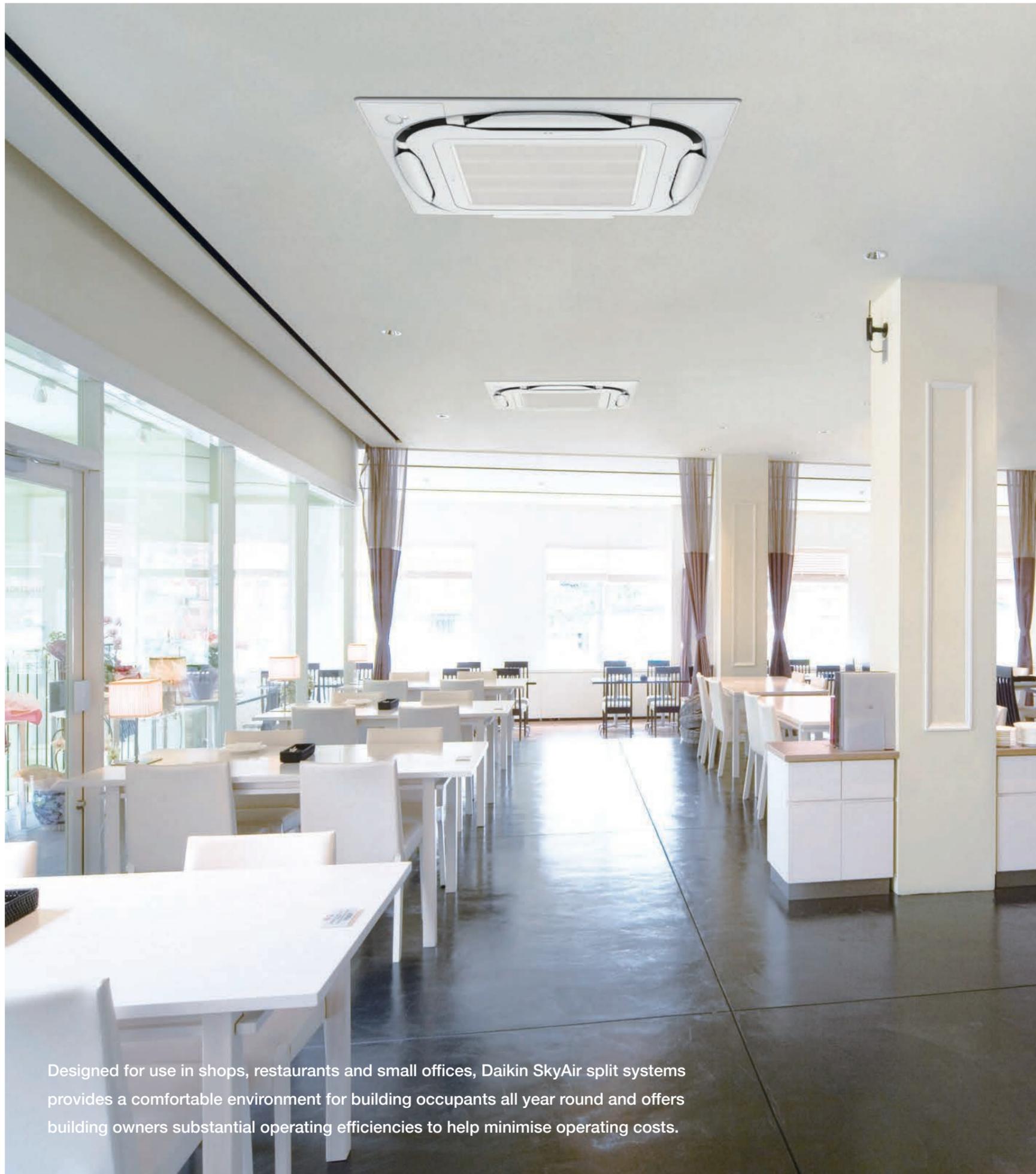


SkyAir



R-32



Designed for use in shops, restaurants and small offices, Daikin SkyAir split systems provides a comfortable environment for building occupants all year round and offers building owners substantial operating efficiencies to help minimise operating costs.



Ceiling Mounted Cassette Type

〈Round Flow〉

Building on Daikin's signature Round Flow design to deliver greater comfort and energy efficiency.



Ceiling Suspended Type

Ceiling suspended indoor units cool the largest spaces without compromising wall space.



Wall Mounted Type

Sophisticated design delivers wide angle airflow and long throws for greater comfort.



Duct Connection Middle Static Pressure Type

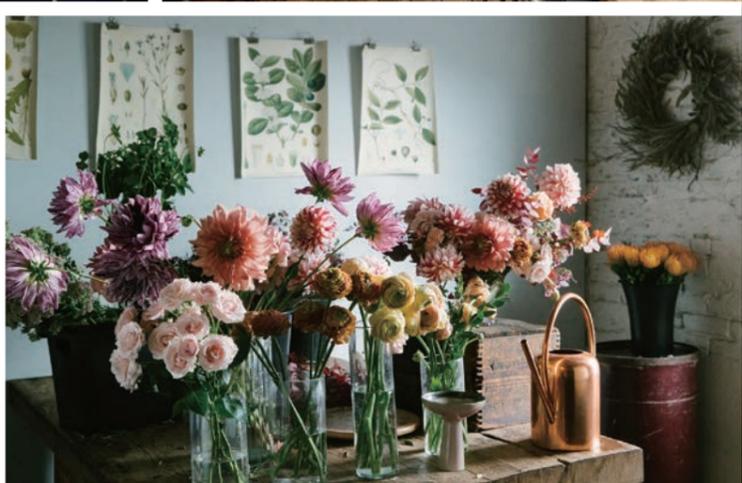
Compact form factor with powerful features for ultimate design flexibility.



*Designed for use in
café & restaurants,
retail shops and small offices.*



Daikin's SkyAir series delivers superior comfort and energy performance for both occupants and building owners.



Energy Saving P.5

R-32 P.5

Durability P.6

Compact P.6

Reuse of Existing Piping P.7-8

Quiet Operation P.9

Smart Airflow Control P.10

Design Flexibility P.11

Convenient Functions P.12

New Inverters launched



R-32

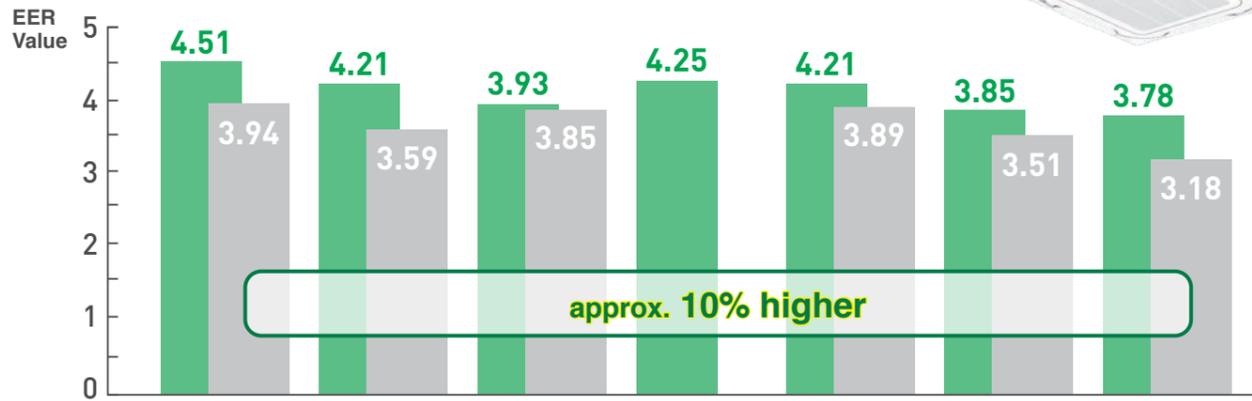
Heat pump

Energy Saving

➤ New premium inverter series achieved higher EER than current inverter series with latest Daikin technology.

● EER values by capacity for cassette models

■ New premium inverter RZAV-C series R-32 <cassette type>
■ Current inverter RZQS-A series R-410A <cassette type>



New Premium Inverter	RZAV50 CV1	RZAV60 CV1	RZAV71 CV1/Y1	RZAV85 CV1/Y1	RZAV100 CV1/Y1	RZAV125 CV1/Y1	RZAV140 CV1/Y1
Current Premium Inverter	RZQS50 AV1	RZQS60 AV1	RZQS71 AV1	—	RZQS100 AV1/AY1	RZQS125 AV1/AY1	RZQS140 AV1/AY1

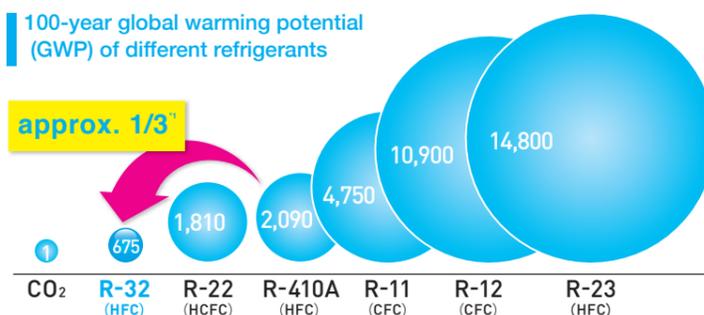
R-32

➤ From R-410A to R-32, Another step towards lower global warming potential.

If you want a new HFC refrigerant with zero ozone depletion potential, which also has a lower global warming potential than R-410A, use R-32. Achieving new levels of energy efficiency while responding to environmental needs, Daikin has redesigned the SkyAir series from the ground up using R-32.

100-year global warming potential (GWP) of different refrigerants

approx. 1/3*



*1. Source: Values for 100-year global warming potential (GWP) from IPCC Fourth Assessment Report. Comparative 100-year GWP: HFC410A, 2,090; HFC32, 675.

Durability

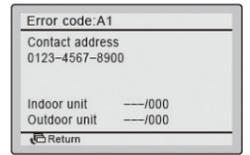
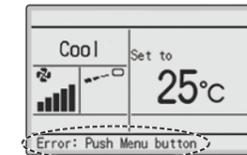
➤ Higher operation range up to 50°C

The outdoor operation range is now extended to 50°C. This enables reliable operation even under high temperature conditions, and wider choice of installation locations.



➤ Self-diagnosis functions enable prompt maintenance response

An error message appears on the LCD of the remote controller and an LED lights up on the unit. When the BRC1E63 is installed, the error code appears showing contact information and model name.



➤ Coated printed circuit boards (outdoor unit)

Coated circuit boards prevent problems caused by humidity and airborne dust. It also protects against salt contained in sea breezes. Both sides of the PCB in outdoor units are coated.



Compact

➤ Compact size and lightweight

New outdoor units of 5.0kW and 6.0kW class are much more compact and lighter weight than current models. This enables easy installation in the places with limited space.



More compact, much higher EER!

30% reduction in weight
64kg → 45kg | 19kg down!

32% reduction in volume
0.22m³ → 0.15m³ | 0.07m³ down!

➤ Smaller piping size

Piping size of new outdoor units of 5.0kW and 6.0kW class are smaller than current model. This enables easier piping work in the field.

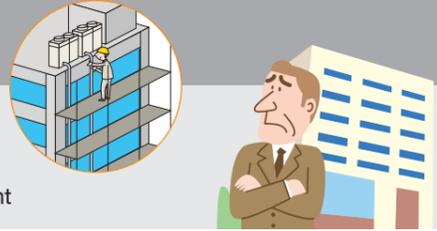
	RZQS50/60AV1	RZAV50/60CV1
Liquid	ø 9.5 mm	▶ ø 6.4 mm
Gas	ø 15.9 mm	▶ ø 12.7 mm

Reuse of Existing Piping

Benefit 1 Simplified installation reduces replacement time and cost

When considering the replacement of your air conditioning system, do the following concern you?

- The length of time your business will be interrupted
- Effect on your existing tenants during the replacement work
- High costs and long work period due to scaffolding needed for pipe replacement



These problems are **solved by Daikin!**

Where feasible, we reduce work costs and time by reusing existing pipes*.

*Strict conditions must be adhered to, please refer to the installation manual and Engineering Data Book for further details including pipe sizes (if pipes are to be re-used)

Benefit 2 You can increase cooling capacity and achieve higher energy efficiency

Upgrade to an air conditioner with the latest technology for greater comfort and energy efficiency.



Technology

Advanced technology, including the use of corrosion resistant electronic expansion valves, acid neutralisers and improved compressor reliability, enables the re-use of existing piping* without the need of pipe flushing for a simplified replacement process.

