YORK® VARIABLE REFRIGERANT FLOW

System Product Catalog

Commercial VRF HVAC Systems for New Construction and Renovation Projects

YORK®

BY JOHNSON CONTROLS

YORK® Variable Refrigerant Flow System

Efficiency and comfort for your customers.

New growth opportunities for your business.

Building climate control is about comfort and efficiency – delivering just the right heating and cooling to every space using no more energy than necessary. York variable refrigerant flow (VRF) technology lets you do that for customers in innovative ways that present new growth opportunities for your business.

VRF technology gives building owners, architects, consulting engineers, and mechanical contractors an innovative solution to address the common challenge of reducing operating costs in buildings with varied loads and occupancy rates while delivering comfort to all areas. The systems can offer:

- **Exceptional efficiency**, delivering an average of up to 39% energy savings for some applications compared to conventional HVAC systems.
- **Flexibility to specify a customized modular system** to the exacting requirements of each project, with options that include heat pump and heat recovery systems and a host of fan coil options.
- **Freedom for designers to choose ducted systems with short or long runs**, **or ductless systems** that allow for much lower clearance between building floors and therefore lower overall construction costs.
- **Impressively quiet comfort**, with control to deliver precisely the correct amount of heating or cooling to each zone.

A partnership of global leaders at your service

700 offices

150 countries

130 years of HVAC expertise

Johnson Controls has partnered with Hitachi Appliances to add VRF technology to its wide portfolio of HVAC solutions. York VRF systems provide another option to help you meet the needs of each specific project with innovative technology that is modular, flexible, and exceptionally efficient.

Innovations like VRF systems challenge traditional thinking about selecting the optimal solution to achieve efficient building comfort control. With York VRF systems, you get results you can count on from two companies with proven records of growth and global HVAC leadership.

- **Johnson Controls**, founded in 1885, is a leading supplier of HVAC and building control systems that increase energy efficiency and lower operating costs for more than a million customers, served through nearly 700 offices in more than 150 countries. Now partnered with the Hitachi Appliances global air conditioning business, we have added a world-class Japanese-engineered VRF product line to our wide portfolio of York equipment – providing more options and flexibility to help you satisfy your customers.

- **Hitachi Appliances** brings more than 30 years of technical expertise and global leadership in Japanese-engineered VRF systems and ductless systems, plus vast experience in commercial and industrial air conditioning. The company develops, manufactures and markets state-of-the-art products for homes and businesses worldwide. Its multiple air conditioning products are renowned for energy savings, superior quality, extraordinary reliability, and consistent comfort for homes and businesses.

When you partner with Johnson Controls, you work with a company that offers proven VRF system technology, and a company you know and trust.

Variable flow means constant comfort and efficiency

In the HVAC world, the term "variable" connotes efficiency. Variable-speed chillers save energy and avoid the wear and tear of frequent cycling. Variable air volume systems improve air conditioning efficiency by modulating air delivery volumes within specific zones.

The York variable refrigerant flow systems achieve extremely high efficiencies by modulating the flow of refrigerant according to the exact demands of individual areas with innovative inverter-driven scroll compressor technology.

Proven efficiency, comfort, ease of installation and quiet operation have been the main drivers of VRF technology adoption in Asia, Europe and South America for the past several decades. Now, York VRF systems, built for outstanding quality and reliability, can help North America's building owners meet the challenge of rising energy prices and the global imperatives to save energy and cut pollutant and CO_2 emissions.

Hitachi Appliances has been manufacturing VRF systems for more than 30 years in Japan, 12 years in China, 15 years in Southern Asia, 9 years in Latin America and 10 years in Europe.

Introducing York VRF from Johnson Controls

York VRF systems are modular and controlled solutions that include models with capability to simultaneously heat and cool different zones.

The technology brings an array of advantages over conventional systems.

- **Save on energy.** Systems essentially eliminate duct losses. In addition, variable-speed compressors in outdoor units provide extremely high part-load efficiency.
- **Keep people comfortable**. Users can set individual temperature set points for multiple zones. Variable-speed compressors with wide capacity and precise modulation help maintain each zone's temperature within a narrow range. Indoor units also operate quietly.
- **Go green.** VRF technology can help users attain LEED® certification points for resource efficiency.

Enjoy design freedom

A variety of standard modular components let you 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. Unlike conventional HVAC systems, VRF systems allow addition of capacity to accommodate expansion simply by adding modular units (capacities 6 to 30 tons). There is no need to remove and replace the original unit or reconfigure ductwork.

Install with ease

York VRF systems are designed for quick and simple installation, since piping from the outdoor units can be connected from the front, back, or underneath. Indoor units are relatively small and light and easy to transport and handle; outdoor units can be brought into a building for installation on a rooftop via a service elevator – no crane or other heavy equipment is needed. 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.

Gain control flexibility

Users can deploy from three basic control options.

- **Indoor fan coil units** come with a selection of thermostats, from simple units with on/off, setpoint, load and speed settings, to programmable units that enable scheduling. Wireless units are available to provide remote control of zone space conditions.
- **Central station controllers** for larger projects provide remote control and scheduling of the entire system from one or more control points.
- **Adapters (gateways)** enable control of large buildings or campuses through building automation systems such as Metasys®.

Choose multiple applications

York VRF systems suit a wide range of buildings in new construction and retrofits. Prime candidates include:

- **Buildings with multiple zones** that have different comfort needs – such as hotels, schools, medical office buildings, commercial office buildings and others.
- **Historical building renovations** in which ducted HVAC options are severely limited and the basic building structure must not be disturbed.
- **Buildings in climate zones favorable for heat pump technology.**

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.

Advanced compressor technology yields the highest efficiency ratings resulting in energy savings

The York VRF Systems boast efficiencies up to:

- 29.5 SCHE
- 25.2 IEER
- 15.6 EER
- 4.21 COP at 47° F
- 2.78 COP at 17° F

Rated highest for energy efficiency

York systems rank impressively high in the ratings that matter most for VRF technology. The traditional measure of HVAC equipment, energy efficiency ratio (EER), measures system efficiency at full load. While this may be appropriate for equipment that operates in a traditional cycle (fully on or fully off), it is not appropriate for properly sized VRF systems, which spend the vast majority of time at part load, reaching full load only on the hottest or coldest days. York VRF systems excel against truer measures of efficiency:

- **Integrated energy efficiency ratio (IEER),** which expresses cooling efficiency based on weighted operation at various part-load conditions. York VRF systems carry IEER ratings as high as 25.2.
- **Simultaneous cooling and heating efficiency (SCHE),** which applies to VRF systems with energy recovery features. SCHE is defined as the ratio of a system's total capacity (heating and cooling) to the effective power consumption. York VRF systems carry SCHE ratings as high as 29.5.

Exclusive Hitachi compressor results in high efficiency ratings

The core technology of York VRF systems is the exclusive Hitachi-designed high-efficiency scroll compressor. Hitachi invented the first air conditioning scroll compressor in 1983 and in 2008 applied a cutting-edge large-capacity scroll compressor to VRF technology. Its advantages include a high compression ratio, excellent reliability and efficiency, and lower compressor noise level.

Profit from quality and innovation

The York VRF line includes a wide selection of products and control options. Numerous innovative features enhance performance, energy efficiency, quiet operation and service life. Quality is built in, from design through manufacturing in state-of-the-art, ISO-certified facilities.

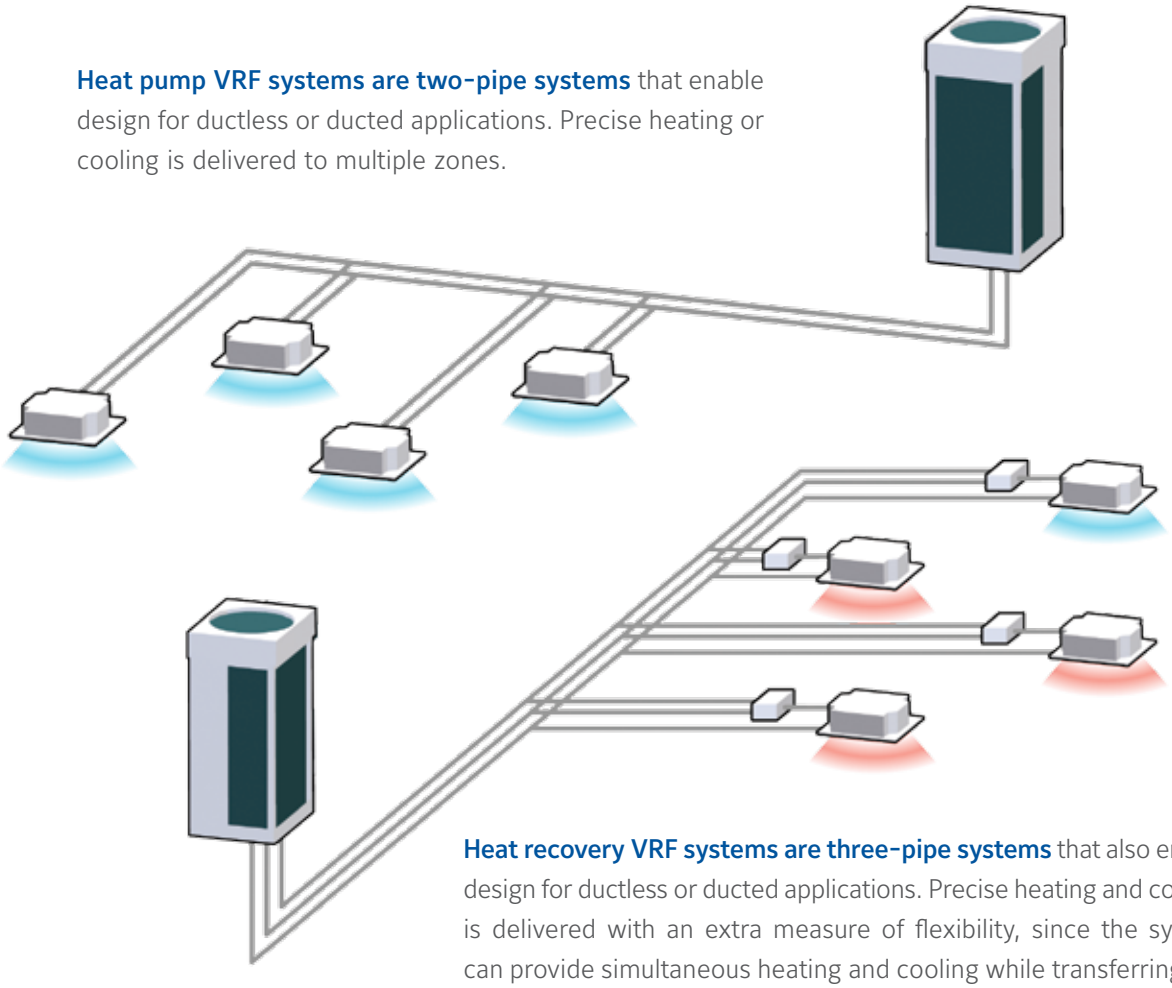
How VRF works

A VRF system typically consists of one or more outdoor condensing units from which refrigerant is piped to a series of indoor fan coil units serving individual zones within building spaces. The system conditions the spaces by delivering to the indoor fan coil units only the volume of refrigerant required to meet the heating or cooling needs of each zone *(see Figure 1)*.

There are two basic types of York VRF systems, ranging from 3- to 30-ton capacity:

- Heat pump VRF systems are two-pipe systems
- Heat recovery VRF systems are three-pipe systems

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



Heat recovery VRF systems are three-pipe systems that also enable design for ductless 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.

Figure 1

Get expert advice at every step: select, design, specify, install

Your Johnson Controls account team supports you as no one else can, at every step of every project. Effective training, intuitive design and specification software, advanced logistics and delivery, and easily accessible documentation form a powerful support package that adds substantial value to York VRF systems.

Get your team up to speed fast. Efficient performance, quality installations.

Comprehensive training programs provide knowledge and skills necessary to effectively and efficiently deploy York VRF technology. Our world-class VRF training center offers a multitude of classes with specialized modules and topics that help:

- **Salespeople** submit competitive bids and close deals.
- **Designers** select and configure the right equipment easily and accurately.
- **Installers** learn the proper procedures and complete jobs accurately, on time and on budget.
- **Service technicians** maintain, troubleshoot and repair systems efficiently.

The training center includes a dedicated VRF laboratory to provide hands-on experience with the various systems, components and controls. Videos and webinars supplement classroom learning on specific subjects and refresh and enhance the skills of your sales, design, installation, and service teams. York VRF training programs help deliver peace of mind that your staff is prepared to support your business with the knowledge to compete in a growing industry.

Get the tools that give you an edge

Right-size systems with intuitive selection software

The York 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.

Web-based program

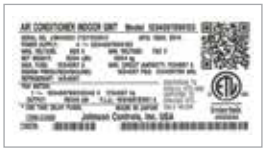
The Web-based program allows access from any computer or tablet. The software helps you:

- **Design accurate final system drawings** including piping and wiring diagrams in an easy, quick, step-by-step process.
- **Accurately select systems** using a System Sizing Analysis. The process starts with the indoor fan coil units, so that outdoor units are optimally sized. Proprietary algorithms figure the system size using data input on the indoor units, load, and measurements, so your system does not include capacity that will go unutilized.
- **Use intuitively designed features and functionality** that make the design process easy, fast, and accurate. You can select options and accessories without referring to additional information or performing additional calculations.
- **Gain an edge** by confidently designing VRF systems that are right-sized, and include the right equipment for each project.

Consistent delivery: Get the right equipment to the jobsite on time

Ample inventory and advanced order management and logistics systems can help you complete installations in a timely manner. Consistent service and predictable deliveries help you prevent delays waiting for essential components and enable you to set a project timeline and schedule labor efficiently. Fast and accurate parts delivery from our state-of-the-art main distribution center in Memphis – where UPS and FedEx have hubs – helps simplify expedited shipments.

Put product information in technicians' hands



Easy access to product information helps designers, contractors and service personnel work accurately and efficiently. Our secure web portal, VRFPro.com, provides product documentation, technical and service manuals, troubleshooting guides, brochures, videos, technical support, contact information, and more. All information is available instantly via smartphone or tablet by scanning the Quick Reference (QR) code on the product nameplate. The QR code also can be used to make warranty registration even easier.

Let's go to work – together

York VRF systems can be configured to meet your project requirements and deliver exceptional performance. Select heat pump or heat recovery outdoor units with DC inverter-driven compressors offering energy savings and the ability to scale to size. Indoor units for ducted or ductless applications offer optional motion sensing control for even greater energy savings. Multiple ventilation options help make sure your systems introduce the right volume of outside air. A host of options and accessories help ensure a custom fit for your project. And users benefit from our variety of control technology options.

Let's explore the many advantages of VRF systems together so you can put them to work for your customers. On these pages, you can explore detailed information on the full range of York VRF systems.

Get winning advice to make the best decisions

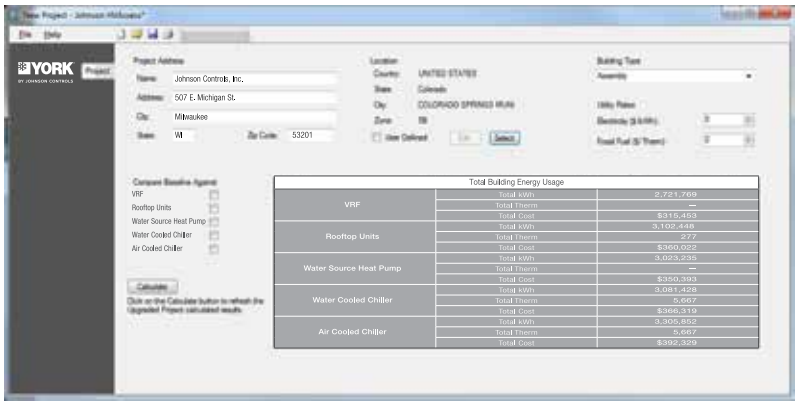
York VRF systems bring exciting new possibilities in building space conditioning, enabling you to satisfy customers, win more business, and enhance your reputation. When you work with Johnson Controls as your partner, our experts can guide you through a thorough analysis to select the system that best delivers exceptional energy efficiency, increased occupant comfort, and a lower life-cycle cost. You can choose from a wide portfolio of HVAC solutions including:

- York VRF systems
- York chillers
- York rooftop units
- York custom built-up air handlers
- Metasys® building automation systems

Our analysis will provide data that helps you appropriately compare all options, so you can make the best-informed decision on every project.

Compare VRF with other HVAC systems using our exclusive energy modeling tool

- **The ability to compare** a VRF system to a number of different HVAC systems to objectively select the most efficient technology for your building.
- **Multiple building models** simulate energy usage for various project types, helping your system selection process.
- **Our exclusive software** helps you quickly and easily compare – so you don't waste time generating individual analyses for comparison.
- **Software features include** the ability to import project data into EnergyPro for complete building energy modeling.



