





# CARRIER XPOWER DC INVERTER VRF



## >> INDEX



### **Outdoor Units**

- 11 Xpower Super Plus Series
- 23 Xpower EcoK series
- 25 Xpower Heat Recovery Series
- 30 Xpower Water Cooled VRF
- 34 Xpower Individual Series
- 39 Xpower Mini VRF



## Indoor Units

- 45 One-way Cassette
- 46 Two-way Cassette
- 47 Four-way Cassette
- 53 Low/Medium Static Pressure Duct
- 55 High Static Pressure Duct
- 58 Fresh Air Processing Unit
- 60 Wall-mounted
- 62 Ceiling & Floor
- 65 Floor Standing
- 66 Console





## Control Systems

69 Control Systems



## HRV

84 Heat Recovery Ventilator

89 Branch pipe



## >>> VRF SYSTEM

#### **Xpower Super Plus Seris**



Heat pump Max. 4 modules can be combined 8~88HP (Tropical 8~72HP) All DC inverter compressors All DC fan motors





Heat pump/Cooling only Max. 4 modules can be combined DC inverter compressor + fixed compressors Heat pump series: All DC fan motors Cooling only series: DC fan motor + AC fan motor

#### **Xpower Heat Recovery Series**



Heat recovery Simultaneous cooling and heating operation in one system Max. 4 modules can be combined 8~64HP All DC inverter compressors All DC fan motors



### Xpower Watercooled VRF



Water cooled Max. 3 modules can be combined 8~36HP DC inverter compressor





Heat pump, cannot be combined 7~32HP
DC inverter compressor + fixed compressors
DC fan motor + AC fan motor

#### Xpower Mini VRF



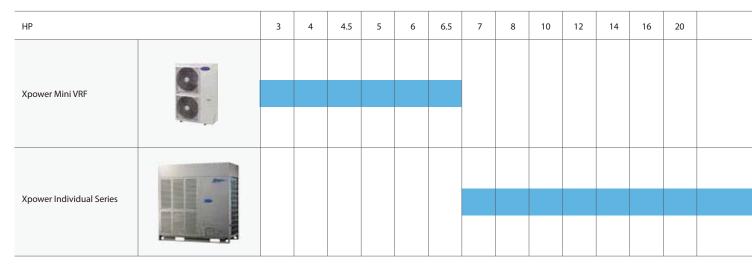
Heat pump, cannot be combined 3~6.5HP
DC inverter compressor
All DC fan motors

## >>> OUTDOOR UNIT LINEUP

#### Connectable VRF

																		1
HP	HP			12	14	16	18	20	22	24	26	28	30	32	34	36	38	
V S																		
Xpower Super Plus Series																		
	3 m m 3 J																	
	-																	
Xpower EcoK Series																		
	-																	
Recovery Series																		
	9 100																	
Xpower Water Cooled VRF	=																	
	11111 1111																	

#### Single VRF



Single unit Multi combination



40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88

22	24	26	28	30	32



## >>> INDOOR UNIT LINEUP

	kW				2.2	2.8	3.6	4.5	5.6	7.1	
	kBtu/h	1	5	5	6	9	12	18	24	28	
	1WAY										
CASSETTE	2WAY	5									
CASSETTE	4WAY										
	СОМРАСТ										
	Low/Medium Static Pressure Duct										
DUCTED	MSPD										
	HSPD										
	FRESH AIR										
HW											
CEILING&FLOOR											
FLOOR STANDING	5	THE PERSON NAMED IN COLUMN									
CONSOLE		1									



8	9	10	11.2	12.5	14	16	20	25	28	40	45	56
32	36	40	48	52	54/56 (cassette)	55	56	58	60	140	160	190



## >>> OUTDOOR UNITS





Xpower Super Plus Series

Xpower EcoK series

Xpower Heat Recovery Series

Xpower Water Cooled VRF

Xpower Individual Series

Xpower Mini VRF



#### **Indoor Units**

Xpower VRF indoor unit



#### **Fresh Air Processing Unit**

100% fresh air supply



#### Ventilation

Heat recovery ventilator (HRV)



#### **AHU Connection Kit**

Connect to other brand AHU



#### **Control Systems**

Smart control systems



## **Xpower Super Plus Series**

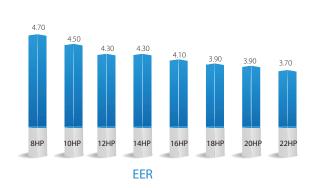
- >>> DC inverter compressor
- >>> DC fan motor
- >>> Capacity up to 72/88HP
- >>> Connectable indoor units quantity up to 64
- >>> ESP up to 60Pa
- >>> Cycle duty operation
- >>> Backup operation
- >>> Precise oil control technology
- >> Advanced silence technology
- >> Intelligent defrosting technology
- >>> Simple communication wiring
- >>> Auto addressing
- >>> Easy maintenance

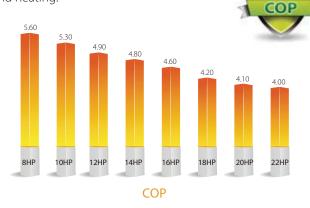


## High Efficiency

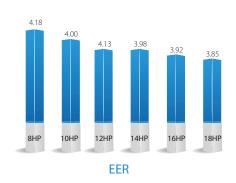
#### High EER and COP >>>

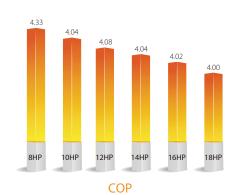
DC compressors and fan motors together with a high-efficiency heat exchanger combine to give the Super Plus Series top-class energy efficiency in cooling and heating.





#### Tropical Model EER and COP >>>





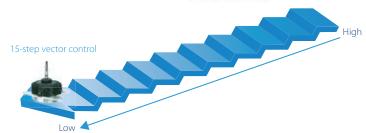
#### All DC Inverter Compressors >>>

At the heart of the Super Plus Series outdoor unit lies a world-leading DC inverter scroll compressor. The compressor's innovative design and numerous high performance features reduce power consumption by 25%.



#### All DC Fan Motors >>>

Fan speed is controlled according to the system pressure and system load, minimizing energy consumption.



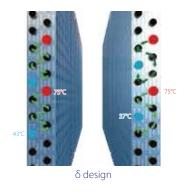
#### High Efficiency Heat Exchanger >>>

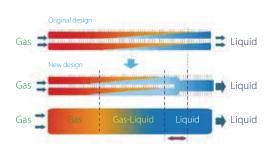
Newly designed fins enlarge the heat exchange area and decrease air resistance, enhance heat exchange performance and save more energy.

Hydrophilic fins and internally threaded copper pipes optimize heat exchange efficiency.

 $\delta$  design increases the degree of liquefaction in the condenser and improves heat-exchange efficiency.







#### Newly Designed Fan >>>

A new blade with sharp edges and a slight curve increases the airflow rate and lowers vibration and airflow resistance.







#### Precise Control >>>

Multiple solenoid valves ensure precise temperature control, stable and efficient operation, and improved comfort.

#### Dual EXVs Control >>>

Dual EXVs in one system, each EXV part achieves 480 Pulse rate to precisely adjust refrigerant flow.







## Wide Application Range

#### Wide Capacity Range >>>

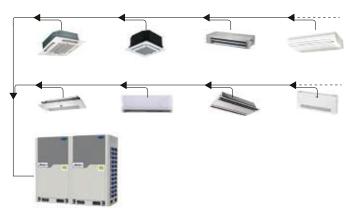
The Super Plus series has an extensive range of capacities, from 8HP to 88HP(max.72HP for tropical model combination), meeting all customer requirements from small to large buildings.





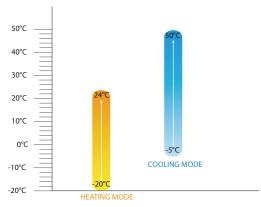
#### Wide Range of Indoor Units >>>

Carrier provides 12 types and more than 100 models of VRF indoor units to meet varied customer requirements in a wide range of locations including shopping malls, hospitals, office buildings, hotels and airports.



#### Wide Operation Range

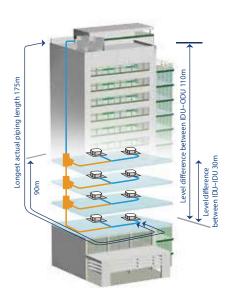
Super Plus Series operates stably under extreme conditions, ranging from minus  $20^{\circ}$  C to  $50^{\circ}$  C. (- $20^{\circ}$  C to  $54^{\circ}$ C for tropical model).



#### Long Piping Capability >>>

Piping length	Capability
Total piping length	1000m
Longest length - actual (equivalent)	175m (200m)
Longest length after first branch	90m*
Largest height difference between indoor and outdoor units - ODU up (down)	90m (110m)
Largest height difference between indoor units	30m

<sup>\*</sup>The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local Carrier sales companies for further information.



## High Reliability

#### Duty Cycling >>>

Duty cycling equalizes the running time of the outdoor units in a multiple-unit system and of the compressors in each unit, significantly extending compressor lifespan.









#### Backup >>>

In a multi-unit system, if one module fails, the other modules provide backup so that the system can continue operating.



#### Precise Oil Control Technology >>>

Five stages of oil control technology ensure all outdoor compressor oil is always kept at a safe level, eliminating any compressor oil shortage problems.

**The 1st stage:** Compressor internal oil separation.

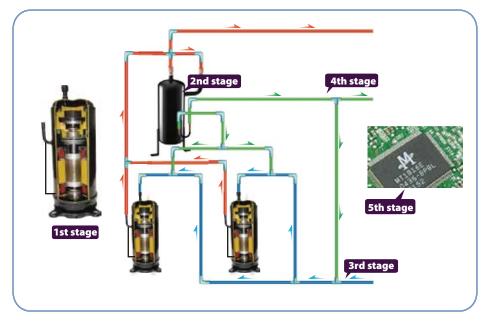
**The 2nd stage:** High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is

separated from the discharge gas and returned to the compressors in a timely fashion.

**The 3rd stage:** Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.

**The 4th stage:** Oil balance pipes among modules ensure even oil distribution among modules.

**The 5th stage:** Auto oil return program monitors the running time and system status to ensure reliable oil return.





## Enhanced Comfort

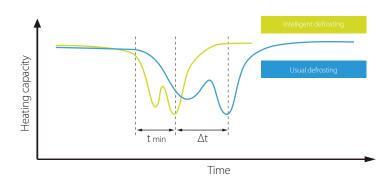
#### Night Silent Mode >>>

The night silent mode feature, which is easily configured on the outdoor unit's PCB, includes various scheduling options that can be used to reduce noise levels at times when low noise operation is required.



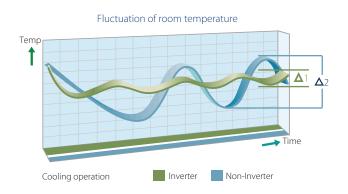
#### Intelligent Defrosting Technology >>>

The intelligent defrosting program calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting. A specialized defrosting valve reduces time required for defrosting to as little at four minutes.



#### Rapid Cooling or Heating >>>

The DC inverter compressor reaches full capacity rapidly, providing quicker cooling or heating with lower levels of temperature fluctuation during the cooling/heating operation.



## **Anti-corrosion Protection**

Outdoor units are given anti-corrosion treatment for non-extreme conditions as standard and can also be customized with heavy anti-corrosion treatment on steel sheets, grills, coil fins, electric control box case and screws/bolts for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life.

The integrity of the anti-corrosion treatment is ensured by subjecting major components and parts to salt mist testing, moisture and heating testing and light aging testing.

#### Motor >>>

Standard products: 72h of neutral salt mist

Heavy anti-corrosion products: 240h of neutral salt mist

#### Painted Sheet Metal >>>

Standard products: 500h of neutral salt mist 1000h of moisture and heating test 500h of light aging test

Heavy anti-corrosion products: 1000h of neutral salt mist 2000h of moisture and heating test 720h of light aging test

#### Screws / Bolts / Gaskets >>>

Standard products:
300h of neutral salt mist

Heavy anti-corrosion products: 720h of neutral salt mist







Standard products: 72h of neutral salt mist

Heavy anti-corrosion products: 1000h of neutral salt mist 140h of acid salt mist



#### Copper >>>

Standard products: 24h of neutral salt mist

Heavy anti-corrosion products: 120h of neutral salt mist



#### Electric Control Box Case >>>

Standard products:

96h of neutral salt mist

Heavy anti-corrosion products: 240h of neutral salt mist





#### Compressor / Motor Bolts >>>

Standard products: 72h of neutral salt mist

Heavy anti-corrosion products: 168h of neutral salt mist

## **Specifications**

#### 380-415V 50(60)Hz



8-12HP

						CIMITE O IZI
Model name			38VF008H119015	38VF010H119015	38VF012H119015	38VF014H119015
Power supply		V/Ph/Hz		380-415,		
	Capacity	kW	25.2	28.0	33.5	40.0
Cooling	capacity	kBtu/h	86.0	95.6	114.3	136.5
2009	Power input	kW	5.36	6.22	7.79	9.30
	EER		4.7	4.5	4.3	4.3
	Capacity	kW	27.0	31.5	37.5	45.0
Heating	Сарасну	kBtu/h	92.1	107.5	128.0	153.6
heating	Power input	kW	4.82	5.94	7.65	9.38
	COP		5.6	5.3	4.9	4.8
Connectable indoor u	Total capacity			50~130% of outo	loor unit capacity	
LOI II IECLADIE II IGOOI GI	Max. quantity		13	16	20	23
	Туре			DC in	verter	
	Model		E655DHD-65D2YG	E655DHD-65D2YG	E705DHD-72D2YG	E405DHD-42D2YG
			200000110 000210			L403D11D 42D210
	Brand			Hita	achi	
Compressor	Quantity		1	1	1	2
	Crankcase heater	W	27.6×2	27.6×2	27.6×2	27.6×4
	Refrigerant oil type			FVC	68D	
	Refrigerant oil charge	ml(gal.)	500(0.132)	500(0.132)	500(0.132)	500(0.132)×2
	Туре			DC n	notor	
	Model			WZDK56	0-38G(B)	
	Brand			Panasor	ic/Nidec	
	Quantity		1	1	1	2
	Insulation class			1		
an motor	Safe class			IP	23	
	Input	W	580	580	580	360+290
	Output	W	465	465	465	290+230
		Pa(in. W.G.)		0-20(0-0.0		
	Static pressure	Pa(in. W.G.)		20-60(0.08-0.24		
	Material	1 4(11.171.63)		Pla		
an	Туре			A>		
di i	Quantity		1	1	1	2
	Number of rows		2	2	3	2
	TP(a) ×RP(b)	mm(in.)	2	Tube pitch x Row pit		
	Fin spacing	mm(in.)		1.6(1		
Outdoor coil	Fin type	(. )		Hydrophilio		
	Tube OD	mm(in.)		Ф7.94(		
	Tube type			Inner-g		
	Coil Igh × height	mm(in.)	1	970×1232 (77-9/16×48-1/		2320×1232 (91-3/8×48-1
	Number of circuits				2	
Refrigerant	Туре				0A	
J	Factory charging	kg(lbs.)	9(20)	9(20)	11(24)	13(29)
	Liquid pipe	mm(in.)	Φ12.7(Φ1/2)	Φ12.7(Φ1/2)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)
ipe connection	Gas pipe	mm(in.)	Ф25.4(Ф1)	Ф25.4(Ф1)	Ф28.6(Ф1-1/8)	Ф31.8(Ф1-1/4)
	Oil balance pipe	mm(in.)		Ф8(Ф	5/16)	
Design pressure(High	n/low)	MPa		4.4,	/2.6	
ocagn pressure(rilgi	() (O (1)	PSI		640,	/380	
ir flow rate		m3/h	12000	12000	12000	14000
		dB(A)	58	59	60	62
ound pressure level		mm		990×1635×790		1340×1635×790
				39×64-3/8×31-1/8		52-3/4×64-3/8×31-1/
	H×D)	inch				+
let dimension (W×H				1055×1805×855		1405×1805×855
Net dimension (W×H		mm		1055×1805×855 41-1/2×71-1/16×33-5/8		
Net dimension (W×H		mm inch	219(483)	41-1/2×71-1/16×33-5/8	237(523)	55-3/8×71-1/16×33-5/
Sound pressure level Net dimension (WXH Packing size (WXHXI Net weight Gross weight		mm	219(483) 234(516)		237(523) 252(556)	1405×1805×855 55-3/8×71-1/16×33-5/ 297(655) 315(695)

- Notes:

  1. Indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

  2. Indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

  3. Diameters given are those of the unit's stop valve.

  4. Sound pressure level is measured at a position 1m (3.28ft) in front of the unit and 1.3m (4.3ft) above the floor in a semi-anechoic chamber.

