CIAC

**VRF 50/60Hz
Catalogue**

2024 XMVF

INDOOR UNITS

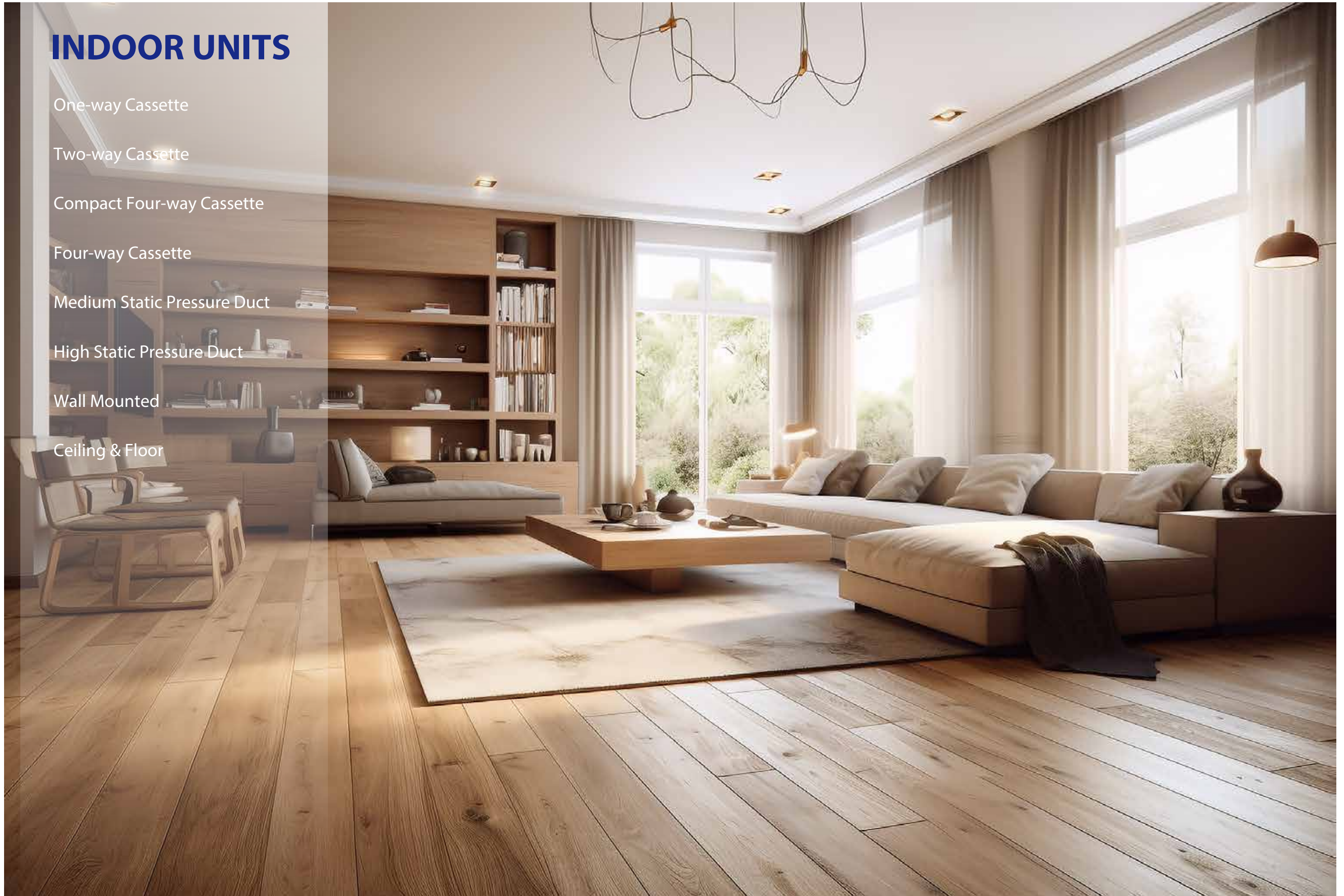One-way Cassette

Two-way Cassette

Compact Four-way Cassette

Four-way Cassette

Medium Static Pressure Duct

High Static Pressure Duct

Wall Mounted

Ceiling & Floor

Inoor Unit Lineup

Normal VRF Indoor Units

kW			1.8	2.2	2.8	3.6	4.5	5.6	7.1		8.0	9.0	10.0	11.2	12.5	14.0	16.0	20.0	25.0	28.0	40.0	45.0	56.0
Btu/h			6k	7k	9k	12k	15k	19k	24k		27k	30k	34k	38k	42k	48k	55k	68k	85k	96k	136k	154k	191k
One-way Cassette			●	●	●	●	●	●	●														
Two-way Cassette				●	●	●	●	●	●														
Four-way Cassette					●	●	●	●	●		●	●	●	●		●							
Compact Four-way Cassette			●	●	●	●	●																
Medium Static Pressure Duct				●	●	●	●	●	●		●	●		●		●							
High Static Pressure Duct									●		●	●		●		●	●	●	●	●	●	●	●
Wall Mounted				●	●	●	●	●	●		●	●											
Ceiling & Floor						●	●	●	●		●	●		●		●							

● AC Indoor Units

Notes: No controller is supplied inside the indoor unit package. Controllers must be purchased separately.

Indoor Unit Functions

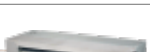|	Functions		One-way Cassette	Two-way Cassette		Compact Four-way Cassette	Four-way Cassette	Medium Static Pressure Duct	High Static Pressure Duct	Wall Mounted	Ceiling & Floor
Comfort	Cold air prevention	When starting to warm up, the fan speed is automatically adjusted according to coil temperature to prevent cold air discharge. After warming up, fan speed is set as desired	●	●		●	●	●	●	●	●
	Quiet operation	All indoor units are quiet operation	●	●		●	●	●	●	●	●
	Auto cooling-heating changeover[1]	Automatically selects cooling or heating mode to achieve the set temperature	●	●		●	●	●	●	●	●
	Digital display on/off	Indoor unit displays can be shut off at night, creating a better environment for rest	●	●		●	●	●	●	●	●
	Buzzer sound on/off	The buzzer sound of the indoor unit can be turned off to create a quieter environment	●	●		●	●	●	●	●	●
	Heat stratification compensation	The heat stratification compensation function in HEAT mode obtains a value that more closely reflects the true temperature of the air conditioned space	●	●		●	●	●	●	●	●
	Two thermistors control	The indoor temperature can be checked using the thermistor in the remote controller as well as from the indoor unit	●	●		●	●	●	●	●	●
	0.5°C/1°C setting temperature adjustment	Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control	●	●		●	●	●	●	●	●
Health	Air filter	Removes airborne dust particles to ensure a steady supply of clean air	●	●		●	●	●	●	●	●
	Fresh air intake	A reserved outside air intake port allows outdoor air to be introduced directly into the unit	● (45-71)	●		● (AC series)	●	●	×	×	×
	Dirty filters indicator signal	The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter	●	●		●	●	●	●	●	●
Air flow	Vertical swing	Possibility to select automatic vertical moving of the air discharge louvre, for uniform air flow and temperature distribution	5 steps setting+auto	5 steps setting+auto		5 steps setting+auto	5 steps setting+auto	×	×	5 steps setting+auto	5 steps setting+auto
	Horizontal swing	Possibility to select automatic horizontal moving of the air discharge louvre, for uniform air flow and temperature distribution	Manually set fixed angle+auto (45-71)	×		×	×	×	×	×	Manually set fixed angle+auto
	Fan speed steps	3 or 7 fan speeds can be selected to optimize comfort levels	3+auto (AC series)	3+auto (AC series)		3+auto (AC series)	3+auto (AC series)	3+auto (AC series)	3+auto (AC series)	7+auto	3+auto (AC series)
	Individual louver control[2]	Individual louver control via the wired remote controller makes it simple to fix the position of each flap individually	×	×		×	● (360° panel)	×	×	×	×
	Auto fan speed	Automatically controls rotation speed of fan depending on indoor load to achieve efficiency and comfort simultaneously	●	●		●	●	●	●	●	●
	Soft wind mode	Supply air against the ceiling to create windless environment	×	×		×	●	×	×	×	×
	Adjustable ESP	ESP can be adjusted over a wide range to ensure constant airflow	×	×		×	×	●	●	×	×
Remote control & timer	Timer	Timer can be set to start and stop operation anytime on a daily or weekly basis	●	●		●	●	●	●	●	●
	Infrared remote control	Infrared remote control with LCD to remotely control your indoor unit	●	●		●	●	●	●	●	●
	Wired remote control	Wired remote control to remotely control your indoor unit	●	●		●	●	●	●	●	●
	Group control	Up to 16 indoor units can be in a group control system	●	●		●	●	●	●	× (AC series)	●
	Centralized control	Centralized control to control several indoor units from one single point	●	●		●	●	●	●	●	●
	°C/°F setting	Temperature unit °C or °F can be set according to your usage habits	●	●		●	●	●	●	●	●
Other functions	Energy saving[3]	Using Infrared Sensor Controller automatically turns indoor units on or off upon sensing that the room is occupied or unoccupied,ensuring climate control whilst minimizing energy consumption	●	●		●	●	●	●	●	●
	Auto-restart	The unit restarts automatically at the original settings after power failure	●	●		●	●	●	●	●	●
	Self-diagnosis	Simplifies maintenance by indicating system faults or operating anomalies	●	●		●	●	●	●	●	●
	Drain pump	Facilitates condensation draining from the indoor unit	●	●		●	●	●	○	×	×
	Fan only	The air conditioner can be used as fan, blowing air without cooling or heating	●	●		●	●	●	●	●	●
	Long-distance on/off function	Long-distance startup or shutoff the system	○	○		○	○	○	○	○	○
	Long-distance alarm function	Long-distance alarm when an error occurs	○	○		○	○	○	○	○	○
	Multiple protections	Multiple protections make the unit run more reliably	●	●		●	●	●	●	●	●
	Easy cleaning	The unit is easy cleaning thanks to the rational design	●	●		●	●	●	●	●	●

Note: ●: equipped as standard; ○: customization option; ×: without this function
1. Please contact your local dealer for detailed information.
2. The indoor units must be customized before order so as to use 360° panel with individual louver control,inproper combinations may cause malfunction.
3. Energy saving function needs to be realized with the infrared sensor controller.

One-way Cassette

Meeting corner location requirements and at the same time maintaining the required visual appearance.

Key Features

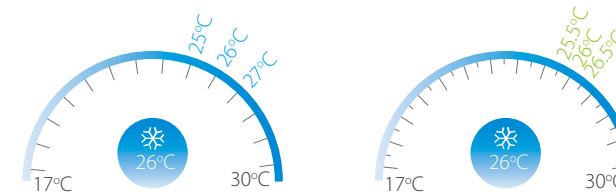| One-way Cassette		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Fresh air intake	● (45 to 71)
	Dirty filters indicator signal	●
Air flow	Multiple fan speeds	3+auto
	Multiple steps vertical swing	5+auto
Easy installation	Minimized height	●
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm

Note: ● : equipped as standard

COMFORT

Quiet Operation

The One-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 22dB(A).

22dB(A).

0.5℃/1℃ Setting Temperature Adjustment

Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.

25℃ 26℃ 27℃
17℃   26℃   30℃

25.5℃ 26℃ 26.5℃
17℃   26℃   30℃

Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.
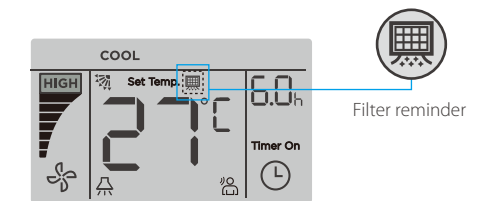
Buzzer

HEALTH

Fresh Air Intake

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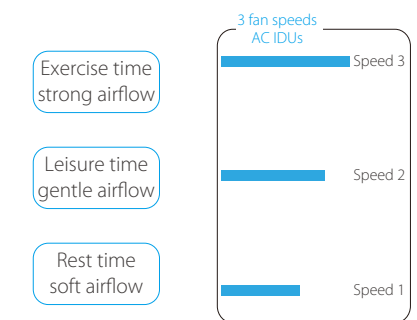
Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.

COOL
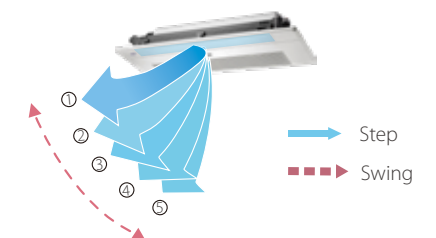HIGH Set Temp. 6.0h
27℃ Timer On
Filter reminder

AIR FLOW

Multiple Fan Speeds

AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

3 fan speeds
AC IDUs
Exercise time strong airflow — Speed 3
Leisure time gentle airflow — Speed 2
Rest time soft airflow — Speed 1

Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.
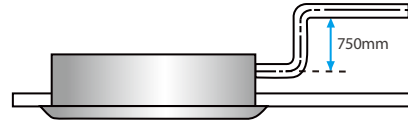
→ Step
┅► Swing

Easy Installation

The slim, compact design make the One-way Cassette ideal for interiors with limited ceiling space. Models 18 to 36 are just 153mm high whilst models 45 to 71 are 189mm high.
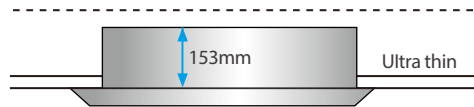
High-lift Drain Pump

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

153mm Ultra thin

750mm

Specifications - AC Series

60Hz Series

Model			CK400A-V006A1AN1X	CK400A-V007A1AN1X	CK400A-V009A1AN1X	CK400A-V012A1AN1X	CK400A-V016A1AN1X	CK400A-V020A1AN1X	CK400A-V024A1AN1X
Power supply			1 phase, 220-240V, 60Hz						
Cooling[1]	Capacity	kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1
	Input	W	41	41	41	41	54	60	75
Heating[2]	Capacity	kW	2.2	2.6	3.2	4	5	6.3	8
	Input	W	41	41	41	41	54	60	75
Indoor fan	Type		AC						
motor	Quantity		1						
Refrigerant type			R410A						
Airflow rate (H/M/L)		m³/h	523/404/275		573/456/315		693/600/476	792/688/549	933/749/592
Sound pressure level (H/M/L)[3]		dB(A)	37/34/30	37/34/30	39/37/34	39/37/34	41/39/35	42/40/36	44/41/37
Indoor unit	Dimension[4] (WxHxD)	mm	1054×153×425				1275×189×450		
	Packing (WxHxD)	mm	1155×245×490				1370×295×505		
	Net/Gross weight	kg	12.5/16		13/16.5		18.5/22.8	18.8/23.1	19.5/23.8
Panel	Dimension (WxHxD)	mm	1180×25×465				1350×25×505		
	Packing (WxHxD)	mm	1232×107×517				1410×95×560		
	Net/Gross weight	kg	3.5/5.2				4/5.4		
Pipe	Liquid pipe	mm	Φ6.35				Φ9.53		
connections	Gas pipe	mm	Φ12.7				Φ15.9		
	Drain pipe	mm	OD Φ25						

Notes:
1. Indoor temperature 27℃ DB, 19℃ WB; outdoor temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20℃ DB; outdoor temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Two-way Cassette

Compact and lightweight two-way airflow, perfect for limited ceiling space applications.

Key Features

Two-way Cassette		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Fresh air intake	●
	Dirty filters indicator signal	●
Air flow	Multiple fan speeds	3+auto
	Multiple steps vertical swing	5+auto
Easy installation	Minimized height	●
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm

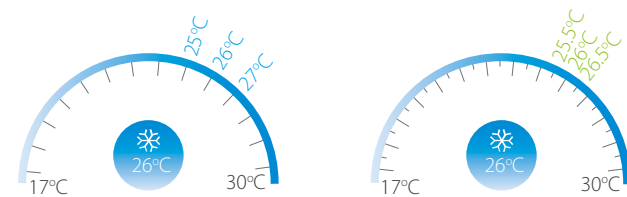Note: ●: equipped as standard

COMFORT

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

24dB(A).

0.5℃/1℃ Setting Temperature Adjustment
Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.

25℃ 26℃ 27℃
25.5℃ 26.5℃
26℃
17℃   30℃
26℃
17℃   30℃

Digital Display On/Off
Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

Buzzer Sound On/Off
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.
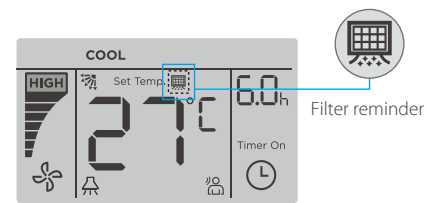
Buzzer

HEALTH

Fresh Air Intake
A reserved outside air intake port allows outdoor fresh air to be introduced directly into the unit, negating the need for a separate ventilation system.
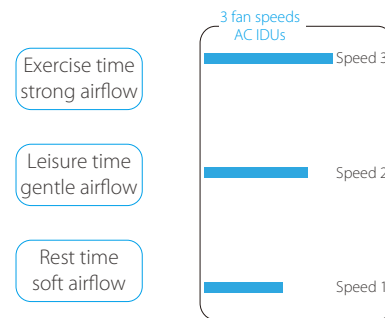
Dirty Filters Indicator Signal
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.

COOL
HIGH
Set Temp.
27℃
6.0h
Timer On
Filter reminder

AIR FLOW

Multiple Fan Speeds
AC Series supplies 3 indoor fan speeds to meet the needs of different indoor conditions.

