B | YVAHP144B32S | YVAHP144B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHP144B42S | YVAHP168B42S |
| | | Unit B | YVAHP144B42S | YVAHP144B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHP144B52S | YVAHP168B52S |
| | | Unit B | YVAHP144B52S | YVAHP144B52S |

| | | | | |
|---|---|---|---|---|
| **Nominal Capacity** | Cooling | Btu/h | 288,000 | 312,000 |
| | Heating | Btu/h | 324,000 | 351,000 |
| **Performance [2] (Non-duct / Duct)** | Rated Cooling Capacity [1] | Btu/h | 276,000 | 298,000 |
| | EER | Btu/Wh | 9.5 / 9.9 | 9.7 / 10.0 |
| | IEER | Btu/Wh | 19.4 / 20.7 | 20.3 / 19.5 |
| | Rated Heating Capacity [1] | Btu/h | 308,000 | 334,000 |
| | COP | W/W | 3.42 / 3.42 | 3.37 / 3.31 |
| | Sound Pressure | dB(A) | 68 | |
| **Operating [4] Temperature Range** | Cooling [3] | oF DB [°C DB] | 23 ~ 122 [-5 ~ 50] | |
| | Heating | oF WB [°C WB] | -13 ~ 59 [-25 ~ 15] | |
| **Refrigerant** | Type | | R410A | |
| | Factory Charge Amount | lb. [kg] | 23.6+23.6 [10.7+10.7] | 24.9+23.6 [11.3+10.7] |
| **Refrigerant Piping** | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] |
| | Gas Pipe | in. [mm] | 1-3/8 [34.93] | 1-3/8 [34.93] |
| **Connection Ratio** | Connection Ratio Range [5] | % | 55 ~ 130(150) | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 20 / 59 | 22 / 64 |
| **Electrical** | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V/230V/460V/575V)" | A | 58+58 / 52+52 / 30+30 / 24+24 | 65+58 / 59+52 / 34+30 / 27+24 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V/230V/460V/575V) | A | 70+70 / 70+70 / 35+35 / 30+30 | 80+70 / 80+70 / 40+35 / 35+30 |
| **Compressor** | Compressor Type | | Inverter | |
| | Operation Range | % | 3 ~ 100 | |
| **Fan** | Fan Type | | Propeller Fan x4 | |
| | Airflow Rate | cfm [$m^3$/min] | 9037+9037 [256+256] | 11614+9037 [329+256] |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | |
| **Unit** | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 98-1/16 x 30-1/2 [1683 x 2490 x 774] | 66-1/4 x 113-3/8 x 30-1/2 [1683 x 2880 x 774] |
| | Weight (Unit A + Unit B) (208,230V/460V/575V) | lb. [kg] | 723+723 / 728+728 / 728+728 [328+328 / 330+330 / 330+330] | 849+723 / 849+728 / 849+728 [385+328 / 385+330 / 385+330] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

# Heat Pump Outdoor Units

## 208/230V | 460V | 575V | 28-30 TON SYSTEMS

| 28-30 Ton Systems | Type | | Double Module Systems | |
|---|---|---|---|---|
| | Tonnage | | 28 Ton | 30 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHP336B32S | YVAHP360B32S |
| | 460V, 3PH, 60Hz | | YVAHP336B42S | YVAHP360B42S |
| | 575V, 3PH, 60Hz | | YVAHP336B52S | YVAHP360B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHP192B32S | YVAHP192B32S |
| | | Unit B | YVAHP144B32S | YVAHP168B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHP192B42S | YVAHP192B42S |
| | | Unit B | YVAHP144B42S | YVAHP168B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHP192B52S | YVAHP192B52S |
| | | Unit B | YVAHP144B52S | YVAHP168B52S |

| | | | | |
|---|---|---|---|---|
| Nominal Capacity | Cooling | Btu/h | 336,000 | 360,000 |
| | Heating | Btu/h | 378,000 | 405,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity [1] | Btu/h | 320,000 | 344,000 |
| | EER | Btu/Wh | 9.5 / 9.8 | 9.5 / 10.2 |
| | IEER | Btu/Wh | 20.8 / 19.1 | 19.8 / 19.5 |
| | Rated Heating Capacity [1] | Btu/h | 360,000 | 382,000 |
| | COP | W/W | 3.27 / 3.32 | 3.27 / 3.20 |
| | Sound Pressure | dB(A)s | 69 | 68 |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | |
| Refrigerant | Type | | R410A | |
| | Factory Charge Amount | lb. [kg] | 25.6+23.6 [11.6+10.7] | 25.6+24.9 [11.6+11.3] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] |
| | Gas Pipe | in. [mm] | 1-3/8 [34.93] | 1-3/8 [34.93] |
| Connection Ratio | Connection Ratio Range [5] | % | 55 ~ 130(150) | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 24 / 64 | 28 / 64 |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V/230V/460V/575V) | A | 76+58 / 68+52 / 39+30 / 32+24 | 76+65 / 68+59 / 39+34 / 32+27 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V/230V/460V/575V) | A | 90+70 / 90+70 / 50+35 / 40+30 | 90+80 / 90+80 / 50+40 / 40+35 |
| Compressor | Compressor Type | | Inverter | |
| | Operation Range | % | 3 ~ 100 | |
| Fan | Fan Type | | Propeller Fan x4 | |
| | Airflow Rate | cfm [$m^3$/min] | 12284+9037 [348+256] | 12284+11614 [348+329] |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 113-3/8 x 30-1/2 [1683 x 2880 x 774] | 66-1/4 x 128-3/4 x 30-1/2 [1683 x 3270 x 774] |
| | Weight (Unit A + Unit B) (208,230V/460V/575V) | lb. [kg] | 849+723 / 849+728 / 849+728 [385+328 / 385+330 / 385+330] | 849+849 / 849+849 / 849+849 [385+385 / 385+385 / 385+385] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

AIR-SOURCE OUTDOOR UNITS

# Heat Pump Outdoor Units

## 208/230V | 460V | 575V | 32-36 TON SYSTEMS

| 32-36 Ton Systems | Type | | Triple Module Systems | | |
|---|---|---|---|---|---|
| | Tonnage | | 32 Ton | 34 Ton | 36 Ton |
| Model # | 208/230V, 3PH, 60Hz | | YVAHP384B32S | YVAHP408B32S | YVAHP432B32S |
| | 460V, 3PH, 60Hz | | YVAHP384B42S | YVAHP408B42S | YVAHP432B42S |
| | 575V, 3PH, 60Hz | | YVAHP384B52S | YVAHP408B52S | YVAHP432B52S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVAHP144B32S | YVAHP144B32S | YVAHP144B32S |
| | | Unit B | YVAHP120B32S | YVAHP144B32S | YVAHP144B32S |
| | | Unit C | YVAHP120B32S | YVAHP120B32S | YVAHP144B32S |
| | 460V, 3PH, 60Hz | Unit A | YVAHP144B42S | YVAHP144B42S | YVAHP144B42S |
| | | Unit B | YVAHP120B42S | YVAHP144B42S | YVAHP144B42S |
| | | Unit C | YVAHP120B42S | YVAHP120B42S | YVAHP144B42S |
| | 575V, 3PH, 60Hz | Unit A | YVAHP144B52S | YVAHP144B52S | YVAHP144B52S |
| | | Unit B | YVAHP120B52S | YVAHP144B52S | YVAHP144B52S |
| | | Unit C | YVAHP120B52S | YVAHP120B52S | YVAHP144B52S |

| | | | | | |
|---|---|---|---|---|---|
| Nominal Capacity | Cooling | Btu/h | 384,000 | 408,000 | 432,000 |
| | Heating | Btu/h | 432,000 | 459,000 | 486,000 |
| Performance [2] (Non-duct / Duct) | Rated Cooling Capacity [1] | Btu/h | 366,000 | 380,000 | 400,000 |
| | EER | Btu/Wh | 9.6 / 9.5 | 9.5 / 9.5 | 9.5 / 9.6 |
| | IEER | Btu/Wh | 19.6 / 18.6 | 19.3 / 19.2 | 19.5 / 19.0 |
| | Rated Heating Capacity [1] | Btu/h | 410,000 | 435,000 | 460,000 |
| | COP | W/W | 3.37 / 3.33 | 3.34 / 3.37 | 3.21 / 3.35 |
| | Sound Pressure | dB(A) | 69 | | 70 |
| Operating [4] Temperature Range | Cooling [3] | °F DB [°C DB] | 23 ~ 122 [-5 ~ 50] | | |
| | Heating | °F WB [°C WB] | -13 ~ 59 [-25 ~ 15] | | |
| Refrigerant | Type | | R410A | | |
| | Factory Charge Amount | lb. [kg] | 23.6+21.8+21.8 [10.7+9.9+9.9] | 23.6+23.6+21.8 [10.7+10.7+9.9] | 23.6+23.6+23.6 [10.7+10.7+10.7] |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | 3/4 [19.05] | 3/4 [19.05] |
| | Gas Pipe | in. [mm] | 1-5/8 [41.28] | 1-5/8 [41.28] | 1-5/8 [41.28] |
| Connection Ratio | Connection Ratio Range [5] | % | 55 ~ 130(150) | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 30 / 64 | | |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B + Unit C) (208V/230V/460V/575V) | A | 58+46+46 / 52+42+42 / 30+24+24 / 24+19+19 | 58+58+46 / 52+52+42 / 30+30+24 / 24+24+19 | 58+58+58 / 52+52+52 / 30+30+30 / 24+24+24 |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B + Unit C) (208V/230V/460V/575V) | A | 70+60+60 / 70+60+60 / 35+30+30 / 30+25+25 | 70+70+60 / 70+70+60 / 35+35+30 / 30+30+25 | 70+70+70 / 70+70+70 / 35+35+35 / 30+30+30 |
| Compressor | Compressor Type | | Inverter | | |
| | Operation Range | % | 2 ~ 100 | | |
| Fan | Fan Type | | Propeller Fan x6 | | |
| | Airflow Rate | cfm [$m^3$/min] | 9037+9037+9037 [256+256+256] | | |
| | External Static Pressure [6] | in. WG [Pa] | 0 ~ 0.32 [0 ~ 80] | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 66-1/4 x 147-7/16 x 30-1/2 [1683 x 3745 x 774] | | |
| | Weight (Unit A + Unit B + Unit C) (208,230V/460V/575V) | lb. [kg] | 723+721+721 / 728+725+725 / 728+725+725 [328+327+327 / 330+329+329 / 330+329+329] | 723+723+721 / 728+728+725 / 728+728+725 [328+328+327 / 330+330+329 / 330+330+329] | 723+723+723 / 728+728+728 / 728+728+728 [328+328+328 / 330+330+330 / 330+330+330] |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 1230 test standard.
3. Extended cooling operating temperature range down to 14°F DB [-10°C DB] with snow protection hood, and down to -10°F DB [-23°C DB] with low ambient kit. However, upper limit temperature for cooling operation is restricted up to 109°F DB [43°C DB].
4. For details, refer to Engineering Manual.
5. For details, refer to Engineering Manual.
6. External static pressure can be changed by DSW setting.

YORK® VRF

# Low-Ambient Systems

Bring the benefits of VRF technology to customers in cold-weather climates with YORK® Low-Ambient Air-Source VRF Heat Pump Units. These heat pump units provide heating when the outdoor ambient temperature is as low as 14°F (-10°C) in the cooling mode and as low as -13°F (-25°C) in the heating mode.