  5. The data in this catalogue may be changed without notice for further improvement on quality and performance.





#### 14-22HP

Model name			38VF016H119015	38VF018H119015	38VF020H119015	38VF022H11901			
ower supply		V/Ph/Hz							
117		kW	45.0	50.0	56.0	61.5			
	Capacity	kBtu/h	153.6	170.6	191.1	209.9			
ooling	Power input	kW	10.98	12.82	14.51	16.44			
	EER		4.1	3.9	3.9	3.7			
		kW	50.0	56.0	63.0	69.0			
	Capacity	kBtu/h	170.6	191.1	215.0	235.5			
leating	Power input	kW	10.87	13.18	15.29	17.12			
	COP	1000	4.6	4.2	4.1	4.0			
	. Total capacity		4.0	50~130% of outd		4.0			
onnectable indoor un	Max. quantity		26	29	33	36			
	' '		20	DC inv		30			
	Type			E405DHD-36D2YG					
	Model		E405DHD-42D2YG	E705DHD-72D2YG	E705DHD-72D2YG	E705DHD-72D2Y			
	Brand			Hita	chi				
Compressor	Quantity			2					
	Crankcase heater	W		27.6					
	Refrigerant oil type			FVC					
	Refrigerant oil charge	ml(gal.)		500(0.1					
	Type	Trii(gui.)		DC m					
	Model			WZDK56					
	Brand			Panasoni					
	Quantity			2					
	Insulation class								
an motor									
	Safe class	14/	260.200	IP2		550 - 420			
	Input	W	360+290	520+440	550+430	550+430			
	Output	W	290+230	420+350	440+350	440+350			
	Static pressure	Pa(in. W.G.)		0-20(0-0.08	· · · · · · · · · · · · · · · · · · ·				
		Pa(in. W.G.)		20-60(0.08-0.24					
	Material			Plas					
an	Туре			Ax					
	Quantity			2					
	Number of rows		2	2	3	3			
	TP(a) ×RP(b)	mm(in.)		Tube Pitch x Row pit					
	Fin spacing	mm(in.)		1.6(1					
Outdoor coil	Fin type			Hydrophilic	aluminum				
2.300. 0011	Tube OD	mm(in.)		Ф7.94(0					
	Tube type			Inner-gi					
	Coil Igh × height	mm(in.)	2320×1232 (91-3/8×48-1/2)	2	270×1232 (89-3/8×48-1/2	)			
	Number of circuits			22	2				
efrigerant	Туре			R41	0A				
emgerant	Factory charging	kg(lbs.)	13(29)	13(29)	16(35)	16(35)			
	Liquid pipe	mm(in.)	Ф15.9(Ф5/8)	Ф19.1(Ф3/4)	Ф19.1(Ф3/4)	Ф19.1(Ф3/4)			
ipe connection	Gas pipe	mm(in.)	Ф31.8(Ф1-1/4)	Ф31.8(Ф1-1/4)	Ф31.8(Ф1-1/4)	Ф31.8(Ф1-1/4)			
	Oil balance pipe	mm(in.)		Ф8(Ф	5/16)				
		MPa		4.4/	2.6				
esign pressure(High/	(IOW)	PSI		640/					
ir flow rate		m3/h	14000 16000 16000 16000						
ound pressure level		dB(A)	62	63	63	63			
·		mm		1340×16		1			
let dimension (W×H>	(D)	inch		52-3/4×64-3					
		mm		1405×18					
acking size (W×H×D	)	inch							
		IIICII		55-3/8×71-1		240(750)			
		lenthan)	207/455	205/6721					
let weight Gross weight		kg(lbs.) kg(lbs.)	297(655) 315(695)	305(673) 323(712)	340(750) 358(790)	340(750) 358(790)			

- Notes:

  1. Indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

  2. Indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

  3. Diameters given are those of the unit's stop valve.

  4. Sound pressure level is measured at a position 1m (3.28ft) in front of the unit and 1.3m (4.3ft) above the floor in a semi-anechoic chamber.

  5. The data in this catalogue may be changed without notice for further improvement on quality and performance.

## **Specifications (Tropical models)**

#### 380-415V 50(60)Hz



Model name			38VF008H11901T	38VF010H11901T	38VF012H11901T
Power supply			380-415V/3Ph/50(60)Hz	380-415V/3Ph/50(60)Hz	380-415V/3Ph/50(60)Hz
	Capacity	kW	25.7 / 22.2	28.6 / 24.8	34.5 / 28.2
Cooling	Сараспу	kBtu/h	87.7 / 75.7	97.5 / 84.7	117.8 / 96.1
(T1 / T3)	Power input	kW	6.2 / 6.9	7.1 / 8.1	8.4 / 8.9
(11/13)	EER	W/W	4.18 / 3.21	4.00 / 3.07	4.13 / 3.16
	EER	Btu/h.W	14.25 / 10.96	13.65 / 10.46	14.08 / 10.79
	Capacity	kW	27.0	31.5	37.5
Heating	Сараспу	kBtu/h	92.1	107.5	128.0
пеацпу	Power input	kW	6.2	7.8	9.2
	COP	W/W	4.33	4.04	4.08
Connectable	Total capacity	•	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
indoor unit	Max. quantity		16	18	22
C	Туре		DC inverter / Scroll	DC inverter / Scroll	DC inverter / Scroll
Compressor	Quantity		1	1	1
	Туре		DC motor	DC motor	DC motor
Fan motor	Quantity		1	1	1
	Static pressure	Pa	20	20	20
Refrigerant	Туре		R410A	R410A	R410A
Reingerani	Factory charging	kg	9	9	11
	Liquid pipe	mm (in.)	Ф12.7 (1/2)	Ф12.7 (1/2)	Ф15.9 (5/8)
Pipe connections	Gas pipe	mm (in.)	Ф22.2 (7/8)	Ф22.2 (7/8)	Ф28.6 (1-1/8)
CONTRECTIONS	Oil balance pipe	mm (in.)	Ф6.35 (1/4)	Ф6.35 (1/4)	Ф6.35 (1/4)
Air flow rate		m³/h	12,000	12,000	12,000
Sound pressur	e level	dB(A)	58	59	60
Net dimension	n (W×H×D)	mm	990×1,635×790	990×1,635×790	990×1,635×790
Packing size (V	V×H×D)	mm	1,055×1,805×855	1,055×1,805×855	1,055×1,805×855
Net weight		kg	219	219	237
Gross weight		kg	234	234	252
Operating tem	perature range		(	Cooling: -5°C to 54°C; Heating: -20°C to 24°	С



Model name				38VF016H11901T	
Power supply			380-415V/3Ph/50(60)Hz	380-415V/3Ph/50(60)Hz	380-415V/3Ph/50(60)Hz
	Canacity	kW	40.5 / 33.6	44.1 / 37.3	49.1 / 41.8
Cooling	Capacity	kBtu/h	138.1 / 114.8	150.6 / 127.2	167.6 / 142.5
9	Power input	kW	10.2 / 10.5	11.3 / 11.9	12.8 / 13.9
(T1 / T3)	EER	W/W	3.98 / 3.21	3.92 / 3.13	3.85 / 3.00
	EER	Btu/h.W	13.58 / 10.94	13.37 / 10.68	13.14 / 10.25
	Capacity	kW	45.0	50.0	56.0
I lantin n	Capacity	kBtu/h	153.5	170.6	191.1
Heating	Power input	kW	11.1	12.6	14.0
	COP	W/W	4.04	4.02	4.00
Connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
indoor unit	Max. quantity		26	30	34
C	Type		DC inverter / Scroll	DC inverter / Scroll	DC inverter / Scroll
Compressor	Quantity		2	2	2
	Type		DC motor	DC motor	DC motor
Fan motor	Quantity		2	2	2
	Static pressure	Pa	20	20	20
D - C	Type		R410A	R410A	R410A
Refrigerant	Factory charging	kg	13	13	13
	Liquid pipe	mm (in.)	Ф15.9 (5/8)	Ф15.9 (5/8)	Ф19.1 (3/4)
Pipe connections	Gas pipe	mm (in.)	Ф25.4 (1)	Ф25.4 (1)	Ф31.8 (1-1/4)
Connections	Oil balance pipe	mm (in.)	Ф6.35 (1/4)	Ф6.35 (1/4)	Ф6.35 (1/4)
Air flow rate		m³/h	14,000	14,000	16,000
Sound pressur	re level	dB(A)	62	62	63
Net dimension	n (W×H×D)	mm	1,340×1,635×790	1,340×1,635×790	1,340×1,635×790
Packing size (V	W×H×D)	mm	1,405×1,805×855	1,405×1,805×855	1,405×1,805×855
Net weight		inch	333	333	344
Gross weight		kg	351	351	362
Operating ten	nperature range	kg		Cooling: -5°C to 54°C; Heating: -20°C to 24°	Ċ

- 1.Tested as per ISO 15042:2011. Power input value is outdoor unit power input to the equipment.
- 2. Capacities are based on the following conditions:

  Cooling T1: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Piping length: Interconnecting piping length is 7.5m, level difference is zero. Cooling T3: Indoor temperature 29°C DB/19°C WB; Outdoor temperature 46°C DB; Piping length: Interconnecting piping length is 7.5m, level difference is zero. Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB; Piping length: Interconnecting piping length is 7.5m, level difference is zero.
- 3. Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
- 4. Pipe connection size is the stop valve's pipe diameter of the single-unit.
- 5. The data in this catalogue may be changed without notice for further improvement on quality and performance.



## **Easy Installation and Service**

#### Simple Communication Wiring >>>

Indoor centralized controller can be connected to either the indoor or the outdoor units.

A single set of wiring can be used for system and network communication, making installation quicker and easier.



#### Auto Addressing >>>

Outdoor unit can distribute addresses to indoor units automatically.

Remote and wired controllers can be used to query or modify each indoor unit's address.



#### Rotatable Electric Control Box

The newly designed rotating control box can be rotated up to 150 degrees to provide access to the pipeline system for inspection and maintenance without the need to remove the control box.



#### Easy Maintainence >>>

Special features that increase ease of maintenance include a control box inspection window for viewing the system status, a self-diagnosis function that speeds fault analysis, and the positioning of the compressor adjacent to the casing, which simplifies inspection and enables valve or compressor parts to be replaced easily.





#### Indoor Units

Xpower VRF indoor unit



#### Fresh Air Processing Unit

100% fresh air supply



#### Ventilation

Heat recovery ventilator (HRV)



#### **AHU Connection Kit**

Connect to other brand AHU



#### **Control Systems**

Smart control systems



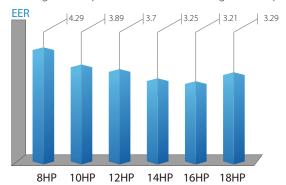
# **Xpower EcoK series Heat Pump/Cooling Only**

- >>> DC inverter compressor
- >>> DC fan motor
- >>> Capacity up to 72HP
- >>> Connectable indoor units quantity up to 64
- >>> ESP up to 60Pa
- >>> Cycle duty operation
- >>> Backup operation
- >>> Precise oil control technology
- >> Advanced silence technology
- >> Intelligent defrosting technology
- >>> Simple communication wiring
- >>> Auto addressing
- >>> Easy maintenance

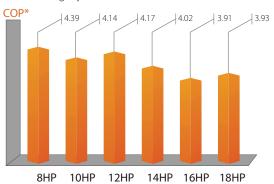


#### High EER and COP Values >>>

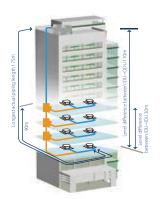
The cooling EER is up to 4.29 and the heating COP is up to 4.39 in the 8HP category.







#### Long Piping Length >>>



Total piping length	1000m
Longest length actual (Equivalent)	175(200)m
Longest length after first branch	90*m
Level difference between indoor and outdoor units - ODU up (down)	70(110)m
Level difference between indoor units	30m

<sup>\*</sup>The longest piping length is 40m standard. It can be extended to 90m. When the length is over 40m, please contact your local Carrier sales company for more information and restrictions.

### **VRF Ecok Series - Heat Pump/Cooling Only**





Capacity(HP)			8	10	12	14	16	18
Model (heat			008H1190K1	010H1190K1	012H1190K1	014H1190K1	016H1190K1	018H1190K1
	ng only)38VR		008C1190K0	010C1190K0	012C1190K0	014C1190K0	016C1190K0	018C1190K0
Power supply		V/Ph/Hz				5/3/50		
	Capacity	kW	25.2	28.0	33.5	40.0	45.0	50.0
Cooling	Power input	kW	5.88	7.20	9.05	12.31	14.02	15.20
	EER		4.29	3.89	3.70	3.25	3.21	3.29
	Capacity	kW	27.0	31.5	37.5	45.0	50.0	56.0
Heating*	Power input	kW	6.15	7.61	8.99	11.19	12.79	14.25
	COP		4.39	4.14	4.17	4.02	3.91	3.93
Connectable					50~130% of outo	door unit capacity		
indoor unit	Max. quantity		13	16	20	23	26	29
Compressor	Туре				DC invert	ter+Fixed		
Compressor	Quantity		1	1	1+1	1+1	1+1	1+1
	Туре			All DC n	notors for Heat pump s	eries; DC+AC for Coolir	ng only series	
Fan motor	Quantity		1	1	1+1	1+1	1+1	1+1
1 411 1110001	Static pressure	Pa		•	0-20 (d	default)		
	Static piessule	Pa	20-40 (cu	stomized)	20-60 (customized)		20-40 (customized)	
Refrigerant	Туре				R4	10A		
nemgerani	Factory charging	kg	9	9	11	13	13	16
Pipe	Liquid pipe	mm	Ф12.7	Ф12.7	Ф15.9	Ф15.9	Ф15.9	Ф19.1
connections	Gas pipe	mm	Ф25.4	Ф25.4	Ф31.8	Ф31.8	Ф31.8	Ф31.8
	Oil balance pipe	mm				D6		
Air flow rate		m³/h	11500	11500	15100	15100	15250	15250
Sound pressu	ure level	dB(A)	57	57	59	60	60	61
Net dimension		mm		615×765		1250×16		
Packing size		mm	1025×1	790×830		1305×17	'90×820	
	Heat pump series)	kg	200	200	268	280	280	300
	: (Heat pump series)	kg	215	215	288	300	300	320
	Cooling only series)	kg	198	198	268	280	280	300
Gross weight	(Cooling only series)	kg ℃	213	213	288	300	300	320
Operating te	mperature range	°C			Cooling: -5-48; He	ating*: -20-24		

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB. Piping length: Interconnecting piping length is 7.5m, level difference is zero. Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

<sup>\*</sup>heating is only available for heat pump series.









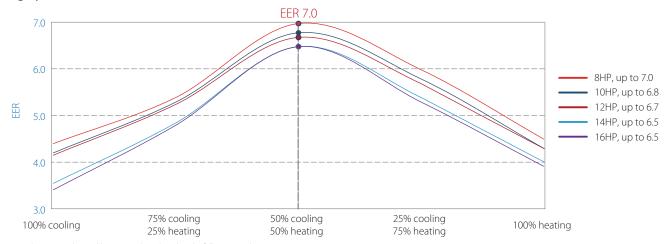
# **Xpower Heat Recovery Series**

- >> ALL DC inverter compressors
- >> ALL DC fan motors
- >>> Capacity up to 64HP
- >>> Connectable indoor units quantity up to 64
- >>> ESP up to 60Pa
- >>> Cycle duty operation
- >>> Backup operation
- >>> Precise oil control technology
- >>> Advanced silence technology
- >>> Simple communication wiring
- >>> Remote addressing
- >>> Easy maintenance



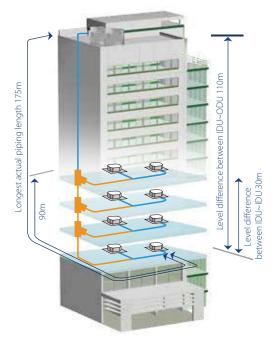
#### Heat Recovery, EER up to 7.0 >>>

Heat recovery is achieved by diverting exhaust heat from indoor units in cooling mode to areas requiring heating, maximizing energy efficiency, reducing electricity costs and leading to high partload efficiencies (up to 7.0 in the 8HP category).



EER in simultaneous cooling and heating mode are based on the following condition:
Outdoor temperature 7°CDB/6°CWB, indoor temperature 27°CDB/19°CWB for cooling, indoor temperature 20°CDB for heating.

#### Long Piping Length >>>

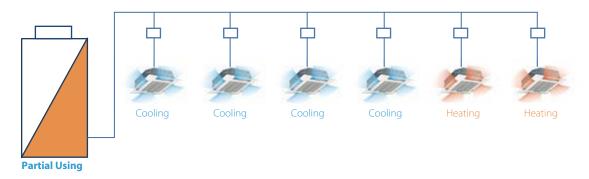


Total piping length	1000m
Longest length actual (Equivalent)	175(200)m
Longest length after first branch	90*m
Longest length from MS to its downstream indoor unit	40m
Level difference between indoor and outdoor units - ODU up (down)	70(110)m
Level difference between indoor units	30m

<sup>\*</sup>The longest piping length is 40m standard. It can be extended to 90m. When the length is over 40m, please contact your local Carrier sales company for more information and restrictions.

#### Adjustable Outdoor Heat Exchanger >>>

Two parts condenser individual design, the unit can distribute a part of evaporator to be as condensing area according to the heating load requirement to improve the utilization rate of the condenser.



#### Continuous Heating During Defrost Operation >>>

Each heat exchanger is defrosted by using heat transferred from one heat exchanger to the other in the outdoor unit. Defrost has no impact on the indoor unit on heating mode.

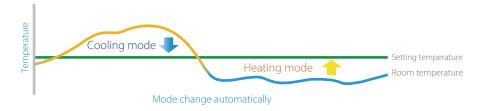






#### Auto Mode Control >>>

Under the Auto Mode, the indoor unit can change the operation mode automatically, to keep the indoor temperature at a constant level.



Note: Auto Mode can be activated only with wired controller WR-120B-CM.



#### Innovative Mode Switch (MS) Box >>>

Simultaneous cooling and heating achieved for new designed MS (Mode Switch) box.

- Low noise operation for precise control of multiple solenoid valves;
- Max. 24 indoor units connect to a MS box;
- Max. 56kW indoor units connect to a MS box;



One group pipe with max. 4 indoor units connection



Two group pipes with max. 8 indoor units connection

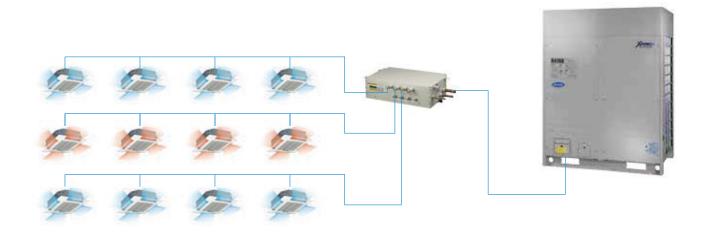


Four group pipes with max. 16 indoor units connection



Six group pipes with max. 24 indoor units connection

❖ Indoor units connected to a same MS can realize simultaneous cooling and heating operation.



#### Rotatable Control Box >>>

Newly designed rotating control box can rotate in a wide angle. It is convenient for the inspection and maintenance of the pipeline system and greatly reduces the dismount time of the electric control box.