Stronger refrigerating machine oil

An acid neutraliser agent is added to disable acids (chlorine ions), which cause corrosion.

Highly corrosion resistant electronic expansion valve

Highly reliable compressor

Compressor durability is improved by installing a filter or accumulator to collect solid foreign substances.

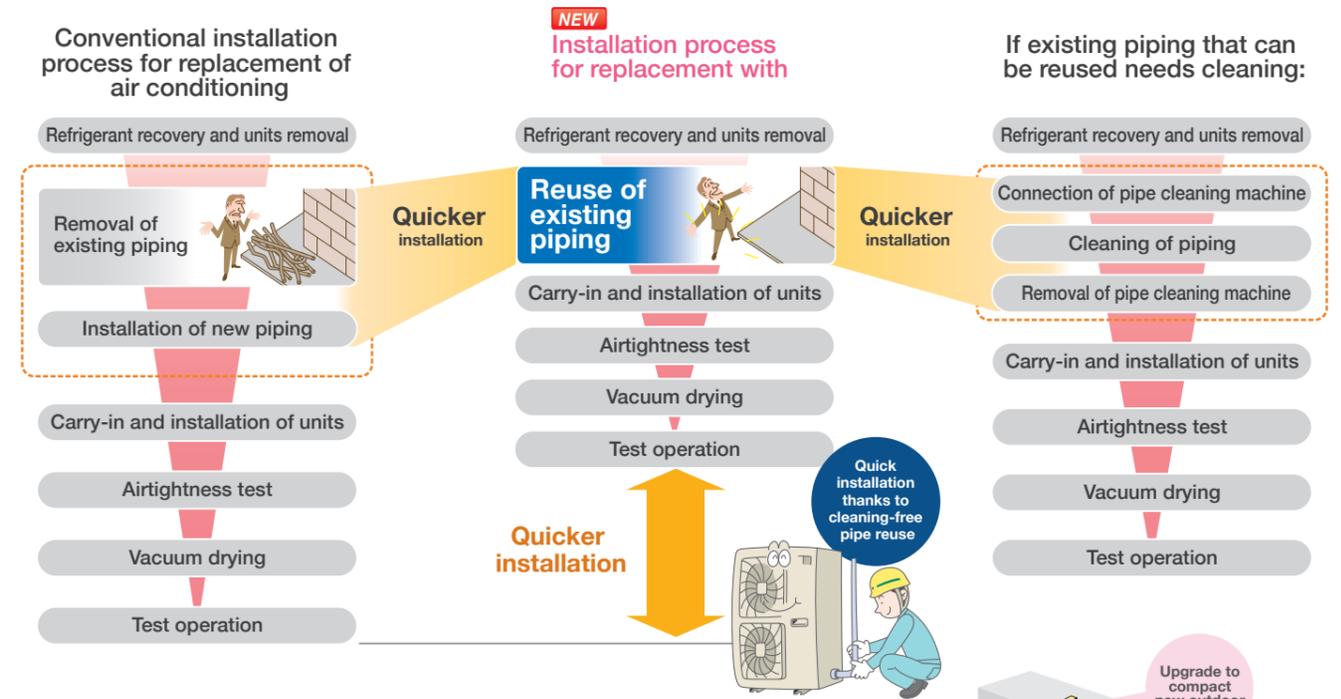
*Strict conditions must be adhered to, please refer to the installation manual and Engineering Data Book for further details including pipe sizes (if pipes are to be re-used)

The new RZAV & RZAC series now both feature R22 retrofit technology.*

*Previously unavailable on RZQ series.

Simplified Installation

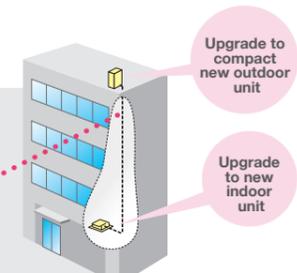
Enables simplified air conditioner replacement with minimal impact on operations.



Particularly convenient in these circumstances

- Pipes are buried and making new pipe installations difficult.
- Outdoor unit difficult to access.
- Multiple units are being upgraded at the same time.

Piping left as is



Reuse of Existing Piping: Refrigerant Pipe Size Table

Outdoor Unit		Existing pipe size (Liquid / Gas)	6.4 / 12.7	6.4 / 15.9	9.5 / 12.7	9.5 / 15.9	9.5 / 19.1	12.7 / 15.9	12.7 / 19.1	Level difference	Design pressure (High pressure)
RZAV 50/60C	6.4 / 12.7	Condition	◎	○	△	×	×	×	×	Max. 30m	4.15MPa
		Max. piping length	50m	50m	25m	25m	—	—	—		
		Chargeless piping length	30m	30m	15m	15m	—	—	—		
RZAV 71-140C	9.5 / 15.9	Condition	■	▲	■	◎	○	△	△	Max. 30m	4.15MPa
		Max. piping length	10m*	10m*	75m	75m	75m	35m	35m		
		Chargeless piping length	10m	10m	30m	30m	30m	15m	15m		
RZAC 71-140C	9.5 / 15.9	Condition	×	×	×	◎	×	×	×	Max. 30m	4.15MPa
		Max. piping length	×	×	×	50m	×	×	×		
		Chargeless piping length	×	×	×	30m	×	×	×		

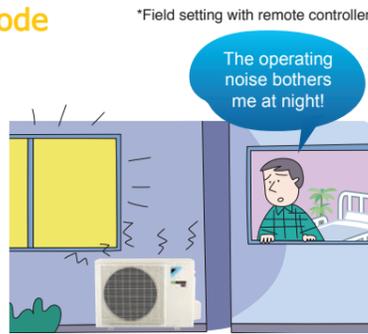
- ◎ Standard pipe size
- Same condition with standard pipe
- △ Piping length and chargeless piping length are shortened
- ▲ Piping length and chargeless piping length are much shortened
- Cooling capacity is lowered (pay attention to piping length)
- × Reuse of existing piping is not allowed

*The allowable minimum piping length is 5 m.
 • Refer to the installation manual for details other than those mentioned in the left table such as additional refrigerant charge amount.
 • Clean the existing piping if its length exceeds 30m.
 • Clean the existing piping if existing piping length exceeds limit of chargeless piping length to perform pump-down refrigerant recovery.

Quiet Operation

Night quiet operation mode

Consideration is given for people living nearby. Outdoor unit operating sound can be reduced.

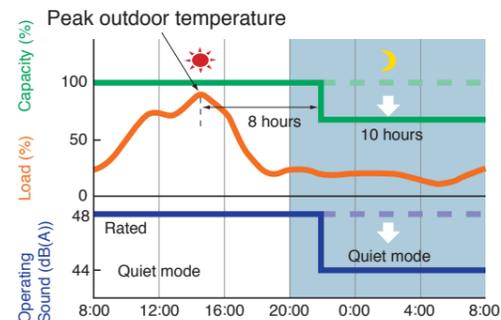


The automatic night quiet mode will initiate 8 hours after the peak temperature is reached in the daytime, and normal operation will resume 10 hours after that.

★ Reducing noise will reduce capacity slightly.

	Sound pressure level ¹ (dB(A))		
	Rated ²	Night Quiet Mode	
Premium Inverter series	RZAV50CV1	48	44
	RZAV60CV1	48	44
	RZAV71CV1/CY1	48	44
	RZAV85CV1/CY1	52	48
	RZAV100CV1/CY1	51	47
	RZAV125CV1/CY1	52	48
Inverter series	RZAC71CV1	48	44
	RZAC85CV1/CY1	51	47
	RZAC100CV1/CY1	52	48
	RZAC125CV1/CY1	53	49
	RZAC140CV1/CY1	54	50

Note: ¹Anechoic chamber conversion value, measured according to JIS parameters and criteria. During operation these values are somewhat higher owing to ambient conditions. ²Value when cooling. Value will differ when heating.



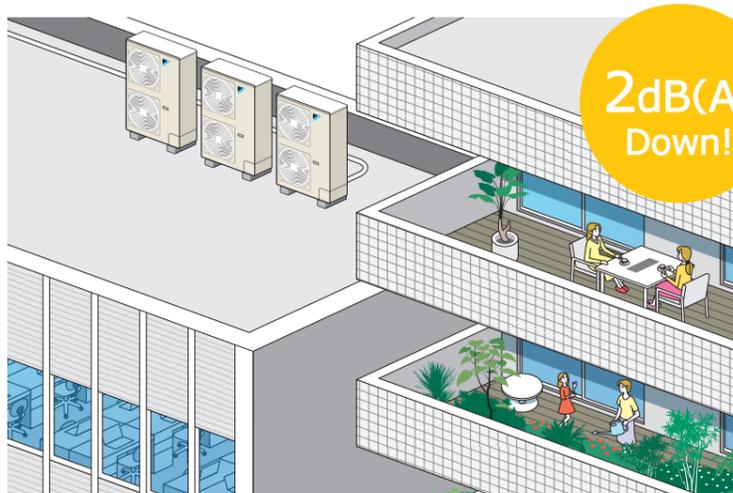
Note: Daikin data for RZAV71C Operating sound about 4 dB quieter

Quieter operations for 71 to 125 class

Operation sound of outdoor unit from 7.1kW to 12.5kW class has reduced 2dB(A) compared to current model.

RZQS	71		100		125	
	Cooling	Heating	Cooling	Heating	Cooling	Heating
	50	52	53	55	54	56

RZAV	71		100		125	
	Cooling	Heating	Cooling	Heating	Cooling	Heating
	48	50	51	53	52	54



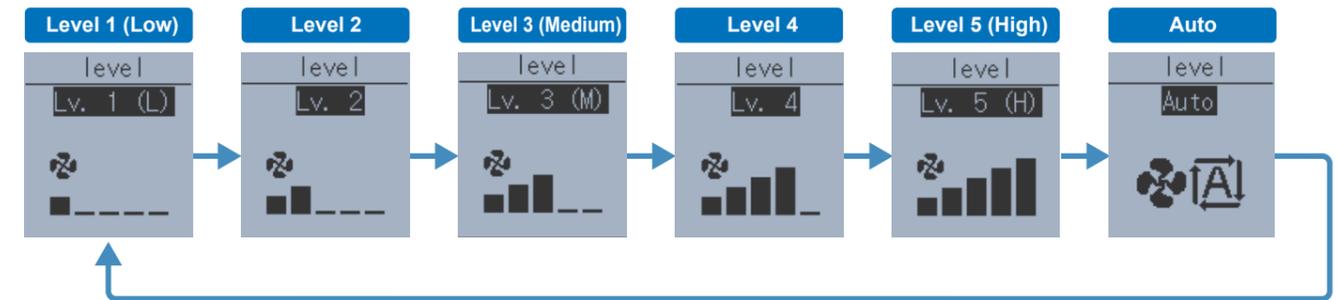
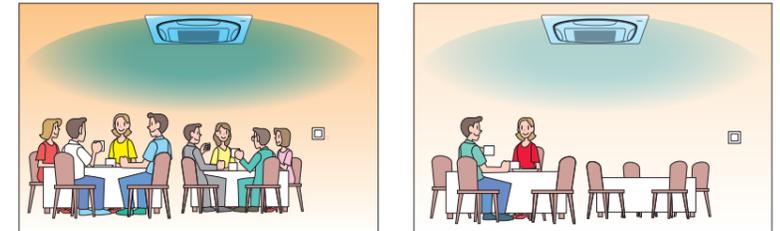
Smart Airflow Control

Indoor units can provide 5-step and 3-step fine control of air volume

5-step: FCA and FHA series
3-step: FAA and FBA series

Comfort ensured by 'Auto' airflow rate that matches load level

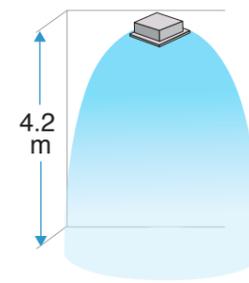
Convenient energy-efficiency for stores with peak and quiet periods.



