

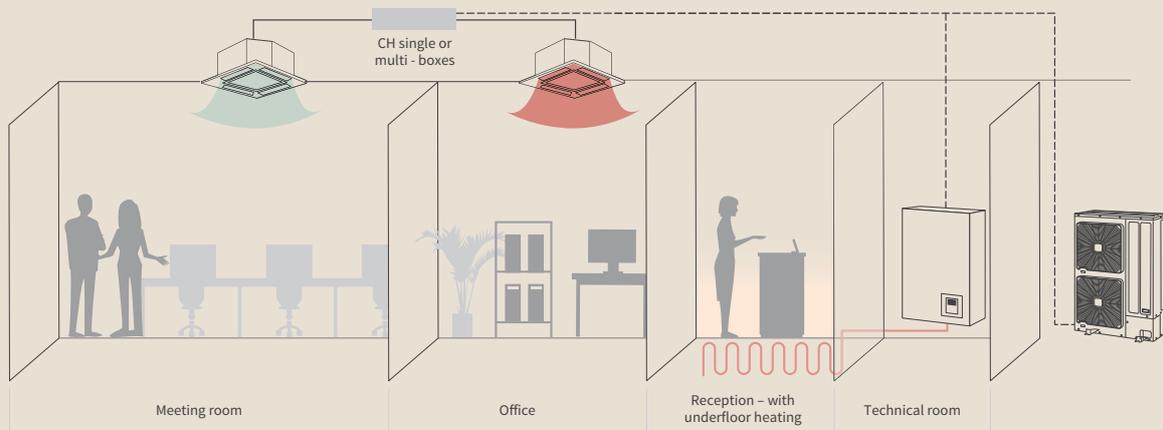
Benefits

VRF SET FREE Mini

1 Choice of 2-pipe / 3-pipe (8 to 12 Hp)



EXCLUSIVE TO HITACHI

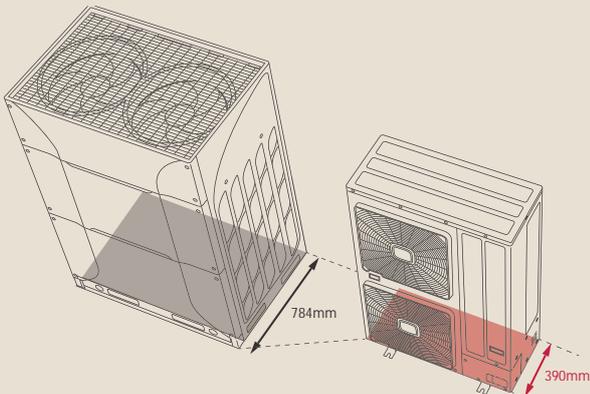


Hitachi has redefined mini VRF with its sideflow heat recovery system offering unparalleled comfort and flexibility. The new SET FREE Mini range from 8 to 12 Hp is exclusively compatible with a 2-pipe or 3-pipe installation and both from the same universal outdoor.

The SET FREE Mini is perfect when the outdoor space is limited but simultaneous heating and cooling is still required.

2 The most compact 3-pipe mini VRF in the world

-37% FOOTPRINT



With its greatly reduced footprint, the SET FREE Mini can be installed discreetly for maximum discretion.

3 High number of indoor units that can be connected

Outdoor unit (Hp)	Number of indoor units that can be connected
4	13
5	16
6	18
8	26
10	32
12	39

The new SET FREE Mini can connect up to 39 indoor units!
Exclusive: even more flexibility with a wide choice of units from 0.4Hp.

4 External static pressure available



Thanks to the external static pressure now available, our SET FREE Mini units can be installed inside a plant room while preserving the aesthetics of your buildings.

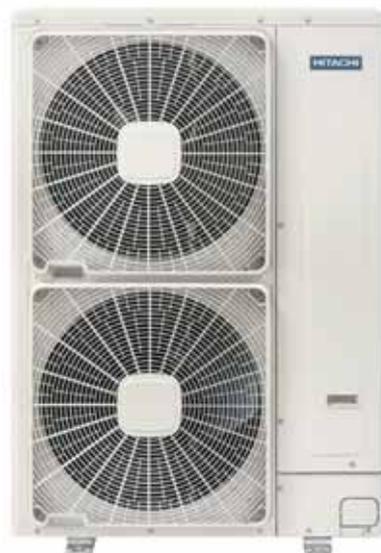
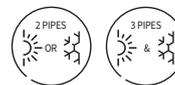
5 Compatible with all Set free indoor units with the Gentle Cool air off setting for more comfort



The GENTLE COOL air off temperature setting, accessible on the wired remote control PC-ARFP1E, adjusts the minimum blown air off temperature for your comfort. In summer, cold drafts are avoided as you can set the air off temperature to the maximum setting.

