Carrier InterAmerica Corporation

ADDRESS
10801 NW 103rd Street Suite 1 Miami, FL 33178
CONTACTS
Tel: 001 305 805 4500
WEBSITE
http//: www.ciac-comfort.com

The specifications, designs and information in this brochure are subject to the actual products. CIAC reserves the right to make change without any notice.

IMVF-II

IMVF-II-SL-201704

IMVF-II
Inverter Multi Variable Flow

Intelligent Flexibility

CONTENTS

50/60Hz R410a

001 Product Line Up

007 IMVF Heat Pump

023 IMVF Mini

035 IMVF Heat Recovery

051 IMVF-II Heat Pump **NEW LINE**

071 IMVF Water Cooled

091 IMVF Indoor Units **NEW LINE**

131 IMVF Controls NEW LINE

PRODUCT LINE-UP

(Condensing units)

Series	Ph/V/Hz \ HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
IMVF Heat Pump	3/208-230/60																					
	3/460/60																					
	3/380-400/50 3/380-400/60																					

Series	Ph/V/Hz \ HP	3	5	7	8	10	12
IMVF Mini	1/208-230/50/60						
	3/380-400/50/60						

Series	Ph/V/Hz \ HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
IMVF Heat Recovery	3/208-230/60																					
	3/380-400/50 3/380-400/60																					

Series	Ph/V/Hz \ HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
IMVF-II	3/208-230/60 3/380-400/50 3/380-400/60																																	

Series	Ph/V/Hz \ HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
IMVF W	3/208-230/60																					
	3/380-400/50 3/380-400/60																					

PRODUCT LINE-UP

Series	kW KBTU/h		1.5 5.1	2.2 7	2.8 9	3.6 12	4.5 16	5.6 18	7.1 24	8 28	9 30	11.2 38	14 48	16 54.6	22.6 72	28 96
4-way cassette compact		CK43BV***-CYJ1H			●	●	●									
4-way cassette		CK43BV***-4YJ1H						●	●	●	●	●			●	
Round-way cassette		CK43BV***-6YJ1H		●	●	●	●	●	●	●	●	●	●	●	●	
2-way cassette		CK43BV***-2YJ1H		●	●	●	●	●								
1-way cassette		CK43BV***-1YJ1H	●	●	●	●										
Ceiling / Floor		CF43BV***-MYJ1H			●	●	●	●	●	●	●	●	●			
Slim duct(0/30Pa)		CC43BV***LLYJ1H		●	●	●	●	●	●							
Medium ESP duct(50/96pa)		CC43BV***MHYJ1H						●	●	●	●	●	●			
Medium ESP duct(80/120Pa)		CC43BV***MHYJ1H									●	●	●			
High ESP duct(100/196Pa)		CC43BV***HHYJ1H						●	●	●	●	●	●		●	●
Console		CJ43BV***-MYJ1H		●	●	●		● (5.0)								
Hi wall		CH43BV***-HYJ1H		●	●	●	●	●	●							
ERV (Energy Reclaim Ventalation)		150m³/h 260m³/h						800m³/h 1000m³/h								
AHU connection kit		28kW						56kW								

007 Perfect Outdoor Structure

009 Energy Efficient

011 Comfort

012 Convenient Installation

013 High Reliability

015 IMVF Heat Pump Specification

IMVF
Inverter Multi Variable Flow
Heat Pump

IMVF

Air Supply Chamber and Equipment Chamber Separation Design

1. Prevent electrical parts and the main functional components by the rain Erosion, prolong the service life of components;

2. Compressor running noise was closed in the equipment room, reduce the running noise about 3 dB(A);

3. Air supply chamber complete isolation: During commissioning and maintenance, the units can be used normally.

Special Heat Exchanger Design

4 way air return heat exchanger design

Reduce the heat exchanger height (650mm), and the upper and lower wind speed uniform and high efficiency.

Two stages heat exchanger design

Two stages heat exchanger can separate control and adjust heat exchanger size, effectively cope with small load operation, to ensure the reliable operation range.

The two stage heat exchanger are respectively controlled by a electronic expansion valve control, which can adjust the condenser volume.

Special Heat Exchanger Design

■ Aviation noise reduction patent fan design

•Streamline vortex fan, sharp fan blade edge, and a certain degree of curvature, reduce the vibration, and pressure loss.

■ DC fan motor

•DC inverter technology •High efficiency •Low noise

Electric Control Box Heat Dissipation Design

Streamline vortex fan forced heat dissipation fan inside the electric control box, to ensure the stable internal temperature and stable system operationn, sharp fan blade edge, and a certain degree of curvature, reduce the vibration, and pressure loss.

ENERGY EFFICIENT

High Efficiency DC Inverter Scroll Compressor

•DC inverter scroll compressor imported from mitsubishi electric.

•Equipped with a "Frame Compliance Mechanism" that allows movement in the axial direction of the frame supporting the cradle scroll. This greatly reduces both leakage and friction loss, ensuring very high efficiency throughout the whole speed range.

Friction loss reduce

Leakage loss reduce

ENERGY EFFICIENT

Stepless DC Inverter Control Technology

High precision control, variable frequency drive from 0 to 360Hz.

180° vector DC inverter drive technology: Sine wave current drive, efficiency improve 17% comparing to conventional rectangle wave.

Energy Management Technology

There is energy saving dip switch (SW8-3) in the indoor unit which can be lock the temperature at 26°C in summer and 20°C in winter, to avoid the energy waste and realize the centralized management.
The temperature lock function also can be realized through the new wired controller YR-E16.

64 Stage Speed Adjustment DC Fan Motor

Efficiency increase 45% comparing with AC motor and power input largely decrease.
64 stage speed adjustment plus DC inverter drive, stabilizing compressor discharge pressure and suction pressure to ensure high system reliability.

Two Stage Deep Sub Cooling Technology

1st stage sub cooling added a sub cooling coil to condenser.
2nd stage sub cooling added a stand alone sub cooler.
After further cooling, sub-cooling degree can be up to 30°C, with the heat exchanging capacity per unit mass of xrefrigerant improved by 46% and flow resistance reduced by 55%, and running efficiency improved by 9%.

High Efficiency Heat Exchanging Technology

Outdoor high efficiency four way air return heat exchanger design.

The compressor and condenser are placed in separated chamber.

High efficiency heat exchanger design.

Efficient ø8 inner grooved tube and 0.11 hydrophilic aluminum coil fin, corrosion and oxidation resistance treatment.

COMFORT

Precise Control

Adopt the inverter control, the temperature could be control precisely within the range of ±0.5°C.

COMFORT

Low Noise and Night Silent Running

Machinery chamber is separated from air supply chamber; Built-in high efficient muffler in the machinery chamber greatly reduce the compressor noise.
The night silent running function can be set on the outdoor PCB. The noise can be reduced by 8 dB(A) at most.

Double EEV Control

Make sure the refrigerant flow equally, to provide more comfort temperature.

Priority Setting

With the human design, you can set different preferential steps of some indoor units according to the room functions, so that it will ensure that the most important room gains high priority.

CONVENIENT INSTALLATION

Long Pipe Length, High Height Drop

Total 300m refrigerant piping length.
Max.175m refrigerant piping length.
Max.50m height drop between indoor and outdoor units.
Max.15m height drop between indoor units.

Easy Transportation

Outdoor footprint only occupy 0.74m²(8/10HP) and 1.04m² (12/14/16HP).

Can lift with elevators and save lots of transport cost and time.

Outdoor High External Static Pressure

Up to 50Pa and can be installed at different floors .

Connection Wire

Two core nonpolar communication line way, no joint wrong hidden trouble.
Centralized controller bus and indoor/outdoor bus shareable, wiring and access is very simple Indoor address automatically set.

HIGH RELIABILITY

The First 2-stages Oil Separation and Cross Oil Return Technology in The Industry

1st stage oil separation: built-in oil separating unit, greatly reduced the oil from the compressor discharge.
2nd stage oil separation: external oil separator to separate the small amount oil from discharge.

High Pressure Difference Oil Equalization

Using the pressure difference between suction and discharge, to realize fast oil balance between module.

Flow	a ► b		b ► a	
ON	SV1a	SV2b	SV1b	SV2a
OFF	SV1b	SV2a	SV1a	SV2b

Compressor Anti-liquid Shock Technology

Compressor adopt flexible frame mechanism, when any liquid enter into compressor, cradle scroll detaching fixed scroll, discharging liquid refrigerant out of scroll set, to avoid scroll damage.

Duty Cycle Operation to Extend the System Lifetime (Combination Model)

The outdoor units priority operating changes every 24 hours.Outdoor units start in turn and operation time can be balanced.Inverter compressor lifetime can be extend maximum 3 times.

First unit priority

Second unit priority

Third unit priority

Cycle unit priority

Backup Operation

If one outdoor unit get into malfunction, the other units continue to operate without affecting the whole system.

12HP-16HP

If one on/off compressor fault

18HP-48HP

If one outdoor fault in cooling mode

IMVF Heat Pump

208-230V/3Ph/60Hz

8 /10 HP

12/14/16 HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Basic model units: 8 HP, 10 HP, 12 HP, 14 HP, 16 HP

Free combination up to 48 HP

Model			CA43BV224-V5J1H	CA43BV280-V5J1H	CA43BV335-V5J1H	CA43BV400-V5J1H	CA43BV450-V5J1H	CA43BV504-V5J1H	CA43BV560-V5J1H	CA43BV615-V5J1H	CA43BV680-V5J1H
Combination model			/	/	/	/	/	CA43BV224-V5J1H	CA43BV280-V5J1H	CA43BV335-V5J1H	CA43BV280-V5J1H
			/	/	/	/	/	CA43BV280-V5J1H	CA43BV280-V5J1H	CA43BV335-V5J1H	CA43BV400-V5J1H
			/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	24
	Cooling	kW	22.6	28	33.5	40	45	50.6	56	61.5	68
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69	76.5
Electrical parameters	Power supply	Ph/V/Hz	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60
	Cooling Rated power input	kW	5.6	8.5	10	12	14	14.1	17	18.5	20.5
	Max power input	kW	12.5	14.5	16.5	18.5	20	27	29	31	33
	Rated current	A	15.15	23.35	27.55	32.75	38.95	38.5	46.7	50.9	56.1
	Max current	A	38.6	44.7	50.9	57.1	61.7	83.3	89.4	95.6	101.8
	Heating Rated power input	kW	5.9	8.8	10.3	12.6	14.5	14.7	17.6	19.1	21.4
	Max power input	kW	12.5	14.5	16.5	18.5	20	27	29	31	33
	Rated current	A	16.05	24.25	28.45	34.65	39.85	40.3	48.5	52.7	58.9
	Max current	A	38.6	44.7	50.9	57.1	61.7	83.3	89.4	95.6	101.8
	EER		4.04	3.29	3.35	3.33	3.21	3.59	3.29	3.32	3.32
	COP		4.24	3.58	3.64	3.57	3.45	3.84	3.58	3.61	3.57
Performance	Air flow (H)	m^3/h	11100	11100	14100	14100	14100	22200	22200	25200	25200
	Sound pressure level (H)	dB(A)	57	57	60	60	60	60	60	61	61
	Sound power level (H)	dB(A)	73	73	76	76	76	77	77	78	78
Installation	External dimensions (W/D/H)	mm	990/750/1808	990/750/1808	1390/750/1808	1390/750/1808	1390/750/1808	990/750/1808+ 990/750/1808	990/750/1808+ 990/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808
	Shipping dimensions (W/D/H)	mm	1090/860/1990	1090/860/1990	1490/860/1990	1490/860/1990	1490/860/1990	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990
	Net/Shipping weight	kg	240/255	240/255	368/386	368/386	368/386	480/510	480/510	608/641	608/641
	Compressor type		DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1 INV	1 INV	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 INV	1 INV+1 INV	(1 INV) +(1 INV+1 FIX)	(1 INV) +(1 INV+1 FIX)
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10	10	10	10	10	20	20	20	20
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Refrigerant gas pipe	mm	22.22	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe lenth	m	300	300	500	500	300	500	300	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max.drop between I.U.&O.U.	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		13	16	19	23	26	29	33	36	39
Working temp.	Cooling	°C	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	°C	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21

Model			CA43BV730-V5J1H	CA43BV800-V5J1H	CA43BV850-V5J1H	CA43BV900-V5J1H	CA43BV960-V5J1H	CA43BV1010-V5J1H	CA43BV1080-V5J1H	CA43BV1130-V5J1H	CA43BV1180-V5J1H	CA43BV1235-V5J1H	CA43BV1300-V5J1H	CA43BV1350-V5J1H
Combination model			CA43BV280-V5J1H	CA43BV400-V5J1H	CA43BV400-V5J1H	CA43BV450-V5J1H	CA43BV280-V5J1H	CA43BV280-V5J1H	CA43BV280-V5J1H	CA43BV280-V5J1H	CA43BV280-V5J1H	CA43BV335-V5J1H	CA43BV400-V5J1H	CA43BV450-V5J1H
			CA43BV450-V5J1H	CA43BV400-V5J1H	CA43BV450-V5J1H	CA43BV450-V5J1H	CA43BV280-V5J1H	CA43BV280-V5J1H	CA43BV400-V5J1H	CA43BV400-V5J1H	CA43BV400-V5J1H	CA43BV450-V5J1H	CA43BV450-V5J1H	CA43BV450-V5J1H
			/	/	/	/	CA43BV400-V5J1H	CA43BV450-V5J1H	CA43BV400-V5J1H	CA43BV450-V5J1H	CA43BV450-V5J1H	CA43BV450-V5J1H	CA43BV450-V5J1H	CA43BV450-V5J1H
Capacity	Capacity range	HP	26	28	30	32	34	36	38	40	42	44	46	48
	Cooling	kW	73	80	85	90	96	101	108	113	118	123.5	130	135
	Heating	kW	81.5	90	95	100	108	113	121.5	126.5	133.5	137.5	145	150
Electrical parameters	Power supply	Ph/V/Hz	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60
	Cooling Rated power input	kW	22.5	24	26	28	29	31	32.5	34.5	36.5	38	40	42
	Max power input	kW	34.5	37	38.5	40	47.5	49	51.5	53	54.5	56.5	58.5	60
	Rated current	A	62.3	65.5	71.7	77.9	79.5	85.7	88.9	95.1	101.3	105.5	110.7	116.9
	Max current	A	106.4	114.2	118.8	123.4	146.5	151.1	158.9	163.5	168.1	174.3	180.5	185.1
	Heating Rated power input	kW	23.3	25.2	27.1	29	30.2	32.1	34	35.9	37.8	39.3	41.6	43.5
	Max power input	kW	34.5	37	38.5	40	47.5	49	51.5	53	54.5	56.5	58.5	60
	Rated current	A	64.1	69.3	74.5	79.7	83.2	88.4	93.6	98.8	104.0	108.2	114.4	119.6
	Max current	A	106.4	114.2	118.8	123.4	146.5	151.1	158.9	163.5	168.1	174.3	180.5	185.1
	EER		3.24	3.33	3.27	3.21	3.31	3.26	3.32	3.28	3.23	3.25	3.25	3.21
	COP		3.50	3.57	3.51	3.45	3.58	3.52	3.57	3.52	3.48	3.50	3.49	3.45
Performance	Air flow (H)	m^3/h	25200	28200	28200	28200	36300	36300	39300	39300	39300	42300	42300	42300
	Sound pressure level (H)	dB(A)	61	62	62	62	63	63	63	63	63	64	64	64
	Sound power level (H)	dB(A)	78	79	79	79	81	81	81	81	81	82	82	82
Installation	External dimensions (W/D/H)	mm	990/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	990/750/1808+ 990/750/1808+ 1390/750/1808	990/750/1808+ 990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808
	Shipping dimensions (W/D/H)	mm	1090/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990
	Net/Shipping weight	kg	736/772	736/772	736/772	736/772	848/896	848/896	976/1027	976/1027	976/1027	1104/1158	1104/1158	1104/1158
	Compressor type		DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		(1 INV) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	20	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.8	31.8	31.8	31.8	31.8	38.1	38.1	38.1	38.1	38.1	38.1	38.1
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe lenth	m	300	300	300	300	300	300	300	300	300	300	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max.drop between I.U.&O.U.	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		43	46	50	53	56	59	63	64	64	64	64	64
Working temp.	Cooling	°C	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	°C	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21

* Max. drop between I.U.& O.U.: 50/40 (Meters (outdoor unit is higher/lower than indoor units).
* All the specifications are tested under nominal condition (In cooling, Indoor temp is 27°C DB/19°C WB; Outdoor temp 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB; Outdoor temp is 7°C DB/6°C WB).

IMVF Heat Pump

460V/3Ph/60Hz

8 /10 HP

12/14/16 HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Basic model units: 8 HP, 10 HP, 12 HP, 14 HP, 16 HP

Free combination up to 48 HP

Model			CA43BV224-V6J1H	CA43BV280-V6J1H	CA43BV335-V6J1H	CA43BV400-V6J1H	CA43BV450-V6J1H	CA43BV504-V6J1H	CA43BV560-V6J1H	CA43BV615-V6J1H	CA43BV680-V6J1H
Combination model			/	/	/	/	/	CA43BV224-V6J1H	CA43BV280-V6J1H	CA43BV280-V6J1H	CA43BV280-V6J1H
			/	/	/	/	/	CA43BV280-V6J1H	CA43BV280-V6J1H	CA43BV335-V6J1H	CA43BV400-V6J1H
			/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	24
	Cooling	kW	22.4	31.5	33.5	40	45	56.5	56.0	61.5	68.0
	Heating	kW	25	3/460/60	37.5	45	50	3/460/60	63.0	69.0	76.5
Electrical parameters	Power supply	Ph/V/Hz	3/460/60	7.36	3/460/60	3/460/60	3/460/60	12.63	3/460/60	3/460/60	3/460/60
	Cooling Rated power input	kW	5.27	15.00	10.00	11.40	13.40	28.00	14.72	17.16	18.76
	Max power input	kW	13.00	9.72	17.00	19.00	20.50	16.69	30.00	32.00	34.00
	Rated current	A	6.96	19.82	13.21	15.06	17.70	37.00	19.45	22.94	24.79
	Max current	A	17.18	7.97	22.46	25.10	27.08	13.86	39.64	42.28	44.92
	Heating Rated power input	kW	5.89	12.40	10.00	11.60	13.50	22.67	15.94	17.97	19.57
	Max power input	kW	10.27	10.53	15.10	17.10	18.30	18.31	24.80	27.50	29.50
	Rated current	A	7.78	16.38	13.21	15.33	17.84	29.95	21.06	23.74	25.86
	Max current	A	13.57	3.80	19.95	22.59	24.18	3.99	32.77	36.33	38.98
	EER		4.25	3.95	3.35	3.51	3.36	4.08	3.80	3.54	3.62
	COP		4.24	11000	3.75	3.88	3.70	22000	3.95	3.84	3.91
Performance	Air flow (H)	m³/h	11000	57	14100	14100	14100	60	22000	25100	25100
	Sound pressure level (H)	dB(A)	57	73	60	60	60	77	60	61	61
	Sound power level (H)	dB(A)	73		76	76	76		77	78	78
Installation	External dimensions (W/D/H)	mm	990/750/1808	990/750/1808	1390/750/1808	1390/750/1808	1390/750/1808	990*1808*750*2	(990/750/1808)*2	990/750/1808 +1390/750/1808	990/750/1808 +1390/750/1808
	Shipping dimensions (W/D/H)	mm	1090/860/1990	1090/860/1990	1490/860/1990	1490/860/1990	1490/860/1990	(1090*1990*860)*2	(1090/860/1990)*2	1090/860/1990 +1490/860/1990	1090/860/1990 +1490/860/1990
	Net/Shipping weight	kg	240/255	240/255	368/386	368/386	368/386	240/255+240/255	(240/255)*2	240/255+368/386	240/255+368/386
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1 INV	1 INV	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 INV	1 INV*2	1 INV +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX)
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10	10	10	10	10	20	20	20	20
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Refrigerant gas pipe	mm	22.22	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe lenth	m	300	300	300	300	300	300	300	300	300
	Max pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max drop between I.U.&O.U	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		13	16	19	23	26	26	26	26	26
Working temp.	Cooling	°C	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	°C	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21