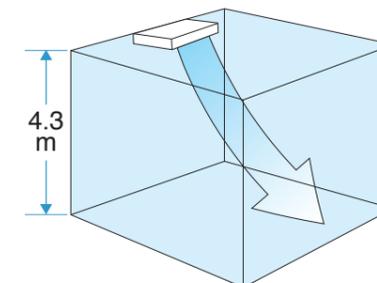
Also convenient for high ceilings and spaces with long throw distances

Cassette type <Round Flow>: maximum 4.2 m*

Ceiling suspended type: maximum 4.3 m



See page 25



See page 30

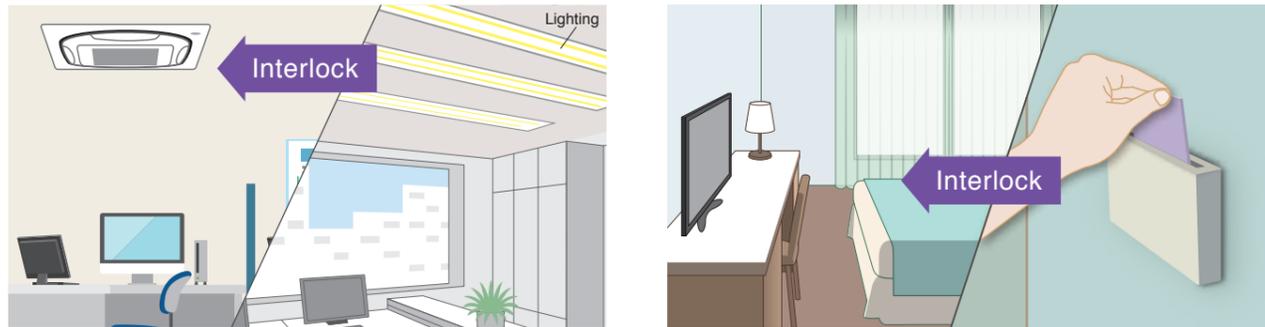
*Maximum 4.2 m for FCA85, 100, 125, 140
Maximum 3.5 m for FCA50, 60, 71

*Field setting with remote controller



Design Flexibility

► Possible to force OFF and ON/OFF operation using external command *Field setting with remote controller



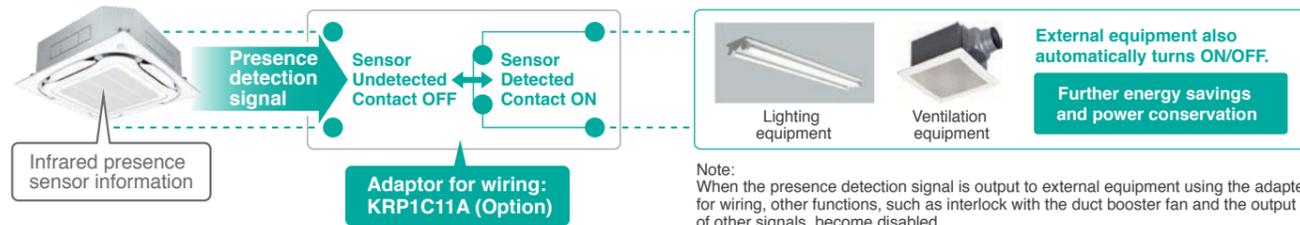
► External equipment interlock (FCA series only)

Power conservation is possible through interlock* of external equipment, such as lighting, with the infrared presence sensor.

*Optional adaptor for wiring: KRP1C11A is necessary.

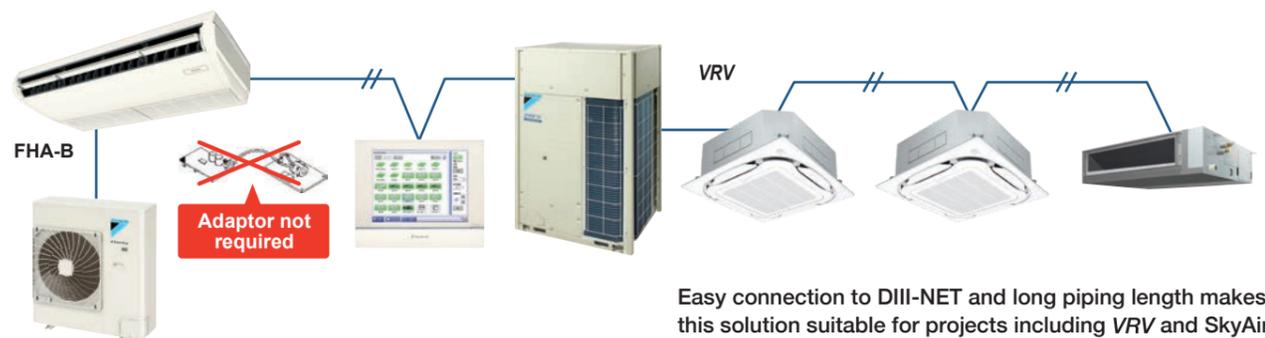
Human presence is detected by the built-in infrared presence sensor in the sensing panel, and the presence detection signal can be output and interlocked with external equipment such as ventilation and lighting equipment.

Sensor interlock mode
The presence detection signal of the infrared presence sensor can turn only external equipment ON/OFF without interlocking with air conditioner operation/stop (ON/OFF).



► Indoor units comply with DIII-Net standards

New indoor unit



Convenient Functions

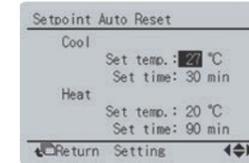
► Navigation remote controller BRC1E63 includes various convenient functions

Automatic return to temperature preset by owner.

Owner can preset upper and lower temperatures.

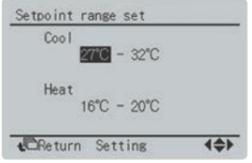
● Setpoint auto reset

- Even if the set temperature is changed, the new set temperature returns to the previous preset value after a preset duration of time.
- Period selectable from 30, 60, 90, or 120 minutes.



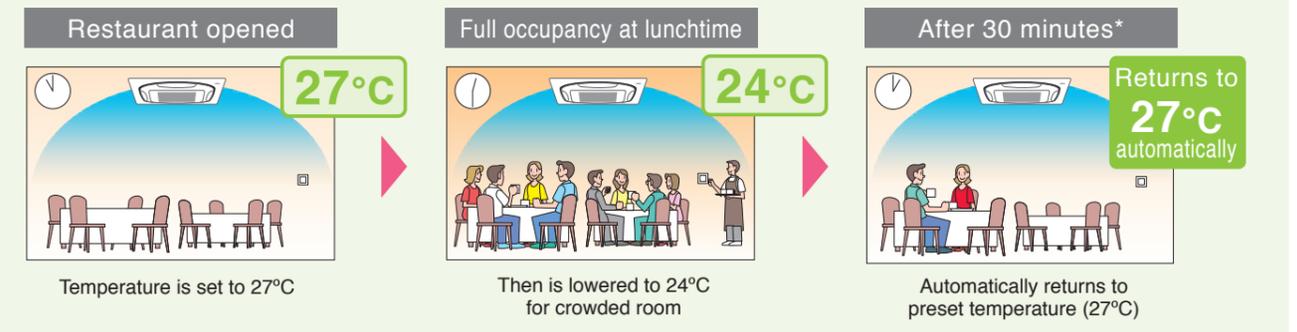
● Setpoint range set

- Saves energy by limiting the min. and max. set temperature.
- Avoids excessive heating or cooling.
- This function is convenient if the remote controller is installed where anyone can change the settings.



Restaurant example

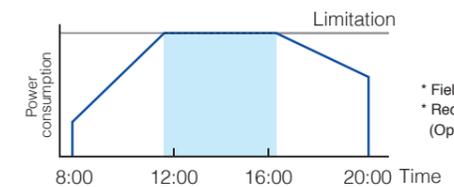
*Preset-return time can be set at 30, 60, 90, or 120 min



► Demand control function

By setting limits that restrict power consumption, you can cut electricity bills.

- Power consumption is given first priority, and limits maximum power consumption of unit.
- Maximum power consumption can be set at 40, 60, 70, 80, or 100%.



* Field setting with remote controller
* Required for Demand adaptor (Option)

► Quick start function

Gets the space to a comfortable temperature rapidly before the arrival of office workers or shop customers. The airflow rate of indoor unit is automatically controlled, increasing the capacity of the outdoor unit and quickly bringing the room to a comfortable temperature. This function will operate for a maximum of 30 minutes before the air conditioner automatically returns to normal operation.



BRC1E63 wired remote controller is used for 'Quick start'.



Premium Inverter series		50	60	71
CEILING MOUNTED CASSETTE TYPE <Round Flow>	Indoor unit	FCA50CAVMA	FCA60CAVMA	FCA71CAVMA
	Outdoor unit	RZAV50CV1	RZAV60CV1	RZAV71CV1 RZAV71CY1
CEILING SUSPENDED TYPE	Indoor unit	FHA50BAVMA	FHA60BAVMA	FHA71BVMA
	Outdoor unit	RZAV50CV1	RZAV60CV1	RZAV71CV1 RZAV71CY1
WALL MOUNTED TYPE	Indoor unit	FAA50BAVMA	FAA60BAVMA	FAA71BVMA
	Outdoor unit	RZAV50CV1	RZAV60CV1	RZAV71CV1 RZAV71CY1
DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE	Indoor unit	FBA50BAVMA	FBA60BAVMA	FBA71BVMA
	Outdoor unit	RZAV50CV1	RZAV60CV1	RZAV71CV1 RZAV71CY1
OUTDOOR UNIT	Outdoor unit	RZAV50CV1	RZAV60CV1	RZAV71CV1 RZAV71CY1
	Power supply	1 phase, 220-240V, 50Hz	1 phase, 220-240V, 50Hz	1 phase, 220-240V, 50Hz 3 phase, 380-415V, 50Hz

Inverter series		50	60	71
CEILING MOUNTED CASSETTE TYPE <Round Flow>	Indoor unit			FCA71CAVMA
	Outdoor unit			RZAC71CV1
DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE	Indoor unit			FBA71BVMA
	Outdoor unit			RZAC71CV1
OUTDOOR UNIT	Outdoor unit			RZAC71CV1
	Power supply			1 phase, 220-240V, 50Hz

		85	100	125	140
CEILING MOUNTED CASSETTE TYPE <Round Flow>	Indoor unit	FCA85CVMA	FCA100CVMA	FCA125CVMA	FCA140CVMA
	Outdoor unit	RZAV85CV1 RZAV85CY1	RZAV100CV1 RZAV100CY1	RZAV125CV1 RZAV125CY1	RZAV140CV1 RZAV140CY1
CEILING SUSPENDED TYPE	Indoor unit	FHA85BVMA	FHA100BVMA	FHA125BVMA	FHA140BVMA
	Outdoor unit	RZAV85CV1 RZAV85CY1	RZAV100CV1 RZAV100CY1	RZAV125CV1 RZAV125CY1	RZAV140CV1 RZAV140CY1
WALL MOUNTED TYPE	Indoor unit	FAA85BVMA	FAA100BVMA		
	Outdoor unit	RZAV85CV1 RZAV85CY1	RZAV100CV1 RZAV100CY1		
DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE	Indoor unit	FBA85BVMA	FBA100BVMA	FBA125BVMA	FBA140BVMA
	Outdoor unit	RZAV85CV1 RZAV85CY1	RZAV100CV1 RZAV100CY1	RZAV125CV1 RZAV125CY1	RZAV140CV1 RZAV140CY1
OUTDOOR UNIT	Outdoor unit	RZAV85CV1	RZAV100CV1	RZAV125CV1	RZAV140CV1
	Power supply	1 phase, 220-240V, 50Hz	3 phase, 380-415V, 50Hz	1 phase, 220-240V, 50Hz	3 phase, 380-415V, 50Hz

		85	100	125	140
CEILING MOUNTED CASSETTE TYPE <Round Flow>	Indoor unit	FCA85CVMA	FCA100CVMA	FCA125CVMA	FCA140CVMA
	Outdoor unit	RZAC85CV1 RZAC85CY1	RZAC100CV1 RZAC100CY1	RZAC125CV1 RZAC125CY1	RZAC140CV1 RZAC140CY1
DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE	Indoor unit	FBA85BVMA			
	Outdoor unit	RZAC85CV1 RZAC85CY1			
OUTDOOR UNIT	Outdoor unit	RZAC85CV1	RZAC100CV1	RZAC125CV1	RZAC140CV1
	Power supply	1 phase, 220-240V, 50Hz	3 phase, 380-415V, 50Hz	1 phase, 220-240V, 50Hz	3 phase, 380-415V, 50Hz

Cassette air conditioner with 360° uniform airflow sets the standard



Option
Accessory required for indoor unit.

Navigation Remote Controller
(Wired Remote Controller)

"Nav Ease" BRC1E63

Note: Remote controller cable is not included and must be obtained locally.

Wireless LCD remote controller
A signal receiver must be added to the indoor unit.

