

# THE PERFORMANCE STANDARD HAS BEEN SET. BY DAIKIN.



## DAIKIN VRV®III HIGHEST OVERALL EFFICIENCY

Daikin AC is pleased to announce the **latest certified efficiency data** in accordance with ANSI/AHRI Standard 1230-2010, "Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment" for the VRVIII PB Series. The VRVIII PB 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- 2010.

With this standardized presentation of data, Daikin's VRV system remains one of the most efficient heating and air conditioning systems available in the North American market, as well as the overall efficiency leader in the VRF category.

### Heat Pump Range 6 to 30 Ton



### Heat Recovery Range 6 to 28 Ton



### Explanation of AHRI Std. 1230 Certification Program

- AHRI 1230 has test and rating requirements for VRF Multi-Split Air-Conditioning and Heat Pump Equipment.
- It allows manufacturers to rate, test and certify their ratings.\*
- It provides the ability to show the true VRV benefits during part load cooling operation (IEER) and low outdoor ambient heating capacity.
- All efficiency values are based on the total system performance including:
  - Outdoor unit capacity output and power input
  - Indoor unit capacity output and power input
  - The tested piping length increases based on the increase in system capacity to reflect real life building performance
- The efficiency levels shown are for Ducted, Non-Ducted and Mixed indoor unit combinations.
  - Certified ratings will be published in the AHRI directory in Sept. 2011 or sooner

### What does IEER stand for?

IEER stands for Integrated Energy Efficiency Ratio and is defined in ANSI/ AHRI 1230-2010 as "a single number that is a cooling seasonal efficiency figure of merit."

### What does SCHE stand for?

SCHE stands for Simultaneous Cooling and Heating Efficiency. This measures the system efficiency of a heat recovery system during simultaneous operation (example – cooling capacity 50% and heating capacity 50%).

### System Efficiency Ratings Metrics

Cooling Full Load - Energy Efficiency Ratio	EER
Integrated (Seasonal Cooling) Energy Efficiency Ratio	IEER
High Temperature Coefficient of Performance	COP (47°F)
Low Temperature Coefficient of Performance	COP (17°F)
Simultaneous Cooling and Heating Efficiency (Heat Recovery Only)	SCHE

\*Systems sized 65-300MBH are certified to ANSI/AHRI 1230-2010. Systems above 300MBH are rated to ANSI/AHRI 1230-2010.