York VRF systems

York Chillers

York Rooftop Units

York custom built-up air handlers

YORK
BY JOHNSON CONTROLS

York VRF Systems: Summary of Features and Benefits

	FEATURES	ADVANTAGES	BENEFITS
ARCHITECT / SYSTEM DESIGNER	**Piping flexibility: Design systems with pipe runs up to 3,281 feet**	· Suitable for short or long runs; accommodates nearly all projects	· Allows design freedom
	Compact footprint	· Requires less indoor space than conventional systems	· Expands options for positioning outdoor units
	Modular components	· Provides flexibility to customize systems to each project's needs	· Simplifies design process · Allows easy updates as space is reconfigured or expanded
	Ductless systems	· Ultimate in design flexibility · Reduces clearance between building floors	· Reduces system costs · Ideal for historic renovations
	Ducted systems	· Accommodates retrofits by making use of existing duct infrastructure · Suits unique buildings that include ducted and ductless areas	· Reduces overall construction costs
	Heat pump VRF systems	· Precisely heats or cools multiple zones	· Provides extreme system design flexibility
	Heat recovery VRF systems	· Allows simultaneous heating/cooling · Allows transfer of excess heat/cooling from one zone to another	· Maximizes comfort and efficiency · Maximizes design flexibility · 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 · Accessible from any computer or tablet	· Allows confident selection and right-sizing of systems

MECHANICAL CONTRACTOR / INSTALLER	**Installation simplicity**	· Outdoor unit piping can be connected from front, back or underneath. · Small and light indoor units are easy to handle without heavy equipment	· Reduces installation time and cost
	Comprehensive training	· Modules tailored to specific job functions	· Enables professional, high-quality, timely installation
	Consistent, reliable product delivery	· Ensures correct components are delivered to job sites on time	· Enhances installation efficiency · Allows efficient labor scheduling
	Easy maintenance access	· All components accessible via removal of one panel	· Speeds up time spent on maintenance, repair, and troubleshooting
	Easy access to product information	· All product information is available on VRFPro.com portal · QR code on unit nameplate allows access to all information on that unit, including warranty registration.	· Simplifies and speeds maintenance, troubleshooting and repairs
	Refrigerant check	· Checks to make sure system is charged with the correct amount of refrigerant to meet requirements.	· Helps contractor and installer adjust for optimum efficiency and performance

		FEATURES	ADVANTAGES	BENEFITS
BUILDING OWNER	System	**Rotational operation**	· In multiple-unit applications at partial load, outdoor units operate alternately so that operating hours are shared equally.	· Optimizes efficiency · Extends service life · Increases reliability
		Backup operation function	· Allows one outdoor unit to be taken off-line for maintenance while remaining units keep operating.	· Avoids system downtime · Protects occupant comfort
		Efficiency optimized for part-load operation	· IEER among industry's highest for VRF systems	· Saves energy
		Optimum individualized comfort	· Heat recovery systems deliver simultaneous heating and cooling	· Efficient heating/cooling · 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 50 dBA for outdoor units; 27 dBA for indoor units) · Ideal where outdoor units are positioned on side of building or in locations where there are noise restrictions
	Compressor	**DC inverter-driven scroll compressor**	· Engineered to deliver the optimum efficiency at normal load conditions	· Among industry's most efficient VRF systems: · Highest IEER · Highest SCHE · Highest COP in low and high heating modes
		Compressor modulation in 1 Hz increments	· Smoothly delivers only the exact amount of refrigerant needed for the load	· Allows fine control for optimum comfort · 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 · Limits equipment wear and tear · Reduces noise
		Load shedding	· Allows programming to turn units on/off in rotation at 10- to 20-minute intervals	· Saves energy · Limits demand charges
		Double-blade fan	· Longer fan blades increase airflow quantity by 25%, resulting in higher static pressure	· Reduces noise · Extends motor life
	Indoor Units	**As high as .74 WG static pressure in ducted systems**	· Offers adjustable speeds to match the 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 · Adds versatility to connect various central control options	· Maximizes indoor comfort · Saves energy · Improves system management
		Temperature control	· Adjusts in 1 degree F increments · Adjustable fan speeds	· Auto-adjusts for daylight saving time · Provides options to satisfy multiple projects/ buildings
		H-LINK II BACnet adapter for integration into BMS	· Enables control of VRF systems by way of a building management system (e.g. Metasys®) for almost unlimited control in a building of campus enterprise.	· Optimizes comfort · Saves energy · Unified interface for all HVAC systems

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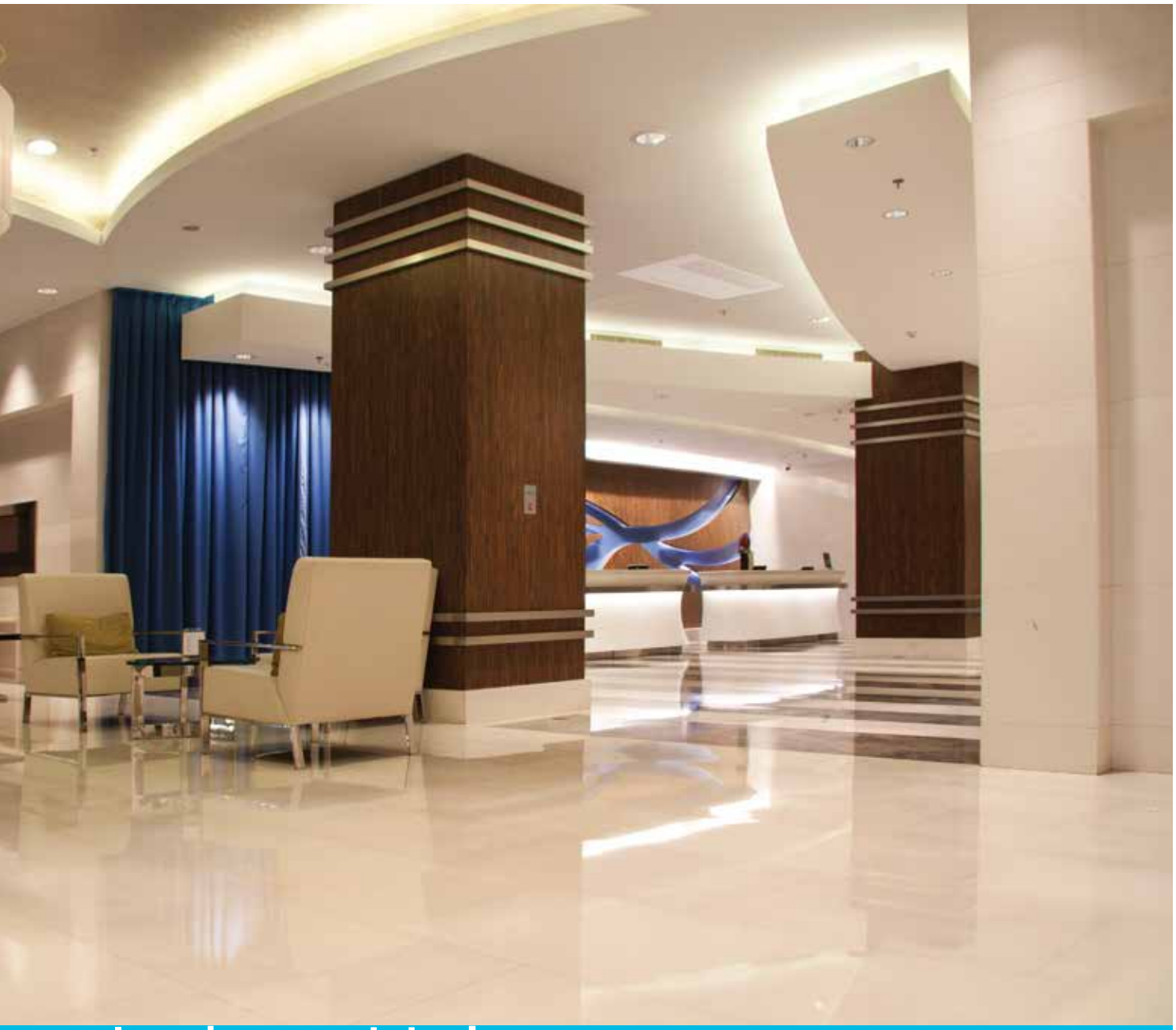


Indoor Units

York VRF indoor units operate quietly and are easy to install, service and maintain.

A wide variety of ductless and ducted units are available in styles and capacities to fit multiple applications. Units operate quietly with sound ratings as low as 27 dBA.

1-Way Cassette
4-Way Cassette
Wall Unit
Ducted Medium Static
Ducted High Static
Ducted Slim

Coming soon in 2015:

2-Way Cassette
4-Way Mini Cassette
Ceiling Suspended
Floor Exposed
Floor Concealed
Vertical Air Handler

Indoor Units Overview

Choose the style and size from the wide selection of indoor units to meet your requirements for layout and design.

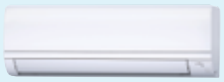
DUCTLESS INDOOR UNIT MODEL NUMBERS

1-Way Cassette

YIC1006B21S
YIC1008B21S
YIC1012B21S
YIC1015B21S

4-Way Cassette

YIC4012B21S
YIC4015B21S
YIC4018B21S
YIC4024B21S
YIC4030B21S
YIC4036B21S



Wall Mount

TIWM1006B21S
TIWM1008B21S
TIWM1012B21S
TIWM015B21S
TIWM018B21S
TIWM024B21S

DUCTED INDOOR UNIT MODEL NUMBERS

Ducted High Static

YIDH018B21S
YIDH024B21S
YIDH030B21S
YIDH036B21S
YIDH048B21S

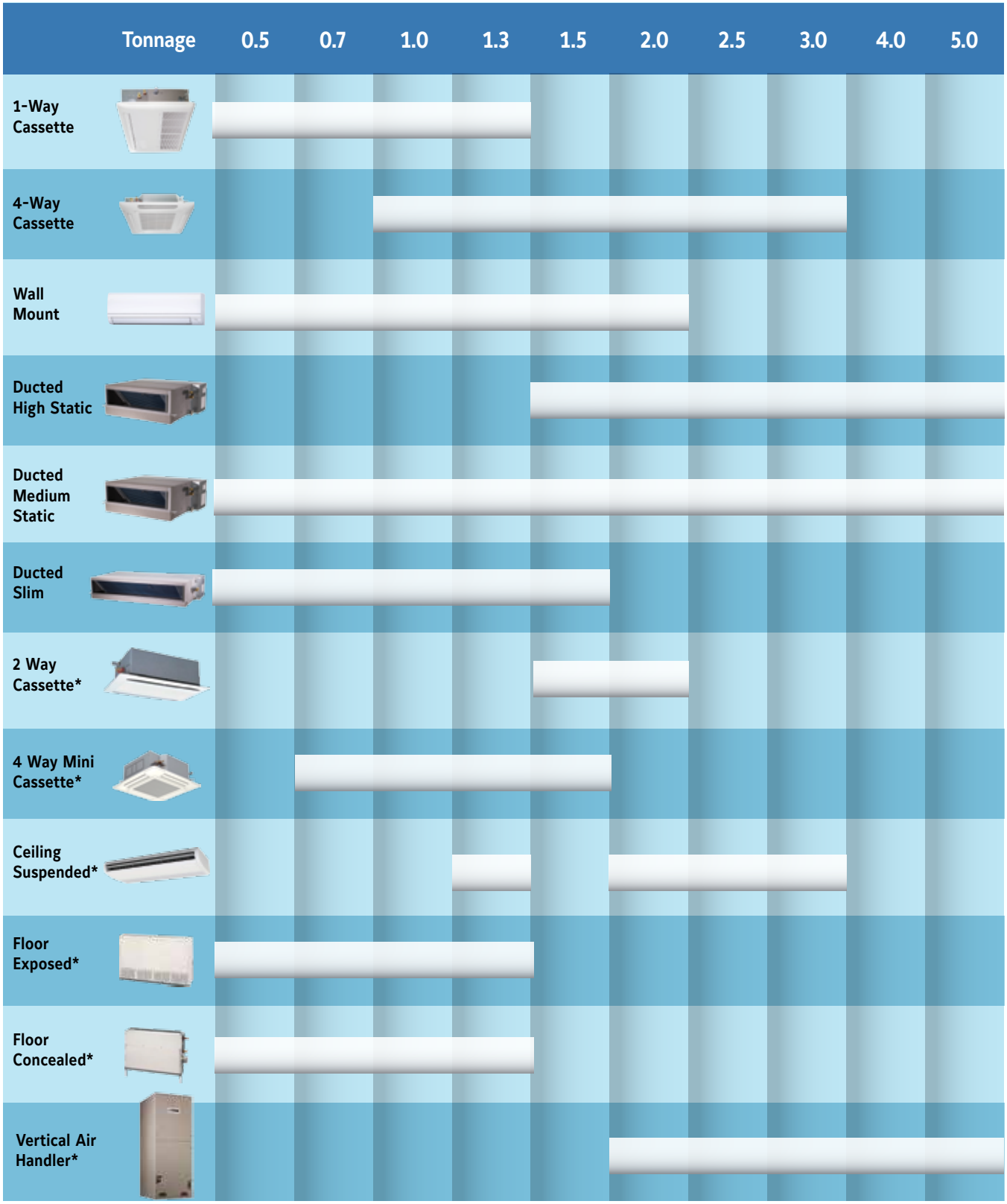
Ducted Medium Static

YIDM006B21S
YIDM008B21S
YIDM012B21S
YIDM015B21S
YIDM018B21S
YIDM024B21S
YIDM030B21S
YIDM036B21S
YIDM048B21S

Ducted Slim

YIDS006B21S
YIDS008B21S
YIDS012B21S
YIDS015B21S
YIDS018B21S

Indoor Unit Selection



*Coming soon in 2015

1-Way Cassette Indoor Unit

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).

Capacities 6,000 to 15,000 Btu/hr

1-Way Cassette Indoor Unit

Tonnage				0.5		0.7		1.0		1.3	
1-Way Cassette Indoor Unit –Model				YIC1006B21S		YIC1008B21S		YIC1012B21S		YIC1015B21S	
Power Supply				208/230V 1PH 60Hz							
Nominal Capacity	Cooling	Btu / h	(kW)	6000	(1.8)	8000	(2.3)	12000	(3.5)	15000	(4.4)
	Heating	Btu / h	(kW)	6700	(2.0)	9000	(2.6)	13500	(4.0)	17000	(5.0)
Power Consumption	Cooling	W		30		30		50		70	
	Heating	W		20		30		50		60	
Dimension	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		lb.	(kg)	55	(25)	55	(25)	57	(26)	57	(26)
Refrigerant		–		R410A							
Refrigerant Piping	Gas Line	in.	(ϕ mm)	1/2 (12.7)							
	Liquid Line	in.	(ϕ mm)	1/4 (6.35)							
Fan Motor Drive		–		DC × 1							
Air Flow Rate	Hi2	cfm	(m^3 / min)	300	(8.5)	335	(9.5)	459	(13)	512	(14.5)
	Hi	cfm	(m^3 / min)	265	(7.5)	300	(8.5)	406	(11.5)	459	(13)
	Me	cfm	(m^3 / min)	229	(6.5)	265	(7.5)	353	(10)	388	(11)
	Lo	cfm	(m^3 / min)	212	(6)	229	(6.5)	300	(8.5)	335	(9.5)
Air Filter				Polypropylene (anti-mold)							
Sound Pressure Level	Hi2	dB(A)		34		36		40		42	
	Hi	dB(A)		32		34		37		38	
	Me	dB(A)		29		31		33		35	
	Lo	dB(A)		27		28		31		31	
Panel Model Name				P-AP36CNA				P-AP56CNA			
External Color (Munsell No.)				Neutral White (4.56Y 8.85 / 0.38)							
Dimension	Height	in.	(mm)	1-3/8 (35)							
	Width	in.	(mm)	43-5/16 (1100)							
	Depth	in.	(mm)	31-1/2 (800)							
Net Weight		lb.	(kg)	10 (4.5)							

Key Features

· Slim and stylish design

· Automatic swing louver distributes airflow evenly for uniform temperature

4-Way Cassette Indoor Unit

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.