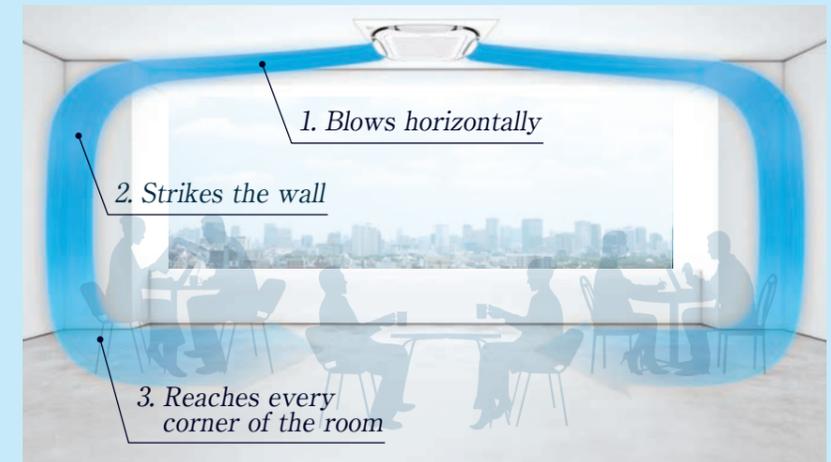
Heat pump **BRC7M634F** (Fresh white)
BRC7M634K (Black)

Signal receiver unit (Installed type)
Wireless remote controller is supplied in a set with a signal receiver.

Circulation Airflow P.17-20

Cools the entire room to deliver comfort that never feels cold.

The illustration shows typical airflow. Effectiveness may differ according to room conditions, room size, and distance to walls.



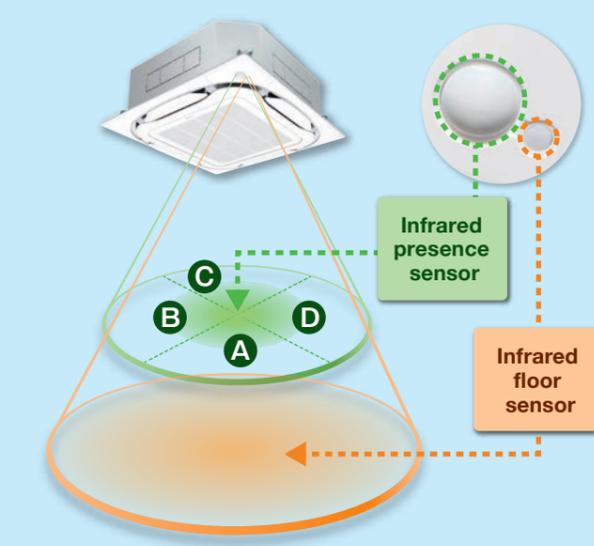
Individual Airflow Direction Control P.21

Airflow direction can be individually adjusted for each air discharge outlet to deliver optimal air distribution.

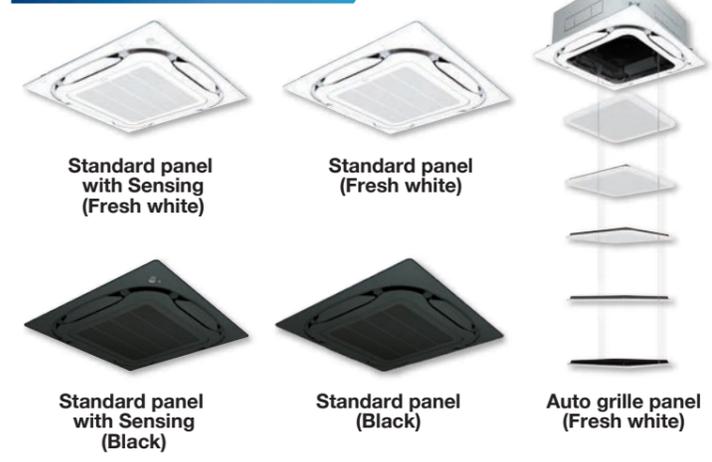


Sensing Technology P.22-24

Dual sensors and individual airflow direction control automatically provide optimal control of airflow.



Panel Variations



360° Airflow

With uniform temperature distribution

Greater comfort

Airflow distribution creates uniform comfort throughout the space.

Room remains comfortable even when set temperature is raised 1°C.

Selectable Airflow Pattern

Because air flows out from corner outlets, comfort spreads more widely.

Typical flow patterns There are a total of 18 flow patterns.

All-round flow	3-way flow	L-shaped 2-way flow	Opposite 2-way flow
(E.g., installed in middle of ceiling) 4-way flow also possible.	(E.g., installed near a wall)	(E.g., installed in a corner)	(E.g., installed in a long room)

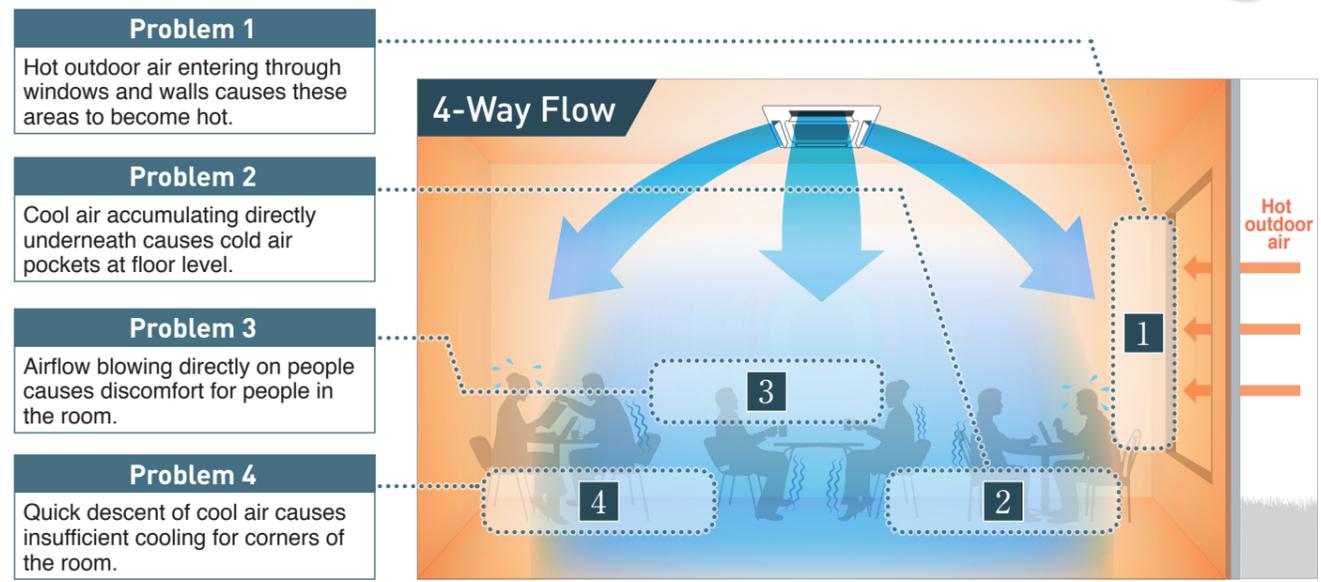
Note:
- Whatever the discharge direction, the same type of panel is used. If installing for other than all-round flow, an air discharge outlet sealing material (option) must be used to close each unused outlet.
- Operation sound increases when using 2-way or 3-way flow.
- Designer panel cannot operate 2-way and 3-way flow.

Required distance to wall surface for closing air discharge outlet Minimum distance of 500mm
* 200mm for corner closing
* Wall surface

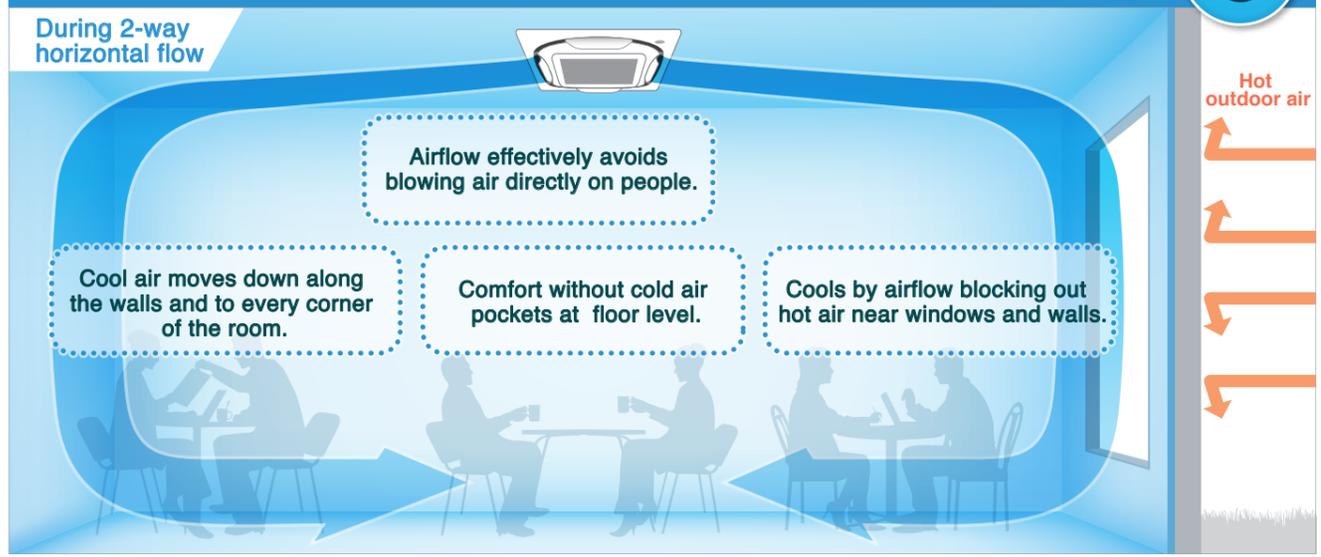
NEW Circulation Airflow Evenly Distributes Cool and Warm

Cooling

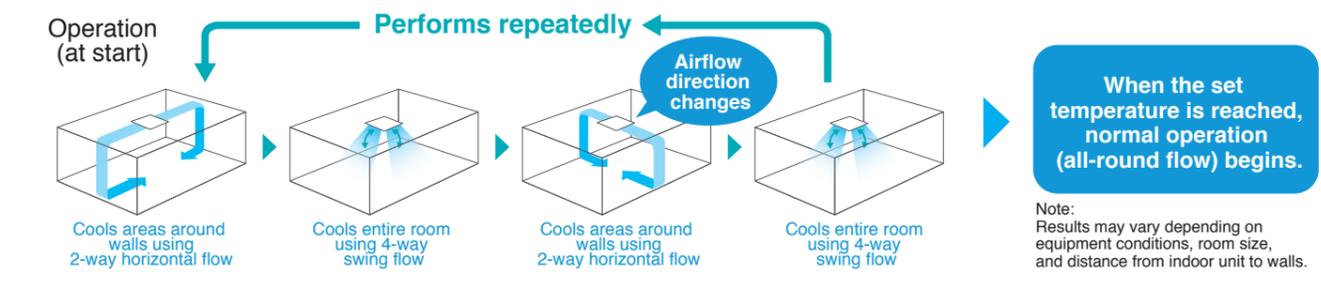
Airflow until now had areas that were either too cool or not cool enough. 



Circulation airflow cools the entire room to deliver comfort that never feels cold. 