3 fan speeds
AC IDUs
Exercise time strong airflow — Speed 3
Leisure time gentle airflow — Speed 2
Rest time soft airflow — Speed 1

Multiple Steps Vertical Swing
There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.
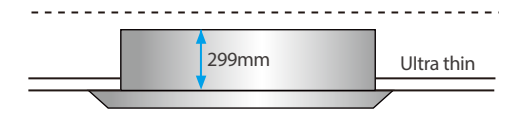
Step
Swing
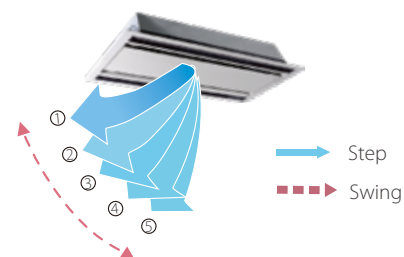
EASY INSTALLATION

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

Easy Installation
The slim, compact design make the Two-way Cassette ideal for interiors with limited ceiling space.

299mm   Ultra thin

High-lift Drain Pump
A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.

750mm
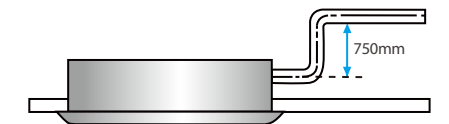
Specifications - AC Series

60Hz Series

Model			CK400A-V007A2AN1X	CK400A-V009A2AN1X	CK400A-V012A2AN1X	CK400A-V016A2AN1X	CK400A-V020A2AN1X	CK400A-V024A2AN1X
Power supply			1 phase, 220-240V, 60Hz					
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Input	W	78	78	83	115	133	205
Heating[2]	Capacity	kW	2.6	3.2	4	5	6.3	8
	Input	W	78	78	83	115	133	205
Indoor fan motor	Type		AC					
	Quantity		1					
Refrigerant type			R410A					
Airflow rate (H/M/L)		m³/h	674/509/381	674/509/381	740/577/435	878/689/561	941/776/654	1236/1110/864
Sound pressure level (H/M/L)[3]		dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30	44/40/34
Indoor unit	Dimension[4] (WxHxD)	mm	1172×299×591					
	Packing (WxHxD)	mm	1355×400×675					
	Net/Gross weight	kg	34/42.5			36/44.5		
Panel	Dimension (WxHxD)	mm	1430×53×680					
	Packing (WxHxD)	mm	1525×130×765					
	Net/Gross weight	kg	10.5/15					
Pipe connections	Liquid pipe	mm	Φ6.35			Φ9.53		
	Gas pipe	mm	Φ12.7			Φ15.9		
	Drain pipe	mm	OD Φ32					

Notes:
1. Indoor temperature 27℃ DB, 19℃ WB; outdoor temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20℃ DB; outdoor temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Compact Four-way Cassette

Compact design allows installation in shallow ceilings.

Key Features

Compact Four-way Cassette		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Fresh air intake	●
	Dirty filters indicator signal	●
Air flow	360° airflow	●
	Multiple fan speeds	3+auto
	Multiple steps vertical swing	5+auto
Easy installation	Compact size	●
	High-lift drain pump	Rated head: 1000mm Raise height: 500mm

Note:a ●: equipped as standard; ×: without this function

COMFORT

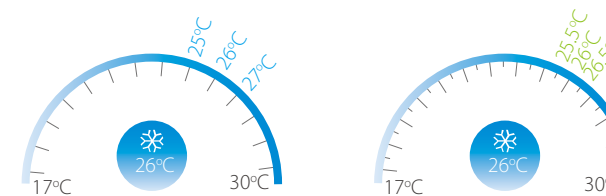### Quiet Operation

The Compact Four-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 22dB(A).

22dB(A).

0.5℃/1℃ Setting Temperature Adjustment

Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.

25℃
26℃
27℃
17℃ 26℃ 30℃

25.5℃
26℃
26.5℃
17℃ 26℃ 30℃

Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.
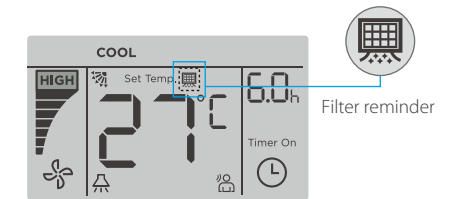
Buzzer

HEALTH

Fresh Air Intake

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

Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.

COOL
HIGH
Set Temp
27℃ 6.0h
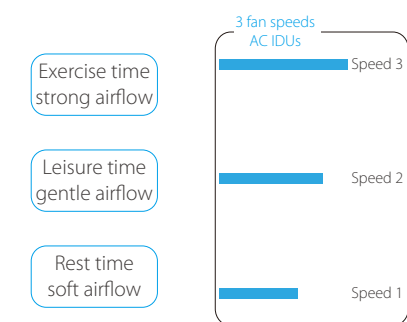Timer On
Filter reminder

AIR FLOW

360° Airflow

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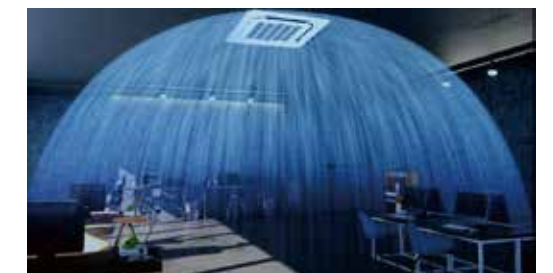
### Multiple Fan Speeds

AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

3 fan speeds
AC IDUs

Exercise time strong airflow — Speed 3
Leisure time gentle airflow — Speed 2
Rest time soft airflow — Speed 1

EASY INSTALLATION
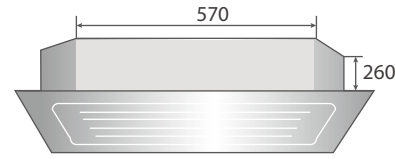
Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.
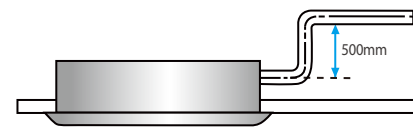
→ Step
▪▪▪▪ Swing
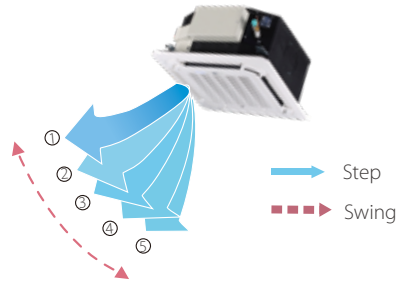
Compact Size

The slim and compact body has reduced the restriction enables the Compact Four-way Cassette successful installation in various ceiling spaces.

570
260

High-lift Drain Pump

A drain pump with a 500mm raise height is fitted as standard, simplifying installation of the drain piping.

500mm

Four-way Cassette

360° airflow for immediate, equal distribution of wider-angle cooling and heating, idea for standard ceilings.

Specifications - AC Series

60Hz Series

Model			CK400A-V007ACAN1X	CK400A-V009ACAN1X	CK400A-V012ACAN1X	CK400A-V016ACAN1X
Power supply			1 phase, 220-240V, 60Hz			
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5
	Input	W	50		60	
Heating[2]	Capacity	kW	2.4	3.2	4	5
	Input	W	50		60	
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate (H/M/L)		m³/h	397/292/215	408/310/231	496/359/263	496/359/263
Sound pressure level (H/M/L)[3]		dB(A)	36/33/23		42/36/29	
Indoor unit	Dimension[4] (WxHxD)	mm	570×260×630			
	Packing (WxHxD)	mm	675×285×675			
	Net/Gross weight	kg	17.4/20.4		18.8/21.8	
Panel	Dimension (WxHxD)	mm	647×50×647			
	Packing (WxHxD)	mm	715×123×715			
	Net/Gross weight	kg	2.5/4.5			
Pipe connections	Liquid pipe	mm	Φ6.35			
	Gas pipe	mm	Φ12.7			
	Drain pipe	mm	OD Φ25			

Notes:
1. Indoor temperature 27℃ DB, 19℃ WB; outdoor temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20℃ DB; outdoor temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Key Features

Four-way Cassette		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Air filter	●
	Fresh air intake	●
	Dirty filters indicator signal	●
Air flow	360° airflow	●
	Individual louver control	○
	Soft wind	●
	Multiple fan speeds	3+auto
	Multiple steps vertical swing	5+auto
Easy installation	Compact size	●
	High ceiling installation	●
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm

Note: ● : equipped as standard; ○ : customization option

COMFORT

0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.

Digital Display On/Off
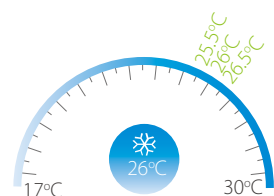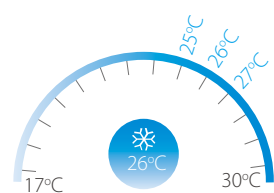
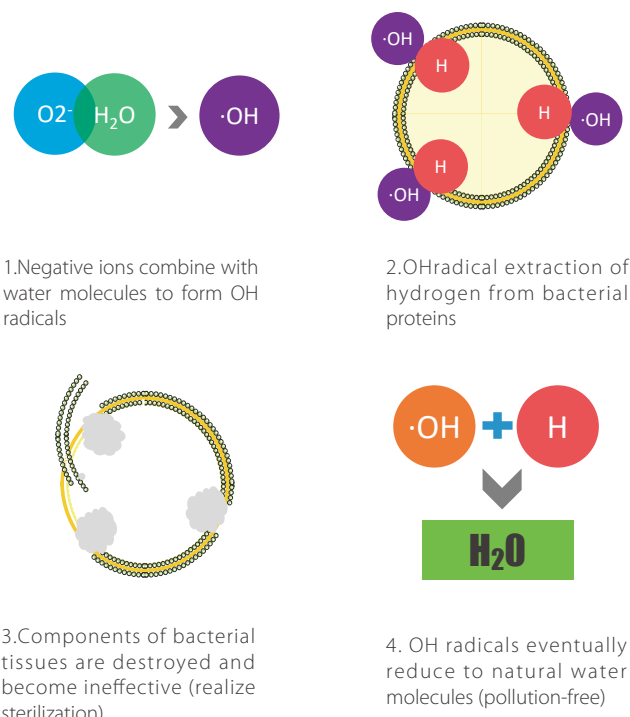Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

Buzzer

## Ionizer Sterilization

The powerful Ionizer protects you from bad odors and harmful bacteria. The circulating sterilization rate is over 96%.

$O2^-$ H_2O > ·OH

1.Negative ions combine with water molecules to form OH radicals

2.OHradical extraction of hydrogen from bacterial proteins

3.Components of bacterial tissues are destroyed and become ineffective (realize sterilization)

·OH + H

H_2O

4. OH radicals eventually reduce to natural water molecules (pollution-free)

Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.

COOL

Set Temp.

HIGH

6.0h

27°C

Timer On

Filter reminder
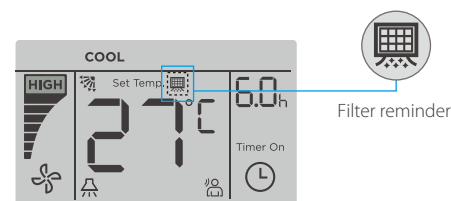
AIR FLOW

360° Airflow

New design, round air flow path ensures uniform air flow and temperature distribution.

360°

Individual louver control*

The Individual louver control can control the motors separately, making it possible to control all four louvers independently.

Airflow direction can be adjusted individually

*The indoor units must be customized before order so as to use 360° panel with individual louver control,inproper combinations may cause malfunction
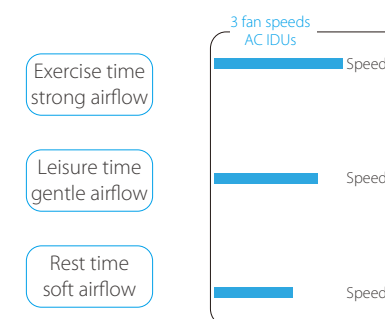
Soft Wind Mode

In soft wind mode, supply air against the ceiling to create windless environment, more comfort.

Multiple Fan Speeds

AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

Exercise time strong airflow

Leisure time gentle airflow

Rest time soft airflow

3 fan speeds AC IDUs

Speed 3

Speed 2
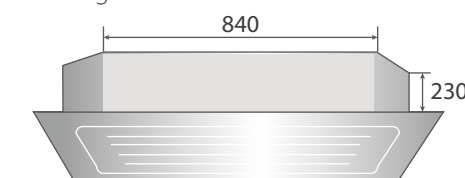
Speed 1

EASY INSTALLATION

High Ceiling Installation

The Four-way Cassette reserves a super high fan speed for high ceiling installation, it can provide power full cooling and heating up to 4.2m in height from floor.
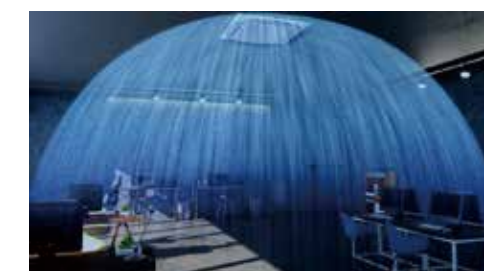
Compact Size

The height of models 28 to 80 are just 230mm whilst models 90 to 160 are 300mm, making the Four-way Cassette idea for standard ceilings.

840

230

High-lift Drain Pump

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

750mm

Sub Duct

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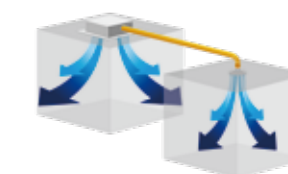
Convenient Panel Installation

The user-friendly design makes the panels very easy to install and simplifies field work.

Grille locks

45°

Simply press two locks to open the grille

Easy to remove the installation cover plate

Specifications - AC Series

60Hz Series

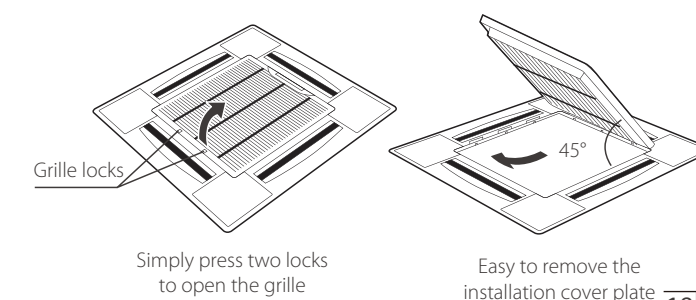| Model			CK400A-V009A4AN1X	CK400A-V012A4AN1X	CK400A-V016A4AN1X	CK400A-V020A4AN1X	CK400A-V024A4AN1X	CK400A-V028A4AN1X
Power supply			1 phase, 220-240V, 60Hz					
Cooling[1]	Capacity	kW	2.8	3.6	4.5	5.6	7.1	8
	Input	W	80	80	88	88	105	120
Heating[2]	Capacity	kW	3.2	4	5	6.3	8	9
	Input	W	80	80	88	88	105	120
Indoor fan motor	Type		AC					
	Quantity		1					
Refrigerant type			R410A					
Airflow rate (H/M/L)		m³/h	791/674/596	791/674/596	942/777/662	942/777/662	1235/1013/805	1235/1013/805
Sound pressure level (H/M/L)[3]		dB(A)	30/25/22	30/25/22	35/31/27	35/31/27	43/37/31	43/37/31
Indoor unit	Dimension[4] (WxHxD)	mm	840×230×840					
	Packing (WxHxD)	mm	955×260×955					
	Net/Gross weight	kg	21.5/26.7		23.7/28.9			
Panel	Dimension (WxHxD)	mm	950×50×950					
	Packing (WxHxD)	mm	1035×89×1035					
	Net/Gross weight	kg	5.8/7.9					
Pipe connections	Liquid pipe	mm	Φ6.35			Φ9.53		
	Gas pipe	mm	Φ12.7			Φ15.9		
	Drain pipe	mm	OD Φ32					

Model			CK400A-V030A4AN1X	CK400A-V034A4AN1X	CK400A-V036A4AN1X	CK400A-V048A4AN1X
Power supply			1 phase, 220-240V, 60Hz			
Cooling[1]	Capacity	kW	9	10	11.2	14
	Input	W	187	200	200	220
Heating[2]	Capacity	kW	10	11.1	12.5	16
	Input	W	187	200	200	220
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate (H/M/L)		m³/h	1333/1158/957	1634/1219/1139		1692/1243/1157
Sound pressure level (H/M/L)[3]		dB(A)	43/38/32	45/37/35		46/38/37
Indoor unit	Dimension[4] (WxHxD)	mm	840×300×840			
	Packing (WxHxD)	mm	955×330×955			
	Net/Gross weight	kg	28.7/34.1			30.9/36.3
Panel	Dimension (WxHxD)	mm	950×50×950			
	Packing (WxHxD)	mm	1035×89×1035			
	Net/Gross weight	kg	5.8/7.9			
Pipe connections	Liquid pipe	mm	Φ9.53			
	Gas pipe	mm	Φ15.9			
	Drain pipe	mm	OD Φ32			

Notes:
1. Indoor temperature 27℃ DB, 19℃ WB; outdoor temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20℃ DB; outdoor temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Medium Static Pressure Duct

Slim, compact design for limited space with duct distribution to the indoor space.

Key Features

Medium Static Pressure Duct		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Air filter	●
		○ (G3-class)
	Innovative puro-air kit	●
	Fresh air intake	●
	Dirty filters indicator signal	●
Air flow	Adjustable ESP	×
	Multiple fan speeds	3+auto
Easy installation	Compact size	●
	Stylish air discharge panel	○ (17 to 71)
	Flexible air inlet port installation	●
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm

Note: ●: equipped as standard; ○: customization option; ×: without this function

COMFORT

Quiet Operation

The Medium Static Pressure Duct indoor unit utilizes centrifugal blowers, reducing noise levels to as low as 23dB(A), and is an excellent choice for hotels and other noise-sensitive locations.
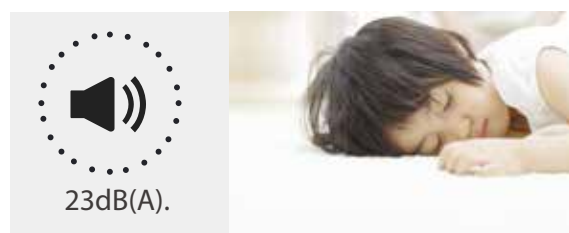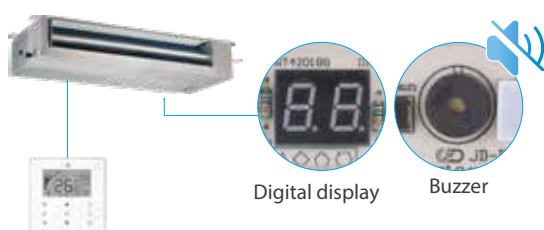
23dB(A).

