





# **PRODUCT**CATALOG



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# A history of industry-leading product innovation

Becoming a global leader in any industry takes more than just time. For over 95 years Daikin has shown that it takes industry-leading product innovation and a commitment to excellence in order to climb to the top. This commitment led Daikin to develop the first Variable Refrigerant Volume (*VRV*) system in 1982 and to become a pioneer with our Variable Refrigerant Volume systems.

# Daikin's 3 core technologies

Daikin is an industry-leading HVAC technology company. We develop state-of-the-art technology that provides indoor comfort solutions for our customers. We do this by focusing on 3 core technologies. Our refrigerant control technology provides an efficient and effective way to transport heat. Daikin inverter technology allows us to maximize energy efficiency and heat pump technology provides an effective method for moving refrigerant.

#### Refrigerant control



# The total solution

Daikin's products and controls are designed to provide a flexible, scalable, total indoor comfort solution. We are committed to supporting our customers at every phase of the project to ensure that the highest quality and most cost effective solution is the one that is provided. From project conception throughout the life of an HVAC system, Daikin provides world class products and support. A single source and total solution for your HVAC requirements.









# What is Daikin VRV?

# One flexible package

Daikin *VRV* is a modular, commercially applied air-conditioning and heating system that distributes refrigerant from the outdoor unit to multiple indoor units, providing efficiency, comfortable individual user control and reliability in one flexible package.

Daikin *VRV* systems provide advanced solutions for almost any large residential to commercial application. Available in air-cooled or water-cooled solutions and heat recovery or heat pump systems, *VRV* provides advanced heating and cooling options with individual zone control for both open plan and tightly grouped applications.

VRV is built upon 5 basic "Building Blocks" — Outdoor Unit, Indoor Unit, Piping, Controls, and Ventilation — providing the attributes of a central chilled water system but with the simplicity of a split system. This makes it very

flexible and ideal for energy-efficient and comfortable cooling and heating of many types of buildings such as banks, health care, skilled care, libraries, storage facilities, conference centers, etc.





# Why choose Daikin VRV?

# Inventor and leader in VRV systems since 1982

# Unique products that make the difference

# » In efficiency

- Variable Refrigerant Temperature (VRT) technology leading to excellent energy efficiency
- Indoor units with advanced sensing technology and optional self-cleaning air filter panel

#### » In comfort

- Variable Refrigerant Temperature technology preventing cold droughts
- 16 different indoor unit types and 91 models
- Low sound indoor and outdoor units

#### » In aesthetics

- Stylish cassettes integrated in the ceiling
- Ceiling suspended cassettes
- Elegant wall mounted units

#### » In installation

- Self-addressing control system after installation
- VRV Configurator for simplified and time saving commissioning
- Flexible connection possibilities for indoor and outdoor units
- Service Window allows for easy commissioning and troubleshooting

#### » In control

- intelligent Touch Manager (iTM)— a mini-BMS/Centralized Controller that integrates all units in a cost-efficient system
- Easy integrating with third party BMS
- Dedicated control solutions for applications such as offices, shops, hotels, schools, etc.

# » In system design

- User friendly sizing and selection software
- CAD drawings and Revit\* families
- Comprehensive engineering manuals

# » In after market support

- Nationwide field support organization
- 50+ product training facilities in North America
- Dedicated tech support team

#### » In reliability

- Refrigerant-cooled electronics in outdoor unit
- Extensive testing before new units leave the factory
- Spare parts available in the US
- ISO 9001 compliant manufacturing
- One of the best warranties\*\* in the industry
- \* Visit bim.daikincity.com for Revit families
- \*\* Complete warranty details available from your local Daikin manufacturer's representative or distributor or online at www.daikincomfort.com or www.daikinac.com.



# Which VRV System Offers the Best Solution?

# Air-cooled or water-cooled?

#### Air-cooled

- » Fast and easy to install no need for additional components
- » Low maintenance costs
- » Can be installed both outdoors and indoors
- » Up to 40 tons capacity for one system

#### Components:



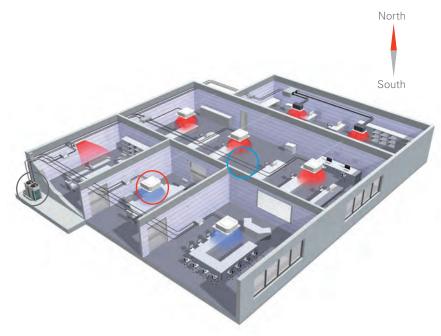




Indoor unit



Refrigerant piping



# Water-cooled

- » Suitable for multi-story and large buildings because of the almost unlimited possibilities of water piping
- » Not affected by outdoor temperature/climate conditions
- » Reduce CO<sub>2</sub> emissions thanks to the possibility of geothermal energy as a renewable energy source

# Components:



Condensing unit



Indoor unit



Refrigerant piping



(Geothermal) water loop



# Heat Recovery or Heat Pump?

# VRV Heat Recovery



Extracted heat from one room/zone delivers heat to another room/zone



Coolin

Heating

» Simultaneous heating AND cooling from one system

» Efficient heating by transferring heat rejected by cooling zones to those requiring heating.

» Maximum individual comfort in all areas

# Components:



Outdoor unit



Indoor unit



3-pipe refrigerant piping



Single and multi Branch Selector boxes: allows the individual switching of indoor units between heating and cooling



# VRV Heat Pump

» For either heating OR cooling operation from one system

# Components:



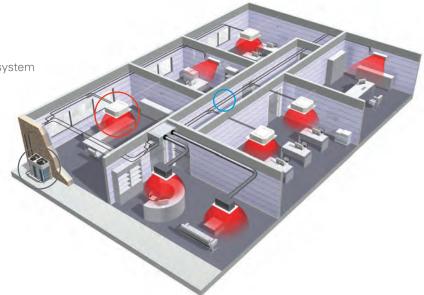
Outdoor unit



Indoor unit



2-pipe refrigerant piping



# Setting the Standards

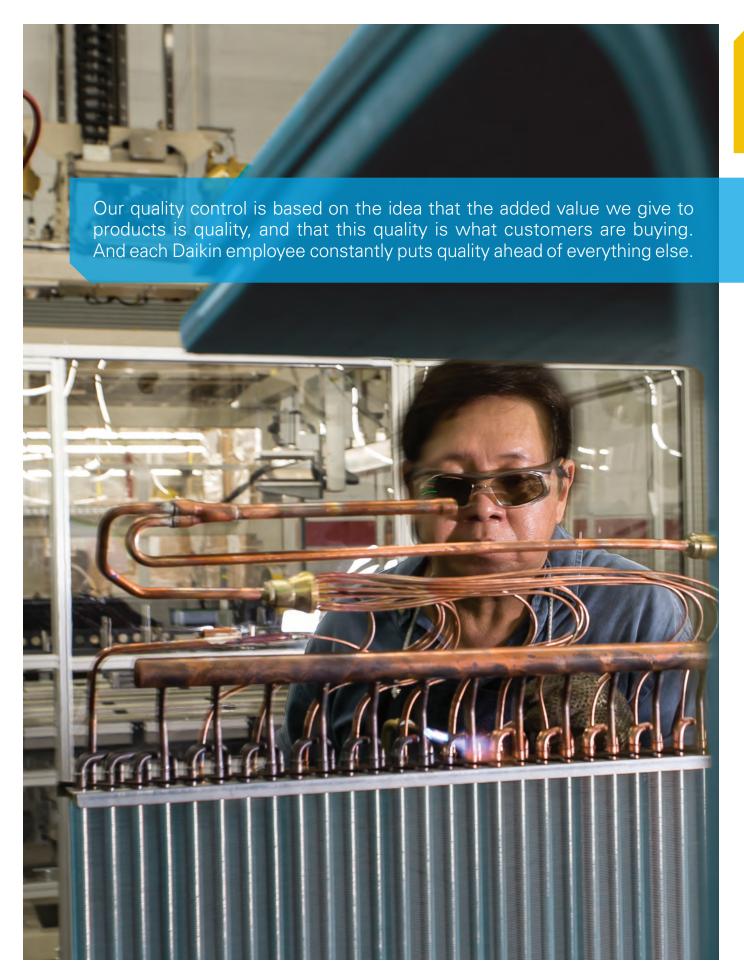
# Over 30 years of VRV history

Daikin invented the first *VRV* system in 1982 and has continued to set standards in the industry and heighten market expectations. Many of the current market expectations are:

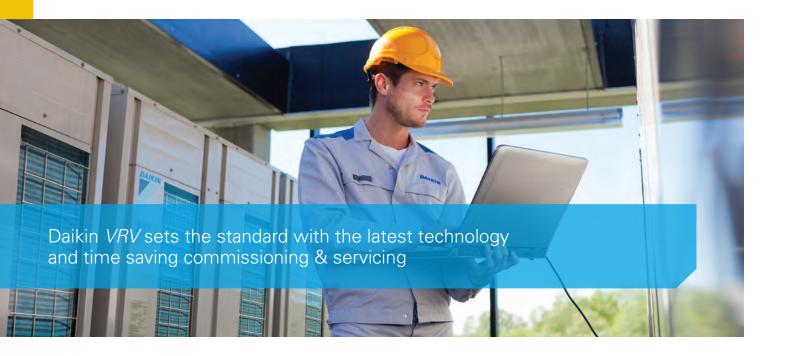
- » Energy efficient inverter compressor
- » Modular system concept
- » Heat recovery function
- » Allow long piping lengths
- » Heating operation down to -13°F ambient air temperature as standard
- » Continuous heat during defrost
- » Auto charge at start up

VRV was invented in 1982 as a result of the oil crisis around the world in the 70's. Energy efficiency laws were passed by the Japanese government. The Japanese government and Daikin worked closely together — they looked at a chiller system; pumps, and air handlers as well and how the pump circulates water and how it uses a lot of power. So, they came up with a concept to use refrigerant instead of water to circulate as a heat transfer medium. The first VRV heat recovery system was launched in 1991 implementing the landmark concept of a heat pump chiller that circulates refrigerant instead of water.





# Setting the Standards, Again



# Optimized life cycle cost

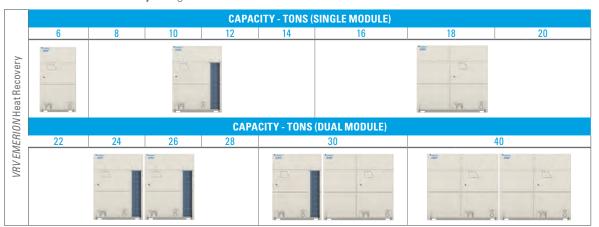
The features of a Daikin *VRV* system, energy efficient and easy to design, install, and maintain, means that it is designed to reduce the total life cycle cost.



# Optimized for the North American market needs

Engineered to be simple, sustainable and connected, *VRV EMERION* delivers an un-matched, all-electric heat recovery solution for new and existing commercial applications that are unique to the needs of North America HVAC Market. In addition, a long list of new and enhanced features and benefits make the new *VRV EMERION* system an ideal choice to address a wide range of commercial applications for owners, architects, engineers, and contractors.

# VRV EMERION Heat Recovery - Single and Dual modules



# Adapting VRV to North American market needs

# Dual Fuel with Gas Furnace Connectivity

Expanding *VRV* into applications that were limited to gas-based heating, *VRV EMERION* and *VRV IV X* are a 3-phase dual-fuel VRF system that integrates with communicating gas furnaces.

VRV EMERION and VRV IV X offer outstanding design flexibility when connected to Daikin communicating 80%, 96%, and 97% AFUE gas furnaces and CXTQ coils. VRV EMERION and VRV IV X enable the use of VRV technology to provide utility cost based heating solutions. With the flexibility to switch between electric heat pump heating and gas heating, operational costs can be optimized to building owner's choice for a heating source.

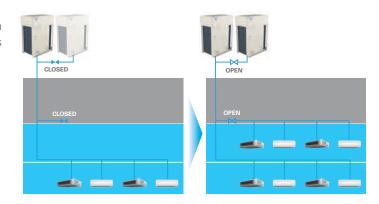
- » Space-saving with ability to connect multiple gas furnaces to one outdoor unit with 14 selectable settings.
- » Customizable changeover temperatures to switch from heat pump to gas heat.
- » Ability to provide system-wide heating independent of outdoor ambient temperature.



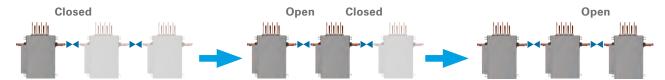
# Phased Installation

VRV EMERION and VRV IV X deliver enhanced design flexibility thanks to its ability to expand with the building's phased construction.

- » Expand the system from a single to a dual module or from dual to triple module without changes to main pipe sizes that are already installed.
- » Help reduce initial capital and design complexity compared to systems that do not offer phased installation.
- » Optimize piping design, branch selector boxes, and indoor units per phase of installation.
- » Synergize well with Flex Branch Selector box to allow additional branch selectors to be added in series without having to branch off from main refrigerant pipe



# Enhance phased installation with Flex Branch Selector Box series connections.



# Setting the Standards, Again (cont.)



# VRT (Variable Refrigerant Temperature) — State-of-the-art energy-saving technology for *VRV*

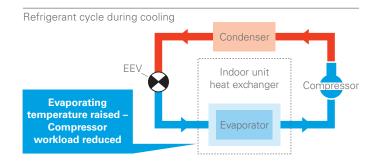
# Adaptive and learning VRT

The Daikin *VRV* systems feature a learning VRT technology. The learning VRT technology, in addition to helping with annual energy efficiency and maintaining comfort, provides features that enable time-based learning to adjust cooling and heating capacities to provide a stable capacity to the indoor units. The feature must be activated through field setting changes.

# How is energy reduced?

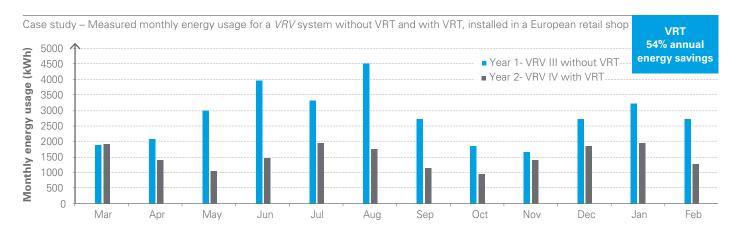
A standard variable refrigerant flow system and previous Daikin *VRV* systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room's heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically



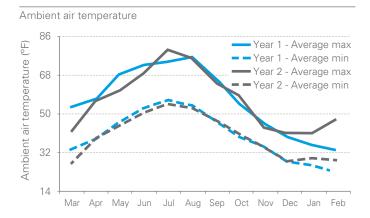
adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin *VRV* system can deliver the optimum efficiency.



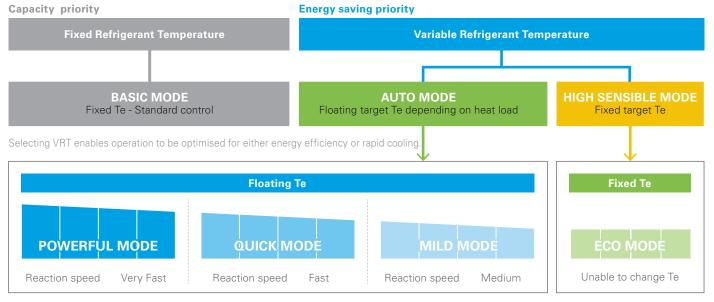
Heating degree days and cooling degree days, that are quantitative indications reflecting demand for energy to heat or cool buildings, were the same for year 1 and year 2.

The basis to determine whether a specific day is a heating degree day or a cooling degree day is the daily average ambient air temperature. Even the average min/max ambient air temperature were very similar for year 1 and year 2.



Fine control to match user preference available through mode selection

Basic mode is selected to maintain optimal comfort. VRT is selected to save energy and prevent excessive cooling.



- » Can boost capacity above 100% if needed.
  - The refrigerant temperature can go lower in cooling than the set minimum.
- » Gives priority to very fast reaction speed.

The refrigerant temperature goes down fast to keep the room setpoint stable.

- » Gives priority to fast reaction speed.
  - The refrigerant temperature goes down fast to keep the room setpoint stable.
- » Gives priority to efficiency.
  - The refrigerant temperature goes down gradually giving priority to the efficiency of the system instead of the reaction speed.



# Setting the Standards, Again (cont.)

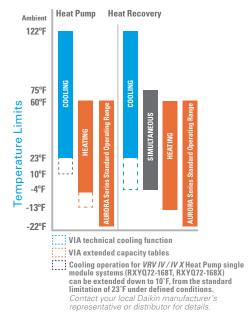
# Extended Operation Range — Heating operation down to -22°F\* outdoor temperature and cooling operation down to -4°F\*

Daikin VRV systems can provide heating inside the building even when the outside air temperature is as low as -22°F\* as standard. This enables enhanced application flexibility and use of the system in colder regions.

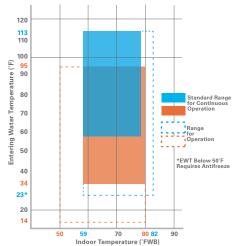
\*varies based on outdoor unit type

Temperature Limits

#### VRV Air-Cooled



#### VRV T-Series Water-Cooled



\*Limited to 27° F (for the PC series)

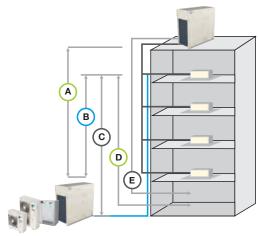
# Piping flexibility — More options for installation location

Daikin VRV provides very flexible piping possibilities. These generous allowances outlined in the figure facilitate an extensive variety of system designs.

- » 100 ft. maximum vertical difference between indoor units provides greater flexibility for riser type piping layouts.
- » Allows for up to 30\* floors to be served from a single VRV System
- » Ideal for mid- to high-rise chiller or WSHP replacement projects

\*varies based on outdoor unit type

# Refrigerant Piping Limitations



	PIPING				AIR-COOLED			WATER	R-COOLED
	MITATIONS .iquid Line Max (ft)	VRV EMERION Heat Recovery	VRV IV / X Heat Pump	VRV IV / X Heat Recovery	VRV AURORA Low Ambient	VRV IV-S (3 Ton)	<i>VRV IV-S</i> (4 & 5 Ton)	VRV IV-W PC-series	VRV T-Series
A	Vertical Drop	164 (361) <sup>1</sup>	164 (295) <sup>1</sup>	164 (295) <sup>1</sup>	164 (295) <sup>1</sup>	98	98	164	164
B	Between IDU	100	100	100 (49) <sup>3</sup>	100 (49) <sup>3</sup>	33	49	49	98
©	Vertical Rise	130 (361) <sup>1</sup>	130 (295) <sup>1</sup>	130 (195) <sup>1</sup>	130 (295) <sup>1</sup>	98	98	130	130
0	From 1st Joint	130 (295) <sup>2</sup>	130 (295) <sup>2</sup>	130 (295) <sup>2</sup>	130 (295) <sup>2</sup>	130	130	130	130 (295) <sup>2</sup>
E	Linear Length	540	540	540	540 164		230	390	540
	Total Network	3280	3280	3280	1640	820	984	980	980

<sup>1</sup> Setting adjustment on condensing unit required.

<sup>2</sup>Application rules apply. Refer to Installation Manual for further details. <sup>3</sup>Possible refrigerant noise can be mitigated (via setting adjustments on ODU) when linear length

# Improved connection ratio flexibility

To properly match outdoor units with indoor units, *VRV* system designers calculate the connection ratio.

If a system has more combined indoor unit capacity index than combined outdoor unit capacity index, the result is a combination ratio that is greater than 100%. If the outdoor unit combined capacity index is higher than the index for indoor units, the combination ratio is less than 100%.

Most Variable refrigerant flow system systems do not allow the combination ratio to be more than 130%. However, due to the advanced design of the Daikin *VRV EMERION* system, the connection ratio is in most cases allowed to be up to 200%.

This generous connection ratio range enables increased flexibility when a *VRV* system is designed.

# Connection ratio 50%-200%\*

Connection ratio =

Total capacity index of the **indoor units** 

Total capacity index of the **outdoor units** 

#### VRV EMERION Connection Ratio

APPLICABLE VRV INDOOR UNITS	FXDQ, FXSQ05-54T, FXMQ_T, FXAQ	OTHER VRV INDOOR UNIT MODELS	FXFQ07T, FXFQ09T FXSQ05T, FXZQ05T
6-14 Ton		200%	180%
16-20 Ton	200%	180%	180%
22-40 Ton		160%	160%

<sup>\*</sup> Connection ratio limitations vary based on outdoor unit and indoor unit models



# Setting the Standards, Again (cont.)

# Advantages of 3-pipe technology

Daikin 3 pipe technology used in heat recovery systems has dedicated refrigerant pipes for suction gas, liquid and discharge gas. The dedicated refrigerant pipes provide smooth and efficient refrigerant flow during all main modes of operation and aid with the heating performance of the system.

In a 2 pipe heat recovery system, where the gas and liquid travel as a mixture in the refrigerant pipes, the condensing temperature needs to be higher in order to separate the mixed gas and refrigerant. The higher condensing temperature that is needed means that the compressor has to work harder. In addition, the disturbed refrigerant flow in large pipes on 2 pipe system results in extra pressure drop which can negatively impact the system capacity and efficiency.

# New Flex Branch Selector for Ultimate Flexibility

Daikin's new *Flex Branch Selector* boxes are engineered to be compact and provide flexibility in design, installation, maintenance, and service. Packed with Daikin's state of the art technology, the new *Flex Branch Selector* boxes fit in tight mechanical spaces (common in ceilings) combined with flexibility in piping configuration and movable E-box makes the new design an ideal choice for commercial buildings.

# Main Features and Benefits

#### **Flexible**

- » Design flexibility with versatile piping configurations of Left or Right or Pass through layouts.
- » Engineered for tight ceiling spaces with a compact height of 9½" and 0"1 service clearance between the slab and the top of the Flex Branch Selector box.
- » Flexibility to expand design with up to 121 ports and 230Mbh¹ down stream capacity by connecting multiple boxes in series.
- » Ability to optimize installed system cost by reducing REFNETs and braze joints in pass thru configuration vs non-pass through configuration.
- » Simple electrical configurations with flexibility to re-position E-box.<sup>2</sup>
- » Ability to mix and match Daikin Flex Branch Selector boxes and standard branch selector box for ultimate design flexibility.
  - <sup>1</sup> Refer to engineering manuals for design rules
  - <sup>2</sup> Feature available for BSF4Q54TAVJU (4-port) model only

# Installation Flexibility

- » Ease of maintenance with access to electronic expansion valve (EEV) heads and motor via side access panel.
- » Eliminate cross piping with refrigerant pipe identification labels.
- » Simple electrical and communication wiring with connection from the front side of E-box.<sup>2</sup>

#### Innovative

- » Daikin's high specification EEV enables precise refrigerant control for high comfort in user spaces and reliable system operation.
- » Hermetically sealed to prevent condensate build up within the unit, eliminating the need for a condensate drain pan and plumbing connections for a simple installation.
- » Low ambient cooling down to  $-4^{\circ}F^{1}$  for simple and integrated system design.

# Design and Installation Flexibility

Engineered to create a truly unique experience for contractors, VRV EMERION offers a new and improved design to provide ease of service and maintenance making way for simplicity in installation.

# •

#### SERVICE WINDOW:

- » For easy access to the multi-functional digital display for easy commissioning and troubleshooting.
- » Coating applied on printed circuit board for protection against dust and water.

# REMOVABLE SECTION 3: MECHANICAL

- » Remove the bottom panel independently from the above two sections to directly access essential mechanical components, such as compressors, for ease of servicing.
- » Dedicated wiring and refrigerant knock-outs designed for quick access and ease of installation.

# DAIRW VRV

# REMOVABLE SECTION 1: AIRFLOW

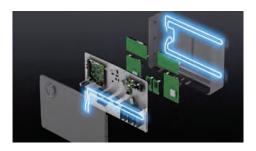
» Quick removal of top panel for outdoor fan servicing.

# CORROSION PROTECTED HEAT EXCHANGER COIL

- » Bottom coils are sectioned off as a dedicated hot gas defrost circuit, which prevents ice accumulation on the bottom of the coil, thus eliminating the need for a base pan heater.
- » VRV EMERION units are shipped with corrosion resistant coil coating as standard — 1000 hr of salt spray testing according to ASTM B117

# REMOVABLE SECTION 2: ELECTRICAL

- » Offers contractors quick access to electrical components.
- » Sealed e-box design with an ingress protection rating of IP55 provides for high dust and moisture protection.
- » Built-in data recorder to store up to 45 minutes of operational data.
- » Electrical box is cooled by a dedicated refrigerant circuit and dissipates heat independent of ambient condition







Dedicated wiring knock-outs available for quick access.

#### **NEW P-TYPE COMPRESSOR**



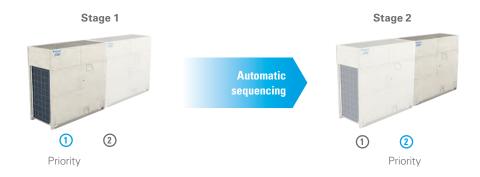
- » Compressor technology with spiral design and injection valves for precise refrigerant control.
- » Strong and efficient motors for optimized compressor performance and part load efficiencies.
- » Back pressure control mechanism optimizes the internal compressor pressure with the intermediate pressure adjusting port according to operating conditions. This stabilizes the orbiting scroll, reducing leaks and scroll friction during operation (compared to compressors without back pressure control).

# Setting the Standards, Again (cont.)

# Outdoor unit sequencing technology

# Automatic sequencing operation

During start-up, Daikin VRV unit sequencing operation will be automatically enabled to ensure balanced operation of each outdoor unit to improve longevity of equipment and stable operation.



# Double backup operation functions responding resiliently to various unexpected situations

# Double backup operation functions

Daikin VRV system boasts double backup operation functions, which can secure the use of air conditioners in this area to the greatest extent by emergently enabling double backup operation functions even if failure occurs in a set of air conditioning equipment. In the event of a failure, emergency operation can be conveniently enabled to allow the remaining system to operate in a limited fashion.

# Unit backup operation function

# If malfunction occurs in an outdoor unit...

Emergency operation can be conveniently set and enabled by the remote controller for indoor unit (for systems composed of two or more outdoor units).

# Compressor backup operation function\*

# If malfunction occurs in a compressor...

Emergency operation can be easily set and enabled by the outdoor unit.

\* Only for modules with 2 compressors









# Setting the Standards, Again (cont.)

# VRV outdoor units assembled in the U.S.A.

The VRV IV is the first variable refrigerant flow system to be Designed, engineered, and assembled in North America. With a state of the art production line, local/in house preparation, tooling, processing and construction of heat exchangers, refrigerant

cycle assemblies, sheet metal parts, electrical box, etc., we can react quickly to changes in the market-place and truly optimize the product for the North American market.



# VRV system configuration and commissioning

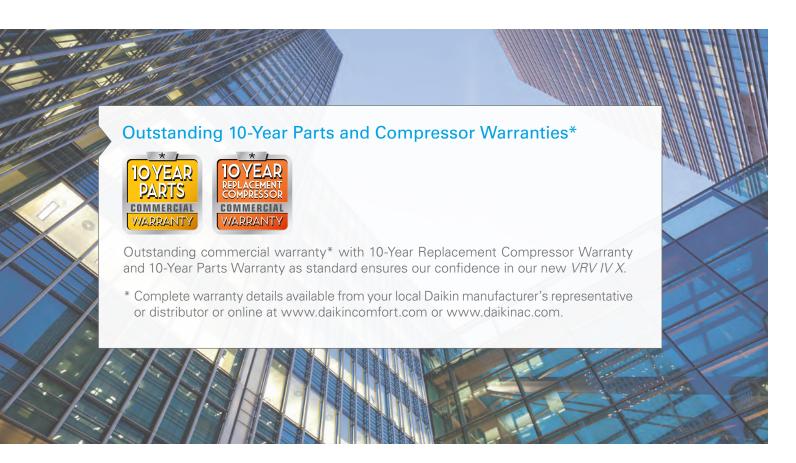
- » The *VRV* configurator is an advanced software solution that allows for easy system configuration and commissioning.
- » Less time is required on the roof configuring the outdoor unit.
- » Multiple systems at different sites can be managed in exactly the same way, thus offering simplified commissioning for key accounts.
- » Initial settings on the outdoor unit can be easily retrieved.



Simplified commissioning

**Retrieve initial system settings** 





# What does a VRV installation mean to you?

# Consulting engineers

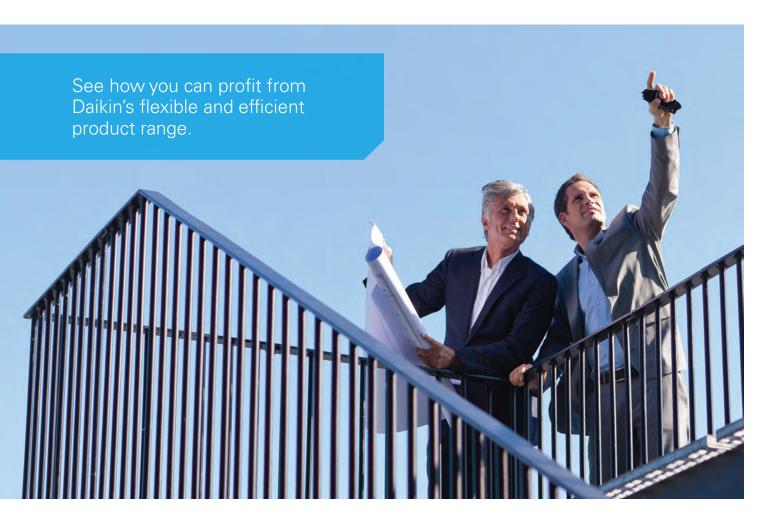
Daikin's *VRV* technology maximizes flexibility and leads the way in customization to match individual building requirements in comfort and energy — all designed to reduce the total life cycle costs.

- » Maximum flexibility to meet customer requirements
- » Advanced software tools assist with system design

# **Building owners**

VRV is the ultimate in customized comfort and intelligent control tailored to your individual needs and used to maximize energy efficiency.

- » Optimized life cycle cost
- » No more cold droughts with variable refrigerant temperature
- » Single point of contact for the design of your climate system
- » Integrated system, combining air conditioning, heating, ventilation, etc., enables optimized system function
- » Multiple systems can be managed in exactly the same way for key accounts
- » Dedicated after-sales service to ensure fast on-site support



#### Installers

Daikin *VRV* sets the standard with state-of-the-art technology and time-saving commissioning and servicing.

- » Simplified and time-saving commissioning with VRV configurator
- » Unique range of single and multi Branch Selector boxes reduce installation time compared to previous generation
- » Wide range of outdoor with single module up to 20 Ton and dual module up to 40 Tons
- » One supplier equals one point of contact
- » Maximum flexibility to meet customer requirements
- » Customized training to maximize expertise
- » Service Window allows for easy commissioning and troubleshooting

#### **Architects**

- » Indoor units with a sleek and sophisticated design
- » Space efficient outdoor units
- » Low sound levels for both indoor and outdoor units
- » Wide range of indoor units to allow installation in most environments



# Vertical Market Applications





#### Our office solution offers:

- » Increased occupant productivity with individual zone control, low sound levels & tight temperature control
- » Optimized energy efficiency
- » Simple maintenance low operational cost
- » Modular system allowing cost effective out-of-hours operation
- » Integrated ventilation solutions allowing high indoor air quality
- » Complete Daikin Building Management System for office building management with *Intelligent Touch Manager (iTM)*
- » Remote monitoring with email alerts
- » Self-cleaning filters yielding operational and maintenance cost savings
- » Intelligent sensors on Round Flow cassette, suspended cassette (optional), and VISTA 2x2 cassette (optional) maximize efficiency using innovative occupancy sensing features.



# VRV for hotels

#### Our hotel solution offers:

- » Energy efficient systems capable of simultaneous heating and cooling.
- » Ultra-quiet guest room solutions discrete and simple to control.
- » Flexible installation options lowering installation complexity, costs and space requirements than most traditional HVAC systems
- » Inverter technology creating the perfect guest room environment by regulating temperature swings and humidity
- » Centralized control with the iTouch Manager improving owner / management operational capabilities
- » Seamless integration & compatibility with industry acclaimed INNCOM™ systems delivering combined benefits in guest operations and experience for both guests and management team





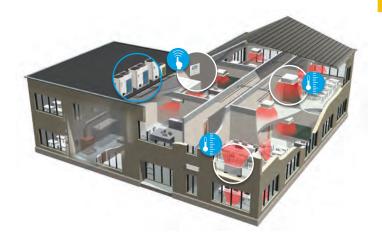




# VRV for retail and restaurants

#### Our retail solutions offer:

- » Scalable project opportunities with modular design
- » Individual zone control for advanced zoning capabilities
- » Enhanced efficiency in retail chain operations and energy usage from Daikin's complete Building Management System with Intelligent Touch Manager (iTM)
- » Centralized building control & autonomy from VRV remote commissioning and management capability
- » 10-Years Parts and Compressor Warranty\*



# VRV for schools

#### Our school solution offers:

- » Flexible, scalable total HVAC solution for school classrooms, common areas and administrative offices
- » Over 12,000 Daikin VRV systems in schools in North America
- » Quiet operating sound levels as low as 28 dB(A)
- » Minimal occupant air temperature variations
- » Advanced zoning capabilities with user-friendly and intuitive controls
- » Modular in design accommodating unique school and classroom spaces
- » Self-cleaning filter option for Round Flow cassette simplifies maintenance process and increases operational efficiency
- » Combined benefits of energy and operations efficiency for both school administrators and maintenance staff
- » 10-Year Parts and Compressor Warranty\*

<sup>\*</sup> Complete warranty details available from your local Daikin manufacturer's representative or distributor or online at www.daikincomfort.com or www.daikinac.com.







# Product Portfolio



# **Outdoor Units**

# **IRV** emeron

# VRV EMERION Heat Recovery

Simple. Sustainable. Connected.

- » Simple and Stylish design with expanded line up with single-module units from 6 – 20 T and dual-modules up to 40 T
- » High energy efficiency with IEERs up to 30.0 delivers up to 30% efficiency increase compared to previous *VRV* systems
- » Sealed e-box design with an ingress protection rating of IP55 provides for high dust and moisture protection
- » Simplified diagnosis with built-in data recorder which stores up to 45 minutes of operational data.
- » Engineered for ease of installation and service with three-segment panel design. Design flexibility to enlarge system from single to a dual-module without changes to installed main pipe sizes for phased installation or tenant fit-out buildings
- » Heating down to -13°F as standard and high heating capacities at 17°F make it an ideal choice for all-electric heat pump solutions
- » Continuous heating during defrost capability with single module (16 T – 20 T) and all dual module systems
- » Hot gas defrost circuit allows for installation without base pan heater.

# YRY IV X

# VRV IV X Heat Pump / Heat Recovery

Industry's first 3-phase variable refrigerant flow system to integrate with communicating gas furnaces

- » Enhanced design flexibility by allowing for phased installations with predefined pipe sizes and design rules
- » Service window provides ease of access to the multi-functional display without removing the main electrical panel. The built-in multi-functional display is utilized for commissioning and maintenance and quickly converts to digital gauges to provide refrigerant pressure and temperatures.
- » Dual-fuel ready with connectivity to Daikin communicating gas furnace or all-electric heat pump heating for optimized operational costs based on utility rates
- » Field performable intermittent outdoor fan operation to help minimize snow accumulation on fan blades when the system is in thermal off.
- » Total comfort solution for heating, cooling, ventilation, and controls.
- » Outstanding warranty\* with 10-Year Compressor and Parts Limited Warranty as standard
- » Fully integrated solution with high efficiency (IEER up to 27.80 on Heat Recovery models and IEER up to 27.30 for Heat Pump)
- Multi module heat recovery systems only for continuous heating during defrost Conditions/rules apply. Refer to Installation and Engineering Manual for further details.
- \* Complete warranty details available from your local Daikin manufacturer's representative or distributor or online at www.daikincomfort.com or www.daikinac.com
- \*\* Varies based on condensing unit model selected



# VRV AURORA Heat Pump / Heat Recovery

- » Variable refrigerant flow system Industry's first air-cooled system that delivers heating down to -22°F (-30°C) as standard
- » Hot gas base pan circuit allows installation without an additional drain pan heater
- » Designed to provide continuous heating during defrost and oil return¹
- » Engineered with Daikin vapor injection compressor for optimized part load efficiencies



#### Air-Cooled

VRV IV-S systems are equipped with built-in intelligence which provide independent zoning control with maximum flexibility and energy savings. With the ability to connect up to ten indoor units to one outdoor unit, the space-saving VRV IV-S system is ideal for most light commercial and residential applications.



- » Available in 3, 4 and 5 ton modules
- » Increase in efficiency up to 18 SEER & 10.5+ HSPF
- » Year round comfort and energy savings delivered by VRT technology
- » Broader diversity with ability to connect up to 9 indoor units
- » Space saving design with under 39" height.\*\* Over 25% smaller as compared to VRV III-S
- » Easier to install with over 39% weight reduction vs VRV III-S
- » Low sound levels for comfort
- » Higher reliability with Daikin's swing compressor
- » Dependable operation in extreme ambient conditions up to 122°F
- » Added safety and peace of mind with optional auto changeover to auxiliary heat
- » Backed by a best in class 10-Year Parts Limited Warranty\*



# VRV T-Series Water-Cooled Condensing Unit Heat Pump / Heat Recovery

- » Flexible System design with increased diversity up to  $150\%^{\dagger}$
- » Can be applied to both geothermal and boiler/tower applications as standard with condenser water inlet temperature as low as 14°F† in heating and 23°F† in cooling is possible
- » Triple-stack capable to deliver up to 36 tons in just under 11.5 feet ceiling height thanks to the compact design
- » Engineered with heat rejection cancellation technology<sup>†</sup> to eliminate mechanical room conditioning requirements
- » 2-9V variable water flow control logic<sup>†</sup> as standard to increase waterside system operational efficiencies
- » Drop-down switch box for easy service to key components
- » Field selectable top or front refrigerant connections for flexible and easy installation



ТҮРЕ	MODEL	FEATURES	PRODUCT NAME	2	1	5	6	Ω	10	12					ON 22		26	2Ω	30	22	3/1	36	20	40
		» New Simple and Stylish design with expanded line up with single-module units from 6 – 20 T and dual-modules up to 40 T.	REYQ_A  YRY emerion	3	4	ð	•	0	10	IZ	14	10	10	20	22	24	20	26	30	<u>3</u> 2	54	20	30	<del>4</del> U
		». High energy efficiency with IEERs up to 30.0 delivers up to 30% efficiency increase compared to previous VRV systems						•	•	•	•													
	ery	» Sealed e-box design with an ingress protection rating of IP55 provides for high dust and moisture protection.																						
	at Recov	» Simplified diagnosis with built-in data recorder which stores up to 45 minutes of operational data.										•	•	•										
	10N Hea	» Engineered for ease of installation and service with three-segment panel design.																						
	VRV EMERION Heat Recovery	» Heating down to -13°F as standard and high heating capacities at 17°F make it an ideal choice for all-electric heat pump solutions													_	•								
		» Continuous heating during defrost capability with single module (16 T – 20 T) and all dual module systems																	•					
		» Hot gas defrost circuit allows for installation without base pan heater.																		•	•	•	•	•
		» Industry's first 3-phase variable refrigerant flow	RXYQ_X, REYQ_X																					
Air-Cooled	Recovery	system to integrate with communicating gas furnaces  » Enhanced design flexibility by allowing for phased	YRY IV X				•	•	•	•	•													
A	& Heat	installations with predefined pipe sizes and design rules																						
	at Pump	» VRV IV X service window provides ease of access to the multi-functional display without removing the main electrical panel. The built-in multi-														•								
	VRV IV X Heat Pump & Heat Recovery	functional display is utilized for commissioning and maintenance and quickly converts to digital gauges to provide refrigerant pressure and temperatures.																	•	•	•	•	•	
	dwr	» Variable refrigerant flow system Industry's first air-cooled system that delivers heating down to -22°F (-30°C) as standard	RXLQ_T, RELQ_T																					
	RA Heat Pump t Recovery	» Hot gas base pan circuit allows installation without an additional drain pan heater	L,																					
	<i>VRV AUROR</i> / & Heat R	» Designed to provide continuous heating during defrost and oil return <sup>1</sup>																						
	VRV.	» Engineered with Daikin vapor injection compressor for optimized part load efficiencies ¹ Multi module heat recovery systems only for continuous heating during defrost								•		•												
	VRV IV-S Heat Pump	» Single phase technology » Space saving solution without	RXTO_TB  ***********************************																					
	<i>VRV</i> Heat	compromising on efficiency  » For residential and light commercial applications	9	-	-																			
	÷	» Ideal for high rise buildings, using water as heat source	RWEQ_T																					
	VRV T-Series Water-Cooled Condensing Unit Heat Recovery / Heat Pump	» Enables use of geothermal energy as a renewable energy source	There were form to see				**	•	-	-														
pə	d Conder eat Pum	» Flexible System design with increased diversity up to 150%***																						
Water-Cooled	r-Coolec very / He	» Triple-stack capable to deliver up to 36 tons in just under 11.5 feet ceiling height thanks to the														•								
Wa:	es Wate at Reco	compact design  » Engineered with heat rejection cancellation  technology *** to eliminate mechanical room	** * ** * **																					
	V T-Serie He	technology*** to eliminate mechanical room conditioning requirements  » 2-9V variable water flow control logic***															•	•	•	•	•	•		
** C +		as standard to increase waterside system operational efficiencies  C-Series model. Some features may not be available for this model	*** Conditions / rules conty Def	or to	Incto	llotis	n or	d En	gina	ring	Mar	uol f-	or fu-	thor	dota:	lc								

<sup>\*\* 6-</sup>ton model is a PC-Series model. Some features may not be available for this model. \*\*\* Conditions/rules apply. Refer to Installation and Engineering Manual for further detail



# Product Portfolio (cont.)

# **Indoor Units**

ТҮРЕ	MODEL	FEATURES	PRODUCT NAME
	HSP DC Concealed Ducted Unit	» Energy efficient due to the DC fan motor  » Ideal to use together with the optional Daikin Zoning Kit, DZK  » Enhanced indoor air quality and LEED® ready with MERV 13 filter options  » Flexible ductwork design with ESP capabilities up to 0.8" In. Wg  » Low profile height of only 9-11/16"	FXMQ_TBVJU
	MSP Concealed Ducted Unit	» Powerful static pressure up to 0.6" In. Wg     » Low profile height of only 9-11/16"      » Auto fan speed control optimizes energy use, occupant comfort, and sound levels     » Factory shipped for rear air inlet — field convertible to bottom air inlet     » Integral condensate pump with more than 25" of lift	FXSQ_TBVJU
Ducted	LSP Slim Concealed Ducted Unit	<ul> <li>» Slim height, at only 7- ½"</li> <li>» Washable filter included</li> <li>» Low sound level</li> <li>» Factory shipped for rear air inlet —field convertible to bottom air inlet</li> <li>» Condensate pump with vertical lift of up to 21-½" included as standard</li> </ul>	FXDQ_MVJU
	Multi-Position Air Handling Unit	» Ideal replacement for fan coils, geothermal heat pumps or traditional splits systems     » Upflow and horizontal right installation is permitted     » ECM fan motor provides energy efficiency     » Wide line up of electric heat (field installed) options from 3kW to 20kW	FXTQ_TAVJU
	HSP High Capacity Concealed Ducted Unit	Design flexibility with a capacity range up to 96 MBH     Improved ductwork and filtration flexibility with high CFM and ESP capabilities     Low profile design of less than 19" high to reduce required installation space     Ideal for Hotels, Schools, Retail	FXMQ_MVJU
	Low Temperature (LT) Hydrobox	» High-efficiency all-electric heat pump hot and chilled water solution for VRV     » Direct control over the leaving water temperature for a wide leaving water temperature range down to 50°F in cooling and up to 113°F in heating     » Ships with factory-installed hydronic accessories	HXY48TAVJU
	Round Flow Sensing Cassette	» True 360° Airflow and three room sensors enables optimized occupant comfort     » Energy efficient with DC fan motor and auto-logic that adjusts fan speed     » Optional self-cleaning filter panel to further increase efficiency and reduce maintenance     » Increased indoor air quality with high efficiency filter options and ventilation connection kit     » Very flexible with 18 different possible airflow patterns	FXFQ_TVJU
	4-Way Ceiling-Suspended Cassette	» Very low unit height of under 8"     » Optional Sensor Kit enables input from three room sensors     » Stylish unit blends easily with any interior     » Individual air louver control	FXUQ_PAVJU
90	VISTA2x2 Cassette for VRV Systems	Fits in a standard 2' x 2' ceiling grid with no overlap of adjacent tiles     Features a low profile decoration panel design measuring only 5/16" deep     Space-saving depth of units requires only 11.75" of ceiling space     Easy-to-clean grille, washable long-life filter     Optional space and presence sensor accessory enhances energy efficiency and occupant comfort	FXZQ_TBVJU
Duct-Free	Ceiling-Mounted Cassette (Single flow)	<ul> <li>Only 7 - ½" in height and a width of 18-½" making it possible to use this style of indoor unit in the tightest of spaces</li> <li>The unit is equipped with both horizontal and vertical louvers to optimize the airflow and throw to suite your room design</li> <li>The indoor unit can be set to 5 predetermined fan speeds which allows for optimum and comfortable airflow</li> <li>Factory installed condensate pump with a lift capacity of up to 33-½" (measured from the bottom of the unit)</li> </ul>	FXEQ_PVJU
	Ceiling-Suspended Unit	» One of our slimmest indoor units, less than 8"      » Wide air discharge outlet distributes a comfortable airflow throughout the entire space      » Innovative stream fan technology keeps sound pressure levels low      » Smooth flat louver design makes cleaning simple      » Long-life filter is standard	FXHQ_MVJU
	Wall-Mounted Unit	» Auto-swing mechanism ensures efficient air distribution via louvers      » Wide air discharge outlet distributes a comfortable airflow throughout the entire space      » Horizontal louvers and front panel can be easily removed for cleaning      » Drain pipe can be easily hidden from sight      » Compact and stylish design	FXAQ_PVJU
	Floor-Standing Unit	» Ideal for installation beneath a window     » Unit requires minimal installation space     » Fitted with a washable long-life filter     » Remote-control options available     » Space-saving unit can be freestanding or wall-mounted	FXLQ_MVJU9, FXNQ_MVJU9

							CAP	ACITY							
MBH TON	5.8	7.5	9.5	12	15 1.25	18 1.5	24	30 2.5	36	42	48	54 4.5	60	72 6	96
TUN	0.5	0.6	0.75	1	1.25	1.5	2	Z.5	3	3.5	4	4.5	5	b	8
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# Product Portfolio (cont.)

# Accessories

# **Branch Selector Boxes**

Providing flexibility and minimizing mechanical and electrical installation costs, Daikin's branch selector boxes that are used in Heat Recovery systems, are ideal for spaces that require individual heating and cooling control.

		SINGLE-PORT BRANCH SELECTOR			MULTI-PORT E	BRANCH SELECTOR		
				Hite	444	ATTHUR!	1 图	WARK.
	MODELS	BSQ36TVJ BSQ60TVJ BSQ96TVJ	BS4Q54TVJ	BSF4Q54TVJ	BSF6Q54TVJ	BSF8Q54TVJ	BS10Q54TVJ	BS12Q54TVJ
Г	PORTS	1		4	6	8	10	12

# REFNET

*REFNET* joints distribute correct flow of refrigerant in every branch of the piping network. Sourced locally and complies to ASTM E-84 Class A low flame and smoke spread index requirements.