Configurations of Circulation Airflow (Cooling)

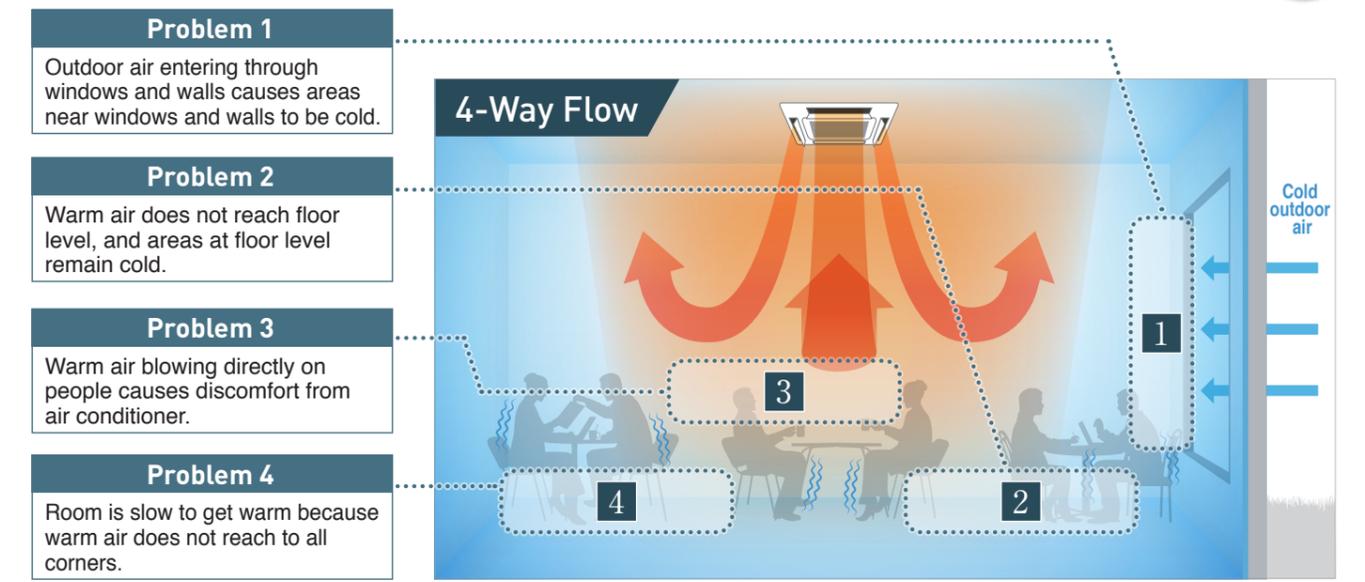


Air *1

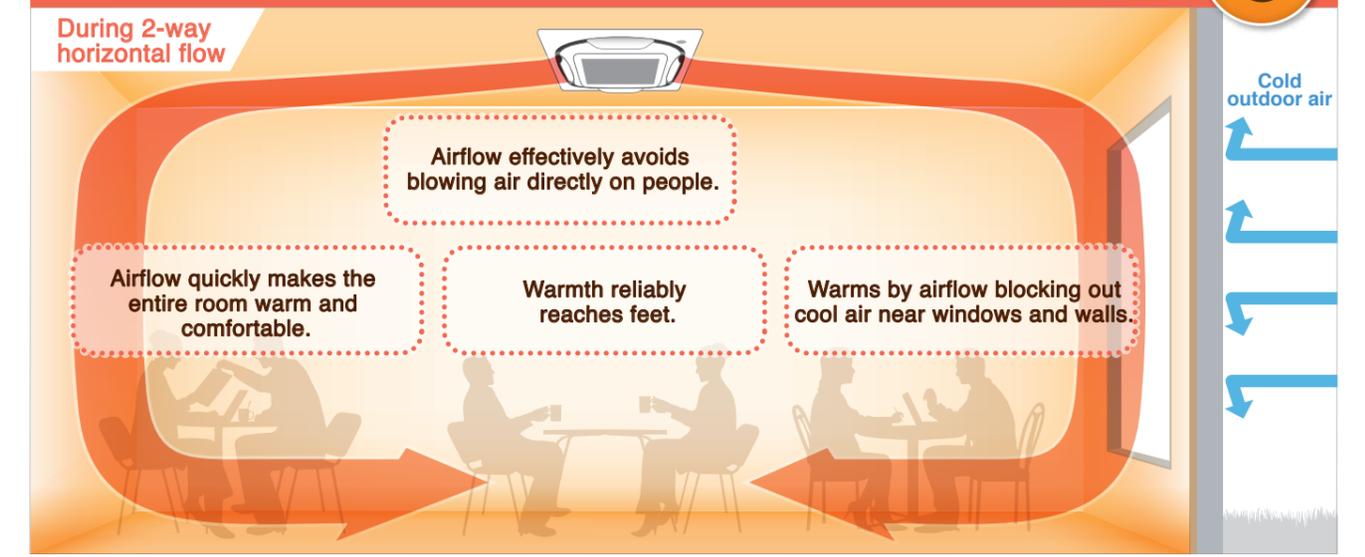
*1. Applicable when wired remote controller BRC1E63 is used.

Heating

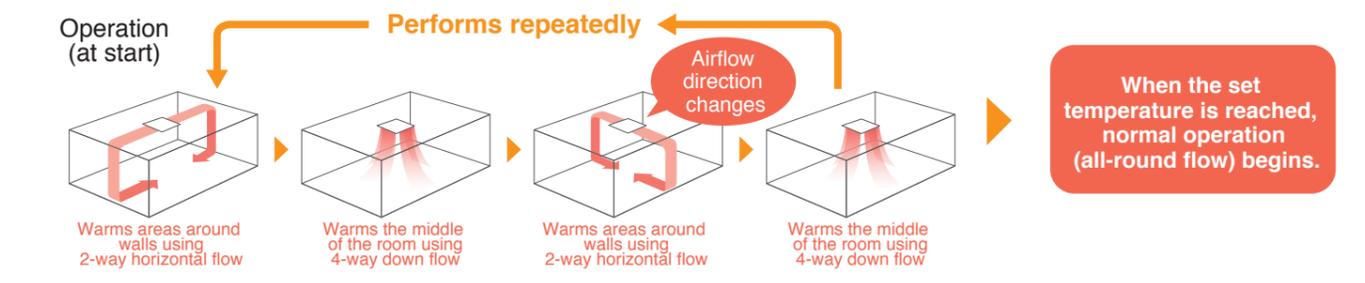
Airflow until now (only downward flow) did not warm areas at floor level or near windows and walls. 



Circulation airflow warms the entire room starting from your feet. 



Configurations of Circulation Airflow (Heating)





NEW Circulation Airflow Evenly Distributes Cool and Warm

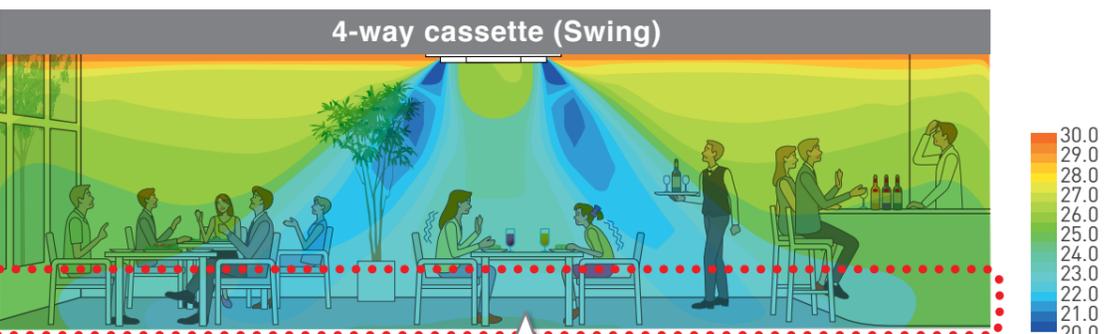
Air *1

*1. Applicable when wired remote controller BRC1E63 is used.

Comfort to the Entire Room with Even Temperatures and No Cold Air Pockets at Floor Level

Comfort to the Entire Room with Even Temperatures and Warmth Reaches Feet

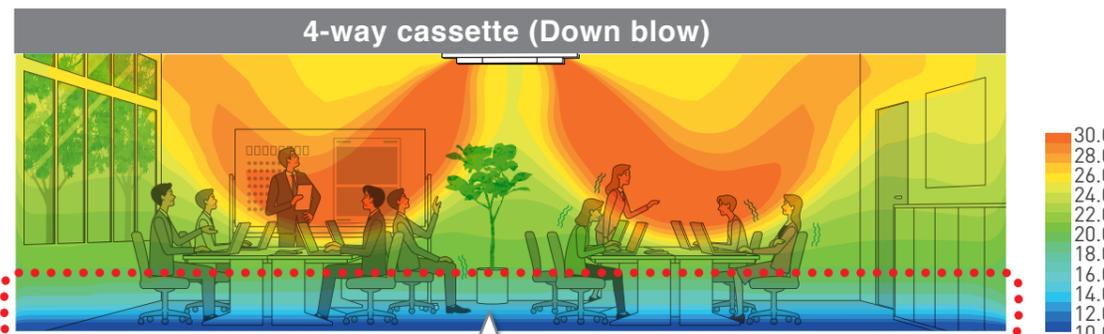
Cooling



Areas at floor level are cold while areas around walls are hot.

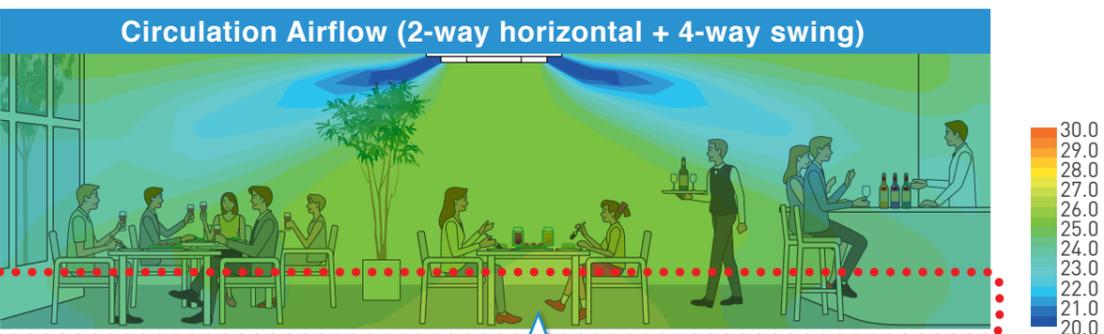
Comparison Conditions
 ■ Room size: Width 7.5m x depth 7.5m x height 2.6m
 ■ Indoor unit capacity: 71 class
 ■ Outdoor air temperature: 35°C
 ■ Airflow rate and air direction: high / swing

Heating



Areas around walls and feet are cold.

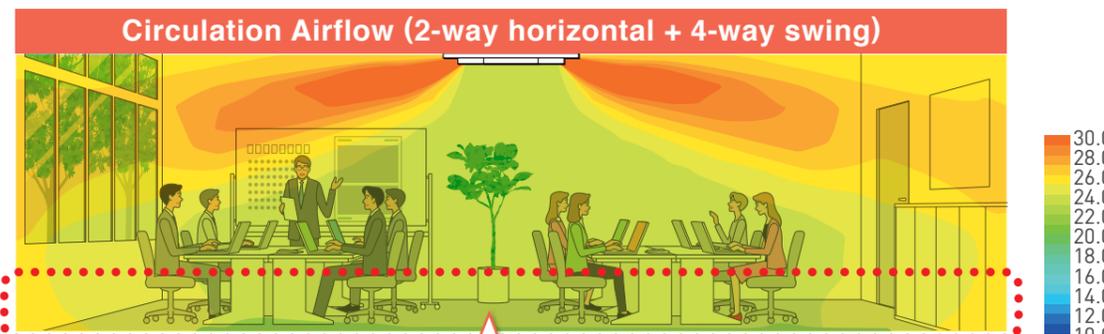
Comparison Conditions
 ■ Room size: Width 7.5m x depth 7.5m x height 2.6m
 ■ Outdoor air temperature: 5°C
 ■ Indoor unit capacity: 71 class
 ■ Airflow rate and air direction: high / Down blow



Full comfort is provided with no cold feet.

Approx. 5% energy savings *2 by reducing uneven temperatures

*2. Calculated under the following comparison conditions: When the average temperature at a height of 0.6m above the floor reaches set temperature. (26°C)



Areas around walls and feet are warm.

Approx. 15% energy savings *3 by reducing uneven temperatures

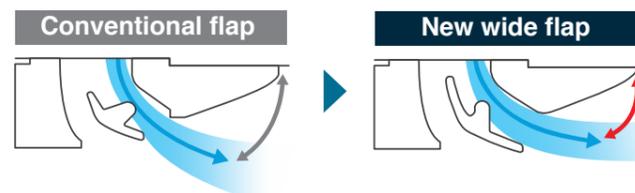
*3. Calculated under the following comparison conditions: When the average temperature at a height of 0.6m above the floor reaches set temperature. (22°C)

Three Technologies That Achieved Circulation Airflow

1 Use of new wide flaps (Straight)
 With new, larger flaps, a straighter trajectory for airflow was achieved.

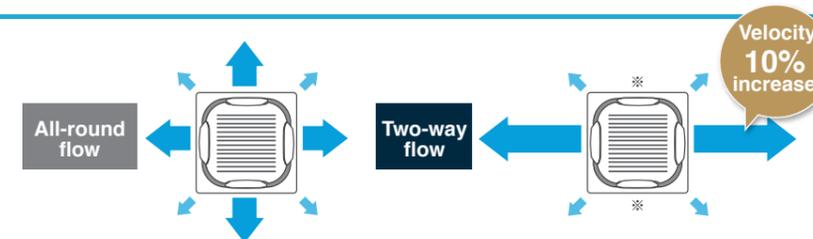


2 Optimizing airflow angle (Horizontally)
 The airflow angle was made more horizontal.



3 Increased velocity in 2-way flow (Strongly)
 Airflow velocity is increased by up to 10% during 2-way flow.

*Other 2 outlets are controlled by changing the flap direction (angle) to suppress airflow volume.



