Carrier
turn to the experts

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XPOWER
DC INVERTER

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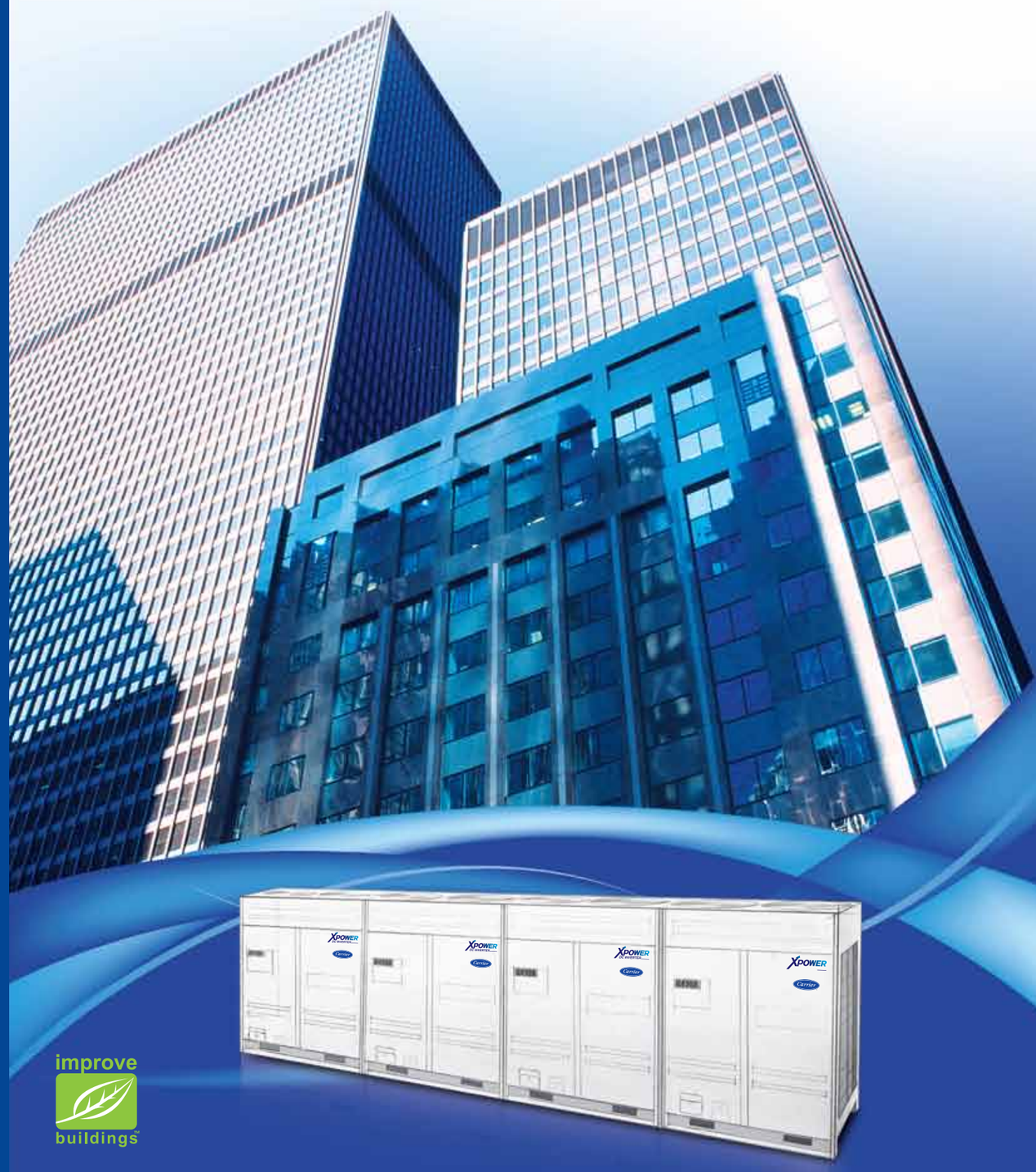
turn to the experts



improve buildings

XPOWER DC INVERTER

Developed to facilitate more flexible system design for big-sized buildings

Carrier proudly introduces the X-Power VRF product, which has a flexible design to suit a variety of occasions. Offering a higher capacity up to 64HP, in 2 HP as an increments, meets the needs of many requirements. It also incorporates numerous outstanding features, a large capacity range of outdoor units and indoor units, longer level difference and actual piping and high external static pressure. The X-Power VRF product provides flexible design and easy installation in big-sized and high-rise buildings for wide application.

Contents

(*preliminary data)

TECHNOLOGIES

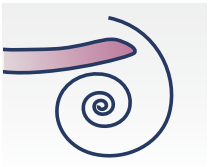
Fan grille

Optimized fan blade shape with new air outlet grille enhanced air flow volume which greatly improves fan performance without increasing noise.

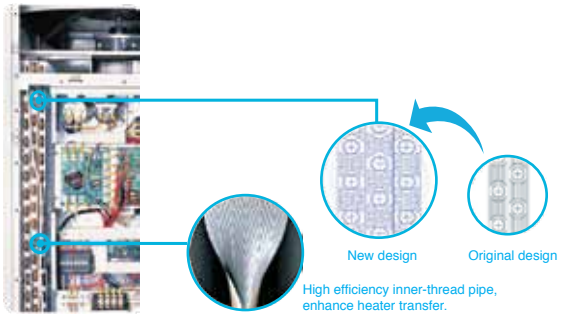
Also, a higher external static pressure has been achieved optionally-from 20 Pa to 40 Pa.

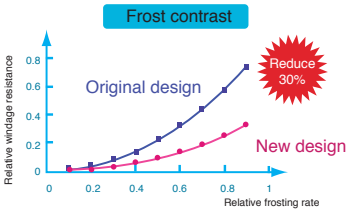
New profile fan blade

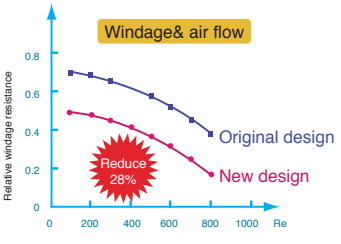
New blade with sharp edge and little curve increases the airflow rate and lowers down vibration and airflow resistance.



High performance heat exchanger

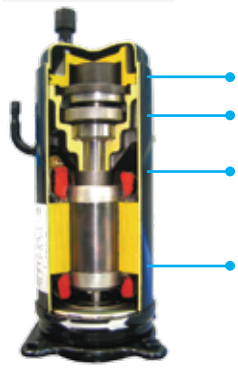






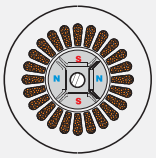
High efficiency full DC inverter compressor

X-Power series achieves the industry's top class energy efficiency of cooling and heating by utilizing the Brushless Reluctance DC compressor control, DC Fan motor, and improved performance heat exchanger. High efficiency DC inverter compressor saves power consumption by 25%.

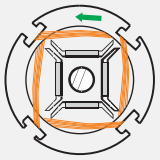


- New structure-enhanced mid-frequency performance
- Specially designed scroll profile for R410A
- More compact, weight reduced by 50%
- Advanced permanent magnet DC motor improves the low frequency band performance

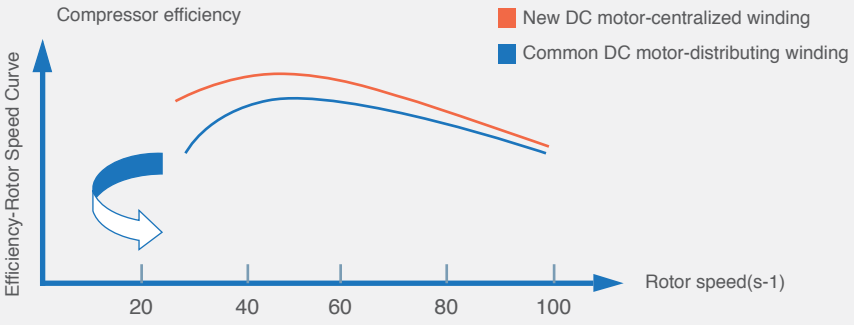
Powerful magnets provide high torque and efficiency and achieve 70% reduction in volume.



Centralizing winding

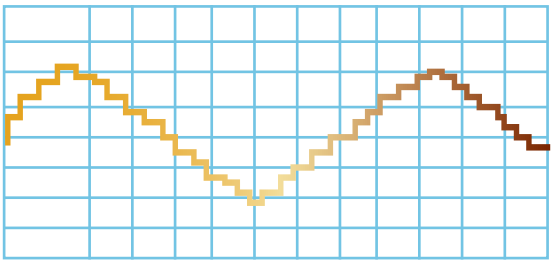


Distributing winding

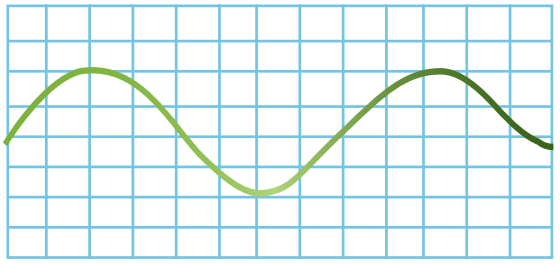


Smooth 180°sine wave DC Inverter

By adoption of the 180°SineWave Inverter, which smooths the rotation of the motor, operation efficiency is improved sharply than traditional sawtooth wave.



Common sawtooth wave



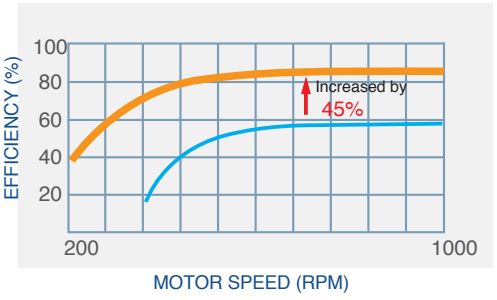
180° Sine Wave DC inverter

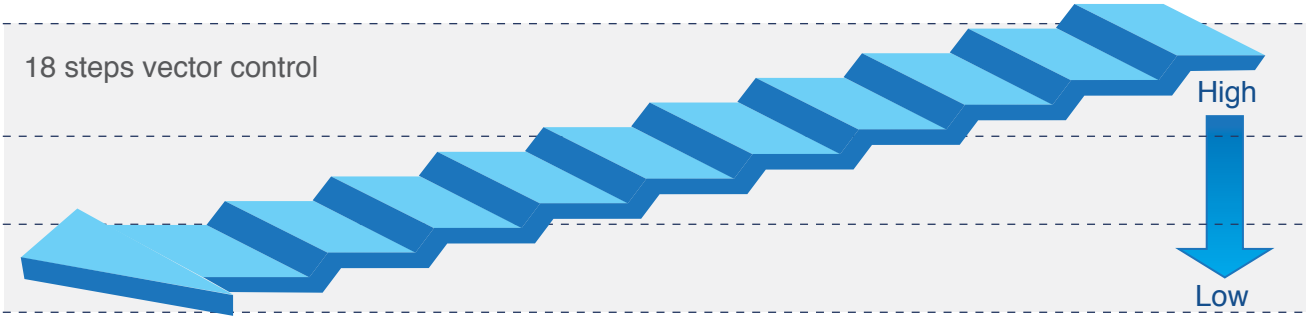
DC fan motor

According to the running load and pressure, it controls the speed of DC fan to achieve the min. power consumption.

- Used across entire range of models (from 8 to 64 HP).
- Efficiency improvement by up to 45%, especially at low speed.

DC motor





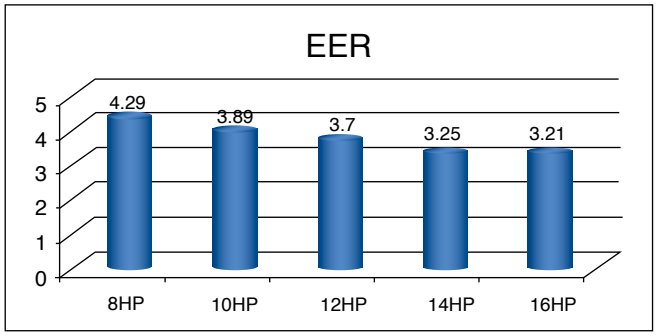
MAIN FEATURES

HIGH EFFICIENCY

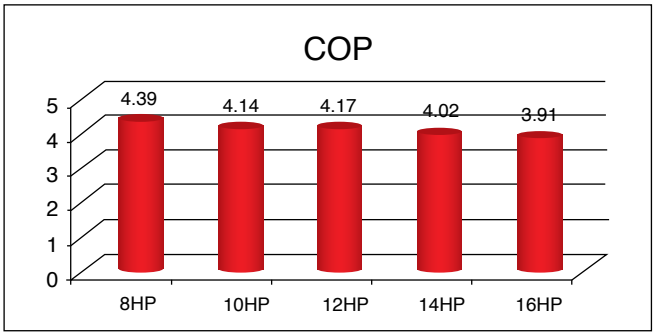
High efficiency X-Power with high efficient DC compressor and DC motor, realized an EER up to 4.29 (8 HP) and achieved the world's Top Class energy efficiency.

Enhanced Rated Heat Capacity

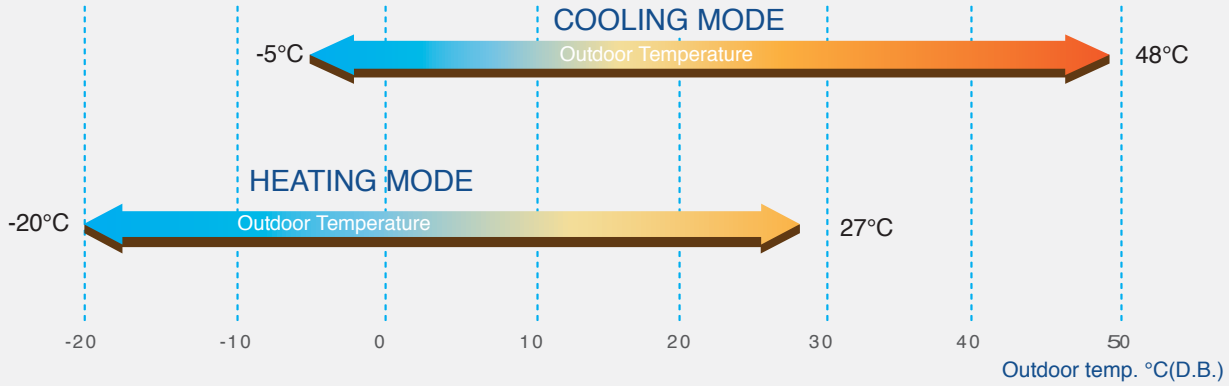
EER



COP



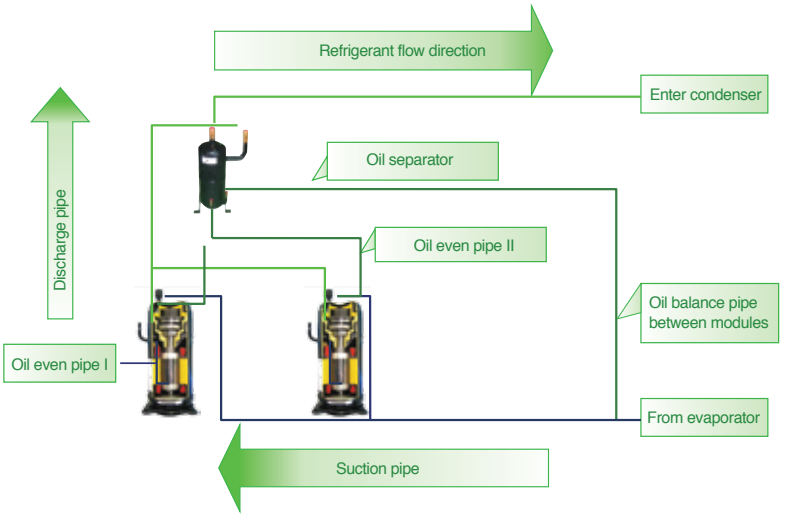
Wide operation Range



Regardless of extremely cold winter, when outdoor temperature is as low as -20°C or in hot summer when temperature is up to 48°C, the X-Power system will keep stable operation.

High efficiency oil balance and oil return technology

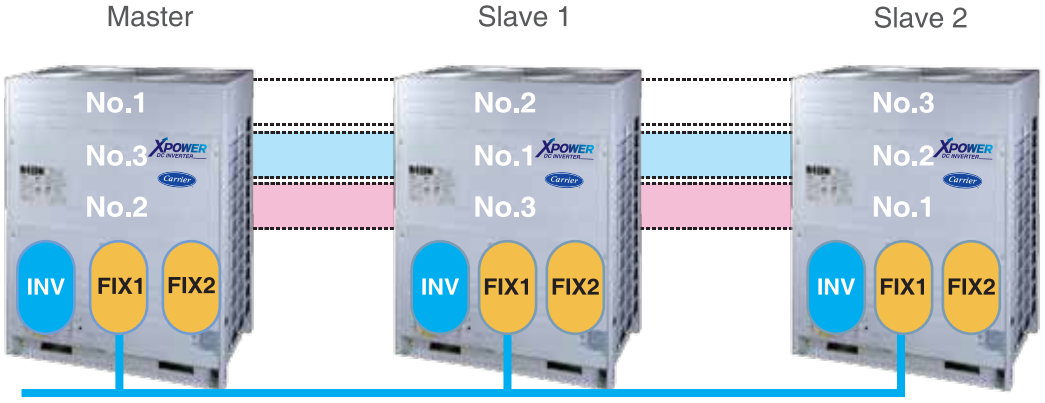
Oil balance pipes among modules and individual oil balance by vector control ensure even oil distribution among the modules which keeps compressor running normally. High effciency centrifugal oil separator (up to 99%) makes oil separate from discharge and go back to compressor.
Auto oil return program by monitoring the running time and state of system ensures reliable oil return.



HIGHER RELIABILITY

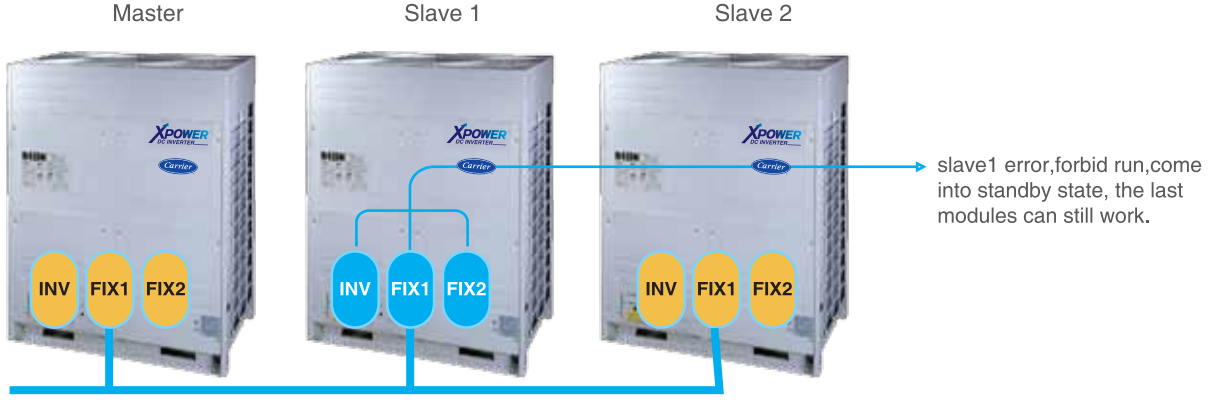
Alternative Cycle Duty operation of outdoor units

In one combination, any outdoor unit can run as the master outdoor unit, to realize the equal lifespan among the outdoor units in the combination.



Outdoor module Back up operation

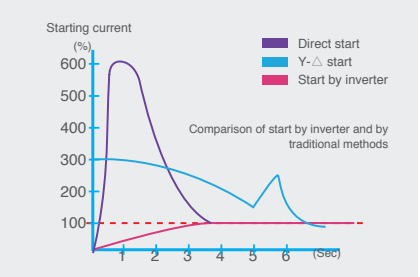
Any single unit can be set as the master unit in a multiple system when the previous master unit fails and remaining units will keep on operating. This can be set on PCB by DIP switches at site.



ENHANCED COMFORT

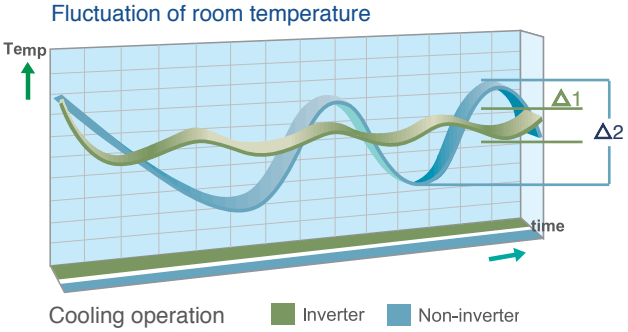
Intelligent soft start technology

DC inverter compressor soft start function reduces strike to the electric network. This kind of high-performance and low sound scroll compressor operates at a faster rate when starting, reducing start-up time. It helps the unit to bring the room temperature up to the set level quickly.



Quick warm-up & cool-down design

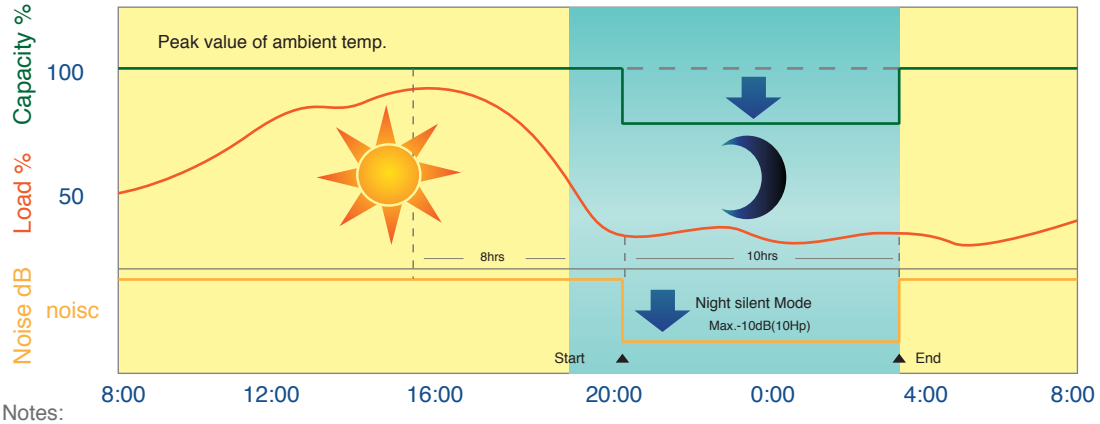
Utilizing the scroll compressor benefits, X-Power plus system can reach full load quickly and shorten warm-up or cool-down time immediately.