Model			CA43BV730-V6J1H	CA43BV800-V6J1H	CA43BV850-V6J1H	CA43BV900-V6J1H	CA43BV960-V6J1H	CA43BV1010-V6J1H	CA43BV1080-V6J1H	CA43BV1130-V6J1H	CA43BV1180-V6J1H	CA43BV1235-V6J1H	CA43BV1300-V6J1H	CA43BV1350-V6J1H
Combination model			CA43BV280-V6J1H	CA43BV400-V6J1H	CA43BV400-V6J1H	CA43BV450-V6J1H	CA43BV280-V6J1H	CA43BV280-V6J1H	CA43BV280-V6J1H	CA43BV280-V6J1H	CA43BV280-V6J1H	CA43BV335-V6J1H	CA43BV400-V6J1H	CA43BV450-V6J1H
			CA43BV450-V6J1H	CA43BV400-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H	CA43BV280-V6J1H	CA43BV280-V6J1H	CA43BV400-V6J1H	CA43BV400-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H
			/	/	/	/	CA43BV400-V6J1H	CA43BV450-V6J1H	CA43BV400-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H	CA43BV450-V6J1H
Capacity	Capacity range	HP	26	28	30	32	34	36	38	40	42	44	46	48
	Cooling	kW	73.0	80.0	85	90	96	101	108.0	113	118.0	123.5	145.0	135.0
	Heating	kW	81.5	90.0	95	100	108	113	121.5	127	131.5	137.5	3/460/60	150.0
Electrical parameters	Power supply	Ph/V/Hz	3/460/60	3/460/60	3/460/60	3/460/60	3/460/60	3/460/60	3/460/60	3/460/60	3/460/60	3/460/60	38.20	3/460/60
	Cooling Rated power input	kW	20.76	22.80	24.80	26.80	26.12	28.12	30.16	32.16	34.16	36.80	60.00	40.20
	Max power input	kW	35.50	38.00	39.50	41.00	49.00	50.50	53.00	54.50	56.00	58.00	50.47	61.50
	Rated current	A	27.43	30.12	32.77	35.41	34.51	37.15	39.85	42.49	45.15	48.62	79.26	53.11
	Max current	A	46.90	50.20	52.18	54.16	64.74	66.72	70.02	72.00	73.98	76.62	38.60	81.24
	Heating Rated power input	kW	21.47	23.20	25.10	27.00	27.54	29.44	31.17	33.07	34.97	37.00	55.70	40.50
	Max power input	kW	30.70	34.20	35.40	36.60	41.90	43.10	46.60	47.80	49.00	51.70	51.00	54.90
	Rated current	A	28.37	30.65	33.16	35.67	36.39	38.90	41.18	43.69	46.20	48.88	70.95	53.51
	Max current	A	40.56	45.19	46.77	48.36	55.36	56.94	61.57	63.15	64.74	68.31	3.40	72.53
	EER		3.52	3.51	3.43	3.36	3.68	3.59	3.58	3.51	3.45	3.36	3.76	3.36
	COP		3.80	3.88	3.78	3.70	3.92	3.84	3.90	3.83	3.76	3.72	42300	3.70
Performance	Air flow (H)	m³/h	25100	28200.0	28200	28200	36100	36100	39200.0	39200	39200	42300	64	42300
	Sound pressure level (H)	dB(A)	61	62	62	62	63	63	63	63	63	64	82	64
	Sound power level (H)	dB(A)	78	79	79	79	81	81	81	81	81	82		82
Installation	External dimensions (W/D/H)	mm	990/750/1808 +1390/750/1808	1390/750/1808 +1390/750/1808	1390/750/1808 +1390/750/1808	(1390/750/1808)*2	990/750/1808*2 +1390/750/1808	(990/750/1808 +1390/750/1808)*2	(990/750/1808) +(1390/750/1808)	(990/750/1808) +(1390/750/1808)	(990/750/1808) +(1390/750/1808)*2	(1390/750/1808) +(1390/750/1808)*2	(1390/750/1808) +(1390/750/1808)*2	(1390/750/1808)*3
	Shipping dimensions (W/D/H)	mm	1090/860/1990 +1490/860/1990	1490/860/1990 +1490/860/1990	1490/860/1990 +1490/860/1990	(1490/860/1990)*2	1090/860/1990*2 +1490/860/1990	1090/860/1990*2 +(1490/860/1990)	(1090/860/1990) +(1490/860/1990)	(1090/860/1990) +(1490/860/1990)	(1090/860/1990) +(1490/860/1990)*2	(1490/860/1990) +(1490/860/1990)*2	(1490/860/1990) +(1490/860/1990)*2	1490/860/1990)*3
	Net/Shipping weight	kg	240/255+368/386	368/386+368/386	368/386+368/386	(368/386)*2	240/255*2+368/386	240/255*2+368/386	240/255+368/386+368/386	240/255+368/386+368/386	240/255+368/386*2	368/386+368/386*2	368/386+368/386*2	(368/386)*3
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1 INV +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX)*2	1 INV*2 +(1 INV+1 FIX)	1 INV*2 +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX)*2	(1 INV+1 FIX) +(1 INV+1 FIX)*2	(1 INV+1 FIX) +(1 INV+1 FIX)*2	(1 INV+1 FIX)*3
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	20	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.8	31.8	31.8	31.8	31.8	38.1	38.1	38.1	38.1	38.1	38.1	38.1
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe lenth	m	300	300	300	300	300	300	300	300	300	300	300	300
	Max pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max drop between I.U.&O.U	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130%	50-130	50-130	50-130	50-130
	Maximum number of indoor units		26	26	26	26	26	26	26	26	26	26	26	26
Working temp.	Cooling	°C	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	°C	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21

* Max. drop between I.U.&O.U. 50/40 Meters (outdoor unit is higher/lower than indoor units).
* All the specifications are tested under nominal conditions: cooling, Indoor temp is 27°C DB/19°C WB, Outdoor temp 35°C DB/24°C WB; in heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB.

IMVF Heat Pump

380-400V/3Ph/50-60Hz

8 /10 HP

12/14/16 HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Basic model units: 8 HP, 10 HP, 12 HP, 14 HP, 16 HP

Free combination up to 48 HP

Model				CA43BV224-V2J1H	CA43BV280-V2J1H	CA43BV335-V2J1H	CA43BV400-V2J1H	CA43BV450-V2J1H	CA43BV504-V2J1H	CA43BV560-V2J1H	CA43BV615-V2J1H	CA43BV680-V2J1H	CA43BV730-V2J1H	CA43BV800-V2J1H	CA43BV850-V2J1H	CA43BV900-V2J1H	CA43BV960-V2J1H	CA43BV1010-V2J1H	CA43BV1080-V2J1H	CA43BV1130-V2J1H	CA43BV1180-V2J1H	CA43BV1235-V2J1H	CA43BV1300-V2J1H	CA43BV1350-V2J1H
Combination model				/	/	/	/	/	/	/	/	/	CA43BV280-V2J1H	CA43BV400-V2J1H	CA43BV400-V2J1H	CA43BV450-V2J1H	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV335-V2J1H	CA43BV400-V2J1H	CA43BV450-V2J1H
				/	/	/	/	/	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV280-V2J1H	CA43BV280-V2J1H	CA43BV400-V2J1H	CA43BV400-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H
				/	/	/	/	/	/	/	/	/	/	/	/	/	CA43BV400-V2J1H	CA43BV450-V2J1H	CA43BV400-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H	CA43BV450-V2J1H
Capacity	Capacity range		HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
	Cooling		kW	22.6	28	33.5	40	45	50.6	56	61.5	68	73	80	85	90	96	101	108	113	118	123.5	130	135
	Heating		kW	25	31.5	37.5	45	50	56.5	63	69	76.5	81.5	90	95	100	108	113	121.5	126.5	131.5	137.5	145	150
Electrical parameters	Power supply		Ph/V/Hz	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60
	Cooling	Rated power input	kW	5.27	7.36	10	11.4	13.4	12.63	14.72	17.36	18.76	20.76	22.8	24.8	26.8	26.12	28.12	30.16	32.16	34.16	36.8	38.2	40.2
		Max power input	kW	12.37	14.7	17.54	18.55	20.48	27.07	29.4	29.91	33.25	35.18	37.1	39.03	40.96	47.95	49.88	51.8	53.73	55.66	58.5	59.51	61.44
		Rated current	A	8.7	11.1	14.2	19.05	20.3	19.8	22.2	25.3	30.15	31.4	38.1	39.35	40.6	41.25	42.5	49.2	50.45	51.7	54.8	59.65	60.9
		Max current	A	19.85	23.4	27.9	29.5	32.37	43.25	46.8	47.75	52.9	55.77	59	61.87	64.74	76.3	79.17	82.4	85.27	88.14	92.64	94.24	97.11
	Heating	Rated power input	kW	5.89	7.97	10	11.6	13.5	13.86	15.94	17.97	19.57	21.47	23.2	25.1	27	27.54	29.4	31.17	33.07	34.97	37	38.6	40.5
		Max power input	kW	9.77	11.9	14.6	16.6	17.8	21.67	23.6	24.37	28.5	29.7	33.2	34.4	35.6	40.4	41.6	45.1	46.3	47.5	50.2	52.2	53.4
		Rated current	A	9.7	12.5	15.1	17.96	19.3	22.2	25	27.6	30.46	31.8	35.92	37.26	38.6	42.96	44.3	48.42	49.76	51.1	53.7	56.56	57.9
		Max current	A	15.7	19	23.3	26.5	28.4	34.7	38	39	45.5	47.4	53	54.9	56.8	64.5	66.4	72	73.9	75.8	80.1	85.3	85.2
	EER			4.29	3.80	3.35	3.51	3.36	4.01	3.80	3.54	3.62	3.52	3.51	3.43	3.36	3.68	3.59	3.58	3.51	3.45	3.36	3.40	3.36
	COP			4.24	3.95	3.75	3.88	3.70	4.08	3.95	3.84	3.91	3.80	3.88	3.78	3.70	3.92	3.84	3.90	3.83	3.76	3.72	3.76	3.70
Performance	Air flow (H)		m³/h	11000	11000	14100	14100	14100	22200	22200	25200	25200	25200	28200	28200	28200	36300	36300	39300	39300	39300	42300	42300	42300
	Sound pressure level (H)		dB(A)	57	57	60	60	60	60	60	61	61	61	62	62	62	63	63	63	63	63	64	64	64
	Sound power level (H)		dB(A)	73	73	76	76	76	77	77	78	78	78	79	79	79	81	81	81	81	81	82	82	82
Installation	External dimensions (W/D/H)		mm	990/750/1808	990/750/1808	1390/750/1808	1390/750/1808	1390/750/1808	990/750/1808+ 990/750/1808	990/750/1808+ 990/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808
	Shipping dimensions (W/D/H)		mm	1090/860/1990	1090/860/1990	1490/860/1990	1490/860/1990	1490/860/1990	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990
	Net/Shipping weight		kg	240/255	240/255	360/378	360/378	368/386	480/510	480/510	600/633	600/633	608/641	720/756	728/764	736/772	840/888	848/896	960/1011	968/1019	976/1027	1086/1150	1086/1150	1104/1158
	Compressor type			DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL
	Compressor brand			MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity			1 INV	1 INV	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 INV	1 INV+1 INV	(1 INV) +(1 INV+1 FIX)	(1 INV) +(1 INV+1 FIX)	(1 INV) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)
	Refrigerant type			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge		kg	10	10	10	10	10	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe		mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe		mm	19.05	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58	31.8	31.8	31.8	31.8	31.8	38.1	38.1	38.1	38.1	38.1	38.1	38.1
	Oil equalization pipe		mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe lenth		m	300	300	500	500	500	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Max pipe length(Equivalent/Actual)		m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max drop between I.U.&O.U.		m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure		Pa	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio		%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units			13	16	19	23	26	29	33	36	39	43	46	50	53	56	59	63	64	64	64	64	64
Working temp.	Cooling		°C	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating		°C	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21

* Max. drop between I.U.& O.U.: 50/40 Meters (outdoor unit is higher/lower than indoor units).
* All the specifications are tested under nominal condition:Or cooling, Indoor temp is 27°C DB/19°C WB, Outdoor temp 35°C DB/24°C WB, In heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB.

023 IMVF Mini (Side Discharge) 3/5/7 HP

027 IMVF Mini (Side Discharge) 5/7/8/10/12 HP

IMVF

Inverter Multi Variable Flow

Mini

IMVF Mini (Side Discharge) 3/5/7 HP

FEATURES&BENEFITS

DC INVERTER TWIN ROTARY COMPRESSOR

Realize high efficiency and compact designed compressor by joint wrap & earths metal magnet motor.
Wide range inverter compressors would satisfy the customer's innovative requirement and design.

DC INVERTER TWIN ROTARY COMPRESSOR

DC INVERTER TECHNOLOGY

DC inverter motor

•DC fan motor speed can be adjusted from 0~1000 r/min, it can improve the unit efficiency, at the same time, the unit can realize low ambient cooling operation.

High efficiency

Low vibration, low noise

High reliability

OPERATION RANGE

•MRV SI series permits a system design considering a heating range operation under a low temperature condition from -15°C of previous model and a cooling range operation -5°C.

•For the capacities under low temperature conditions, please see technical data sheets.

PRECISE CONTROL

•PID control adjusts the output of compressor and the open degree of EEV, balances the indoor refrigerant flow, realizes the linear output, creates a comfortable environment. The temperature could be controlled precisely.

P : Proportion adjustment
I : Integral adjustment
D : Differential adjustment

FEATURES & BENEFITS

180° VECTOR CONTROL TECHNOLOGY

•Haier using power resistance to detect the rotor position of compressor, results in the consistency of the compressor working current and current sine waves, improve power efficiency about 17%.

Conventional control

180° vector control

SIDE DISCHARGE MRV SI OUTDOOR UNITS

•Dual Frequency 50/60Hz

DC Inverter TWIN Rotary Compressor

BLDC Fan (BrushLess DC motor)

15kW 1 Phase
15kW 3 Phase
18kW 3 Phase

1. Control the compressor running frequency by temp. Sensor, more precise and prompt than conventional control system.
1. Protections: Pressure, temp., compressor, fan motor, refrigerant, oil quantity etc. Realize perfect performance.
1. Malfunction self-diagnose.
2. DC fan motor (AU48/60).
3. DC inverter compressor, high efficiency.
4. Single set valve, easy to installation and save installation time.

IMVF Mini

- CM43BV110-HYJ1H
- CM43BV140-HYJ1H
- CM43BV155-HYJ1H

3 HP

5 /7 HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Model			CM43BV110-HYJ1H	CM43BV140-HYJ1H	CM43BV155-HYJ1H
Capacity	Capacity range	HP	3	5	7
	Cooling	kBtu/h	27.3	51.2	61
		kW	8	15	18
	Heating	kBtu/h	32.4	58	68
		kW	9.5	17	20
Electrical parameters	Power supply	Ph/V/Hz	1 / 208-230 / 50/60	1 / 208-230 / 50/60	1 / 208-230 / 50/60
	Power input (Cooling)	kW	2.2	4.2	6.33
	Power input (Heating)	kW	2.15	4	5.93
	EER/COP		3.64/4.42	3.57/4.25	3.79/4.39
Performance	Air flow (H)	m³/h	3500	6500	
	Sound pressure level (H)	dB(A)	55	59	56
	Sound power level (H)	dB(A)	66	70	67
Installation	External dimensions(W/D/H)	mm	960/340/830	960/340/1250	960×380×1250
	Shipping dimensions(W/D/H)	mm	1095/410/945	1095/410/1400	1090×410×1408
	Net/Shipping weight	kg	74/89	105/113	105/113
	Compressor type		Rotary	Rotary	Rotary
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1 INV	1 INV	1 INV
	Refrigerant type		R410A	R410A	R410A
	Refrigerant charge	kg	2.6	3.6	3.8
	Refrigerant liquid pipe	mm	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	19.05	19.05
	Total pipe lenth	m	50	100	150
	Max. pipe length(Equivalent/Actual)	m	35	70	70
	Max drop between I.U.&O.U	m	30	30	30
Connection ratio	Connectable indoor unit ratio	%	50~130	50%~130%	
	Maximum number of indoor units		4	8	9
Working temp.	Cooling	℃	10~43	-5~43	-5~43
	Heating	℃	-15~21	-15~21	-15~21

* All the specifications are tested under nominal conditions:In cooling, Indoor temp is 27°C DB/19°C WB, Outdoor temp 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB)

IMVF Mini (Side Discharge)
5/7/8/10/12 HP

OUTDOOR STRUCTURE

More Outdoor Capacity, More Flexible Application

High efficiency DC fan motor

•DC fan motor with stepless inverter control, efficiency increase 45% comparing with AC motor and power input largely decrease

Large diameter fan

•570mm big diameter axial flow fan
•Zigzag design, reduce airflow disturbance, air volume is bigger, the noise is lower

High efficiency condenser

•New type high efficiency Ø8 inner grooved tube
•New hydrophilic corrugated fissure fin, high efficiency

Vector inverter control

•180 degrees sine wave vector control, 64-bit operation
•High precision control, to achieve high efficiency and lower noise

Double pressure sensor

•Equipped with high and low voltage Pressure double sensors
•Accurate Pressure control, the system run more smoothly, more energy efficiency

Twin rotary DC Inverter compressor

•High chamber DC INVERTER twin rotary compressor
•Small vibration, low noise, high energy efficiency

1 Energy Efficiency

2 Comfort Environment

3 Side Discharge and Compact Design

4 High Reliability

ENERGY EFFICIENCY

High EER and COP

DC Fan and Fan Motor

DC inverter fan motor more higher efficiency in part load running

•16-stage speed control; high efficiency running especially in low speed

•Efficiency increase 45% comparing with AC motor and power input largely decrease

Big diameter fan

•570mm big diameter fan, more big air flow and more higher efficiency

AC motor efficiency

Ø570mm fan

DC motor efficiency

DC motor

LOW NOISE LEVEL

Night Quiet Operation Function

Noise can be reduced to 45dB(A)

Low noise operation

•DC INVERTER compressor, smooth operation, no need frequent start the compressor, effectively reduce the noise outdoor

•Vector inverter control, more precise control

•DC fan motor, motor bracket used the non-resonance structure, ensure smooth running of the motor, reduce operating noise

•Big diameter fan, design according to aviation quieter principle

FEATURES&BENEFITS

EASY INSTALLATION

Compact Side Discharge Design, Big Capacity, Small Floor Area

Small floor area, only 0.42m², 43% floor area can be reduced

Compact Side Discharge Design

No need additional ventilation hood comparing with top discharge unit

4 Way pipe connection

Front, rear, right, down 4 way pipe connection, flexible installation

New DC Inverter Twin Rotary Compressor

- Small torque change, good dynamic balance, the system runs stably, little vibration, low noise, high efficiency
- Higher efficiency in part load running

Long Pipe Length, High Height Drop

- Total pipe length: 300m
- Single pipe length: Max.175m
- From outdoor to the first branch pipe: 135m
- From the first branch to the farthest indoor door unit: 40m
- Height drop: 50m(outdoor above)/40m (outdoor below)
- Height drop between indoor units: 15m

Separate Refrigerant Charging Valve

Easy for refrigerant charging

EASY SERVICE

Parameter Display Panel

- The first original parameter display panel on the side
- The parameter can be observed directly by opening the protective cover in case of maintenance, to avoid removing the repair board

Easy Maintenance for Control

- The control box is in front, reserving space 108mm between control box and top panel, easy maintenance from the top Control box is with hinge design, easy to open for maintenance

FEATURES & BENEFITS

HIGH RELIABILITY

Refrigerant Automatically Reclaim Technology

•Set refrigerant automatically reclaim through dip switch, the refrigerant in indoor and pipe can be automatically return to outdoor, convenient in maintenance and reducing waste of refrigerant, reduce customer maintenance cost, improve the efficiency of after-sales maintenance

Refrigerant Control Technology

•Refrigerant control technology without high pressure accumulator, reducing the refrigerant volume and enhancing the running efficiency

Air Inlet Grill Design on Right Side Panel

•Air inlet grill design, reducing the module temperature and avoid air dust into air conditioner

High and Low Double Pressure Sensor

•Double pressure sensor with PID control technology

•Together with high speed communication to realize the quick start of compressor and more precise control, the temperature can be control ±0.5°C

