



VRV IV

ENERGY-INTELLIGENT™ HEATING AND COOLING SYSTEMS

VRV IV Air-Cooled Heat Recovery

Daikin's VRV IV systems integrate advanced technology to provide comfort control with maximum energy efficiency and reliability. VRV IV provides a heating and cooling solution for multi-family residential to large commercial applications. Daikin VRV IV is the first variable refrigerant flow (VRF) system to be assembled in North America.

Main Features and Benefits:

- Total comfort solution for heating, cooling, ventilation and controls
- All inverter compressors and inverter fan motors optimize part load efficiency.
- Redesigned and optimized for low total Life Cycle Cost (LCC)
- New single/multiple port branch selector boxes provide compact dimensions and a wide range of product offerings (single, 4, 6, 8, 10 and 12 port options)
- Reduced install cost and increased flexibility as compared to VRV III with larger capacity single modules up to 14 Tons and system capacity up to 38Tons
- Efficiency improved over VRV III by an average of 21% with IEER Values now up to 29.3
- Improved seasonal efficiency as compared to VRV III with automatic and customizable Variable Refrigerant Temperature (VRT) climate tuning
- Best-In-class warranty* with 10 year compressor and parts limited warranty as standard
- Reduced commissioning time vs. VRV III with VRV configurator software and Graphical User Interface (GUI)
- Design flexibility with long piping lengths up to 3,280 ft. total and up to 100 ft. vertical separation between indoor units
- Take advantage of Daikin's unique zone and centralized controls that are optimized for the specific needs of North America



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.

FIND OUT MORE ABOUT DAIKIN VRV.

* Complete warranty details available from your local distributor or manufacturer's representative.



COMMERCIAL ■ RENOVATION ■ NEW CONSTRUCTION

VRV IV | AIR COOLED HEAT RECOVERY

VRV IV Operation

Lower capacity is required to cool and heat a building during mid season
Adapting to required heat load by variable refrigerant volume



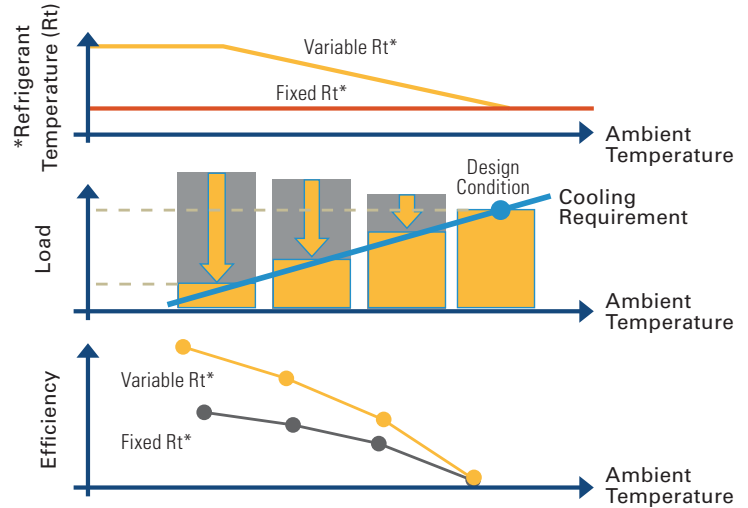
A VRV system adapts to the required changes in capacity by varying the refrigerant volume. This results in an increase in efficiency at part load operation



The efficiency of VRV IV is further increased by adjusting the refrigerant temperature dependant on the space load and weather conditions



Up to 28% Improved Seasonal Cooling Efficiency vs. VRV III

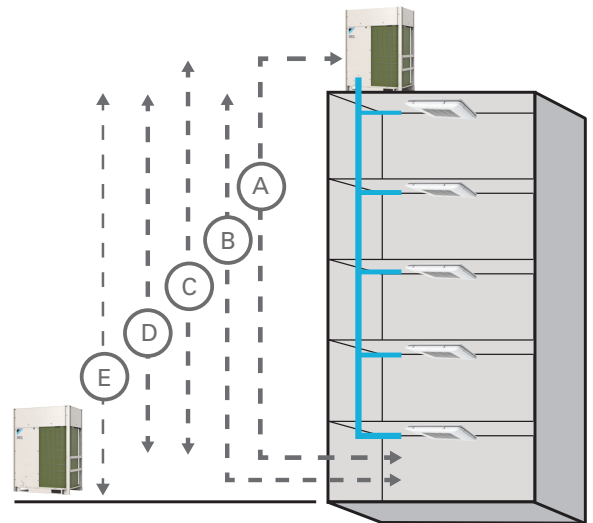


The above graphs are intended only to depict how advantages of the new Daikin VRV IV system combine to achieve the stated increase in seasonal efficiency. The graphs do not reflect test results, are not to scale and therefore do not quantify the effect of any such advantage.