### **Xpower Heat Recovery Series**



Capacity(HP)			8	10	12	14	16		
Model 38VR			008T119010	010T119010	012T119010	014T119010	016T119010		
Power supply V/Ph/Hz					380-415/3/50				
Cooling	Capacity	kW	25.2	28	33.5	40	45		
	Power input	kW	5.73	6.67	8.07	11.3	13.24		
	EER		4.4	4.2	4.15	3.54	3.4		
	Capacity	kW	27	31.5	37.5	45	50		
Heating	Power input	kW	6	7.33	8.72	11.19	12.79		
	COP		4.5	4.3	4.3	4.02	3.91		
	e Total capacity				~130% of outdoor unit ca				
indoor unit	Max. quantity		13	16	20	23	26		
Compressor	. Type			DC inverter					
Complessor	Quantity		1	1	1	2	2		
	Туре		DC motor						
Fan motor	Quantity		2	2	2	2	2		
	Static pressure	Pa		0-20 (default)					
	Pa		20-40 (customized) 20-60 (customized)			20-40 (c	20-40 (customized)		
Refrigerant	Туре				R410A				
gerarie	Factory charging	kg	10	10	10	13	13		
	Liquid pipe	mm	Ф12.7	Ф12.7	Ф15.9	Ф15.9	Ф15.9		
Pipe	Low pressure gas pipe	mm	Ф22.2	Ф22.2	Ф25.4	Ф28.6	Ф28.6		
connections	High pressure gas pipe	mm	Ф19.1	Ф19.1	Ф19.1	Ф22.2	Ф22.2		
connections	High pressure gas balance pipe	mm	Ф19.1	Ф19.1	Ф19.1	Ф19.1	Ф19.1		
	Oil balance pipe	mm m³/h	Ф6	Ф6	Ф6	Ф6	Ф6		
	Air flow rate		12000	12000	13000	15000	15000		
Sound pressure level		dB(A)	57	57	58	60	60		
Net dimension (W×H×D) mm		mm	1250×1615×765						
Packing size (W×H×D) mm		1305×1790×820							
Net weight		kg	255	255	255	303	303		
Gross weigh	Gross weight kg		273	273	273	322	322		
Operating to	emperature range	°C		Cooling: -5~48; Heatir	ng: -20~24; Simultaneous (	Looling and Heating: -5~	-24		

Capacities are based on the following conditions:
Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.
Piping length: Interconnecting piping length is 7.5m, level difference is zero.
Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

### **Xpower Heat Recovery Series - MS Box**









Model				MSFT-01C-CM	MSFT-02C-CM	MSFT-04C-CM	MSFT-06C-CM	MSFT-02E-CM	MSFT-04E-CM
Applicable indoor units				All VRF	indoor units excep	Only high static pressure duct			
Max. indoor uni	t groups			1	2	4	6	1	1
Max. number of	feach group of in	door units		4	4	4	4	1	1
Max. number of	f downstream ind	oor units		4	8	16	24	1	1
Max. capacity c	of each group of ir	ndoor units	kW	16	16	16	16	20/25/28	40/45/56
Max. total capa	city of all downst	ream indoor units	kW	16	28	45	45	20-28	40-56
	Connected to outdoor unit	Liquid pipe	mm	Ф9.53	Ф12.7	Ф15.9	Ф15.9	Ф12.7	Ф15.9
		High pressure gas pipe	mm	Ф15.9	Ф19.1	Ф22.2	Ф22.2	Ф19.1	Ф22.2
Piping connections		Low pressure gas pipe	mm	Ф19.1	Ф25.4	Ф31.8	Ф31.8	Ф25.4	Ф31.8
	Connected to indoor unit	Liquid pipe	mm	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53
		Gas pipe	mm	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9
Sound pressure	Sound pressure level dB(A		dB(A)	33	33	33	40	33	33
Net dimension (W×H×D) mm			630×225×600	630×225×600	960×225×600	960×225×600	630×225×600	960×225×600	
Packing size (W×H×D) mm			725×325×685	725×325×685	1055×325×685	1055×325×685	725×325×685	1055×325×685	
Net weight kg			18	19.5	31	35	19.5	31	
Gross weight kg			25	27	40	44.5	27	40	

 $Sound\ values\ are\ measured\ in\ a\ semi-anechoic\ room, at\ a\ position\ 1m\ below\ the\ MS\ equipment\ in\ mode\ switch\ condition.$ 

It is not recommended to install in a place where low noise performance is required.





## **Indoor Units**Xpower VRF indoor unit



## Fresh Air Processing Unit 100% fresh air supply



#### Ventilation

Heat recovery ventilator (HRV)



#### **AHU Connection Kit**

Connect to other brand AHU



#### Control Systems

Smart control systems



# **Xpower Water Cooled VRF**

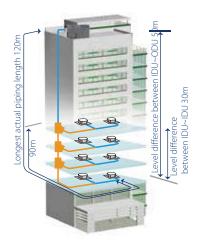
# Perfect combined of water and refrigerant system

- >>> DC inverter compressors
- >>> Capacity up to 36HP
- >>> Connectable indoor units quantity up to 59
- >>> Cycle duty operation
- >>> Backup operation
- >>> Precise oil control technology
- >>> Low noise operation
- >>> Simple communication wiring
- >>> Easy maintenance

#### Wide Range of Outdoor Units >>>

The Water Cooled Series capacity ranges from 8HP to 36HP, meets all customer requirements from small to large buildings.

#### Long Piping Length >>>



#### 8/10/12HP



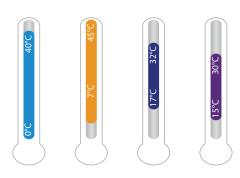
Max. 3 units combination



Total piping length	300m
Longest length actual (Equivalent)	120(150)m
Longest length after first branch	90*m
Level difference between indoor and outdoor units - ODU up (down)	50(40)m
Level difference between indoor units	30m

<sup>\*</sup>The longest piping length is 40m standard. It can be extended to 90m. When the length is over 40m, please contact your local Carrier sales company for more information and restrictions.

#### Wide Operation Temperature Range >>>



Main unit ambient temperature: 0°C~40°C

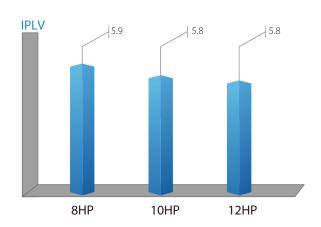
■ Main unit water inlet temperature: 7°C~45°C

Indoor temperature in cooling mode: 17°C~32°C

Indoor temperature in heating mode: 15°C~30°C

#### High IPLV >>>

Water cooled VRF Series System combines water system and refrigerant system perfectly. IPLV(C) reaches as high as 5.9. Compared with air-cooled VRF, energy saving is higher.





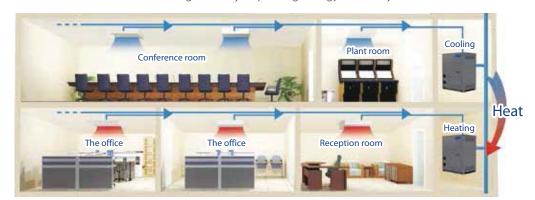
#### High Efficiency Double-Pipe Heat Exchanger >>>

With the innovatively designed double-pipe heat exchanger, the water quality required is low. The water side has large circulation area, and it is not easily plugged, creating higher reliability and easier cleaning and maintenance.



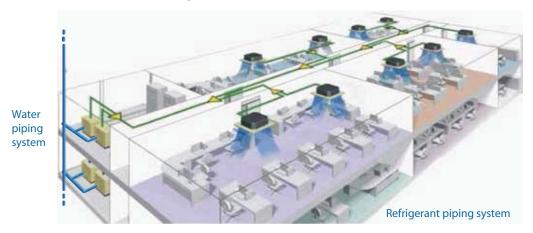
#### Water Side Heat Recovery Function >>>

In modern large-scale buildings, the load between the internal and external areas is different. It may occur in some situations that both cooling and heating are required. The water cooled VRF Series not only can achieve meticulous system division in different areas but also can recover heat at the same time, significantly improving energy efficiency.



#### No Water Leakage >>>

No water pipes installed indoors, no water leakage risks.



### **Xpower Water Cooled VRF**





Capacity(HP)			8	10	12		
Model 38VW			008H119010	010H119010	012H119010		
Combined type			/	/	/		
Power supply		V/Ph/Hz	380-415/3/50				
	Capacity	kW	25.2	28.0	33.5		
Cooling	Power input	kW	4.80	6.10	8.00		
	EER		5.25	4.59	4.19		
	Capacity	kW	27.0	31.5	37.5		
Heating	Power input	kW	4.45	5.83	7.80		
	COP		6.07	5.40	4.81		
Connectable	Total capacity			50~130% of outdoor unit capacity			
indoor unit	Max. quantity		13	16	19		
Compressor	Туре		DC inverter				
compressor	Quantity		1	1	1		
Heat exchanger	Туре		Double-pipe heat exchanger				
ricat exchanger	Rated water flow volume	m³/h	5.4	6	7.2		
Refrigerant	Туре		R410A				
nemgerane	Factory charging	kg	2	2	2		
	Liquid pipe	mm	Ф12.7	Ф12.7	Ф15.9		
Pipe connections	Gas pipe	mm	Ф25.4	Ф25.4	Ф31.8		
	Oil balance pipe	mm	Ф6.35	Ф6.35	Ф6.35		
Sound pressure level dB(		dB(A)	51	52	52		
Net dimension (W×H×D) mm		mm	780×1000×550				
Packing size (WxHxD) mm		mm	845×1170×600				
Net weight		kg	146	146	147		
Gross weight kg		kg	155	155	156		
Operating temperating	erature range	°C	V	Vater inlet temp.: 7-45; ambient temp.: 0-40			

Capacities are based on the following conditions:
Cooling: Indoor temperature 27°C DB/19°C WB; Main unit ambient temperature 35°C DB/24°C WB; Water inlet temperature 30°C; Heating: Indoor temperature 20°C DB/15°C WB; Main unit ambient temperature 7°C DB/6°C WB; Water inlet temperature 20°C;

Piping length: Interconnecting piping length is 5m, level difference is zero.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.





#### **Indoor Units**

Xpower VRF indoor unit



#### **Fresh Air Processing Unit**

100% fresh air supply



#### Ventilation

Heat recovery ventilator (HRV)



#### **AHU Connection Kit**

Connect to other brand AHU



#### **Control Systems**

Smart control systems



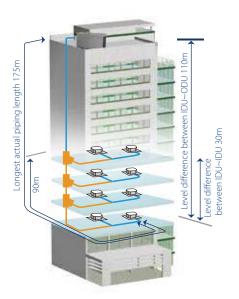
# **Xpower Individual Series**

# Optimized design for middle-sized buildings

- >>> DC inverter compressor
- >>> DC fan motor
- >>> Capacity up to 32HP
- >>> Connectable indoor units quantity up to 53
- >>> ESP up to 40Pa
- >>> Precise oil control technology
- >>> Advanced silence technology
- >> Intelligent defrosting technology
- >>> Simple communication wiring
- >>> Auto addressing
- >>> Easy maintenance

#### Long Piping Length >>>

	Side air	discharge	Top air discharge		
	20-26kW	40-45kW	56-67kW	73-90kW	
Total piping length	120m	250m	1000m	1000m	
Longest length actual (Equivalent)	60(70)m	100(120)m	175(200)m	165(190)m	
Longest length after first branch	20m	40m	90*m	90*m	
Longest length after nearest branch	15m	15m	40m	40m	
Level difference between indoor and outdoor units - ODU up (down)	30(20)m	30(20)m	70(110)m	50(90)m	
Level difference between indoor units	8m	8m	30m	30m	



<sup>\*</sup>The longest piping length is 40m standard. It can be extended to 90m. When the length is over 40m, please contact your local Carrier sales company for more information and restrictions.

#### Integrated Design, Easy Installation and Less Leakage Possibility >>>

- Compare with combination units, the individual units don't need complicated piping and wiring at the jobsite. It eliminates the communication wire, power wire, oil balance pipe, and refrigerant distributors between units.
- \* There are more brazing joints in the combination system, therefore vapor and moisture can easily enter the system. Thanks to reduced joints in the individual system, it minimizes the possibility of moisture entering the system.





# **Xpower Individual Series**





Capacity(HP)				8	10	12	14	16	
Model 38VR			007H119010	008H11901S	010H11901S	012H11901S	014H119012	016H119012	
Power supply		V/Ph/Hz		1	380-415/3/50				
	Capacity	kW	20.0	22.4	26.0	33.5	40.0	45.0	
Cooling	Power input	kW	6.1	6.8	7.6	9.85	11.9	13.6	
	EER		3.28	3.29	3.42	3.4	3.35	3.32	
	Capacity	kW	22.0	24.5	28.5	33.5	45.0	50.0	
Heating	Power input	kW	6.1	5.9	6.8	8.38	11.1	12.7	
	СОР		3.61	4.15	4.19	4	4.05	3.93	
Connectable	Total capacity				50~130% of ou	tdoor unit capacity			
indoor unit	Max. quantity	Max. quantity		11	12	13	14	15	
	Туре	Туре			DC i	nverter			
Compressor	Quantity		1	1	1	1	2	2	
F	Туре		DC motor				DC motor		
Fan motor	Quantity		2	2	2	2	2	2	
D. C	Туре		R410A						
Refrigerant	Factory charging	kg	4.8	6.2	6.2	7.5	9	12	
Pipe	Liquid pipe	mm	Ф9.53	Ф9.53	Ф9.53	Ф12.7	Ф12.7	Ф12.7	
connections	Gas pipe	mm	Ф19.1	Ф19.1	Ф22.2	Ф22.2	Ф22.2	Ф25.4	
Air flow rate		m³/h	10999	10494	10494	10837	16575	16575	
Sound pressure	level	dB(A)	59	59	60	62	62	62	
Net dimension (	(W×H×D)	mm		1120×1558×528		1120×1558×528	1360×1650×540	1460×1650×540	
Packing size (W×H×D) mm		mm		1270×1720×565		1270×1720×565	1450×1785×560	1550×1785×560	
Net weight		kg	137	146.5	147	157	240	275	
Gross weight		kg	153	162.5	163	173	260	290	
Operating temp	erature range	°C	Cooling: -15~48; Heating: -15~24			Cooling: -5~48; Heating: -15~24			

Capacities are based on the following conditions:
Cooling: Indoor temperature 27C DB/19°C WB; Outdoor temperature 35C DB/24°C WB; Heating: Indoor temperature 27C DB/15°C WB; Outdoor temperature 7C DB/6°C WB.
Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

# **Xpower Individual Series**





Capacity(HP)			20	22	24				
Model 38VR			020H119013	022H119013	024H119013				
Power supply		V/Ph/Hz		380-415/3/50					
	Capacity	kW	56.0	61.5	67.0				
Cooling	Power input	kW	17	18.8	20.8				
	EER	·	3.3	3.27	3.22				
	Capacity	kW	63.0	69.0	75.0				
Heating	Power input	kW	16	17.9	19.8				
	COP		3.94	3.86	3.79				
Connectable	Total capacity			50~130% of outdoor unit capacity					
indoor unit	Max. quantity		33	36	39				
Type Compressor			DC inverter+Fixed						
Quantity			1+2	1+2	1+2				
	Туре			DC motor+AC motor					
Fan motor	Quantity		1+1	1+1	1+1				
Tarrinotor	Max Static Pressure		0-20 (default)						
	Iviax Static Flessule	Pa	20-40 (customized)						
Refrigerant	Туре		R410A						
neiligelalit	Factory charging	kg	17	18.5	18.5				
Pipe	Liquid pipe	mm	Ф19.1	Ф19.1	Ф19.1				
connections	Gas pipe	mm	Ф31.8	Ф31.8	Ф31.8				
Air flow rate	•	m³/h	20000	23000	23000				
Sound pressure	level	dB(A)	62	63	63				
Net dimension (W×H×D) mr		mm	1390×1615×765	1585×10	615×765				
Packing size (W×H×D)		mm	1455×1790×830	1650×18	810×840				
Net weight		kg	360	385	390				
Gross weight		kg	375 400 405						
Operating temp	erature range	°C	Cooling: -5~48; Heating: -20~24						

Capacities are based on the following conditions:
Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB. Piping length: Interconnecting piping length is 7.5m, level difference is zero.
Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.





Capacity(HP)			26	28	30	32				
Model 38VR			026H119013	028H119013	030H119013	032H119013				
Power supply		V/Ph/Hz		380-41	5/3/50					
	Capacity	kW	73.0	78.5	85.0	90.0				
Cooling	Power input	kW	22.3	24.2	28.3	28.5				
	EER		3.27	3.24	3	3.16				
	Capacity	kW	81.5	87.5	95.0	100.0				
Heating	Power input	kW	20.6	22.4	26.0	26.5				
	COP		3.96	3.91	3.65	3.77				
Connectable	Total capacity			50~130% of outd	oor unit capacity					
indoor unit Max. quantity			43	46	50	53				
Compressor	Туре		DC inverter+Fixed							
Quantity			1+3	1+3	1+4	1+4				
1	Туре			AC m	notor					
Fan motor	Quantity		2+2	2+2	2+2	2+2				
ran motor	Max Static Pressure	Pa		0-20 (default)						
	Max Static Pressure	Pa	20-40 (customized)							
Refrigerant	Туре			R41	R410A					
neiligelalit	Factory charging	kg	27	27	27	27				
Pipe	Liquid pipe	mm	Ф22.2	Ф22.2	Ф22.2	Ф22.2				
connections	Gas pipe	mm	Ф38.1	Ф38.1	Ф38.1	Ф38.1				
Air flow rate	'	m³/h	33100	33100	33100	33100				
Sound pressure	level	dB(A)	64	64	65	65				
Net dimension	W×H×D)	mm		2540×16	615×765					
Packing size (V	/×H×D)	mm		2600×18	300×825					
Net weight		kg	5	55	600					
Gross weight kg			590 635			5				
Operating temp	erature range	°C	L Cooling: -5~48; Heating: -15~24							

### Notes:

Capacities are based on the following conditions:
Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB. Piping length: Interconnecting piping length is 7.5m, level difference is zero.
Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.







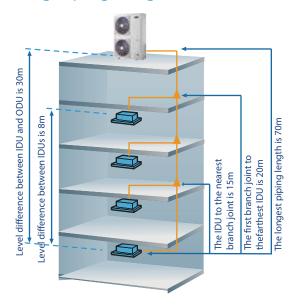


# **Xpower Mini VRF**

- >>> DC inverter compressor
- >>> DC fan motor
- >>> Capacity up to 18kW
- >>> Connectable indoor units quantity up to 9
- >>> Precise oil control technology
- >> Advanced silence technology
- >> Intelligent defrosting technology
- >>> Simple communication wiring
- >>> Auto addressing
- >>> Easy maintenance

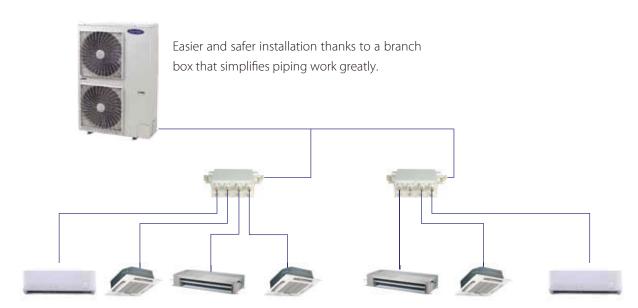


## Long Piping Length >>>



	8-10.5kW	12-18kW
Total piping length	100m	100m
Longest length actual (Equivalent)	45(50)m	60(70)m
Longest length after first branch	20m	20m
Level difference between indoor and outdoor units - ODU up (down)	30(20)m	30(20)m
Level difference between indoor units	8m	8m

## More Convenient Piping Connector − Branch Box >>>



# Four-Way Piping Connection >>>



A four-direction space is available for connecting pipes and wiring in various installation sites.