**REFNET** Joint



# VRV IV X, VRV IV / VRV AURORA Heat Pump

OPTION	AL ACCESSORIES	RXYQ72 - 96T RXYQ72 - 96X RXLQ72 - 96T	RXYQ120-168T RXYQ120-168X RXLQ120T	RXYQ192-336T RXYQ192-336X RXLQ144-240T	RXYQ360-408T RXYQ360-408X RXYQ360-480MBH		
Distributed piping	REFNET Header	KHRP26M22H (max. 4 branch) KHRP26M33H (max. 8 branch)	KHRP26M22H (max. 4 branch) KHRP26M33H (max. 8 branch) KHRP26M72H (max. 8 branch)	KHRP26M KHRP26M	22H (max. 4 branch) 33H (max. 8 branch) 72H (max. 8 branch) 73HU (max. 8 branch)		
REFNET Joint		KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26M72TU	KHRP26A22T, KHRP26A33T, KHRP26M72TU, KHRP26M73TU			
Outdoor unit multi co	onnection piping kit		_	BHFP22P100U	BHFP22P151U		

# VRV EMERION / VRV IV X / VRV IV / VRV AURORA Heat Recovery

OPTION	IAL ACCESSORIES	REYQ72 - 96A REYQ72 - 96X RELQ72 - 96T	REYQ120-168A REYQ120-168X REYQ120-168T	REYQ192-480A REYQ192-336X REYQ192-336T	REYQ360-456X REYQ360-456T			
Distributed	REFNET header	KHRP25M33H (max. 8 branch)	KHRP25M33H (max. 8 branch) KHRP25M72H (max. 8 branch)	KHRP25M33H (max. 8 branch) KHRP25M72H (max. 8 branch) KHRP25M73HU (max. 8 branch)				
piping	REFNET joint KHRP25A22T KHRP25A33T		KHRP25A22T KHRP25A33T KHRP25M72TU	KHRP25A33T KHRP25M				
	connection piping kit		_	BHFP26P100U <sup>1</sup>	BHFP26P151U			

<sup>&</sup>lt;sup>1</sup>Reducer pipe kit KHFP26P100UA is required for REYQ264-480A models

#### VRV T-Series Water-Cooled Heat Pump / Heat Recovery and VRV IV-S

			VRI	/ T-SERIES WATER-	COOLED		VRV IV-S
UNIT MO NUMB		RWEQ96T	RWEQ120T	RWEQ144T	RWEQ192 - 288T	RWEQ312 - 432T	RXTQ36TAVJ9A RXTQ48TAVJUA RXTQ60TAVJUA
REFNET	K HBP/bl//33H (May 8 branch)				1	, KHRP26M33H (Max 8 branch) KHRP26M73HU (Max 8 branch)	KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch
Header	Heat Recovery	KHRP25M33H (Max 8 branch)	KHRP25M33H (M KHRP25M72H (M		KHRP25M33H (Max 8 branch) KHRP25M73HL	_	
REFNET	Heat Pump	KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A3	33T, KHRP26M72TU	KHRP26A22T, KHRP26A33T, K	HRP26M72TU, KHRP26M73TU	KHRP26A22T
Joint	Heat Recovery	KHRP25A22T, KHRP25A33T	KHRP25A22T, KHRP25A3	KHRP25A22T, KHRP25A33T, KHRP25M72TU		HRP25M72TU, KHRP25M73TU	_
Outdoor Unit Multi Piping	Heat Pump		_		BHFP22T84U	BHFP22T126U	_
Connection Kit	Heat Recovery		_		BHFP26T84U	BHFP26T126U	_

# **Hail Guard Kits**

The optional hail guard kit for *VRV* 3-phase enables optimal airflow for efficient heat transfer while providing condenser coil protection from hail damage in severe climates. Each hail guard kit, that is field installed, consists of 4 panels (Right, Left, Front and Back).

# Hail Guard Kit for VRV IV X, VRV IV, and VRV AURORA

		QUANTITY	OF KITS PER	ODU MODELS		PANEL DIMENSIONS (H X W X D)						
VRV IV	R_YQ72T	R_YQ96-168T	R_YQ192T	R_YQ216-336T	R_YQ360-456T							
VRV AURORA		R_LQ72-120T		R_LQ144-240T		Dight Donal	Left Panel	Front Panel	Front Panel			
VRV IV X HP	RXYQ72X	RXYQ96-168X	RXYQ192X	RXYQ216-336X	RXYQ360-456X	Right Panel	Leit Panei	FIUILFallel	FrontPaner			
VRV IV X HR		REYQ72-168X		REYQ192-336X	REYQ360-408X							
VRV4HGS-K1	1		1			4E7/ " v 2C" v 4"	45 <sup>7</sup> / <sub>8</sub> " x 12 <sup>7</sup> / <sub>8</sub> " x 4"	45 <sup>7</sup> / <sub>8</sub> " x 13 <sup>1</sup> / <sub>4</sub> " x 4"	45 <sup>7</sup> / <sub>8</sub> " x 32 <sup>5</sup> / <sub>8</sub> " x 4"			
VRV4HGL-K1		1	1	2	3	45 <sup>7</sup> / <sub>8</sub> " x 26" x 4"	45'/8 X IZ'/8 X 4	45 <sup>7</sup> / <sub>8</sub> " x 24" x 4"	45 <sup>7</sup> / <sub>8</sub> " x 44 <sup>3</sup> / <sub>4</sub> " x 4"			

<sup>\*</sup>Refer engineering and installation manual for more detail.

#### Hail Guard Kit for VRV EMERION

	QUANT	TITY OF KITS PER OD	U MODELS
VRV EMERION	REYQ72A	REYQ96-168A	REYQ192-240A
VRV6HGM-K1	1		
VRV6HGL-K1		1	
VRV6HGXL-K1			1

# Snow/Wind Hood Kits

The optional Snow/Wind Hood Kits mount over the heat exchanger coil to protect from snow build-up and wind in cold climates. The Hoods install easily to condensing units using existing screw taps with no modification required. Different kits can be ordered for different job requirements.

	KIT PART NUMBER	CHASSIS SIZE	KIT INCL	USION		
XA	VRV-SHS-FR	Small Chassis	Front Hood	Rear Hood Rear Hood		
5.8	VRV-SHL-FR	Large Chassis	Front Hood			
55	VRV-SH-RL	Both Chassis	Right Hood	Left Hood		
₹ <b>₹</b>	VRV-SHS-T	Small Chassis	Top Ho	boc		
	VRV-SHL-T	Large Chassis	Top Hood			



	KIT PART NUMBER	CHASSIS SIZE	KIT INC	LUSION			
2	VRV6-SHM-FR	Medium Chassis	Front Hood	Rear Hood			
VRVEMERIO	VRV6-SHL-FR	Large Chassis Front Hood		Rear Hood			
当	VRV6-SHXL-FR	X-Large Chassis	Front Hood	Rear Hood			
2	VRV6-SH-RL	All Chassis	Right Hood	Left Hood			
₩	VRV6-SHM-T	Top H		lood			
	VRV6-SHL-T	Large Chassis	Top H	lood			
	VRV6-SHXL-T	X-Large Chassis	Top Hood				

		NUMBER O	KITS REQU	RIED FO	R EACH	OUTDO	OR SYS	TEM							
	MODEL TYPE		NUMBER OF MODULES	VRV6-SHM-FR	VRV6-SHL-FR	VRV6-SHXL-FR	VRV6-SHM-T	VRV6-SHL-T	VRV6-SHXL-T	VRV6-SH-RL	VRV-SHS-FR	VRV-SHL-FR	VRV-SH-RL	VRV-SHS-T	VRV-SHL-T
	208-230V /460V	REYQ72A	Single	1			1			1					
		REYQ96-168A	Single		1			1		1					
VRV EMERION		REYQ196-240A	Single			1			1	1					
VIIV LIVILIIIOIV		REY0264-336A	Dual		2			2		1					
		REYQ360A	Dual		1	1		1	1	1					
		REYQ384-480A	Dual			2			2	1					
VRV AURORA	208-230V /460V / 575V	R_LQ72-120T	Single									1	1		1
VIIV AUTIUTIA		R_LQ144-240T	Dual									2	1		2
		R_YQ72T	Single								1		1	1	
VRV IV		R_YQ96-168T	Single									1	1		1
Heat Recovery	208-230V / 460V	R_YQ192T	Dual								1	1	1	1	1
Heat Pump		R_YQ216-336T	Dual									2	1		2
		R_YQ360-456T*	Triple									3	1		3
VRV IV X	208-230V / 460V	REYQ72-168X	Single									1	1		1
Heat Recovery		REYQ192-336X	Dual									2	1		2
TIEGI TIEGOVETY		REYQ360-456X	Triple									3	1		3
	208-230V / 460V	RXYQ72X	Single								1		1	1	
VRV IV X		RXYQ96-168X	Single									1	1		1
Heat Pump		RXYQ192X	Dual								1	1	1	1	1
ricatrump		RXYQ216-336X	Dual									2	1		2
		RXYQ360-408X	Triple									3	1		3

<sup>\*</sup>Up to 408 on Heat Pump

# Product Portfolio (cont.)

# Accessories (continued)

# DZK (Daikin Zoning Kit)



The optional DZK increases the flexibility of the Daikin *VRV* and *SkyAir* systems in both residential and commercial applications by adding a Zoning Box to an indoor unit fan coil, allowing several separate ducts to supply air to different individually controlled zones. The DZK BACnet™ HUB module will work with any *BACnet*/IP & *BACnet*/MSTP compatible Building Management System. The DZK BACnet Hub is now Wi-Fi capable and provides remote access via the Airzone Cloud app or device web browser. (DZK-*BACnet*-HUB4)

DZK Zoning Box for FXMQ and FXSQ indoor units



Daikin *BACnet* HUB4 Module



DZK Wired, Wireless, and Wireless Lite thermostat options



#### Air treatment systems

Daikin's Outside Air Processing Unit can combine fresh air treatment and air conditioning, supplied from a single system.

The compact Energy Recovery Ventilator is designed to improve indoor air quality while reducing the overall HVAC system power

consumption. This is achieved by providing fresh outside air and recovering waste heat from exhaust air leaving the conditioned space.

		OUTSIDE AIR PROCESSING UNIT, FXMQ_MFVJU	ENERGY RECOVERY VENTILATOR, VAM-GVJU			
			00			
VRV Refrigerant Piping		Connectable	Not connectable			
VRV Control Wiring		Connectable				
High Efficiency Filter (MERV 8 and MERV 13)		Option	Not available			
Ventilation System		Air supply	Air supply and Air exhaust			
Power Supply	V/ph/Hz	208-230/1/60				
Airflow Rate	CFM	635 988 1236	305/300/170 470/470/390 600/600/500 1200/1200/930			



The configurable display and operation buttons on the *Navigation* Remote Controller will provide as much or as little control as the installed *VRV* system requires.



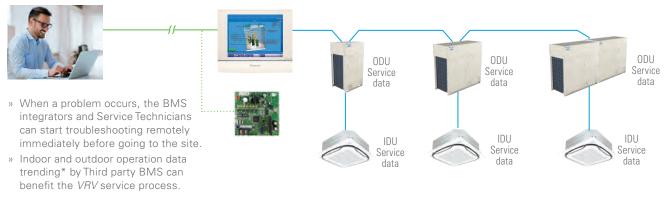
# Product Portfolio (cont.)

# Accessories (continued)

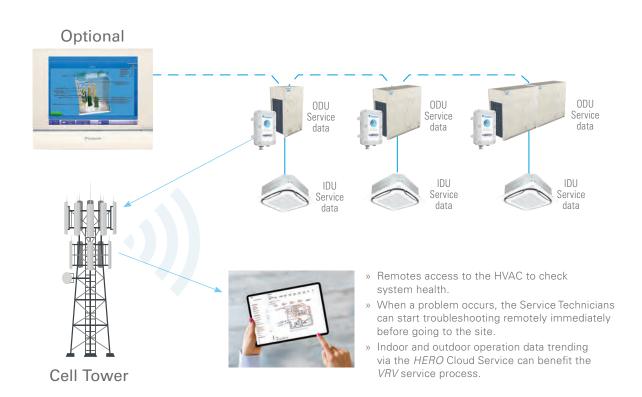
Network solutions

ТҮРЕ		iTM	LonWorks*	BACnet™	ModBus®	BACnet™ MSTP Adaptor	DKN Plus Interface
		50000 P. 1	Process Hill				ORZONE *
0	Layout screen	•					
Screen	Touch screen						
Integration	Mini BMS for heating, air conditioning applied systems and refrigeration units ( <i>BACnet</i> and WAGO®)	•					
	3rd party equipment integration	•					Tstat & Aux Heater
	Basic control functions: on/off, set point setting, air flow settings, operation mode	•	•	•	•	•	•
	Temperature limitation	•					
	Setback						
Control	Automatic changeover						•
	Weekly schedule and special day pattern						•
	Timer extension	_	_				_
	Forced off Interlock	_	-	•			•
	Basic control functions: ON/OFF status, operation mode, set point temp.	•	•			•	•
	Filter status		•	•	•	•	
Monitorina	Malfunction code	•	•	•	•		•
Iviointoinig	History (Control, malfunction, settings, status)						
	Data storage (indoor and outdoor unit operation data)	_					
	Visualization	•					
	PPD (Power Proportional Distribution)						
	Web access and control	Web Browser					Wi-Fi App Access
0 .:	BACnet Client	•					
Options	BACnet Server	•		•		•	•
	D-Net Service						
	Operation Data						
Other	Maximum number of indoor unit groups	8 x 64	64	4 x 64	16	32	1

# Powerful Service Tool with Indoor and Outdoor Unit Operation Data Points



\*BMS programming needed



# Product Portfolio (cont.)

### Daikin VRV controls

Optimized for VRV technology, Daikin controls provide highly scalable solutions for all applications and budgets. VRV controls offer solutions to meet your project controls needs from individual zone control with local controllers to centrally controlling the building with Centralized Controllers and/or interfacing with Building Management Systems (BMS) for comfort control in an easily managed and operated system.

PROJECT REQUIREMENTS				DAII	KIN <i>VRV</i> CONTROLS							
	Madoka Remote Controller	DKN Cloud Wi-Fi Adaptor	Navigation Remote Controller	72* Daikin <i>One</i> + Smart Thermostat	Adaptive Touch Controller	intelligent Touch Manager	BACnet™ Interface	LonWorks* Interface	Modbus® Interface	BACnet™ MSTP Adaptor	Simple Edge	
Individual zone control		-	•									
Independent cool and heat set-points	-	•	-	•	•	-				•		
Individual zone control with weekly programmable scheduling		•	•	•	•	•	•	•	•	•		
Basi On/Off control for indoor units	-	•	•	•	•	-	•	•	•			
Advanced multi-zone control of small to medium size projects						-			•			
Advanced multi-zone control of large commercial projects						-		-				
Advanced multi-zone control with scheduling logic and calendar						•						
Automatic cooling/heating changeover for heat pump systems	•	-	•	-	-	•						
Single input batch shutdown of all connected air handlers						-		•	•	•		
Web browser control and monitoring						-	•	•	•	•	•	
E-mail notification of system alarms and equipment malfunctions						•	•	•	•	•		
Multiple tenant power billing for shared condenser applications												
Temperature set-point range restrictions	•		•	•	-	•	•	•	•	•		
Graphical user interface with floor plan layout						•	•	•	•	•		
Start/stop control of ancillary building systems*								•	•	•		
Daikin VRV integration with BACnet based automation systems					•	•	•			•		
Daikin VRV integration with LonWorks based automation systems								•				
Daikin VRV integration with Modbus based automation systems		-							-			
Wi-Fi option remote access through smartphone app		•										
View service data on a graphical view											•	
Trend and Plot (Current and Past Data)											•	
Adjust outdoor unit field settings remotely											•	
Multisite Monitoring											•	
Automated Reports												

<sup>\*</sup> Requires WAGO® IO module (for use with iTM only).

<sup>■</sup> Native application or feature for this device. ■ Dependent upon capabilities of the third party energy management system



# Indoor Units



As many as 64 separate indoor units can be connected to a refrigerant circuit with a single outdoor unit of up to 38 tons capacity. The Daikin *VRV* indoor unit range is one of the widest on the market, offering no less than 16 stylish and elegant indoor units types in 91 different models — all designed to maximize comfort, minimize operating sound and simplify installation and servicing.

Indoor unit models include *Round Flow* ceiling mounted cassette, ceiling concealed ducted, ceiling suspended, wall mounted and floor standing models.

The Round Flow sensing cassette now includes an optional variable refrigerant flow system industry first self-cleaning filter, which automatically cleans itself daily

(user adjustable), leading to yearly energy savings of up to 50%. Dust from the filter is collected in the unit for easy and quick removal (when indicated) with a standard vacuum cleaner.

Designed to fit rooms of any size and shape, Daikin indoor units are also user friendly, ultra reliable, easy to control and quiet in operation.

							C.	APACIT	Υ								
	INDOOR UNIT TYPE	MBH TONS	5.8 0.5	7.5 0.6	09 0.75	12 1	15 1.25	18 1.5	24	30 2.5	36 3	42 3.5	48 4	54 4.5	60 5	72 6	96 8
	FXMQ_TBVJU HSP DC Concealed Ducted Unit						€ OSA	A Wall	€ E SA	A SA	A SA		To SA	A SA			
	FXSQ_TBVJU MSP Concealed Ducted Unit		€ SA	SA OSA		€ SA	***	A € d		€ OSA	To SA		€ OSA	A €			
DUCTED	FXDQ_MVJU LSP Slim Concealed Ducted Unit			A SA	****	¥d Sa		****	¥d Sa								
	FXTO_TAVJU Multi-Position Air Handling Unit (Upflow, Downflow, Horizontal Left and Horizontal Right)	*				OSA OSA		OSA OSA	OSA OSA	OSA OSA	OSA OSA	OSA OSA	OSA OSA	OSA OSA	OSA OSA		
	FXMQ_MVJU HSP High Capacity Concealed Ducted Unit																OSA OSA
	HXY48TAVJU Low Temperature (LT) Hydrobox												_				
	FXFQ_TVJU  Round Flow Sensing Cassette, Ceiling Mounted			₹ø	***	₩ W	***	***	₩ W	€	₩ SSA		€				
	FXUQ_PAVJU 4-Way Blow Ceiling-Suspended Cassette							***	***	<u>*</u>	***						
DUCT-FREE	FXZQ_TBVJU VISTA 2x2 Cassette for VRV		A ₹₫	₩ ₩ ₩	To SA	₩ ₩	A ₩	₩ ₩									
	FXEQ_PVJU Ceiling-Mounted Cassette (Single Flow)			₩ ₩ ₩		¥d	**************************************	**************************************	**************************************								
	FXHQ_MVJU Ceiling-Suspended Unit								<b>A</b>		<b>A</b>						
	FXAQ_PVJU Wall-Mounted Unit																
	FXNQ_MVJU9 Concealed Floor- Standing Unit,			DSA OSA	Marie	OSA		I SA	M SSA								
	FXLQ_MVJU9 Floor-Standing Unit			<b>A</b>													

Comfort cooling/heating Condensate pump standard Outside air connection possible





# Indoor Units Overview

# What are your choices?

# FXMQ\_TBVJU

# HSP DC Concealed Ducted Unit

Ceiling mounted DC-Ducted unit — ideal for small to large spaces in need of a concealed air-conditioning system.





# FXMQ\_MVJU

# **HSP High Capacity Concealed Ducted**

Ideal unit for larger open space floor plans usually found in offices, retails, hotels or education facilities.





### **FXSQ TBVJU**

# MSP Concealed Ducted

Ducted unit with compact design and powerful static pressure capabilities.





### **FXTQ TAVJU**

# Multi-Position Air Handling Unit

Vertical air handling unit ideal for both residential and light commercial applications.



It has upflow, downflow, horizontal left and horizontal right possibilities.



# FXDQ\_MVJU

# LSP Slim Concealed Ducted Unit

Slim duct built-in concealed unit with low profile and low sound level.





# FXNQ\_MVJU9

# Concealed Floor-Standing Unit

Floor-standing unit that can easily be installed along a perimeter wall — or concealed

# **FXLQ\_MVJU9** Floor-Standing Unit

Great way to save space. The floor-standing units can easily be installed along a perimeter wall.





# **FXFQ\_TVJU**

# Round Flow Sensing Cassette, Ceiling Mounted

Ideal for open plan applications such as classrooms and offices where adaptive comfort control is preferred. Provides excellent comfort level, energy efficiency, and flexibility due to advanced control functions.





# FXZQ\_TBVJU

# VISTA 2x2 Cassette for VRV

2'x2' 4-way Cassette best for open plan applications such as classrooms, offices and retail.





### **FXUQ PAVJU**

# 4-Way Blow Ceiling-Suspended Cassette

Perfect solution for rooms without a false ceiling, or minimal space above a false ceiling, where adaptive comfort control is preferred.





# FXEQ\_PVJU

# Ceiling-Mounted Cassette (Single Flow)

Slim and compact design for installation flexibility. For hotel rooms, offices and residential.



# FXHQ\_MVJU

# Ceiling-Suspended Unit

Ceiling-suspended with slim and elegant design solution for *VRV* 



# FXAQ\_PVJU

# Wall-Mounted Unit

Unit ideal for cooling or heating smaller zones such as stores, offices and restaurants. Compact and stylish design.





# **HXY48TAVJU**

# Low Temperature Hydrobox

High-efficiency all-electric heat pump hot and chilled water solution for *VRV* 





# FXMQ\_TBVJU HSP DC Concealed Ducted Unit

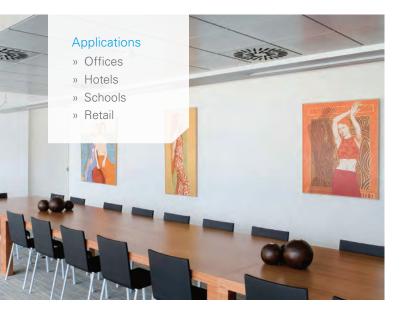


# Powerful, Concealed, Flexible

The ceiling mounted HSP DC concealed ducted unit is ideal for small to large spaces in need of a concealed air-conditioning system. It is extremely powerful and the compact design allows it to be completely concealed. This makes it perfect for retail, classrooms, offices, banks, restaurants, shops and hotels common areas.

# Features and Benefits

- » Capacity range up to 54 MBH.
- » Energy efficient due to the DC fan motor
- » Ideal to use together with the optional Daikin Zoning Kit, DZK
- » Provides a high degree of control for auxiliary heating devices, with independently configurable on/off temperature values
- » Advanced economizer control logic
- » Enhanced indoor air quality and LEED® ready with MERV 13 filter options
- » Ease of installation with auto adjusting airflow at commissioning based on external static pressure
- » Flexible ductwork design with ESP capabilities up to 0.8" W.G.
- » Installation flexibility with a low profile, compact design at less than 12" in height
- » Easy maintenance with complete service access from below
- \* Refer to installation manual for all installation clearance requirements.
- \*\* Auto fan speed requires the use of the BRC1E73 controller











BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82 (option)









BRC1H71W (option)

(option)

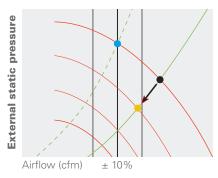
(option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

# Auto Adjust External Static Pressure

- » After installation, it is possible that the actual duct resistance is lower than expected at the time of designing. As a consequence, the air-flow will be too high.
- » With the automatic air-flow adjustment function the unit can adapt its fan speed to a lower curve, so the air-flow decreases.
- » The air-flow will always be within 10% of the rated air-flow because of the amount of possible fan curves (more than 8 fan curves available per model).
- » Alternatively the installer can manually select a fan curve with the wired remote control.

Auto Adjust External Static Pressure



— Fan characteristic curve

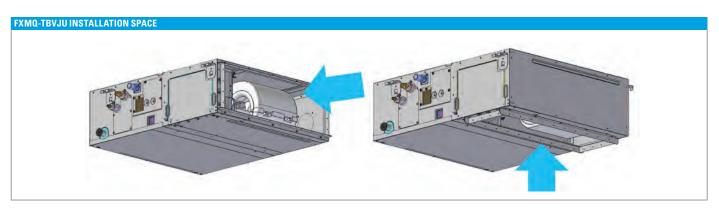
- Actual duct resistance curve
- Duct resistance curve at the time of designing
   Rated airflow
  - Airflow without airflow automatic adjustment
  - Actual airflow

FXMQ-TBVJ	JU SPECIFICATIONS		1.25 TON	1.5 TON	2.0 TON	2.5 TON	3.0 TON	4.0 TON	4.5 TON				
Model Name			FXMQ15TBVJU	FXMQ18TBVJU	FXMQ24TBVJU	FXMQ30TBVJU	FXMQ36TBVJU	FXMQ48TBVJU	FXMQ54TBVJU				
Power Supply		V/ph/Hz			Sir	ngle-phase 208/230V	60Hz						
Rated Cooling	Capacity	BTU/h	14,200 (4.2)	18,000 (5.3)	24,000 (7.0)	30,000 (8.8)	36,000 (10.6)	48,000 (14.1)	54,000 (16.7)				
Rated Heating	g Capacity	BTU/h	17,000 (5.0)	20,000 (5.9)	27,000 (7.9)	34,000 (10.0)	40,000 (11.7)	54,0009 (15.8)	63,000 (18.5)				
Airflow Rate (I	H/M/L)	SCFM (M3/MIN)	560/447/406 (15.8/12.7/11.5)	635/565/512 (18.0/16.0/14.5)	742/635/565 (21.0/18.0/16.0)	1094/847/795 (31.0/24/22.5)	1130/953/795 (32.0/27.0/22.5)	1377/1130/918 (39.0/32.0/26.0)	1518/1235/989 (43.0/35.0/28.0)				
Height		in.		9-11/16									
Width		in.		39-3/8			55-1/8		61				
Depth		in.				31-1/2							
Condensate P	ump Lift	in.		25-5/16									
0 11 1/5	D ( )*	Power dB(A)	65	64	67	71	72	76	80				
Sound Level (F	Heterence) *	Pressure dB(A)	37/34/31	36/34/32	39/35/33	43/38/36	44/40/36	48/44/39	52/47/42				
Weight		lbs (kg)	77	(35)	82 (37)	101	(46)	104 (47)	115 (52)				
Condensate Pi	ipe Connection	in. O.D.		VP25									
Pipe	Gas	in. (mm)	ø1/4 (ø6	ø1/4 (ø6.4) (Flare)									
Connections	Liquid	in. (mm)	ø1/2 (ø12	.7) (Flare)			ø5/8 (ø15.9) Flare						
Refrigerant						R-410A							
Refrigerant Co	ontrol				E	lectronic Expansion V	alve						
Maximum Ove	ercurrent Protective Device	А				15							
Minimum Circ	uit Amps	А	1.8 1.9 3 3.1 3.6										
Protection Dev	vices				Fuse ar	nd Fan Driver Overload	l Protector						
External Finish	h		Galvanized Steel Plate										
External Station	c Pressure (H/L)	in. W.G.	0.80/0.20 0.56/0.20										

 $<sup>^{\</sup>star}$  The sound power levels are based on ISO9614 and the sound pressure levels are based on JIS B 8616.

FXDQ_MVJU ACCESSORIES										
Model Name	FXMQ15TBVJU	FXMQ18TBVJU	FXMQ24TBVJU	FXMQ30TBVJU	FXMQ36TBVJU	FXMQ48TBVJU	FXMQ54TBVJU			
Navigation Remote Controller*				BRC1E73						
DKN Cloud Wi-Fi Adaptor	AZAI6WSCDKA									
Madoka Remote Controller	doka Remote Controller BRC1H71W									
Button Sensor Klt	or Klt KRCSH2018-01									
Daikin One+ Smart Thermostat	DTST-ONE-ADA-A									
DKN Plus Interface				AZAI6WSPDKC						
Adaptive Touch Controller		BAC	RC-T-P01/ BACRC-T	H-P01/ BACRC-THO	-P01/BACRC-THOC	-P01				
Wireless Remote Controller				BRC4C82						
Remote Sensor Kit				Kit KRCS01-6B						
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)	KRP1C75									
Group Control Adaptor PCB (connects to external BMS)				KRP4A74						

<sup>\*</sup> Optional face plates available to provide a more intuitive user interface and disable specific functions



# **FXSQ\_TBVJU**

# MSP Concealed **Ducted Unit**



# Do more with less

The MSP concealed ducted unit is engineered with impressive static pressure capability in a compact, flexible chassis design to give designers a tool to approach even the most cramped air conditioning applications.

### **Features and Benefits**

- » Powerful static pressure capability, with up to 0.6 in. Wg (150Pa) external static pressure.
- » Ease of installation with auto adjusting airflow at commissioning based on external static pressure.
- » Designed for installation flexibility, with a factory rear-return configuration and field convertible to bottom return.
- » Sound levels as low as 28 dB(A) for quiet operation.
- » Provides a high degree of control for auxiliary heating devices, with independently configurable on/off temperature values.
- » Integral condensate pump with up to 25-5/16" (643mm) of lift from the drain outlet









BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82

(option)









BRC1H71W (option)

AZAI6WSPDKC (option)

(option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

# Flexible Installation

The FXSQ\_TA can easily be converted to a bottom-return configuration to optimize the use of space above the ceiling or bulkhead space.



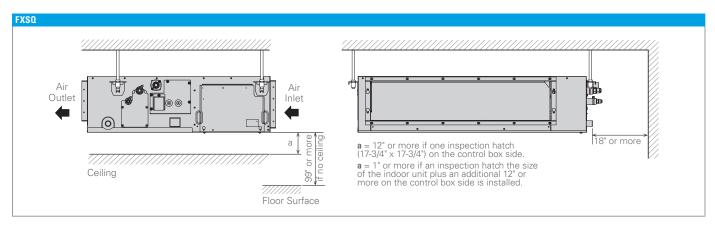


<b>SPECIFICATION</b>	VS		0.5 TON	0.6 TON	0.75 TON	1.0 TON	1.25 TON	1.5 TON		
Model Name			FXSQ05TBVJU	FXSQ07TBVJU	FXSQ09TBVJU	FXSQ12TBVJU	FXSQ15TBVJU	FXSQ18TBVJU		
Capacity Index			5.8	7.5	9.5	12	15	18		
Power Supply		V/ph/Hz			208/230V/	AC, 60Hz, 1 phase				
Nominal Cooling (	Capacity*1	Btu/h (kW)	5,800 (1.7)	7,200 (2.1)	9,500 (2.8)	12,000 (3.5)	15,000 (4.4)	18,000 (5.3)		
Nominal Heating	Capacity*2	Btu/h (kW)	6,500 (1.9)	8,500 (2.5)	10,500 (3.1)	13,500 (4.0)	17,000 (5.0) 20,000 (5.9)			
	Туре									
	Motor Output	W		-	78		130	230		
Fan	Air Flow Rate (H/M/L)	CFM	281 / 26	5 / 230	318 / 265 / 230	335 / 283 / 247	530 / 441 / 371 600 / 512 / 406			
I dii	Drive Type		DC Direct Drive							
	External Static Pressure (Std./Max)			0.2	0.4 / 0.6					
Height		in. (mm)				9-11/16				
Width		in. (mm)		21-	11/16		27-9/16	39-3/8		
Depth		in. (mm)				31-1/2				
Weight (net)		lb. (kg)	55 (25)				60 (27)	77 (35)		
Condensate Pump		in. (mm)			25-	5/16 (643)				
Sound Pressure Lo	evel (H/M/L speed)	dB(A)		33 / 30 / 28		34 / 32 / 30	36 / 33 / 30	34 / 32 / 29		
Dina	Liquid	in.			1,	/4 (Flare)				
Pipe Connections	Gas	in.			1,	/2 (Flare)				
Condensate Drain in. VP25										
Refrigerant Contro	ol				Electronic	Expansion Valve				
Maximum Overcu	rrent Protection Device	А				15				
Minimum Circuit A	Ampacity	А		(	).8		1.4	1.6		

SPECIFICATIO	INS		2.0 TON	2.5 TON	3.0 TON	4.0 TON	4.5 TON				
Model Name			FXSQ24TBVJU	FXSQ30TBVJU	FXSQ36TBVJU	FXSQ48TBVJU	FXSQ54TBVJU				
Capacity Index			24	30	36	48	54				
Power Supply		V/ph/Hz			208/230VAC, 60Hz, 1 phas	e					
Nominal Cooling		Btu/h (kW)	24,000 (7.0)	24,000 (7.0) 30,000 (8.8) 36,000 (10.6) 48,000		48,000 (14.1)	54,000 (15.8)				
Nominal Heating	Capacity*2	Btu/h (kW)	27,000 (7.9)	27,000 (7.9) 34,000 (10.0) 40,000 (11.7) 54,000 (15.8)							
	Туре			Sirocco fan							
Motor Output W			2:	30	3	00	350				
Fan Air Flow Rate (H/M/L) CFM			742 / 618 / 512	812 / 689 / 565	1130 / 953 / 795	1307 / 1112 / 918	1377 / 1183 / 989				
i aii	Drive Type				DC Direct Drive						
	External Static Pressure (Std./Max)			0.2 / 0.56							
Height		in. (mm)			9-11/16						
Width		in. (mm)	39-	61							
Depth		in. (mm)		31-1/2							
Weight (net)		lb. (kg)	77 (35)	82 (37)	101 (46)	104 (47)	115 (52)				
Condensate Pur	ıp Lift	in. (mm)			25-5/16 (643 mm)						
Sound Pressure	Level (H/M/L speed)	dB(A)	36 / 32 / 29	37.5 / 34 / 30	39 / 35 / 32	42 / 38.5 / 35	43 / 40 / 36				
p:	Liquid	in.			3/8 (Flare)						
Pipe Connections	Gas	in.			5/8 (Flare)						
COLLIGERIOUS	Condensate Drain	in.	VP25								
Refrigerant Cont	rol		Electronic Expansion Valve								
Maximum Overc	urrent Protection Device	А			15						
Minimum Circuit	Ampacity	А	1	.8	2.5	2.8	3.3				

Note: 1 Nominal cooling capacities are based on the following conditions: 80°F DB / 67°F WB (26.7°C DB / 19.4°C WB) return air temperature; 95°F DB (35°C DB) outdoor temperature; 25 ft. (7.6 m) equivalent refrigerant piping.

 $<sup>^{\</sup>prime 2}$  Nominal heating capacities are based on the following conditions: 70°F DB (21.1°C DB) return air temperature; 47°F DB / 43°F WB (8.3°C DB / 6.1°C WB) outdoor temperature; 25 ft. (7.6 m) equivalent refrigerant piping.



# FXDQ\_MVJU LSP Slim Concealed Ducted Unit



Condensate Pump as Standard



Outside Air Integration Possible



Filter Included

# Concealed, Slim, Quiet, Comfortable

The LSP slim concealed unit is available for use with the *VRV* systems to complement the existing concealed ceiling unit options. With its low profile and low sound level this unit can be installed into limited ceiling void, bulkhead or soffit space.

### **Features and Benefits**

- » Slim height, at only 7%", makes it suitable for most of the applications where attic / bulkhead space is limited
- » With a sound level down to 29 dB(A) these units are among the quietest on the market
- » Factory shipped for rear air inlet field convertible to bottom air inlet
- » Washable filter included
- » Condensate pump with vertical lift of up to 215%" included as standard
- » Blends unobtrusively with any interior decor; only the suction and discharge grills are visible









BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82 (option)



(option)



(option)





(option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

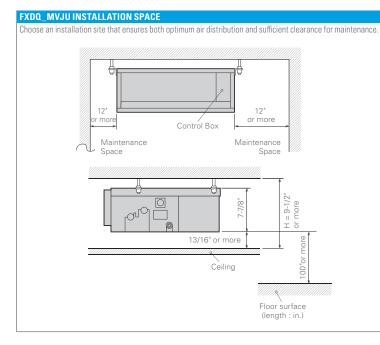


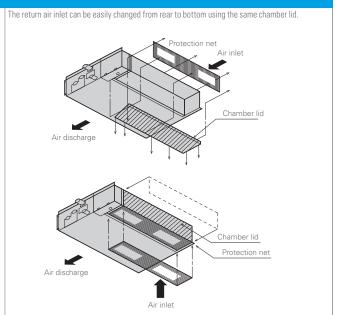
FXDQ_MVJU SPECIFICATIO	NS		0.6 TON	0.75 TON	1 TON	1.5 TONS	2 TONS			
Model Name			FXDQ07MVJU	FXDQ09MVJU	FXDQ12MVJU	FXDQ18MVJU	FXDQ24MVJU			
Power Supply		V/ph/Hz			208-230/1/60					
Rated Cooling Capacity		BTU/h	7,500	9,500	18,000	24,000				
Rated Heating Capacity		BTU/h	8,500	10,500	13,500	20,000	27,000			
Airflow Rate (H/L)		CFM		280/226		440/350	580/460			
Weight		lbs.		51		63	71			
Height		in.			7-7/8					
Width		in. 27-9/16 35-7/16 43-					43-5/16			
Depth		in. 24-7/16								
Sound Pressure (H/L)		dB(A)		33/29 35/31 36/3						
Condensate Pump Lift		in.			21-5/8					
Condensate Pipe Connection		in. O.D.	1-1/32							
Dina Connections	Gas	in.	1/2 (Flare) 5/8 (Fla							
Pipe Connections	Liquid	in.		1/4 (Flare) 3/8 (Flare)						
Refrigerant					R-410A					
Refrigerant Control					Electronic Expansion Valve					
Maximum Overcurrent Protectiv	e Device	А			15					
Minimum Circuit Amps		А		0.9		1.3	1.4			
Protection Devices			Fuse and Fan Motor Thermal Protector							
External Finish			Galvanized Steel Plate							
Standard Filter Type				Rer	movable, Washable, Mildew	Proof				
External Static Pressure (H/L)		in. Wg	0.12/0.04 0.17/0.06 0.17/0.06							

Cooling Mode Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft. Heating Mode Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft. **Note:** Specifications are subject to change without notice.

FXDQ_MVJU ACCESSORIES						
Model Name	FXDQ07MVJU	FXDQ09MVJU	FXDQ12MVJU	FXDQ18MVJU	FXDQ24MVJU	
Navigation Remote Controller*			BRC1E73			
DKN Cloud Wi-Fi Adaptor			AZAI6WSCDKA			
Madoka Remote Controller			BRC1H71W			
Button Sensor KIt			KRCSH2018-01			
Daikin <i>One</i> + Smart Thermostat						
DKN Plus Interface AZAI6WSPDKC						
Adaptive Touch Controller		BACRC-T-P01/ BAC	RC-TH-P01/BACRC-THO-P01/	BACRC-THOC-P01		
Wireless Remote Controller			BRC4C82			
Remote Sensor Kit			KRCS01-1B			
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)			KRP1C75			
Group Control Adaptor PCB (connects to external BMS)			KRP4A74			
Access Panel (single door)		APFXDQ18	APFXDQ24			
Access Panel with return air filter (single door)		APRFFXDQ070912	APRFFXDQ18	APRFFXDQ24		
Filter Media Replacement		APRFFXDQ070912F	APRFFXDQ18F	APRFFXDQ24F		

<sup>\*</sup> Optional face plates available to provide a more intuitive user interface and disable specific functions







# FXTQ\_TAVJUA(D)

# Multi-Position Air Handling Unit



Outside Air Integration Possible



Aluminum



Variable Speed **ECM Motor** 

# Outstanding flexibility and performance

The FXTQ\_TAVJUA(D) air handler features full multi-position\* flexibility to meet the most demanding installation conditions. A multitude of features ensure reliable, efficient performance year round.

### **Features and Benefits**

- » Expanded capacity lineup, featuring ten models ranging from 34 ton to 5 tons, with a redesigned\*\* unit frame for maximum durability.
- » Full multi-position air handler capable of upflow, downflow\*, horizontal right, and horizontal left installation.
- » A high efficiency, ECM motor powers the fan to deliver nominal CFM at up to 0.9" in. Wg static. An auto fan speed setting automatically adjusts the fan speed through 5 steps based on the load in the space.
- » Wide line up of electric heat (field installed) options from 3kW to 25kW.
- » An auxiliary heat logic features a reduced heater operation deadband and the ability to run both heat pump and auxiliary heat for maximum comfort and performance in colder climates. The auxiliary heat can be interlocked with the ambient temperature sensed by the outdoor unit.
- » Designed with less than 2% air leakage when tested in accordance with ASHRAE standard 193.
- » New integrated control board reduces\*\* the number of electrical connections required. Quick disconnect control wiring terminals simplify installation.
- » Easily integrate with third party accessories such as a humidifier or economizer with on-board contacts.









DTST-ONF-ADA-A (option)







BACRC-T-P01. BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

BRC1H71W (option)

AZAI6WSPDKC (option)

BRC1E73 (option)

- » Up to 200% connection ratio is possible on applicable VRV IV systems.
- » Available with optional factory installed disconnect (Built to order — model FXTQ\_TAVJUD.)
  - \*Downflow requires field installed optional downflow accessory. (Part number DFK-B/C/D)
- \*\*Compared to previous model FXTQ\_P

# **Designed for Compact Spaces**

With its compact and space saving design, the new FXTQ\_TAVJUA(D) air handler units are engineered to suit most light commercial and residential applications.

- » At under 46" tall and only 17-1/2" wide up to 3 tons, the FXTQ\_TAVJUA(D) can be installed in tight closet spaces.
- » Designed for zero clearance on three sides and only 24" clearance on the front for service.
- » Sound levels as low as 36 dBA to suit applications in sound sensitive environments.

# **Electric Heater Options**

<b>ELECTRICAL HE</b>	ATER (	APAC	ITY						
Model Name	3kW	5kW	6kW	8kW	10kW	15kW	19kW	20kW	25kW
FXTQ09TAVJUA(D)									
FXTQ12TAVJUA(D)		•	•						
FXTQ18TAVJUA(D)									
FXTQ24TAVJUA(D)			•						
FXTQ30TAVJUA(D)									
FXTQ36TAVJUA(D)			•						
FXTQ42TAVJUA(D)									
FXTQ48TAVJUA(D)		-	-	•	-	•			
FXTQ54TAVJUA(D)									
FXTQ60TAVJUA(D)			•						

<b>SPECIFICATION</b>	S		0.75 TON	N 1 TON 1.5 TON 2 TON 2.5 TON								
Model Name			FXTQ09TAVJUA	FXTQ12TAVJUA	FXTQ18TAVJUA	FXTQ24TAVJUA	FXTQ30TAVJUA					
Model Name (With	factory disconnect)		FXTQ09TAVJUD	FXTQ12TAVJUD	FXTQ18TAVJUD	FXTQ24TAVJUD	FXTQ30TAVJUD					
Power Supply		V/ph/Hz			208/230VAC, 60Hz, 1 phase							
Nominal Cooling	Capacity*1	Btu/h	9,500	9,500 12,000 18,000 24,000								
Nominal Heating	Capacity*2	Btu/h	10,500 13,500 20,000 27000 34,000									
	Туре		Sirocco FC Centrifugal									
	Motor Output	HP			1/2							
Fan	Air Flow Rate (H/M/L	CFM	300 / 275 / 250	400 / 340 / 280	600 / 510 / 420	800 / 680 / 560	1000 / 850 / 700					
	Static Pressure*3	in. Wg	0.18" / 0.9"									
	Drive Type		Variable speed ECM									
Height		in.	45									
Width		in.	17.5									
Depth		in.	21									
Weight (net) (TAV	JUA/TAVJUD)	lbs.	105/108	112/115	111/118	112/115	113/116					
Sound Pressure L	evel (H speed)	dB(A)	3	6	4	5	52					
D.	Liquid	in.		1/4 (Braze)		3/8 (8	Braze)					
Pipe Connections	Gas	in.		1/2 (Braze)		5/8 (E	Braze)					
Connections	Condensate Drain	in.			3/4 (fpt)							
Refrigerant Control Electronic Expansion Valve												
Maximum Overcu Protective Device		А	15									
Minimum Circuit Amps A												

<b>SPECIFICATION</b>	VS		3 TON	3.5 TON	4 TON	4.5 TON	5 TON			
Model Name			FXTQ36TAVJUA	FXTQ42TAVJUA	FXTQ48TAVJUA	FXTQ54TAVJUA	FXTQ60TAVJUA			
Model Name (W	ith factory disconnect)		FXTQ36TAVJUD	FXTQ42TAVJUD	FXTQ48TAVJUD	FXTQ54TAVJUD	FXTQ60TAVJUD			
Power Supply		V/ph/Hz			208/230VAC, 60Hz, 1 phase					
Nominal Cooling	Capacity*1	Btu/h	36,000	42,000	48,000	54,000	60,000			
Nominal Heating	Capacity*2	Btu/h	40,000	46,000	54,000	60,000	66,000			
	Туре			Sirocco FC Centrifugal						
	Motor Output	HP	1/2	3	/4	1	.0			
Fan	Air Flow Rate (H/M/L	CFM	1050 / 900 / 750	1400 / 1190 / 980	1520 / 1290 /1060	1800 / 1530 / 1260	1800 / 1530 / 120			
Static Pressure*3 in. W			0.23" / 0.9"							
	Drive Type				Variable speed ECM					
Height		in.	45	53	.43	5	8			
Width		in.	17.5	21 24.5						
Depth		in.	21							
Weight (net) (TA)	/JUA/TAVJUD)	lbs.	113/116	144	/147	165/168				
Sound Pressure I	_evel (H speed)	dB(A)	52	5	4	5	0			
Di	Liquid	in.			3/8 (Braze)					
Pipe Connections	Gas	in.			5/8 (Braze)					
Connections	Condensate Drain	in.			3/4 (fpt)					
Refrigerant Cont	rol		Electronic Expansion Valve							
Maximum Overco Protective Device		А	15							
Minimum Circuit	Amps	А	4.9 6.5 8.6							

<sup>\*1</sup> Nominal cooling capacities are based on the following conditions: 80°F DB / 67°F WB (26.7°C DB / 19.4°C WB) return air temperature; 95°F DB (35°C DB) outdoor temperature; 25 ft. (7.6 m) equivalent refrigerant piping.

 $<sup>^{\</sup>rm *3}$  External static pressures are indicated as rated / maximum allowable range.

FXTQ_TAVJUA(D) ACCESSORIES						
Model Name	FXTQ36TAVJUA(D)	FXTQ42TAVJUA (D)	FXTQ48TAVJUA (D)	FXTQ54TAVJUA (D)	FXTQ60TAVJUA (D)	
Navigation Remote Controller*			BRC1E73			
DKN Cloud Wi-Fi Adaptor			AZAI6WSCDKA			
Madoka Remote Controller			BRC1H71W			
Button Sensor Klt			KRCSH2018-01			
Daikin One+ Smart Thermostat			DTST-ONE-ADA-A			
DKN Plus Interface			AZAI6WSPDKC			
Adaptive Touch Controller		BACRC-T-P01/BAC	RC-TH-P01/BACRC-THO-P01/	BACRC-THOC-P01		
Wireless Remote Controller			BRC4C82			
Remote Sensor Kit			KRCS01-1B			
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)	KRP1C75					
Group Control Adaptor PCB (connects to external BMS)			KRP4A74			

<sup>\*</sup> Optional face plates available to provide a more intuitive user interface and disable specific functions



 $<sup>^{\</sup>circ}2$  Nominal heating capacities are based on the following conditions: 70°F DB (21.1°C DB) return air temperature; 47°F DB / 43°F WB (8.3°C DB / 6.1°C WB) outdoor temperature; 25 ft. (7.6 m) equivalent refrigerant piping.

