

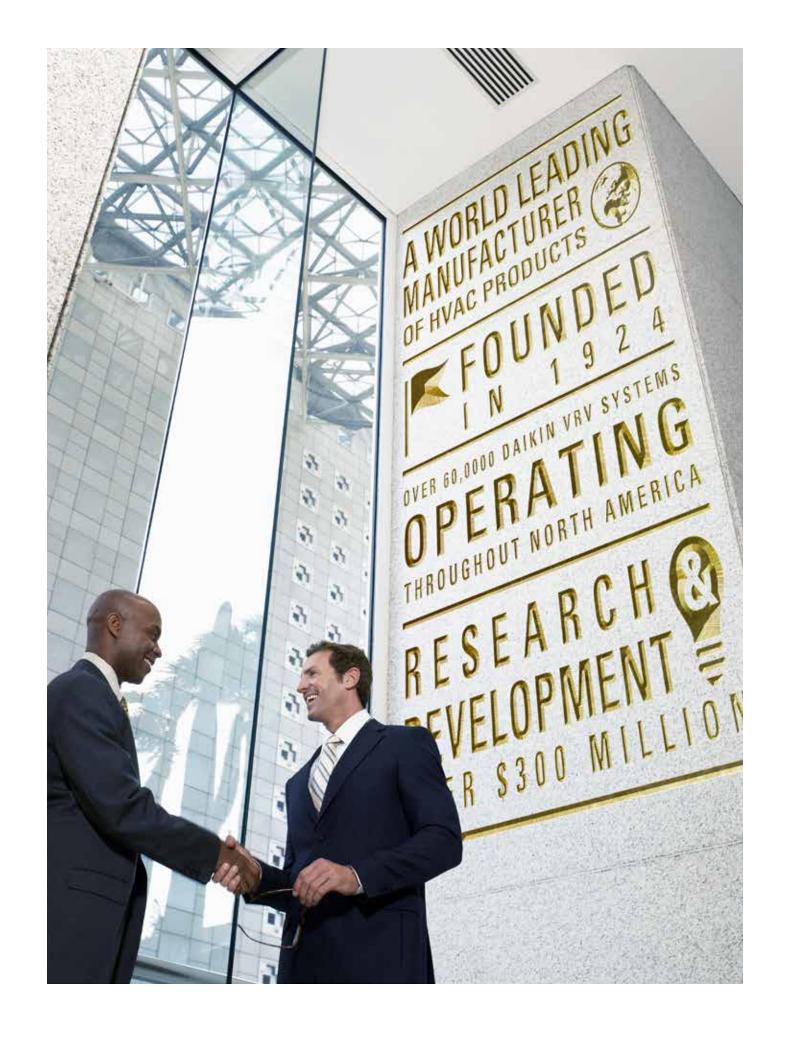
DAIKIN

HEATING AND COOLING SYSTEMS





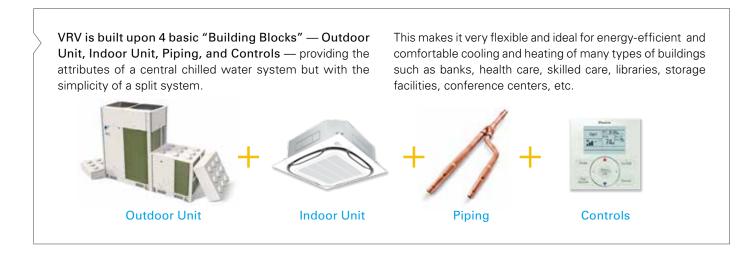




What is Daikin VRV?

One flexible package

Daikin VRV is a modular, commercially applied airconditioning 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.