# **Xpower Mini VRF**





Capacity(HP)			3	4	4.5	5	6	
Model 38VR			003H112010	004H11201S	004H112010	005H112010	006H112010	
Power supply		V/Ph/Hz			220-240/1/50			
Capacity		kW	8.0	10.5	12.3	14	15.5	
Cooling	Power input	kW	2.05	2.68	3.25	3.95	4.52	
	EER		3.9	3.92	3.78	3.54	3.43	
	Capacity	kW	9.0	11.5	13.2	15.4	17	
Heating	Power input	kW	2.24	2.9	3.47	4.16	4.77	
	COP	COP		3.97	3.8	3.7	3.56	
Connectable Total capacity				45~	130% of outdoor unit o	apacity		
indoor unit	Max. quantity		4	5	6	6	7	
Compressor	Туре				Rotary			
Compressor	Quantity		1	1	1	1	1	
Fan motor	Туре				DC Motor			
Tarrinotor	Quantity		1	1	2	2	2	
Refrigerant	Туре		R410A					
nemgerane	Factory charging	kg	2.95	2.95	3.3	3.9	3.9	
Pipe	Liquid pipe	mm	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	
connections	Gas pipe	mm	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф19.1	
Air flow rate		m³/h	5500	5500	6000	6000	6000	
Sound pressure le	evel	dB(A)	56	57	57	57	57	
Net dimension (W	/×H×D)	mm	1075×9	966×396		900×1327×400		
Packing size (W×H×D)		mm	1120×1	100×435		1030×1456×435		
Net weight		kg	62	74	9:	5	100	
Gross weight		kg	67	81	10	6	111	
Operating tempe	rature range	°C		Cod	oling: -5~48; Heating: -	15~24		

Capacities are based on the following conditions:
Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.
Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.



# **Xpower Mini VRF**



Capacity(HP)			4.5			6.5		
Model 38VR			004H119010	005H119010	006H119010	*007H11901S		
Power supply		V/Ph/Hz		380-41	5/3/50			
	Capacity	kW	12.3	14	15.5	17.5		
Cooling	Power input	kW	3.25	3.95	4.52	5.3		
	EER		3.78	3.54	3.43	3.3		
	Capacity	kW	13.2	15.4	17	19		
Heating	Power input	kW	3.47	4.16	4.78	5		
	COP		3.8	3.7	3.56	3.8		
Connectable	Total capacity			45~130% of outd	oor unit capacity			
indoor unit	Max. quantity		6	6	7	9		
-	Туре			Rot	ary	,		
Compressor	Quantity		1	1	1	1		
-	Туре			DC m	notor			
Fan motor	Quantity		2	2	2	2		
Defrierent	Туре		R410A					
Refrigerant	Factory charging	kg	3.3	3.9	3.9	4.5		
Pipe connections	Liquid pipe	mm	Ф9.53	Ф9.53	Ф9.53	Ф9.53		
ripe connections	Gas pipe	mm	Ф15.9	Ф15.9	Ф19.1	Ф19.1		
Air flow rate		m³/h	6000	6000	6000	6800		
Sound pressure leve	I	dB(A)	57	57	57	59		
Net dimension (W×I	H×D)	mm		900×13	27×400			
Packing size (W×H×I	D)	mm		1030×14	456×435			
Net weight		kg	9	5	102	107		
Gross weight		kg	10	6	113	118		
Operating temperat	ure range	°C		Cooling: -5~48; F	Heating: -15~24			

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB. Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.

\* Please contact local Carrier sales company for more information and restrictions for this model 38VR007H11901S.





# Cassette Units



One-way Cassette





Two-way Cassette





Compact Four-way Cassette





Four-way Cassette



































Auto Addressing

Auto Defrosting Easy-cleaning Panel

Follow Me

Anti-cold Air Built-in Drain Function Pump

LED Display

Built-in Independent Filter Dehumidification

Auto Swing

# **One-way Cassette**

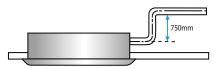
### Only 153mm high >>>

The slim, compact design make the One-way Cassette ideal for interiors with limited ceiling space. Capacities 1.8 to 3.6kw are just 153mm high whilst capacities 4.5 to 7.1kw are 189mm high.



## High-lift Drain Pump >>>

A drain pump with a 750mm pump head is fitted as standard.



### Fresh Air Intake >>>

A reserved outside air intake port allows outdoor air to be introduced directly into the unit, negating the need for a separate ventilation system.



## **Specifications**

### 50Hz AC fan motors

Model			40VZ005H11200011	40VZ006H11200011	40VZ009H11200011	40VZ012H11200011	40VZ018H11200011	40VZ024H11200011	40VZ028H11200011			
Power supply					1-	-phase,220-240V,50	Hz					
Canacity	Cooling	kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1			
Capacity	Heating	kW	2.2	2.6	3.2	4.0	5.0	6.3	8.0			
	Cooling	W	41	41	41	41	48	48	60			
Power input	Heating	W	41	41	41	41	43	44	55			
Airflow rate(H/M/L) m³/h		m³/h	523/404/275	523/404/275	573/456/315	573/456/315	693/600/476	792/688/549	933/749/592			
Sound pressure level(H/M/L) dB(A)			37/34/30	38/34/30	39/37/34	40/38/34	41/39/35	42/40/36	44/41/37			
	Net dim.(W×H×D)	mm	1054×153×425	1054×153×425	1054×153×425	1054×153×425	1275×189×450	1275×189×450	1275×189×450			
Main body	Packing dim.(W×H×D)	mm	1155×245×490	1155×245×490	1155×245×490	1155×245×490	1370×295×505	1370×295×505	1370×295×505			
	Net/gross weight	kg	12.5/16	12.5/16	13/16.5	13/16.5	18.5/22.8	18.8/23.1	19.5/23.8			
	Net dim.(W×H×D)	mm	1180×25×465	1180×25×465	1180×25×465	1180×25×465	1350×25×505	1350×25×505	1350×25×505			
Panel	Packing dim.(W×H×D)	mm	1232×107×517	1232×107×517	1232×107×517	1232×107×517	1410×95×560	1410×95×560	1410×95×560			
	Net/gross weight	kg	3.5/5.2	3.5/5.2	3.5/5.2	3.5/5.2	4/5.4	4/5.4	4/5.4			
Piping	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9			
connections	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25			
Standard cont	roller			Wireless remote controller								

### Notes

- $1. \ Nominal \ capacities \ are \ based \ on \ the \ following \ conditions:$ 
  - Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- 2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.



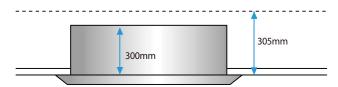
# **Two-way Cassette**

### Low Sound Level >>>

The Two-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 24dB(A).

### Stylish Design and Slim Body >>>

A stylish design and slim body make the Two-way Cassette suited to any room's decor and ambience. At only 300mm high, it can be installed in most ceiling spaces.



### High-lift Drain Pump >>>

A drain pump with a 750mm pump head is fitted as standard, simplifying installation of the drain piping. Higher pump heads are available as a customization option.

### High Airflow >>>

A high airflow rate ensures even airflow and temperature throughout the room, even in high ceiling installations.



### **Specifications**

### 50Hz AC fan motors

Model			40VT006H10200010	40VT009H10200010	40VT012H10200010	40VT018H10200010	40VT024H10200010	40VT028H10200010
Power supply					1-phase,220-240V,50H	Z		
Canacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
Capacity	Heating	kW	2.6	3.2	4.0	5.0	6.3	8.0
Danieria	Cooling	W	57	57	60	92	108	154
Power input	Heating	W	57	57	60	92	108	154
Airflow rate(H/M/L)		m³/h	654/530/410	654/530/410	725/591/458	850/670/550	980/800/670	1,200/1,000/770
Sound pressure leve	el(H/M/L)	dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30	44/40/34
	Net dim.(W×H×D)	mm	1172×299×591	1172×299×591	1172×299×591	1172×299×591	1172×299×591	1172×299×591
Main body	Packing dim.(W×H×D)	mm	1355×400×675	1355×400×675	1355×400×675	1355×400×675	1355×400×675	1355×400×675
	Net/gross weight	kg	34/42.5	34/42.5	34/42.5	36/44.5	36/44.5	36/44.5
	Net dim.(W×H×D)	mm	1430×53×680	1430×53×680	1430×53×680	1430×53×680	1430×53×680	1430×53×680
Panel	Packing dim.(W×H×D)	mm	1525×130×765	1525×130×765	1525×130×765	1525×130×765	1525×130×765	1525×130×765
	Net/gross weight	kg	10.5/15	10.5/15	10.5/15	10.5/15	10.5/15	10.5/15
Dining and a stings	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9
Piping connections	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Ф32	OD Φ32	OD Φ32
Standard controller				W	ireless remote control	er		

### Notes:

- ${\it 1.}\ Nominal\ capacities\ are\ based\ on\ the\ following\ conditions:$ 
  - $Cooling: indoor temperature 27^{\circ}C (80.6^{\circ}F) DB, 19^{\circ}C (66.2^{\circ}F) WB; outdoor temperature 35^{\circ}C (95.0^{\circ}F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.$
- Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- 2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.

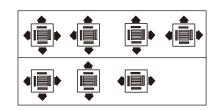
# **Four-way Cassette**

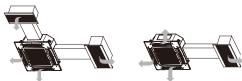
### Multiple Options >>>

Three different versions of Four-way Cassette can be selected based on ceiling arrangements and user preference: Compact Four-way Cassette, Four-way Cassette and Silent Four-way Cassette

### Multiple Airflow Patterns >>>

Seven airflow patterns with up to four flow directions can selected to suit the requirements of the installation site or the shape of the room. Sub-ducts may also be connected.





<sup>\*</sup> Optional:four-way cassette and silent four-way cassette.

### Fan Motor Options >>>

Choose either AC or DC fan motors

### Sub Duct >>>

Connecting a sub-duct enables an indoor unit to be used to also cool a smaller nearby space.



### 360° Airflow >>>

The Compact Four-way Cassette's 360 ° air outlets provide strong airflow circulation to cool or heat every corner of a room and evenly control temperature.



\* Optional

## High-lift Drain Pump >>>

A drain pump with a 500mm pump head is fitted as standard to the Compact Four-way Cassette. Higher pump heads (of up to 600mm) are available as a customization option. On the Four-way Cassette and Silent Four-way Cassette a drain pump with a 750mm pump head is fitted as standard, simplifying installation of the drain piping.

## **Specifications**

### Compact Four-way Cassette (DC fan motors)

Model			40VX005H11500010	40VX006H11500010	40VX009H11500010	40VX012H11500010	40VX018H11500010		
Power supply					1-phase,220-240V,50/60Hz				
Compain	Cooling	kW	1.5	2.2	2.8	3.6	4.5		
Capacity	Heating	kW	1.7	2.4	3.2	4.0	5.0		
Power input	Cooling	W	14	15	16	21	21		
Power input	Heating	W	11	13	13	18	18		
Airflow rate(H/M/L)		m³/h	526/449/364	526/449/364	576/503/405	604/516/400	604/516/400		
Sound pressure leve	Sound pressure level(H/M/L) dB(A)		33.9/32.5/21.8	34.8/32.4/22.4	34.8/32.4/22.4	40.5/34.6/27.8	40.5/34.6/27.8		
Sound power level(	H/M/L)	dB(A)	45/44/34	46/44/35	46/44/35	52/47/41	52/47/41		
	Net dim.(W×H×D)	mm	570×260×570	570×260×570	570×260×570	570×260×570	570×260×570		
Main body	Packing dim.(W×H×D)	mm	675×285×675	675×285×675	675×285×675	675×285×675	675×285×675		
	Net/gross weight	kg	16/22	16/22	16/22	17.5/23.5	17.5/23.5		
	Net dim.(W×H×D)	mm	647×50×647	647×50×647	647×50×647	647×50×647	647×50×647		
Panel	Packing dim.(W×H×D)	mm	715×123×715	715×123×715	715×123×715	715×123×715	715×123×715		
	Net/gross weight	kg	2.5/4.5	2.5/4.5	2.5/4.5	2.5/4.5	2.5/4.5		
Dining connections	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7		
Piping connections	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25		
Standard controller	Standard controller			Wireless remote controller					



# Compact Four-way Cassette (50Hz AC fan motors)

Model			40VX006H11200010	40VX009H11200010	40VX012H11200010	40VX018H11200010			
Power supply				1-phase,220	)-240V,50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5			
Capacity	Heating	kW	2.4	3.2	4.0	5.0			
Power input	Cooling	W	50	50	56	56			
rowei iriput	Heating	W	50	50	56	56			
Airflow rate(H/M/L) $m^3/h$		m³/h	414/313/238	414/313/238	521/409/314	521/409/314			
Sound pressure level(	Sound pressure level(H/M/L) dB(A)			35.8/33.4/23.4	41.5/35.6/28.8	41.5/35.6/28.8			
	Net dim.(W×H×D)	mm	570×260×570	570×260×570	570×260×570	570×260×570			
Main body	Packing dim.(W×H×D)	mm	675×285×675	675×285×675	675×285×675	675×285×675			
	Net/gross weight	kg	16/20	16/20	18/22	18/22			
	Net dim.(W×H×D)	mm	647×50×647	647×50×647	647×50×647	647×50×647			
Panel	Packing dim.(W×H×D)	mm	715×123×715	715×123×715	715×123×715	715×123×715			
	Net/gross weight	kg	2.5/4.5	2.5/4.5	2.5/4.5	2.5/4.5			
Piping connections	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7			
riping connections	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25			
Standard controller			Wireless remote controller						

# Four-way Cassette (DC fan motors)

Model			40VK009H11500010	40VK012H11500010	40VK018H11500010	40VK024H11500010	40VK028H11500010
Power supply					1-phase,220-240V,50/60Hz		
Cit .	Cooling	kW	2.8	3.6	4.5	5.6	7.1
Capacity	Heating	kW	3.2	4.0	5.0	6.3	8.0
	Cooling	W	25	25	31	31	46
Power input	Heating	W	25	25	31	31	46
Airflow rate(H/M/L)		m³/h	982/832/677	982/832/677	1029/857/704	1029/857/704	1200/996/748
Sound pressure level(H/M/L) dB(A)		dB(A)	42/37/32	42/37/32	43/38/34	43/38/34	45/39/34
Sound power level(	H/M/L)	dB(A)	53/49/45	53/49/45	54/50/47	54/50/47	56/51/47
	Net dim.(WxHxD)	mm	904×230×840	904×230×840	904×230×840	904×230×840	904×230×840
Main body	Packing dim.(W×H×D)	mm	955×260×955	955×260×955	955×260×955	955×260×955	955×260×955
	Net/gross weight	kg	21.8/27.6	21.8/27.6	24/29.5	24/29.5	24/29.5
	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950
Panel	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035
	Net/gross weight	kg	5/8	5/8	5/8	5/8	5/8
Dii	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9
Piping connections	Drain pipe	mm	OD Ф32	OD Φ32	OD Φ32	OD Ф32	OD Ф32
Standard controller					Wireless remote controller		1

Model			40VK032H11500010	40VK036H11500010	40VK040H11500010	40VK048H11500010	40VK056H11500010
Power supply					1-phase,220-240V,50/60Hz		
Capacity	Cooling	kW	8.0	9.0	10.0	11.2	14.0
Capacity	Heating	kW	9.0	10.0	11.1	12.5	15.0
Power input	Cooling	W	48	75	75	75	94
rower input	Heating	W	48	75	75	75	94
Airflow rate(H/M/L)		m³/h	1264/1055/811	1596/1239/1034	1596/1239/1034	1596/1239/1034	1727/1426/1224
Sound pressure level(H/M/L) dB(A)		dB(A)	46/40/35	47/41/36	47/41/36	47/41/36	50/45/35
Sound power level(	H/M/L)	dB(A)	57/52/48	58/53/49	58/53/49	58/53/49	61/57/48
	Net dim.(W×H×D)	mm	904×230×840	904×300×840	904×300×840	904×300×840	904×300×840
Main body	Packing dim.(W×H×D)	mm	955×260×955	955×330×955	955×330×955	955×330×955	955×330×955
	Net/gross weight	kg	24/29.5	27.4/33.2	27.4/33.2	27.4/33.2	30/35.8
	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950
Panel	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035
	Net/gross weight	kg	5/8	5/8	5/8	5/8	5/8
Dining connections	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9
Piping connections	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Ф32	OD Ф32
Standard controller					Wireless remote controller		

# Four-way Cassette (EXV built-at side, 50Hz AC fan motors)

Model			40VK009H11200010	40VK012H11200010	40VK018H11200010	40VK024H11200010	40VK028H11200010	
Power supply					1-phase,220-240V,50Hz			
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1	
Сараспу	Heating	kW	3.2	4.0	5.0	6.3	8.0	
Power input	Cooling	W	65	65	75	75	82	
1 Ower Input	Heating	W	65	65	75	75	82	
Airflow rate(H/M/L)		m³/h	847/766/640	847/766/640	864/755/658	864/755/658	1,157/955/749	
Sound pressure level(I	H/WL)	dB(A)	42/38/35	42/38/35	42/38/35	42/38/35	45/42/39	
	Net dim.(W×H×D)	mm	904×230×840	904×230×840	904×230×840	904×230×840	904×230×840	
Main body	Packing dim.(W×H×D)	mm	955×260×955	955×260×955	955×260×955	955×260×955	955×260×955	
	Net/gross weight	kg	24/28	24/28	26/30	26/30	26/30	
	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	
Panel	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	
Net/gross weight kg		kg	6/9	6/9	6/9	6/9	6/9	
Piping connections	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9	
r iping connections	Drain pipe	mm	OD Ф32	OD Ф32	OD Ф32	OD Φ32	OD Φ32	
Standard controller			Wireless remote controller					

Model			40VK032H11200010	40VK036H11200010	40VK040H11200010	40VK048H11200010	40VK056H11200010	
Power supply					1-phase,220-240V,50Hz			
Capacity	Cooling	kW	8.0	9.0	10.0	11.2	14.0	
Сарасіту	Heating	kW	9.0	10.0	11.1	12.5	15.0	
Power input	Cooling	W	97	160	160	160	170	
i owei iriput	Heating	W	97	160	160	160	170	
Airflow rate(H/M/L) m³/h			1236/973/729	1540/1300/1120	1540/1300/1120	1540/1300/1120	1800/1500/1280	
Sound pressure level(l	H/M/L)	dB(A)	45/42/39	48/45/43	48/45/43	48/45/43	50/47/44	
	Net dim.(W×H×D)	mm	904×230×840	904×300×840	904×300×840	904×300×840	904×300×840	
Main body	Packing dim.(W×H×D)	mm	955×260×955	955×330×955	955×330×955	955×330×955	955×330×955	
	Net/gross weight	kg	26/30	32/37	32/37	32/37	32/37	
	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	
Panel	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	
	Net/gross weight	kg	6/9	6/9	6/9	6/9	6/9	
Piping connections	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	
riping connections	Drain pipe	mm	OD Ф32	OD Ф32	OD Ф32	OD Ф32	OD Ф32	
Standard controller			Wireless remote controller					