0.5℃/1℃ Setting Temperature Adjustment

Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.

25℃ 26℃ 27℃
17℃ 26℃ 30℃

25.5℃ 26℃ 26.5℃
17℃ 26℃ 30℃
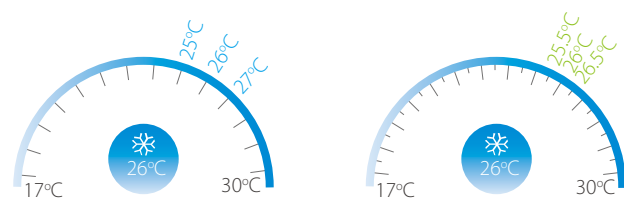
Digital Display and Buzzer Sound On/Off

Indoor unit displays can be shut off at night and buzzer sound can be set off to not disturb the user, creating a better environment for rest.

Digital display   Buzzer

HEALTH

Optional G3-class Air Filter

G3-class filter is optional for Medium Static Pressure Duct installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10 μm), creating a cleaner living environment.

The optional filter comply with EN779:2012

Innovative Puro-air Kit

Puro-Air kit, powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air to provide a healthy and safe indoor environment. It is also innovatively designed so that it could prevent UV damage to the eyes, skin, and respiratory tract.

Puro-Air Kit
Protectors of health and safety

OSRAM From Germany -OSRAM quality UV light source
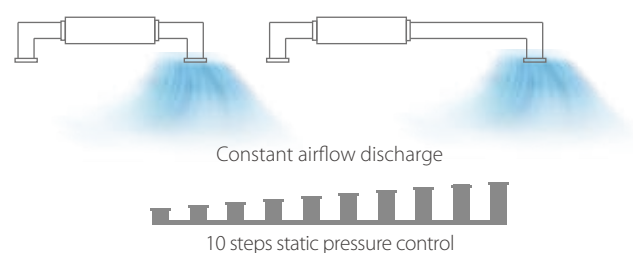
CE Ozone –Free
UV leakage-Free

*The indoor unit needs to be customized in order to use the Puro-air Kit.
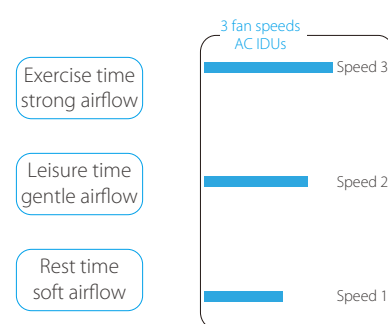
AIR FLOW

Static Pressure 10 Steps Control

Depending on the installation environment, Medium Static Pressure Duct is controlled the static pressure up to 10 steps via wired remote controller, for providing comfortable environment suitable for any environment.

Constant airflow discharge

10 steps static pressure control

Multiple Fan Speeds

AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

3 fan speeds
AC IDUs

Exercise time strong airflow — Speed 3

Leisure time gentle airflow — Speed 2

Rest time soft airflow — Speed 1

EASY INSTALLATION

Compact Size

Models 22 to 71 are just 210mm high whilst models 80 to 112 are 270mm high and model 140 to 160 are 300mm high.
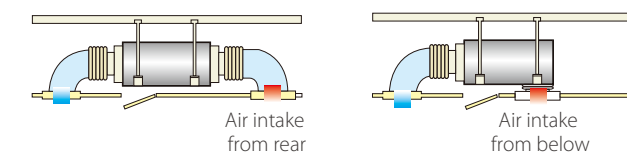
210mm

Ceiling
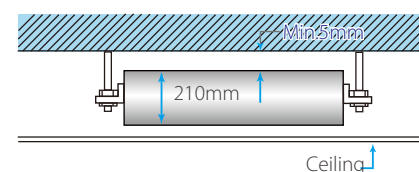
Stylish Air Discharge Panel

Stylish air discharge panel can be integrated with any decoration style (optional for models 17 to 71).

Flexible Air Inlet Port Installation

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

Air intake from rear   Air intake from below

High-lift Drain Pump

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

750mm

Specifications - AC Series

60Hz Series

Model			CC400A-V007AUANMX	CC400A-V009AUANMX	CC400A-V012AUANMX	CC400A-V016AUANMX	CC400A-V020AUANMX
Power supply			1 phase, 220-240V,60Hz				
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5	5.6
	Input	W	66	72	77	100	100
Heating[2]	Capacity	kW	2.6	3.2	4	5	6.3
	Input	W	66	72	77	100	100
Indoor fan motor	Type		AC				
	Quantity		1				
Refrigerant type			R410A				
Airflow rate (SH/H/M/L)		m³/h	538/456/375	538/456/375	597/514/429	811/684/575	811/684/575
External static pressure (Std(Min~Max))		Pa	10(10~30)				
Sound pressure level (H/M/L)[3]		dB(A)	36/35/32	36/35/32	39/38/34	39/38/34	39/38/34
Indoor unit	Dimension[4] (WxHxD)	mm	780x210x500			1000x210x500	
	Packing (WxHxD)	mm	870×285×525			1115×285×525	
	Net/Gross weight	kg	17.5/20			22/25	
Pipe connections	Liquid pipe	mm	Φ6.35			Φ9.53	
	Gas pipe	mm	Φ12.7			Φ15.9	
	Drain pipe	mm	OD Φ25				

Model			CC400A-V024AUANMX	CC400A-V028AUANMX	CC400A-V030AUANMX	CC400A-V036AUANMX	CC400A-V048AUANMX
Power supply			1 phase, 220-240V,60Hz				
Cooling[1]	Capacity	kW	7.1	8	9	11.2	14
	Input	W	125	133	134	378	352
Heating[2]	Capacity	kW	8	9	10	12.5	15.5
	Input	W	125	133	134	378	352
Indoor fan motor	Type		AC				
	Quantity		1				
Refrigerant type			R410A				
Airflow rate (SH/H/M/L)		m³/h	1029/934/781	1345/1165/1013	1345/1165/1013	1800/1556/1400	1905/1636/1400
External static pressure (Std(Min~Max))		Pa	10(10~30)	20(10~50)	20(10~50)	40(10~80)	40(10~100)
Sound pressure level (H/M/L)[3]		dB(A)	41/39/35	45/40/37	45/40/37	48/42/38	48/43/39
Indoor unit	Dimension[4] (WxHxD)	mm	1220×210x500	1230×270x775			1290×300×865
	Packing (WxHxD)	mm	1335×285×525	1355×350×795			1400×375×925
	Net/Gross weight	kg	27.5/31	37.5/43			46.5/55.5
Pipe connections	Liquid pipe	mm	Φ9.53				
	Gas pipe	mm	Φ15.9				
	Drain pipe	mm	OD Φ25				

Notes:
1. Indoor temperature 27℃ DB, 19℃ WB; outdoor temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20℃ DB; outdoor temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
All specifications are measured at standard external static pressure.

High Static Pressure Duct

High external static pressure with long duct distribution, ideal for large sized spaces.
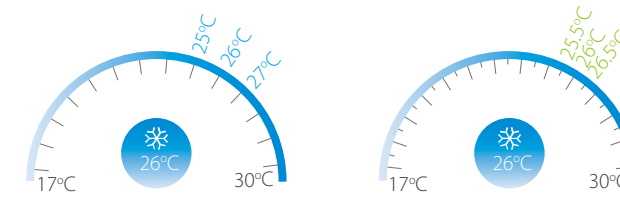
Key Features

High Static Pressure Duct		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Air filter	● ○ (G3-class)
	Innovative puro-air kit	○
	Dirty filters indicator signal	●
Air flow	Adjustable ESP	×
	Multiple fan speeds	3+auto
Easy installation	Compact size	●
	Flexible duct design	●
	Double-skin drainage pan	●
	High-lift water pump box	○

Note: ●: equipped as standard; ○: customization option; ×: without this function

COMFORT

0.5℃/1℃ Setting Temperature Adjustment

Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.
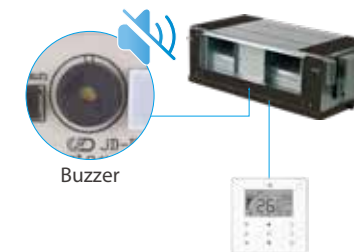
25.5℃
26℃
27℃
26℃
17℃   30℃

25.5℃
26℃
26.5℃
26℃
17℃   30℃

Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

Buzzer

HEALTH

Innovative Puro-air Kit

Puro-Air kit, powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air to provide a healthy and safe indoor environment. It is also innovatively designed so that it could prevent UV damage to the eyes, skin, and respiratory tract.

Puro-Air Kit
Protectors of health and safety

OSRAM From Germany -OSRAM quality UV light source

CE   **Ozone –Free**
UV leakage-Free

*The indoor unit needs to be customized in order to use the Puro-air Kit.

Optional G3-class Air Filter

G3-class filter is optional for High Static Pressure Duct installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10 μm), creating a cleaner living environment.
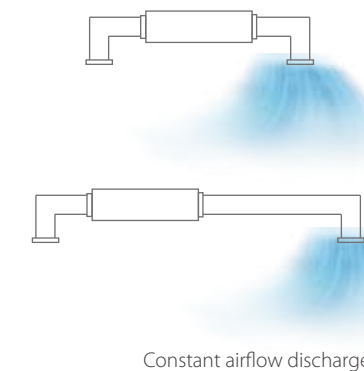
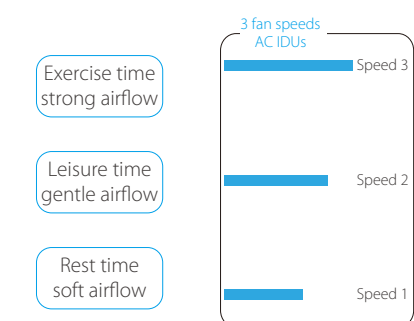The optional filter comply with EN779:2012

AIR FLOW

Static Pressure 20 Steps Control

Depending on the installation environment, High Static Pressure Duct is controlled the static pressure up to 20 steps via wired remote controller, for providing comfortable environment suitable for any environment.

Constant airflow discharge

20 steps static pressure control

Multiple Fan Speeds

AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

3 fan speeds
AC IDUs

Exercise time strong airflow — Speed 3

Leisure time gentle airflow — Speed 2

Rest time soft airflow — Speed 1
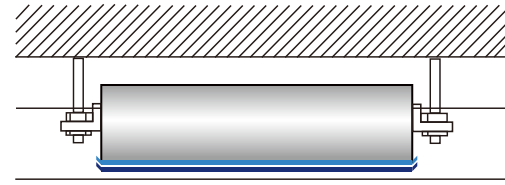
EASY INSTALLATION

Flexible Duct Design

High Static Pressure Duct supplies a wide static pressure from 30Pa to 400Pa which can support short to long duct with high ceiling air supply.

Air return

INDOOR UNIT

Air supply

Excellent coverage of rooms up to 6.5m in height
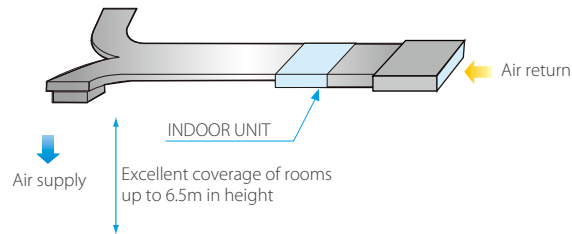
Double-skin Drainage Pan

A double-skin drainage pan provides double protection for ceilings.

Specifications - AC Series

60Hz Series

Model MDV-			CC400A-V024AUANHX	CC400A-V028AUANHX	CC400A-V030AUANHX	CC400A-V036AUANHX	CC400A-V048AUANHX	CC400A-V054AUANHX
Power supply			\multicolumn{6}{c}{1 phase, 220-240V,60Hz}					
Cooling[1]	Capacity	kW	7.1	8	9	11.2	14	15
	Input	W	414	402	409	409	527	532
Heating[2]	Capacity	kW	8	9	10	12.5	16	16.5
	Input	W	414	402	409	409	527	532
Indoor fan motor	Type		\multicolumn{6}{c}{AC}					
	Quantity		\multicolumn{6}{c}{1}					
Refrigerant type			\multicolumn{6}{c}{R410A}					
Airflow rate (SH/H/M/L)		m³/h	1614/1507/1406/1310	1589/1483/1386/1292	2089/1977/1729/1569	2029/1914/1694/1544	2892/2683/2472/2339	2892/2683/2472/2339
External static pressure (Std(Min~Max))		Pa	25(25~196)	37(37~ 196)	37(37~ 196)	50(50~196)	50(50~196)	50(50~196)
Sound pressure level (SH/H/M/L)[3]		dB(A)	48/46/45/44	48/46/45/44	52/49/47/44	52/49/47/46	53/50/48/47	54/52/50/49
Indoor unit	Dimension[4] (WxHxD)	mm	\multicolumn{4}{c}{965×423×690}				1322×423×691	
	Packing (WxHxD)	mm	\multicolumn{4}{c}{1090×440×768}				1436×450×768	
	Net/Gross weight	kg	46.5/52	46.5/52	48/53	48/53	67/73	67/73
Pipe connections	Liquid pipe	mm	\multicolumn{6}{c}{Φ9.53}					
	Gas pipe	mm	\multicolumn{6}{c}{Φ15.9}					
	Drain pipe	mm	\multicolumn{6}{c}{OD Φ25}					

Model MDV-			CC400A-V070AUANHX	CC400A-V085AUANHX	CC400A-V096AUANHX	CC400A-V140AUANHX	CC400A-V160AUANHX	CC400A-V190AUANHX
Power supply			\multicolumn{6}{c}{1 phase, 220-240V,60Hz}					
Cooling[1]	Capacity	kW	20	25	28	40	45	56
	Input	W	1670	1670	1670	2833	2833	3243
Heating[2]	Capacity	kW	22.5	26	31.5	45	50	63
	Input	W	1670	1670	1670	2833	2833	3243
Indoor fan motor	Type		\multicolumn{6}{c}{AC}					
	Quantity		\multicolumn{3}{c}{2}			\multicolumn{3}{c}{3}		
Refrigerant type			\multicolumn{6}{c}{R410A}					
Airflow rate (SH/H/M/L)		m³/h	\multicolumn{3}{c}{5000/4385/3700/3000}			\multicolumn{2}{c}{7700/6377/5200/4100}		8300/6637/5300/4300
External static pressure (Std(Min~Max))		Pa	\multicolumn{3}{c}{250(50~300)}			\multicolumn{3}{c}{300(50~400)}		
Sound pressure level (SH/H/M/L)[3]		dB(A)	\multicolumn{3}{c}{59/57/54/50}			\multicolumn{2}{c}{61/58/54/50}		60/57/54/52
Indoor unit	Dimension[4] (WxHxD)	mm	\multicolumn{3}{c}{1454×515×931}			\multicolumn{3}{c}{2010×680×905}		
	Packing (WxHxD)	mm	\multicolumn{3}{c}{1509×550×990}			\multicolumn{3}{c}{2095×800×964}		
	Net/Gross weight	kg	\multicolumn{3}{c}{124/135}			202/233	202/233	202/233
Pipe connections	Liquid pipe	mm	\multicolumn{3}{c}{Φ12.7}			\multicolumn{3}{c}{Φ15.9}		
	Gas pipe	mm	\multicolumn{3}{c}{Φ22.2}			\multicolumn{3}{c}{Φ28.6}		
	Drain pipe	mm	\multicolumn{6}{c}{OD Φ32}					

Notes:
1. Indoor temperature 27℃ DB, 19℃ WB; outdoor temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20℃ DB; outdoor temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
All specifications are measured at standard external static pressure.

Wall Mounted

*Stylish panel, ideal for rooms with no or narrow ceilings.*

Key Features

Wall Mounted		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Air filter	●
	Dirty filters indicator signal	●
Air flow	Multiple fan speeds	7+auto
	Multiple steps vertical swing	5+auto
Easy installation	Compact size	●
	Pure white stylish panel	4 options
	Exposed installation, no need ceilings	●
	Flexible pipe outlet direction	●

Note: ●: equipped as standard
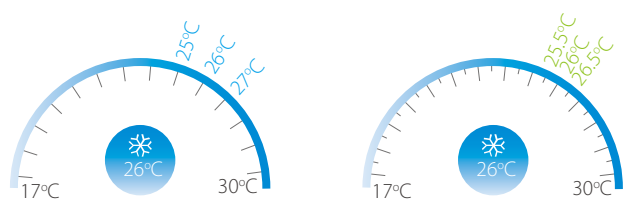
COMFORT

Quiet Operation

The minimum noise level of Wall Mounted is as low as 29dB(A), idea for hotels and other noise-sensitive locations.
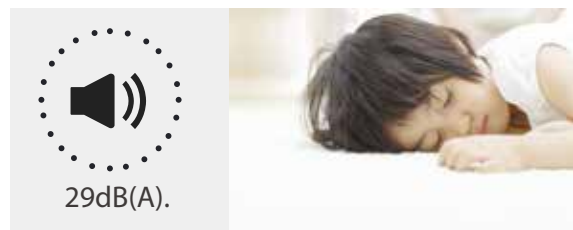
29dB(A).

0.5℃/1℃ Setting Temperature Adjustment

Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.

25.5℃
26℃
27℃

25.5℃
26.5℃
26℃

17℃ 26℃ 30℃

17℃ 26℃ 30℃

Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

Buzzer

HEALTH

Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.