# FXMQ\_MVJU

# HSP High Capacity Concealed Ducted Unit



# Concealed, Slim Design, Strong, Comfortable

The FXMQ\_MVJU ducted fan coil unit is ideal for larger open space floor plans usually found in offices, retails, hotels, or education facilities. It performs well across multiple spaces that can benefit from the same mode of operation, limiting equipment and installation cost.

# **Features and Benefits**

- » Design flexibility with a capacity range up to 96 MBH
- » Improved ductwork and filtration flexibility with ESP capabilities of up to 1.1" W.G.
- » Low profile design of less than 19" high to reduce required installation space









BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82 (option)









BRC1H71W (option)

AZAI6WSPDKC (option)

(option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

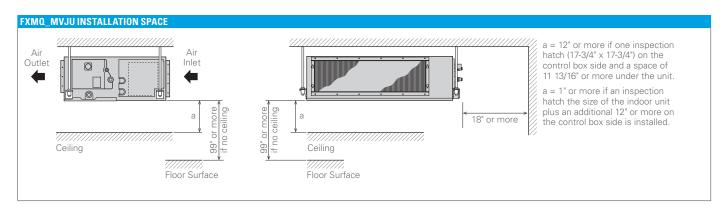


FXMQ_MVJU SPECIFICATIONS			6 TON 8 TON				
Model Name			FXMQ72MVJU	FXMQ96MVJU			
Power Supply		V/ph/Hz	20	8-230/1/60			
Rated Cooling Capacity		BTU/h	72,000	96,000			
Rated Heating Capacity		BTU/h	81,000	108,000			
Airflow Rate (H/L)		CFM	2,047/1,764	2,541/2,188			
Weight		lbs.		380			
Height		in.		18-1/8			
Width		in.		54-3/8			
Depth		in.		43-5/16			
Sound Pressure (H/L)		dB(A)		48/45			
Condensate Pipe Connection		in. O.D.		1			
Pipe Connections	Gas	in.	3/4 (Flare)	7/8 (Flare)			
Tipe Connections	Liquid	in.	;	3/8 (Flare)			
Refrigerant				R-410A			
Refrigerant Control			Electroni	c Expansion Valve			
Maximum Overcurrent Protective D	evice	A		15			
Minimum Circuit Amps		A	9.5				
Protection Devices			Fuse and Fan Motor Thermal Protector				
External Finish			Galvar	nized Steel Plate			
External Static Pressure (Nominal/I	Maximum)	in. Wg	0.38/0.95	0.43/1.1			

Cooling Mode Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft. Heating Mode Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft. **Note:** Specifications are subject to change without notice.

FXMQ_MVJU ACCESSORIES		
Model Name	FXMQ72MVJU	FXMQ96MVJU
Navigation Remote Controller*	BR	C1E73
DKN Cloud Wi-Fi Adaptor	AZAI6	WSCDKA
Madoka Remote Controller	BRC	1H71W
Button Sensor KIt	KRCS	H2018-01
Daikin <i>One</i> + Smart Thermostat	DTST-0	NE-ADA-A
DKN Plus Interface	AZAI6	WSPDKC
Adaptive Touch Controller	BACRC-T-P01/ BACRC-TH-P01/ B	BACRC-THO-P01/ BACRC-THOC-P01
Wireless Remote Controller	BR	C4C82
Remote Sensor Kit	KRC	S01-1B
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)	KR	P1C74
Group Control Adaptor PCB (connects to external BMS)	KR	P4A71
High Efficiency Filter Kit (MERV 13)	DACA-M	Q96M-13-1K
High Efficiency Filter Kit (MERV 8)	DACA-N	1Q96M-8-1K

 $<sup>^{\</sup>ast}$  Optional face plates available to provide a more intuitive user interface and disable specific functions



# **FXNQ\_MVJU9** Concealed Floor-Standing Unit



# Versatile, Logical, Durable, Quiet

The ideal way to save space, our floor-standing units can easily be installed along a perimeter wall — or concealed. The air distribution from these models will allow you to find the right balance for classrooms, churches, office hallways or similar spaces. The concealed floor units cover a wide range of capacities and can be built into counter in order to maintain the aesthetics of the room.

# **Features and Benefits**

- » Ideal for installation beneath a window
- » Unit requires minimal installation space
- » Fitted with a washable long-life filter
- » Remote-control options available
- » Space-saving unit can be freestanding or wall-mounted, concealed or exposed
- » Models range from 7.5 MBH to 24 MBH









BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82 (option)



(option)

BRC1H71W



AZAI6WSPDKC

(option)

DTST-ONE-ADA-A (option)





BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

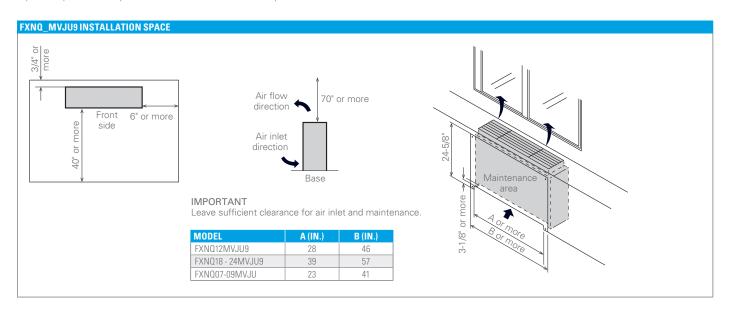


FXNQ_MVJU9 SPECIF	ICATIONS		0.6 TON	0.75 TON	1 TON	1.5 TON	2 TON
Model Name			FXNQ07MVJU9	FXNQ09MVJU9	FXNQ12MVJU9	FXNQ18MVJU9	FXNQ24MVJU9
Power Supply		V/ph/Hz			208-230/1/60		
Rated Cooling Capacity		BTU/h	7,500	9,500	12,000	18,000	24,000
Rated Heating Capacity		BTU/h	8,500	10,500	13,500	20,000	27,000
Airflow Rate (H/L)		CFM	245	/210	280/210	490/380	560/420
Weight		lbs.	4	.7	56	6	60
Height		in.			24		
Width		in.	36-	5/8	42-1/8	53	-1/8
Depth		in.			8-5/8		
Sound Pressure (H/L)		dB(A)	35,	/32	36/33	40/35	41/36
Condensate Pipe Connec	tion	in. O.D.	27/32				
Pipe Connections	Gas	in.		,	1/2		5/8
	Liquid	in.			1/4		3/8
Refrigerant					R-410A		
Refrigerant Control					Electronic Expansion Valve		
Maximum Overcurrent Protective Device		А			15		
Minimum Circuit Amps		А	0.3 0.5 0.6				.6
Protection Devices			Fuse and Fan Motor Thermal Protector				
External Finish					Galvanized Steel Plate		
Standard Filter Type					Resin Net (with Mold Resistant		

Cooling Mode Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft. Heating Mode Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft. **Note:** Specifications are subject to change without notice.

FXNO_MVJU9 ACCESSORIES							
Model Name	FXNQ07MVJU9	FXNQ09MVJU9	FXNQ12MVJU9	FXNQ18MVJU9	FXNQ24MVJU9		
Navigation Remote Controller			BRC1E73				
DKN Cloud Wi-Fi Adaptor			AZAI6WSCDKA				
Madoka Remote Controller			BRC1H71W				
Button Sensor Klt			KRCSH2018-01				
Daikin One+ Smart Thermostat			DTST-ONE-ADA-A				
DKN Plus Interface			AZAI6WSPDKC				
Adaptive Touch Controller		BACRC-T-P01/BACRC	-TH-P01/ BACRC-THO-P0	01/BACRC-THOC-P01			
Wireless Remote Controller			BRC4C82				
Remote Sensor Kit			KRCS01-1B				
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)	KRP1C74						
Group Control Adaptor PCB (connects to external BMS)	KRP4A71						
Condensate Pump			DACA-CP3-1				

<sup>\*</sup> Optional face plates available to provide a more intuitive user interface and disable specific functions



# **FXFQ TVJU**

# Round Flow Sensing Cassette



Condensate Pump as Standard



Outside Air Integration Possible



Filter Included



Optional Auto Cleaning Filter



Surface & Occupancy Sensor Kit as Standard

# Adaptive Comfort Control

The Round Flow Sensing Cassette is ideal for open plan applications such as classrooms and offices where adaptive comfort control is preferred. The unit provides an excellent comfort level, energy efficiency, and flexibility due to advanced control functions based on input from three room sensors (occupancy, air temperature, and surface temperature). With 18 configurable airflow distribution patterns, it can be efficient and provide a comfortable environment in smaller, more intricate spaces as well.

### Features and Benefits

- » Capacity range from 7.5 to 48 MBH.
- » True 360° Airflow and three room sensors enables optimized occupant comfort and efficiency
- » Energy efficient with DC fan motor and auto-logic that adjusts fan speed based on space load
- » Optional self-cleaning air filter panel to further increase efficiency and reduce maintenance costs, when used in VRV IV systems
- » Very flexible with 18 different possible airflow patterns, ensuring ideal air distribution to maximize comfort and efficiency
- » Compact design to allow for installation in small ceiling voids
- » Sound pressure levels as low as 27 db(A)
- » Enhanced indoor air quality and LEED® ready with MERV 13 filter options

The built-in occupancy sensor has two main functions: save energy and optimize occupancy comfort. In order to save energy, the function of the occupancy sensor can be used to automatically set back the air temperature and also lower the fan speed if no people are present in the room.



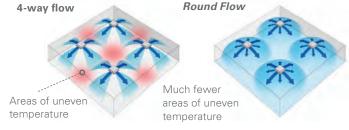


Together with the occupancy sensor, the air-temperature sensor and the built-in surface temperature sensor are used to maintain an even and comfortable temperature distribution from floor to ceiling in the room. This is done by automatically adjusting the supplied airflow rate and the individual position of each of the four supply air louvers in the unit, thus maintaining the required comfortable space environment.

In order to further increase efficiency and reduce maintenance costs, the *Round Flow* Sensing Cassette can be equipped with an optional self-cleaning filter panel that performs automatic air-filter cleaning up to once a day. Dust is deposited into a collection box during the self-cleaning process. When indicated with light on the unit and on the controller display, the dust collection box in the unit can easily and quickly be emptied with a standard vacuum cleaner.

4-way flow vs. Round Flow

Round Flow Ceiling Mounted Cassette type offers  $360^\circ$  airflow with improved temperature distribution.



Advanced design for comfort and efficiency

# **Heat Exchanger Design**

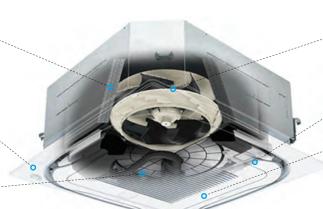
Optimized for part load operation — great enhancement to seasonal energy efficiency

# Occupancy and Surface Temperature Sensors

Enables additional energy savings and increased comfort

# Optional Self-Cleaning Filter Panel

Provides optimum efficiency, airflow and reduced maintenance



### DC Fan Motor

Very efficient — enables fan auto logic based on  $\Delta T$  set point

### **DC Drain Pump**

Low power consumption

### **Decoration Panel**

- » Efficient due to large air discharge outlets
- » Unique 360° airflow distribution
- » 4 individually controlled louvers enables optimized comfort in the space
- » Possibility to close 1, 2 or 3 louvers adds flexibility

Automatic air-direction control





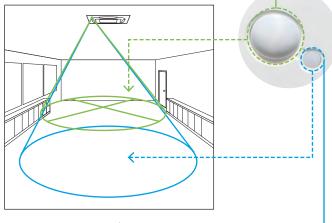
Air flow from the indoor unit is automatically adjusted to always maintain a comfortable environment — even when occupancy changes.

# Dual infrared sensors

Sensors detect the presence of people and surface temperature to provide comfortable air-conditioning and energy savings.

# Infrared presence sensor ←

The sensor detects human presence, and energy saving control can be performed when no people are detected.



### Infrared surface sensor

The sensor detects the surface temperature and automatically adjusts operation of the indoor unit to reduce the temperature difference between the ceiling and the floor.



# FXFQ\_TVJU (cont.)

# Round Flow Sensing Cassette



Condensate Pump as Standard



Outside Air Integration Possible



Filter Included

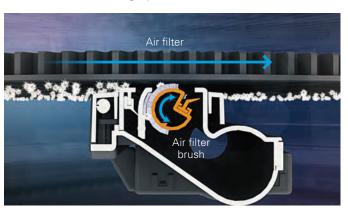


Optional Auto Cleaning Filter

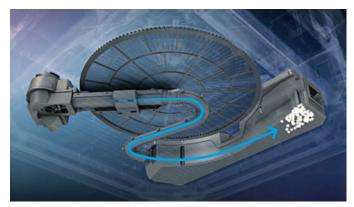


Surface & Occupancy Sensor Kit as Standard

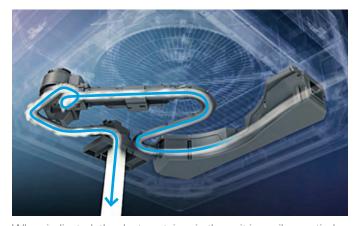




At the programmed time, the air filter rotates while the air filter brush turns back and forth to brush the filter.



Dust from the air filter brush is deposited into the dust collection container during the fully automatic self-cleaning process.



When indicated, the dust container in the unit is easily emptied with a standard vacuum cleaner.



FXFQ_TVJU SP	PECIFICATIO	NS	0.60 TON	0.75 TON	1 TON	1.25 TON	1.5 TON	2 TON	2TON 2.5TON 3TON 4TON			
Model Name			FXFQ07TVJU	FXFQ09TVJU	J FXFQ12TVJU FXFQ15TVJU FXFQ18TVJU FXFQ24TVJU FXFQ30TVJU FXFQ36TVJU FXFQ48TVJU				FXFQ48TVJU			
Power Supply		(V/ph/Hz)		208-230/1/60								
Rated Cooling Ca	apacity	BTU/h	7,500	9,500	12,000	15,000	18,000	24,000	30,000	36,000	48,000	
Rated Heating C	apacity	BTU/h	8,500	10,500	13,500	17,000	20,000	27,000	34,000	40,000	54,000	
Airflow Rate (H/	M/L)	CFM	420/406/353	441/406/353	441/406/353	512/459/388	742/618/477	777/618/477	1,112/918/671	1,165/918/671	1,218/971/742	
Weight		lbs.		48			48			58		
Height		in.			9-1	1/16				11-5/16		
Width		in.					33-1/16					
Depth		in.					33-1/16					
Sound Pressure	(H/M/L)	dB(A)		30/28.5/27		31/29/27	35.5/32/28	36/32/28	43.5/38/32	44/38/32	45/40/35	
Condensate Pum	np Lift	in.		33-1/2								
Condensate Pipe	Connection	in. O.D.					1-1/4					
Pipe	Gas	in.			1/2 (Flare)				5/8 (	Flare)		
Connections	Liquid	in.			1/4 (Flare)				3/8 (	Flare)		
Refrigerant							R-410A					
Refrigerant Cont	rol					Elec	tronic Expansion \	/alve				
Maximum Overc Protective Devic		А					15					
Minimum Circuit	Amps	А	0.3 0.4 0.6 0.7 1.3 1.5 1.8					1.8				
Protection Devic	es		Fuse/Breaker and Fan Motor Thermal Protector									
External Finish						G	alvanized Steel Pla	ite				
Standard Filter T	уре					Mo	d-Resistant Resin	Net				

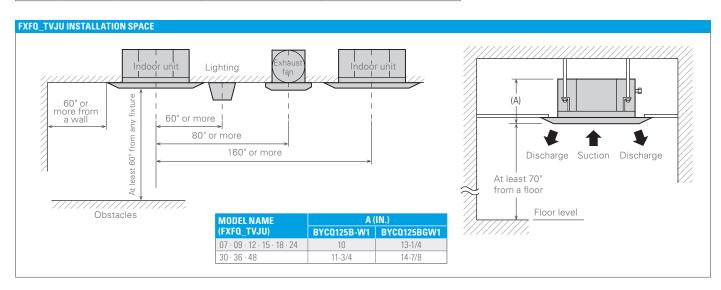
Cooling Mode Indoor: 80°F DB / 67°F WB
Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft.

**Heating Mode** Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft.

Note: Specifications are subject to change without notice.

OPTION			FXFQ09-48TVJU				
Type of pan	el		Self-Cleaning Filter Panel	Standard Sensing Decoration Panel			
Self-Cleani	ng Filter Panel		BYCQ125BGW1	-			
Connection	pipe (for dust reco	overy)	KKHAP55B160	-			
L-shape ext	ension pipe		KKHAP55A160	-			
Standard S	ensing Decoration	Panel	-	BYCQ125B-W1			
Sealing ma	terial for air discha	arge outlet	KDBH55K160F	KDBHQ55B140			
Panel space	er		KDBP55H160FA	KDBP55H160FA			
Fresh air	Chambartuna	Without T shape pipe	-	KDDQ55B140			
intake kit	Chamber type	With T shape pipe	-	KDDP55B160K			
Replaceme	nt long life filter		-	KAFP55B160			
Self-Cleani	ng Filter Panel rep	lacement filter	KAFP554A160	-			
MERV 13 Fi	Iter Kit		-	DACA-FQP13-1K			

OUTDOOR / CO	INDENSING UNIT C	OMPATIBILITY
	FXFQ_T	/JU with:
Outdoor Condensing Unit	Self-Cleaning Filter Panel (BYCQ125BGW1)	Standard Sensing Decoration Panel (BYCQ125B-W1)
VRV IV-S VRV IV VRV IV W-series	Y	es
VRV III	No	Yes
SkyAir	N	lo



# **FXUQ PAVJU**

# 4-Way Ceiling-Suspended Cassette



Condensate Pump as Standard



Filter Included



Optional Surface & Occupancy Sensor Kit

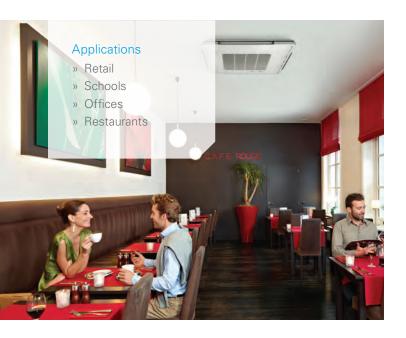
# Slim, Stylish, Flexible

The unique 4-way ceiling-suspended cassette is an ideal solution for rooms without a false ceiling, or minimal space above a false ceiling, where adaptive comfort control is preferred.

The optional Sensor Kit (occupancy and surface temperature) together with air temperature sensor and advanced control functions enables the unit to provide an exceptional comfort level, energy efficiency, and flexibility.

# Features and Benefits

- » Very low unit height of under 8" makes it an ideal solution for school, shops, restaurants and offices with no or low false ceilings
- » Optional Sensor Kit enables input from three room sensors to provide optimized occupant comfort and efficiency
- » Stylish unit blends easily with any interior, as the air louvers close entirely when not in operation
- » Energy efficient fan motor
- » Individual air louver control one or more louvers can be easily closed via the remote controller when required
- » Ideal for both new and existing buildings
- » Can also be mounted partially recessed in a false ceiling
- » Same appearance and size for all capacity models
- » Standard drain pump with 19.5" lift











BRC1H71W

BRC1E73 (option)

tion) (option)

72°



AZAI6WSPDKC (option)

DTST-ONE-ADA-A (option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

# Flexible Airflow Pattern

The four individually controlled air louvers in the unit enables comfortable space environment in a variety of different room layouts.

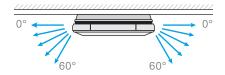
Air from each louver can be set to exhaust in 5 different angles between 0 and 60 degrees, or set to auto-swing.

Airflow Angles

Auto Swing: Wide discharge angle: 0° to 60°



Fixed angles: 5 levels



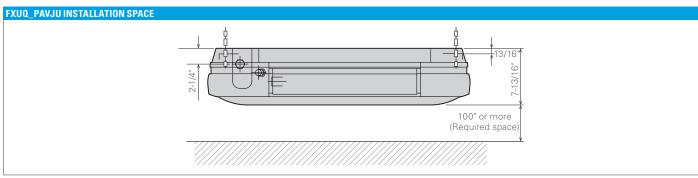
FXUQ_PAVJU S	PECIFICATIONS		1.5 TON	2 TON	2.5 TON	3 TON	
Model Name			FXUQ18PAVJU	FXUQ24PAVJU	FXUQ30PAVJU	FXUQ36PAVJU	
Power Supply		(V/ph/Hz)		208-23	0/1/60		
Rated Cooling Cap	acity	BTU/h	18,000	24,000	30,000	36,000	
Rated Heating Cap	acity	BTU/h	20,000	27,000	34,000	40,000	
Airflow Rate (H/M	/L)	CFM	795/6	89/565	1095/9	18/742	
Weight		lbs.	Ę	58	60	)	
Height		in.		7-13	3/16		
Width		in.		37	3/8		
Depth		in.		37	3/8		
Sound Pressure (H	/M/L)	dB(A)	40/3	38/36	47/44	1/40	
Condensate Pump	Lift	in.		19	0.5		
Condensate Pipe (	Connection	in. O.D.	VP20				
Pipe	Gas	in.	1/2 (Flare)	5/8 (Flare)	5/8 (F	lare)	
Connections	Liquid	in.	1/4 (Flare)	3/8 (Flare)	3/8 (F	lare)	
Refrigerant				R-4	10A		
Refrigerant Contro				Electronic Ex	pansion Valve		
Maximum Overcur	rent Protective Device	А		1	5		
Minimum Circuit A	mps	А	0.6				
Protection Devices	3		Fuse and Fan Motor Thermal Protector				
External Finish				White	Casing		
Standard Filter Typ	е			Resin Net (with	Mold Resister)		

Cooling Mode Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft. Heating Mode Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft.

 $\begin{tabular}{ll} \textbf{Note:} Specifications are subject to change \\ without notice. \end{tabular}$ 

FXUQ_PAVJU ACCESSORIES								
Model Name	FXUQ18PAVJU	FXUQ24PAVJU	FXUQ30PAVJU	FXUQ36PAVJU				
Sealing Member of Air Discharge Outlet		KDBHP4	9B140					
Decoration Panel for Air Discharge		KDBTP4	9B140					
Replacement Long-Life Filter		KAF5511	ID160					
Remote Control (wired type)		BRC1	E73					
Sensor Kit 2		BRE49	B2F					
Madoka Remote Controller		BRC1H	71W					
Button Sensor KIt		KRCSH20	018-01					
Daikin One+ Smart Thermostat		DTST-ONE	-ADA-A					
DKN Plus Interface		AZAI6W3	SPDKC					
Adaptive Touch Controller		BACRC-T-P01/ BACRC-TH-P01/ BAC	CRC-THO-P01/ BACRC-THOC-P01					
Group Control Adaptor Printed Circuit Board1		KRP4A	A74					
Installation Box for Adaptor PCB		KRP1BA97						
Remote Sensor 2		KRCSO	1-6B					

<sup>&</sup>lt;sup>1</sup> Installation box for Adaptor PCB (KRP1BA97) is necessary. <sup>2</sup> Remote Sensor can only be installed when Sensor Kit is not installed.



# Automatic air-direction control





Air-flow from the indoor unit is automatically adjusted to always maintain a comfortable environment — even when occupancy changes.



# FXZQ\_TBVJU VISTA 2 x 2 Cassette Unit for VRV



Condensate Pump as Standard



Outside Air Integration Possible



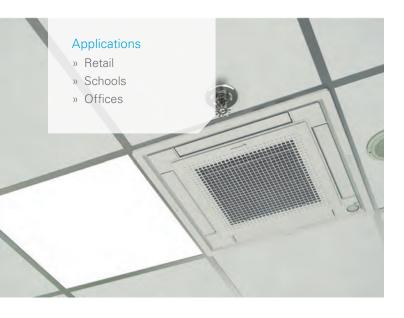
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# Designer Comfort

VISTA is a remarkable blend of iconic design and engineering excellence with an elegant white or a silver and white finish. Fitting within the ceiling grid, VISTA is stylish, low profile, and compact. Energy efficiency and comfort can be enhanced through the combined use of optional floor and presence sensors. It is also possible to close individual louvers via the wired remote control for personalized comfort.

# **Features and Benefits**

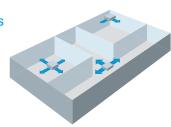
- » New 0.5 ton (5,800 Btu/h) size.
- » Seamless integration in standard architectural ceiling tiles, eliminating any overlap of adjacent tiles.
- » Energy efficient operation thanks to specially developed small tube heat exchanger and two optional intelligent sensors.
- » The use of a high efficiency DC fan motor reduces operational power input up to 48% compared to the previous generation.
- » Provides high degree of control for auxiliary heating devices, with independently configurable on/off temperature values.
- » Direct integration of fresh air through a factory knock out





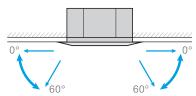
# Flexible Airflow Patterns

The four air louvers in the unit enables comfortable space environment in many different room layouts.

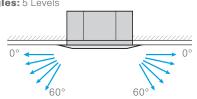


Airflow Angles

Auto Swing: Wide discharge angle: 0° to 60°



Fixed Angles: 5 Levels



Angles can be also set on site to prevent drafts  $(0^{\circ}-35^{\circ})$  or soiling of the ceiling  $(25^{\circ}-60^{\circ})$ , other than standard setting  $(0^{\circ}-60^{\circ})$ .

SPECIFICATI	DNS		0.5 TON	0.6 TON	0.75 TON	1 TON	1.25 TON	1.5 TON
Model Name			FXZQ05TBVJU	FXZQ07TBVJU	FXZQ09TBVJU	FXZQ12TBVJU	FXZQ15TBVJU	FXZQ18TBVJU
Capacity Index			5.8	7.5	9.5	12	15	18
Power Supply		V/ph/Hz			208/230VAC,	60Hz, 1 phase		
Nominal Cooling	Capacity*1	Btu/h (kW)	5,800 (1.7)	7,500 (2.2)	9,500 (2.8)	12,000 (3.5)	15,000 (4.5)	18,000 (5.3)
Nominal Heating	Capacity*2	Btu/h (kW)	6,500 (1.9)	8,500 (2.5)	10,500 (3.1)	13,500 (4.0)	17,000 (5.0)	20,000 (5.9)
	Туре			,	Turb	Fan		
F	Motor Output	W			5	0		
Fan	Air Flow Rate (H/M/L)	CFM	300 / 247 / 229	307 / 264 / 229	317 / 282 / 229	353 / 300 / 247	405 / 335 / 282	511 / 441 / 353
	Drive Type				DC Dire	ct Drive		
Dimensions - Uni	t Body (H x W x D)	in. (mm)			10-1/4 x 22-5/8 x 22	-5/8 (260x575x575)		
Dimensions - Dec	oration Panel (H x W x D)	in. (mm)			1-13/16 x 24-7/16 x 2	4-7/16 (46x620x620)		
Weight (net)		lb. (kg)		40.4 (18.3)		42.6	(19.3)	47 (21.3)
Condensate Pum	p Lift	in. (mm)			24-15/1	16 (630)		
Sound Pressure L	evel (H/M/L speed)	dB(A)	32 / 29	.5 / 25.5	33 / 30 / 29.5	33.5 / 30 / 26	37 / 32 / 28	43 / 40 / 33
	Liquid	in.			1/4 (1	-lare)		
Pipe Connections	Gas	in.			1/2 (1	Flare)		
Connections	Condensate Drain	in.			VP	20		
Refrigerant Cont	·ol				Electronic Ex	pansion Valve		
Maximum Overco	ırrent Protection Device	А			1	5		
Minimum Circuit	Ampacity	А	0.3 0.4 0.6					0.6
Decoration Pane	- White				BYFQ60	C3W1W		
Decoration Pane	- Silver/White				BYFQ60	C3W1S		

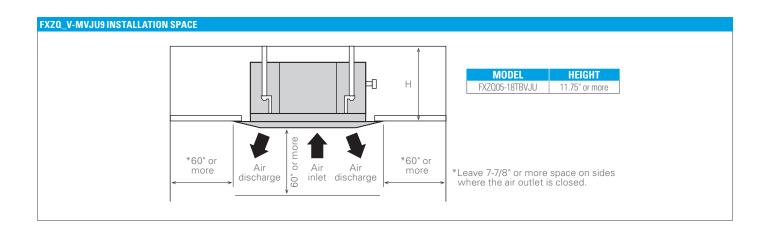
Note: \*1 Nominal cooling capacities are based on the following conditions: 80°F DB / 67°F WB (26.7°C DB / 19.4°C WB) return air temperature; 95°F DB (35°C DB) outdoor temperature; 25 ft. (7.6 m) equivalent refrigerant piping.

 $<sup>^{\</sup>circ 2}$  Nominal heating capacities are based on the following conditions: 70°F DB (21.1°C DB) return air temperature; 47°F DB / 43°F WB (8.3°C DB / 6.1°C WB) outdoor temperature; 25 ft. (7.6 m) equivalent refrigerant piping.

FXZQ_TBVJU ACCESSORIES							
Model Name	FXZQ05TBVJU	FXZQ07TBVJU	FXZQ09TBVJU	FXZQ12TBVJU	FXZQ15TBVJU	FXZQ18TBVJU	
Navigation Remote Controller*			BRC	1E73			
DKN Cloud Wi-Fi Adaptor			AZAI6V	VSCDKA			
Madoka Remote Controller			BRC1	H71W			
Button Sensor Klt			KRCSH	2018-01			
Daikin One+ Smart Thermostat			DTST-ON	IE-ADA-A			
DKN Plus Interface			AZAI6V	VSPDKC			
Adaptive Touch Controller		BACRC-T-P	01/ BACRC-TH-P01/ B	ACRC-THO-P01/BACRC	-THOC-P01		
Infrared Remote Controller - White**			BRC08	2A42W			
Infrared Remote Controller - Silver**			BRC08	32A42S			
Space and Presence Sensor Kit - White**			BRYQ	60AAW			
VISTA Decoration Panel - White			BYFQ60	C3W2W			
Legacy MVJU9-style Decoration Panel			BYFQ6	0B3W1			
Remote Sensor Kit			KRCS	01-6B			
Wiring Adaptor PCB (interface with aux heater, humidifier, OA damper/fan)			KRC	1C75			
Long-Life Replacement Filter	KAFQ441BA60						
Sealing Member of Air Discharge Kit	BDBHQ44C60						
Fresh Air Intake Kit			KDDQ4	14XA60			

 $<sup>{}^{*}\</sup>mathrm{Optional}$  face plates to provide a more intuitive user interface and disable specific functions

<sup>\*\*</sup>Not compatible with the legacy-style decoration panel



# **FXEQ\_PVJU**

# Ceiling-Mounted Cassette (Single Flow)



Condensate Pump as Standard



Outside Air Integration Possible

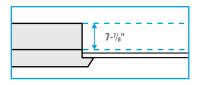


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Slim and Compact Design for Installation Flexibility

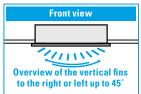
# **Features and Benefits**

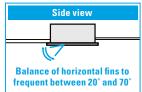
» The main body of the unit is optimized to be a compact design.
Only 7-1/8" in height and a width of 18-1/2" making it possible to



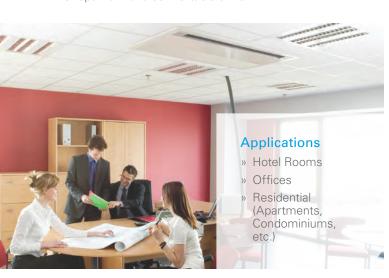
use this style of indoor unit in the tightest of spaces.

» The innovative discharge air louver design forces air in heating mode to ground level to improve the overall space heating effect of the indoor unit.





- » The unit is equipped with both horizontal and vertical louvers that can be freely adjusted with the remote controller providing a capability to optimize the airflow and throw to suit your room design.
- » The utilization of both a DC-style Fan Motor and integrated Condensate Pump allow for improvements in energy consumption as well as lower operating sound levels than other styles of indoor units.
- » This Indoor unit can be set to 5 predetermined fan speeds using the BRC1E73 wired remote controller, which allows for optimum and comfortable airflow.











(option)



BRC1E73 (option)

\* 72 ·

BRC1H71W

(option)

DTST-ONE-ADA-A (option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

» A Ventilation Air knock-out is provided to allow up to 15% of the rated airflow through the unit to be pretreated outside air.

» The innovative "smooth finish" decoration panel design

helps to minimize dust and dirt build-up and facilitates easier cleaning.

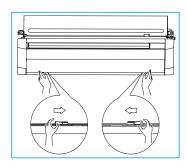
» The Indoor Unit is equipped with a factory installed condensate pump with a lift capacity of up to 33-7/16" (measured from the bottom of the unit).



31-1/21

» The units are equipped with customizable auxiliary heat control settings to facilitate the

settings to facilitate the On/Off control of an external auxiliary heat solution.



» For ease of service and maintenance activities, it is possible to access the main components of the unit by only removing the decoration panel.

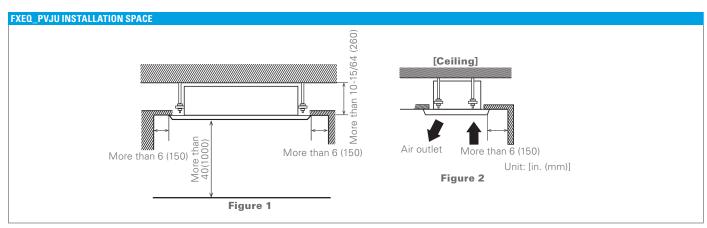
FXEQ_PVJ	U SPECIFIC <i>A</i>	ATIONS		0.6 TON FXEQ07PVJU	0.75 TON FXEQ09PVJU	1.0 TON FXEQ12PVJU	1.25 TON FXEQ15PVJU	1.5 TON FXEQ18PVJU	2 TON FXEQ24PVJU	
Power Supply			1 phase 60Hz 208/230V							
Cooling capacity	*1,*3 Btu/h		Btu/h	7500	9500	12000	15000	18000	24000	
Heating capacity	*2,*3 Btu/h		Btu/h	8500	10500	13500	17000	20000	27000	
	Min. circuit amps (MCA)		А	0.3	0.4	0.4	0.5	0.5	0.7	
Electrical	Max. ove	rcurrent protection (MOP)	А	15	15	15	15	15	15	
Casing/color						Galvanize	d steel plate			
Dimensions:	(H x W x D)		in.		7-7/ <sub>8</sub> x 18-1	⁄ <sub>2</sub> x 33-1-1/16		7-7/8 x 18-1/2	7-7/8 x 18-1/2 x 48-13/16	
		Туре				Siro	cco fan			
Fan	Air flow rate (Dry coil)	Cooling (H/HM/M/ML/L)	CFM	212/191/173/155/141	244/226/205/187/170	283/265/247/223/194	346/311/276/247/219	441/403/367/336/307	530/481/431/389/346	
	Drive		Direct drive							
Sound press	Sound pressure level Cooling (H/HM/M/ML/L) dBA		30/29/28/27/26	32/31/30/29/28	35/34/33/32/30	38/37/35/33/31	38/37/35/33/31	43/41/39/37/35		
	Weight		lbs.		38		40	5	1	
D: :	Liquid in.		ø ¼ (flare connection)					ø 3/8 (flare connection)		
Piping connections	Gas in.		in.	ø ½ (flare connection)					ø <sup>5</sup> / <sub>8</sub> (flare connection)	
		Drain	in.	PVC26 (0.D. 1-1/32 x l.D. 13/16						
Drain pump I	ift		in.	25						
Refrigerant o	Refrigerant control			Electronic expansion valve						
Connectable outdoor unit			R-410A VRV series							
	Model			3AW1						
Decoration panel	Color		Fresh White							
(required	Dimensions (H x W x D) in.		in.	3-3/16 x 21-5/ <sub>8</sub> x 37-13/32 3-3/16 x 21-					% x 53-5/32	
option)		Air filter		Resin net (with mold resistant)						
_ ′	\ 	Veight	lbs.	17.6 22					2	

Note: \*1. Nominal cooling capacities are based on the following conditions: return air temperature: 80.0°F DB (26.7°C DB), 67.0°F WB (19.4°C WB), outdoor temperature: 95.0°F DB (35.°C DB) equivalent ref. piping: 25ft. (7.6m) (Horizontal)

<sup>\*3</sup> Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

FXEQ_PVJU ACCESSORIES								
Model	FXEQ07PVJU	FXEQ09PVJU	FXEQ12PVJU	FXEQ15PVJU	FXEQ18PVJU	FXEQ24PVJU		
Decoration panel		BYEP40AW1			BYEP63AW1			
Wired remote controller		BRC1E73						
Madoka Remote Controller		BRC1H71W						
Button Sensor KIt		KRCSH2018-01						
Daikin One+ Smart Thermostat		DTST-ONE-ADA-A						
DKN Plus Interface		AZAI6WSPDKC						
Adaptive Touch Controller		BACRC-T-P01/ BACRC-TH-P01/ BACRC-THO-P01/ BACRC-THOC-P01						
Remote sensor		KRCS01-4B						
Wiring adaptor printed circuit board 2		KRP1C75						
Group control adaptor printed circuit board 2		KRP4A74						
Adaptor mounting box		KRP1B101						

Note: \*1.Electrical box (No.5-1/6-1) is required for controller (No. 5/6) \*2. Adaptor mounting box (No.12) is necessary.



<sup>&</sup>lt;sup>\*2</sup> Nominal heating capacities are based on the following conditions: return air temperature: 70.0°F DB (21.1°C DB), outdoor temperature: 47.0°F DB (8.3°C DB), 43.0°F DB (6.1°C WB) equivalent ref. piping: 25ft. (7.6m) (Horizontal)

# **FXHQ\_MVJU**Ceiling-Suspended Unit



# Slim, Efficient, Quiet, Easy to Maintain

With its slim, elegant design, the FXHQ ceiling-suspended unit is a great fit for any light commercial space. Wide air openings provide a comfortable airflow and an innovative stream fan ensures quiet operation, making it ideal for retail stores, restaurants, classrooms and conference rooms.

# **Features and Benefits**

- » One of our slimmest indoor units (less than 8") fits within any interior design
- » Wide air discharge outlet distributes a comfortable airflow throughout the entire space with throw of up to 25 ft.
- » Innovative stream fan technology keeps sound pressure levels low
- » Smooth flat louver design makes cleaning simple
- » Long-life filter is standard
- » Models range from 12 MBH to 36 MBH









BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82 (option)









BRC1H71W (option)

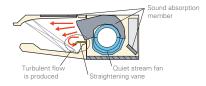
AZAI6WSPDKC (option)

(option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)

Quiet Stream Fan (side view)

Uses the quiet stream fan and many more advanced technologies.





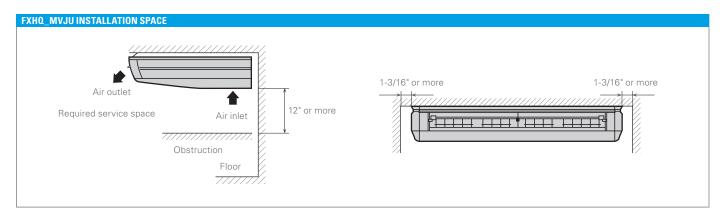
FXHQ_MVJU SPECIFIC	CATIONS		1 TON 2 TON		3 TON		
Model Name			FXHQ12MVJU	FXHQ24MVJU	FXHQ36MVJU		
Power Supply V/ph/Hz			208-230/1/60				
Rated Cooling Capacity BTU/h			12,000 24,000		36,000		
Rated Heating Capacity		BTU/h	13,500 27,000		40,000		
Airflow Rate (H/L)		CFM	410/340	710/600	830/670		
Weight		lbs.	55	80	90		
Height		in.	7-11/16				
Width	Width		37-13/16	55-1/8	62-5/8		
Depth	Depth		26-3/4				
Sound Pressure (H/L)		dB(A)	42/33	44/36	46/41		
Condensate Pipe Connecti	Condensate Pipe Connection			1			
Pipe Connections	Gas	in.	1/2 (Flare) 5/8 (Flare)				
ripe confilections	Liquid	in.	1/4 (Flare)	3/8 (FI	are)		
Refrigerant			R-410A				
Refrigerant Control			Electronic Expansion Valve				
Maximum Overcurrent Protective Device A		А	15				
Minimum Circuit Amps		А	0.8 1.0		1.4		
Protection Devices		Fuse and Fan Motor Thermal Protector					
External Finish			White Casing				
Standard Filter Type			Resin Net (with Mold Resistant)				

Cooling Mode Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft.

Heating Mode Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft. **Note:** Specifications are subject to change without notice.

FXHO_MVJU ACCESSORIES						
Model Name	FXHQ12MVJU	FXHQ24MVJU	FXHQ36MVJU			
Navigation Remote Controller*		BRC1E73				
DKN Cloud Wi-Fi Adaptor	AZAI6WSCDKA					
Madoka Remote Controller		BRC1H71W				
Button Sensor Klt		KRCSH2018-01				
Daikin <i>One</i> + Smart Thermostat	DTST-ONE-ADA-A					
DKN Plus Interface	AZAI6WSPDKC					
Adaptive Touch Controller	BACRC-T-P01/	BACRC-TH-P01/BACRC-THO-P01/BACRC	C-THOC-P01			
Wireless Remote Controller	BRC7E83					
Remote Sensor Kit	KRCS01-1B					
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)	KRP1C74					
Group Control Adaptor PCB (connects to external BMS)	KRP4A72					
Replacement long-life filter	KAFJ501D56	KAFJ501D112	KAFJ501D160			
Condensate Pump	DACA-CP3-1					

<sup>\*</sup> Optional face plates available to provide a more intuitive user interface and disable specific functions





# **FXAQ\_PVJU**Wall-Mounted Unit



# Stylish, Compact, Convenient, Comfortable

Daikin's wall-mounted units are ideal for cooling or heating smaller zones such as stores, offices, and restaurants. The compact, stylish design lets the unit blend discreetly into any interior design, and airflow can be supplied in any of five different directions and easily programmed via remote control.

# **Features and Benefits**

- » Auto-swing mechanism ensures efficient air distribution via louvers that automatically close when the unit is turned off
- » Wide air discharge outlet distributes a comfortable airflow throughout the entire space
- » Horizontal louvers and front panel can be easily removed for cleaning
- » Drain pipe can be easily hidden from sight
- » Models range from 7.5 MBH to 24 MBH





CIRZONE + :



BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82 (option)







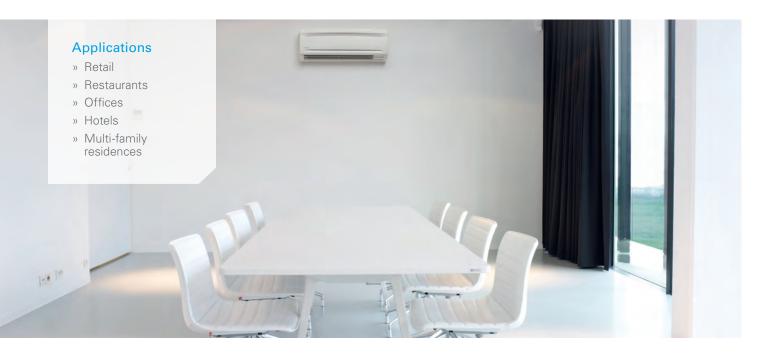


BRC1H71W (option)

AZAI6WSPDKC (option)

(option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)



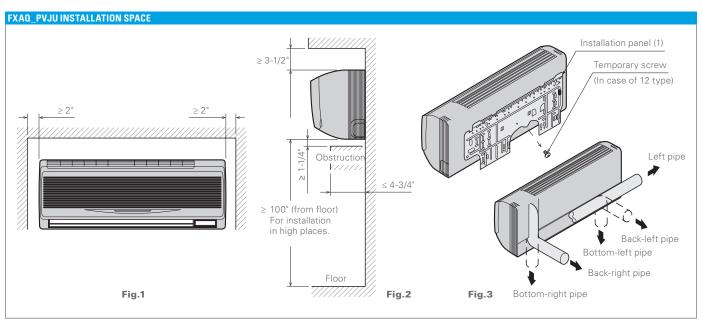
FXAQ_PVJU SPECIFICATIONS			0.6 TON	0.75 TON	1 TON	1.5 TON	2 TON	
Model Name			FXAQ07PVJU	FXAQ09PVJU	FXAQ12PVJU	FXAQ18PVJU	FXAQ24PVJU	
Power Supply V/ph/Hz			208-230/1/60					
Rated Cooling Capacity		BTU/h	7,500	9,500	12,000	18,000	24,000	
Rated Heating Capacity		BTU/h	8,500	10,500	13,500	20,000	27,000	
Airflow Rate (H/L)		CFM	260/160	280/175	290/180	500/400	635/470	
Weight		lbs.	26				31	
Height		in.	11-3/8					
Width		in.	31-1/4 41-3/8				3/8	
Depth		in.	9					
Sound Pressure (H/L)	Sound Pressure (H/L)		36/31	37/31	38/31	43/37	47/41	
Condensate Pipe Connectio	1	in. O.D.	11/16					
Pipe Connections	Gas	in.	1/2 (Flare) 5/8 (Flare)					
ripe connections	Liquid	in.		3/8 (Flare)				
Refrigerant			R-410A					
Refrigerant Control			Electronic Expansion Valve					
Maximum Overcurrent Protective Device		A	15					
Minimum Circuit Amps		A	0.4 0.5 0.6					
Protection Devices		Fuse and Fan Motor Thermal Protector						
External Finish		White Casing						
Standard Filter Type			Resin Net (washable)					

Cooling Mode Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft. Heating Mode Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft.

**Note:** Specifications are subject to change without notice.

FXAQ_PVJU ACCESSORIES							
Model Name	FXAQ07PVJU	FXAQ09PVJU	FXAQ12PVJU	FXAQ18PVJU	FXAQ24PVJU		
Navigation Remote Controller*	BRC1E73						
DKN Cloud Wi-Fi Adaptor	AZAI6WSCDKA						
Madoka Remote Controller	BRC1H71W						
Button Sensor Klt	KRCSH2018-01						
Daikin One+ Smart Thermostat	DTST-ONE-ADA-A						
DKN Plus Interface	AZAIGWSPDKC						
Adaptive Touch Controller	BACRC-TH-P01/ BACRC-TH-P01/ BACRC-THO-P01/ BACRC-THOC-P01						
Wireless Remote Controller	BRC7E818						
Remote Sensor Kit	KRCS01-1B						
Group Control Adaptor PCB (Connects to external BMS)	KRP4A71						
Condensate Pump	DACA-CP1-1						

<sup>\*</sup> Optional face plates available to provide a more intuitive user interface and disable specific functions



# **FXLQ\_MVJU9** Floor-Standing Unit



# Versatile, Logical, Durable, Quiet

The ideal way to save space, our floor-standing units can easily be installed along a perimeter wall. The air distribution from these models will allow you to find the right balance for classrooms, churches, office hallways or similar spaces.