## Four-way Cassette (EXV built-in, 50Hz AC fan motors)

Model			40VK009H11200011	40VK012H11200011	40VK018H11200011	40VK024H11200011	40VK028H11200011			
Power supply				1-phase,220-240V,50Hz						
Canacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1			
Capacity	Heating	kW	3.2	4.0	5.0	6.3	8.0			
Power input	Cooling	W	80	80	88	88	88			
rower input	Heating	W	80	80	88	88	88			
Airflow rate(H/M/L) m <sup>3</sup>			764/638//554	764/638//554	905/740//651	905/740//651	950/767//663			
Sound pressure level(H/M	I/L)	dB(A)	32/31/30	32/31/30	36/34/33	36/34/33	38/36/35			
	Net dim.(W×H×D)	mm	840×230×840	840×230×840	840×230×840	840×230×840	840×230×840			
Main body	Packing dim.(W×H×D)	mm	955×260×955	955×260×955	955×260×955	955×260×955	955×260×955			
	Net/gross weight	kg	21.5/26.7	21.5/26.7	23.7/28.9	23.7/28.9	23.7/28.9			
	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950			
Panel	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035			
Net/gross weight		kg	6/9	6/9	6/9	6/9	6/9			
Piping connections	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9			
riping connections	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32			
Standard controller				\	Wireless remote controlle	r				

Model			40VK032H11200011	40VK036H11200011	40VK040H11200011	40VK048H11200011	40VK056H11200011			
Power supply					1-phase,220-240V,50Hz					
Capacity	Cooling	kW	8.0	9.0	10.0	11.2	14.0			
Capacity	Heating	kW	9.0	10.0	11.1	12.5	15.0			
Power input	Cooling	W	110	140	165	165	176			
rower input	Heating	W	110	140	165	165	176			
Airflow rate(H/M/L) m <sup>3</sup> /h			1200/1021/789	1332/1129/908	1651/1304/1127	1651/1304/1127	1658/1335/1130			
Sound pressure level(H/N	1/L)	dB(A)	42/39/37	43/39/38	45/42/40	45/42/40	46/41/39			
	Net dim.(W×H×D)	mm	840×230×840	840×300×840	840×300×840	840×300×840	840×300×840			
Main body	Packing dim.(W×H×D)	mm	955×260×955	955×330×955	955×330×955	955×330×955	955×330×955			
	Net/gross weight	kg	23.7/28.9	28.7/34.1	28.7/34.1	28.7/34.1	30.9/36.3			
	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950			
Panel	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035			
	Net/gross weight	kg	6/9	6/9	6/9	6/9	6/9			
Piping connections	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9			
Drain pipe mm			OD Ф32	OD Ф32	OD Φ32	OD Φ32	OD Φ32			
Standard controller	'		Wireless remote controller							

### Notes

- 1. Nominal capacities are based on the following conditions:
  - $Cooling: indoor temperature 27^{\circ}C (80.6^{\circ}F) DB, 19^{\circ}C (66.2^{\circ}F) WB; outdoor temperature 35^{\circ}C (95.0^{\circ}F) DB; equivalent refrigerant piping length 7.5 m (24.6ft.) with zero level difference.$
  - Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature  $7^{\circ}$ C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- 2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.



# High Efficiency Four-way Cassette (DC fan motors)

Model			40VK005H1120001T	40VK006H1120001T	40VK009H1120001T	40VK012H1120001T
Power supply				1Ph, 220-240	V, 50Hz/60Hz	
Capacity	Cooling	kW	1.8	2.2	2.8	3.6
Capacity	Heating	kW	2.2	2.6	3.2	4.0
Dower input	Cooling	W	40	40	66	103
Power input	Heating	W	41	41	67	103
Airflow rate (H)		m³/h	1,000	1,000	1,100	1,200
Sound pressure	e level (H/M/L)	dB(A)	35/31/28	35/31/28	37/33/28	38/34/29
	Net Dim. (W×H×D)	mm	840×300×840	840×300×840	840×300×840	840×300×840
Main body	Packing Dim. (W×H×D)	mm	955×330×955	955×330×955	955×330×955	955×330×955
	Net/gross weight	kg	32/38	32/38	32/38	32/38
	Net Dim. (W×H×D)	mm	950×46×950	950×46×950	950×46×950	950×46×950
Panel	Packing Dim. (W×H×D)	mm	1,035×90×1,035	1,035×90×1,035	1,035×90×1,035	1,035×90×1,035
	Net/gross weight	kg	6/9	6/9	6/9	6/9
Piping	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9
connections	connections Drain pipe mm		OD Ф32	OD Ф32	OD Ф32	OD Φ32
Standard contr	oller			Wireless rem	ote controller	

			40VK018H1120001T	40VK024H1120001T	40VK028H1120001T
Power supply				1Ph, 220-240V, 50Hz	
Canacity	Cooling	kW	4.5	5.6	7.1
Capacity	Heating	kW	5.0	6.3	8.0
D	Cooling	W	120	138	150
Power input	Heating	W	124	143	155
Airflow rate (H)	1	m³/h	1,500	1,600	1,800
Sound pressur	e level (H/M/L)	dB(A)	39/35/31	40/36/33	41/39/37
	Net Dim. (W×H×D)	mm	840×300×840	840×300×840	840×300×840
Main body	Packing Dim. (W×H×D)	mm	955×330×955	955×330×955	955×330×955
	Net/gross weight	kg	32/38	32/38	32/38
	Net Dim. (W×H×D)	mm	950×46×950	950×46×950	950×46×950
Panel	Packing Dim. (W×H×D)	mm	1,035×90×1,035	1,035×90×1,035	1,035×90×1,035
	Net/gross weight	kg	6/9	6/9	6/9
Piping	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9
connections	Drain pipe	mm	OD Φ32	OD Ф32	OD Φ32
Standard conti	oller			Wireless remote controller	

### Notes

<sup>1.</sup> Nominal cooling capacities are based on the following conditions: return air temperature: 27°C DB, 19°C WB, outdoor temperature: 35°C DB, equivalent ref. piping: 8m (horizontal).

<sup>2.</sup> Nominal heating capacities are based on the following conditions: return air temperature: 20°C DB, outdoor temperature: 7°C DB, 6°C WB, equivalent ref. piping: 8m (horizontal).

<sup>3.</sup> Sound Level is measured 1.4m below the unit.

# **Duct Units**



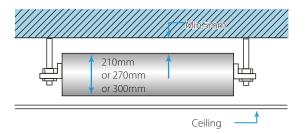




# Low/Medium Static Pressure Duct (1.5-7.1kW) Medium Static Pressure Duct (8-14kW)

### Compact Design >>>

Capacities 2.2 to 7.1kW are just 210mm high whilst Capacities 8 to 11.2kW are 270mm high and model 140 is 300mm high.



### Fan Motor Options >>>

Choose either AC or DC fan motors.

# High-lift Drain Pump

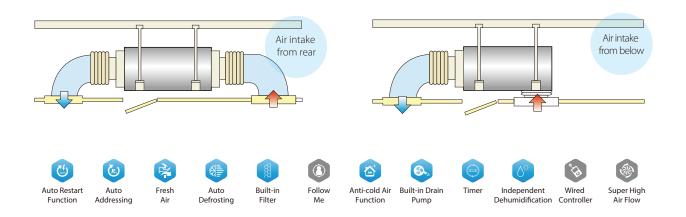
A drain pump with a 750mm pump head is fitted as standard, simplifying installation of the drain piping.

## Easy Maintenance Access, Flexible Control >>>

As a customization option, for ease of access the electric control box can be separated from the unit by up to 1m. Functional ports including remote on/off dry contact and 220V alarm signal output are included as standard, providing control flexibility.

### Flexibility >>>

To provide the flexibility to adapt to differing installation situations, the air inlet may be positioned either on the underside or the rear of the unit.





# **Specifications**

### 50Hz AC fan motors

					A CONTRACTOR OF THE PARTY OF TH		A CONTRACTOR OF THE PARTY OF TH		
Model			42VD006H112013011	42VD009H112013011	42VD012H112013011	42VD018H112013011	42VD024H112013011		
Power supply					1-phase,220-240V,50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6		
Capacity	Heating	kW	2.6	3.2	4.0	5.0	6.3		
Power input	Cooling	W	57	57	61	98	103		
rower input	Heating	W	57	57	61	98	103		
Airflow rate(H/M/L)		m³/h	538/456/375	538/456/375	597/514/429	811/684/575	811/684/575		
External static pressure(Min/Std/N	lax)	Pa	0/10/30	0/10/30	0/10/30	0/10/30	0/10/30		
Sound pressure level(H/M/L)		dB(A)	36/35/32	37/35/32	38.6/37.5/33.8	39/37.9/34	39/37.9/34		
Net dimension(WxHxD)		mm	780×210×500	780×210×500	780×210×500	1000×210×500	1000×210×500		
Packing dimension(W×H×D)		mm	870×285×525	870×285×525	870×285×525	1115×285×525	1115×285×525		
Net/gross weight		kg	17.5/20	17.5/20	17.5/20	22.5/26	22.5/26		
Piping connections	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Φ6.35/Φ12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9		
riping connections	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25		
Standard controller			Wireless remote controller						
Model			42VD028H112013011	42VD032H112003010	42VD036H112003010	42VD048H112003010	42VD054H112003010		
Power supply					1-phase,220-240V,50Hz				
6 4	Cooling	kW	7.1	8.0	9.0	11.2	14.0		
Capacity	Heating	kW	8.0	9.0	10.0	12.5	15.5		
Danisana	Cooling	W	140	198	200	313	274		
Power input	Heating	W	140	198	200	313	274		
Airflow rate(H/M/L) m³/h			1029/934/781	1345/1165/1013	1345/1165/1013	1800/1556/1400	1905/1636/1400		
External static pressure(Min/Std/Ma	x)	Pa	0/10/30	10/20/50	10/20/50	10/40/80	10/40/100		
Sound pressure level(H/M/L)		dB(A)	41.4/39/35	45.4/39.8/37	45.4/39.8/37	48.0 /41.9/38	47.7/43.2/39.0		

1230×270×775

1355×350×795

38/46.5

Ф9.53/Ф15.9

OD Ф25

1230×270×775

1355×350×795

40/48

Ф9.53/Ф15.9

OD Φ25

Wireless remote controller

1230×270×775

1355×350×795

40/48

Ф9.53/Ф15.9

OD Ф25

1290×300×865

1400×375×925

49/58

OD Φ25

### Notes:

Net dimension(W $\times$ H $\times$ D)

Net/gross weight

Piping connections

Standard controller

Packing dimension(W×H×D)

- 1. Nominal capacities are based on the following conditions:
- Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

1220×210×500

1335×285×525

28/31.5

Ф9.53/Ф15.9

ОD Ф25

- Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- 2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.

Liquid/gas pipe

mm

mm

kg

mm

mm

3. External static pressure is based on high speed indoor airflow.

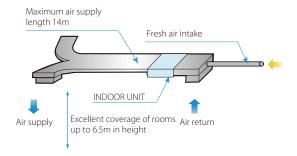
# **High Static Pressure Duct**

### Fan Motor Options >>>

Choose either AC or DC fan motors.

### Flexible Duct Design >>>

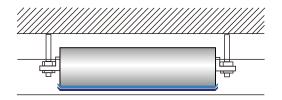
The High Static Pressure Duct indoor unit offers external static pressures of up to 196Pa (Capacities 7.1 to 16kW) or 280Pa (Capacities 20 to 56kW), allowing air supply duct lengths of up to 14m at a height of 6.5m. With a height of just 420mm (Capacities 7.1 to 16kW), only 450mm of ceiling space is required.



# 420mm INDOOR UNIT

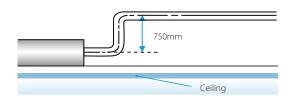
### Double-skin Drainage Pan >>>

A double-skin drainage pan provides double protection for ceilings (Capacities 7.1 to 16kW and 40 to 56kW).



## Drain Pumpn >>>

A drain pump with a 750mm pump head is available as a customization option (Capacities 7.1 to 16kW).



## Easy Installation >>>

Flanges for air inlet/outlet ducts are fitted as standard on the High Static Pressure Duct. On Capacities 7 to 16kW, the expansion valve is fitted inside the unit, requiring no extra connection.

## Easy Maintenance Access, Flexible Control >>>

The wireless remote controller is provided as standard and the wired remote controller is available as a customization option. Functional ports including remote on/off dry contact are included as standard, providing additional control flexibility. For ease of installation, the electric control box's display board is factory-fitted and the filter can be accessed either from the rear of from below.

























<sup>\*</sup>Filter is standard for 7.1 to 28kw models



# Specifications 50Hz AC fan motors

Model			42VD028H112011010	42VD032H112011010	42VD036H112011010	42VD048H112011010	42VD054H112011010	42VD055H112011010			
Power supply				1-phase,220-240V,50Hz							
Canadib	Cooling	kW	7.1	8.0	9.0	11.2	14.0	16.0			
Capacity	Heating	kW	8.0	9.0	10.0	12.5	16.0	17.0			
D	Cooling	W	263	263	423	524	724	940			
Power input	Heating	W	263	263	423	524	724	940			
Airflow rate(H/M/L)	Airflow rate(H/M/L) m³/h			1416/1338/1220	1951/1741/1518	2116/1936/1520	3000/2618/2226	3620/3044/2744			
External static pressure(Min/S	Std/Max)	Pa	25/25/196	37/37/196	37/37/196	50/50/196	50/50/196	50/50/196			
Sound pressure level(H/M/L)		dB(A)	48/46/44	48/46/44.5	52/49/47	52/49/47	53/50/48	54/52/50			
Net dimension(W×H×D)		mm	952×420×690	952×420×690	952×420×690	952×420×690	1300×420×690	1300×420×690			
Packing dimension(W×H×D)		mm	1090×440×768	1090×440×768	1090×440×768	1090×440×768	1436×450×768	1436×450×768			
Net/gross weight		kg	45/50	45/50	46.5/52.4	50.6/56	68/70	70/77.5			
		mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9			
Piping connections Drain pipe r		mm	OD Φ25	OD Φ25	OD Φ25	OD Ф25	OD Φ25	OD Φ25			
Standard controller					Wireless Remo	ote Controller					

- 1. Nominal capacities are based on the following conditions:

   Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

   Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

  2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.
- 3. External static pressure is based on high speed indoor airflow.

Model			42VD056H112011010	42VD058H112011010	42VD060H112011010	42VD140H112011010	42VD160H112011010	42VD190H112011010		
Power supply			1-phase,220-240V,50Hz							
Capacity	Cooling	kW	20.0	25.0	28.0	40.0	45.0	56.0		
Capacity	Heating	kW	22.5	26.0	31.5	45.0	50.0	63.0		
Dower input	Cooling	W	1516	1516	1516	2700	2700	3400		
Power input Heating W			1516	1516	1516	2700	2700	3400		
Airflow rate(H/M/L)	Airflow rate(H/M/L) m³/ł			4700/4100/3599	4700/4100/3599	7472/6072/4995	7472/6072/4995	9550/7950/6600		
External static pressure(Min/	Std/Max)	Pa	50/200/280	50/200/280	50/200/280	50/200/280	50/200/280	50/200/280		
Sound pressure level(H/M/L)		dB(A)	59/55/52	59/55/52	59/55/52	61/59/56	61/59/56	63/60/57		
Net dimension(W×H×D)		mm	1440×505×925	1440×505×925	1440×505×925	1970×668×902.5	1970×668×902.5	1970×668×902.5		
Packing dimension(W×H×D)		mm	1509×550×990	1509×550×990	1509×550×990	2095×800×964	2095×800×964	2095×800×964		
Net/gross weight		kg	115/129	115/129	115/129	232/245	232/245	235/250		
Liquid/gas pipe mm		Ф9.53×2/Ф15.9×2	Ф9.53×2/Ф15.9×2	Ф9.53×2/Ф15.9×2	Ф9.53×2/Ф22.2×2	Ф9.53×2/Ф22.2×2	Ф9.53×2/Ф22.2×2			
Piping connections	Drain pipe mm		OD Φ32	OD Φ32	OD Ф32	OD Ф32	OD Ф32	OD Φ32		
Standard controller			Wireless Remote Controller							

### Notes:

- 1. Nominal capacities are based on the following conditions:
  - $Cooling: indoor temperature 27^{\circ}C (80.6^{\circ}F) \ DB, 19^{\circ}C (66.2^{\circ}F) \ WB; outdoor temperature 35^{\circ}C (95.0^{\circ}F) \ DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.$
  - $\ Heating: indoor temperature \ 20^{\circ}C \ (68.0^{\circ}F) \ DB; outdoor temperature \ 7^{\circ}C \ (44.6^{\circ}F) \ DB, \ 6^{\circ}C \ (42.8^{\circ}F) \ WB; equivalent refrigerant piping length \ 7.5m \ (24.6^{\circ}ft.) \ with zero level difference.$
- 2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.
- 3. External static pressure is based on high speed indoor airflow.



# Fresh Air Processing Unit

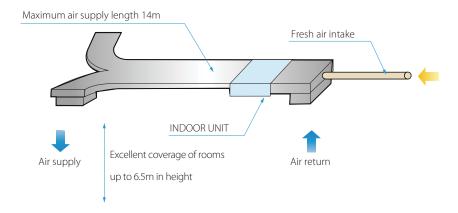
### Fan Motor Options >>>

Choose either AC or DC fan motors.

### 100% Fresh Air Processing Unit >>>

Both fresh air filtration and heating/cooling can be achieved in a single system.

Indoor units and the Fresh Air Processing Unit can be connected to the same refrigerant system, increasing design flexibility and greatly reducing total system costs.



## Flexible Duct Design >>>

The Fresh Air Processing unit offers external static pressures of up to 196Pa (Capacities 12.5 to 14kW) or 280Pa (Capacities 20 to 28kW), allowing air supply duct lengths of up to 14m at a height of 6.5m.