## AIR-SOURCE OUTDOOR UNITS

# Low-Ambient Heat Pump Outdoor Units 208/230V | 6-8 TON SYSTEMS

| 6-8 Ton Systems | Type | | | | Low Ambient Outdoor Systems | | | |
|---|---|---|---|---|---|---|---|---|
| | Tonnage | | | | 6 Ton | | 8 Ton | |
| Model # | | | | | YVAHP072B31CW | | YVAHP096B31CW | |
| Power Supply | | | | | 208/230V/ 3PH 60Hz | | 208/230V/ 3PH 60Hz | |
| Capacity (Nominal) [1] | Cooling | Capacity (Nominal) | Btu/h | (kW) | 72,000 | (21.1) | 96,000 | (28.1) |
| | | Power input | kW | | 5.88 | | 9.61 | |
| | | Current input | A (208/230V) | | 16.8 / 16.1 | | 27.2 / 25.9 | |
| | Heating | Capacity (Nominal) | Btu/h | (kW) | 81,000 | (23.7) | 108,000 | (31.7) |
| | | Power Input | kW | | 5.51 | | 8.08 | |
| | | Current Input | A (208/230V) | | 15.8 / 15.0 | | 23.1 / 21.8 | |
| Efficiency Ratings [2] | Cooling | Capacity (Rated) | Btu/h | (kW) | 69,000 | (20.2) | 92,000 | (27.0) |
| | | EER | Btu/Wh | (W/W) | 13.00 | (3.81) | 11.90 | (3.49) |
| | | IEER | Btu/Wh | (Wh/Wh) | 18.10 | (5.31) | 18.90 | (5.54) |
| | Heating High | Capacity (Rated) | Btu/h | (kW) | 76,000 | (22.3) | 103,000 | (30.2) |
| | | COP | W/W | | 4.09 | | 3.80 | |
| | Heating Low | Capacity | Btu/h | (kW) | 64,000 | (18.8) | 87,000 | (25.5) |
| | | COP | W/W | | 2.57 | | 2.42 | |
| Cooling Operating Range | Indoor | | °F WB (°C WB) | | 59(15)~73(23) | | 59(15)~73(23) | |
| | Outdoor [3] | | °F DB (°C DB) | | 14(-10)~118(48) | | 14(-10)~118(48) | |
| Heating Operating Range | Indoor | | °F DB (°C DB) | | 59(15)~80(27) | | 59(15)~80(27) | |
| | Outdoor [4] | | °F WB (°C WB) | | -13(-25)~59(15) | | -13(-25)~59(15) | |
| Cabinet Color (Munsell Code) | | | - | | 2.5Y 8/2 | | 2.5Y 8/2 | |
| Outer Dimensions | (H x W x D) | | in | | 68-1/8 x 48-1/8 x 31-1/4 | | 68-1/8 x 48-1/8 x 31-1/4 | |
| Package Dimensions | (H x W x D) | | in | | 74-1/4 x 50-7/8 x 34 | | 74-1/4 x 50-7/8 x 34 | |
| Weight | Net | | lbs | (kg) | 699 | (317) | 699 | (317) |
| | Gross | | lbs | (kg) | 756 | (343) | 756 | (343) |
| Connection Ratio | Connection Ratio Range | | % | | 130 - 60 | | 110 - 60 | |
| | Max. (Recommendation) indoor units/system | | - | | 15 (10) | | 16 (10) | |
| Heat Exchanger | Type | | - | | Multi-pass cross-finned tube | | | |
| | Material | | - | | Cu-Al (Anti-corrosion) | | | |
| Compressor | Type | Inverter | - | | EK655DHD×1 | | EK655DHD×1 | |
| | | Fixed Speed | - | | EK655DH×1 | | EK655DH×1 | |
| | Motor Output (Pole) | | kW (Pole) | | 3.2(4)+3.0(2) | | 3.2(4)+3.0(2) | |
| | Start Method | | - | | inverter | | | |
| | Operation Range | | % | | 14 ~ 100 | | 14 ~ 100 | |
| | Refrigeration Oil Type | | - | | FVC68D | | FVC68D | |
| Crank Case Heater | | | W×Qty | | 40.8 (230V) ×6 | | 40.8 (230V) ×6 | |
| Fan | Type | | - | | Propeller Fan | | | |
| | Motor Output (Pole) | | kW (Pole) | | 0.66(8) | | 0.66(8) | |
| | Quantity | | Qty | | 1 | | | |
| | Airflow Rate | | cfm | ($m^3$/min) | 6884 | (195) | 6884 | (195) |
| | External Static Pressure [5] | | in.WG | (Pa) | 0 (0) | | 0 (0) | |
| | Drive | | - | | Direct-drive | | | |
| Electrical | Min Circuit Amps | | A | | 51/46 | | 51/46 | |
| | Max Overcurrent Protective Device | | A | | 72/65 | | 72/65 | |
| | Maximum Fuse Size | | A | | 70/60 | | 70/60 | |
| Sound Pressure Level | Cooling (Night-SYIFt) | | dB (A) | | 60 | (56) | 60 | (56) |
| | Heating | | dB (A) | | 61 | | 61 | |
| Protection devices | Cycle | | - | | High pressure switch at 601psi (4.15MPa) | | | |
| | Inverter | | - | | Over-current protection / Over-heat protection | | | |
| | Compressor | | - | | Over-heat protection | | | |
| | PCB | | - | | Over-current protection | | | |
| Refrigerant | Type | | - | | R410A | | | |
| | Charge Amount | | lbs | (kg) | 17.0 | (7.7) | 17.0 | (7.7) |
| Refrigeration Oil | Charge Amount | | gal/Unit | (L/Unit) | 2.1 | (7.9) | 2.1 | (7.9) |
| Defrost Method | | | - | | Reversed refrigerant cycle / Hot gas bypass | | | |
| Main Refrigerant Piping (Heat Pump) | Gas Line | | in | (mm) | 7/8 | (22.2) | 7/8 | (22.2) |
| | Liquid Line | | in | (mm) | 3/8 | (9.52) | 3/8 | (9.52) |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Rating Conditions are based on the AHRI 1230 test standard.
3. For more details, please refer to Engineering manual "Operation range" section.
4. For more details, please refer to Engineering manual "Operation range" section.
5. External static pressure can be changed via DSW setting 0.24 in. W.G.. (60Pa).

# Low-Ambient Heat Pump Outdoor Units 208/230V | 12-24 TON SYSTEMS

| 12-24 Ton Systems | Type | | | | Low Ambient Outdoor Systems | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tonnage | | | | 12 Ton (6 + 6) | | 14 Ton (8+6) | | 16 Ton (8+8) | | 24 Ton (8+8+8) | |
| Model # (combination) | | | | | YVAHP144B31CW | | YVAHP168B31CW | | YVAHP192B31CW | | YVAHP288B31CW | |
| Model # (individual) | Unit A | | | | YVAHP072B31CW | | YVAHP096B31CW | | YVAHP096B31CW | | YVAHP096B31CW | |
| | Unit B | | | | YVAHP072B31CW | | YVAHP072B31CW | | YVAHP096B31CW | | YVAHP096B31CW | |
| | Unit C | | | | - | | - | | - | | YVAHP096B31CW | |
| Power Supply | | | | | 208/230V/ 3PH 60Hz | | 208/230V/ 3PH 60Hz | | 208/230V/ 3PH 60Hz | | 208/230V/ 3PH 60Hz | |
| Capacity (Nominal) [1] | Cooling | Capacity (Nominal) | Btu/h | (kW) | 144,000 | (42.2) | 168,000 | (49.2) | 192,000 | (56.3) | 288,000 | (84.4) |
| | | Power input | kW | | 11.77 | | 15.50 | | 19.23 | | 28.84 | |
| | | Current input | A (208/230V) | | 33.6 / 32.2 | | 44.0 / 42.0 | | 54.4 / 51.8 | | 81.6 / 77.7 | |
| | Heating | Capacity Nominal) | Btu/h | (kW) | 162,000 | (47.5) | 189,000 | (55.4) | 216,000 | (63.3) | 324,000 | (95.0) |
| | | Power Input | kW | | 11.02 | | 13.59 | | 16.16 | | 24.25 | |
| | | Current Input | A (208/230V) | | 31.6 / 30.0 | | 38.9/ 36.8 | | 46.2 / 43.6 | | 69.3 / 65.4 | |
| Efficiency Ratings [2] | Cooling | Capacity (Rated) | Btu/h | (kW) | 138,000 | (40.5) | 160,000 | (46.9) | 182,000 | (53.4) | 274,000 | (80.4) |
| | | EER | Btu/Wh | (W/W) | 12.80 | (3.75) | 12.30 | (3.61) | 12.20 | (3.58) | 10.60 | (3.11) |
| | | IEER | Btu/Wh | (Wh/Wh) | 17.60 | (5.16) | 18.50 | (5.43) | 18.50 | (5.43) | 17.70 | (5.19) |
| | Heating High | Capacity (Rated) | Btu/h | (kW) | 154,000 | (45.2) | 178,000 | (52.2) | 204,000 | (59.8) | 308,000 | (90.3) |
| | | COP | W/W | | 3.99 | | 3.80 | | 3.68 | | 3.57 | |
| | Heating Low | Capacity | Btu/h | (kW) | 129,000 | (37.8) | 151,000 | (44.3) | 174,000 | (51.0) | 260,000 | (76.3) |
| | | COP | W/W | | 2.50 | | 2.33 | | 2.37 | | 2.34 | |
| Cooling Operating Range | Indoor | | °F WB (°C WB) | | 59(15)~73(23) | | 59(15)~73(23) | | 59(15)~73(23) | | 59(15)~73(23) | |
| | Outdoor [3] | | °F DB (°C DB) | | 14(-10)~118(48) | | 14(-10)~118(48) | | 14(-10)~118(48) | | 14(-10)~118(48) | |
| Heating Operating Range | Indoor | | °F DB (°C DB) | | 59(15)~80(27) | | 59(15)~80(27) | | 59(15)~80(27) | | 59(15)~80(27) | |
| | Outdoor [4] | | °F WB (°C WB) | | -13(-25)~59(15) | | -13(-25)~59(15) | | -13(-25)~59(15) | | -13(-25)~59(15) | |
| Cabinet Color (Munsell Code) | | | - | | 2.5Y 8/2 | | 2.5Y 8/2 | | 2.5Y 8/2 | | 2.5Y 8/2 | |
| Outer Dimensions | (H x W x D) | | in | | (68-1/8 x 48-1/8 x 31-1/4) x2 | | (68-1/8 x 48-1/8 x 31-1/4) x2 | | (68-1/8 x 48-1/8 x 31-1/4) x2 | | (68-1/8 x 48-1/8 x 31-1/4) x3 | |
| Package Dimensions | (H x W x D) | | in | | - | | - | | - | | - | |
| Weight | Net | | lbs | (kg) | 1398 | (634) | 1398 | (634) | 1398 | (634) | 2097 | (951) |
| | Gross | | lbs | (kg) | 1513 | (686) | 1513 | (686) | 1513 | (686) | 2269 | (1029) |
| Connection Ratio | Connection Ratio Range | | % | | 130 - 60 | | 110 - 60 | | 110 - 60 | | 110 - 60 | |
| | Max. (Recommendation) indoor units/system | | - | | 31(18) | | 30(18) | | 33(18) | | 50(32) | |
| Heat Exchanger | Type | | - | | Multi-pass cross-finned tube | | | | | | | |
| | Material | | - | | Cu-Al (Anti-corrosion) | | | | | | | |
| Compressor | Type | Inverter | - | | EK655DHD×2 | | EK655DHD×2 | | EK655DHD×2 | | EK655DHD×3 | |
| | | Fixed Speed | - | | EK655DH×2 | | EK655DH×2 | | EK655DH×2 | | EK655DH×3 | |
| | Motor Output (Pole) | | kW (Pole) | | 3.2(4)+3.0(2)<br>3.2(4)+3.0(2) | | 3.2(4)+3.0(2)<br>3.2(4)+3.0(2) | | 3.2(4)+3.0(2)<br>3.2(4)+3.0(2) | | 3.2(4)+3.0(2)<br>3.2(4)+3.0(2)<br>3.2(4)+3.0(2) | |
| | Start Method | | - | | inverter | | | | | | | |
| | Operation Range | | % | | 7 ~ 100 | | 7 ~ 100 | | 7 ~ 100 | | 8 ~ 100 | |
| | Refrigeration Oil Type | | - | | FVC68D | | FVC68D | | FVC68D | | FVC68D | |
| Crank Case Heater | | | W×Qty | | 40.8 (230V) ×12 | | 40.8 (230V) ×12 | | 40.8 (230V) ×12 | | 40.8 (230V) ×18 | |
| Fan | Type | | - | | Propeller Fan | | | | | | | |
| | Motor Output (Pole) | | kW (Pole) | | 0.66(8)×2 | | 0.66(8)×2 | | 0.66(8)×2 | | 0.66(8)×3 | |
| | Quantity | | Qty | | 2 | | 2 | | 2 | | 3 | |
| | Airflow Rate | | cfm | ($m^3$/min) | 6884+6884 | (195+195) | 6884+6884 | (195+195) | 6884+6884 | (195+195) | 6884+6884+6884 | (195+195+195) |
| | External Static Pressure [5] | | in.WG | (Pa) | 0 (0) | | 0 (0) | | 0 (0) | | 0 (0) | |
| | Drive | | - | | Direct-drive | | | | | | | |
| Electrical | Min Circuit Amps | | A | | Reference:<br>YVAHP072B31CW<br>YVAHP072B31CW | | Reference:<br>YVAHP096B31CW<br>YVAHP072B31CW | | Reference:<br>YVAHP096B31CW<br>YVAHP096B31CW | | Reference:<br>YVAHP096B31CW<br>YVAHP096B31CW<br>YVAHP096B31CW | |
| | Max Overcurrent Protective Device | | A | | | | | | | | | |
| | Maximum Fuse Size | | A | | | | | | | | | |
| Sound Pressure Level | Cooling (Night-SYIFt) | | dB (A) | | 63 | (59) | 63 | (59) | 63 | (59) | 65 | (61) |
| | Heating | | dB (A) | | 64 | | 64 | | 64 | | 66 | |
| Protection devices | Cycle | | - | | High pressure switch at 601psi (4.15MPa) | | | | | | | |
| | Inverter | | - | | Over-current protection / Over-heat protection | | | | | | | |
| | Compressor | | - | | Over-heat protection | | | | | | | |
| | PCB | | - | | Over-current protection | | | | | | | |
| Refrigerant | Type | | - | | R410A | | | | | | | |
| | Charge Amount | | lbs | (kg) | 17.0+17.0 | (7.7+7.7) | 17.0+17.0 | (7.7+7.7) | 17.0+17.0 | (7.7+7.7) | 17.0+17.0+17.0 | (7.7+7.7+7.7) |
| Refrigeration Oil | Charge Amount | | gal/Unit | (L/Unit) | 2.1+2.1 | (7.9+7.9) | 2.1+2.1 | (7.9+7.9) | 2.1+2.1 | (7.9+7.9) | 2.1+2.1+2.1 | (7.9+7.9+7.9) |
| Defrost Method | | | - | | Reversed refrigerant cycle / Hot gas bypass | | | | | | | |
| Main Refrigerant Piping (Heat Pump) | Gas Line | | in | (mm) | 1-1/8 | (28.58) | 1-1/8 | (28.58) | 1-1/8 | (28.58) | 1-3/8 | (34.93) |
| | Liquid Line | | in | (mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 3/4 | (19.05) |