PIPING FLEXIBILITY:

The VRV IV 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 12 floors to be served from a single VRV System
- Ideal for mid to high rise chiller or WSHP replacement projects

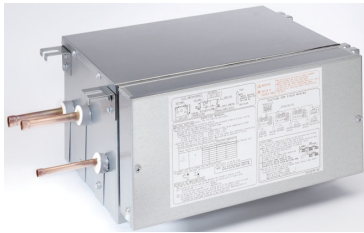


Daikin VRV IV Piping

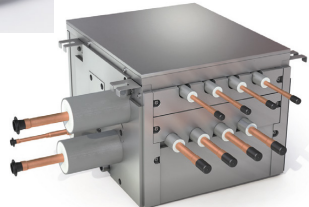
Maximum total one-way piping length		3282 ft.
Maximum piping length between outdoor unit and indoor unit - A		541 ft.
Maximum piping length between 1st branch connection and indoor unit (with application rules) - B		131 ft. (295 ft.)
Maximum piping length between indoor unit and closest branch connection		131 ft.
Maximum vertical difference between outdoor unit and indoor unit (with application rules)	OU above IUs - C	164 ft. (295 ft.)
	OU below IUs - E	131 ft. (195 ft. for VRV IV HR)
Maximum vertical difference between indoor units - D		100 ft.



DAIKIN VRV IV BRANCH SELECTOR BOXES:



BSQ36TVJ, BSQ60TVJ, & BSQ96TVJ Single Port



BS4Q54TVJ



BS6Q54TVJ



BS10Q54TVJ

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.

- Extended range of product offerings with 4, 6, 8, 10 and 12 port options
- No drain or condensate consideration required
- Unlimited number of unused ports per box or system
- Reduced electrical and mechanical installation costs
- Ultimate flexibility – Choose multi-port or single-port styles to customize your design
- Up to 72% reduction in footprint, as compared to previous generation models
- Up to 17% lower sound levels compared to current VRV III models
- Up to 65% reduction in weight, as compared to previous generation models

Technical data for single-port branch selector boxes

Model	BSQ36TVJ	BSQ60TVJ	BSQ96TVJ
Power supply	1 phase, 208/230V, 60Hz		
Number of branches	1	1	1
Maximum capacity index	36	60	96
Maximum connectable indoor units	4	8	8
Mass (Weight) lbs.	27	27	33
Dimensions (HxWxD) in.	8-1/8 x 15-1/4 x 12-13/16		

Technical data for multi-port branch selector boxes

Model	BS4Q54TVJ	BS6Q54TVJ	BS8Q54TVJ	BS10Q54TVJ	BS12Q54TVJ
Power supply	1 phase, 208/230V, 60Hz				
Number of branches	4	6	8	10	12
Maximum capacity index per branch	54				
Maximum total capacity index	144	216	290		
Maximum connectable indoor units per branch	5				
Mass (Weight) lbs.	49	68	73	101	106
Dimensions (HxWxD) in.	11-3/4 x 14-9/16 x 18-15/16	11-3/4 x 22-13/16 x 18-15/16	11-3/4 x 32-5/16 x 18-15/16		11-3/4 x 32-5/16 x 18-15/16

