



# Micro VRF IVX Centrifugal



## Ideal solution for city centers

Installed in suspended ceilings, units are invisible from the outside.

## Easy to implement

Suspended single-block system: less footprint. Intake and fan blower can be adjusted to suit the situation (same side or at right angle). Available pressure up to 120 Pa.

The air intake and output grids are also interchangeable, increasing your installation options in any part of the building.

## More comfort, every time

The IVX Centrifugal VRF can provide air-conditioning for up to 6 different zones and offers more comfort as you can independently control each indoor unit.

The premium compressor installed on these units provides smart defrosting. This lengthens the warming period and brings more comfort.

## Silence

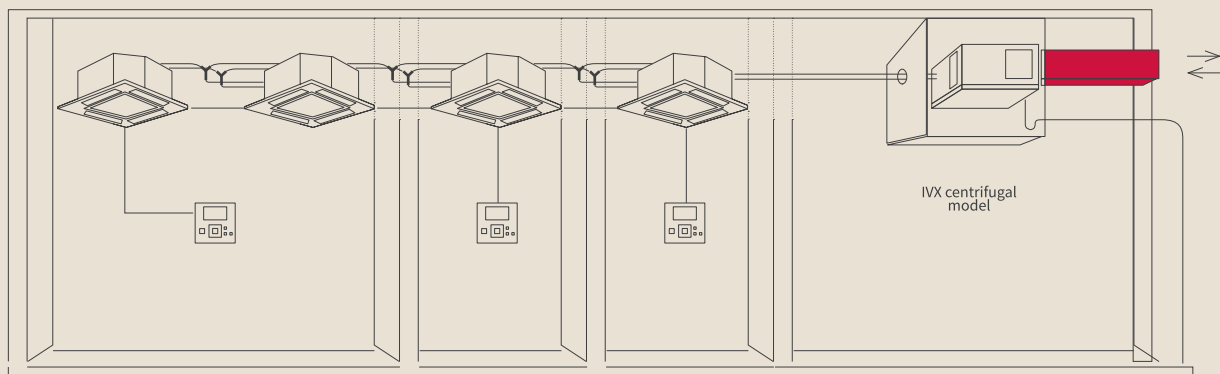
Fans are equipped with a frequency dimmer, which achieves sound levels unmatched on the market.

## Compatible with all SYSTEM FREE control systems:

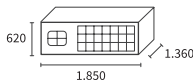
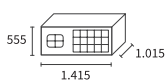
From individual control to central controls and communication interfaces for direct integration into a BMS.

## Installation

You can opt for 2 branches with up to 4 indoor units or up to 6 indoor units on one branch. Set up with a maximum of 5 different indoor units for RASC-(4-6)HNPE or 6 indoor units for RASC-(8/10)HNPE. Compatible with DX KIT.



### Outdoor units



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

RASC-8HNPE  
RASC-10HNPE

Performance, cooling	Unit	RASC-4HNPE	RASC-5HNPE	RASC-6HNPE	RASC-8HNPE	RASC-10HNPE
Rated power cooling	kW	10.00	12.50	14.00	20.00	24.00
Rated power input cooling	kW	2.99	3.98	5.09	7.41	9.02
EER	-	3.35	3.14	2.75	2.7	2.66
SEER (average climate)	-	5.6	5.43	5.22	5.39	5.48
Energy rating (Cooling)	-	A				
Operating ranges in Cooling mode*	°C	-5°C / +46°C (DB)				

**Performance, heating**

Rated power heating	kW	11.20	14.00	15.50	22.40	26.00
Rated power input heating	kW	2.95	4.12	5.74	7.00	8.52
COP	-	3.8	3.4	2.7	3.2	3.05
SCOP (average climate)	-	3.98	3.74	3.66	3.51	3.71
Energy rating (Heating)	-	A				
Operating ranges in Heating mode	°C	-15°C / +15.5°C (WB)				

**Technical features**

Airflow (cooling)	m³/h	3300	3600		6900	
Available pressure (rated / max.)	Pa	56 / 90	72 / 100	100 / 100	84 / 120	102 / 120
Sound pressure	dB(A)	70	71	72	74	75
Noise level in Cooling mode (night-time pressure)	dB(A)	52 (48)		53 (49)	55 (51)	56 (52)
Net weight	kg	192			300	303
Dimensions (H x L x D)	mm	555 x 1415 x 1015			620 x 1850 x 1360	
Diameter of pipes (Liq / Gas)	inches	3/8 - 5/8			3/8 - 1	1/2 - 1
Compressor	-	SCROLL				
Grille dimension (fresh air intake)	-	444 x 642			509 x 925	
Grille dimension (expel)	-	288 x 334			337 x 398	
Min. power of indoor unit	Hp	0.8				
Number of connectible units (min - max)	-	1 - 5			1 - 6	

**Cooling properties**

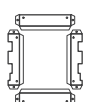
Coolant	-	R410A				
Initial coolant fill	kg	4.1	4.2		5.7	6.2
Max. length / Coolant refill	m/g/m	75 / see technical documentation			100 / see technical documentation	
Prefilled for	m	30				
Max. level difference (outdoor unit above)	m	30 / 20				