Key Features

- Optional motion and radiant heat sensors for shutoff and activation in response to room occupancy.
- Multiple fan speed settings
- Optional fresh air kit available
- 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 included in all units.
- Uniform panel sizing
- Optional lift mechanism allows panel to be lowered for convenient service access

Tonnage				1.0		1.3	
4-Way Cassette Indoor Unit – Model				YIC4012B21S		YIC4015B21S	
Power Supply				208/230V 1PH 60Hz			
Nominal Capacity	Cooling	Btu / h	(kW)	12000	(3.5)	15000	(4.4)
	Heating	Btu / h	(kW)	13500	(4.0)	17000	(5.0)
Power Consumption	Cooling	W		50		70	
	Heating	W		50		60	
Dimension	Height	in.	(mm)	9-3/4	(248)	9-3/4	(248)
	Width	in.	(mm)	33-1/16	(840)	33-1/16	(840)
	Depth	in.	(mm)	33-1/16	(840)	33-1/16	(840)
Net Weight		lb.	(kg)	46	(21)	46	(21)
Refrigerant		–		R410A			
Refrigerant Piping	Gas Line	in.	(ϕ mm)	1/2	(12.7)	1/2	(12.7)
	Liquid Line	in.	(ϕ mm)	1/4	(6.35)	1/4	(6.35)
Fan Motor Drive		–		DC × 1			
Air Flow Rate	Hi2	cfm	(m^3 / min)	741	(21)	777	(22)
	Hi	cfm	(m^3 / min)	600	(17)	600	(17)
	Me	cfm	(m^3 / min)	494	(14)	494	(14)
	Lo	cfm	(m^3 / min)	388	(11)	388	(11)
Air Filter				Polypropylene (anti-mold)			
Sound Pressure Level	Hi2	dB(A)		35		37	
	Hi	dB(A)		31		32	
	Me	dB(A)		30		30	
	Lo	dB(A)		27		27	
Panel Model Name							
External Color (Munsell No.)				"Neutral White (P-AP160NA2)"			
Dimension	Height	in.	(mm)	1-9/16 (40)			
	Width	in.	(mm)	37-13/32 (950)			
	Depth	in.	(mm)	37-13/32 (950)			
Net Weight		lb.	(kg)	14 (6.5)			

Capacities: 12,000 to 36,000 Btu/hr

4-Way Cassette Indoor Unit *(continued)*

Tonnage				1.5		2.0		2.5		3.0	
4-Way Cassette Indoor Unit – Model				YIC4018B21S		YIC4024B21S		YIC4030B21S		YIC4036B21S	
Power Supply				208/230V 1PH 60Hz							
Nominal Capacity	Cooling	Btu / h	(kW)	18000	(5.3)	24000	(7.0)	30000	(8.8)	36000	(10.5)
	Heating	Btu / h	(kW)	20000	(5.8)	27000	(7.9)	34000	(10.0)	40000	(11.7)
Power Consumption	Cooling	W		120		120		150		170	
	Heating	W		120		120		140		160	
Dimension	Height	in.	(mm)	9-3/4	(248)	11-23/32	(298)	11-23/32	(298)	11-23/32	(298)
	Width	in.	(mm)	33-1/16	(840)	33-5/64	(840)	33-5/64	(840)	33-5/64	(840)
	Depth	in.	(mm)	33-1/16	(840)	33-5/64	(840)	33-5/64	(840)	33-5/64	(840)
Net Weight		lb.	(kg)	49	(22)	57	(26)	57	(26)	57	(26)
Refrigerant		–		R410A							
Refrigerant Piping	Gas Line	in.	(ϕ mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)
	Liquid Line	in.	(ϕ mm)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)
Fan Motor Drive		–		DC × 1							
Air Flow Rate	Hi2	cfm	(m^3 / min)	953	(27)	953	(27)	1306	(37)	1306	(37)
	Hi	cfm	(m^3 / min)	777	(22)	812	(23)	1094	(31)	1165	(33)
	Me	cfm	(m^3 / min)	635	(18)	635	(18)	847	(24)	918	(26)
	Lo	cfm	(m^3 / min)	494	(14)	494	(14)	706	(20)	741	(21)
Air Filter				Polypropylene (anti-mold)							
Sound Pressure Level	Hi2	dB(A)		42		42		48		48	
	Hi	dB(A)		36		36		43		45	
	Me	dB(A)		32		32		39		40	
	Lo	dB(A)		28		28		33		35	
Panel Model Name											
External Color (Munsell No.)				"Neutral White (P-AP160NA2)"							
Dimension	Height	in.	(mm)	1-9/16 (40)							
	Width	in.	(mm)	37-13/32 (950)							
	Depth	in.	(mm)	37-13/32 (950)							
Net Weight		lb.	(kg)	14 (6.5)							

Wall Indoor Unit

Wall-mount units include wide-angle louvers that distribute airflow comfortably. An auto-swing function ensures efficient air distribution and uniform temperature throughout the conditioned space. Refrigerant and drain 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.
- Optional wireless controller and built-in wireless sensor
- Optional condensate pump

Tonnage				0.5		0.7	
Wall Indoor Unit – Model				**TIWM1006B21S**		**TIWM1008B21S**	
Power Supply				**208/230V 1PH 60Hz**			
Nominal Capacity	Cooling	Btu / h	(kW)	6000	(1.8)	8000	(2.3)
	Heating	Btu / h	(kW)	6700	(2.0)	9000	(2.6)
Power Consumption	Cooling	W		30		30	
	Heating	W		20		30	
External Color (Munsell No.)				White (6.8PB 9.21 / 0.49)			
Dimension	Height	in.	(mm)	11-13/16	(300)	11-13/16	(300)
	Width	in.	(mm)	31-3/32	(790)	31-3/32	(790)
	Depth	in.	(mm)	9-1/16	(230)	9-1/16	(230)
Net Weight		lb.	(kg)	22	(10)	22	(10)
Refrigerant		–		R410A			
Refrigerant Piping	Gas Line	in.	(ϕ mm)	1/2	(12.7)	1/2	(12.7)
	Liquid Line	in.	(ϕ mm)	1/4	(6.35)	1/4	(6.35)
Fan Motor Drive		–		DC × 1			
Air Flow Rate	Hi2	cfm	(m^3 / min)	353	(10)	353	(10)
	Hi	cfm	(m^3 / min)	282	(8)	282	(8)
	Me	cfm	(m^3 / min)	247	(7)	247	(7)
	Lo	cfm	(m^3 / min)	39	(6.5)	39	(6.5)
Air Filter				Polypropylene (anti-mold)			
Sound Pressure Level	Hi2	dB(A)		39	39	39	39
	Hi	dB(A)		35	35	35	35
	Me	dB(A)		32	32	32	32
	Lo	dB(A)		30	30	30	30

Capacities: 6,000 to 24,000 Btu/hr

Wall Indoor Unit *(continued)*

Tonnage				1.0		1.3		1.5		2.0	
Wall Indoor Unit – Model				TIWM1012B21S		TIWM015B21S		TIWM018B21S		TIWM024B21S	
Power Supply				208/230V 1PH 60Hz							
Nominal Capacity	Cooling	Btu / h	(kW)	12000	(3.5)	15000	(4.4)	18000	(5.3)	24000	(7.0)
	Heating	Btu / h	(kW)	13500	(4.0)	17000	(5.0)	20000	(5.8)	27000	(7.9)
Power Consumption	Cooling	W		60		50		80		90	
	Heating	W		60		50		80		90	
External Color (Munsell No.)				White (6.8PB 9.21 / 0.49)							
Dimension	Height	in.	(mm)	11-13/16	(300)	13-1/8	(333)	13-1/8	(333)	13-1/8	(333)
	Width	in.	(mm)	35-7/16	(900)	45-9/32	(1150)	45-9/32	(1150)	45-9/32	(1150)
	Depth	in.	(mm)	9-1/16	(230)	9-21/32	(245)	9-21/32	(245)	9-21/32	(245)
Net Weight		lb.	(kg)	24	(11)	37	(17)	40	(18)	40	(18)
Refrigerant		–		R410A							
Refrigerant Piping	Gas Line	in.	(ϕ mm)	1/2	(12.7)	1/2	(12.7)	5/8	(15.88)	5/8	(15.88)
	Liquid Line	in.	(ϕ mm)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)	3/8	(9.52)
Fan Motor Drive				DC × 1							
Air Flow Rate	Hi2	cfm	(m^3 / min)	494	(14)	530	(15)	671	(19)	777	(22)
	Hi	cfm	(m^3 / min)	388	(11)	494	(14)	600	(17)	671	(19)
	Me	cfm	(m^3 / min)	318	(9)	459	(13)	494	(14)	600	(17)
	Lo	cfm	(m^3 / min)	265	(7.5)	353	(10)	424	(12)	530	(15)
Air Filter				Polypropylene (anti-mold)							
Sound Pressure Level	Hi2	dB(A)		46		42		49		51	
	Hi	dB(A)		40		40		43		49	
	Me	dB(A)		36		38		40		46	
	Lo	dB(A)		33		33		36		41	

YORK
BY JOHNSON CONTROLS

Ducted Medium Static Indoor Unit

Features

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to .32 WG static pressure
- Bottom access for easy service and troubleshooting
- Built-in condensate pump

Capacities: 6,000 to 48,000 Btu/hr

Tonnage				0.5		0.7		1.0		1.3RT		1.5RT	
Model				YIDM006B21S		YIDM008B21S		YIDM012B21S		YIDM015B21S		YIDM018B21S	
Power Supply				208/230V 1PH 60Hz									
Nominal Capacity	Cooling	Btu / h	(kW)	6000	(1.8)	8000	(2.3)	12000	(3.5)	15000	(4.4)	18000	(5.3)
	Heating	Btu / h	(kW)	6700	(2.0)	9000	(2.6)	13500	(4.0)	17000	(5.0)	20000	(5.9)
Power Consumption	Cooling	W		43		43		69		68		107	
	Heating	W		43		43		69		68		107	
Dimension	Height	in.	(mm)	10-5/8	(270)	10-5/8	(270)	10-5/8	(270)	10-5/8	(270)	10-5/8	(270)
	Width	in.	(mm)	25-19/32	(650)	25-19/32	(650)	25-19/32	(650)	35-7/16	(900)	35-7/16	(900)
	Depth	in.	(mm)	28-11/32	(720)	28-11/32	(720)	28-11/32	(720)	28-11/32	(720)	28-11/32	(720)
Net Weight		lb.	(kg)	53	(24)	53	(24)	53	(24)	66	(30)	66	(30)
Refrigerant		–		R410A									
Refrigerant Piping	Gas Line	in.	(ϕ mm)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)	5/8	(15.88)
	Liquid Line	in.	(ϕ mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)
Fan Motor Drive		–		DC × 1									
Air Flow Rate	Hi2	cfm	(m3 / min)	318	(9)	318	(9)	424	(12)	512	(14.5)	671	(19)
	Hi	cfm	(m3 / min)	282	(8)	282	(8)	388	(11)	459	(13)	600	(17)
	Me	cfm	(m3 / min)	240	(6.8)	240	(6.8)	353	(10)	406	(11.5)	530	(15)
	Lo	cfm	(m3 / min)	205	(5.8)	205	(5.8)	282	(8)	335	(9.5)	388	(11)
Sound Pressure Level	Hi2	dB(A)		34		34		38		39		42	
	Hi1	dB(A)		32		32		36		36		40	
	Hi	dB(A)		29		29		34		33		37	
	Lo	dB(A)		26		26		30		28		29	
Static Pressure	High Pressure	in WG	(Pa)	0.32	(80)	0.32	(80)	0.32	(80)	0.32	(80)	0.32	(80)
	Standard	in WG	(Pa)	0.20	(50)	0.20	(50)	0.20	(50)	0.20	(50)	0.20	(50)
	Low Pressure	in WG	(Pa)	0.14	(35)	0.14	(35)	0.14	(35)	0.14	(35)	0.14	(35)

Ducted Medium Static Indoor Unit *(continued)*

Tonnage				2.0		2.5		3.0		4.0	
Model				YIDM024B21S		YIDM030B21S		YIDM036B21S		YIDM048B21S	
Power Supply				208/230V 1PH 60Hz							
Nominal Capacity	Cooling	Btu / h	(kW)	24000	(7.0)	30000	(8.8)	36000	(10.5)	48000	(14.1)
	Heating	Btu / h	(kW)	27000	(7.9)	34000	(10.0)	40000	(11.7)	54000	(15.8)
Power Consumption	Cooling	W		105		147		172		222	
	Heating	W		105		147		172		222	
Dimension	Height	in.	(mm)	11-13/16	(300)	11-13/16	(300)	11-13/16	300	11-13/16	300
	Width	in.	(mm)	43-5/16	(1100)	43-5/16	(1100)	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
Net Weight		lb.	(kg)	93	(42)	93	(42)	108	49	108	49
Refrigerant		–		R410A							
Refrigerant Piping	Gas Line	in.	(ϕ mm)	5/8	(15.88)	5/8	(15.88)	5/8	15.88	5/8	15.88
	Liquid Line	in.	(ϕ mm)	3/8	(9.52)	3/8	(9.52)	3/8	9.52	3/8	9.52
Fan Motor Drive		–		DC × 1							
Air Flow Rate	Hi2	cfm	(m3 / min)	883	(25)	1094	(31)	1253	(35.5)	1377	(39)
	Hi	cfm	(m3 / min)	812	(23)	988	(28)	1147	(32.5)	1236	(35)
	Me	cfm	(m3 / min)	741	(21)	883	(25)	1041	(29.5)	1094	(31)
	Lo	cfm	(m3 / min)	600	(17)	741	(21)	830	(23.5)	847	(24)
Sound Pressure Level	Hi2	dB(A)		38		42		44		46	
	Hi1	dB(A)		35		39		41		44	
	Hi	dB(A)		33		36		39		40	
	Lo	dB(A)		29		32		33		34	
Static Pressure	High Pressure	in WG	(Pa)	0.32	(80)	0.32	(80)	0.32	(80)	0.32	(80)
	Standard	in WG	(Pa)	0.20	(50)	0.20	(50)	0.20	(50)	0.20	(50)
	Low Pressure	in WG	(Pa)	0.14	(35)	0.14	(35)	0.14	(35)	0.14	(35)

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Ducted High Static Indoor Unit

Features

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to .74 WG static pressure
- Bottom access for easy service and troubleshooting
- Built-in condensate pump

Capacities: 18,000 to 48,000 Btu/hr

Tonnage				1.5		2.0		2.5		3.0		4.0	
Model				YIDH018B21S		YIDH024B21S		YIDH030B21S		YIDH036B21S		YIDH048B21S	
Power Supply				208/230V 1PH 60Hz									
Nominal Capacity	Cooling	Btu / h	(kW)	18000	(5.3)	24000	(7.0)	30000	(8.8)	36000	(10.5)	48000	(14.1)
	Heating	Btu / h	(kW)	20000	(5.9)	27000	(7.9)	34000	(10.0)	40000	(11.7)	54000	(15.8)
Power Consumption	Cooling	W		180	210	270	310	270	310	355	420	385	460
	Heating	W		180	210	270	310	270	310	355	420	385	460
Dimension	Height	in.	(mm)	10-5/8	(270)	13-25/32	(350)	13-25/32	(350)	13-25/32	(350)	13-25/32	(350)
	Width	in.	(mm)	35-7/16	(900)	35-7/16	(900)	35-7/16	(900)	51-3/16	(1300)	51-3/16	(1300)
	Depth	in.	(mm)	28-11/32	(720)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)
Net Weight		lb.	(kg)	75	(34)	106	(48)	106	(48)	128	(58)	132	(60)
Refrigerant		–		R410A									
Refrigerant Piping	Gas Line	in.	(ϕ mm)	5/8 (15.88)									
	Liquid Line	in.	(ϕ mm)	3/8 (9.52)									
Fan Motor Drive		–		AC × 1									
Air Flow Rate (208V)	Hi	cfm	(m^3 / min)	547	(15.5)	883	(25)	883	(25)	1190	(33.7)	1236	(35)
	Lo	cfm	(m^3 / min)	388	(11)	618	(17.5)	618	(17.5)	830	(23.5)	890	(25.2)
Sound Pressure Level (208V, Standard Pressure)	Hi	dB(A)		38		39		39		43		44	
	Lo	dB(A)		29		30		40		34		35	
Sound Pressure Level (230V, Standard Pressure)	Hi	dB(A)		44		42		42		46		47	
	Lo	dB(A)		37		34		34		37		40	
Static Pressure (208V)	High Pressure	in WG	(Pa)	0.60 (150)									
	Standard	in WG	(Pa)	0.20 (50)									
Static Pressure (230V)	High Pressure	in WG	(Pa)	0.74 (185)									
	Standard	in WG	(Pa)	0.40 (100)									

Ducted Slim Indoor Unit

Features

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to .20 WG static pressure
- Bottom access for easy service and troubleshooting
- Built-in condensate pump

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

Tonnage				0.5		0.7		1.0		1.3		1.5	
Model				YIDS006B21S		YIDS008B21S		YIDS012B21S		YIDS015B21S		YIDS018B21S	
Power Supply				208/230V 1PH 60Hz									
Nominal Capacity	Cooling	Btu / h	(kW)	6000	(1.8)	8000	(2.3)	12000	(3.5)	15000	(4.4)	18000	(5.3)
	Heating	Btu / h	(kW)	6700	(2.0)	9000	(2.6)	13500	(4.0)	17000	(5.0)	20000	(5.9)
Power Consumption	Cooling	W		25		25		30		45		55	
	Heating	W		25		25		30		45		55	
Dimension	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		lb.	(kg)	44	(20)	44	(20)	46	(21)	57	(26)	57	(26)
Refrigerant		–		R410A									
Refrigerant Piping	Gas Line	in.	(ϕ mm)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)	5/8	(15.88)
	Liquid Line	in.	(ϕ mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)
Fan Motor Drive		–		DC × 1									
Air Flow Rate	Hi2	cfm	(m^3 / min)	318	(9)	318	(9)	346	(9.8)	512	(14.5)	582	(16.5)
	Hi	cfm	(m^3 / min)	289	(8.2)	289	(8.2)	318	(9)	477	(13.5)	530	(15)
	Me	cfm	(m^3 / min)	244	(6.9)	244	(6.9)	300	(8.5)	441	(12.5)	494	(14)
	Lo	cfm	(m^3 / min)	205	(5.8)	205	(5.8)	268	(7.6)	381	(10.8)	424	(12)
Sound Pressure Level	Hi2	dB(A)		32		32		34		36		40	
	Hi	dB(A)		30		30		33.5		35		38	
	Me	dB(A)		29		29		33		33		36	
	Lo	dB(A)		27		27		32		32		34	
Static Pressure	High Pressure	in WG	(Pa)	0.12	(30)	0.12	(30)	0.12	(30)	0.20	(50)	0.20	(50)
	Standard	in WG	(Pa)	0.04	(10)	0.04	(10)	0.04	(10)	0.04	(10)	0.04	(10)
	Low Pressure	in WG	(Pa)	0.00	(0)	0.00	(0)	0.00	(0)	0.00	(0)	0.00	(0)

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Summary Table of Outdoor Units

		Heat Recovery VRF	Heat Pump VRF
Capacity		6 to 30 Tons	3 to 30 Tons
Maximum connectable indoor unit quantity		64	64
Combination capacity ratio between OD and ID		60% to 150%	
Total piping length	ft (m)	3280 (1000)	3280 (1000)
Maximum piping length between OD and ID	ft (m)	541 (165)	541 (165)
Maximum equivalent piping length between OD and ID	ft (m)	623 (190)	623 (190)
Maximum piping length between 1st branch and ID	ft (m)	295 (90)	295 (90)
Maximum height difference between OD and ID (when OD is higher than ID)	ft (m)	164 (50)	164 (50)
Maximum height difference between OD and ID (when ID is higher than OD)	ft (m)	131 (40)	131 (40)
Maximum height difference between ID and OD	ft (m)	49 (15)	98 (30)
Cooling Operation Range	F (C)	14 to 118 (-10 to 48)	14 to 118 (-10 to 48)
Heating Operation Range	F (C)	-4 to 60 (-20 to 16)	-4 to 60 (-20 to 16)

Outdoor Units

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 to design for a variety of building spaces and ambient conditions. Units operate quietly with sound ratings as low as 50 dBA.*

208/230V Heat Recovery

460V Heat Recovery

208/230V Heat Pump

460V Heat Pump

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Outdoor Units Overview

York VRF outdoor units provide maximum flexibility for modular design.