Things to remember when using circulation airflow

Main points for use

- Effectiveness may differ according to room conditions, room size, and distance to walls.
- Airflow operation differs when using the designer panel. (Operation repeatedly switches from 3-way horizontal flow to 4-way downward flow [swing] to 2-way horizontal flow to 4-way downward flow [swing].)
- Circulation airflow functions during connection with wired remote controller. (BRC1E63). However, use is not possible for the following conditions:
 - When a sealing material of air discharge outlet and branch ducts are used;
 - When individual airflow setting is selected;
 - When using group control other than round flow.

Installation conditions



[Table 1] Distance to wall from indoor unit

Indoor unit capacity	FCA50-71	FCA85-140
Distance range	1.5-5m	1.5-7m

[Table 2] Minimum distance between indoor units

Indoor unit capacity	FCA50-71	FCA85-140
Distance range	5m or more	7m or more

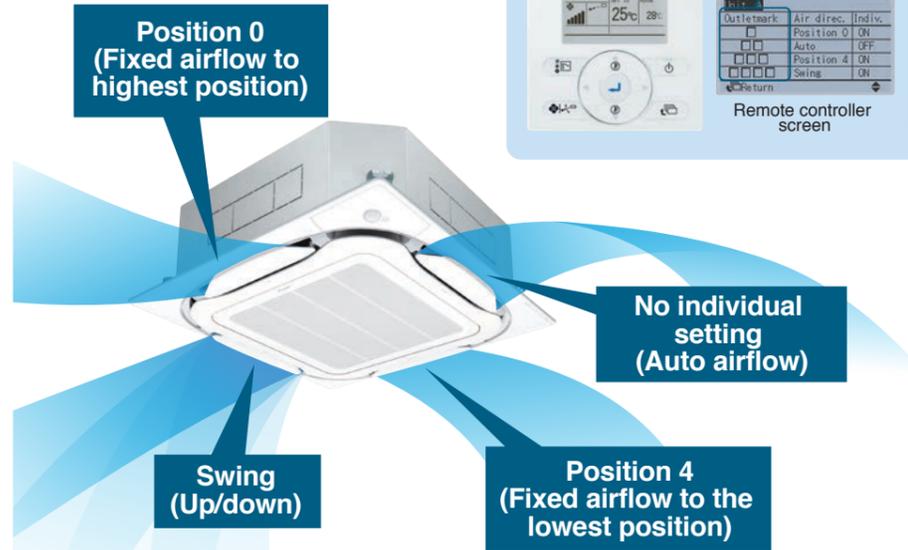


NEW Individual Airflow Direction Control *1

*1. Applicable when wired remote controller BRC1E63 is used.

Comfortable air conditioning for all room layouts and conditions

Airflow direction can be individually adjusted for each air discharge outlet to deliver optimal air distribution.



Easy setting is possible with a wired remote controller.

NEW BRC1E63

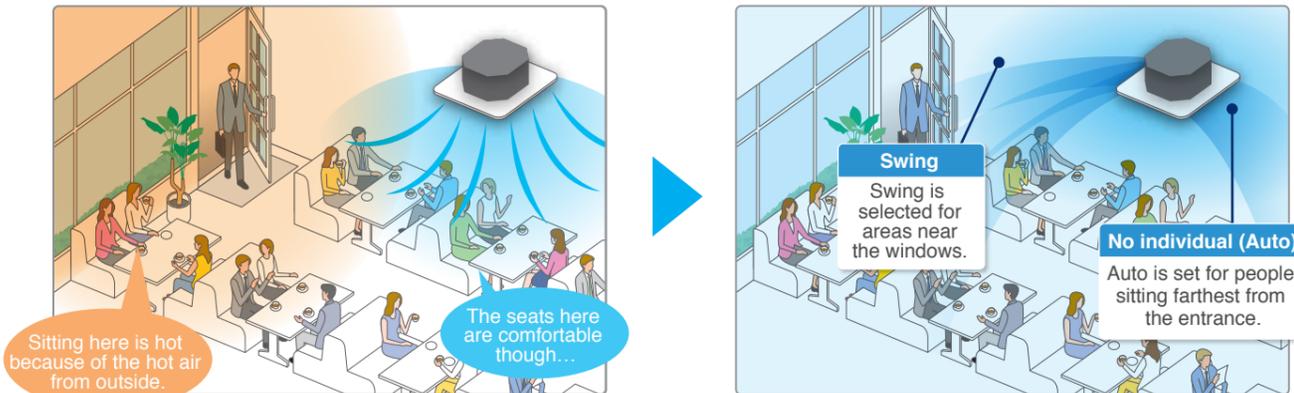
There are identification marks near the air outlets.

- Individual airflow settings**
- No individual setting (Auto airflow)
 - Position 0 (Highest point)
 - Position 1
 - Position 2
 - Position 3
 - Position 4 (Lowest point)
 - Swing

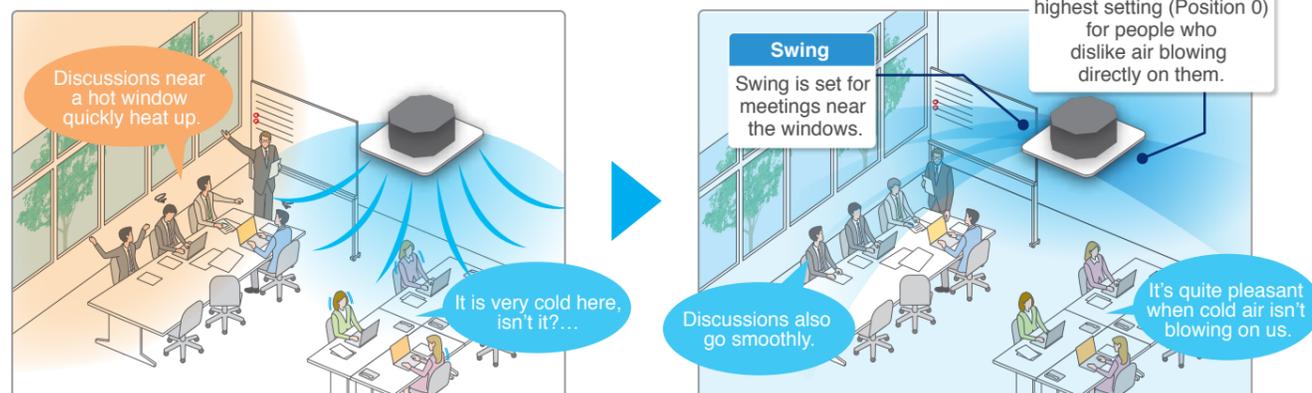
Individual settings are possible as stated above.

When individual airflow is selected, airflow direction can be adjusted to room layout.

For shops and restaurant



For offices

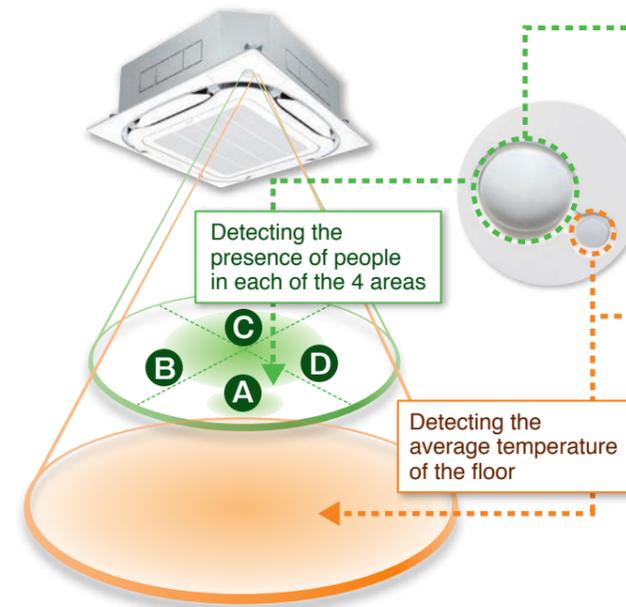


NEW Daikin Sensing Technology *1,2

*1. Applicable when wired remote controller BRC1E63 is used. *2. Applicable when sensing panel (BYCQ125EEF/EEK) is installed.

Dual Sensors*2

Dual sensors and individual airflow direction control automatically provide optimal control of airflow.



Infrared presence sensor

The sensor detects the presence of people in each of the 4 areas.

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter) ³	approx. 8.5m	approx. 11.5m	approx. 13.5m

³The infrared presence sensor detects 80cm above the floor.

Infrared floor sensor

The sensor detects the floor temperature and automatically adjusts operation of the indoor unit to reduce the temperature difference between the ceiling and the floor.

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter) ⁴	approx. 11m	approx. 14m	approx. 16m

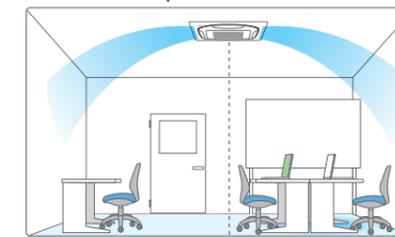
⁴The infrared floor sensor detects at the floor surface.

Auto Airflow Functions*5

*5. Airflow direction should be set to "Auto".

Direct Airflow (default: OFF) Cooling Dry

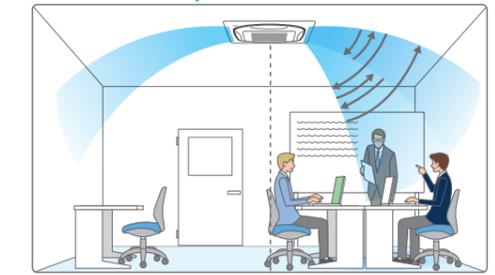
When human presence is not detected



Optimal air direction by "Auto"

- With "Auto" airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.

When human presence is detected

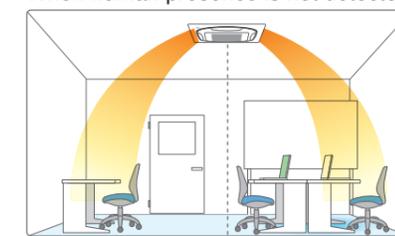


Optimal air direction by "Auto" **Swing (narrow)**

- When presence is detected, air direction is set to "Swing (narrow)" to deliver cool air to users.

Draft prevention (default: OFF) Heating

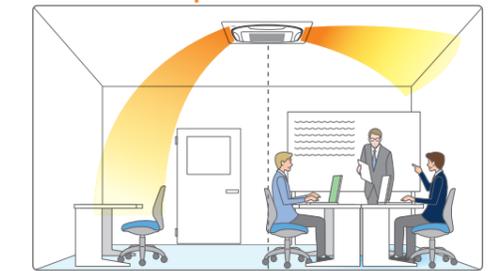
When human presence is not detected



Optimal air direction by "Auto"

- With "Auto" airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.

When human presence is detected



Optimal air direction by "Auto" **Blown horizontally**

- When presence is detected, drafts are prevented by making the flap horizontal.

• When human is not detected for 5 minutes, the unit automatically returns to controlling the flaps for an unoccupied room.

Daikin Sensing Technology^{*1,2}

*1. Applicable when sensing panel (BYCQ125EEF/EEK) is installed.
*2. Applicable when wired remote controller BRC1E63 is used.

Comfort and Energy Saving Preventing Overcooling / Overheating^{*3}

*3. Airflow direction and airflow rate should be set to "Auto".

> Floor temperature is detected and overcooling prevented. **Cooling**

Without sensing function

Room temperature is detected as 30°C.

Area around feet gets too cold because the air conditioner continues until the temperature near the ceiling reaches the set temperature.

With sensing function

Room temperature is calculated as 27°C in the area which is in the vicinity of the person.

The floor temperature, which is lower than near the ceiling, is detected.

Automatic control using the temperature near the person as the room temperature.

Energy savings The temperature near the person is automatically calculated by detecting the temperature of the floor. Energy is saved because the area around the feet does not get too cold.

> Feet are kept warm and comfortable while reducing uncomfortable drafts. **Heating**

Without sensing function

When air is blown horizontally...

Drafts are minimal, but feet get cold.

Feet get cold, because warm air collects near the ceiling. Area near floor doesn't reach set temperature and feet feel cold.

For this reason, we end up raising the temperature setting.

