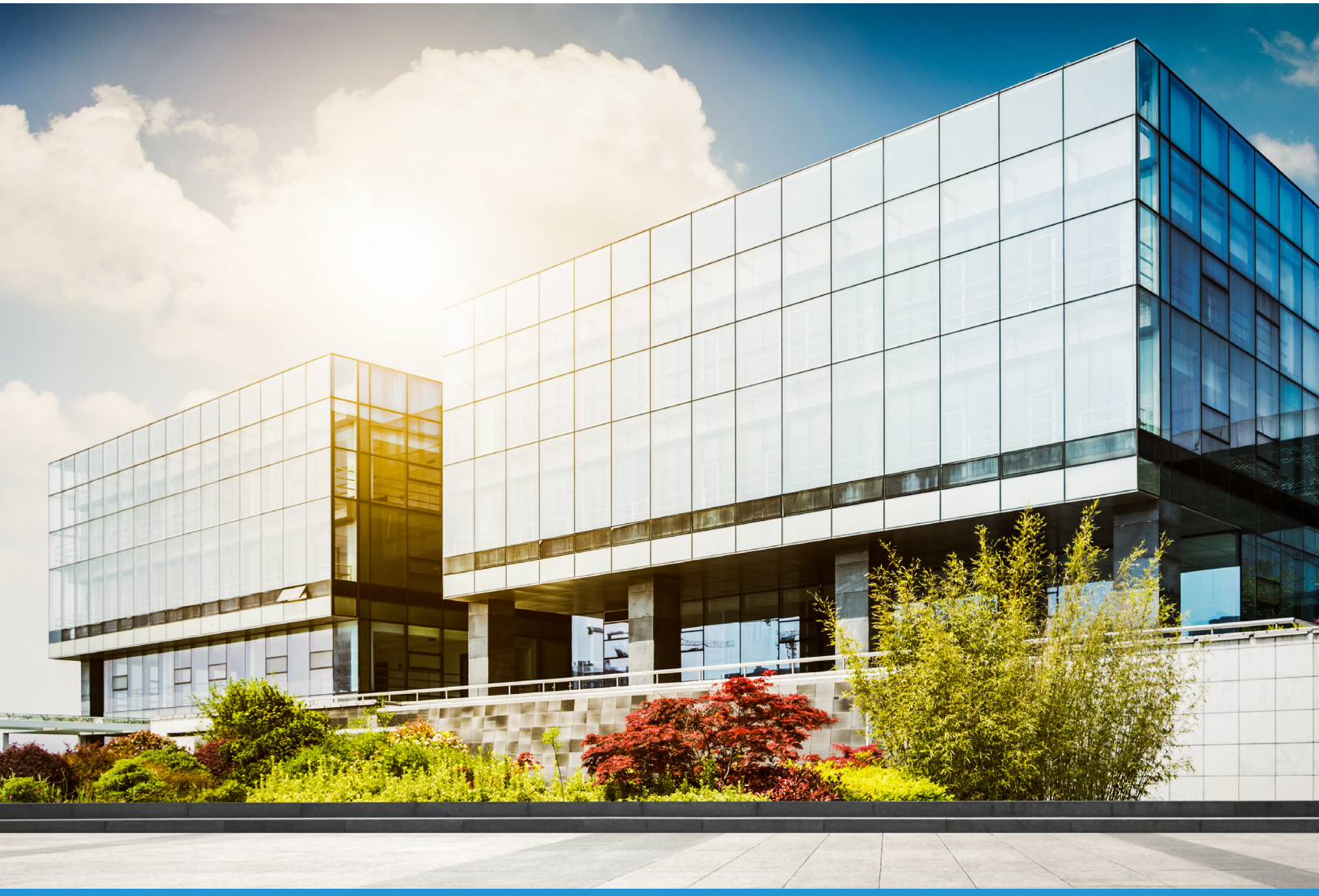
DAIKIN

VRV
T-Series Water Cooled System



VRV T-SERIES
WATER-COOLED SYSTEMS

Why Consider a Daikin *VRV T-Series* Water-Cooled System?

VRV T- Series Water Cooled System

One Flexible Package

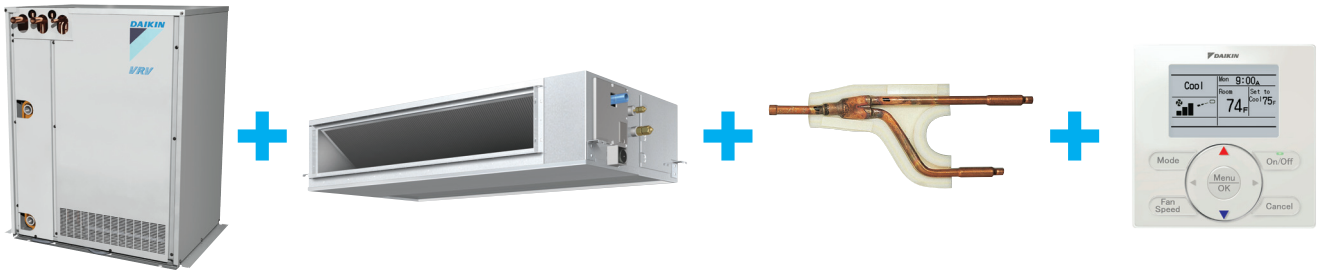
The Daikin *VRV T-Series* Water-Cooled is a flexible and modular energy saving alternative to traditional centralized equipment solutions such a Chilled Water System or Water Source Heat Pumps (WSHP).

