

Hitachi Air Conditioning

Engineered for tomorrow.

SYSTEM
FREE

-20
+15

-5
+46

DC
INVERTER

Set Free
VRF Systems

FSNM Side Flow 2-pipe

FSNM offers a compact alternative to traditional vertical discharge VRF. A twin fan horizontal airflow unit provides the most economical use of plant space, even allowing the option of a wall mounted VRF system.

A reduction in materials results in a reduced cost, whilst still maintaining the excellent performance and reliability expected of Hitachi VRF systems, with COP's of up to 4.24.



Features and Benefits

- Capacities from 22.4kW to 37.5kW
- Compact design with side flow discharge
- Connect up to 10 indoors per outdoor unit, minimising pipework required, with individual control
- Connection ratios between 50% and 130% in relation to outdoor capacity
- Three phase
- Low sound pressure of 42dB(A)
- High energy efficiency.

SYSTEM
FREE

Flexibility built in

Hitachi's System Free indoor units can be combined with outdoor units from either our Utopia splits or Set Free VRF ranges for ultimate flexibility.

Compatibility

Compatible with heat recovery modules, active heat exchangers, and air curtains.

Compatible with H-LINK II and CS Net Web.

Optional integration with all leading BMS protocols.



RAS FSNM

SYSTEM
FREE



Set Free
VRF Systems

Side Flow 2-pipe

Outdoor Unit		RAS 8FSNM	RAS 10FSNM	RAS 12FSNM
Power supply		415V / 3Ph / 50Hz	415V / 3Ph / 50Hz	415V / 3Ph / 50Hz
Nominal Cooling Capacity	kW	22.4	28.0	33.5
Nominal Heating Capacity	kW	25.0	31.5	37.5
UK Cooling Capacity	kW	20.8	26.0	31.2
Minimum - Maximum Indoor Units ⁽¹⁾		1 - 10	1 - 10	1 - 10
Minimum - Maximum connected capacity		50% - 130%	50% - 130%	50% - 130%
Nominal Load Efficiency EER / COP ⁽²⁾		3.56 / 4.24	3.37 / 4.04	3.13 / 3.79
Energy Class (Cool/Heat)		A / A	A / A	B / A
Noise level cooling (sound pressure) (night mode)	dB(A)	53 (tbc)	56 (tbc)	59 (tbc)
Noise level heating (sound pressure)	dB(A)	55	58	61
Air flow (Cooling / Heating)	m ³ /h	7260	9000	9780
Dimensions (H x W x D)	mm	1650x1100x390	1650x1100x390	1650x1100x390
Weight	Kg	170	170	173
Piping diameter (Liquid / Gas)	Inch	3/8 / 3/4	1/2 / 7/8	1/2 / 1 1/8
	mm	9.52 / 19.05	12.70 / 22.20	12.70 / 28.60
Total Piping Length / Height Difference	m	250 / 40	250 / 40	250 / 40
Max Piping Length (outdoor to indoor)	m	100	100	100
Current Quantity of Refrigerant	Kg	5.0	5.5	6.5
Chargeless / Additional Refrigerant Charge	m/g/m	calculate	calculate	calculate
Recommended fuse size	A	16	20	25
Starting current (1Ø/3Ø)	A	8	8	8
Running current (cooling / heating)	A	9.4 / 8.8	12.4 / 11.7	15.8 / 14.7
Working Range (cooling / heating)	°C	-5°C~46(db)°C / -20°C~-15(wb)°C		
Refrigerant / GWP		R410a / 1975	R410a / 1975	R410a / 1975
Compressor type		Scroll	Scroll	Scroll

⁽¹⁾ Maximum Indoor Units - restrictions apply see Technical Catalogue

⁽²⁾ Nominal load efficiency (Cooling 35°C/27°C, Heating 7°C/20°C) Outdoor input only

⁽³⁾ Sound power level is the A-weighted sound power level [dB(A)] measured at standard rated conditions for the "cooling" mode operation in accordance to EN12102