Night time silent operation mode

X-Power Night Silent Mode feature, which is easily set on the PCB board, allows the unit to be set to various time options during Non Peak and Peak operation time optimizing the unit's noise output.
Extra silent operation mode can reduce sound level further, minimum 46.8dB (A).
Night time silent operation will be activated X hours after the peak temperature during daytime, and it will go back to normal operation after Y hours.

-Model 1–X: 6 hours, Y: 10 hours
-Model 2–X: 8 hours, Y: 10 hours
-Model 3–X: 6 hours, Y: 12 hours
-Model 4–X: 8 hours, Y: 8 hours



Notes:
This function can be activatedby setting at site. Temperature(load) curve shown in the graph is just an example.

*1&*2 can be set on PCB board by DIP switch S2.

FLEXIBILITY DESIGN FOR BIG SIZED BUILDING

Large capacity for big sized building

The outdoor units capacity range from 8HP up to 64HP in 2HP increment. Maximum 64 indoor units with capacity up to 130% of total outdoor units can be connected as one refrigeration system.

8, 10HP

12, 14, 16HP

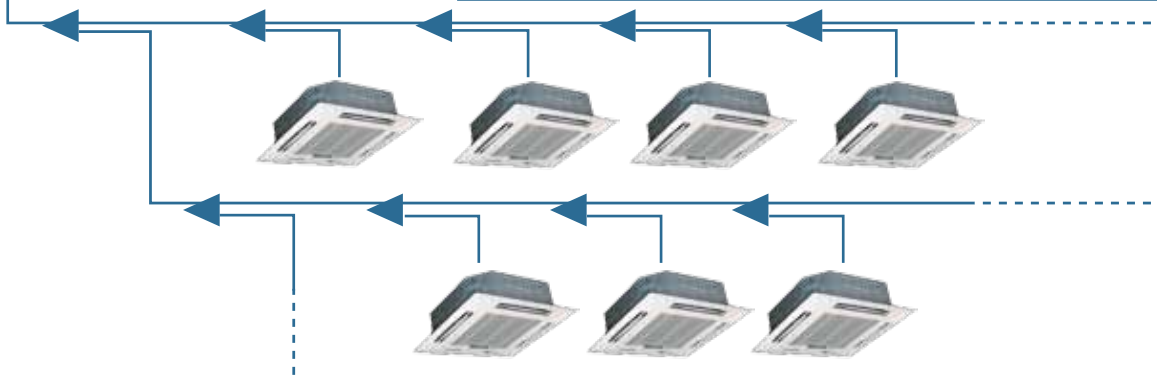
18, 20, 22, 24, 26, 28, 30, 32HP

34, 36, 38, 40, 42, 44, 46, 48HP

50, 52, 54, 56, 58, 60, 62, 64HP

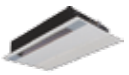
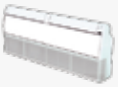
Maximum indoor unit quantity

Maximum Capacity	Maximum indoor unit quantity
64HP	64 sets

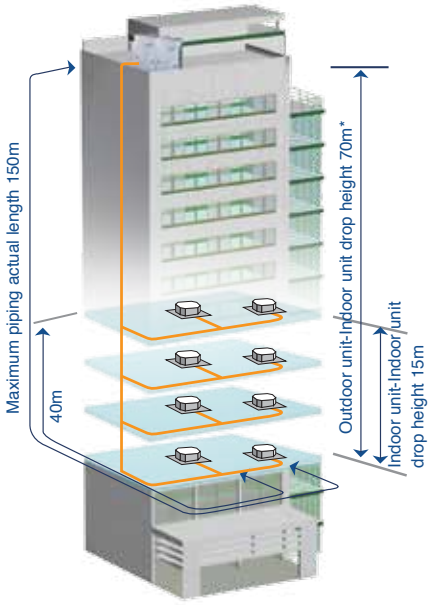


Outdoor unit combination

Capacity (HP)	Recommended combination					Max. indoor units nos.
	8(HP)	10(HP)	12(HP)	14(HP)	16(HP)	
8	●					13
10		●				16
12			●			16
14				●		16
16					●	20
18	●	●				20
20		● ●				24
22		●	●			24
24		●		●		28
26		●			●	28
28				● ●		28
30				●	●	32
32					● ●	32
34		● ●		●		36
36		● ●			●	36
38		●	●		●	36
40		●		●	●	42
42				● ● ●		42
44				● ●	●	42
46				●	● ●	48
48					● ● ●	48
50	●	●			● ●	54
52		● ●			● ●	54
54		●	●		● ●	54
56		●		●	● ●	58
58				● ● ●	●	58
60				● ●	● ●	58
62				●	● ● ●	64
64					● ● ● ●	64

Type		Model (capacity *100)	05	06	09	12	18	24	28	32	36	40	48	50	54	55	56	58	60
One-way cassette	40VZ***H11200010				●	●	●	●											
Two-way cassette	40VT***H10200010			●	●	●	●	●	●										
Compact cassette	40VX***H11200010			●	●	●	●												
Four-way cassette	40VK***H11200010				●	●	●	●	●	●	●	●	●		●				
Low Static Duct	42VD***H112002010		●	●	●	●	●	●											
Medium Static Ductable	42VD***H112003010			●	●	●	●	●	●	●	●		●		●				
High Static Duct	42VD***H112011010								●	●	●		●						
															●	●			
																	●	●	●
Ceiling & Floor	42VF***H112000010					●	●	●	●	●	●		●		●				
Wall-mounted S Type	42VH***H112000101 42VH***H112100101			●	●	●	●	●											
Wall-mounted C Type	42VH***H112000100 42VH***H112100100			●	●	●	●	●											
Floor standing	42VS**H112003010			●	●	●	●	●	●	●									
	42VS**H112002010 42VS**H112001010			●	●	●	●	●	●	●									
Console	42VC***H112000010			●	●	●	●												
Fresh Air processing unit	42VD***H112211010													●	●				
																	●	●	●

Long Piping Length

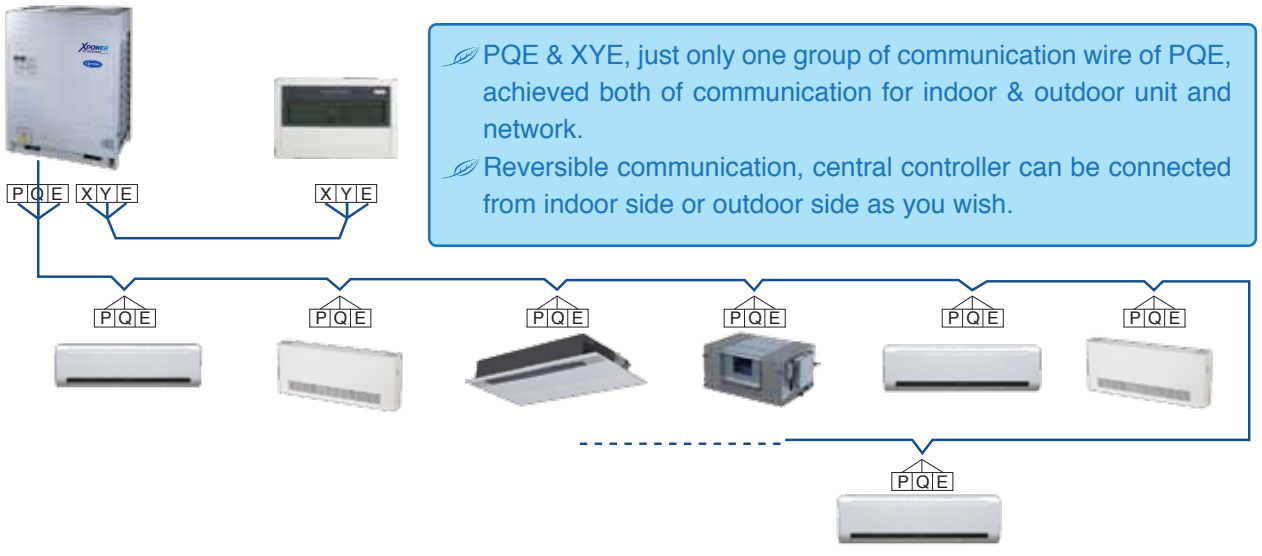


			Permitted value
Piping length	Total pipe length*(Actual)	≤30HP	350m
		>30HP	500m
	Maximum piping(L)	Actual length	150m
		Equivalent length	175m
Drop height	Piping (farthest from the first line pipe branch) equivalent length		40m
	Indoor unit-outdoor unit drop height	Outdoor unit up	70m*
		Outdoor unit down	70m
	Indoor unit to indoor unit drop height		15m

*Total pipe length is equal to gas pipe or liquid pipe length.
*Level difference above 50m are not supported by default but are available on request for customized.

Simple signal line connection

Installation is made easier as the communication wiring between indoor & outdoor units can be shared. It's easy for the user to retrofit the existing system with a centralized control by simply connecting to the outdoor units.



- PQE & XYE, just only one group of communication wire of PQE, achieved both of communication for indoor & outdoor unit and network.
- Reversible communication, central controller can be connected from indoor side or outdoor side as you wish.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OUTDOOR UNITS LINEUP

Specification

Factory model			38VR008H119010	38VR010H119010	38VR012H119010	38VR014H119010	38VR016H119010	38VR018H119010	38VR020H119010
Constituent Units			--	--	--	--	--	38VR008H119010 38VR010H119010	38VR010H119010 38VR010H119010
Power supply		V-Ph-Hz	380~415V 3Ph~50Hz	380~415V 3Ph~50Hz	380~415V 3Ph~50Hz	380~415V 3Ph~50Hz	380~415V 3Ph~50Hz	380~415V 3Ph~51Hz	380~415V 3Ph ~ 50Hz
Cooling (*1)	Capacity	kW	25.2	28	33.5	40	45	53.2	56
		Btu/h	86,000	95,500	114,300	136,500	153,500	181,500	191,100
		kcal/h	21,703	24,115	28,852	34,450	38,756	45,818	48,229
	Input	kW	5.87	7.20	9.05	12.31	14.02	13.07	14.40
	EER	W/W	4.29	3.89	3.70	3.25	3.21	4.07	3.89
Heating (*1)	Capacity	kW	27	31.5	37.5	45	50	58.5	63
		Btu/h	92,100	107,500	128,000	153,500	170,600	199,600	215,000
		kcal/h	23,253	27,129	32,297	38,756	43,062	50,383	54,258
	Input	kW	6.15	7.61	8.99	11.19	12.79	13.76	15.22
	COP	W/W	4.39	4.14	4.17	4.02	3.91	4.25	4.14
Connectable indoor unit	Maximum		13	16	16	16	20	20	24
	Cooling capacity range	kW	12.6~32.76	14~36.4	16.75~43.55	20~52	22.5~58.5	26.6~69.16	28~72.8
Compressor Configration			Hermetically sealed scroll type						
Compressor Motor input		kW	3.6+5.1	3.6+5.7	3.6+5.7	3.6+5.1×2	3.6+5.7×2	(3.6+5.1)+(3.6+5.7)	(3.6+5.7)+(3.6+5.7)
Air flow		m^3/h	11,700	11,700	15,600	15,600	15,600	11,700+11,700	11,700+11,700
		CFM	6,880	6,880	9,173	9,173	9,173	6,880+6,880	6,880+6,880
Sound level (*2)		dB(A)	57	57	59	60	60	61	61
Outdoor unit Dimension	Body(W×H×D)	mm	960×1615×765	960×1615×765	1,250×1,615×765	1,250×1,615×765	1,250×1,615×765	(960×1,615×765)+(960×1,615×765)	
	Packing(W×H×D)	mm	1,025×1,790×830	1,025×1,790×830	1,305×1,790×820	1,305×1,790×820	1,305×1,790×820	(1,025×1,790×830)+(,1025×1,790×830)	
Net weight		kg	245	245	275	325	325	245+245	245+245
Refrigerant Type and Charged Volume		kg	R410A (10)	R410A (10)	R410A (12)	R410A (15)	R410A (15)	R410A (10+10)	R410A (10+10)
Refrigerant piping (*3)	Liquid side	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas side	mm	Φ25.4	Φ25.4	Φ25.4	Φ31.8	Φ31.8	Φ31.8	Φ31.8

Factory model			38VR022H119010	38VR024H119010	38VR026H119010	38VR028H119010	38VR030H119010	38VR032H119010	38VR034H119010	38VR036H119010
Constituent Units			38VR010H119010 38VR012H119010	38VR010H119010 38VR014H119010	38VR010H119010 38VR016H119010	38VR014H119010 38VR014H119010	38VR014H119010 38VR016H119010	38VR016H119010 38VR016H119010	38VR010H119010 38VR010H119010 38VR014H119010	38VR010H119010 38VR010H119010 38VR016H119010
Power supply		V-Ph-Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph~50Hz	380~415V 3Ph~50Hz	380~415V 3Ph ~ 50Hz
Cooling (*1)	Capacity	kW	61.5	68	73	78.5	85	90	96	101
		Btu/h	209,800	232,000	249,100	267,800	290,000	307,100	327,600	344,600
		kcal/h	52,966	58,64	62,871	67,607	73,205	77,512	82,679	86,985
	Input	kW	16.25	19.51	21.22	24.61	26.33	28.04	26.70	28.42
	EER	W/W	3.78	3.49	3.44	3.19	3.23	3.21	3.60	3.55
Heating (*1)	Capacity	kW	69	76.5	81.5	90	95	100	108	113
		Btu/h	235,400	261,000	278,100	307,100	324,100	341,200	368,500	385,600
		kcal/h	59,426	65,885	70,191	77,512	81,818	86,124	93,014	97,320
	Input	kW	16.60	18.80	20.40	22.39	23.98	25.58	26.41	28.00
	COP	W/W	4.16	4.07	4.00	4.02	3.96	3.91	4.09	4.04
Connectable indoor unit	Maximum		24	28	28	28	32	32	36	36
	Cooling capacity range	kW	30.75~79.95	34~88.4	36.5~94.9	39.25~102.05	42.5~110.5	45~117	48~124.8	50.5~131.3
Compressor Configration			Hermetically sealed scroll type							
	Motor input kW	kW	(3.6+5.7)+(3.6+5.7)	(3.6+5.7)+(3.6+5.1×2)	(3.6+5.7)+(3.6+5.7×2)	2×(3.6+5.1×2)	(3.6+5.1×2)+(3.6+5.7×2)	2×(3.6+5.7×2)	2×(3.6+5.7)+(3.6+5.1×2)	2×(3.6+5.7)+(3.6+5.7×2)
Air flow		m^3/h	11,700+15,600	11,700+15,600	11,700+15,600	15,600+15,600	15,600+15,600	15,600+15,600	11,700+11,700+15,600	11,700+11,700+15,600
		CFM	6,880+9,173	6,880+9,173	6,880+9,173	9,173+9,173	9,173+9,173	9,173+9,173	6,880+6,880+9,173	6,880+6,880+9,173
Sound level (*2)		dB(A)	62	62	62	63	63	63	64	64
Outdoor unit Dimension	Body(W×H×D)	mm	(960×1,615×765)+(1,250×1,615×765)			(1,250×1,615×765)+(1,250×1,615×765)			(960×1615×765)+(960×1615×765) +(1,250×1,615×765)	
	Pakcing(W×H×D)	mm	(1,025×1,790×830)+(1,305×1,790×820)			(1,305×1,790×820)+(1,305×1,790×820)			(1,025×1,790×830)+(1,025×1,790×830) +(1,305×1,790×820)	
Net weight		kg	245+275	245+325	245+325	325+325	325+325	325+325	245+245+325	245+245+325
Refrigerant Type and Charged Volume		kg	R410A (10+12)	R410A (10+15)	R410A (10+15)	R410A (15+15)	R410A (15+15)	R410A (15+15)	R410A(10+10+15)	R410A(10+10+15)
Refrigerant piping (*3)	Liquid side	mm	Φ15.9	Φ15.9	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1
	Gas side	mm	Φ31.8	Φ34.9	Φ34.9	Φ34.9	Φ34.9	Φ34.9	Φ41.3	Φ41.3

Specification

Factory model			38VR038H119010	38VR040H119010	38VR042H119010	38VR044H119010	38VR046H119010	38VR048H119010	38VR050H119010	38VR052H119010
Constituent Units			38VR010H119010 38VR012H119010 38VR016H119010	38VR010H119010 38VR014H119010 38VR016H119010	38VR014H119010 38VR014H119010 38VR014H119010	38VR014H119010 38VR014H119010 38VR016H119010	38VR014H119010 38VR016H119010 38VR016H119010	38VR016H119010 38VR016H119010 38VR016H119010	38VR008H119010 38VR010H119010 38VR016H119010 38VR016H119010	38VR010H119010 38VR010H119010 38VR016H119010 38VR016H119010
Power supply		V-Ph-Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz
Cooling (*1)	Capacity	kW	106.5	113	118	123.5	130	135	143.2	146
		Btu/h	363,400	385,600	402,600	421,400	4436,00	460,600	488,600	498,200
		kcal/h	91,722	97,320	101,626	106,363	111,961	116,267	123,330	125,741
	Input	kW	30.27	33.52	36.92	38.63	40.35	42.06	41.11	42.43
	EER	W/W	3.52	3.37	3.20	3.20	3.22	3.21	3.48	3.44
Heating (*1)	Capacity	kW	119	126.5	135	140	145	150	158.5	163
		Btu/h	406,000	431,600	460,600	477,700	494,700	511,800	540,800	556,200
		kcal/h	102,488	108,947	116,267	120,574	124,880	129,186	136,507	140,382
	Input	kW	29.39	31.59	33.58	35.18	36.77	38.36	39.33	40.79
	COP	W/W	4.05	4.00	4.02	3.98	3.94	3.91	4.03	4.00
Connectable indoor unit	Maximum		36	42	42	42	48	48	54	54
	Cooling capacity range	kW	53.25~138.45	56.5~146.9	59~153.4	61.75~160.55	65~169	67.5~175.5	71.6~186.16	73~189.8
Compressor Configration			Hermetically sealed scroll type							
Motor input kW		kW	2×(3.6+5.7)+(3.6+5.7×2)	(3.6+5.7)+(3.6+5.1×2)+(3.6+5.7×2)	3×(3.6+5.1×2)	2×(3.6+5.1×2)+(3.6+5.7×2)	(3.6+5.1×2)+2×(3.6+5.7×2)	3×(3.6+5.7×2)	(3.6+5.1)+(3.6+5.7)+2×(3.6+5.7×2)	2×(3.6+5.7)+2×(3.6+5.7×2)
Air flow		m^3/h	11,700+15,600+15,600	11,700+15,600+15,600	15,600+15,600+15,600	15,600+15,600+15,600	15,600+15,600+156,00	15,600+15,600+15,600	11,700+11,700+15,600+15,600	11,700+11,700+15,600+15,600
		CFM	6,880+9,173+9,173	6,880+9,173+9,173	9,173+9,173+9,173	9,173+9,173+9,173	9,173+9,173+9,173	9,173+9,173+9,173	6,880+6,880+9,173+9,173	6,880+6,880+9,173+9,173
Sound level (*2)		dB(A)	65	65	65	65	65	65	66	66
Outdoor unit Dimension	Body(W×H×D)	mm	(960×1,615×765)+(1,250×1,615×765) +(1,250×1,615×765)		(1,250×1,615×765)+(1,250×1,615×765)+(1,250×1,615×765)				(960×1615×765)+(960×1,615×765)+ (1,250×1,615×765)+(1,250×1,615×765)	
	Packing(W×H×D)	mm	(1,025×1,790×830)+(1,305×1,790×820) +(1,305×1,790×820)		(1,305×1,790×820)+(1,305×1,790×820)+(1,305×1,790×820)				(1,025×1,790×830)+(1,025×1,790×830)+ (1,305×1,790×820)+(1,305×1,790×820)	
Net weight		kg	245+275+325	245+325+325	325+325+325	325+325+325	325+325+325	325+325+325	245+245+325+325	245+245+325+325
Refrigerant Type and Charged Volume		kg	R410A(10+12+15)	R410A(10+15+15)	R410A(15+15+15)	R410A(15+15+15)	R410A(15+15+15)	R410A(15+15+15)	R410A(10+10+15+15)	R410A(10+10+15+15)
Refrigerant piping(*3)	Liquid side	mm	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ22.2	Φ22.2
	Gas side	mm	Φ41.3	Φ41.3	Φ41.3	Φ41.3	Φ41.3	Φ41.3	Φ44.5	Φ44.5

Factory model			38VR054H119010	38VR056H119010	38VR058H119010	38VR060H119010	38VR062H119010	38VR064H119010
Constituent Units			38VR010H119010 38VR012H119010 38VR016H119010 38VR016H119010	38VR010H119010 38VR014H119010 38VR016H119010 38VR016H119010	38VR014H119010 38VR014H119010 30VR014H119010 38VR016H119010	38VR014H119010 38VR014H119010 38VR016H119010 38VR016H119010	38VR014H119010 38VR016H119010 38VR016H119010 38VR016H119010	38VR016H119010 38VR016H119010 38VR016H119010 38VR016H119010
Power supply		V-Ph-Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz	380~415V 3Ph ~ 50Hz
Cooling (*1)	Capacity	kW	151.5	158	163	168.5	175	180
		Btu/h	516,900	539,100	556,200	574,900	597,100	614,200
		kcal/h	130,478	136,076	140,382	145,119	150,717	155,023
	Input	kW	44.29	47.54	50.94	52.65	54.36	56.08
	EER	W/W	3.42	3.32	3.20	3.20	3.22	3.21
Heating (*1)	Capacity	kW	169	176.5	185	190	195	200
		Btu/h	576,600	602,200	631,200	648,300	665,300	682,400
		kcal/h	145,550	152,009	159,329	163,636	167,942	172,248
	Input	kW	42.18	44.38	46.37	47.96	49.56	51.15
	COP	W/W	4.01	3.98	3.99	3.96	3.93	3.91
Connectable indoor unit	Maximum		54	58	58	58	64	64
	Cooling capacity range	kW	75.75~196.95	79~205.4	81.5~211.9	84.25~219.05	87.5~227.5	90~234
Compressor Configration			Hermetically sealed scroll type					
	Motor input kW	kW	2×(3.6+5.7)+2×(3.6+5.7×2)	(3.6+5.7)+(3.6+5.1×2)+2×(3.6+5.7×2)	3×(3.6+5.1×2)+(3.6+5.7×2)	2×(3.6+5.1×2)+2×(3.6+5.7×2)	(3.6+5.1×2)+3×(3.6+5.7×2)	4×(3.6+5.7×2)
Air flow		m^3/h	11,700+15,600+15,600+15,600	11,700+15,600+15,600+15,600	15,600+15,600+15,600+15,600	15,600+15,600+15,600+15,600	15,600+15,600+15,600+15,600	15,600+15,600+15,600+15,600
		CFM	6,880+9,173+9,173+9,173	6,880+9,173+9,173+9,173	9,173+9,173+9,173+9,173	9,173+9,173+9,173+9,173	9,173+9,173+9,173+9,173	9,173+9,173+9,173+9,173
Sound level (*2)		dB(A)	66.5	66.5	67	67	67	67
Outdoor unit Dimension	Body(W×H×D)	mm	(960×1,615×765)+(1,250×1,615×765)+ (1,250×1,615×765)+(1,250×1,615×765)		(1,250×1,615×765)+(1,250×1,615×765)+(1,250×1,615×765)+(1,250×1,615×765)			
	Packing(W×H×D)	mm	(1,025×1,790×830)+(1,305×1,790×820)+ (1,305×1,790×820)+(1,305×1,790×820)		(1,305×1,790×820)+(1,305×1,790×820)+(1,305×1,790×820)+(1,305×1,790×820)			
Net weight		kg	245+275+325+325	245+325+325+325	325+325+325+325	325+325+325+325	325+325+325+325	325+325+325+325
Refrigerant Type and Charged Volume		kg	R410A(10+12+15+15)	R410A(10+15+15+15)	R410A(15+15+15+15)	R410A(15+15+15+15)	R410A(15+15+15+15)	R410A(15+15+15+15)
Refrigerant piping(*3)	Liquid side	mm	Φ22.2	Φ22.2	Φ22.2	Φ22.2	Φ22.2	Φ22.2
	Gas side	mm	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5

Notes:

1.Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB(80.6°F), 19°C WB(60°F)	35°C DB(95°F)	7.5m	0m
Heating	20°C DB(68°F), 15°C WB(44.6°F)	7°C DB(42.8°F)	7.5m	0m

2.Sound level: Anechoic chamber conversion value, measured at a position 1m in front of the unit and 1.5m above the floor.