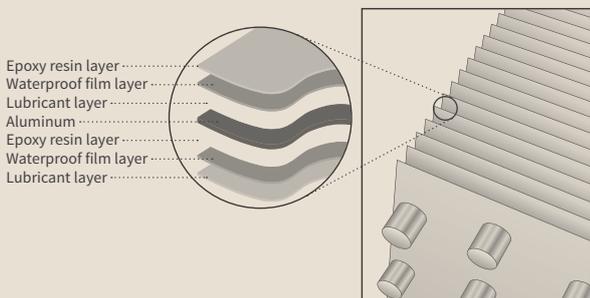


VRF SET FREE Mini



Advanced anti-corrosion treatment

With its triple coating, the SET FREE MINI offers the best protection on the market for use in tough environments.



Precise temperature control is maintained with Smooth Drive Control

Ultra-precise compressor frequency control (0.1Hz) ensures optimum outdoor unit performance under partial loads and a consistent indoor temperature. This new feature allows a single 1.1kW (0.4Hp) unit to operate on its own if required.

Smart Defrost

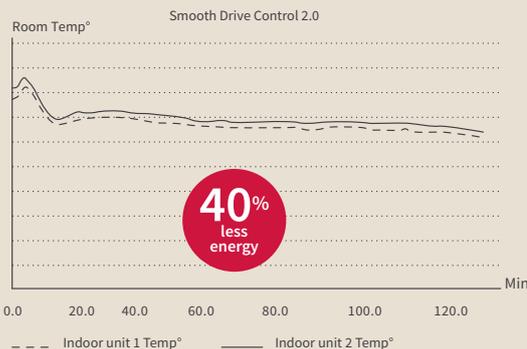
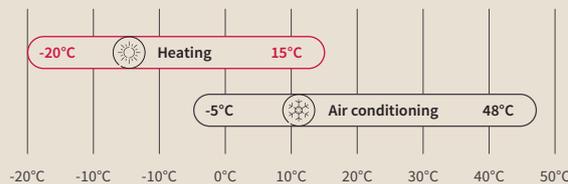
The smart defrost feature ensures a longer heating period without defrosting. This period automatically adjusts to the defrosting time of previous cycles and can extend up to 240 minutes, improving the comfort level as well as the heating capacity.

Easier maintenance

Direct access to the 7-segment display to perform tests and diagnostics. Real-time operating conditions and installation error codes are displayed for ease of servicing.

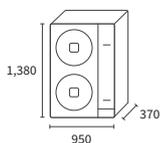
Large operating range

Outside temperature operating range

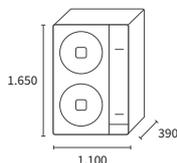


Performance at 25% partial load
 Cooling capacity = 7.88 kW
 Power Input = 1.13kW
 EER = 6.96

Outdoor units



SET FREE Mini S
 RAS-4FS(V)NME
 RAS-5FS(V)NME
 RAS-6FS(V)NME



SET FREE Mini L
 RAS-8FSXNME
 RAS-10FSXNME
 RAS-12FSXNME

Performance, cooling	Unit	RAS-4FS(V)NME	RAS-5FS(V)NME	RAS-6FS(V)NME	RAS-8FSXNME	RAS-10FSXNME	RAS-12FSXNME
Nominal Cooling capacity	kW	12.10	14.00	16.00	22.40	28.00	33.50
Rated power input cooling	kW	2.97	3.26	4.35	6.25	7.27	9.36
EER	-	4.07	4.29	3.68	3.60	3.85	3.58
SEER Three-phase / Single-phase	-	6.61 / 6.67	6.61 / 6.64	6.37 / 6.40	7.59	8.31	8.26
Working range in Cooling	-	-5°C / 48°C (DB)					

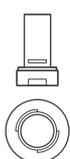
Performance, heating	Unit	RAS-4FS(V)NME	RAS-5FS(V)NME	RAS-6FS(V)NME	RAS-8FSXNME	RAS-10FSXNME	RAS-12FSXNME
Nominal Heating capacity	kW	12.50	16.00	18.00	25.00	31.50	37.50
Rated power input heating	kW	2.89	3.57	4.30	5.32	6.89	9.15
Heating capacity at -7°C	kW	8.6	10.8	12.0	18.6	21.5	25.5
Heating capacity at -15°C	kW	7.3	8.7	10.0	16.2	17.7	21.1
COP	-	4.33	4.48	4.19	4.70	4.57	4.10
SCOP	-	4.15	4.40	4.25	5.62	4.72	4.66
Working range in heating	-	-20°C / 15°C (WB)					