The *VRV T-Series* Water-Cooled provides all of the attributes of an air-cooled *VRV* system such as low sound levels, advanced comfort control and zoning but with the added application flexibility for cold climates, buildings with an existing water loop infrastructure or geothermal applications.

The long piping capabilities, small refrigerant pipes, compact condensing unit size and ability to take advantage of building diversity and 2-stage heat recovery provide great flexibility in applying the solution to your building whether existing or new constructions. This aids in reducing the overall construction complexity compared to traditional water based systems and helps optimize the total cost of construction.

VRV is built upon 4 basic "Building Blocks" — Condensing Unit, Indoor Unit, Piping, and Controls — providing the attributes of a central chilled water system but with the simplicity of a split system.

This enhanced system offers energy-efficient and comfortable cooling and heating for many types of applications such as offices, hotels, high-rise buildings and large commercial applications.



Condensing Unit | Indoor Unit | Piping | Controls

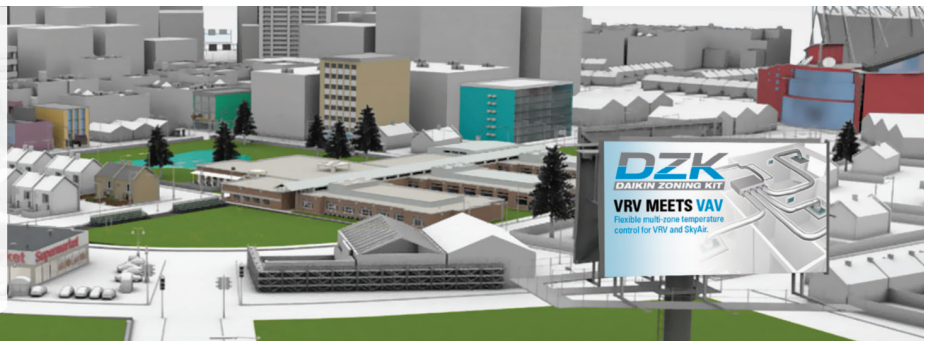
VRV T-Series Water-Cooled Main Features

- Flexible System design with increased diversity up to 150%*
- 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* to minimize mechanical room conditioning requirements
- 2-9V variable water flow control logic* as standard to increase waterside system operational efficiencies compared to previous models
- Drop-down electrical box for easy service to key components
- Field selectable top or front refrigerant connections for flexible and easy installation

* Conditions/rules apply. Refer to Installation and Engineering Manual for further details.

Applications

- Offices
- Hotels
- High-rise buildings
- Multi-family complexes
- Shopping malls
- Other large commercial applications



What is Daikin *VRV T-Series* Water-Cooled?

COMMERCIAL

Overview

The *VRV T-Series* Water-Cooled offers an energy saving alternative to traditional centralized equipment. The system design is based on a modular design concept. It is composed of unified condensing units that require simply connecting a 2-pipe refrigerant network for heat pump applications or a 3-pipe refrigerant network for heat recovery applications. The condensing units are conveniently compact, which not only enables transport by elevator possible, but also effectively simplifies installation in mechanical rooms. This also saves a great deal of time and labor labor when compared to traditional water based equipment.

VRV Water-Cooled systems are equivalent to 2-pipe or 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 cellular applications with different operation requirements.

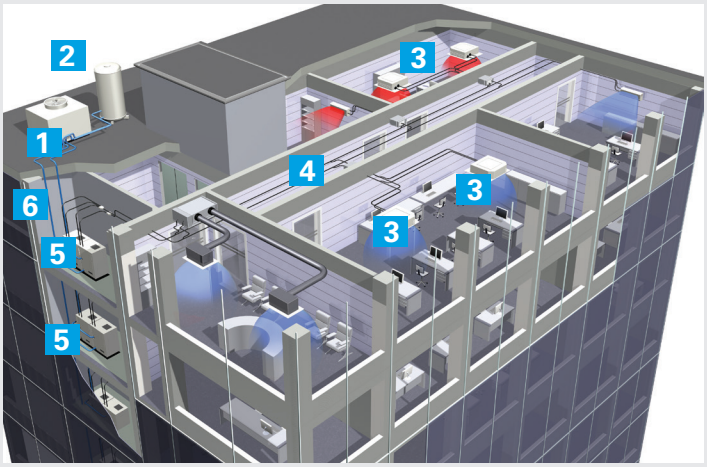
Geothermal Application

The *VRV T-Series* Water-Cooled system can connect to a geothermal water loop as standard, which makes it one of the most energy-efficient air-conditioning systems available in the market.

Underground temperatures remain relatively constant all year round. They are warmer than the air above it during the winter and cooler than the air above it during the summer. *VRV* Water-Cooled systems are capable of utilizing this constant temperature by exchanging heat with the earth through a ground heat exchanger.

This helps reduce the load on the compressor and provides substantial energy savings over traditional cooling tower/boiler installations.

Standard Operation
(Cooling Tower/Dry Cooler, Boiler)



Geothermal Application

1 Cooling Tower or Dry Cooler 2 Boiler 3 Indoor Units 4 Refrigerant Pipes 5 Condensing Units 6 Water Loop Piping

Why select a *VRV T-Series* Water-Cooled System?