3.Refrigerant pipe dim.listed here only for when the total equivalent length ＜90m. For the data when total quivalent length ≥90 please refer to technical manual.

4.The above data may be changed without notice for further improvement on quality and performance.

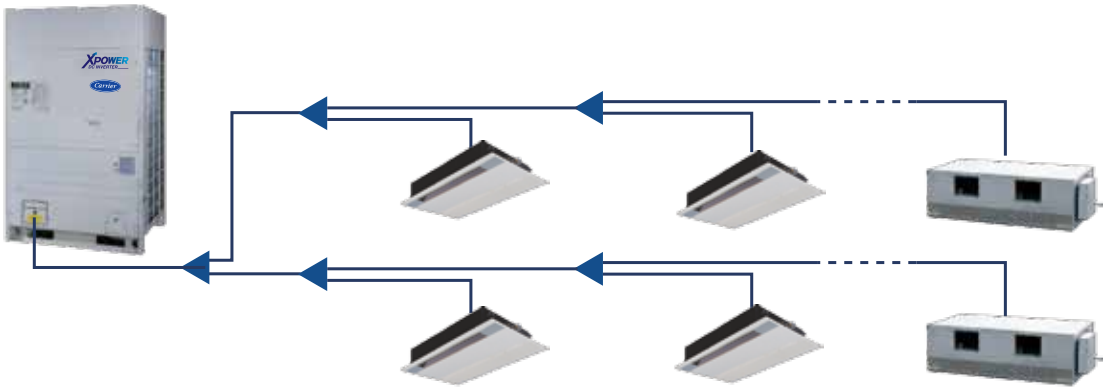
INDIVIDUAL X-POWER+I INTRODUCTION

INDIVIDUAL, SMART, FASHION

Unmatched solutions for middle and small sized commercial and residential space

If you are pioneering your own business: it maybe a comfort business office, a creative name brand store, a top grade restaurant full of tasty food, or some kinds of private club for young people to hang out. When you blueprint your small commercial space or decorate to make it attractive to the possible customers, have you ever taken the invisible air conditioning systems into account?

X-Power individual provides unmatched solution for any application requirement like that. Also, the integral design dramatically simplifies installation in the jobsite. Furthermore, environmentally friendly refrigerant is utilized to provide a sustainable solution for your HVAC system.



X-Power+i Applications

Villa

Traditional split units

VS

X-POWER+i

- Take up too much living space.
- Need too many outdoor units, unaesthetic!
- Limited indoor units option range.
- Individual controlled, difficult to manage.
- Fluctuating indoor temperature, lower comfort.

- Only one outdoor unit can connect up to 32 indoor units, more aesthetical.
- Various indoor units option for better match space decoration style, more elegant.
- All the indoor units can be centrally controlled, easy to manage.
- Advanced DC inverter technology, outstanding temperature control precision, ± 0.5°C.

DESIGN VERSATILITY

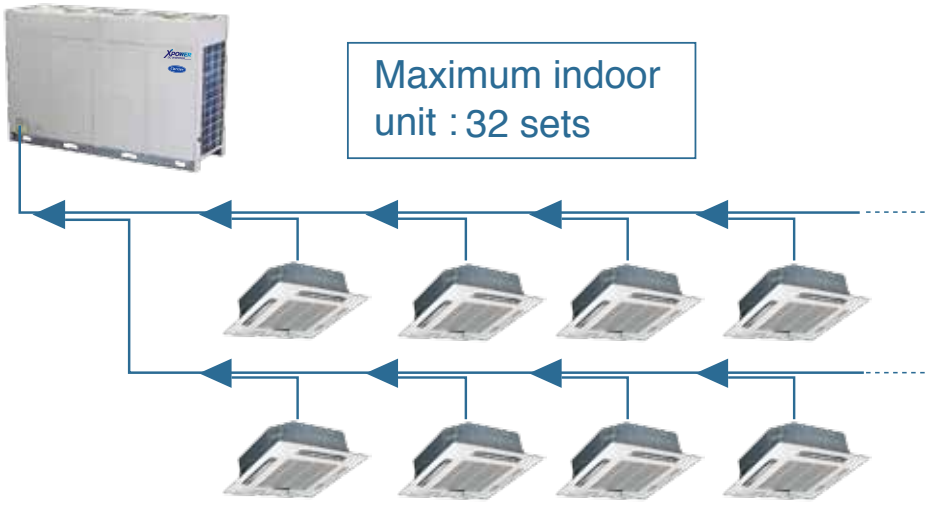
Outdoor unit lineup

X-Power+i is an integrally designed VRF system for small and middle sized commercial application. The outdoor units capacity range from 8HP to 30HP and can be connected with 14type indoor units which totally contain more than 100 models.

8, 10HP	12, 14, 16HP	18,20,HP	30HP
			

Versatile indoor units

14 type indoor units, more than 100 models, maximum 32 indoor units can be connected in one system.
Wide range indoor unit option for better match with the room ceiling and decorate style of occupied space.

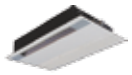


Capacity (HP)	Max. indoor unit counts
8	13
10	16
12	16
14	16
16	20
18	20
20	24
30	32

Long Piping Length

			Permitted value
Piping length	Total pipe length*(Actual)	≤30HP	350m
	Maximum piping(L)	Actual length	350m
		Equivalent length	
Drop height	Piping (farthest from the first line pipe branch) equivalent length		40m
	Indoor unit-outdoor unit drop height	Outdoor unit up	70m*
		Outdoor unit down	70m
	Indoor unit to indoor unit drop height		15m

*Total pipe length is equal to gas pipe or liquid pipe length.
*Level difference above 50m are not supported by default but are available on request for customized.

Type		Model (capacity *100)	05	06	09	12	18	24	28	32	36	40	48	50	54	55	56	58	60
One-way cassette	40VZ***H11200010				●	●	●	●											
Two-way cassette	40VT***H10200010			●	●	●	●	●	●										
Compact cassette	40VX***H11200010			●	●	●	●												
Four-way cassette	40VK***H11200010				●	●	●	●	●	●	●	●	●	●	●				
Low Static Duct	42VD***H112002010		●	●	●	●	●	●											
Medium Static Ductable	42VD***H112003010			●	●	●	●	●	●	●	●		●		●				
High Static Duct	42VD***H112011010								●	●	●		●						
															●	●			
																	●	●	●
Ceiling & Floor	42VF***H112000010					●	●	●	●	●	●		●		●				
Wall-mounted S Type	42VH***H112000101 42VH***H112100101			●	●	●	●	●											
Wall-mounted C Type	42VH***H112000100 42VH***H112100100			●	●	●	●	●											
Floor standing	42VS**H112003010			●	●	●	●	●	●	●									
	42VS**H112002010 42VS**H112001010			●	●	●	●	●	●	●									
Console	42VC***H112000010			●	●	●	●												
Fresh Air processing unit	42VD***H112211010													●	●				
																	●	●	●

OUTDOOR UNITS LINEUP

Specification

Factory model			38VR008H119011	38VR010H119011	38AR012H119011	38VR014H119011
Power supply		V-Ph-Hz	380V 3Ph～50Hz	380~415V 3Ph～50Hz	380~415V 3Ph～50Hz	380~415V 3Ph～50Hz
Cooling (*1)	Capacity	kW	25.2	28	33.5	40
		Btu/h	86,000	95,500	114,300	136,500
		Kcal/h	21,703	24,115	28,852	34,450
	Input	kW	5.87	7.20	9.05	12.31
	EER	W/W	4.29	3.89	3.70	3.25
Heating (*1)	Capacity	kW	27	31.5	37.5	45
		Btu/h	92,100	107,500	128,000	153,500
		Kcal/h	23,253	27129	32,297	38,756
	Input	kW	6.15	7.61	8.99	11.19
	COP	W/W	4.39	4.14	4.17	4.02
Connectable indoor unit	Maximum		13	16	16	16
	Cooling capacity range		12.6~32.76	14~36.4	16.75~43.55	20~52
Compressor Configration			Hermetically sealed scroll type			
	Motor intput	kW	3.6+5.1	3.6+5.7	3.6+5.7	3.6+5.1x2
Air flow		m^3/h	11,700	11,700	7,500x2	7,500x2
Outdoor sound level (*2)		dB(A)	57	57	58	60
Outdoor unit	Dimension(W×H×D)	mm	960x1,615x765	960x1,615x765	1,250x1,615x765	1,250x1,615x765
	Packing (W×H×D)	mm	1,025x1,790x830	1,025x1,790x830	1,310x1,790x825	1,310x1,790x825
Net/Gross weight		kg	245/260	245/260	275/295	325/345
Charged refrigerant type and volume		kg	R410A (10)	R410A (10)	R410A (12)	R410A (15)
Refrigerant piping(*3)	Liquid side	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	Gas side	mm	Φ25.4	Φ25.4	Φ31.8	Φ31.8

Factory model			38VR0116H119011	38VR018H119011	38VR020H119011	38VR030H119011
Power supply		V-Ph-Hz	380~415V 3Ph～50Hz	380~415V 3Ph～50Hz	380~415V 3Ph～50Hz	380~415V 3Ph～50Hz
Cooling (*1)	Capacity	kW	45	53	56	85
		Btu/h	153,500	180,800	191,100	290,000
		Kcal/h	38,756	45,571	48,229	73205
	Input	kW	14.02	18.80	19.90	36.00
	EER	W/W	3.21	2.82	2.81	2.36
Heating (*1)	Capacity	kW	50	58	63	95
		Btu/h	170,600	197,900	215,000	324,100
		Kcal/h	43,062	49,870	54,258	81,818
	Input	kW	12.79	17.90	19.10	31.50
	COP	W/W	3.91	3.24	3.30	3.02
Connectable indoor unit	Maximum		20	20	24	32
	Cooling capacity range		22.5~58.5	26.6~69.16	28~72.8	42.5~110.5
Compressor Configration			Hermetically sealed scroll type			
	Motor intput	kW	3.6+5.7x2	5.1+5.1x3	5.1+5.1x3	5.1+5.7x5
Air flow		m^3/h	7500x2	11,000x2	11,000x2	7,000x4
Outdoor sound level(*2)		dB(A)	60	63	63	63
Outdoor unit	Dimension(W×H×D)	mm	1,250x1,615x765	1,960x1,615x765	1,960x1,615x765	2,540x1,615x765
	Packing (W×H×D)	mm	1,310x1,790x825	2,002x1,787x810	2,002x1,787x810	2,600x1,800x825
Net/Gross weight		kg	325/345	460/480	460/480	645/660
Charged refrigerant type and volume		kg	R410A (15)	R410A (18)	R410A (18)	R410A (21)
Refrigerant piping(*3)	Liquid side	mm	Φ15.9	Φ19	Φ19	Φ22
	Gas side	mm	Φ31.8	Φ31.8	Φ31.8	Φ38

Notes:

1.Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB(80.6°F), 19°C WB(60°F)	35°C DB(95°F)	7.5m	0m
Heating	20°C DB(68°F), 15°C WB(44.6°F)	7°C DB(42.8°F)	7.5m	0m

2.Sound level: Anechoic chamber conversion value, measured at a position 1m in front of the unit and 1.5m above the floor.

3.Refrigerant pipe dim.listed here only for when the total equivalent length ＜90m. For the data when total quivalent length ≥90 please refer to technical manual.

4.The above data maybe changed without notice for further improvement on quality and performance.

Indoor Units Lineup →

Indoor Units Lineup

- Wall-mounted S Type
- Wall-mounted C Type
- Four-way Cassette
- Compact Four-way Cassette
- Two-way Cassette
- One-way Cassette
- Ceiling & Floor Type
- Floor Standing
- Console
- Low Static Pressure Unit
- Concealed Duct Unit (A5 Type)
- High Static Pressure Duct
- Fresh Air-processing Unit

INDOOR UNIT LINEUP

Wall-mounted Type

42VH0**H112000101
42VH0**H112100101
42VH0**H112000100
42VH0**H112100100

Model	06	09	12	18	24
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW

Four-way Cassette

40VK0**H11200010

Model	09	12	18	24	28
Capacity	2.8kW	3.6kW	4.5kW	5.6 kW	7.1 kW

Model	32	36	40	48	54
Capacity	8.0 kW	9.0 kW	10.0 kW	11.2 kW	14.0 kW

Compact Four-way Cassette

40VX0**H11200010

Model	06	09	12	18
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Two-way Cassette

40VT0**H10200010

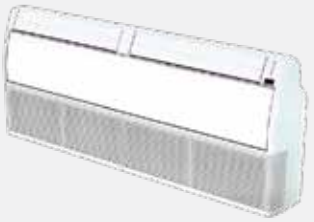
Model	06	09	12	18	24	28
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW	7.1kW

One-way Cassette

40VZ0**H11200010

Model	09	12	18	24
Capacity	2.8kW	3.6kW	4.5kW	5.6 kW

Ceiling & Floor



42VF0**H112000010

Model	12	18	24	28
Capacity	3.6kW	4.5kW	5.6 kW	7.1kW

Model	32	36	48	54
Capacity	8.0 kW	9.0 kW	11.2 kW	14.0 kW

Floor Standing

42VS0**H112001010 42VS0**H112003010

Model	06	09	12	18
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Model	24	28	32
Capacity	5.6 kW	7.1kW	8.0 kW

Console

42VC0**H112000010

Model	06	09	12	18
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Low Static Pressure Duct

42VD0**H112002010

Model	05	06	09	12	18	24
Capacity	1.8kW	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW

Concealed Duct Unit (A5 Type)

42VD0**H112003010

Model	06	09	12	18	24
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW

Model	28	32	36	48	54
Capacity	7.1kW	8.0 kW	9.0 kW	11.2 kW	14.0 kW

High Static Pressure Duct

42VD0**H112011010

Model	28	32	36	48
Capacity	7.1kW	8.0 kW	9.0 kW	11.2 kW

Model	54	55	56	58	60
Capacity	14.0 kW	16.0 kW	20.0 kW	25.0 kW	28.0 kW

Fresh Air Processing Unit

42VD0**H112211010

Model	50	54	56	58	60
Capacity	12.5kW	14kW	20.0kW	25.0kW	28.0 kW

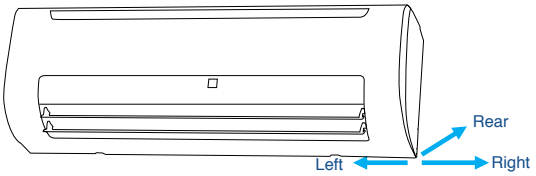
Wall mounted (S type panel)

Panel with LED display

The front panel and display panel have different colors to choose: white and brown for big panel, blue and brown for small panel, and the other colors can be customized according to the customers' demands.

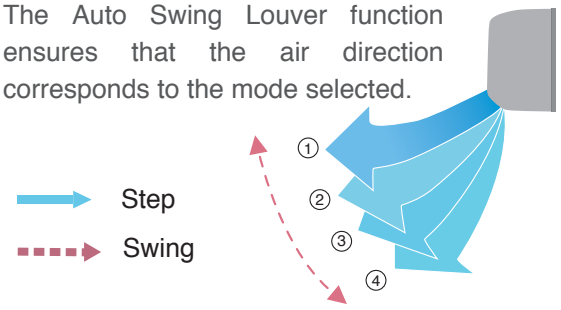
Convenient for installation

- Multi-refrigerant outlet pipe method: left / right / rear, more flexible for installation.
- The EXV is built-in the indoor unit, compact size, longer connection pipe, Gas pipe: 468mm/Liquid pipe: 550mm, more flexible for the installation
- Adopts new type fixing plate, easy for installation and stable.



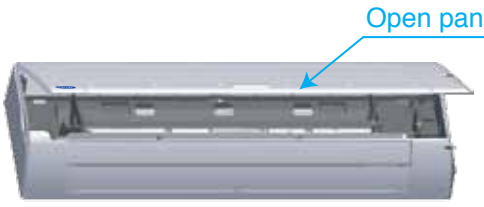
Auto swing louver

The Auto Swing Louver function ensures that the air direction corresponds to the mode selected.



Easy maintenance

Easy maintenance has been realized as the front panel can be removed for easy access.



Specifications

Model			42VH006H112000101	42VH009H112000101	42VH012H112000101	42VH018H112000101	42VH024H112000101
Power supply			1-phase, 220-240V, 50Hz				
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6
		kcal/h	1,900	2,400	3,100	3,900	4,800
		Btu/h	7,500	9,500	12,200	15,300	19,100
Heating capacity		kW	2.4	3.2	4	5	6.3
		kcal/h	2,100	2,700	3,400	4,300	5,400
		Btu/h	8,200	10,900	13,600	17,000	21,500
Power input	Cooling	W	28	28	28	45	45
	Heating		28	28	28	45	45
Rated current	Cooling	A	0.14	0.14	0.14	0.2	0.2
	Heating		0.14	0.14	0.14	0.2	0.2
Airflow rate(H/M/L)		m^3/h	525/480/430	525/480/430	590/520/480	860/755/630	925/860/755
		CFM	309/283/253	309/283/253	309/283/253	506/444/371	544/506/444
Sound level		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Refrigerant		Type	R410A				
		Control method	EXV				
Net dimension(W×H×D)		mm	915×290×230	915×290×230	915 ×290×230	1,072×315×230	1,072×315×230
Packing dimension(W×H×D)		mm	1,020×390×315	1,020×390×315	1,020×390×315	1,180×415×315	1,180×415×315
Net weight		kg	13	13	13	15.1	15.1
Gross weight		kg	16.5	16.5	16.5	18.8	18.8
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Drain piping	mm	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5

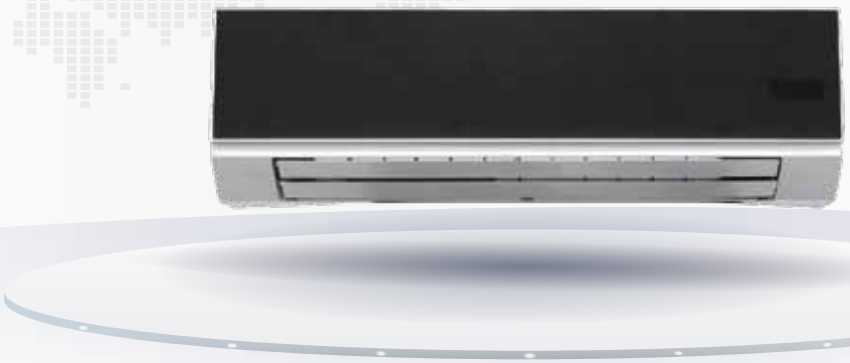
Model			42VH006H112100101	42VH009H112100101	42VH012H112100101	42VH018H112100101	42VH024H112100101
Power supply			1-phase, 220-240V, 50Hz				
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6
		kcal/h	1,900	2,400	3,100	3,900	4,800
		Btu/h	7,500	9,500	12,200	15,300	19,100
Heating capacity		kW	2.4+0.75	3.2+0.75	4+0.75	5+0.9	6.3+0.90
		kcal/h	2,100+600	2,700+600	3,400+600	4,300+800	5,400+800
		Btu/h	8,200+2,600	10,900+2,600	13,600+2,600	17,000+3,100	21,500+3,100
Power input	Cooling	W	28	28	28	45	45
	Heating		28+0.75	28+0.75	28+0.75	45+0.90	45+0.90
Rated current	Cooling	A	0.14	0.14	0.14	0.2	0.2
	Heating		0.14+3.38	0.14+3.38	0.14+3.38	0.20+4.05	0.20+4.05
Airflow rate(H/M/L)		m^3/h	525/480/430	525/480/430	590/520/480	860/755/630	925/860/755
		CFM	309/283/253	309/283/253	347/306/283	506/444/371	544/506/444
Sound level		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Refrigerant		Type	R410A				
		Control method	EXV				
Net dimension(W×H×D)		mm	915×290×230	915×290×230	915 ×290×230	1,072×315×230	1,072×315×230
Packing dimension(W×H×D)		mm	1,020×390×315	1,020×390×315	1,020×390×315	1,180×415×315	1,180×415×315
Net weight		kg	13.0	13.0	13.0	15.0	15.0
Gross weight		kg	16.5	16.5	16.5	18.8	18.8
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Drain piping	mm	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Sound level is measured 1m below the air out-let both in horizontal and vertical distance.

⋆ Specifications are subject to change without prior notice for product improvement.

Wall mounted (C type panel)

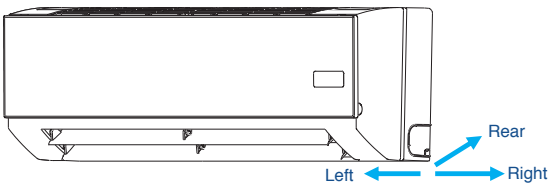


Panel with LED display

The front panel and display panel have different colors to choose: white and brown for big panel, blue and brown for small panel, and the other colors can be customized according to the customers' demands.

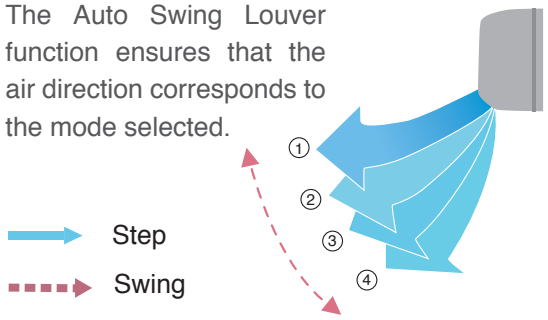
Convenient for installation

- Multi-refrigerant outlet pipe method: left/right/rear, more flexible for installation.
- The EXV is built-in the indoor unit, compact size, longer connection pipe, Gas pipe: 468mm/Liquid pipe: 550mm, more flexible for the installation
- Adopts new type fixing plate, easy for installation and stable.