Product portfolio



Outdoor units

VRV IV

Heat Recovery

- Fully integrated solution with heat recovery offers high efficiencies with IEER values up to 29.3
- Total comfort solution for heating, cooling, ventilation, and controls
- Outstanding warranty* with 10 year compressor and parts limited warranty as standard
- Perfect personal comfort for guests / tenants via simultaneous cooling and heating
- Incorporates VRV IV standards and technologies such as variable refrigerant temperature and all inverter compressors
- Unique range of single and multi-port branch selector boxes
- Heating function down to -13°F ambient air temperature
- Daikin VRV IV is the first variable refrigerant flow (VRF) system to be assembled in North America

VRV IV

Heat Pump

- Total comfort solution for heating, cooling, ventilation and controls
- Energy efficiency values (IEER) up to 28.0
- Incorporates VRV IV standards and technologies such as variable refrigerant temperature and all inverter compressors
- Best-In-class warranty* with 10 year compressor and parts limited warranty as standard
- Daikin VRV IV is the first variable refrigerant flow (VRF) system to be assembled in North America

YRY III

Heat Recovery

- Advanced continuous heating during defrost cycle and oil return for single module systems
- Variable Refrigerant Temperature (VRT) control
- Extended operating range with heating function down to -4°F ambient air temperature



VRVIV S-series NEW

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 NEW 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 10 indoor units
- Space saving design with under 39"** height. Over 25% smaller as compared to VRV III-S
- Easier to install with over 60% 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

Condensing unit



Water Cooled

- Enables geothermal energy as an energy source
- Can be applied to both geothermal and boiler, cooling tower applications
- Geothermal mode eliminates need for an external heating or cooling source
- Compact and lightweight design can be stacked for maximum space saving
- 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 27°F in cooling is possible
- * Complete warranty details available from your local Daikin manufacturer's representative or distributor or online at www.daikincomfort.com.
- ** Dependent on outdoor unit model



Outdoor Units Lineup

TVDE	MODEL	FEATURE	PROPUST MANE									C/	\PA	CIT	Y (1	ON	S)								
TYPE	MUDEL	FEATURES	PRODUCT NAME	3	4	5	6	7	8	10	12	14	16	18	20	21	22	24	26	28	30	32	34	36	38
	VRV IV Heat Recovery	 Best efficiency & comfort solution Fully integrated solution with heat recovery for high efficiencies with IEER of up to 29.3 Covers all thermal needs of a building via a single point of contact for accurate temperature control The perfect personal comfort for guests/ tenants via simultaneous cooling and heating Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature and 	REYO-T VRV IV				•		•	•	•	•	•	•	•		•	•	•	•					
		all inverter compressors Widest range of Branch Selector boxes on the market																			•	•	•	•	•
led	dwn	 Daikin's solution for comfort & low energy consumption Covers all thermal needs of a building via a single point of contact for accurate 	RXYQ-T YRY IV				•		•	•	•	•													
Air cooled	VRV IV Heat Pump	temperature control	II										•	•	•		•	•	•	•					
	>		III																		•	•	•		
	VRV III PC Heat Recovery	 Advanced continuous heating during defrost cycle and oil return for single module systems Variable Refrigerant Temperature (VRT) control Extended operating range with heating function down to -4°F ambient air temperature 	REYQ-PC VRV III				•		•	•	•*														
	VRV IV-S Heat Pump	 Single phase technology Space saving solution without compromising on efficiency For residential and light commercial applications 	RXYMQ-PV VRV IV S-series NEW	•	•	•																			
	ry / Heat Pump	 Ideal for high rise buildings, using water as heat source Enables use of geothermal energy as a renewable energy source No need for an external heating or cooling 	RWEYQ-PC YRY IV Wares Risks Colour System				•	•																	
Water cooled	VRV IV W-Series Heat Recovery / Hea	 source when used in geothermal mode Covers all thermal needs of a building via a single point of contact for accurate temperature control Compact & lightweight design can be stacked 									•	•													
	VRV IV W-Sei	 Compact & lightweight design can be stacked for maximum space saving Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature and all inverter compressors. 												•		•									

^{* 208-230}V/3Ph/60Hz only

Indoor units overview

What are your choices?

FXMQ-PBVJU

DC-Ducted Concealed Ceiling (Medium Static)

Ceiling mounted DC-Ducted unit — ideal for small to large spaces in need of a concealed air-conditioning system. The optional DZK connects to the unit allowing several separate ducts to supply air to different individually controlled zones.





FXMQ-MVJU

Concealed Ceiling Unit (Medium Static)

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





FXDQ-MVJU

Slim Duct Built-In Concealed Ceiling 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.