## AIR-SOURCE OUTDOOR UNITS

# Low-Ambient Heat Pump Outdoor Units 460V | 6-8 TON SYSTEMS

| 6-8 Ton Systems | Type | | | | Low Ambient Outdoor Systems | | | |
|---|---|---|---|---|---|---|---|---|
| | Tonnage | | | | 6 Ton | | 8 Ton | |
| Model # | | | | | YVAHP072B41CW | | YVAHP096B41CW | |
| Power Supply | | | | | 460V/ 3PH 60Hz | | 460V/ 3PH 60Hz | |
| Capacity (Nominal)[1] | Cooling | Capacity (Nominal) | Btu/h | (kW) | 72,000 | (21.1) | 96,000 | (28.1) |
| | | Power input | kW | | 5.88 | | 9.61 | |
| | | Current input | A | | 7.9 | | 12.8 | |
| | Heating | Capacity (Nominal) | Btu/h | (kW) | 81,000 | (23.7) | 108,000 | (31.7) |
| | | Power Input | kW | | 5.51 | | 8.08 | |
| | | Current Input | A | | 7.4 | | 10.8 | |
| Efficiency Ratings [2] | Cooling | Capacity (Rated) | Btu/h | (kW) | 69,000 | (20.2) | 92,000 | (27.0) |
| | | EER | Btu/Wh | (W/W) | 13.00 | (3.81) | 11.90 | (3.49) |
| | | IEER | Btu/Wh | (Wh/Wh) | 18.10 | (5.31) | 18.90 | (5.54) |
| | Heating High | Capacity (Rated) | Btu/h | (kW) | 76,000 | (22.3) | 103,000 | (30.2) |
| | | COP | W/W | | 4.09 | | 3.80 | |
| | Heating Low | Capacity | Btu/h | (kW) | 64,000 | (18.8) | 87,000 | (25.5) |
| | | COP | W/W | | 2.57 | | 2.42 | |
| Cooling Operating Range | Indoor | | °F WB (°C WB) | | 59(15)~73(23) | | 59(15)~73(23) | |
| | Outdoor [3] | | °F DB (°C DB) | | 14(-10)~118(48) | | 14(-10)~118(48) | |
| Heating Operating Range | Indoor | | °F DB (°C DB) | | 59(15)~80(27) | | 59(15)~80(27) | |
| | Outdoor [4] | | °F WB (°C WB) | | -13(-25)~59(15) | | -13(-25)~59(15) | |
| Cabinet Color (Munsell Code) | | | - | | 2.5Y 8/2 | | 2.5Y 8/2 | |
| Outer Dimensions | (H x W x D) | | in | | 68-1/8 x 48-1/8 x 31-1/4 | | 68-1/8 x 48-1/8 x 31-1/4 | |
| Package Dimensions | (H x W x D) | | in | | 74-1/4 x 50-7/8 x 34 | | 74-1/4 x 50-7/8 x 34 | |
| Weight | Net | | lbs | (kg) | 787 | (357) | 787 | (357) |
| | Gross | | lbs | (kg) | 845 | (383) | 845 | (383) |
| Connection Ratio | Connection Ratio Range | | % | | 130 - 60 | | 110 - 60 | |
| | Max. (Recommendation) indoor units/system | | - | | 15 (10) | | 16 (10) | |
| Heat Exchanger | Type | | - | | Multi-pass cross-finned tube | | | |
| | Material | | - | | Cu-Al (Anti-corrosion) | | | |
| Compressor | Type | Inverter | - | | EK655DHD×1 | | EK655DHD×1 | |
| | | Fixed Speed | - | | EK655DH×1 | | EK655DH×1 | |
| | Motor Output (Pole) | | kW (Pole) | | 3.2(4)+3.0(2) | | 3.2(4)+3.0(2) | |
| | Start Method | | - | | inverter | | | |
| | Operation Range | | % | | 14 ~ 100 | | 14 ~ 100 | |
| | Refrigeration Oil Type | | - | | FVC68D | | FVC68D | |
| Crank Case Heater | | | W×Qty | | 40.8 (230V) ×6 | | 40.8 (230V) ×6 | |
| Fan | Type | | - | | Propeller Fan | | | |
| | Motor Output (Pole) | | kW (Pole) | | 0.66(8) | | 0.66(8) | |
| | Quantity | | Qty | | 1 | | | |
| | Airflow Rate | | cfm | ($m^3$/min) | 6884 | (195) | 6884 | (195) |
| | External Static Pressure [5] | | in.WG | (Pa) | 0 (0) | | 0 (0) | |
| | Drive | | - | | Direct-drive | | | |
| Electrical | Min Circuit Amps | | A | | 24 | | 24 | |
| | Max Overcurrent Protective Device | | A | | 34 | | 34 | |
| | Maximum Fuse Size | | A | | 30 | | 30 | |
| Sound Pressure Level | Cooling (Night-SYIFt) | | dB (A) | | 60 | (56) | 60 | (56) |
| | Heating | | dB (A) | | 61 | | 61 | |
| Protection devices | Cycle | | - | | High pressure switch at 601psi (4.15MPa) | | | |
| | Inverter | | - | | Over-current protection / Over-heat protection | | | |
| | Compressor | | - | | Over-heat protection | | | |
| | PCB | | - | | Over-current protection | | | |
| Refrigerant | Type | | - | | R410A | | | |
| | Charge Amount | | lbs | (kg) | 17.0 | (7.7) | 17.0 | (7.7) |
| Refrigeration Oil | Charge Amount | | gal/Unit | (L/Unit) | 2.1 | (7.9) | 2.1 | (7.9) |
| Defrost Method | | | - | | Reversed refrigerant cycle / Hot gas bypass | | | |
| Main Refrigerant Piping (Heat Pump) | Gas Line | | in | (mm) | 7/8 | (22.2) | 7/8 | (22.2) |
| | Liquid Line | | in | (mm) | 3/8 | (9.52) | 3/8 | (9.52) |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
2. Rating Conditions are based on the AHRI 1230 test standard.
3. For more details, please refer to Engineering manual "Operation range" section.
4. For more details, please refer to Engineering manual "Operation range" section.
5. External static pressure can be changed via DSW setting 0.24 in. W.G.. (60Pa).

# Low-Ambient Heat Pump Outdoor Units 460V | 12-24 TON SYSTEMS

| 12-24 Ton Systems | Type / Tonnage | | | | Low Ambient Outdoor Systems | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12 Ton (6 + 6) | | 14 Ton (8+6) | | 16 Ton (8+8) | | 24 Ton (8+8+8) | |
| Model # (combination) | | | | | YVAHP144B41CW | | YVAHP168B41CW | | YVAHP192B41CW | | YVAHP288B41CW | |
| Model # (individual) | Unit A | | | | YVAHP072B41CW | | YVAHP096B41CW | | YVAHP096B41CW | | YVAHP096B41CW | |
| | Unit B | | | | YVAHP072B41CW | | YVAHP072B41CW | | YVAHP096B41CW | | YVAHP096B41CW | |
| | Unit C | | | | - | | - | | - | | YVAHP096B41CW | |
| Power Supply | | | | | 460V/ 3PH 60Hz | | 460V/ 3PH 60Hz | | 460V/ 3PH 60Hz | | 460V/ 3PH 60Hz | |
| Capacity (Nominal) [1] | Cooling | Capacity (Nominal) | Btu/h | (kW) | 144,000 | (42.2) | 168,000 | (49.2) | 192,000 | (56.3) | 288,000 | (84.4) |
| | | Power input | kW | | 11.77 | | 15.50 | | 19.23 | | 28.84 | |
| | | Current input | A | | 15.8 | | 20.7 | | 25.6 | | 38.4 | |
| | Heating | Capacity (Nominal) | Btu/h | (kW) | 162,000 | (47.5) | 189,000 | (55.4) | 216,000 | (63.3) | 324,000 | (95.0) |
| | | Power Input | kW | | 11.02 | | 13.59 | | 16.16 | | 24.25 | |
| | | Current Input | A | | 14.8 | | 18.2 | | 21.6 | | 32.4 | |
| Efficiency Ratings [2] | Cooling | Capacity (Rated) | Btu/h | (kW) | 138,000 | (40.5) | 160,000 | (46.9) | 182,000 | (53.4) | 274,000 | (80.4) |
| | | EER | Btu/Wh | (W/W) | 12.80 | (3.75) | 12.30 | (3.61) | 12.20 | (3.58) | 10.60 | (3.11) |
| | | IEER | Btu/Wh | (Wh/Wh) | 17.60 | (5.16) | 18.50 | (5.43) | 18.50 | (5.43) | 17.70 | (5.19) |
| | Heating High | Capacity (Rated) | Btu/h | (kW) | 154,000 | (45.2) | 178,000 | (52.2) | 204,000 | (59.8) | 308,000 | (90.3) |
| | | COP | W/W | | 3.99 | | 3.80 | | 3.68 | | 3.57 | |
| | Heating Low | Capacity | Btu/h | (kW) | 129,000 | (37.8) | 151,000 | (44.3) | 174,000 | (51.0) | 260,000 | (76.3) |
| | | COP | W/W | | 2.50 | | 2.33 | | 2.37 | | 2.34 | |
| Cooling Operating Range | Indoor | | °F WB (°C WB) | | 59(15) ~ 73(23) | | 59(15) ~ 73(23) | | 59(15) ~ 73(23) | | 59(15) ~ 73(23) | |
| | Outdoor [3] | | °F DB (°C DB) | | 14(-10) ~ 118(48) | | 14(-10) ~ 118(48) | | 14(-10) ~ 118(48) | | 14(-10) ~ 118(48) | |
| Heating Operating Range | Indoor | | °F DB (°C DB) | | 59(15) ~ 80(27) | | 59(15) ~ 80(27) | | 59(15) ~ 80(27) | | 59(15) ~ 80(27) | |
| | Outdoor [4] | | °F WB (°C WB) | | -13(-25) ~ 59(15) | | -13(-25) ~ 59(15) | | -13(-25) ~ 59(15) | | -13(-25) ~ 59(15) | |
| Cabinet Color (Munsell Code) | | | - | | 2.5Y ~ 8/2 | | 2.5Y ~ 8/2 | | 2.5Y ~ 8/2 | | 2.5Y ~ 8/2 | |
| Outer Dimensions | (H x W x D) | | in | | (68-1/8 x 48-1/ 8 x 31-1/4) x2 | | (68-1/8 x 48-1/ 8 x 31-1/4) x2 | | (68-1/8 x 48-1/ 8 x 31-1/4) x2 | | (68-1/8 x 48-1/ 8 x 31-1/4) x3 | |
| Package Dimensions | (H x W x D) | | in | | - | | - | | - | | - | |
| Weight | Net | | lbs | (kg) | 1574 | (714) | 1574 | (714) | 1574 | (714) | 2362 | (1071) |
| | Gross | | lbs | (kg) | 1689 | (766) | 1689 | (766) | 1689 | (766) | 2534 | (1149) |
| Connection Ratio | Connection Ratio Range | | % | | 130 - 60 | | 110 - 60 | | 110 - 60 | | 110 - 60 | |
| | Max. Recommendation) indoor units/system | | - | | 31(18) | | 30(18) | | 33(18) | | 50(32) | |
| Heat Exchanger | Type | | - | | Multi-pass cross-finned tube | | | | | | | |
| | Material | | - | | Cu-Al (Anti-corrosion) | | | | | | | |
| Compressor | Type | Inverter | - | | EK655DHD×2 | | EK655DHD×2 | | EK655DHD×2 | | EK655DHD×3 | |
| | | Fixed Speed | - | | EK655DH×2 | | EK655DH×2 | | EK655DH×2 | | EK655DH×3 | |
| | Motor Output (Pole) | | kW (Pole) | | 3.2(4)+3.0(2) 3.2(4)+3.0(2) | | 3.2(4)+3.0(2) 3.2(4)+3.0(2) | | 3.2(4)+3.0(2) 3.2(4)+3.0(2) | | 3.2(4)+3.0(2) 3.2(4)+3.0(2) 3.2(4)+3.0(2) | |
| | Start Method | | - | | inverter | | | | | | | |
| | Operation Range | | % | | 7 ~ 100 | | 7 ~ 100 | | 7 ~ 100 | | 8 ~ 100 | |
| | Refrigeration Oil Type | | - | | FVC68D | | FVC68D | | FVC68D | | FVC68D | |
| Crank Case Heater | | | W×Qty | | 40.8 (230V) ×12 | | 40.8 (230V) ×12 | | 40.8 (230V) ×12 | | 40.8 (230V) ×18 | |
| Fan | Type | | - | | Propeller Fan | | | | | | | |
| | Motor Output (Pole) | | kW (Pole) | | 0.66(8)×2 | | 0.66(8)×2 | | 0.66(8)×2 | | 0.66(8)×3 | |
| | Quantity | | Qty | | 2 | | 2 | | 2 | | 3 | |
| | Airflow Rate | | cfm | ($m^3$/min) | 6884+6884 | (195+195) | 6884+6884 | (195+195) | 6884+6884 | (195+195) | 6884+6884+6884 | (195+195+195) |
| | External Static Pressure [5] | | in.WG | (Pa) | 0 (0) | | 0 (0) | | 0 (0) | | 0 (0) | |
| | Drive | | - | | Direct-drive | | | | | | | |
| Electrical | Min Circuit Amps | | A | | Reference: YVAHP072B41CW YVAHP072B41CW | | Reference: YVAHP096B41CW YVAHP072B41CW | | Reference: YVAHP096B41CW YVAHP096B41CW | | Reference: YVAHP096B41CW YVAHP096B41CW YVAHP096B41CW | |
| | Max Overcurrent Protective Device | | A | | | | | | | | | |
| | Maximum Fuse Size | | A | | | | | | | | | |
| Sound Pressure Level | Cooling (Night-SYIFt) | | dB (A) | | 63 | (59) | 63 | (59) | 63 | (59) | 65 | (61) |
| | Heating | | dB (A) | | 64 | | 64 | | 64 | | 66 | |
| Protection devices | Cycle | | - | | High pressure switch at 601psi (4.15MPa) | | | | | | | |
| | Inverter | | - | | Over-current protection / Over-heat protection | | | | | | | |
| | Compressor | | - | | Over-heat protection | | | | | | | |
| | PCB | | - | | Over-current protection | | | | | | | |
| Refrigerant | Type | | - | | R410A | | | | | | | |
| | Charge Amount | | lbs | (kg) | 17.0+17.0 | (7.7+7.7) | 17.0+17.0 | (7.7+7.7) | 17.0+17.0 | (7.7+7.7) | 17.0+17.0+17.0 | (7.7+7.7+7.7) |
| Refrigeration Oil | Charge Amount | | gal/Unit | (L/Unit) | 2.1+2.1 | (7.9+7.9) | 2.1+2.1 | (7.9+7.9) | 2.1+2.1 | (7.9+7.9) | 2.1+2.1+2.1 | (7.9+7.9+7.9) |
| Defrost Method | | | - | | Reversed Refrigerant cycle / Hot Gas Bypass | | | | | | | |
| Main Refrigerant Piping (Heat Pump) | High/Low Pressure Gas Line | | in | (mm) | 1-1/8 | (28.58) | 1-1/8 | (28.58) | 1-1/8 | (28.58) | 1-3/8 | (34.93) |
| | Liquid Line | | in | (mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) | 3/4 | (19.05) |

# The Compact Unit with Big Benefits

Meet diverse application needs with YORK® Mini VRF Outdoor Units. These small units solve substantial application challenges. Units are available in a range of capacities, providing exceptional design freedom. And, each unit operates multiple indoor units. Building occupants will appreciate the unit's quiet performance with sound ratings as low as 51 dBA.