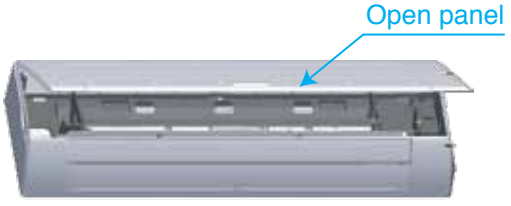
Auto swing louver

The Auto Swing Louver function ensures that the air direction corresponds to the mode selected.



Easy maintenance

Easy maintenance has been realized as the front panel can be removed for easy access.



Low noise and improved flow control make more comfortable

Adoption of the mechanical expansion valve which has 2000 stages element positioning, ensures precise flow control, as well lower modulation noise when EXV is operating. Creates quiet and comfortable environment. Three air flow speeds: high/middle/low, double air guides. Smoother airflow with less turbulence. Owing to the multiple-blade fan and the air guide design, the airflow is getting smoother and more comfortable.

Specifications

Model			42VH006H112000100	42VH009H112000100	42VH012H112000100	42VH018H112000100	42VH024H112000100
Power supply			1-phase, 220-240V, 50Hz				
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6
		kcal/h	1,900	2,400	3,100	3,900	4,800
		Btu/h	7,500	9,500	12,300	15,400	19,100
Heating capacity		kW	2.4	3.2	4	5	6.3
		kcal/h	2,200	2,700	3,400	4,300	5,400
		Btu/h	8,900	10,900	13,600	17,000	21,500
Power input	Cooling	W	28	28	28	45	45
	Heating		28	28	28	45	45
Rated current	Cooling	A	0.14	0.14	0.14	0.2	0.2
	Heating		0.14	0.14	0.14	0.2	0.2
Airflow rate(H/M/L)		m^3/h	525/480/430	525/480/430	525/480/430	860/755/630	925/860/755
		CFM	309/283/253	309/283/253	309/283/253	506/444/371	544/506/444
Sound level		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Refrigerant		Type	R410A				
		Control method	EXV				
Net dimension(W×H×D)		mm	915×290×210	915×290×210	915×290×210	1,070×315×210	1,070×315×210
Packing dimension(W×H×D)		mm	1,020×385×300	1,020×385×300	1,020×385×300	1,165×395×285	1,165×395×285
Net weight		kg	12	12	12	16	16
Gross weight		kg	16	16	16	19	19
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Drain piping	mm	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5

Model			42VH006H112100100	42VH009H112100100	42VH012H112100100	42VH018H112100100	42VH024H112100100
Power supply			1-phase, 220-240V, 50Hz				
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6
		kcal/h	1,900	2,400	3,100	3,900	4,800
		Btu/h	7,500	9,500	12,300	15,400	19,100
Heating capacity		kW	2.4+0.75	3.2+0.75	4+0.75	5+0.9	6.3+0.9
		kcal/h	2,200+600	2,700+600	3,400+600	4,300+800	5,400+800
		Btu/h	8,900+2,500	10,900+2,500	13,600+2,500	17,000+3,100	21,500+3,100
Power input	Cooling	W	28	28	28	45	45
	Heating		28+0.75	28+0.75	28+0.75	45+0.90	45+0.90
Rated current	Cooling	A	0.14	0.14	0.14	0.2	0.2
	Heating		0.14+3.38	0.14+3.38	0.14+3.38	0.2+4.05	0.2+4.25
Airflow rate(H/M/L)		m^3/h	525/480/430	525/480/430	525/480/430	860/755/630	925/860/755
		CFM	309/283/253	309/283/253	309/283/253	506/444/371	544/506/444
Sound level		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Refrigerant		Type	R410A				
		Control method	EXV				
Net dimension(W×H×D)		mm	915×290×210	915×290×210	915×290×210	1,070×315×210	1,070×315×210
Packing dimension(W×H×D)		mm	1,020×385×300	1,020×385×300	1,020×385×300	1,165×395×285	1,165×395×285
Net weight		kg	12	12	12	16	16
Gross weight		kg	16	16	16	19	19
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Drain piping	mm	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5	ODΦ16.5

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Sound level is measured 1m below the air out-let both in horizontal and vertical distance.

* Specifications are subject to change without prior notice for product improvement.

Four Way Cassette

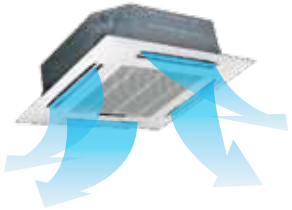
Quiet operation, soft air supply

- Streamline plate ensures quietness
- Advanced 3-D spiral fan design reduces the air resistance and operation noise.

Uniform air flow of four ways

The four-way discharge port provides strong circulating air flow to cool or heat every corner of the room and realizes even temperature distribution; by choosing high airflow mode, high ceiling application over 3m can get equal comfort.

Four-way Airflow(4-stage fan speed)

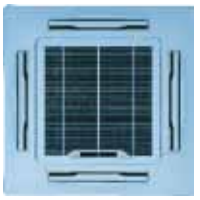


Four kinds of colors panel available


(White) Standard


(Black) Optional


(Gray) Optional

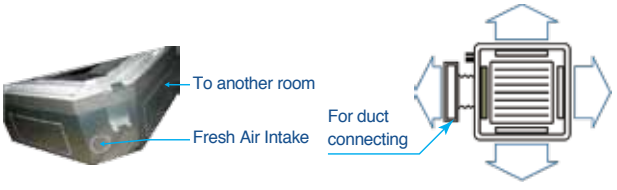

(Blue) Optional

*The optional can be customized if it is more than 500 units.

Easy trouble shooting

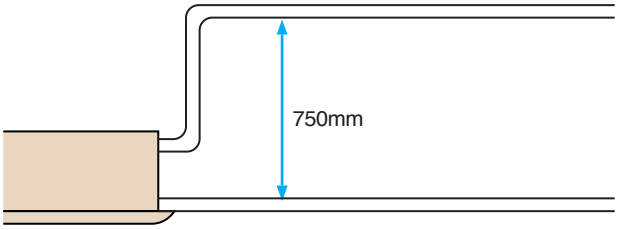
By adding digital tube displayer on the display board, the Error Codes can be displayed directly on it which helps to find and troubleshoot.

Reserved multi-function ports

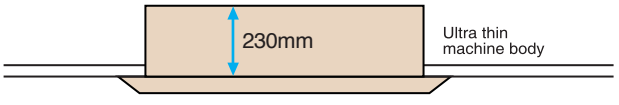


High lift pump

Drain pump can take up the condenser water to 750mm which helps to make easier installation of the drain piping system.



Ultra-thin machine body for easy installation and maintenance, min. 230mm in height.



Specifications

Model			40VK009H11200010	40VK012H11200010	40VK018H11200010	40VK024H11200010	40VK028H11200010
Power supply			1-phase, 220-240V, 50Hz				
Cooling capacity		kW	2.8	3.6	4.5	5.6	7.1
		kcal/h	2,400	3,100	3,800	4,800	6,100
		Btu/h	9,500	12,200	15,300	19,100	24,200
Heating capacity		kW	3.2	4.0	5.0	6.3	8.0
		kcal/h	2,700	3,400	4,300	5,400	6,800
		Btu/h	10,900	13,600	17,000	21,500	27,300
Power input	Cooling	W	80	80	90	90	90
	Heating		80	80	90	90	90
Rated current	Cooling	A	0.4	0.4	0.4	0.4	0.5
	Heating		0.4	0.4	0.4	0.4	0.5
Airflow rate(H/M/L)		m^3/h	847/766/640	847/766/640	864/755/658	864/755/658	1,157/955/749
		CFM	498/450/376	498/450/376	508/444/387	508/444/387	680/562/440
Sound level		dB(A)	42/38/35	42/38/35	42/38/35	42/38/35	45/42/39
Refrigerant		Type	R410A				
		Control method	EXV				
Body	Net dim.(WxHxD)	mm	840x230x840	840x230x840	840x230x840	840x230x840	840x230x840
	Gross dim.(WxHxD)		955X247X955	955X247X955	955X247X955	955X247X955	955X247X955
	Net/gross	kg	24/28	24/28	24/28	26/30	26/30
Panel	Net dim.(WxHxD)	mm	950x46x950	950x46x950	950x46x950	950x46x950	950x46x950
	Gross dim.(WxHxD)		1,000x60x1,000	1,000x60x1,000	1,000x60x1,000	1,000x60x1,000	1,000x60x1,000
	Net/gross	kg	6/8	6/8	6/8	6/8	6/8
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	Drain piping	mm	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32
Drain pump pumpheadr		mm	750	750	750	750	750

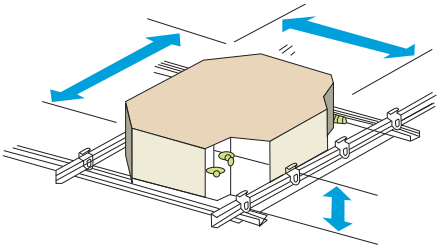
Model			40VK032H11200010	40VK036H11200010	40VK040H11200010	40VK048H11200010	40VK054H11200010
Power supply			1-phase, 220-240V, 50Hz				
Cooling capacity		kW	8.0	9.0	10.0	11.2	14.0
		kcal/h	6,800	7,700	8,600	9,600	12,000
		Btu/h	27,300	30,700	34,100	38,200	47,800
Heating capacity		kW	9.0	10.0	11.0	12.5	15.0
		kcal/h	7,700	8,600	9,400	10,700	12,900
		Btu/h	30,700	34,100	37,500	42,600	51,200
Power input	Cooling	W	97	160	160	160	170
	Heating		97	160	160	160	170
Rated current	Cooling	A	0.5	0.7	0.7	0.7	0.8
	Heating		0.5	0.7	0.7	0.7	0.8
Airflow rate(H/M/L)		m^3/h	1,236/973/729	1,540/1,300/1,120	1,540/1,300/1,120	1,540/1,300/1,120	1,800/1,500/1,280
		CFM	727/572/429	906/765/659	906/765/659	906/765/659	1059/883/753
Sound level		dB(A)	45/42/39	48/45/43	48/45/43	48/45/43	50/47/44
Refrigerant		Type	R410A				
		Control method	EXV				
Body	Net dim.(WxHxD)	mm	840x230x840	840x300x840	840x300x840	840x300x840	840x300x840
	Gross dim.(WxHxD)		955X247X955	955X317X955	955X317X955	955X317X955	955X317X955
	Net/gross	kg	26/30	32/37	32/37	32/37	32/37
Panel	Net dim.(WxHxD)	mm	950x46x950	950x46x950	950x46x950	950x46x950	950x46x950
	Gross dim.(WxHxD)		1,000x60x1,000	1,000x60x1,000	1,000x60x1,000	1,000x60x1,000	1,000x60x1,000
	Net/gross	kg	6/8	6/8	6/8	6/8	6/8
Piping connections	L(flare)	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	G(flare)	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Drain piping	mm	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32	IDΦ28.5 ODΦ32
Drain pump pumphead		mm	750	750	750	750	750

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp. : 27°CDB,19°CWB,outdoor temp.:35°CDB, equivalent ref. Piping: 8m(horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB,outdoor temp.: 7°CDB, 6°CWB,equivalent ref. Piping: 8m(horizontal)
3. Sound level is measured 1.4m below the unit.

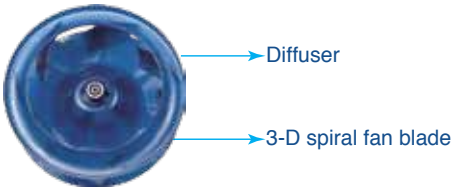
Compact Four Way Cassette

Compact design, easy installation and maintenance



Extremely compact casing (570mm in width and depth) makes it a perfect match with the ambient decoration. Little space is required for installation into a shallow ceiling.
Due to its compact body and light weight, all models can be installed without a hoist.

Quiet operation, soft air supply



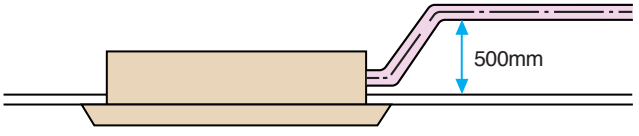
Streamline plate ensures quietness
Advanced 3-D spiral fan design reduces the air resistance and operation noise.

Uniform air flow of four ways

The four-way discharge port provides strong circulating air flow to cool or heat every corner of the room and realizes even temperature distribution; by choosing high airflow mode, high ceiling application over 3m can get equal comfort.

360°Airflow outlet

360°air outlet provides strong circulating air flow to cool or heat every corner of the room and realizes even temperature distribution



Drain up pump with 500mm pumphead fitted as standard, max. up to 600mm head.

Specifications

Model			40VX006H11200010	40VX009H11200010	40VX012H11200010	40VX018H11200010
Power supply			1-phase, 220-240V, 50Hz			
Cooling capacity		kW	2.2	2.8	3.6	4.5
		kcal/h	1,900	2,400	3,100	3,800
		Btu/h	7,500	9,500	12,200	15,300
Heating capacity		kW	2.4	3.2	4.0	5.0
		kcal/h	2,000	2,700	3,400	4,300
		Btu/h	8,900	10,900	13,600	17,000
Power input	Cooling	W	51	52	58	58
	Heating		43	44	50	51
Rated current	Cooling	A	0.175	0.175	0.21	0.21
	Heating		0.175	0.175	0.21	0.21
Airflow rate(H/M/L)		m^3/h	522/414/313	520/415/320	610/521/409	610/521/409
		CFM	307/244/184	306/200/188	359/306/241	359/306/241
Sound level		dB(A)	35.8/33.4/23.4	35.8/33.4/23.4	41.5/35.6/28.8	41.5/35.6/28.8
Refrigerant		Type	R410A			
		Control method	EXV			
Body	Net dim.(WxHxD)	mm	575×265×575	575×265×575	575×265×575	575×265×575
	Gross dim.(WxHxD)		675×285×675	675×285×675	675×285×675	675×285×675
	Net/gross	kg	17.5/22	17.5/22	19/23.5	19/23.5
Panel	Net dim.(WxHxD)	mm	647×50×647	647×50×647	647×50×647	647×50×647
	Gross dim.(WxHxD)		705×113×705	705×113×705	705×113×705	705×113×705
	Net/gross	kg	3/5	3/5	3/5	3/5
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7
	Drain piping	mm	ID Φ20 ODΦ25	ID Φ20 ODΦ25	ID Φ20 ODΦ25	ID Φ20 ODΦ25
Drain pump pumphead		mm	500	500	500	500

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp. : 27°CDB,19°CWB,outdoor temp.:35°CDB, equivalent ref. Piping: 8m(horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB,outdoor temp.: 7°CDB, 6°CWB,equivalent ref. Piping: 8m(horizontal)
3. Sound level is measured 1.4m below the unit.

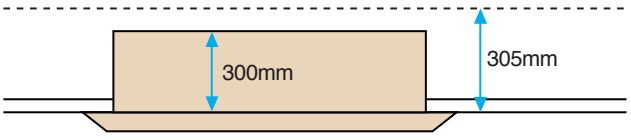
Two Way Cassette

Quiet operation

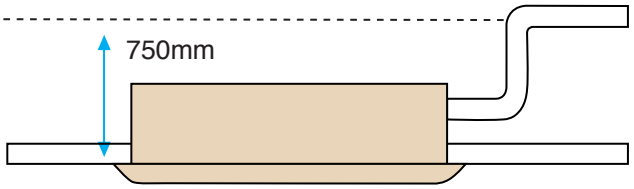
Optimized airflow duct with low resistance greatly reduces noise level, min. 24 dB(A).

Stylish design and slim body

Thanks to the stylish appearance and slim body, the unit can be harmonious with the room decoration and ambient. Slim body with only 300 mm height needs small suspended ceiling space. Installation is free of story height limitation which makes the decoration much more flexible.



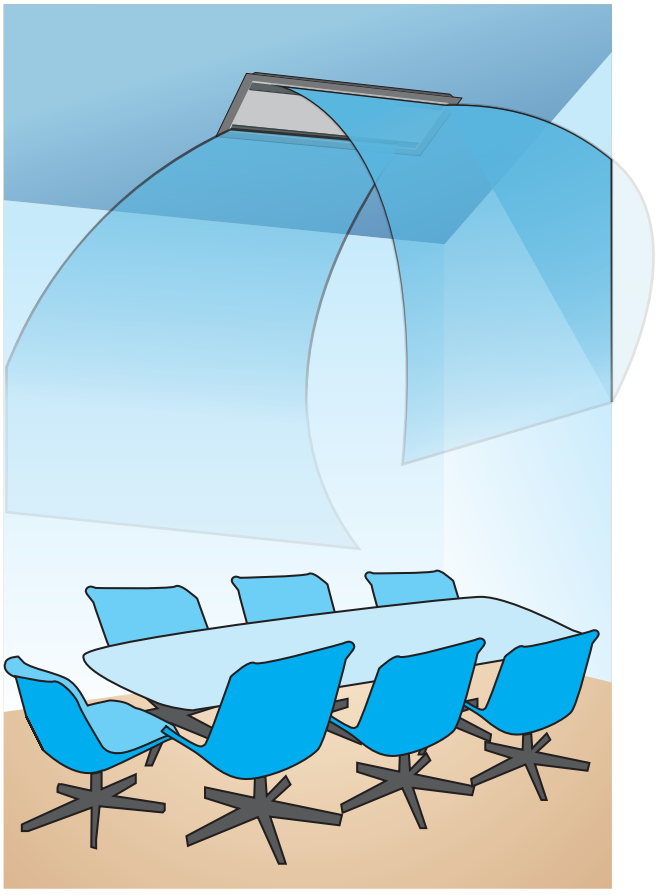
Standard built-in drain pump with 750mm pumphead (higher pumphead can be customized).



Flat-type suction grille design makes maintenance work very easy.

High airflow

High airflow for high ceiling application guarantees equal comfort of large space. It makes every comer of the room get even distribution of airflow and temperature.



Specifications

Model			40VT006H10200010	40VT009H10200010	40VT012H10200010	40VT018H10200010	40VT024H10200010	40VT028H10200010
Power supply			1-phase, 220-240V, 50Hz					
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1
		kcal/h	1,900	2,400	3,100	3,800	4,800	6,100
		Btu/h	7,500	9,500	12,200	15,300	19,100	24,200
Heating capacity		kW	2.6	3.2	4．0	5.0	6.3	8.0
		kcal/h	2,200	2,700	3,400	4,300	5,400	6,800
		Btu/h	8,900	10,900	13,600	17,000	21,500	27,300
Power input	Cooling	W	57	57	60	92	108	154
	Heating		57	57	60	92	108	154
Rated current	Cooling	A	0.35	0.45	0.45	0.55	0.55	0.75
	Heating		0.35	0.45	0.45	0.55	0.55	0.75
Airflow rate(H/M/L)		m^3/h	654/530/410	654/530/410	725/591/458	850/670/550	980/800/670	1,200/1,000/770
		CFM	385/312/241	385/312/241	427/348/270	500/394/324	577/471/394	706/589/453
Sound level		dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30	44/40/34
Refrigerant		Type	R410A					
		Control method	EXV					
Body	Net dim.(WxHxD)	mm	1,172×300×592	1,172×300×592	1,172×300×592	1,172×300×592	1,172×300×592	1,172×300×592
	Gross dim.(WxHxD)		1,355×400×675	1,355×400×675	1,355×400×675	1,355×400×675	1,355×400×675	1,355×400×675
	Net/gross	kg	34/42.5	34/42.5	34/42.5	36.5/45	36.5/45	36.5/45
Panel	Net dim.(WxHxD)	mm	1,430×90×680	1,430×90×680	1,430×90×680	1,430×90×680	1,430×90×680	1,430×90×680
	Gross dim.(WxHxD)		1,525×130×765	1,525×130×765	1,525×130×765	1,525×130×765	1,525×130×765	1,525×130×765
	Net/gross	kg	10.5/15	10.5/15	10.5/15	10.5/15	10.5/15	10.5/15
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	Drain piping	mm	ID Φ25, OD Φ32	ID Φ25, OD Φ32	ID Φ25, OD Φ32	ID Φ25, OD Φ32	ID Φ25, OD Φ32	ID Φ25, OD Φ32
Drain pump pumphead		mm	750	750	750	750	750	750

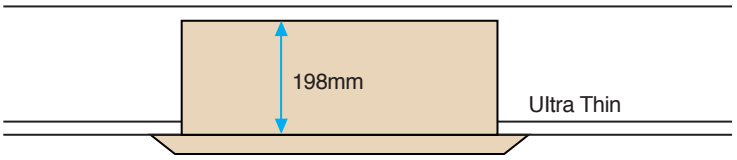
Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp. : 27°CDB,19°CWB,outdoor temp.:35°CDB, equivalent ref. Piping: 8m(horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB,outdoor temp.: 7°CDB, 6°CWB,equivalent ref. Piping: 8m(horizontal)
3. Sound level is measured 1.4m below the unit.

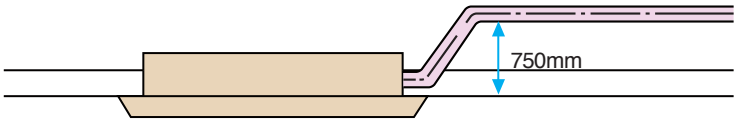
One Way Cassette

Thickness 198mm only

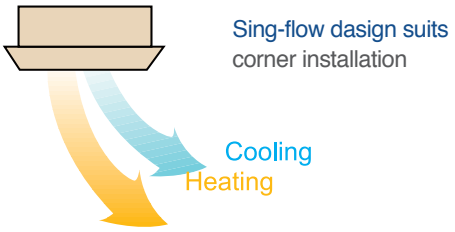
Compact design, ultra slim body with a min. thickness of 198mm only, especially suitable for narrow ceiling places, such as lobby, small-size meeting room, etc.



Standard built-in drain pump with 750mm pumphead and slim body makes the installation free from limitation of story height.

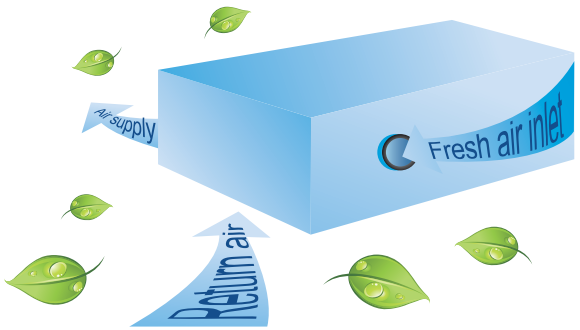


Auto swing mechanism guarantees even distribution of airflow and better balance of room temperature.