208/230V HR (HEAT RECOVERY) MODELS

6-10 Ton Systems

6 Ton YVAHR072B31S
8 Ton YVAHR096B31S
10 Ton YVAHR120B31S

12-16 Ton Systems

12 Ton YVAHR144B31S
14 Ton YVAHR168B31S
16 Ton YVAHR192B31S

18-26 Ton Systems

18 Ton YVAHR216B31S
20 Ton YVAHR240B31S
22 Ton YVAHR264B31S
24 Ton YVAHR288B31S
26 Ton YVAHR312B31S

28-30 Ton Systems

28 Ton YVAHR336B31S
30 Ton YVAHR360B31S

460V HR (HEAT RECOVERY) MODELS

6-10 Ton Systems

6 Ton YVAHR072B41S
8 Ton YVAHR096B41S
10 Ton YVAHR120B41S

12-16 Ton Systems

12 Ton YVAHR144B41S
14 Ton YVAHR168B41S
16 Ton YVAHR192B41S

18-26 Ton Systems

18 Ton YVAHR216B41S
20 Ton YVAHR240B41S
22 Ton YVAHR264B41S
24 Ton YVAHR288B41S
26 Ton YVAHR412B41S

28-30 Ton Systems

28 Ton YVAHR336B41S
30 Ton YVAHR360B41S

208/230V HP (HEAT PUMP) MODELS

6-10 Ton Systems

6 Ton YVAHP072B31S
8 Ton YVAHP096B31S
10 Ton YVAHP120B31S

12-16 Ton Systems

12Ton YVAHP144B31S
14Ton YVAHP168B31S
16Ton YVAHP192B31S

18-26 Ton Systems

18 Ton YVAHP216B31S
20 Ton YVAHP240B31S
22 Ton YVAHP264B31S
24 Ton YVAHP288B31S
26 Ton YVAHP312B31S

28-30 Ton Systems

28 Ton YVAHP336B31S
30 Ton YVAHP360B31S

460V HP (HEAT PUMP) MODELS

6-10 Ton Systems

6 Ton YVAHP072B41S
8 Ton YVAHP096B41S
10 Ton YVAHP120B41S

12-16 Ton Systems

12 Ton YVAHP144B41S
14 Ton YVAHP168B41S
16 Ton YVAHP192B41S

18-26 Ton Systems

18 Ton YVAHP216B41S
20 Ton YVAHP240B41S
22 Ton YVAHP264B41S
24 Ton YVAHP288B41S
26 Ton YVAHP412B41S

28-30 Ton Systems

28 Ton YVAHP336B41S
30 Ton YVAHP360B41S

SINGLE PHASE 208/230V HP (HEAT PUMP) MODELS *(Coming in 2015)*

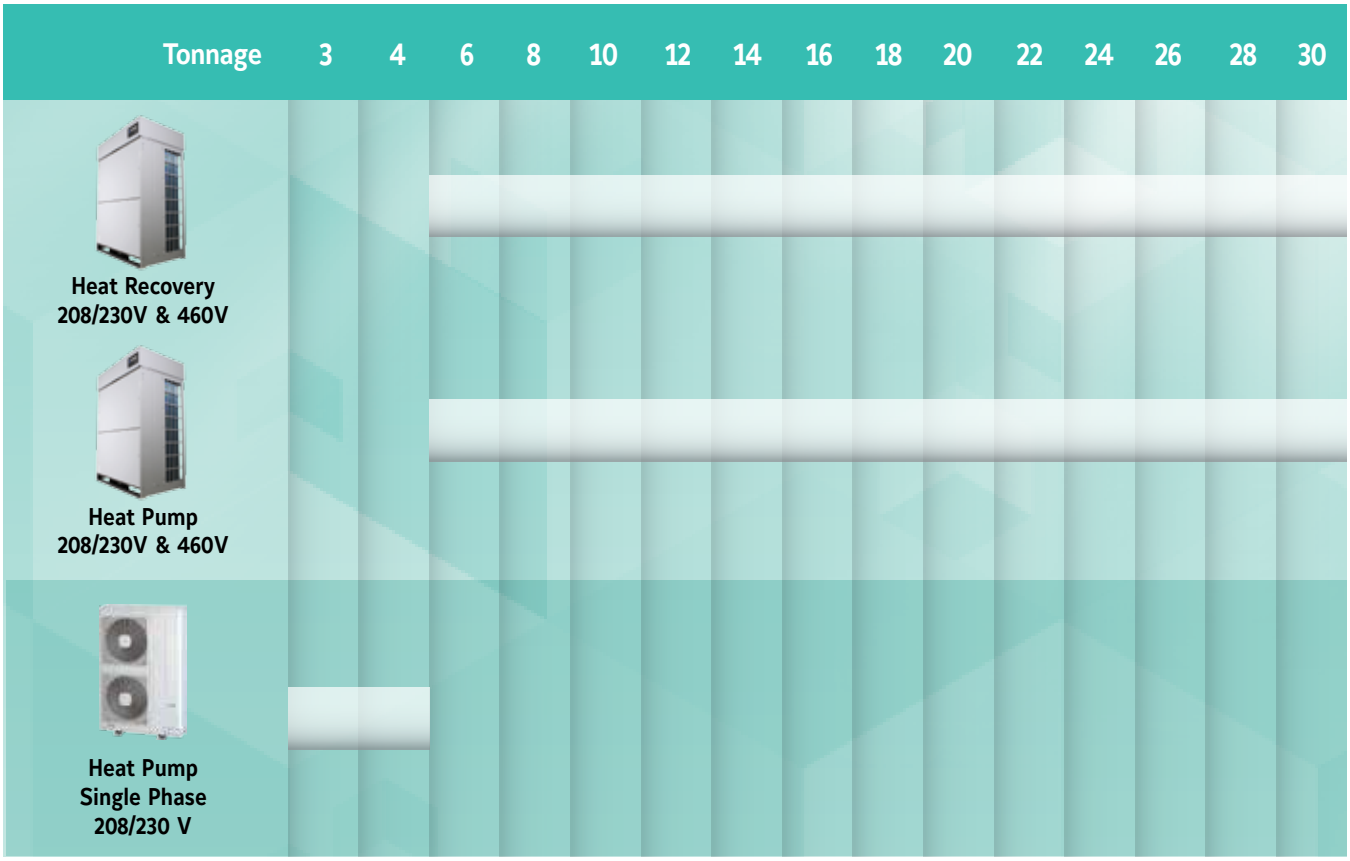
Single Phase 3 Ton Unit

YVAHP036B21S

Single Phase 4 Ton Unit

YVAHP048B21S

York VRF Outdoor Units



York® VRF Outdoor Units

York VRF outdoor units, in capacities from 3.0 to 30 tons with modular system combinations, include heat pump and heat recovery units.

Heat pump units can either heat or cool spaces. York VRF heat pump units offer an extended operating temperature range: outdoor ambient temperature as low as 14°F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

Heat recovery units can heat and cool spaces simultaneously. York VRF heat recovery units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

All outdoor units feature:

- **Long refrigerant piping lengths** – up to 3,280 feet total pipe run
- **Advanced defrost cycle operation** in the heating mode
- Able to **operate up to 64 indoor units** on a single piping network
- **Power-saving demand control** for reduced peak load and energy savings
- **Automatic delivery of required refrigerant charge**
- **Diagnostics and malfunction codes** available at push of a control panel button

Outdoor Unit
208/230V HR (HEAT RECOVERY)

Heat recovery units can heat and cool spaces simultaneously. York VRF heat recovery units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

6-10 Ton Systems

Outdoor Unit 208/230V HR | 6-10 TON SYSTEMS

6-10 Ton Systems	Type			Single Unit Systems					
	Tonnage			6 Ton		8 Ton		10 Ton	
Model				YVAHR072B31S		YVAHR096B31S		YVAHR120B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	69000	(20.2)	92000	(27.0)	114000	(33.4)
	EER	Btu/Wh	(W/W)	15.60	(4.58)	13.70	(4.02)	11.60	(3.40)
	Power input	kW		4.42		6.72		9.83	
	Current input	A (208V/230V)		13.6	12.3	20.7	18.7	30.3	27.4
	IEER	Btu/Wh	(W/W)	25.20	(7.39)	21.80	(6.39)	20.80	(6.10)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48) *1		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	76000	(22.3)	103000	(30.2)	129000	(37.8)
	COP	W/W		4.21		4.01		3.74	
	Power input	kW		5.30		7.53		10.12	
	Current input	A (208V/230V)		16.3	14.8	23.2	21.0	31.2	28.2
Heating Low *3	Capacity	Btu/h	(kW)	55000	(16.1)	76000	(22.3)	89000	(26.1)
	COP	W/W		2.60		2.43		2.36	
Heating Operating Range	Indoor	°F DB	(°C (DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C (WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-	-	-	-	-	-
	COP	W/W		23.30		27.10		26.80	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	37-7/8	(962)	48-1/8	(1222)	48-1/8	(1222)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	74-1/4	(1886)	74-1/4	(1886)	74-1/4	(1886)
	Width	in	(mm)	40-5/8	(1032)	50-7/8	(1292)	50-7/8	(1292)
	Depth	in	(mm)	34-1/32	(864)	34-1/32	(864)	34-1/32	(864)
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		135 - 65		130 - 60	
	Max. (Recommendation) indoor units/system			18 (10)		21 (16)		25 (16)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×1		DA65PHD×1		DA65PHD×1	
		Fix Speed		-		E655DH×1		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.2 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
	Start Method	-		inverter					
	Operation Range	%		20~100		16~100		15~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×2		40.8 (230V)×4		40.8 (230V)×4	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)		0.66(8)		0.91(8)	
	Quantity	Q'ty		1					
	Air Flow Rate	cfm	(m^3/min)	6178	(175)	6884	(195)	7413	(210)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		45/40		55/50		64/58	
	Recommended Fuse/Breaker Size	A		79/71		84/76		92/84	
	Maximum Fuse Size	A		70/70		80/70		90/80	
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		64	(59)	65	(60)	65	(60)
	Heating	dB (A)		64		65		66	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1	(7.3)	18.7	(8.5)	20.9	(9.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2	(6.0)	17.4	(7.9)	17.4	(7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-1/8	(28.58)	1-1/8	(28.58)
	Gas Line (High/Low)	in	(mm)	7/8	(22.2)	7/8	(22.2)	7/8	(22.2)
	Liquid Line	in	(mm)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)
Weight	Net	lbs	(kg)	540	(245)	730	(331)	732	(332)
	Gross	lbs	(kg)	587	(266)	787	(357)	789	(358)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
208/230V HR (HEAT RECOVERY)

Heat recovery units can heat and cool spaces simultaneously. York VRF heat recovery units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

12-16 Ton Systems

Outdoor Unit 208/230V HR | 12-16 TON SYSTEMS

12-16 Ton Systems	Type			Twin Unit Systems					
	Tonnage			12 Ton (6+6)		14 Ton (8+6)		16 Ton (8+8)	
Model (combination)				YVAHR144B31S		YVAHR168B31S		YVAHR192B31S	
Model (individual)	Unit A			YVAHR072B31S		YVAHR096B31S		YVAHR096B31S	
	Unit B			YVAHR072B31S		YVAHR072B31S		YVAHR096B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	138000	(40.5)	160000	(46.9)	182000	(53.4)
	EER	Btu/Wh	(W/W)	14.50	(4.25)	11.40	(3.34)	10.60	(3.11)
	Power input	kW		9.52		14.04		17.17	
	Current input	A (208V/230V)		29.4	26.6	43.3	39.2	53.0	47.9
	IEER	Btu/Wh	(W/W)	24.20	(7.10)	19.70	(5.78)	19.10	(5.60)
Cooling Operating Range	Indoor	F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	154000	(45.2)	178000	(52.2)	204000	(59.8)
	COP	W/W		4.11		3.69		3.64	
	Power input	kW		10.99		14.15		16.44	
	Current input	A (208V/230V)		33.9	30.7	43.6	39.5	50.7	45.9
Heating Low *3	Capacity	Btu/h	(kW)	109000	(32.0)	129000	(37.8)	150000	(44.0)
	COP	W/W		2.78		2.27		2.34	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-		-		-	
	COP	W/W		29.50		26.80		27.80	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	76-5/32	(1934)	86-3/8	(2194)	96-5/8	(2454)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR072B31S YVAHR072B31S		Reference: YVAHR096B31S YVAHR072B31S		Reference: YVAHR096B31S YVAHR096B31S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		150 - 75		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			36 (26)		39 (32)		43 (32)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×2		DA65PHD×2		DA65PHD×2	
		Fix Speed		-		E655DH×1		E655DH×2	
	Motor Output (Pole)	kW (Pole)		7.26(6) 7.26(6)		4.8 (6)+4.4(2) 7.26(6)		4.8 (6)+4.4(2) 4.8 (6)+4.4(2)	
	Start Method	-		inverter					
	Operation Range	%		10~100		9~100		8~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×4		40.8 (230V)×6		40.8 (230V)×8	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)x2		0.66(8)+0.49(8)		0.66(8)×2	
	Quantity	Q'ty		2					
	Air Flow Rate	cfm	(m^3/min)	6178+6178	(175+175)	6884+6178	(195+175)	6884+6884	(195+195)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHR072B31S YVAHR072B31S		Reference: YVAHR096B31S YVAHR072B31S		Reference: YVAHR096B31S YVAHR096B31S	
	Recommended Fuse/Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		67	(62)	68	(63)	68	(63)
	Heating	dB (A)		67		68		68	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1+16.1	(7.3+7.3)	18.7+16.1	(8.5+7.3)	18.7+18.7	(8.5+8.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2	(6.0+6.0)	17.4+13.2	(7.9+6.0)	17.4+17.4	(7.9+7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-3/8	(34.93)	1-3/8	(34.93)
	Gas Line (High/Low)	in	(mm)	7/8	(22.2)	1-1/8	(28.58)	1-1/8	(28.58)
	Liquid Line	in	(mm)	5/8	(15.88)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1080	(490)	1270	(576)	1460	(662)
	Gross	lbs	(kg)	1173	(532)	1374	(623)	1574	(714)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

YORK
BY JOHNSON CONTROLS

Outdoor Unit 208/230V HR | 18-26 TON SYSTEMS

18-26 Ton Systems	Type			Triple Unit Systems			
	Ton			18 Ton (6+6+6)		20RT (8+6+6)	
Model (combination)				YVAHR216B31S		YVAHR240B31S	
Model (individual)	Unit A			YVAHR072B31S		YVAHR096B31S	
	Unit B			YVAHR072B31S		YVAHR072B31S	
	Unit C			YVAHR072B31S		YVAHR072B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	206000	(60.4)	228000	(66.9)
	EER	Btu/Wh	(W/W)	10.60	(3.11)	10.60	(3.11)
	Power input	kW		19.43		21.51	
	Current input	A (208V/230V)		59.9	54.2	66.3	60.0
	IEER	Btu/Wh	(W/W)	19.20	(5.63)	20.30	(5.95)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48) *1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	232000	(68.1)	258000	(75.7)
	COP	W/W		3.49		3.80	
	Power input	kW		19.50		19.92	
	Current input	A(208V/230V)		60.1	54.4	61.4	55.6
Heating Low *3	Capacity	Btu/h	(kW)	164000	(48.1)	182000	(53.4)
	COP	W/W		2.34		2.42	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-	-	-	-
	COP	W/W		25.90		27.80	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	144-13/32	(2906)	124-21/32	(3166)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR072B31S YVAHR072B31S YVAHR072B31S		Reference: YVAHR096B31S YVAHR072B31S YVAHR072B31S	
	Width	in	(mm)				
	Depth	in	(mm)				
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		150 - 70	
	Max. (Recommendation) indoor units/system			54 (32)		60 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3	
		Fix Speed		-		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.26 (6)		4.8 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)	
				7.26 (6)		7.26 (6)	
	Start Method	-		inverter			
	Operation Range	%		7~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×6		40.8 (230V) ×8	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)×3		0.66(8)+0.49(8)×2	
	Quantity	Q'ty		3			
	Air Flow Rate	cfm	(m^3/min)	6178+6178+6178	(175+175+175)		
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHR072B31S YVAHR072B31S YVAHR072B31S		Reference: YVAHR096B31S YVAHR072B31S YVAHR072B31S	
	Recommended Fuse/Breaker Size	A					
	Maximum Fuse Size	A					
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)c			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	69	(64)
	Heating	dB (A)		69		69	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	16.1+16.1+16.1	(7.3+7.3+7.3)		
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2+13.2	(6.0+6.0+6.0)		
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-5/8	(41.28)
	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-3/8	(34.93)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1621	(735)	1810	(821)
	Gross	lbs	(kg)	1760	(798)	1960	(889)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa)