# **Features and Benefits**

- » Ideal for installation beneath a window
- » Unit requires minimal installation space
- » Fitted with a washable long-life filter
- » Remote-control options available
- » Space-saving unit can be freestanding or wall-mounted
- » Models range from 7.5 MBH to 24 MBH









BRC1E73 (option)

AZAI6WSCDKA (option)

BRC4C82 (option)



(option)





(option)





(option)

BACRC-T-P01, BACRC-TH-P01, BACRC-THO-P01, BACRC-THOC-P01 (option)



FXLQ_MVJU9 SPECII	ICATIONS		0.6 TON	0.75 TON	1 TON	1.5 TON	2 TON						
Model Name			FXLQ07MVJU9	FXLQ09MVJU9	FXLQ12MVJU9	FXLQ18MVJU9	FXLQ24MVJU9						
Power Supply		V/ph/Hz			208-230/1/60								
Rated Cooling Capacity		BTU/h	7,500	9,500	12,000	18,000	24,000						
Rated Heating Capacity		BTU/h	8,500	10,500	13,500	20,000	27,000						
Airflow Rate (H/L)		CFM	245	/210	280/210	490/380	560/420						
Weight		lbs.	5	58 66									
Height		in.			23-5/8								
Width		in.	39-	3/8	44-7/8	55	-7/8						
Depth	in. 8-3/4												
Sound Pressure (H/L)		dB(A)	35.	35/32 36/33 40/35 41/36									
Condensate Pipe Connec	ction	in. O.D.		27/32									
Pipe Connections	Gas	in.		1/2 (	Flare)		5/8 (Flare)						
	Liquid	in.		1/4 (	Flare)		3/8 (Flare)						
Refrigerant					R-410A								
Refrigerant Control					Electronic Expansion Valve								
Maximum Overcurrent Protective Device		А			15								
Minimum Circuit Amps		А	0	.3	0.5	0	.6						
Protection Devices				Fuse and Fan Motor Thermal Protector									
External Finish					Ivory White Casing								
Standard Filter Type Resin Net (with Mold Resistant)													

Nominal Conditions:

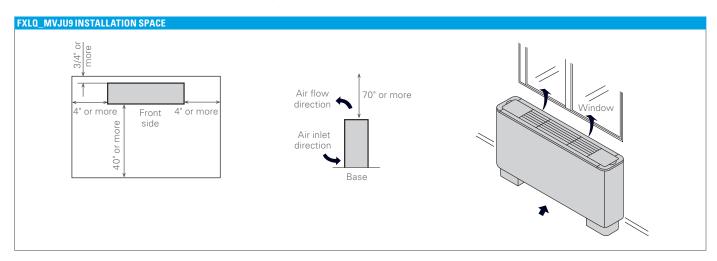
Cooling Mode Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB Pipe Length: 25 ft. Level Difference: 0 ft.

Heating Mode Indoor: 70°F DB Outdoor: 47°F DB / 43°F WB Pipe Length: 25 ft. Level Difference: 0 ft.

**Note:** Specifications are subject to change without notice.

FXLQ_MVJU9 ACCESSORIES									
Model Name	FXLQ12MVJU9	FXLQ18MVJU9	FXLQ24MVJU9	FXNQ12MVJU9	FXNQ18MVJU9	FXNQ24MVJU9			
Navigation Remote Controller*			BRC	1E73					
DKN Cloud Wi-Fi Adaptor			AZAI6V	VSCDKA					
Madoka Remote Controller			BRC1	H71W					
Button Sensor Klt			KRCSH	2018-01					
Daikin <i>One</i> + Smart Thermostat			DTST-ON	IE-ADA-A					
DKN Plus Interface			AZAI6V	VSPDKC					
Adaptive Touch Controller		BACRC-T-P	01/BACRC-TH-P01/B/	ACRC-THO-P01/BACRO	C-THOC-P01				
Wireless Remote Controller			BRC	4C82					
Remote Sensor Kit			KRCS	01-1B					
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)	KRP1C74								
Group Control Adaptor PCB (connects to external BMS)			KRP	4A71					

<sup>\*</sup> Optional face plates available to provide a more intuitive user interface and disable specific functions



#### **DZK**

### Daikin Zoning Kit

#### Kits and Accessories



The optional Daikin Zoning Kit (DZK) increases the flexibility of the Daikin VRV systems by adding a Zoning

Box to an indoor unit fan coil, allowing several separate ducts to supply air to different individually-controlled zones in the building. A zone can be a room, part of room, or several rooms. This flexible and scalable Zoning Kit integrates seamlessly with the indoor unit fan coil controls. The DZK system controls work together with the regular Daikin zone controller (i.e. BRC1E73) to establish the required set-point, fan speed and mode of operation that is then requested to the VRV indoor unit via the Daikin zone controller. This allows the internal DZK control algorithms to look at the number of zone dampers in operation, and at what position the dampers need to be and adjust the VRV indoor unit operation accordingly. The DZK system is not directly compatible with the suite of Daikin centralized control options such as iTM.

A complete Daikin Zoning Kit consists of Zoning Box (with Control Board), Wired Thermostat, and Wireless Thermostats. The optional DZK BACnet Interface enables any BACnet/IP compatible Building Management System to be used for remote monitoring and control of the DZK.

#### Wired Thermostat

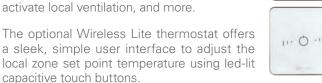
The 4th generation DZK introduces a software redesign for the Wired thermostat. The revised software offers a simplistic interface for commissioning DZK controls for an enhanced user experience.



The Wired thermostat in the DZK is a graphical colored, touchscreen interface with text menus, intuitive icons, and guided scheduling capability. It displays temperatures and operating values, and selects the operating mode for the system.

#### Wireless Thermostats

The optional Wireless thermostat offers a backlit, low energy E Ink display with capacitive touch buttons. The user can adjust the zone set point temperature, set user mode schedules, activate local ventilation, and more.







#### Now with BACnet™/IP compatibility



#### Zoning Box with Control Box (Model Depends on Indoor Unit)

The Zoning Box in the Daikin Zoning Kit mounts easily on Daikin's Indoor Unit FXMQ-P or FXSQ series fan coils. It consists of the enclosure, individually motorized dampers, and a control box. It is available in different sizes and damper configurations and by utilizing ducts for air supply it can be used to control the air temperature in up to 6 zones. The wired thermostat and the wireless thermostats provide temperature inputs and user interfaces for programming and adjustment of the control functions for each zone.

#### Daikin BACnet HUB4 Module

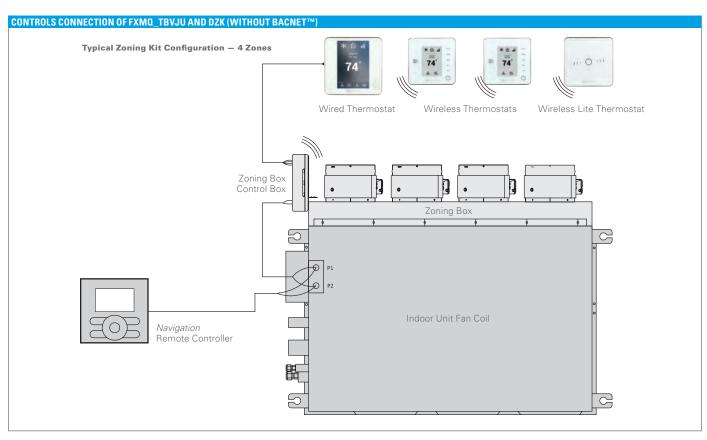
The DZK BACnet™ HUB module will work with any BACnet/IP & BACnet/ MSTP compatible Building Management System. The DZK BACnet Hub is now Wi-Fi capable and provides remote access via the Airzone Cloud app or device web browser. (DZK-BACnet-HUB4)



DAIKIN ZON	DAIKIN ZONING KIT (DZK) - GENERAL TECHNICAL DATA													
DZK Model		DZKS015E3-4	DZKS015E4-3	DZKS030E4-3	DZKS030E5-4	DZKS048E4-4	DZKS048E6-4	DZK030E4-4	DZK030E5-4	DZK048E4-4	DZK048E6-4			
Height	in.	9-5/8	9-5/16	9-5/8	9-5/16	9-5/8	9-5/16	10-7/16	10-1/4	10-7/16	10-1/4			
Width	in.	34-	3/16	43-	5/8	53-	-7/16	43-	9/16	53-	7/16			
Depth	in.		10-7/16											
Weight	lb.	16	18	18	20	18	23	18	20	20	23			
No. of Zones		3	4	4	5	4	6	4	5	4	6			
Ø of Outlets	in.	8	6	8	6	8	6	8	6	8	6			
D	VAC					11	10/230 VAC							
Power Supply	ph		1											
Supply	Hz						60							

DAIKIN ZONING KIT (DZK) - COMPATIBILITY						
<i>VRV</i> Indoor Unit	DZKS015E4-4	DZKS015E4-4	DZKS030E4-4	DZKS030E5-4	DZKS048E4-4	DZKS048E6-4
FXSQ15TAVJU	•	•				
FXMQ15/18/24TBVJU						
FXMQ30/36/48TBVJU						•
DZK-MTS-3-W*	•		•			•
DZK-ZTS-4-W		•	•	•	•	•
DZK-LTS-3-W	•	•	•	•	•	•
DZK-BACNET-HUB4	•	•	•	•	•	•

<sup>\*</sup>Minimum (1) required per DZK Zoning Kit





### Outdoor Units



#### **Outdoor Units**

### CERTIFIED® www.ahridirectory.org

#### **Outdoor Units**

### **IRV** emeron

#### VRV EMERION Heat Recovery

Simple. Sustainable. Connected.

- » Simple and Stylish design with expanded line up with single-module units from 6 – 20 T and dual-modules up to 40 T
- » High energy efficiency with IEERs up to 30.0 delivers up to 30% efficiency increase compared to previous *VRV* systems
- » Sealed e-box design with an ingress protection rating of IP55 provides for high dust and moisture protection
- » Simplified diagnosis with built-in data recorder which stores up to 45 minutes of operational data.
- » Engineered for ease of installation and service with three-segment panel design. Design flexibility to enlarge system from single to a dual-module without changes to installed main pipe sizes for phased installation or tenant fit-out buildings
- » Heating down to -13°F as standard and high heating capacities at 17°F make it an ideal choice for all-electric heat pump solutions
- » Continuous heating during defrost capability with single module (16 T – 20 T) and all dual module systems
- » Hot gas defrost circuit allows for installation without base pan heater.

#### VRV IV X

#### VRV IV X Heat Pump / Heat Recovery

Industry's first 3-phase variable refrigerant flow system to integrate with communicating gas furnaces

- » Enhanced design flexibility by allowing for phased installations with predefined pipe sizes and design rules
- » Service window provides ease of access to the multi-functional display without removing the main electrical panel. The built-in multi-functional display is utilized for commissioning and maintenance and quickly converts to digital gauges to provide refrigerant pressure and temperatures.
- » Dual-fuel ready with connectivity to Daikin communicating gas furnace or all-electric heat pump heating for optimized operational costs based on utility rates
- » Field performable intermittent outdoor fan operation to help minimize snow accumulation on fan blades when the system is in thermal off.
- » Total comfort solution for heating, cooling, ventilation, and controls.
- » Outstanding warranty\* with 10-Year Compressor and Parts Limited Warranty as standard
- » Fully integrated solution with high efficiency (IEER up to 27.80 on Heat Recovery models and IEER up to 27.30 for Heat Pump)
- <sup>1</sup> Multi module heat recovery systems only for continuous heating during defrost <sup>†</sup> Conditions/rules apply. Refer to Installation and Engineering Manual for
- further details.

  \* Complete warranty details available from your local Daikin manufacturer's representative or distributor or online at www.daikincomfort.com or
- www.daikinac.com

  \*\* Varies based on condensing unit model selected

#### *YRY*

#### VRV AURORA Heat Pump / Heat Recovery

- » Variable refrigerant flow system Industry's first air-cooled system that delivers heating down to -22°F (-30°C) as standard
- » Hot gas base pan circuit allows installation without an additional drain pan heater
- » Designed to provide continuous heating during defrost and oil return¹
- » Engineered with Daikin vapor injection compressor for optimized part load efficiencies

#### **VRV IV** S-series

#### Air-Cooled

VRV IV-S systems are equipped with built-in intelligence which provide independent zoning control with maximum flexibility and energy savings. With the ability to connect up to ten indoor units to one outdoor unit, the space-saving VRV IV-S system is ideal for most light commercial and residential applications.



- » Available in 3, 4 and 5 ton modules
- » Increase in efficiency up to 18 SEER & 10.5+ HSPF
- » Year round comfort and energy savings delivered by VRT technology
- » Broader diversity with ability to connect up to 9 indoor units
- » Space saving design with under 39" height.\*\* Over 25% smaller as compared to VRV III-S
- » Easier to install with over 39% weight reduction vs VRV III-S
- » Low sound levels for comfort
- » Higher reliability with Daikin's swing compressor
- » Dependable operation in extreme ambient conditions up to 122°F
- » Added safety and peace of mind with optional auto changeover to auxiliary heat
- » Backed by a best in class 10-Year Parts Limited Warranty\*

#### *VRV*

### VRV T-Series Water-Cooled Condensing Unit Heat Pump / Heat Recovery

- » Flexible System design with increased diversity up to  $150\%^{\dagger}$
- » Can be applied to both geothermal and boiler/tower applications as standard with condenser water inlet temperature as low as 14°F† in heating and 23°F† in cooling is possible
- Triple-stack capable to deliver up to 36 tons in just under 11.5 feet ceiling height thanks to the compact design
- » Engineered with heat rejection cancellation technology<sup>†</sup> to eliminate mechanical room conditioning requirements
- » 2-9V variable water flow control logic<sup>†</sup> as standard to increase waterside system operational efficiencies
- » Drop-down switch box for easy service to key components
- » Field selectable top or front refrigerant connections for flexible and easy installation





## Air-Cooled Heat Recovery



Daikin *VRV EMERION* is available in single and dual-module lineups. The introduction of new 16-20 T single modules allows a system capacity of up to 40 Tons with just two modules. This helps reduce the overall space required for mechanical equipment and optimizes total project costs.

#### Features and Benefits

- » New Simple and Stylish design with expanded line up with single-module units from 6 – 20 T and dual-modules up to 40 T.
- » Space-saving 16 20 T single module units provide up to 34% footprint and up to 500 lbs./unit weight reduction compared to previous series<sup>2</sup>.
- » High energy efficiency with IEERs up to 30.0 delivers up to 30% efficiency increase compared to previous VRV systems.
- » Year-round comfort and energy savings with Daikin's Variable Refrigerant Temperature technology (VRT), compared to standard VRF and previous VRV systems.
- » Increased piping lengths of up to 361 ft. vertical separation between ODU and IDU provide additional application flexibility compared to previous VRV systems¹.
- » Heating down to -13°F as standard and high heating capacities at 17°F make it an ideal choice for all-electric heat pump solutions.
- $\,$  » Continuous heating during defrost capability with single module (16 T 20 T) and all dual module systems  $^1$  .
- » Hot gas defrost circuit allows for installation without base pan heater.
- » Sealed e-box design with an ingress protection rating of IP55 provides for high dust and moisture protection.
- » Dual-fuel ready with connectivity to Daikin communicating gas furnace or all-electric heat pump heating for optimized operational costs based on utility rates.
- » Design flexibility to enlarge system from single to a dual-module without changes to installed main pipe sizes for phased installation or tenant fit-out buildings.
- » Meets several local code compliance certifications such as OSHPD Seismic, Miami Dade Wind, and Chicago pressure relief codes.
- » Reduced wiring costs with up to 34% reduction in MCA values compared to previous series.



- » Engineered for ease of installation and service with three-segment panel design.
- » Enhanced installation and serviceability with increased space for easy field piping connections to service valves¹.
- » Simplified diagnosis with built-in data recorder which stores up to 45 minutes of operational data.
- » Integrates with new Daikin HERO ecosystem, an IoT-based remote monitoring and diagnostics platform. Available Fall of 2022.
- <sup>1</sup> Refer to engineering and installation manuals for application rules.
- <sup>2</sup> Model specific; check product specification for details.

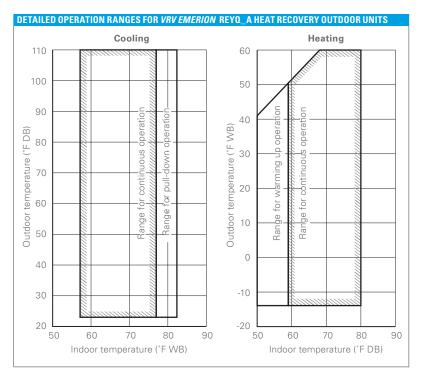


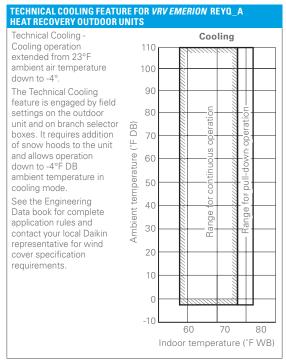
Complete commercial warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com or www.daikinac.com.



VRV EMERION CE	RTIFIED D	ATA - HE	AT RECOV	ERY, -230V	//60HZ/3P	H, 460V/6	OHZ/3PH									
Product#	Capacity (Tons)	IEER Non-Ducted	IEER Ducted	IEER Mixed	SCHE Non-Ducted	SCHE Ducted	SCHE Mixed	COP @ 47°F Non-Ducted	COP @ 47°F Ducted	COP @ 47°F Mixed	COP @ 17°F Non-Ducted	COP @ 17°F Ducted	COP @ 17°F Mixed	EER Non-Ducted	EER Ducted	EER Mixed
REYQ72AA	6	28.00	23.00	25.50	26.10	22.00	24.05	4.35	3.58	3.97	2.50	2.40	2.45	15.70	12.80	14.25
REYQ96AA	8	30.00	25.30	27.65	26.10	21.10	23.60	4.30	3.56	3.93	2.48	2.25	2.37	14.60	12.80	13.70
REYQ120AA	10	27.50	23.50	25.50	26.10	22.20	24.15	4.00	3.48	3.74	2.38	2.25	2.32	13.20	12.40	12.80
REYQ144AA	12	26.50	22.50	24.50	25.60	22.10	23.85	3.80	3.35	3.58	2.20	2.10	2.15	12.50	12.00	12.25
REYQ168AA	14	24.00	21.40	22.70	25.60	22.30	23.95	3.50	3.20	3.35	2.10	2.10	2.10	11.50	11.10	11.30
REYQ192AA	16	24.00	21.00	22.50	26.60	22.80	24.70	3.85	3.45	3.65	2.05	2.05	2.05	12.30	11.50	11.90
REYQ216AA	18	23.00	20.50	21.75	25.50	21.90	23.70	3.70	3.25	3.48	2.05	2.05	2.05	11.50	11.00	11.25
REYQ240AA	20	21.60	19.70	20.65	25.60	21.80	23.70	3.45	3.20	3.33	2.05	2.05	2.05	11.00	10.80	10.90
REYQ264AA	22	23.90	19.20	21.55	26.20	18.20	22.20	3.70	3.20	3.45	2.35	2.10	2.23	12.00	10.60	11.30
REY0288AA	24	23.20	19.30	21.25	23.40	20.00	21.70	3.60	3.27	3.44	2.41	2.13	2.27	12.00	11.00	11.50
REYQ312AA	26	22.80	19.20	21.00	24.40	20.80	22.60	3.60	3.25	3.43	2.35	2.10	2.23	11.30	10.80	11.05
REYQ336AA	28	22.10	18.60	20.35	23.40	19.80	21.60	3.60	3.23	3.42	2.20	2.10	2.15	10.50	10.60	10.55
REYQ360AA	30	21.00	18.20	19.60	23.00	19.40	21.20	3.60	3.21	3.41	2.05	2.05	2.05	11.50	10.70	11.10
REYQ384AA	32	22.00	18.80	20.40	22.00	17.00	19.50	3.40	3.25	3.33	2.05	2.05	2.05	10.70	10.50	10.60
REYQ408AA	34	21.50	18.40	19.95	21.90	18.40	20.15	3.40	3.25	3.33	2.05	2.05	2.05	10.70	10.50	10.60
REYQ432AA	36	21.10	18.10	19.60	20.30	18.20	19.25	3.40	3.25	3.33	2.05	2.05	2.05	10.70	10.10	10.40
REYQ456AA	38	20.20	17.50	18.85	18.90	18.00	18.45	3.40	3.25	3.33	2.05	2.05	2.05	9.90	9.80	9.85
REYQ480AA	40	19.40	17.20	18.30	16.90	16.50	16.70	3.40	3.25	3.33	2.05	2.05	2.05	9.70	9.60	9.65

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2014, "Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment" for the VRV series. The VRV EMERION series has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2016. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2016.





# VRV EMERION Air-Cooled Heat Recovery (cont)

TECHNICAL	DATA FOR <i>VRV EMERION</i>	/- AATJA/A	AAYDA HEAT RE	COVERY OUTDO	OR UNITS						
			6 Ton	8 Ton	10 Ton	12 Ton	14 Ton	16 Ton	18 Ton	20 Ton	
	208-230V/3Ph/60I	Hz	REYQ72AATJA	REYQ96AATJA	REYQ120AATJA	REYQ144AATJA	REYQ168AATJA	REYQ192AATJA	REYQ216AATJA	REYQ240AATJA	
Model	460V/3Ph/60Hz		REYQ72AAYDA	REYQ96AAYDA	REYQ120AAYDA	REYQ144AAYDA	REYQ168AAYDA	REYQ192AAYDA	REYQ216AAYDA	REYQ240AAYDA	
	Combination										
	Rated Cooling Capacity	BTU/h	69,000	92,000	114,000	138,000	160,000	184,000	206,000	228,000	
	Rated Heating Capacity	BTU/h	77,000	103,000	129,000	154,000	180,000	206,000	232,000	256,000	
	Operation Range Cooling	°F (°C) DB				-4* — 122	(-20* - 50)				
Performance	Operation Range Heating	°F (°C) WB				-13 – 60 (	-25 — 15.6)				
	Sound Pressure	dB(A)	58	61	61	65	65	67	68	69	
	Airflow	CFM	6200	8965	8965	9675	9675	13650	14505	14505	
	Fan ESP, Standard/Max	in. W.G.				0.12	/ 0.32				
	Compressors, all inverter	Qty	1				2				
Compressor	Revolutions per minute	RPM	4212	4482 + 4482	5934 + 5934	5496 + 5496	6684 + 6684	5586 + 5586	6294 + 6294	7272 + 7272	
	Capacity Control Range	%	7-100	4-100	3-100	3-100	2-100	4-100	3-100	3-100	
	Maximum Vertical Pipe Length Above Unit	ft.				164 (361 With	Field Setting)*				
	Maximum Vertical Pipe Length Below Unit	ft.				130 (361 With	Field Setting)*				
Refrigerant	Maximum Vertical Pipe Length Between IDU	ft.				1	00				
Piping, Layout	Maximum Actual Pipe Length	ft.				5	41				
	Maximum Equivalent Pipe Length	ft.				6	20				
	Maximum Total Pipe Length	ft.				3,	280				
	Liquid Pipe, Main Line	in.	3/8	3/8	1/2	1/2	5/8	5/8	5/8	5/8	
Refrigerant Piping,	Suction Gas Pipe, Main Line	in.	3/4	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8	
Connections	Discharge Gas Pipe, Main Line	in.	5/8	3/4	3/4	7/8	7/8	1-1/8	1-1/8	1 1/8	
Connection	Standard Connectable Indoor Unit Ratio	%				50 -	· 200¹				
Ratio	Maximum Number of Indoor Units	Qty	12	16	20	25	29	33	37	41	
	Maximum Overcurrent Protection, MOP (208-230V / 460V)	А	30 / 15	35 / 20	40 / 20	50 / 25	60 / 25	60/30	70 / 30	80 / 40	
Electrical	Minimum Circuit Amps, MCA (208-230V / 460V)	А	27.3 / 12.4	34.1 / 16.4	36.5 / 16.6	47.8 / 21.3	54.9 / 24.9	59.8 / 28.3	67.2 / 29.9	73.7 / 33.4	
	Compressor Rated Load Amps, (208-230V / 460V)	А	11.1 / 5.1	7.6 + 7.6 / 3.4 + 3.5	10.5 + 10.6 / 4.8 + 4.8	10.0 + 15.8 / 4.5 + 7.2	12.5 + 20.0 / 5.7 + 9.1	16.6 + 16.6 / 7.5 + 7.6	20.0 + 20.0 / 9.1 + 9.1	24.3 + 24.4 / 11.0 + 11.1	
	Factory Refrigerant Charge	lbs.	23.4				25.8				
Unit	Weight (208-230V / 460V)	lbs.	509 / 525	710 / 725	712 / 728	785 / 800	787 / 802	957 / 972	957 / 972	957 / 972	
Unit	Dimensions (H x W x D)	in.	65-3/8 x 36-5/8 x 30-1/8		65-3/8 x 48-	13/16 x 30-1/8		65	-3/8 x 68-7/8 x 30-1	//8	

<sup>&</sup>lt;sup>1</sup>Varies based on indoor model selected \*Refer to engineering and installation manuals for rules and conditions

22 Ton 24 Ton 26 Ton 28 Ton 30 Ton 32 Ton 34 Ton 36 Ton 38 Ton 40 Ton													
22 Ton	24 Ton	26 Ton	28 Ton	30 Ton	32 Ton	34 Ton	36 Ton	38 Ton	40 Ton				
REYQ264AATJA	REYQ288AATJA	REYQ312AATJA	REYQ336AATJA	REYQ360AATJA	REYQ384AATJA	REYQ408AATJA	REYQ432AATJA	REYQ456AATJA	REYQ480AATJA				
REYQ264AAYDA	REYQ288AAYDA	REYQ312AAYDA	REYQ336AAYDA	REYQ360AAYDA	REYQ384AAYDA	REYQ408AAYDA	REYQ432AAYDA	REYQ456AAYDA	REYQ480AAYDA				
1 x REYQ120AA 1 x REYQ144AA	2 x REYQ144AA	1 x REYQ144AA 1 x REYQ168AA	2 x REYQ168AA	1 x REYQ168AA 1 x REYQ192AA	2 x REYQ192AA	1 x REYQ192AA 1 x REYQ216AA	2 x REYQ216AA	1 x REYQ216AA 1 x REYQ240AA	2 x REYQ240AA				
252,000	274,000	296,000	320,000	342,000	364,000	388,000	410,000	434,000	456,000				
282,000	294,000	320,000	338,000	376,000	386,000	394,000	404,000	414,000	424,000				
				-4* - 12	2 (-20* – 50)								
				-13 – 60	) (-25 — 15.6)								
67	69	69	69	70	71	71	72	72	73				
8965 + 9675	9675 + 9675	9675 + 9675	9675 + 9675	9675 + 13650	13650 + 13650	13650 + 14505	14505 + 14505	14505 + 14505	14505 + 14505				
				0.1	2 / 0.32								
 2+2  (503A + 503A) + (5A96 + 5A96) + (5A96 + 5A96) + (668A + 668A) + (668A + 668A) + (6586 + 5586) + (5586 + 5586) + (620A + 620A) + (620A + 620A) + (7272 + 7272) + (7272 + 7													
(5934 + 5934) + (5496 + 5496)	(5496 + 5496) + (5496 + 5496)	(5496 + 5496) + (6684 + 6684)	(6684 + 6684) + (6684 + 6684)	(6684 + 6684) + (5586 + 5586)	(5586 + 5586) + (5586 + 5586)	(5586 + 5586) + (6294 + 6294)	(6294 + 6294) + (6294 + 6294)	(6294 + 6294) + (7272 + 7272)	(7272 + 7272) + (7272 + 7272)				
1-100	1-100	1-100	1-100	1-100	1-100	1-100	1-100	1-100	1-100				
				164 (361 Wi	th Field Setting)*								
				130 (361 Wi	th Field Setting)*								
					100								
					541								
					620								
					3280								
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4				
1-3/8	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8				
1-1/8	1-1/8	1-1/8	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8				
				50	) - 200¹								
45	49	54	58	62			64						
40 + 50 / 20 + 25	50 + 50 / 25 + 25	50+60/25+25	60+60/25+25	60+60/25+30	60+60/30+30	60+70/30+30	70 + 80 / 30 + 30	70 + 80 / 30 + 40	80 + 80 / 40 + 40				
36.5 + 47.8 / 16.6+21.3	47.8 + 47.8 / 21.3 + 21.3	47.8 + 54.9 / 21.3 + 24.9	54.9 + 54.9 / 24.9 + 24.9	54.9 + 59.8 / 24.9 + 28.3	59.8 + 59.8 / 28.3 + 28.3	59.8 + 67.2 / 28.3 + 29.9	67.2 + 67.2 / 29.9 + 29.9	67.2 + 73.7 / 29.9 + 33.4	73.7 + 73.7 / 33.4 + 33.4				
(10.5 + 10.6) + (10.0 + 15.8) / (4.8 + 4.8) + (4.5 + 7.2)	(10.0 + 15.8) + (10.0 + 15.8) / (4.5 + 7.2) + (4.5 +7.2)	(10.0 + 15.8) + (12.5 + 20.0) / (4.5 + 7.2) + (5.7 + 9.1)	(12.5 + 20.0) + (12.5 + 20.0) / (5.7 + 9.1) + (5.7 + 9.1)	(12.5 + 20.0) + (16.6 + 16.6) / (5.7 + 9.1) + (7.5 + 7.6)	(16.6 + 16.6) + (16.6 + 16.6) / (7.5 + 7.6) + (7.5 + 7.6)	(16.6 + 16.6) + (20.0 + 20.0) / (7.5 + 7.6) + (9.1 + 9.1)	(20.0 + 20.0) + (20.0 + 20.0) / (9.1 + 9.1) + (9.1 + 9.1)	(20.0 + 20.0) + (24.3 + 24.3) / (9.1 + 9.1) + (11.0 + 11.1)	(24.3 + 24.3) + (24.3 + 24.4) / (11.0 + 11.1) + (11.0 + 11.1)				
712 , 705 /	705 , 705 /	705 , 707 /	707 , 707 /		8 + 25.8								
712+785 / 785+785 / 785+787 / 787+787 / 787+957 / 728+800 800+800 800+802 802+802 802+972 957+957 / 972+972													
(65-3/8 x	48-13/16 x 30-1/8)+	(65-3/8 x 48-13/16 x	x 30-1/8)	(65-3/8 x 48-13/16 x 30-1/8) + (65-3/8 x 68-7/8 x 30-1/8)		(65-3/8 x 68-7/8	x 30-1/8) + (65-3/8 x	68-7/8 x 30-1/8)					

## Air-Cooled Heat Recovery



Engineered and assembled in North America, Daikin's VRV IV X Heat Recovery adapts VRV to North American HVAC market needs by expanding the applications in which VRV can be leveraged to solve traditional HVAC challenges. Packed with advanced technology, the VRV IV X is the industry's first 3-phase variable refrigerant flow system with dual-fuel capability. The new series is equipped with features to optimize initial capital required on phased installations and provides ease of service and maintenance.

#### **Features and Benefits**

- » Adapting VRV to North American market needs
  - Industry's first 3-phase variable refrigerant flow system to integrate with communicating gas furnaces.
  - Design flexibility to enlarge system from single to dual module or dual to triple module without change to installed main pipe sizes<sup>1</sup>.
  - Engineered to optimize capital on phased and tenant fit out commercial buildings.
  - Choice of gas furnace or heat pump heating for optimizing operational costs based on utility cost.
  - Year round comfort and energy savings with Variable Refrigerant Temperature (VRT) technology.

#### » Technology that matters

- Engineered with Daikin's patented vapor injection compressor technology.
- Corrosion resistant up to 1000<sup>†</sup> hours Daikin Blue Fin coating as factory standard.
- Heat exchanger engineered with a bottom refrigerant circuit that allows installation without base pan heater.
- Refrigerant cooled inverter technology keeps
   PCB cool independent of ambient temperature.

#### » Engineered for maintenance

- New service window provides ease of access to the multi-functional display without removing the main electrical panel. The built-in multifunctional display is utilized for commissioning and maintenance and quickly converts to digital gauges to provide refrigerant pressure and temperatures.
- Multi-functional display eliminates the need to connect gauges during regular maintenance checks.
- Ease of commissioning with ability to program off site and upload using configurator tool.



#### **Applications:**













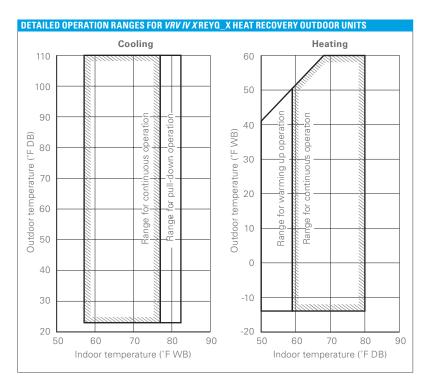
- Field performable intermittent outdoor fan operation to help minimize snow accumulation on fan blades when the system is in thermal off.
- Seamless integration with T-Series and Flex Branch Selector Boxes, M, P, and T-Series indoor units.
- Compatible with the full suite of Daikin VRV controls.
- Outstanding 10-Year Parts Warranty\* as standard.
- \* Complete commercial warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com or www.daikinac.com.
- <sup>†</sup> When testing in accordance to ASTM B117 methodology.
- <sup>1</sup> Refer to engineering manuals for design rules and pipe sizes.

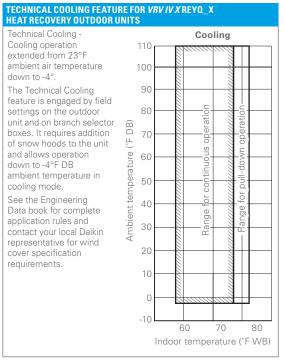




VRV IV X CERTIFIE	D DATA -	HEAT REC	OVERY, 20	8-230V/60	HZ/3PH, 4	60V/60HZ	/3PH									
Product#	Capacity (Tons)	IEER Non-Ducted	IEER Ducted	IEER Mixed	SCHE Non-Ducted	SCHE Ducted	SCHE Mixed	COP @ 47° F Non-Ducted	COP @ 47°F Ducted	COP @ 47°F Mixed	COP @ 17°F Non-Ducted	COP @ 17°F Ducted	COP @ 17°F Mixed	EER Non-Ducted	EER Ducted	EER Mixed
REYQ72XA	6	25.20	21.30	23.25	26.10	22.00	24.05	4.30	3.68	3.99	2.50	2.25	2.38	15.80	13.90	14.85
REYQ96XA	8	27.80	21.90	24.85	26.40	21.10	23.75	4.23	3.56	3.90	2.63	2.31	2.47	14.60	12.50	13.55
REYQ120XA	10	25.50	22.60	24.05	26.00	22.00	24.00	3.81	3.48	3.65	2.54	2.28	2.41	13.20	12.30	12.75
REYQ144XA	12	23.50	21.60	22.55	25.50	22.00	23.75	3.75	3.42	3.59	2.16	2.12	2.14	11.90	11.60	11.75
REYQ168XA	14	22.30	20.40	21.35	25.50	22.20	23.85	3.55	3.30	3.43	2.08	2.05	2.07	10.70	10.70	10.70
REYQ192XA	16	22.60	21.40	22.00	26.60	22.80	24.70	3.85	3.67	3.76	2.50	2.37	2.44	13.00	13.00	13.00
REYQ216XA	18	23.10	21.70	22.40	25.50	21.90	23.70	3.76	3.52	3.64	2.34	2.20	2.27	12.40	12.30	12.35
REYQ240XA	20	22.20	20.00	21.10	25.60	21.80	23.70	3.68	3.39	3.54	2.34	2.16	2.25	11.60	11.70	11.65
REYQ264XA	22	21.60	18.00	19.80	26.10	18.20	22.15	3.62	3.20	3.41	2.22	2.07	2.15	11.20	10.40	10.80
REYQ288XA	24	21.00	17.90	19.45	23.30	19.90	21.60	3.51	3.20	3.36	2.20	2.06	2.13	11.00	10.30	10.65
REYQ312XA	26	20.40	18.00	19.20	24.30	20.70	22.50	3.56	3.20	3.38	2.09	2.05	2.07	10.10	9.90	10.00
REYQ336XA	28	20.00	17.30	18.65	23.30	19.80	21.55	3.53	3.20	3.37	2.12	2.05	2.09	9.90	9.50	9.70
REYQ360XA	30	20.00	18.80	19.40	23.00	19.40	21.20	3.56	3.20	3.38	2.25	2.10	2.18	10.90	10.60	10.75
REYQ384XA	32	19.00	17.60	18.30	21.90	17.00	19.45	3.21	3.20	3.21	2.22	2.06	2.14	9.70	9.90	9.80
REYQ408XA	34	17.20	17.70	17.45	21.80	18.30	20.05	3.21	3.20	3.21	2.09	2.05	2.07	9.80	9.70	9.75
REYQ432XA	36	16.20	17.30	16.75	20.20	18.10	19.15	3.21	3.20	3.21	2.08	2.06	2.07	9.80	9.70	9.75
REYQ456XA	38	16.20	16.70	16.45	18.80	17.90	18.35	3.21	3.20	3.21	2.07	2.05	2.06	9.30	9.50	9.40

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2014, "Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment" for the VRV series. The VRV IV X series has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2016. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2016.





## VRV IV X Air-Cooled Heat Recovery (cont.)



Combination				6 Ton	8 Ton	10 Ton	12 Ton	14 Ton	16 Ton	18 Ton	20 Ton
Combination   Release   Coulog Capacity   BTU/h   69,000   92,000   114,000   138,000   156,000   184,000   206,000   228,000   228,000   230,000   174,000   206,000   230,00			lz								
Rated Cooling Capearty   BTU/h   69,000   92,000   114,000   138,000   156,000   134,000   206,000   232,000   256,000	lodel	460V/3Ph/60Hz		REYQ72XAYDB	REYQ96XAYDB	REYQ120XAYDB	REYQ144XAYDB	REYQ168XAYDB	REYQ192XAYDB		REYQ240XAYDE
Rated Heating Capacity   Standard Operation Range   F   PC  DB   Standard Operation Range   F   PC  DB   Standard Operation Range   PC										1 x REYQ120XA	2 x REYQ120XA
Standard Operation Range Cooling Cooling Standard Operation Range Standard Range Standard Operation Range Standard Operation Range Standard Range Stand		0 1 /				· · · · · · · · · · · · · · · · · · ·				-	
Cooling   Fr(C) UB		- ,	BTU/h	77,000	103,000	129,000	154,000	174,000	206,000	232,000	256,000
Heating		Cooling	°F (°C) DB				23 to	122			
Airflow CFM 7283 7989 7989 9480 9480 7989+7989	formance		°F (°C) WB				-13 t	0 60			
Fan ESP, Standard/Max			. ,								
Compressors, all inverter   City   1   2   3   4   5300   5214 + 5214   5994 + 5994   6702 + 6702				7283	7989	7989			7989 + 7989	7989 + 7989	7989 + 7989
Revolutions per minute   RPM   3738   5142   6888   5214   6330   5214   5394   5994   6702   6702							0.12 /	0.32			
Capacity Control Range   %   15-100   13-100   11-100   14-100   12-100   6-100   6-100   5-100			,			1					
Maximum Vertical Pipe   ft.   164 (295 With Field Setting)	mpressor										
Length Above Unit			%	15-100	13-100	11-100	14-100	12-100	6-100	6-100	5-100
Length Below Unit   Tt.   130 (195 With Field Setting)		Length Above Unit	ft.				164 (295 With	Field Setting)			
Length Between IDU   16.   541		Length Below Unit	ft.				130 (195 With	Field Setting)			
Maximum Equivalent   Fit.	frigerant ping,	Length Between IDU	ft.				10	00			
Pipe Length	yout		ft.				54	41			
Length   Liquid Pipe, Main Line   Liquid Pipe, Main Line   Lin.   3/8   3/8   1/2   1/2   5/8			ft.				62	20			
Suction Gas Pipe,   Inc.   3/4   7/8   1-1/8			ft.				3,2	280			
Main Line   Maximum Number of Indoor Unit Ratio   Maximum Number of Indoor Units   Maximum Overcurrent   Protection, MOP   A   45/25   45/25   50/25   70/40   70/40   45+45/ 25+25			in.	3/8	3/8	1/2	1/2	5/8	5/8	5/8	5/8
Main Line   Standard Connectable   Indoor Unit Ratio   Maximum Number of Indoor Units   Maximum Overcurrent Protection, MOP (208-230v/460v)   A   45/25   45/25   50/25   70/40   70/40   45+45/ 25+25/ 25+	frigerant ing,		in.	3/4	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8
Indoor Unit Ratio   Waximum Number of Indoor Units   Oty   12   16   20   25   29   33   37   41	nnections		in.	5/8	3/4	3/4	7/8	7/8	1-1/8	1-1/8	1-1/8
Maximum Overcurrent	onnection		%	70 - 200¹				50 - 200¹			
Protection, MOP (208-230v/460v)  A 45/25 45/25 50/25 70/40 70/40 49+45/ 25+25/	atio		Ωty	12	16	20	25	29	33	37	41
MCA (208-230v/460v)  A 38.1 / 18.9 38.1 / 21.1 43.0 / 21.1 58.3 / 27.9 61.9 / 31.1 21.1 + 21.1 / 21.		Protection, MOP	А	45 / 25	45 / 25	50 / 25	70 /40	70 /40			
Amps, (208-230v/460v)       A       20.879.4       23.3710.5       28.2712.8       42.6719.3       49.0722.2       11.2 + 11.2 /       12.9 + 12.9 /       13.5 + 13.5 /         Factory Refrigerant Charge       lbs.       25.8       25.8 + 25.8         Weight       lbs.       727       727       727       793       793       727 + 727       727 + 727       727 + 727         Dimensions (H v M v D)       ip       66-11/16 x 48-7/8 x 30-3/16 +       66-11/16 x 48-7/8 x 30-3/16 +	ectrical		А	38.1 / 18.9	38.1 / 21.1	43.0 / 21.1	58.3 / 27.9	61.9 / 31.1			
Weight lbs. 727 727 727 793 793 727 +727 727 +727 727 +727 727 +727 727			А	20.8 / 9.4	23.3 / 10.5	28.2 / 12.8	42.6 / 19.3	49.0 / 22.2			
Dimonsions (H v W v D) in 66-11/16 x 48-7/8 x 30-3/16 +		Factory Refrigerant Charge	lbs.			25.8				25.8 + 25.8	
	nit	Weight	lbs.	727	727	727	793	793			
		Dimensions (H x W x D)	in.		66	-11/16 x 48-7/8 x 30	-3/16				

<sup>&</sup>lt;sup>1</sup> Varies based on indoor model selected

OPERATION RANGE FOR ALL VRV IV X HEAT R	ECOVERY OUTDOOR UNITS
Cooling°F DB	-4* - 122
Heating°F WB	-13 – 60

<sup>\*</sup>Application rules apply



22 Ton	24 Ton	26 Ton	28 Ton	30 Ton	32 Ton	34 Ton	36 Ton	38 Ton			
REYQ264XATJB	REYQ288XATJB	REYQ312XATJB	REYQ336XATJB	REYQ360XATJB	REYQ384XATJB	REYQ408XATJB	REYQ432XATJB	REYQ456XATJB			
REYQ264XAYDB	REYQ288XAYDB	REYQ312XAYDB	REYQ336XAYDB	REYQ360XAYDB	REYQ384XAYDB	REYQ408XAYDB	REYQ432XAYDB	REYQ456XAYDB			
1 x REYQ120XA 1 x REYQ144XA	2 x REYQ144XA	1 x REYQ144A 1 x REYQ168XA	2 x REYQ168XA	3 x REYQ120XA	2 x REYQ120XA 1 x REYQ144XA	1 x REYQ120XA 2 x REYQ144XA	3 x REYQ144XA	2 x REYQ144XA 1 x REYQ168XA			
252,000	274,000	296,000	320,000	342,000	364,000	388,000	410,000	430,000			
282,000	294,000	320,000	338,000	376,000	386,000	394,000	405,000	414,000			
				23 to 122							
				-13 to 60							
69	69	69	69	70	71	71	71	71			
7989 + 9480	9480 + 9480	9480 + 9480	9480 + 9480	7989 + 7989 + 7989	7989 + 7989 + 9480	7989 + 9480 + 9480	9480 + 9480 + 9480	9480 + 9480 + 9480			
				0.12 / 0.32							
0504 5014	2	F200 F200	FCC4 FCC4	2002 2002 2002	0400 0400 5070	3	4050 4050 4050	4470 4470 4470			
6504 + 5214 5-100	4794 + 4794 7-100	5286 + 5286 7-100	5664 + 5664 6-100	6606 + 6606 + 6606 4-100	6426 + 6426 + 5070 3-100	6162 + 4470 + 4470 3-100	4350 + 4350 + 4350 5-100	4470 + 4470 + 4470 4-100			
3-100	7-100	7-100			1	3-100	J-100	4-100			
				64 (295 With Field Setti							
			1	30 (195 With Field Setti	ing)						
				100							
				541							
				620							
				3,280							
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4			
1-3/8	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8			
1-1/8	1-1/8	1-1/8	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8			
				50 - 200¹							
45	49	54	58			64					
50 + 70 / 25 + 40	70 + 70 / 40 + 40	70 + 70 / 40 + 40	70 + 70 / 40 + 40	50 + 50 + 50 / 25 + 25 + 25	50 + 50 + 70 / 25 + 25 + 40	50 + 70 + 70 / 25 + 40 + 40	70 + 70 + 70 / 40 + 40 + 40	70 + 70 + 70 / 40 + 40 + 40/			
43.0+58.3/	58.3+58.3 /	58.3+61.9/	61.9+61.9 /	43.0+43.0+43.0/	43.0+43.0+58.3/	43.0 + 58.3 + 58.3/	58.3 + 58.3 + 58.3/	58.3 + 58.3 + 61.9/			
21.1 + 27.9	27.9 + 27.9	27.9 + 31.1	31.1 + 31.1	21.1 + 21.1 + 21.1	21.1 + 21.1 + 27.9	21.1 + 27.9 + 27.9	27.9 + 27.9 + 27.9	27.9 + 27.9 + 31.1 /			
32.9 + 42.1 / 14.9 + 19.0	43.5 + 43.5 / 19.7 + 19.7	46.5 + 46.5 / 21.0 + 21.0	50.1 + 50.1 / 22.7 + 22.7	32.7 + 32.7 + 32.7 / 14.8 + 14.8 + 14.8	33.8 + 33.8 + 43.7 / 15.3 + 15.3 + 19.8	35.7 + 45.1 + 45.1 / 16.2 + 20.4 + 20.4	45.1 + 45.1 + 45.1 / 20.4 + 20.4 + 20.4	47.0 + 47.0 + 47.0 / 21.3 + 21.3 + 21.3			
11.0 1 10.0	25.8+		LL.I I LL.I	11.0 1 14.0	10.0 1 10.0 1 10.0	25.8 + 25.8 + 25.8	20.11.20.11.20.4	2.10 / 21.0 / 21.0			
727 + 793	793 + 793	793 + 793	793 + 793	727 + 727 + 727	727 + 727 + 793	727 + 793 + 793	793 + 793 + 793	793 + 793 + 793			
		66-11/16 x 48-7/8 x 30		66-11/16 x 48-7/8 x 30-3/16 + 66-11/16 x 48-7/8 x 30-3/16 + 66-11/16 x 48-7/8 x 30-3/16							

For additional technical information please refer to specific Engineering Data Books.



## *VRV IV X*Air-Cooled Heat Pump



Engineered and assembled in North America, Daikin's VRV IV X Heat Pump adapts VRV to North American HVAC market needs by expanding the applications in which VRV can be leveraged to solve traditional HVAC challenges. Packed with advanced technology, the VRV IV X is the industry's first 3-phase variable refrigerant flow system with dual-fuel capability. The new series is equipped with features to optimize initial capital required on phased installations and provides ease of service and maintenance.