COOL
HIGH
Set Temp.
6.0h
27℃
Timer On

Filter reminder
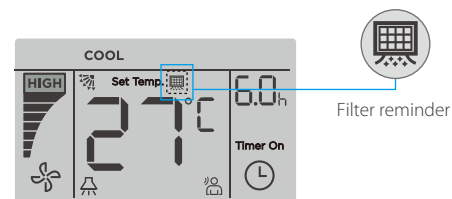
AIR FLOW

Multiple Fan Speeds

AC Series come with 7 indoor fan speed options to meet the needs of different indoor conditions.
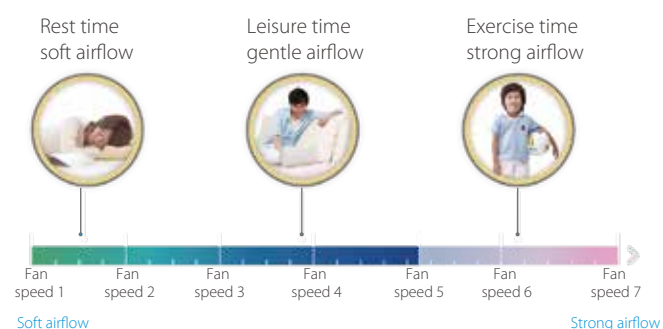
Rest time
soft airflow

Leisure time
gentle airflow

Exercise time
strong airflow

| Fan speed 1 | Fan speed 2 | Fan speed 3 | Fan speed 4 | Fan speed 5 | Fan speed 6 | Fan speed 7 |

Soft airflow   Strong airflow

Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.

Step
Swing
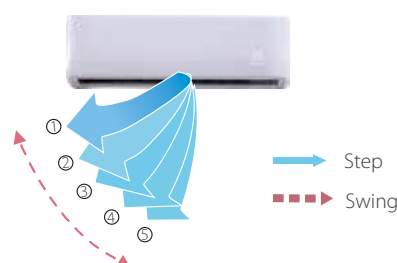
EASY INSTALLATION

Flexible Pipe Outlet Direction

Multi-outlet pipe method for both refrigerant pipe and drain pipe: left/right/rear, more flexible for installation.

Rear
Left Right
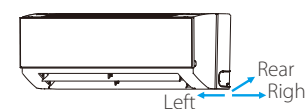
Exposed Installation, No Need Ceilings

The Wall Mounted can be installed against a wall, no need ceilings, simplifying installation.

Specifications - AC Series

60Hz Series

Model			CH400A-V007ADAN1X	CH400A-V009ADAN1X	CH400A-V012ADAN1X	CH400A-V016ADAN1X
Power supply			1 phase, 220-240V, 60Hz			
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5
	Input	W	29	29	31	45
Heating[2]	Capacity	kW	2.4	3.2	4	5
	Input	W	29	29	31	45
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate[3]		m^3/h	446/429/424/409/394/382/373	457/445/433/421/419/410/402	447/429/399/369/339/333/303	648/618/582/563/546/505/476
Sound pressure level[4]		dB(A)	34/33/33/32/32/31/31	33/33/32/32/31/31/31	36/35/34/33/32/32/32	37/36/34/34/33/32/31
Indoor unit	Dimension[5] (WxHxD)	mm	835×280×203			990×315×223
	Packing (WxHxD)	mm	915x353x300			1075x395x300
	Net/Gross weight	kg	8.5/11.0	8.5/11.0	9.7/12.2	13.8/16.4
Pipe connections	Liquid pipe	mm	Φ6.35			
	Gas pipe	mm	Φ12.7			
	Drain pipe	mm	OD Φ16			

Model			CH400A-V020ADAN1X	CH400A-V024ADAN1X	CH400A-V028ADAN1X	CH400A-V030ADAN1X
Power supply			1 phase, 220-240V, 60Hz			
Cooling[1]	Capacity	kW	5.6	7.1	8	9
	Input	W	54	77	77	90
Heating[2]	Capacity	kW	6.3	8	9	10
	Input	W	54	77	77	90
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate[3]		m^3/h	798/764/723/691/665/627/595	1240/1171/1107/1045/976/914/869	1248/1194/1119/1056/993/914/863	1427/1403/1303/1232/1186/1096/1043
Sound pressure level[4]		dB(A)	42/41/40/39/38/37/36	48/47/45/44/42/39/38	48/47/45/43/42/39/38	52/51/50/49/47/45/43
Indoor unit	Dimension[5] (WxHxD)	mm	990×315×223	1194×343×262		
	Packing (WxHxD)	mm	1075x395x300	1265x420x345		
	Net/Gross weight	kg	13.8/16.4	17.4/20.8	17.6/21.0	17.6/21.0
Pipe connections	Liquid pipe	mm	Φ9.53			
	Gas pipe	mm	Φ15.9			
	Drain pipe	mm	OD Φ16			

Notes:
1. Indoor temperature 27℃ DB, 19℃ WB; outdoor temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20℃ DB; outdoor temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3).
   Sound pressure level is measured 1m in front and 1m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Ceiling & Floor

Two installation options are available: horizontally against the ceiling or vertically against the floor/wall, idea for wide rooms with no ceilings.
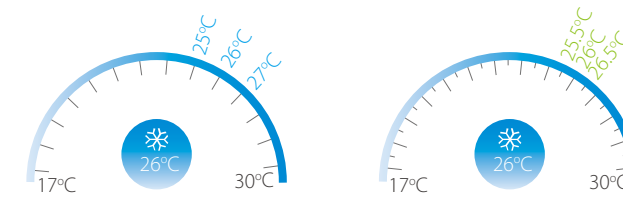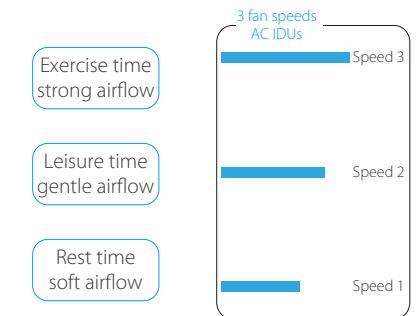
Key Features

Ceiling & Floor		AC Series
Comfort	Quiet operation	●
	0.5℃/1℃ setting temperature adjustment	●
	Digital display on/off	●
	Buzzer sound on/off	●
Health	Air filter	●
	Dirty filters indicator signal	●
Air flow	Multiple fan speeds	3+auto
	Multiple steps vertical swing	5+auto
	Horizontal swing	●
Easy installation	Pure white stylish panel with slim design	●
	Exposed installation, easy installation and maintenance	●
	Two installation options	●

Note: ●: equipped as standard

COMFORT

0.5℃/1℃ Setting Temperature Adjustment

Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.

Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

Buzzer

HEALTH

Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.

Filter reminder

AIR FLOW

Multiple Fan Speeds

AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

3 fan speeds
AC IDUs

Exercise time strong airflow — Speed 3
Leisure time gentle airflow — Speed 2
Rest time soft airflow — Speed 1

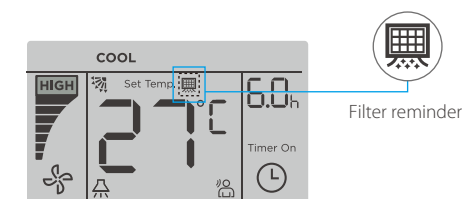### Multiple Steps Vertical Swing and Horizontal Swing

Vertical air flow direction can be adjusted 5 steps and horizontal air flow direction can be adjusted manually, both vertical and horizontal can be set auto swing.
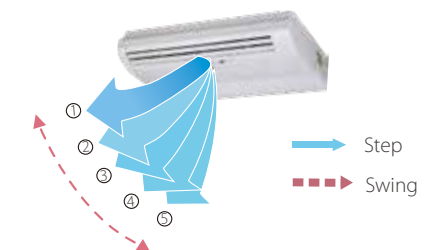
Horizontal & Vertical

Step
Swing

EASY INSTALLATION

Pure White Stylish Panel with Slim Design

Pure white stylish panel with slim design, perfect fusion in all kinds of decoration.

>20
Drop ceiling
203mm
Air outlet
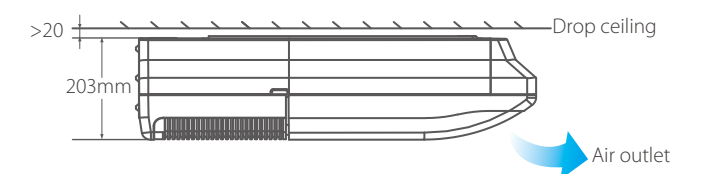
Exposed Installation, Easy Installation and Maintenance

The Ceiling & Floor unit is exposed installation, it is easy installation and maintenance. It can be serviced through the bottom of the machine, easy to access the key components of the unit.

Two Installation Options

A sleek design suits installation either on the ceiling or floor, providing flexibility to accommodate a wide range of room designs.
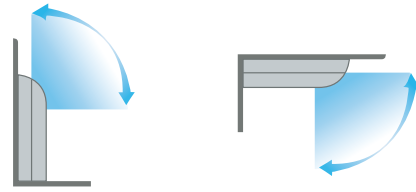
The unit can be installed either horizontally on the ceiling or vertically against the wall.

Specifications - AC Series

60Hz Series

Model			CF400A-V012ALAN1X	CF400A-V016ALAN1X	CF400A-V020ALAN1X	CF400A-V024ALAN1X
Power supply			1 phase, 220-240V,60Hz			
Cooling[1]	Capacity	kW	3.6	4.5	5.6	7.1
	Input	W	50	148	148	148
Heating[2]	Capacity	kW	4	5	6.3	8
	Input	W	50	148	148	148
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate (H/M/L)		m³/h	600/480/400	750/650/550	750/650/550	750/650/550
Sound pressure level (H/M/L)[3]		dB(A)	40/38/36	43/41/38	43/41/38	43/41/38
Indoor unit	Dimension[4] (WxHxD)	mm	990×203×660			
	Packing (WxHxD)	mm	1089x296x744			
	Net/Gross weight	kg	26/32	28/34	28/34	28/34
Pipe connections	Liquid pipe	mm	Φ6.35		Φ9.53	
	Gas pipe	mm	Φ12.7		Φ15.9	
	Drain pipe	mm	OD Φ25			

Model			CF400A-V028ALAN1X	CF400A-V030ALAN1X	CF400A-V036ALAN1X	CF400A-V048ALAN1X
Power supply			1 phase, 220-240V,60Hz			
Cooling[1]	Capacity	kW	8	9	11.2	14
	Input	W	183	183	245	245
Heating[2]	Capacity	kW	9	10	12.5	15
	Input	W	183	183	245	245
Indoor fan motor	Type		AC			
	Quantity		1		2	
Refrigerant type			R410A			
Airflow rate (H/M/L)		m³/h	1200/900/700	1200/900/700	1980/1860/1730	1980/1860/1730
Sound pressure level (H/M/L)[3]		dB(A)	45/43/40	45/43/40	47/45/42	47/45/42
Indoor unit	Dimension[4] (WxHxD)	mm	1280×203×660		1670 x244x680	
	Packing (WxHxD)	mm	1379x296x744		1764x329x760	
	Net/Gross weight	kg	34.5/41	34.5/41	54/59	54/59
Pipe connections	Liquid pipe	mm	Φ9.53			
	Gas pipe	mm	Φ15.9			
	Drain pipe	mm	OD Φ25			

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Floor standing: Sound pressure level is measured 1m in front and 1m above the floor in a semi-anechoic chamber.
   Ceiling mounted: Sound pressure level is measured 1m in front and 1m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

PURO - AIR KIT

SAFE INDOOR AIR, FROM THE INVISIBLE CARE
PURIFICATION SPEED INDUSTRY LEADER
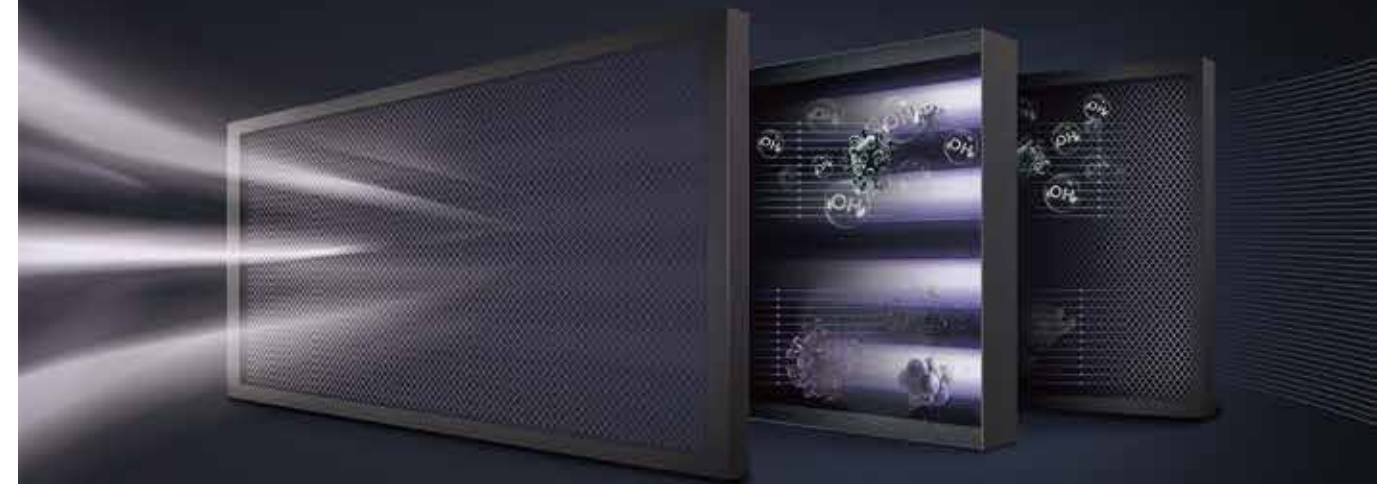
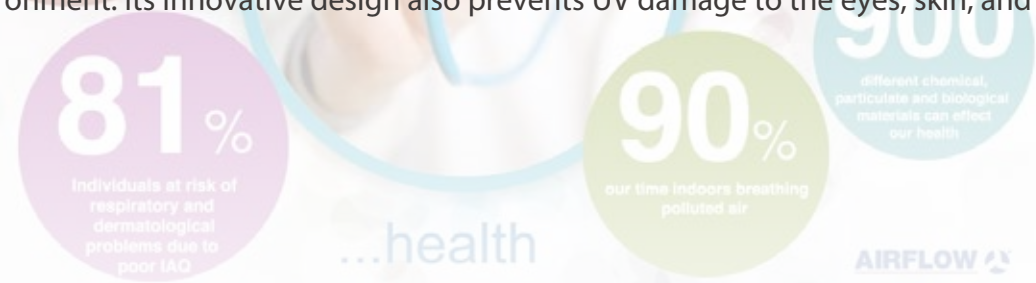**UVGI** **CLEAN WAVE** **UV RADIATION FREE** **OZONE FREE**

Premium Osram Hns Uv Lamp Made In Europe

Indoor air pollution is affecting our...

We spend 80% of our time indoors. On average, a person consumes about 8000 liters of air in a day. According to the EPA, indoor air pollution could be five times greater than outdoor air. Over 99% of particles in the air are smaller than 1 micron, and they cannot sink because of their lightweight. When a person sneezes, around 100,000 contagious germs may be sent into the air.
Puro-Air kit can effectively remove bacteria, viruses and odors from indoor air to provide a healthy and safe indoor environment. Its innovative design also prevents UV damage to the eyes, skin, and respiratory tract.

81%
Individuals at risk of respiratory and dermatological problems due to poor IAQ

90%
our time indoors breathing polluted air

900
different chemical, particulate and biological materials can effect our health

...health

AIRFLOW

ASHRAE

UVGI is increasingly widely used in the sterilization of HVAC equipment. W.J.Kowalski and others have obtained the effect of UV sterilization on the concentration of indoor pollutants through experiments. It can be seen that the virus , bacteria and spores exposed to UV irradiation with an intensity of 25 mW / cm2 is significantly reduced. The results show that the microorganisms carried in the air can be killed by applying a certain intensity and time of UV irradiation (200-270nm) under appropriate conditions[1].
[1].HVAC Design Manual for Hospitals and Clinics, ASHRAE

medRχiv
THE PREPRINT SERVER FOR HEALTH SCIENCES

Cold Spring Harbor Laboratory **BMJ** Yale
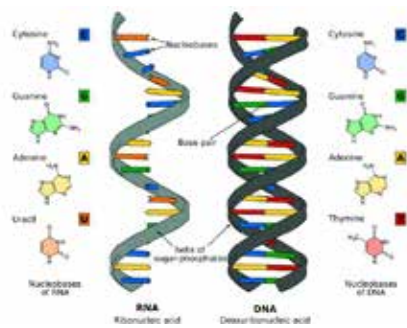
Andrea Bianco, Mara Biasin and others have confirmed through experiments that UV-C irradiation has the potential virucidal effects on SARS-CoV-2. The potential virucidal effects of UV-C irradiation on SARS-CoV-2 were evaluated for different illumination doses and virus concentrations. These results could explain the epidemiological trends of COVID-19 and are important for the development of novel sterilizing methods to contain SARS-CoV-2 infection[2].
[2]Refer to UV-C irradiation is highly effective in inactivating and inhibiting SARS-CoV-2 replication，Andrea Bianco , Mara Biasin

Features:

1. 2 models, power range from 60W to 120W

2. 2 UV lamps and 4 UV lamps are optional

3. Application air flow rate of 2 UV lamps model can be up to 2600 m3/h

4. Application air flow rate of 4 UV lamps model can be up to 4300 m3/h.

5. UVGI high efficient

6. Innovative structural design

7. Higher safty,Ozone-free and UV leakage-free

8. Flexibility Control

9. Higher reliability

10. Higher killing rate for viruses and bacteria,99.9% killing rate of Staphylococcus albus in 10 minutes,99.9% killing rate of H1N1and 98% killing rate of natural bacteria in 30 minutes

11. Be widely used in many scenes

Precise	Premium	Powerful	Durable	Reliable
253.7nm UV wave length	Ozone Free	360° Coverage Area	9000hr 80% output	Solid Amalgam

Model	Description	Key component	Box size	Air flow(m³/h)
HFB1-P-U02	UV Health function box	2x(UV lamp,230V,30W)	BOXI	2600
HFB1-P-U04	UV Health function box	4x(UV lamp,230V,30W)	BOXI	4300

	BOX Dimension WxHxD(mm)	Air-flow(m³/h)	Air velocity(m/s)	Pressure loss(Pa)
HFB1 Puro-Air	1120x418x420	4000	2.44	65
		3500	2.13	50
		3000	1.86	40
		2500	1.52	30
		2000	1.19	20
		1500	0.94	12
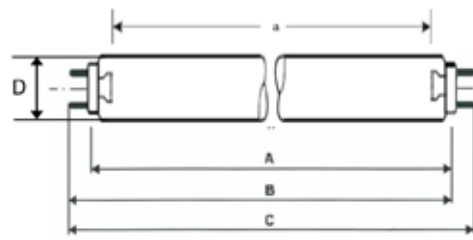
Geometric Data

Face to Face	A max 894.3 mm
Face to end of opposite pin	B min 899.3 mm
Face to end of opposite pin	B max 901.7 mm
Overall length	C max 908.8 mm
Radiation length	a 824 ± 2 mm
Tube diameter	D max 25.5 ± 2 mm
Base G13	

Electrical Data

Lamp Power	30 W
Lamp Voltage	96 V
Input Voltage	230 V

Note: The OSRAM HNS G13 lamp can be purchased from the market for replacement.