Outdoor Unit 208/230V HR | 18-26 TON SYSTEMS *(continued)*

18-26 Ton Systems	Type			Triple Unit Systems					
	Ton			22 Ton (10+6+6)		24 Ton (10+8+6)		26 Ton (10+10+6)	
Model (combination)				YVAHR264B31S		YVAHR288B31S		YVAHR312B31S	
Model (individual)	Unit A			YVAHR120B31S		YVAHR120B31S		YVAHR120B31S	
	Unit B			YVAHR072B31S		YVAHR096B31S		YVAHR120B31S	
	Unit C			YVAHR072B31S		YVAHR072B31S		YVAHR072B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	252000	(73.9)	274000	(80.4)	296000	(86.8)
	EER	Btu/Wh	(W/W)	10.30	(3.02)	10.00	(2.93)	9.60	(2.82)
	Power input	kW		24.47		27.40		30.83	
	Current input	A (208V/230V)		75.5	68.3	84.5	76.4	95.1	86.0
	IEER	Btu/Wh	(W/W)	18.80	(5.51)	18.60	(5.46)	18.80	(5.51)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	280000	(82.1)	308000	(90.3)	334000	(98.0)
	COP	W/W		3.61		3.70		3.56	
	Power input	kW		22.75		24.42		27.52	
	Current input	A(208V/230V)		70.2	63.5	75.3	68.1	84.9	76.8
Heating Low *3	Capacity	Btu/h	(kW)	200000	(58.7)	216000	(63.4)	236000	(69.2)
	COP	W/W		2.37		2.42		2.37	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-	-	-	-	-	-
	COP	W/W		27.00		25.20		26.00	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	124-21/32	(3166)	134-7/8	(3426)	134-7/8	(3426)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR120B31S YVAHR072B31S YVAHR072B31S		Reference: YVAHR120B31S YVAHR096B31S YVAHR072B31S		Reference: YVAHR120B31S YVAHR120B31S YVAHR072B31S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65		130 - 65	
	Max. (Recommendation) indoor units/system			61 (38)		64 (38)		64 (38)	
Heat Exchanger	Type								
	Material								
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3		DA65PHD×3	
		Fix Speed		E655DH×1		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)		7.26 (6)	
	Start Method	-		inverter					
	Operation Range	%		6~100		6~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×8		40.8 (230V) ×10		40.8 (230V) ×10	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.91(8)+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)		0.91(8)×2+0.49(8)	
	Quantity	Q'ty		3					
	Air Flow Rate	cfm	(m^3/min)	7413+6178+6178	(210+175+175)	7413+6884+6178	(210+195+175)	7413+7413+6178	(210+210+175)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHR120B31S YVAHR072B31S YVAHR072B31S		Reference: YVAHR120B31S YVAHR096B31S YVAHR072B31S		Reference: YVAHR120B31S YVAHR120B31S YVAHR072B31S	
	Recommended Fuse/Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty								
	Maximum length	Ft	(m)						
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	70	(65)	70	(65)
	Heating	dB (A)		70		70		70	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	20.9+16.1+16.1	(9.5+7.3+7.3)	20.9+18.7+16.1	(9.5+8.5+7.3)	20.9+20.9+16.1	(9.5+9.5+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	17.4+13.2+13.2	(7.9+6.0+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)	1-5/8	(41.28)
	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-3/8	(34.93)	1-3/8	(34.93)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1813	(822)	2002	(908)	2004	(909)
	Gross	lbs	(kg)	1962	(890)	2163	(981)	2165	(982)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa)

Outdoor Unit
208/230V HR (HEAT RECOVERY)

Heat recovery units can heat and cool spaces simultaneously. York VRF heat recovery units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

28-30 Ton Systems

Outdoor Unit 208/230V HR | 28-30 TON SYSTEMS

28-30 Ton Systems	Type			Quad Unit Systems			
	Tonnage			28 Ton (8+8+6+6)		30 Ton (10+8+6+6)	
Model (combination)				YVAHR336B31S		YVAHR360B31S	
Model (individual)	Unit A			YVAHR096B31S		YVAHR120B31S	
	Unit B			YVAHR096B31S		YVAHR096B31S	
	Unit C			YVAHR072B31S		YVAHR072B31S	
	Unit D			YVAHR072B31S		YVAHR072B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	320000	(93.9)	342000	(100.3)
	EER	Btu/Wh	(W/W)	11.10	(3.26)	9.50	(2.79)
	Power input	kW		28.83		36.00	
	Current input	A (208V/230V)		88.9	80.4	111.0	100.4
	IEER	Btu/Wh	(W/W)	21.20	(6.22)	18.50	(5.43)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	360000	(105.6)	386000	(113.2)
	COP	W/W		3.87		3.88	
	Power input	kW		27.29		29.18	
	Current input	A (208V/230V)		84.2	76.1	90.0	81.4
Heating Low *3	Capacity	Btu/h	(kW)	268000	(78.6)	284000	83.3
	COP	W/W		2.60		2.46	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-		-	
	COP	W/W		26.90		27.60	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	173-5/32	(4398)	173-5/32	(4398)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR096B31S YVAHR096B31S YVAHR072B31S YVAHR072B31S		Reference: YVAHR120B31S YVAHR096B31S YVAHR072B31S YVAHR072B31S	
	Width	in	(mm)				
	Depth	in	(mm)				
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			64 (38)		64 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×4		DA65PHD×4	
		Fix Speed		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		4.8(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)		6.0(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)	
	Start Method	-		inverter			
	Operation Range	%		5~100		5~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×12		40.8 (230V)×12	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.66(8)×2+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)×2	
	Quantity	Q'ty		4			
	Air Flow Rate	cfm	(m^3/min)	6884+6884+6178+6178	(195+195+175+175)	7413+6884+6884+6178	(210+195+195+175)
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHR096B31S YVAHR096B31S YVAHR072B31S YVAHR072B31S		Reference: YVAHR120B31S YVAHR096B31S YVAHR072B31S YVAHR072B31S	
	Recommended Fuse/Breaker Size	A					
	Maximum Fuse Size	A					
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		71	(66)	71	(66)
	Heating	dB (A)		71		71	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	18.7+18.7+16.1+16.1	(8.5+8.5+7.3+7.3)	20.9+18.7+16.1+16.1	(9.5+8.5+7.3+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)
	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-3/8	(34.93)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	2540	(1152)	2542	(1153)
	Gross	lbs	(kg)	2747	(1246)	2750	(1247)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation,the maximum connectable indoor unit capacity ratio is 100%.

*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)

*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).

*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
460V HR (HEAT RECOVERY)

Heat recovery units can heat and cool spaces simultaneously. York VRF heat recovery units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

6-10 Ton Systems

Outdoor Unit 460V HR | 6-10 TON SYSTEMS

6-10 Ton Systems	Type			Single Unit Systems					
	Tonnage			6 Ton		8 Ton		10 Ton	
Model				YVAHR072B41S		YVAHR096B41S		YVAHR120B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	69000	(20.2)	92000	(27.0)	114000	(33.4)
	EER	Btu/Wh	(W/W)	15.30	(4.49)	13.10	(3.84)	11.20	(3.29)
	Power input	kW		4.51		7.02		10.18	
	Current input	A (208V/230V)		13.9	12.6	21.7	19.6	31.4	28.4
	IEER	Btu/Wh	(W/W)	24.80	(7.27)	21.40	(6.28)	19.80	(5.81)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48) *1		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	76000	(22.3)	103000	(30.2)	129000	(37.8)
	COP	W/W		4.14		3.88		3.66	
	Power input	kW		5.38		7.79		10.34	
	Current input	A (208V/230V)		16.6	15.0	24.0	21.7	31.9	28.8
Heating Low *3	Capacity	Btu/h	(kW)	55000	(16.1)	76000	(22.3)	89000	(26.1)
	COP	W/W		2.48		2.31		2.25	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-	-	-	-	-	-
	COP	W/W		22.60		26.30		26.00	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	37-7/8	(962)	48-1/8	(1222)	48-1/8	(1222)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	74-1/4	(1886)	74-1/4	(1886)	74-1/4	(1886)
	Width	in	(mm)	40-5/8	(1032)	50-7/8	(1292)	50-7/8	(1292)
	Depth	in	(mm)	34-1/32	(864)	34-1/32	(864)	34-1/32	(864)
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		135 - 65		130 - 60	
	Max. (Recommendation) indoor units/system			18 (10)		21 (16)		25 (16)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×1		DA65PHD×1		DA65PHD×1	
		Fix Speed		-		E655DH×1		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.2 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
	Start Method	-		inverter					
	Operation Range	%		20~100		16~100		15~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×2		40.8 (230V)×4		40.8 (230V)×4	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)		0.66(8)		0.91(8)	
	Quantity	Q'ty		1					
	Air Flow Rate	cfm	(m^3/min)	6178	(175)	6884	(195)	7413	(210)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		24		28		34	
	Recommended Fuse/Breaker Size	A		41		40		49	
	Maximum Fuse Size	A		40					
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		64	(59)	65	(60)	65	(60)
	Heating	dB (A)		64		65		66	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1	(7.3)	18.7	(8.5)	20.9	(9.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2	(6.0)	17.4	(7.9)	17.4	(7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-1/8	(28.58)	1-1/8	(28.58)
	Gas Line (High/Low)	in	(mm)	7/8	(22.2)	7/8	(22.2)	7/8	(22.2)
	Liquid Line	in	(mm)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)
Weight	Net	lbs	(kg)	611	(277)	796	(361)	798	(362)
	Gross	lbs	(kg)	657	(298)	853	(387)	856	(388)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
460V HR (HEAT RECOVERY)

Heat recovery units can heat and cool spaces simultaneously. York VRF heat recovery units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

12-16 Ton Systems

Outdoor Unit 460V HR | 12-16 TON SYSTEMS

Category	Type			Twin Unit Systems					
	Tonnage			12 Ton (6+6)		14 Ton (8+6)		16 Ton (8+8)	
Model (combination)				YVAHR144B41S		YVAHR168B41S		YVAHR192B41S	
Model (individual)	Unit A			YVAHR072B41S		YVAHR096B41S		YVAHR096B41S	
	Unit B			YVAHR072B41S		YVAHR072B41S		YVAHR096B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	138000	(40.5)	160000	(46.9)	182000	(53.4)
	EER	Btu/Wh	(W/W)	14.30	(4.19)	10.80	(3.17)	10.60	(3.11)
	Power input	kW		9.65		14.81		17.17	
	Current input	A (208V/230V)		29.8	26.9	45.7	41.3	53.0	47.9
	IEER	Btu/Wh	(W/W)	23.80	(6.98)	19.40	(5.69)	18.60	(5.46)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	154000	(45.2)	178000	(52.2)	204000	(59.8)
	COP	W/W		4.04		3.51		3.53	
	Power input	kW		11.18		14.88		16.95	
	Current input	A (208V/230V)		34.5	31.2	45.9	41.5	52.3	47.3
Heating Low *3	Capacity	Btu/h	(kW)	109000	(32.0)	129000	(37.8)	150000	(44.0)
	COP	W/W		2.64		2.16		2.26	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-		-		-	
	COP	W/W		28.60		26.00		27.00	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	76-5/32	(1934)	86-3/8	(2194)	96-5/8	(2454)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR072B41S YVAHR072B41S		Reference: YVAHR096B41S YVAHR072B41S		Reference: YVAHR096B41S YVAHR096B41S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		150 - 75		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			36 (26)		39 (32)		43 (32)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×2		DA65PHD×2		DA65PHD×2	
		Fix Speed		-		E655DH×1		E655DH×2	
	Motor Output (Pole)	kW (Pole)		7.26(6) 7.26(6)		4.8 (6)+4.4(2) 7.26(6)		4.8 (6)+4.4(2) 4.8 (6)+4.4(2)	
	Start Method	-		inverter					
	Operation Range	%		10~100		9~100		8~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×4		40.8 (230V)×6		40.8 (230V)×8	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)x2		0.66(8)+0.49(8)		0.66(8)×2	
	Quantity	Q'ty		2					
	Air Flow Rate	cfm	(m^3/min)	6178+6178	(175+175)	6884+6178	(195+175)	6884+6884	(195+195)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHR072B41S YVAHR072B41S		Reference: YVAHR096B41S YVAHR072B41S		Reference: YVAHR096B41S YVAHR096B41S	
	Recommended Fuse/Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		67	(62)	68	(63)	68	(63)
	Heating	dB (A)		67		68		68	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1+16.1	(7.3+7.3)	18.7+16.1	(8.5+7.3)	18.7+18.7	(8.5+8.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2	(6.0+6.0)	17.4+13.2	(7.9+6.0)	17.4+17.4	(7.9+7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-3/8	(34.93)	1-3/8	(34.93)
	Gas Line (High/Low)	in	(mm)	7/8	(22.2)	1-1/8	(28.58)	1-1/8	(28.58)
	Liquid Line	in	(mm)	5/8	(15.88)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1222	(554)	1407	(638)	1592	(722)
	Gross	lbs	(kg)	1314	(596)	1510	(685)	1707	(774)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

YORK
BY JOHNSON CONTROLS

Outdoor Unit 460V HR | 18-26 TON SYSTEMS

18-26 Ton Systems	Type			Triple Unit Systems			
	Tonnage			18 Ton (6+6+6)		20 Ton (8+6+6)	
Model (combination)				YVAHR216B41S		YVAHR240B41S	
Model (individual)	Unit A			YVAHR072B41S		YVAHR096B41S	
	Unit B			YVAHR072B41S		YVAHR072B41S	
	Unit C			YVAHR072B41S		YVAHR072B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	206000	(60.4)	228000	(66.9)
	EER	Btu/Wh	(W/W)	10.60	(3.11)	10.20	(2.99)
	Power input	kW		19.43		22.35	
	Current input	A (208V/230V)		59.9	54.2	68.9	62.3
	IEER	Btu/Wh	(W/W)	18.80	(5.51)	19.80	(5.81)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48) *1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	232000	(68.1)	258000	(75.7)
	COP	W/W		3.32		3.68	
	Power input	kW		20.50		20.57	
	Current input	A (208V/230V)		63.2	57.2	63.4	57.4
Heating Low *3	Capacity	Btu/h	(kW)	164000	(48.1)	182000	(53.4)
	COP	W/W		2.23		2.32	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-	-	-	-
	COP	W/W		25.10		27.00	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	114-13/32	(2906)	124-21/32	(3166)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR072B41S YVAHR072B41S YVAHR072B41S		Reference: YVAHR096B41S YVAHR072B41S YVAHR072B41S	
	Width	in	(mm)				
	Depth	in	(mm)				
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		150 - 70	
	Max. (Recommendation) indoor units/system			54 (32)		60 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3	
		Fix Speed		-		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.26 (6)		4.8 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)	
				7.26 (6)		7.26 (6)	
	Start Method	-		inverter			
	Operation Range	%		7~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×6		40.8 (230V) ×8	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)×3		0.66(8)+0.49(8)×2	
	Quantity	Q'ty		3			
	Air Flow Rate	cfm	(m^3/min)	6178+6178+6178	(175+175+175)	6884+6178+6178	(195+175+175)
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHR072B41S YVAHR072B41S YVAHR072B41S		Reference: YVAHR096B41S YVAHR072B41S YVAHR072B41S	
	Recommended Fuse/Breaker Size	A					
	Maximum Fuse Size	A					
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	69	(64)
	Heating	dB (A)		69		69	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	16.1+16.1+16.1	(7.3+7.3+7.3)	18.7+16.1+16.1	(8.5+7.3+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2+13.2	(6.0+6.0+6.0)	17.4+13.2+13.2	(7.9+6.0+6.0)
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-5/8	(41.28)
	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-3/8	(34.93)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1832	(831)	2018	(915)
	Gross	lbs	(kg)	1971	(894)	2168	(983)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit 460V HR | 18-26 TON SYSTEMS *(continued)*