FXTQ-PAVJU

Vertical Air Handling Unit (Horizontal RHS is Possible)

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



both upflow and horizontal right installation possibilities.



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.





Indoor units overview (continued)

FXUQ-PVJU

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

NEW

Ceiling-Mounted Cassette (Single Flow)

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





NEW

FXZQ-MVJU9

2'x2' 4-Way Ceiling-Mounted Cassette

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





FXAQ-PVJU

Wall-Mounted Unit

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





FXHQ-MVJU

Ceiling-Suspended Unit

Ceiling-suspended with slim and elegant design.





FXLQ-MVJU9

Floor-Standing Unit

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





Product portfolio (continued)

Indoor Units

ТҮРЕ	MODEL	FEATURES	PRODUCT NAME
	DC-Ducted Concealed Ceiling 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" W.G. Installation flexibility with a low profile, compact design at less than 12" in height 	FXMQ-PBVJU
	Slim-Duct, Built-In Concealed Ceiling Unit	 Slim height, at only 7-7/8" Washable filter included Low sound level Factory shipped for rear air inlet —field convertible to bottom air inlet Condensate pump with vertical lift of up to 21-5/8" included as standard 	FXDQ-MVJU
Ducted	Vertical 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-PAVJU
	Concealed Ceiling Unit (Medium Static)	 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
	Concealed Floor- Standing Unit	 Ideal for installation beneath a window Requires minimal installation space Fitted with a washable long-life filter Space-saving unit can be freestanding or wall-mounted 	FXNQ-MVJU9
	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
	NEW 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-PVJU
	2' x 2' 4-Way Ceiling-Mounted Cassette	 Fits in a standard 2' x 2' ceiling grid. Sound pressure levels are as low as 29 dB(A) Space-saving depth of units requires only 11.6" of ceiling space Easy-to-clean grille, washable long-life filter Simple installation with an easy-to-fit decoration panel 	FXZQ-MVJU9
Duct-Free	NEW Ceiling-Mounted Cassette (Single flow)	 Only 7-%" in height and a width of 18-½" making it possible to use this style of indoor unit in the tightest of spaces The unit is equipped with both horizontal and vertical louvers to optimize the airflow and throw to suite your room design The indoor unit can be set to 5 predetermined fan speeds which allows for optimum and comfortable airflow Factory installed condensate pump with a lift capacity of up to 33-7/16" (measured from the bottom of the unit) 	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



						CAI	PACITY						
MBH	7.5	9.5	12	15	18	24	30	36	42	48	54	72	96
TON	0.6	0.75	1	1.25	1.5	2	2.5	3	3.5	4	4.5	6	8
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Product Portfolio (continued)

Major Accessories Lineup

NEW 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.

NUMBER OF BRANC	HES / MAXIMUM TOTA	L CAPACITY INDEX (K	BTU/H)				
							Military.
BSQ36TVJ	BSQ60TVJ	BSQ96TVJ	BS4Q54TVJ	BS6Q54TVJ	BS8Q54TVJ	BS10Q54TVJ	BS12Q54TVJ
1/36	1/60	1/96	4/144	6/216	8/290	10/290	12/290

REFNET

REFNET Joints distribute correct flow of refrigerant in every branch of the piping network.





VRV IV Heat Pump

OPTIONAL ACCE	SSORIES	RXYQ72T RXYQ96T	RXYQ120T RXYQ144T RXYQ168T	RXYQ192T RXYQ216T RXYQ240T RXYQ264T RXYQ288T RXYQ312T RXYQ336T	RXYQ360T RXYQ384T RXYQ408T	
Distributed disira	Refnet Header KHRP26M22H (max. 4 branch) KHRP26M33H (max. 8 branch) Refnet Joint KHRP26A22T KHRP26A33T		KHRP26M22H (max. 4 branch) KHRP26M33H (max. 8 branch) KHRP26M72H (max. 8 branch)	KHRP26M22H (max. 4 branch) KHRP26M33H (max. 8 branch) KHRP26M72H (max. 8 branch) KHRP26M73HU (max. 8 branch)		
Distributed piping			KHRP26A22T KHRP26A33T KHRP26M72TU	KHRP2 KHRP2 KHRP26 KHRP26	6A33T M72TU	
Outdoor unit multi o	onnection piping kit	_	-	BHFP22P100U	BHFP22P151U	