›› The efficiency and capacity of air-cooled systems reduce at extreme ambient conditions, causing systems to be oversized and increasing initial cost. Water-Cooled *VRV* operation is not affected by outside air temperatures.

›› Geothermal energy can be used to heat and cool your building, which can help you gain more LEED® points.

›› Extreme piping lengths in applications such as high-rise buildings cause capacity reductions. Positioning water-cooled condensing units floor-by-floor reduces the capacity reduction and improves the system efficiency.

›› Water-Cooled *VRV* systems typically require less base refrigerant charge than that of a similar air-cooled *VRV* system and thus can be used in applications with limited allowable refrigerant within the building.

›› Condensing units can be linked to existing water piping and utilize the existing heat source to reduce initial costs.

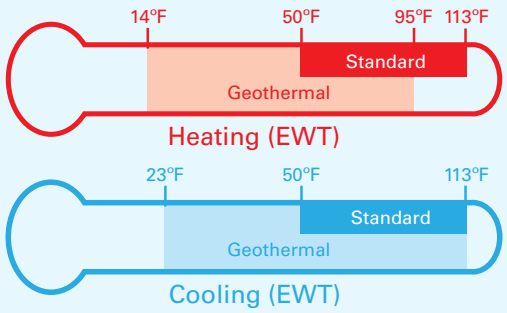
›› No external operation sound produced by condensing units to disturb your building neighbors since Water-Cooled *VRV* systems are installed indoors only.

Geothermal Operation and Advantages

VRV T-Series Water-Cooled can use lakes, rivers and ground loops to take advantage of the Earth as a natural heat sink or heat source, eliminating the need for equipment such as boilers, cooling towers, or dry coolers.

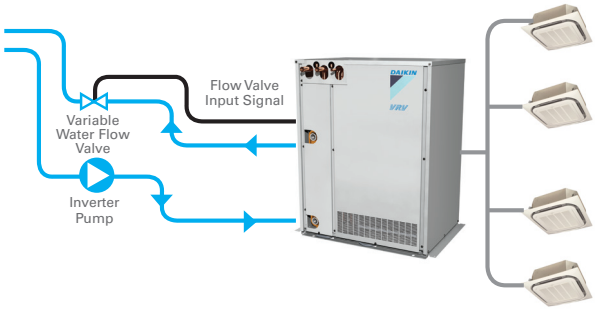
Extended Water Temperature Operation Range

Condenser water inlet temperature can be as low as 23°F in cooling and 14°F in heating. Please note that glycol usage is required when entering condenser water temperature is below 50°F. Please refer to Engineering Manual for further details.



Variable Water Flow Control

Condensing unit can control water control device such as an inverter pump or modulating valve via 2-9V signal based on capacity requirement. This increases waterside system operational efficiencies by reducing the water flow when possible.



Indoor Installation Makes Unit Invisible from the Outside

Because the system is water-cooled, outside air temperature does not affect system capacity. Condensing units are installed inside the building, which enhances design flexibility and makes it easier to adapt to different buildings types.

›› Great solution for sound sensitive environments as there is no noise mitigation outside to disturb building neighbors

›› Superior efficiency, even in the most extreme outside conditions, especially in geothermal operation

Heat Rejection Cancellation Technology

Engineered with heat rejection cancellation technology to minimize heat addition to mechanical rooms*

* This function needs to be enabled through field settings.

VRT mode control selection to match user preferences

This chart reflects the operation trend of a VRV system when in normal operation and under VRT control. Actual energy savings through VRT vary based on the building location, load characteristics, occupancy and system usage conditions.

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

Capacity priority

Fixed Refrigerant Temperature

BASIC MODE
Fixed Te - Standard control

Energy saving priority

Variable Refrigerant Temperature

AUTO MODE
Floating target Te depending on heat load

HIGH SENSIBLE MODE
Fixed target Te

Selecting VRT enables operation to be optimised for either energy efficiency or rapid cooling.

Floating Te

POWERFUL MODE
Reaction speed Very Fast

- » 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.

QUICK MODE
Reaction speed Fast

- » Gives priority to fast reaction speed.
  The refrigerant temperature goes down fast to keep the room setpoint stable.

MILD MODE
Reaction speed Medium

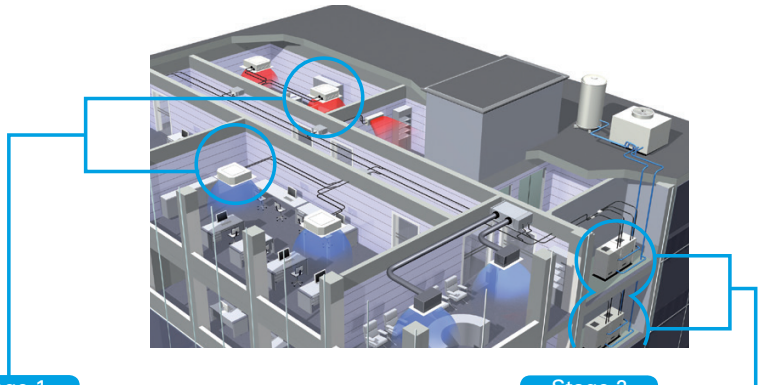
- » Gives priority to efficiency.
  The refrigerant temperature goes down gradually giving priority to the efficiency of the system instead of the reaction speed.