18-26 Ton Systems	Type			Triple Unit Systems					
	Tonnage			22 Ton (10+6+6)		24 Ton (10+8+6)		26 Ton (10+10+6)	
Model (combination)				YVAHR264B41S		YVAHR288B41S		YVAHR412B41S	
Model (individual)	Unit A			YVAHR120B41S		YVAHR120B41S		YVAHR120B41S	
	Unit B			YVAHR072B41S		YVAHR096B41S		YVAHR120B41S	
	Unit C			YVAHR072B41S		YVAHR072B41S		YVAHR072B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	252000	(73.9)	274000	(80.4)	296000	(86.8)
	EER	Btu/Wh	(W/W)	10.00	(2.93)	9.50	(2.79)	9.50	(2.79)
	Power input	kW		25.20		28.84		31.16	
	Current input	A (208V/230V)		77.7	70.3	88.9	80.4	96.1	86.9
	IEER	Btu/Wh	(W/W)	18.20	(5.34)	17.70	(5.19)	17.90	(5.25)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	280000	(82.1)	308000	(90.3)	334000	(98.0)
	COP	W/W		3.50		3.58		3.45	
	Power input	kW		23.47		25.24		28.40	
	Current input	A (208V/230V)		72.4	65.5	77.8	70.4	87.6	79.2
Heating Low *3	Capacity	Btu/h	(kW)	200000	(58.7)	216000	(63.4)	236000	(69.2)
	COP	W/W		2.30		2.34		2.30	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-	-	-	-	-	-
	COP	W/W		26.00		24.40		25.20	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	124-21/32	(3166)	134-7/8	(3426)	134-7/8	(3426)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR120B41S YVAHR072B41S YVAHR072B41S		Reference: YVAHR120B41S YVAHR096B41S YVAHR072B41S		Reference: YVAHR120B41S YVAHR120B41S YVAHR072B41S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65		130 - 65	
	Max. (Recommendation) indoor units/system			61 (38)		64 (38)		64 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3		DA65PHD×3	
		Fix Speed		E655DH×1		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)		7.26 (6)	
	Start Method	-							
	Operation Range	%		6~100		6~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×8		40.8 (230V) ×10		40.8 (230V) ×10	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.91(8)+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)		0.91(8)×2+0.49(8)	
	Quantity	Q'ty		3					
	Air Flow Rate	cfm	(m^3/min)	7413+6178+6178	(210+175+175)	7413+6884+6178	(210+195+175)	7413+7413+6178	(210+210+175)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHR120B41S YVAHR072B41S YVAHR072B41S		Reference: YVAHR120B41S YVAHR096B41S YVAHR072B41S		Reference: YVAHR120B41S YVAHR120B41S YVAHR072B41S	
	Recommended Fuse/Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	70	(65)	70	(65)
	Heating	dB (A)		70		70		70	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	20.9+16.1+16.1	(9.5+7.3+7.3)	20.9+18.7+16.1	(9.5+8.5+7.3)	20.9+20.9+16.1	(9.5+9.5+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	17.4+13.2+13.2	(7.9+6.0+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)	1-5/8	(41.28)
	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-3/8	(34.93)	1-3/8	(34.93)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	2020	(916)	2205	(1000)	2207	(1001)
	Gross	lbs	(kg)	2170	(984)	2366	(1073)	2368	(1074)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
460V HR (HEAT RECOVERY)

Heat recovery units can heat and cool spaces simultaneously. York VRF heat recovery units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

28-30 Ton Systems

Outdoor Unit 460V HR | 28-30 TON SYSTEMS

28-30 Ton Systems	Type			Quad Unit Systems			
	Tonnage			28 Ton (8+8+6+6)		30 Ton (10+8+6+6)	
Model (combination)				YVAHR336B41S		YVAHR360B41S	
Model (individual)	Unit A			YVAHR096B41S		YVAHR120B41S	
	Unit B			YVAHR096B41S		YVAHR096B41S	
	Unit C			YVAHR072B41S		YVAHR072B41S	
	Unit D			YVAHR072B41S		YVAHR072B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	320000	(93.9)	342000	(100.3)
	EER	Btu/Wh	(W/W)	10.50	(3.08)	9.50	(2.79)
	Power input	kW		30.48		36.00	
	Current input	A (208V/230V)		94.0	85.0	111.0	100.4
	IEER	Btu/Wh	(W/W)	20.20	(5.93)	17.50	(5.13)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	360000	(105.6)	386000	(113.2)
	COP	W/W		3.68		3.68	
	Power input	kW		28.70		30.77	
	Current input	A (208V/230V)		88.5	80.0	94.9	85.8
Heating Low *3	Capacity	Btu/h	(kW)	268000	(78.6)	284000	83.3
	COP	W/W		2.52		2.36	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cooling and Heating	Capacity	Btu/Wh	W/W	-		-	
	COP	W/W		26.10		26.80	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	173-5/32	(4398)	173-5/32	(4398)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHR096B41S YVAHR096B41S YVAHR072B41S YVAHR072B41S		Reference: YVAHR120B41S YVAHR096B41S YVAHR072B41S YVAHR072B41S	
	Width	in	(mm)				
	Depth	in	(mm)				
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			64 (38)		64 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×4		DA65PHD×4	
		Fix Speed		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		4.8(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)		6.0(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)	
	Start Method	-		inverter			
	Operation Range	%		5~100		5~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×12		40.8 (230V)×12	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.66(8)×2+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)×2	
	Quantity	Q'ty		4			
	Air Flow Rate	cfm	(m^3/min)	6884+6884+6178+6178	(195+195+175+175)	7413+6884+6884+6178	(210+195+195+175)
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHR096B41S YVAHR096B41S YVAHR072B41S YVAHR072B41S		Reference: YVAHR120B41S YVAHR096B41S YVAHR072B41S YVAHR072B41S	
	Recommended Fuse/Breaker Size	A					
	Maximum Fuse Size	A					
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		71	(66)	71	(66)
	Heating	dB (A)		71		71	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	18.7+18.7+16.1+16.1	(8.5+8.5+7.3+7.3)	20.9+18.7+16.1+16.1	(9.5+8.5+7.3+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)
	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-3/8	(34.93)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	2814	(1276)	2816	(1277)
	Gross	lbs	(kg)	3021	(1370)	3023	(1371)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation,the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
208/230V HP (HEAT PUMP)

Heat pump units can either heat or cool spaces. York VRF heat pump units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

6-10 Ton Systems

Outdoor Unit 208/230V HP | 6-10 TON SYSTEMS

6-10 Ton Systems	Type			Single Unit Systems					
	Tonnage			6 Ton		8 Ton		10 Ton	
Model				YVAHP072B31S		YVAHP096B31S		YVAHP120B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	69000	(20.2)	92000	(27.0)	114000	(33.4)
	EER	Btu/Wh	(W/W)	15.60	(4.58)	13.70	(4.02)	11.60	(3.40)
	Power input	kW		4.42		6.72		9.83	
	Current input	A (208V/230V)		13.6	12.3	20.7	18.7	30.3	27.4
	IEER	Btu/Wh	(W/W)	25.20	(7.39)	21.80	(6.39)	20.80	(6.10)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48) *1		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	76000	(22.3)	103000	(30.2)	129000	(37.8)
	COP	W/W		4.21		4.01		3.74	
	Power input	kW		5.30		7.53		10.12	
	Current input	A (208V/230V)		16.3	14.8	23.2	21.0	31.2	28.2
Heating Low *3	Capacity	Btu/h	(kW)	55000	(16.1)	76000	(22.3)	89000	(26.1)
	COP	W/W		2.60		2.43		2.36	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	37-7/8	(962)	48-1/8	(1222)	48-1/8	(1222)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	74-1/4	(1886)	74-1/4	(1886)	74-1/4	(1886)
	Width	in	(mm)	40-5/8	(1032)	50-7/8	(1292)	50-7/8	(1292)
	Depth	in	(mm)	34-1/32	(864)	34-1/32	(864)	34-1/32	(864)
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		135 - 65		130 - 60	
	Max. (Recommendation) indoor units/system			18 (10)		21 (16)		25 (16)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×1		DA65PHD×1		DA65PHD×1	
		Fix Speed		-		E655DH×1		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.2 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
	Start Method	-		inverter					
	Operation Range	%		20~100		16~100		15~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×2		40.8 (230V)×4		40.8 (230V)×4	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)		0.66(8)		0.91(8)	
	Quantity	Q'ty		1					
	Air Flow Rate	cfm	(m^3/min)	6178	(175)	6884	(195)	7413	(210)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		45/40		55/50		64/58	
	Recommended Fuse/Breaker Size	A		79/71		84/76		92/84	
	Maximum Fuse Size	A		70/70		80/70		90/80	
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		64	(59)	65	(60)	65	(60)
	Heating	dB (A)		64		65		66	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1	(7.3)	18.7	(8.5)	20.9	(9.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2	(6.0)	17.4	(7.9)	17.4	(7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-1/8	(28.58)	1-1/8	(28.58)
	Liquid Line	in	(mm)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)
Weight	Net	lbs	(kg)	540	(245)	730	(331)	732	(332)
	Gross	lbs	(kg)	587	(266)	787	(357)	789	(358)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
208/230V HP (HEAT PUMP)

Heat pump units can either heat or cool spaces. York VRF heat pump units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4o F (-20° C) in the heating mode.

12-16 Ton Systems

Outdoor Unit 208/230V HP | 12-16 TON SYSTEMS

12-16 Ton Systems	Type			Twin Unit Systems					
	Tonnage			12 Ton (6+6)		14 Ton (8+6)		16 Ton (8+8)	
Model (combination)				YVAHP144B31S		YVAHP168B31S		YVAHP192B31S	
Model (individual)	Unit A			YVAHP072B31S		YVAHP096B31S		YVAHP096B31S	
	Unit B			YVAHP072B31S		YVAHP072B31S		YVAHP096B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	138000	(40.5)	160000	(46.9)	182000	(53.4)
	EER	Btu/Wh	(W/W)	14.50	(4.25)	11.40	(3.34)	10.60	(3.11)
	Power input	kW		9.52		14.04		17.17	
	Current input	A (208V/230V)		29.4	26.6	43.3	39.2	53.0	47.9
	IEER	Btu/Wh	(W/W)	24.20	(7.10)	19.70	(5.78)	19.10	(5.60)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	154000	(45.2)	178000	(52.2)	204000	(59.8)
	COP	W/W		4.11		3.69		3.64	
	Power input	kW		10.99		14.15		16.44	
	Current input	A (208V/230V)		33.9	30.7	43.6	39.5	50.7	45.9
Heating Low *3	Capacity	Btu/h	(kW)	109000	(32.0)	129000	(37.8)	150000	(44.0)
	COP	W/W		2.78		2.27		2.34	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	76-5/32	(1934)	86-3/8	(2194)	96-5/8	(2454)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP072B31S YVAHP072B31S		Reference: YVAHP096B31S YVAHP072B31S		Reference: YVAHP096B31S YVAHP096B31S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		150 - 75		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			36 (26)		39 (32)		43 (32)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×2		DA65PHD×2		DA65PHD×2	
		Fix Speed		-		E655DH×1		E655DH×2	
	Motor Output (Pole)	kW (Pole)		7.26(6) 7.26(6)		4.8 (6)+4.4(2) 7.26(6)		4.8 (6)+4.4(2) 4.8 (6)+4.4(2)	
	Start Method	-		inverter					
	Operation Range	%		10~100		9~100		8~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×4		40.8 (230V)×6		40.8 (230V)×8	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)x2		0.66(8)+0.49(8)		0.66(8)×2	
	Quantity	Q'ty		2					
	Air Flow Rate	cfm	(m^3/min)	6178+6178	(175+175)	6884+6178	(195+175)	6884+6884	(195+195)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHP072B31S YVAHP072B31S		Reference: YVAHP096B31S YVAHP072B31S		Reference: YVAHP096B31S YVAHP096B31S	
	Recommended Fuse/Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		67	(62)	68	(63)	68	(63)
	Heating	dB (A)		67		68		68	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1+16.1	(7.3+7.3)	18.7+16.1	(8.5+7.3)	18.7+18.7	(8.5+8.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2	(6.0+6.0)	17.4+13.2	(7.9+6.0)	17.4+17.4	(7.9+7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-3/8	(34.93)	1-3/8	(34.93)
	Liquid Line	in	(mm)	5/8	(15.88)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1080	(490)	1270	(576)	1460	(662)
	Gross	lbs	(kg)	1173	(532)	1374	(623)	1574	(714)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

YORK
BY JOHNSON CONTROLS

Outdoor Unit 208/230V HP | 18-26 TON SYSTEMS

18-26 Ton Systems	Type			Triple Unit Systems			
	Ton			18 Ton (6+6+6)		20 Ton (8+6+6)	
Model (combination)				YVAHP216B31S		YVAHP240B31S	
Model (individual)	Unit A			YVAHP072B31S		YVAHP096B31S	
	Unit B			YVAHP072B31S		YVAHP072B31S	
	Unit C			YVAHP072B31S		YVAHP072B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	206000	(60.4)	228000	(66.9)
	EER	Btu/Wh	(W/W)	10.60	(3.11)	10.60	(3.11)
	Power input	kW		19.43		21.51	
	Current input	A (208V/230V)		59.9	54.2	59.9	54.2
	IEER	Btu/Wh	(W/W)	19.20	(5.63)	19.20	(5.63)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48) *1,*2		14(-10)~118(48) *1,*2	
Heating High *2	Capacity	Btu/h	(kW)	232000	(68.1)	258000	(75.7)
	COP	W/W		3.49		3.80	
	Power input	kW		19.50		19.92	
	Current input	A(208V/230V)		60.1	54.4	61.4	55.6
Heating Low *3	Capacity	Btu/h	(kW)	164000	(48.1)	182000	(53.4)
	COP	W/W		2.34		2.42	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	144-13/32	(2906)	124-21/32	(3166)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP072B31S		Reference: YVAHP096B31S	
	Width	in	(mm)	YVAHP072B31S		YVAHP072B31S	
	Depth	in	(mm)	YVAHP072B31S		YVAHP072B31S	
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		150 - 70	
	Max. (Recommendation) indoor units/system			54 (32)		60 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3	
		Fix Speed		-		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.26 (6)		4.8 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)	
				7.26 (6)		7.26 (6)	
	Start Method	-		inverter			
	Operation Range	%		7~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×6		40.8 (230V) ×8	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)×3		0.66(8)+0.49(8)×2	
	Quantity	Q'ty		3			
	Air Flow Rate	cfm	(m^3/min)	6178+6178+6178	(175+175+175)	6884+6178+6178	(195+175+175)
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHP072B31S		Reference: YVAHP096B31S	
	Recommended Fuse/Breaker Size	A		YVAHP072B31S		YVAHP072B31S	
	Maximum Fuse Size	A		YVAHP072B31S		YVAHP072B31S	
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	69	(64)
	Heating	dB (A)		69		69	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	16.1+16.1+16.1	(7.3+7.3+7.3)	18.7+16.1+16.1	(8.5+7.3+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2+13.2	(6.0+6.0+6.0)	17.4+13.2+13.2	(7.9+6.0+6.0)
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-5/8	(41.28)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1621	(735)	1810	(821)
	Gross	lbs	(kg)	1760	(798)	1960	(889)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit 208/230V HP | 18-26 TON SYSTEMS *(continued)*

18-26 Ton Systems	Type			Triple Unit Systems					
	Tonnage			22 Ton (10+6+6)		24 Ton (10+8+6)		26 Ton (10+10+6)	
Model (combination)				YVAHP264B31S		YVAHP288B31S		YVAHP312B31S	
Model (individual)	Unit A			YVAHP120B31S		YVAHP120B31S		YVAHP120B31S	
	Unit B			YVAHP072B31S		YVAHP096B31S		YVAHP120B31S	
	Unit C			YVAHP072B31S		YVAHP072B31S		YVAHP072B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	252000	(73.9)	274000	(80.4)	296000	(86.8)
	EER	Btu/Wh	(W/W)	10.30	(3.02)	10.00	(2.93)	9.60	(2.82)
	Power input	kW		24.47		27.40		30.83	
	Current input	A (208V/230V)		75.5	68.3	84.5	76.4	95.1	86.0
	IEER	Btu/Wh	(W/W)	18.80	(5.51)	18.60	(5.46)	18.80	(5.51)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	280000	(82.1)	308000	(90.3)	334000	(98.0)
	COP	W/W		3.61		3.70		3.56	
	Power input	kW		22.75		24.42		27.52	
	Current input	A(208V/230V)		70.2	63.5	75.3	68.1	84.9	76.8
Heating Low *3	Capacity	Btu/h	(kW)	200000	(58.7)	216000	(63.4)	236000	(69.2)
	COP	W/W		2.37		2.42		2.37	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	124-21/32	(3166)	134-7/8	(3426)	134-7/8	(3426)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP120B31S YVAHP072B31S YVAHP072B31S		Reference: YVAHP120B31S YVAHP096B31S YVAHP072B31S		Reference: YVAHP120B31S YVAHP120B31S YVAHP072B31S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65		130 - 65	
	Max. (Recommendation) indoor units/system			61 (38)		64 (38)		64 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3		DA65PHD×3	
		Fix Speed		E655DH×1		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)		7.26 (6)	
	Start Method	-		inverter					
	Operation Range	%		6~100		6~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×8		40.8 (230V) ×10		40.8 (230V) ×10	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.91(8)+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)		0.91(8)×2+0.49(8)	
	Quantity	Q'ty							
	Air Flow Rate	cfm	(m^3/min)	7413+6178+6178	(210+175+175)	7413+6884+6178	(210+195+175)	7413+7413+6178	(210+210+175)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHP120B31S YVAHP072B31S YVAHP072B31S		Reference: YVAHP120B31S YVAHP096B31S YVAHP072B31S		Reference: YVAHP120B31S YVAHP120B31S YVAHP072B31S	
	Recommended Fuse Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	70	(65)	70	(65)
	Heating	dB (A)		70		70		70	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	20.9+16.1+16.1	(9.5+7.3+7.3)	20.9+18.7+16.1	(9.5+8.5+7.3)	20.9+20.9+16.1	(9.5+9.5+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	17.4+13.2+13.2	(7.9+6.0+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)	1-5/8	(41.28)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1813	(822)	2002	(908)	2004	(909)
	Gross	lbs	(kg)	1962	(890)	2163	(981)	2165	(982)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
208/230V HP (HEAT PUMP)

Heat pump units can either heat or cool spaces. York VRF heat pump units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