# Cooling - AHRI Performance Ratings



System Type	Function	System Name	Nominal Capacity	Part Load			Full Load		
				IEER Ducted	IEER Non-Ducted	IEER Mixed	EER Ducted	EER Non-Ducted	EER Mixed
VRV III 460V	Heat Pump	RXYQ72PBYD	6-Ton	21.5	25.8	23.7	12.8	14.1	13.4
		RXYQ96PBYD	8-Ton	18.8	23.0	20.9	12.5	13.5	13.0
		RXYQ120PBYD	10-Ton	17.2	20.4	18.8	11.9	12.5	12.2
		RXYQ144PBYD	12-Ton	22.1	20.0	24.4	12.7	14.0	13.4
		RXYQ168PBYD	14-Ton	20.2	22.0	21.1	12.1	12.4	12.3
		RXYQ192PBYD	16-Ton	18.2	19.9	19.1	11.8	11.7	11.8
		RXYQ216PBYD	18-Ton	18.3	19.2	18.8	11.7	11.6	11.7
		RXYQ240PBYD	20-Ton	16.0	16.5	16.3	11.6	11.5	11.6
		RXYQ264PBYD	22-Ton	19.1	20.8	20.0	11.7	11.3	11.5
		RXYQ288PBYD	24-Ton	18.4	19.6	19.0	10.5	11.5	11.0
	RXYQ312PBYD	26-Ton	17.0	17.3	17.2	11.5	10.7	11.1	
	RXYQ336PBYD	28-Ton	16.1	15.9	16.0	10.7	10.8	10.8	
	RXYQ360PBYD	30-Ton	15.3	15.1	15.2	10.8	9.8	10.3	
	Heat Recovery	REYQ72PYDN	6-Ton	20.5	25.1	22.8	13.8	15.4	14.6
		REYQ96PYDN	8-Ton	18.8	22.9	20.9	12.1	13.2	12.7
		REYQ120PYDN	10-Ton	16.1	20.2	18.2	11.3	12.1	11.7
		REYQ144PBYD	12-Ton	20.0	22.5	21.3	13.7	13.8	13.8
		REYQ168PBYD	14-Ton	18.5	20.3	19.4	11.5	12.0	11.8
		REYQ192PBYD	16-Ton	16.9	18.7	17.8	11.0	11.2	11.1
		REYQ216PBYD	18-Ton	16.4	17.2	16.8	10.8	10.7	10.8
REYQ240PBYD		20-Ton	15.4	16.1	15.8	10.1	10.1	10.1	
REYQ264PBYD		22-Ton	17.8	18.5	18.2	11.3	10.8	11.1	
REYQ288PBYD		24-Ton	16.0	18.4	18.0	10.7	10.7	10.7	
REYQ312PBYD	26-Ton	16.2	16.9	16.6	10.3	10.2	10.3		
REYQ336PBYD	28-Ton	15.9	15.6	15.8	10.2	10.2	10.2		
VRV III 208/230V	Heat Pump	RXYQ72PBTJ	6-Ton	21.5	25.8	23.7	12.8	14.1	13.4
		RXYQ96PBTJ	8-Ton	17.0	23.0	20.9	12.5	13.5	13.0
		RXYQ120PBTJ	10-Ton	17.2	20.4	18.8	11.9	12.5	12.2
		RXYQ144PBTJ	12-Ton	17.6	20.5	19.1	11.3	11.3	11.3
		RXYQ168PBTJ	14-Ton	20.2	22.0	21.1	12.1	12.4	12.3
		RXYQ192PBTJ	16-Ton	18.2	19.9	19.1	11.8	11.7	11.8
		RXYQ216PBTJ	18-Ton	18.3	19.2	18.8	11.7	11.6	11.7
		RXYQ240PBTJ	20-Ton	16.1	16.5	16.3	11.6	11.5	11.6
		RXYQ264PBTJ	22-Ton	19.1	20.8	20.0	11.7	11.3	11.5
		RXYQ288PBTJ	24-Ton	18.4	19.6	19.0	10.5	11.5	11.0
	RXYQ312PBTJ	26-Ton	17.0	17.3	17.2	11.5	10.7	11.1	
	RXYQ336PBTJ	28-Ton	16.1	15.9	16.0	10.7	10.8	10.8	
	RXYQ360PBTJ	30-Ton	15.3	15.1	15.2	10.8	9.8	10.3	
	Heat Recovery	REYQ72PTJU	6-Ton	20.5	25.1	22.8	13.8	15.4	14.6
		REYQ96PTJU	8-Ton	18.8	22.9	20.9	12.1	13.2	12.7
		REYQ120PTJU	10-Ton	16.1	20.2	18.2	11.3	12.1	11.7
		REYQ144PBTJ	12-Ton	16.5	18.9	17.7	10.6	11.2	10.9
		REYQ168PBTJ	14-Ton	17.5	20.3	19.4	11.5	12.0	11.8
		REYQ192PBTJ	16-Ton	16.9	18.7	17.8	11.0	11.2	11.1
		REYQ216PBTJ	18-Ton	16.4	17.2	16.8	10.8	10.7	10.8
REYQ240PBTJ		20-Ton	15.4	16.1	15.8	10.1	10.1	10.1	
REYQ264PBTJ		22-Ton	17.8	18.5	18.2	11.3	10.8	11.1	
REYQ288PBTJ		24-Ton	17.6	18.4	18.0	10.7	10.7	10.7	
REYQ312PBTJ	26-Ton	16.2	16.9	16.6	10.3	10.2	10.3		
REYQ336PBTJ	28-Ton	15.9	15.6	15.8	10.2	10.2	10.2		