IMVF Mini

- CM43BV140-HEJ1H
- CM43BV160-HEJ1H
- CA43BV224-HEJ1H
- CA43BV280-HEJ1H
- CA43BV335-HEJ1H

5 /7 HP

8 /10 /12 HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Model			CM43BV140-HEJ1H	CM43BV160-HEJ1H	CA43BV224-HEJ1H	CA43BV280-HEJ1H	CA43BV335-HEJ1H
Capacity	Capacity range	HP	5	7	8	10	12
	Cooling	kBtu/h	51.2	61.4	77.1	95.5	114.3
		kW	15	18	22.6	28	33.5
	Heating	kBtu/h	58	68.2	85.3	107.5	128
		kW	17	20	25	31.5	37.5
Electrical parameters	Power supply	PhV/Hz	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60
	Power input (Cooling)	kW	4.2	5.5	5.79	8	9.75
	Power input (Heating)	kW	4	5.25	5.43	7.5	9.62
	EER/COP		3.57/4.25	3.27/3.8	3.9/4.6	3.5/4.2	3.44/3.9
Performance	Air flow (H)	m³/h	6500	6500	10000	10000	10000
	Sound pressure level (H)	dB(A)	59	60	55	58	60
	Sound power level (H)	dB(A)	70	71	66	69	71
Installation	External dimensions(W/D/H)	mm	960/340/1250	960/340/1250	1050/400/1636	1050/400/1636	1050/400/1636
	Shipping dimensions(W/D/H)	mm	1095/410/1400	1095/410/1400	1150/510/1795	1150/510/1795	1150/510/1795
	Net/Shipping weight	kg	105/113	105/113	168/183	168/183	168/183
	Compressor type		Rotary	Rotary	Rotary	Rotary	Rotary
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1 INV	1 INV	1 INV	1 INV	1 INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	4	4	7.4	7.4	7.4
	Refrigerant liquid pipe	mm	9.52	9.52	9.52	12.7	12.7
	Refrigerant gas pipe	mm	19.05	19.05	19.05	22.22	25.4
	Total pipe lenth	m	100	100	300	300	300
	Max. pipe length(Equivalent/Actual)	m	70	70	175/135	175/135	175/135
	Max drop between I.U.&O.U	m	30	30	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50%-130%	50%-130%	50%-130%	50%-130%	50%-130%
	Maximum number of indoor units		8	9	13	16	19
Working temp.	Cooling	°C	-5-43	-5-43	-5-43	-5-43	-5-43
	Heating	°C	-15-21	-15-21	-15-21	-15-21	-15-21

* All the specifications are tested under nominal conditions:In cooling, Indoor temp is 27°C DB/19°C WB, Outdoor temp 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB)

IMVF
Inverter Multi Variable Flow

Heat Recovery

IMVF HEAT RECOVERY

IMVF Heat Recovery

•Cooling and heating simultaneously with only one outdoor unit •Heat recovery system

Heat pump system

Heat recovery system

Variable Operation Mode in One System

SYSTEM INTRODUCTION

IMVF Heat Recovery

All Cooling Circuit

•12/14/16 HP double compressor module for example

SYSTEM INTRODUCTION

All Heating Circuit

Cooling > Heating Circuit

•12/14/16 HP double compressor module for example

Cooling < Heating Circuit

•12/14/16 HP double compressor module for example

Cooling = Heating Circuit

•12/14/16 HP double compressor module for example

SYSTEM INTRODUCTION

Light Part Load Cooling

•12/14/16 HP double compressor module for example, little indoor heating, others off

Light Part Load Heating

•12/14/16 HP double compressor module for example, little indoor heating, others off

OUTDOOR STRUCTURE

USER FRIENDLY OUTDOOR STRUCTURE

Core Technologies and Parts

Patent fan design and DC fan motor
•Air flow improved by 17.5% with patent fan design
•Noise reduced 3 dB(A) with DC fan motor

2 stages heat exchanger
Separate control and heat exchanger size can be adjusted, effectively cope with small load operation, to ensure reliable operation

Forced heat dissipation fan
Forced heat dissipation fan inside the electric control box, to ensure the stable internal temperature and stable system operation

4 way air return
Reduce the heat exchanger height(650mm), and the upper and lower wind speed uniform and high efficiency

Double EEV design
The double EEV control the 2 stages heat exchanger separately, which can adjust the condenser volume

DC Inverter scroll Compressor
•DC inverter scroll compressor from Mitsubishi electric
•For big module, also with another fixed-speed compressor from mitsubishi electric

INNER SYSTEM

Core Parts: For 12/14/16 HP Single Module

INNER SYSTEM

Core Parts: For 12/14/16 HP Single Module

VP (VALVE PIPE) BOX STRUCTURE

OVERVIEW

Individual Valve + Pipe Box for Heat Recovery
•High comfort: Individual control box and change over for one group indoor units
•Super slim built-in height: only 180mm
•Threaded joint connection, easy for installation

Model name	Max.capacity of indoor(kw)	Power Supply	Max. indoor units	Dimension
VP1-112A	x≤11.2	1/220-240/50/60	5	400/365/180
VP1-180A	11.2<x≤18	1/220-240/50/60	8	400/365/180
VP1-280A	18<x≤28	1/220-240/50/60	8	400/365/180

SYSTEM INTRODUCTION

TYPICAL HEAT RECOVERY SYSTEM

The heat discharged from outdoor unit can be used to cooling Indoor units. It can save energy above 30% averagely

Mode	Heat Recovery system operation	Part Load	Energy Saving
Cooling only (10 HP outdoor each indoor 2HP)			0%
Heating only (10 HP outdoor)			0%
Cooling>Heatinng			20%
Cooling=Heatinng			50%
Cooling<Heatinng			40%

SYSTEM INTRODUCTION

WIDE TEMPERATURE OPERATION RANGE

IMVF Heat Recovery

208-230V/3Ph/60Hz

8 /10 HP

12/14/16 HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Basic model units: 8 HP, 10 HP, 12 HP, 14 HP, 16 HP

Free combination up to 48 HP

Model			CA43BV224-V5J1S	CA43BV280-V5J1S	CA43BV335-V5J1S	CA43BV400-V5J1S	CA43BV450-V51S	CA43BV504-V5J1S	CA43BV560-V5J1S	CA43BV615-V5J1S	CA43BV670-V5J1S
Combination model			/	/	/	/	/	CA43BV224-VDJ1S	CA43BV280-VDJ1S	CA43BV280-VDJ1S	CA43BV335-VDJ1S
			/	/	/	/	/	CA43BV280-VDJ1S	CA43BV280-VDJ1S	CA43BV335-VDJ1S	CA43BV400-VDJ1S
			/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	24
	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5	68
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69	76.5
Electrical parameters	Power supply	Ph/V/Hz	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60
	Cooling Rated power input	kW	5.81	7.55	9.18	12.3	14.1	13.36	15.1	16.73	19.85
	Cooling Max power input	kW	12.5	14.5	16.5	18.5	20	27	29	31	33
	Cooling Rated current	A	16.40	21.31	25.91	34.71	39.79	37.70	42.61	47.21	56.02
	Cooling Max current	A	38.6	44.7	50.9	57.1	61.7	83.3	89.4	95.6	101.8
	Heating Rated power input	kW	6.1	7.97	9.15	11.1	13.5	14.07	15.94	17.12	19.07
	Heating Max power input	kW	12.5	14.5	16.5	18.5	20	27	29	31	33
	Heating Rated current	A	17.21	22.49	25.82	31.32	38.10	39.70	44.98	48.31	53.81
	Heating Max current	A	38.6	44.7	50.9	57.1	61.7	83.3	89.4	95.6	101.8
	EER		3.86	3.71	3.65	3.25	3.19	3.77	3.71	3.68	3.43
	COP		4.10	3.95	4.10	4.05	3.70	4.02	3.95	4.03	4.01
Performance	Air flow (H)	m³/h	11100	11100	14100	14100	14100	22200	22200	25200	25200
	Sound pressure level (H)	dB(A)	57	57	60	60	60	60	60	61	61
	Sound power level (H)	dB(A)	73	73	76	76	76	77	77	78	78
Installation	External dimensions (W/D/H)	mm	990/750/1808	990/750/1808	1390/750/1808	1390/750/1808	1390/750/1808	990/750/1808+ 990/750/1808	990/750/1808+ 990/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808
	Shipping dimensions (W/D/H)	mm	1090/860/1990	1090/860/1990	1490/860/1990	1490/860/1990	1490/860/1990	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990
	Net/Shipping weight	kg	240/268	240/268	368/393	368/393	368/393	480/536	480/536	608/661	608/641
	Compressor type		DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1 INV	1 INV	1 INV +1 FIX	1 INV +1 FIX	1 INV +1 FIX	1 INV +1 INV	1 INV +1 INV	(1 INV) +(1 INV+1 FIX)	(1 INV) +(1 INV+1 FIX)
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10	10	10	10	10	20	20	20	20
	Refrigerant liquid pipe	mm	9.52	9.52	12.70	12.70	12.70	15.88	15.88	15.88	15.88
	Refrigerant gas pipe	mm	19.05	22.22	25.40	25.40	28.58	28.58	28.58	28.58	28.58
	Gas pipe	mm	19.05	19.05	22.22	22.22	22.22	25.40	25.40	25.40	25.40
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe length	m	300	300	300	300	300	300	300	300	300
	Max pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max drop between I.U.&O.U	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		13	16	19	23	26	29	33	36	39
Working temp.	Cooling	℃	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	℃	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5
	Cooling & Heating	℃	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18

Model			CA43BV728-V5J1S	CA43BV784-V5J1S	CA43BV840-V5J1S	CA43BV895-V5J1S	CA43BV950-V5J1S	CA43BV1005-V5J1S	CA43BV1060-V5J1S	CA43BV1115-V5J1S	CA43BV1170-V5J1S	CA43BV1225-V5J1S	CA43BV1280-V5J1S	CA43BV1335-V5J1S
Combination model			CA43BV280-VDJ1S	CA43BV400-VDJ1S	CA43BV400-VDJ1S	CA43BV450-VDJ1S	CA43BV280-VDJ1S	CA43BV280-VDJ1S	CA43BV280-VDJ1S	CA43BV280-VDJ1S	CA43BV280-VDJ1S	CA43BV335-VDJ1S	CA43BV400-VDJ1S	CA43BV450-VDJ1S
			CA43BV450-VDJ1S	CA43BV400-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S	CA43BV280-VDJ1S	CA43BV280-VDJ1S	CA43BV400-VDJ1S	CA43BV400-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S
			/	/	/	/	CA43BV400-VDJ1S	CA43BV450-VDJ1S	CA43BV400-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S	CA43BV450-VDJ1S
Capacity	Capacity range	HP	26	28	30	32	34	36	38	40	42	44	46	48
	Cooling	kW	73	80	85	90	96	101	106.5	113	118	123.5	130	135
	Heating	kW	81.5	90	95	100	108	113	119	126.5	131.5	137.5	145	150
Electrical parameters	Power supply	Ph/V/Hz	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60
	Cooling Rated power input	kW	21.65	24.6	26.4	28.2	27.4	29.2	30.83	33.95	35.75	37.38	40.5	42.3
	Cooling Max power input	kW	34.5	37	38.5	40	47.5	49	51	53	54.5	56.5	58.5	60
	Cooling Rated current	A	61.09	69.42	74.50	79.58	77.32	82.40	87.00	95.80	100.88	105.48	114.29	119.37
	Cooling Max current	A	106.4	114.2	118.8	123.4	146.5	151.1	157.3	163.5	168.1	174.3	180.5	185.1
	Heating Rated power input	kW	21.47	22.2	24.6	27	27.04	29.44	30.62	32.57	34.97	36.15	38.1	40.5
	Heating Max power input	kW	34.5	37	38.5	40	47.5	49	51	53	54.5	56.5	58.5	60
	Heating Rated current	A	60.59	62.65	69.42	76.19	76.31	83.08	86.41	91.91	98.68	102.01	107.52	114.29
	Heating Max current	A	106.4	114.2	118.8	123.4	146.5	151.1	157.3	163.5	168.1	174.3	180.5	185.1
	EER		3.57	3.25	3.22	3.19	3.50	3.46	3.45	3.33	3.30	3.30	3.21	3.19
	COP		3.80	4.05	3.86	3.70	3.99	3.84	3.89	3.88	3.76	3.80	3.81	3.70
Performance	Air flow (H)	m³/h	25200	28200	28200	28200	36300	36300	39300	39300	39300	42300	42300	42300
	Sound pressure level (H)	dB(A)	61	62	62	62	63	63	63	63	63	64	64	64
	Sound power level (H)	dB(A)	78	79	79	79	81	81	81	81	81	82	82	82
Installation	External dimensions (W/D/H)	mm	990/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808	990/750/1808+ 990/750/1808+ 1390/750/1808	990/750/1808+ 990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808
	Shipping dimensions (W/D/H)	mm	1090/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1090/860/1990+ 1090/860/1990+ 1490/860/1990	1090/860/1990+ 1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990+ 1490/860/1990
	Net/Shipping weight	kg	608/641	736/786	756/786	736/786	848/929	848/929	976/1054	976/1054	976/1054	1104/1179	1104/1179	1104/1179
	Compressor type		DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		(1 INV) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	20	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.80	31.80	31.80	31.80	34.90	34.90	38.10	38.10	38.10	38.10	38.10	38.10
	Gas pipe	mm	28.58	28.58	28.58	28.58	28.58	28.58	31.80	31.80	31.80	31.80	31.80	31.80
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe length	m	300	300	300	300	300	300	300	300	300	300	300	300
	Max pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max drop between I.U.&O.U	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		43	46	50	53	56	59	63	64	64	64	64	64
Working temp.	Cooling	℃	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	℃	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5	-15~15.5
	Cooling & Heating	℃	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18	-8~18

- 1 outdoor above 50m outdoor below 40m.
- All the specifications are tested under nominal conditions in cooling, Indoor temp is 27°C DB/19°C WB, Outdoor temp. 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB.
- The specification may change according to the further product development.

IMVF Heat Recovery

380-400V/3Ph/60Hz

8/10 HP

12/14/16 HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Power Supply: 3/380-400/50/60

5 Basic Single Modular Units: 8HP, 10HP, 12HP, 14HP, 16HP

Compatible with all the IMVF Indoor Units

DC Inverter Scroll Compressor & BLDC Fan

Max. 3 Modules Combination up to 48HP.

Max Connected Indoor Units up to 64

Model			CA43BV224-V2J1S	CA43BV280-V2J1S	CA43BV335-V2J1S	CA43BV400-V2J1S	CA43BV450-V2J1S	CA43BV504-V2J1S	CA43BV560-V2J1S	CA43BV615-V2J1S	CA43BV680-V2J1S
Combination model			/	/	/	/	/	CA43BV224-V2J1S	CA43BV280-V2J1S	CA43BV280-V2J1S	CA43BV280-V2J1S
			/	/	/	/	/	CA43BV280-V2J1S	CA43BV280-V2J1S	CA43BV335-V2J1S	CA43BV400-V2J1S
			/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	24
	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5	68
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69	76.5
Electrical parameters	Power supply	Ph/V/Hz	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60
	Cooling Rated power input	kW	5.81	7.55	9.18	12.3	14.1	13.36	15.1	16.73	19.85
	Max power input	kW	12.37	14.7	17.54	18.55	20.48	27.07	29.4	32.24	33.25
	Rated current	A	9.49	12.33	15.00	20.10	23.04	21.83	24.67	27.33	32.43
	Max current	A	19.85	23.4	27.9	29.5	32.37	43.25	46.8	51.3	52.9
	Heating Rated power input	kW	6.1	7.97	9.15	11.1	13.5	14.07	15.94	17.12	19.07
	Max power input	kW	9.77	11.9	14.6	16.6	17.8	21.67	23.8	26.5	28.5
	Rated current	A	9.97	13.02	14.95	18.13	22.06	22.99	26.04	27.97	31.16
	Max current	A	15.7	19	23.3	26.5	28.4	34.7	38	42.3	45.5
	EER		3.86	3.71	3.65	3.25	3.19	3.77	3.71	3.68	3.43
	COP		4.10	3.95	4.10	4.05	3.70	4.02	3.95	4.05	4.01
Performance	Air flow (H)	m³/h	11100	11100	14100	14100	14100	22200	22200	25200	25200
	Sound pressure level (H)	dB(A)	57	57	60	60	60	60	60	61	61
	Sound power level (H)	dB(A)	73	73	76	76	76	77	77	78	78
Installation	External dimensions (W/D/H)	mm	990/750/1808	990/750/1808	1390/1808/750	1390/1808/750	1390/1808/750	990/750/1808+ 990/750/1808	990/750/1808+ 990/750/1808	990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808
	Shipping dimensions (W/D/H)	mm	1090/860/1990	1090/860/1990	1490/1990/860	1490/1990/860	1490/1990/860	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1090/860/1990	1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990
	Net/Shipping weight	kg	240/268	240/268	368/393	368/393	368/393	480/536	480/536	608/661	608/641
	Compressor type		DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1 INV	1 INV	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 FIX	1 INV+1 INV	1 INV+1 INV	(1 INV) +(1 INV+1 FIX)	(1 INV) +(1 INV+1 FIX)
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10	10	10	10	10	20	20	20	20
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Refrigerant gas pipe	mm	19.05	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58
	Gas pipe	mm	19.05	19.05	22.22	22.22	22.22	25.4	25.4	25.4	25.4
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe lenth	m	300	300	300	300	300	300	300	300	300
	Max. pipe lenght(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max drop between I.U.&O.U	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		11	16	19	23	26	29	33	36	39
Working temp.	Cooling	°C	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	°C	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21

Model			CA43BV710-V2J1S	CA43BV800-V2J1S	CA43BV850-V2J1S	CA43BV900-V2J1S	CA43BV960-V2J1S	CA43BV1010-V2J1S	CA43BV1080-V2J1S	CA43BV1130-V2J1S	CA43BV1180-V2J1S	CA43BV1235-V2J1S	CA43BV1300-V2J1S	CA43BV1350-V2J1S
Combination model			CA43BV280-V2J1S	CA43BV400-V2J1S	CA43BV400-V2J1S	CA43BV450-V2J1S	CA43BV280-V2J1S	CA43BV280-V2J1S	CA43BV280-V2J1S	CA43BV280-V2J1S	CA43BV280-V2J1S	CA43BV335-V2J1S	CA43BV400-V2J1S	CA43BV450-V2J1S
			CA43BV450-V2J1S	CA43BV400-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S	CA43BV280-V2J1S	CA43BV280-V2J1S	CA43BV400-V2J1S	CA43BV400-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S
			/	/	/	/	CA43BV400-V2J1S	CA43BV450-V2J1S	CA43BV400-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S	CA43BV450-V2J1S
Capacity	Capacity range	HP	26	28	30	32	34	36	38	40	42	44	46	48
	Cooling	kW	73	80	85	90	96	101	106.5	113	118	123.5	130	135
	Heating	kW	81.5	90	95	100	108	113	119	126.5	131.5	137.5	145	150
Electrical parameters	Power supply	Ph/V/Hz	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60
	Cooling Rated power input	kW	21.65	24.6	26.4	28.2	27.4	29.2	30.83	33.95	35.75	37.38	40.5	42.3
	Max power input	kW	35.18	37.1	39.03	40.96	47.95	49.88	52.72	53.73	55.66	58.5	59.51	61.44
	Rated current	A	35.37	40.19	43.13	46.07	44.76	47.71	50.37	55.47	58.41	61.07	66.17	69.11
	Max current	A	55.77	59	61.87	64.74	76.3	79.17	83.67	85.27	88.14	92.64	94.24	97.11
	Heating Rated power input	kW	21.47	22.2	24.6	27	27.04	29.44	30.62	32.57	34.97	36.15	38.1	40.5
	Max power input	kW	29.7	33.2	34.4	35.6	40.4	41.6	44.3	46.3	47.5	50.2	52.2	53.4
	Rated current	A	35.08	36.27	40.19	44.11	44.18	48.10	50.03	53.21	57.13	59.06	62.25	66.17
	Max current	A	47.4	53	54.9	56.8	64.5	66.4	70.7	73.9	75.8	80.1	83.3	85.2
	EER		3.37	3.25	3.22	3.19	3.50	3.46	3.45	3.33	3.30	3.30	3.21	3.19
	COP		3.80	4.05	3.86	3.70	3.99	3.84	3.89	3.88	3.76	3.80	3.81	3.70
Performance	Air flow (H)	m³/h	25200	28200	28200	28200	36300	36300	39300	39300	39300	42300	42300	42300
	Sound pressure level (H)	dB(A)	61	62	62	62	63	63	63	63	63	64	64	64
	Sound power level (H)	dB(A)	78	79	79	79	81	81	81	81	81	82	82	82
Installation	External dimensions (W/D/H)	mm	990/750/1808+ 990/750/1808+ 1390/750/1808	1390/750/1808+ 990/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	990/750/1808+ 990/750/1808+ 1390/750/1808	990/750/1808+ 990/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	990/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808	1390/750/1808+ 1390/750/1808+ 1390/750/1808
	Shipping dimensions (W/D/H)	mm	1090/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990	1090/860/1990+ 1090/860/1990+ 1490/860/1990	1090/860/1990+ 1090/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990+ 1490/860/1990	1090/860/1990+ 1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990+ 1490/860/1990	1490/860/1990+ 1490/860/1990+ 1490/860/1990
	Net/Shipping weight	kg	608/641	736/786	736/786	736/786	848/929	848/929	976/1054	976/1054	976/1054	1104/1179	1104/1179	1104/1179
	Compressor type		DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL	DC INV SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		(1 INV) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +1 INV +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	1 INV +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)	(1 INV+1 FIX) +(1 INV+1 FIX) +(1 INV+1 FIX)
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	20	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.8	31.8	31.8	31.8	34.9	34.9	38.1	38.1	38.1	38.1	38.1	38.1
	Gas pipe	mm	28.58	28.58	28.58	28.58	28.58	28.58	31.8	31.8	31.8	31.8	31.8	31.8
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe lenth	m	300	300	300	300	300	300	300	300	300	300	300	300
	Max. pipe lenght(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150	175/150
	Max drop between I.U.&O.U	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	External static pressure	Pa	50	50	50	50	50	50	50	50	50	50	50	50
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		43	46	50	53	56	59	63	64	64	64	64	64
Working temp.	Cooling	°C	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	°C	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21	-15~21