Spectral Data

Radiation flux (254nm)	12.0 W
Initial UV-C irradiance	> 0.31 W/m2 @ 2 meter
Lifetime	9000 hrs
UV-C irradiance @ 9000hrs	> 0.24 W/m2 @ 2 meter

Air Duct Installation

1. The air inlet flange and air outlet flange are connected to air ducts, respectively.

2. Seal the connection parts of the flange and air duct with aluminum foil tape.

3. Use screws (prepared on site) to connect the air duct to the unit.
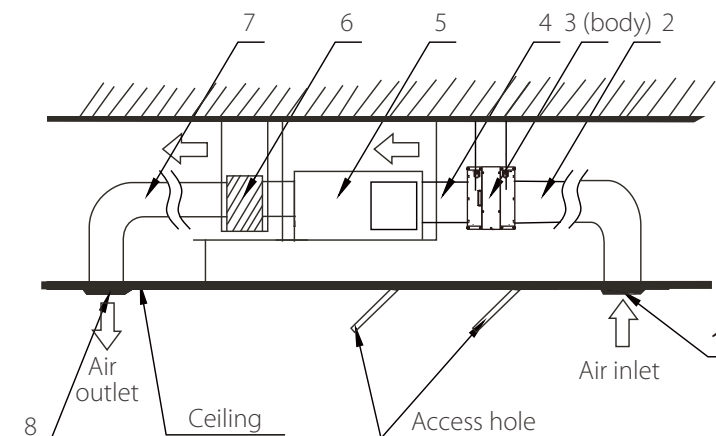
Legend	
1	Air inlet mesh(prepared on site)
2	Air outlet mesh(prepared on site)
3	PURO-AIR KIT
4	Air duct(prepared on site)
5	Master unit of the air conditioner
6	Air plenum(prepared on site)
7	Air outlet duct(prepared on site)
8	Air outlet(prepared on site)

Dimensions (mm)
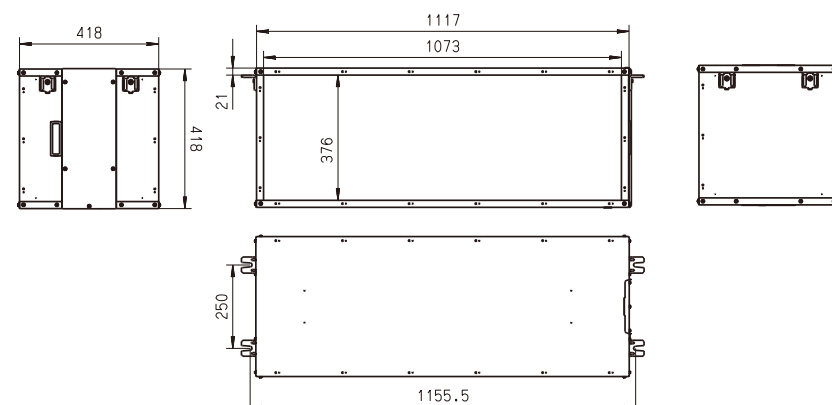
CONTROL SOLUTIONS

Remote Controllers

Wired Controllers

Central Controllers

Data Converter

Network Control System

BMS Gateways

Accessories

Remote Controllers

Features

Model	CIAC-WL-12B-CM	CIAC-WL-12F-CM
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5℃ or 1℃ steps)	● (0.5℃ or 1℃ steps)
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	×	●
Eco mode	●	●
Silent mode	●	●
Display shut-off	●	●
Daily timer	●	●
Keyboard lock	●	●
Background light	●	●
Indoor Unit parameter setting	●	●
Dimensions (H×W×D) (mm)	150×65×20	170×48×20
Batteries	1.5V (LR03/AAA) × 2	

Note: ●: equipped as standard; ×: without this function

0.5℃/1℃ Setting Temperature Adjustment

Set temperature can be adjusted in 0.5℃ or 1℃ steps, enabling precise comfort control.
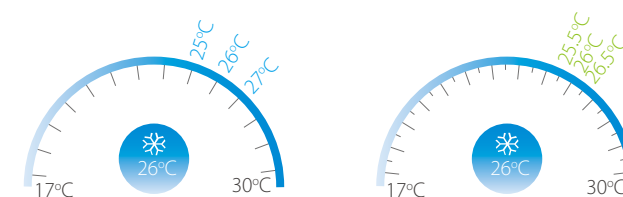
Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.

Digital display

5 Swing Angles for Louver

Thanks to the 5 swing angles for indoor unit louver, the air flow direction can be controlled more precisely.

Step
Swing
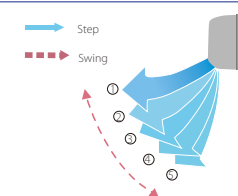
Follow Me

With the follow me function, the indoor unit responds to the temperature measured by the temperature sensor built-in to the wireless remote controller, rather than the temperature sensor in the indoor unit itself, enabling more precise control of the temperature in the user's immediate environment.

Multiple Fan Speed Control

AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

Exercise time strong airflow

Leisure time gentle airflow

Rest time soft airflow

3 fan speeds AC IDUs

Speed 3

Speed 2

Speed 1
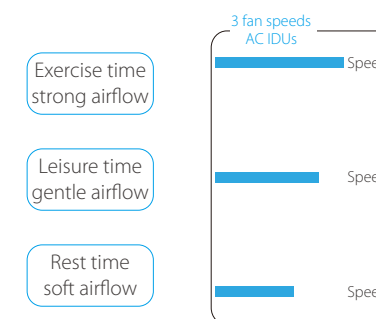
Wired Controllers

Features

Model	CIAC-WR-86KD-CM	CIAC-WR-120G-CM
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5℃ or 1℃ steps)	● (0.5℃ or 1℃ steps)
Dual temperature set points	●	●
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	●	●
Eco mode	●	●
Room temperature display	●	●
℉/℃ display	●	●
Keyboard lock	×	●
Background light	●	●
Daily timer	●	●
Weekly schedule timer	×	●
Auto restart	●	●
2 permission levels	×	●
Bi-directional communication	●	●
Group control	×	●
Main or secondary controller setting	●	●
Display shut-off	●	●
Silent mode	●	●
Remote signal receiver	●	●
Clean filter reminder	●	●
Extension function	×	●
Daylight saving time	×	●
Clock display	×	●
Dot matrix display	×	●
Error check function	●	●
System parameter querying	●	●
After Hours/Off Timer function	●	●
Language	English	English, French, Spanish, Polish,Italian,German, Portuguese, Turkish
HRV control	×	●
Puro-Air Kit control	×	●
System setting control	●	●
Dimensions (WxHxD) (mm)	86x86x18	120x120x20
Power supply	18V DC	18V DC

Note:
●: equipped as standard; ×: without this function
when the indoor units connect to group controller, the indoor units need to customize D1 D2 terminals.

Group Control

One controller can be used to unify the settings across up to 16 indoor units.
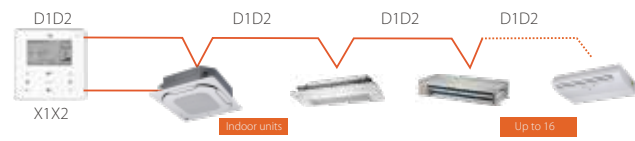
Note: when indoor units connect to group controller , the indoor units need to customize D1 D2 terminals.
Group control is not available for Wall Mounted Series.

Main or Secondary Controller Setting

Two controllers can be used together with single indoor unit. Operating mode and settings would be set according to the most recent instruction received. The controller display screens are synchronized so that both displays update when a setting is adjusted.

One indoor unit

Two or more indoor units

2 Permission Levels

2 permission levels ensure users can easily access control functions and allow administrators convenient access to operating parameters.

Buzzer Sound On/Off

The buzzer sound of the indoor unit can be turned off to create a quieter environment.

Buzzer
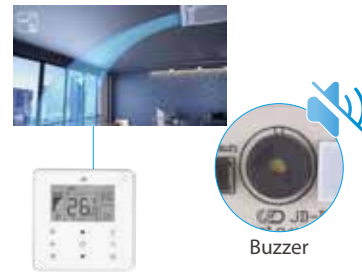
Off Timer Function

We can use the wired controller to set an automatic off timer or after hours function for the indoor unit.

Weekly Schedule Timer

The weekly schedule timer allows users to set multiple schedules each with its own operating mode, temperature settings and fan speeds.

Weekly Schedule

| SUN | MON | TUE | WED | THU | FRI | SAT |

OFF   HEAT   COOL   FAN
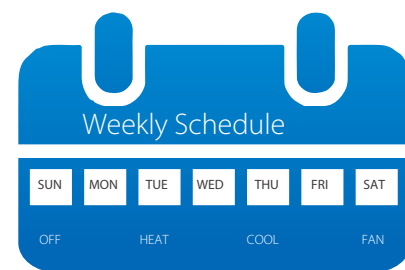
Central Controllers

Features

Function	CIAC-CRF-180B-CM	CIAC-CRF-210G-CM	CIAC-CRF-270C-CM
Max. number of indoor units	64	64	384
Max. number of refrigerant systems	8	8	48
Touch screen	● (6.2-inch)	● (7-inch)	● (10.1-inch)
On/Off	●	●	●
Mode selection	●	●	●
Temperature setting		(0.5℃ steps)*	
7-speed fan control			
Auto swing	●	● ●	●
5-step swing louver*	●	●*	●
Room temperature display	●	●	●
Holiday setting	●	●	●
℃/℉ display	●	●	●
Schedule management	●	●	●
Clock display	●	●	●
2 permission levels	●	●	●
Extension function	●	✕	✕
Indoor unit type/model recognition		●*	
Indoor unit with capacity larger than 16kW recognition		●*	
HRV Control	●	●	●
Visual schematic	✕	✕	●
Energy management	●	●	●
Group management	●	●	●
Error check function	●	●	●*
System parameter querying	●	●	●
USB output	●	●	●
Report display	Error report	operation record	Error report and operation record
Operation log	✕	✕	●
LAN access	✕	✕	●
Language supported	English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Russian, Korean	English, Chinese	English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Russian, Korean
Dimensions (W×H×D)(mm)	182×123×34	174×111×26	270×183×27
Power supply	12V DC	12V DC	24V AC

Note:
●: equipped as standard; ✕: without this function
*means this function is only available for XMVF cooling only top discharge Mini outdoor unit.

Features

Function	CIAC-CRF-40-CM	CIAC-CRF-10-CM
Max. number of indoor units	64	64
Max. number of refrigerant systems	8	8
Touch screen	✕	✕
On/Off	●	●
Mode selection	●	●
Temperature setting		● (1℃ steps)
7-speed fan control		3-speed fan control
Auto swing	●	●
5-step swing louver*	✕	✕
Room temperature display	●	●
Holiday setting	✕	✕
℃/℉ display	●	●
Schedule management	✕	Weekly timer
Clock display	✕	✕
2 permission levels	✕	✕
Extension function	✕	✕
Indoor unit type/model recognition	✕	✕
Indoor unit with capacity larger than 16kW recognition		Identify as two or four units (depend on units model)
HRV Control	●	●
Visual schematic	✕	✕
Energy management		Mode/Remote controller limit
Group management	✕	✕
Error check function	●	●
System parameter querying	●	●
USB output	✕	✕
Report display	✕	✕
Operation log	✕	✕
LAN access	✕	✕
Language supported		English
Dimensions (W×H×D) (mm)	179×119×74	179×119×74
Power supply		198-242V AC (50/60Hz)
Outdoor unit series or indoor unit series	XMVF	Water cooled VRF

Note:
●: equipped as standard; ✕: without this function
*means this function is only available for XMVF outdoor unit.

Touch Screen

Colorful touch screen and vivid display make operation more convenient and simple.

Electricity Charge Distribution

The controllers use the patented CIAC Calculation Method to estimate the electricity consumption of the outdoor units and then divide it among the indoor units so that the electricity charges can be equitably divided among building occupants.

Energy Management

User can set limits or locks on an indoor unit, such as minimum cooling temperature, maximum heating temperature, fan speed, operation mode, swing lock, remote controller lock and wired controller lock.
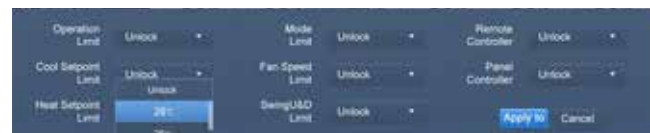
Unit Model Recognition

The controller recognizes the model of indoor and outdoor units and different models are represented by different icons.

Visual Schematic

By importing floor plans and then dragging and dropping the indoor units to their actual positions on the floor plan, users can create a tailored system schematic which enables monitoring and control of the indoor units through a clear visual representation of the system layout.

Group Management

Units can be viewed according to group, system or location, making unit management clearer and more convenient.

Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.
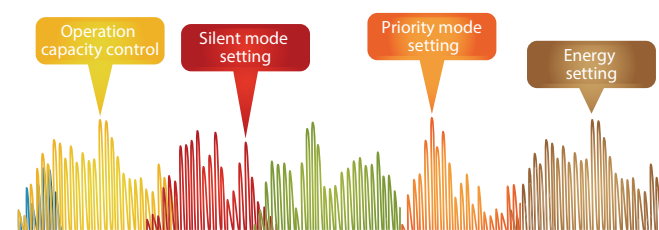
Note: This function is only available for XMVF top discharge outdoor unit.

Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.
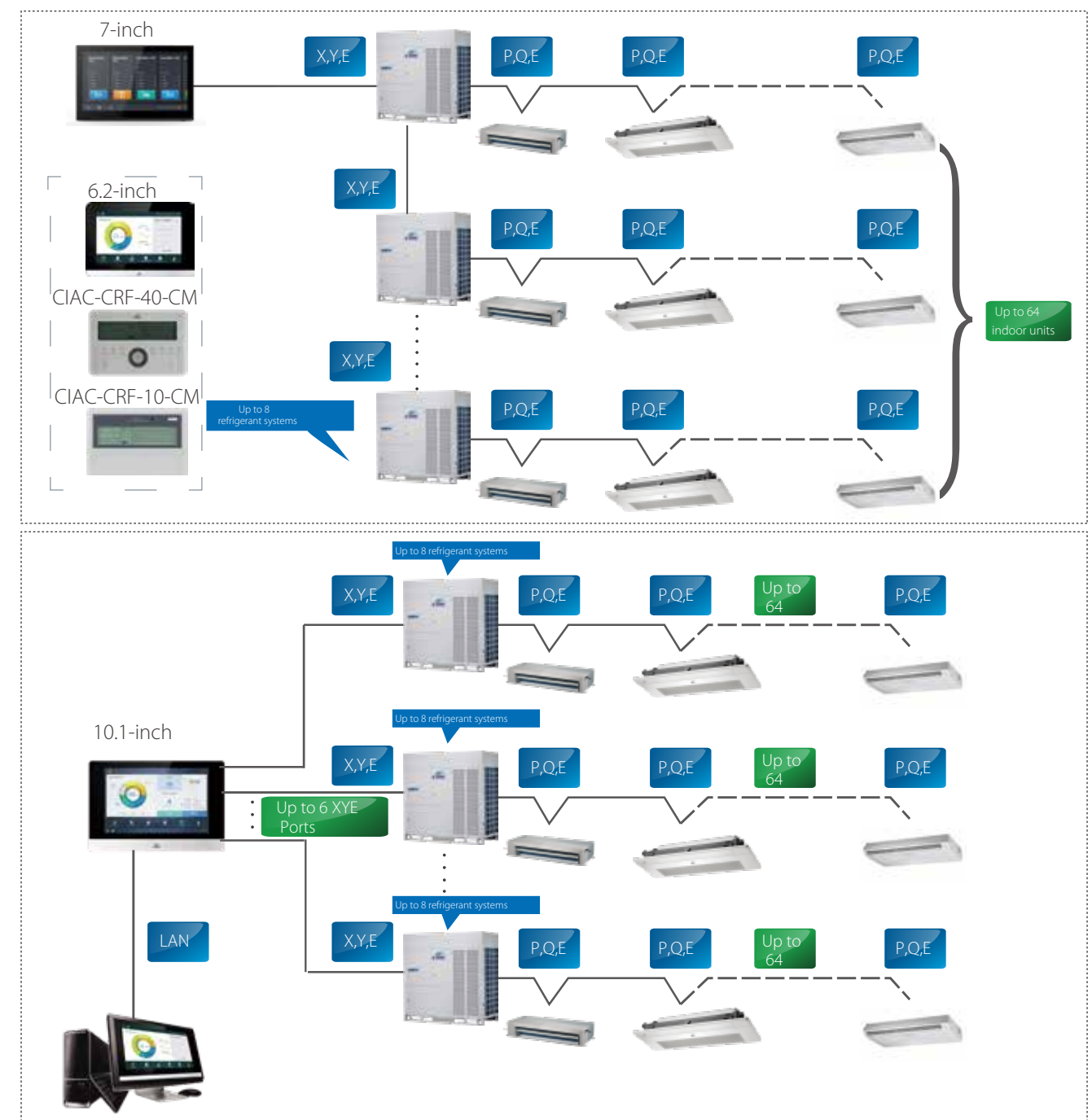
Wiring Flexibility

The controllers can be connected to the master outdoor unit directly.