# Good Things Come in Small Packages

Mini VRF systems offer a host of benefits to you and your customers. These small-footprint systems offer tremendous design flexibility, enabling you to solve multiple HVAC challenges. And your customers will appreciate the exceptional energy savings and individualized comfort they provide.

## Design with freedom

**Customize and size equipment to meet specific project requirements.** Because ductwork is generally needed only for ventilation, ducts can be smaller, reducing capital cost. Systems can easily be adapted as space is reconfigured. There is no need to remove and replace the original unit or reconfigure ductwork.

## Install with ease

**YORK® Air-Source Mini VRF Systems are designed for quick and simple installation.** Piping from the outdoor units can be connected from the front, back, side, or underneath. Indoor units are relatively small and light and easy to transport and handle.

Service is simple, too: systems need little maintenance beyond changing filters and cleaning coils. Removal of a single panel provides easy access to all components: control boards, electrical connections, compressor and piping.

## Enjoy guilt-free comfort

These compact systems are among the most energy-efficient HVAC options available today, so customers never have to choose between comfort and savings.

Variable-speed compressors provide extremely high part-load efficiency. And the systems essentially eliminate the energy loss that occurs in conventional, ducted central systems which may account for as much as 30% of energy consumption. In fact, these green technology systems can help customers attain LEED® certification points for resource efficiency.

Occupants will enjoy unparalleled comfort with YORK Air-Source Mini VRF Systems. Temperature can be set individually for multiple zones to suit different needs. And, once the temperature is set, the system's variable-speed compressors and precise modulation help maintain it within a narrow range, ensuring consistent comfort. Occupants will also appreciate the system's whisper-quiet operation.

**YORK® MINI VRF Systems boast impressive efficiency ratings:**

- Seasonal Energy Efficiency Ratio **(SEER)** up to **24.1**
- Energy Efficiency Ratio **(EER)** up to **16.7**
- Heating Seasonal Performance Factor **(HSPF)** up to **12.8**

## Industry certified

YORK Air-Source Mini VRF Systems are Intertek ETL Listed (Canada & USA), signifying that they comply with the standard of Heating and Cooling Equipment (ANSI/UL 1995 and CAN/CSA C22.2 No. 236-11, 4th Edition, October 14, 2011). Our Mini VRF products are tested under AHRI 210/240.

The systems are also certified by the Air Conditioning, Heating & Refrigeration Institute.

## ENERGY STAR certified product

(Only for 3 and 4 Ton)

Proper sizing and installation of equipment is critical to achieve optimal performance.

AIR-SOURCE OUTDOOR UNITS

# Mini VRF Heat Pump Outdoor Units

## 208/230V | 3-, 4-& 5-TON SYSTEMS

| 3, 4 & 5 Ton Systems | Type | | | | Mini VRF Outdoor Units | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Tonnage | | | | 3 Ton[5] | | 4 Ton[5] | | 5 Ton | |
| Model # | | | | | YVAHP036B21S | | YVAHP048B21S | | YVAHP060B21S | |
| Power Supply | | | | | 208/230V/ 1PH 60Hz | | 208/230V/ 1PH 60Hz | | 208/230V/ 1PH 60Hz | |
| Capacity (Nominal) [1] | Cooling | Capacity (Nominal) | Btu/h | (kW) | 36,000 | (10.6) | 48,000 | (14.1) | 60,000 | (17.6) |
| | | Power input | kW | | 2.53 | | 3.78 | | 5.05 | |
| | | Current input | A | | 12.3 / 11.1 | | 18.6 / 16.9 | | 24.8 / 22.4 | |
| | Heating | Capacity (Nominal) | Btu/h | (kW) | 40,000 | 11.7 | 54,000 | 15.8 | 64,000 | 18.7 |
| | | Power input | kW | | 2.40 | | 4.00 | | 4.40 | |
| | | Current input | A | | 11.8 / 10.6 | | 19.6 / 17.7 | | 21.7 / 19.6 | |
| Efficiency Ratings [2] | Cooling (for Non-ducted and Ducted) | Capacity (Rated) | Btu/h | | 36,000 | 36,000 | 48,000 | 48,000 | 60,000 | 55,000 |
| | | EER | Btu/Wh | | 16.70 | 13.80 | 18.40 | 13.10 | 15.90 | 9.70 |
| | | SEER | Btu/Wh | | 23.50 | 18.70 | 24.10 | 18.40 | 16.80 | 15.90 |
| | Heating (for Non-ducted and Ducted) | Rated Capacity | Btu/h | | 40,000 | 40,000 | 54,000 | 54,000 | 64,000 | 64,000 |
| | | COP | W/W | | 5.12 / 3.90 | | 4.56 / 3.86 | | 3.90 / 3.30 | |
| | | HSPF | Btu/Wh | | 12.80 | 11.00 | 11.70 | 11.80 | 12.10 | 10.60 |
| Cooling Operating Range[3] | | Outdoor | °F DB (°C DB) | | 23 (-5) ~ 118 (48) | | 23 (-5) ~ 118 (48) | | 23 (-5) ~ 118 (48) | |
| Heating Operating Range[3] | | Outdoor | °F WB (°C WB) | | -4 (-20) ~ 59 (15) | | -4 (-20) ~ 59 (15) | | -4 (-20) ~ 59 (15) | |
| Outer Dimensions | Height | | in | (mm) | 54-5/16 | (1380) | 54-5/16 | (1380) | 54-5/16 | (1380) |
| | Width | | in | (mm) | 37-3/8 | (950) | 37-3/8 | (950) | 37-3/8 | (950) |
| | Depth | | in | (mm) | 14-9/16 | (370) | 14-9/16 | (370) | 14-9/16 | (370) |
| Weight | Net | | lbs | (kg) | 249 | (113) | 249 | (113) | 249 | (113) |
| Connection Ratio | Total Indoor Unit Capacity | | % | | 60-130 | | 60-130 | | 60-105 | |
| | Max. (Recommendation) indoor units/system | | - | | 6 | | 8 | | 8 | |
| Compressor | Type | | – | | HA36PHD-A1S2 | | HA36PHD-A1S2 | | A36PHD-A1S2 | |
| | Motor Output (Pole) | | – / – | | 3PH / 6 | | 3PH / 6 | | 3PH / 6 | |
| | Operation Range | | % | | 10 ~ 100 | | 10 ~ 100 | | 10 ~ 100 | |
| | Refrigeration Oi Type | | – | | FVC68D | | FVC68D | | FVC68D | |
| Fan | Type | | – | | Propeller Fan | | Propeller Fan | | Propeller Fan | |
| | Motor Output | | W | | 58 + 58 | | 58 + 58 | | 58 + 58 | |
| | Quantity | | Q'ty | | 2 | | | | | |
| | Air Flow Rate | | cfm | ($m^3$/min) | 3177 | (90) | 3530 | (100) | 3530 | (100) |
| Electrical | Min Circuit Amps | | A | | 31 | | 31 | | 31 | |
| | Max. Overcurrent Protective Device | | A | | 40 | | | | | |
| Sound Pressure Level[4] | Cooling (Night-Shift) | | dB(A) | | 51 | (44) | 52 | (46) | 53 | (46) |
| | Heating | | dB(A) | | 52 | | 54 | | 56 | |
| Refrigerant | Type | | - | | R410A | | | | | |
| | Charge amount | | lbs | (kg) | 7.9 | (3.6) | 7.9 | (3.6) | 7.9 | (3.6) |
| Main Refrigerant Piping | Gas Line | | in | (mm) | 5/8 | (15.88) | 5/8 | (15.88) | 5/8 | (15.88) |
| | Liquid Line | | in | (mm) | 3/8 | (9.52) | 3/8 | (9.52) | 3/8 | (9.52) |

**NOTES:**

1. Nominal capacity conditions are based on AHRI standard Visit www.ahrinet.org for more information.
2. Efficiency ratings are based on the AHRI 210/240 test standard.
3. There are some exceptions and notes for cooling and cooling operation ranges. For details, refer to Section 2.12 "Operation Range".
4. Measurement Point: 3.3 ft. (1m) from the air outlet side, 4.9 ft. (1.5m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation. The sound of the air inlet side may be 3dB higher than that of the air outlet side.
5. Unit is ENERGY STAR certified.

# Water-Source Units

## Solve More HVAC Challenges

Bring the advantages of VRF technology to more customers with YORK® Water-Source VRF Systems. Because all equipment is housed indoors, YORK Water-Source VRF Systems are the ideal solution for any application where outdoor equipment placement is problematic.

Overview ..... 70-72

**Unified Heat Pump / Heat Recovery Systems Specification Tables**

6 - 8 Ton Units ..... 73
10-12 Ton Units ..... 74
14-18 Ton Units ..... 75
20-24 Ton Units ..... 76
26-30 Ton Units ..... 77
32-36 Ton Units ..... 78
38-42 Ton Units ..... 79
44-48 Ton Units ..... 80

WATER-SOURCE UNITS

# Design with Freedom

## *Custom Solutions for Challenging Applications*

Bring cost-efficient YORK VRF technology to applications where outdoor conditions or roof lines/weight limits challenge other systems.

### Key Benefits

**All components are protected from the elements, solving problems presented by:**

- Harsh climates and coastal regions
- Roof weight , exterior appearance, and external noise concerns


**Largest-capacity systems in industry**

- Modules in capacities from 6 to 48 tons can be configured in multiple ways to meet exact application requirements

**Connection ratio range of 50 – 130%**

- Provides design flexibility
- Minimizes initial costs

**Impressive efficiency ratings**

- Non-ducted systems
  - IEER 18.9 to 29
  - COP: 4.00 to 6.30
- Ducted systems
  - IEER 16.9 to 23.8
  - COP: 4.00 to 5.00

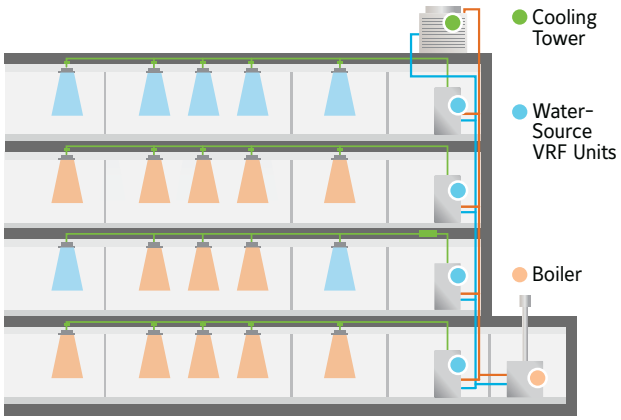
**Small, light, modular units**

- Require minimal space
- Increase design flexibility
- Simplify transportation and installation
- Enable modules to be stacked with racking
- Allow more space to be rented

**Code Compliance**

- Less refrigerant is required for water-source VRF for easier compliance with ASHRAE Standard 15

## SYSTEM BASICS




***A water loop between a cooling tower and the Water-Source VRF unit*** *is used as a heat exchanger for the refrigerant. Water inlet temperature remains 50-113°F.*

***The Water-Source VRF unit modulates*** *so only the amount of refrigerant needed to meet individual zone demand is distributed.*

***Heat pump systems can gain efficiencies*** *utilizing heat recovery to and from the water loop.*

***Heat recovery water-source units gain efficiencies*** *because heat can be exchanged both within the refrigerant circuit and in the water loop.*

***Boilers can be added in cold-weather climates*** *to maintain the temperature of the water loop.*

## *Problem Solved*

**Project challenges are no match for YORK® Water-Source VRF Systems:**

- High-rise buildings
- Coastal areas and cold-weather climates
- Architecturally restricted properties
- Where local codes limit refrigerant use
- Buildings with cooling towers/boilers
- Applications in which cost savings are paramount
- Where space or weight are an issue

| Heat Pump and Heat Recovery Units 208/230V & 460V | | Heat Recovery VRF | Heat Pump VRF |
|---|---|---|---|
| Capacity | | 6 to 48 Tons | 6 to 48 Tons |
| Maximum connectable indoor unit quantity | | 64 | 64 |
| Connection ratio OU / IU | | As low as 50% and up to 130% | |
| Total piping length | ft (m) | 984 (300) | 984 (300) |
| Maximum piping length between OU and IU | ft (m) | 393 (120) | 393(120) |
| Maximum piping length between 1st branch and IU | ft (m) | 131(40) | 131(40) |
| Maximum height difference between OU and IU (when OU is higher than IU) | ft (m) | 164 (50) | 164(50) |
| Maximum height difference between OU and IU (when IU is higher than OU) | ft (m) | 131 (40) | 131 (40) |
| Maximum height difference between IU and IU | ft (m) | 49 (15) | 49 (15) |
| Entering Water Temperature* | °F (°C) | 50(10) to 113(45) | 50(10) to 113(45) |

* For more details and limitations, please consult YORK sales team or refer to product manuals

## THE YORK® WATER-SOURCE VRF SYSTEM ADVANTAGE

**Systems are designed with dual heat recovery –**

heat can be recovered in both the water and refrigerant circuits

**Dual fuels can be used –**

electricity for VRF units and natural gas or electricity for boiler

**Defrost mode is not required –**

increasing energy savings and comfort

WATER-SOURCE UNITS

# Overview

*YORK® VRF Water-Source Units provide maximum flexibility for modular design.*

## HEAT RECOVERY MODELS 208/230V

**6-18 Ton**
**Single Unit Systems**

| | | | |
|---|---|---|---|
| 6 Ton | YVWHR072B32S | 14 Ton | YVWHR168B32S |
| 8 Ton | YVWHR096B32S | 16 Ton | YVWHR192B32S |
| 10 Ton | YVWHR120B32S | 18 Ton | YVWHR216B32S |
| 12 Ton | YVWHR144B32S | | |