With sensing function

Feet are warm, but draft is strong.

Uncomfortable draft occurs, because air is blown downward. To avoid draft, air direction is changed to horizontal and feet get cold.

Energy savings The tendency of people to raise the temperature too much is prevented, because you are warmed up from the feet.

Energy savings The floor temperature, which is lower, is detected and warm air is blown downward where there is no human presence. In order to reduce drafts, air is blown horizontally where a person is located.^{*4}

Comfortable because draft is reduced and area around feet is warm.

*4. Draft prevention function is set OFF in the initial setting.

To increase comfort, Auto airflow rate mode controls the airflow in accordance with the difference between floor and ceiling temperatures.

When there is a large difference between the ceiling and floor temperatures, the airflow rate is automatically increased. When the difference becomes small, the airflow rate is automatically reduced.

Sensing Sensor Functions^{*5,6}

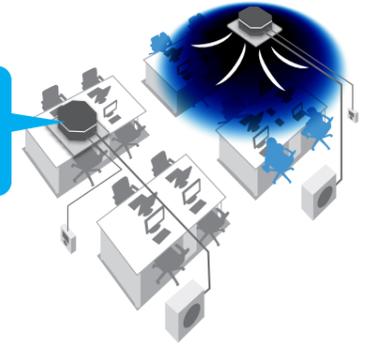
*5. These functions are not available when using the group control system.
*6. User can set these functions with remote controller.

> Sensing sensor low mode (default: OFF)

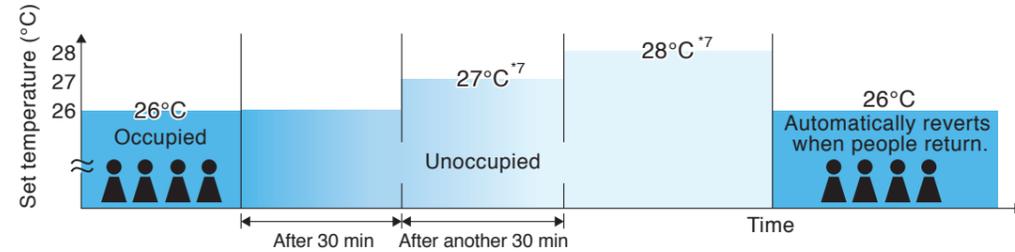
When there are no people in a room, the set temperature is shifted automatically.

- The system automatically saves energy by detecting whether or not the room is occupied. The set temperature is shifted automatically if the room is unoccupied.

Operation is reduced in places where there are no people.

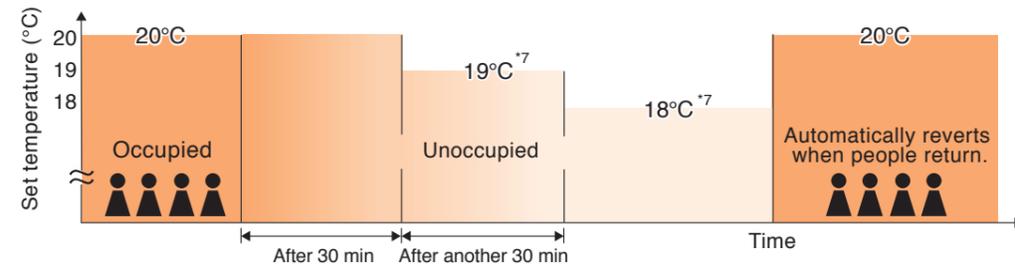


Example • Cooling set temperature: 26°C • Shift temperature: 1.0°C
• Shift time: 30 min. • Limit cooling set temperature: 30°C



If people do not return, the air conditioner will raise the set temperature 1°C every 30 minutes and then operate at 30°C.

Example • Heating set temperature: 20°C • Shift temperature: 1.0°C
• Shift time: 30 min. • Limit heating set temperature: 16°C



If people do not return, the air conditioner will lower the set temperature 1°C every 30 minutes and then operate at 16°C.

Shift temperature and time can be selected from 0.5 to 4°C in 0.5°C increments and 15, 30, 45, 60, 90 or 120 minutes respectively with remote controller.

*7. On basic screen of remote controller, set temperature does not change.

> Sensing sensor stop mode (default: OFF)

When there are no people in a room, the system stops automatically.^{*8,9}

- The system automatically saves energy by detecting whether or not the room is occupied.
- Based on preset user conditions, the system automatically stops operation if the room is unoccupied.

Absent stop time can be selected from 1 to 24 hrs in 1 hr increments with remote controller.

*8. Please note that upon re-entering the room, the air conditioner will not switch on automatically.
*9. To protect the machine, the standby system may operate temporarily.



Comfort

> Unified square panels

Panel size is the same for all models. It is easy to maintain a neat appearance when multiple units are installed in the same room.



> Optimal comfort and convenience assured by 3 air discharge modes

Air direction	Standard setting ¹	Draft prevention setting (field setting)	Ceiling soiling prevention setting ² (field setting)
Desired situation	For gentle drafts.	When drafts are unwanted.	For shops with light coloured ceilings that must be kept spotless.
Auto-swing			
5-level air direction setting			
Draft prevention (In heating mode)		At heating startup and thermo OFF, air discharge is automatically set to a near horizontal to prevent direct exposure to cool air drafts.	
Auto air direction control		The air direction is set automatically to the memorised position of the previous air direction.	

Note:
¹Air direction is set to the standard position when the unit is shipped from the factory. The position can be changed from the remote controller.
²Closing of the corner discharge outlets is recommended.

> Switchable fan speed: 5 steps and Auto

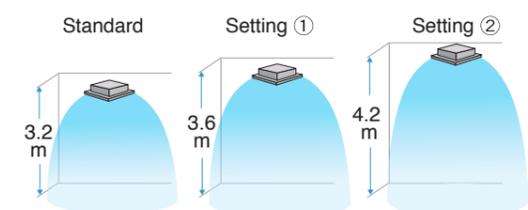
Control of airflow rate has been improved from 3-step to 5-step. Auto airflow rate is newly available.

> Quiet operation

Indoor unit	Sound pressure level				
	H	HM	M	ML	L
50-71CA	37.0	36.0	34.0	31.0	27.5
85/100C	45.0	42.0	39.0	36.5	34.0
125/140C	46.0	43.5	41.0	38.5	36.0

> Suitable for high ceilings

Even in spaces with high ceilings, a comfortable airflow is carried down to the floor level.



When all round flow is selected, ceilings up to 4.2 m in height can be accommodated. (85-140C)

■ Criteria for ceiling height and number of air discharge outlets (Ceiling height is reference value)

Ceiling height	Standard	Number of air discharge outlets used							
		50-71CA				85-140C			
		All round flow	4-way flow	3-way flow	2-way flow	All round flow	4-way flow	3-way flow	2-way flow
Standard	2.7 m	3.1 m	3.0 m	3.5 m	3.2 m	3.4 m	3.6 m	4.2 m	
High ceiling ①	3.0 m	3.4 m	3.3 m	3.8 m	3.6 m	3.9 m	4.0 m	4.2 m	
High ceiling ②	3.5 m	4.0 m	3.5 m	—	4.2 m	4.5 m	4.2 m	—	

Note:
 • The aforementioned is for standard panels. See the installation manual for designer panels.
 • Factory settings are for standard ceiling height and all-round flow.
 • High ceiling settings (1) and (2) are set with the remote controller by field setting.
 • High-efficiency filters are not available for high ceiling applications.

Cleanliness

> Silver ion anti-bacterial drain pan

A built-in antibacterial treatment that uses silver ion in the drain pan prevents the growth of slime, bacteria, and mould that cause odours and clogging. (The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)



> Non-flocking flaps

Flaps can be detached without use of tools. Condensation does not easily form and dirt does not cling to non-flocking flaps. They are easy to clean.



> Filter has anti-mould and antibacterial treatment

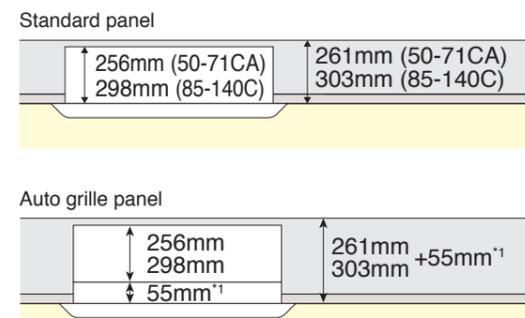
Prevents mould and microorganisms growing out of the dust and moisture that adheres to the filters.

Quick and Easy Installation

> Lightweight

All models can be installed without using a lifter.

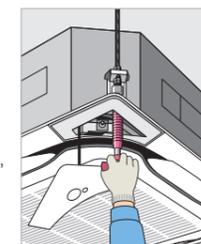
> Installable in tight ceiling spaces



*1. Body height (ceiling required space) is 55 mm higher than standard panel.
 *When the ceiling space is limited, an optional panel spacer is available. (see P.28)

> Easy height adjustment

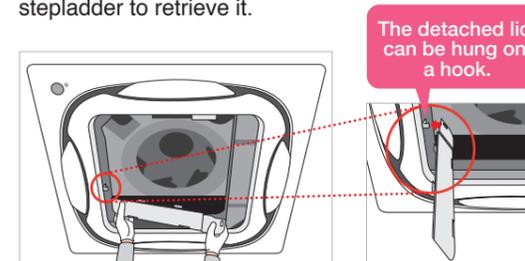
Each corner of the unit has an adjuster pocket that lets you easily adjust the unit's suspended height.



Note:
 If the wireless remote controller is installed, a signal receiver unit is housed in one of the adjuster pockets.

> Temporary placement of control box lid

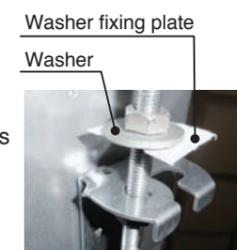
Because the control box lid can be temporarily hung on the unit, there is no need to climb down the stepladder to retrieve it.



The detached lid can be hung on a hook.

> Easy hanging

Washer fixing plates secure washers in place and prevent washers from falling for easy installation.



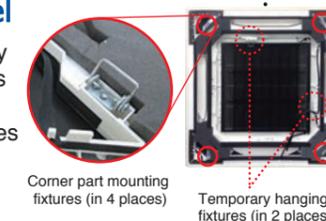
> Easy removal of corner cover

It is possible to easily remove without use of screws or tools.



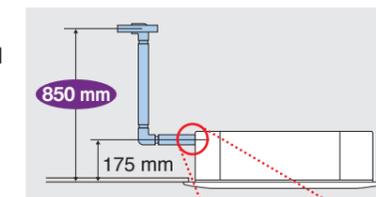
> Ease in temporary hanging of decoration panel

In addition to the temporary hanging fixtures in 2 places normally used, corner part mounting fixtures in 4 places are provided.



> Drain pump

Equipped as standard accessory with 850 mm lift.



> Transparent drain socket



■ Hanging height adjustment

Because the configuration of the hanger bracket changed, the dimensions from the ceiling to the hanger bracket also change during height adjustment for indoor unit.

	A Dimensions
Standard panel	125-130mm
Chamber option*+ standard panel	175-180mm
Auto grille panel	180-185mm

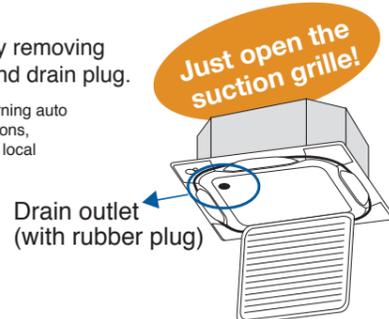
*High-efficiency filter, ultra long-life filter, and fresh air intake

Easy Maintenance

> Condition of the drain pan and drain water

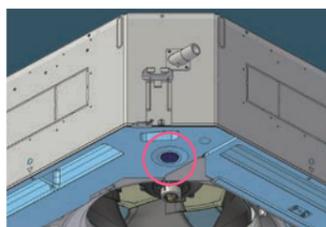
Can be checked by removing the suction grille and drain plug.

Note: For inquiries concerning auto grille panel installations, please contact your local dealer or Daikin representative.



> 24 mm diameter drain outlet

The drain outlet allows insertion of a finger or dental mirror for inspection of the internal cleanliness of the drain pan. Removal of the suction panel enables access.



> Ultra long-life filter (option)

See page 28

Maintenance is not required in normal shops or offices for up to four years.

> Low gas pressure detection



> Auto grille panel (option)

Grille and air filter cleaning can be performed without need for a stepladder by lowering the grille.