VRV IV Heat Recovery

OPTIONAL ACCE	SSORIES	REYO72T REYO96T	REYO120T REYO144T REYO168T	REY0192T REY0216T REY0240T REY0264T REY0288T REY0312T REY0336T	REYQ360T REYQ384T REYQ408T REYQ432T REYQ456T	
	Refnet Header KHRP26M33H (max. 8 branch)		KHRP26M33H (max. 8 branch) KHRP26M72H (max. 8 branch)	KHRP25M33H9 (max. 8 branch) KHRP25M72H9 (max. 8 branch) KHRP25M73H9 (max. 8 branch)		
Distributed piping	Refnet Joint KHRP25A22T9 KHRP25A33T9		KHRP25A22T9 KHRP25A33T9 KHRP25M72TU9	KHRP2: KHRP2: KHRP25 KHRP25	5A33T9 M72TU9	
Outdoor unit multi c	onnection piping kit	_	-	BHFP26P100U	BHFP26P151U	

Product Portfolio (continued)

Major Accessories Lineup

VRV III PC Heat Recovery

OPTIONAL ACCESSORIES		REYQ72PC	REYQ96PC REYQ120PC REYQ144PCTJ
	Refnet Header	KHRP25M33H9 (max. 8 branch)	KHRP25M33H9 (max. 8 branch) KHRP25M72H9 (max. 8 branch)
Distributed piping	Refnet Joint	KHRP25A22T9 KHRP25A33T9	KHRP25A22T9 KHRP25A33T9 KHRP25M72TU9

VRV-IV W-Series Heat Pump / Heat Recovery and VRV IV-S

		VRV-WIII		VRV-IV-S
UNIT MODEL NUMBER	RWEYQ72P RWEYQ84P	RWEYQ144P RWEYQ168P	RWEYQ168P RWEYQ252P	RXTQ36TAVJU RXTQ48TAVJU RXTQ60TAVJU
REFNET Header	KHRP25M33H9 (max. 8 branch) KHRP26M22H9 (max. 4 branch) KHRP26M33H9 (max. 8 branch)	KHRP25M33H9 (max. 8 branch) KHRP25M72H9 (max. 8 branch) KHRP26M22H9 (max. 4 branch) KHRP26M33H9 (max. 8 branch) KHRP26M72H9 (max. 8 branch)	KHRP25M33H9 (max. 8 branch) KHRP25M72H9 (max. 8 branch) KHRP25M73HU9 (max. 8 branch) KHRP26M22H9 (max. 4 branch) KHRP26M33H9 (max. 8 branch) KHRP26M72H9 (max. 8 branch) KHRP26M73HUU9 (max. 8 branch)	KHRP26M22H9 (Max. 4 branch) KHRP26M33H9 (Max. 8 branch)
REFNET Joint	KHRP25M22T9 KHRP25A33T9 KHRP26M22T9 KHRP26A33T9	KHRP25M22T9 KHRP25A33T9 KHRP25M72TU9 KHRP26M22T9 KHRP26A33T9 KHRP26M72TU9	KHRP25M22T9 KHRP25A33T9 KHRP25M72TU9 KHRP25M73TU9 KHRP26M22T9 KHRP26M33T9 KHRP26M72TU9 KHRP26M73TU9	KHRP26A22T9
Outdoor Unit Multi Piping Connection Kit (Heat Pump)		BHFP22MA56U	BHFP22MA84U	
Outdoor Unit Multi Piping Connection Kit (Heat Recovery)		BHFP26MA56U	BHFP26MA84U	

NEW Hail Guard Kit for VRV IV

The optional hail guard kit for VRV IV 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).

KIT PART NUMBER		QUANTITY O	F KITS PER V	RV IV OU MODE	L
	R_YQ72T	R_YQ96-168T	R_YQ192T	R_YQ216-336T	R_YQ360-456T
VRV4HGS-K1	1	1	1		
VRV4HGL-K1			1	2	3



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 (FXMQ-P or FBQ-P series, respectively) allowing several separate ducts to supply air to different individually controlled zones. The DZK BACnet® Gateway module will work with any BACnet/IP compatible Building Management System.