Fixed Te

ECO MODE
Unable to change Te

2-Stage Heat (Energy) Recovery

2-Stage Heat (Energy) Recovery is available between indoor units on the same *VRV* system and then across all the systems connected to a common water loop. This has a dramatic impact on power consumption and helps improve energy efficiency.

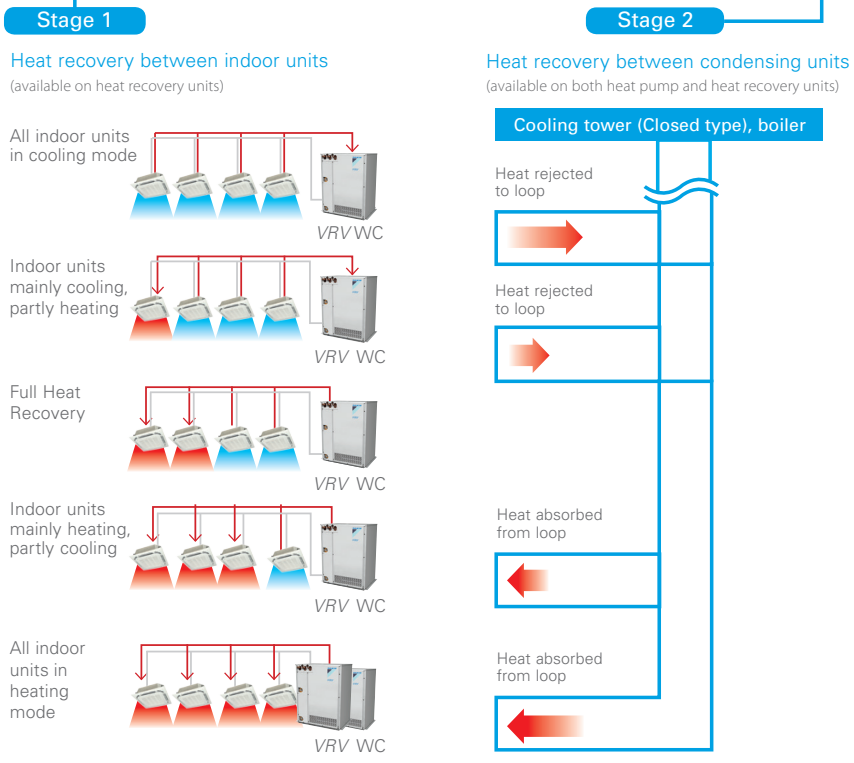


Stage 1: Heat recovery between indoor units in the same refrigerant circuit — available on heat recovery units.

Heat rejected from indoor units in cooling mode is transferred to units in areas requiring heating. This waste heat utilization leads to maximizing energy efficiency and reducing electricity costs.

Stage 2: Heat recovery between condensing units via the water loop — available on both heat pump and heat recovery units.

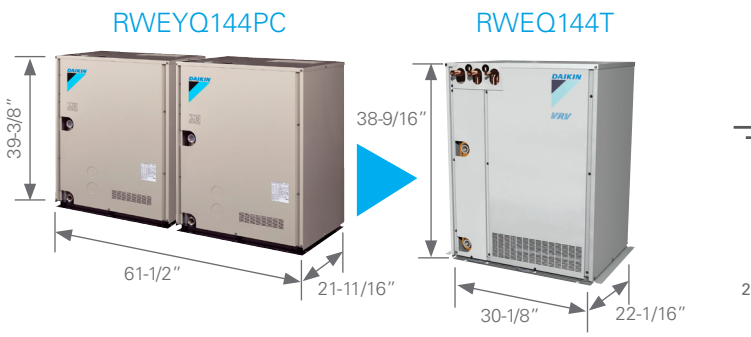
Second stage heat recovery is achieved within the water loop between condensing units, reducing the use of cooling tower/boiler for more energy efficiency.



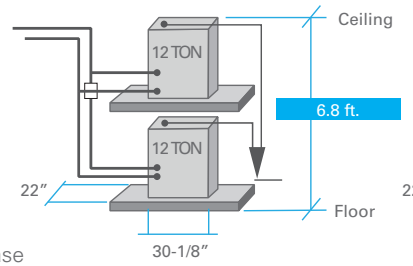
* Above system configurations are for illustration purposes only.

Space Saving – Compact Design and Stacked Configurations

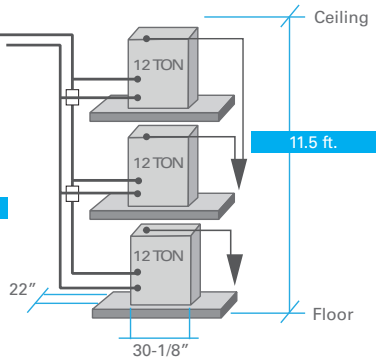
Compact casing (Height: 38-9/16" Width: 30-1/8" Depth: 22-1/16") allows for stacking of the units to maximize space saving. Stacked systems can easily fit in mechanical rooms with under 7 ft. (dual stack) or under 11.5 ft. (triple stack) ceilings thanks to the reduced unit height.