* Max. drop between I.U.& O.U.: 50/40 Meters (outdoor unit is higher/lower than indoor units)
* All the specifications are tested under nominal condition (in cooling, Indoor temp is 27°C DB/19°C WB, Outdoor temp 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB)
* The specification may change according to the further product development

IMVF-II
Inverter Multi Variable Flow

Heat Pump

IMVF-II Heat Pump

FEATURES&BENEFITS

IMVF milestones & IMVF-II line up

Largest capacity single module

Single module line-up

Capacity
8,10,12,14,16HP

Capacity
18,20,22,24HP

IMVF milestones & IMVF-II line up

Combination line-up

8~72HP

- Max 3 modules combination 72HP, every 2HP one model.
- Footprint of 72HP only 2.92m², 50% size reduced

8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

FEATURES&BENEFITS

Full DC Inverter High Efficiency

1. Full DC Inverter technology
2. Key parts to support full DC inverter technology
3. High efficiency

Full DC inverter technology

IMVF
- One Compressor
- DC INVERTER x 1

IMVF
- Two Compressor
- One DC INVERTER compressor + One Fixed Speed comp ressor

IMVF-II (16-24HP)
- Two Compressor
- Full DC Inverter x 2

Full new outlook, full DC inverter technology key parts

IPLV(c) up to 8.2, average IPLV(c) up to 7.7, low running cost

Higher energy efficiency than IMVF

FEATURES&BENEFITS

Easy Installation

1. Largest capacity single module, smallest footprint
2. Long pipe length, high height drop
3. High outdoor ESP

Largest capacity single module in the industry: 24HP ,
Smallest footprint in the industry : 0.97m2

All the outdoor with same bottom size

Footprint 41% reduced. Smallest in the industry

Footprint of 72HP only 2.92m², 30% size reduced

82Pa ESP, Long air duct connecting available

Up to 82 Pa outdoor ESP

Longer air duct connecting available

Long pipe length, high height drop

Max. total pipe length **1000m**

Max. Single pipe length **165m** (equivalent pipe **190m**)

Max.Height drop between ID and OD **Max.110m/90m**[*1] Standard 50m/40m

Max height drop between ID **Max 30m**[*2] (Standard 18m)

*1 *2 Need contact your local distributor/dealer for individual design.

FEATURES&BENEFITS

Comfort

1. Wide operation range
2. Low noise, night silent running
3. Optimal temperature control

Wide operation range, -23°C heating, 53°C cooling

Full DC Inverter Comp.

Precise control Tech.

Low noise and night silent running

- 8dB/A noise will be reduced if night silent mode starts.

Optimal Temperature Control

- When a multiple number of indoor units are connected, an insufficient or excess amount of refrigerant may be supplied to indoor units depending on the difference in length of the piping connection from outdoor units
- Optimal refrigerant control uses the indoor coil temperature to detect the air conditioning status of each indoor unit and control the capacity(refrigerant amounts) very precisely

FEATURES&BENEFITS

High Reliability

1. Recycling operation
2. 2 stage oil return
3. Oil temperature sensor
4. Double Pressure sensor
5. Thunder Protection

Recycling operation

Recycling operation, longer life of compressor

Oil Return

If the compressor operate at low frequency,oil return is only through the capillary. If the compressor operate at high frequency,oil return is through the capillary and magnetic valve.

Compressor double protection

Base on the basic gas discharge sensor, IMVF-II add the oil temperature sensor at the bottom of compressor.

With the oil temperature sensor

- Control the on/off of heater of compressor, preventing from the liquid shock of compressor
- Judge if the liquid refrigerant enter into the compressor
- Compressor oil sub heating protection.

- High pressure sensor for every compressor so for the module with 2 compressors ,there are 2 high pressure sensors and 1 low pressure sensors, total 3 sensors

Thunder protection

There are electricity discharge wire in the terminal block, to lead the abnormal voltage into the earth, then to prevent the thunder affect.

Cloud Service Platform

1. Cloud Service

Cloud Service

- 7*24 on-line service
- Intelligent service: failure remind, maintenance mind information
- Energy saving: real-time data saving, provide energy saving solution according to data analysis
- Under development

IMVF-II

380-400V/3Ph/50-60Hz

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Blue fin

8/10/12/14/16HP

18/20/22/24HP

- Single Module: 8/10/12/14/16HP,18/20/22/24HP
- Combination Module: 26-72HP, 2-3 modules
- Full DC INVERTER technology

- Max.1000m total pipe length, Max.110m height drop
- Compatible with all the IMVF indoor units.

Model			AV08NMMEUA	AV10NMMEUA	AV12NMMEUA	AV14NMMEUA	AV16NMMEUA	AV18NMMEUA	AV20NMMEUA	AV22NMMEUA	AV24NMMEUA
Combination model			/	/	/	/	/	/	/	/	/
			/	/	/	/	/	/	/	/	/
			/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	24
	Cooling	kW	25.2	28	33.5	40	45	50.4	56	61.5	68
	Heating	kW	27.3	31.5	37.5	45	50	56.5	63	69	73
Electrical parameters	Power supply	Ph/V/Hz	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60
	Cooling Rated power input	kW	5.79	7.00	8.59	10.26	11.90	13.62	15.56	17.57	19.71
	Max power input	kW	14.02	14.38	14.73	16.91	22.68	22.10	25.19	30.56	37.47
	Rated current	A	9.57	11.56	14.19	16.94	19.66	22.50	25.69	29.02	32.55
	Max current	A	23.09	23.68	25.1	28.4	36.8	36.15	41.1	49.65	60.45
	Heating Rated power input	kW	6.00	7.08	8.72	10.71	12.05	13.95	15.95	18.16	19.47
	Max power input	kW	12.72	13.23	13.68	15.60	17.20	22.68	25.19	27.72	28.62
	Rated current	A	9.91	11.69	14.40	17.69	19.90	23.04	26.34	29.99	32.15
	Max current	A	20.95	21.79	22.1	25.2	27.88	37.8	42	46.05	47.4
	EER		4.35	4.00	3.90	3.90	3.78	3.70	3.60	3.50	3.45
	COP		4.55	4.45	4.30	4.20	4.15	4.05	3.95	3.80	3.75
Performance	Air flow (H)	m^3/h	C:15000/H:13200	C:15000/H:13200	C:15000/H:13200	C:15000/H:13200	C:15600/H:14400	C:16200/H:15000	C:16200/H:15000	C:16200/H:15000	C:16200/H:15000
	Sound pressure level (H)	dB(A)	57	57	59	59.5	61	62	62	62	63
	Sound power level (H)	dB(A)	73	73	75	76	77	79	79	79	80
Installation	External dimensions (W/D/H)	mm	1350×720×1690	1350×720×1690	1350×720×1690	1350×720×1690	1350×720×1690	1350×720×2048	1350×720×2048	1350×720×2048	1350×720×2048
	Shipping dimensions (W/D/H)	mm	1450×826×1885	1450×826×1885	1450×826×1885	1450×826×1885	1450×826×1885	1450×826×2225	1450×826×2225	1450×826×2225	1450×826×2225
	Net/Shipping weight	kg	276/301	276/301	276/301	279/304	321/346	335/360	335/360	359/384	359/384
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1INV	1INV	1INV	1INV	2INV	2INV	2INV	2INV	2INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	9.7	9.7	9.7	10	10	10	10	10	10
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Refrigerant gas pipe	mm	19.05	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Max.total pipe length	m	1000	1000	1000	1000	1000	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual)	m	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165
	Max drop between I.U.&O.U (O.U up/down) *1	m	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110
	Standard drop between I.U.&O.U*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	Max drop between I.U *3	m	30	30	30	30	30	30	30	30	30
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	18
	External static pressure	Pa	82	82	82	82	82	82	82	82	82
Connection ratio	Connectable indoor unit ratio	%	50-160	50-160	50-160	50-160	50-160	50-160	50-160	50-160	50-160
	Maximum number of indoor units		18	20	24	29	33	37	41	45	49
Working temp.	Cooling	℃	(-5-50)								
	Heating	℃	(-23-21)								

Model			AV26NMMEUA	AV28NMMEUA	AV30NMMEUA	AV32NMMEUA	AV34NMMEUA	AV36NMMEUA	AV38NMMEUA	AV40NMMEUA	AV42NMMEUA	AV44NMMEUA	AV46NMMEUA	AV48NMMEUA
Combination model			AV12NMMEUA	AV14NMMEUA	AV14NMMEUA	AV14NMMEUA	AV16NMMEUA	AV18NMMEUA	AV18NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV22NMMEUA	AV24NMMEUA
			AV14NMMEUA	AV14NMMEUA	AV16NMMEUA	AV18NMMEUA	AV18NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV22NMMEUA	AV24NMMEUA	AV24NMMEUA	AV24NMMEUA
Capacity	Capacity range	HP	26	28	30	32	34	36	38	40	42	44	46	48
	Cooling	kW	73.5	80	85	90.4	95.4	101	106.4	112	117.5	124	129.5	136
	Heating	kW	82.5	90	95	101.5	106.5	113	119.5	126	132	136	142	146
Electrical parameters	Power supply	Ph/V/Hz	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60
	Cooling Rated power input	kW	18.85	20.51	22.16	23.88	25.53	27.46	29.18	31.11	33.13	35.27	37.28	39.42
	Max power input	kW	31.64	33.81	39.59	39.00	44.78	47.87	47.28	50.37	55.75	62.66	68.03	74.94
	Rated current	A	31.12	33.88	36.60	39.43	42.16	45.35	48.19	51.38	54.71	58.24	61.57	65.10
	Max current	A	53.5	56.8	65.2	64.55	72.95	77.9	77.25	82.2	90.75	101.55	110.1	120.9
	Heating Rated power input	kW	19.44	21.43	22.76	24.66	26.00	28.00	29.90	31.90	34.11	35.42	37.62	38.93
	Max power input	kW	29.28	31.20	32.80	38.28	39.88	42.39	47.87	50.37	52.91	53.81	56.34	57.24
	Rated current	A	32.10	35.39	37.59	40.73	42.94	46.24	49.38	52.68	56.33	58.49	62.14	64.30
	Max current	A	47.3	50.4	53.08	63	65.68	69.88	79.8	84	88.05	89.4	93.45	94.8
	EER		3.90	3.90	3.84	3.79	3.74	3.68	3.65	3.60	3.55	3.52	3.47	3.45
	COP		4.24	4.20	4.17	4.12	4.10	4.04	4.00	3.95	3.87	3.84	3.77	3.75
Performance	Air flow (H)	m^3/h	C:30000/H:26400	C:30000/H:26400	C:30600/H:27600	C:31200/H:28200	C:31480/H:29400	C:31480/H:29400	C:32400/H:30000	C:32400/H:30000	C:32400/H:30000	C:32400/H:30000	C:32400/H:30000	C:32400/H:30000
	Sound pressure level (H)	dB(A)	62	62.5	63	64	64.5	64.5	65	65	65	65.5	65.5	66
	Sound power level (H)	dB(A)	79	80	80	81	82	82	83	83	83	83	83	84
Installation	External dimensions (W/D/H)	mm	1350×720×1690 +1350×720×1690	1350×720×1690*2	1350×720×1690 +1350×720×1690	1350×720×1690 +1350×720×2048	1350×720×1690 +1350×720×2048	1350×720×1690 +1350×720×2048	1350×720×2048 +1350×720×2048	1350×720×2048*2	1350×720×2048 +1350×720×2048	1350×720×2048 +1350×720×2048	1350×720×2048 +1350×720×2048	(1350×720×2048)*2
	Shipping dimensions (W/D/H)	mm	1450×826×1885 +1450×826×1885	1450×826×1885*2	1450×826×1885 +1450×826×1885	1450×826×1885 +1450×826×2225	1450×826×1885 +1450×826×2225	1450×826×1885 +1450×826×2225	1450×826×2225 +1450×826×2225	1450×826×2225*2	1450×826×2225 +1450×826×2225	1450×826×2225 +1450×826×2225	1450×826×2225 +1450×826×2225	(1450×826×2225)*2
	Net/Shipping weight	kg	276/301+279/304	279/304*2	279/304+321/346	279/304+335/360	321/346+335/360	321/346+335/360	335/360+335/360	335/360*2	335/360+359/384	335/360+359/384	359/384+359/384	(359/384)*2
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1INV+1INV	1INV*2	1INV+2INV	1INV+2INV	2INV+2INV	2INV+2INV	2INV+2INV	2INV*2	2INV+2INV	2INV+2INV	2INV+2INV	2INV*2
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	19.7	20	20	20	20	20	20	20	20	20	20	20
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.8	31.8	31.8	31.8	31.8	38.1	38.1	38.1	38.1	38.1	38.1	38.1
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Max.total pipe length	m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual)	m	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165
	Max drop between I.U.&O.U (O.U up/down) *1	m	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110
	Standard drop between I.U.&O.U*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	Max drop between I.U *3	m	30	30	30	30	30	30	30	30	30	30	30	30
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	18	18	18	18
	External static pressure	Pa	82	82	82	82	82	82	82	82	82	82	82	82
Connection ratio	Connectable indoor unit ratio	%	50-160	50-160	50-160	50-160	50-160	50-160	50-160	50-160	50-160	50-160	50-160	50-160
	Maximum number of indoor units		53	58	62	64	64	64	64	64	64	64	64	64
Working temp.	Cooling	℃	(-5-50)											
	Heating	℃	(-23-21)											

Max drop between I.U.&O.U *1 If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between I.U.&O.U *2 Standard design and production in the factory.
Max drop between I.U. *3 If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between I.U. *4 Standard design and production in the factory.
Connectable indoor unit ratio *5 If the connection capacity is between 130%~160%, you MUST contact your local distributor/dealer for individual design and separate order.
* All the specifications are tested under nominal condition:In cooling, indoor temp. is 27℃ DB/19℃ WB,Outdoor temp.35℃ DB/24WB;In heating, indoor temp.is 20℃ DB;In heating, outdoor temp.is 7℃ DB/6℃ WB)

72HP

IMVF-II

380-400V/3Ph/50-60Hz

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Blue fin

- Single Module: 8/10/12/14/16HP,18/20/22/24HP
- Combination Module: 26-72HP, 2-3 modules
- Full DC INVERTER technology
- Max.1000m total pipe length, Max.110m height drop
- Compatible with all the IMVF indoor units.

Model			AV50NMMEUA	AV52NMMEUA	AV54NMMEUA	AV56NMMEUA	AV58NMMEUA	AV60NMMEUA	AV62NMMEUA	AV64NMMEUA	AV66NMMEUA	AV68NMMEUA	AV70NMMEUA	AV72NMMEUA
Combination model			AV14NMMEUA	AV16NMMEUA	AV16NMMEUA	AV16NMMEUA	AV18NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV22NMMEUA	AV24NMMEUA
			AV18NMMEUA	AV16NMMEUA	AV18NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV22NMMEUA	AV24NMMEUA	AV24NMMEUA	AV24NMMEUA
			AV18NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV20NMMEUA	AV22NMMEUA	AV24NMMEUA	AV24NMMEUA	AV24NMMEUA	AV24NMMEUA	AV24NMMEUA
Capacity	Capacity range	HP	50	52	54	56	58	60	62	64	66	68	70	72
	Cooling	kW	140.8	146	151.4	157	162.4	168	173.5	180	185.5	192	197.5	204
	Heating	kW	158	163	169.5	176	182.5	189	195	199	205	209	215	219
Electrical parameters	Power supply	PhV/Hz	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60	3/380~400/50/60
	Cooling Rated power input	kW	37.50	39.37	41.08	43.02	44.73	46.67	48.68	50.82	52.84	54.98	56.99	59.13
	Max power input	kW	61.10	70.55	69.96	73.05	72.47	75.56	80.93	87.84	93.22	100.13	105.50	112.41
	Rated current	A	61.93	65.01	67.85	71.04	73.88	77.07	80.40	83.93	87.26	90.79	94.12	97.65
	Max current	A	100.7	114.7	114.05	119	118.35	123.3	131.85	142.65	151.2	162	170.55	181.35
	Heating Rated power input	kW	38.62	40.05	41.95	43.95	45.85	47.85	50.06	51.37	53.57	54.88	57.09	58.40
	Max power input	kW	60.96	59.59	65.07	67.57	73.05	75.56	78.09	78.99	81.53	82.43	84.96	85.86
	Rated current	A	63.77	66.14	69.28	72.58	75.72	79.02	82.67	84.83	88.48	90.64	94.29	96.45
	Max current	A	100.8	97.76	107.68	111.88	121.8	126	130.05	131.4	135.45	136.8	140.85	142.2
	EER		3.75	3.71	3.69	3.65	3.63	3.60	3.56	3.54	3.51	3.49	3.47	3.45
	COP		4.09	4.07	4.04	4.00	3.98	3.95	3.90	3.87	3.83	3.81	3.77	3.75
Performance	Air flow (H)	m^3/h	C:44440/H:43200	C:44440/H:43480	C:48000/H:44400	C:48000/H:44400	C:48600/H:45000	C:48600/H:45000	C:48600/H:45000	C:48600/H:45000	C:48600/H:45000	C:48600/H:45000	C:48600/H:45000	C:48600/H:45000
	Sound pressure level (H)	dB(A)	66	66	66.5	66.5	67	67	67	67	67	67.5	67.5	68
	Sound power level (H)	dB(A)	84	84	85	85	85	85	85	85	85	86	86	86
Installation	External dimensions (W/D/H)	mm	1350×720×1690 +(1350×720×2048)*2	(1350×720×1690)*2 +(1350×720×2048)	(1350×720×1690) +(1350×720×2048) +(1350×720×2048)	(1350×720×1690) +(1350×720×2048)*2	(1350×720×2048) +(1350×720×2048)*2	(1350×720×2048)*3	(1350×720×2048)*2 +(1350×720×2048)	(1350×720×2048)*2 +(1350×720×2048)	(1350×720×2048) +(1350×720×2048) +(1350×720×2048)	(1350×720×2048) +(1350×720×2048)*2	(1350×720×2048) +(1350×720×2048)*2	(1350×720×2048)*3
	Shipping dimensions (W/D/H)	mm	1450×826×1885 +(1450×826×2225)*2	(1450×826×1885)*2 +(1450×826×2225)	(1450×826×1885) +(1450×826×2225) +(1450×826×2225)	(1450×826×1885) +(1450×826×2225)*2	(1450×826×2225) +(1450×826×2225)*2	(1450×826×2225)*3	(1450×826×2225)*2 +(1450×826×2225)	(1450×826×2225)*2 +(1450×826×2225)	(1450×826×2225) +(1450×826×2225) +(1450×826×2225)	(1450×826×2225) +(1450×826×2225)*2	(1450×826×2225) +(1450×826×2225)*2	(1450×826×2225)*3
	Net/Shipping weight	kg	279/304+(335/360)*2	(321/346)*2+(335/360)	(321/346)+(335/360)+(335/360)	(321/346)+(335/360)*2	(335/360)+(335/360)*2	(335/360)*3	(335/360)*2+(359/384)	(335/360)*2+(359/384)	(335/360)+(335/360)+(359/384)	(335/360)+(359/384)*2	(335/360)+(359/384)*2	(359/384)*3
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1INV+2INV*2	2INV*2+2INV	2INV+2INV+2INV	2INV+2INV*2	2INV+2INV*2	2INV*3	2INV*2+2INV	2INV*2+2INV	2INV+2INV+2INV	2INV+2INV*2	2INV+2INV*2	2INV*3
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	30	30	30	30	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	22.22	22.22	22.22	22.22
	Refrigerant gas pipe	mm	38.1	38.1	38.1	41.3	41.3	41.3	41.3	41.3	44.5	44.5	44.5	44.5
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Max.total pipe length	m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual)	m	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165
	Max drop between I.U.&O.U (O.U up/down) *1	m	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110
	Standard drop between I.U.&O.U*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	Max drop between I.U *3	m	30	30	30	30	30	30	30	30	30	30	30	30
	Standard drop between I.U*4	m	18	18	18	18	18	18	18	18	18	18	18	18
	External static pressure	Pa	82	82	82	82	82	82	82	82	82	82	82	82
Connection ratio	Connectable indoor unit ratio	%	50~160	50~160	50~160	50~160	50~160	50~160	50~160	50~160	50~160	50~160	50~160	50~160
	Maximum number of indoor units		64	64	64	64	64	64	64	64	64	64	64	64
Working temp.	Cooling	℃	(-5-50)					(-5-50)						
	Heating	℃	(-23-21)					(-23-21)						

Max drop between I.U.&O.U *1 If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between I.U.&O.U *2 Standard design and production in the factory.
Max drop between I.U. *3 If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between I.U. *4 Standard design and production in the factory.
Connectable indoor unit ratio *5 If the connection capacity is between 130%~160%, you MUST contact your local distributor/dealer for individual design and separate order.
* All the specifications are tested under nominal condition in cooling, indoor temp. is 27℃ DB/19℃ WB,Outdoor temp 35℃ DB/24WB.in heating, indoor temp.is 20℃ DB,in heating, outdoor temp.is 7℃ DB/6℃ WB)

IMVF-II

220V/3Ph/50-60Hz

8/10/12/14HP

16/18/20HP

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Blue fin

- Single Module: 8/10/12/14HP,16/18/20HP
- Combination Module: 22-60HP, 2-3 modules
- Full DC INVERTER technology

- Max.1000m total pipe length, Max.110m height drop
- Compatible with all the IMVF indoor units.