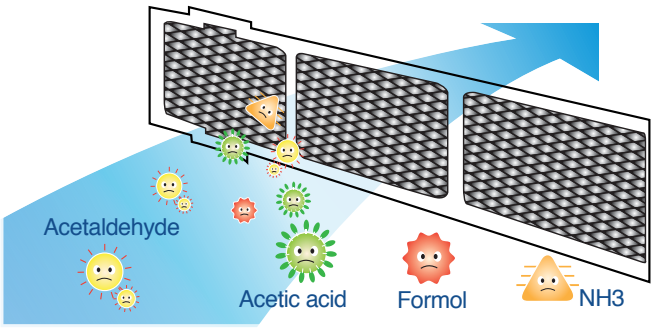


Fresh air, improved air quality

Reserved fresh air intake port for high quality air supply requirement, creates a comfort and healthy environment.



Special enzyme sterilization and filtering technology can filter the bacteria, smog, pollen, etc. Provides plenty clean, healthy and natural air supply.



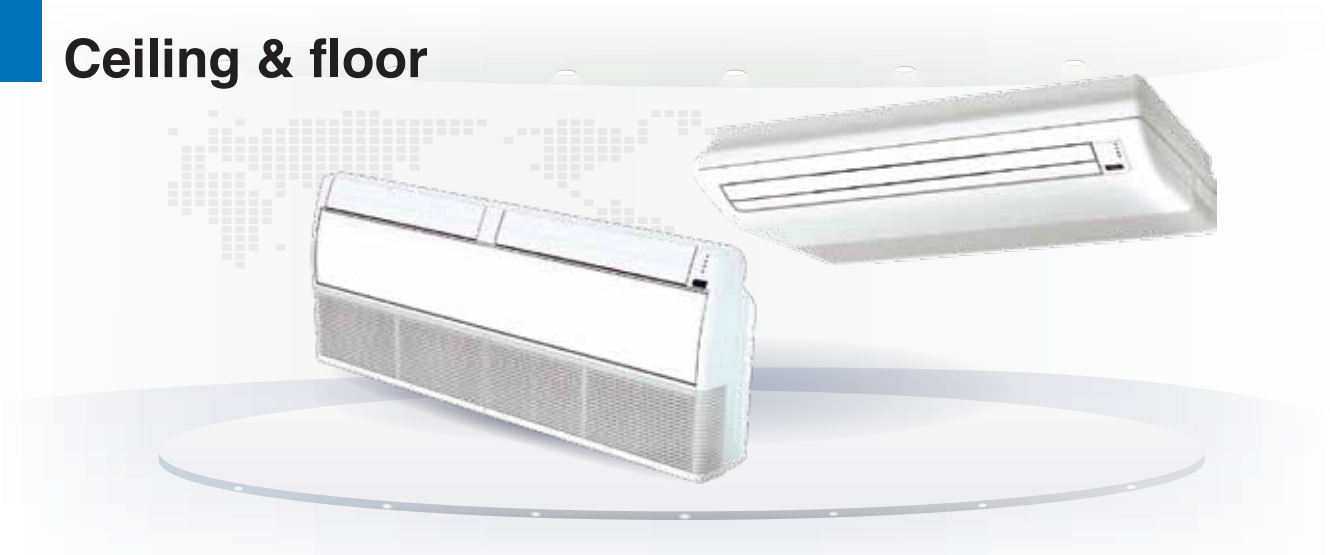
Specifications

Model			40VZ009H11200010	40VZ012H11200010	40VZ018H11200010	40VZ024H11200010
Power supply			1-phase, 220-240V, 50Hz			
Cooling capacity		kW	2.8	3.6	4.5	5.6
		kcal/h	2,400	3,100	3,800	4,800
		Btu/h	9,500	12,200	15,300	19,100
Heating capacity		kW	3.2	4.0	5.0	6.3
		kcal/h	2,700	3,400	4,300	5,400
		Btu/h	10,900	13,600	17,000	21,500
Power input	Cooling	W	53	53	86	86
	Heating		53	53	86	86
Rated current	Cooling	A	0.4	0.4	0.4	0.4
	Heating		0.4	0.4	0.4	0.4
Airflow rate(H/M/L)		m^3/h	500/450/410	500/450/410	890/800/750	919/850/760
		CFM	294/265/241	294/265/241	524/470/441	541/500/412
Sound level		dB(A)	36/34/30	36/34/30	41/38/35	41/38/35
Refrigerant		Type	R410A			
		Control method	EXV			
Body	Net dim.(WxHxD)	mm	850×235×400	850×235×400	1,200×198×655	1,200×198×655
	Gross dim.(WxHxD)		1,080×320×460	1,080×320×460	1,380×265×775	1,380×265×775
	Net/gross	kg	23/27	23/27	31/38	31/38
Panel	Net dim.(WxHxD)	mm	1,050×18×470	1,050×18×470	1,420×10×755	1,420×10×755
	Gross dim.(WxHxD)		1,100×40×520	1,100×40×520	1,470×50×805	1,470×50×805
	Net/gross	kg	4/6	4/6	9/11	9/11
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Drain piping	mm	ODΦ16	ODΦ16	ODΦ16	ODΦ16
Drain pump pumphead		mm	750	750	750	750

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp. : 27°cdb,19°cwb,outdoor temp.:35°cdb, equivalent ref. Piping: 8m(horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°cdb,outdoor temp.: 7°cdb, 6°cwb,equivalent ref. Piping: 8m(horizontal)
3. Sound level is measured 1m below the unit.

Ceiling & floor

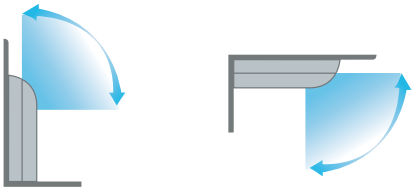


Panel with LED display

The front panel and display panel have different colors to choose: white and brown for big panel, blue and brown for small panel, and the other colors can be customized according to the customers' demands.

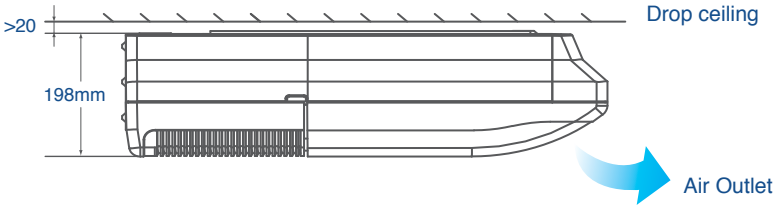
Convenient for installation

- The ceiling type can be easily installed into a corner of the ceiling even if the ceiling is very narrow
- It is especially useful when installation of an air conditioner in the center of the ceiling is impossible due to a structure such as lighting

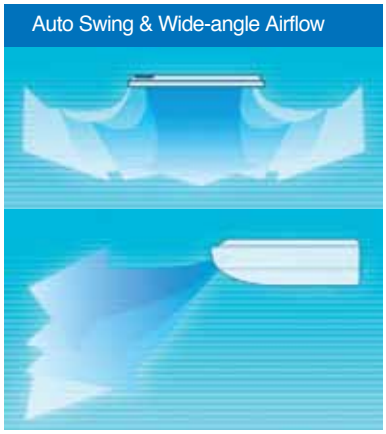


The unit can be installed either horizontally on the ceiling or vertically against the wall.

Low noise, creates quiet and comfortable environment



- Slim and sleek design starting at just 30kg in weight means quick, easy & neat installation.
  Low noise operation, lowest to 36 dB(A)



1. The unit has auto horizontal swing and auto vertical swing function, which supplies more even and comfortable airflow.
2. Three air flow speeds: high/middle/low, double air guides.
3. Adoption of the electronic expansion valve, ensures precise flow control, as well lower modulation noise when EXV operating.
4. Smoother airflow with less turbulence. Owing to the multiple-blade fan and the air guide design, the airflow is getting smoother and more comfortable.

Specifications

Model			42VF012H112000010	42VF018H112000010	42VF024H112000010	42VF028H112000010
Power supply			1-phase, 220-240V, 50Hz			
Cooling capacity		kW	3.6	4.5	5.6	7.1
		kcal/h	3,100	3,800	4,800	6,100
		Btu/h	12,200	15,300	19,100	24,200
Heating capacity		kW	4	5	6.3	8
		kcal/h	3,400	4300	5,400	6,800
		Btu/h	13,600	17,000	21,500	27,300
Power input	Cooling	W	49	120	122	125
	Heating		49	120	122	125
Rated current	Cooling	A	0.55	0.55	0.55	0.57
	Heating		0.55	0.55	0.55	0.57
Airflow rate(H/M/L)		m^3/h	650/570/500	800/600/500	800/600/500	800/600/500
		CFM	383/335/294	471/353/294	471/353/294	471/353/294
Sound level		dB(A)	40/38/36	43/41/38	43/41/38	43/41/38
Refrigerant		Type	R410A			
		Control method	EXV			
Net dimension(W×H×D)		mm	990x660x206	990x660x206	990x660x206	990x660x206
Packing dimension(W×H×D)		mm	1,089x744x296	1,089x744x296	1,089x744x296	1,089x744x296
Net weight		kg	26	28	28	28
Gross weight		kg	32	34	34	34
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	Drain piping	mm	OD Φ16	OD Φ16	OD Φ16	OD Φ16

Model			42VF032H112000010	42VF036H112000010	42VF048H112000010	42VF054H112000010
Power supply			1-phase, 220-240V, 50Hz			
Cooling capacity		kW	8	9	11.2	14
		kcal/h	6,800	7,700	9,600	12,000
		Btu/h	27,300	30,700	38,200	47,800
Heating capacity		kW	9	10	12.5	15.5
		kcal/h	7,700	8,600	11,000	13,000
		Btu/h	30,700	34,100	42,600	52,900
Power input	Cooling	W	130	130	182	182
	Heating		130	130	182	182
Rated current	Cooling	A	0.6	0.6	0.83	0.83
	Heating		0.6	0.6	0.83	0.83
Airflow rate(H/M/L)		m^3/h	1,200/900/700	1,200/900/700	1,980/1,860/1,730	1,980/1,860/1,730
		CFM	706/530/412	706/530/412	1,165/1,095/1,018	1,165/1,095/1,018
Sound level		dB(A)	45/43/40	45/43/40	47/45/42	47/45/42
Refrigerant		Type	R410A			
		Control method	EXV			
Net dimension(W×H×D)		mm	1,280x660x206	1,280x660x206	1,670x680x244	1,670x680x244
Packing dimension(W×H×D)		mm	1,379x744x296	1,379x744x296	1,764x760x329	1,764x760x329
Net weight		kg	34.5	34.5	54	54
Gross weight		kg	41	41	59	59
Piping connections	L(flare)	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	G(flare)	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Drain piping	mm	ODΦ16	ODΦ16	ODΦ16	ODΦ16

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Floor standing :Sound level is measured 1m from air-outlet in horizontal distance, 1m above the floor in vertical distance.
   Ceiling mounted:Sound level is measured 1m from air-outlet in horizontal distance,1m from air-outlet in vertical distance.

* Specifications are subject to change without prior notice for product improvement.

Floor standing

Easy installation

Floor standing types can be hung on the wall or installed on the floor. The former can make cleaning and maintenance much easier. Running the piping from the back allows the unit to be hung on walls. Cleaning under the unit, where dust tends to accumulate, is considerably easier.

Easy maintenance

Filter is equipped as standard accessory, and it can be removed and cleaned easily due to sophisticated design, as well as the removable blades.

Streamlined appearance makes it much more harmonious with the decoration. All metal parts are made of commercial grade galvanized steel, providing maximum protection against corrosion.

So compact that it fits into even a tiny space

Concealed floor standing type

The body is concealed in the skirting-wall to pursue harmony with the interior. With 212mm depth of body dimension, it can be installed in the perimeter zone.

Low noise level due to special installation method for no exposure in the room space.

F3 series concealed type

Air intake from front(F4 series)

Air intake from below(F5 series)

Specifications

Model			42VS006H112003010	42VS009H112003010	42VS012H112003010	42VS018H112003010	42VS024H112003010	42VS028H112003010	42VS032H112003010
			42VS006H112002010	42VS009H112002010	42VS012H112002010	42VS018H112002010	42VS024H112002010	42VS028H112002010	42VS032H112002010
			42VS006H112001010	42VS009H112001010	42VS012H112001010	42VS018H112001010	42VS024H112001010	42VS028H112001010	42VS032H112001010
Power supply			1-phase, 220-240V, 50Hz						
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1	8
		kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	6,900
		Btu/h	7,500	9,500	12,200	15,300	19,100	242,00	27,300
Heating capacity		kW	2.4	3.2	4	5	6.3	8	9
		kcal/h	2,100	2,700	3,400	4,300	5,400	6,900	7,700
		Btu/h	8,200	10,900	13,600	17,000	21,500	27,300	30,700
Power input	Cooling	W	40	46	40	49	88	130	130
	Heating		40	46	35	49	88	130	130
Rated current	Cooling	A	0.19	0.2	0.19	0.22	0.38	0.57	0.57
	Heating		0.19	0.2	0.15	0.22	0.38	0.57	0.57
Airflow rate(H/M/L)		m^3/h	530/456/400	569/485/421	624/522/375	660/542/440	1,150/970/830	1,380/1,100/870	1,332/1,212/1,023
		CFM	312/268/235	335/285/248	367/307/221	388/319/259	677/571/489	812/647/512	784/713/602
Sound level(Hi/Mid/Lo)	F3B	dB（A）	36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33	44/39/33
	F4		36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33	44/39/33
	F5		36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33	44/39/33
Refrigerant		Type	R410A						
		Control method	EXV						
Net dimension (W×H×D)	F3B	mm	840×212×545	840×212×545	1,036×212×545	1,036×212×545	1,336×212×545	1,336×212×545	1,336×212×545
	F4		1,000×220×625	1,000×220×625	1,200×220×625	1,200×220×625	1,500×220×625	1,500×220×625	1,500×220×625
	F5		1,000×220×625	1,000×220×625	1,200×220×625	1,200×220×625	1,500×220×625	1,500×220×625	1,500×220×625
Packing dimension (W×H×D)	F3B	mm	925×305×639	925×305×639	1,125×305×639	1,125×305×639	1,425×305×639	1,425×305×639	1,425×305×639
	F4		1,089×312×722	1,089×312×722	1,289×312×722	1,289×312×722	1,589×312×722	1,589×312×722	1,589×312×722
	F5		1,182×312×722	1,182×312×722	1,382×312×722	1,382×312×722	1,682×312×722	1,682×312×722	1,682×312×722
Net/Gross weight	F3B	kg	26/29.5	26/29.5	29.5/34	29.5/34	36/40	36/40	36/40
	F4		30/35	30/35	37/43	37/43	44/50	44/50	44/50
	F5		30/38	30/38	37/46	37/46	44/53	44/53	44/53
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Drain piping	mm	ODΦ16	ODΦ16	ODΦ16	ODΦ16	ODΦ16	ODΦ16	ODΦ16

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Sound level is measured 1m from the air out-let in horizontal distance and 1m above the floor in vertical distance.

* Specifications are subject to change without prior notice for product improvement.

Console

Compact unit body, space saving, nice-looking appearance

- This unit body is very thin and harmonious with the room. It is elegant and space saving.
- The EXV is fixed inside of the indoor unit. Compact unit body.

Flexible installation

- Can be used for floor standing or lower wall applications
- As a floor standing type, it can be semi or fully cessed without loss of capacity.

High Comfort

- Flexible air blow: vertical auto swing and wide angle louvers ensure that warm air reaches the furthest corners of the room and increase the air flow coverage
  Indoor unit adopts DC motor which has five level fan speeds to meet different requirements.
- Adoption of the Fujikoki brand mechanical expansion valve which has 2000 stages element positioning, ensure precise flow control, as well lower modulation noise when EXV operating.

Powerful mode can be selected for rapid cooling or heating

COOLING MODE

quick cooling

to maintain temp

HEATING MODE

anti-cold air

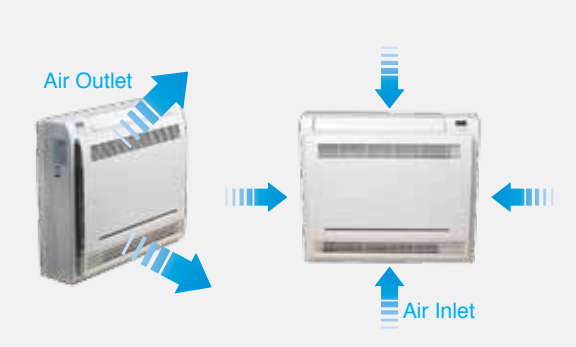
normal operation

High efficiency filter

- Built in Formaldehyde nemesis filter
- Active-carbon and biological anti-virus filter is optional.

Two air outlet, Four air inlet

Air inlet from 4 directions, there are 2 optional air-outlet ways, Both up and Down air-outlet or up air-outlet only.



Bottom, Top, and right/left side, for better ventilation.

Quiet Design

Five speed indoor unit, Low noise and Energy saving.

Low noise operation, lowest to 26dB(A)

Specifications

Model			42VC006H112000010	42VC009H112000010	42VC012H112000010	42VC018H112000010
Power supply			1-phase, 220-240V, 50Hz			
Cooling capacity		kW	2.2	2.8	3.6	4.5
		kcal/h	1,900	2,400	3,100	3,900
		Btu/h	7,500	9,500	12,200	15,300
Heating capacity		kW	2.6	3.2	4.0	5.0
		kcal/h	2,200	2,700	3,400	4,300
		Btu/h	8,900	10,900	13,600	17,000
Power input	Cooling	W	20	25	25	45
	Heating		20	25	25	45
Rated current	Cooling	A	0.09	0.11	0.11	0.2
	Heating		0.09	0.11	0.11	0.2
Airflow rate(H/M/L)		m^3/h	430/345/229	510/430/229	510/430/229	660/512/400
		CFM	253/203/135	300/253/135	300/253/135	388/300/235
Sound level		dB(A)	38/32/26	39/33/27	39/33/27	42/39/36
Refrigerant		Type	R410A			
		Control method	EXV			
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 weight		kg	14	15	15	15
Gross weight		kg	19	20	20	20
Piping connections	L(flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	G(flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7
	Drain piping	-	OD Φ16	OD Φ16	OD Φ16	OD Φ16

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Sound level is measured 1m from the air out-let in horizontal distance and 1m above the floor in vertical distance.

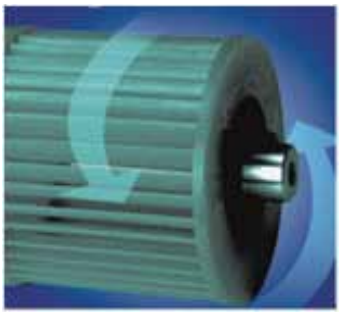
* Specifications are subject to change without prior notice for product improvement.

Low Static Pressure Duct

Wide capacity range

The capacity ranges from 1.8KW to 5.6KW, six models.

Low sound level



When utilizing the cross blow fan, the lowest noise is 21dB (A). Excellent choice for hotels and other sound sensitive places.

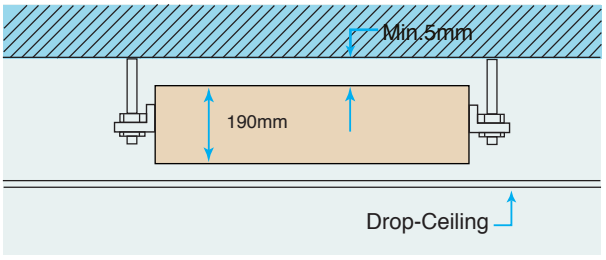
More Smooth airflow with less turbulence

Thanks to the multiple-blade fan rotor and the air guide design, the airflow is getting smoother and more comfortable

Convenient installation

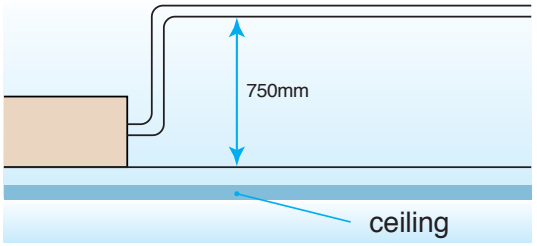
The EXV is fixed beside the indoor unit
Suction chamber is included as standard equipment

Slim, lightweight and compact design



Uniform 190mm in height, compact design for easy positioning where space over ceiling is limited,
The whole body adopts fireproof plastic material, the minimum weight is 11.5kg

Options



With a drain-up pump as an optional accessory (750 mm pumphead).

Specifications

Model			42VD005H112002010	42VD006H112002010	42VD009H112002010	42VD012H112002010	42VD018H112002010	42VD024H112002010
Power Supply			220～240V-1Ph-50Hz					
Capacity	Cooling	kW	1.8	2.2	2.8	3.6	4.5	5.6
		kcal/h	1,547	1,891	2,407	3,095	3,869	4,815
		btu/h	6,100	7,500	9,500	12,200	15,300	19,100
	Heating	kW	2.2	2.6	3.2	4.0	5.0	6.3
		kcal/h	1,891	2,235	2,751	3,439	4,299	5,416
		btu/h	7,500	8,900	10,900	13,600	17,000	21,500
Power (Cooling)	Input	W	40	40	40	40	40	56
	Rated Current	A	0.17	0.17	0.17	0.17	0.17	0.24
Power (Heating)	Input	W	40	40	40	40	40	56
	Rated Current	A	0.17	0.17	0.17	0.17	0.24	0.24
Indoor air flow (H/M/L)		m^3/h	446/323/250	446/323/250	527/359/267	527/359/267	767/634/512	767/634/512
		cfm	263/190/147	263/190/147	310/211/157	310/211/157	451/373/301	451/373/301
ESP (external static pressure)		Pa	5	5	5	5	5	5
Sound Pressure (Hi/Mid/Lo)		dB(A)	33/27/21	34/29/21	36/34/30	36/34/30	37/35/31	37/35/31
Refrigerant	Type		R410A					
	Control Method		EXV					
Net dimension	W×H×D	mm	850×190×405	850×190×405	850×190×405	850×190×405	1,030×190×430	1,030×190×430
Packing dimension	W×H×D	mm	903×277×445	903×277×445	903×277×445	903×277×445	1,084×277×472	1,084×277×472
Net/Gross Weight		kg	11.5/14.5	11.5/14.5	11.5/14.5	11.5/14.5	14 /17.5	14/17.5
Piping Connections	Liquid (Flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas (Flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Drain piping	mm	IDΦ15 ODΦ20	IDΦ15 ODΦ20	IDΦ15 ODΦ20	IDΦ15 ODΦ20	IDΦ15 ODΦ20	IDΦ15 ODΦ20
Drain pump pumphead		mm	750					

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Sound level is measured 1.4m below the air out-let.