#### **Features and Benefits**

- » Adapting VRV to North American market needs
  - Design flexibility to enlarge system from single to dual module or dual to triple module without change to installed main pipe sizes¹.
  - Engineered to optimize capital on phased and tenant fit out buildings.
  - Choice of gas furnace or heat pump heating for optimizing operational costs based on utility rates.
- » Technology that matters
  - Year round comfort and energy savings with Variable Refrigerant Temperature (VRT) technology.
  - Corrosion resistant up to 1000<sup>†</sup> hours Daikin Blue Fin coating as factory standard.
  - Refrigerant cooled inverter technology keeps
     PCB cool independent of ambient temperature.
- » Engineered for maintenance
  - New service window provides ease of access to the multi-functional display without removing the main electrical panel. The built-in multi-functional display is utilized for commissioning and maintenance.
     Digital display and quickly converts to digital gauges to provide refrigerant pressure and temperatures.
  - Multi-functional display eliminates the need to connect gauges during regular maintenance checks.
  - Ease of commissioning with ability to program off site and upload using configurator tool.
  - Field performable intermittent outdoor fan operation to help minimize snow accumulation on fan blades when the system is in thermal off.
  - Seamless integration with M, P, and T-series indoor units.
  - Compatible with the full suite of Daikin VRV controls.
  - Outstanding 10-Year Parts Warranty\* as standard.

### **VRV IV X**

#### **Applications:**











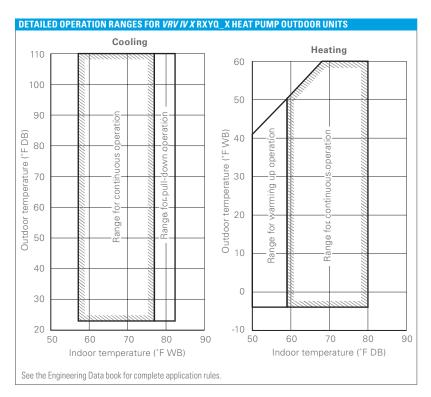


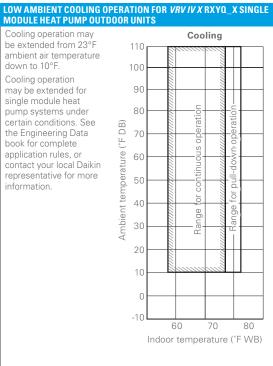


- \* Complete commercial warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com or www.daikinac.com.
- <sup>†</sup> When testing in accordance to ASTM B117 methodology.
- <sup>1</sup> Refer to engineering manuals for design rules and pipe sizes.

VRV IV X CERTIFIED	DATA - HEAT	T PUMP, 208-	-230V/60HZ/	3PH AND 46	0V/60HZ/3PI	Н							
Product#	Capacity (Tons)	IEER Non-Ducted	IEER Ducted	IEER Mixed	COP @ 47°F Non-Ducted	COP @ 47°F Ducted	COP @ 47°F Mixed	COP @ 17°F Non-Ducted	COP @ 17°F Ducted	COP @ 17°F Mixed	EER Non-Ducted	EER Ducted	EER Mixed
RXYQ72X	6	25.80	20.70	23.25	3.67	3.30	3.49	2.44	2.25	2.35	14.70	12.70	13.70
RXYQ96X	8	27.30	22.50	24.90	4.00	3.49	3.75	2.63	2.48	2.56	14.00	12.60	13.30
RXYQ120X	10	25.40	22.00	23.70	3.50	3.30	3.40	2.25	2.37	2.31	12.00	11.60	11.80
RXYQ144X	12	24.80	22.60	23.70	3.64	3.34	3.49	2.33	2.20	2.27	12.10	11.50	11.80
RXYQ168X	14	22.60	19.80	21.20	3.34	3.20	3.27	2.34	2.27	2.31	10.60	10.60	10.60
RXYQ192X	16	22.20	21.20	21.70	3.62	3.29	3.46	2.27	2.23	2.25	11.10	11.60	11.35
RXYQ216X	18	20.50	21.10	20.80	3.83	3.50	3.67	2.57	2.46	2.52	10.70	10.90	10.80
RXYQ240X	20	20.80	20.90	20.85	3.63	3.33	3.48	2.41	2.34	2.38	11.00	11.20	11.10
RXYQ264X	22	20.30	19.60	19.95	3.33	3.24	3.29	2.43	2.30	2.37	10.30	9.60	9.95
RXYQ288X	24	20.10	19.60	19.85	3.25	3.30	3.28	2.07	2.13	2.10	10.50	10.10	10.30
RXYQ312X	26	19.90	18.80	19.35	3.30	3.21	3.26	2.32	2.20	2.26	9.80	9.60	9.70
RXYQ336X	28	20.60	18.50	19.55	3.22	3.20	3.21	2.38	2.27	2.33	9.50	9.50	9.50
RXYQ360X	30	19.40	18.50	18.95	3.46	3.20	3.33	2.47	2.36	2.42	10.30	9.80	10.05
RXYQ384X	32	21.10	18.50	19.80	3.30	3.20	3.25	2.28	2.27	2.28	9.50	9.50	9.50
RXYQ408X	34	21.10	19.00	20.05	3.24	3.20	3.22	2.18	2.10	2.14	9.50	9.50	9.50

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2014, "Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment" for the VRV series. The VRV IV X series has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2016. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2016.





# VRV IV X Air-Cooled Heat Pump (cont.)



			6 Ton	8 Ton	OOR UNITS 10 Ton	12 Ton	14 Ton	16 Ton	18 Ton	20 Ton
	208-230V/3Ph/60	Ц-,				RXYQ144XATJA		RXYQ192XATJA	RXYQ216XATJA	
Model	460V/3Ph/60Hz				RXYQ120XAYDA		RXYQ168XAYDA	RXYQ192XAYDA	RXYQ216XAYDA	
	Combination	•	INTEREST	TIXT COOK TO T	TIXT CIZOXX TOX	TIXTETT NOTES	10000000	1 x RXYQ120X 1 x RXYQ72X	1 x RXYQ120X 1 x RXYQ96X	2 x RXYQ120X
	Rated Cooling Capacity	BTU/h	69,000	92,000	114,000	138,000	158,000	184,000	206,000	228 000
	Rated Heating Capacity	BTU/h	73,000	103,000	129,000	154,000	174,000	206,000	230,000	
	Sound Pressure	dB(A)	58		61	64	65	63	64	
rformance	IEER (Ducted / Non-Ducted)		20.7 / 25.8	22.5 / 27.3	22.0 / 25.4	22.6 / 24.8	19.8 / 22.6	21.2 / 22.2	21.1 / 20.5	20.9 / 20.8
	Airflow	CFM	5,544	5,827	6286	8,2	228	5544 + 6286	5827 + 6286	6286 + 6286
	Fan ESP, Standard/Max	in. Wg				0	.12 / 0.32			
	Compressors, all inverter	Qty		1				2		
ompressor	Revolutions per minute	RPM	7668	7650	7746	7008 + 7608	7680 + 8280	7668, 7746	7650, 7746	7746, 7746
	Capacity Control Range	%	20-100	16-100	15-100	11-100	10-100	17-100	15-1	100
	Maximum Vertical Pipe Length Above Unit	ft.				164 (295 \	With Field Setting)			
	Maximum Vertical Pipe Length Below Unit	ft.				130 (295 \	With Field Setting)			
efrigerant iping,	Maximum Vertical Pipe Length Between IDU	ft.		100						
ayout	Maximum Actual Pipe Length	ft.					540			228,000 256,000 3 20.9 / 20.8 6286 + 6286 7746, 7746 000 01-3/8 (34.9) C1220T (Brazing Connection) 41 45 + 45 / 25 + 25 36.3 + 36.3 / 20.6 + 20.6 26.2 + 26.2 / 11.7 + 11.7 22.9 + 22.9 528 + 528 / 556 + 556
	Maximum Equivalent Pipe Length	ft.					620			XY0240XAYDA  2 x RXY0120X  228,000  256,000  4  20.9 / 20.8  6286 + 6286  7746, 7746  100  41  45 + 45 / 25 + 25  36.3 + 36.3 / 20.6 + 20.6  26.2 + 26.2 / 11.7 + 11.7  22.9 + 22.9  528 + 528 / 556 + 556
	Maximum Total Pipe Length	ft.					3,280			
efrigerant	Liquid Pipe, Main Line	in.	(Brazing C		Ø1/2 (12. (Brazing C	7) C1220T connection)		Ø5/8 (15.9) C1220T	(Brazing Connection)	
iping, connections	Suction Gas Pipe, Main Line	in.	Ø3/4 (19.1) C1220T (Brazing Connection)	Ø7/8 (22.2) C1220T (Brazing Connection)		Ø1-1/8 (2	28.6) C1220T (Brazir	ng Connection)		C1220T (Brazing
Connection	Standard Connectable Indoor Unit Ratio	%					50 - 200			
atio	Maximum Number of Indoor Units	Qty	12	16	20	25	29	33	37	41
	Maximum Overcurrent Protection, MOP (RXYQ_XAT / RXYQ_ XAY)	А	35 / 20	45	/ 25	60/35	60/35	35 + 45 / 20 + 25	45 + 45 / 25+25	45 + 45 / 25 + 25
Electrical	Minimum Circuit Amps, MCA (RXYQ_XAT / RXYQ_ XAY)	А	27.6 / 12.3	36.3 / 20.6	36.3 / 20.6	55.1 / 25.9	55.1 / 25.9	27.6 + 36.3 / 12.3 + 20.6	36.3 + 36.3 / 20.6 + 20.6	
	Compressor Rated Load Amps, RLA (RXYQ_XAT / RXYQ_ XAY)	А	15.7 / 7.1	23.8 / 10.2	26.2 / 11.7	16.7 + 16.7 / 7.6 + 7.6	18.8 + 18.8 / 8.5 + 8.5	15.7 + 26.2 / 7.1 + 11.7	23.8 + 26.2 / 10.2 + 11.7	
	Factory Refrigerant Charge	lbs.	13	22.7	22.9	18.1	17.2	13.0 + 22.9	22.7 + 22.9	22.9 + 22.9
Jnit	Weight (RXYQ_XAT / RXYQ_ XAY)	lbs.	435 / 451	525 / 553	528 / 556	695	/709	435 + 528 / 451 + 556	525 + 528 / 553 + 556	Ø1-3/8 (34.9) C1220T (Brazing Connection)  41  45+45/25+25  36.3+36.3/ 20.6+20.6  26.2+26.2/ 11.7+11.7  22.9+22.9  528+528/ 556+556
	Dimensions (H x W x D)	ns (H x W x D) in. 66-11/16 × 36- 11/16 × 30-3/16 66-11/16 × 48-7/8 × 30-3/16 66-11/16 × 48-7/8 × 30-3/16 (66-11/16 × 48-7/8 × 30-3/16) x 2 × 30-3/16								

OPERATION RANGE FOR ALL VRV IV HEAT PU	MP OUTDOOR UNITS
Cooling°F DB	10* - 122
Heating°F WB	-4-60

<sup>\*</sup>Application rules apply

22 Ton	3 7746, 7746, 7746 15-100 Id Setting)	32 Ton RXYQ384XATJA RXYQ384XAYDA 1 x RXYQ168X 1 x RXYQ120X 1 x RXYQ96X 356,000 396,000 68 18.5 / 21.1 5827 + 6286 + 8228 4 7650, 7746, (7680, 8280) 13-100	34 Ton RXYQ408XATJA RXYQ408XAYDA 1 x RXYQ168X 1 x RXYQ144X 1 x RXYQ96X 372,000 435,000 8 19.0 / 21.1 6286 + 6286 + 8228 5 7650, (7008, 7608), (7680, 8280) 12-100								
RXYQ264XATJA	RXYQ360XATJA RXYQ360XAYDA  3 x RXYQ120X  342,000 372,000 66 18.5 / 19.4 6286 + 6286 + 6286 2 3 7746, 7746, 7746 15-100  Id Setting)  Id Setting)	RXYQ384XATJA RXYQ384XAYDA  1 x RXYQ168X 1 x RXYQ120X 1 x RXYQ96X 356,000 396,000 60 18.5 / 21.1 5827 + 6286 + 8228	RXYQ408XATJA RXYQ408XAYDA  1 x RXYQ168X 1 x RXYQ144X 1 x RXYQ96X 372,000 435,000  3  19.0 / 21.1 6286 + 6286 + 8228  5  7650, (7008, 7608), (7680, 8280)								
RXYQ264XAYDA	RXYQ360XAYDA  3 x RXYQ120X  342,000  372,000  66  18.5 / 19.4  6286 + 6286 + 6286 2  3  7746, 7746, 7746  15-100  Id Setting)  Id Setting)	RXYQ384XAYDA  1 x RXYQ168X  1 x RXYQ120X  1 x RXYQ96X  356,000  396,000  61  18.5 / 21.1  5827 + 6286 + 8228  4  7650, 7746, (7680, 8280)	RXYQ408XAYDA  1 x RXYQ168X  1 x RXYQ144X  1 x RXYQ96X  372,000  435,000  3  19.0 / 21.1  6286 + 6286 + 8228  5  7650, (7008, 7608), (7680, 8280)								
1x RXY0120X         2X RXY0144X         1x RXYQ144X         2X RXY0168X           252,000         274,000         296,000         312,000           282,000         308,000         334,000         342,000           66         67         68           19.6 / 20.3         19.6 / 20.1         18.8 / 19.9         18.5 / 20.6           6286 + 8228         8228 + 8228         0.12 / 0.3           3         4         (7008, 7608)         (7008, 7608)         (7008, 7608), (7680, 8280)         (7680, 8280), (7680, 8280)         (7680, 8280)           13-100         11-100         10-100         164 (295 With Field)           100         541         620           3,280         3,280           Ø3/4 (19.1) C1220T (Brazzing Connection)         50 - 200	342,000 372,000 66 18.5 / 19.4 6286 + 6286 + 6286 2 3 7746, 7746, 7746 15-100 Id Setting)	1 x RXYQ168X 1 x RXYQ120X 1 x RXYQ96X 356,000 396,000 60 18.5 / 21.1 5827 + 6286 + 8228 4 7650, 7746, (7680, 8280)	1 x RXYQ168X 1 x RXYQ144X 1 x RXYQ96X 372,000 435,000 3 19.0 / 21.1 6286 + 6286 + 8228 5 7650, (7008, 7608), (7680, 8280)								
282,000 308,000 334,000 342,000 66 67 68 19.6 / 20.3 19.6 / 20.1 18.8 / 19.9 18.5 / 20.6 6286 + 8228 8228 + 8228 0.12 / 0.3 3 4 0.12 / 0.3 3 4 0.12 / 0.3 13.100 11-100 10-100 164 (295 With Fiel 131 (295 With Fiel 100 541 620 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280	372,000 66 18.5 / 19.4 6286 + 6286 + 6286 2 3 7746, 7746, 7746 15-100 Id Setting)	396,000 68 18.5 / 21.1 5827 + 6286 + 8228 4 7650, 7746, (7680, 8280)	435,000 8 19.0 / 21.1 6286 + 6286 + 8228 5 7650, (7008, 7608), (7680, 8280)								
66 67 68  19.6 / 20.3 19.6 / 20.1 18.8 / 19.9 18.5 / 20.6 6286 + 8228 8228 0.12 / 0.3  3 4  7746, (7008, 7608) (7008, 7608) (7008, 7608), (7008, 7608), (7680, 8280) (7680, 8280) 13-100 11-100 10-100  164 (295 With Fiel  131 (295 With Fiel  620 3,280  Ø3/4 (19.1) C1220T (Brazing Connection)	66 18.5 / 19.4 6286 + 6286 + 6286 2 3 7746, 7746, 7746 15-100 Id Setting) Id Setting)	61 18.5 / 21.1 5827 + 6286 + 8228 4 7650, 7746, (7680, 8280)	19.0 / 21.1 6286 + 6286 + 8228 5 7650, (7008, 7608), (7680, 8280)								
19.6 / 20.3 19.6 / 20.1 18.8 / 19.9 18.5 / 20.6 6286 + 8228 8228 0.12 / 0.3 3 4 7746, (7008, 7608) (7008, 7608), (7008, 7608) (7008, 7608) (7008, 7608) 10-100 164 (295 With Fiel 131 (295 With Fiel 131 (295 With Fiel 620 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.280 0.12 / 0.3 3.2 0.12	18.5 / 19.4 6286 + 6286 + 6286 2 3 7746, 7746, 7746 15-100 Id Setting) Id Setting)	18.5 / 21.1 5827 + 6286 + 8228 4 7650, 7746, (7680, 8280)	19.0 / 21.1 6286 + 6286 + 8228 5 7650, (7008, 7608), (7680, 8280)								
6286 + 8228 8228 0.12 / 0.33  3 4  7746, (7008, 7608) (7008, 7608), (7008, 7608), (7680, 8280) (7680, 8280) 13-100 11-100 10-100  164 (295 With Fiel  131 (295 With Fiel  620  3,280  Ø1-3/8 (34.9) C1220T (Brazing Connection)	6286 + 6286 + 6286 2 3 7746, 7746, 7746 15-100 Id Setting)	5827 + 6286 + 8228 4 7650, 7746, (7680, 8280)	5 7650, (7008, 7608), (7680, 8280)								
0.12 / 0.33  3  4  7746, (7008, 7608) (7008, 7608), (7008, 7608), (7008, 7608), (7680, 8280) (7680, 8280), (7680, 8280)  13-100  11-100  164 (295 With Fiel  131 (295 With Fiel  100  541  620  3,280  Ø3/4 (19.1) C1220T (Brazing Connection)	2 3 7746, 7746, 7746 15-100 Id Setting)	4 7650, 7746, (7680, 8280)	5 7650, (7008, 7608), (7680, 8280)								
3 4 7746, (7008, 7608) (7008, 7608), (7008, 7608), (7008, 7608), (7680, 8280) (7680, 8280) 13-100 11-100 10-100 164 (295 With Fiel 131 (295 With Fiel 100 541 620 3,280 Ø3/4 (19.1) C1220T (Brazing Connection)	3 7746, 7746, 7746 15-100 Id Setting)	7650, 7746, (7680, 8280)	7650, (7008, 7608), (7680, 8280)								
7746, (7008, 7608) (7008, 7608), (7008, 7608), (7680, 8280) (7680, 8280), (7680, 8280) (7680, 820) (7680, 820) (7680, 820) (7680, 820)	7746, 7746, 7746 15-100 Id Setting)	7650, 7746, (7680, 8280)	7650, (7008, 7608), (7680, 8280)								
7746, (7008, 7608) (7008, 7608) (7008, 7608), (7680, 8280) (7680, 8280	15-100 Id Setting) Id Setting)		8280)								
164 (295 With Fiel  131 (295 With Fiel  100  541  620  3,280  Ø3/4 (19.1) C1220T (Brazing Connection)  Ø1-3/8 (34.9) C1220T (Brazing Connection)	ld Setting)	13-100	12-100								
131 (295 With Fiel  100  541  620  3,280  Ø3/4 (19.1) C1220T (Brazing Connection)  50 - 200	ld Setting)										
100 541 620 3,280 Ø3/4 (19.1) C1220T (Brazing Connection)  Ø1-3/8 (34.9) C1220T (Brazing Connection)											
541 620 3,280 Ø3/4 (19.1) C1220T (Brazing Connection)  01-3/8 (34.9) C1220T (Brazing Connection)	ving Connection)										
620 3,280 Ø3/4 (19.1) C1220T (Brazing Connection)	ving Connection)										
3,280 Ø3/4 (19.1) C1220T (Brazing Connection) Ø1-3/8 (34.9) C1220T (Brazing Connection)	ving Connection)										
Ø3/4 (19.1) C1220T (Brazing Connection)  Ø1-3/8 (34.9) C1220T (Brazing Connection)  50 - 200	vina Cannection)										
Ø1-3/8 (34.9) C1220T (Brazing Connection) 50 - 200	ring Connection)										
50 - 200	ang connection,										
	Ø1-5	5/8 (41.3) C1220T (Brazing Connect	ion)								
45 49 54 58											
	62	64	4								
45+60/25+35 60+60/35+35	45 + 45 + 45 / 25 + 25 + 25	45+45+60/25+25+35	45+60+60/25+35+35								
36.3+55.1/20.6+25.9 55.1+55.1/25.9+25.9	36.3 + 36.3 + 36.3 / 20.6 + 20.6 + 20.6	36.3 + 36.3 + 55.1 / 20.6 + 20.6 + 25.9	36.3 + 55.1 + 55.1 / 20.6 + 25.9 + 25.9								
26.2+(16.7+16.7) / (16.7+16.7) x 2 / (18.8+18.8) x (18.8+18.8) x (16.7+6) x 2 / (7.6+7.6) x 2 / (7.6+7.6) + (8.5+8.5) x 2	26.2 + 26.2 + 26.2 / 11.7 + 11.7 + 11.7	23.8 + 26.2 + (18.8 + 18.8) / 10.2 + 11.7 + (8.5 + 8.5)	23.8 + (16.7 + 16.37) + (18.8 + 18.8) / 10.2 + (7.6 + 7.6) + (8.5 + 8.5)								
22.9 + 18.1 18.1 + 18.1 18.1 + 17.2 17.2 + 17.2	22.9 + 22.9 + 22.9	22.7 + 22.9 + 17.2	22.7 + 18.1 + 17.2								
528 + 695 / 556 + 709 695 + 695 / 709 + 709	528 + 528 + 528 / 525 + 528 + 695	525 + 528 + 695 / 553 + 556 + 709	525 + 695 + 695 / 553 + 709 + 709								
(66-11/16 x 48-7/8 x 30-3/16) x 2											

### High-Efficiency All-Electric Heat Pump Hot and Chilled Water Solutions

Daikin's LT hydrobox (HXY48TAVJU) offers an all-electric means of refrigerant to water heat exchange providing an efficient method for hot and cold-water generation for many hydronic solutions including high-efficiency space heating and cooling. The LT hydrobox combines with Daikin's *VRV* systems for expanded indoor unit flexibility with hydronic integration. Delivering water from 50°F – 113°F without the need for a backup electric heater, for use in underfloor heating and cooling, air handling units, and low-temperature radiators, making it an ideal choice in both new construction and renovation applications.

The stylish and compact wall hung unit with front access and minimal clearance requirements make it ideal for installation in tight spaces and ease of maintenance.

#### **Features and Benefits**

- » Direct control over the leaving water temperature for a wide leaving water temperature range down to 50°F in cooling and up to 113°F in heating.
- » Eliminates the need for gas connection or oil tanks to generate hot or cold water
- » Space-saving contemporary wall hung design
- » Seamless integration with VRV IV X systems<sup>1</sup>
- » Save time on system design as all water components are fully integrated with direct control over leaving water temperature. Factory installed hydronic accessories include:

#### **Applications:**





STORE









- Flow switch
- Safety relief valve
- Expansion tank
- Pump
- Strainer
- Auto air vent valve
- Inlet/outlet temp sensors
- <sup>1</sup> Refer to the engineering manuals for detailed design conditions.



Complete warranty details available from your local distributor, manufacturer's representative, www.daikincomfort.com or www.daikinac.com.



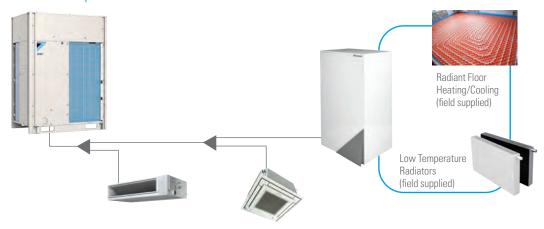
SPECIFICATIONS			LIVO/40TAV/III
Model			HXY48TAVJU
Power Supply		V/ph/Hz	208/230VAC 60 Hz, 1-Phase
Nominal Capacity	Cooling*1	Btu/h (kW)	42,650 (12.5)
Nominal Gapacity	Heating*2	Btu/h (kW)	48,000 (14.0)
	Туре		DC Motor
Pump	Nr of Speeds		Inverter Controlled
i uiiip	Cooling Nominal ESP	ft hd (kPa)	24.4 (73)
	Heating Nominal ESP	ft hd (kPa)	21.8 (65)
Dimensions (H x W x D)		in. (mm)	35 1/16 x 18 7/8 x 13 1/2 (890 x 480 x 344)
Weight (Dry)		lbs (kg)	97 (44)
Casing		(Color / Material)	White / Precoated Sheet Metal
Sound	Power Level	dBA	60
Souriu	Pressure Level	dBA	31
Water Flow Rate Range		gpm (I/min)	3.4 - 11.9 (15 - 45)
Pump Control Method			Water Inlet/Outlet Delta T Control
Delta T Range		°F (°C)	5.4 - 14.4 (3 - 8)
Outlet Temp Dance	Cooling	°F (°C)	50 - 68 (10 - 20)
Outlet Temp. Range	Heating	°F (°C)	77 -113 (25 - 45)
Ambient	Cooling	°F (°C)	50 - 109 (10 - 43)
Temperature Range	Heating	°F (°C)	-4 - 75 (-20 - 24)
	Liquid	in. (mm)	3/8 (9.5) (Flare)
Pipe Connections	Gas	in. (mm)	5/8 (15.9) (Flare)
	Water Side Connection*3	in. (mm)	1 1/4 (31.8)
Refrigerant Control			Electronic Expansion Valve
Maximum Overcurrent Pr	otection	A	15
Minimum Circuit Ampacit	V	A	2.5

#### NOTE:

Ambient: 95°F DB, LWT: 64.4°F, Delta T: 9°F, Flow Rate: 9.5 gpm

Ambient: 44.6°F DB / 42.8°F WB, LWT: 95°F, Delta T: 9°F, Flow Rate: 10.6 gpm

#### Installation Example





<sup>&</sup>lt;sup>11</sup> Nominal Cooling Conditions <sup>12</sup> Nominal Heating Conditions <sup>13</sup> Adaptor Shipped Loose with IDU (BSPP to NPT)

## VRV IV X, VRV EMERION Indoor Units 80-97% AFUE Communicating Gas Furnace

#### **Features**

- » Compatible with VRV IV X and VRV EMERION outdoor units. Available from 60,000 Btu up to 120,000 Btu
- » Durable heat exchanger Unique tubular stainless-steel construction formed using wrinkle-bend technology results in an extremely durable heat exchanger. Paired with a stainless-steel secondary heat exchanger, this combination provides for reliability, durability and efficiency.
- » Modulating gas valve Operates between 35% 100% capacity, providing precise efficiency and the ultimate in comfort.
- » Continuous air circulation Provides filtration and keeps air moving throughout your home to help maintain comfort.
- » Self-diagnostic control board continuously monitors the system for consistent, reliable operation.
- » Quiet, variable-speed induced draft blower provides precise control and enhanced energy-efficient performance as compared to single-speed blowers.





### COMFORTABLE WARRANTY\* PROTECTION

10 YEAR PARTS
COMMERCIAL
WARRANTY

\* Complete commercial warranty details available from your local Daikin manufacturer's representative or distributor or online at www.daikincomfort.com or www.daikinac.com.

## VRV IV X VRV A-Coil CXTQ\_TASBLU



#### **CXTQ All Aluminum Coil**

- » Available in 2, 3, 4, and 5-Ton capacities
- » Engineered for VRV IV X outdoor unit
- » Factory installed electronic expansion valve with PID control loop for precision capacity control
- » Seamless integration to full suite of Daikin controls using onboard control board
- » Air cleaner and humidifier integration capable<sup>1</sup>
- » UV and rust resistant, 5VA rated thermoplastic drain pan with integrated secondary drain
- » Foil-faced insulation covers internal casing to reduce cabinet condensation
- » Split seam front for easy installation and service access
- » Light weight all aluminum evaporator coil
- » Ships factory standard up flow with easy field conversion to downflow¹
- » Backed by a 10-Year Parts Limited Warranty\* ¹Rules apply, refer to installation manual for details.

INDOOR - C	XTQ											
	Model Name		CXTQ24TASBLU	CXTQ36TASBLU	CXTQ48TASBLU	CXTQ60TASBLU						
Power Suppl	/		24VAC from gas furnace									
Nominal Ton	3		2	3	4	5						
*1,*3 Cooling	Capacity	Btu/h (kW)	24,000 (7.0)	36,000 (10.6)	48,000 (14.1)	60,000 (17.6)						
*2,*3 Heatin	Capacity Btu/h (kW) 27,000 (7.9) 40,000 (11.7) 54,000 (15.8) 66,000 (19.4)					66,000 (19.4)						
Casing / Color Daikin Slate												
Dimensions (H x W x D)		in. (mm)	22-1/16 x 17-23/32 x 24-7/32 (560 x 450 x 615)									
Coil	Туре	'	Cased Upflow/Downflow A-coil									
Coil	*4 Air pressure drop	in w.g.	0.089"	0.240"	0.310"	0.329"						
Weight		lbs (kg)	46 (20.9)	52 (23.6)	72 (32.7)	79 (35.8)						
Dino	Liquid	in. (mm)	3/8" (9.5)	3/8" (9.5)	3/8" (9.5)	3/8" (9.5)						
Pipe Connections	Gas	in. (mm)	5/8" (15.8)	5/8" (15.8)	5/8" (15.8)	5/8" (15.8)						
COLLIGERIOUS	Drain	in. (mm)	3/4" (19.1)	3/4" (19.1)	3/4" (19.1)	3/4" (19.1)						
Safety devic	es				Fuse							
Refrigerant (	ontrol		Electronic Expansion Valve									
Connectible	Outdoor Unit		VRV IV X									



### Daikin VRV AURORA Heat Recovery 208-230V & 460V



Daikin VRV AURORA series heat recovery systems introduce a new benchmark for variable refrigerant flow system technology by integrating advanced technologies to provide comfort, control, energy efficiency and reliability. The Daikin VRV AURORA series heat recovery systems set a new industry standard for heating and cooling solutions by delivering high heat capacities at low ambient applications.

#### Features and Benefits

- » Variable refrigerant flow system Industry's first air-cooled system that delivers heating down to -22°F (-30°C) as standard
- » Daikin's inverter based vapor injection compressor is designed to deliver heating capacity of up to 100% of nominal at 0°F (-18°C), up to 85% of nominal at -13°F (-25°C) and up to 60% of nominal at -22°F (-30°C)
- » Optimized efficiencies delivered by dedicated allinverter compressors and inverter fan motors
- » Refrigerant-cooled efficient and stable inverter board operation, independent of ambient conditions
- » Hot gas base pan circuit allows installation without an additional drain pan heater
- » Designed to provide continuous heating during defrost and oil return\*\*
- » Engineered with Daikin vapor injection compressor for optimized part load efficiencies
- » Added peace of mind with Auto Changeover ability to back up (auxiliary) heat



#### **Applications:**









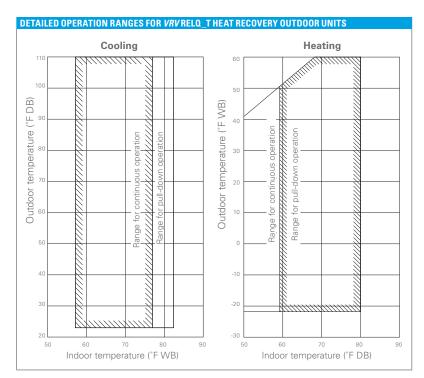


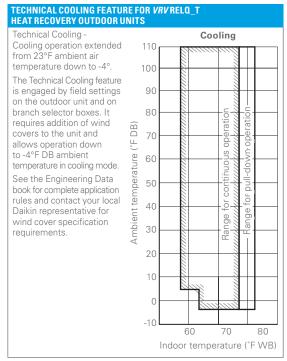
- » Long pipe lengths up to 1640 ft total and ability to connect up to 41\*\*\* indoor units with up to 100 ft vertical separation between indoor units provides design and installation flexibility
- » Corrosion resistant, 1000 hours salt spray tested Daikin PE blue fin heat exchanger
- » Ships factory standard with coil guards
- » Outstanding 10-Year Parts Warranty\* as standard.
- Complete commercial warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com or www.daikinac.com.
- \*\*Multi modules only for continuous heating during defrost
- \*\*\*Varies by model



VRV AURO	<i>RA</i> HEAT F	RECOVERY	CERTIFIE	DATA - HI	EAT RECOV	ERY, 208-2	30V/60HZ/	3PH AND	460V/60HZ	/3PH						
Product#	Capacity (Tons)	IEER Non-Ducted	IEER Ducted	IEER Mixed	SCHE Non-Ducted	SCHE Ducted	SCHE Mixed	COP @ 47°F Non-Ducted	COP @ 47°F Ducted	COP @ 47°F Mixed	COP @ 17°F Non-Ducted	COP @ 17°F Ducted	COP @ 17°F Mixed	EER Non-Ducted	EER Ducted	EER Mixed
RELQ72T	6	24.00	20.80	22.40	26.10	22.60	24.30	4.30	3.68	3.99	2.50	2.30	2.40	15.80	13.70	14.70
RELQ96T	8	24.80	19.10	21.90	25.70	19.70	22.70	4.23	3.42	3.83	2.50	2.25	2.37	15.30	12.50	13.90
RELQ120T	10	23.40	19.60	21.50	26.70	21.10	24.00	3.98	3.51	3.74	2.25	2.25	2.25	13.70	12.40	13.00
RELQ144T	12	22.50	18.60	20.50	25.50	23.80	24.60	3.81	3.55	3.68	2.20	2.20	2.20	12.90	12.60	12.70
RELQ192T	16	22.10	19.00	20.50	25.50	21.20	23.30	3.85	3.57	3.71	2.20	2.15	2.17	12.50	12.70	12.60
RELQ240T	20	21.10	18.60	19.80	24.90	20.80	22.80	3.68	3.49	3.59	2.20	2.13	2.16	12.30	11.70	12.00

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2014, "Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment" for the VRV series. The VRV AURORA series has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2016. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2016.

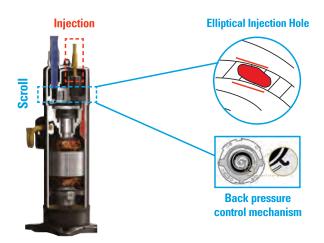




#### Daikin VRV AURORA

### Heat Recovery 208-230 & 460V (cont.)





- » Compressor technology with new spiral design and injection valves for precise refrigerant control
- » Strong and efficient motors for optimized compressor performance and part load efficiencies
- » Patented back pressure control mechanism to minimize scroll pressure losses

			6 Ton	8 Ton	10 Ton
	208-230V/3Ph/60Hz		RELQ72TATJA	RELQ96TATJA	RELQ120TATJA
Model	460V/3Ph/60Hz		RELQ72TAYDA	RELQ96TAYDA	RELQ120TAYDA
	Combination				
	Rated Cooling Capacity	BTU/h	69,000	92,000	114,000
	Rated Heating Capacity	BTU/h	77,000	103,000	129,000
	Operation Range Cooling	°F (°C) DB		231 to 122	
Performance	Operation Range Heating	°F (°C) WB		-22 to 60	
remormance	Sound Pressure	dB(A)	60	61	64
	Airflow (Cooling)	CFM	6956	7989	8806
	Airflow (Heating)	CFM	7283	7283	7283
	Fan ESP, Standard/Max	in. Wg		0.12 / 0.32	
	Compressors, all inverter	Qty		1	
Compressor	Revolutions per minute	RPM	3738	3342	4350
	Capacity Control Range	%	11~100	10~100	9~100
I-filmont Division	Maximum Vertical Pipe Length Above Unit	ft.		164 (295 With Field Setti	ng)
	Maximum Vertical Pipe Length Below Unit	ft.		131 (195 With Field Setti	ng)
Refrigerant Piping,	Maximum Vertical Pipe Length Between IDU	ft.		100	
ayout	Maximum Actual Pipe Length	ft.		541	
	Maximum Equivalent Pipe Length	ft.		620	
	Maximum Total Pipe Length	ft.		1,640	
Refrigerant Piping,	Liquid Pipe (Main Line)	in.	3/8	3/8	1/2
Connections	Suction Gas Pipe (Main Line)	in.	3/4	7/8	1-1/8
Joiniections	Discharge Gas Pipe (Main Line)	in.	5/8	3/4	3/4
Connection Ratio	Standard Connectable Indoor Unit Ratio	%		70 - 200 <sup>2</sup>	
Julille Chori Hatio	Maximum Number of Indoor Units	Qty	12	16	20
	Maximum Overcurrent Protection, MOP (RELQ_TATJA / RELQ_TAYDA)	A	70 / 35	80 / 45	90 / 50
lectrical	Minimum Circuit Amps, MCA (RELQ_TATJA / RELQ_TAYDA)	A	60.8 / 28.1	76.5 / 39.8	83.4 / 43.4
	Compressor Rated Load Amps, RLA (RELQ_TATJA / RELQ_TAYDA)	A	20.7 / 9.4	36.8 / 16.6	39.3 / 17.8
	Factory Refrigerant Charge	lbs.		25.8	
Jnit	Weight	lbs.	727	793	793
	Dimensions (H x W x D)	in.		66-11/16 X 48-7/8 X 30-3	/16

<sup>&</sup>lt;sup>1</sup> Cooling operation can be extended down to-4°F with application rules and conditions

<sup>&</sup>lt;sup>2</sup> Varies based on indoor model selected

			12 Ton	16 Ton	20 Ton
	208-230V/3Ph/60Hz		RELQ144TATJA	RELQ192TATJA	RELQ240TATJA
Model	460V/3Ph/60Hz		RELQ144TAYDA	RELQ192TAYDA	RELQ240TAYDA
	Combination		2 x RELQ72T	2 x RELQ96T	2 x RELQ120T
	Rated Cooling Capacity	BTU/h	138,000	184,000	228,000
	Rated Heating Capacity	BTU/h	154,000	206,000	256,000
	Operation Range Cooling	°F (°C) DB		231 to 122	
Performance	Operation Range Heating	°F (°C) WB		-22 to 60	
remormance	Sound Pressure	dB(A)	63	64	67
	Airflow (Cooling)	CFM	7283 + 7283	7989 + 7989	8806 + 8806
	Airflow (Heating)	CFM	6956 + 6956	7283 + 7283	7283 + 7283
	Fan ESP, Standard/Max	in. Wg		0.12 / 0.32	
	Compressors, all inverter	Qty		2	
Compressor	Revolutions per minute	RPM	3786 + 3786	3294 + 3294	4230 + 4230
	Capacity Control Range	%	6~100	5~100	4~100
	Maximum Vertical Pipe Length Above Unit	ft.	16	4 (295 With Field Setting	)
	Maximum Vertical Pipe Length Below Unit	ft.	13	1 (195 With Field Setting	)
Refrigerant Piping,	Maximum Vertical Pipe Length Between IDU	ft.		100	
Layout	Maximum Actual Pipe Length	ft.		541	
	Maximum Equivalent Pipe Length	ft.		620	
	Maximum Total Pipe Length	ft.		1,640	
Refrigerant Piping,	Liquid Pipe (Main Line)	in.	1/2	5/8	5/8
Connections	Suction Gas Pipe (Main Line)	in.	1-1/8	1-1/8	1-3/8
Connections	Discharge Gas Pipe (Main Line)	in.	7/8	1-1/8	1-1/8
Connection Ratio	Standard Connectable Indoor Unit Ratio	%		70 - 200 <sup>2</sup>	
Connection natio	Maximum Number of Indoor Units	Qty	25	33	41
	Maximum Overcurrent Protection, MOP (RELQ_TATJA / RELQ_TAYDA)	А	70 + 70 / 35 + 35	80 + 80 / 45 + 45	90 + 90 / 50+ 50
Electrical	Minimum Circuit Amps, MCA (RELQ_TATJA / RELQ_TAYDA)	А	60.8 + 60.8 / 28.1 + 28.1	76.5 + 76.5 / 39.8 + 39.8	83.4 + 83.4 / 43.4 + 43.4
	Compressor Rated Load Amps, RLA (RELQ_TATJA / RELQ_TAYDA)	А	21.6 + 21.6 / 9.8 + 9.8	38.1 + 38.1 / 17.3 + 17.3	40.4 + 40.4 / 18.3 + 18.3
	Factory Refrigerant Charge	lbs.		25.8 + 25.8	
Unit	Weight	lbs.	2 x 727	2 x 793	2 x 793
	Dimensions (H x W x D)	in.	66-11/16 X 48-7/8	X 30-3/16 + 66-11/16 X 4	8-7/8 X 30-3/16

### Daikin VRV AURORA Heat Pump 208-230V & 460V



Daikin VRV AURORA series systems introduce a new benchmark for variable refrigerant flow system technology by integrating advanced technologies to provide comfort, control, energy efficiency and reliability. The Daikin VRV AURORA series systems set a new industry standard for heating and cooling solutions by delivering high heat capacities at low ambient applications.

#### **Features and Benefits**

- » Variable refrigerant flow system Industry's first air-cooled system that delivers heating capacities down to -22°F (-30°C) as standard
- » Daikin's inverter based vapor injection compressor is designed to deliver heating capacity of up to 100% of nominal at 0°F (-18°C), up to 85% of nominal at -13°F (-25°C) and up to 60% of nominal at -22°F (-30°C)
- » Year round comfort and energy savings with Variable Refrigerant Temperature technology (VRT)
- » Refrigerant-cooled efficient and stable inverter board operation, independent of ambient conditions
- » Hot gas base pan circuit allows installation without an additional drain pan heater
- » Added peace of mind with Auto Changeover ability to back up (auxiliary) heat











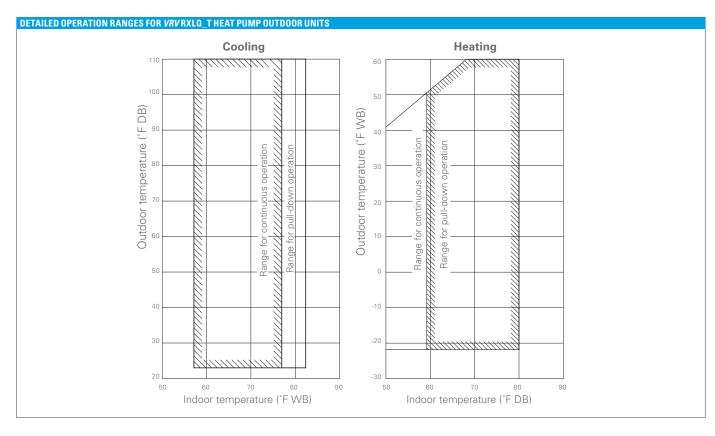


- » Long pipe lengths up to 1640 ft. total and ability to connect up to 41\*\* indoor units with up to 100 ft. vertical separation between indoor units provides design and installation flexibility
- » Corrosion resistant, 1000 hours salt spray tested Daikin PE blue fin heat exchanger
- » Ships factory standard with coil guards
- » Outstanding 10-Year Parts Warranty\* as standard.
- \* Complete commercial warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com or www.daikinac.com.
- \*\* Varies by model



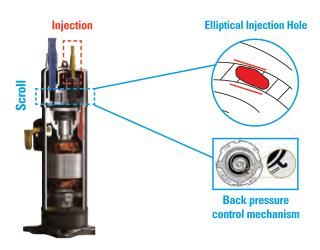
VRV AURORA HE	EAT PUMP C	ERTIFIED DA	TA - HEAT PL	JMP, 208-230	V/60HZ/3PH	, 460V/60HZ/	ЗРН						
Product#	Capacity (Tons)	IEER Non-Ducted	IEER Ducted	IEER Mixed	COP @ 47°F Non-Ducted	COP @ 47°F Ducted	COP @ 47°F Mixed	COP @ 17°F Non-Ducted	COP @ 17°F Ducted	COP@17°FMixed	EER Non-Ducted	EER Ducted	EER Mixed
RXLQ72T	6	24.00	20.40	22.20	4.37	3.73	4.05	2.52	2.31	2.42	15.10	13.00	14.05
RXLQ96T	8	24.70	18.90	21.80	4.29	3.49	3.89	2.51	2.26	2.39	14.90	12.30	13.60
RXLQ120T	10	23.30	19.40	21.35	4.05	3.56	3.81	2.27	2.26	2.27	13.50	12.20	12.85
RXLQ144T	12	22.40	18.20	20.30	3.86	3.56	3.71	2.21	2.21	2.21	12.70	12.40	12.55
RXLQ192T	16	22.00	18.80	20.40	3.90	3.61	3.76	2.22	2.16	2.19	12.30	12.50	12.40
RXLQ240T	20	21.00	18.60	19.80	3.77	3.53	3.65	2.22	2.13	2.18	12.10	11.50	11.80

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2014, "Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment" for the VRV series. The VRV AURORA series has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2016. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2016.



