VRF IVX Centrifugal

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Hidden air conditioning for high street premises





Complying with regulations

The Hitachi VRF IVX Centrifugal system meets all air discharge regulations for air conditioning, as the air flow does not exceed 3,600 m² (depending on model).

Guaranteed comfort and savings

It conditions up to 6 different zones and ensures greater comfort and savings thanks to independent control of each indoor unit.

Designed for every need

The air input and output grilles are interchangeable, increasing the options for installation anywhere in the premises.

Greater flexibility

This system allows a connection ratio between 75% and 120%. IVX VRF Centrifugal has Euroventcertified EER and COP, and also complies with the ErP Lot 21 Ecodesign Directive, offering high seasonal energy efficiency values certified by EUROVENT: SEER/SCOP.

Lower bills and ultraquiet operation

It is fitted with the Premium Inverter Compressor for smart defrosting and a fan regulated by a variable speed drive. Thanks to this, it: significantly reduces energy consumption, extends the working life of motors operating at reduced speed, and, above all, achieves an unrivalled noise level without any vibration.

Adjustable

The IVX VRF Centrifugal's variable speed drive adjusts speed in line with requirements and keeps motor consumption to a minimum.

Control systems

Compatible with any Hitachi control systems, BMS systems and Modbus protocols, KNX.

INX VRF Centrifugal BANK Image: Construction of the state of t

Outdoor units



RASC-4HNPE RASC-5HNPE RASC-6HNPE

RASC-8HNPE RASC-10HNPE

Compatible controls and accessories:



Accessory kit to change air discharge nozzle position, mod. FL-RASC46

FD-RASC46

VRF IVX Centrifugal

Outdoor unit			RASC-4HNPE	RASC-5HNPE	RASC-6HNPE	RASC-8HNPE	RASC-10HNP
Maximum number of connectable indoor units			5	5	5	6	
Capacity index *		%	75-120	75-120	75-120	75-120	75-12
Capacity	Cooling (Nom/Max)	kW	10.20 -11.20	12.50 -14.00	14.00 -16.00	20.00 -22.40	24.00 -26.0
	Heating (Nom /Max)	kW	11.20 -13.60	14.00 -14.90	15.50 -16.80	2 2.40 -25.30	26.00 -27.4
Consumption	Cooling (Nom)	kW	2.99	3.98	5.09	7.41	9.0
	Heating (Nom)	kW	2.95	4.12	5.74	7.00	8.5
EER			3.35	3.14	2.75	2.70	2.6
COP			3.80	3.40	2.70	3.20	3.0
SEER			5.60	5.43	5.22	5.39	5.4
SCOP			3.98	3.74	3.66	3.51	3.7
Outside operating temperatures	Cooling (DB)	°C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 4
	Heating (WB)	°C	-15 to 15.5	-15 to 15.5	-15 to 15.5	-15 to 15.5	-15 to 15.
Electrical power			3N ~400V 50 Hz	3N ~400V 50 H			
Maximum current		А	14.1	14.1	16	24.7	24.
Indoor/outdoor wiring section (shielded)		mm	2x0.75	2x0.75	2x0.75	2x0.75	2x0.7
Air flow		m3/h	3,300	3,600	3,600	6,900	6,90
Sound pressure		dB(A)	53	53	54	56	5
Sound power		dB(A)	70	71	72	74	7
Available static pressure (Nom/Max)		Ра	56/90	72/100	100/100	84/120	102 /12
Pipe diameter	Liquid-gas	inches	3/8-5/8	3/8-5/8	3/8-5/8	3/8-1	1/2-
Minimum pipe length		m	5	5	5	5	
Maximum pipe length		m	75	75	75	100	10
Maximum height difference (highest OU/ lowest OU)		m	30/20	30/20	30/20	30/20	30/2
Compressor			Scroll DC Inverter	Scroll DC Inverter	Scroll DC Inverter	Scroll DC Inverter	Scroll DC Inverte
Refrigerant			R410A	R410A	R410A	R410A	R410
Refrigerant charge (length without additional charge)		kg (m)	4.1 (30)	4.2 (30)	4.2 (30)	5.7 (30)	6.2 (30
Additional refrigerant charge		g/m	60	60	60	Must be calculated	Must be calculate
Dimensions (H x W x D)		mm	555x1,415x1,015	555x1,415x1,015	555x1,415x1,015	620x1,850x1,360	620x1,850x1,36
Weight		kg	192	192	192	300	30

*Ask about limitations on combining some indoor units.