28-30 Ton Systems

Outdoor Unit 208/230V HP | 28-30 TON SYSTEMS

28-30 Ton Systems	Type			Quad Unit Systems			
	Ton			28 Ton (8+8+6+6)		30 Ton (10+8+6+6)	
Model (combination)				YVAHP336B31S		YVAHP360B31S	
Model (individual)	Unit A			YVAHP096B31S		YVAHP120B31S	
	Unit B			YVAHP096B31S		YVAHP096B31S	
	Unit C			YVAHP072B31S		YVAHP072B31S	
	Unit D			YVAHP072B31S		YVAHP072B31S	
Power Supply				208/230V/ 3PH 60Hz		208/230V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	320000	(93.9)	342000	(100.3)
	EER	Btu/Wh	(W/W)	11.10	(3.26)	9.50	(2.79)
	Power input	kW		28.83		36.00	
	Current input	A (208V/230V)		88.9	80.4	111.0	100.4
	IEER	Btu/Wh	(W/W)	21.20	(6.22)	18.50	(5.43)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	360000	(105.6)	386000	(113.2)
	COP	W/W		3.87		3.88	
	Power input	kW		27.29		29.18	
	Current input	A (208V/230V)		84.2	76.1	90.0	81.4
Heating Low *3	Capacity	Btu/h	(kW)	268000	(78.6)	284000	83.3
	COP	W/W		2.60		2.46	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	173-5/32	(4398)	173-5/32	(4398)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP096B31S YVAHP096B31S YVAHP072B31S YVAHP072B31S		Reference: YVAHP120B31S YVAHP096B31S YVAHP072B31S YVAHP072B31S	
	Width	in	(mm)				
	Depth	in	(mm)				
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			64 (38)		64 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×4		DA65PHD×4	
		Fix Speed		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		4.8(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)		6.0(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)	
	Start Method	-		inverter			
	Operation Range	%		5~100		5~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×12		40.8 (230V)×12	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.66(8)×2+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)×2	
	Quantity	Q'ty		4			
	Air Flow Rate	cfm	(m^3/min)	6884+6884+6178+6178	(195+195+175+175)	7413+6884+6884+6178	(210+195+195+175)
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHP096B31S YVAHP096B31S YVAHP072B31S YVAHP072B31S		Reference: YVAHP120B31S YVAHP096B31S YVAHP072B31S YVAHP072B31S	
	Recommended Fuse/Breaker Size	A					
	Maximum Fuse Size	A					
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		71	(66)	71	(66)
	Heating	dB (A)		71		71	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	18.7+18.7+16.1+16.1	(8.5+8.5+7.3+7.3)	20.9+18.7+16.1+16.1	(9.5+8.5+7.3+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	2540	(1152)	2542	(1153)
	Gross	lbs	(kg)	2747	(1246)	2750	(1247)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
460V HP (HEAT PUMP)

Heat pump units can either heat or cool spaces. York VRF heat pump units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

6-10 Ton Systems

Outdoor Unit 460V HP | 6-10 TON SYSTEMS

6-10 Ton Systems	Type			Single Unit Systems					
	Tonnage			6 Ton		8 Ton		10 Ton	
Model				YVAHP072B41S		YVAHP096B41S		YVAHP120B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	69000	(20.2)	92000	(27.0)	114000	(33.4)
	EER	Btu/Wh	(W/W)	15.30	(4.49)	13.10	(3.84)	11.20	(3.29)
	Power input	kW		4.51		7.02		10.18	
	Current input	A (208V/230V)		13.9	12.6	21.7	19.6	31.4	28.4
	IEER	Btu/Wh	(W/W)	24.80	(7.27)	21.40	(6.28)	19.80	(5.81)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C (DB)	14(-10)~118(48) *1		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	76000	(22.3)	103000	(30.2)	129000	(37.8)
	COP	W/W		4.14		3.88		3.66	
	Power input	kW		5.38		7.79		10.34	
	Current input	A (208V/230V)		16.6	15.0	24.0	21.7	31.9	28.8
Heating Low *3	Capacity	Btu/h	(kW)	55000	(16.1)	76000	(22.3)	89000	(26.1)
	COP	W/W		2.48		2.31		2.25	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	37-7/8	(962)	48-1/8	(1222)	48-1/8	(1222)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	74-1/4	(1886)	74-1/4	(1886)	74-1/4	(1886)
	Width	in	(mm)	40-5/8	(1032)	50-7/8	(1292)	50-7/8	(1292)
	Depth	in	(mm)	34-1/32	(864)	34-1/32	(864)	34-1/32	(864)
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		135 - 65		130 - 60	
	Max. (Recommendation) indoor units/system			18 (10)		21 (16)		25 (16)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×1		DA65PHD×1		DA65PHD×1	
		Fix Speed		-		E655DH×1		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.2 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
	Start Method	-		inverter					
	Operation Range	%		20~100		16~100		15~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×2		40.8 (230V)×4		40.8 (230V)×4	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)		0.66(8)		0.91(8)	
	Quantity	Q'ty		1					
	Air Flow Rate	cfm	(m^3/min)	6178	(175)	6884	(195)	7413	(210)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		24		28		34	
	Recommended Fuse/Breaker Size	A		41		40		49	
	Maximum Fuse Size	A		40					
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		64	(59)	65	(60)	65	(60)
	Heating	dB (A)		64		65		66	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1	(7.3)	18.7	(8.5)	20.9	(9.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2	(6.0)	17.4	(7.9)	17.4	(7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-1/8	(28.58)	1-1/8	(28.58)
	Liquid Line	in	(mm)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)
Weight	Net	lbs	(kg)	611	(277)	796	(361)	798	(362)
	Gross	lbs	(kg)	657	(298)	853	(387)	856	(388)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
460V HP (HEAT PUMP)

Heat pump units can either heat or cool spaces. York VRF heat pump units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

12-16 Ton Systems

Outdoor Unit 460V HP | 12-16 TON SYSTEMS

12-16 Ton Systems	Type			Twin Unit Systems					
	Tonnage			12 Ton (6+6)		14 Ton (8+6)		16 Ton (8+8)	
Model (combination)				YVAHP144B41S		YVAHP168B41S		YVAHP192B41S	
Model (individual)	Unit A			YVAHP072B41S		YVAHP096B41S		YVAHP096B41S	
	Unit B			YVAHP072B41S		YVAHP072B41S		YVAHP096B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	138000	(40.5)	160000	(46.9)	182000	(53.4)
	EER	Btu/Wh	(W/W)	14.30	(4.19)	10.80	(3.17)	10.60	(3.11)
	Power input	kW		9.65		14.81		17.17	
	Current input	A (208V/230V)		29.8	26.9	45.7	41.3	53.0	47.9
	IEER	Btu/Wh	(W/W)	23.80	(6.98)	19.40	(5.69)	18.60	(5.46)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	154000	(45.2)	178000	(52.2)	204000	(59.8)
	COP	W/W		4.04		3.51		3.53	
	Power input	kW		11.18		14.88		16.95	
	Current input	A (208V/230V)		34.5	31.2	45.9	41.5	52.3	47.3
Heating Low *3	Capacity	Btu/h	(kW)	109000	(32.0)	129000	(37.8)	150000	(44.0)
	COP	W/W		2.64		2.16		2.26	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	76-5/32	(1934)	86-3/8	(2194)	96-5/8	(2454)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP072B41S YVAHP072B41S		Reference: YVAHP096B41S YVAHP072B41S		Reference: YVAHP096B41S YVAHP096B41S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		150 - 75		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			36 (26)		39 (32)		43 (32)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×2		DA65PHD×2		DA65PHD×2	
		Fix Speed		-		E655DH×1		E655DH×2	
	Motor Output (Pole)	kW (Pole)		7.26(6) 7.26(6)		4.8 (6)+4.4(2) 7.26(6)		4.8 (6)+4.4(2) 4.8 (6)+4.4(2)	
	Start Method	-		inverter					
	Operation Range	%		10~100		9~100		8~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×4		40.8 (230V)×6		40.8 (230V)×8	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)x2		0.66(8)+0.49(8)		0.66(8)×2	
	Quantity	Q'ty		2					
	Air Flow Rate	cfm	(m^3/min)	6178+6178	(175+175)	6884+6178	(195+175)	6884+6884	(195+195)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHP072B41S YVAHP072B41S		Reference: YVAHP096B41S YVAHP072B41S		Reference: YVAHP096B41S YVAHP096B41S	
	Recommended Fuse/Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		67	(62)	68	(63)	68	(63)
	Heating	dB (A)		67		68		68	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount	lb	(kg)	16.1+16.1	(7.3+7.3)	18.7+16.1	(8.5+7.3)	18.7+18.7	(8.5+8.5)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2	(6.0+6.0)	17.4+13.2	(7.9+6.0)	17.4+17.4	(7.9+7.9)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-1/8	(28.58)	1-3/8	(34.93)	1-3/8	(34.93)
	Liquid Line	in	(mm)	5/8	(15.88)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1222	(554)	1407	(638)	1592	(722)
	Gross	lbs	(kg)	1314	(596)	1510	(685)	1707	(774)

*1 When the Outdoor air temperature is 109°F 43°C or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C)or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

YORK
BY JOHNSON CONTROLS

Outdoor Unit 460V HP | 18-26 TON SYSTEMS

18-26 Ton Systems	Type			Triple Unit Systems			
	Tonnage			18 Ton (6+6+6)		20 Ton (8+6+6)	
Model (combination)				YVAHP216B41S		YVAHP240B41S	
Model (individual)	Unit A			YVAHP072B41S		YVAHP096B41S	
	Unit B			YVAHP072B41S		YVAHP072B41S	
	Unit C			YVAHP072B41S		YVAHP072B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	206000	(60.4)	228000	(66.9)
	EER	Btu/Wh	(W/W)	10.60	(3.11)	10.20	(2.99)
	Power input	kW		19.43		22.35	
	Current input	A (208V/230V)		59.9	54.2	68.9	62.3
	IEER	Btu/Wh	(W/W)	18.80	(5.51)	19.80	(5.81)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48) *1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	232000	(68.1)	258000	(75.7)
	COP	W/W		3.32		3.68	
	Power input	kW		20.50		20.57	
	Current input	A 208V/230V)		63.2	57.2	63.4	57.4
Heating Low *3	Capacity	Btu/h	(kW)	164000	(48.1)	182000	(53.4)
	COP	W/W		2.23		2.32	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	114-13/32	(2906)	124-21/32	(3166)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP072B41S		Reference: YVAHP096B41S	
	Width	in	(mm)	YVAHP072B41S		YVAHP072B41S	
	Depth	in	(mm)	YVAHP072B41S		YVAHP072B41S	
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70		150 - 70	
	Max. (Recommendation) indoor units/system			54 (32)		60 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3	
		Fix Speed		-		E655DH×1	
	Motor Output (Pole)	kW (Pole)		7.26 (6)		4.8 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)	
				7.26 (6)		7.26 (6)	
	Start Method	-		inverter			
	Operation Range	%		7~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×6		40.8 (230V) ×8	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)×3		0.66(8)+0.49(8)×2	
	Quantity	Q'ty		3			
	Air Flow Rate	cfm	(m^3/min)	6178+6178+6178	(175+175+175)	6884+6178+6178	(195+175+175)
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHP072B41S		Reference: YVAHP096B41S	
	Recommended Fuse/Breaker Size	A		YVAHP072B41S		YVAHP072B41S	
	Maximum Fuse Size	A		YVAHP072B41S		YVAHP072B41S	
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	69	(64)
	Heating	dB (A)		69		69	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	16.1+16.1+16.1	(7.3+7.3+7.3)	18.7+16.1+16.1	(8.5+7.3+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	13.2+13.2+13.2	(6.0+6.0+6.0)	17.4+13.2+13.2	(7.9+6.0+6.0)
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-3/8	(34.93)	1-5/8	(41.28)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	1832	(831)	2018	(915)
	Gross	lbs	(kg)	1971	(894)	2168	(983)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit 460V HP | 18-26 TON SYSTEMS *(continued)*

18-26 Ton Systems	Type			Triple Unit Systems					
	Tonnage			22 Ton (10+6+6)		24 Ton (10+8+6)		26 Ton (10+10+6)	
Model (combination)				YVAHP264B41S		YVAHP288B41S		YVAHP412B41S	
Model (individual)	Unit A			YVAHP120B41S		YVAHP120B41S		YVAHP120B41S	
	Unit B			YVAHP072B41S		YVAHP096B41S		YVAHP120B41S	
	Unit C			YVAHP072B41S		YVAHP072B41S		YVAHP072B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	252000	(73.9)	274000	(80.4)	296000	(86.8)
	EER	Btu/Wh	(W/W)	10.00	(2.93)	9.50	(2.79)	9.50	(2.79)
	Power input	kW		25.20		28.84		31.16	
	Current input	A (208V/230V)		77.7	70.3	88.9	80.4	96.1	86.9
	IEER	Btu/Wh	(W/W)	18.20	(5.34)	17.70	(5.19)	17.90	(5.25)
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)		59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB (°C DB)		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	280000	(82.1)	308000	(90.3)	334000	(98.0)
	COP	W/W		3.50		3.58		3.45	
	Power input	kW		23.47		25.24		28.40	
	Current input	A 208V/230V)		72.4	65.5	77.8	70.4	87.6	79.2
Heating Low *3	Capacity	Btu/h	(kW)	200000	(58.7)	216000	(63.4)	236000	(69.2)
	COP	W/W		2.30		2.34		2.30	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)		59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB (°C WB)		-4(-20)~59(15) *4		-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	124-21/32	(3166)	134-7/8	(3426)	134-7/8	(3426)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP120B41S YVAHP072B41S YVAHP072B41S		Reference: YVAHP120B41S YVAHP096B41S YVAHP072B41S		Reference: YVAHP120B41S YVAHP120B41S YVAHP072B41S	
	Width	in	(mm)						
	Depth	in	(mm)						
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65		130 - 65	
	Max. (Recommendation) indoor units/system			61 (38)		64 (38)		64 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube					
	Material			Anti-corrosion/Cu-Al					
Compressor	Type	Inverter		DA65PHD×3		DA65PHD×3		DA65PHD×3	
		Fix Speed		E655DH×1		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		4.8 (6)+4.4 (2)		6.0 (6)+4.4 (2)	
				7.26 (6)		7.26 (6)		7.26 (6)	
	Start Method	-		inverter					
	Operation Range	%		6~100		6~100		6~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V) ×8		40.8 (230V) ×10		40.8 (230V) ×10	
Fan	Type	-		Propeller Fan		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.91(8)+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)		0.91(8)×2+0.49(8)	
	Quantity	Q'ty		3					
	Air Flow Rate	cfm	(m3/min)	7413+6178+6178	(210+175+175)	7413+6884+6178	(210+195+175)	7413+7413+6178	(210+210+175)
	External static pressure	in.WG	(Pa)	0 (0) *5					
	Drive			Direct-drive					
Electrical	Min Circuit Amps	A		Reference: YVAHP120B41S YVAHP072B41S YVAHP072B41S		Reference: YVAHP120B41S YVAHP096B41S YVAHP072B41S		Reference: YVAHP120B41S YVAHP120B41S YVAHP072B41S	
	Recommended Fuse/Breaker Size	A							
	Maximum Fuse Size	A							
Control	Type-Qty			AWG18-2					
	Maximum length	Ft	(m)	3,280 (1000)					
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		69	(64)	70	(65)	70	(65)
	Heating	dB (A)		70		70		70	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)					
	Inverter			Over-current protection Over-heat protection					
	Compressor			Over-heat protection					
	PCB			Over-current protection					
Refrigerant	Type-Qty			R410A					
	Charge amount			20.9+16.1+16.1	(9.5+7.3+7.3)	20.9+18.7+16.1	(9.5+8.5+7.3)	20.9+20.9+16.1	(9.5+9.5+7.3)
Refrigeration Oil	Charge amount			17.4+13.2+13.2	(7.9+6.0+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)	17.4+17.4+13.2	(7.9+7.9+6.0)
Defrost Method				Reversed Refrigerant cycle					
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)	1-5/8	(41.28)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	2020	(916)	2205	(1000)	2207	(1001)
	Gross	lbs	(kg)	2170	(984)	2366	(1073)	2368	(1074)

*1 When the Outdoor air temperature is 109°F (43°C) or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C) or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

Outdoor Unit
460V HP (HEAT PUMP)

Heat pump units can either heat or cool spaces. York VRF heat pump units offer an extended operating temperature range: outdoor ambient temperature as low as 14° F (-10° C) in the cooling mode and as low as -4° F (-20° C) in the heating mode.