**Electrical features**

Power supply	-	400V / 3 Ph + N / 50Hz				
Max. current	A	14.1		16.0	24.7	
Cable width (EN 60 335-1) <sup>(1)</sup>	mm²	5 x 4.00			5 x 6.00	
Indoor/outdoor connection (protected)	mm²	2 x 0.75				

<sup>(1)</sup> Data shown is for indication purposes only. It is the installer's responsibility to ensure that these cable widths meet the needs of the facility and current standards.  
 \* The RASC-4HNPE, follows EcoDesign ErP Lot10. Its seasonal performance follows standard EN14825 (2013). HITACHI Centrifugal units are VRF-certified, so the specified performance applies for units only.

**Controls and compatible accessories** (see the tab VRF TWIN controls)



Fan blower intake at a right angle  
 FD-RASC46  
 FD-RASC810



Cooler connection kit  
 See next page

# Cooling connections

## Micro VRF IVX Centrifugal

### Quantity of indoor units

External unit	Hp	4	5	6	8	10
Max. number of indoor units			5			6
Min. power of indoor unit					0.8	

### Permitted connection rate

External unit	Hp	4	5	6	8	10
Max. number of indoor units	1 to 4	75~120%				
		3 to 4.8 Hp	3.8 to 6 Hp	4.5 to 7.2	6 to 9.6 Hp	7.5 to 12 Hp
	5	75~100%				
		3 to 4 Hp	3.8 to 5 Hp	4.5 to 6 Hp	6 to 8 Hp	7.5 to 10 Hp
	6	75~100%				
		-	-		6 to 8 Hp	7.5 to 10 Hp

\* If more than 4 indoor units are connected, the power of the indoor units must be balanced out according to the table below.

### Authorized combinations of indoor units for all outdoor units

The most powerful unit in the combination	0.80	1.00	1.30	1.50	1.80	2.00	2.30	2.50	3.00	4.00	5.00	6.00
The least powerful unit in the combination	0.80					1.00			1.30	1.50	1.80	2.00

### RASC-10HNPE: Special combinations allowed for the outdoor unit

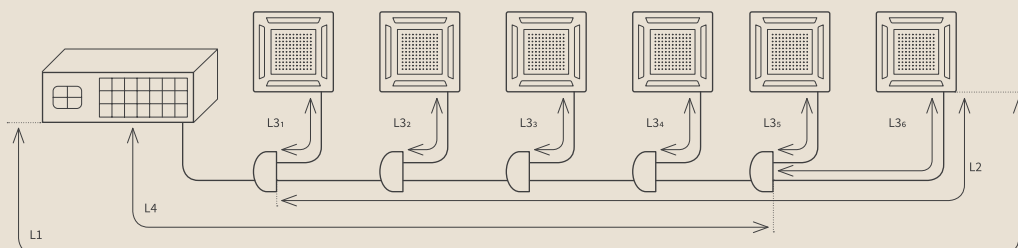
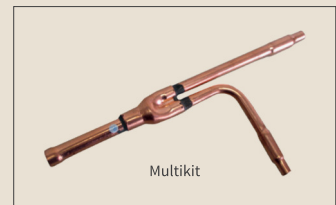
Power combinations of authorized indoor units (Hp)

Max. number of indoor units	2	8 + 3	8 + 2	10 + 3	10 + 2	-
	3	8 + 2 + 2	8 + 1.5 + 1.5	8 + 1 + 1	10 + 1.5 + 1.5	10 + 1 + 1

### Units of 4 to 10 Hp:

#### Permitted installation (1 to 6 indoor units)

- Installation with deviations.
- 1 or 2 lines with a constant diameter.
- Installation with more than 4 indoor units: cooler connections with one main permitted line (2 branches not allowed).



Permitted connection rate

External unit		Hp	4	5	6	8	10
Max. length between outdoor unit and the furthest indoor unit	Actual length	m		75			100
	Equivalent length	m		95			125
Max. level difference from outdoor unit to indoor unit (H) (outdoor unit above/below)		m			30/20		
Max. level difference from indoor unit to indoor unit		m			10		
Max. level difference from Multikit to indoor unit / Multikit to Multikit		m			3		
Total length of the pipe		m		95		100	145
Max. length of indoor unit to Multikit		m		10			15
Max. length of first Multikit to indoor unit		m		30			40

Multikit part numbers		Hp	E-102SN4	E-162SN4
Diameter of the main line			-	Constant diameter
Diameter of outdoor unit - first multikit	Liq/Gas	"	3/8 - 5/8	3/8* - 1 / 1/2 - 1

\*\*If the pipe is longer than 70m, use a 1/2" liquid line instead of 3/8".

Power of indoor unit		Hp	<1.5	1.8 to 2	2.3 to 6	8	10
Diameter of the indoor unit multikit	Liq/Gas	"	1/4 - 1/2	1/4 - 5/8	3/8 - 5/8	3/8 - 3/4	3/8 - 7/8