Accessory kit to change air discharge nozzle position, mod. FL-RASC810

FD-RASC810

VRF Systems

126 Combinability

Outdoor unit	RASC - 4HNPE	RASC - 5HNPE	RASC - 6HNPE	RASC - 8HNPE	RASC - 10HNPE
Maximum number of indoor units connected	5	5	5	6	6
Ratio of indoor units connected %	75 - 120 %	75 - 120 %	75 - 120 %	75 - 120 %	75 - 120 %
(number of indoor units connected)	(≤ 4 units)				
	75 - 100 %	75 - 100 %	75 - 100 %	75 - 100 %	75 - 100 %
	(5 units)	(5 units)	(5 units)	(5 or 6 units)	(5 or 6 units)
Minimum connectable indoor unit	0.8 (≤ 4 units:				
	no restrictions)				
	0.8 (5 units:				
	with restrictions)				

In systems where all units are RCI-FSN4, the maximum allowable capacity ratio is 100 % and the maximum number of connectable indoor units is 4.

The RPI-8FSN3E and RPI-10.0FSN3E units have the following combination limitations.
The units can only be installed in 1x1 combination. There are special combinations allowed (see table below)

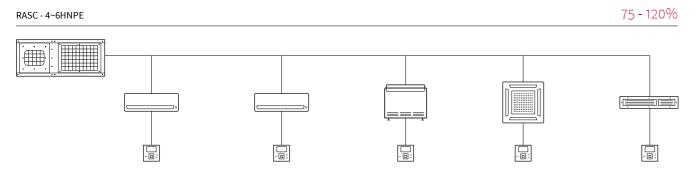
75 - 120%

Special combinations allowed

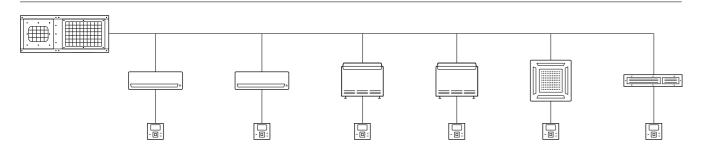
The combinations allowed with RPI-8FSN3E and RPI-10.0FSN3E units are as follows:

Two indoor units system	Three indoor units system		
8.0 + 3.0	8.0 + 2.0 + 2.0		
8.0 + 2.0	8.0 + 1.5 + 1.5		
10.0 + 3.0	8.0 + 1.0 + 1.0		
10.0 + 2.0	10 + 1.5 +1.5		
	10 + 1.0 +1.0		

Combinations



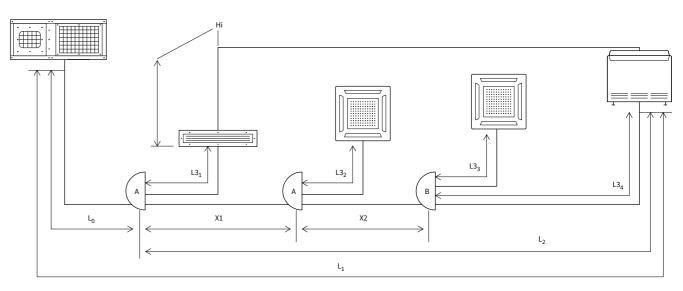
RASC -8~10HNPE



Maximum length of refrigerant pipes (in-line distribution)

Combinations

RASC-4-10HNPE



			4 HP	5 HP	6 HP	8 HP	10 HP
unit and the furthest indoor unit (L)	Actual pipe length	m	75	75	75	100	100
	Equivalent pipe length	m	95	95	95	125	125
Maximum length between the 1st Multi-ki	t and the furthest indoor u	unit (L2)	30	30	30	40	40
Maximum pipe length (L3)			10	10	10	15	15
Maximum height difference between the RASC unit and the indoor unit (H-O)	RASC unit higher than the indoor unit	m	30	30	30	30	30
	Indoor unit higher than the RASC unit	m	20	20	20	20	20
Maximum height difference between indoor units (Hi)		10	10	10	10	10	
Maximum total pipe length (L1 + L3, + L3, + L3,)		95	95	95	100	145	

- For distributions other than in-line with splitters, please contact your usual Hitachi vendor.

Pipe and splitter dimensions

Main pipe dimensions

	Liquid	Gas			Pipe size	
RASC - 4HNPE	3/8"	5/8"	Indoor unit		Liquid	Gas
RASC - 5HNPE	3/8"	5/8"	0.8 - 1.5 HP		1/4"	1/2"
RASC - 6HNPE	3/8"	5/8"	1.8 - 2.0 HP		1/4"	5/8"
RASC - 8HNPE	3/8"	1"	2.3 - 6.0 HP	inches	3/8"	5/8"
RASC - 10HNPE	1/2"	1"	8 HP		3/8"	3/4"
			10 HP		3/8"	7/8"

Splitters

Outdoor unit	Multi-kit	Multi-kit: Splitters
RASC - 4HNPE	E-102SN4	E-102SN4
RASC - 5HNPE	E-102SN4	E-162SN4
RASC - 6HNPE	E-102SN4	
RASC - 8HNPE	E-162SN4	
RASC - 10HNPE	E-162SN4	

Dimensions between the splitter and the indoor unit

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