**20-36 Ton**
**Double Unit Systems**

| | | | |
|---|---|---|---|
| 20 Ton | YVWHR240B32S | 30 Ton | YVWHR360B32S |
| 22 Ton | YVWHR264B32S | 32 Ton | YVWHR384B32S |
| 24 Ton | YVWHR288B32S | 34 Ton | YVWHR408B32S |
| 26 Ton | YVWHR312B32S | 36 Ton | YVWHR432B32S |
| 28 Ton | YVWHR336B32S | | |

**38-48 Ton**
**Triple Unit Systems**

| | | | |
|---|---|---|---|
| 38 Ton | YVWHR456B32S | 44 Ton | YVWHR528B32S |
| 40 Ton | YVWHR480B32S | 46 Ton | YVWHR552B32S |
| 42 Ton | YVWHR504B32S | 48 Ton | YVWHR576B32S |

## HEAT RECOVERY MODELS 460V

**6-18 Ton**
**Single Unit Systems**

| | | | |
|---|---|---|---|
| 6 Ton | YVWHR072B42S | 14 Ton | YVWHR168B42S |
| 8 Ton | YVWHR096B42S | 16 Ton | YVWHR192B42S |
| 10 Ton | YVWHR120B42S | 18 Ton | YVWHR216B42S |
| 12 Ton | YVWHR144B42S | | |

**20-36 Ton**
**Double Unit Systems**

| | | | |
|---|---|---|---|
| 20 Ton | YVWHR240B42S | 30 Ton | YVWHR360B42S |
| 22 Ton | YVWHR264B42S | 32 Ton | YVWHR384B42S |
| 24 Ton | YVWHR288B42S | 34 Ton | YVWHR408B42S |
| 26 Ton | YVWHR312B42S | 36 Ton | YVWHR432B42S |
| 28 Ton | YVWHR336B42S | | |

**38-48 Ton**
**Triple Unit Systems**

| | | | |
|---|---|---|---|
| 38 Ton | YVWHR456B42S | 44 Ton | YVWHR528B42S |
| 40 Ton | YVWHR480B42S | 46 Ton | YVWHR552B32S |
| 42 Ton | YVWHR504B42S | 48 Ton | YVWHR576B42S |

## HEAT PUMP MODELS 208/230V

**6-18 Ton**
**Single Unit Systems**

| | | | |
|---|---|---|---|
| 6 Ton | YVWHP072B32S | 14 Ton | YVWHP168B32S |
| 8 Ton | YVWHP096B32S | 16 Ton | YVWHP192B32S |
| 10 Ton | YVWHP120B32S | 18 Ton | YVWHP216B32S |
| 12 Ton | YVWHP144B32S | | |

**20-36 Ton**
**Double Unit Systems**

| | | | |
|---|---|---|---|
| 20 Ton | YVWHP240B32S | 30 Ton | YVWHP360B32S |
| 22 Ton | YVWHP264B32S | 32 Ton | YVWHP384B32S |
| 24 Ton | YVWHP288B32S | 34 Ton | YVWHP408B32S |
| 26 Ton | YVWHP312B32S | 36 Ton | YVWHP432B32S |
| 28 Ton | YVWHP336B32S | | |

**38-48 Ton**
**Triple Unit Systems**

| | | | |
|---|---|---|---|
| 38 Ton | YVWHP456B32S | 44 Ton | YVWHP528B32S |
| 40 Ton | YVWHP480B32S | 46 Ton | YVWHP552B32S |
| 42 Ton | YVWHP504B32S | 48 Ton | YVWHP576B32S |

## HEAT PUMP MODELS 460V

**6-18 Ton**
**Single Unit Systems**

| | | | |
|---|---|---|---|
| 6 Ton | YVWHP072B42S | 14 Ton | YVWHP168B42S |
| 8 Ton | YVWHP096B42S | 16 Ton | YVWHP192B42S |
| 10 Ton | YVWHP120B42S | 18 Ton | YVWHP216B42S |
| 12 Ton | YVWHP144B42S | | |

**20-36 Ton**
**Double Unit Systems**

| | | | |
|---|---|---|---|
| 20 Ton | YVWHP240B42S | 30 Ton | YVWHP360B42S |
| 22 Ton | YVWHP264B42S | 32 Ton | YVWHP384B42S |
| 24 Ton | YVWHP288B42S | 34 Ton | YVWHP408B42S |
| 26 Ton | YVWHP312B42S | 36 Ton | YVWHP432B42S |
| 28 Ton | YVWHP336B42S | | |

**38-48 Ton**
**Triple Unit Systems**

| | | | |
|---|---|---|---|
| 38 Ton | YVWHP456B42S | 44 Ton | YVWHP528B42S |
| 40 Ton | YVWHP480B42S | 46 Ton | YVWHP552B42S |
| 42 Ton | YVWHP504B42S | 48 Ton | YVWHP576B42S |

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 6-8 TON SYSTEMS

| Tonnage | | | 6 Ton | | 8 Ton | |
|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 072B32S | YVWHR 072B32S | YVWHP 096B32S | YVWHR 096B32S |
| | 460V, 3PH, 60Hz | | YVWHP 072B42S | YVWHR 072B42S | YVWHP 096B42S | YVWHR 096B42S |
| Unit Type (Heat Pump: HP, Heat Recovery: HR) | | | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 72,000 | | 96,000 | |
| | Heating | Btu/h | 81,000 | | 108,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 69,000 | | 92,000 | |
| | EER | Btu/Wh | 17.1 / 13.6 | | 13.7 / 12.6 | |
| | IEER | Btu/Wh | 29.0 / 22.5 | | 25.2 / 22.3 | |
| | Rated Heating Capacity[1] | Btu/h | 77,000 | | 103,000 | |
| | COP | W/W | 6.30 / 4.65 | | 5.05 / 4.40 | |
| | SCHE | Btu/Wh | - | 21.7 / 12.4 | - | 16.6 / 15.1 |
| | Sound Pressure[5] | dB(A) | 55 | | 57 | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/8 [9.52] | | 3/8 [9.52] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 3/4 [19.05] | 5/8 [15.88] | 7/8 [22.2] | 3/4 [19.05] |
| | Low Pressure Gas Pipe | in. [mm] | - | 3/4 [19.05] | - | 7/8 [22.2] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 8 / 13 | | 8 / 16 | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | |
| | Water Flow Range per Unit (Rated/Range) | gpm [L/m] | 15.1 [57] / 11 - 31 [40 - 120] | | 20.3 [77] / 14 - 39 [50 - 150] | |
| Electrical | Minimum Circuit Amps, MCA (208V / 230V / 460V) | A | 20 / 18 / 11 | | 32 / 29 / 17 | |
| | Maximum Overcurrent Protection, MOP (208V / 230V / 460V) | A | 30 / 30 / 15 | | 50 / 45 / 25 | |
| Compressor | Compressor Type | – | Inverter | | | |
| | Operating Range | % | 10 - 100 | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 30-11/16 x 21-5/8 [1000 x 780 x 550] | | | |
| | Weight (208, 230V / 460V) | lb. [kg] | 370 / 379 [168 / 172] | | | |

NOTES:

1 Rating Conditions:

**COOLING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB<br>66.2°F (19°C)WB |
| Entering Water Temperature: | 86°F (30°C) |
| Piping Length: | 24.6ft. (7.5m) |
| Piping Lift: | 0ft. (0m) |

**HEATING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 68°F (20°C) |

2 Efficiency ratings are based on the AHRI 1230 test standard.

3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.

4 For details, refer to Engineering Manual.

5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

## WATER-SOURCE UNITS

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 10-12 TON SYSTEMS

| Tonnage | | | 10 Ton | | 12 Ton | |
|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 120B32S | YVWHR 120B32S | YVWHP 144B32S | YVWHR 144B32S |
| | 460V, 3PH, 60Hz | | YVWHP 120B42S | YVWHR 120B42S | YVWHP 144B42S | YVWHR 144B42S |
| Unit Type (Heat Pump: HP, Heat Recovery: HR) | | | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 120,000 | | 144,000 | |
| | Heating | Btu/h | 135,000 | | 162,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 115,000 | | 138,000 | |
| | EER | Btu/Wh | 14.4 / 13.0 | | 15.0 / 14.0 | |
| | IEER | Btu/Wh | 26.1 / 22.6 | | 24.9 / 23.8 | |
| | Rated Heating Capacity[1] | Btu/h | 129,000 | | 154,000 | |
| | COP | W/W | 4.95 / 4.62 | | 5.42 / 5.00 | |
| | SCHE | Btu/Wh | - | 21.8 / 19.8 | - | 21.9 / 19.9 |
| | Sound Pressure[5] | dB(A) | 60 | | 58 | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 1/2 [12.7] | | 1/2 [12.7] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 7/8 [22.2] | 3/4 [19.05] | 1-1/8 [28.58] | 7/8 [22.2] |
| | Low Pressure Gas Pipe | in. [mm] | - | 7/8 [22.2] | - | 1-1/8 [28.58] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 8 / 23 | | 10 / 26 | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | |
| | Water Flow Range per Unit (Rated/Range) | gpm [L/m] | 25.4 [96] / 20 - 56 [72 - 214] | | 36.5 [138] / 22 - 63 [81 - 241] | |
| Electrical | Minimum Circuit Amps, MCA (208V / 230V / 460V) | A | 38 / 34 / 20 | | 37 / 34 / 20 | |
| | Maximum Overcurrent Protection, MOP (208V / 230V / 460V) | A | 60 / 50 / 30 | | 50 / 45 / 25 | |
| Compressor | Compressor Type | – | Inverter | | | |
| | Operating Range | % | 10 - 100 | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 30-11/16 x 21-5/8 [1000 x 780 x 550] | | 39-3/8 x 39-3/8 x 21-5/8 [1000 x 1000 x 550] | |
| | Weight (208, 230V / 460V) | lb. [kg] | 381 / 390 [173 / 177] | | 556 / 564 [252 / 256] | |

NOTES:

1 Rating Conditions:

**COOLING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB<br>66.2°F (19°C)WB |
| Entering Water Temperature: | 86°F (30°C) |
| Piping Length: | 24.6ft. (7.5m) |
| Piping Lift: | 0ft. (0m) |

**HEATING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 68°F (20°C) |

2 Efficiency ratings are based on the AHRI 1230 test standard.

3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.

4 For details, refer to Engineering Manual.

5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 14-18 TON SYSTEMS

| Tonnage | | | 14 Ton | | 16 Ton | | 18 Ton | |
|---|---|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 168B32S | YVWHR 168B32S | YVWHP 192B32S | YVWHR 192B32S | YVWHP 216B32S | YVWHR 216B32S |
| | 460V, 3PH, 60Hz | | YVWHP 168B42S | YVWHR 168B42S | YVWHP 192B42S | YVWHR 192B42S | YVWHP 216B42S | YVWHR 216B42S |
| Unit Type (Heat Pump: HP, Heat Recovery: HR) | | | HP | HR | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 168,000 | | 192,000 | | 216,000 | |
| | Heating | Btu/h | 189,000 | | 216,000 | | 243,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 160,000 | | 184,000 | | 206,000 | |
| | EER | Btu/Wh | 13.9 / 13.2 | | 12.9 / 12.3 | | 11.3 / 10.7 | |
| | IEER | Btu/Wh | 22.7 / 20.4 | | 20.9 / 21.0 | | 20.3 / 19.5 | |
| | Rated Heating Capacity[1] | Btu/h | 180,000 | | 206,000 | | 232,000 | |
| | COP | W/W | 5.30 / 4.90 | | 4.85 / 4.50 | | 4.30 / 4.05 | |
| | SCHE | Btu/Wh | - | 22.6 / 20.5 | - | 26.5 / 25.4 | - | 19.3 / 17.6 |
| | Sound Pressure[5] | dB(A) | 58 | | 59 | | | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 5/8 [15.88] | | 5/8 [15.88] | | 5/8 [15.88] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-1/8 [28.58] | 7/8 [22.2] | 1-1/8 [28.58] | 7/8 [22.2] | 1-1/8 [28.58] | 7/8 [22.2] |
| | Low Pressure Gas Pipe | in. [mm] | - | 1-1/8 [28.58] | - | 1-1/8 [28.58] | - | 1-1/8 [28.58] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 12 / 29 | | 14 / 33 | | | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | | | |
| | Water Flow Range per Unit (Rated/Range) | gpm [L/m] | 44.1 [167] / 24 - 70 [90 - 268] | | 51 [193] / 27 - 79 [101 - 301] | | 56 [212] /27 - 79 [101 - 301] | |
| Electrical | Minimum Circuit Amps, MCA (208V / 230V / 460V) | A | 41 / 37 / 22 | | 55 / 50 / 29 | | 71 / 64 / 37 | |
| | Maximum Overcurrent Protection, MOP (208V / 230V / 460V) | A | 50 / 50 / 25 | | 70 / 60 / 40 | | 90 / 80 / 50 | |
| Compressor | Compressor Type | – | Inverter | | | | | |
| | Operating Range | % | 10 - 100 | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 39-3/8 x 21-5/8 [1000 x 1000 x 550] | | | | | |
| | Weight (208, 230V / 460V) | lb. [kg] | 558 / 567 [253 / 257] | | | | | |

NOTES:

1 Rating Conditions:

**COOLING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB<br>66.2°F (19°C)WB |
| Entering Water Temperature: | 86°F (30°C) |
| Piping Length: | 24.6ft. (7.5m) |
| Piping Lift: | 0ft. (0m) |

**HEATING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 68°F (20°C) |

2 Efficiency ratings are based on the AHRI 1230 test standard.

3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.