DZK Product Number	DZK030E4, DZK030E4-2	DZK030E5, DZK030E5-2	DZK048E4, DZK048E4-2	DZK048E6, DZK048E6-2	DZK-MTS-1-W, DZK-MTS-2-W	Wireless Thermostat DZK-ZTS-1-W, DZK-ZTS-2-W	BACnet Gateway Interface	Changeover Master DZK-CM-1
	0110°	WAAQQ	121.0°	WAAAA	074V	15rt		_

Product Portfolio (continued)

Major Accessories Lineup

Air treatment systems

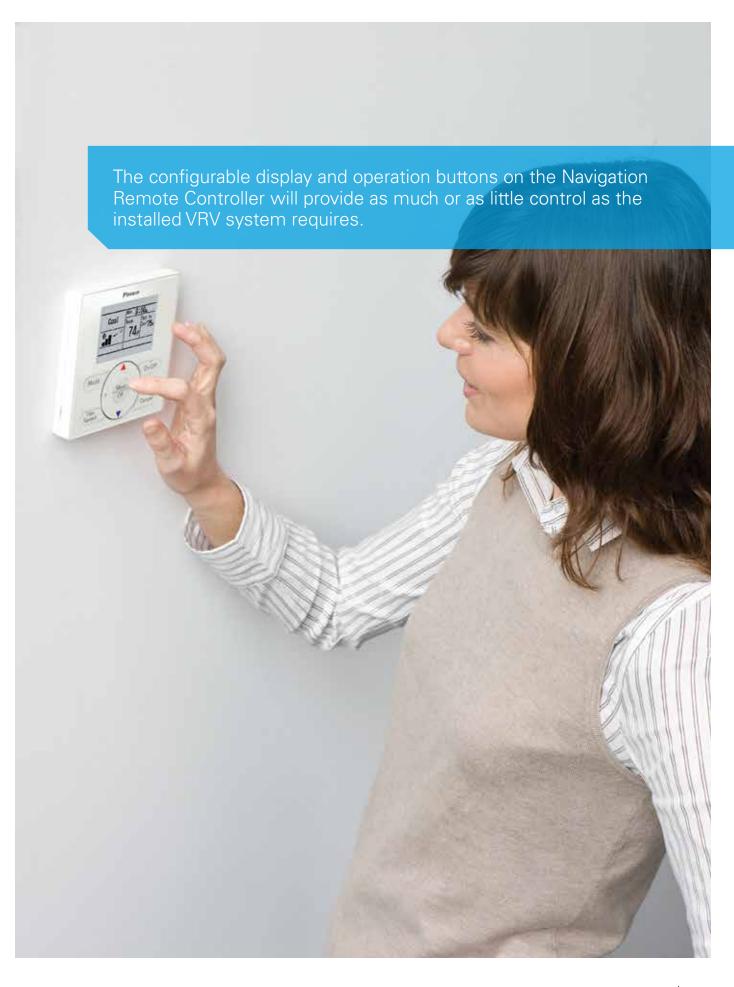
Daikin's Outside Air Processing Unit can combine fresh air treatment and air conditioning, supplied from a single system.

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.