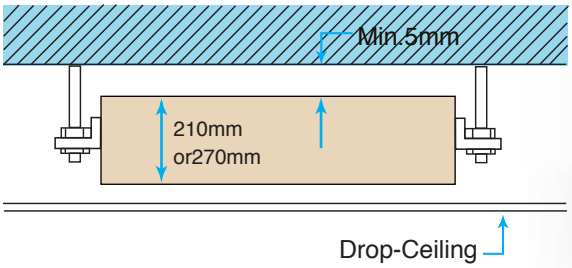
* external static pressure are based on high speed indoor air flow.
* Specifications are subject to change without prior notice for product improvement.

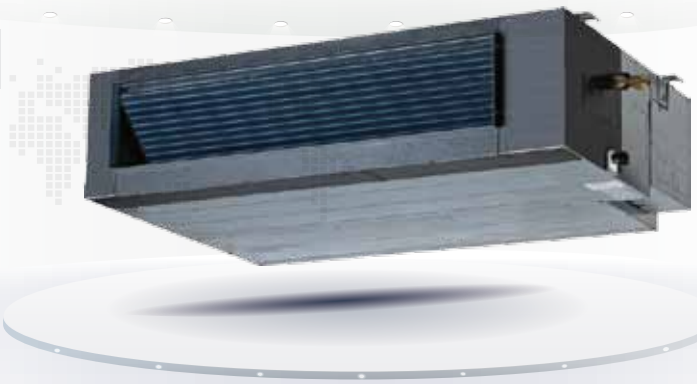
Concealed Duct Unit (A5 Type)

Wide capacity range

The capacity ranges from 2.2KW to 14.0KW, totally 10 models.

Compact size





Only 210 mm (6~28 models) or 270mm (32 to 54 model) in height.
The EXV is built-in design in the indoor unit, main body without an extra throttle kit box.

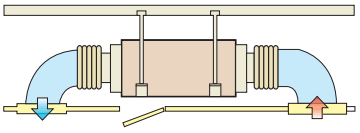
Two external static pressure settings for added flexibility

Four speed fan motor (Super high speed as an optional)
Change the wiring connection from 'SH' to 'Hi' to change the ESP.

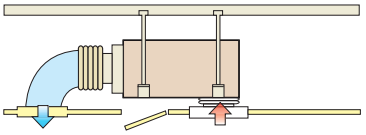
Convenient installation

The EXV is fixed inside the indoor unit
Standard filter placed in an aluminum frame, which is removable downwards from bottom.
Suction chamber is included as standard equipment
Fresh air hole, air inlet/outlet flange are standard for easy duct connection.
Air inlet from back is standard and from bottom as optional with the same connectable duct.

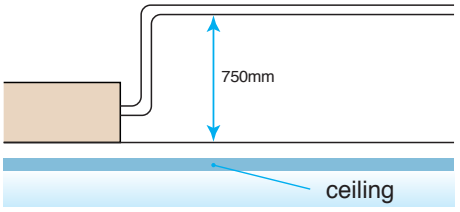
Air intake from back



Air intake from below



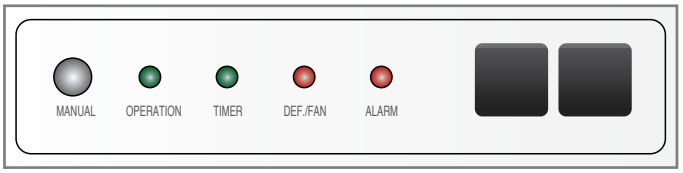
Drain pump is equipped as standard accessory with 750 mm pumphead.



Flexible control and convenient for maintenance

The display board is connected with the E-box in factory, easier trouble-shooting by LED display.
The Electrical control box can be removed 1m away from the unit, easy to access when needs maintenance.
Standard functional port such as Remote On/Off Dry contact switch and Alarm signal output (220V).

6~24 model



28~54 model

Specifications

Model			42VD006H112003010	42VD009H112003010	42VD012H112003010	42VD018H112003010	42VD024H112003010
Power Supply			220～240V-1Ph-50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
		kcal/h	1,891	2,407	3,095	3,869	4,815
		btu/h	7,500	9,500	12,200	15,300	19,100
	Heating	kW	2.6	3.2	4	5	6.3
		kcal/h	2,235	2,751	3,439	4,299	5,416
		btu/h	8,900	10,900	13,600	17,000	21,500
Power (Cooling)	Input	W	59	57	61	92	92
	Rated Current	A	0.28	0.28	0.28	0.5	0.5
Power (Heating)	Input	W	59	57	61	92	92
	Rated Current	A	0.28	0.28	0.28	0.5	0.5
Indoor air flow (H/M/L)		m^3/h	570/530/410/320	570/530/410/320	570/530/410/320	958/850/667/583	958/850/667/583
		cfm	335/312/241/188	335/312/241/188	335/312/241/188	563/500/392/343	563/500/392/343
ESP (external static pressure)		Pa	10(10~30)	10(10~30)	10(10~30)	10(10~30)	10(10~30)
Sound Pressure (Hi/Mid/Lo)		dB(A)	38/35/32	38/35/32	40/38/36	41/38.9/36	41/38.9/36
Refrigerant	Type		R410A				
	Control Method		EXV				
Net dimension	W×H×D	mm	700x210x570	700x210x570	700x210x570	920X210X570	920X210X570
Packing dimension	W×H×D	mm	915x290x655	915x290x655	915x290x655	1,135X290X655	1,135X290X655
Net/Gross Weight		kg	17.5/20	17.5/20	17.5/20	27/32	27/32
Piping Connections	Liquid (Flare)	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas (Flare)	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Drain piping	mm	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32
Drain pump pumphead		mm	750				

Model			42VD028H112003010	42VD032H112003010	42VD036H112003010	42VD048H112003010	42VD054H112003010
Power Supply			220～240V-1Ph-50Hz				
Capacity	Cooling	kW	7.1	8	9	11.2	14
		kcal/h	6,105	6,879	7,739	9,630	12,037
		btu/h	24,200	27,300	30,700	38,200	47,800
	Heating	kW	8	9	10	12.5	15.5
		kcal/h	6,879	7,739	8,598	10,748	13,327
		btu/h	27,300	30,700	34,100	42,600	52,900
Power (Cooling)	Input	W	149	198	200	313	274
	Rated Current	A	0.7	1	1	1.8	1.9
Power (Heating)	Input	W	149	198	200	313	274
	Rated Current	A	0.7	1	1	1.8	1.55
Indoor air flow (H/M/L)		m^3/h	1207/1050/905/821	1559/1352/1168/1034	1559/1352/1168/1034	2064/1800/1565/1401	2139/1900/1643/1406
		cfm	710/618/532/483	917/795/687/608	917/795/687/608	1,214/1,059/921/824	1,258/1,118/967/827
ESP (external static pressure)		Pa	10(10~30)	20(10~50)	20(10~50)	40(10~80)	40(10~100)
Sound Pressure (Hi/Mid/Lo)		dB(A)	43.4/40/36	45.4/39.8/37	45.4/39.8/37	48.0 /41.9/38	47.7/43.2/39.0
Refrigerant	Type		R410A				
	Control Method		EXV				
Net dimension	W×H×D	mm	920X210X570	1,140X270X710	1,140X270X710	1,140X270X710	1,200X300X800
Packing dimension	W×H×D	mm	1,135X350X655	1,355X350X795	1,355X350X795	1,355X350X795	1,385X375X920
Net/Gross Weight		kg	30/34	38/46.5	40/48	40/48	49/58
Piping Connections	Liquid (Flare)	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas (Flare)	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Drain piping	mm	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32
Drain pump pumphead		mm	750				

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Sound level is measured 1.4m below the air out-let.

* external static pressure are based on high speed indoor air flow.
* Specifications are subject to change without prior notice for product improvement.

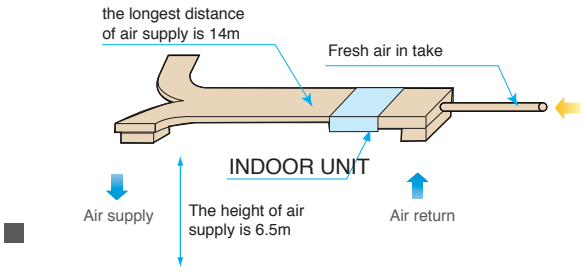
High Static Pressure Duct

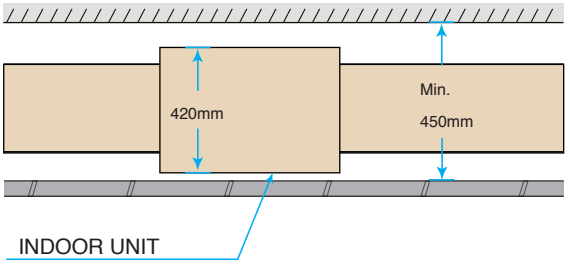
Wide capacity range

The capacity ranges from 7.1KW
to 28.0 KW, totally nine models.

Flexible duct design

Four speed fan motor (medium high speed as an option only for 28~55 model)
External static pressure can be up to 196Pa (28~55 models) or 250Pa (56~60 models).





The max distance of air supply is about 14m while the height of air supply is about 6.5m.
With 420mm (28~55 model) thickness body, the minimum distance above the ceiling is 450mm.

Added flexibility with four speed fan

Just exchange the wiring connection of 'MH' and 'Me'.(for 28~55 model)

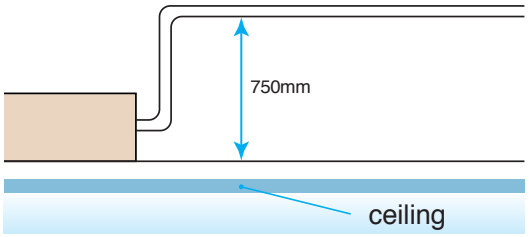
Convenient installation

The EXV is fixed inside the indoor unit (for 28~55 model), no extra connections needed.
Standard filter placed in an aluminum frame, which is removable downward from bottom.
Flange for air in/outlet duct connection is standard.

Flexible control and convenient for maintenance

The display board is connected with the E-box in factory, easier trouble-shooting by LED display.
Easy access filters both in rear & bottom
Standard functional port such as remote on/off dry contact.

Option:



Optional drain pumps with 750 mm pumphead.
* (for 28~55 model)

Specifications

Model			42VD028H112011010	42VD032H112011010	42VD036H112011010	42VD048H112011010	42VD054H112011010	42VD055H112011010
Power Supply			220～240V-1Ph-50Hz					
Capacity	Cooling	kW	7.1	8	9	11.2	14	16
		kcal/h	6,105	6,879	7,739	9,630	12,037	13,757
		btu/h	24,200	27,300	30,700	38,200	47,800	54,600
	Heating	kW	8	9	10	12.5	16	18
		kcal/h	6,879	7,739	8,598	10,748	13,757	15,477
		btu/h	27,300	30,700	34,100	42,600	54,600	61,400
Power (Cooling)	Input	W	263	263	423	524	627	832
	Rated Current	A	1.1	1.1	1.8	2.3	2.7	3.6
Power (Heating)	Input	W	263	263	423	524	627	832
	Rated Current	A	1.1	1.1	1.8	2.3	2.7	3.6
Indoor air flow (H/M/L)		m^3/h	1,510/1,399/1,236	1,500/1,396/1,221	1,936/1,721/1,511	2,117/1,950/1,644	2,988/2,670/2,229	3,890/3,200/2,700
		cfm	889/823/727	883/822/719	1,139/748/889	1,246/1,147/968	1,758/1,572/1312	2,290/1,883/1,589
ESP (external static pressure)		Pa	40(30~ 196)	40(30~ 196)	40(30~ 196)	50(30~ 196)	50(30~ 196)	50(30~ 196)
Sound Pressure (Hi/Mid/Lo)		dB(A)	48/46/44	48/46/44.5	52/49/47	52/49/47	53/50/48	54/52/50
Refrigerant	Type		R410A					
	Control Method		EXV					
Net dimension	W×H×D	mm	952×420×690	952×420×690	952×420×690	952×420×690	1,200×400×600	1,200×400×600
Packing dimension	W×H×D	mm	1,102×450×768	1,102×450×768	1,102×450×768	1,102×450×768	1,430×450×768	1,430×450×768
Net/Gross Weight		kg	45/50	45/50	46.5/52.4	50.6/56	68/70	70/77.5
Piping Connections	Liquid (Flare)	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas (Flare)	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Drain piping	mm	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32
Drain pump pumphead		mm	750					

Model			42VD056H112011010	42VD058H112011010	42VD060H112011010
Power Supply				220～240V-1Ph-50Hz	
Capacity	Cooling	kW	20	25	28
		kcal/h	17,197	21,496	24,075
		btu/h	68,200	85,300	95,500
	Heating	kW	22.5	26	31.5
		kcal/h	19,346	22,355	27,084
		btu/h	76,800	88,700	107,500
Power (Cooling)	Input	W	1516	1516	1516
	Rated Current	A	6.6	6.6	6.6
Power (Heating)	Input	W	1516	1516	1516
	Rated Current	A	6.6	6.6	6.6
Indoor air flow (H/M/L)		m^3/h	4,268/3,780/3,200	4,280/3,820/3,200	4,400/3,708/3,200
		cfm	2,512/2,225/1,883	2,519/2,248/1,833	2,590/2,182/1,883
ESP (external static pressure)		Pa	140(50~250)	140(50~250)	160(50~250)
Sound Pressure (Hi/Mid/Lo)		dB(A)	59/55/52	59/55/52	59/55/52
Refrigerant	Type		R410A		
	Control Method		EXV		
Net dimension	W×H×D	mm	1,425×500×928	1,425×500×928	1,425×500×928
Packing dimension	W×H×D	mm	1,509×522×964	1,509×522×964	1,509×522×964
Net/Gross Weight		kg	115/129	115/129	115/129
Piping Connections	Liquid (Flare)	mm	Φ9.52×2	Φ9.52×2	Φ9.52×2
	Gas (Flare)	mm	Φ15.9×2	Φ15.9×2	Φ15.9×2
	Drain piping	mm	IDΦ25 ODΦ32	IDΦ25 ODΦ32	IDΦ25 ODΦ32
Drain pump pumphead		mm	750		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)
3. Sound level is measured 1.4m below the air out-let.

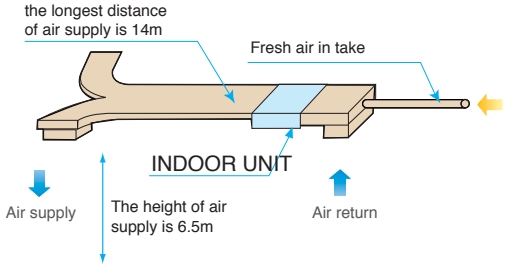
* External static pressure are based on high speed indoor air flow.
* Specifications are subject to change without prior notice for product improvement.

Fresh Air Processing unit

Creating comfortable and healthier climate

Fresh air is introduced into the environment, improved air quality, creates comfortable and healthier climate.

100% Fresh Air Processing Unit

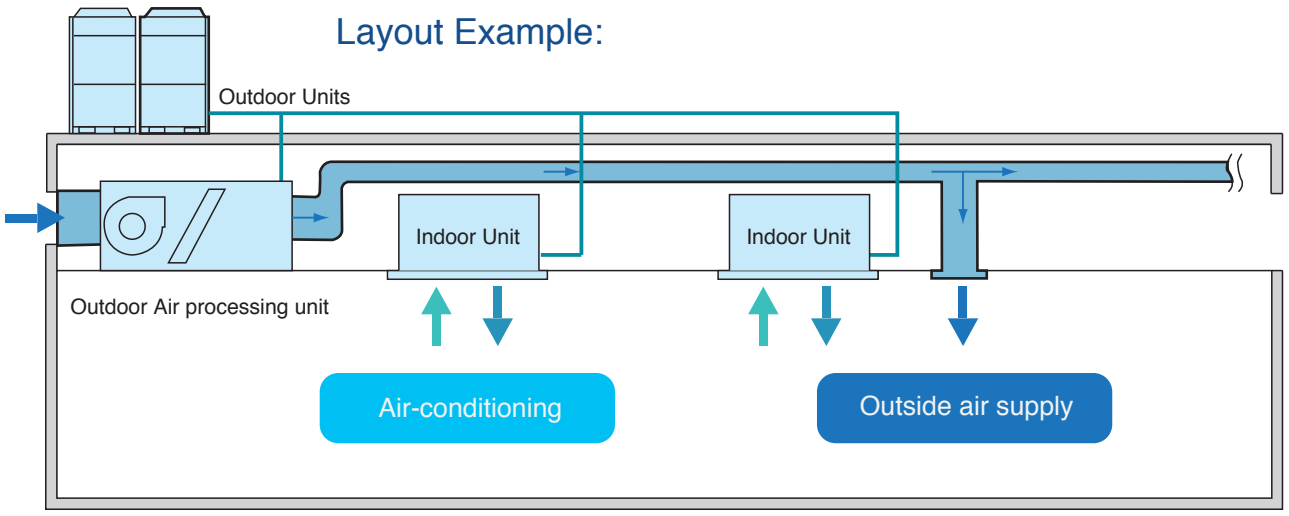


Both fresh air filtration and heating/cooling can be achieved in a single system.
Indoor units and fresh air processing unit can be connected to the same refrigerant system, resulting in enhanced design flexibility and a significant reduction in total system costs.

High External Static Pressure

External static pressure can be up to 220 Pa (50~54 models) and 260 Pa (56~60 models) for more flexible duct applications. The maximal distance of air supply is about 14m and the maximum height of air supply is about 6.5m.

Innovative air supply technology for excellent room temperature control



Specifications

Model			42VD050H112211010	42VD054H112211010	42VD056H112211010	42VD058H112211010	42VD060H112211010
Power Supply			1-phase, 220-240V, 50Hz				
Capacity	Cooling	kW	12.5	14	20	25	28
		kcal/h	10,766	12,057	17,225	21,531	24,115
		btu/h	42,600	47,800	68,200	85,300	95,500
	Heating	kW	10.5	12	18	20	22
		kcal/h	9,043	10,335	15,502	17,225	18,947
		btu/h	35,800	41,000	61,400	68,200	75,000
Power (Cooling)	Input	W	461	461	1,063	1,063	1,063
	Rated Current	A	2.3	2.3	5.3	5.3	5.3
Power (Heating)	Input	W	461	461	1,063	1,063	1,063
	Rated Current	A	2.3	2.3	5.3	5.3	5.3
Air flow (H/M/L)		m^3/h	1,700/1,350/1,050	1,700/1,350/1,050	3,150/2,650/2,300	3,300/2,850/2,500	3,300/2,850/2,500
		cfm	1,000/795/618	1,000/795/618	1,854/1,560/1,354	1,942/1,677/1,471	1,942/1,677/1,471
ESP (external static pressure)		Pa	50(30~220)	50(30~220)	140(50~260)	140(50~260)	140(50~260)
Sound Pressure (Hi/Mid/Lo)		dB(A)	54/52/50	54/52/50	54/53/51	55/54/52	55/54/52
Refrigerant	Type		R410A				
	Control Method		EXV				
Net dimension	W×H×D	mm	1,200×400×600	1,200×400×600	1,425×500×928	1,425×500×928	1,425×500×928
Packing dimension	W×H×D	mm	1,430×450×964	1,430×450×964	1,509×522×964	1,509×522×964	1,509×522×964
Net/Gross Weight		kg	69.5/76	69.5/76	115/125	115/125	115/125
Piping Connections	Liquid (Flare)	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas (Flare)	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Drain piping	mm	OD Φ25	OD Φ25	OD Φ32	OD Φ32	OD Φ32
Drain pump pumphead		mm	750		-	-	-

Notes:

1 . Nominal cooling capacities are based on the following conditions: outdoor air temp.: 33ºC DB, 24ºC WB, equivalent ref. piping: 8m (horizontal)

2. Nominal heating capacities are based on the following conditions: outdoor air temp.: 0°CDB, -1°CWB, equivalent ref. Piping: 8m (horizontal)

3. Sound level is measured 1.4m from the air out-let.

* external static pressure are based on high speed indoor air flow.

* Specifications are subject to change without prior notice for product improvement.

Connection Conditions:

The following restrictions must be observed in order to maintain the indoor units connected to the same system.

* When outdoor-air processing units are connected, the total connection capacity must be within 50% to 100% of that of the outdoor units.

* When outdoor-air processing units and standard indoor units are connected, the total connection capacity of the outdoor-air processing units must not exceed 30% of that of the outdoor units.

* Outdoor-air processing units can be used without indoor units.

HRV

Heat recovery ventilator

Larger air supply rate
enhanced heat exchange efficiency
enhanced energy saving property

The heat recovery ventilator (HRV) can reclaim heat energy lost through ventilation and reduces the room temperature fluctuation caused by ventilation process. By utilizing the most advanced technology and techniques. Midea HRV has extremely good performance. The heat-exchanged core is made of special paper processed with chemical treatment, which could realize better temperature and humidity control of the room environment. Temperature exchange efficiency is above 65% and enthalpy exchange efficiency between 50-65%.

Model Names

HRV-200
HRV-300
HRV-400

HRV-500
HRV-800
HRV-1000

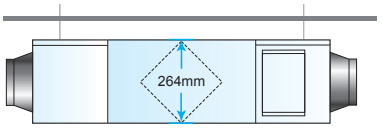
HRV-1500
HRV-2000

Low noise

Sound proof material is used to guarantee quiet operation.

Compact design, flexible installation and easy maintenance

With a min. height of only 264mm and 23kg weight, the unit provides best convenience and possibility for installation in limited spaces.

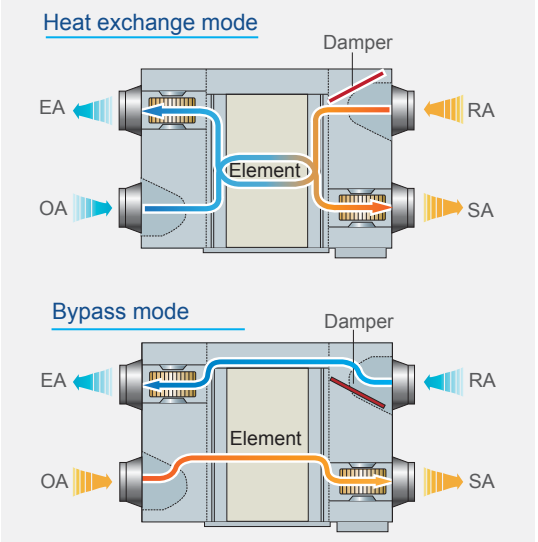


Multi-Modes for different situations

Heat exchange mode
When air flow formed by the fans goes through the heat exchange core in cross way, due to temperature difference between two channels of the core, thermal transmission happens naturally.
In summer days, high temperature outdoor air gets cooled by indoor exhaust air, in winter, low temperature outdoor air gets heated by indoor exhaust air. So the energy contained in exhaust air can be reclaimed and energy efficiency gets improved.

Bypass mode
In mild climate areas or seasons, when temperature and humidity level difference between indoor and outdoor is small, the unit works as conventional ventilation fan. Both supply fan and exhaust fan works at the same speed (Hi/mid/low/auto).