Technical features							
Airflow	m³/h	8,700			9,900	11,100	
Available static pressure	Pa	30					
Number of fans	-	2					
Sound power in Cooling mode	dB(A)	69	72	74	76	77	
Sound pressure in Cooling mode	dB(A)	52		53	55	59	60
Dimensions (H x L x D)	mm	1380 x 950 x 370			1650 x 1100 x 390		
Net weight of single-phase / three-phase	kg	114 / 115	118 / 119		- / 188	- / 194	- / 196
Type of compressor	-	Scroll Inverter					
Compressor number	-	1					
Max. number of connectible units	-	13	16	18	26	32	39
Connection ratio (min - max)	%	50-130					

Refrigeration characteristics								
Refrigerant	-	R410A						
Refrigerant charge	kg	3.7	4.1	4.1	4.2	5.5		
Diameter of pipes	Liquid	inches	3/8				1/2	
	Low pressure gas	inches	-			3/4	7/8	1 1/8
	High pressure gas	inches	5/8		5/8	3/4	7/8	

Electrical features							
Power supply	Three-phase (Single-phase)	-	3N ~400V 50 Hz (1 ~230V 50 Hz)			3N ~400V 50 Hz	
Max. current	Three-phase (Single-phase)	A	16 (23.5)		18	19	23
Recommended fuse size		A	20 (25)		20		25
Indoor/outdoor connection (shielded)	mm	2 x 0.75					

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



Condensate drain kit
DBS-26

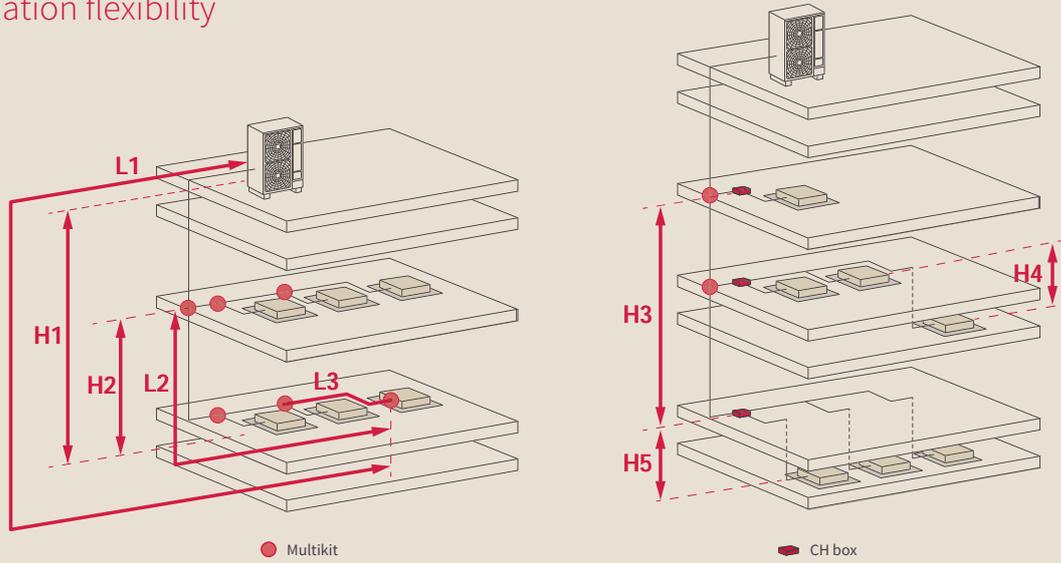


Multi kit

Piping rules

VRF SET FREE Mini

Installation flexibility



			4 to 6 Hp	8 to 12 Hp	8 to 12 Hp (heat recovery)	
Max. length of piping	Total	-	180	500	500	
	Between outdoor unit and the furthest indoor unit	L1	85	125	125	
	Between the first multikit branch and the furthest indoor unit	L2	40	90*	90*	
	Between the multikit and the indoor unit	L3	15	40	40	
	Between the CH box and the indoor unit	-	-	-	40	
Max. level difference	Between the outdoor unit and the indoor unit	Outdoor unit above the indoor unit	H1	30	50	50
		Indoor unit above the outdoor unit	-	30	40	40
	Between indoor units	H2	15	15	15	
	Between CH boxes	H3	-	-	15	
	Between indoor units connected to a CH box (same branch)	H4	-	-	4	
	Between the CH box and the indoor unit	H5	-	-	15	

(*) 40 m over the recommended number of indoor units.

Part numbers of piping accessories

Multikit



2P

3P

E-102SN4

E-102XN3

E-162SN4

E-162XN3

Header



2P

3P

MH-84AN1

MH-108XN

MH-108AN

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