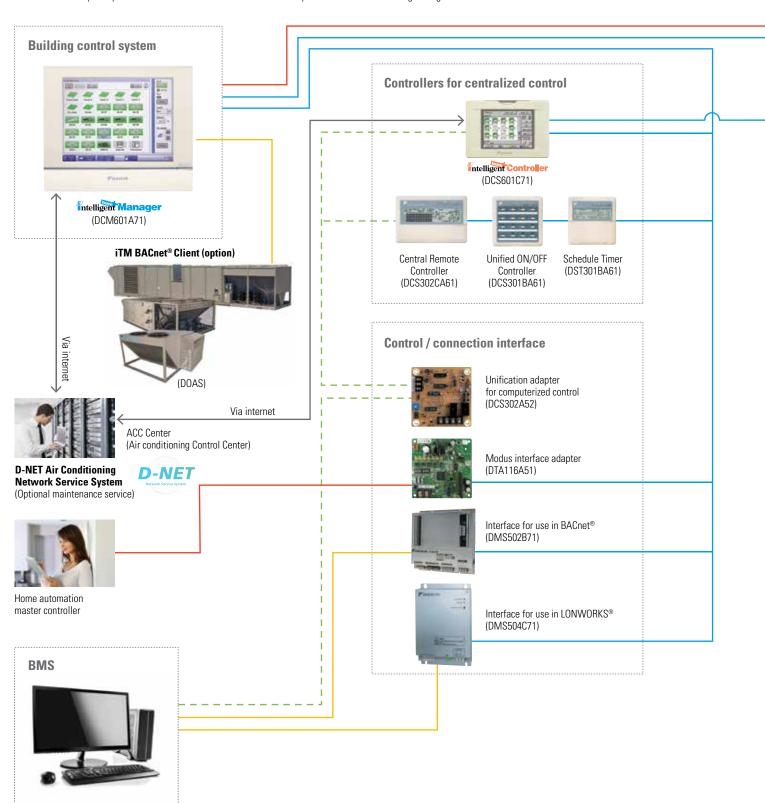
		OUTSIDE AIR PROCESSING UNIT, FXMQ-MFVJU	ENERGY RECOVERY VENTILATOR, VAM-GVJU
			00
VRV Refrigerant Piping		Connectable	Not connectable
VRV Control Wiring		Conne	ctable
High Efficiency Filter (MERV 8 and MERV 13)		Option	Not available
Ventilation System		Air supply	Air supply and Air exhaust
Power Supply	V/ph/Hz	208-23	0/1/60
Airflow Rate	CFM	635 988 1236	300/300/170 470/470/390 600/600/500 1200/1200/930



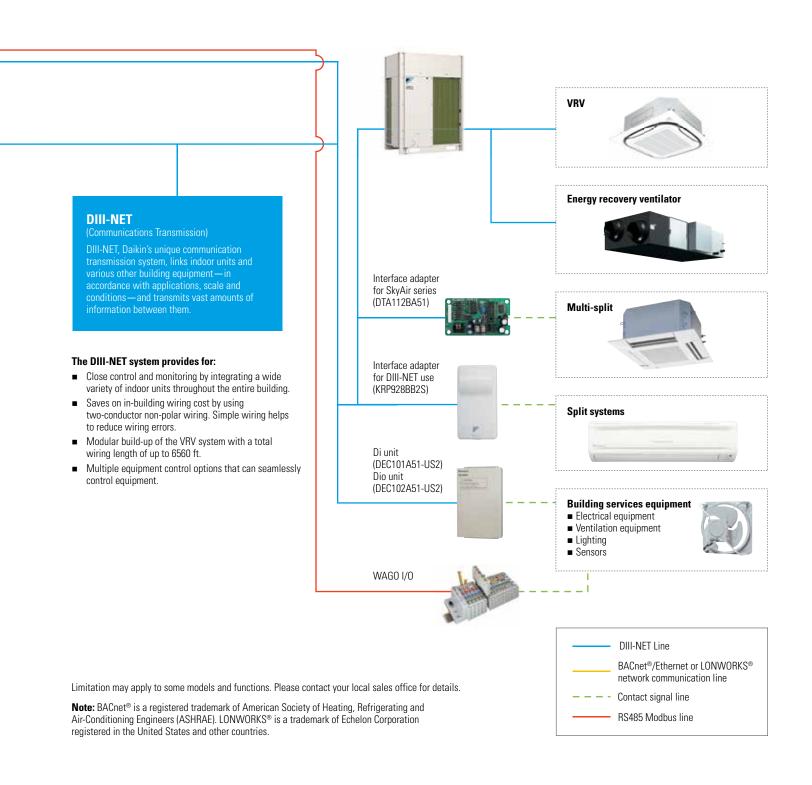


VRV control systems

The VRV controls system provides an advanced architecture that ensures optimum comfort and building management.