Model				CA43CV224-V5J1H	CA43CV280-V5J1H	CA43CV335-V5J1H	CA43CV400-V5J1H	CA43CV450-V5J1H	CA43CV500-V5J1H	CA43CV560-V5J1H	CA43CV615-V5J1H	CA43CV680-V5J1H	CA43CV730-V5J1H	CA43CV800-V5J1H	CA43CV850-V5J1H	CA43CV900-V5J1H	CA43CV960-V5J1H
Combination model				/	/	/	/	/	/	/	CA43CV280-V5J1H	CA43CV280-V5J1H	CA43CV335-V5J1H	CA43CV335-V5J1H	CA43CV400-V5J1H	CA43CV400-V5J1H	CA43CV400-V5J1H
				/	/	/	/	/	/	/	CA43CV335-V5J1H	CA43CV400-V5J1H	CA43CV400-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV500-V5J1H	CA43CV560-V5J1H
				/	/	/	/	/	/	/	/	/	/	/	/	/	/
Capacity	Capacity range		HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34
	Cooling		kW	25.2	28	33.5	40	45	50.4	56	61.5	68	73.5	78.5	85	90.4	96
	Heating		kW	27.3	31.5	37.5	45	50	56.5	63	69	76.5	82.5	87.5	95	101.5	108
Electrical parameters	Power supply		Ph/V/Hz	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60
	Cooling	Rated power input	kW	5.31	6.09	7.61	9.20	10.84	12.60	14.36	13.70	15.29	16.81	18.45	20.04	21.8	23.56
		Max power input	kW	12.19	12.54	12.67	19.44	19.99	20.38	24.38	25.21	31.98	32.11	32.66	39.43	39.82	43.82
		Rated current	A	16.07	18.44	23.06	27.85	32.84	38.16	43.49	41.50	46.29	50.91	55.9	60.69	66.01	71.34
		Max current	A	34.76	35.78	36.15	55.45	57.03	58.12	69.56	71.93	91.23	91.6	93.18	112.48	113.57	125.01
	Heating	Rated power input	kW	5.25	6.36	7.98	9.78	11.11	13.14	15.18	14.34	16.14	17.76	19.09	20.89	22.92	24.96
		Max power input	kW	9.48	10.93	11.67	15.92	17.77	18.62	21.71	22.60	26.85	27.59	29.44	33.69	34.54	37.63
		Rated current	A	15.90	19.27	24.17	29.63	33.65	39.80	45.98	43.44	48.9	53.8	57.82	63.28	69.45	75.61
		Max current	A	27.05	31.19	33.29	45.40	50.68	53.12	61.93	64.48	76.59	78.69	83.97	96.08	98.52	107.33
	EER			4.75	4.60	4.40	4.35	4.15	4.00	3.90	4.49	4.45	4.37	4.25	4.24	4.15	4.07
	COP			5.20	4.95	4.70	4.60	4.50	4.30	4.15	4.81	4.74	4.65	4.58	4.55	4.43	4.33
Performance	Air flow (H)		m³/h	C: 15000/H: 13200	C: 15000/H: 13200	C: 15000/H: 13200	C: 15600/H: 14400	C: 15600/H: 14400	C: 16200/H: 15000	C: 16200/H: 15000	C: 30000/H: 26400	C: 30600/H: 27600	C: 30600/H: 27600	C: 30600/H: 27600	C: 31200/H: 28800	C: 31800/H: 29400	C: 31800/H: 29400
	Sound pressure level (H)		dB(A)	57	57	59	61	61	62	62	61.5	62.5	63.5	63.5	64	64.5	64.5
	Sound power level (H)		dB(A)	73	73	75	77	77	79	79	79	80	81	81	82	82	82
Installation	External dimensions (W/D/H)		mm	1350×720×1690	1350×720×1690	1350×720×1690	1350×720×1690	1350×720×1690	1350×720×2048	1350×720×2048	1350×720×1690 +1350×720×1690	1350×720×1690 +1350×720×1690	1350×720×1690 +1350×720×1690	1350×720×1690 +1350×720×1690	1350×720×1690 +1350×720×1690	1350×720×1690 +1350×720×2048	1350×720×1690 +1350×720×2048
	Shipping dimensions (W/D/H)		mm	1450×826×1885	1450×826×1885	1450×826×1885	1450×826×1885	1450×826×1885	1450×826×2225	1450×826×2225	1450×826×1885 +1450×826×1885	1450×826×1885 +1450×826×1885	1450×826×1885 +1450×826×1885	1450×826×1885 +1450×826×1885	1450×826×1885 +1450×826×1885	1450×826×1885 +1450×826×2225	1450×826×1885 +1450×826×2225
	Net/Shipping weight		kg	276/301	276/301	276/301	321/346	321/346	335/360	335/360	276/301+276/301	276/301+321/346	321/346+276/301	321/346+276/301	321/346+321/346	321/346+335/360	321/346+335/360
	Compressor type			DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand			MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity			1INV	1INV	1INV	2INV	2INV	2INV	2INV	1INV+1INV	1INV+2INV	2INV+1INV	2INV+1INV	2INV+2INV	2INV+2INV	2INV+2INV
	Refrigerant type			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge		kg	9.7	9.7	9.7	10	10	10	10	19.4	19.7	19.7	19.7	20	20	20
	Refrigerant liquid pipe		mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe		mm	19.05	22.22	25.4	28.58	28.58	28.58	28.58	28.58	28.58	31.8	31.8	31.8	31.8	31.8
	Oil equalization pipe		mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Max.total pipe length		m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual)		m	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165
	Max drop between I.U.&O.U (O.U down/up) *1		m	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110
	Standard drop between I.U. &O.U (O.U up/down) *2		m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	Max drop between I.U. *3		m	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	Standard drop between I.U.*4		m	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	External static pressure		Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Connection ratio	Connectable indoor unit ratio		%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units			14	16	20	24	27	30	33	36	40	43	46	50	53	57
Working temp.	Cooling		℃	(-5℃-50℃)						(-5℃-50℃)							
	Heating		℃	(-23℃-21℃)						(-23℃-21℃)							

Max drop between I.U.&O.U *1 If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between I.U.&O.U *2 Standard design and production in the factory.
Max drop between I.U. *3 If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

Standard drop between I.U. *4 Standard design and production in the factory.
* All the specifications are tested under nominal conditions: cooling T1, indoor temp. is 27℃ DB/19℃ WB,Outdoor temp 35℃ DB/24WB;in cooling T3, indoor temp. is 27℃ DB/19℃ WB,Outdoor temp 46℃ DB/24WB;in heating, indoor temp is 20℃ DB;in heating, outdoor temp is 7℃ DB/6℃WB)

60HP

IMVF-II

220V/3Ph/50-60Hz

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Blue fin

- Single Module: 8/10/12/14HP,16/18/20HP
- Combination Module: 22-60HP, 2-3 modules
- Full DC INVERTER technology
- Max.1000m total pipe length, Max.110m height drop
- Compatible with all the IMVF indoor units.

Model			CA43CV1010-V5J1H	CA43CV1080-V5J1H	CA43CV1130-V5J1H	CA43CV1180-V5J1H	CA43CV1235-V5J1H	CA43CV1300-V5J1H	CA43CV1350-V5J1H	CA43CV1400-V5J1H	CA43CV1460-V5J1H	CA43CV1520-V5J1H	CA43CV1575-V5J1H	CA43CV1640-V5J1H	CA43CV1690-V5J1H
Combination model			CA43CV450-V5J1H	CA43CV500-V5J1H	CA43CV560-V5J1H	CA43CV335-V5J1H	CA43CV335-V5J1H	CA43CV400-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV500-V5J1H	CA43CV500-V5J1H	CA43CV560-V5J1H
			CA43CV560-V5J1H	CA43CV560-V5J1H	CA43CV560-V5J1H	CA43CV400-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV500-V5J1H	CA43CV500-V5J1H	CA43CV560-V5J1H	CA43CV560-V5J1H
			/	/	/	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV450-V5J1H	CA43CV500-V5J1H	CA43CV560-V5J1H	CA43CV560-V5J1H	CA43CV560-V5J1H	CA43CV560-V5J1H	CA43CV560-V5J1H
Capacity	Capacity range	HP	36	38	40	42	44	46	48	50	52	54	56	58	60
	Cooling	kW	101	106.4	112	118.5	123.5	130	135	140.4	146	151.4	156.8	162.4	168
	Heating	kW	113	119.5	126	132.5	137.5	145	150	156.5	163	169.5	176	182.5	189
Electrical parameters	Power supply	Ph/V/Hz	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60
	Cooling	Rated power input	25.2	26.96	28.72	27.65	29.29	30.88	32.52	34.28	36.04	37.8	39.56	41.32	43.08
		Max power input	44.37	44.76	48.76	52.1	52.65	59.42	59.97	60.36	64.36	64.75	65.14	69.14	73.14
		Rated current	76.33	81.65	86.98	83.75	88.74	93.53	98.52	103.84	109.17	114.49	119.81	125.14	130.47
		Max current	126.59	127.68	139.12	148.63	150.21	169.51	171.09	172.18	183.62	184.71	185.8	197.24	208.68
	Heating	Rated power input	26.29	28.32	30.36	28.87	30.2	32	33.53	35.36	37.4	39.43	41.46	43.5	45.54
		Max power input	39.48	40.33	43.42	45.36	47.21	51.46	53.31	54.16	57.25	58.1	58.95	62.04	65.13
		Rated current	79.63	85.78	91.96	87.45	91.47	96.93	100.95	107.1	113.28	119.43	125.58	131.76	137.94
		Max current	112.61	115.05	123.86	129.37	134.65	146.76	152.04	154.48	163.29	165.73	168.17	176.98	185.79
	EER		4.01	3.95	3.90	4.29	4.22	4.21	4.15	4.10	4.05	4.01	3.96	3.93	3.90
	COP		4.30	4.22	4.15	4.59	4.55	4.53	4.50	4.43	4.36	4.30	4.25	4.20	4.15
Performance	Air flow (H)	m³/h	C: 31800/H: 29400	C: 32400/H: 30000	C: 32400/H: 30000	C: 46200/H: 42000	C: 46200/H: 42000	C: 46800/H: 43200	C: 46800/H: 43200	C: 47400/H: 43800	C: 47400/H: 43800	C: 48000/H: 44400	C: 48600/H: 45000	C: 48600/H: 45000	C: 48600/H: 45000
	Sound pressure level (H)	dB(A)	64.5	65	65	65.5	65.5	66	66	66.5	66.5	66.5	67	67	67
	Sound power level (H)	dB(A)	82	83	83	84	84	84	84	85	85	85	85	85	85
Installation	External dimensions (W/D/H)	mm	1350×720×1690 +1350×720×2048	1350×720×2048 +1350×720×2048	(1350×720×2048)*2	1350×720×1690+1350×720×1690 +1350×720×1690	1350×720×1690+1350×720×1690 +1350×720×1690	(1350×720×1690)*2 +1350×720×1690	(1350×720×1690)*3	(1350×720×1690)*2 +1350×720×2048	(1350×720×1690)*2 +1350×720×2048	1350×720×1690+1350×720 ×2048+1350×720×2048	1350×720×2048 +(1350×720×2048)*2	1350×720×2048 +(1350×720×2048)*2	(1350×720×2048)*3
	Shipping dimensions (W/D/H)	mm	1450×826×1885 +1450×826×2225	1450×826×2225 +1450×826×2225	(1450×826×2225)*2	1450×826×1885+1450×826×1885 +1450×826×1885	1450×826×1885+1450×826×1885 +1450×826×1885	(1450×826×1885)*2 +1450×826×1885	(1450×826×1885)*3	(1450×826×1885)*2 +1450×826×2225	(1450×826×1885)*2 +1450×826×2225	1450×826×1885+1450×826 ×2225+1450×826×2225	1450×826×2225 +(1450×826×2225)*2	1450×826×2225 +(1450×826×2225)*2	(1450×826×2225)*3
	Net/Shipping weight	kg	321/346+335/360	335/360+335/360	(335/360)*2	276/301+321/346+321/346	276/301+321/346+321/346	(321/346)*2+321/346	(321/346)*3	(321/346)*2+335/360	(321/346)*2+335/360	321/346+335/360+335/360	335/360+(335/360)*2	335/360+(335/360)*2	(335/360)*3
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		2INV+2INV	2INV+2INV	(2INV)*2	1INV+2INV+2INV	1INV+2INV+2INV	(2INV)*2+2INV	(2INV)*3	(2INV)*2+2INV	(2INV)*2+2INV	2INV+2INV+2INV	2INV+(2INV)*2	2INV+(2INV)*2	(2INV)*3
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	29.7	29.7	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	41.3	41.3	41.3
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Max.total pipe length	m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual)	m	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165	190/165
	Max drop between I.U.&O.U (O.U down/up) *1	m	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110	90/110
	Standard drop between I.U. &O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	Max drop between I.U. *3	m	30	30	30	30	30	30	30	30	30	30	30	30	30
	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	18	18	18	18	18	18
	External static pressure	Pa	82	82	82	82	82	82	82	82	82	82	82	82	82
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		60	64	64	64	64	64	64	64	64	64	64	64	64
Working temp.	Cooling	℃	(-5℃-50℃)					(-5℃-50℃)							
	Heating	℃	(-23℃-21℃)					(-23℃-21℃)							

Max drop between I.U.&O.U *1 If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between I.U.&O.U *2 Standard design and production in the factory.
Max drop between I.U. *3 If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

Standard drop between I.U. *4 Standard design and production in the factory.
* All the specifications are tested under nominal condition:In cooling T1, indoor temp. is 27℃ DB/19℃ WB,Outdoor temp 35℃ DB/24WB;In cooling T3, indoor temp. is 27℃ DB/19℃ WB,Outdoor temp 46℃ DB/24WB;In heating, indoor temp is 20℃ DB;In heating, outdoor temp is 7℃ DB/6℃ WB)

071 Features & Benefits

085 IMVF W Outdoor

IMVF
Inverter Multi Variable Flow

Water Cooled VRF (IMVF W)

FEATURES&BENEFITS

Outdoor Structure (8/10/12hp Side Discharge)

More Bigger Outdoor Capacity, More Flexible Application

River water

Lake water

Sea water

Ground water

Soil

Solar energy

Waste water

Industry waste heat

What is IMVF W Series

- IMVF W series system is a VRF air conditioning system that adopts water as a cooling or heating source
- IMVF W series can combine water system and refrigerant system together

FEATURES&BENEFITS

System Introduction

Working Principle

Working Principle

Working principle in cooling mode

Working principle in heating mode

FEATURES&BENEFITS

Outdoor Structure

Core Technologies and Parts (Front Side)

Core Technologies and Parts(Back Side)

IMVF W Application Typical high-rise buildings

3 Types Typical High-rise Buildings

•Compact inner structure and core parts

High rise building without podium

High rise building with podium

Single layer with a large area

Type 1 High-rise Building

•Conventional chiller system, and new water-cooled IMVF solution

FEATURES&BENEFITS

IMVF W Application

Type 2 High-rise Building

•Conventional chiller system, and water-cooled IMVF solution

Type 3 High-rise Building

•Conventional chiller system, and water-cooled IMVF solution

IMVF W Application

Buildings That Suitable

•New construction or retrofit building: MRV W provides an energy efficient solution anywhere that could use a water-cooled chiller or replacing water source heat pump design by enabling them to afford the water-cooled chiller benefits. It is especially true for high-rise buildings such as condos, offices, medical centers, schools

•High-rise building that didn't design with VRF system

•Glass curtain wall or special design building

•No enough space to put the outdoor unit even accept the VRF system

•Building which required to renewable energy sources

Benefit

•Lower initial cost for the developer and builder

•Client or developer can add air conditioning to match load requirement

•No rebalancing of water systems if commissioning valves are installed on each floor

•Connect to the full suite of MRV control solution A/C management system

•Separate control to every indoor unit

FEATURES&BENEFITS

Overview

Energy saving

•COP can be up to 6.02, much more higher energy level than air system
•EER can be up to 4.98, more higher energy level than air system

Energy Saving

High efficiency dc inverter compressor

•High efficiency DC inverter compressor from mitsubishi electric

Energy Saving

High efficiency double coil heat exchanger

•Double coil heat-exchanger, more uniform heat transfer effect

Energy Saving

Heat recovery between different refrigerant system

•Heat recovery is achieved within the water loop between different refrigerant system, more higher total COP
•Cooling and heating at the same time in different refrigerant system

Double EEV Control

•The double EEV control the 2 stages heat exchanger separately, which can adjust the condenser volume

Two Stage Deep Sub Cooling Technology

•1st stage sub cooling added a sub cooling coil to condenser
•2nd stage sub cooling added a stand alone sub cooler
•After further cooling, sub-cooling degree can be up to 30°C,
with the heat exchanging capacity per unit mass of refrigerant improved by 46% and flow resistance reduced by 55%, and running efficiency improved by 9%

FEATURES&BENEFITS

Comfortable Environment

Low Noise Level

•Comparing with air system, without fan in the outdoor and with full insulation design, the noise level can be reduced to only 50dB(A), much lower than the air system and conventional chiller

No Influence From Ambient Temperature

•Thanks to the stable water source, the capacity and efficiency will not reduce with extreme ambient conditions compare with air-cooled system

•Especially in heating mode, water cooling means no defrost operation is required, the resultant rapid start up time assures quick and comfortable heating, even in cold environment

High Reliability

Water Pump Controlled Together with the Outdoor

•The reserved water pump linkage control, realize the pump linkage control, reduce the energy consumption and eliminate hidden dangers

High Convenience (Use/installation/service)

Compact and Lightweight Design

•The industry's most compact and lightweight design, installed in the narrow space.
Comparing with the conventional top discharge air-cooled system, height 45% reduced, footprint 43% reduced

Stacked Installation

•The condensers are smaller and can be staked, reducing the installation space and increasing the customers usable square footage

High Reliability

Chilled Electric Control Module

•Using refrigerant to reduce the module temperature, to realize stable module temperature, more reliable operation
•Canceling heat dissipation fan of the module, reduce the power consumption and noise level