12-Ton *VRV IV* PC vs New *VRV T-Series*



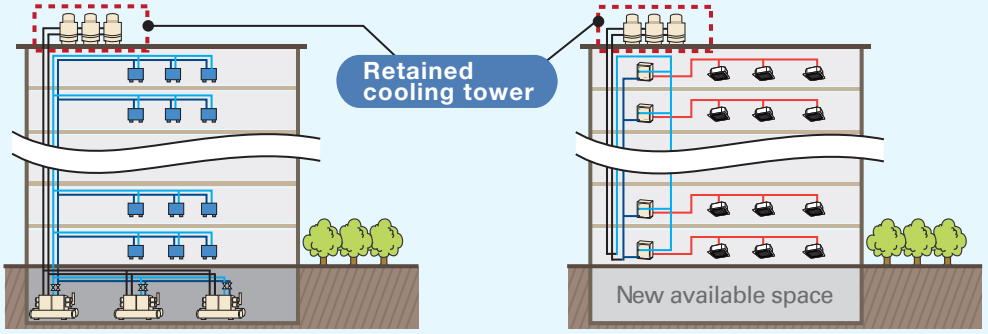
24-Ton
Dual Stack Installation



35.5-Ton
Triple Stack Installation

Ideal Retrofit to Existing Water-Cooled Systems

VRV T-Series Water-Cooled can utilize the existing systems such as cooling towers, dry coolers and boilers during renovation for further cost savings.



Before renovation

After renovation

Easy Installation and Servicing

Developed for easy installation and servicing: options to choose between top or front connection for refrigerant piping and drop-down switch box for easy access to components.

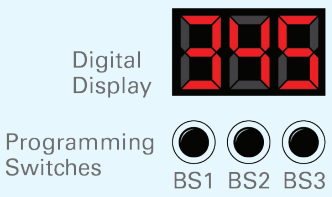
Drop-Down
Electrical Box

Top Side
Refrigerant Piping
Connection

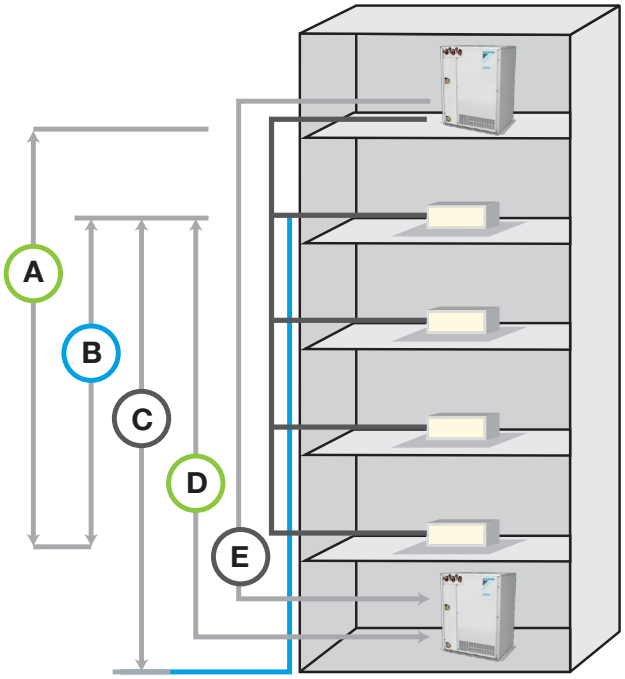
Front Side
Refrigerant Piping
Connection

Simplified Commissioning and Servicing

- New configurator software designed to simplify the commissioning and maintenance of the system.
- 3-digit 7-segment digital display on the unit for improved and faster configuration, commissioning, and troubleshooting compared to previous model.