# Heating - AHRI Performance Ratings



System Type	Function	System Name	Nominal Capacity	Full Load					
				COP@47F Ducted	COP@47F Non-Ducted	COP@47F Mixed	COP@17F Ducted	COP@17F Non-Ducted	COP@17F Mixed
Daikin VRV III 460V	Heat Pump	RXYQ72PBYD	6-Ton	3.71	4.00	3.86	2.40	2.65	2.53
		RXYQ96PBYD	8-Ton	3.65	4.20	3.93	2.50	2.85	2.68
		RXYQ120PBYD	10-Ton	3.63	3.80	3.72	2.50	2.65	2.58
		RXYQ144PBYD	12-Ton	3.70	3.90	3.80	2.45	2.55	2.50
		RXYQ168PBYD	14-Ton	3.70	3.95	3.83	2.45	2.65	2.55
		RXYQ192PBYD	16-Ton	3.55	3.70	3.63	2.45	2.55	2.50
		RXYQ216PBYD	18-Ton	3.60	3.80	3.70	2.45	2.60	2.53
		RXYQ240PBYD	20-Ton	3.50	3.60	3.55	2.35	2.55	2.45
		RXYQ264PBYD	22-Ton	3.50	3.50	3.50	2.30	2.45	2.38
		RXYQ288PBYD	24-Ton	3.45	3.50	3.48	2.45	2.45	2.45
		RXYQ312PBYD	26-Ton	3.30	3.30	3.30	2.35	2.35	2.35
		RXYQ336PBYD	28-Ton	3.45	3.45	3.45	2.35	2.35	2.35
	RXYQ360PBYD	30-Ton	3.20	3.45	3.33	2.30	2.40	2.35	
	Heat Recovery	REYQ72PYDN	6-Ton	3.80	4.20	4.00	2.60	2.95	2.78
		REYQ96PYDN	8-Ton	3.60	3.70	3.65	2.65	2.70	2.68
		REYQ120PYDN	10-Ton	3.40	3.60	3.50	2.35	2.60	2.48
		REYQ144PBYD	12-Ton	3.60	3.80	3.70	2.40	2.55	2.48
		REYQ168PBYD	14-Ton	3.50	3.70	3.60	2.35	2.50	2.43
		REYQ192PBYD	16-Ton	3.40	3.40	3.40	2.30	2.50	2.40
		REYQ216PBYD	18-Ton	3.30	3.50	3.40	2.30	2.40	2.35
		REYQ240PBYD	20-Ton	3.20	3.33	3.27	2.35	2.40	2.38
		REYQ264PBYD	22-Ton	3.30	3.40	3.35	2.30	2.40	2.35
REYQ288PBYD		24-Ton	3.40	3.35	3.38	2.35	2.40	2.38	
REYQ312PBYD		26-Ton	3.33	3.23	3.28	2.25	2.25	2.25	
REYQ336PBYD		28-Ton	3.20	3.23	3.22	2.20	2.30	2.25	
Daikin VRV III 208/230V	Heat Pump	RXYQ72PBTJ	6-Ton	3.71	4.00	3.86	2.40	2.65	2.53
		RXYQ96PBTJ	8-Ton	3.65	4.20	3.93	2.50	2.85	2.68
		RXYQ120PBTJ	10-Ton	3.63	3.80	3.72	2.50	2.65	2.58
		RXYQ144PBTJ	12-Ton	3.40	3.60	3.50	2.45	2.55	2.50
		RXYQ168PBTJ	14-Ton	3.70	3.95	3.83	2.45	2.65	2.55
		RXYQ192PBTJ	16-Ton	3.55	3.70	3.63	2.45	2.55	2.50
		RXYQ216PBTJ	18-Ton	3.60	3.80	3.70	2.45	2.60	2.53
		RXYQ240PBTJ	20-Ton	3.50	3.60	3.55	2.35	2.55	2.45
		RXYQ264PBTJ	22-Ton	3.50	3.50	3.50	2.30	2.45	2.38
		RXYQ288PBTJ	24-Ton	3.45	3.50	3.48	2.45	2.45	2.45
		RXYQ312PBTJ	26-Ton	3.30	3.30	3.30	2.35	2.35	2.35
		RXYQ336PBTJ	28-Ton	3.45	3.45	3.45	2.35	2.35	2.35
	RXYQ360PBTJ	30-Ton	3.20	3.45	3.33	2.30	2.40	2.35	
	Heat Recovery	REYQ72PTJU	6-Ton	3.80	4.20	4.00	2.60	2.95	2.78
		REYQ96PTJU	8-Ton	3.60	3.70	3.65	2.65	2.70	2.68
		REYQ120PTJU	10-Ton	3.40	3.60	3.50	2.35	2.60	2.48
		REYQ144PBTJ	12-Ton	3.40	3.60	3.50	2.40	2.55	2.48
		REYQ168PBTJ	14-Ton	3.50	3.70	3.60	2.35	2.50	2.43
		REYQ192PBTJ	16-Ton	3.40	3.40	3.40	2.30	2.50	2.40
		REYQ216PBTJ	18-Ton	3.30	3.50	3.40	2.30	2.40	2.35
		REYQ240PBTJ	20-Ton	3.20	3.33	3.27	2.35	2.40	2.38
		REYQ264PBTJ	22-Ton	3.30	3.40	3.35	2.30	2.40	2.35
REYQ288PBTJ		24-Ton	3.40	3.35	3.38	2.35	2.40	2.38	
REYQ312PBTJ		26-Ton	3.33	3.23	3.28	2.25	2.25	2.25	
REYQ336PBTJ		28-Ton	3.20	3.23	3.22	2.20	2.30	2.25	