Stable Pressure Setting

•Stable pressure setting design, to make the high pressure keep above the required pressure, ensure the compressor reliability and stable capacity output

Wide Operation Range

Temperature range of water inlet 7~45°C

Temperature range of indoor Cooling:18~32°C(Heating: 15~27°C)

Condensing unit ambient temperature range 0~40°C

The condensing unit water flow range is 50~150L/min (Standard 96L/min)

FEATURES&BENEFITS

Energy Efficiency

Long Pipe Length and High Height Drop

The condensers are smaller and can be staked, reducing the installation space and increasing the customers usable square footage

Energy Efficiency

Flexible Water Pipe Design

- Max water pressure can be up to 1.96MPa
- Condensate pipe length can be up to 200m

Energy Efficiency

Flexible Installation Location

Outside

Machine room

Balcony

Corridor

Equipment room

Storage

High Convenience (Use/installation/service)

Various Mode and Priority Selection

- The condensers are smaller and can be staked, reducing the installation space and increasing the customers usable square footage

Easy Maintenance

Compact outdoor structure design

8/10/12HP

IMVF Water Cooled Module

208-230V/3Ph/60Hz

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Model				CA43BV224-E5J1W	CA43BV280-E5J1W	CA43BV335-E5J1W	CA43BV448-E5J1W	CA43BV504-E5J1W	CA43BV560-E5J1W	CA43BV615-E5J1W	CA43BV670-E5J1W	CA43BV728-E5J1W	CA43BV784-E5J1W	CA43BV840-E5J1W	CA43BV895-E5J1W	CA43BV950-E5J1W	CA43BV1005-E5J1W
Combination model				/	/	/	CA43BV224-5J1W	CA43BV224-5J1W	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV335-5J1W	CA43BV224-5J1W	CA43BV224-5J1W	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV335-5J1W
				/	/	/	CA43BV224-5J1W	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV335-5J1W	CA43BV335-5J1W	CA43BV224-5J1W	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV335-5J1W	CA43BV335-5J1W
				/	/	/	/	/	/	/	/	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV280-5J1W	CA43BV335-5J1W	CA43BV335-5J1W	CA43BV335-5J1W
Capacity	Capacity range		HP	8	10	12	16	18	20	22	24	26	28	30	32	34	36
	Cooling capacity		kW	22.4	28	33.5	44.8	50.4	56	61.5	67.0	72.8	78.4	84.0	89.5	95.0	100.5
	Heating capacity		kW	25	31.5	37.5	50.0	56.5	63	69.0	75.0	81.5	88.0	94.5	100.5	106.5	112.5
Electrical parameters	Power supply		PhV/Hz	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60	3/208-230/60
	Cooling	Rated power input	kW	4.50	6.00	7.70	9.00	10.50	12.00	13.70	15.40	15.00	16.50	18.00	19.70	21.40	23.10
		Max. power input	kW	13.00	15.00	17.00	26.00	28.00	30.00	32.00	34.00	41.00	43.00	45.00	47.00	49.00	51.00
		Rated current	A	12.43	16.58	21.27	24.86	29.01	33.15	37.85	42.54	41.44	45.58	49.73	54.42	59.12	63.81
		Max.current	A	35.91	41.44	46.96	71.83	77.35	82.88	88.40	93.93	113.26	118.79	124.31	129.84	135.36	140.89
	Heating	Rated power input	kW	4.15	5.80	7.80	8.30	9.95	11.60	13.60	15.60	14.10	15.75	17.40	19.40	21.40	23.40
		Max. power input	kW	13.00	15.00	17.00	26.00	28.00	30.00	32.00	34.00	41.00	43.00	45.00	47.00	49.00	51.00
		Rated current	A	11.46	16.02	21.55	22.93	27.49	32.05	37.57	43.10	38.95	43.51	48.07	53.59	59.12	64.64
		Max.current	A	35.91	41.44	46.96	71.83	77.35	82.88	88.40	93.93	113.26	118.79	124.31	129.84	135.36	140.89
	EER/COP			4.98/6.02	4.67/5.43	4.35/4.81	4.98/6.02	4.8/5.68	4.67/5.43	4.49/5.07	4.35/4.81	4.85/5.78	4.75/5.59	4.67/5.43	4.54/5.18	4.44/4.98	4.35/4.81
Performance	Water flow (H)		m^3/h	4.8	6	7.2	9.6	10.8	12	13.2	14.4	15.6	16.8	18.0	19.2	20.4	21.6
	Sound pressure level (H)		dB(A)	50	51	53	53	54	54	55	56	55	55	56	57	57	58
	Sound power level (H)		dB(A)	61	62	64	64	65	65	66	67	66	66	67	68	68	69
Installation	External dimensions(W/D/H)		mm	775/545/995	775/545/995	775/545/995	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3
	Shipping dimensions(W/D/H)		mm	875/655/1182	875/655/1182	875/655/1182	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*3	(875/655/1182)*3	(875/655/1182)*3	(875/655/1182)*3	(875/655/1182)*3	(875/655/1182)*3
	Net/Shipping weight		kg	172/183	172/183	172/183	344/366	344/366	344/366	344/366	344/366	516/549	516/549	516/549	516/549	516/549	516/549
	Compressor type			DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor quantity			1 INV	1 INV	1 INV	2 INV	2 INV	2 INV	2 INV	2 INV	3 INV	3 INV	3 INV	3 INV	3 INV	3 INV
	Refrigerant type			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge		kg	2	2	2	4	4	4	4	4	6	6	6	6	6	6
	Refrigerant liquid pipe		mm	9.52	9.52	12.7	12.7	15.9	15.9	15.9	15.9	19.1	19.1	19.1	19.1	19.1	19.1
	Refrigerant gas pipe		mm	19.05	22.2	25.4	28.6	28.6	28.6	28.6	28.6	31.8	31.8	31.8	31.8	31.8	38.1
	Oil equalization pipe		mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe length		m	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Max. pipe length(Equivalent/Actual)		m	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120
	Max drop between I.U.&O.U		m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
Heat Exchanger	Type			Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil
	Material			Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel	Copper&Steel
Water side	Inlet water connection pipe		mm	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32
	Outlet water connection pipe		mm	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32
	pressure drop(inlet and outlet)		Kpa	35	50	70	35+35	35+50	50+50	50+70	70+70	35+35+50	35+50+50	50+50+50	50+50+70	50+70+70	70+70+70
	Connection type			inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved
	Max. system water pressure		Mpa	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	Inlet water temperature range (Cooling & Heating)		°C	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45
Connection ratio	Connectable indoor unit ratio		%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		unit	13	16	19	23	29	33	36	39	43	46	50	53	56	59

- 1. outdoor above 50m,outdoor below 40m.
- All the specifications are tested under normal condition(In cooling, Indoor temp is 27°C DB/19°C WB; Outdoor temp: 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB; Outdoor temp is 7°C DB/6°C WB).
- The specification may change according to the further product development.

8/10/12HP

IMVF Water Cooled Module

380-400V/3Ph/50-60Hz

DC motor | High performance compressor | 180° sine wave DC inverter | Super quiet | Quiet operation | 3 minutes protection | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Model				CA43BV224-E2J1W	CA43BV280-E2J1W	CA43BV335-E2J1W	CA43BV448-E2J1W	CA43BV504-E2J1W	CA43BV560-E2J1W	CA43BV615-E2J1W	CA43BV670-E2J1W	CA43BV728-E2J1W	CA43BV784-E2J1W	CA43BV840-E2J1W	CA43BV895-E2J1W	CA43BV950-E2J1W	CA43BV1005-E2J1W
Combination model				/	/	/	CA43BV224-E2J1W	CA43BV224-EJ21W	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV335-E2J1W	CA43BV224-E2J1W	CA43BV224-E2J1W	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV335-E2J1W
				/	/	/	CA43BV224-E2J1W	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV335-E2J1W	CA43BV335-E2J1W	CA43BV224-E2J1W	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV335-E2J1W	CA43BV335-E2J1W
				/	/	/	/	/	/	/	/	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV280-E2J1W	CA43BV335-E2J1W	CA43BV335-E2J1W	CA43BV335-E2J1W
Capacity	Capacity range		HP	8	10	12	16	18	20	22	24	26	28	30	32	34	36
	Cooling capacity		kW	22.4	28	33.5	44.8	50.4	56	61.5	67.0	72.8	78.4	84.0	89.5	95.0	100.5
	Heating capacity		kW	25	31.5	37.5	50.0	56.5	63	69.0	75.0	81.5	88.0	94.5	100.5	106.5	112.5
Electrical parameters	Power supply		PhV/Hz	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60	3/380-400/50/60
	Cooling	Rated power input	kW	4.50	6.00	7.70	9.00	10.50	12.00	13.70	15.40	15.00	16.50	18.00	19.70	21.40	23.10
		Max. power input	kW	13.00	15.00	17.00	26.00	28.00	30.00	32.00	34.00	41.00	43.00	45.00	47.00	49.00	51.00
		Rated current	A	7.20	9.60	12.32	14.39	16.79	19.19	21.91	24.63	23.99	26.39	28.79	31.51	34.23	36.95
		Max.current	A	20.79	23.99	27.19	41.58	44.78	47.98	51.18	54.38	65.57	68.77	71.97	75.17	78.37	81.57
	Heating	Rated power input	kW	4.15	5.80	7.80	8.30	9.95	11.60	13.60	15.60	14.10	15.75	17.40	19.40	21.40	23.40
		Max. power input	kW	13.00	15.00	17.00	26.00	28.00	30.00	32.00	34.00	41.00	43.00	45.00	47.00	49.00	51.00
		Rated current	A	6.64	9.28	12.47	13.27	15.91	18.55	21.75	24.95	22.55	25.19	27.83	31.03	34.23	37.42
		Max.current	A	20.79	23.99	27.19	41.58	44.78	47.98	51.18	54.38	65.57	68.77	71.97	75.17	78.37	81.57
	EER/COP			4.98/6.02	4.67/5.43	4.35/4.81	4.98/6.02	4.80/5.68	4.67/5.43	4.49/5.07	4.35/4.81	4.85/5.78	4.75/5.59	4.67/5.43	4.54/5.18	4.44/4.98	4.35/4.81
Performance	Water flow (H)		m^3/h	4.8	6	7.2	9.6	10.8	12	13.2	14.4	15.6	16.8	18.0	19.2	20.4	21.6
	Sound pressure level (H)		dB(A)	50	51	53	53	54	54	55	56	55	55	56	57	57	58
	Sound power level (H)		dB(A)	61	62	64	64	65	65	66	67	66	66	67	68	68	69
Installation	External dimensions(W/D/H)		mm	775/545/995	775/545/995	775/545/995	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3
	Shipping dimensions(W/D/H)		mm	840/625/1150	840/625/1150	840/625/1150	(840/625/1150)*2	(840/625/1150)*2	(840/625/1150)*2	(840/625/1150)*2	(840/625/1150)*2	(840/625/1150)*3	(840/625/1150)*3	(840/625/1150)*3	(840/625/1150)*3	(840/625/1150)*3	(840/625/1150)*3
	Net/Shipping weight		kg	172/183	172/183	172/183	344/366	344/366	344/366	344/366	344/366	516/549	516/549	516/549	516/549	516/549	516/549
	Compressor type			DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor quantity			1 INV	1 INV	1 INV	2 INV	2 INV	2 INV	2 INV	2 INV	3 INV	3 INV	3 INV	3 INV	3 INV	3 INV
	Refrigerant type			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge		kg	2	2	2	4	4	4	4	4	6	6	6	6	6	6
	Refrigerant liquid pipe		mm	9.52	9.52	12.7	12.7	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe		mm	19.05	22.2	25.4	28.58	28.58	28.58	28.58	28.58	31.8	31.8	31.8	31.8	31.8	38.1
	Oil equalization pipe		mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Total pipe length		m	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Max. pipe length(Equivalent/Actual)		m	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120	150/120
	Max drop between I.U.&O.U		m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
Heat Exchanger	Type			Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil
	Material			Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper
Water side	Inlet water connection pipe		mm	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32
	Outlet water connection pipe		mm	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32
	pressure drop(inlet and outlet)		Kpa	35	50	70	35+35	35+50	50+50	50+70	70+70	35+35+50	35+50+50	50+50+50	50+50+70	50+70+70	70+70+70
	Connection type			inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved
	Max. system water pressure		Mpa	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	Inlet water temperature range (Cooling & Heating)		°C	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45	7~45
Connection ratio	Connectable indoor unit ratio		%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		unit	13	16	19	23	29	33	36	39	43	46	50	53	56	59

- 1 outdoor above 50m outdoor below 40m
- All the specifications are tested under nominal condition(In cooling, Indoor temp is 27°C DB/19°C WB, Outdoor temp 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB).
- The specification may change according to the further product development.

091 4-way cassette compact

093 4-way cassette

095 Round-way Cassette

097 2-way cassette

099 1-way cassette

101 Ceiling / Floor

105 Slim duct(0/30Pa)

109 Medium ESP duct(50/96pa)

111 Medium ESP duct(80/120Pa)

113 High ESP duct(100/196Pa)

117 Console

119 Hi wall

121 ERV (Energy Reclaim Ventalation)

123 AHU connection kit

IMVF
Inverter Multi Variable Flow

Indoor Units

4-way cassette compact

•Fresh Air Inlet Except For 5.6/7.1/8. 0 kW

•Compact Design, Only 240mm Height, (For 5.6/7.1/8.0kW)
700 X 700mm Panel (For 2.8/3.6/4.5kW)

•Quiet Operation, Diffuser and Space Vortex Fan Design, More Lower Noise

•Built in High Head Drain Pump

CK43BV028-CYJ1H CK43BV045-CYJ1H
CK43BV036-CYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Auto-swing | 4-way airflow | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating | Drain water pump

Model/Indoor unit			CK43BV028-CYJ1H	CK43BV036-CYJ1H	CK43BV045-CYJ1H
Capacity	Cooling	kBtu/h	9.5	12.3	15.3
		kW	2.8	3.6	4.5
	Heating	Btu/h	10.9	13.6	17.1
		kW	3.2	4	5
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/220-230/50/60
Performance	Air flow (H)	m³/h	700	700	700
	Sound pressure level(H/M/L)	dB(A)	32/30/29	32/30/29	33/30/29
	Sound power level(H/M/L)	dB(A)	46/44/43	46/44/43	47/44/43
Installation	External dimensions(W/D/H)	mm	570/570/260	570/570/260	570/570/260
	Shipping dimensions(W/D/H)	mm	718/680/380	718/680/380	718/680/380
	Net/Shipping weight	kg	17/21	19/23	19/23
	Refrigerant liquid pipe	mm	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52	12.7	12.7
Panel	Model name		PB-700IB	PB-700IB	PB-700IB
	External dimensions(W/D/H)	mm	700/700/60	700/700/60	700/700/60
	Shipping dimensions(W/D/H)	mm	740/740/115	740/740/115	740/740/115
	Net/Shipping weight	kg	2.8/4.5	2.8/4.5	2.8/4.5
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)

4-way cassette

- CK43BV056-4YJ1H
- CK43BV071-4YJ1H
- CK43BV080-4YJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Auto-swing | 4-way airflow | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating | Drain water pump

Model/Indoor unit			CK43BV056-4YJ1H	CK43BV071-4YJ1H	CK43BV080-4YJ1H
Capacity	Cooling	kBtu/h	19.1	24.2	27.3
		kW	5.6	7.1	8
	Heating	Btu/h	21.5	27.3	30.7
		kW	6.3	8	9
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	1200	1200	1200
	Sound pressure level(H/M/L)	dB(A)	34/32/30	35/34/31	37/35/31
	Sound power level(H/M/L)	dB(A)	48/46/44	49/48/45	51/49/45
Installation	External dimensions(W/D/H)	mm	840/840/240	840/840/240	840/840/240
	Shipping dimensions(W/D/H)	mm	930/930/330	930/930/330	930/930/330
	Net/Shipping weight	kg	30/32.5	30/32.5	30/32.5
	Refrigerant liquid pipe	mm	6.35	9.52	9.52
	Refrigerant gas pipe	mm	12.7	15.88	15.88
Panel	Model name		PB-950JB	PB-950JB	PB-950JB
	External dimensions(W/D/H)	mm	950/950/60	950/950/60	950/950/60
	Shipping dimensions(W/D/H)	mm	992/992/115	992/992/115	992/992/115
	Net/Shipping weight	kg	6/7.5	6/7.5	6/7.5
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)

- CK43BV090-4YJ1H
- CK43BV112-4YJ1H
- CK43BV140-4YJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Auto-swing | 4-way airflow | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating | Drain water pump

Model/Indoor unit			CK43BV090-4YJ1H	CK43BV112-4YJ1H	CK43BV140-4YJ1H
Capacity	Cooling	kBtu/h	30.7	38.2	47.7
		kW	9	11.2	14
	Heating	Btu/h	34.1	42.6	54.6
		kW	10	12.5	16
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	1800	1800	1800
	Sound pressure level(H/M/L)	dB(A)	37/35/31	37/35/31	42/39/35
	Sound power level(H/M/L)	dB(A)	51/49/45	51/49/45	56/53/49
Installation	External dimensions(W/D/H)	mm	840/840/295	840/840/295	840/840/295
	Shipping dimensions(W/D/H)	mm	930/930/390	930/930/390	930/930/390
	Net/Shipping weight	kg	38/40	38/40	38/40
	Refrigerant liquid pipe	mm	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88	15.88
Panel	Model name		PB-950JB	PB-950JB	PB-950JB
	External dimensions(W/D/H)	mm	950/950/60	950/950/60	950/950/60
	Shipping dimensions(W/D/H)	mm	992/992/115	992/992/115	985/985/115
	Net/Shipping weight	kg	6/7.5	6/7.5	6/7.5
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)

Round-way Cassette

- CK43BV022-6YJ1H
- CK43BV028-6YJ1H
- CK43BV036-6YJ1H
- CK43BV045-6YJ1H
- CK43BV056-6YJ1H

YR-E17(S)

YR-E16B(O)

YR-HBS01(O)

- Unique round-way air outlet, no blind spot
- Innovative 4 independent air flow control
- 6 adjustable louver positions, 1296 air flow combinations

Model/indoor unit			CK43BV022-6YJ1H	CK43BV028-6YJ1H	CK43BV036-6YJ1H	CK43BV045-6YJ1H	CK43BV056-6YJ1H
Capacity	Cooling	Btu/h	7600	9600	12100	15100	18200
	Heating	Btu/h	8600	10600	13600	17000	20000
Electrical parameters	Power supply	V/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
Performance	Air flow (H)	m3/h	1000	1000	1000	1000	1000
		cfm	588	588	588	588	588
	Sound pressure level(H/M/L)	dB(A)	30/27/25	30/27/25	30/27/25	32/29/27	33/30/29
Installation	External dimensions(W/D/H)	mm	840/840/183	840/840/183	840/840/183	840/840/183	840/840/183
		inch	33/33/7	33/33/7	33/33/7	33/33/7	33/33/7
	Shipping dimensions(W/D/H)	mm	983/983/268	983/983/268	983/983/268	983/983/268	983/983/268
		inch	38/38/11	38/38/11	38/38/11	38/38/11	38/38/11
	Net/Shipping weight	kg	28/31	28/31	28/31	28/31	28/31
		lbs	62/68	62/68	62/68	62/68	62/68
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35
		inch	1/4	1/4	1/4	1/4	1/4
	Refrigerant gas pipe	mm	12.7	12.7	12.7	12.7	12.7
		inch	1/2	1/2	1/2	1/2	1/2
Panel	Model Name		PB-950KB	PB-950KB	PB-950KB	PB-950KB	PB-950KB
	External dimensions(W/D/H)	mm	950/950/50	950/950/50	950/950/50	950/950/50	950/950/50
		inch	37/37/2	37/37/2	37/37/2	37/37/2	37/37/2
	Shipping dimensions(W/D/H)	mm	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123
		inch	40/40/5	40/40/5	40/40/5	40/40/5	40/40/5
	Net/Shipping weight	kg	6.5/9	6.5/9	6.5/9	6.5/9	6.5/9
		lbs	14/20	14/20	14/20	14/20	14/20
Controller	Wired (O-optional,S-Standard)	/	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)
		/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
	Infrared(O-optional,S-Standard)	/	YR-HBS01(O)	YR-HBS01(O)	YR-HBS01(O)	YR-HBS01(O)	YR-HBS01(O)