LAN Access

A desktop or laptop PC can be used for browser-based access via a LAN connection.

Data Converter
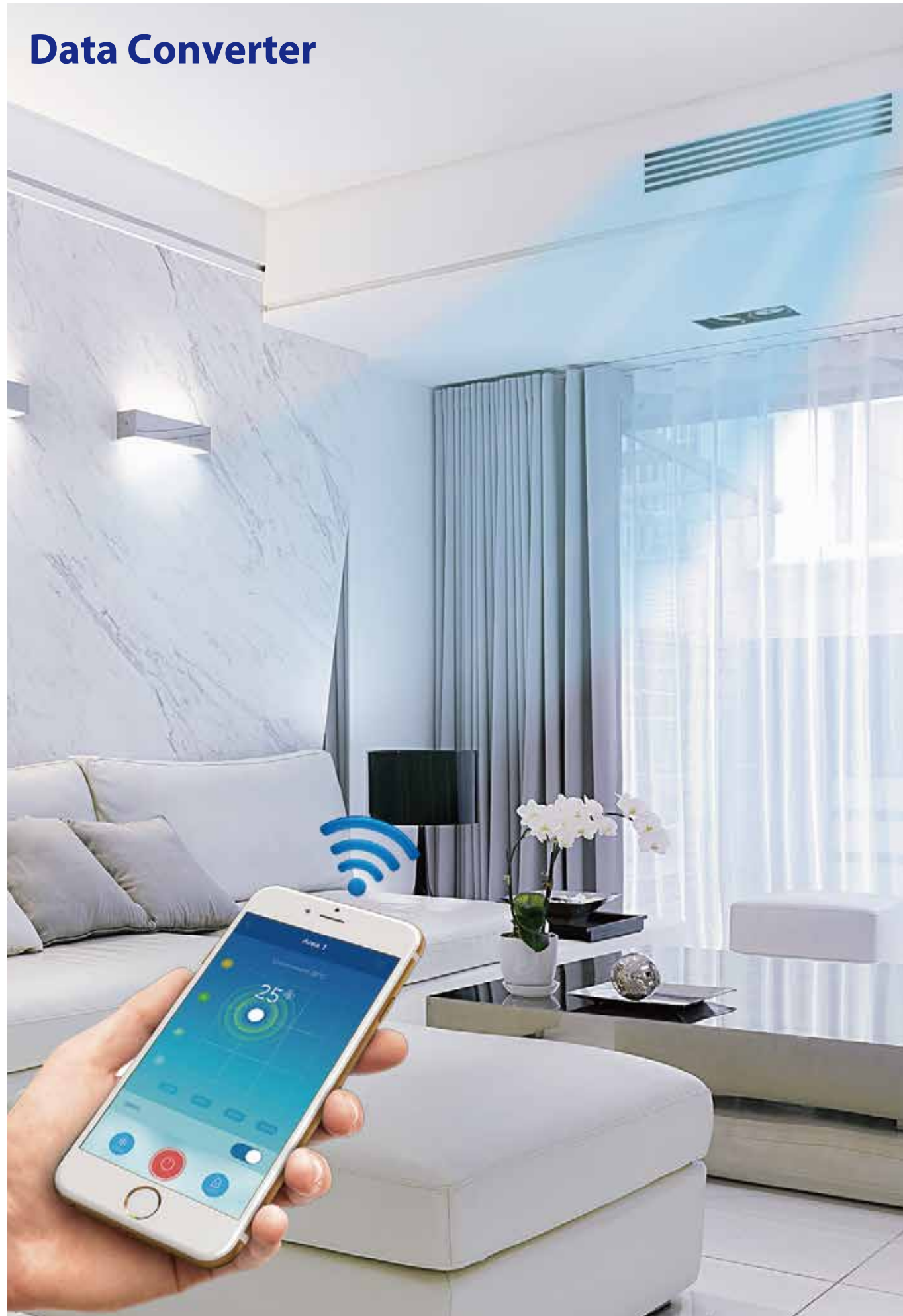
Features

	Hardware model	
	CIAC-CIF-15B-CM	
Application scenarios	Mobile Phone Application	Cloud Server Website
Max. number of Data Converter for one mobile APP	10	10
Max. number of indoor units	640	640
Max. number of refrigerant systems	80	80
On/Off	●	●
Mode selection	●	●
Temperature setting	● (1℃ steps)	● (1℃ steps)
7-speed fan control	×	×
Auto swing	●	●
5-step swing louver	×	×
Room temperature display	●	●
℃/℉ display	●	●
Weekly timer	●	●
Indoor unit type recognition	×	×
Energy management	●	●
Group management	●	●
User group management	●	●
Operation log	●	●
Device log	●	●
Login record	●	●
Error log	×	●
Configuration	●	×
Account registration	●	×
Virtual	●	×
Mode display	●	●
Languages supported	English, French, Spanish	English, French, Spanish
Dimensions (W×H×D) (mm)	225×128×28	
Power supply	12V DC	
Outdoor unit series	All series*	

Note:
●: equipped as standard; ×: without this function

High Compatibility
Compatible with a variety of operating systems.

User Friendly Interface
Clear, stylish interface designed by leading industrial designers.

Cloud Server Website
In addition to "M-control", users can control air conditioners and query the status of air conditioning equipment anytime and anywhere through the cloud server website.

Virtual Experience
After downloading "M-control", you can experience the operation of the interface through the virtual experience function without registration.

No registration

Easy Configuration
User groups can be joined simply by scanning a QR code.

Convenient Operation
Drag the position of the floating bubbles to change temperature and fan speed.

Anytime Control
Remote access to Data Converter allows anytime, anywhere control.

Clear Icons
Clear, color-coded icons allow unit operating states to be viewed at a glance.

AC-5 ☼ 24℃	AC-6 ✿ -- ℃
HEAT	FAN
AC-4 ❄ 24℃	AC-2 ❄ Off
COOL	OFF
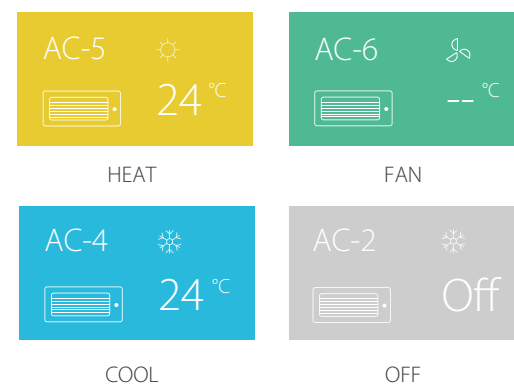
Group Management
The user can group the air conditioners equipment, and the air conditioner in the same group can be controlled together just with one tap.

Multiple Language Options
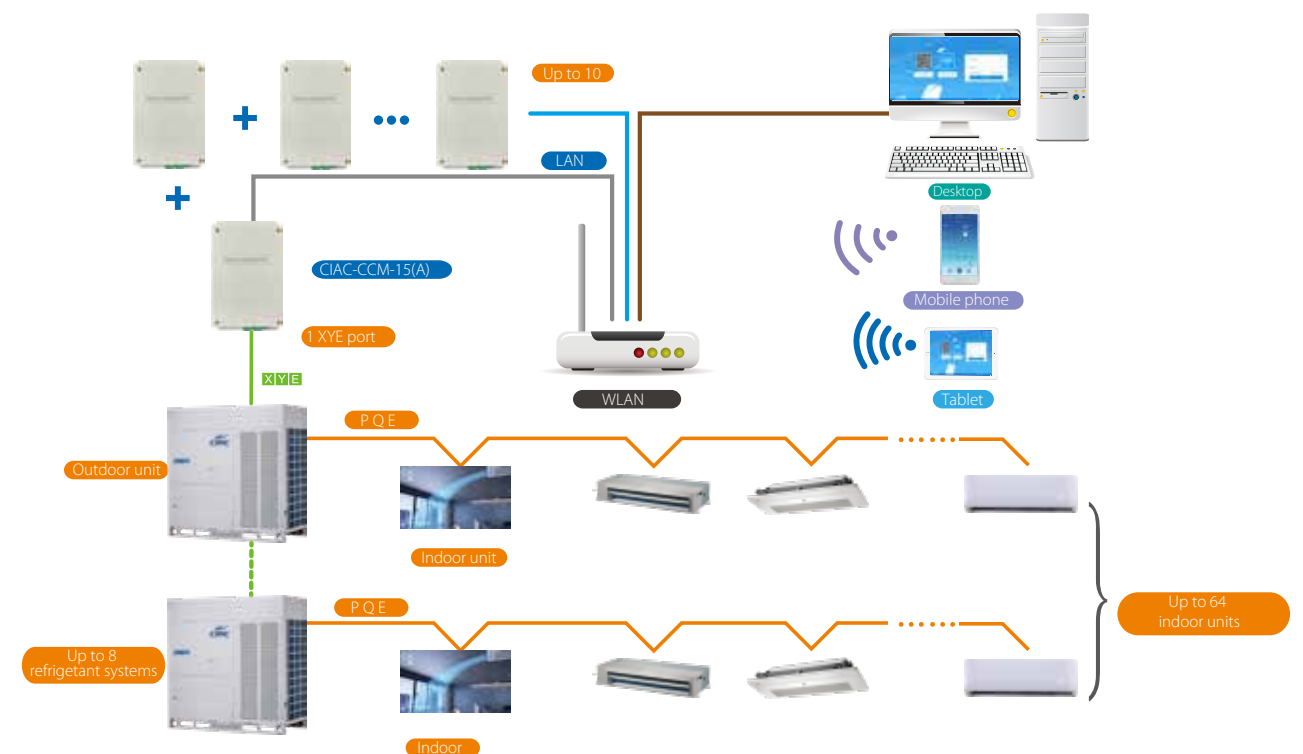Supports multiple languages so that users of different languages can operate easily.

Spanish

English

French
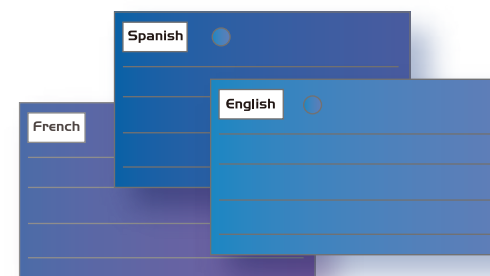
2 Permission Levels
Administrators can set different permissions for different users to facilitate better management of devices.

Flexibility
The Data Converter can be connected directly to a network of indoor/outdoor units.

Network Control System

Features

	Software model	
	CIAC-IMMP-S(A)	
Hardware model	CIAC-5GNS-BAC-CM	CIAC-CRF-270C-CM
Max. number per software system	10	10
Max. number of indoor units	2560	3840
Max. number of refrigerant systems	320	480
Temperature setting	● (0.5℃ steps)	● (0.5℃ steps)
7-speed fan control*	●	●
Auto swing	●	●
5-step swing louver	●	●
Outdoor unit Eco mode setting	●	●
Holiday setting	●	●
Schedule management	●	●
Clock display	●	●
2 permission levels	●	●
Unit model recognition	●	●
Electricity charge distribution	●	●
Visual schematic	●	●
Energy management	●	●
Group management	●	●
Error check function	●	●
System parameter querying	●	●
Report output	●	●
Operation log	●	●
LAN access	●	●
Languages supported	English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Russian, Korean	
Dimensions (W×H×D) (mm)	251×319×61	270×183×27
Power supply	24V AC	24V AC
Outdoor unit series	XMVF	

Note:
●: equipped as standard; ×: without this function
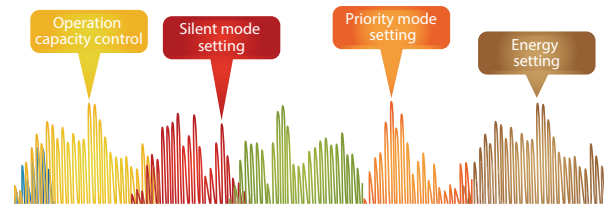*means this function is only available for XMVF outdoor unit.

User-friendly Interface

Simple, practical user interface makes for a user-friendly experience even for first-time users.

Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.

Note: This function is only available for V6/V6i/VC Pro/VC-i outdoor unit.

Electricity Charge Distribution

The IMMPRO uses the patented CIAC Calculation Method to estimate the electricity consumption of the outdoor units and then divide it among the indoor units so that the electricity charges can be equitably divided among building occupants.

Public and Idle Devices

Marking a unit as a public device or idle device ensures the electricity charge distribution is more accurate and reasonable.

Floor Plan

By importing floor plans and then dragging and dropping the indoor units to their actual positions on the floor plan, users can create a tailored system schematic which enables monitoring and control of the indoor units through a clear visual representation of the system layout.

Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.
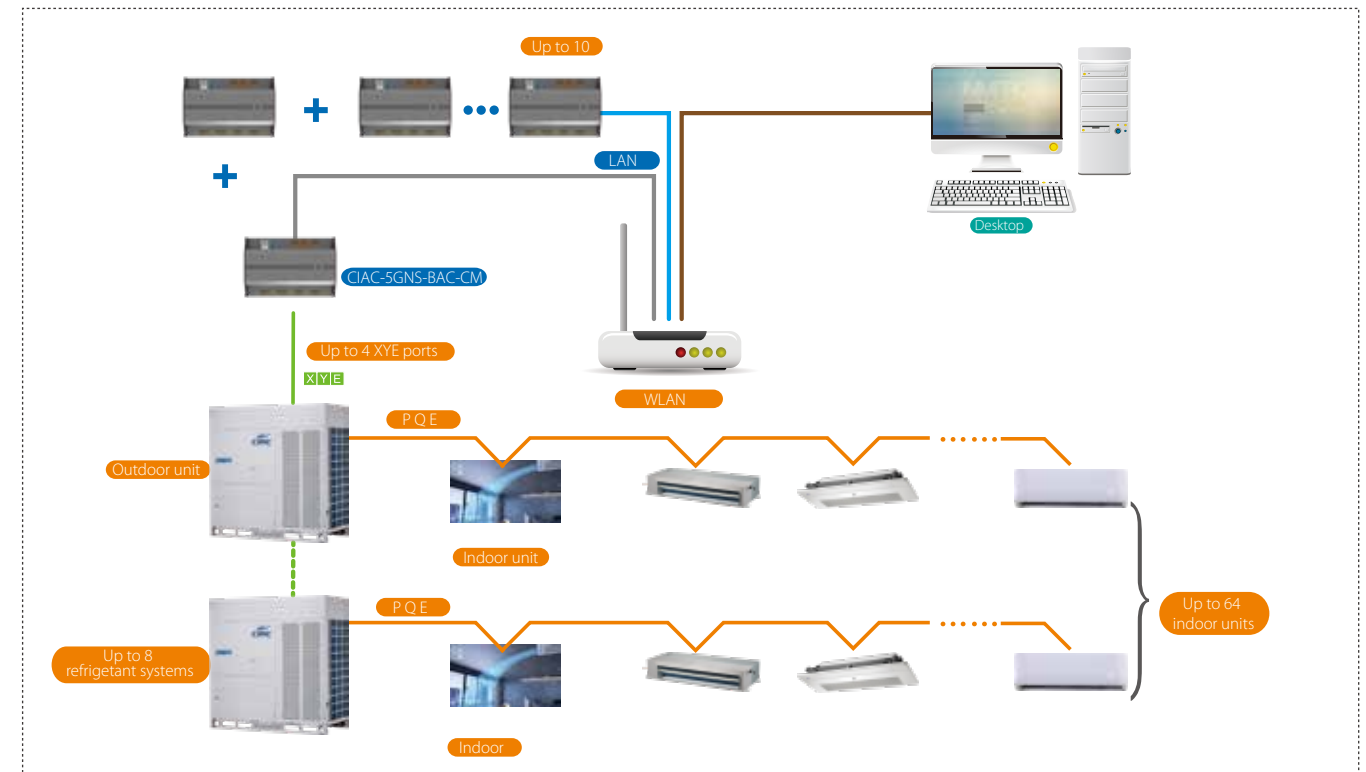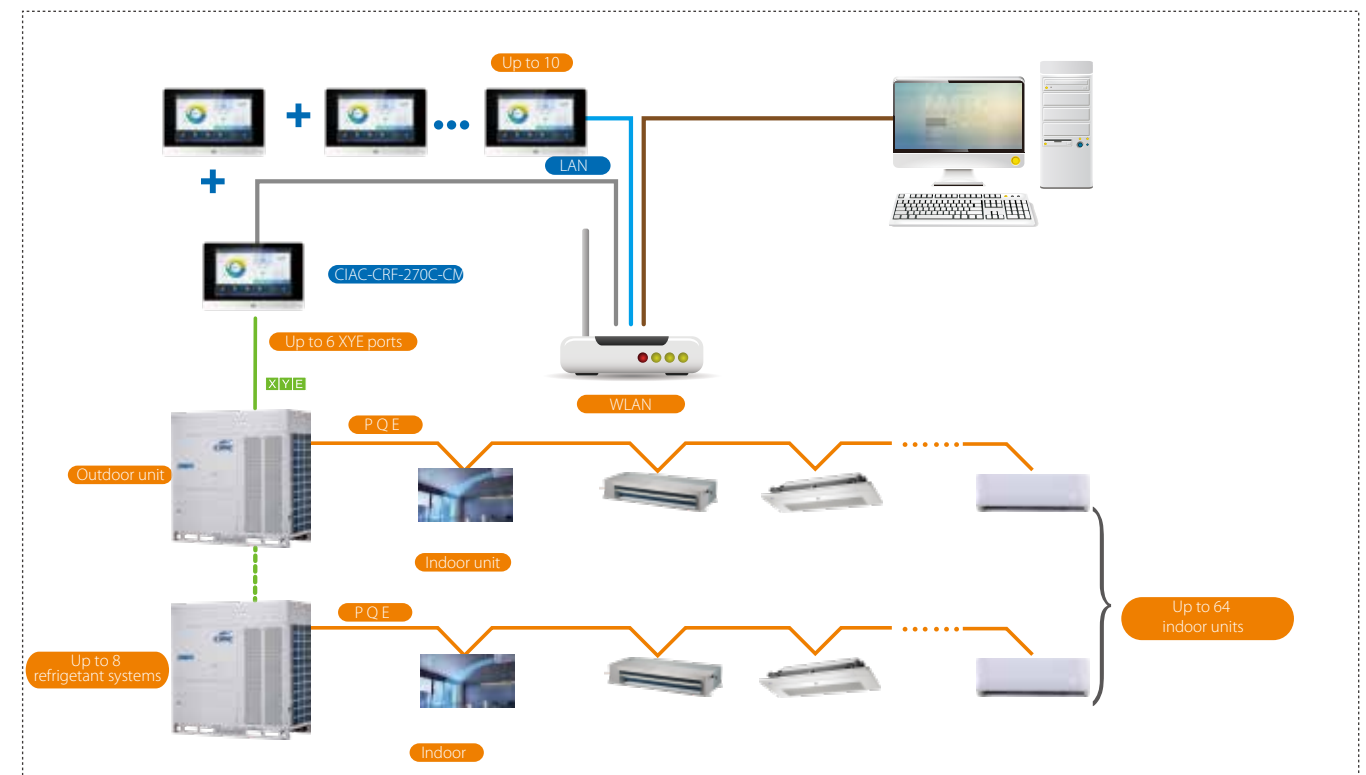

Xpress Installation

With the Xpress Installation wizard, IMMPRO can be installed quickly and easily without requiring support from a technical support engineer.