# SCHE Simultaneous Cooling & Heating Performance



System Type	Function	System Name	Nominal Capacity	SCHE Ducted	SCHE Non-Ducted	SCHE Mixed
Daikin VRV III 460V	Heat Recovery	REYQ72PYDN	6-Ton	18.0	21.1	19.6
		REYQ96PYDN	8-Ton	15.4	20.0	17.7
		REYQ120PYDN	10-Ton	15.3	19.6	17.5
		REYQ144PBYD	12-Ton	16.0	19.8	17.9
		REYQ168PBYD	14-Ton	16.2	19.0	17.6
		REYQ192PBYD	16-Ton	15.5	18.8	17.2
		REYQ216PBYD	18-Ton	15.0	17.9	16.5
		REYQ240PBYD	20-Ton	14.8	17.5	16.2
		REYQ264PBYD	22-Ton	15.9	19.8	17.9
		REYQ288PBYD	24-Ton	15.8	18.9	17.4
		REYQ312PBYD	26-Ton	15.4	18.9	17.2
		REYQ336PBYD	28-Ton	14.9	18.3	16.6
Daikin VRV III 208/230V	Heat Recovery	REYQ72PTJU	6-Ton	18.0	21.1	19.6
		REYQ96PTJU	8-Ton	15.4	20.0	17.7
		REYQ120PTJU	10-Ton	15.3	19.6	17.5
		REYQ144PBTJ	12-Ton	16.0	19.8	17.9
		REYQ168PBTJ	14-Ton	16.2	19.0	17.6
		REYQ192PBTJ	16-Ton	15.5	18.8	17.2
		REYQ216PBTJ	18-Ton	15.0	17.9	16.5
		REYQ240PBTJ	20-Ton	14.8	17.5	16.2
		REYQ264PBTJ	22-Ton	15.9	19.8	17.9
		REYQ288PBTJ	24-Ton	15.8	18.9	17.4
		REYQ312PBTJ	26-Ton	15.4	18.9	17.2
		REYQ336PBTJ	28-Ton	14.9	18.3	16.6

EER and COP ratings for the Daikin's VRVIII PB series are subject to the United States Department of Energy's (DOE) waiver issued in Washington, D.C. and published in the Federal Register / Vol. 76, No. 114 / Tuesday, June 14, 2011 / 34,685. IEER ratings are as defined in ASHRAE 90.1-2010.