VRV control systems (continued)

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			DAIKIN VR\	/ CONTROLS			
	Navigation Remote Controller	Simplified Remote Controller	intelligent Touch Controller	intelligent Touch Manager	BACnet®	LonWorks Interface	Modbus Interface
Individual zone control		00111101101	Todon Controllor	Todon Managor	IIItoriuoo	medituos	Intoriuo
Independent cool and heat setpoints	•		•	•			
Individual zone control with weekly programmable scheduling	•		•	•			
Basic central point on/off control of all air handling 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 via Intranet and Internet			•	•	•	•	•
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							•

^{*}Requires one or more DEC102A51-US2 Digital Input/Output units or WAGO DO module (for use with iTM only).

Native application or feature for this device. Dependent upon capabilities of the third party energy management system

Control Options

Network solutions

ТҮРЕ		ITC	ITM	LONWORKS	BACnet®	MODBUS
		0.000				
Screen	Layout screen		•			
	Touch screen	•	•			
Integration	Mini BMS for heating, air conditioning applied systems and refrigeration units (BACnet and WAGO)		•			
	3rd party equipment integration (BACnet and WAGO)		•			
	Basic control functions: on/off, set point setting, air flow settings, operation mode	•	•	•	•	•
	Temperature limitation	•	•			
Control	Setback		•			
	Automatic changeover	•	•			
	Weekly schedule and special day pattern	•	•			
	Timer extension		•			
	Forced off	•	•	•	•	
Monitoring	Basic control functions: ON/OFF status, operation mode, set point temp.	•	•	•	•	•
	Filter status	•	•	•	•	•
	Malfunction code	•	•	•	•	•
	History (operation, malfunction)	•	•			
	Visualization	•	•			
Options	PPD	•	•			
	Web access and control	•	Std			
	HTTP option	•				
Other	Interlock	•	•			
Ottiel	Maximum number of indoor unit groups	2 x 64	8 x 64	64	4 x 64	16

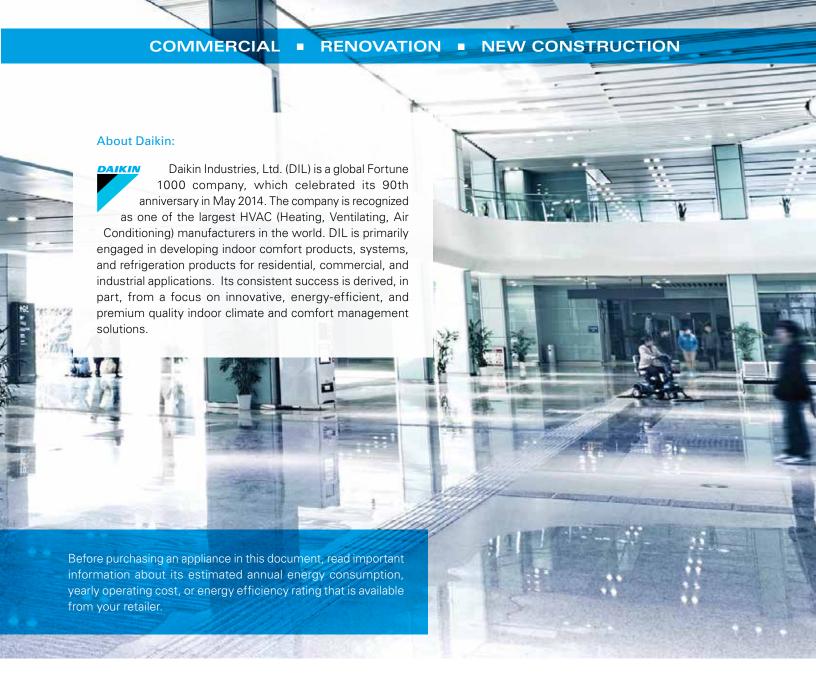
Support and tools

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 VRV support and tools overview

CATEGORIES		TOOLS																
		Xpress	W-III Xpress	Ventilation Xpress	Controls Configurator	Online Energy Calculator	IES-VE Daikin VRV plug-in	Performance curves for third-party energy simulation Programs	CAD drawings	Revitmodels	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	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•	•	•	•													
Energy screening and simulation						•	•	•										
Design and verification									•	•	•	•						
Online and tablet reference (spec, data, submittal)													•					
Smartphone and mobile reference														•	•			
After sales and service																•	•	•





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.







Daikin, and its design, VRV and REFNET are trademarks of Daikin Industries, Ltd.