28-30 Ton Systems

Outdoor Unit 460V HP | 28-30 TON SYSTEMS

28-30 Ton Systems	Type			Quad Unit Systems			
	Tonnage			28 Ton (8+8+6+6)		30 Ton (10+8+6+6)	
Model (combination)				YVAHP336B41S		YVAHP360B41S	
Model (individual)	Unit A			YVAHP096B41S		YVAHP120B41S	
	Unit B			YVAHP096B41S		YVAHP096B41S	
	Unit C			YVAHP072B41S		YVAHP072B41S	
	Unit D			YVAHP072B41S		YVAHP072B41S	
Power Supply				460V/ 3PH 60Hz		460V/ 3PH 60Hz	
Cooling	Capacity	Btu/h	(kW)	320000	(93.9)	342000	(100.3)
	EER	Btu/Wh	(W/W)	10.50	(3.08)	9.50	(2.79)
	Power input	kW		30.48		36.00	
	Current input	A (208V/230V)		94.0	85.0	111.0	100.4
	IEER	Btu/Wh	(W/W)	20.20	(5.93)	17.50	(5.13)
Cooling Operating Range	Indoor	°F WB	(°C WB)	59(15)~73(23)		59(15)~73(23)	
	Outdoor	°F DB	(°C DB)	14(-10)~118(48)*1,*2		14(-10)~118(48)*1,*2	
Heating High *2	Capacity	Btu/h	(kW)	360000	(105.6)	386000	(113.2)
	COP	W/W		3.68		3.68	
	Power input	kW		28.70		30.77	
	Current input	A (208V/230V)		88.5	80.0	94.9	85.8
Heating Low *3	Capacity	Btu/h	(kW)	268000	(78.6)	284000	83.3
	COP	W/W		2.52		2.36	
Heating Operating Range	Indoor	°F DB	(°C DB)	59(15)~80(27)		59(15)~80(27)	
	Outdoor	°F WB	(°C WB)	-4(-20)~59(15) *4		-4(-20)~59(15) *4	
Cabinet Color (Munsell Code)				2.5Y 8/2		2.5Y 8/2	
Outer Dimensions	Height	in	(mm)	68-1/8	(1730)	68-1/8	(1730)
	Width	in	(mm)	173-5/32	(4398)	173-5/32	(4398)
	Depth	in	(mm)	31-7/32	(793)	31-7/32	(793)
Package Dimensions	Height	in	(mm)	Reference: YVAHP096B41S YVAHP096B41S YVAHP072B41S YVAHP072B41S		Reference: YVAHP120B41S YVAHP096B41S YVAHP072B41S YVAHP072B41S	
	Width	in	(mm)				
	Depth	in	(mm)				
Connection Ratio	Total Indoor Unit Capacity	%		140 - 65		135 - 65	
	Max. (Recommendation) indoor units/system			64 (38)		64 (38)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube			
	Material			Anti-corrosion/Cu-Al			
Compressor	Type	Inverter		DA65PHD×4		DA65PHD×4	
		Fix Speed		E655DH×2		E655DH×2	
	Motor Output (Pole)	kW (Pole)		4.8(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)		6.0(6)+4.4(2) 4.8(6)+4.4(2) 7.26(6) 7.26(6)	
	Start Method	-		inverter			
	Operation Range	%		5~100		5~100	
	Refrigeration Oil Type	-		FVC68D		FVC68D	
Crank Case Heater		W×Q'ty		40.8 (230V)×12		40.8 (230V)×12	
Fan	Type	-		Propeller Fan		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.66(8)×2+0.49(8)×2		0.91(8)+0.66(8)+0.49(8)×2	
	Quantity	Q'ty		4			
	Air Flow Rate	cfm	(m^3/min)	6884+6884+6178+6178	(195+195+175+175)	7413+6884+6884+6178	(210+195+195+175)
	External static pressure	in.WG	(Pa)	0 (0) *5			
	Drive			Direct-drive			
Electrical	Min Circuit Amps	A		Reference: YVAHP096B41S YVAHP096B41S YVAHP072B41S YVAHP072B41S		Reference: YVAHP120B41S YVAHP096B41S YVAHP072B41S YVAHP072B41S	
	Recommended Fuse/Breaker Size	A					
	Maximum Fuse Size	A					
Control	Type-Qty			AWG18-2			
	Maximum length	Ft	(m)	3,280 (1000)			
Sound Pressure Level	Cooling (Night-Shift)	dB (A)		71	(66)	71	(66)
	Heating	dB (A)		71		71	
Protection devices	Cycle			High pressure switch at 4.15 (601psi)			
	Inverter			Over-current protection Over-heat protection			
	Compressor			Over-heat protection			
	PCB			Over-current protection			
Refrigerant	Type-Qty			R410A			
	Charge amount	lb	(kg)	18.7+18.7+16.1+16.1	(8.5+8.5+7.3+7.3)	20.9+18.7+16.1+16.1	(9.5+8.5+7.3+7.3)
Refrigeration Oil	Charge amount	L/Unit	(kg/Unit)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)	17.4+17.4+13.2+13.2	(7.9+7.9+6.0+6.0)
Defrost Method				Reversed Refrigerant cycle			
Main Refrigerant Piping (Heat Recovery)	Gas Line (High/Low)	in	(mm)	1-5/8	(41.28)	1-5/8	(41.28)
	Liquid Line	in	(mm)	3/4	(19.05)	3/4	(19.05)
Weight	Net	lbs	(kg)	2814	(1276)	2816	(1277)
	Gross	lbs	(kg)	3021	(1370)	3023	(1371)

*1 When the Outdoor air temperature is 109°F 43°C or more during the outdoor unit cooling operation, the maximum connectable indoor unit capacity ratio is 100%.
*2 (at 47°F/8.3°C)
*3 (at 17°F/-8.3°C)
*4 When the Outdoor air temperature is 23°F (-5°C)or less during the outdoor unit cooling operation, the minimum connectable indoor unit capacity is 18,000 Btu/h. in this case, install the wind protection hood (optional).
*5 External static pressure is adjustable via DSW setting (0.24 in.WG/60Pa).

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Optional Parts & Accessories

Change-Over Box

Piping Kits

Accessories

Change-Over Box

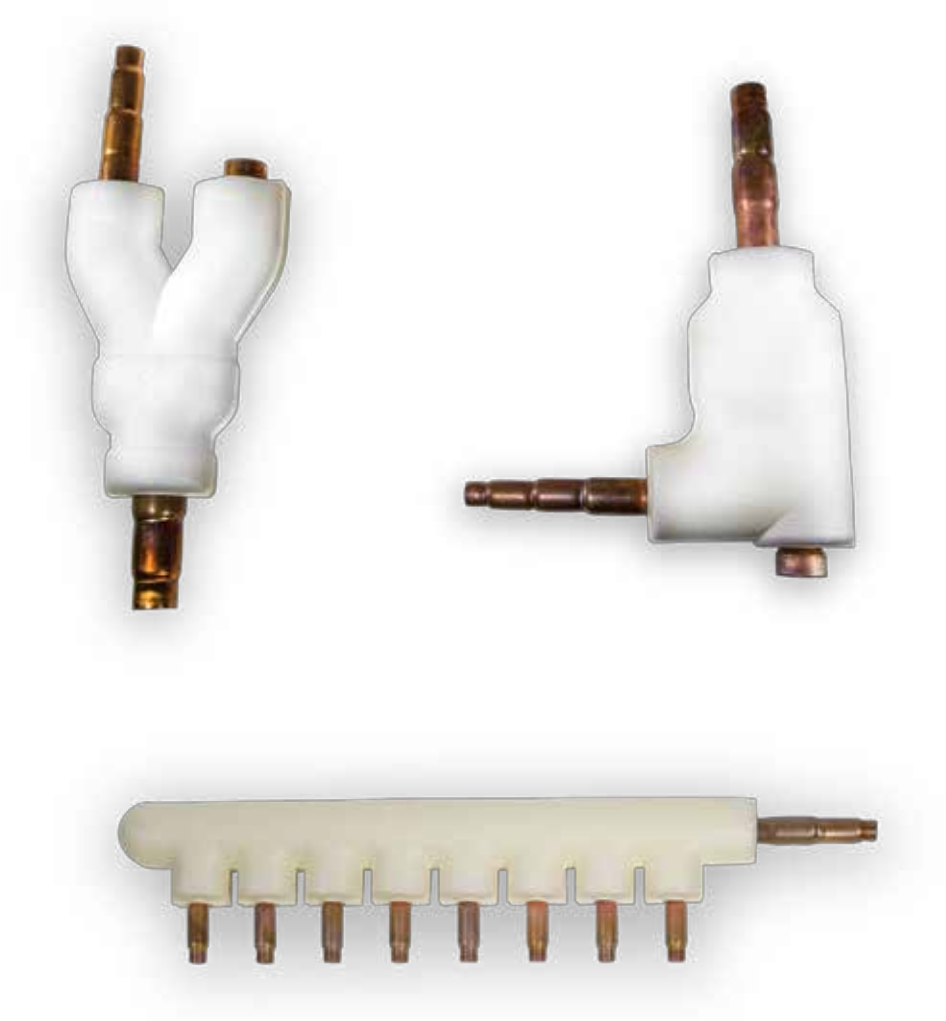
Change-Over Box Model				COBS048B21S		COBS096B21S	
Power Supply				**208/230V 1PH 60Hz**			
Power Consumption		W		20		20	
Connectable Indoor Unit Total Capacity		more than 2 Units	kBtu/h	≤41		42 – 71	
		1 Unit	kBtu/h	≤48		49 – 96	
Number of Connectable Indoor Units				1-7		1-8	
Dimension	Height	in.	(mm)	7-17/32	191	7-17/32	191
	Width	in.	(mm)	11-27/32	301	11-27/32	301
	Depth	in.	(mm)	8-7/16	214	8-7/16	214
Net Weight		lb.	(kg)	15	7	15	7
Refrigerant		–		R410A			
Refrigerant Piping (from Indoor Unit)	Gas Line (Low Pressure)	in.	(ϕ mm)	3/4	19.05	3/4	19.05
	Gas Line (High Pressure)	in.	(ϕ mm)	5/8	15.88	5/8	15.88
	Liquid Line	in.	(ϕ mm)	–		–	
Refrigerant Piping (from Outdoor Unit)	Gas Line	in.	(ϕ mm)	5/8	15.88	3/4	19.05
	Liquid Line	in.	(ϕ mm)	–		–	

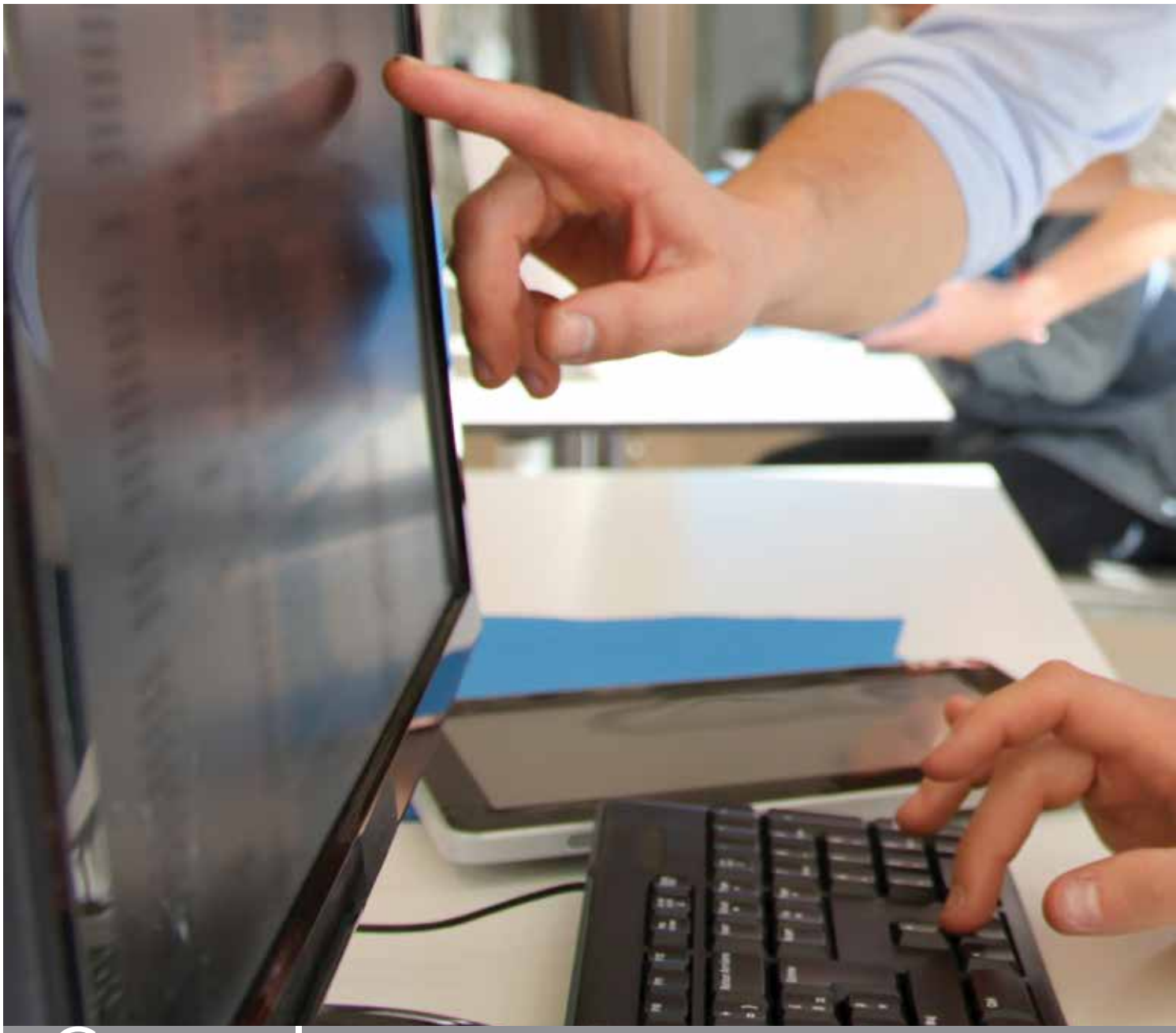
Change Over Box

VRF Accessories

Unit Type	Accessory	Description
Outdoor Unit	Protection Net	Protects the condenser coils from large elements damaging the coil.
	Snow Protection Hood	Protects the coils and fan from snow building up on the unit.
4-Way Cassette	Filter Box	For use when a higher efficiency filter is required.
	Air Outlet Shutter Plate	Used to block off supply grille in air panel when using a remote diffuser.
	Duct Adapter	Adapter to duct conditioned air to a remote diffuser (diffuser and ductwork not included)
	Fresh Air Inlet Kit	Kit is used when connecting outside air directly to unit.
	Motion Sensor Kit	Detects motion in room, if no motion is detected will reset zone to unoccupied set point.
1-Way Cassette	Motion Sensor Kit	Detects motion in room, if no motion is detected will reset zone to unoccupied set point.
	Duct Adapter	Adapter to duct conditioned air to grille for front discharge (ductwork not included)
	Grille for Front Discharge	Grille used when it is required to supply air horizontally (ductwork not included)
	Air Outlet Shutter Plate	Used to block off supply grille in air panel when using grille for front discharge.
Wall Mounted	Air Filter	Replacement filter
	Drain Pump	External condensate pump for use when gravity draining is not available
Ducted High Static	Air Filter	Filter box with high efficiency filters (MERV 13)
Ducted Medium Static	Air Filter	Filter box with high efficiency filters (MERV 13)
Ducted Slim	Air Filter	Filter box with high efficiency filters (MERV 13)

Selection software tool indicates which piping kits are needed for your design





Controls

York VRF systems offer a wide range of control systems to suit multiple applications.

Systems include wired and wireless controls, central station and computerized control options, and BACnet Adapter for control by way of building management systems.

Simplified Wired Controller

Wired Controller

Wireless Controller

Central Station

Computerized Controller

BACnet Adapter

Control Systems

MODEL CIS01

Simplified Wired 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

Centralized Computer Software: MODEL CCCS01

Centralized Computer Adapter: MODEL CCCA01

Computerized Controller

Computerized controllers can manage up to 2,048 groups of systems with a maximum 2,560 total indoor units) from a PC. This option increases management and setting possibilities and allows instructions to be carried out from any point on a local communication network.

LONworks Adapter

CLW01 – coming later 2015

MODEL CIW01

Wired Controller

- Standard wall controller
- Controls temp., mode, fan speed
- 7-day timer with multiple setpoints
- Control up to 16 indoor units
- Built-in 24-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 72 hours.
- It 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.
- Equipped with energy-saving functions such as a preset temperature range limiting function for preventing excessive cooling/heating and a preset temperature automatic reset function, as well as an operation locking mechanism and the capability to prevent users from forgetting to turn off the system. *(Function selection setting is required.)*

MODEL CIR01

Wireless Controller

- Control up to 16 indoor units
- Built-in 24-hour timer
- Wireless receiver must be added for all indoor units except wall-mount models (built in)

MODEL CBN01

BACnet Adapter

BACnet integration enables control of VRF systems by way of a building management system, such as the Metasys® system from Johnson Controls. This control mode offers almost unlimited capability to control space conditions within a building, across a campus, or over an entire enterprise.

Controllers

Large: MODEL CCL01

Mini: MODEL CCM01

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 operations time for tenant billing
- Color-coded graphics for quick reference
- Set up to 10 on/off times per day
- Up to 8 units 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.

Compatible with the H-LINK II

Control up to 160 indoor units

Control up to 64 remote control groups

Connect up to 8 units

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 transmission system for connection between outdoor and indoor units provides an extended system configuration and improved functions without sacrificing workability and the flexibility.

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

Flexible Wiring Routes

There are no restrictions on the order of wiring routes and the number of branches. Simply connect to the adjacent units or the terminal block of a centralized control system.

Summary Table of H-LINK System

H-LINK II System	
Max. Number of Refrigerant Group / System	64
Address Setting Range of Indoor Units / Refrigerant Group	0 to 63
Max. Number of Indoor Unit / System	160
Total Number of Devices in the same H-LINK II	200
Max. Wiring Length	Total 3,281 ft

YORK
BY JOHNSON CONTROLS

Notes

Check our warranty certificate for parts extended warranties. For more details on terms, conditions, and limitations, please refer to the warranty certificate.

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.

Johnson Controls