Network Flexibility

CIAC-5GNS-BAC-CM

CIAC-CRF-270C-CM

M-BMS MAX

Project Qty Level A   **57,028**
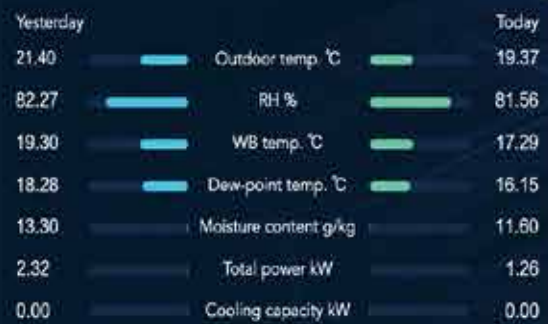
Current month   **5,325**

VRF   3,204   Air-cooled modular chiller water system: 450

Air-cooled heat pump 1,541   Centrifugal/screw chiller water system   130

2019年12月24日 20:16:23   Shunde

	12.25	12.26	12.27	12.28
☁	Wednesday	Thursday	Friday	Saturday
20	☁	☁	☁	☁
16-26℃	16-26℃	13-25℃	15-21℃	16-22℃
NWwind 2level	Cloudy	Cloudy	Cloudy	Light rain
Cloudy				

Transient Chain Indexes

Yesterday			Today
21.40	Outdoor temp. ℃		19.37
82.27	RH %		81.56
19.30	WB temp. ℃		17.29
18.28	Dew-point temp. ℃		16.15
13.30	Moisture content g/kg		11.60
2.32	Total power kW		1.26
0.00	Cooling capacity kW		0.00

Real-Time Monitoring Data

12-24-   20-1

Plant Room Power Data

Chilled pump 18%   Power 0.23Kw   Chiller 78%   Power 1.34Kw

Cooling tower 4%   Power 0.06Kw   Cooling pump 0%   Power 0.01Kw

---

BMS Gateway

Monitoring and control of CIAC's VRF air conditioners can be integrated into building management systems, enabling air conditioning to be monitored alongside lighting, power, fire, access and security systems. CIAC's gateway devices provide full compatibility with the leading BMS protocols: BACnet, LonWorks, Modbus and KNX.
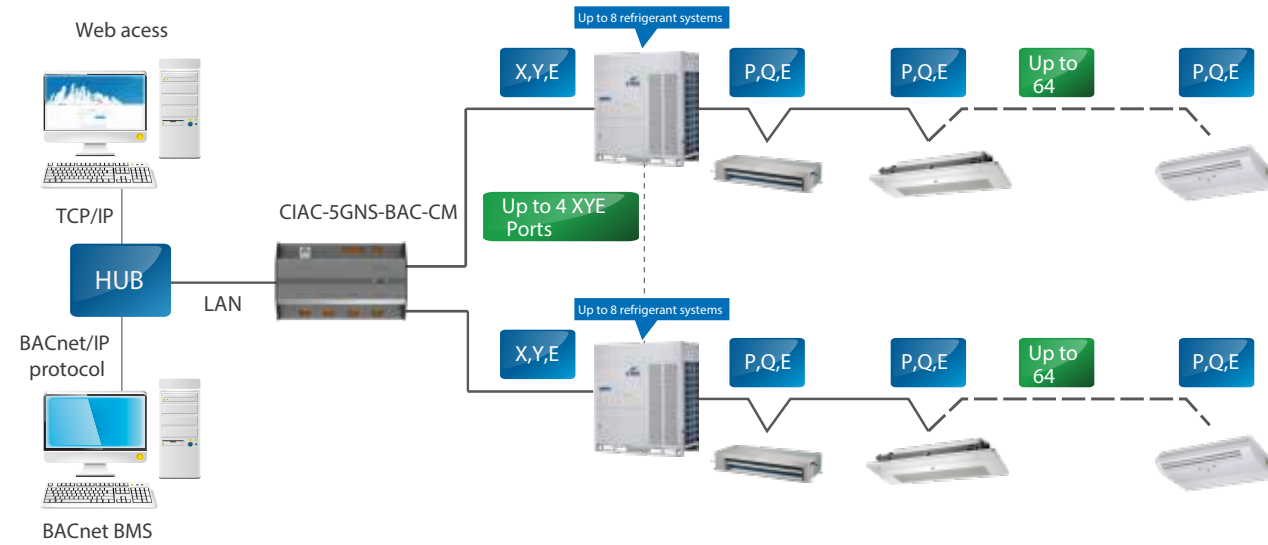
BACnet Gateway

Full Integration

The Bacnet Gateway allows CIAC VRF systems to be monitored and controlled alongside other building management technology that use the BACnet protocol such as access control, fire detection and lighting systems.

Network Flexibility

The gateway can be connected to master outdoor units' XYE ports directly.

Features

Model		CIAC-5GNS-BAC-CM
Max. number of devices (include indoor and outdoor units)		256
Max. number of refrigerant systems		32
Control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Energy management	●
Indoor unit monitoring	Room temperature display	●
	Error status	●
	Error alarms	●
Outdoor unit monitoring	Operating mode	●
	Outdoor ambient temperature	●
	Fan speed	●
	Compressor operating frequency	●
	Discharge temperature	●
	System pressure	●
	Error status	●
	Error alarms	●
LAN access		●
Compatibility	Siemens	APOGEE
	Trane	TRACER
	Honeywell	ALERTON
	Schneider	Andover Continuum
	Johnson Controls	METASYS
Dimensions (HxWxD)(mm)		116×190×67
Power supply		24V AC~50/60Hz
Outdoor unit series		All series *

Note:
●: equipped as standard; ✕: without this function

LonWorks Gateway

Full Integration

The LonWorks Gateway allows CIAC VRF systems to be monitored and controlled alongside other building management technology on the LonWorks platform such as security, fire safety and lighting systems.

Network Flexibility

The gateway can be connected to master outdoor units' XYE port directly.
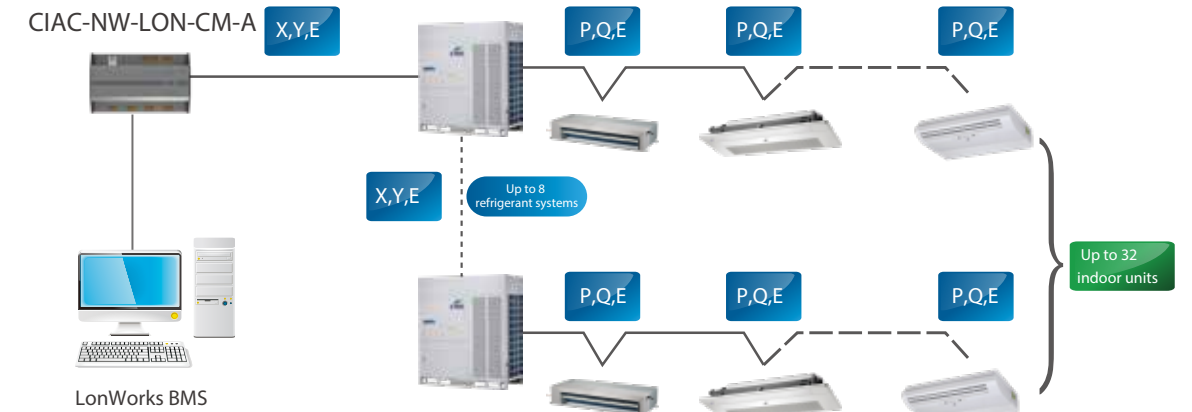
Features

| Model		CIAC-NW-LON-CM-A
Max. number of indoor units		32
Max. number of refrigerant systems		8
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Group shut down	●
	On / Off	●
Indoor unit monitoring	Operating mode	●
	Set temperature	●
	Fan speed	●
	Online status	●
	Operating status	●
	Room temperature	●
	Error status	●
Outdoor unit monitoring	Error status	●
Dimensions (HxWxD)(mm)		116×170×67
Power supply		24V AC~50/60Hz
Outdoor unit series		All series *

Note:
●: equipped as standard

Modbus Gateway

Full Integration

The Modbus Gateway enables seamless connection of CIAC VRF systems with building management systems built on the Modbus communication protocol.

Network Flexibility

The gateway can be connected to master outdoor units' XYE ports directly.
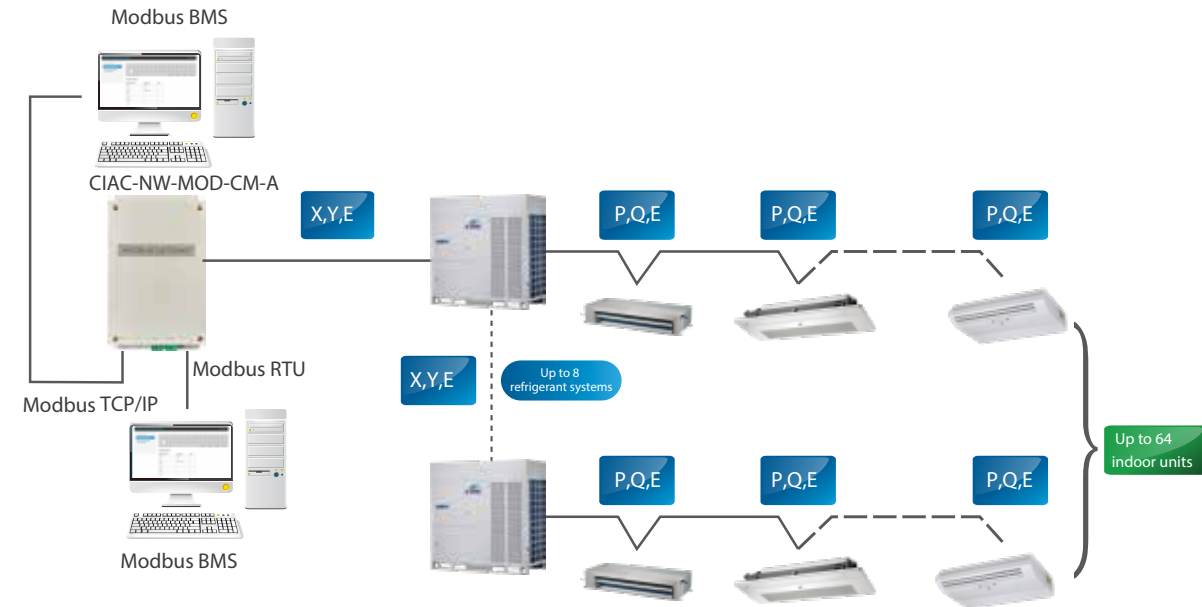
Features

Model		CIAC-NW-MOD-CM-A
Max. number of indoor units		64
Max. number of refrigerant systems		8
Control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Group on/off	●
Indoor unit monitoring	Online status	●
	Room temperature	●
	Error status	●
	Operating mode	●
Outdoor unit monitoring	Operating mode	●
	Number of operating IDUs	●
	Outdoor ambient temperature	●
	Error status	●
LAN access		●
Dimensions (HxWxD)(mm)		225×128×28
Power supply		12V DC
Outdoor unit series		XMVF

Note:
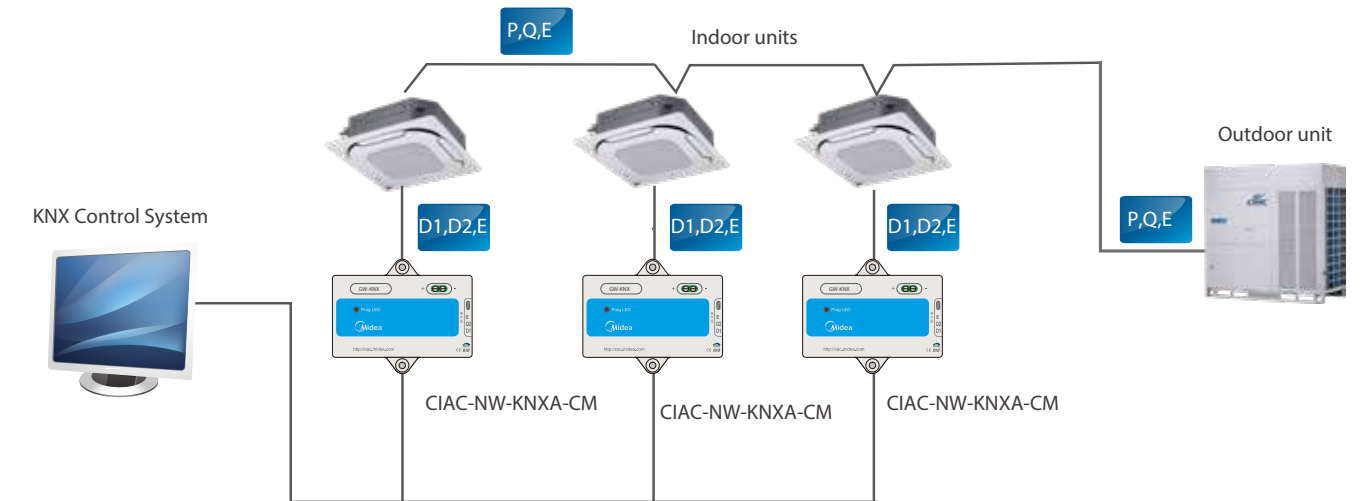●: equipped as standard; ×: without this function
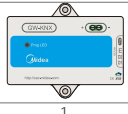
KNX Gateway

Full Integration

The KNX Gateway enables full integration of CIAC VRF systems with home and building management systems built on the KNX network communications protocol. KNX is the only global standard for housing and building control, and has been adopted by 70% of Europe's smart home market.

Network Flexibility

The gateway can be connected to indoor units' XYE or D1D2E ports directly.

Features

Model		CIAC-NW-KNXA-CM
Max. number of indoor units		1
Control	On / Off	●
	Mode selection	●
	Temperature setting	● (1°C steps)
	7-speed fan control	● (3-speed)
	Swing	●
Monitoring	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Swing	●
	Room temperature	●
	Error alarm	●
Dimensions (HxWxD)(mm)		85×51×16
Power supply		29VDC (KNX bus supply)

Hotel Key Card Interface Modules

Full Integration

The Hotel Key Card Interface Modules enable power supply to indoor units to be integrated with hotel key card power supply management systems, which are designed to save energy by only running appliances whilst guests are present in their room.

Features

Model	CIAC-CA-HKCW	CIAC-CA-HKCS
Appearance		
Network flexibility		
Auto restart	●	●
Compatiblity	Remote and wired controller	Remote and wired controller
Dimensions (H×W×D) (mm)	15.5×86×72.8	87×150×70
Power supply	5V DC (Supplied by indoor unit)	5V DC (Supplied by indoor unit)
Indoor unit series	All series	

Note:
●: equipped as standard

Infrared Sensor Controller

Full Integration

Using infrared sensors to detect movement, the CIAC-CA-NIM09 Infrared Sensor Controller automatically turns indoor units on or off upon sensing that the room is occupied or unoccupied. Suitable for hotels, offices, conference rooms and residences, the Infrared Sensor Controller ensures climate control whilst minimizing energy consumption.

Features

Model	CIAC-CA-IS
Appearance	
Network flexibility	
Dimensions (H×W×D)(mm)	Sensor 46×30×25.6, Control box 86×72.8×15.5
Power supply	5V DC (Supplied by indoor unit)
Indoor unit series	all series

Diagnosis Software

Monitor and Diagnose

Diagnosis Software tool is used to monitor VRF systems and diagnose system errors.

System settings and operating parameters can be accessed easily and data logs can be reviewed for fault prevention purposes.