### The Comfort of Fresh Air >>>

Enjoy the comfort and health benefits of fresh air being drawn into your working or living environment.

# **Specifications**

### 50Hz AC fan motors

Model			42VD052H112211010	42VD054H112211010	42VD056H112211010	42VD058H112211010	42VD060H112211010		
Power supply					1-phase,220-240V,50Hz				
Capacity	Cooling	kW	12.5	14.0	20.0	25.0	28.0		
Capacity	Heating	kW	10.5	12.0	18.0	20.0	22.0		
Power input	Cooling	W	430	430	1000×2	1063×2	1063×2		
rowei input	Heating	W	430	430	1000×2	1063×2	1063×2		
Airflow rate(H/M/L) m³/h			2142/1870/1611	2142/1870/1611	2870/2620/2150	3005/2700/2250	3005/2700/2250		
External static pressure(Min/Std/	External static pressure(Min/Std/Max) Pa			30/50/196	50/200/280	50/200/280	50/200/280		
Sound pressure level(H/M/L)		dB(A)	54/52/50	54/52/50	54/53/51	55/54/52	55/54/52		
Net dimension(W×H×D)		mm	1300×420×690	1300×420×690	1440×505×925	1440×505×925	1440×505×925		
Packing dimension(W×H×D)		mm	1436×450×768	1436×450×768	1509×550×990	1509×550×990	1509×550×990		
Net/gross weight		kg	69.5/76	69.5/76	115/125	115/125	115/125		
Dining and a set in a	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9		
Piping connections	Drain pipe	mm	OD Φ25	OD Φ25	OD Ф32	OD Φ32	OD Φ32		
peration temperature range °C			Heating: -5~16; Fan only: 16~20; Cooling: 20~43						
Standard controller			Wireless Remote Controller						

### Notes:

- 1. Nominal capacities are based on the following conditions:
- Cooling: outdoor temperature 33°C (91.4°F) DB, 24°C (75.2°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- Heating: outdoor temperature 0°C (32°F) DB, -1°C (30.2°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- 2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.
- 3. External static pressure is based on high speed indoor airflow.
- 4. The Fresh Air Processing Unit can be used either independently or in conjunction with other types of indoor unit. If used independently, the total capacity of the Fresh Air Processing Units must be between 50% and 100% of that of the outdoor units. If used in conjunction with other types of indoor unit, the total capacity of the Fresh Air Processing Units must not exceed 30% of that of the outdoor units.



# **Wall-mounted**





























Auto Restart Function

Addressing

Defrosting

Panel

Function

Swing

Display

Filter

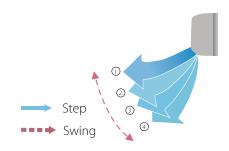
Independent Dehumidification Controller

### **Multiple Options**

The elegant new series units enhance the aesthetics of any room and are suitable for a wide variety of installation space situations.

## Auto Swing Louver >>>

Multiple louver positions and the auto swing ensure precise and flexible airflow control.

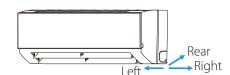


## High Efficiency, Low Sound Level

Advanced brushless DC fan motors operate highly efficiently without generating excessive noise, saving energy at the same time as providing a low-noise work or living space.

### Flexibility >>>

To increase installation flexibility, the expansion valve is fitted internally, increasing compactness, and the refrigerant outlet direction can be left, right or rear as the installation situation requires. A new fixing plate design speeds installation and provides extra stability.



## Optimal Comfort Through Better Flow Control

A 2000-stage element mechanical expansion valve ensures precise flow control whilst generating little modulation noise. A multi-blade fan coupled with a dual-blade air guide smooth output airflow and three fan speeds provide flexibility to respond to users' particular comfort requirements.



# **Specifications**

# (DC fan motors)

Model			42VH006H115000102	42VH009H115000102	42VH012H115000102	42VH018H115000102			
Power supply				1-phase,220-	240V,50/60Hz				
Canacity	Cooling	kW	2.2	2.8	3.6	4.5			
Capacity	Heating	kW	2.4	3.2	4	5			
Power input	Cooling	W	8	9	19	19			
rowei iriput	Heating	W	8	9	19	19			
Airflow rate (H/M/L)	•	m³/h	422/393/356	417/370/316	656/573/488	594/507/424			
Sound pressure level (	H/M/L)	dB(A)	31/30/29	31/30/29	33/32/30	35/33/31			
Net dimension (W×H>	(D)	mm	835×280×203	835×280×203	990×315×223	990×315×223			
Packing dimension (W	/×H×D)	mm	935×385×320	935×385×320	1085×420×335	1085×420×335			
Net/ Gross weight		kg	8.4/12.1	9.5/13.1	11.4/15.5	12.8/16.9			
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7						
riping conflections	Drain pipe	mm	OD Ф16.5						
Standard controller	-		Wireless remote controller						

Model			42VH024H115000102	42VH028H115000102	42VH032H115000102	42VH036H115000102		
Power supply				1-phase,220-2	240V,50/60Hz			
Canacity	Cooling	kW	5.6	7.1	8	9		
Capacity	Heating	kW	6.3	8	9	10		
Dower input	Cooling	W	27	49	53	82		
Power input Heating W			27	49	53	82		
Airflow rate (H/M/L)	•	m³/h	747/648/547	1195/1005/809	1195/1005/809	1421/1067/867		
Sound pressure level	(H/M/L)	dB(A)	38/36/34	44/39/36	44/39/36	48/43/38		
Dimension (W×H×D)		mm	990×315×223	1194×343×262	1194×343×262	1194×343×262		
Packing (W×H×D)		mm	1085×420×335	1290×375×460	1290×375×460	1290×375×460		
Net/ Gross weight		kg	12.8/16.9	17/22.4	17/22.4	17/22.4		
Dining	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9		
Piping connections	Drain pipe	mm	OD Φ16.5					
Standard controller	-		Wireless remote controller					

### Notes

- $1. \ Nominal \ cooling \ capacities \ are \ based \ on \ the \ following \ conditions: \ return \ air \ temperature.: 27^{\circ}CDB, 19^{\circ}CWB, outdoor \ temperature.: 35^{\circ}CDB, \ equivalent \ ref. \ piping: 7.5m(horizontal).$
- $2. \ Nominal\ heating\ capacities\ are\ based\ on\ the\ following\ conditions:\ return\ air\ temperature::\ 20^\circ CDB,\ outdoor\ temperature::\ 7^\circ CDB,\ 6^\circ CWB,\ equivalent\ ref.\ Piping:\ 7.5m(horizontal).$
- 3. Sound level is measured 1m below the air outlet horizontally and vertically.



# **Ceiling & Floor**































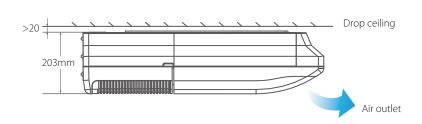
Independent Dehumidification

## Fan Motor Options >>>

Choose either AC or DC fan motors.

### Flexibility >>>

A sleek design suits installation either on the ceiling or floor, providing flexibility to accommodate a wide range of room designs.

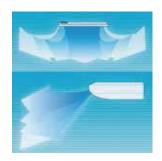




The unit can be installed either horizontally on the ceiling or vertically against the wall.

## Wide-Angle Swing >>>

A wide-angle swing together with bi-directional louver swing allows the positioning of the unit to be selected to suit the room's decor, whilst ensuring that full-room cooling and heating coverage is achieved.



Wide-angle swing

### Increased Comfort >>>

Sound levels as low as 36dB(A) are achieved using electronic expansion valves which ensure precise flow control whilst generating little modulation noise. A multi-blade fan coupled with a dual-louver air guide smooth output airflow.

# **Specifications**

## 50Hz AC fan motors

Model			42VF012H112000010	42VF018H112000010	42VF024H112000010	42VF028H112000010	42VF032H112000010		
Power supply			1-phase,220-240V,50Hz						
Canacity	Cooling	kW	3.6	4.5	5.6	7.1	8.0		
Capacity	Heating	kW	4.0	5.0	6.3	8.0	9.0		
Power input	Cooling	W	49	120	122	125	130		
Power input	Heating	W	49	120	122	125	130		
Airflow rate(H/M/L)		m³/h	650/570/500	800/600/500	800/600/500	800/600/500	1,200/900/700		
Sound pressure level(H/M/L)		dB(A)	40/38/36	43/41/38	43/41/38	43/41/38	45/43/40		
Net dimension(W×H×D)		mm	990×203×660	990×203×660	990×203×660	990×203×660	1280×203×660		
Packing dimension(W×H×D)		mm	1089×296×744	1089×296×744	1089×296×744	1089×296×744	1379×296×744		
Net/gross weight		kg	26/32	28/34	28/34	28/34	34.5/41		
D'. · · · · · · · · · · · · · · · · · · ·	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9		
Piping connections	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25		
Standard controller			Wireless remote controller						

Model			42VF036H112000010	42VF048H112000010	42VF054H112000010	42VF055H12000010		
Power supply			1-phase,220-240V,50Hz					
Canacity	Cooling	kW	9.0	11.2	14.0	16.0		
Capacity	Heating	kW	10.0	12.5	15.0	18.0		
Power input	Cooling	W	130	182	182	300		
Power input	Heating	W	130	182	182	300		
Airflow rate(H/M/L)		m³/h	1200/900/700	1980/1860/1730	1980/1860/1730	1980/1860/1730		
Sound pressure level(H/M/L)		dB(A)	45/43/40	47/45/42	47/45/42	47/45/42		
Net dimension(W×H×D)		mm	1280×203×660	1670×244×680	1670×244×680	1670×285×680		
Packing dimension(W×H×D)		mm	1379×296×744	1764×329×760	1764×329×760	1775×377×760		
Net/gross weight			34.5/41	54/59	54/59	57.5/63.5		
Piping connections	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9		
	Drain pipe	mm	OD Φ25	OD Φ25	OD Ф25	OD Φ25		
Standard controller	-		Wireless remote controller					

- 1. Nominal capacities are based on the following conditions:
- Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

   Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- 2. Floor standing: Sound pressure level is measured at a position 1 m (3.28ft) in front the unit and 1 m (3.28ft) above the floor in a semi-anechoic chamber.Ceiling mounted: Sound pressure level is measured at a position 1m (3.28ft) in front and 1m (3.28ft) below the unit in a semi-anechoic chamber.



### DC fan motors

Model			42VF012H115000010	42VF018H115000010	42VF024H115000010	42VF028H115000010		
Power supply			1-phase,220-240V,50/60Hz					
Canadita	Cooling	kW	3.6	4.5	5.6	7.1		
Capacity	Heating	kW	4.0	5.0	6.3	8.0		
Davisaiaavt	Cooling	W	23	94	94	94		
Power input	Heating	W	23	94	94	94		
Airflow rate(H/M/L) m³/h			550/480/420	930/830/720	930/830/720	930/830/720		
Sound pressure level(H/M/L) dB(A)			40/38/36	43/41/38	43/41/38	43/41/38		
Sound power level(H/M/L)		dB(A)	51/50/49	54/53/51	54/53/51	54/53/51		
Net dimension(W×H×D)		mm	990×203×660	990×203×660	990×203×660	990×203×660		
Packing dimension(W×H×E	0)	mm	1089×296×744	1089×296×744	1089×296×744	1089×296×744		
Net/gross weight kg		kg	25/31	27/33	27/33	27/33		
Piping connections	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9		
	Drain pipe	mm	OD Ф25	OD Φ25	OD Φ25	OD Φ25		
Standard controller			Wireless remote controller					

Model			42VF032H115000010	42VF036H115000010	42VF048H115000010	42VF054H115000010		
Power supply			1-phase,220-240V,50/60Hz					
Caracita	Cooling	kW	8.0	9.0	11.2	14.0		
Capacity	Heating	kW	9.0	10.0	12.5	15		
Danisaia	Cooling	W	126	126	65×2	65×2		
Power input	Heating	W	126	126	65×2	65×2		
Airflow rate(H/M/L) m³/h			1280/1170/1050	1280/1170/1050	1890/1700/1580	1890/1700/1580		
Sound pressure level(H/M/L) dB(A)			45/43/40	45/43/40	47/45/42	47/45/42		
Sound power level(H/M/L)		dB(A)	56/55/53	56/55/53	58/56/55	58/56/55		
Net dimension(W×H×D)		mm	1280×203×660	1280×203×660	1670×244×680	1670×244×680		
Packing dimension(W×H×I	D)	mm	1379×296×744	1379×296×744	1764×329×760	1764×329×760		
Net/gross weight kg		kg	33.5/40	33.5/40	49/57	49/57		
Piping connections	Liquid/gas pipe	mm	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9		
	Drain pipe	mm	OD Ф25	OD Φ25	OD Φ25	OD Φ25		
Standard controller			Wireless remote controller					

- 1. Nominal capacities are based on the following conditions:
- Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
   Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
  2. Floor standing: Sound pressure level is measured at a position 1m (3.28ft) in front the unit and 1m (3.28ft) above the floor in a semi-anechoic chamber.
- Ceiling mounted: Sound pressure level is measured at a position 1m (3.28ft) in front and 1m (3.28ft) below the unit in a semi-anechoic chamber.

# **Floor Standing**









Function



Addressing



Defrosting







Controller

Fan Motor Options >>>

Choose either AC or DC fan motors.

### Flexibility >>>

The Floor Standing indoor unit can be installed on the floor or, for easier floor cleaning, hung on the wall with piping running from the rear. The streamlined appearance complements any room's decor.

### **Specifications**

Model			42VS006H1120020	<b>142</b> VS009H1120020	<b>42</b> VS012H1120020	<b>#2</b> VS018H1120020	<b>#12</b> VS024H1120020	<b>1402</b> VS028H1120020	<b>40</b> VS032H112002	
Power supply			1-phase,220-240V,50Hz							
	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	
Capacity	Heating	kW	2.4	3.2	4.0	5.0	6.3	8.0	9.0	
Cooling		W	40	46	46	49	88	130	130	
Power input	Heating	W	40	46	46	49	88	130	130	
Airflow rate(H/M/L) m³/h		m³/h	530/456/400	569/485/421	624/522/375	660/542/440	1,150/970/830	1,380/1,100/870	1,380/1,100/870	
Sound pressure level(H/M/	L)	dB(A)	36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33	44/39/33	
Net dimension(W×H×D)		mm	1000×596×225	1000×596×225	1200×596×225	1200×596×225	1500×596×225	1500×596×225	1500×596×225	
Packing dimension(W×H×I	D)	mm	1089×683×312	1089×683×312	1289×683×312	1289×683×312	1589×683×312	1589×683×312	1589×683×312	
Net/gross weight kg		kg	30/35	30/35	36/44	36/44	41/46.5	41/46.5	42.5/48.5	
Piping connections	Liquid/gas pip	e mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	
	Drain pipe	mm	OD Ф25	OD Ф25	OD Ф25	OD Ф25	OD Ф25	OD Ф25	OD Ф25	
Standard controller				Wireless remote controller						

Model			42VS006H1150020	1402VS009H1150020	1 <b>4</b> 2VS012H1150020	1 <b>4</b> 02VS018H1150020	1402VS024H1150020	1402VS028H1150020	1 <b>4</b> 02VS032H1150020	
Power supply			1-phase,220-240V,50/60Hz							
	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	
Capacity	Heating	kW	2.4	3.2	4.0	5.0	6.3	8.0	9.0	
Power input Cooling Heating	W	24	24	21	24	38	62	62		
	Heating	W	23	24	19	24	41	65	63	
Airflow rate(H/M/L)		m³/h	530/456/400	569/485/421	624/522/375	660/542/440	1150/970/830	1380/1100/870	1380/1100/870	
Sound pressure level(H/M/L)		dB(A)	36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33	44/39/33	
Sound power level(H/M/L)		dB(A)	47/45/42	47/45/42	48/46/43	48/46/43	52/47/44	55/51/46	55/51/46	
Net dimension (W×H	×D)	mm	1000×596×225	1000×596×225	1200×596×225	1200×596×225	1500×596×225	1500×596×225	1500×596×225	
Packing dimension (V	V×H×D)	mm	1089×683×312	1089×683×312	1289×683×312	1289×683×312	1589×683×312	1589×683×312	1589×683×312	
Net/gross weight		kg	29/34	29/34	35/43	35/43	40/45.5	40/45.5	41/46.5	
Piping connections	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф9.53/Ф15.9	Ф9.53/Ф15.9	Ф9.53/Ф15.9	
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	
Standard controller					Wir	eless remote contro	oller			

- 1. Nominal capacities are based on the following conditions:

   Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

   Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- 2. The specifications of the F3B series are measured at 10Pa external static pressure and those of the F4 and F5 series at 0Pa external static pressure.
- 3. Sound pressure level is measured at a position 1m (3.28ft) in front the unit and 1m (3.28ft) above the floor in a semi-anechoic chamber.



### Console





























### Compact and Stylish >>>

The elegant, space-saving design of the Console unit complements any room's decor. The expansion valve is installed inside the indoor unit for added compactness.

# High-Efficiency Filter >>>

Formaldehyde nemesis filter is fitted as standard and active-carbon and biological anti-virus filter are available as a customization option.

### High Comfort >>>

A wide-angle swing together with auto swing louvers and five fan speed options ensure that airflow reaches every corner of the room. A 2000-stage element mechanical expansion valve ensures precise flow control whilst generating little modulation noise.

## Flexibility >>>

The Console unit can be installed on the floor or lower part of the wall. Full capacity is still achieved even when the underside air inlet is unavailable.



### Two Air Outlets and Four Air Inlets >>>

The Console unit's combination of four air inlets and two air outlets ensure that cooling and heating is distributed in all directions.



## Low-noise Design >>>

A five-speed fan allows airflow customization whilst maintaining low-noise, low power consumption operation.