### Daikin VRV AURORA Heat Pump 208-230 & 460V (cont.)





- » Compressor technology with new spiral design and injection valves for precise refrigerant control
- » Strong and efficient motors for optimized compressor performance and part load efficiencies
- » Patented back pressure control mechanism to minimize scroll pressure losses

			6 Ton	8 Ton	10 Ton	
	208-230V/3Ph/60Hz		RXLQ72TATJA	RXLQ96TATJA	RXLQ120TATJA	
Model	460V/3Ph/60Hz		RXLQ72TAYDA	RXLQ96TAYDA	RXLQ120TAYDA	
	Combination					
	Rated Cooling Capacity	BTU/h	69,000	92,000	114,000	
	Rated Heating Capacity	BTU/h	77,000	103,000	129,000	
	Operation Range Cooling	°F (°C) DB		23 to 122		
Performance	Operation Range Heating	°F (°C) WB		-22 to 60		
	Sound Pressure	dB(A)	60	61	64	
	Airflow	CFM	7283	7989	8806	
	Fan ESP, Standard/Max	in. Wg		0.12 / 0.32		
	Compressors, all inverter	Qty		1		
Compressor	Revolutions per minute	RPM	3738	3294	4350	
	Capacity Control Range	%	11~100	13~100	12~100	
	Maximum Vertical Pipe Length Above Unit	ft.		164 (295 With Field Setti	ng)	
	Maximum Vertical Pipe Length Below Unit	ft.		131 (195 With Field Setti	ng)	
Refrigerant Piping,	Maximum Vertical Pipe Length Between IDU	ft.		100		
_ayout	Maximum Actual Pipe Length	ft.		541		
	Maximum Equivalent Pipe Length	ft.		620		
	Maximum Total Pipe Length	ft.	1,640			
Refrigerant Piping,	Liquid Pipe (Main Line)	in.	3/8	3/8	1/2	
Connections	Suction Gas Pipe (Main Line)	in.	3/4	7/8	1-1/8	
Connection Ratio	Standard Connectable Indoor Unit Ratio	%		70 - 200¹		
Connection natio	Maximum Number of Indoor Units	Qty	12	16	20	
	Maximum Overcurrent Protection, MOP (RXLQ_TATJA / RXLQ_TAYDA)	А	70 / 35	80 / 45	90 / 50	
Electrical	Minimum Circuit Amps, MCA (RXLQ_TATJA / RXLQ_TAYDA)	А	60.8 / 28.1	76.5 / 39.8	83.4 / 43.4	
	Compressor Rated Load Amps, RLA (RXLQ_TATJA / RXLQ_TAYDA)	А	23.9 / 10.4	42.2 / 18.3	41.4 / 18.0	
	Factory Refrigerant Charge	lbs.		25.8		
Jnit	Weight	lbs.	727	793	793	
	Dimensions (H x W x D)	in.		66-11/16 X 48-7/8 X 30-3	/16	

<sup>&</sup>lt;sup>1</sup> Varies based on indoor model selected

			12 Ton	16 Ton	20 Ton
	208-230V/3Ph/60Hz		RXLQ144TATJA	RXLQ192TATJA	RXLQ240TATJA
Model	460V/3Ph/60Hz		RXLQ144TAYDA	RXLQ192TAYDA	RXLQ240TAYDA
	Combination		2 x RXLQ72T	2 x RXLQ96T	2 x RXLQ120T
	Rated Cooling Capacity	BTU/h	138,000	184,000	228,000
	Rated Heating Capacity	BTU/h	154,000	206,000	256,000
	Operation Range Cooling	°F (°C) DB		23 to 122	
Performance	Operation Range Heating	°F (°C) WB		-22 to 60	
	Sound Pressure	dB(A)	63	64	67
	Airflow (Cooling)	CFM	7283 + 7283	7989 + 7989	8806 + 8806
	Fan ESP, Standard/Max	in. Wg		0.12 / 0.32	
	Compressors, all inverter	Qty		2	
Compressor	Revolutions per minute	RPM	3804 + 3804	3342 + 3342	4230 + 4230
	Capacity Control Range	%	6~100	6~100	6~100
	Maximum Vertical Pipe Length Above Unit	ft.	16	4 (295 With Field Setting	1)
	Maximum Vertical Pipe Length Below Unit	ft.	13	1 (195 With Field Setting	)
Refrigerant Piping,	Maximum Vertical Pipe Length Between IDU	ft.		100	
Layout	Maximum Actual Pipe Length	ft.		541	
	Maximum Equivalent Pipe Length	ft.		620	
	Maximum Total Pipe Length	ft.		1,640	
Refrigerant Piping,	Liquid Pipe (Main Line)	in.	1/2	5/8	5/8
Connections	Suction Gas Pipe (Main Line)	in.	1-1/8	1-1/8	1-3/8
Connection Ratio	Standard Connectable Indoor Unit Ratio	%		70 - 200¹	
Connection natio	Maximum Number of Indoor Units	Qty	25	33	41
	Maximum Overcurrent Protection, MOP (RXLQ_TATJA / RXLQ_TAYDA)	A	70 + 70 / 35 + 35	80 + 80 / 45 + 45	90 + 90 / 50+ 50
Electrical	Minimum Circuit Amps, MCA (RXLQ_TATJA / RXLQ_TAYDA)	A	60.8 + 60.8 / 28.1 + 28.1	76.5 + 76.5 / 39.8 + 39.8	83.4 + 83.4 / 43.4 + 43.4
	Compressor Rated Load Amps, RLA (RXLQ_TATJA / RXLQ_TAYDA)	А	23.9 + 23.9 / 10.4 + 10.4	40.8 + 40.8 / 17.7 + 17.7	41.7 + 41.7 / 18.2 + 18.2
	Factory Refrigerant Charge	lbs.		25.8 + 25.8	
Unit	Weight	lbs.	2 x 727	2 x 793	2 x 793
	Dimensions (H x W x D)	in.	66-11/16 X 48-7/8	X 30-3/16 + 66-11/16 X 4	18-7/8 X 30-3/16

## VRV T-Series Water-Cooled Heat Pump / Heat Recovery 208-230V / 460V



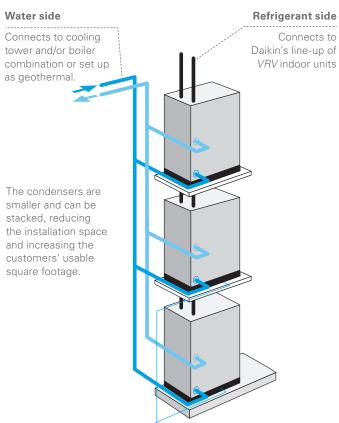
VRV T-Series Water-Cooled systems are equivalent to 4-pipe chilled water systems, but also offer a viable alternative to Water Source Heat Pump solutions. Each connected indoor unit can provide heating and cooling independently to suit zone requirements making these systems suitable for both open plan, or cellar applications with different operation requirements.

#### **Features and Benefits**

- » Flexible System design with increased diversity up to 150%¹ compared to previous VRV water-cooled generation
- » Triple-stack capable to deliver up to 36 tons in 11.5 ft ceiling height
- » Flexible and easy installation with field selectable top or front refrigerant connections
- » Design flexibility with long piping lengths up to 980 ft. total (540 ft. max. linear liquid piping length) and up to 100 ft. vertical separation between indoor units
- » Engineered with heat rejection cancellation technology<sup>2</sup> to minimize mechanical room conditioning requirements
- » Year round comfort and energy efficiency by combining VRV and VRT technologies
- » Wide water temperature operation range Can be applied to both geothermal and boiler/tower applications as standard with condenser water inlet temperature as low as 14°F in heating and 23°F in cooling is possible.
- » 2-9V variable water flow control logic² as standard to increase waterside system operational efficiencies
- » Refrigerant cooled inverter technology to deliver consistent and reliable PCB operations
- » Easy commissioning with ability to program settings off site using new configurator tool
- » 3-digit 7-segment digital display on the unit for improved and faster configuration, commissioning, and troubleshooting
- » Engineered for easy service with drop-down switch box to access key components
  - <sup>1</sup> Model specific, check product specification for details
  - <sup>2</sup> Refer to installation manual for field settings and other requirements to activate this feature







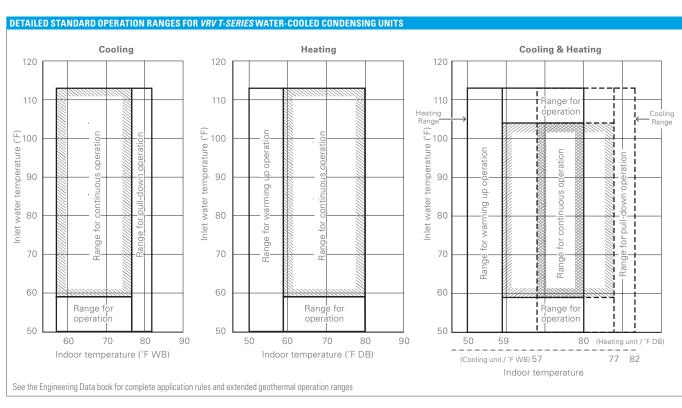
VRV Water-Cooled System series design is based on a modular design concept. It is composed of unified condensing units that require simply connecting a two-pipe refrigerant network for heat pump applications or a three-pipe refrigerant network for heat recovery applications. Water-cooled condensers are available in 6\*, 8, 10 and 12 tons.

This is a simple system that allows manifolding together up to three condensers to form one system of up to 36 tons. The condensers are designed for internal mounting only.

\* 6-ton model (RWEY072PC) is PC series. T and PC series models cannot be combined to form multi-module systems.

VRV T-SE	ERIES WATER-COO	LED CERTIF	IED DATA. 2	208-230V/60	HZ/3PH AN	ID 460V/60I	IZ/3PH							
Function	System Name	Tonnage	IEER Non-Ducted	IEER Ducted	IEER Mixed	SCHE Non-Ducted (Heat Recovery only)	SCHE Ducted (Heat Recovery only)	SCHE Mixed (Heat Recovery only)	EER Non-Ducted	EER Ducted	EER Mixed	COP @ 68°F Non-Ducted	COP @ 68°F Ducted	COP @ 68°F Mixed
	RWEYQ72PC	6 Tons	24.1	22.3	23.2	N/A	N/A	N/A	14.0	14.0	14.0	4.89	4.78	4.84
	RWEQ96T	8 Tons	30.8	25.4	28.1	N/A	N/A	N/A	19.6	15.4	17.5	6.27	5.8	6.035
	RWEQ120T	10 Tons	29.4	23.5	26.45	N/A	N/A	N/A	16	13.6	14.8	6.1	5.55	5.83
	RWEQ144T	12 Tons	24.3	19.8	22.05	N/A	N/A	N/A	15.4	12.6	14.0	6.01	5.33	5.67
	RWEQ192T	16 Tons	26.8	24.7	25.75	N/A	N/A	N/A	16.5	14.6	15.55	5.82	5.82	5.82
	RWEQ216T	18 Tons	26.3	23.8	25.05	N/A	N/A	N/A	15.0	13.8	14.4	5.68	5.62	5.65
Heat Pump	RWEQ240T	20 Tons	25.7	22.7	24.2	N/A	N/A	N/A	14.0	12.8	13.4	5.52	5.38	5.45
at P	RWEQ264T	22 Tons	23.5	2.00	21.75	N/A	N/A	N/A	13.5	12.1	12.8	5.34	4.96	5.15
Ξ	RWEQ288T	24 Tons	20.9	18.8	19.85	N/A	N/A	N/A	12.6	11.3	11.95	5.3	4.81	5.06
_	RWEQ312T	26 Tons	21.9	21.8	21.85	N/A	N/A	N/A	13.7	12.7	13.2	5.5	4.86	5.18
	RWEQ336T	28 Tons	21.5	21.4	21.45	N/A	N/A	N/A	13.5	12.3	12.9	5.42	4.73	5.08
	RWEQ360T	30 Tons	21.2	20.2	20.7	N/A	N/A	N/A	12.4	11.7	12.05	5.3	4.7	5.0
	RWEQ384T	32 Tons	19.5	17.9	18.7	N/A	N/A	N/A	12	11	11.5	4.53	4.12	4.33
	RWEQ408T	34 Tons	18.2	17.2	17.7	N/A	N/A	N/A	11.1	10.7	10.9	4.35	4.03	4.19
	RWEQ432T	36 Tons	17.0	16.6	16.8	N/A	N/A	N/A	10.5	10.3	10.4	4.19	3.92	4.06
	RWEYQ72PC	6 Tons	24.1	22.3	23.2	17.8	19.2	18.5	14.0	14.0	14.0	4.89	4.78	4.84
	RWEQ96T	8 Tons	30.8	25.4	28.1	25.7	21.3	23.5	19.6	15.4	17.5	6.27	5.8	6.035
	RWEQ120T	10 Tons	29.4	23.5	26.45	26.3	22.5	24.4	16	13.6	14.8	6.1	5.55	5.83
	RWEQ144T	12 Tons	24.3	19.8	22.05	26.5	22.7	24.6	15.4	12.6	14	6.01	5.33	5.67
	RWEQ192T	16 Tons	26.8	24.7	25.75	26.0	22.9	24.45	16.5	14.6	15.55	5.82	5.82	5.82
SIC	RWEQ216T	18 Tons	26.3	23.8	25.05	25.5	22.1	23.8	15.0	13.8	14.4	5.68	5.62	5.65
30 VE	RWEQ240T	20 Tons	25.7	22.7	24.2	25.4	21.9	23.65	14.0	12.8	13.4	5.52	5.38	5.45
Heat Recovery	RWEQ264T	22 Tons	23.5	2.00	21.75	25.2	19.2	22.2	13.5	12.1	12.8	5.34	4.96	5.15
eat	RWEQ288T	24 Tons	20.9	18.8	19.85	23.5	20.0	21.75	12.6	11.3	11.95	5.3	4.81	5.06
工	RWEQ312T	26 Tons	21.9	21.8	21.85	24.5	20.7	22.6	13.7	12.7	13.2	5.5	4.86	5.18
	RWEQ336T	28 Tons	21.5	21.4	21.45	23.5	20.0	21.75	13.5	12.3	12.9	5.42	4.73	5.08
	RWEQ360T	30 Tons	21.2	20.2	20.7	23.2	19.1	21.15	12.4	11.7	12.05	5.3	4.7	5.0
	RWEQ384T	32 Tons	19.5	17.9	18.7	22.0	19.1	20.55	12.0	11.0	11.5	4.53	4.12	4.33
	RWEQ408T	34 Tons	18.2	17.2	17.7	21.2	18.5	19.85	11.1	10.7	10.9	4.35	4.03	4.19
	RWEQ432T	36 Tons	17.0	16.6	16.8	20.5	17.7	19.1	10.5	10.3	10.4	4.19	3.92	4.055

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2014, "Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment" for the VRVT-Series Water-Cooled. The VRV T-Series Water-Cooled has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2016. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2016.



## VRV T-Series Water-Cooled Heat Pump or Heat Recovery 208-230V



#### A modular, energy-efficient and reliable alternative to centralized equipment

#### **Features and Benefits**

- » Flexible System design with increased diversity up to 150%¹ compared to previous VRV water-cooled generation
- » Small condensers can be triple stacked for reduced installation space and increased usable square footage
- » Larger (than previous models) single-system capacity and modular concept ensures wider application range for accommodating floor-by-floor loads of commercial buildings
- » Year round comfort and energy efficiency by combining VRV and VRT technologies

- » Can be applied to both geothermal and boiler/tower applications as standard with condenser water inlet temperature as low as 14°F in heating and 23°F in cooling is possible
- » 2-9V variable water flow control logic² as standard to increase waterside system operational efficiencies
- » Refrigerant cooled inverter technology to deliver consistent and reliable PCB operations
- » Engineered for easy service with drop-down switch box to access key components
- <sup>1</sup> Model specific, check product specification for details
- <sup>2</sup> Refer to installation manual for field settings and other requirements to activate this feature

Performance -	Name Combination  Rated Cooling Capacity <sup>2</sup> Rated Heating Capacity <sup>3</sup> Power Sound Pressure Level @ 3 ft. System Configuration: Heat Pump: HP, Heat Recovery: HR Liquid Pipe (Main Line)	BTU/h BTU/h V/ph/Hz dB(A)	69, 77,	000	8 T RWEQ9			Ton 20TATJA		Ton 14TATJA			RWEQ2	Ton 16TATJA	RWE02		
Performance -	Combination  Rated Cooling Capacity <sup>2</sup> Rated Heating Capacity <sup>3</sup> Power Sound Pressure Level @ 3 ft.  System Configuration: Heat Pump: HP, Heat Recovery: HR	BTU/h V/ph/Hz	69, 77,	000		UIAIUA	HVVLQI	UIAIUA	HWLUI	TTIAIJA		ZIAIJA			HVVLUZ	TUTATUA	
Performance -	Rated Cooling Capacity <sup>2</sup> Rated Heating Capacity <sup>3</sup> Power Sound Pressure Level @ 3 ft. System Configuration: Heat Pump: HP, Heat Recovery: HR	BTU/h V/ph/Hz	77,		92,0			IIWEGIZOTATOA		MILETATION		2 x RWEQ96TATJA		RWEQ96TATJA			
Performance -	Rated Heating Capacity <sup>3</sup> Power Sound Pressure Level @ 3 ft. System Configuration: Heat Pump: HP, Heat Recovery: HR	BTU/h V/ph/Hz	77,		92,0								RWEUIZUIAIJA				
Refrigerant -	Power Sound Pressure Level @ 3 ft. System Configuration: Heat Pump: HP, Heat Recovery: HR	V/ph/Hz		nnn	92,000		114,000		138,000		184,000		206,000		228,000		
Refrigerant -	Sound Pressure Level @ 3 ft.  System Configuration: Heat Pump: HP, Heat Recovery: HR			77,000		000	129,000		154,000		206,000		232,000		258,000		
Refrigerant -	System Configuration: Heat Pump: HP, Heat Recovery: HR	dB(A)										230/3/60					
Refrigerant -	HP, Heat Recovery: HR		50		5.	4	5	5	61	).5	5	7	57	7.5	58		
Refrigerant -	Liquid Pipe (Main Line)		HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	
		in.	3/8	3/8	3/8	3/8	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	
	Suction Gas Pipe (Main Line)	in.	3/4	5/8	7/8	3/4	1-1/8	3/4	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8	1-1/8	
ihilid	Discharge Gas Pipe (Main Line)	in.	N/A	3/4	N/A	7/8	N/A	1-1/8	N/A	1-1/8	N/A	1-1/8	N/A	1-1/8	N/A	1-3/8	
приц	Vertical Pipe Length (if unit is below FCU)	ft.	164	(130)	164 (130)												
	Actual Pipe Length (Equivalent Length)	ft.	390	(459)						540	0 (623)						
ľ	Total Pipe Length	ft.		30							980						
Connection	Standard Connectable Indoor Unit Ratio	%	50 -	130				50 - 150 <sup>4</sup>									
Ratio	Maximum Number of Indoor Units	Qty.	1	2	11	6	2	0	2	:5	3	3	3	37	41		
	BPHE Inlet Pipe (Female Thread)	in.	1-1/4		1-1	/4		1/4	1-1/4		2 x 1-1/4		2 x 1-1/4		2 x 1-1/4		
	BPHE Outlet Pipe (Female Thread)	in.	1-1/4		1-1	1-1/4		1-1/4		1-1/4		2 x 1-1/4		2 x 1-1/4		I-1/4	
Ī	Drain Pipe (Female Thread)	in.	1/2		3/	3/8		3/8		3/8		3/8	2 x 3/8		2 x	3/8	
-	Maximum System Water Pressure (BPHE)	psi	285		464												
Water Side Standard)	Standard Inlet Water Temperature Range Cooling	°F	50 - 113														
	Standard Inlet Water Temperature Range Heating	°F		50 - 113													
	Recommended Inlet Water Flow Rate per Module (minimum) <sup>5</sup>	gpm	13.2 ~ 39.6														
	Inlet Water Temperature Range Cooling <sup>6</sup>	°F	27 -	113			23 - 113										
Water Side Geothermal)	Inlet Water Temperature Range Heating <sup>6</sup>	°F	14	- 95	14 - 95												
	Water Flow Rate <sup>5</sup>	qpm	gpm 21.2 - 39.6							21.2	2 - 39.6						
	Weight	lbs.		30	41	9	4:	23	4	423		2 x 419		419 + 423		423	
Unit	Dimensions (H x W x D)	in.	39-3/8 x	30-3/4 x 1/16			8-9/16 x 30							/8 x 2) x 2			
	Voltage Range (min - max)	V								187	7 - 253						
	Maximum Overcurrent Protection (MOP)	A	3	0	3!	5	//	5	-	i0		- 35	35	+ 45	45	+ 45	
Electrical -	Minimum Circuit Amps (MCA)	A A		2.4	28			5 5.5		1.6	28.8 -			+ 36.5	36.5		
	Compressor Rated Load Amps (RLA)	A	11.6		1:		20			3.4		- 19		20.9	20.9		
	Compressor Type		Daikin G-		Daikin K-Type Scroll												
Compressor	Compressor Set-Up		Paikiii U*	Ahe arini		1 INV 1 INV 1 INV											
	Compressor Capacity Control	%	22	100	16 -	100		100	11	100	8 -	100		100	7 -	100	

<sup>&</sup>lt;sup>1</sup> Some features and benefits may not be available for this model. Please contact your local Daikin sales representative for more details.

<sup>&</sup>lt;sup>2</sup> Indoor temp.: 80°F DB, 67°F WB/inlet water temp.: 85°F/ Equivalent piping length : 25 ft., level difference : 0 ft.

<sup>&</sup>lt;sup>3</sup> Indoor temp.: 70°F DB, 60°F WB/inlet water temp.: 70°F / Equivalent piping length: 25 ft., level difference : 0 ft.



#### RWEQ\_TATJA/TAYDA

 22 T		24		26 To		287		301		32 T		347			Ton
RWEQ26	4TATJA	RWEQ28	8TATJA	RWEQ312	2TATJA	RWE033	6TATJA	RWEQ36	OTATJA	RWEQ384	1TATJA	RWEQ40	8TATJA	RWEQ43	32TATJA
RWEQ120		2 x RWEQ	144TATJA	2 x RWEQ96TATJA RWEQ120TATJA		RWEQ96TATJA 2 x RWEQ120TATJA		3 x RWEQ120TATJA		2 x RWEQ120TATJA RWEQ144TATJA		RWEQ120TATJA 2 x RWEQ144TATJA		3 x RWEQ144TATJ	
252,0	000	274,000		298,000		320,000		342,000		366,000		388,000		410,000	
284,0	000	308,	000	334,0	000	360,	360,000		386,000		410,000		000	460,000	
								30/3/60							
61.5		63.5		59		59	.5	60		62		64		65	
HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8
N/A	1-3/8	N/A	1-3/8	N/A	1-3/8	N/A	1-3/8	N/A	1-5/8	N/A	1-5/8	N/A	1-5/8	N/A	1-5/8
							164	(130)							
								(623)							
								80 150 <sup>4</sup>							
45		4	q	54		5		62	7	64		6	Л	6	14
2 x 1-		2 x 1		3 x 1-		3 x 1		3 x 1		3 x 1-		3 x 1			1-1/4
2 x 1-		2 x 1		3 x 1-		3 x 1		3 x 1		3 x 1-		3 x 1			1-1/4
2 x 3		2x3/8         3x3/8         3x3/8         3x3/8         3x3/8         3x3/8													
464															
	50 - 113														
							50	- 113							
							13.2	~ 39.6							
							23	- 113							
							14	- 95							
								- 39.6							
2 x 4	23	2 x	423	2 x 419	+ 423	419 + 2	2 x 423	3 x 4	423	3 x 4	23	3 x 4	423	3 x	423
38-9/	/16 x (30-1	1/8 x 2) x 22-	1/16					38-9	I/16 x (30-1/	/8 x 3) x 22-1	/16				
							187	- 253							
45+		50 +		35 + 35		35 + 4		45 + 4		45 + 45		45 + 5			0 + 50
36.5+		44.6 +		28.8 + 28.		28.8 + 36		36.5 + 36		36.5 + 36.		36.5 + 44		44.6 + 44	
20.9+	29.4	29.4 -	- 29.4	19 + 19 -	+ 20.9	19 + 20.		20.9 + 20	.9 + 20.9	20.9 + 20.	9+29.4	20.9 + 29	.4 + 29.4	29.4 + 29	9.4 + 29.4
	4 18/17	4 151) /					Daikin K-	Type Scroll	4 151) ( 4 11	11) / 4 (1) /					
0 4		+1INV	100	F 44	00	Г.	100		1 INV + 1 II		20		100	4	100
6 - 1		5 - 1		5 - 10		5 - 1		5 - 1		4 - 10 the <sup>6</sup> Appli		4 - 1			100

selected; refer to Engineering Manual for details.

T-series, field supplied for the PC-series) is required for each

Takin sales representative for design assistance and approval.



condensing unit model.

## VRV T-Series Water-Cooled Heat Pump or Heat Recovery 460V



#### A modular, energy-efficient and reliable alternative to centralized equipment

#### **Features and Benefits**

- » Flexible System design with increased diversity up to 150%¹ compared to previous VRV water-cooled generation
- » Small condensers can be triple stacked for reduced installation space and increased usable square footage
- » Larger (than previous models) single-system capacity and modular concept ensures wider application range for accommodating floor-by-floor loads of commercial buildings
- » Year round comfort and energy efficiency by combining VRV and VRT technologies

- » Can be applied to both geothermal and boiler/tower applications as standard with condenser water inlet temperature as low as 14°F in heating and 23°F in cooling is possible
- » 2-9V variable water flow control logic² as standard to increase waterside system operational efficiencies
- » Refrigerant cooled inverter technology to deliver consistent and reliable PCB operations
- » Engineered for easy service with drop-down switch box to access key components
- <sup>1</sup> Model specific, check product specification for details
- <sup>2</sup> Refer to installation manual for field settings and other requirements to activate this feature

			6 T	on	8 T	on	10 T	on	121	on	16	Гon	18	Ton	20	O Ton	
	Name		RWEQ72PCYD1		RWEQ96TAYDA		RWEQ12	OTAYDA	RWEQ144TAYDA		RWEQ192TAYDA		RWEQ216TAYDA		RWEQ240TAYDA		
Model	Combination										2 x RWEQ96TAYDA		RWEQ96TAYDA RWEQ120TAYDA		2 x RWEQ120TAYDA		
	Rated Cooling Capacity <sup>2</sup>	BTU/h	69,0	100	92,0	000	114,	000	138,000		184,000		206,000		228,000		
D (	Rated Heating Capacity <sup>3</sup>	BTU/h	77,0	100	103,	.000	129,000		154,000		206	000	232	,000	258,000		
Performance	Power	V/ph/Hz								46	0/3/60			-			
	Sound Pressure Level @ 3 ft.	dB(A)	50		5	4	5	5	60	.5	5	7	5	7.5	58		
	System Configuration: Heat Pump: HP, Heat Recovery: HR		HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	
	Liquid Pipe (Main Line)	in.	3/8	3/8	3/8	3/8	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	
	Suction Gas Pipe (Main Line)	in.	3/4	5/8	7/8	3/4	1-1/8	3/4	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8	1-1/8	
Refrigerant	Discharge Gas Pipe (Main Line)	in.	N/A	3/4	N/A	7/8	N/A	1-1/8	N/A	1-1/8	N/A	1-1/8	N/A	1-1/8	N/A	1-3/8	
Piping	Vertical Pipe Length (if unit is below FCU)	ft.	164 (	130)	164 (130)												
	Actual Pipe Length (Equivalent Length)	ft.	390 (	459)	540 (623)												
	Total Pipe Length	ft.		980 980													
Connection	Standard Connectable Indoor Unit Ratio	dard Connectable Indoor Unit Ratio % 50 - 130 50 - 1504															
Ratio	Maximum Number of Indoor Units	Qty.	1	12		6	20	)	2	5	3	3	3	37	41		
	BPHE Inlet Pipe (Female Thread)	in.	1-1/4		1-1/4		1-1	1-1/4		1-1/4		2 x 1-1/4		2 x 1-1/4		2 x 1-1/4	
	BPHE Outlet Pipe (Female Thread)	in.	1-1/4		1-1/4		1-1	/4	1-1/4		2 x 1-1/4		2 x	1-1/4	2 x 1-1/4		
	Drain Pipe (Female Thread)	in.	1/2		3/8		3/	3/8		3/8		2 x 3/8		2 x 3/8		2 x 3/8	
	Maximum System Water Pressure (BPHE)	psi	28	5	536.6												
Water Side (Standard)	Standard Inlet Water Temperature Range Cooling	°F		50 - 113													
	Standard Inlet Water Temperature Range Heating	°F		50 - 113													
	Recommended Inlet Water Flow Rate per Module (minimum) <sup>5</sup>	gpm		13.2~39.6													
	Inlet Water Temperature Range Cooling <sup>6</sup>	°F	27 -	27 - 113 23 - 113													
Water Side (Geothermal)	Inlet Water Temperature Range Heating <sup>6</sup>	°F	14 -	113		14 - 95											
	Water Flow Rate <sup>5</sup>	gpm	21.2 - 39.6						21		.2 - 39.6						
	Weight	lbs.	34	3	42	26	43	430		430		2 x 426		426 + 430		x 430	
Unit	Dimensions (H x W x D)	in.	39-3/8 x 21-1			38-9/16 x 30-1/8 x 22-					38-9/16 x (30-1/8 x 2) x 22-1/16						
	Voltage Range (min - max)	V								41	4 - 506						
	Maximum Overcurrent Protection (MOP)	A	15		1	5	20	)	2		15 -	- 15	15	+20	20	) + 20	
Electrical	Minimum Circuit Amps (MCA)	А	10.2		1		16		20		13 -			16.5		5 + 16.5	
	Compressor Rated Load Amps (RLA)	A	5.3		8.		9.		13		8.6 -			+ 9.4		1+9.4	
	Compressor Type		Daikin G-T	ype Scroll	Daikin K-Type Scroll												
Compressor	Compressor Set-Up			, ,		1 INV											
p100001	Compressor Capacity Control	%	23 - 100		16 - 100			14 - 100		11 - 100		8 - 100		8 - 100		7 - 100	

'Some features and benefits may not be available for this model. Please contact your local Daikin sales representative for more details. <sup>2</sup>Indoor temp.: 80°F DB, 67°F WB/inlet water temp.: 85°F/ Equivalent piping length : 25 ft., level difference : 0 ft.

<sup>3</sup>Indoor temp.: 70°F DB, 60°F WB/inlet water temp.: 70°F / Equivalent piping length: 25 ft., level difference : 0 ft.



RWEQ\_TATJA/TAYDA

22	Ton	24	Ton	26 7	on	28	Ton	30	Ton	32	Ton	34	Ton	36	Ton
RWEQ26	4TAYDA	RWEQ2	B8TAYDA	RWEQ31	2TAYDA	RWEQ33	86TAYDA	RWEQ36	OTAYDA	RWEQ3	34TAYDA	RWEQ4	O8TAYDA	RWEQ4	32TAYDA
RWEQ12 RWEQ14		2 x RWEQ	144TAYDA	2 x RWEQ RWEQ12		RWEQ9		3 x RWEQ	120TAYDA		120TAYDA I4TAYDA		120TAYDA 1144TAYDA	3 x RWEC	1144TAYD
252,	,000	274	,000	298,	000	320,	,000	342,000 366,000		38	8,000	410,000			
284,	,000	308	,000	334,	000	00 360,000		386,000 410		410	,000 435,000		460,000		
							46	0/3/60							
61	.5	63	3.5	59	9	59	9.5	6	0	6	2	64		65	
HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR	HP	HR
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
 1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8
N/A	1-3/8	N/A	1-3/8	N/A	1-3/8	N/A	1-3/8	N/A	1-5/8	N/A	1-5/8	N/A	1-5/8	N/A	1-5/8
	164 (130)														
							54	0 (623)							
								980							
1			0		4			) - 1504	0		4		0.4		0.4
4			9	54		5			2		4		64		1-1/4
2 x 1-1/4 2 x 1-1/4 2 x 1-1/4 2 x 1-1/4			3 x 1-1/4 3 x 1-1/4		3 x 1		3 x 1-1/4 3 x 1-1/4			I-1/4 I-1/4		1-1/4	_	1-1/4	
2 x 1-1/4 2 x 1-1/4 2 x 3/8 2 x 3/8			3 x i		3 x	,		3/8		3/8		(3/8		(3/8	
2.1	536.6														
							5	0 - 113							
							5	0 - 113							
							13.	2 ~ 39.6							
							2	3 - 113							
							1	4 - 95							
							21	2 - 39.6							
2 x 4	430	2 x	430	2 x 426	+430	426 + 2	2 x 430	3 x	430	3 x	430	3)	(430	3 x	(430
38-9	1/16 x (30-1	/8 x 2) x 22	-1/16					38	3-9/16 x (30-	-1/8 x 3) x 2	2-1/16				
							41	4 - 506							
20 -	+ 25	25	+ 25	15 + 15	5 + 20	15+2			0+20	20 + 2	0 + 25	20+	25 + 25	25+	25 + 25
16.5+	+20.2	20.2	+ 20.2	13 + 13			5 + 16.5		6.5 + 16.5	16.5 + 16	6.5 + 20.2		0.2 + 20.2		0.2 + 20.2
9.4+	13.3	13.3	+ 13.3	8.6 + 8.	6+9.4	8.6+9.	4+9.4	9.4+9	.4+9.4	9.4+9.	4+13.3	9.4 + 13	3.3 + 13.3	13.3 + 1	3.3 + 13.3
							Daikin I	K-Type Scro							
	1 INV	+ 1 INV							1 INV + 1	INV + 1 IN	V				
6 - 1	100	5 -	100	5 - 1	00	5 -	100	5 -	100	4 -	100	4 -	- 100	4 -	100

<sup>4</sup>Varies based on indoor and condensing unit model selected; refer to Engineering Manual for details.

condensing unit model.

\*Please note that a water strainer (standard accessory for the *T-series*, field supplied for the PC-series) is required for each Daikin sales representative for design assistance and approval.



#### VRV IV S-series

### Heat Pump 208-230V

#### **Light Commercial**

The VRV IV S-series system is a highly efficient solution for small commercial buildings requiring heating and cooling of up to 9 zones. A mix of ducted and duct-free indoor units can be combined to provide individual comfort and ease of installation.

Whether you are working with space constraints or want to maximize the amount of commercial space available, the VRV IV S-series system gives you the flexibility you need. With its simple, versatile design and long piping (up to 230 ft. actual piping length one way), the VRV IVS-series can accommodate practically any floor layout, enabling better use of space.

Its advanced zoning capabilities allow floor-by-floor installation so that each floor can be occupied quickly upon completion. And, because the outdoor units are lightweight and vibration-free, there's no need to reinforce floors, reducing both installation time and costs.

Daikin VRV's wide range of stylish and discreet indoor units provide configurations for every retail space, giving you the benefit of our highly efficient technology, whatever the design of your store. Wall mounted units matched to your interior meet both aesthetic and energy needs while also supporting the look and feel of your brand and preserving floor space. Slim ducted and concealed units blend almost unseen into your store, while floor standing units with small footprints preserve floor space, fitting unobtrusively into recesses or under windows.

#### Features and Benefits

- » Single-phase technology is perfect for light commercial and residential applications in 36,000, 48,000 and 60,000 Btu/h models.
- » Space-saving design to fit in tight areas and realize quick and easy installation.
- » Savings in energy use due to higher SEER and HSPF ratings when compared to VRV III-S.
- » Soft sound level operation ensures a comfortable fit in any room.
- » Single-supplier reliability. The system factory engineered and 80% complete upon delivery — is fully optimized by Daikin, plus has self-diagnostics and one of the best warranties in the industry\*.
- » Simplified equipment selection with a flexible array of indoor unit options.
- \* Complete warranty details available from your local Daikin manufacturer's representative or distributor or online at www.daikincomfort.com or www.daikinac.com.









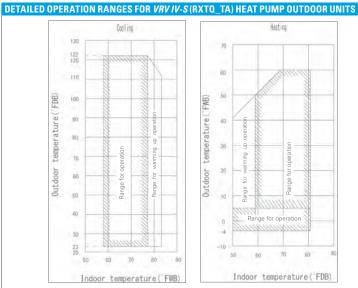


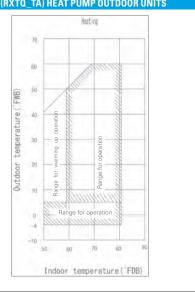


<b>CERTIFIED PERF</b>	FORMANCE DATA								
Outdoor Unit	Indoor Units Combination	Rated Cooling Capacity (Btu/hr)	EER2 95°F	SEER2	Rated Heating Capacity @47°F (Btu/h)	COP 47°F	Rated Heating Capacity @17°F (Btu/h)	COP 17°F	HSPF2
	Non-Ducted Indoor Units		12.0	18.2	37,000	4.10	23,600	3.0	9.0
RXTQ36TBVJUA*	Ducted Indoor Units	34,200	9.2	15.3		3.30	24,600	2.5	8.5
	Mixed Ducted and Non-Ducted Indoor Units		10.6	16.3		3.70	24,100	2.8	8.8
	Non-Ducted Indoor Units		10.3	18.6	49,500	4.00	32,200	3.0	8.5
RXTQ48TBVJUA*	Ducted Indoor Units	45,500	7.9	14.6	46,000	3.35	30,200	2.7	8.3
	Mixed Ducted and Non-Ducted Indoor Units		9.1	16.6	47,750	3.68	31,200	2.9	8.4
	Non-Ducted Indoor Units		9.8	18.6		4.30	37,000	3.2	8.5
RXTQ60TBVJUA*	Ducted Indoor Units	57,500	8.5	15.5	57,000	3.70	36,400	2.7	8.5
	Mixed Ducted and Non-Ducted Indoor Units		9.2	17.1		4.00	36,700	3.0	8.5

	Model Name		RXTQ36TBVJUA	RXTQ48TBVJUA	RXTQ60TBVJUA		
	ODU Style	Fan Type	Single Fan	Single Fan	Double Fan		
	Nominal Cooling Capacity	BTU/h	36,000	48,000	57,500		
	Nominal Heating Capacity	BTU/h	40,000	52,000	57,000		
Df	Operation Range Cooling °F DB			23 to 122			
Performance	Operation Range Heating	°F WB		-4 to 60			
	Power V/P/HZ		208-230/1/60				
	Sound Pressure Level @ 3ft	dB(A)	58	<del>_</del>			
	Refrigerant						
	Refrigerant Quantity	lbs.	6.4	7.5	7.9		
	Liquid Pipe (Main Line)	in.		3/8			
	Suction Gas Pipe (Main Line)	in.	5/8		3/4		
Refrigerant Piping	Vertical Drop	ft.	98		165		
	Vertical Rise		98	130			
	Maximum vertical pipe length between IDU	ft.	33		49		
	Actual Pipe Length (Equivalent Length)	ft.	164 (213)	230 (295)	394 (492)*		
	Total Piping Length	ft.	820		984		
Connection Ratio	Connectable Indoor Unit Ratio	%		50-130			
CUIII ection natio	Number of Indoor Units	QTY	6	8	9		
Unit	Outdoor Unit Size	(HxWxD)	39 x 37 x 12-5/8	39 x 37 x 12-5/8	52-15/16 x 35-7/16 x 12-5/8		
UIII	Weight	lbs.	172	176	225		
Fan	Airflow	CFM	2682	!	3741		
ı alı	Fan Motor Output and Quantity	KW	0.20 x	1	0.070 X 2		
	Maximum Over Current Protection (MOP)	A	20		35		
Electrical	Minimum Circuit Amps (MCA)	А	16.5		29.1		
	Rated Load Amps (RLA	А	15.3	19.0	23.2		
Compressor	Compressor Type	TYPE		Daikin Swing			
Compressor	Capacity Control	%		14-100			

<sup>\*</sup> Application rules apply. Refer to Installation Manual for further details.



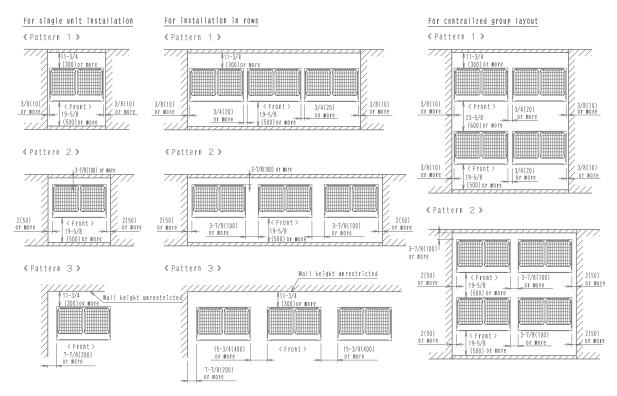


# VRV EMERION, VRV IV X, VRV IV & VRV AURORA, VRV T-Series Water-Cooled & VRV IV-S Installation Space

### URU EMERIN | URU IV X | URU IV | URU AURORA

#### **Installation Space Examples**

- » The installation space requirement shown in the figure is a reference for cooling.
- » During installation, install the units using the most appropriate of the patterns shown in the figure for the location in question, taking into consideration human traffic and wind.
- » If the number of units installed is more than that shown in the pattern in the figure, install the units so that there is no air short circuiting.
- » Consider the space needed for the refrigerant piping when installing the units, as determined by local codes.
- » If the space requirements in the figure do not apply, contact your contractor or Daikin directly.



#### Notes

1. Heights of walls in case of Patterns 1 and 2: Front: 59in

Suction side: 19-5/8in

Side: Height unrestricted.

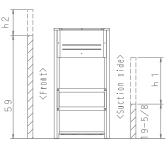
Installation space shown in this drawing is based on the cooling operation at 95°F outdoor air temperature. When the design outdoor temperature exceeds 95°F or the load exceeds maximum ability because of much generation

load exceeds maximum ability because of much generation load of heat in all outdoor unit, take the suction-side space more broadly than the space shown in this drawing.

- 2. If the above wall heights are exceeded then h2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the figure.
- 3. When installing, the units most appropriate pattern should be selected in order to obtain the best fit in the space available, always bearing in mind the need to leave enough space for a person to pass between the units

pass between the units and wall and for the air to circulate freely.

4. The units should be installed to leave sufficient space at the front for the field refrigerant piping work to be carried out comfortably.



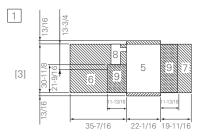


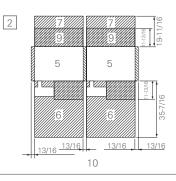
- 1. In case of a single installation [inch.]
- 2. In case of multiple unit installation [inch.]
- 3. Top view
- 4. Side view
- 5. Condensing unit
- 6. Service Space (front side)
- 7. Service Space (back side)
- 8. Space for installing water piping must be ample enough to remove the front panel.

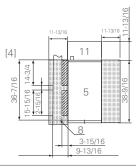
- 9. Ventilation space (refer to Engineering Data Book for further details)
- 10. Secure spaces in the front, back, and top sides as same as the case of single installation.

[1]

11. Service space above the unit for refrigerant piping (refer to Engineering Data Book for further details)



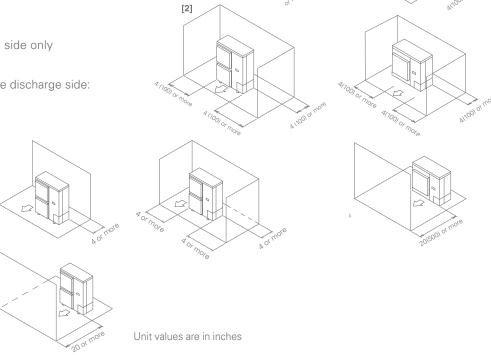




### **IRV** IV S-series

In case of series installation, some space between the units is needed for wiring with conduit and servicing.

- 1. Where there is an obstacle on the suction side:
  - (a) No obstacle above
    - (1) Stand alone installation
      - Obstacle on the suction side only
      - Obstacle on both sides
- 2. Where there is an obstacle on the discharge side:
  - (a) No obstacle above
    - (1) Stand alone installation



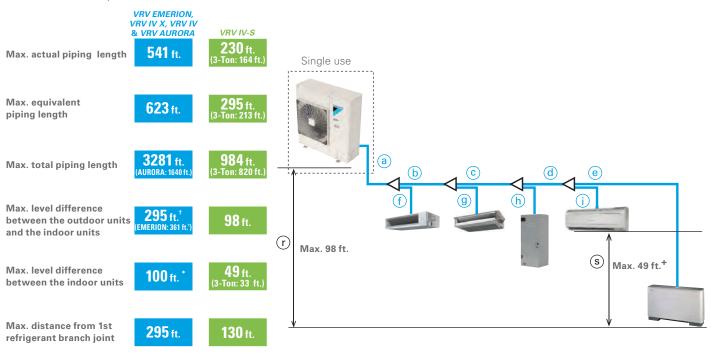


# VRV EMERION, VRV IV X, VRV IV & VRV AURORA, VRV T-Series Water-Cooled & VRV IV-S Piping Length

The long piping length provides more design flexibility, which can match even large-sized buildings.

#### Air-cooled system piping length

For connection of only VRV indoor units



Piping for VRV EMERION VRV IV X, VRV IV, VRV AURORA, and VRV IV-S

		ACTUAL PIPING LENGTH			EXAMPLE	EQUIVALENT PIPING LENGTH			
		VRV EMERION, VRV IV X / VRV IV / VRV AURORA	VRV IV-S			VRV EMERION, VRV IV X / VRV IV / VRV AURORA	VR	VRV IV-S	
			3-Ton	4-5 Ton			3-Ton	4-5 Ton	
	Refrigerant piping length	541 ft.	164 ft.	230 ft.	a+b+c+d+e	623 ft	213 ft	295 ft	
Maximum	Total piping length	3281 ft. AURORA: 1640 ft.	820 ft.	984 ft.	a+b+c+d+e+f+g+h+i	-	_	_	
allowable piping length	Between the first indoor unit branch and the farthest indoor unit	295 ft.*	98 ft.	98 ft.	b+c+d+e	-	-	_	

			LEVEL DIFFERENCE	LEVEL DIFFERENCE			
		VRV EMERION, VRV IV X / VRV IV / VRV AURORA	/RV IV X   VRV IV   VRV AURORA VRV IV-S				
				3-Ton	4-5 Ton		
	Between the outdoor units (multiple use of	n the same circuit)	16 ft.	n/a	n/a	_	
Maximum allowable	Between the indoor units		98 ft.	33	49	S	
level difference	Between the outdoor units and	If the outdoor unit is above	295 ft. ( <i>EMERION</i> : 361 ft.) <sup>†</sup>	98	98	r	
	the indoor units	If the outdoor unit is below	295 ft. (EMERION: 361 ft.)†	98	98	r	

<sup>\*</sup> No special requirements up to 131 ft. The maximum actual piping length can be 295 ft., depending on conditions. Various conditions and requirements have to be met to allow utilization of 295 ft. piping length. Be sure to refer to the Engineering Data Book for details of these conditions and requirements.

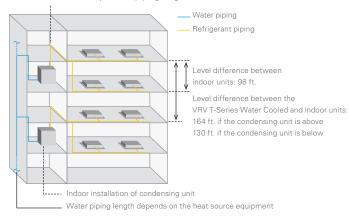
<sup>&</sup>lt;sup>†</sup> Refer to installation manuals for details of the conditions and requirements

#### Water-cooled system piping length

Water-Cooled systems provide considerable design flexibility with total piping lengths of up to 980 ft. and vertical separation of up to 164 ft.\* between condensing units and indoor units.

For connection of only VRV indoor units

Actual piping length between the VRV T-Series and indoor units: 540ft. (equivalent piping length: 623ft.)



REFRIGERANT PIPING LIMITATIONS	LIMITATIONS
Linear piping between condensing unit and furthest located fan coil unit (equivalent), ft.	540 (623)
Total "one-way" piping in the complete piping network, ft.	980
Vertical (height) separation between the condensing unit and the fan coil units (if condensing unit is below)*, ft.	164 (130)
Vertical (height) separation between fan coil units, ft.	98
Linear piping between 1st <i>REFNET</i> and furthest located fan coil unit, ft.	130 (295)**

- \* Conditions apply when the condenser is lower than indoor units. Refer to your local Daikin representative for further information.
- $\ensuremath{^{**}}$  Conditions/rules apply. Refer to Installation manual for further details.



#### **VRV** Accessories

# Branch Selector Boxes

#### New Flex Branch Selector for Ultimate Flexibility

Daikin's new Flex Branch Selector boxes are engineered to be compact and provide flexibility in design, installation, maintenance, and service. Packed with Daikin's state of the art technology, the new Flex Branch Selector boxes fit in tight mechanical spaces (common in ceilings) combined with flexibility in piping configuration and movable E-box makes the new design an ideal choice for commercial buildings.

## Main Features and Benefits Flexible

- » Design flexibility with versatile piping configurations of Left or Right or Pass through layouts.
- » Engineered for tight ceiling spaces with a compact height of 9½" and 0"1 service clearance between the slab and the top of the Flex Branch Selector box.
- » Flexibility to expand design with up to 121 ports and 230Mbh¹ down stream capacity by connecting multiple boxes in series.
- » Ability to optimize installed system cost by reducing REFNETs and braze joints in pass thru configuration vs non-pass through configuration.
- » Simple electrical configurations with flexibility to re-position E-box.<sup>2</sup>
- » Ability to mix and match Daikin Flex Branch Selector boxes and standard branch selector box for ultimate design flexibility.
  - <sup>1</sup> Refer to engineering manuals for design rules
  - <sup>2</sup> Feature available for BSF4Q54TVJ (4-port) model only



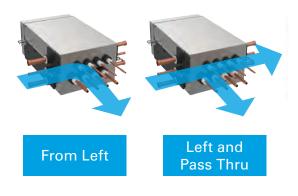
#### Installation Flexibility

- » Ease of maintenance with access to electronic expansion valve (EEV) heads and motor via side access panel.
- » Eliminate cross piping with refrigerant pipe identification labels.
- » Simple electrical and communication wiring with connection from the front side of E-box.<sup>2</sup>

#### Innovative

OR

- » Daikin's high specification EEV enables precise refrigerant control for high comfort in user spaces and reliable system operation.
- » Hermetically sealed to prevent condensate build up within the unit, eliminating the need for a condensate drain pan and plumbing connections for a simple installation.
- » Low ambient cooling down to  $-4^{\circ}F^{1}$  for simple and integrated system design.