Air supply mode
It is one kind of bypass mode with air supply fan speed higher than exhaust fan speed. It can be used in mild climate area where large amount fresh air is needed.



Exhaust air mode
It is also one kind of bypass mode with exhaust fan speed higher than air supply fan speed. It can be used in mild climate area where large amount exhaust air needs to be expelled.

Auto mode
The controller chooses hest exchange mode or bypass mode according to the temperature difference between outdoor and indoor temperature. Both the two fans work at low speed.

Specifications

Model				HRV-200	HRV-300	HRV-400	HRV-500
Power Supply			V/ph/Hz	220-240/1/50			
Temp. Exchange Efficiency (%) [50Hz]			%	65	65	65	65
				65	65	65	65
				70	70	70	70
Enthalpy Exchange Efficiency (%) [50Hz]	For Cooling	High	%	50	50	50	50
		Medium		50	50	50	50
		Low		55	55	55	55
	For Heating	High		55	55	60	60
		Medium		55	55	60	60
		Low		60	60	65	65
Sound Level	Heat Exchange Mode	High	dB(A)	27	30	32	35
		Medium		26	29	31	34
		Low		20	23	25	28
	Bypass Mode	High		28	31	33	36
		Medium		27	30	32	35
		Low		22	25	27	30
Dimensions(W×D×H)			mm	866×655×264	944×722×270	944×927×270	10,38×1,026×270
Machine Weight			kg	23	26	31	41
Casing			-	Galvanized steel plate			
Heat Exchange System			-	Air to air cross flow total heat (Sensible heat + latent heat) exchange			
Heat Exchange Element Material			-	Specially processed nonflammable paper			
Fan	Type		-	Centrifugal fan			
	Airflow Rate [50Hz]	High	m3/h	200	300	400	500
		Medium		200	300	400	500
		Low		150	225	300	375
	ESP (Pa) [50Hz]	High	Pa	75	75	80	80
		Medium		58	60	65	68
		Low		35	40	43	45
	Motor Output		W	20	40	80	120
Duct diameter			Φ/mm	144	144	144	194
Operation ambient condition			-	'-7°C-43°C (DB), 80%RH or less			

Specifications

Model				HRV-800	HRV-1000	HRV-1500	HRV-2000
Power Supply			V/ph/Hz	220-240/1/50		380/3/50	
Temp. Exchange Efficiency (%) [50Hz]			%	65	65	65	65
				65	65	/	/
				70	70	/	/
Enthalpy Exchange Efficiency (%) [50Hz]	For Cooling	High	%	50	50	50	50
		Medium		50	50	/	/
		Low		55	55	/	/
	For Heating	High		60	60	60	60
		Medium		60	60	/	/
		Low		65	65	/	/
Sound Level	Heat Exchange Mode	High	dB(A)	39	40	51	53
		Medium		38	39	/	/
		Low		32	33	/	/
	Bypass Mode	High		40	41	52	54
		Medium		39	40	/	/
		Low		34	35	/	/
Dimensions(W×D×H)			mm	1,286×1,006×388	1,286×1,256×388	1,600×1,270×540	1,650×1,470×540
Machine Weight			kg	62	79	163	182
Casing			-	Galvanized steel plate			
Heat Exchange System			-	Air to air cross flow total heat (Sensible heat + latent heat) exchange			
Heat Exchange Element Material			-	Specially processed nonflammable paper			
Fan	Type		-	Centrifugal fan			
	Airflow Rate [50Hz]	High	m3/h	800	1,000	1,500	2,000
		Medium		800	1,000	/	/
		Low		600	750	/	/
	ESP (Pa) [50Hz]	High	Pa	100	100	160	170
		Medium		82	85	/	/
		Low		54	58	/	/
	Motor Output		W	360	360	450	450
Duct diameter			Φ/mm	242	242	346×326	346×326
Operation ambient condition			-	'-7°C-43°C (DB), 80%RH or less			

Note:
1. For the units model of HRV (200-1000), there are 3-speed adjustable air volume (Hi, Med, Low), but for the units model of HRV (1500-2000), there are only 1-speed which cannot be adjusted.
2. Sound level is measured at 1.4m below the center of the body in an anechoic chamber..
3. Airflow rate can transmit between low mode and high mode
4. Temperature Exchange Efficiency is the mean value between cooling and heating
5. Efficiency is measured under the following conditions:
* Cooling Condition: Air Exhaust Temp. 27°C DB,19.5°CWB., Fresh Air Temp. 35°C DB,28°CWB
* Heating Condition: Air Exhaust Temp. 21°C DB,13°CWB., Fresh Air Temp. 5°C DB,2°CWB

AHU KIT

Can be used to connect VRF outdoor units with DX AHU or other brand indoor units, but cannot connect to the heat recovery system.

Can only connect to R410A refrigerant system.

Features

- Sheet Metal integration design
- Electrical mounting plate can be flipped, easy to install and maintain
- Add the T2C indoor evaporator inlet sensor
- Built-in electronic expansion valve
- One main control board
- With failure feedback function

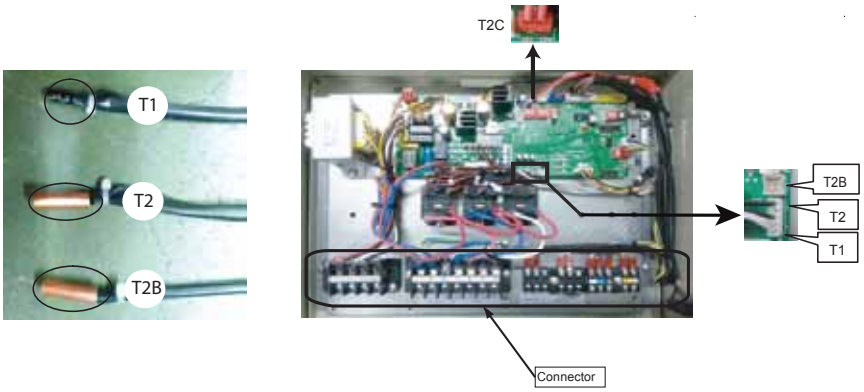
Basic specification

Model		AHUKZ-01	AHUKZ-02	AHUKZ-03
Power supply		220-240V~50Hz; 208-230V~60Hz		
Indoor unit capacity	kW	9~20	20.1~33	40~56
IP-class		IPX0	IPX0	IPX0
Piping size (in/out)	mm	Φ8/Φ8	Φ12.7/Φ12.7	Φ16/Φ16
Dimension	mm	375x350x150		
Packing dimension	mm	490x240x420		

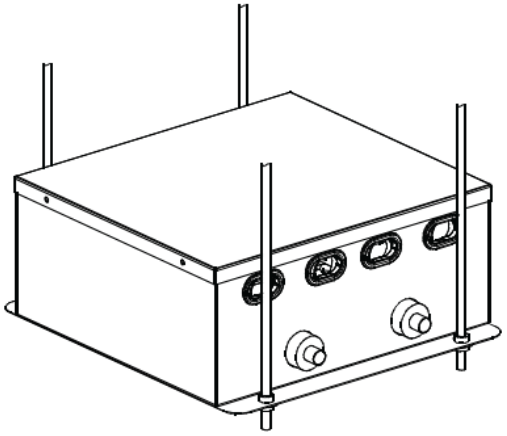
Wiring

AHUKZ-01, AHUKZ-02 and AHUKZ-03 are applied one main control board, the temperature sensor T1,T2 and T2B must be connected to the main control board before power on the first time.

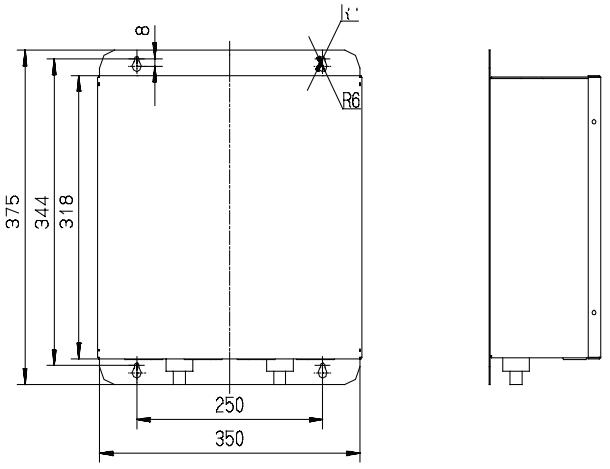
- T1 is indoor temperature sensor, install at the air inlet of the indoor unit.
- T2 is indoor evaporator intermediate temperature sensor, install the intermediate of temperature evaporators.
- T2B is indoor evaporator outlet sensor, install at the outlet of the evaporator.
- T2C is indoor evaporator inlet sensor, and it has been installed before the product leaves the factory.



Installation methods (vertically)

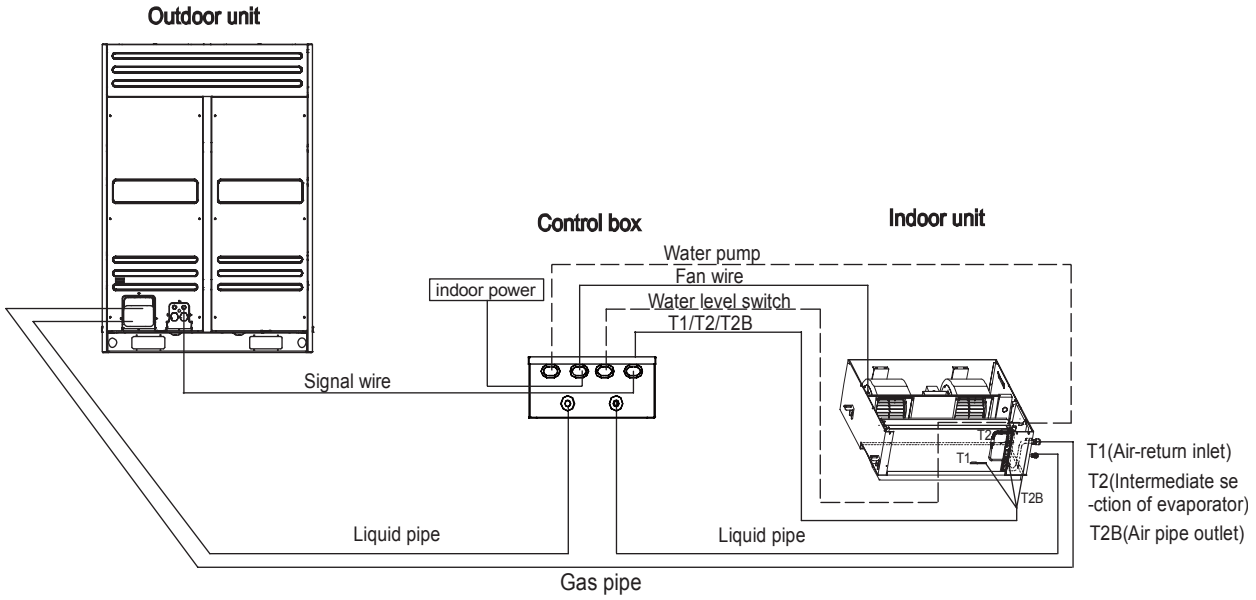


√ Horizontally install



√ Vertically install

Wiring diagram between indoor and outdoor units



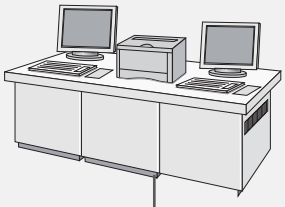
Notes: If it is needed, user can select the backup function in the dotted line frame.
T2C has been installed before the product leaves the factory

CONTROL SYSTEMS

Building Management System

Connectable to various sized BMS/BAS

NW-LNW-CM



NW-BCN-CM

Note: The wires in the diagram show the signal flows only, while not representing the actual connecting ways.
*Combined ON/OFF function can be customized by us.

Centralized Control

Network Monitoring Controller

485A-I

Weekly Schedule Centralized Controller

WCRF-10-M

Indoor Centralized Controller

CRF-10-CM

Outdoor Centralized Controller

CRC-10-CM

Web Monitoring Tool

NW-BCN-CN

Individual control

Wire controller
WR-10-CM

Remote controller
WL-10-CM

Accessories

Card-key Interface

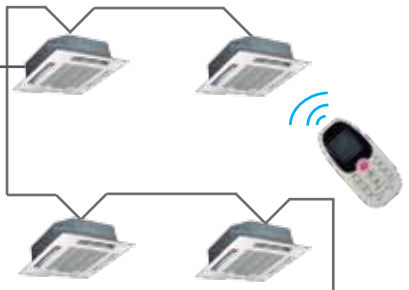
CA-NIM05/E

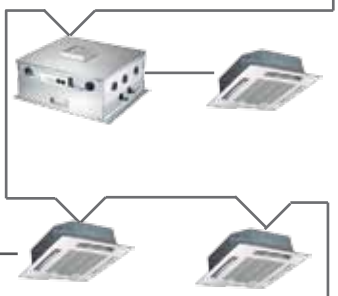
Card-key

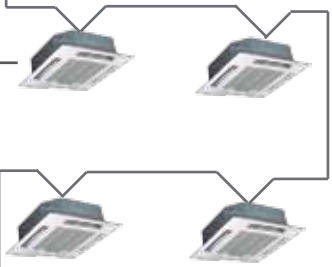
Infared Sensor

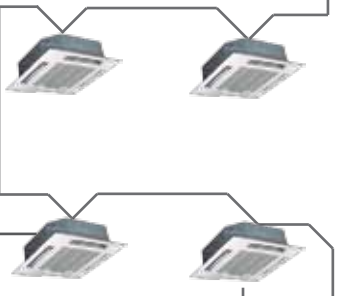
CA-NIM05/E

INFARED SENSOR









Combined ON/OFF*

Outdoor units

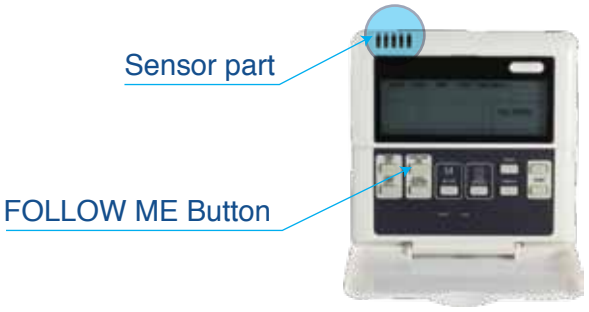
Comparison of Controllers

Item		Remote	Wired Controller	Centralized Controller	3rd-generation Monitoring System
Model name		WL-10CM	WR-10-CM	CRF-10-CM WCRF-10-CM	3GNS-10-CM
MAX. controllable IDU		1	1	16/64	1024
AC control function	On/Off	●	●	●	●
	Operation mode setting	●	○	○	●
	Heating mode	○	○	●	●
	Fan speed setting	●	●	○	●
	Room temp. setting	●	●	○	●
	Vertical swing	●	●	○	●
	Horizontal swing	○	○	—	—
	Economic mode	○	○	—	—
	Group setting	—	—	●	●
	Key lock	○	○	○	—
Display	Backlight	○	○	●	—
	Current time	○	—	○	—
	RC prohibition	—	—	○	●
	Address	—	—	●	●
	Error code	—	—	○	●
Timer	Period	—	—	— /Week	—
	On/Off per day	—	—	— /4	—
	On/Off per week	—	—	— /28	—
	On/Off timer	●	●	○	●
Control	FOLLOW ME	○	○	—	—
	Emergent stop	—	—	○	—
	Emergent start	—	—	○	—
	Address setting	○	—	—	—
	BMS access	—	—	○	●
	Control via internet	—	—	○	●

● : Each of this kind of controller has the corresponding functions.
○ : This function is optional.
— : This function is not available through the corresponding controller.

Wired Remote Controller: WR-10-CM (WR-12-CM with Follow Me function)

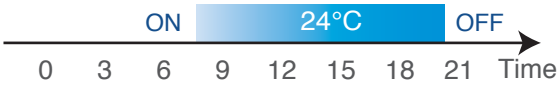
Follow me



With the FOLLOW ME function, the wired controller can detect the air temperature at the user's altitude instead that of the ceiling or the floor. This helps making the room environment comfortable and the temperature accurate.

Built-in timer

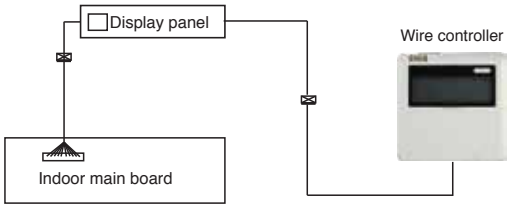
Built-in daily timer offers the convenience of automatically starting and turning down the air conditioners according to the set time.



The indoor unit is set to work at automode from 8:00 to 20:00

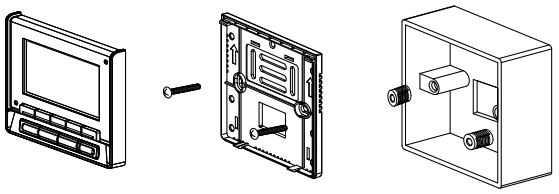
Easy connection

Wired controller conveniently connects to the indoor unit's display panel with the appropriative connecting wire.



Easy installation

The wired controller allows to be installed into the wall by fixing the bottom directly or fixing the device to a mounting cabinet.



Specifications

Model	10-CM
Dimensions	120×120×31.2
Power	Power from the display panel. Extra power is unnecessary.

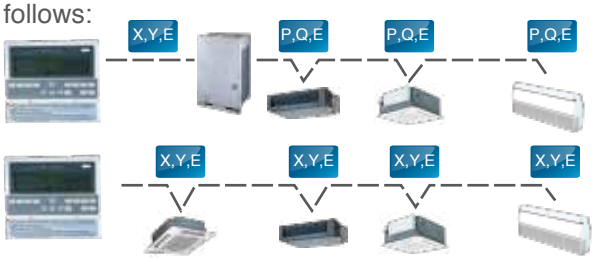
INDOOR CENTRALIZED CONTROLLER

CRF-10-CM

Functions

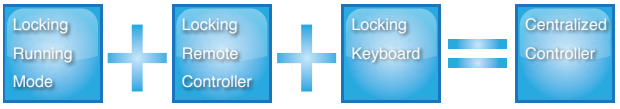
Centralized control

CRF-10-CM is a multifunctional device which is able to control up to 64 indoor units. And the connection length can be up to 1,200m. With the newly designed machines, this device connects to the master outdoor unit, making the centralized wiring quite simple.The 2 ways of connecting is as follows:



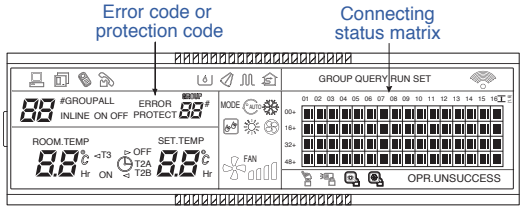
Three lock modes

Centralized controller CRF-10-CM provides a superior way to manage the indoor units. Users are able to make their own choice from locking the wireless controller, locking the running mode or lock the CRF-10-CM's keyboard, as they wish.



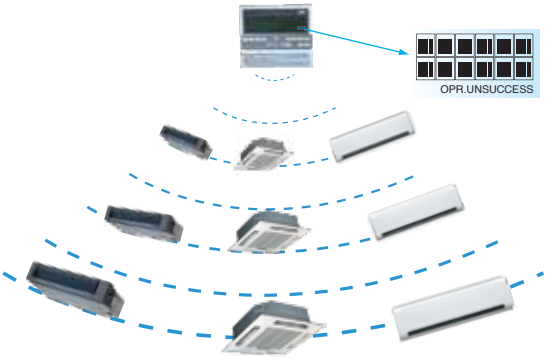
Indoor unit working status display

CRF-10-CM displays both the indoor units working status and the error codes. Via checking the error codes table in the user manual, users can easily find out the malfunction and call service.



Single/unified control mode

The control object can be either single or all, making the controlling operation convenient and easy. With the operation signal feedback, users ensure their machines work at the precise working mode.



Access to network monitoring

CRF-10-CM is able to bridge up to 64 indoor units to the network monitoring system and the building management system.

Specifications

Model	CRF-10-CM
Dimensions(H×W×D)(mm)	180×120×64.2
Power	198-242V(50/60Hz)

Centralized Controller

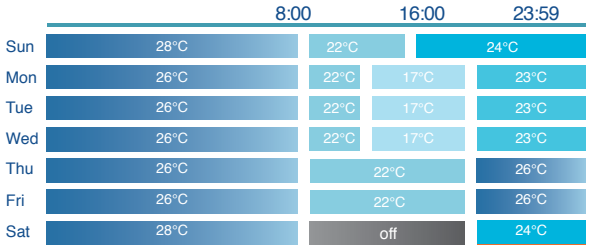
WEEKLY SCHEDULE CENTRALIZED CONTROLLER

WCRF-10-CM

Functions

Weekly schedule

WCRF-10-CM allows to make a weekly schedule out of 64 indoor units. Users can set up to 4 periods per day and select the desired running mode and room temperature. The operating object could be any indoor unit or all the indoor units.

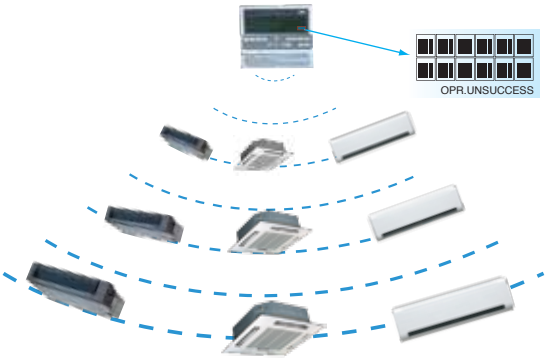


Three lock modes

Centralized controller WCRF-10-CM provides a superior way to manage the indoor units. Users are able to make their own choice from locking the wireless controller, locking the running mode or lock the WCRF-10-CM's keyboard, as they wish.

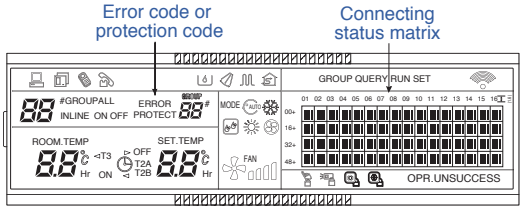
Single/unified control mode

The control object can be either single or all, making the controlling operation convenient and easy. With the operation signal feedback, users ensure their machines work at the precise working mode.



Indoor unit working status display

WCRF-10-CM displays both the indoor units working status and the error codes. Via checking the error codes table in the user manual, users can easily find out the malfunction and call service.