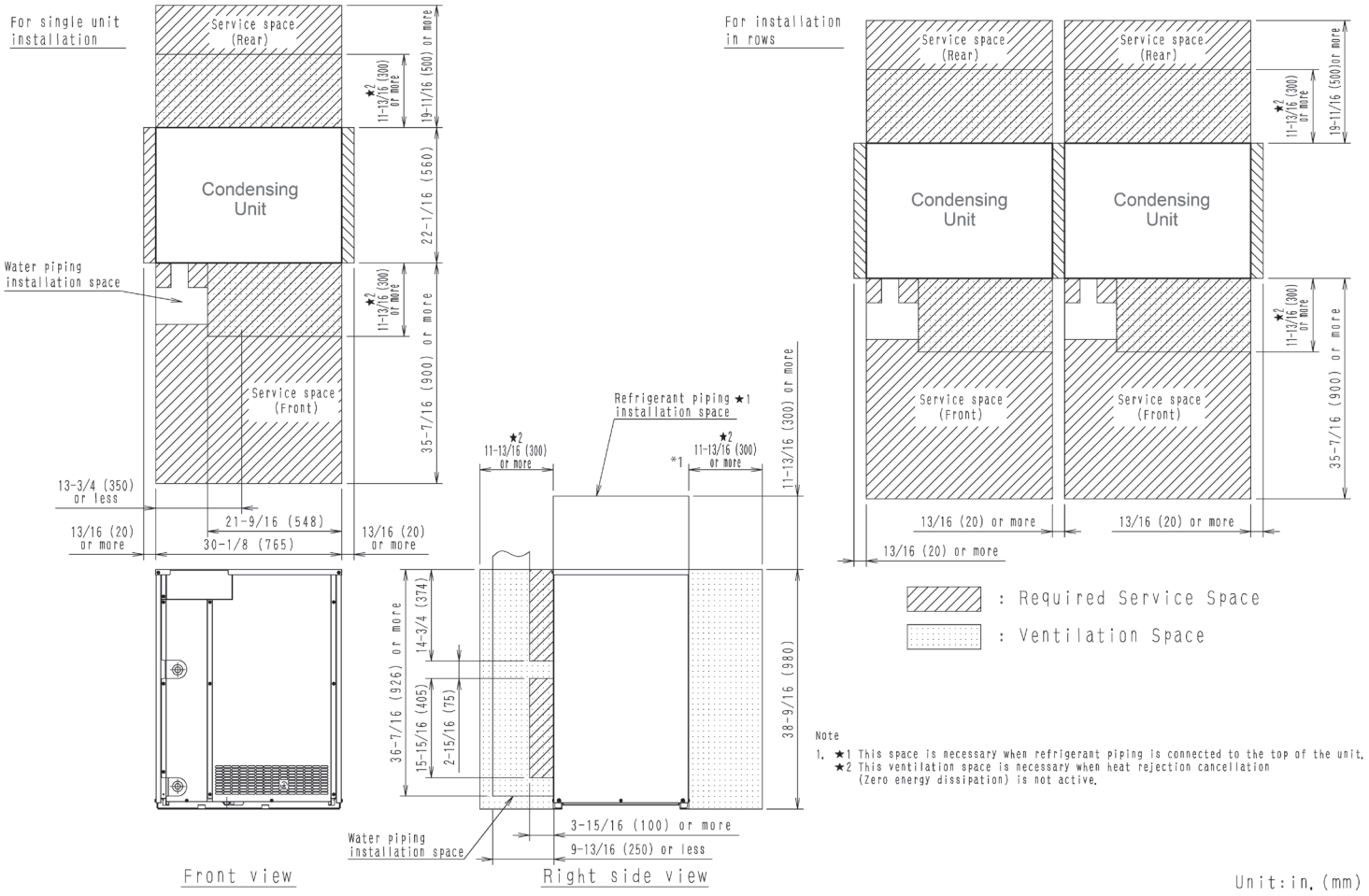
Refrigerant Piping Limitations



Liquid Line Max (feet)		*VRV T-Series* Water-Cooled
A	Vertical Drop	164
B	Between IDU	98
C	Vertical Rise	130
D	From 1st Joint	130 (295*)
E	Linear Length	540 Actual 623 Equivalent
	Total one-way Piping Length	980

* Upsizing is required. Please refer to Installation Manual for further details.

Service Space Requirements



Note
1. ★1 This space is necessary when refrigerant piping is connected to the top of the unit.
★2 This ventilation space is necessary when heat rejection cancellation (Zero energy dissipation) is not active.

Unit: in. (mm)

SPECIFICATIONS (Cont'd)

VRV T-SERIES UNIFIED HEAT PUMP AND HEAT RECOVERY 208-230V & 460V

			6 Ton		8 Ton		10 Ton		12 Ton		14 Ton	16 Ton		18 Ton		20 Ton		22 Ton	
Model	208-230V/3Ph/60Hz		RWEQ72TBTJA		RWEQ96TBTJA		RWEQ120TBTJA		RWEQ144TBTJA		RWEQ168TBTJA	RWEQ192TBTJA		RWEQ216TBTJA		RWEQ240TBTJA		RWEQ264TBTJA	
	460V/3Ph/60Hz		RWEQ72TBYDA		RWEQ96TBYDA		RWEQ120TBYDA		RWEQ144TBYDA		RWEQ168TBYDA	RWEQ192TBYDA		RWEQ216TBYDA		RWEQ240TBYDA		RWEQ264TBYDA	
	Combination										RWEQ72T RWEQ96T	2 x RWEQ96T		RWEQ96T RWEQ120T		2 x RWEQ120T		RWEQ120T RWEQ144T	
Performance	Rated Cooling Capacity [1]	BTU/h	69,000		92,000		114,000		138,000		156,000	184,000		206,000		228,000		252,000	
	Rated Heating Capacity [2]	BTU/h	69,000		92,000		114,000		138,000		156,000	184,000		206,000		228,000		252,000	
	Sound Pressure Level @ 3 ft.	dB(A)	50		54		55		60.5			57		57.5		58		61.5	
Refrigerant Piping	System Configuration: Heat Pump: HP, Heat Recovery: HR		HP	HR	HP	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	5/8	5/8	3/4	3/4
	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	1-1/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8
	Discharge Gas Pipe (Main Line)	in.	N/A	3/4	N/A	7/8	N/A	1-1/8	N/A	1-1/8	7/8 - 7/8	N/A	1-1/8	N/A	1-1/8	N/A	1-3/8	N/A	1-3/8
Connection Ratio	Standard Connectable Indoor Unit Ratio [3]	%	50 - 130		50 - 150														
	Maximum Number of Indoor Units	Qty.	12		16		20		25		28	33		37		41		45	
Water Side (Standard)	BPHE Inlet Pipe (Female Thread)	in.	1-1/4		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		2 x 1-1/4	
	BPHE Outlet Pipe (Female Thread)	in.	1-1/4		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		2 x 1-1/4	
	Drain Pipe (Female Thread)	in.	1/2		3/8		3/8		3/8		3/8	2 x 3/8		2 x 3/8		2 x 3/8		2 x 3/8	
	Maximum System Water Pressure (BPHE)	psi	285		464														
	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)	gpm	15.9 - 39.6 (13.2)																
Water Side (Geothermal)	Inlet Water Temperature Range Cooling [4]	°F	27 - 113		23 - 113														
	Inlet Water Temperature Range Heating [4]	°F	14 - 95																
	Water Flow Rate [5]	gpm	21.2 - 39.6																
Unit	Weight (230V/460V)	lbs.	434.3 / 440.9		434.3 / 440.9		438.7 / 445.3		438.7 / 445.3		2 x 434.3 / 2 x 440.9	2 X 440.9 / 2 X 440.9		438.7 + 434.3 / 445.3 + 440.9		2 x 438.7 / 2 x 445.3		2 x 438.7 / 2 x 445.3	
	Dimensions (H x W x D)	in.	38-9/16 x 30-1/8 x 22-1/16		38-9/16 x 30-1/8 x 22-1/16						38-9/16 x 30-1/8 x 22-1/16	38-9/16 x (30-1/8 x 2) x 22-1/16							
Electrical (208-230V)	Maximum Overcurrent Protection (MOP)	V	40		40		50		60		40 + 40	40 + 40		40 + 50		50 + 50		50 + 60	
	Minimum Circuit Amps (MCA)	A	37.9		38.3		45.2		52.6		37.9 + 38.3	38.3 + 38.3		38.3 + 45.2		45.2 + 45.2		45.2 + 52.6	
Electrical (460V)	Maximum Overcurrent Protection (MOP)	A	20		20		25		25		17.2 + 17.3	20 + 20		25 + 25		25 + 25		25 + 25	
	Minimum Circuit Amps (MCA)	A	17.2		17.3		20.4		23.8		20 + 20	17.3 + 17.3		17.3 + 20.4		20.4 + 20.4		20.4 + 23.8	
Compressor	Compressor Type		Inverter																
	Compressor Capacity Control	%	23 - 100		16 - 100		14 - 100		11 - 100			8 - 100		8 - 100		7 - 100		6 - 100	