Sound levels as low as 26dB(A)

## **Specifications**

Model			42VC006H112000010	42VC009H112000010	42VC012H112000010	42VC018H112000010		
Power supply			1-phase,220-240V,50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5		
Сараспу	Heating	kW	2.6	3.2	4.0	5.0		
Dower input	Cooling	W	20	25	25	45		
Power input	Heating	W	20	25	25	45		
Airflow rate(H/M/L) m³/h			430/345/229	510/430/229	510/430/229	660/512/400		
Sound pressure level(H/M/L)		dB(A)	38/32/26	39/33/27	39/33/27	42/39/36		
Net dimension(W×H×D)		mm	700×600×210	700×600×210	700×600×210	700×600×210		
Packing dimension(W×H×D)		mm	810×710×305	810×710×305	810×710×305	810×710×305		
Net/gross weight kg			14/19	15/20	15/20	15/20		
Dining	Liquid/gas pipe	mm	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7	Ф6.35/Ф12.7		
Piping connections	Drain pipe	mm	OD Ф16	ОD Ф16	OD Φ16	OD Φ16		
Standard controller			Wireless remote controller					

 $<sup>{\</sup>it 1.}\ Nominal\ capacities\ are\ based\ on\ the\ following\ conditions:$ 

<sup>-</sup> Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

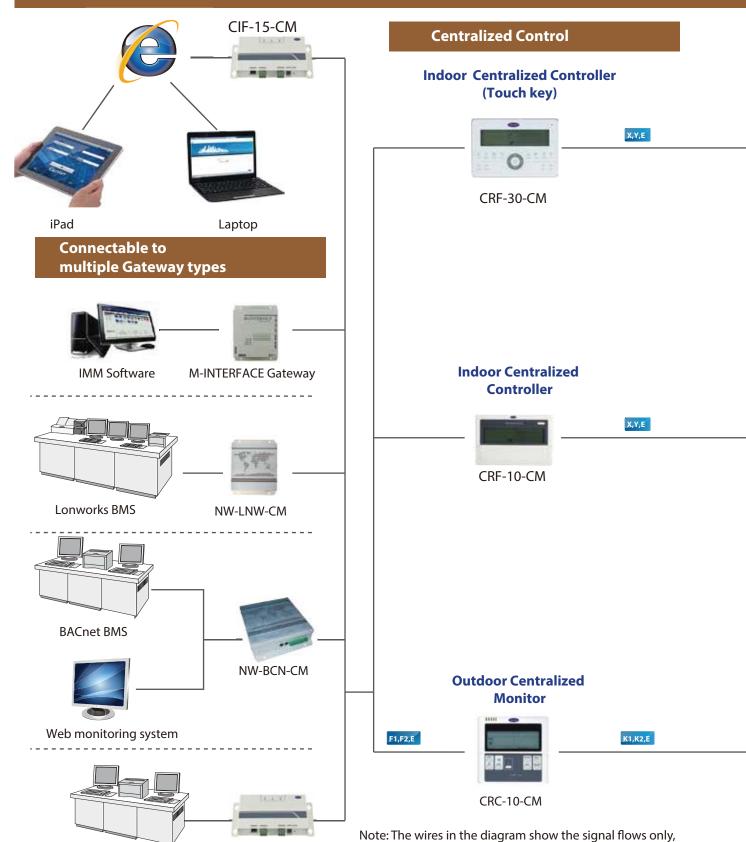
<sup>-</sup> Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

<sup>2.</sup> Sound pressure level is measured at a position 1m (3.28ft) in front the unit and 1m (3.28ft) above the floor in a semi-anechoic chamber.



# **Control Systems**

## **Network Control**

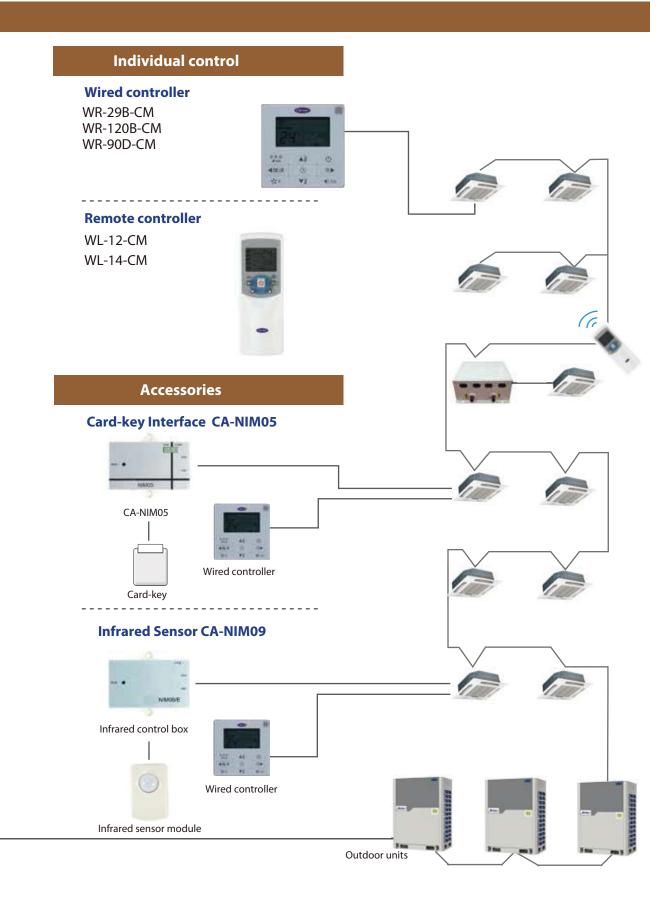


while not represent the actual connecting ways.

Modbus BMS

CRF-18-CM/CRF-18U-CM





# Wireless Remote Controller >>>





**WL-14-CM** 

**WL-12-CM** 

Model Name	WL-14-CM	WL-12-CM
Mode change	√	√
Temp. setting	√	√
Fan speed control	√	√
Keyboard lock	√	√
Swing function	√	√
Air direction	√	$\checkmark$
24h timer	√	√
Clock display		√
Address setting	√	$\checkmark$
Follow me function	√	
26°C shortcut setting	√	
Background light	√	√
Dimensions (H*W*D)mm	150*60*15	150*65*20



# Wired Controller >>>



WR-29B-CM **WR-120B-CM** 



WR-90D-CM























DRY mode HEAT mode COOL mode FAN mode Silent mode

Lock

reminder

Filter cleaning Follow Me Address setting

Model Name	WR-90D-CM	WR-29B-CM	WR-120B-CM
Fanspeed control	√	√	V
Mode change	√	√	√
Auto mode			√*
Keyboard lock	√	$\checkmark$	√
Swing function	√	$\checkmark$	√
Background light	√	√	√
24h timer	√	√	√
Clock display	√	√	√
Address setting	√	√	
Receiving remote signal	√	$\checkmark$	
Clean filter reminder	√	$\checkmark$	√
Follow me function	√	√	
Silent mode	√	$\checkmark$	√
°F/°C initial setting	√	√	√
Auto restart	√	√	√
Error reporting			√
Dimensions (H*W*D)mm	86*86*20	120*120*20	120*120*20

<sup>\*</sup>only available for heat recovery VRF series,

# Centralized Controller >>>

# **Indoor Centralized Controller**

















Filter cleaning reminder

HEAT mode Keyboard lock









CRF-10-CM

CRF-30-CM

Remote controller lock

Fan mode

Cooling lock Heating lock Net connection

# **Weekly Schedule Centralized Controller**

WCRF-10-CM



















Fan mode





Cooling lock







Keyboard lock Heating lock Remote controller lock Weekly schedule

Model	CRF-30-CM	CRF-10-CM	WCRF-10-CM
Mstinu roodni fo rebmun .xa	64	64	64
Group control	$\sqrt{}$	√	$\checkmark$
ndividual control	$\sqrt{}$	√	$\checkmark$
- -anspeed control	$\sqrt{}$	√	$\checkmark$
Model selection	$\sqrt{}$	√	√
Modelock	$\sqrt{}$	√	√
Remotecontroller lock	√	√	√
Keyboardlock	√	√	√
Weekly schedule timer			√
24h timer	√	√	√
Error check	√	√	√
Emergency start	√	√	√
Emergency stop	√	√	√
Background light	√	√	√
Swing function	$\checkmark$	√	√
Air filter cleaning reminder	$\checkmark$		
Parameter query	$\checkmark$	√	√
BMS access	√	√	
Dimensions (H*W*D)mm	180*122*78	179*119*74	179*119*74



# Centralized Controller >>>

# **Unified On/Off Controller**

Unified controller design with graceful appearance and explicit panel.

### CRF-90-CM



Max. 16 units

### Feature:

- Centralized Control
- Short press: Only turn ON/OFF the last time operated indoor units.
- Long press (3 seconds): Can turn ON/OFF all indoor units.
- Operation Mode Selection Switch (Cooling, Heating)
- Sleep and memory function

If no operation to be conducted at the controller after 25 seconds, system would enter to sleep mode, all indicators are faded. Press any key to recovery the displaying.

# **Outdoor Centralized Monitor**

### CRC-10-CM





Max. 8 systems

- RS485 communication
- Up to 8 systems, max.32 outdoor units can be centralized monitored
- It can display the operating parameters of outdoor units
- t can display the error or protection code of outdoor unit
- Dimensions (H\*W\*D) mm: 120\*120\*15







Protection/ Error codes



Power consumption



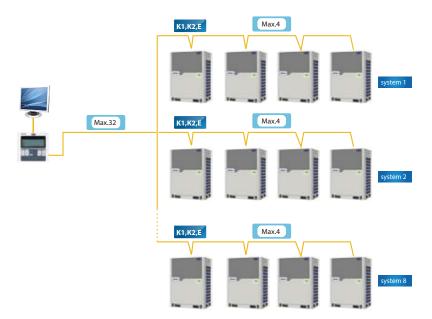
With the ODU communication



With the PC communication



Force



# Central Control Software >>>





# Central Control Software >>>

# Intelligent Manager of Carrier 4th Generation Network Control System

4GNS-10-CM 4GNS-10-IF



# Functions >>>

Intelligent Manager of Carrier, designed specifically to control VRF systems, is based on a centralized format and dedicated to the complete control and monitoring of all the system's functions. It can be used as a flexible multi-purpose system and applied to a variety of needs, according to the scale, purpose and control method of each building.

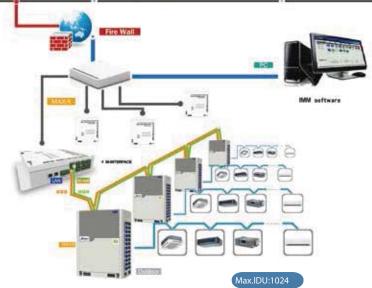
- Up to 4 M-interfaces, 64 refrigerant systems, 1,024 indoor units, and 256 outdoor units can be controlled by one PC.
- Web Access
- User friendly operation
- Central building monitoring and control
- Energy saving management
- SMS modem (optional)

- Electricity charge distribution
- Annual schedule control
- Low-load operation indicate
- Generate operational history reports (daily, weekly, monthly)
- Fault display & Warning message
- Filter replacement reminder
- Emergency stop and Alarm signal output

# Network Control Application >>>



- Can run on ,Window 7\_64 bit and Window XP\_32 bit.
- Can monitor and control A/C anytime, anywhere by PC, iPhone, iPad and notebook computer.
- Support WEB access: IE, Firefox, Safari and Chrome.
- Enables remote access through DSL, VPNs and so on.



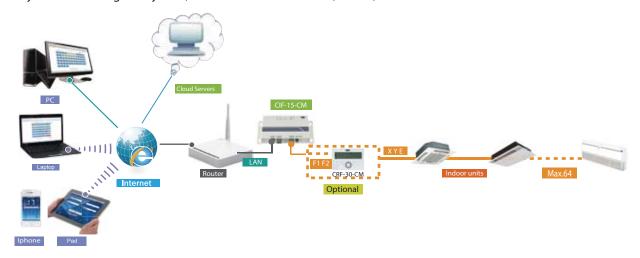
# **Data converter**

### CIF-15-CM

- Can realize data conversion between TCP/IP protocol and 485 protocol.
- WEB function realizes VRF system's webpage access.
- User can monitor and query the air conditioners through LAN and WAN.
- Providing the TCP / IP port for VRF system of Carrier to achieve WEB/HTTP/TCP/IP access.
- Can remotely control the A/C systems through computer, iPhone, iPad or other intelligent terminals.

# Network example >>>

- Can be directly connected with XYE port of the indoor units.
- Up to connect 64 indoor units.
- CRF-10-CM/CRF-30-CM is optional and can be connected with CIF-15-CM through F1, F2 and E ports.
- The system consisting A/C system, data converter CIF-15-CM, router, cloud server and control terminal.



# Simply control interface >>>

- Software control/ Cloud server control (WEB access).
- Click & operate, a user-friendly interface.
- Allows signal and group control.
- Simplified user control interface.
- Color indication and icon makes it easy to recognize unit state.
- Full screen display and the temperature can be adjusted by fingers' sliding.







# **BACnet® BMS Gateway**

### **NW-BCN-CM**



**BACnet Gateway** 

### Feature:

- BACNET protocol network
- Web Access Function
- BTL certification
- Dimensions (H\*W\*D) mm: 319\*251\*61
- Contains 4 groups of RS485 communication ports
- Comnect up to 256 imdoor units or 128 outdoor units to the BMS

# Accessories >>>

# **Modbus BMS Gateway**

### CRF-18-CM/CRF-18U-CM



**Modbus Gateway** 

# Feature:

- Directly bridge the IDU to the Modbus network
- One CRF-18-CM can connect max. 64 IDU and 40 utdoor unit
- One CRF-18U-CM can connectmax.16 IDU
- Built-in WEB server function
- Can't connect with central controller
- Dimensions(H\*W\*D)mm:187\*115\*25

# Accessories >>>

# LonWorks® BMS Gateway

**NW-LNW-CM** 



**LonWorks Gateway** 

- Directly bridge the IDU to the LonWorks network
- One gateway max. connect 64 IDU
- Can't connect with central controllers
- Only can monitor/control indoor unit
- Dimensions (H\*W\*D) mm: 319\*251\*61

# **KNX Gateway**

### **NW-KNX-CM**



**KNX Gateway** 

### Feature:

- \* External power is not required and direct connect to the KNX EIB bus
- One KNX connect one indoor unit
- Easy installation and directly connects with one indoor unit through the RS485 bus
- Directly connect to the KNX bus
- KNX certification
- Dimensions (H\*W\*D) mm: 85\*51\*16

# **3-Phase Protector**

**HWUA** 



**DPB71CM48** 



3-phase protector

### **Feature:**

- Detects power status and take protective action to stop the compressor from being damaged
- Automatically distinguishes the abnormal power supply conditions and automatically recovers
- Auto restart after recovery

# **Digital Power Ammeter**

### DTS634/DTS636



**Digital Power Ammeter** 

- Calculates power consumption
- Doesn't need to adjust after long-term use
- Corresponds one outdoor unit to one digital power ammeter
- Powersupply:380V-3N~50Hz,
- 380V-3N~60Hz,
- 220V-3N~60Hz
- Dimensions (H\*W\*D) mm: 230\*145\*72
- \* Different type power meters match different power forms.



# **Remote Alarm Controller**

**WR-32-CM** 



**ODU alarm module** 

### **Feature:**

- Design for outdoor alarm and monitoring
- It doesn't display the ODU's working parameters, it can connect the alarm device when the ODU is working abnormally, in which case the RUN light will flash
- Access to network monitoring system
- 220V power input
- 220V AC output for the alarm device
- Dimensions(H\*W\*D)mm:85\*150\*70

# **Indoor Unit Group Controller**

WR-150A-CM



# Feature:

- It can connect up to 16 indoor units through XYE ports.
- With a display panel connected to WR-150A-CM, signal from wired controller and remote controller can control a group of indoor units simultaneously and all indoor units will run at the same setting parameters.
- Dimensions (H\*W\*D) mm: 85\*150\*70

**Outdoor Unit Dry Contact** 

**WR-150B-CM** 



- Connect the outdoor unit through K1 K2 E three terminals, offer 3 dry contact in 3 different states through status output
- Dimensions (H\*W\*D) mm: 85\*150\*70

# **Hotel Key Card Interface Module**



CA-NIM05/E



CA-NIM05B/E

# Key Features >>>

- Special design for hotel guest room, working with hotel card system
- ❖ When the Card Key is in place, the air conditioner is activated
- When the Card Key is removed, the air conditioner switches off, to avoid cooling an unoccupied room and save energy
- Built-in auto restart function
- Compatible with remote and wired controllers
- The CA-NIM05/E works in conjunction with a high voltage replay
- The CA-NIM05B/E can be connected directly to the hotel card slot system (AC 220V) without the need for a high voltage relay
- **CA-NIM05/E 15.5\*86\*72.8 ; CA-NIM05B/E 87\*150\*70**







# **Infrared Sensor Controller**





CA-NIM09

### Feature:

- The infrared sensor is suitable to be used in hotel, office, conference room, residence, etc.
- When someone gets into the room, air conditioner will start automatic. If no one activities, it will be turn off. It controls the AC's on/off by the infrared that our body has delivered.
- This function will save energy since it minimizes the unnecessary energy usage by powering off when the area is empty.
- Dimensions (H\*W\*D) mm:
- sensor part 46\*30\*25.6; control box 86\*72.8\*15.5

# Accessories >>>

# **AHU Control Box**

### AHUKZ-01B/AHUKZ-02B/AHUKZ-03B

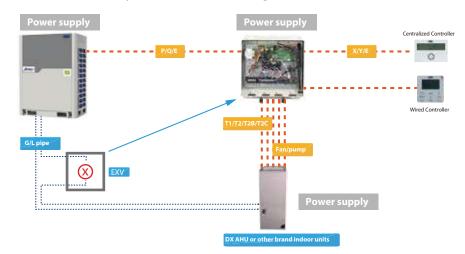
X-Power Standard functions inside.

Can be used to connect VRF outdoor units with DX AHU or other brand indoor units



# Introduction >>>

AHUKZ-01B/AHUKZ-02B/AHUKZ-03B is an independent control box that can connect a AHU to X-Power system to realize centralized control with X-Power system. Control box wiring is as follows:



# Feature >>>

Maximum 4 AHU Control Box can be parallel installed to one 3rd party indoor unit Interface to allow other brand's DX AHU connecting to our VRF outdoor units.

DX AHU connection kit consist of control part, EXV part, temperature sensors and wired controller.

- Access to network monitoring system
- Dimensions (H\*W\*D) mm: 335\*375\*150





# HEAT RECOVERY VENTILATOR

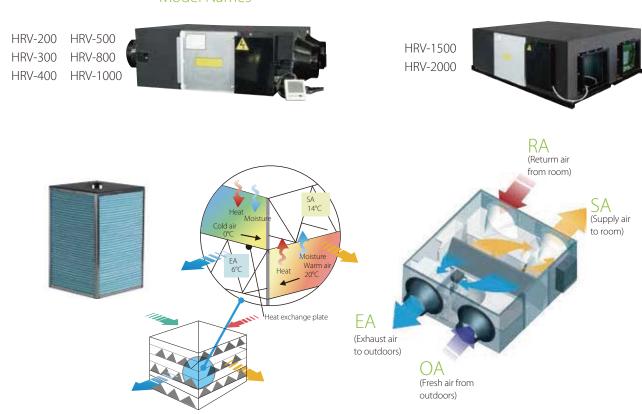
### Alternative fan motor >>

Versions for AC/DC fan motors.