4 For details, refer to Engineering Manual.

5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

## WATER-SOURCE UNITS

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 20-24 TON SYSTEMS

| Tonnage | | | 20 Ton | | 22 Ton | | 24 Ton | |
|---|---|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 240B32S | YVWHR 240B32S | YVWHP 264B32S | YVWHR 264B32S | YVWHP 288B32S | YVWHR 288B32S |
| | 460V, 3PH, 60Hz | | YVWHP 240B42S | YVWHR 240B42S | YVWHP 264B42S | YVWHR 264B42S | YVWHP 288B42S | YVWHR 288B42S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVWHP 120B32S | YVWHR 120B32S | YVWHP 144B32S | YVWHR 144B32S | YVWHP 144B32S | YVWHR 144B32S |
| | | Unit B | YVWHP 120B32S | YVWHR 120B32S | YVWHP 120B32S | YVWHR 120B32S | YVWHP 144B32S | YVWHR 144B32S |
| | 460V, 3PH, 60Hz | Unit A | YVWHP 120B42S | YVWHR 120B42S | YVWHP 144B42S | YVWHR 144B42S | YVWHP 144B42S | YVWHR 144B42S |
| | | Unit B | YVWHP 120B42S | YVWHR 120B42S | YVWHP 120B42S | YVWHR 120B42S | YVWHP 144B42S | YVWHR 144B42S |
| Unit Type (Heat Pump: HP, Heat Recovery: HR) | | | HP | HR | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 240,000 | | 264,000 | | 288,000 | |
| | Heating | Btu/h | 2700,00 | | 297,000 | | 324,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 230,000 | | 252,000 | | 276,000 | |
| | EER | Btu/Wh | 13.5 / 12.0 | | 13.4 / 12.9 | | 14.0 / 13.5 | |
| | IEER | Btu/Wh | 24.2 / 21.5 | | 23.1 / 22.0 | | 22.5 / 22.0 | |
| | Rated Heating Capacity[1] | Btu/h | 258,000 | | 282,000 | | 308,000 | |
| | COP | W/W | 5.15 / 4.50 | | 5.05 / 4.60 | | 5.00 / 4.65 | |
| | SCHE | Btu/Wh | - | 20.0 / 19.1 | - | 18.5 / 21.5 | - | 18.9 / 19.8 |
| | Sound Pressure[5] | dB(A) | 63 | | 62.5 | | 61 | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | | 3/4 [19.05] | | 3/4 [19.05] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-1/8 [28.58] | 7/8 [22.2] | 1-3/8 [34.93] | 1-1/8 [28.58] | 1-3/8 [34.93] | 1-1/8 [28.58] |
| | Low Pressure Gas Pipe | in. [mm] | - | 1-1/8 [28.58] | - | 1-3/8 [34.93] | - | 1-3/8 [34.93] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 16 / 46 | | 18 / 49 | | 20 / 52 | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | | | |
| | Water Flow Range per Unit (Rated/Range) (Unit A + Unit B) | gpm [L/m] | 25.4+25.4 [96+96] / 20 - 56 [72 - 214] + 21 - 56 [72 - 214] | | 36.5+25.4 [138+96] / 22 - 63 [81 - 241] + 20 - 56 [72 - 214] | | 36.5+36.5 [138+138] / 22 - 63 [81 - 241] + 22 - 63 [81 - 241] | |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V / 230V / 460V) | A | 38+38 / 34+34 / 20+20 | | 37+38 / 34+34 / 20+20 | | 37+37 / 34+34 / 20+20 | |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V / 230V / 460V) | A | 60+60 / 50+50 / 30+30 | | 50+60 / 45+50 / 25+30 | | 50+50 / 45+45 / 25+25 | |
| Compressor | Compressor Type | – | Inverter | | | | | |
| | Operating Range | % | 10 - 100 | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 65-3/8 x 21-5/8 [1000 x 1660 x 550] | | 39-3/8 x 74 x 21-5/8 [1000 x 1880 x 550] | | 39-3/8 x 82-11/16 x 21-5/8 [1000 x 2100 x 550] | |
| | Weight (Unit A + Unit B) (208, 230V / 460V) | lb. [kg] | 381+381 / 390+390 [173+173 / 177+177] | | 556+381 / 564+390 [252+173 / 256+177] | | 556+556 / 564+564 [252+252 / 256+256] | |

NOTES:

1 Rating Conditions:

**COOLING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB 66.2°F (19°C)WB |
| Entering Water Temperature: | 86°F (30°C) |
| Piping Length: | 24.6ft. (7.5m) |
| Piping Lift: | 0ft. (0m) |

**HEATING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 68°F (20°C) |

2 Efficiency ratings are based on the AHRI 1230 test standard.

3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.

4 For details, refer to Engineering Manual.

5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 26-30 TON SYSTEMS

| Tonnage | | | 26 Ton | | 28 Ton | | 30 Ton | |
|---|---|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 312B32S | YVWHR 312B32S | YVWHP 336B32S | YVWHR 336B32S | YVWHP 360B32S | YVWHR 360B32S |
| | 460V, 3PH, 60Hz | | YVWHP 312B42S | YVWHR 312B42S | YVWHP 336B42S | YVWHR 336B42S | YVWHP 360B42S | YVWHR 360B42S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVWHP 168B32S | YVWHR 168B32S | YVWHP 168B32S | YVWHR 168B32S | YVWHP 192B32S | YVWHR 192B32S |
| | | Unit B | YVWHP 144B32S | YVWHR 144B32S | YVWHP 168B32S | YVWHR 168B32S | YVWHP 168B32S | YVWHR 168B32S |
| | 460V, 3PH, 60Hz | Unit A | YVWHP 168B42S | YVWHR 168B42S | YVWHP 168B42S | YVWHR 168B42S | YVWHP 192B42S | YVWHR 192B42S |
| | | Unit B | YVWHP 144B42S | YVWHR 144B42S | YVWHP 168B42S | YVWHR 168B42S | YVWHP 168B42S | YVWHR 168B42S |
| UNIT TYPE (HEAT PUMP: HP, HEAT RECOVERY: HR) | | | HP | HR | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 312,000 | | 336,000 | | 360,000 | |
| | Heating | Btu/h | 351,000 | | 378,000 | | 405,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 298,000 | | 320,000 | | 344,000 | |
| | EER | Btu/Wh | 13.4 / 13.2 | | 12.9 / 12.8 | | 12.65 / 12.6 | |
| | IEER | Btu/Wh | 21.4 / 21.5 | | 20.7 / 20.5 | | 19.7 / 18.6 | |
| | Rated Heating Capacity[1] | Btu/h | 334,000 | | 360,000 | | 382,000 | |
| | COP | W/W | 4.70 / 4.45 | | 4.60 / 4.50 | | 4.50 / 4.40 | |
| | SCHE | Btu/Wh | - | 18.5 / 20.2 | - | 18.2 / 21.8 | - | 18.1 / 23.6 |
| | Sound Pressure[5] | dB(A) | 61 | | | | 61.5 | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | | 3/4 [19.05] | | 3/4 [19.05] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-3/8 [34.93] | 1-1/8 [28.58] | 1-3/8 [34.93] | 1-1/8 [28.58] | 1-5/8 [41.28] | 1-3/8 [34.93] |
| | Low Pressure Gas Pipe | in. [mm] | - | 1-3/8 [34.93] | - | 1-3/8 [34.93] | - | 1-5/8 [41.28] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 22 / 55 | | 24 / 58 | | 26 / 62 | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | | | |
| | Water Flow Range per Unit (Rated/Range) (Unit A + Unit B) | gpm [L/m] | 44.1+36.5 [167+138] / 24 - 70 [90 - 268] + 22 - 63 [81 - 241] | | 44.1+44.1 [167+167] / 24 - 70 [90 - 268] + 24 - 70 [90 - 268] | | 51+44.1 [193+167] / 27 - 79 [101 - 301] + 24 - 70 [90 - 268] | |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V / 230V / 460V) | A | 41+37 / 37+34 / 22+20 | | 41+41 / 37+37 / 22+22 | | 55+41 / 50+37 / 29+22 | |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V / 230V / 460V) | A | 50+50 / 50+45 / 25+25 | | 50+50 / 50+50 / 25+25 | | 70+50 / 60+50 / 40+25 | |
| Compressor | Compressor Type | – | Inverter | | | | | |
| | Operating Range | % | 10 - 100 | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 82-11/16 x 21-5/8 [1000 x 2100 x 550] | | | | | |
| | Weight (Unit A + Unit B) (208, 230V / 460V) | lb. [kg] | 558+556 / 567+564 [253+252 / 257+256] | | 558+558 / 567+567 [253+253 / 257+257] | | | |

NOTES:

1 Rating Conditions:

**COOLING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB<br>66.2°F (19°C)WB |
| Entering Water Temperature: | 86°F (30°C) |
| Piping Length: | 24.6ft. (7.5m) |
| Piping Lift: | 0ft. (0m) |

**HEATING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 68°F (20°C) |

2 Efficiency ratings are based on the AHRI 1230 test standard.

3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.

4 For details, refer to Engineering Manual.

5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

## WATER-SOURCE UNITS

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 32-36 TON SYSTEMS

| Tonnage | | | 32 Ton | | 34 Ton | | 36 Ton | |
|---|---|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 384B32S | YVWHR 384B32S | YVWHP 408B32S | YVWHR 408B32S | YVWHP 432B32S | YVWHR 432B32S |
| | 460V, 3PH, 60Hz | | YVWHP 384B42S | YVWHR 384B42S | YVWHP 408B42S | YVWHR 408B42S | YVWHP 432B42S | YVWHR 432B42S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVWHP 192B32S | YVWHR 192B32S | YVWHP 216B32S | YVWHR 216B32S | YVWHP 216B32S | YVWHR 216B32S |
| | | Unit B | YVWHP 192B32S | YVWHR 192B32S | YVWHP 192B32S | YVWHR 192B32S | YVWHP 216B32S | YVWHR 216B32S |
| | 460V, 3PH, 60Hz | Unit A | YVWHP 192B42S | YVWHR 192B42S | YVWHP 216B42S | YVWHR 216B42S | YVWHP 216B42S | YVWHR 216B42S |
| | | Unit B | YVWHP 192B42S | YVWHR 192B42S | YVWHP 192B42S | YVWHR 192B42S | YVWHP 216B42S | YVWHR 216B42S |
| UNIT TYPE (HEAT PUMP: HP, HEAT RECOVERY: HR) | | | HP | HR | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 384,000 | | 408,000 | | 432,000 | |
| | Heating | Btu/h | 432,000 | | 459,000 | | 486,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 366,000 | | 390,000 | | 414,000 | |
| | EER | Btu/Wh | 12.2 / 12.4 | | 11.7 / 11.7 | | 11.1 / 11.0 | |
| | IEER | Btu/Wh | 18.9 / 18.5 | | 19.0 / 18.0 | | 19.5 / 17.5 | |
| | Rated Heating Capacity[1] | Btu/h | 410,000 | | 434,000 | | 460,000 | |
| | COP | W/W | 4.30 / 4.20 | | 4.15 / 4.10 | | 4.10 / 4.00 | |
| | SCHE | Btu/Wh | - | 17.9 / 19.4 | - | 17.5 / 18.8 | - | 20.0 / 18.4 |
| | Sound Pressure[5] | dB(A) | 62 | | | | | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | | 3/4 [19.05] | | 3/4 [19.05] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-5/8 [41.28] | 1-3/8 [34.93] | 1-5/8 [41.28] | 1-3/8 [34.93] | 1-5/8 [41.28] | 1-3/8 [34.93] |
| | Low Pressure Gas Pipe | in. [mm] | - | 1-5/8 [41.28] | - | 1-5/8 [41.28] | - | 1-5/8 [41.28] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 28 / 64 | | | | | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | | | |
| | Water Flow Range per Unit (Rated/Range) (Unit A + Unit B) | gpm [L/m] | 51+51 [193+193] / 27 - 79 [101 - 301] + 27 - 79 [101 - 301] | | 56+51 [212+193] / 27 - 79 [101 - 301] + 27 - 79 [101 - 301] | | 56+56 [212+212] / 27 - 79 [101 - 301] + 27 - 79 [101 - 301] | |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B) (208V / 230V / 460V) | A | 55+55 / 50+50 / 29+29 | | 71+55 / 64+50 / 37+29 | | 71+71 / 64+64 / 37+37 | |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B) (208V / 230V / 460V) | A | 70+70 / 60+60 / 40+40 | | 90+70 / 80+60 / 50+40 | | 90+90 / 80+80 / 50+50 | |
| Compressor | Compressor Type | – | Inverter | | | | | |
| | Operating Range | % | 10 - 100 | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 82-11/16 x 21-5/8 [1000 x 2100 x 550] | | | | | |
| | Weight (Unit A + Unit B) (208, 230V / 460V) | lb. [kg] | 558+558 / 567+567 [253+253 / 257+257] | | | | | |

NOTES:

1 Rating Conditions:

**COOLING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB<br>66.2°F (19°C)WB |
| Entering Water Temperature: | 86°F (30°C) |
| Piping Length: | 24.6ft. (7.5m) |
| Piping Lift: | 0ft. (0m) |

**HEATING**

| | |
|---|---|
| Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 68°F (20°C) |

2 Efficiency ratings are based on the AHRI 1230 test standard.

3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.