- CK43BV071-6YJ1H
- CK43BV090-6YJ1H
- CK43BV112-6YJ1H
- CK43BV126-6YJ1H
- CK43BV140-6YJ1H

YR-E17(S)

YR-E16B(O)

YR-HBS01(O)

- Unique round-way air outlet, no blind spot
- Innovative 4 independent air flow control
- 6 adjustable louver positions, 1296 air flow combinations

Model/indoor unit			CK43BV071-6YJ1H	CK43BV090-6YJ1H	CK43BV112-6YJ1H	CK43BV126-6YJ1H	CK43BV140-6YJ1H	AB602MRERA
Capacity	Cooling	Btu/h	24000	30000	36000	42000	48000	54600
	Heating	Btu/h	27000	34000	40000	47000	54000	61200
Electrical parameters	Power supply	V/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	1/220-230/50/60
Performance	Air flow (H)	m3/h	1380	2050	2050	2100	2100	2100
		cfm	812	1206	1206	1235	1235	1235
	Sound pressure level(H/M/L)	dB(A)	35/34/31	37/35/31	37/35/31	44/40/36	44/40/36	44/40/36
Installation	External dimensions(W/D/H)	mm	840/840/204	840/840/246	840/840/246	840/840/288	840/840/288	840/840/288
		inch	33/33/8	33/33/10	33/33/10	33/33/11	33/33/11	33/33/11
	Shipping dimensions(W/D/H)	mm	983/983/290	983/983/331	983/983/331	983/983/373	983/983/373	983/983/373
		inch	38/38/11	38/38/13	38/38/13	38/38/15	38/38/15	38/38
	Net/Shipping weight	kg	29/32	34/37	34/37	35/38	35/38	35/38
		lbs	64/71	75/82	75/82	77/84	77/84	77/84
	Refrigerant liquid pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52
		inch	3/8	3/8	3/8	3/8	3/8	3/8
	Refrigerant gas pipe	mm	15.88	15.88	15.88	15.88	15.88	15.88
		inch	5/8	5/8	5/8	5/8	5/8	5/8
Panel	Model Name		PB-950KB	PB-950KB	PB-950KB	PB-950KB	PB-950KB	PB-950KB
	External dimensions(W/D/H)	mm	950/950/50	950/950/50	950/950/50	950/950/50	950/950/50	950/950/50
		inch	37/37/2	37/37/2	37/37/2	37/37/2	37/37/2	37/37/2
	Shipping dimensions(W/D/H)	mm	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123
		inch	40/40/5	40/40/5	40/40/5	40/40/5	40/40/5	40/40/5
	Net/Shipping weight	kg	6.5/9	6.5/9	6.5/9	6.5/9	6.5/9	6.5/9
		lbs	14/20	14/20	14/20	14/20	14/20	14/20
Controller	Wired (O-optional,S-Standard)	/	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)
		/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
	Infrared(O-optional,S-Standard)	/	YR-HBS01(O)	YR-HBS01(O)	YR-HBS01(O)	YR-HBS01(O)	YR-HBS01(O)	YR-HBS01(O)

2-way cassette

- **Compact Design: Only 220mm Height**

- **Built in High Head Drain Pump**

- **Ceiling Antifouling Design Unique Antifouling Design**
- **Two Way Air Flow**
- **Quiet Operation**
- **5 Models Ranging From 2.2kW to 5.6kW**

CK43BV022-2YJ1H CK43BV036-2YJ1H CK43BV056-2YJ1H
CK43BV028-2YJ1H CK43BV045-2YJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

Model/Indoor unit			CK43BV022-2YJ1H	CK43BV028-2YJ1H	CK43BV036-2YJ1H	CK43BV045-2YJ1H	CK43BV056-2YJ1H
Capacity	Cooling	kBtu/h	7.5	9.6	12.3	15.4	19.1
		kW	2.2	2.8	3.6	4.5	5.6
	Heating	Btu/h	8.5	10.9	13.7	17.1	21.5
		kW	2.5	3.2	4	5	6.3
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m^3/h	840	840	840	840	840
	Sound pressure level(H/M/L)	dB(A)	42/37/33	42/37/33	42/37/33	44/39/34	44/39/34
	Sound power level(H/M/L)	dB(A)	55/50/46	55/50/46	55/50/46	57/52/47	57/52/47
Installation	External dimensions(W/D/H)	mm	817/620/220	817/620/220	817/620/220	817/620/220	817/620/220
	Shipping dimensions(W/D/H)	mm	1022×682×274	1022×682×274	1022×682×274	1022/682/247	1022×682×274
	Net/Shipping weight	kg	21/23	21/23	21/23	21/23	21/23
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52	9.52	12.7	12.7	12.7
Panel	Model name		P2B-1055IB	P2B-1055IB	P2B-1055IB	P2B-1055IB	P2B-1055IB
	External dimensions(W/D/H)	mm	1055/680/68	1055/680/68	1055/680/68	1055/680/68	1055/680/68
	Shipping dimensions(W/D/H)	mm	1097×707×136	1097×707×136	1097×707×136	1097/707/136	1097×707×136
	Net/Shipping weight	kg	7/8	7/8	7/8	7/8	7/8
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)	YR-HD(O)	YR-HD(O)

1-way cassette

- CK43BV016-1YJ1H
- CK43BV022-1YJ1H
- CK43BV028-1YJ1H
- CK43BV036-1YJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

•Ultra Thin Design 185mm

•Ultra low sound level 29 dB(A)

•Built-in high head drain pump

•4 Models Ranging From 1.5kW to 3.6kW

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Auto-swing | Drain water pump | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating

Model/Indoor unit			CK43BV016-1YJ1H	CK43BV022-1YJ1H	CK43BV028-1YJ1H	CK43BV036-1YJ1H
Capacity	Cooling	kBtu/h	5.1	7.5	9.6	12.3
		kW	1.5	2.2	2.8	3.6
	Heating	kBtu/h	5.8	8.5	10.9	13.6
		kW	1.7	2.5	3.2	4
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
Performance	Air flow (H)	m^3/h	280/300/330	340/370/400	410/440470	480/510/540
	Sound pressure level(H/M/L)	dB(A)	36/30/23	37/30/24	37/31/24	38/32/25
	Sound power level(H/M/L)	dB(A)	54/48/41	55/48/42	55/49/42	56/50/43
Installation	External dimensions(W/D/H)	mm	875/505/185	875/505/185	875/505/185	875/505/185
	Net/Shipping weight	kg	23/27	23/27	23/27	23/27
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7
Panel	External dimensions(W/D/H)	mm	1050/550/125	1050/550/125	1050/550/125	1050/550/125
	Net/Shipping weight	kg	4/6	4/6	4/6	4/6
Controller	Wired (O-Optional/S-Standard)	/	YR-E16A(O)	YR-E16A(O)	YR-E16A(O)	YR-E16A(O)
		/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)	YR-HD(O)

Ceiling / Floor

•Wide Range Angle Air Flow

•Compact Design, Ultra Thin Unit Body 199mm (Less than 24k BTU model)

•Quiet Operation

•Active Carbon and ESF Filter Optional

•9 Models Ranging From 2.8kW to 14kW

CF43BV028-MYJ1H CF43BV045-MYJ1H CF43BV071-MYJ1H
CF43BV036-MYJ1H CF43BV056-MYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Auto-swing | Left&Right airflow | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating

Model/Indoor unit			CF43BV028-MYJ1H	CF43BV036-MYJ1H	CF43BV045-MYJ1H	CF43BV056-MYJ1H	CF43BV071-MYJ1H
Capacity	Cooling	kBtu/h	9.5	12.3	15.4	19.1	24.2
		kW	2.8	3.6	4.5	5.6	7.1
	Heating	Btu/h	10.9	13.6	17.1	21.5	27.3
		kW	3.2	4	5	6.3	8
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	800	800	800	800	800
	Sound pressure level(H/M/L)	dB(A)	38/35/33	38/35/33	40/37/35	40/37/35	40/37/35
	Sound power level(H/M/L)	dB(A)	51/48/46	51/48/46	53/50/48	53/50/48	53/50/48
Installation	External dimensions(W/D/H)	mm	990/655/199	990/655/199	990/655/199	990/655/199	990/655/199
	Shipping dimensions(W/D/H)	mm	1160/730/280	1160/730/280	1160/730/280	1160/730/280	1160/730/280
	Net/Shipping weight	kg	28.3/34.3	28.3/36.4	28.3/36.4	28.3/36.4	28.3/36.4
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	9.52
	Refrigerant gas pipe	mm	9.52	12.7	12.7	12.7	15.88
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)	YR-HD(O)	YR-HD(O)

Ceiling / Floor

- CF43BV080-MYJ1H
- CF43BV090-MYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Auto-swing | Left&Right airflow | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating

Model/Indoor unit			CF43BV080-MYJ1H	CF43BV090-MYJ1H
Capacity	Cooling	kBtu/h	27.3	30.7
		kW	8	9
	Heating	Btu/h	30.7	34.1
		kW	9	10
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	2040	2040
	Sound pressure level(H/M/L)	dB(A)	43/40/38	43/40/38
	Sound power level(H/M/L)	dB(A)	56/53/51	56/53/51
Installation	External dimensions(W/D/H)	mm	1580/700/240	1580/700/240
	Shipping dimensions(W/D/H)	mm	1720/800/330	1720/800/330
	Net/Shipping weight	kg	50/57	50/57
	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)

- CF43BV112-MYJ1H
- CF43BV140-MYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Auto-swing | Left&Right airflow | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating

Model/Indoor unit			CF43BV112-MYJ1H	CF43BV140-MYJ1H
Capacity	Cooling	kBtu/h	38.2	48
		kW	11.2	14
	Heating	Btu/h	42.6	55
		kW	12.5	16
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	2040	2040
	Sound pressure leve(H/M/L)	dB(A)	46/42/38	46/42/38
	Sound power level(H/M/L)	dB(A)	59/55/51	59/55/51
Installation	External dimensions(W/D/H)	mm	1580/700/240	1580/700/240
	Shipping dimensions(W/D/H)	mm	1720/800/330	1720/800/330
	Net/Shipping weight	kg	54/61	54/61
	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)

Slim duct(0/30Pa)

- **185mm Height Ultra Thin Design and 420mm Depth**

- **Built in Drain Pump**

- **Ultra Low Noise: Realize 21 dB(A) Operation Noise**
- **Rear Air Return**
- **Static Pressure 0/30Pa**
- **6 Models Ranging From 2.2kW to 7.1kW**

CC43BV022LLYJ1H **CC43BV036LLYJ1H**
CC43BV028LLYJ1H **CC43BV045LLYJ1H**

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

Model/Indoor unit			CC43BV022LLYJ1H	CC43BV028LLYJ1H	CC43BV036LLYJ1H	CC43BV045LLYJ1H
Capacity	Cooling	kBtu/h	7.5	9.5	12.3	15.3
		kW	2.2	2.8	3.6	4.5
	Heating	Btu/h	8.5	10.9	13.6	17.1
		kW	2.5	3.2	4	5
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	480	480	550	600
	Sound pressure level(H/M/L)	dB(A)	27/24/21	27/24/21	30/28/25	33/30/27
	Sound power level(H/M/L)	dB(A)	41/38/35	41/38/35	44/42/39	47/44/41
Installation	External dimensions(W/D/H)	mm	850/420/185	850/420/185	850/420/185	850/420/185
	Shipping dimensions(W/D/H)	mm	1045/540/270	1045/540/270	1045/540/270	1045/540/270
	Net/Shipping weight	kg	16.5/21.5	16.5/21.5	17.5/22.5	18.5/23.5
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52	9.52	12.7	12.7
	Static pressure	Pa	0/30	0/30	0/30	0/30
Drain pump	S-standard		S	S	S	S
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)	YR-HD(O)

Slim duct(0/30Pa)

CC43BV056LLYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Compact design | Drain water pump | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating

Model/Indoor unit			CC43BV056LLYJ1H
Capacity	Cooling	kBtu/h	19.1
		kW	5.6
	Heating	Btu/h	21.5
		kW	6.3
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60
Performance	Air flow (H)	m³/h	800
	Sound pressure level(H/M/L)	dB(A)	33/30/28
	Sound power level(H/M/L)	dB(A)	47/44/42
Installation	External dimensions(W/D/H)	mm	1170/420/185
	Shipping dimensions(W/D/H)	mm	1365/540/270
	Net/Shipping weight	kg	22.2/28.2
	Refrigerant liquid pipe	mm	6.35
	Refrigerant gas pipe	mm	12.7
	Static Pressure	Pa	0/30
Drain Pump	S-standard		S
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)
		/	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)

CC43BV071LLYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Compact design | Drain water pump | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin | Lowambient heating

Model/Indoor unit			CC43BV071LLYJ1H
Capacity	Cooling	kBtu/h	24.2
		kW	7.1
	Heating	Btu/h	27.3
		kW	8
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60
Performance	Air flow (H)	m³/h	930
	Sound pressure level(H/M/L)	dB(A)	36/33/31
	Sound power level(H/M/L)	dB(A)	50/47/44
Installation	External dimensions(W/D/H)	mm	1170/420/185
	Shipping dimensions(W/D/H)	mm	1365/540/270
	Net/Shipping weight	kg	24/30
	Refrigerant liquid pipe	mm	9.52
	Refrigerant gas pipe	mm	15.88
	Static Pressure	Pa	0/30
Drain Pump	S-standard		S
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)
		/	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)

Medium ESP duct(50/96pa)

- **Flexible Duct Connection**

- **Built in Drain Pump**

- **Static Pressure 50/96Pa**

- **6 Models Ranging From 5.6kW to 14kW**

CC43BV056MHYJ1H **CC43BV080MHYJ1H**
CC43BV071MHYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Lowambient heating | Drain water pump | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C) | Blue fin

Model/Indoor unit			CC43BV056MHYJ1H	CC43BV071MHYJ1H	CC43BV080MHYJ1H
Capacity	Cooling	kBtu/h	19.1	24.2	27.3
		kW	5.6	7.1	8
	Heating	Btu/h	21.5	27.3	30.7
		kW	6.3	8	9
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	1200	1200	1200
	Sound pressure level(H/M/L)	dB(A)	36/34/31	36/34/31	39/37/35
	Sound power level(H/M/L)	dB(A)	49/47/44	49/47/44	52/50/48
Installation	External dimensions(W/D/H)	mm	990/650/300	990/650/300	990/650/300
	Shipping dimensions(W/D/H)	mm	1170/860/340	1170/860/340	1170/860/340
	Net/Shipping weight	kg	39/45	39/45	39/45
	Refrigerant liquid pipe	mm	6.35	9.52	9.52
	Refrigerant gas pipe	mm	12.7	15.88	15.88
	Static Pressure(Standard/Max.)	Pa	50/96	50/96	50/96
Drain Pump	O-optional,S-standard,W-without		S	S	S
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)

Medium ESP duct(80/120Pa)

- **New Compact Design:270mm Height**

- **Optional External Drain Pump**
- **Flexible Duct Connection**

- **Static Pressure 80/120Pa**

CC43BV090MHYJ1H **CC43BV140MHYJ1H**
CC43BV112MHYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Lowambient heating | Blue fin | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C)

Model/Indoor unit			CC43BV090MHYJ1H	CC43BV112MHYJ1H	CC43BV140HHYJ1H
Capacity	Cooling	kBtu/h	30	38	48
		kW	9	11.2	14
	Heating	Btu/h	34	43	55
		kW	10	12.5	16
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	1600	1600	1600
	Sound pressure level(H/M/L)	dB(A)	49/47/43	49/47/43	49/47/43
	Sound power level(H/M/L)	dB(A)	62/60/56	62/60/56	62/60/56
Installation	External dimensions(W/D/H)	mm	1135/742/270	1135/742/270	1135/742/270
	Shipping dimensions(W/D/H)	mm	1355/856/380	1355/856/380	1355/856/380
	Net/Shipping weight	kg	50/56	50/56	50/56
	Refrigerant liquid pipe	mm	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88	15.88
	Static Pressure(Standard/Max.)	Pa	80/120	80/120	80/120
Drain Pump	O-optional,S-standard,W-without		KT-NP01(Optional)	KT-NP01(Optional)	KT-NP01(Optional)
Controller	Wired (O-Optional/S-Standard)	/	YR-E16(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)

High ESP duct(100/196Pa)

- **Flexible Duct Connection**

- **Variable Static Pressure 100/196Pa Setting**
- **8 Models Ranging From 5.6kW to 28kW**

CC43BV056HHYJ1H **CC43BV080HHYJ1H**
CC43BV071HHYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Lowambient heating | Blue fin | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C)

Model/Indoor unit			CC43BV056HHYJ1H	CC43BV071HHYJ1H	CC43BV080HHYJ1H
Capacity	Cooling	kBtu/h	19.1	24.2	27.3
		kW	5.6	7.1	8
	Heating	Btu/h	21.5	27.3	30.73
		kW	6.3	8	9
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	1500	1500	1500
	Sound pressure level(H/M/L)	dB(A)	42/40	42/40	42/40
	Sound power level(H/M/L)	dB(A)	55/53	55/53	55/53
Installation	External dimensions(W/D/H)	mm	975/876/360	975/875/360	975/875/360
	Shipping dimensions(W/D/H)	mm	1050/945/405	1050/945/405	1050/945/405
	Net/Shipping weight	kg	48/58	48/58	48/58
	Refrigerant liquid pipe	mm	6.35	9.52	9.52
	Refrigerant gas pipe	mm	12.7	15.88	15.88
	Static Pressure(Standard/Max.)	Pa	100/196	100/196	100/196
Drain Pump	O-optional;S-standard;W-without		KT-NP01(Optional)	KT-NP01(Optional)	KT-NP01(Optional)
Controller	Wired (O-Optional/S-Standard)	/	YR-E16(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)

High ESP duct(100/196Pa)

CC43BV090HHYJ1H CC43BV140HHYJ1H

CC43BV112HHYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Lowambient heating | Blue fin | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C)

Model/Indoor unit			CC43BV090HHYJ1H	CC43BV112HHYJ1H	CC43BV140HHYJ1H
Capacity	Cooling	kBtu/h	30.7	38.2	47.8
		kW	9	11.2	14
	Heating	Btu/h	34.1	42.6	54.6
		kW	10	12.5	16
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	1560	1600	2100
	Sound pressure level(H/M/L)	dB(A)	45/40	45/40	45/40
	Sound power level(H/M/L)	dB(A)	58/53	58/53	58/53
Installation	External dimensions(W/D/H)	mm	1355/876/360	1355/876/360	1355/876/360
	Shipping dimensions(W/D/H)	mm	1386/966/418	1386/966/418	1386/966/418
	Net/Shipping weight	kg	62/77	62/77	62/77
	Refrigerant liquid pipe	mm	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88	15.88
	Static Pressure(Standard/Max.)	Pa	100/196	100/196	100/196
Drain Pump	O-optional,S-standard,W-without		KT-NP01(Optional)	KT-NP01(Optional)	KT-NP01(Optional)
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)	YR-HD(O)

CC43BV224HHYJ1H CC43BV280HHYJ1H

YR-E17(S)

YR-E16B(O)

YR-HD(O)

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Lowambient heating | Blue fin | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating (-15°C)

Model/Indoor unit			CC43BV224HHYJ1H	CC43BV280HHYJ1H
Capacity	Cooling	kBtu/h	77.1	95.6
		kW	22.6	28
	Heating	Btu/h	85.3	105.8
		kW	25	31
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	4050	4050
	Sound pressure level(H/M/L)	dB(A)	54/49	54/49
	Sound power level(H/M/L)	dB(A)	67/62	67/62
Installation	External dimensions(W/D/H)	mm	1725/876/360	1725/876/360
	Shipping dimensions(W/D/H)	mm	1830/990/530	1830/990/530
	Net/Shipping weight	kg	105/125	92/100
	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	25.4	25.4
	Static Pressure(Standard/Max.)	Pa	100/196	100/196
Drain Pump	O-optional,S-standard,W-without		KT-NP01(Optional)	KT-NP01(Optional)
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(S)	YR-E17(S)
	Infrared(O-Optional/S-Standard)	/	YR-HD(O)	YR-HD(O)

Console

CJ43BV022-MYJ1H CJ43BV036-MYJ1H
CJ43BV028-MYJ1H CJ43BV050-MYJ1H

- Air Discharge Through Top ang Bottom

YR-HD(S)

- Compact Design & Small Space Occupation
- Quiet Operation
- 4 Models Ranging From 2.2kW to 5.0kW