# Enhanced Efficiency >>>

The heat recovery ventilator (HRV) can greatly reduce energy losses and room temperature fluctuations caused by the ventilation process. The HRV's strong performance is a result of the advanced technology incorporated into its design. The heat exchanger core is made of specially treated paper which gives enhanced temperature and humidity control. Temperature exchange efficiency is over 65% and enthalpy exchange efficiency is 50-65%.

### Model Names

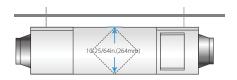


### Low noise >>>

Soundproofing is used to guarantee quiet operation.

# Flexibility >>>

Heights starting from as little as 264mm and weights from as little as 23kg mean that the HRV can be easily installed even where space is limited.



# Multiple Modes >>>

# Heat exchange mode

The flows of incoming and outgoing air pass close to each other, allowing heat transfer between the two channels.

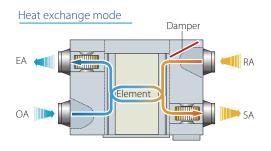
During summer, incoming air is cooled by the indoor air being exhausted and in winter, incoming air is warmed.

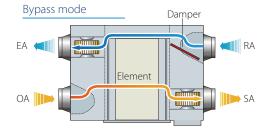
# Bypass mode

In mild climates or seasons, where temperature and humidity differences between indoors and outdoors are small, the HRV can work as a conventional ventilation fan. In standard bypass mode the supply and exhaust fans run at the same speed.

# Air supply mode

Air supply mode is a form of bypass mode where the supply fan is set to run faster than the exhaust fan, which is useful in mild climate installations with high fresh air ventilation requirements.





### Exhaust mode

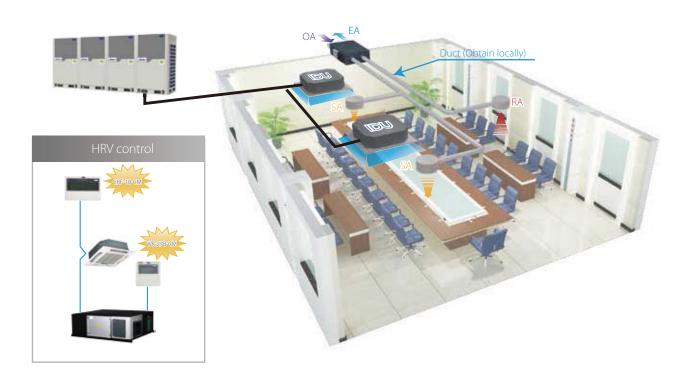
Exhaust mode is a form of bypass mode where the exhaust fan is set to run faster than the supply fan, which is useful in mild climate installations with large amounts of exhaust air to be expelled.

### Auto mode

The controller chooses heat exchange mode or bypass mode according to the temperature difference between outdoors and indoors . Both fans are set to run at low speed.

# Flexible Control >>>

HRV can be controlled together with other indoor units.





# **Specifications**

# AC fan motors

Model				HRV-200	HRV-300	HRV-400	HRV-500		
Power supply				1-phase,22	0-240V,50Hz	1-phase,220-240V,50Hz (1-phase,220V,60Hz)			
Cooling	Temperature	High	%	55	55	55	55		
	exchange	Medium	%	55	55	55	55		
	efficiency	Low	%	60	60	60	60		
	Enthalpy	High	%	50	50	50	50		
	exchange	Medium	%	50	50	50	50		
	efficiency	Low	%	55	55	55	55		
	Temperature	High	%	60	60	60	65		
	exchange	Medium	%	60	60	60	65		
Heating	efficiency	Low	%	65	65	65	70		
пеашту	Enthalpy	High	%	55	55	60	60		
	exchange	Medium	%	55	55	60	60		
	efficiency	Low	%	60	60	65	65		
	Heat	High	dB(A)	27	30	32	35		
Sound	exchange	Medium	dB(A)	26	29	31	34		
	mode	Low	dB(A)	20	23	25	28		
pressure level	Bypass mode	High	dB(A)	28	31	33	36		
		Medium	dB(A)	27	30	32	35		
		Low	dB(A)	22	25	27	30		
Net dimension (W×D×H) mm		866×655×264	944×722×270	944×927×270	1038×1026×270				
Packing si	ze (W×D×H)		mm	960×770×445	1020×810×452	1020×1020×452	1120×1120×452		
Net/gross	weight		kg	23/40	26/44	31/52	41/64		
Casing						d steel plate	.,, .		
	ange system			A		nsible heat + latent heat) exchang	je		
	ange element ma	iterial		Specially processed nonflammable paper					
	Type			Centrifugal fan					
		High	m³/h	200	300	400	500		
	Airflow rate	Medium	m³/h	200	300	400	500		
Г		Low	m³/h	150	225	300	375		
Fan		High	Pa	75	75	80	80		
	ESP	Medium	Pa	58	60	65	68		
		Low	Pa	35	40	43	45		
	Motor output		W	20	40	80	120		
Duct diameter mm		Ф144	Ф144	Ф144	Ф194				
Operating temperature range °C			°C		-7~43 DB, 8	0% RH or less			

Model				HRV-800	HRV-1000	HRV-1500	HRV-2000		
Power supply				1-phase,220-240V,50I	Hz (1-phase,220V,60Hz)	3-phase,380-415V,50Hz (3-phase,220V,60Hz)			
	Temperature	High	%	55	55	55	55		
Cooling	exchange	Medium	%	55	55	/	/		
	efficiency	Low	%	60	60	/	/		
	Enthalpy	High	%	50	50	50	50		
	exchange	Medium	%	50	50	/	/		
	efficiency	Low	%	55	55	/	/		
	Temperature	High	%	65	65	65	65		
	exchange	Medium	%	65	65	/	/		
Heating	efficiency	Low	%	70	70	/	/		
reating	Enthalpy	High	%	60	60	60	60		
	exchange	Medium	%	60	60	/	/		
	efficiency	Low	%	65	65	/	/		
	Heat	High	dB(A)	39	40	51	53		
Sound pressure	exchange	Medium	dB(A)	38	39	/	/		
	mode	Low	dB(A)	32	33	/	/		
	Bypass mode	High	dB(A)	40	41	52	54		
evel		Medium	dB(A)	39	40	/	/		
	mode	Low	dB(A)	34	35	/	/		
Net dimension (W×D×H) mm		1286×1006×388	1286×1256×388	1600×1270×540	1650×1470×540				
Packing si	ze (W×D×H)		mm	1380×1100×573	1400×1370×573	1710×1410×720	1760×1610×720		
Net/gross	weight		kg	62/88	79/110	163/224	182/247		
Casing					Galvanized	steel plate			
Heat exch	ange system			A	ir to air cross flow total heat (ser	sible heat + latent heat) exchang	ge		
Heat exch	ange element m	aterial			Specially processed nonflammable paper				
	Type				Centrif	ugal fan			
		High	m³/h)	800	1000	1500	2000		
	Airflow rate	Medium	m³/h	800	1000	/	/		
Fan		Low	m³/h	600	750	/	/		
all		High	Pa	100	100	160	170		
	ESP	Medium	Pa	82	85	/	/		
		Low	Pa	54	58	/	/		
	Motor output W		W	360	360	450	450		
Duct diameter mm			mm	Ф242	Ф242	346×326	346×326		
Operating temperature range °C			°C		-7~43 DB, 8	0% RH or less			

- 1. For the units model of HRV (200-1000), there are 3-speed adjustable air volume (Hi, Med, Low), but the fan speed of models HRV-1500 and HRV-2000 is not adjustable.

- 2. Sound level is measured 1.4m below the center of the unit in an anechoic chamber.

  3. Efficiency is measured under the following conditions:

  \* Cooling: air exhaust temp 27°C (80.6°F) DB, 19.5°C (67.1°F) WB; fresh air temp. 35°C (95°F) DB, 28°C (82.4°F) WB.

  \* Heating: air exhaust temp 21°C (69.8°F) DB, 13°C (55.4°F) WB; fresh air temp. 5°C (41°F) DB, 2°C (35.6°F) WB.

# DC fan motors

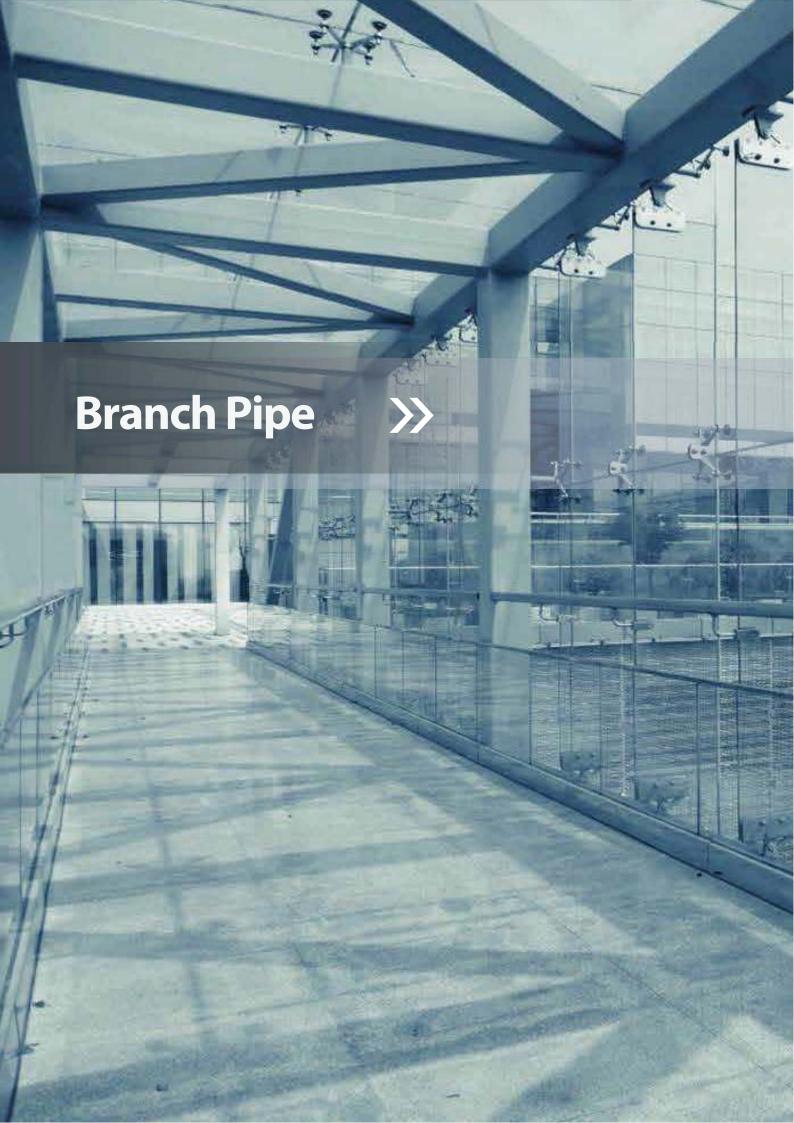
Sale Model			HRV-D200	HRV-D300	HRV-D400	HRV-D500	
Power supply		V-Ph-Hz		1-phase,220-	240V,50/60Hz		
Cooling	Temp. exchange efficiency	%	76.1	74.8	76.2	76.1	
Cooling	Enthalpy exchange efficiency	%	77.3	76.1	78.7	78.2	
Lleating	Temp. exchange efficiency	%	76.1	74.8	76.2	76.1	
Heating	Enthalpy exchange efficiency	%	82.6	79.8	83.6	80.4	
Input power		W	61	98	109	170	
Current		А	0.72	0.99	1.07	1.56	
	Model		WZDK100-38G-1	WZDK100-38G-1	WZDK100-38G-1	WZDK100-38G-1	
	Insulation class				E		
Indoor fan motor	Output	W	26*2	42*2	46*2	72*2	
motor	Pole number		8P	8P	8P	8P	
	Speed	r/min	1390	1390	1390	1380	
	material		ABS				
Indoor fan	Type		Centrifugal fan				
indoor ian	Diameter	mm	Ф154	Ф194	Ф194	Ф203	
	Height	mm	102	100	100	151	
Indoor external s	static pressure (Hi)	Pa	75	75	80	80	
Nominal air flow	r	m³/h	200	300	400	500	
Sound pressure	level	dB(A)	27	30	32	35	
Net dimension (l	L×W×H)	mm	866×666×264	944×733×270	944×938×270	1038×1037×270	
Packing size (L×\	W×H)	mm	960×770×445	1020×810×452	1020×1020×452	1120×1120×452	
Net/Gross weigh	nt	kg	25/40	27/44	32/52	35/60	
Power supply	Wire's qty		3	3	3	3	
wire	Code wire cross section	mm²	2.5	2.5	2.5	2.5	
Controller		·	Wired controller				
Fresh Air Diamet	ter	mm	Ф144	Ф144	Ф144	Ф194	
Operationg temperature range °C		°C	-7~43DB, 80%RH or less				

Sale Model			HRV-D800	HRV-D1000	HRV-D1500	HRV-D2000	
Power supply		V-Ph-Hz		1-phase,220-	240V,50/60Hz		
Cooling	Temp. exchange efficiency	%	76.9	75.8	77.8	77.2	
Cooling	Enthalpy exchange efficiency	%	78.1	76.9	79.2	78.7	
Heating	Temp. exchange efficiency	%	76.9	75.8	77.8	77.2	
neating	Enthalpy exchange efficiency	%	80.1	78.6	80.5	80.3	
Input power		W	246	360	725	1340	
Current		A	2.28	3.1	5.29	9.11	
	Model		WZDK170-38G-2	WZDK170-38G-2	WZDK750-38G-W-1	WZDK750-38G-W-1	
	Insulation class		E				
Indoor fan motor	Output	W	104*2	153*2	308*2	570*2	
motor	Pole number		8P	8P	8P	8P	
	Speed	r/min	1150	1230	1220	1390	
	material		ABS		metal		
Indoor fan	Type		Centrifugal fan				
indoor ian	Diameter	mm	Ф245	Ф245	Ф234	Ф234	
	Height	mm	203	203	261	261	
Indoor external :	static pressure (Hi)	Pa	100	100	160	170	
Nominal air flow	1	m³/h	800	1000	1500	2000	
Sound pressure	level	dB(A)	39	40	51	53	
Net dimension (	L×W×H)	mm	1286×1017×388	1286×1267×388	1600×1270×540	1650×1470×540	
Packing size (L×	W×H)	mm	1380×1100×573	1400×1370×573	1710×1410×720	1760×1610×720	
Net/Gross weigh	nt	kg	58/88	69/100	151/224	165/247	
Power supply wire	Wire's qty		3	3	3	3	
	Code wire cross section	mm²	2.5	2.5	2.5	2.5	
Controller		Wired controller					
Fresh Air Diame	ter	mm	Ф242	Ф242	346×326	346×326	
Operationg temperature range °C		°C	-7~43DB, 80%RH or less				

- 1. For the units model of HRV-D200~HRV-D2000, there are 3-speed adjustable air-volume (Hi, Med, Low).
- 2. All the parameters is measured at the high speed air-volume.
- 3. Sound level is measured 1.4m below the center of the unit in an anechoic chamber.
- 4. Efficiency is measured under the following conditions:

  \* Cooling: air exhaust temp 27°C (80.6°F) DB, 19.5°C (67.1°F) WB; fresh air temp. 35°C (95°F) DB, 28°C (82.4°F) WB.

  \* Heating: air exhaust temp 21°C (69.8°F) DB, 13°C (55.4°F) WB; fresh air temp. 5°C (41°F) DB, 2°C (35.6°F) WB.



# Branch Pipe

# Branch joints of two-pipe refrigerant system

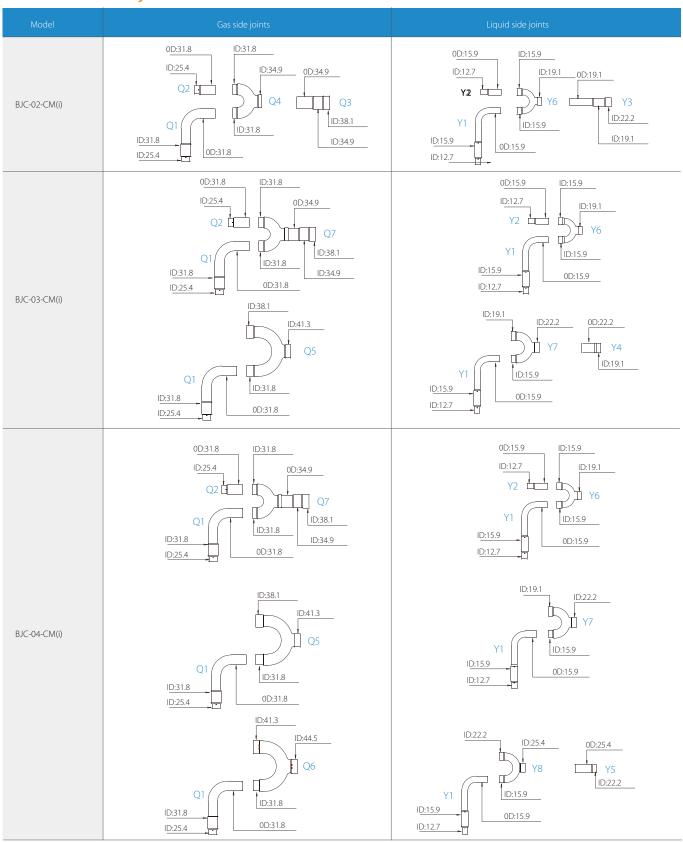
Model	Appearance	Model name	Packing Size (mm)	Gross Weight (kg)	Description
	<u>-&gt;-</u>	BJC-02-CM(i)	255×150×185	1.5	For two outdoor units connection
Branch joint for R410A outdoor unit	-»»	BJC-03-CM(i)	345×160×285	3.4	For three outdoor units connection
		BJC-04-CM(i)	475×165×300	4.8	For four outdoor units connection
		BJF-224-CM(i)	90×105×100	0.4	A*<16.6kW
		BJF-330-CM(i)	290×105×100	0.6	16.6≤A*<33kW
Branch joint for R410A indoor unit		BJF-710-CM(i)	310×130×125	0.9	33kW≤A*<66kW
		BJF-1344-CM(i)	350×180×170	1.5	66kW≤A*<92kW
		BJF-E1344-CM(i)	365×195×215	1.9	92kW≤A*

 $\label{eq:A*:The total capacity of indoor units which is connected to this branch joint} A^{\star}: The total capacity of indoor units which is connected to this branch joint$ 



# **Dimensions**

# Outdoor branch joints



# Indoor branch joints