			24 Ton		26 Ton		28 Ton		30 Ton		32 Ton		34 Ton		36 Ton	
Model	208-230V/3Ph/60Hz		RWEQ288TBTJA		RWEQ312TBTJA		RWEQ336TBTJA		RWEQ360TBTJA		RWEQ384TBTJA		RWEQ408TBTJA		RWEQ432TBTJA	
	460V/3Ph/60Hz		RWEQ288TBYDA		RWEQ312TBYDA		RWEQ336TBYDA		RWEQ360TBYDA		RWEQ384TBYDA		RWEQ408TBYDA		RWEQ432TBYDA*	
	Combination		2 x RWEQ144TB		2 x RWEQ96TB RWEQ120TB		RWEQ96TB 2 x RWEQ120TB		3 x RWEQ120TB		2 x RWEQ120TB RWEQ144TB		RWEQ120TB 2 x RWEQ144TB		3 x RWEQ144TB	
Performance	Rated Cooling Capacity [1]	BTU/h	274,000		296,000		320,000		342,000		366,000		388,000		402,000	
	Rated Heating Capacity [2]	BTU/h	274,000		298,000		320,000		342,000		366,000		388,000		402,000	
	Sound Pressure Level @ 3 ft.	dB(A)	63.5		59		59.5		60		62		64		65	
Refrigerant Piping	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.	3/4	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
	Suction Gas Pipe (Main Line)	in.	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
	Discharge Gas Pipe (Main Line)	in.	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
Connection Ratio	Standard Connectable Indoor Unit Ratio [3]	%	50 - 150													
	Maximum Number of Indoor Units	Qty.	49		54		58		62		64		64		64	
Water Side (Standard)	BPHE Inlet Pipe (Female Thread)	in.	2 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4	
	BPHE Outlet Pipe (Female Thread)	in.	2 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4		3 x 1-1/4	
	Drain Pipe (Female Thread)	in.	2 x 3/8		3 x 3/8		3 x 3/8		3 x 3/8		3 x 3/8		3 x 3/8		3 x 3/8	
	Maximum System Water Pressure (BPHE)	psi	464													
	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)	gpm	15.9 - 39.6 (13.2)													
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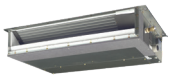
	Water Flow Rate [5]	gpm	21.2 - 39.6													
Unit	Weight (230V/460V)	lbs.	2 x 438.7 / 2 x 445.3		2 x 434.3 + 438.7 2 x 440.9 + 445.3		434.3 + 2 x 438.7 440.9 + 2 x 445.3		434.3 + 2 x 438.7 / 440.9 + 2 x 445.3		3 x 438.7 / 3 x 445.3		3 x 438.7 / 3 x 445.3		3 x 438.7 / 3 x 445.3	
	Dimensions (H x W x D)	in.	38-9/16 x 30-1/8 x 22-1/16													
Electrical (208-230V)	Maximum Overcurrent Protection (MOP)	V	60 + 60		40 + 40 + 50		40 + 50 + 50		50 + 50 + 50		50 + 50 + 50		50 + 60 + 60		60 + 60 + 60	
	Minimum Circuit Amps (MCA)	A	52.6 + 52.6		38.3 + 38.3 + 45.2		38.3 + 45.2 + 45.2		45.2 + 45.2 + 45.2		45.2+ 45.2 + 52.6		45.2 + 52.6 + 52.6		52.6 + 52.6 + 52.6	
Electrical (460V)	Maximum Overcurrent Protection (MOP)	A	25 + 25		20 + 20 + 25		20 + 25 + 25		25 + 25 + 25		25 + 25 + 25		25 + 25 + 25		25 + 25 + 25	
	Minimum Circuit Amps (MCA)	A	23.8 + 23.8		17.3 + 17.3 + 20.4		17.3 + 20.4 + 20.4		20.4 + 20.4 + 20.4		20.4 + 20.4 + 23.8		20.4 + 23.8 + 23.8		23.8 + 23.8 + 23.8	
Compressor	Compressor Type		Inverter													
	Compressor Capacity Control	%	5 - 100		5 - 100		5 - 100		5 - 100		4 - 100		4 - 100		4 - 100	