4 For details, refer to Engineering Manual.

5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 38-42 TON SYSTEMS

| Tonnage | | | 38 Ton | | 40 Ton | | 42 Ton | |
|---|---|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 456B32S | YVWHR 456B32S | YVWHP 480B32S | YVWHR 480B32S | YVWHP 504B32S | YVWHR 504B32S |
| | 460V, 3PH, 60Hz | | YVWHP 456B42S | YVWHR 456B42S | YVWHP 480B42S | YVWHR 480B42S | YVWHP 504B42S | YVWHR 504B42S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVWHP 168B32S | YVWHR 168B32S | YVWHP 168B32S | YVWHR 168B32S | YVWHP 168B32S | YVWHR 168B32S |
| | | Unit B | YVWHP 144B32S | YVWHR 144B32S | YVWHP 168B32S | YVWHR 168B32S | YVWHP 168B32S | YVWHR 168B32S |
| | | Unit C | YVWHP 144B32S | YVWHR 144B32S | YVWHP 144B32S | YVWHR 144B32S | YVWHP 168B32S | YVWHR 168B32S |
| | 460V, 3PH, 60Hz | Unit A | YVWHP 168B42S | YVWHR 168B42S | YVWHP 168B42S | YVWHR 168B42S | YVWHP 168B42S | YVWHR 168B42S |
| | | Unit B | YVWHP 144B42S | YVWHR 144B42S | YVWHP 168B42S | YVWHR 168B42S | YVWHP 168B42S | YVWHR 168B42S |
| | | Unit C | YVWHP 144B42S | YVWHR 144B42S | YVWHP 144B42S | YVWHR 144B42S | YVWHP 168B42S | YVWHR 168B42S |
| Unit Type (Heat Pump: HP, Heat Recovery: HR) | | | HP | HR | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 456,000 | | 480,000 | | 504,000 | |
| | Heating | Btu/h | 513,000 | | 540,000 | | 567,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 436,000 | | 460,000 | | 480,000 | |
| | EER | Btu/Wh | 12.5 / 14.0 | | 11.9 / 13.6 | | 11.5 / 13.1 | |
| | IEER | Btu/Wh | 22.0 / 20.2 | | 21.5 / 19.9 | | 21.0 / 18.8 | |
| | Rated Heating Capacity[1] | Btu/h | 484,000 | | 510,000 | | 540,000 | |
| | COP | W/W | 4.55 / 4.60 | | 4.40 / 4.55 | | 4.30 / 4.50 | |
| | SCHE | Btu/Wh | - | 23.5 / 18.9 | - | 21.0 / 18.8 | - | 19.5 / 18.8 |
| | Sound Pressure[5] | dB(A) | 63 | | | | | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | | 3/4 [19.05] | | 3/4 [19.05] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-5/8 [41.28] | 1-3/8 [34.93] | 1-5/8 [41.28] | 1-3/8 [34.93] | 1-5/8 [41.28] | 1-3/8 [34.93] |
| | Low Pressure Gas Pipe | in. [mm] | - | 1-5/8 [41.28] | - | 1-5/8 [41.28] | - | 1-5/8 [41.28] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 28/64 | | | | | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | | | |
| | Water Flow Range per Unit (Rated/Range) (Unit A + Unit B + Unit C) | gpm [L/m] | 44.1+36.5+36.5 [167+138+138] / 24 - 70 [90 - 268] + 22 - 63 [81 - 241] + 22 - 63 [81 - 241] | | 44.1+44.1+36.5 [167+167+138] / 24 - 70 [90 - 268] + 24 - 70 [90 - 268] + 22 - 63 [81 - 241] | | 44.1+44.1+44.1 [167+167+167] / 24 - 70 [90 - 268] + 24 - 70 [90 - 268] + 24 - 70 [90 - 268] | |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B + Unit C) (208V / 230V / 460V) | A | 41+37+37 / 37+34+34 / 22+20+20 | | 41+41+37 / 37+37+34 / 22+22+20 | | 41+41+41 / 37+37+37 / 22+22+22 | |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B + Unit C) (208V / 230V / 460V) | A | 50+50+50 / 50+45+45 / 25+25+25 | | 50+50+50 / 50+50+45 / 25+25+25 | | 50+50+50 / 50+50+50 / 25+25+25 | |
| Compressor | Compressor Type | – | Inverter | | | | | |
| | Operating Range | % | 10 - 100 | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 126 x 21-5/8 [1000 x 3200 x 550] | | | | | |
| | Weight (Unit A + Unit B + Unit C) (208, 230V / 460V) | lb. [kg] | 558+556+556 / 567+564+564 [253+252+252 / 257+256+256] | | 558+558+556 / 567+567+564 [253+253+252 / 257+257+256] | | 558+558+558 / 567+567+567 [253+253+253 / 257+257+257] | |

NOTES:

1 Rating Conditions:

| COOLING | | HEATING | |
|---|---|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB 66.2°F (19°C)WB | Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 86°F (30°C) | Entering Water Temperature: | 68°F (20°C) |
| Piping Length: | 24.6ft. (7.5m) | | |
| Piping Lift: | 0ft. (0m) | | |

2 Efficiency ratings are based on the AHRI 1230 test standard.

3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.

4 For details, refer to Engineering Manual.

5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

## WATER-SOURCE UNITS

# Water-Source VRF Heat Pump and Heat Recovery Units

## 208/230V & 460V 44-48 TON SYSTEMS

| Tonnage | | | 44 Ton | | 46 Ton | | 48 Ton | |
|---|---|---|---|---|---|---|---|---|
| Model # | 208/230V, 3PH, 60Hz | | YVWHP 528B32S | YVWHR 528B32S | YVWHP 552B32S | YVWHR 552B32S | YVWHP 576B32S | YVWHR 576B32S |
| | 460V, 3PH, 60Hz | | YVWHP 528B42S | YVWHR 528B42S | YVWHP 552B42S | YVWHR 552B42S | YVWHP 576B42S | YVWHR 576B42S |
| Unit Combination | 208/230V, 3PH, 60Hz | Unit A | YVWHP 192B32S | YVWHR 192B32S | YVWHP 192B32S | YVWHR 192B32S | YVWHP 192B32S | YVWHR 192B32S |
| | | Unit B | YVWHP 168B32S | YVWHR 168B32S | YVWHP 192B32S | YVWHR 192B32S | YVWHP 192B32S | YVWHR 192B32S |
| | | Unit C | YVWHP 168B32S | YVWHR 168B32S | YVWHP 168B32S | YVWHR 168B32S | YVWHP 192B32S | YVWHR 192B32S |
| | 460V, 3PH, 60Hz | Unit A | YVWHP 192B42S | YVWHR 192B42S | YVWHP 192B42S | YVWHR 192B42S | YVWHP 192B42S | YVWHR 192B42S |
| | | Unit B | YVWHP 168B42S | YVWHR 168B42S | YVWHP 192B42S | YVWHR 192B42S | YVWHP 192B42S | YVWHR 192B42S |
| | | Unit C | YVWHP 168B42S | YVWHR 168B42S | YVWHP 168B42S | YVWHR 168B42S | YVWHP 192B42S | YVWHR 192B42S |
| UNIT TYPE (HEAT PUMP: HP, HEAT RECOVERY: HR) | | | HP | HR | HP | HR | HP | HR |
| Nominal Capacity | Cooling | Btu/h | 528,000 | | 552,000 | | 576,000 | |
| | Heating | Btu/h | 594,000 | | 621,000 | | 648,000 | |
| Performance[2] (Non-ducted / Ducted) | Rated Cooling Capacity[1] | Btu/h | 504,000 | | 530,000 | | 550,000 | |
| | EER | Btu/Wh | 11.0 / 12.6 | | 10.8 / 11.8 | | 10.35 / 11.4 | |
| | IEER | Btu/Wh | 20.5 / 18.8 | | 20.5 / 17.2 | | 20.5 / 16.9 | |
| | Rated Heating Capacity[1] | Btu/h | 564,000 | | 590,000 | | 614,000 | |
| | COP | W/W | 4.20 / 4.35 | | 4.10 / 4.30 | | 4.00 / 4.10 | |
| | SCHE | Btu/Wh | - | 18.0 / 18.5 | - | 17.0 / 18.3 | - | 15.0 / 18.1 |
| | Sound Pressure[5] | dB(A) | 63.5 | | 63.5 | | 64 | |
| Refrigerant Piping | Liquid Pipe | in. [mm] | 3/4 [19.05] | | 3/4 [19.05] | | 3/4 [19.05] | |
| | High/Low Pressure Gas Pipe | in. [mm] | 1-5/8 [41.28] | 1-3/8 [34.93] | 1-5/8 [41.28] | 1-3/8 [34.93] | 1-5/8 [41.28] | 1-3/8 [34.93] |
| | Low Pressure Gas Pipe | in. [mm] | - | 1-5/8 [41.28] | - | 1-5/8 [41.28] | - | 1-5/8 [41.28] |
| Connection Ratio | Connection Ratio Range[4] | % | 50 -130 | | | | | |
| | Number of Indoor Units (Recommended / Maximum) | Qty. | 28 / 64 | | | | | |
| Water Side | Inlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Outlet Pipe | in. [mm] | 1-1/4 - 11-1/2 NPT | | | | | |
| | Condensation Pipe | in. [mm] | 1/2 NPT | | | | | |
| | Maximum System Water Pressure | psi [MPa] | 285 [1.96] | | | | | |
| | Inlet Water Temperature Range[3] | °F [°C] | 50 -113 [10 - 45] | | | | | |
| | Water Flow Range per Unit (Rated/Range) (Unit A + Unit B + Unit C) | gpm [L/m] | 51+44.1+44.1 [193+167+167] / 27 - 79 [101 - 301] + 24 - 70 [90 - 268] + 24 - 70 [90 - 268] | | 51+51+44.1 [193+193+167] / 27 - 79 [101 - 301] + 27 - 79 [101 - 301] + 24 - 70 [90 - 268] | | 51+51+51 [193+193+193] / 27 - 79 [101 - 301] + 27 - 79 [101 - 301] + 27 - 79 [101 - 301] | |
| Electrical | Minimum Circuit Amps, MCA (Unit A + Unit B + Unit C) (208V / 230V / 460V) | A | 55+41+41 / 50+37+37 / 29+22+22 | | 55+55+41 / 50+50+37 / 29+29+22 | | 55+55+55 / 50+50+50 / 29+29+29 | |
| | Maximum Overcurrent Protection, MOP (Unit A + Unit B + Unit C) (208V / 230V / 460V) | A | 70+50+50 / 60+50+50 / 40+25+25 | | 70+70+50 / 60+60+50 / 40+40+25 | | 70+70+70 / 60+60+60 / 40+40+40 | |
| Compressor | Compressor Type | – | Inverter | | | | | |
| | Operating Range | % | 10 - 100 | | | | | |
| Unit | Dimensions (H x W x D) | in. [mm] | 39-3/8 x 126 x 21-5/8 [1000 x 3200 x 550] | | | | | |
| | Weight (Unit A + Unit B + Unit C) (208, 230V / 460V) | lb. [kg] | 558+558+558 / 567+567+567 [253+253+253 / 257+257+257] | | | | | |

NOTES:

1 Rating Conditions:

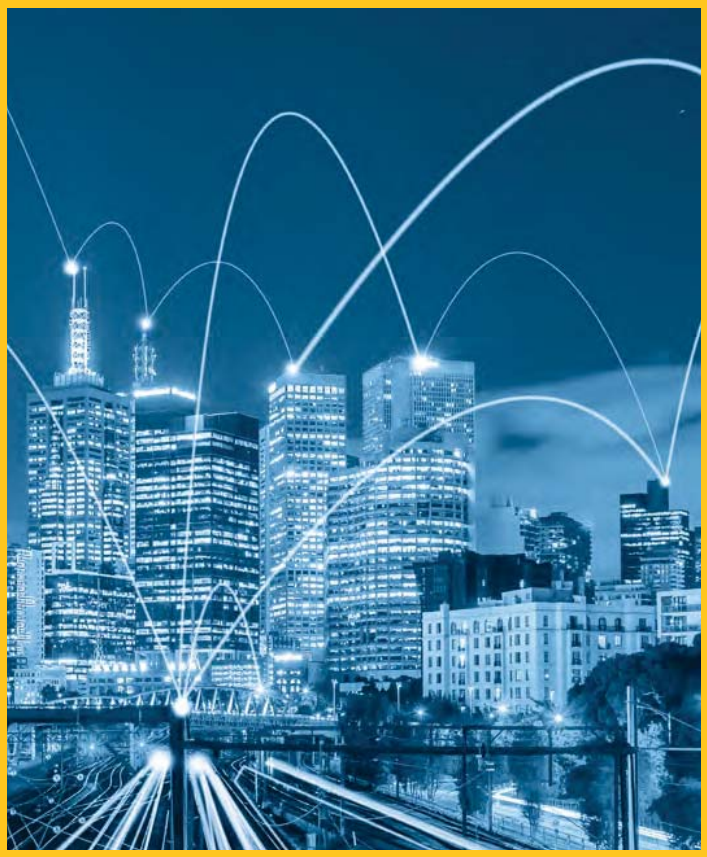
| COOLING | | HEATING | |
|---|---|---|---|
| Indoor Air Inlet Temperature: | 80.6°F (27°C)DB 66.2°F (19°C)WB | Indoor Air Inlet Temperature: | 68°F (20°C)DB |
| Entering Water Temperature: | 86°F (30°C) | Entering Water Temperature: | 68°F (20°C) |
| Piping Length: | 24.6ft. (7.5m) | | |
| Piping Lift: | 0ft. (0m) | | |

2 Efficiency ratings are based on the AHRI 1230 test standard.
3 There are some exceptions and notes for each operation range. For details, refer to Engineering Manual.
4 For details, refer to Engineering Manual.
5 Measurement Point: 3.3ft. (1m) from the air outlet side, 3.3ft. (1m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding environmental noise. Be sure to check environmental conditions before installation.

# Controllers & Network Adapters

## A Control Option for Every Application

Bring your customers premium control options with YORK® controllers and gateways. The wide range of options ensures an optimal solution for every customer's needs. All YORK controllers are compatible with all YORK Air-Source and Water-Source Systems.