Technical Data for VRV IV Heat Recovery Outdoor Units

		6 Ton		8 Ton		10 Ton		12 Ton		14 Ton	
Model	208-230V/3Ph/60Hz		REYQ72TTJU	REYQ96TTJU	REYQ120TTJU	REYQ144TTJU	REYQ168TTJU				
	460V/3Ph/60Hz		REYQ72TYDN	REYQ96TYDN	REYQ120TYDN	REYQ144TYDN	REYQ168TYDN				
Performance	Rated Cooling Capacity	BTU/h	69,000	92,000	114,000	138,000	160,000				
	Rated Heating Capacity	BTU/h	77,000	103,000	129,000	154,000	180,000				
	Sound Pressure	dB(A)	58	61		65					
	IEER (Ducted / Non-Ducted)		20.8 / 26.2	21.0 / 29.3	20.7 / 25.4	20.7 / 24.2	19.5 / 22.0				
	Airflow	CFM	5,544	5,827	6,286	8,228	8,228				
Unit	Weight (REYQ_TT /	lbs	507 / 527	703 / 717	780 / 717	780 / 794					
	Dimensions (H x W x D)	in.	66-11/16 x 36-11/16 x 30-3/16		66-11/16 x 48-7/8 x 30-3/16						
		16 Ton		18 Ton		20 Ton		22 Ton		24 Ton	
Model	208-230V/3Ph/60Hz		REYQ192TTJU	REYQ216TTJU	REYQ240TTJU	REYQ264TTJU	REYQ288TTJU				
	460V/3Ph/60Hz		REYQ192TYDN	REYQ216TYDN	REYQ240TYDN	REYQ264TYDN	REYQ288TYDN				
	Combination		1 x REYQ120T 1 x REYQ72T	1 x REYQ120T 1 x REYQ96T	1 x REYQ144T 1 x REYQ96T	1 x REYQ144T 1 x REYQ120T	2 x REYQ144T				
Performance	Rated Cooling Capacity	BTU/h	184,000	206,000	228,000	251,000	274,000				
	Rated Heating Capacity	BTU/h	206,000	231,000	257,000	283,000	308,000				
	Sound Pressure	dB(A)	63	64	66		68				
	IEER (Ducted / Non-Ducted)		20.4 / 22.9	20.2 / 22.9	19.2 / 21.9	18.1 / 21.6	18.2 / 21.4				
	Airflow	CFM	5,544 + 6,286	5,827 + 6,286	5,827 + 8,228	6,286 + 8,228	8,228 + 8,228				
Unit	Weight (REYQ_TT /	lbs	507 + 703 / 527 + 717	703 + 703 / 717 + 717	703 + 780 / 717 + 794		780 + 780 / 794 + 794				
	Dimensions (H x W x D)	in.	(66-11/16 x 36-11/16 x 30-3/16) + (66-11/16 x 36-11/16 x 30-3/16)								
		26 Ton		28 Ton		30 Ton		32 Ton		34 Ton	
Model	208-230V/3Ph/60Hz		REYQ312TTJU	REYQ336TTJU	REYQ360TTJU	REYQ384TTJU	REYQ408TTJU				
	460V/3Ph/60Hz		REYQ312TYDN	REYQ336TYDN	REYQ360TYDN	REYQ384TYDN	REYQ408TYDN				
	Combination		1 x REYQ168T 1 x REYQ144T	2 x REYQ168T	3 x REYQ120T	1 x REYQ168T 1 x REYQ120T 1 x REYQ96T	1 x REYQ168T 1 x REYQ144T 1 x REYQ96T				
Performance	Rated Cooling Capacity	BTU/h	297,000	320,000	342,000	365,000	388,000				
	Rated Heating Capacity	BTU/h	334,000	360,000	385,000	411,000	427,000				
	Sound Pressure	dB(A)	68		66	68	69				
	IEER (Ducted / Non-Ducted)		17.8 / 20.2	17.0 / 19.0	17.9 / 19.6	16.6 / 18.3	16.5 / 17.2				
	Airflow	CFM	8,228 + 8,228		6,286 + 6,286 + 6,286	5,827 + 6,286 + 8,228	5,827 + 8,228 + 8,228				
Unit	Weight (REYQ_TT /	lbs	780 + 780 / 794 + 794		703 + 703 + 703 / 717 + 717 + 717	703 + 703 + 780 / 717 + 717 + 794	780 + 780 + 780 / 717 + 794 + 794				
	Dimensions (H x W x D)	in.	(66-11/16 x 36-11/16 x 30-3/16) + (66-11/16 x 36-11/16 x 30-3/16)		(66-11/16 x 48-7/8 x 30-3/16) + (66-11/16 x 47-7/8 x 30-3/16) + (66-11/16 x 48-7/8 x 30-3/16)						
		36 Ton		38 Ton							
Model	208-230V/3Ph/60Hz		REYQ432TTJU	REYQ456TTJU							
	460V/3Ph/60Hz		REYQ432TYDN	REYQ456TYDN							
	Combination		3 x REYQ144T	1 x REYQ168T 2 x REYQ144T							
Performance	Rated Cooling Capacity	BTU/h	411,000	424,000							
	Rated Heating Capacity	BTU/h	434,000	447,000							
	Sound Pressure	dB(A)	68								
	IEER (Ducted / Non-Ducted)		16.5 / 16.2	15.9 / 16.2							
	Airflow	CFM	8,228 + 8,228 + 8,228								
Unit	Weight (REYQ_TT /	lbs	780 + 780 + 780 / 794 + 794 + 794								
	Dimensions (H x W x D)	in.	(66-11/16 x 48-7/8 x 30-3/16) + (66-11/16 x 47-7/8 x 47-7/8 x 30-3/16)								

Operation range for all VRV IV Heat Recovery Outdoor Units

Cooling °F DB 23 - 122
 Heating °F WB -13 - 60

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