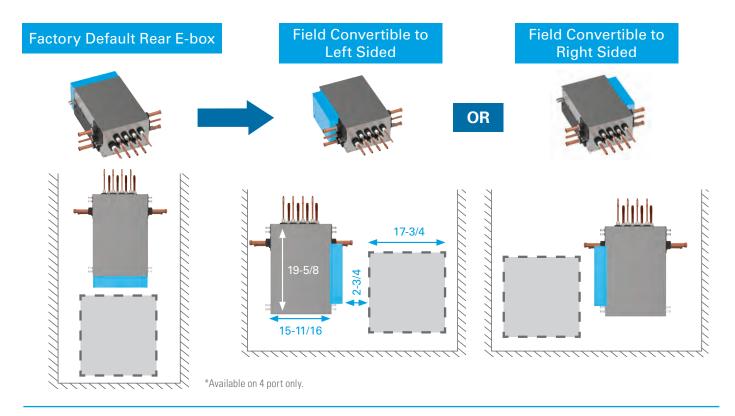




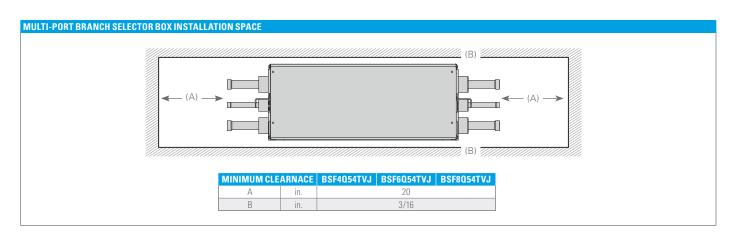


From Right

Right and Pass Thru



	L DATA FOR I	MULTI-PORT BRANCH SELECT	OR BOXES						
Model				BSF4Q54TVJ	BSF6Q54TVJ	BSF8Q54TVJ			
Number of E	Branches			4	6	8			
Maximum ca	apacity index p	er branch		54					
Max Total C	apacity Index v	hen in Parallel/ when in Series		144	216 / 162	290 / 162			
Max Numbe	r of Connectab	le Indoor Units Per Branch			5				
Max total ca	apacity Index ur	nder BS Units Connected in Series			230				
	Indoor Unit	Liquid	in.		3/8 (1/4) Brazing				
	Indoor Onit	Gas	in.		5/8 (1/2) Brazing				
Connecting Pipes		Liquid	in.	5/8 Brazing					
Проз	Outdoor unit	Suction Gas	in.	1-1/8 Brazing					
		HP/LP Gas	in.	1-1/8 Brazing					
	Power Suppl	у	ph/V/HZ		Single phase / 208-230V / 60Hz				
Electrical	Maximum 0	vercurrent Protection, MOP	А		15				
	Minimum Cir	cuit Amps, MCA	А	0.4	0.6	0.8			
C		Operating sound	dB (A)	37	40.5	40.5			
200110 F6A61	Sound Level Max. sound		dB (A)	47	50	50			
Weight	Weight lbs			49	49 73				
Dimensions	Dimensions (H x W x D) in.			9 -1/2 x 13-3/4 x 23-3/4	9 -1/2 x 13-3/4 x 23-3/4 9 -1/2 x 23-3/8 x 23-3/4				



#### **VRV** Accessories

# Branch Selector Boxes (cont.)

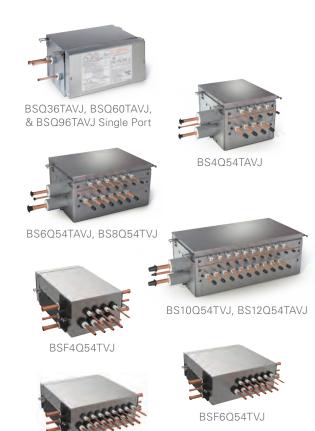
#### Branch Selector Boxes for Heat Recovery Systems

Providing flexibility and minimizing mechanical and electrical installation costs, Daikin's branch selector boxes are ideal for spaces that require individual heating and cooling control.

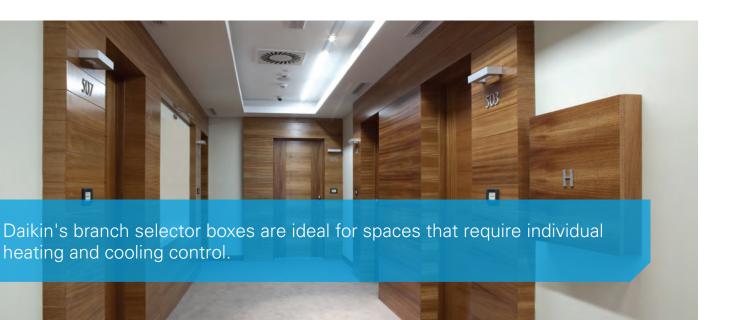
- » New Flex Branch Selector models offered in 4, 6, and 8 port.
- » Ability to connect multiple branch selector boxes in series or in parallel when using Flex Branch Selector Box
- » Extend phase installation capability of VRV EMERION and VRV IV X by leveraging Flex Branch Selector box ability to add on additional boxes in series
- » Wide range of product offerings with 1, 4, 6, 8, 10 and 12 port options
- » No drain or condensate consideration required
- » Unlimited number of unused ports per box or system
- » Reduce electrical and mechanical installation costs
- » Ultimate flexibility Choose multi-port or single-port styles to customize your design

#### **Branch Selector Boxes Compatibility**

Single-Port and Multi-Port Branch Selector Boxes BS-TVJ and BSF-TVJ series are compatible with *VRV EMERION*, *VRV IV X*, *VRV IV* and *VRV T-Series* Water-Cooled Heat Recovery Units.

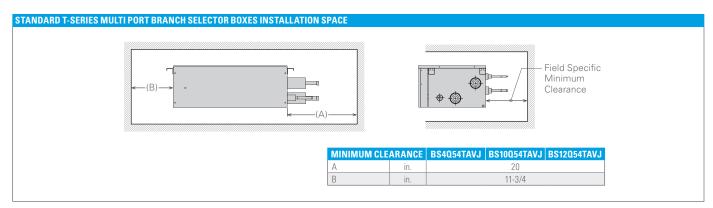


BSF8Q54TVJ



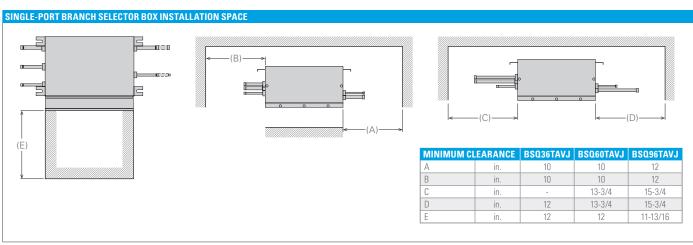
#### STANDARD MULTI-PORT T-SERIES

TECHNICAL DA	ГА - М	<b>ULTI-PORT T-SERIES BRANCH SEL</b>	ECTOR BOXES					
Model				BS4Q54TAVJ	BS10Q54TAVJ	BS12Q54TAVJ		
Number of branch	es			4	10 12			
Maximum capacit	y index	per branch		54				
Maximum total ca	pacity	index		144	290			
Maximum connec	table ir	ndoor units per branch			5			
	IU	Liquid	in.	Ø1/4, Ø3/8				
	10	Gas	in.		Ø1/2, Ø5/8			
Connecting Pipes		Liquid	in.	Ø3/8	Ø5/8			
	OU	Suction Gas	in.	Ø7/8 Ø1-1/8				
		HP/LP Gas	in.	Ø3/4	Ø3/4 Ø1-1/8			
	Powe	r Supply	ph/V/Hz		1/208-230/60			
Electrical	Maxi	mum Overcurrent Protection, MOP	А		15			
	Minin	num Circuit Amps, MCA	А		1	1.2		
Mass (Weight)			lbs.	49 101 1				
Dimensions (H x W x D) in.			11-3/4 x 14-9/16 x 18-15/16 11-3/4 x 32-5/16 x 18-15/16					



#### SINGLE PORT BRANCH SELECTOR BOXES

	DATA	FOR SINGLE-PORT BRANCH SELE	OTON DOKES	DOGGTAVA	DOGGETANA	DOGGETALL		
Model				BSQ36TAVJ	BSQ60TAVJ	BSQ96TAVJ		
Number of bra	anches			1	1	1		
Maximum capacity index				36	60	96		
Maximum connectable indoor units				4	8	8		
	IU Liquid			Ø3/8				
0	10	Gas	in.	Øŧ	5/8	Ø7/8		
Connecting Pipes		Liquid	in.		Ø3/8			
i ibes	OU	Suction Gas	in.	Øf	5/8	Ø7/8		
		HP/LP Gas	in.	Ø.	1/2	Ø3/4		
		Power Supply	ph/V/Hz		1/208-230/60			
Electrical	M	aximum Overcurrent Protection, MOP	А		15			
Minimum Circuit Amps, MCA		А	0.1					
Mass (Weigh	1)		lbs.	24 24 31				
Dimensions (H x W x D) in.			in.	8-1/8 x 15-1/4 x 12-13/16				



For additional technical information and all equipment installation and application limitations please refer to the specific Engineering Data Books.



### **VRV** Accessories

# REFNET Pipe Joints

#### **REFNET**

REFNET joints distribute correct flow of refrigerant in every branch of the piping network. Sourced locally and complies to ASTM E-84 Class A low flame and smoke spread index requirements.



**REFNET** Joint



#### VRV IV X, VRV IV / VRV AURORA Heat Pump

OPTIONAL ACCESSORIES		RXYQ72 - 96T RXYQ72 - 96X RXLQ72 - 96T	RXYQ120-168T RXYQ120-168X RXLQ120T	RXYQ192-336T RXYQ360-408T RXYQ192-336X RXYQ360-408X RXLQ144-240T RXYQ360-480MBH			
Distributed piping	<i>REFNET</i> Header	KHRP26M22H (max. 4 branch) KHRP26M33H (max. 8 branch)	KHRP26M22H (max. 4 branch) KHRP26M33H (max. 8 branch) KHRP26M72H (max. 8 branch)	KHRP26M KHRP26M	22H (max. 4 branch) 33H (max. 8 branch) 72H (max. 8 branch) '3HU (max. 8 branch)		
	REFNET Joint	KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26M72TU	KHRP26A22T, KHRP26A33T, KHRP26M72TU, KHRP26M73TU			
Outdoor unit multi connection piping kit			_	BHFP22P100U BHFP22P151U			

#### VRV EMERION / VRV IV X / VRV IV / VRV AURORA Heat Recovery

OPTIONAL ACCESSORIES		REYQ72 - 96A REYQ72 - 96X RELQ72 - 96T	REYQ120-168A REYQ120-168X REYQ120-168T	REY0192-480A REY0360-456X REY0192-336X REY0360-456T		
Distributed	REFNET header KHRP25M33H (max. 8 branch)		KHRP25M33H (max. 8 branch) KHRP25M72H (max. 8 branch)			
piping	REFNET joint KHRP25A22T KHRP25A33T		KHRP25A22T KHRP25A33T KHRP25M72TU	KHRP25A22T KHRP25A33T KHRP25M72TU KHRP25M73TU		
Outdoor unit multi connection piping kit			_	BHFP26P100U <sup>1</sup>	BHFP26P151U	

¹Reducer pipe kit KHFP26P100UA is required for REYQ264-480A models

#### VRV T-Series Water-Cooled Heat Pump / Heat Recovery and VRV IV-S

			VRV	/ T-SERIES WATER-	COOLED		VRV IV-S
UNIT MODEL NUMBER		RWEQ96T	RWEQ120T	RWEQ120T RWEQ144T		RWEQ312 - 432T	RXTQ36TAVJ9A RXTQ48TAVJUA RXTQ60TAVJUA
Heat Pump		KHRP26M22H (Max 4 branch) KHRP26M33H (Max 8 branch)	KHRP26M22H (Ma KHRP26M33H (Ma KHRP26M72H (Ma	ax 8 branch)	KHRP26M22H (Max 4 branch), KHRP26M72H (Max 8 branch),	KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch	
Header	Heat Recovery	KHRP25M33H (Max 8 branch) KHRP25M33H (Max 8 branch) KHRP25M72H (Max 8 branch)				, KHRP25M72H (Max 8 branch) J (Max 8 branch)	_
REFNET	Heat Pump	KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26M72TU		KHRP26A22T, KHRP26A33T, K	HRP26M72TU, KHRP26M73TU	KHRP26A22T
Joint	Heat Recovery	KHRP25A22T, KHRP25A33T	KHRP25A22T, KHRP25A33T KHRP25A22T, KHRP25A33T, KHRP25M72TU			KHRP25A22T, KHRP25A33T, KHRP25M72TU, KHRP25M73TU	
Outdoor Unit Multi Piping	Heat Pump	_			BHFP22T84U BHFP22T126U		_
Connection Kit	Heat Recovery		_		BHFP26T84U	BHFP26T126U	_

#### **Hail Guard Kits**

The optional hail guard kit for *VRV* 3-phase enables optimal airflow for efficient heat transfer while providing condenser coil protection from hail damage in severe climates. Each hail guard kit, that is field installed, consists of 4 panels (Right, Left, Front and Back).

#### Hail Guard Kit for VRV IV X, VRV IV, and VRV AURORA

		QUANTITY	OF KITS PER	ODU MODELS		PANEL DIMENSIONS (H X W X D)				
VRV IV	R_YQ72T	R_YQ96-168T	R_YQ192T	R_YQ216-336T	R_YQ360-456T				Front Panel	
VRV AURORA		R_LQ72-120T		R_LQ144-240T		Right Panel	Left Panel	Front Panel		
VRV IV X HP	RXYQ72X	RXYQ96-168X	RXYQ192X	RXYQ216-336X	RXYQ360-456X	nigiit railei	Leit Fallei			
VRV IV X HR		REYQ72-168X		REYQ192-336X	REYQ360-408X					
VRV4HGS-K1	1		1			45 <sup>7</sup> / <sub>8</sub> " x 26" x 4"	45 <sup>7</sup> / <sub>8</sub> " x 12 <sup>7</sup> / <sub>8</sub> " x 4"	45 <sup>7</sup> / <sub>8</sub> " x 13 <sup>1</sup> / <sub>4</sub> " x 4"	45 <sup>7</sup> / <sub>8</sub> " x 32 <sup>5</sup> / <sub>8</sub> " x 4"	
VRV4HGL-K1		1	1	2	3	43'/8 X Z0 X 4	437/8 X 127/8 X 4	45 <sup>7</sup> / <sub>8</sub> " x 24" x 4"	45 <sup>7</sup> / <sub>8</sub> " x 44 <sup>3</sup> / <sub>4</sub> " x 4"	

<sup>\*</sup>Refer engineering and installation manual for more detail.

#### Hail Guard Kit for VRV EMERION

	QUAN	U MODELS	
VRV EMERION	REYQ72A	REYQ96-168A	REYQ192-240A
VRV6HGM-K1	1		
VRV6HGL-K1		1	
VRV6HGXI-K1			1

#### Snow/Wind Hood Kits

The optional Snow/Wind Hood Kits mount over the heat exchanger coil to protect from snow build-up and wind in cold climates. The Hoods install easily to condensing units using existing screw taps with no modification required. Different kits can be ordered for different job requirements.

	KIT PART NUMBER	CHASSIS SIZE	KIT INCL	USION	
Z 2	VRV-SHS-FR	Small Chassis	Front Hood	Rear Hood	
5.8	VRV-SHL-FR	Large Chassis	Front Hood	Rear Hood	
V IV, IV URORA	VRV-SH-RL	Both Chassis	Right Hood	Left Hood	
₹ <b>₹</b>	VRV-SHS-T	Small Chassis	Top Ho	ood	
	VRV-SHL-T	Large Chassis	Top Hood		



	KIT PART NUMBER	CHASSIS SIZE	KIT INC	USION	
z	VRV6-SHM-FR	Medium Chassis	Front Hood	Rear Hood	
<u></u>	VRV6-SHL-FR	Large Chassis	Front Hood	Rear Hood	
EMERIO	VRV6-SHXL-FR	X-Large Chassis	Front Hood	Rear Hood	
<b>a</b>	VRV6-SH-RL	All Chassis	Right Hood	Left Hood	
VRV	VRV6-SHM-T	Medium Chassis	Top H	lood	
_	VRV6-SHL-T	Large Chassis	Top H	lood	
	VRV6-SHXL-T	X-Large Chassis	Top H	lood	

		NUMBER OF	KITS REQU	RIED FO	R EACH	OUTDO	OR SYS	TEM							
	MODEL TYPE		NUMBER OF MODULES	VRV6-SHM-FR	VRV6-SHL-FR	VRV6-SHXL-FR	VRV6-SHM-T	VRV6-SHL-T	VRV6-SHXL-T	VRV6-SH-RL	VRV-SHS-FR	VRV-SHL-FR	VRV-SH-RL	VRV-SHS-T	VRV-SHL-T
		REYQ72A	Single	1			1			1					
		REYQ96-168A	Single		1			1		1					
VRV EMERION	208-230V /460V	REYQ196-240A	Single			1			1	1					
VIIV LIVILIIIOIV	200-230 V / 400 V	REY0264-336A	Dual		2			2		1					
		REYQ360A	Dual		1	1		1	1	1					
		REYQ384-480A	Dual			2			2	1					
VRV AURORA	208-230V /460V / 575V	R_LQ72-120T	Single									1	1		1
VIIV AUTOTIA		R_LQ144-240T	Dual									2	1		2
		R_YQ72T	Single								1		1	1	
VRV IV		R_YQ96-168T	Single									1	1		1
Heat Recovery	208-230V / 460V	R_YQ192T	Dual								1	1	1	1	1
Heat Pump		R_YQ216-336T	Dual									2	1		2
		R_YQ360-456T*	Triple									3	1		3
VRV IV X		REY072-168X	Single									1	1		1
Heat Recovery	208-230V / 460V	REYQ192-336X	Dual									2	1		2
TIGUTITICOVCTY		REYQ360-456X	Triple									3	1		3
		RXYQ72X	Single								1		1	1	
VRV IV X		RXYQ96-168X	Single									1	1		1
Heat Pump	208-230V / 460V	RXYQ192X	Dual								1	1	1	1	1
ricat i ullip		RXYQ216-336X	Dual									2	1		2
		RXYQ360-408X	Triple									3	1		3

<sup>\*</sup>Up to 408 on Heat Pump



# Air Handling Unit (AHU) Integration Kit

#### **Designed for High Efficiency**

The Daikin Air Handling Unit Integration Kit enables a non-VRV Air Handling Unit to be fully integrated into a Daikin VRV system, allowing the benefits of inverter technology to extend to custom terminal units and air handling equipment.

Designed for high system efficiency, the Air Handling Unit Integration Kit offers a seamless integration and optimized design flexibility for Air Handling Units while keeping total installation and commissioning time to a minimum.

A kit consists of one Control Box and one EEV Box. Two different control methods can be used for an evaporator coil of up to 16 tons.

#### **Features and Benefits**

- » Enables non-*VRV* Air Handling Units to be seamlessly integrated into a Daikin *VRV* system
- » Integrates to VRV Heat Pump and Heat Recovery systems\*
- » Daikin DIII-NET communication compatible can be used with both Daikin *iTM* and *Navigation* controller
- » Separate Control Box and EEV Box accommodates flexible installation
- » Available with two control methods:
  - EKEQMCBAV3-US (Z-Control)
  - Standard VRV indoor unit room temperature control
  - EKEQFCBAV3-US (W-Control)
  - Field supplied temperature sensor
  - Field supplied DDC controller with 0-10V capability)







Important! For any VRV systems that utilize the AHU integration kits to perform as intended, the DX coil(s) in the non-VRVAHU unit(s) must meet the range of criteria set forth in the AHU Integration Kit Selection Guide and all associated piping and combination rules (refer to IOD-7041A and IOD-7042A), and should be installed in accordance to the installation manual provided with the EKEQ control boxes.

# Air Handling Unit (AHU) Integration Kit (cont.)

ELECTRONIC EXPANSION VALVE BOX SPECIFICATION	s	EKEXV50-US	EKEXV63-US	EKEXV80-US	EKEXV100-US	EKEXV125-US	EKEXV140-US	EKEXV200-US	EKEXV250-US	EKEXV400-US	EKEXV500-US
Nominal Capacity	BTU/h	18,000	24,000	30,000	36,000	48,000	60,000	72,000	96,000	144,000	192,000
AHU Heat Exchanger Cooling Capacity Range	BTU/h	17,000-21,000	21,500-26,500	27,000-34,500	34,000-42,000	42,500-52,500	53,000-60,000	60,500-84,000	84,500-105,000	120,000-169,000	170,000-210,000
AHU Heat Exchanger Heating Capacity Range	BTU/h	19,000-24,000	24,200-30,000	30,500-38,000	38,500-47,000	47,500-59,000	59,500-67,500	68,000-94,500	95,000-118,500	136,000-187,500	188,000-236,500
AHU Heat Exchanger Refrigerant Volume Range	in³	46-100	101-126	127-161	162-201	202-251	252-281	282-402	403-503	564-804	806-1006
Power Supply	V/ph/Hz					208-23	0/1/60				
Weight	lbs.					6	4				
Height	in.					15-	3/4				
Width	in.					8-	/2				
Depth	in.					3-1	/16				
Pipe Connections	in.	1/2 x 1/4			3/8 x 5/8			3/4 x 3/8	7/8 x 3/8	1-1/8 x 1/2	1-1/8 x 5/8

<sup>\*</sup>Important! For any VRV systems that utilize the AHU integration kits to perform as intended, the DX coil(s) in the non-VRV AHU unit(s) must meet the range of criteria set forth in the AHU Integration Kit Selection Guide and all associated piping and combination rules (refer to IOD-7041A and IOD-7042A), and should be installed in accordance to the installation manual provided with the EKEQ control boxes.



#### Features and Benefits

- » Designed for both indoor and outdoor installation
- » Equipped with refrigerant filters on both sides of the expansion valve
- » Can be mounted up to 16 ft (5m) away from the air handling unit
- » Simplified installation with inlet and outlet brazed connections
- » Wide range that covers from 1.5 ton to 16 ton
- » Same EEVs as used in standard VRV Indoor product to deliver precise refrigerant control

# Control Box EKE CBAV3-US

#### **EKEQMCBAV3 - US**

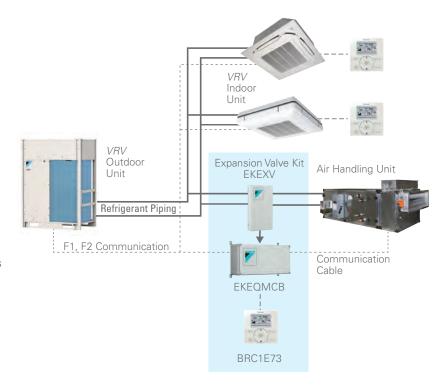
### For use with both Daikin VRV indoor units and custom air handling units

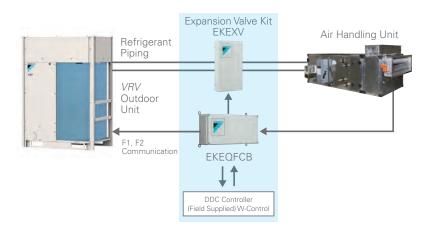
- » Allows for discharge air control
- » Seamless integration of non-VRV air handling units with VRV IV HP and HR systems
- » Enables control of the AHU as a VRV Indoor unit when integrated with a Daikin remote control
- » Connect other *VRV* indoor units along with the AHU to the condensing units
- » Provides remote ON/OFF option when integrated with optional KRP4A71 board
- » Designed for both indoor and outdoor installations

#### **EKEQFCBAV3 - US**

### For use with custom air handling units only

- » Seamlessly integrate non-VRV air handling units with VRV IV HP
- » Best suited for applications where 1 AHU is connected to 1 VRV system only
- » Connect up to 3 integration kits per VRV system to serve a large capacity AHU
- » Unified cooling and heating mode programming
- » Enables control of AHU unit using field temperature sensor and 0-10V field supplied DDC controller
- » Allows for discharge air temperature control





# **Control Box** EKE\_CBAV3-US (cont.)



CATIONS	EKEQMCBAV3-US (Z-Control)	EKEQFCBAV3-US (W-CONTROL)		
Cooling °F	57 WB - 77 WB	106 DB/90 WB		
V/ph/Hz	208-230/1/60	Min of 23 DB		
lbs.	8	8.6		
in.	5-13/6	3/64		
in.	15-3/4			
in.	9-3/8			
	50 - 110%	90 - 110%		
EKEXV to AHU	16 ft.	16ft.		
ODU to AHU	Standard VRV outdoor unit piping limitations based on model selection apply	360 ft*		
Max number	of IDU/system			
	64	Not available		
	32	1		
	Cooling °F Heating °F V/ph/Hz Ibs. in. in. EKEXV to AHU	Cooling °F   57 WB - 77 WB		

<sup>\*</sup>Capacity de-rate applies beyond 164 ft

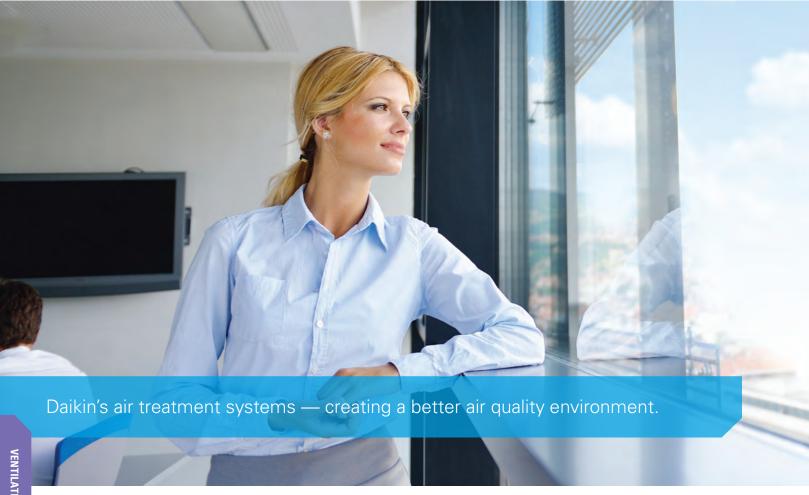
#### **VRV** System Compatibility

	I/DI/ Custo	_	AHU Integration Kit Type			
	VRV System	" <u> </u>	EKEQMCBAV3-US	EKEQFCBAV3-US		
VRV System Type	Туре	Series	Z-Control	W-Control		
		RXYQ_PB				
	Heat Pump	RXYQ_T*	√	$\sqrt{}$		
	neat Fullip	RXLQ_T*	√	$\sqrt{}$		
Air-Cooled all voltages (3-Phase)		RXYQ_X*	√	$\sqrt{}$		
	Heat Recovery	REYQ_PB				
		REYQ_PC	√			
		REYQ_T*	√			
		RELO_T*	√			
		REYQ_X*	√			
Air-Cooled		RXYMQ_P				
all voltages (1-Phase)	Heat Pump	RXTQ_T*	√	$\sqrt{}$		
		RWEYQ_P				
	Heat Pump	RWEYQ_PC	√	$\sqrt{}$		
Water-Cooled		RWEQT*	√	$\sqrt{}$		
all voltages (3-Phase)	Heat Recovery	RWEYQ_P	√			
(5 1 11000)		RWEYQ_PC	√			
		RWEQT*	√			





### Air Treatment Systems



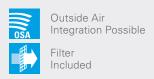
Daikin's Outside Air Processing Unit can be integrated with a VRV system to provide outside air treatment and air conditioning in a single system to meet code requirements. It adjusts the temperature of air from outdoors using a fixed discharge temperature control reducing air conditioning load.

In addition to Outside Air Processing Units, we also offer Energy Heat Recovery units. The Energy Heat Recovery VAM-GVJU series units combines compactness, energy conservation, and extensive operation range of outdoor temperatures. This series provides higher enthalpy efficiency, due to the greatly enhanced performance of the thin heat exchanging element. Furthermore, improved external static pressure offers more flexibility for installation.



		OUTSIDE AIR PROCESSING UNIT, FXMQ_MFVJU	ENERGY RECOVERY VENTILATOR, VAM-GVJU
			00.
VRV Refrigerant Piping		Connectable	Not connectable
VRV Control Wiring		Conne	ectable
High Efficiency Filter (MERV 8 and MERV 13)		Option	Not available
Ventilation System		Air supply	Air supply and Air exhaust
Power Supply	V/ph/Hz	208-23	30/1/60
Airflow Rate	CFM	635 988 1236	305/300/170 470/470/390 600/600/500 1200/1200/930

### FXMQ\_MFVJU 100% Outside Air Processing Unit



#### Concealed, Powerful, Compact, Quiet, Fresh Air Quality

This unit provides a zoned, decentralized approach to conditioning outside air. This helps to reduce ductwork and installation time while increasing efficiency and flexibility. Both outside air treatment and space conditioning can be provided from one compact, flexible and efficient *VRV* system. *VRV* indoor units and outdoor air processing unit can be connected to the same refrigerant line, enabling enhanced design flexibility.

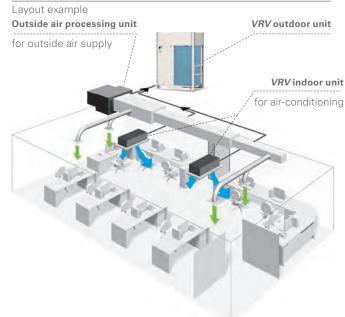
#### Features and Benefits

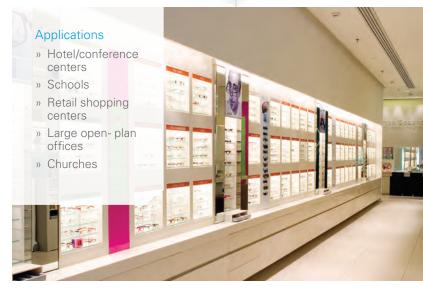
- » Available in three capacities, nominal 48, 72 and 96 MBH
- » The nominal airflow rates are 635, 988, and 1,236 CFM respectively
- » External static pressure capabilities of up to 1.03" W.G. allows for flexibility with duct work and filtration choices
- » The indoor unit is controlled to a set cooling and heating discharge air temperature allowing the flexibility to integrate with a standard Daikin indoor unit or duct directly to the space
- » A low profile design of only 18.5" high reduces the required installation space and can eliminate mechanical rooms or additional structural supports associated with traditional OA systems
- » Indoor Air Quality options include MERV 8 and 13 filters and filter boxes
- » Can be connected to all North American Daikin VRV systems
- » Connects directly and seamlessly into the Daikin local and centralized controllers

#### **Operational Characteristics**

When the suction air temperature is between 66°F and 109°F, the Outside Air Processing Unit operates in cooling, and when between 23°F and 59°F, it operates in heating. The OA processing unit will work in energy saving fan only between 59°F and 66°F.







FXMQ_MFVJU SPEC	CIFICATIONS		4 TON	6 TON	8 TON			
Model Name			FXMQ48MFVJU	FXMQ72MFVJU	FXMQ96MFVJU			
Power Supply		V/ph/Hz	208-230/1/60					
Rated Cooling Capacity	У	BTU/h	48,000	72,000	96,000			
Rated Heating Capacit	У	BTU/h	30,000	47,000	59,000			
Airflow Rate		CFM	635	988	1,236			
Weight		lbs.	190	27	71			
Height		in.		18-1/2				
Width	Width in.		29-1/4	54-	3/8			
Depth		in.	43-5/16					
Sound Pressure		dB(A)	42 47					
External Static Pressur	re	in. Wg	0.88	0.96	1.03			
Pipe Connections	Gas	in.	5/8	3/4	7/8			
ripe Connections	Liquid	in.		3/8				
Protection Devices				Fuse				
Protection Devices				Fan Motor Thermal Protector				
External Finish				Galvanized Steel Plate				
Operating Range - Coo	ling	°F	66 DB/59 WB - 109 DB/90 WB					
Operating Range - Hea	ting	°F	23 DB to 59 DB					
Discharge Air Temp 0	Cooling	°F	55-77					
Discharge Air Temp F	Heating	°F	64-86					

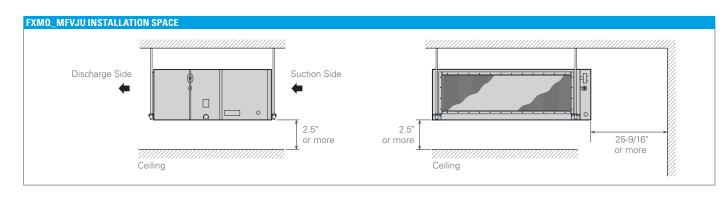
Nominal Conditions:

Cooling Mode
Discharge Set Temperature: 64°F DB
Outdoor: 91°F DB, 82°F WB (68% RH)
Pipe Length: 25 ft.
Level Difference: 0 ft.

Heating Mode
Discharge Set Temperature: 77°F DB
Outdoor: 32°F DB, 27°F WB (50% RH)
Pipe Length: 25 ft.
Level Difference: 0 ft.

Note: Specifications are subject to change without notice.

FXMQ_MFVJU ACCESSORIES							
Model Name	FXMQ48MFVJU	FXMQ72MFVJU	FXMQ96MFVJU				
Navigation Remote Controller		BRC1E73					
Wireless Remote Controller		BRC4C82					
Madoka Remote Controller		BRC1H71W					
Button Sensor KIt		KRCSH2018-01					
Remote Sensor Kit		KRCS01-1B					
Wiring Adaptor PCB (interface with aux/primary heater, humidifier, OA damper/fan)		KRP1C74					
Group Control Adaptor PCB (connects to external BMS)		KRP4A71					
High Efficiency Filter Kit (MERV 13)	DACA-MQ48F131K	DACA-MQ48F131K DACA-MQ96F131K					
High Efficiency Filter Kit (MERV 8)	DACA-MQ48F-8-1K	DACA-MQ48F-8-1K DACA-MQ96F-8-1K					



# **VAM-GVJU**Energy Recovery Ventilator



## Helping to Improve Indoor Air Quality and Energy Efficiency

The VAM Energy Recovery Ventilator is designed to help improve indoor air quality and reduce the overall HVAC system power consumption. This is achieved by providing fresh outside air and recovering waste heat from exhaust air leaving the conditioned space.

#### **Features and Benefits**

- » Provides energy-saving heat recovery ventilation via a new heat exchanger with high temperature and enthalpy recovery efficiency
- » Design flexibility thanks to high static pressure fans and the capability for use in a wide range of climates (5°F to 122°F DB and 80% RH or less)\*
- » Wide range of functions such as independent operation, interlock with other HVAC systems, and automatic night purge to reduce cooling loads and increase energy savings
- » Interlocked simultaneous operation with VRV indoor units through a single controller
- » Auto mode switches the ventilation mode (total heat exchange mode to bypass mode) according to the operating status of the air conditioner system
- » Pre-cooling/heating control function to delay the start of ventilation during air conditioner start-up for higher energy savings
- » Supply and exhaust fresh-up operation modes to control pressure within a space
- » Filter sign and display reset notifies when filter changes are required
- » ESP as high as 0.76" W.G.
- » Sound levels as low as 25.5 dB(A) for sound-sensitive installation locations
- \* Performance characteristics certified to AHRI Standard 1060 are only applicable to the cooling and heating operating conditions specified in the performance table of this document.
  - The cooling effectiveness shall be based on 95°F DB / 78°F WB for the entering supply air and 75°F DB / 63°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.
  - The heating effectiveness shall be based on 35°F DB / 33°F WB for the entering supply air and 70°F DB / 58°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.

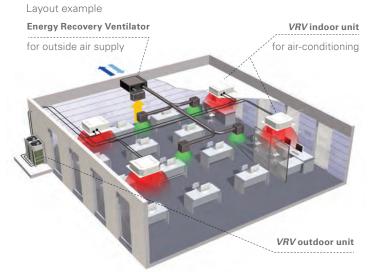






BRC1H71W (option)

BRC1E73 (option)



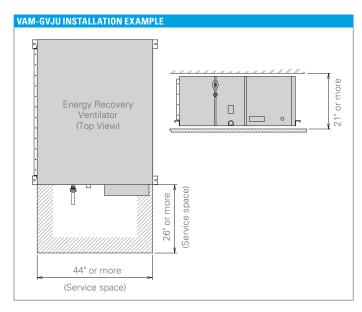


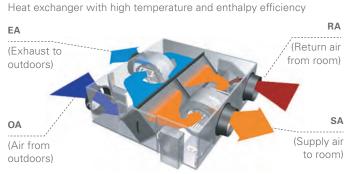
<b>VAM SPECIFICATIONS</b>									
Mode	Airflo	w Effective	eness Type	VAM300GVJU	VAM470GVJU	VAM600GVJU	VAM1200GVJU		
	100%	Sensible	%	60	62	68	68		
Heating!	100%	Latent	%	46	48	42	42		
Heating <sup>1</sup>	75%	Sensible	%	63	66	72	72		
	7370	Latent	%	53	55	47	47		
	100%	Sensible	%	60.6	63	68	68		
Cooling	100 %	Latent	%	29	30	34	34		
Cooling <sup>1</sup>	75%	Sensible	%	63.9	67	72	72		
	7370	Latent	Latent % 40 38 37		37	37			
Power Supply		V/p	h/Hz	208-230/1/60					
Airflow Rate (H/M/L)	Heat Exchange Mo	e	FM	305/300/170	470/470/390	600/600/500	1,200/1,200/930		
All How Hate (H/W/L)	Bypass Mode		I IVI	305/300/170	470/470/390	600/600/500	1,200/1,200/930		
Weight		I	bs.	71	121 148		346		
Height			in.	12-1/16	15-1/4	15-1/4	30-7/8		
Width			in.	34-5/8	43-1	1/16	63-3/4		
Depth			in.	31-1/2	32-3/4	47-1	3/16		
Sound Pressure @ 208V	(H/M/L)	dl	B(A)	34.5/31.5/21.5	40/37/33	40.1/37/33.1	43/39/35		
External Static Pressure	(H/M/L)	in.	. Wg	0.64/0.26/0.16	0.73/0.39/0.33	0.76/0.34/0.32	0.56/0.24/0.16		
External Finish					Galvanized	Steel Plate			
Insulation Material					Self-Extinguishin	g Urethane Foam			
Connection Duct Diamet	er		in.	8 10 14					
Ambient Conditions*			А		5°F ~ 122°F DB 80% RH or less				

<sup>\*</sup>AHRI 1060 Performance characteristics certified to AHRI Standard 1060 are only applicable to the specified cooling and heating operation conditions, as specified within the performance table in this document.

Note: Certified in accordance with the AHRI ERV Certification Program, which is based on AHRI Standard 1060. Certified units may be found in the AHRI Directory at www.ahridirectory.org. Performance characteristics certified to AHRI Standard 1060 based on the following conditions::

- » The cooling effectiveness shall be based on 95°F DB / 78°F WB for the entering supply air and 75°F DB / 63°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.
- » The heating effectiveness shall be based on 35°F DB / 33°F WB for the entering supply air and 70°F DB / 58°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.





ACCESSORIES					
Model Name	VAM300GVJU	VAM470GVJU	VAM600GVJU	VAM1200GVJU	
Navigation Remote Controller*	BRC1E73				
Madoka Remote Controller	BRC1H71W				
PCB Adaptor for Humidifier	KRP50-2				

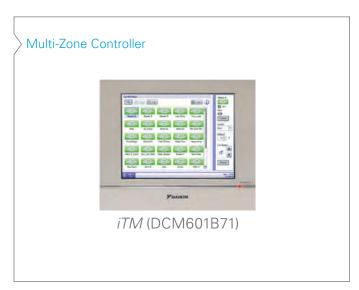




### VRV Controls Solution

#### What are your choices?



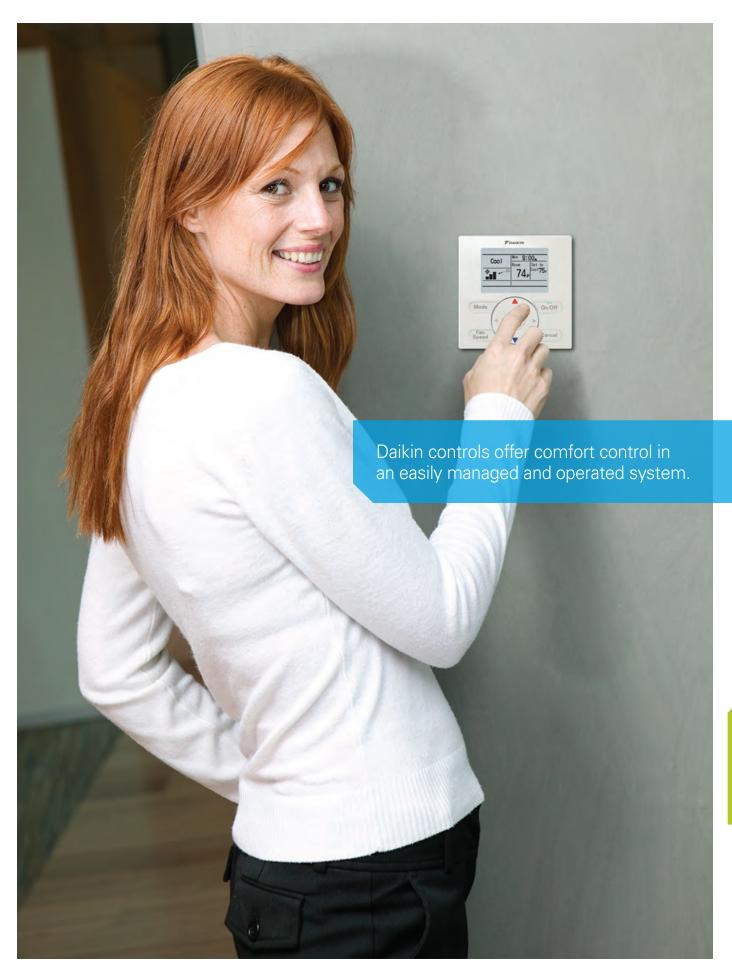




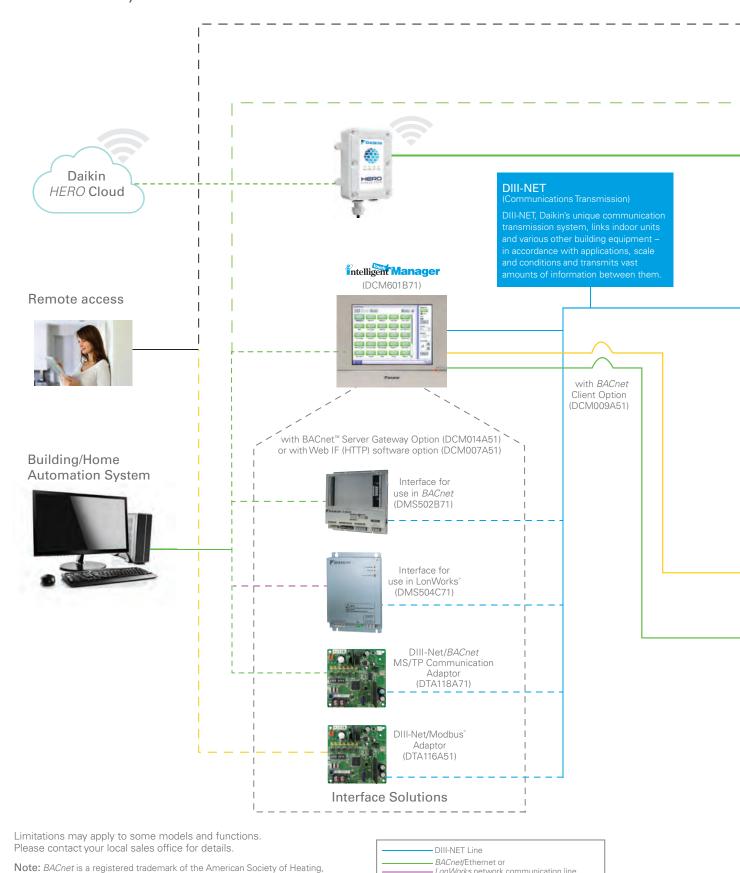








### VRV Control Systems Overview



-RS485 Modbus line

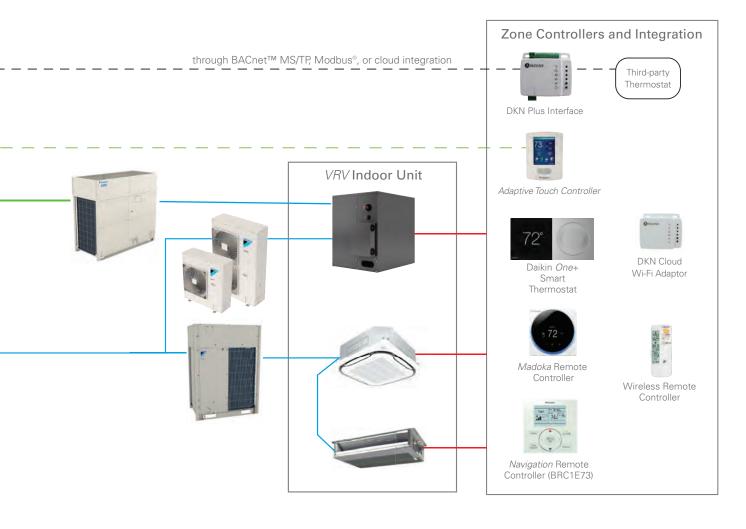
P1P2 line

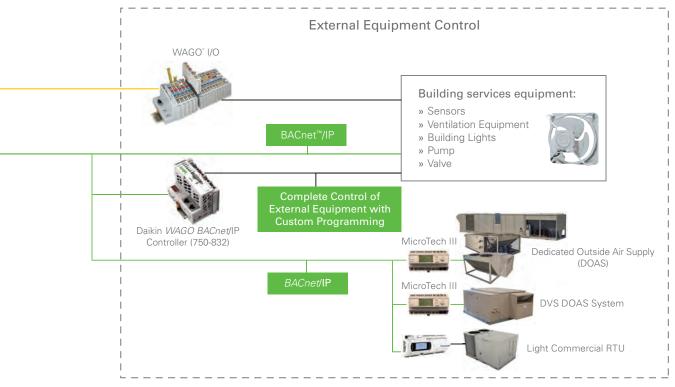
- Connection line

Refrigerating and Air-Conditioning Engineers (ASHRAE). LonWorks is a

trademark of Echelon Corporation registered in the United States and

other countries. Modbus is a registered trademark of Modicon.





#### Individual Controllers

#### BRC1E73 - Navigation Remote Controller

The Navigation Remote Controller has been enhanced to meet the configuration requirements of Daikin's VRV indoor units. The BRC1E73 provides all the great features and options the market requires. The configurable display and operation buttons will provide as much or as little control as the project requires.

#### Features and Benefits

- » Basic Operation
  - On/Off, operation mode, set-point
  - Up to 5 fan speeds selectable (enhanced)
  - Airflow direction (enhanced)
  - Individual louver airflow direction
  - Dual airflow
  - Auto-draft prevention (prevents air blowing directly on occupants)

#### » Function

- Configurable display Detailed, Standard, and Simple
- Dual or single cool and heat set-points for occupied periods
- Independent setback set-points for unoccupied periods
- Automatic Setback by occupancy sensor
- Automatic Off by occupancy sensor
- Unwanted buttons/operation modes can be disabled
- Set-point range limitation
- Individual button prohibits/lockout
- Auto-changeover for Heat Recovery and Heat Pump systems with dual or single set-points
- Self-cleaning filter panel
- Automatic adjustment for Daylight Savings Time (DST) (enhanced)
- Built in 7, 5+2, 5+1+1, and 1 (everyday) schedule with up to 5 actions per day with independent cooling, heating and setback set-points
- » More Features
  - Backlit display
  - Room temperature sensor
  - 12/24 hour clock
  - Fahrenheit/Celsius selectable
  - English/French/Spanish languages selectable
  - Remote control group up to 16 indoor units





#### Auto-changeover



Automatic changeover is available for Heat Pump system and Heat Recovery systems. The set-point for cooling and heating are configurable with a minimum differential of 0 to 7°F or single set-point. The changeover is automatically controlled to happen in either of the following two cases:

- 1. Case 1: Changeover at the primary changeover temperature after the guard timer expires.
  - In default, the primary changeover set-point is 1°F above cooling set-point or 1°F below heating setpoint, which is configurable between 1°F – 4°F.
  - In default, the guard timer is 60 minutes, which is selectable among 15, 30, 60 (default) or 90 minutes.
  - The initiation of guard timer is built in to help prevent frequent changeover which may cause energy loss.
- Case 2: Changeover at the secondary changeover temperature.
  - In default, the secondary changeover temperature is 1°F above the primary changeover temperature for cooling or 1°F below the primary changeover temperature for heating, which is configurable between 1°F – 4°F.
  - Case 2 will happen while the guard time is active in case 1.