Features

Model		VRF-DIAG-B CIAC-CAC-DSCK
Max. number of indoor units		64
Max. number of refrigerant systems		1
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
Outdoor unit monitoring	Operating mode	●
	Capacity	●
	Compressor operating frequency	●
	Operating current	●
	Error status	●
	Temperatures	T3,T4,Tp (See note 1)
	Valve statuses	SV4, SV5, SV6, ST1 (See note 2)
	EXV position	●
Indoor unit monitoring	Operating mode	●
	Capacity	●
	Fan speed	●
	Address	●
	Temperatures	T1, T2, T2B, TS (See note 3)
	EXV position	●
Error codes		●
Toubleshooting		●
Data logs		●
Diagrams		System schematic, refregetrant flow diagram, parameter chart
Languages supported		English, Chinese
Outdoor unit series		XMVF

Note:

● : equipped as standard

1. Heat exchanger temperature, outdoor ambient temperature, discharge temperature.

2. Oil return valve, defrosting valve, EXV bypass valve, four-way valve.

3. Indoor ambient temperature, indoor heat exchanger mid-point temperature, indoor heat exchanger outlet temperature, set temperature.

Expert Diagnosis

XMVF Diagnosis Software is specially designed to allow service engineers, to understand the operating status of the system at a glance.

Parameter Querying

Access all the system parameters easily.

Use-friendly Interface

A stylish and simple interface with rich graphical representations makes diagnosing system issues quick and convenient.

Data Logs

Data logs including operating records and error reports are saved by the software which is useful for discovering system issues.
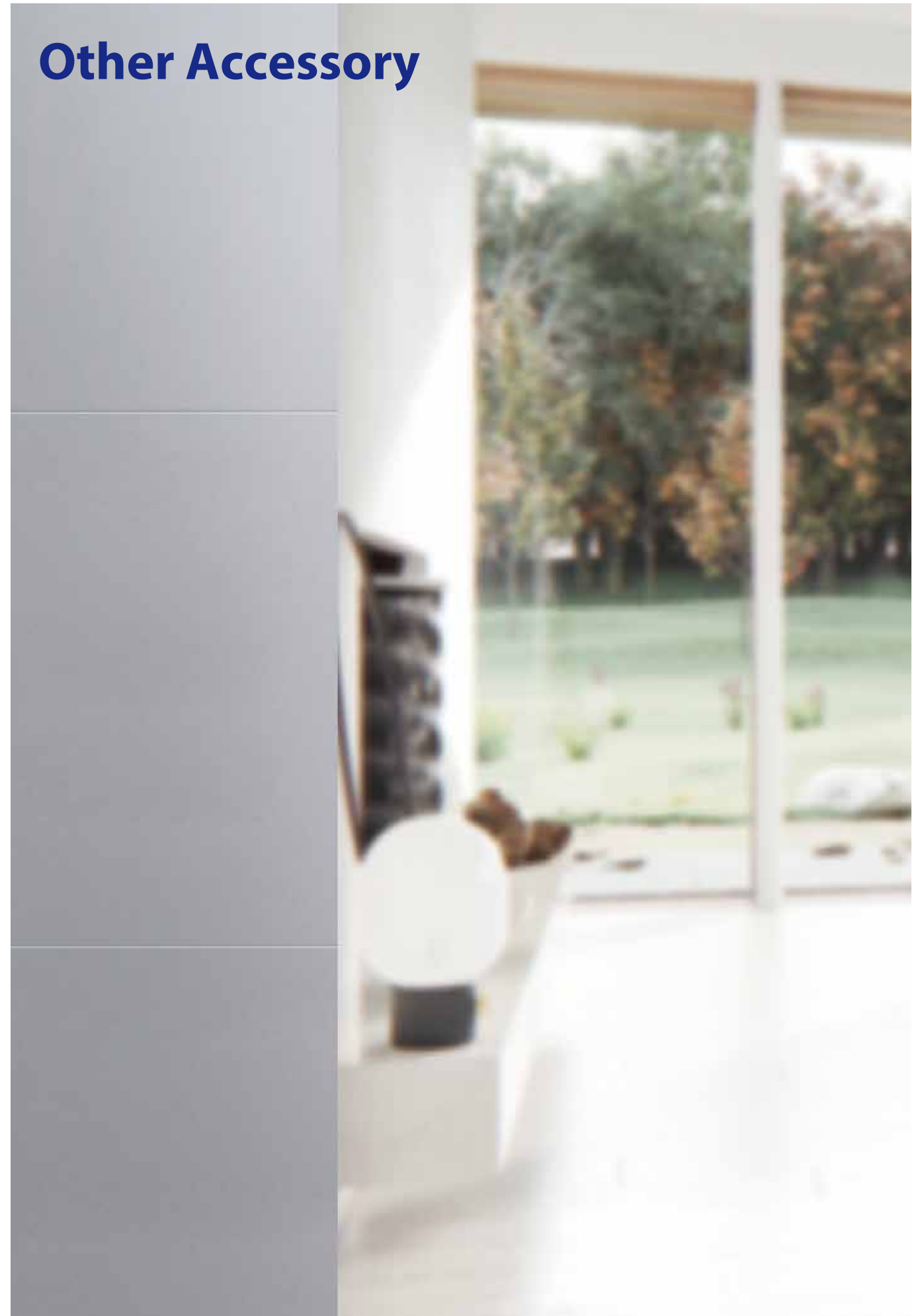
Data logs

Diagrams

A system schematic, refregetrant flow diagram and parameter chart can be generated to provide a graphical interpretation of the system status.

Wiring Schematic

VRF-DIAG-B
CIAC-CAC-DSCK

X,Y,E

P,Q,E   P,Q,E   Up to 64   P,Q,E

H₁H₂E

H₁H₂E
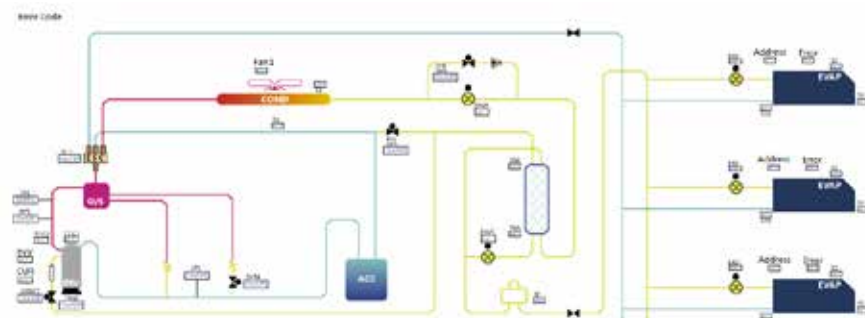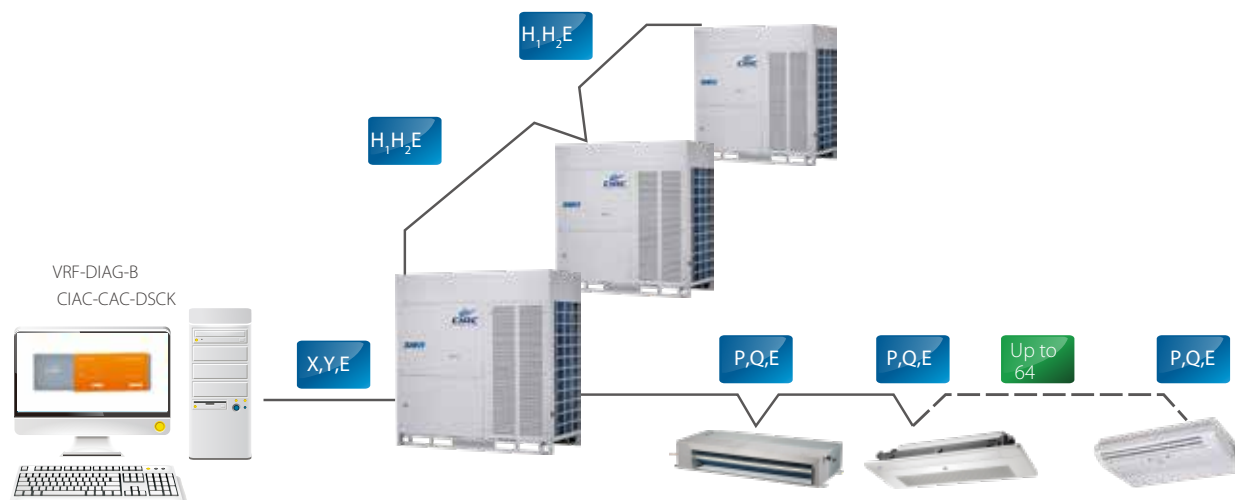
Other Accessory

XYE Extension Kit

Simple Design

The CIAC-CA-EK used to extend the XYE port of outdoor unit as the 2-way one which can connect to 2 Central Controllers or gateways.

Features

Model	
	CIAC-CA-EK
Max. number of refrigerant systems	8
Wiring flexibility	CIAC-5GNS-BAC-CM Up to 8 Refrigerant Systems CIAC-CA-EK X,Y,E P,Q,E P,Q,E Up to 64 P,Q,E CIAC-CRF-180B-CM
Dimensions (H×W×D)(mm)	128X225X28
Power supply	12V DC
Outdoor unit series	XMVF

VRF DX AHU Control Box

High Efficiency

AHU Control Box facilitates raising the EER/COP of the complete AHU system.

Wide Capacity Range

Four control boxes can be used in parallel, giving an overall capacity range of 0.8HP to 80HP.

AHUKZ-00B: 2.2~9kW
AHUKZ-01B: 9~20kW
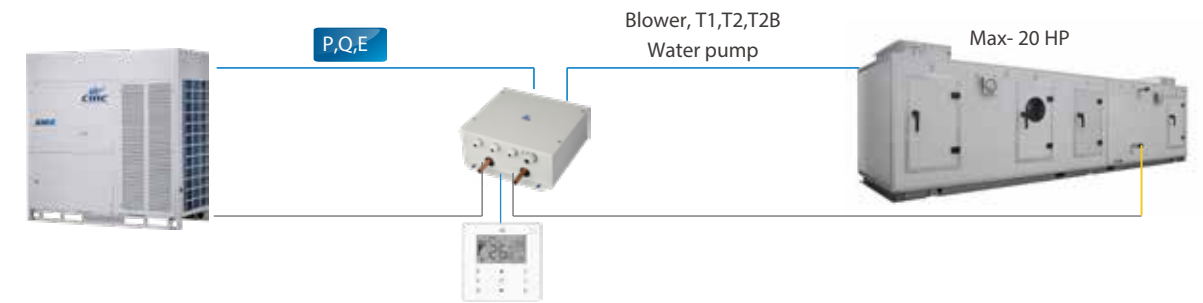AHUKZ-02B: 20~36kW
AHUKZ-03B: 36~56kW

AHUKZ-00D: 2.2~9kW
AHUKZ-01D: 9~20kW
AHUKZ-02D: 20~36kW
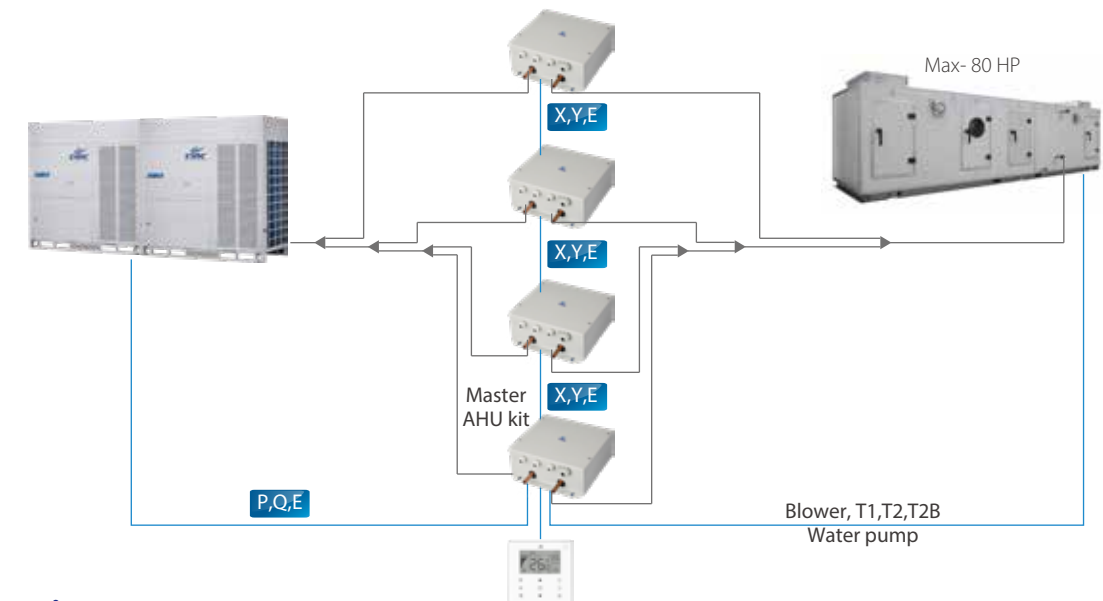AHUKZ-03D: 36~56kW

Compatible with VRF Systems

AHU Control Box are compatible with CIAC VRF outdoor units and can be used together with all types of CIAC VRF indoor units.

Single AHU Control Box Connection

P,Q,E   Blower, T1,T2,T2B   Water pump   Max- 20 HP

Multi AHU Control Boxes Connection

Max- 80 HP

X,Y,E

X,Y,E

Master AHU kit   X,Y,E

P,Q,E   Blower, T1,T2,T2B   Water pump

Specifications

Model name	AHUKZ-00D	AHUKZ-01D	AHUKZ-02D	AHUKZ-03D
Capacity A (kW)	2.2≤A<9	9≤A≤20	20<A≤36	36<A≤56
Power supply	220-240V~50/60Hz			
Liquid pipe (in/out) (mm)	Φ9.53/Φ9.53	Φ9.53/Φ9.53	Φ12.7/Φ12.7	Φ15.9/Φ15.9
Dimension (WxHxD) (mm)	341x133x395			
Weight (kg)	5.7	5.7	5.8	6.0
Operation range (cooling on coil) (oC)	17-43			
Operation range (heating on coil) (oC)	10-30			
Applicable outdoor units	Heat pump / heat recovery / cooling only			
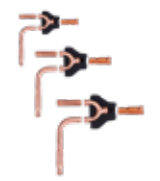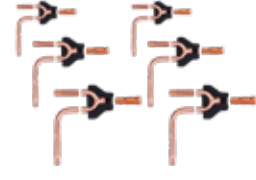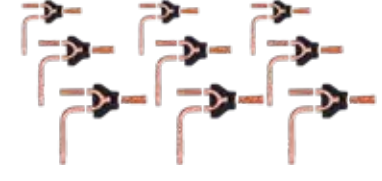
Model name	AHUKZ-00B	AHUKZ-01B	AHUKZ-02B	AHUKZ-03B
Capacity A (kW)	2.2≤ A<9	9≤A≤20	20<A≤36	36<A≤56
Power supply	220-240V~50/60Hz			
Liquid pipe (in/out) (mm)	Φ9.53/Φ9.53	Φ9.53/Φ9.53	Φ12.7/Φ12.7	Φ15.9/Φ15.9
Dimension (WxHxD) (mm)	350×150×375			
Weight (kg)	8.4	8.4	8.7	8.9
Operation range (cooling on coil) (oC)	17-43			
Operation range (heating on coil) (oC)	5-30			
Applicable outdoor units	Heat pump / cooling only			

Branch Joints

For Heat Pump Outdoor Units
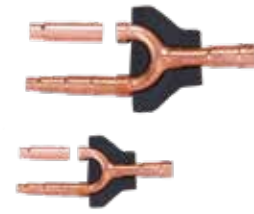
Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints for XMVF Top Discharge		FQZHW-02N1E	255×150×185	2.0	Connecting two outdoor units
		FQZHW-03N1E	345×160×285	4.3	Connecting three outdoor units

For Heat Recovery Outdoor Units

Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints between outdoor unit		FQZHW-02SB1	272×167×232	2.2	Connecting two outdoor units
		FQZHW-03SB1	472×157×312	5.0	Connecting three outdoor units
		FQZHW-04SB1	745×160×335	7.5	Connecting four outdoor units

Branch Joints

For Indoor Units

Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints for indoor units		FQZHN－01D	290×105×100	0.4	/
		FQZHN－02D	290×105×100	0.6	/
		FQZHN－03D	310×130×125	0.9	/
		FQZHN－04D	350×180×170	1.5	/
		FQZHN－05D	365×195×215	1.9	/
		FQZHN－06D	390×230×255	3.1	/
		FQZHN－07D	390×230×255	3.4	/

For DX AHU Control Box

Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints for DX AHU control box		FQZHD－01	240×80×80	0.3	/
		FQZHD－02	280×90×90	0.5	/
		FQZHD－05	310×130×125	0.7	/
		FQZHD－04	310×130×125	0.9	/

Dimensions

Outdoor Branch Joints

Model	Gas side joints	Liquid side joints
FQZHW-02N1E		
FQZHW-03N1E		

Outdoor Branch Joints

Model	Low-pressure gas side joints	High-pressure gas side joints	Liquid side joints
FQZHW-02SB1			
FQZHW-03SB1			

Indoor Branch Joints

Model	Gas side joints	Liquid side joints
FQZHN-01D		
FQZHN-02D		
FQZHN-03D		
FQZHN-04D		
FQZHN-05D		
FQZHN-06D		
FQZHN-07D		

DX AHU Control Box Branch Joints

Type	Liquid side joints (2 Sets)
FQZHD-01	
FQZHD-02	
FQZHD-03	
FQZHD-04	

Branch Header

For Indoor Units

Model	Appearance	Gas side dimension	Liquid side dimension
DXFQT4-01		ID:19.1 ID:22.2 ID:25.4	ID:9.5 ID:12.7 ID:15.9
DXFQT8-01		ID:25.4 ID:28.6 ID:31.8	ID:12.7 ID:15.9 ID:19.1