Overview ..... 82

**Local Controllers**

Simplified Wired Zone Controller ..... 83
Programmable Wired Zone Controller ..... 83
Wireless Zone Controller ..... 83
5-Wired Thermostat Adapter ..... 83

**Central Controllers**

Large Central Controller ..... 84
Mini Central Controller ..... 84
VRF Central Touchscreen Controller ..... 84

**Network Adapters**

VRF Smart Gateway (BACnet) ..... 85
LONWorks Adapter ..... 85
VRF Cloud Gateway ..... 86
H-Link Network Systems ..... 86

CONTROLLERS

# Overview

| Project Requirements | Wireless Zone Controller | Simplified Wired Zone Controller | Programmable Wired Zone Controller | Mini Central Station | Large Central Station | Touchscreen Central Controller | LONWorks® Adapter | VRF Smart Gateway (BACnet)® | VRF Cloud Gateway |
|---|---|---|---|---|---|---|---|---|---|
| | CIR01 | CIS01 | CIW01 | CCM01 | CCL01 | CCXL01 | CLW01 | CBN02 | CMNETS |
| Simple individual zone control | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | ✔ |
| Independent Cool and Heat setpoints | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ■ | ■ | ✔ |
| Individual zone control with weekly programmable scheduling | | | ✔ | ✔ | ✔ | ✔ | ■ | ■ | |
| Basic central point on/off control of all units | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Advanced multi-zone control of small to medium size projects | | | | ✔ | ✔ | | ■ | ■ | ✔ |
| Advanced multi-zone control of large commercial projects | | | | | ✔ | ✔ | ■ | ■ | ✔ |
| Automatic cooling/ heating changeover for heat recovery systems | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ■ | ■ | |
| Single input batch shutdown of all connected units | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Multiple tenant power billing for shared condenser applications* | | | | | | ✔ | | ■ | |
| Temperature set-point range restrictions | | ✔ | ✔ | ✔ | ✔ | ✔ | ■ | ■ | ✔ |
| Graphical user interface with floor plan layout | | | | | | ✔ | ■ | ■ | |
| Exposes more points | | | | | | | ■ | ■ | |
| Exposes outdoor unit points | | | | | | | ■ | ■ | |
| Capable of reading Indoor and Outdoor Unit sensors | | | | | | | | ✔ | ✔ |
| Wi-Fi enabled | | | | | | | ■ | ✔ | ✔ |
| Easy integration | | | | | | | ■ | ✔ | ✔ |
| Easy commissioning | | | | | | | ■ | ✔ | ✔ |

✔ = Native application or feature of this device ■ = Dependent upon capabilities of a third-party energy management system * = Additional metering hardware and software is required for consumption-based tenant billing

# Local Controllers

*MODEL CIW01*

## Programmable Wired Zone Controller

- Standard wall controller
- Dual set point
- Controls temperature, mode, fan speed
- Seven-day schedule with multiple setpoints
- Control up to 16 indoor units
- Built-in 23-hour timer
- Room name and service company name programmable
- Help menus and error code diagnosis
- Large LCD display permits users to see the operating conditions and settings.
- The timer can be set at half-hour intervals up to 23 hours.
- Monitors the operating conditions in the system and an alarm is issued if a problem occurs.
- A "self-diagnosis function" checks for problems on printed boards in indoor and outdoor units.

| ZONE CONTROLLERS ENERGY-SAVING FEATURES |
|---|
| Temperature range limit |
| Setback |
| Occupancy-based operation (Sensors available on select Indoor Units) |
| Set temperature auto reset |
| Off timer |
| Individual function lockout (mode, temperature, fan speed) |

*MODEL CIR01*

## Wireless Zone Controller

- Controls up to 16 indoor units
- Built-in 23-hour timer
- Wireless receiver must be added for all indoor units except Wall Mount models (built in)

*MODEL C3STAT01*

## 5-Wire Thermostat Adapter

- Enables communication from standard 5-wire thermostats into VRF controls logic
- Small size for discreet installation
- Illuminated 7-segment display
- Field-configurable
- External sensor option available
- Easy-to-use desktop user interface available
- Single 24V AC power connection can power both adapter and third-party thermostat

*MODEL CIS01*

## Simplified Wired Zone Controller

- Small size for discreet applications
- Controls 1 to 16 indoor units (same settings)
- Error code diagnosis
- Adjustable fan speed
- Typically used in hotels, offices and restaurants

CONTROLLERS

# Central Controllers

## Central Station

**Mini and large systems are available**.

- Large version controls up to 64 groups of indoor units (maximum 160 units).
- Mini version controls up to 32 groups of indoor units (maximum 160 units).
- Easy-to-use touchscreen interface
- Records accumulated operation time for tenant billing
- Color-coded graphics for quick reference
- Set up to 10 on/off times per day
- Up to 8 stations can be connected to the H-LINK II.
- In addition to basic control, such as settings for operation/stop, the operation mode and temperature, the air quantity and auto louver can be set. If a problem occurs, an alarm code immediately shows the details of the problem.
- An external input terminal is provided as standard. External signals enable the following functions:
  - central operation/stop
  - demand control
  - emergency stop
  - central operation output and central alarm output

*Large: MODEL CCL01*

*Mini: MODEL CCM01*

Compatible with the H-LINK II

Control up to 160 indoor units

Control up to 32 or 64 groups (model dependent)*

Connect up to 8 stations

*See model details for specifics

*MODEL CCXL01*

## VRF Central Touchscreen Controller

The YORK® Touchscreen Central Controller offers an intuitive, large touch screen for easy control of 2,560 VRF indoor units and up to 2,048 VRF systems.

- Individual zone control with weekly programmable scheduling
- Basic central point on/off control of all units
- Advanced multi-zone control of large commercial projects
- Automatic cooling/heating changeover for heat recovery systems
- Single input batch shutdown of all connected units
- Multiple tenant power billing for shared condenser applications (metering hardware required)
- Graphical user interface with floor plan layout

# Johnson Controls VRF Smart Gateway

## Control Through Building Automation Systems

The VRF Smart Gateway enables unprecedented control of YORK® VRF system components through fast, simple integration into the *Metasys*® BAS. Complete system data is available for all components in the system.

### Enhanced Features

- Automatically structures and organizes data for faster, easier and less costly integration
- **Works over Ethernet** to obtain system data and make it accessible through BAS
- **Brings all BMS capabilities to VRF components** including User Interface, Global Search, schedules, reporting, and offline configuration
- BACnet® compatible
- **Information conforms to BAS conventions** for quick adoption
- **Wi-Fi accessibility** enables 24/7 monitoring and control of equipment from laptops, tablets and smartphones


*MODEL CBN02*

SMART EQUIPMENT Johnson Controls

# LonWorks Adapter

- Supports up to 64 Remote Control Groups
- Supports up to 160 Indoor Units with a variety of network variables on a per indoor unit basis
- Control points include: Run/Stop, Operation Mode, Fan Speed, Temperature Setpoint, Prohibit Zone Controller Functions
- Monitoring points include: Run/Stop Status, Operation Mode Status, Fan Speed Status, Temperature Setpoint, Thermo Status, Alarm Status


*MODEL CLW01*

### Features

- 24V AC powered
- Connect up to 4 LonWorks Adapters (CLW01) simultaneously to the same H-LINK II segment
- Connect up to 8 Large (CCL01) and/or Mini (CCM01) Central Controllers and/or LONWorks Adapters (CLW01) simultaneously to the same H-LINK II segment
- Support for the following maximum device limits:
  - 64 Refrigerant Systems
  - 160 Indoor Units
  - Total of 200 nodes: A combination of up to 160 indoor units and a maximum of 64 outdoor units, not to exceed a total of 200.

CONTROLLERS

# VRF Cloud Gateway

## Control and Integrate YORK® VRF Systems with Smart Devices and Home Automation Systems

*Model (CMNETS)*

The VRF Cloud Gateway by Cool Automation seamlessly integrates VRF systems with smart phones, tablets, or any similar wireless device as well as home automaton control systems. This simplifies monitoring and control as VRF systems can be managed through the same interface as lighting, security and other home systems. It can also be used as a stand-alone device with information accessible over the web. And, it comes with the peace of mind that it has been thoroughly tested by the team at Johnson Controls.

### Features

- Monitor and control equipment from a laptop, tablet or smartphone anytime, anywhere
- Manage and control Indoor Units through simple touchscreen display
- Install and integrate with ease (true plug-and-play device)
- Interface through RS232 (ASCII), RS485 (MODBUS RTU) or ethernet (ASCII & MODBUS IP)

# H-LINK II Network Systems

## H-LINK II

H-LINK II is a unique communication system that can be used to control multiple outdoor and indoor units from one control point. Its use assists installers and service engineers by simplifying commissioning and service maintenance. For building owners and occupants, it provides great versatility to connect various types of central control options enabling better system management.

The H-LINK II communication system for connection between outdoor and indoor units provides an extended system configuration and improved functions without sacrificing workability and flexibility.

Our proprietary high-performance communication system enables connection of control wiring between indoor and outdoor units, and between a centralized control system and indoor/outdoor units across two or more refrigerant systems.

**Flexible Wiring Routes**
The H-LINK allows for easy installation through a simple daisy-chain configuration. Simply connect to the adjacent units or the terminal block of a centralized control system.

| H-LINK II System | |
|---|---|
| Max. Number of Refrigerant Groups / System | 64 |
| Max. Number of Indoor Units / System | 160 |
| Total Number of Devices in the same H-LINK II | 200 |
| Total Max. Wiring Length | Total 3,281 ft |

# Service & Support

## We're on your team

When you purchase a YORK® VRF System, you have the full support of a team of experienced professionals as well as 24/7 access to online tools. We're there to help at every stage from design to maintenance.

Selection Software ..... 88
World-Class Training ..... 89
Advanced Logistics ..... 90
Customer Service ..... 90

SERVICE & SUPPORT

# Selection Software

## HVACNavigator.com – Simply get the job done

Everything you need from initial design to maintenance manuals is available to you through the HVACNavigator.com portal.

Our VRF selection software intuitively guides you step-by-step through equipment selection so you can quickly and accurately choose an appropriate and cost-effective equipment package for each project:

- **Design detailed final system drawings** including piping and wiring diagrams.
- **Accurately select systems** using a System Sizing Analysis. Proprietary algorithms calculate system size using data on all included units and piping, load, and site-specific measurements to ensure your system is optimized.
- **Select options and accessories** using intuitively designed features and functionality that make the design process fast, easy, and accurate.
- **Output reports** as Excel and PDF files and drawings as AutoCAD, Revit and PDF files.
- **Generate pricing** for equipment through our pricing system, UST, and adjust pricing to reflect the desired margin for the project.
- **Generate a complete bill of materials** with itemized pricing and a complete quotation submittal package with drawings and detailed product information.
- **Send the bill of materials directly to the ordering system.**

Once you have ordered equipment, HVACNavigator.com is your source for all the product information you need including product documentation, technical and service manuals, troubleshooting guides, brochures, videos, technical support, contact information, and more.

# World-Class Training

## Expert training for you and your staff

**Our premier VRF training center** offers an extensive line of classes with specialized modules and topics to ensure you have the knowledge and skills needed to effectively and efficiently deploy our VRF technology. Our classes help:

- **salespeople** submit competitive bids and close deals
- **engineers** easily and accurately design, select and configure equipment
- **installers** proficiently complete jobs on-time and on-budget
- **service technicians** efficiently maintain, troubleshoot, and repair systems

The training center includes a dedicated VRF laboratory with multiple working systems, components, controls and integration equipment to provide hands-on experience for students. Videos and webinars supplement classroom learning on specific subjects to refresh and enhance the skills of your sales, design, installation, and service teams. With our VRF training programs, your staff will have the knowledge and confidence to compete in a growing industry.

## Courses include:

- VRF System Design and Engineering
- VRF Installation and Commissioning
- VRF Service and Troubleshooting
- Controls Commissioning

For your convenience, we also provide training at regional training centers located in Shrewsbury, Pennsylvania, Kansas City, Missouri, Lacey, Washington, Long Island, New York and Chicago, Illinois.

The YORK® VRF Training Center features a training lab with multiple working systems and expect instructions.

Please visit **https://www.johnsoncontrols.com/services-and-support/training-services/vrf-training** for the latest training course and schedules.

## State-of-the-Art Warranty System

Our warranty registration process is the easiest in the industry. Simply complete your commissioning and start-up form, and all your equipment is automatically registered for a standard warranty.

Our system automatically captures the information needed. Once you've completed training, you are automatically upgraded to our extended warranty.

SERVICE & SUPPORT

# Advanced Logistics & Customer Support

## Integrated logistics systems

- **Our ample inventory and advanced order management and logistics systems** ensure you can set a project timeline, schedule labor efficiently, and meet installation deadlines.
- **When equipment arrives, it is ready for installation.** Our 99% damage-free work record exceeds the industry average.

## Expect fast, accurate deliveries

Our warehouse is located near UPS and FedEx hubs, and our distribution center uses advanced order management and logistics systems for quick, correct parts delivery.

Most equipment arrives within one to three days, and all shipments arrive within five days.


DAMAGE-FREE WORK RECORD


ATTRACTIVE SHIPPING RATES

## Our professionals are one call away

A dedicated support center for VRF systems distinguishes our approach from others in the industry.

One phone number connects you with the support you need to address any issue.

| Phone: 1 (844) 873-4445 \| Fax: 1 (972) 915-3860 | Dial In Selection | Email Address |
|---|---|---|
| **Customer Service** | **Option 1** | **BE-VRFCustomerService@jci-hitachi.com** |
| Assistance with using Navigatyor to order equipment, parts and accessories as well as process credits and returns. | | |
| **Technical Support** | **Option 2** | **BE-VRFTechSupport@jci-hitachi.com** |
| Support during installation, commissioning and service as well as parts look-up and troubleshooting. | | |
| **Warranty** | **Option 3** | **BE-VRFWarranty@jci-hitachi.com** |
| Assistance with using Navigator to register warranties, enter claims, and obtain extended labor warranty contracts (distribution level only). | | |
| **Application and Design** | **Option 4** | **BE-VRFApplicationDesign@jci-hitachi.com** |
| Presale assitance with equipment applications and design support as well as use of Selection Navigator tool | | |
| **Training** | **Option 5** | **BE-VRFTraining@jci-hitachi.com** |
| Support related to training course offerings and registration | | |

## Notes

YORK®
VRF

www.york.com/vrf


*For more details on terms, conditions, and limitations, please refer to the warranty certificate.*

*Contact your sales person or visit our warranty support center at BE-VRFWarranty@jci.com for specific eligibility requirements.*

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## Industry certified

YORK® VRF systems are Intertek ETL Listed (Canada & USA), signifying that they comply with the standard of Heating and Cooling Equipment (ANSI/UL 1995 and CAN/CSA C22.2 No. 236-11, 4th Edition, October 14, 2011). The systems are also certified by the Air Conditioning, Heating & Refrigeration Institute (AHRI). To view AHRI numbers or Energy Guide labels, please go to www.ahridirectory.org

Some products are Energy-Star Certified. Please see catalog for details.

## Additional Information

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating available from your retailer.



Johnson Controls