#### BRC1E73 - Navigation Remote Controller (continued)

#### Configurable Display Mode – Detailed, Standard, Simple

DISPLAY MODE	DETAILED	STANDARD	SIMPLE NEW
Display Image	Auto 9:41 <sub>A</sub> 600 9:41 <sub>A</sub> 72 <sub>F</sub> 100 74 <sub>F</sub> 72 <sub>F</sub> 170 <sub>0</sub>	Auto Cool 74 Heat 70 F	Auto (cost 72, 72, 72, 72, 74, 74, 74, 74, 74, 74, 74, 74, 74, 74
On/Off status on LED (LED blinks when an error occurs)	•	•	•
Mode	<b>■</b> 1	<b>■</b> 1	<b>1</b>
Set-point (Dual/Single)	2	2	2
Room temperature			•
Fan speed	■ 3	■ 3	3
Airflow direction (when a louver is available)	•		
Day and Time	■ 3		
Status icon	■ 3	■ 3	
Key lock icon	•	•	
Error message			

<sup>&</sup>lt;sup>1</sup> OFF can be displayed instead of the operation mode while the unit is turned off with the field setting

#### On/Off Display Option





#### Optional Face Decals – Hides unnecessary (locked/prohibited) buttons

#### USED WITH SINGLE SET-POINT MODE **DUAL SET-POINT MODE** Model 0 (4) 0 0 (4) • • • • • BRC1E72RM BRC1E72RF **BRC1E72RMF** BRC1E72RM2 BRC1E72RF2 BRC1E72RMF2 On/Off Mode Fan Up, Down Left, Right Menu/0k Cancel

#### Clear display

- » Backlit display
  - Backlight helps operating in dark rooms.
- » Dot matrix display
  - A combination of fine dots enables various icons.
  - Large text display is easy to see.

#### Simple operation

- » Large buttons and arrow keys
  - Large buttons and arrow keys enable easy operation. Basic setting such as fan speed and temperature can be intuitively operated. For other settings just select the function from the menu list.









<sup>&</sup>lt;sup>2</sup> Can be removed from the display while the unit is turned off with a field setting

<sup>&</sup>lt;sup>3</sup> Can be removed from the display with a field setting

# Individual Controllers (cont.)

#### BRC1E73 - Navigation Remote Controller (continued)

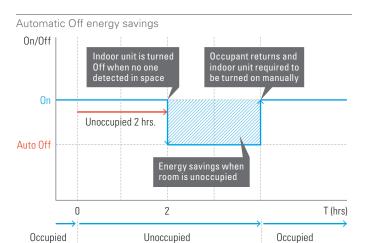
#### **Energy saving**

- » Automatic Off by occupancy sensor<sup>†</sup>
  - The indoor unit will turn off when it is determined that the room is unoccupied after a specified time has elapsed.
- Automotif by Sensor

  Enable/Disable: Enable
  Automotif in: 2 hr(s)

  Settins

- Can be used in conjunction with the Auto Setback by sensor function



College classroom sample (a summer Monday case)

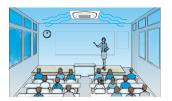
#### 1) 8:30 ON

The first period starts and the air conditioner starts the cooling operation.



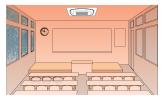
#### 3) 13:00 ON

When the third period starts, operation starts again.



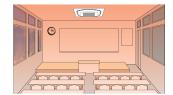
#### 2) 10:30 OFF

In the second period, the classroom is unoccupied and the air conditioner stops.



#### 4) 15:00 OFF

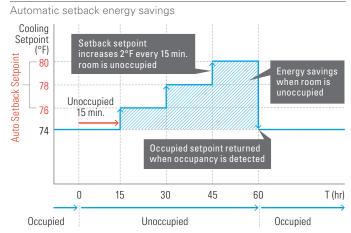
After the third period, the classroom becomes vacant again and the air conditioner stops.



- » Auto Setback by sensor<sup>†</sup>
  - The cooling and heating set-points will gradually relax (configurable) internally when the room is determined to be unoccupied.



- The internal set-point will return to the original set-point when room occupancy is detected.

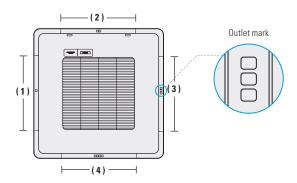




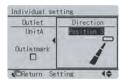
#### Comfort

- » Individual airflow direction<sup>†</sup>
  - Airflow direction of each of the four air outlets can be controlled individually.
  - (Positions 0 to 4, Swing, and No individual setting are selectable.)
- » Auto airflow rate<sup>†</sup>
  - Airflow rate is automatically controlled in accordance with the difference between room temperature and set temperature.
- <sup>†</sup> Only available for *VRV* 4-Way Flow Ceiling Suspended type FXUQ\_P series and Ceiling Mounted Cassette (*Round Flow* with Sensing) type FXFQ\_T series.

Individual airflow direction



(1)



(2)



(3)



(4)





# Individual Controllers (cont.)

#### BRC1H71W - Madoka Remote Controller

- » Easy Commissioning
  - Settings and configuration can be copied to and from the app or controller and applied to other controllers using Bluetooth® BLE technology
  - Selective display mode: Text, Icon, and Scale display
  - Field settings are categorized based on the application
  - Language: English, French, Spanish
  - Supports both Fahrenheit and Celsius

- » Basic Control functions
  - On/Off, operation mode, set-point
  - Up to 5 fan speeds selectable
  - Louver direction
  - Auto-draft prevention
- » Advanced functions
  - Setback logic
  - Set-point range limitation
  - Function Prohibition



*Madoka*Remote Controller

#### DTST-ONE-ADA-A - Daikin One+ Smart Thermostat for VRV, SkyAir, Single Zone and Multi-Zone System

- » A cloud-connected smart thermostat to control indoor temperature, humidity, and air quality.
- » Features
  - Capacitive multi-touch display with easy rotational dial and light pipe indication
  - Wi-Fi enabled smart thermostat with smartphone control, voice control and OTA update capability
  - Intelligent energy management with schedule and configurable energy and comfort functions
  - Auxiliary heater control (primary/secondary/emergency heat)



Daikin One+ Smart
Thermostat

#### BACRC-T-P01/ BACRC-TH-P01/ BACRC-THO-P01/ BACRC-THOC-P01 - Adaptive Touch Controller

- » Controls VRV and SkyAir indoor units with advanced and configurable control logic
- » Features
  - Built-in sensors with advanced control logics
  - Temp/Humidity/Occ/CO<sub>2</sub>
  - Auxiliary equipment control through configurable AI, AO, DI, and DO terminals
  - Capable to integrate with BMS through BACnet™ MS/TP

Coming Soon!



Adaptive Touch Controller

#### AZAI6WSCDKA - DKN Cloud Wi-Fi Adaptor

- » Remote control of  $\mathit{VRV}$  indoor units from iOS/Android smartphone app
- » Voice control capability through Google Assistant and Amazon Alexa
- » Provides Cloud API integration option for hotel and home automation integration developers
- » Features
  - On/Off Set-point - Mode - Fan speed
  - Error alert Room temperature
  - Leveled user authority Louver position



DKN Cloud Wi-Fi Adaptor

# BRC4C82/BRC7E818/BRC7E83/BRC7E830 - Wireless Remote Controller

- » The same operation modes and settings as with wired remote controllers are possible.
- » Features
  - On/Off Fan speed adjustment
  - Operation mode Louver position adjustment
  - Single set-point Reports system malfunctions
- » A compact signal receiver unit (separate type) to be mounted into a wall or ceiling is included.
  - The Ceiling Suspended and Wall-Mount indoor units use signal receivers that are mounted in the indoor unit.
    - \* Wireless remote controller and signal receiver unit are sold as a set.







Signal receiver unit (separate type)\*

INDIVIDUAL CONTROL CAPABILITIES						
	DKN Cloud Wi-Fi Adaptor (AZAI6WSCDKA)	Navigation Remote Controller (BRC1E73)	Daikin <i>One</i> + Smart Thermostat (DTST-ONE-ADA-A)	Adaptive Touch Control	Wireless Remote Controller (model depends on unit)	, 72 Madoka Remote Controller (BRC1H71W
Communications	2 Wire / DIII-Net	2 Wire / DIII-Net	2 Wire / DIII-Net	2 Wire / DIII-Net	Infrared	2 Wire/ DIII-Net
°F/°C Selector	•	•	•	•	°F only	•
Display		Blacklight LCD Display	Multi-touch capacitive color display	Color LCD Touchscreen		Backlight LCD Display
Room temperature display	•	•	•	•		•
Schedule and setback capabilities (with Time and Date display)	•	•	•	•		
User restriction options		•				•
On/Off, Operation mode, Set-point, Fan speed	•	•	•	•	•	•
Louver position adjustment	•	•	•	•	•	•
Reports system malfunctions	•	•	•	•	•	•
Space temperature sensor	•	•	•	•		•
Simultaneous operation with Daikin multi-zone controllers	•	•	Monitor only		•	•
Simultaneous operation with BACnet™ and LonWorks®	•	•	Monitor only		•	•
Group control capacity	Up to 16 indoor units*	Up to 16 indoor units	Up to 16 indoor units		Up to 16 indoor units	Up to 16 indoor units

<sup>\*</sup> with future software update

Summary

REMOTE CONTROLLER COMPATIBILITY WITH VRV INDOOR UNITS											
	FXFQ_TA	FXZQ	FXUQ	FXDQ	FXSQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXTQ	FXEQ
Navigation remote controller (Wired remote controller)					•						•
Madoka Remote Controller	•	•	-	•	•	•	•		•	•	•
Wireless remote controller (Installed type signal receiver unit)											
Wireless remote controller (Separate type signal receiver unit)				•	•	•					
DKN Cloud Wi-Fi Adaptor	•				•	•					•

# Advanced Multi-Zone Controllers

# DCM601B71 - intelligent Touch Manager (iTM)

The *intelligent Touch Manager (iTM)* is an advanced multizone controller that provides the most cost-effective way to control and monitor the Daikin *VRV* system.

### Centralized and Advanced VRV Control

Up to 64 Indoor Unit Groups (128 actual Indoor Units) can be monitored and controlled with individual Cool and Heat Set-points, Set-point Range Limitation, Setback Set-points, and Auto changeover to meet your expectations and project requirements. Up to 512 Indoor Unit Groups (1024 actual Indoor Units) can be monitored and controlled with the addition of up to 7 optional *iTM* Plus Adaptors (DCM601A72).

### **Built-in Service Tool with Remote Access**

- » Operation data are stored in the *iTM* for the last 5 days:
  - Indoor unit and outdoor unit operation data
  - BACnet™ Client objects
  - WAGO® I/O system data
- » Operation data can be exported through a USB drive or through the iTM web browser remotely
- » BMS can monitor the BACnet objects of indoor unit and outdoor unit operation data with the BACnet Server Gateway Option activated

### **Ancillary Equipment Control**

Integrates and/or interlocks sensors, switches, dampers, fans, pumps, and lighting with Daikin Indoor Units.

# Web Access and Alert E-mail

Allows daily remote monitoring and control with the Web/ E-mail function that can be accessed via the facility's Local Area Network or your Internet connection. Sends Error E-mail to mobile devices with the Web/E-mail function.

## **Tenant Billing**

Determines energy consumption of shared condensing units based upon tenant (Indoor Unit) demand using the PPD Software option (DCM002A71).

### Features

- » 10.4" LCD touch screen, USB drive
- » Advanced, scalable and cost-effective management system
  - Up to 650 points (max 512 indoor unit groups (1024 indoor units)
  - Floor plan layout view

### **Functions**

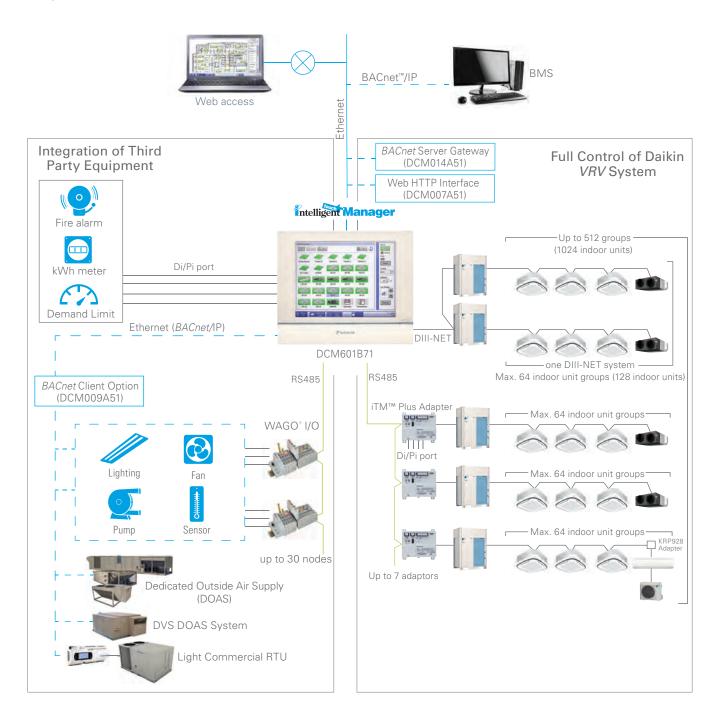
- » Dual set-points or Single set-point in occupied or Setback in unoccupied
- » Set-point Range Limitation
- » Scheduling (7 day, Weekday-Weekend, Weekday-Saturday-Sunday, Everyday)





- » Scheduling (7 day, Weekday-Weekend, Weekday-Saturday-Sunday, Everyday)
- » Optimum Start and Timed Override
- » Advanced Auto changeover
  - Applicable to both *VRV* Heat Pump and Heat Recovery systems
  - Fixed, Individual, Average and Vote methods
- » Demand Response
  - Interlock the digital input signals to provide automatic demand control functions
  - Multiple demand control functions: Indoor unit set-point shift control, Indoor unit forced thermo-off, Indoor unit on/ off control and Outdoor unit's capacity demand limit control
- » WAGO I/O
  - Monitor and control 3rd party equipment with DI, DO, AI and AO signals
  - Up to 512 management points
  - Interlock function with indoor units and ancillary equipment
- » Power Proportional Distribution Option (DCM002A71)
  - Calculates apportionment of outdoor unit's total power consumption to individual units on the system
- » iTM BACnet Client Option (DCM009A51)
  - Enabling the BACnet Client option allows the iTM to use the BACnet/IP protocol
  - Allows for full monitoring and control of 3rd party BACnet capable equipment
  - Up to 512 BACnet management points
- » iTM BACnet Server Gateway Option (DCM014A51)
  - Enable BMS to control indoor units and/or monitor outdoor unit operation via BACnet/IP (up to a total of 128 BACnet device IDs and 4000 BACnet objects)
  - Virtual router function embedded that enables individual and configurable BACnet device ID for each indoor unit group address and each outdoor unit.
- » Web (HTTP) Interface Option (DCM007A51)
  - The iTM Web IF (HTTP) software provides a building automation system or a home automation system the ability to monitor and control the VRV indoor units over the HTTP protocol

## iTM System Overview



# External Equipment Control

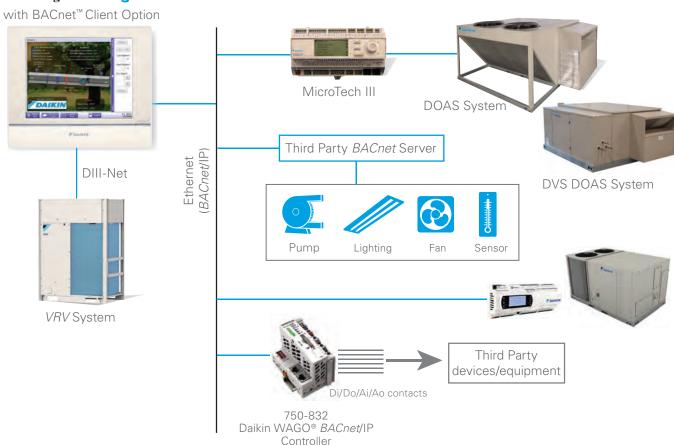
# DCM009A51 - iTM BACnet™ Client Option

The *intelligent Touch Manager (iTM)* offers an advanced and cost-effective solution for Building Management Systems (BMS) applications. The *iTM BACnet* Client Option (DCM009A51) provides more flexibility to enhance the *iTM*'s function as a mini BMS. With this option, the *iTM* is able to manage DOAS systems and other third party equipment through the *BACnet*/IP protocol. By registering equipment connected to a *BACnet* server as management points in the *iTM*, you can now monitor and control the equipment via the *iTM*.

### **Features**

- » Cost- effective BMS solution
- » Direct connection on *iTM* using the BACnet/IP Protocol
- » Integrated control on Daikin VRV system and Daikin Applied System
- » Monitors and controls third party equipment
- » Easy commissioning with pre-engineering Preset Tool
- » Easy monitoring with preconfigured GUI

# Intelligent Manager



## **Object Types**

- » Analog Input, Analog Output, Analog Value
- » Binary Input, Binary Output, Binary Value
- » Multi-State Input, Multi-State Output, Multi-State Value

## **Applications**

- » Simple I/O: Sensor, Pump, Light, Fan
- » Multi-State Objects: AHU, Alarm, Elevator
- » The iTM can integrate with the WAGO® BACnet/IP Controller (750-832) using the BACnet Client Server Option

# External Equipment Control (cont.)

# 750-832 - Daikin WAGO® BACnet™/IP Controller

The Daikin *WAGO BACnet*/IP Controller (750-832) is a programmable controller that connects the *WAGO* I/O system to the *BACnet* protocol. This controller provides the three following functionalities:

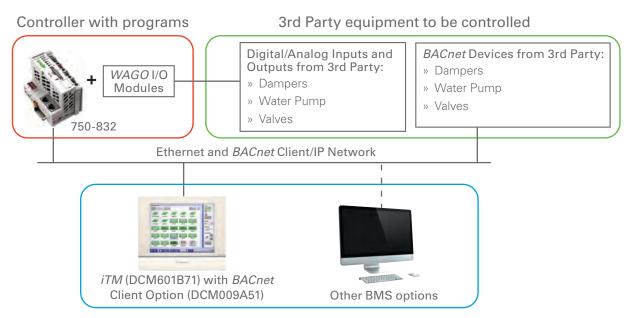
» Native server: BACnet objects are generated automatically for the DI, DO, AI, AO modules that are connected to the controller.



750-832 Daikin *WAGO BACnet*/IP Controller

- » Application server: Other supported BACnet objects can be created via programming and made available to a BACnet network.
- » Application client: Using the client functionality, BACnet objects and the properties of the external equipment can be accessed.

Daikin's *VRV* Marketing Controls Group will provide custom programming (programming) for applications where external equipment control is needed.



Monitoring and Management Options

# Interface Solutions

## **DKN Plus Interface**

The DKN Plus Interface (AZAI6WSPDKC) enables the energy-efficient control of Daikin air conditioners by a third-party thermostat or an automation system. With this interface, third-party devices or systems can control the *VRV*, *SkyAir*, and Daikin Single/Multi-Zone indoor units through Cloud API, Modbus®, BACnet™ MS/TP, or thermostat relay contacts. This interface can be commissioned with ease through the DKN Cloud North America (NA) app via Bluetooth® Low Energy (BLE).



- » Versatile interface adaptor that can integrate with a third-party thermostat/BMS through multiple approaches:
  - Cloud API
  - Modbus
  - BACnet MS/TP
  - Backup thermostat G/Y/W (Fan/Cool/Heat) relay control through thermostat wire:
    - Automatically disables thermostat relay logic when cloud API connection detected
    - Advanced control logic to maximize indoor unit efficiency
- » Easy commissioning with the BLE configuration app (DKN Cloud NA app)





- » Indoor unit control and monitoring points\*
  - On/Off
  - Set-point
  - Room temperature
  - Mode (Auto, Cool, Heat, Fan, Dry)
  - Fan speed
  - Louver position
  - Error code
  - Interlock control with indoor unit On/Off
- » Auxiliary Heater Control
  - Auxiliary heater controlled as a secondary heat source
- \*Availability depends on indoor unit model

# Integration with Building Management System (BMS) or Home Automation System (HAS)

» Integration through Modbus or BACnet MS/TP

DIII-Net

Up to 16 Indoor Units\*

Other Modbus or BACnet MS/TP

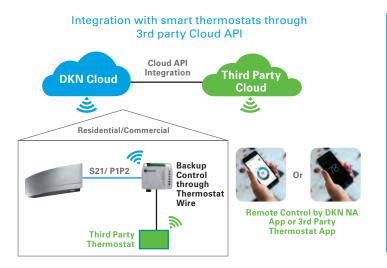
Devices

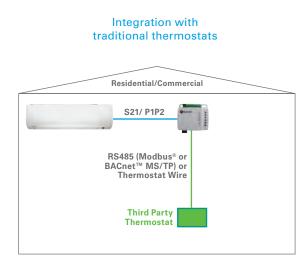
\* future software undate

# System Diagram

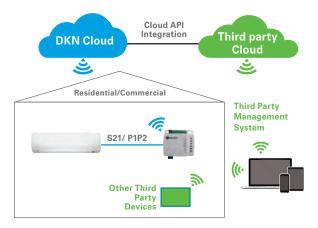
# Integration with 3rd party thermostat

» The adaptor provides 4 different approaches for a 3rd party thermostat to control the Daikin indoor units





» Integration through Cloud API







Modbus is a registered trademark of Schneider Electric USA, Inc.

BACnet is a trademark of ASHRAE.

The Bluetooth®word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks are under license.

# Interface Solutions (cont.)

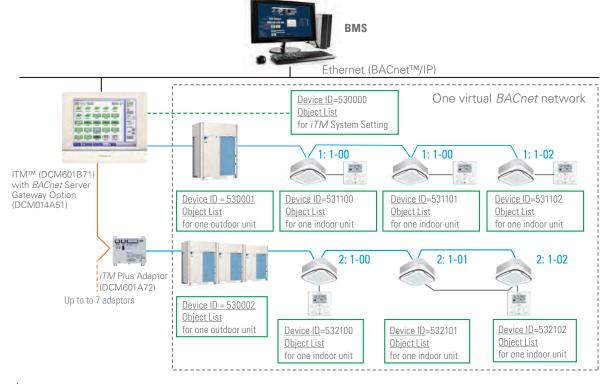
# DCM014A51 - *iTM* BACnet<sup>™</sup> Server Gateway Option

The *intelligent Touch Manager (iTM)* is capable of serving as a *BACnet* interface for Building Management System (BMS) integration. With the *iTM BACnet* Server Gateway Option (DCM014A51), the *iTM* provides BMS integrators with the ability to monitor and/or control the *VRV* indoor and outdoor units, eliminating the need for an additional hardware interface. Moreover, with the latest software update to the *iTM* 2+ (v2.06), the *iTM* is able to serve as a service tool to access indoor and outdoor unit operation data. With the *iTM BACnet* Server Gateway Option, the operation data points for both the IDU (indoor unit) and ODU (outdoor unit) are also available to the BMS through *BACnet*.

# **Features**

- » Additional service data points are now available\*:
  - 6 new IDU service data points
  - 9 new common ODU service data points and 22 new service data points for each ODU module
- » Direct connection on iTM using the BACnet/IP Protocol
- » Supports Change of Value (COV) notifications to the BMS

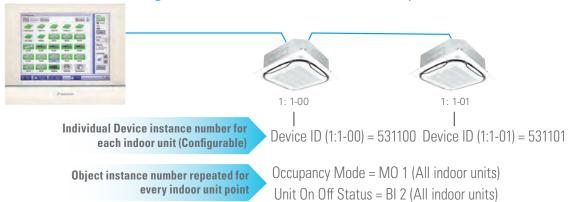
- » Configurable as a BACnet foreign device if a BBMD exist on a different subnet within a BACnet network
- » BACnet virtual router function implemented:
  - Individual BACnet device ID assigned to each indoor unit group address and each outdoor unit
  - Indoor unit group names created in the iTM are visible on the BMS
- » Easy commissioning using CSV file
  - Available objects can be configured for each indoor unit
- » Independent heating and cooling set-points for occupied and unoccupied periods
- » Individual min/max Set-point Range Limitation for heat and cool modes
- » The iTM's auto changeover, set-point range limitation, setback, dual set-point logic and schedule can be accessed by the BMS
- » Up to 128 Device IDs (including both indoor units and outdoor units) and up to 4000 BACnet objects can be monitored and controlled by BMS.
  - When the IDU/ODU operation data is enabled a total of 128 devices and 4000 BACnet points are available
- » Up to 7 iTM Plus Adaptors can be connected to an iTM for a total of 8 DIII-Net ports



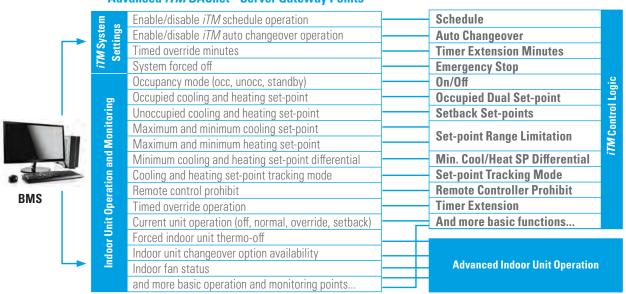
# Powerful Service Tool with Indoor and Outdoor Unit Operation Data Points



# **Enhanced BMS Integration Solution for Indoor Unit Operation**



# **Advanced iTM BACnet™ Server Gateway Points**



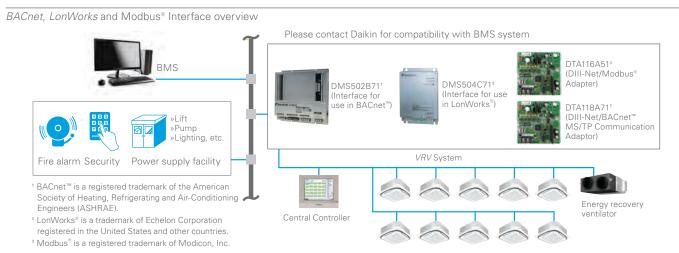
# Interface Solutions (cont.)

# DCM007A51 - ITM Web (HTTP) Interface Option

- » Building or Home Automation Interface based on HTTP protocol
- » Interface between the DIII-Net and the HTTP automation work station.
- » Monitor and Control up to 512 Indoor units groups

# DMS502B71 - Interface for use in BACnet™

- » BACnet: Building Automation and Control Networks
  - Standard open protocol based on ANSI/ASHREA Standard 135
- » Monitor/Control indoor unit's points
- » Monitor/Control up to 256 indoor units groups (512 indoor units)
- » Manage up to 4 DIII-Net systems
  - Option Board (DAM411B51) required



## DMS504C71 Interface for use in LonWorks®

- » BMS interface based on LonTalk
- » Interface between Daikin DIII-Net and BMS LonTalk work station
  - Manages up to 64 indoor unit groups (128 indoor units) with network variables for each group
  - Manages 1 DIII-Net system
- » Lon Interface communicates over twisted pair wire
- » External Interface File (XIF) documents device information available at www.daikinac.com

Daikin's *BACnet*, *LonWorks* and *Modbus* interface units provides control for all *VRV* systems.

# DTA116A51 - DIII-Net Modbus Adaptor

- » BMS interface based on Modbus (RS485)
- » Gateway between Daikin DIII-Net and BMS Modbus workstation
  - Manages up to 16 VRV indoor units connected to up to 2 outdoor units
- » Modbus interface communicates via Modbus RTU

# DTA118A71 -DIII-NET/ BACnet MSTP Communication Adaptor

- » The DIII-Net/BACnet MS/TP Communication Adaptor enables the connection of VRV systems to a compatible Building Management System (BMS).
- » The adaptor operates as a BACnet router/gateway for the VRV system.
- » With this adaptor, a third-party BMS can monitor the VRV indoor units and outdoor units, as well as control the VRV indoor units through the BACnet MS/TP protocol.
- » The adaptor can be mounted to the VRV outdoor or indoor unit.

# HERO Cloud Service and HERO Simple Edge

The Daikin *HERO* Simple Edge provides a connection of a Daikin *VRV\** system to the *HERO* Cloud Services network for remote monitoring. The *HERO* Simple Edge is mounted onto the outdoor unit, and the built-in SIM card provides wireless connectivity.

Daikin HERO Cloud Services is a remote monitoring service for Daikin VRV\* systems. When integrated, data visualization of connected indoor and outdoor unit data and animated piping diagrams displaying operation status is provided. Daikin HERO Cloud Services also includes failure prediction for the compressors and sensors and refrigerant leak detection in the VRV system. In addition, HERO Cloud Services can help optimize the equipment operation based on outdoor ambient temperatures.

# Elevate control through remote monitoring:

- » Time and cost-saving opportunities Helps reduce unnecessary truck rolls and expand awareness of potential system issues.
- An owner-oriented design with a customizable dashboard – Provides a quick overview of all connected sites and VRV systems.

HERO Cloud Services is based upon a recurring licensing fee to access site information. Licenses can be purchased in 1-year, 3-year, or 5-year increments, with no additional cost for the first-year access after the device, is activated.

\*Compatible with select Daikin *VRV* models. Please visit daikinac.com to learn more.



# HERO Cloud Service and HERO Simple Edge (cont.)

# Features and Benefits:

- » Mounts to the outdoor unit using powerful Neodymium magnets.
- » Powered by the outdoor unit and does not require separate power or panel build.
- » The built-in cellular connectivity¹ provides a simple connection to the cloud without burdening the building network and without the addition of expensive network gateways.
- » Connects directly to the Daikin VRV\* outdoor unit system without needing additional adaptors or centralized controllers.
- » Simple device commissioning using a QR code.

# System Capacity:

- » A maximum of the one (1) Daikin VRV\* outdoor unit system and its connected indoor units (up to 64) can be connected to the Simple Edge device.
- » Multiple Simple Edge devices can be connected on a site.
- » A single user account can monitor multiple sites.



- <sup>1</sup> HERO Simple Edge uses cellphone communication. HERO Simple Edge cannot establish communication outside the service area, and it is possible, communication cannot be established even if installed within the service area but where cellphone signals are hard to reach, such as underground or on a high-rise building, etc.
- \*Compatible with select Daikin *VRV* models. Please visit daikinac.com to learn more.



# VRV Monitoring Services

# D-NET Air Conditioning Network Service System

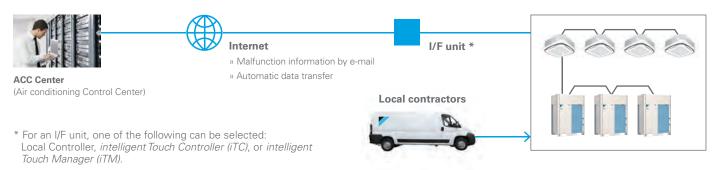
Save energy. Protect your equipment investment. Maintain comfort levels.



*D-NET* connects your equipment to our monitoring center over the web. We continually monitor more than 80 data points in your equipment\*, so we know exactly how your systems are performing. We also monitor outside

conditions from more than 400 locations across the United States and Canada, so we know what kind of weather you're up against. Putting this information together, we know if your systems can be optimized remotely to reduce your energy consumption.

D-NET Air Conditioning Network Service System overview





# Controls Product List

# **Individual Controllers**

ITEM	MODEL NO.	FUNCTION
Navigation Remote Controller	BRC1E73	Programmable zone controller
DKN Cloud Wi-Fi Adaptor	AZAI6WSCDKA	Remote control by smartphone app
Wireless Remote Controller	BRC4C82 BRC7E818 BRC7E83 BRC082A41W BRC082A42S BRC082A42W	Hand-held zone controller with infrared receiver kit
Daikin One+ Smart Thermostat	DTST-ONE-ADA-A	Smart thermostat with App control
Madoka Remote Controller	BRC1H71W	Compact controller with Bluetooth setup App
Adaptive Touch Controller	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	Advanced control logic with BACnet™ MS/TP integration

# Multi-Zone Controllers and Options

ITEM		MODEL NO.	FUNCTION
	intelligent Touch Manager (iTM)	DCM601B71	Air-conditioning management system that can be controlled by touch screen or web browser to monitor and control up to 64 groups (10 outdoor units)
	iTM Plus Adaptor	DCM601A72	Maximum of 7 <i>iTM</i> Plus Adaptors can be connected to <i>intelligent Touch Manager</i> . Each <i>iTM</i> Plus Adaptor can add up to 64 additional groups (10 outdoor units)
intelligent Touch Manager	iTM PPD Option	DCM002A71	Power consumption of indoor units are calculated based on operation status of the indoor unit and outdoor unit power consumption measured by kWh meter
(iTM)	iTM Web (HTTP) Interface Option	DCM007A51	The <i>iTM</i> Web IF (HTTP) software provides a building automation system or a home automation system the ability to monitor and control the <i>VRV</i> indoor units over the HTTP protocol.
	iTM BACnet™ Client Option	DCM009A51	The BACnet Client Option enables the iTM to control and monitor equipment through the BACnet/IP protocol
	iTM BACnet Server Gateway Option*	DCM014A51	The BACnet Server Gateway Option provide BMS integrators with the ability to monitor and control the VRV indoor units via the BACnet/IP protocol.

<sup>\*</sup>iTM BACnet Server Gateway Option is not compatible with iTM BACnet Client option.

# **Hardware Interface Solutions**

ITEM	MODEL NO.	FUNCTION
DKN Plus Interface	AZAI6WSPDKC	Third-party thermostat/HAS integration through cloud, Modbus®, BACnet MS/TP, or G/Y/W connection
Interface for use in BACnet	DMS502B71	Interface unit to allow communications between VRV and BMS.  Operation and monitoring of air-conditioning systems through BACnet/IP communication.
Optional DIII board	DAM411B51	Expansion kit, installed on DMS502B71, to provide 2 more DIII-NET communication ports. Not usable independently.
Interface for use in LonWorks®	DMS504C71	Interface unit to allow communications between VRV and BMS.  Operation and monitoring of air-conditioning systems through LonWorks communication
Interface for use in Modbus®	DTA116A51	Use of the <i>Modbus</i> protocol enables the connection of the <i>VRV</i> system with a variety of home automation and BMS systems from other manufacturers.
DIII-Net/ <i>BACnet</i> MS/TP Communication Adaptor	DTA118A51	Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through BACnet/MSTP communication.

# Controls Product List (cont.)

Adaptors

10.0.0		
ITEM	MODEL NO.	FUNCTION
DIII-Net Expander Adaptor	DTA109A51	Apply to increase the number of outdoor units (up to another 10) connected in one DIII-Net system.  Apply to overcome communication errors in electrically noisy environments.
External control Adaptor for Outdoor Unit	DTA104A53/61/62	Unified changeover of Cool/Heat mode. To change the mode of several outdoor units by one remote controller.  Demand Control. Low Noise Control: -2 to 3 dB of outdoor unit
Group Control Adaptor	KRP4A71/72/73/74	Turn On/Off Remote Control Group. Change set-point (with resistance interface 0-135 ohm).  Monitor On/Off and Error status
ABC Terminal Kit	BRP2A81	Remotely manage the operating mode of the heat pump system. Integration point for ambient thermostats to engage lock-out
Wiring Adaptor	KRP1C74/75	Thermo-on status. Fan status. AUX heater output. Humidifier output
RA Interface Adaptor for DIII-Net Use	KRP928B2S	Mini-split can be controlled through DIII-NET
RA PCB Adaptor for Time Clock	KRP413A1S	Remotely Start / Stop for mini-split indoor units

WAGO® I/O System

MODULE		PART NUMBER	DESCRIPTION
Basic Kit		60359653	Bus Coupler, Connector, 24 VDC Power Supply, and End Module
	2 Channel DI	750-400	2 Channel Digital Input Module, 24 VDC
Digital Input	4 Channel DI	750-432	4 Channel Digital Input Module, 24 VDC
	8 Channel DI	750-430	8 Channel Digital Input Module, 24 VDC
Digital Output	2 Channel DO	750-513/000-001	2 Channel Digital Output Module, without power jumper
Digital Output	al Output 4 Channel DO 750		4 Channel Digital Output Module, 24 VDC
		750-454	2 Channel Analog Input Module, 4-20 mA, Differential Inputs
	2 Channel AI	750-479	2 Channel Analog Input Module, ± 10 VDC, Differential Measurement Input
Analog Input		750-461/020-000	2 Channel Analog Input Module, NTC 20k Ohm
	4 Channel AI	750-455	4 Channel Analog Input Module, 4-20 mA, single-ended
	4 Channel Al	750-459	4 Channel Analog Input Module, 0-10 VDC, single-ended
	2 Channel AO	750-554	2 Channel Analog Output Module, 4-20 mA
Analog Output	Z Glidillei AU	750-550	2 Channel Analog Output Module, 0-10 VDC
Allalog Output	4 Channel AO	750-555	4 Channel Analog Output Module, 4-20 mA
	4 Glaffiel AU	750-559	4 Channel Analog Output Module, 0-10 VDC
Internal System Power Supply		750-613	24 VDC Bus Power Supply Module, Required for use after every 32 contact points connected in a node
Passive Power Su	pply	750-602	24 VDC Power Supply Module, passive
24 VDC Jumper		750-603	24 VDC Power Jumper Module, for use with 8 channel DI module

# Daikin WAGO BACnet™/IP Controller and Parts

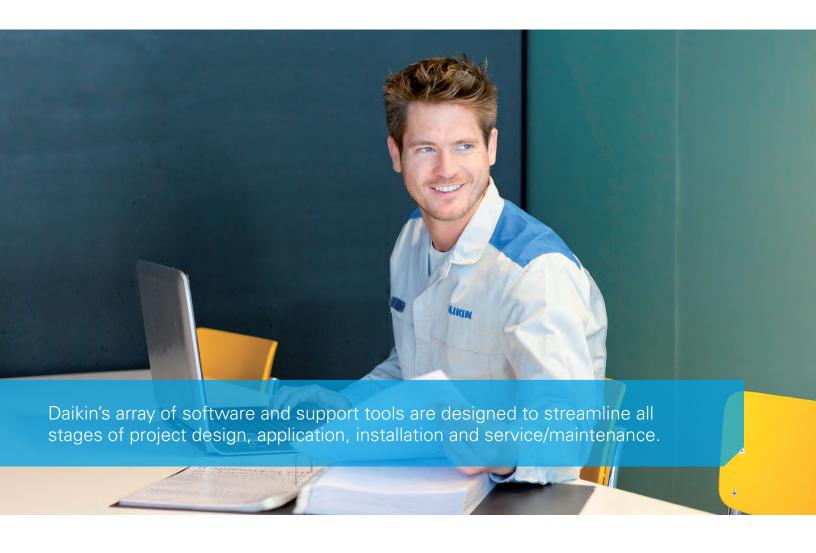
PART NUMBER	NAME	DESCRIPTION
750-832	Daikin WAGO BACnet/IP Controller	WAGO BACnet/IP Controller
759-302/000-923	WAGO I/O Check USB kit	WAGO I/O Check CD ROM and service cable
787-712	24 VDC Power Supply	24 VDC Power Supply
750-600	End Module	WAGO End Module







# Support and Tools



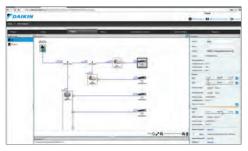
Daikin provides multiple tools to aid the design, selection, analysis, submission, and general support for its line up of ductless, rooftop, light commercial split and specifically for the full line of Daikin *VRV* systems.

The tools have been designed to be simple to use, easily accessible and to address the various considerations and steps in the evolution of a residential or commercial project, aimed at helping the architect, consulting engineer, contractor, installation technician, and service company to enhance workflows and general project execution.

# Daikin $\mathit{VRV}$ support and tools overview

CATEGORIES		TOOL	.S														
		WebXpress	Ventilation Xpress	Controls Configurator	Online Energy Calculator	IES-VE Daikin VRV plug-in	Performance curves for third-party energy simulation Programs	CAD drawings	Revit models	Reference Charge Calculator	Ventilation Rate Calculator	Daikin City (including Guide Specs, IOMS etc.)	Daikin eQuip application	Dr. Daikin	VRV Configurator	Service Checker	Online Spare Parts Bank
Selection		•	•	•													
Energy screening and simulation					•	•	•										
Design and verification									•	•	•						
Online and tablet reference (spec, data, submittal)	Tribut											•					
Smartphone and mobile reference	Protests												•	•			
After sales and service															•	•	•

# Support and Tools (cont.)



WebXpress



A key tool for Reps, Consulting Engineers and Contractors to use is the suite of **Xpress** selection software. These tools are web based and windows based EXE file designed to provide quick, easy and above all accurate selections of *VRV* systems and ventilation devices. Inputs can be customized to meet a variety of project needs and has the following features and benefits:

- » Fully array of software configuration settings
- » Select and customize indoor unit types with options/accessories
- » Optimize condensing unit selections based on block load characteristics
- » Define pipe sizes and lengths and both local and centralized wiring schemes
- » Define and generate selection reports in Word (DOC), Excel (XLS), or CAD (DXF) formats

As controls for variable refrigerant flow system systems become much more sophisticated at both a zone and building level, ensuring the full array of features are captured, Daikin has developed a simple **controls configurator tool** allowing the consulting engineer or contractor to capture all of the features that are needed to be utilized with the suite of controls products from Daikin so to ensure that the commissioning engineer can then set-up and configure the system appropriately at start up.



IES-VE plug-in for Daikin VRV



# Energy screening and simulation tools

With the continued trend in looking at building costs beyond just the 1<sup>st</sup> cost, accurately screening or simulating the performance of systems in buildings at the conceptual stage is more important than ever. Daikin recognizes this need and has developed a variety of support tools for this purpose.

# Online VRV energy calculator

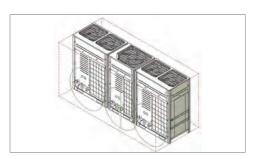
- » Easy access and registration via online.
- » Free of charge and easy to use.
- » Allows for a semi-dynamic energy screening to be completed for VRV only. Provides useful information such as part load curves, estimated annualized operating costs etc.

### IES-VE plug-in for Daikin VRV

- » One of the leading Energy Simulation programs in Europe is now gaining awareness and a growing user-base in North America.
- » With the Daikin VRV plug in for IES-VE you can take advantage of the enhanced energy simulation capabilities with the IES platform and combine in a fully validated modeling methodology for Daikin VRV systems including the innovative and energy saving "VRT" function. The results of the IES-VE simulations can be utilized for LEED®, California Title 24 and other regulatory energy simulation requirements.

# » Performance curve/plug-ins for 3rd party modeling software

- » Daikin have developed curves, instructions and sample building files for a variety of other 3rd party energy simulation software programs such as:
  - eQuest
- Energy Pro
- Trace 700
- Energy Plus (VRV HP only)
- HAP



Revit



# Design and verification

Equipment Selection and Energy Simulation only reflect the early stages of a project evolution. At Daikin we recognize the importance of additionally providing resources to the Engineer and Architect community as well as contractors as follows:

- » CAD files for all products in multiple formats (DWG and DXF), etc.
- » Revit files for BIM architecture for all products

# » Refrigerant Charge Calculator

- Quick check of the total refrigerant charge in a VRV System based on applied pipelengths and combination ratio's etc
- Quick check of the minimum room volume (occupied space) that system charge can be utilized in per ASHRAE Standard 15-2010 and ASHRAE Standard 34-2010.

## » Ventilation Rate Calculator

- Easy to use calculator to determine ventilation rates required for different room sizes and applications in accordance with ASHRAE Standard 62.1-2013.



www.DaikinCity.com



# Online and tablet reference material

**Daikin City** serves as the multi-functional portal for all disciplines interested in or already using Daikin products and technologies for a project. More than just a typical website, Daikin City provides:

- » Energy-saving characteristics of VRV systems in various vertical market buildings
- » Product videos and feature summaries via the communications center
- » A fully stocked library of information simply arranged for ease of finding any piece of Daikin information you may need such as IOM's, brochures, engineering data, and application guides etc (registration required).
- » Easy access to the suite of sales tools that Daikin offer (registration required).
- » An easy to use product specification library to quickly verify any spec item required, or to generate a submittal data sheet, guide spec or confirmation of the available accessories and options for a specific product (registration required).



# Support and Tools (cont.)



Daikin eQuip application



# Smartphone and mobile reference

» With the Daikin eQuip application, available for both iOS devices and Android devices, you can have the power of all Daikin product information and support material readily accessible on your mobile device or tablet.



www.DrDaikin.com

» For rapid resolution to a system with an error code, or general troubleshooting needs, the Dr. Daikin tool is a helpful and quick reference tool that works via a standard desktop, tablet or smartphone and even SMS. When you need to understand or isolate the scope of one of Daikin's diagnostic codes, enter the code into the Dr. Daikin resource and automatically the tool will provide feedback of what the diagnostic code refers to and straightforward guidance on how to address the code.

Visit www.drdaikin.com for further information.





Daikin VRV Configurator



Daikin's online spare parts databank



# After sales and service

With a strong commitment to sales tools to help design and apply the product is equally supported with a strong commitment on after-sales and service tools aimed at the service contractor or maintenance technician.

- » Daikin VRV Configurator is a PC based software tool that allows an installing contractor to "set-up" the operating parameters and field settings of the VRV IV outdoor units off-site and then use a handy USB connection to upload those settings during the commissioning process. This helps save time and ensure that projects with multiple systems can be set up correctly and error free. The Configurator tool also allows for up to 48hrs of operation data from an installed system to be downloaded to a laptop computer for analysis if needed.
- » Daikin VRV Service Checker is a PC based software tool that facilitates a connection to the system and monitors all components of the system including temperatures, pressures, compressor and fan speeds, and may other items and can be utilized to understand operational trends with the system and what is happening in the system at a specific

time. This tool is very helpful when troubleshooting a system in the event of error or diagnostic notification.

- » Daikin's online spare parts databank (registration required) is an easy to use graphically driven means of identifying what spare or replacement part might be needed during the life cycle of the VRV equipment. Using this resource will help you identify the part number, applicable model, any alternative part options, and the availability of the part both locally and globally.
- » Daikin University offers Daikin's customers a variety of quality training programs designed to provide the tools and resources needed for our customers to be successful.
  - Our courses are designed by training professionals around specific objectives based on industry needs and job task analysis. We offer a choice of instructional settings based on the program goals and our students' needs including: online/on-demand web-based training, instructor led webinars, on-site training, and instructor-led classroom training at one of our many Daikin Authorized training facilities.

# Notes

Notes	



# Notes





### **WARNINGS:**

- » Always use a licensed installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- » Use only those parts and accessories supplied or specified by Daikin. Ask a licensed contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- » Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.
- » For any inquiries, contact your local Daikin sales office.

### **Additional Information**

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