STANDARD FUNCTION

On-Off card | Group controller | Central control | Clean air | Lowambient heating (-15°C) | Blue fin | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating

Model/Indoor unit			CJ43BV022-MYJ1H	CJ43BV028-MYJ1H	CJ43BV036-MYJ1H	CJ43BV050-MYJ1H
Capacity	Cooling	kBtu/h	7.5	9.5	12.3	17
		kW	2.2	2.8	3.6	5.0
	Heating	Btu/h	8.5	10.9	13.6	20.5
		kW	2.5	3.2	4	6
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m^3/h	460	460	520	580
	Sound pressure level(H/M/L)	dB(A)	43/39/36	43/39/36	43/39/36	48/46/42
	Sound power level(H/M/L)	dB(A)	56/53/49	56/53/49	56/53/49	61/59/55
Installation	External dimensions(W/D/H)	mm	720/255/640	720/255/640	720/255/640	720/255/640
	Shipping dimensions(W/D/H)	mm	784/305/720	784/305/720	784/305/720	784/305/720
	Net/Shipping weight	kg	18/20	18/20	18/20	18/20
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	12.7	12.7	12.7	12.7
Controller	Wired (O-Optional/S-Standard)	/	/	/	/	/
	Infrared(O-Optional/S-Standard)	/	YR-HD(S)	YR-HD(S)	YR-HD(S)	YR-HD(S)

Hi wall

CH43BV022-HYJ1H CH43BV036-HYJ1H CH43BV056-HYJ1H
CH43BV028-HYJ1H CH43BV045-HYJ1H CH43BV071-HYJ1H

YR-HD(S)

YR-E16B(O)

YR-E17(O)

- Stylish Design & LED Display

- Built in EEV, Easy to Installation

- Negative Ion, Vitamin C, and ESF Filter Optional
- 6 Models Ranging From 2.2kW to 7.1kW

STANDARD FUNCTION

On-Off card | Auto-swing | Central control | Clean air | Lowambient heating (-15°C) | Blue fin | Auto restart | 3 minutes protection | 24 hours timer | Lowambient cooling (-5°C) | Lowambient heating

Model/Indoor unit			CH43BV022-HYJ1H	CH43BV028-HYJ1H	CH43BV036-HYJ1H	CH43BV045-HYJ1H	CH43BV056-HYJ1H	CH43BV071-HYJ1H
Capacity	Cooling	kBtu/h	7.5	9.5	12.3	15.3	19.1	24.2
		kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	Btu/h	8.5	10.9	13.6	17.1	21.5	27.3
		kW	2.5	3.2	4	5	6.3	8
Electrical Parameters	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
Performance	Air flow (H)	m³/h	600	600	600	600	800	800
	Sound pressure level(H/M/L)	dB(A)	37/33/31	37/34/31	41/36/33	41/36/33	43/39/34	48/39/37
	Sound power level(H/M/L)	dB(A)	48/44/42	48/45/42	52/47/44	52/47/44	54/50/45	59/50/48
Installation	External dimensions(W/D/H)	mm	938/187/265	938/187/265	938/187/265	938/187/265	1046/239/299	1046/239/299
	Shipping dimensions(W/D/H)	mm	1016/304/360	1016/304/360	1016/304/360	1016/304/360	1111/329/373	1111/329/373
	Net/Shipping weight	kg	10.9/13.1	10.9/13.1	10.9/13.1	10.9/13.1	13/16.5	13/16.5
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	9.52	9.52
	Refrigerant gas pipe	mm	12.7	12.7	12.7	12.7	15.88	15.88
Controller	Wired (O-Optional/S-Standard)	/	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)	YR-E16B(O)
		/	YR-E17(O)	YR-E17(O)	YR-E17(O)	YR-E17(O)	YR-E17(O)	YR-E17(O)
	Infrared(O-Optional/S-Standard)	/	YR-HD(S)	YR-HD(S)	YR-HD(S)	YR-HD(S)	YR-HD(S)	YR-HD(S)

ERV

Energy Reclaim Ventilation

CE43BV015-HYJ1H CE43BV080-HYJ1H
CE43BV026-HYJ1H CE43BV100-HYJ1H

YR-N07

- **Be Controlled with Other Indoor Units Together**

- **Efficient Heat Recovery Air Processing**
- **Heat Recovery Media Element**
- **4 Models Ranging From 150m³/h to 1000m³/h**

STANDARD FUNCTION

Model/Indoor unit			CE43BV015-HYJ1H	CE43BV026-HYJ1H	CE43BV080-HYJ1H	CE43BV100-HYJ1H
Electrical	Power supply	Ph/V/Hz	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60	1/208-230/50/60
	Rated power input	kW	0.1	0.12	0.36	0.36
	Rated current	A	0.55	0.55	1.65	1.65
Performance	Air flow (H)	m³/h	150	260	800	1000
	Sound pressure level(H/L)	dB(A)	44/43	44/43	57/55	57/55
	Sound power level(H/L)	dB(A)	55/54	55/54	68/66	68/66
Installation	External dimensions(W/D/H)	mm	940/685/276	940/685/276	1227/1115/387	1227/1115/387
	Shipping dimensions(W/D/H)	mm	1013/773/345	1013/773/345	1465/1213/430	1465/1213/430
	Net/Shipping weight	kg	28.7/31.2	28.7/31.2	85.5/90.6	85.5/90.6
	Static Pressure	Pa	80	60	120	100
Controller	Wired (O-Optional/S-Standard)	/	YR-N07(S)	YR-N07(S)	YR-N07(S)	YR-N07(S)
	Infrared(O-Optional/S-Standard)	/	/	/	/	/

AHU Connection Kit

System Introduction

CIAC offers a range of connection kit to connect IMVF outdoor units to third party DX air handling units.

System Application

•Provide a solution for big space to cool down the supply fresh air with IMVF outdoor units to match the air handling units. Intergraded the advantages of IMVF and AHU units

•Meet the requirement of law in EU, that for every working place it have to supply at minimum 25 m3/h fresh air.so it means that every office, every shop and mostly every commercial building MUST have this solution.

High rise building without podium

High rise building with podium

Single layer with a large area

System Line Up

AHU Kit Configuration

CIAC AHU Connection Kit consists the following 4 parts.

•EXV part, Control part, Sensor and wire are all integrated in one box.
•Controller need to be purchased separately.

AHU Connection Kit Control

System Control

Central Control: AHU control is same as IMVF, models indoor unit control.

Central controller
(YCZ-A003,A004)

Easy Installation

•Adopting the IMVF outdoor ,not the traditional chiller outdoor system, is easy to design and install since no additional water system such as boilers , gas connections, cooling tower etc. are required. This also reduces the total system cost.
•AHU can provide enough cooled fresh air to big space other than ERV and fresh air indoor units.
•All the control system for IMVF outdoor is available:
-Wired control -Central control -Network control -BMS control

EXV part and Control part integration, easy for translation and installation. Gas pipe is integrated into the valve box.	Gas pipe no need the bend and welding, easy installation. CIAC Traditional
Optional installation location EEV box inlet and outlet pipe can be left or right.	Installation can choose lifting or nailed to the wall. Hang, Nail to the wall OR

Advantages

Broad capacity	Connected AHU capacity from 5HP to 20HP.
High Compatible	1.Same PCB board with IMVF indoor, easy operation and service. 2.Same wired controller can be used with IMVF indoor unit such as YR-E14, YR-E16 and YR-E17.
Reliable EEV	

Specification

Model	AH1-280A	AH1-560A
Connected AHU capacity	14≤x ≤28kW(5-10HP)	28<x ≤56kW(10-20HP)
Power Supply （Ph/V/Hz）	1/220-230/50/60	1/220-230/50/60
Dimention(W/D/H)	350/226/155	433/296/193
Shipping dimensions	606*295*209	667*365*249
Material	Galvanized steel	Galvanized steel
Color	Grey	Grey
Weight/kg	6	9
Shipping Weight/kg	8	12
Liquid pipe (mm)	9.52 （Main） /12.7	12.7 （Main） /15.88
Gas pipe (mm)	25.4 （Main） /22.2 /19.05	28.58 （Main） /25.4/22.22
Pipe connection method	Flare connection and welding	Flare connection and welding
Brand box-Indoor Max Single pipe length/m	5	5
Branch box- indoor max drop/m	5	5
Height Drop between branch box /m	15	15

131 Control System Structure

133 Individual Controller

135 Central Controller

136 BMS

140 Accessories

IMVF
Inverter Multi Variable Flow

Control Systems

Control System Structure

User Friendly Management Control Solution

Integrated Management

Convenient and efficient. CIAC controllers realize the co-management of IMVF in one system, providing you more combination choices for better managing large or middle-sized buildings.

Building Management

The excellent building management system provides a professional and reliable service for a better management of your air conditioning units.

1 2 4 3

Intelligent Management

"CIAC Smart AC" provides an intelligent and personalized experience for your smart life.

Applications

CIAC control products are designed to provide you a perfect solution for the small, medium or large commercial projects.

Individual Controller

The individual control system has a variety of wired and wireless controllers which enable you an easy and intelligent control of your air conditioners. You can choose the one which best suits for your air conditioning management.

YR-HD

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual control
- Timer
- Clock

YR-E17

- On/Off, Mode, Fan speed, Temperature setting, Swing.
- Individual & Group control (Max 16 indoor units)
- Simple and Smart design, 86*86*13.05mm
- Touch button with back light
- Timer /Clock
- Easy installation, user friendly

YR-E16B

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual & Group control (Max 16 indoor units)
- Large touch button
- Fahrenheit/ Celsius selectable; Sensitivity ±0.5°C (±1 ℉)
- Humidity display
- Multi Language: English, Spanish, Italian, Russian, French
- Static pressure setting
- Error display in sequence of date

RE-02

- Infrared signal receiver
- Realize the remote control of Duct type indoor unit

Central Controller

YCZ-A004 is a smart touch screen controller enabling remote management of up to 256 indoor units.

YCZ-A004

- Individual control, Group control & Central control (Max 256 indoor units)
- 7-inch TFT LCD touch screen with back light
- Schedule control
- Operation mode lock
- Control mode setting (LIFO, Central, Lock)
- User editable control logic
- Indoor units' information edit
- Error display
- Fire alarm terminal
- Historical data backup

YCZ-A004 System

BMS

The building management modules could perfectly integrate air conditioners into the Building Management System, providing an excellent solution for large commercial areas.

HCM-03

HCM-01

HCM-01

- Local control version; Convert RS-485 to RS-232
- Max. 32 systems/ outdoor units, each system unit requires one IGU02.
- Operation status setting & monitoring.
- Max. 400 indoor units can be controlled
- Schedule setting (weekly, monthly)
- Operation and Error history log
- Electricity charge report

IGU02

- Protocol adapter, convert Homebus to RS-485
- Match with BMS (HCM-01, 03). Each system requires one IGU02
- Max. 40 indoor units can be connected with one IGU02
- Electricity data collection, calculation, allocation and storage.

HCM-03 BACnet

- Remote monitoring version; Third party interface: BACnet ip/ Modbus ip/ Modbus rtu
- Max. 1000 indoor units can be controlled
- Max. 4 groups. Each group can connect 20 systems. Each system requires one IGU02.
- Operation status setting & monitoring.
- Schedule setting (weekly, monthly)
- Multi user management with different authorized levels
- Operation and Error history log

IGU02

- Protocol adapter, convert Homebus to RS-485
- Match with BMS (HCM-01, 03). Each system requires one IGU02
- Max. 40 indoor units can be connected with one IGU02
- Electricity data collection, calculation, allocation and storage.

HCM-05/HCM-05(A)

- Third party interface: BACnet ip
- Max. 250 indoor units can be controlled for HCM-05; and 500 indoor units for HCM-05(A)
- Max. 32 systems. Each system requires one IGU02.
- Multi user management with different authorized levels
- Cooperated technology with Honeywell

IGU02

- Protocol adapter, convert Homebus to RS-485
- Match with BMS (HCM-01, 03, 05, 05A). Each system requires one IGU02
- Max. 40 indoor units can be connected with one IGU02
- Electricity data collection, calculation, allocation and storage.

Cloud Services Platform

- 7*24 Personalized Long-distance monitoring & service
- Malfunction alarm and error solving suggestions
- Power consumption data collection and analysis

LonWorks

IGU06

- Protocol adapter, convert Homebus to Modbus
- Max. 64 indoor units can be controlled
- Match with IGU07 to realize the Lonworks gateway function
- Max. 32 indoor units can be connected with one IGU06 when connecting with the IGU07

IGU07

- Protocol adapter, convert Modbus to Lonworks
- Each system requires one IGU07+ IGU06
- Max. 32 indoor units can be connected in one system
- External 24V DC power supply is needed by IGU07.

LonWorks System

ACCESSORIES

Name	Design	Model	Functions	For what units
Gather pipe		HZG-20A	Refrigerant gathering	2 IMVF outdoor units
Gather pipe		HZG-30A	Refrigerant gathering	3 IMVF outdoor units
Gather pipe		HZG-R20A	Refrigerant gathering for IMVF Heat Recovery	2 outdoor units
Gather pipe		HZG-R30A	Refrigerant gathering for IMVF Heat Recovery	3 outdoor units
Manifold pipe		FQG-B335A	Refrigerant distribution for heat pump MRV	Total indoor units capacity less than 33,500W
Manifold pipe		FQG-B506A	Refrigerant distribution for heat pump MRV	Total indoor units capacity less than 50,600W, but equal or bigger than 33,500W
Manifold pipe		FQG-B730A	Refrigerant distribution for heat pump MRV	Total indoor units capacity less than 73,000W, but equal or bigger than 50,600W
Manifold pipe		FQG-B1350A	Refrigerant distribution for heat pump MRV	Total indoor units capacity bigger than 73,000W
Manifold pipe		FQG-RB335A	Refrigerant distribution for IMVF Heat Recovery	Total indoor units capacity less than 33,500W
Manifold pipe		FQG-RB506A	Refrigerant distribution for IMVF Heat Recovery	Total indoor units capacity less than 50,600W, but equal or bigger than 33,500W
Manifold pipe		FQG-RB730A	Refrigerant distribution for IMVF Heat Recovery	Total indoor units capacity less than 73,000W, but equal or bigger than 50,600W
Manifold pipe		FQG-RB1350A	Refrigerant distribution for IMVF Heat Recovery	Total indoor units capacity less than 135,000W, but equal or bigger than 73,000W
VP box		VP1-112A	Vavle box	IMVF Heat Recovery
VP box		VP1-180A	Vavle box	IMVF Heat Recovery
VP box		VP1-280A	Vavle box	IMVF Heat Recovery
VP box		VP4-450A	Vavle box	IMVF Heat Recovery

Control System		Model	Design	Functions	For MRV Units	For Super Match Units
Individual Controller	Wireless Controller	YR-HBS01		•On/Off, Mode, Fan speed, Temperature setting, Swing. •Individual control •Five grades of fan speed: •Individual blade control for Smart Power Cassette •Clock & Timer •Follow/Evade function	All	Smart Power Series
		YR-HD		•On/Off, Mode, Fan speed, Temperature setting, Swing •Individual control •Mode: one button solution. Cool, Heat, Dry, Quiet. •Simple schedule control •Clock	All	Super Match R410A ON/OFF
		YR-H005		•On/Off, Mode, Fan speed, Temperature setting, Swing •Individual control •Simple schedule control •Turbo cooling/heating	/	R22 ON/OFF
		YL-HE		•Individual control •Cooling only	/	Super Match R410A ON/OFF R22 ON/OFF
	Wired Controller	YR-E16A		•Alternating current •On/Off, Mode, Fan speed, Temperature setting, Swing. •Individual & Group control (Max 16 indoor units) •Large button •Fahrenheit/ Celsius selectable; Sensitivity ±0.5°C (±1°F) •Weekly timer. •Individual louver control for Smart Power Cassette •Static pressure setting	All	Smart Power Super Match R410A ON/OFF
		YR-E16B		•Alternating current •Colorful screen •On/Off, Mode, Fan speed, Temperature setting, Swing. •Individual & Group control (Max 16 indoor units) •Fahrenheit/ Celsius selectable; Sensitivity ±0.5°C (±1°F) •Weekly timer •Individual louver control for Smart Power Cassette •Static pressure setting	All	Smart Power Super Match R410A ON/OFF
		YR-E17		•Alternating current •On/Off, Mode, Fan speed, Temperature setting, Swing. •Individual & Group control (Max 16 indoor units) •Simple and Smart design, 86*86*13.05mm •Touch button with back light •Timer/ Clock •Easy installation	All	Smart Powe Super Match R410A ON/OFF
		HW-BA116ABK		•Alternating current •Basic fucntion: On/Off, Mode, Fan speed, Temperature •Individual & Group control (Max 16 indoor units) •Simple and Smart design, 86*86*13.05mm	All	Smart Power Super Match R410A ON/OFF
		YR-E20		•Direct current •On/Off, Mode, Fan speed, Temperature setting, Swing. •Individual & Group control (Max 16 indoor units) •Simple and Smart design, 86*86*16.5mm •Touch button with back light	/	R22 ON/OFF

Control System	Model	Design	Functions	For MRV Units	For Super Match Units
Centralized Controller	YCZ-A004		•Individual control, Group control & Central control (Max 256 indoor units) •7-inch TFT LCD touch screen with back light •Weekly timer •Indoor units' information edit •Historical data backup * Must be used in combination with an HA-MA for each MRV system. (Max. 32 sets)	All	Smart Power Super Match R410A ON/OFF R22 ON/OFF
	YCZ-G001		•Individual control, Group control & Central control (Max 32 indoor units) •Large touch kiey •Weekly timer •Unit name & Group name free setting. Four background available (mall, hotel, office, home) •Error display * Must be used in combination with an HA-MA for each MRV system (Max. 32 sets)	All	Smart Power Super Match R410A ON/OFF R22 ON/OFF
BMS (Building Mannagement System)	HCM-01A		•Local control version; Convert RS-485 to RS-232 •Max. 400 indoor units can be controlled •Modbus rtu terminal •Brand new interface design •Win 7 32bits/64bits, Win 8 compatible •Max. 32 systems/ outdoor units, each system unit requires one HA-MA •Schedule setting •Electricity charge report	All	Smart Power Super Match
	HCM-03		•Remote monitoring version; Third party interface: BACnet ip/ Modbus ip/ Modbus rtu •Max. 1000 indoor units can be controlled •Max. 4 groups. Each group can connect 20 systems. Each system requires one HA-MA •Operation status setting & monitoring. •Schedule setting •Multi user management with different authorized levels •Operation and Error history log	All	Smart Power Super Match
	HCM-05 HCM-05A		•Remote monitoring version •Third party interface: BACnet ip •Max. 250 indoor units can be controlled for f HCM-05; and 500 indoor units for HCM-05A •Max. 32 systems. Each system requires one IGU02. •Operation status setting & monitoring. •Schedule setting •Multi user management with different authorized levels •Electricity charge report •Operation and Error history log •Cooperated technology with Honeywell	All	Smart Power Super Match
Gateway	IGU02		•Protocol adapter, convert Homebus to Modbus •Match with BMS (HCM-01, 03, 05, 05A). Each system requires one IGU02 •Max. 40 indoor units can be connected with one IGU02 •Electricity data collection, calculation, allocation and storage	All	/
	HA-MA1		•Protocol adapter, convert Homebus to RS-485 •Gateway: Modbus rtu •Match with Centralized controller (YCZ-G001, A004) Each system requires one HA-MA •Max. 64 indoor units can be connected with one HA-MA	All	/
	IGU07		•Protocol adapter, convert Modbus to Lonworks •Each system requires one IGU07+ HA-MA •Max. 32 indoor units can be connected in one system •External 24V DC power supply is needed by IGU07.	All	/
WIFI Control	KZW-W001		•Remote control: On/Off, Mode, Fan speed, Temperature setting, Swing. •Individual & Group control (Max 16 indoor units) •Cloud adaptation •Weekly timer •A YCJ-A002 isrequired on some indoor unit	/	Smart Power Super Match
Adapter (Detector)	RE-01/02		•Infrared signal receiver •Realize the remote control of Duct type indoor unit * Model selection depens on the duct indoor unit	Duct Two- way Cassette	Duct
	YCJ-A002		•Protocal adapter: RS-485 •Super Match and ON/OFF Unitary can be controlled together with MRV in one system	/	Smart Power Super Match R410A ON/OFF R22 ON/OFF
	YCJ-A003		•Malfunction detector	/	Smart Power Super Match R410A ON/OFF R22 ON/OFF

CIAC®