[1] Indoor temp.: 80°FDB, 67°FWB/inlet water temp.: 85°F/ Equivalent piping length : 25 ft., level difference : 0 ft.
[2] Indoor temp.: 70°FDB, 60°FWB/inlet water temp.: 70°F / Equivalent piping length: 25 ft., level difference : 0 ft.
[3] Varies based on indoor and condensing unit model selected; refer to Engineering Manual for details.
[4] Application rules apply below 50°F. Please contact your local Daikin office for design assistance and approval.
[5] Please note that a water strainer (standard accessory for the *T-Series*, field supplied for the PC-series) is required for each condensing unit.
[6] PC series model. Some features and benefits may not be available for this model.

VRV INDOOR UNITS

Designed for premium comfort and versatility, Daikin's wide selection of ducted and duct-free indoor units with a sleek and sophisticated design provides zoning flexibility and comfort control for almost any application.

	INDOOR UNIT TYPE		CAPACITY															
		MBH	5.8	7.5	09	12	15	18	24	30	36	42	48	54	60	72	96
		TONS	0.5	0.6	0.75	1	1.25	1.5	2	2.5	3	3.5	4	4.5	5	6	8
DUCTED	FXMQ_TBVJU HSP DC Concealed Ducted Unit			▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA		▲ 🔧 OSA	▲ 🔧 OSA			
DUCTED	FXSQ_TBVJU MSP Concealed Ducted Unit		▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA		▲ 🔧 OSA	▲ 🔧 OSA			
DUCTED	FXDQ_MVJU LSP Slim Concealed Ducted Unit			▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA		▲ 🔧 OSA	▲ 🔧 OSA								
DUCTED	FXTQ_TBVJU Multi-Position Air Handling Unit (Upflow, Downflow, Horizontal Left and Horizontal Right)					▲ OSA		▲ OSA	▲ OSA	▲ OSA	▲ OSA	▲ OSA	▲ OSA	▲ OSA	▲ OSA		
DUCTED	FXMQ_MVJU HSP High Capacity Concealed Ducted Unit															▲ OSA	▲ OSA
DUCTED	FXNQ_MVJU9 Concealed Floor- Standing Unit			▲ OSA	▲ OSA	▲ OSA		▲ OSA	▲ OSA								
DUCT-FREE	FXFQ_AAVJU *Round Flow* Sensing Cassette, Ceiling Mounted ROUND FLOW			▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA		▲ 🔧 OSA	▲ 🔧 OSA			
DUCT-FREE	FXUQ_PVJU 4-Way Blow Ceiling-Suspended Cassette							▲ 🔧	▲ 🔧	▲ 🔧	▲ 🔧						
DUCT-FREE	FXZQ_TBVJU *VISTA* 2x2 Cassette for *VRV*		▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA									
DUCT-FREE	FXEQ_PVJU Ceiling-Mounted Cassette (Single Flow)			▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA	▲ 🔧 OSA								
DUCT-FREE	FXHQ_MVJU Ceiling-Suspended Unit					▲			▲		▲						
DUCT-FREE	FXAQ_PVJU Wall-Mounted Unit			▲	▲	▲		▲	▲								
DUCT-FREE	FXLQ_MVJU9 Floor-Standing Unit			▲ OSA	▲ OSA	▲ OSA		▲ OSA	▲ OSA								

▲ Comfort cooling/heating 🔧 Condensate pump standard OSA Outside air connection possible

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™ Interface module will work with any *BACnet*/IP compatible Building Management System.

DZK Zoning Box for FXMQ_TB and FXSQ indoor units

DZK Wired, Wireless, and Wireless Lite thermostat options

Air Treatment Systems

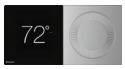
Daikin's Outside Air Processing Unit can combine fresh air treatment and air conditioning, supplied from a single system.

The compact Energy Recovery Ventilator (EEG) 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
			
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	300/300/170 470/470/390 600/600/500 1200/1200/930

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 *VRV* CONTROLS										
	 *Madoka* Remote Controller	 DKN Cloud Wi-Fi Adaptor	 *Navigation* Remote Controller	 Daikin *One+* Smart Thermostat	 Daikin *One* Touch	 *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											■

* Requires WAGO® IO module (for use with iTM only).

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

About Daikin:

Daikin Industries, Ltd. (DIL) is a global Fortune 1000 company and is recognized as one of the largest HVAC (Heating, Ventilation, Air Conditioning) manufacturers in the world. Founded in 1924, Daikin is celebrating 100 years of HVAC worldwide leadership. DIL is primarily engaged in developing indoor comfort systems and refrigeration products for residential, commercial, and industrial applications. Its consistent success is derived, in part, from a focus on innovative, energy-efficient, and premium quality indoor climate and comfort management solutions.

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

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.

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DAIKIN

Our continuing commitment to quality products may mean a change in specifications without notice.

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