Specifications

Model	WCRF-10-CM
Dimensions(H×W×D)(mm)	180×120×64.2
Power	198-242V(50/60Hz)

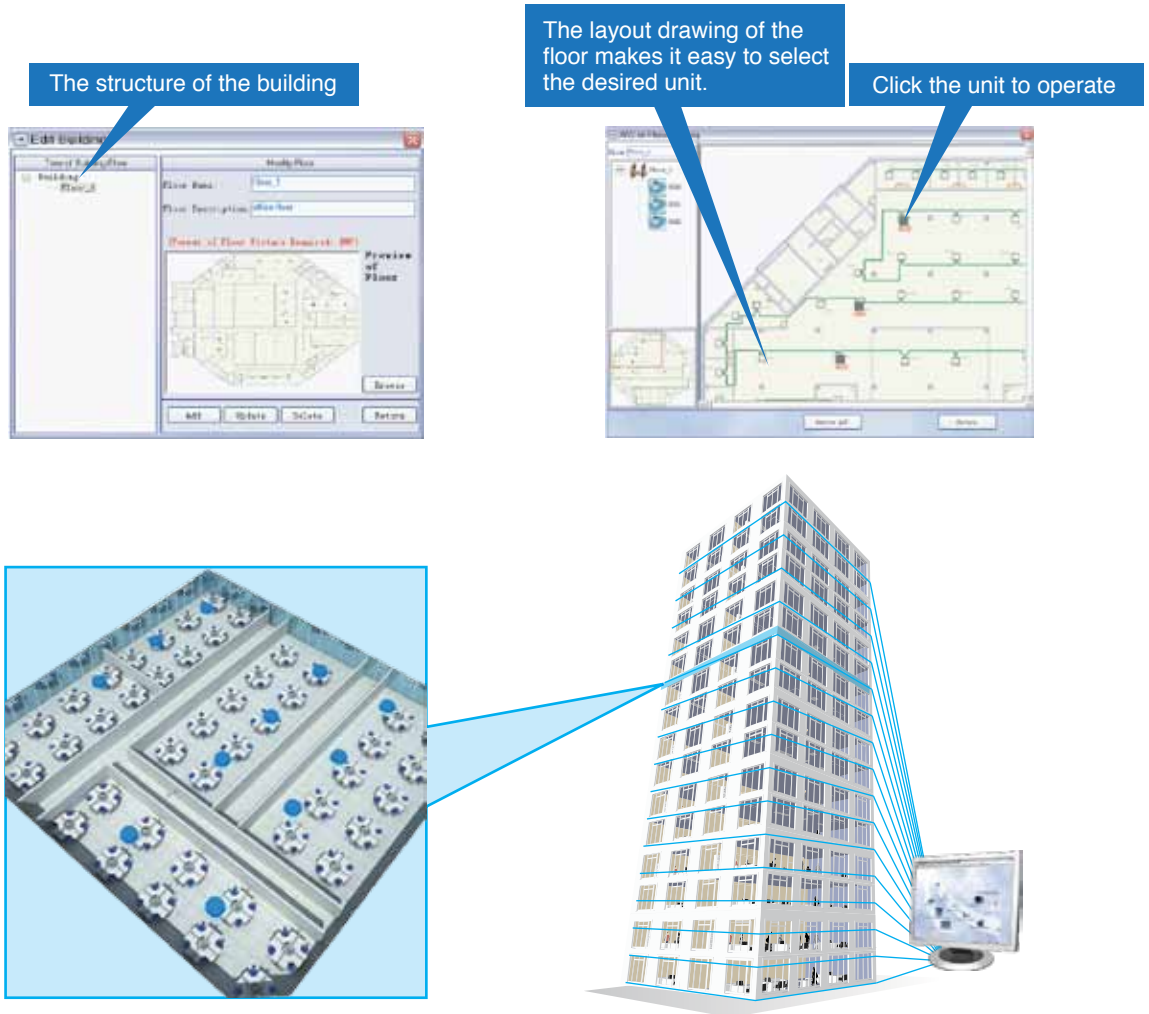
3RD GENERATION MONITORING SYSTEM

Functions

Friendly user interface

3rd generation monitoring system offers a simple and explicit user interface to allow realize a simple implementation of its functions. 3rd generations monitoring system is able to control up 1024 indoor units and 512 outdoor units.

Group definition 3rd



Multiple functions

3rd generation system is able to implement the remote control of indoor units. The commands of indoor unit can be both the normal ones, such as changing the running modes, adjusting the temp., timer functions, and the higher class commands, such as excluding the other controllers to implement unique PC control.

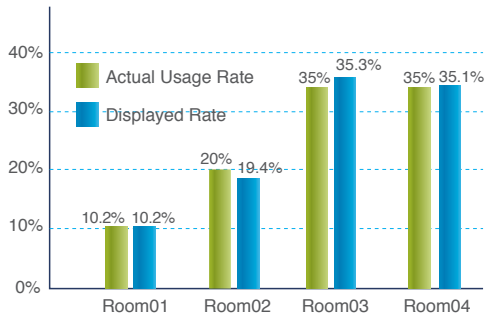
Normal Funtions + Group Settings + Unique PC Control + Running status Reports = 3rd generation monitoring system

Running parameter display

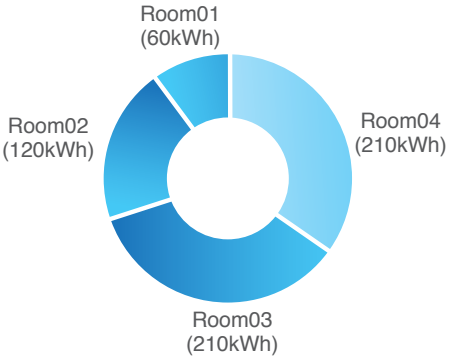
3rd generation system can synchronize both the indoor and outdoor units' running status and parameters, to implement the visual control of the refrigerant system. Moreover, the 3rd generation system records the running status and error information of the refrigerant system, which helps the maintenance to be accurate and easy.

Electricity charge apportionment

With the appropriate devices, 3rd generation system can record the total electricity consumption and the on/off time of the outdoor units. And with the indoor units' actual cooling power, the software intelligently distributes the power consumption to each indoor unit. Moreover, the software can generate the electricity charge bills and the bill of the indoor units' on/off time, which is a basis of the power consumption.



power distribution



The principle of the electricity distribution

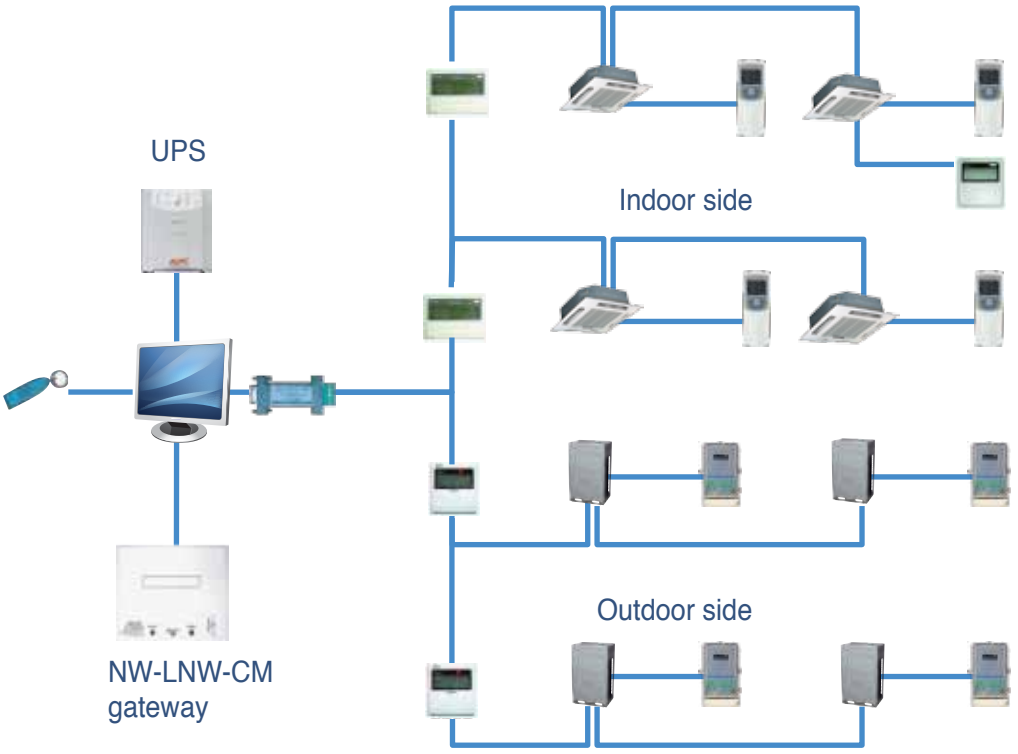
Room 01 electric power consumption = (Demand capacity of Room01 / Total demand capacity of indoor units) × Total power consumption

LONWORKS® BMS GATEWAY

NW-LNW-CM

Co-operates with the 3rd generation monitoring software.
Enables centralized control of up to 1024 indoor units and 512 outdoor units by the LonWorks BMS.
Easily connects to the BMS system.
Ideal for scattered units of large projects, such as high office buildings, etc.

Network example



UPS is recommended only, not necessary.

Recommended config

Operating system	WIN2000/WIN XP SP4
CPU	Pentium 4 2G or above
HDD	40G free space
Interface port	2 RS-232 terminals and 3 USB ports
Software	3rd generation monitoring software kit
Database	Microsoft SQL Sever 2000 personal edition
Electricity meter	Chint DTS634 or corresponding model

Packing list

Packing list	NW-LNW-CM and power converter

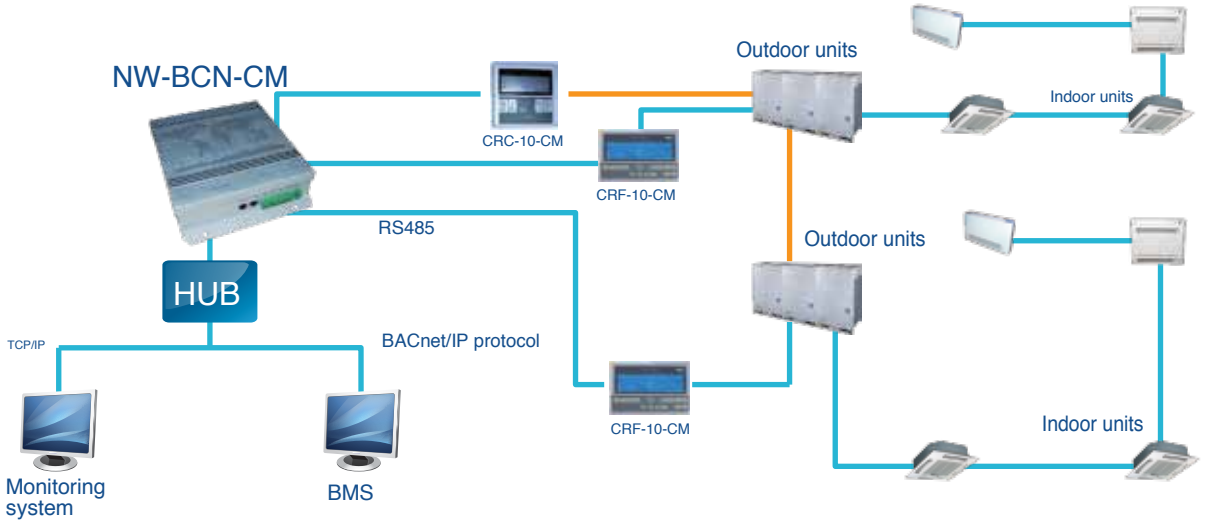
PC should be field supplied.
3-core shield twisted pair lines should be applied to the network.

BACNET® BMS GATEWAY

NW-BCN-CM

Contains 4 groups of RS-485 communication ports and is able to connect up to 256 indoor units or 128 outdoor units to the BMS.
Free to connect to the BMS or not.
Compatible with 3rd generation monitoring software Firebird.
Monitors machines via local network.

Network example



Monitoring units via local web

NW-BCN-CM allows users to explore the units via local network, by simply using the Internet Explorer. Moreover, users can not only check the units running conditions, but also change the running parameter of the units, which is quite convenient for users to control.

Wide compatibility

NW-BCN-CM has a wonderful adaptability to the BMS

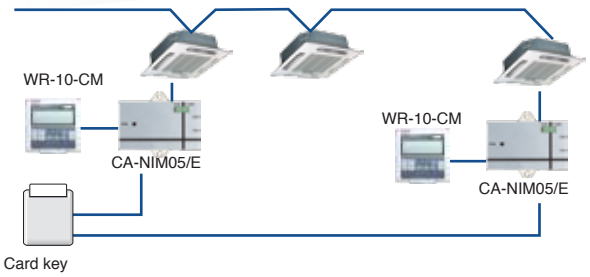
	Company	BMS software	Brand
1	SIMENS	APOGEE	
2	TRANE	Tracer Summit	
3	Honeywell	Alerton	
4	Schneider	Andover	
5	Johnson	METASYS	

HOTEL CARD KEY INTERFACE MODULE

CA-NIM05/E

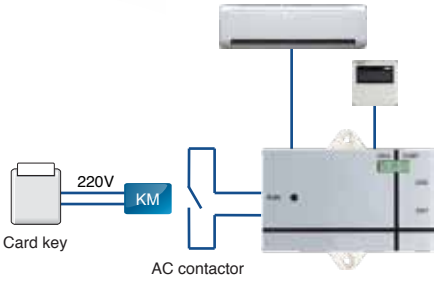
Co-operates with the wired controller to realized human automatic control.
High voltage power is unnecessary, making the device safe and steady.
Auto-restart function inside.

Installation example



Wired controller is necessary in this card-key system.

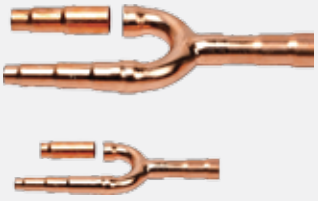
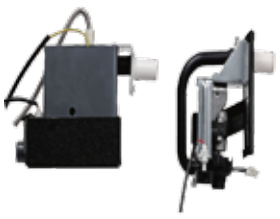
Electrical wiring



Specifications

Model	CA-NIM05/E
Dimensions(H×W×D)(mm)	86×72.8×15.5
Power	Powered from display panel. Extra power unnecessary.

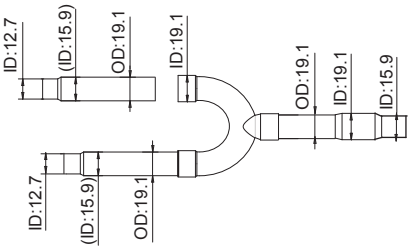
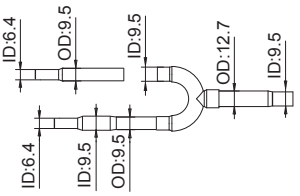
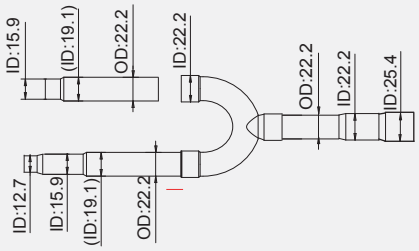
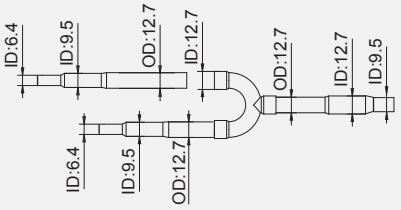
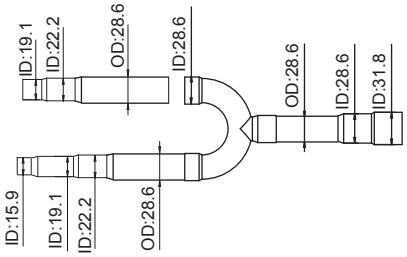
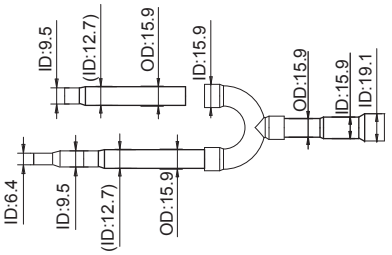
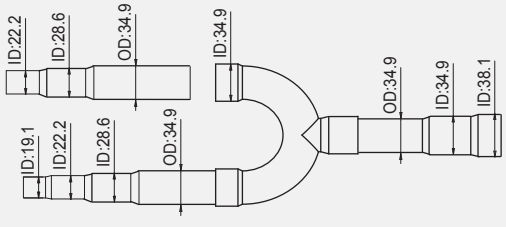
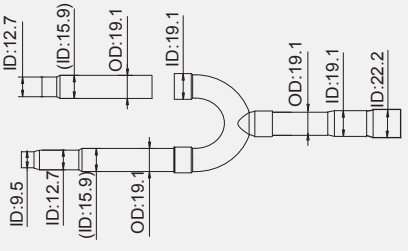
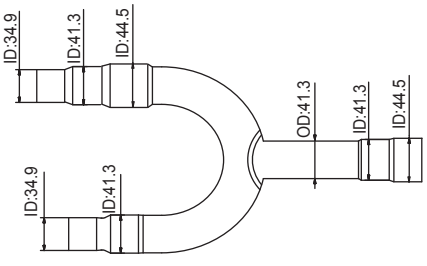
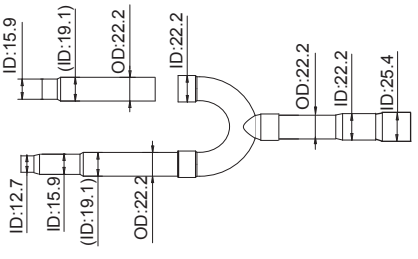
ACCESSORIES

Model	Feature	Model name	Description
Branch joint for 410A outdoor unit		BJC-02-CM	For two outdoor units connection
		BJC-03-CM	For three outdoor units connection
		BJC-04-CM	For four outdoor units connection
Branch joint for R410A indoor unit		BJF-224-CM	A*<16.6kW
		BJF-330-CM	16.6≤A*<33kW
		BJF-710-CM	33kW≤A*<66kW
		BJF-1344-CM	66kW≤A*<92kW
		BJF-E1344-CM	92kW≤A*
Drain pump kit		SBH-01 SBH-03 SBH-04	For low/high static pressure duct type indoor unit(Option)

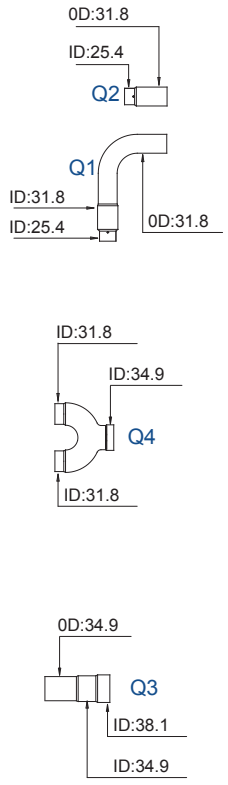
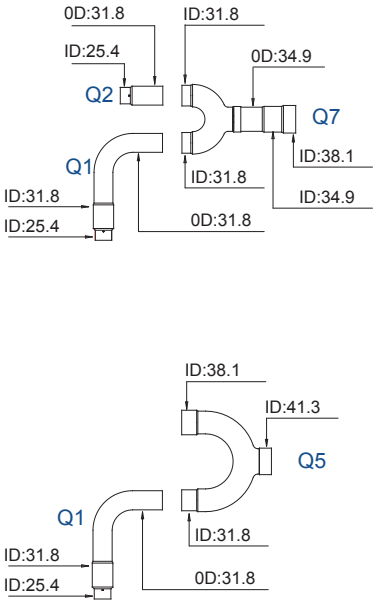
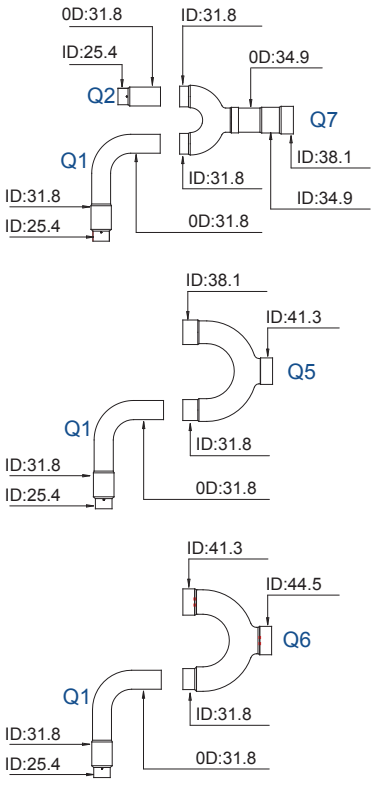
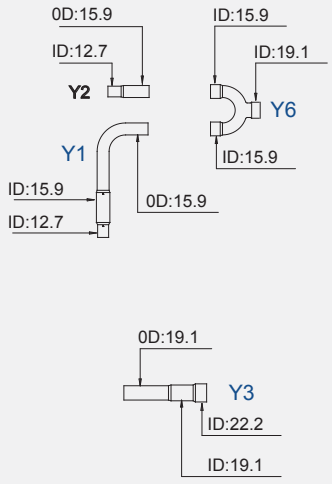
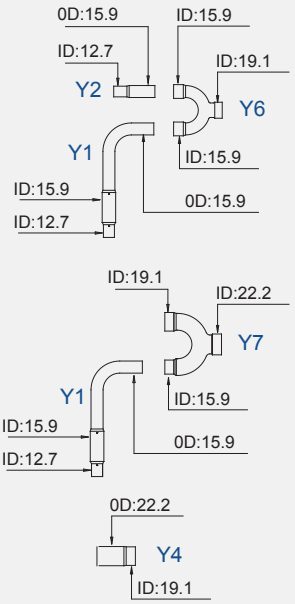
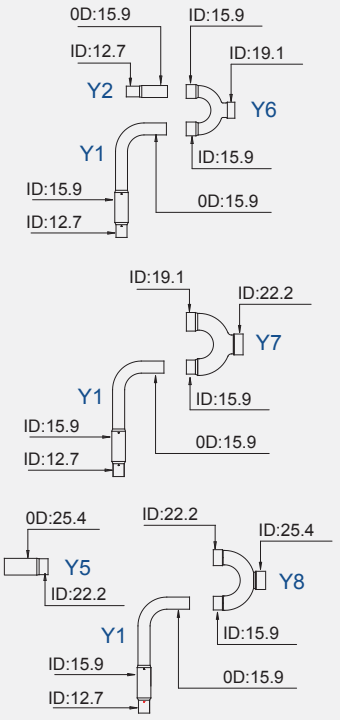
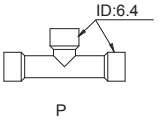
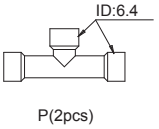
A*:The total capacity of indoor units following this branch joint

HOTEL CARD KEY INTERFACE MODULE

Indoor branch drawing

Name	Gas side joints	Liquid Side Joints
BJF-224-CM		
BJF-330-CM		
BJF-710-CM		
BJF-1344-CM		
BJF-E1344-CM		

Outdoor branch drawing

Outdoor branch	BJC-02-CM	BJC-03-CM	BJC-04-CM
Gas side			
Liquid side			
Oil balance pipe		 P	 P(2pcs)

Memo

Memo

Memo