A dedicated remote controller for the auto grille panel (BRC16A2) is included. Operation is not possible using BRC1E63.

The drop length corresponds to ceiling height and can be set for 8 different levels.

Ceiling Height Standard (m)	Drop Length
2.4	1.2
2.7	1.6
3.0	2.0
3.5	2.4
3.8	2.8
4.2	3.1
4.5	3.5
5.0*	3.9

*Airflow range is up to 4.5m. Please refer to "criteria for ceiling height and number of air discharge outlets" on page 25.

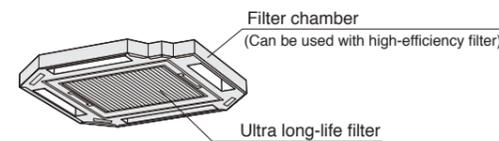


Options

Options required for specific operating environments

> Ultra long-life filter unit

Even in dusty environments where the air conditioning is constantly operating, the ultra long-life filter only has to be cleaned once a year.



Dusty area: annual filter change

*For dust concentration of 0.3 mg/m³ (Requires separately sold Air purifier.)
1 year (Approx. 5,000 hr) ≈ 15 hr/day x 28 day/month x 12 month/year

Ordinary store or office: filter change every 4 years

*For dust concentration of 0.15 mg/m³
4 years (Approx. 10,000 hr) ≈ 8 hr/day x 25 day/month x 12 month/years x 4 years

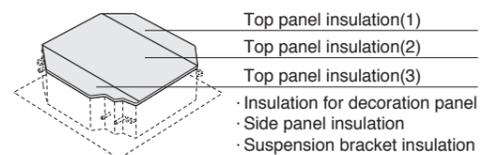
> High-efficiency filter unit

Available in two types: 65% and 90% colorimetry.



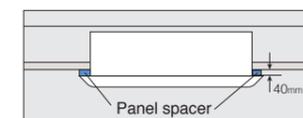
> Insulation kit for high humidity

Please use if you think the temperature and humidity inside the ceiling exceeds 30°C and RH 80%, respectively.



> Panel spacer

Use when only minimal space is available between drop ceilings and ceiling slabs.



Note: Some ceiling constructions may hinder installation. Contact your Daikin Dealer before installing your unit.

> Sealing material of air discharge outlet

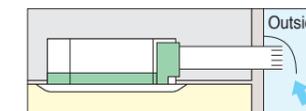
Sealing material block air discharge openings not used in 2-way or 3-way blow.

> Branch duct chamber

This chamber lets you connect a round flexible duct to the air discharge opening at any time after the original installation.

> Fresh air intake kit Note 1.2

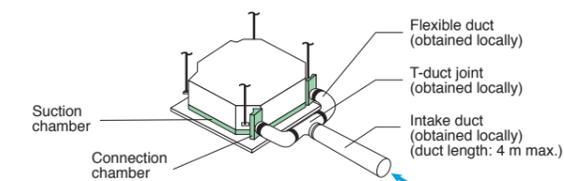
Using this kit, a duct can be connected to take in outdoor air. There are two chamber types that have intake in two places: with T-duct joint and without T-duct joint.



The units can be installed in the following different ways

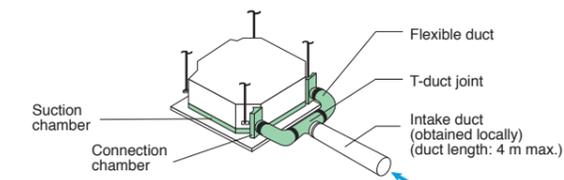
Chamber type (without T-duct joint) Note 3.4.5

KDDP55B160



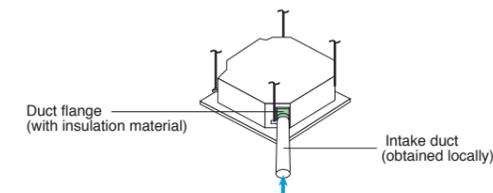
Chamber type (with T-duct joint) Note 3.4.5

KDDP55B160K



Direct installation type Note 6

KDDP55X160A



- Note:
1. Use of options will increase operating sound.
 2. Connecting ducts, fan, insect nets, fire dampers, air filters, and other parts should, as required, be obtained locally.
 3. When a local-obtained fan is used, an interlock with air conditioner is necessary. Optional PCB (KRP1C11A) is required for interlocking.
 4. When installing a fresh air intake kit (chamber type), two air outlet corners are closed.
 5. It is recommended that the volume of outdoor air introduced through the kit is limited to 10% of the maximum airflow rate of the indoor unit. Introducing higher quantities will increase the operating sound and may also influence temperature sensing.
 6. The volume of fresh air for direct installation type is approximately 1% of the indoor unit airflow. The chamber type is recommended when more fresh air is necessary.

Comfortable airflow travels throughout the room



FHA50/60BAVMA
FHA71/85/100/125/140BVMA



Option

Accessory required for indoor unit.

Navigation Remote Controller
(Wired Remote Controller)



"Nav Ease"
BRC1E63

Note: Remote controller cable is not included and must be obtained locally.

Wireless LCD remote controller

A signal receiver must be added to the indoor unit.



Heat pump **BRC7M53**



Signal receiver unit (Installed type)
Wireless remote controller is supplied in a set with a signal receiver.

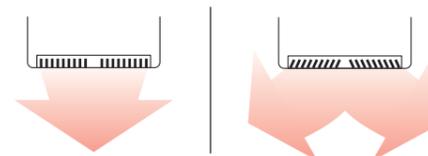
Stylish Model

- > **Sophisticated design**
Flap neatly closes when not in use.
- > **White colour**

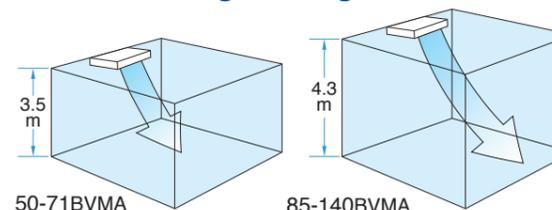


Comfort

- > **The technology**
DC fan motor, wide sirocco fan, and large heat exchanger combine for greater airflow and quiet operation.
- > **Auto swing (up and down) and louvers (left and right by hand)**
Bring comfort to the room.
- > **Louver manually adjusts for straight or wide angle airflow**



- > **Suitable for high ceilings**



	50-71B(A)	85/100B	125/140B
Standard	2.7m or less	3.8m or less	4.3m or less
High ceiling	2.7m-3.5m	3.8m-4.3m	—

Note: Factory settings is "standard".
"High ceiling" are set with remote controller by field setting.

- > **Switchable fan speed: 5 steps and Auto**
Control of airflow rate has been improved from 3-step to 5-step. Auto airflow rate is newly available.

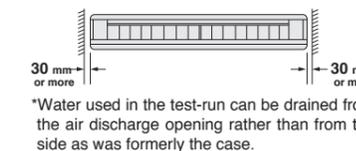
Quiet Operation

Indoor unit	Sound pressure level dB(A)				
	H	HM	M	ML	L
50/60BA	37.0	36.0	35.0	33.5	32.0
71B	38.0	37.0	36.0	35.0	34.0
85/100B	42.0	40.0	38.0	36.0	34.0
125B	44.0	42.5	41.0	39.0	37.0
140B	46.0	44.0	42.0	40.0	38.0

Installation Flexibility for Freedom of Design

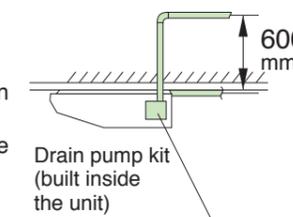
- > **Flexible installation**

The unit fits more snugly into tight spaces.



- > **Drain pump kit (option) can be easily incorporated**

Drain pipe connection can be done inside the unit. Refrigerant and drain pipe outlets are at the same opening.

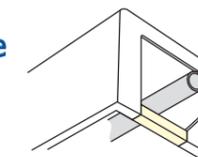


- > **DIII-NET communication standard**

Connection to a centralised control system is available without need for an optional adaptor.

- > **All wiring and internal servicing can be done from under the unit**

- > **The rear side removable frame allows ease of access for piping work**



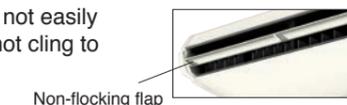
Easy Maintenance

- > **Drain pump kit (option) includes a silver ion antibacterial agent**

That assists in preventing the growth of slime, bacteria, and mould that cause odours and clogging.

- > **Non-flocking flap**

Condensation does not easily form and dirt does not cling to non-flocking flap. It is easy to clean.



- > **Easy-clean, flat surfaces**

It is easy to wipe dirt off the flat side and lower surfaces of the unit.

Oil Resistant Grille

- > **Oil-resistant plastic is used for the air suction grille.**

This satisfies durability in restaurants and other similar environments.

Note: Intended for use in salons, dining rooms, and ordinary sales floors, this specification is not suitable for kitchens or other harsh environments.

Compact design and easy installation



FAA50/60BAVMA
FAA71/85/100BVMA



Option

Accessory required for indoor unit.

Navigation Remote Controller

(Wired Remote Controller)



"Nav Ease"
BRC1E63

Note: Remote controller cable is not included and must be obtained locally.

Wireless LCD remote controller

A signal receiver must be added to the indoor unit.



Heat pump **BRC7EB518**



Signal receiver unit (Installed type)
Wireless remote controller is supplied in a set with a signal receiver.

Compact & Sophisticated Design

- Flaps neatly close When not in use.
- Fresh white colour

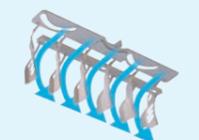


Comfort

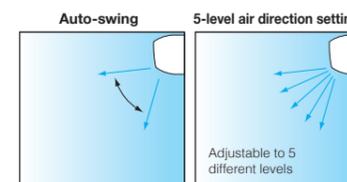
- Auto swing (up and down) and wide-angle louvers (left and right by hand) facilitate even room temperature.

Wide-angle louvers (by hand)

Soft material louver bends airflow over a wider area

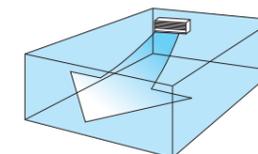


- An air discharge modes ensure comfortable air distribution across the entire room



- Comfort even on the far side of the room

To carry air to the far side of long rooms, extra-high airflow adds 10% more fan speed the "high" setting. Air discharge strength is selected from the remote controller by field setting.



- Switchable fan speed: 3 steps and Auto

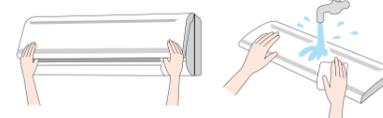
"Auto" is applicable when BRC1E63 is used.

- Programme "Dry"

Dehumidification is microprocessor controlled to prevent abrupt and uncomfortable changes in air temperature.

Easy Cleaning

- Removable and washable grille



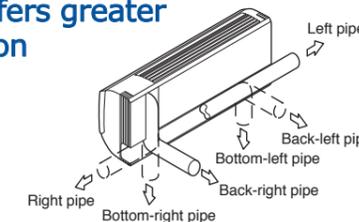
- Flat panel, easy to wipe dust off

- Non-flocking flaps

Condensation does not easily form and dirt does not cling to non-flocking flaps. It is easy to clean.

Design and Installation Flexibility

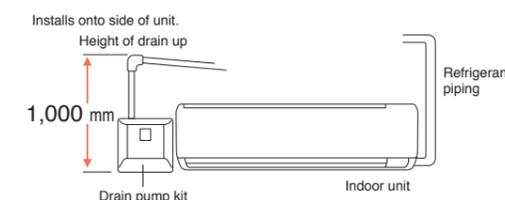
- 6-direction refrigerant piping offers greater installation flexibility



- Maintenance possible from the front of the unit

All maintenance tasks can be carried out via front access. During servicing, attachment and detachment of parts is easier.

- Drain pump kit is available as option



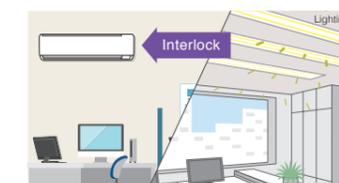
Drain pump kit can be installed on either left and right side of the indoor unit.



- Interlock control

As an energy saving feature, the room air conditioning unit can be interlocked with the key card system.

Using a 3rd-party building management system, air conditioning and lighting can be interlocked.



* Field setting with remote controller

- DIII-NET communication standard

Connection to a centralised control system is available without need for an optional adaptor.

Thinner design allows greater installation flexibility



FBA50/60BAVMA
FBA71/85/100/125/140BVMA



Option

Accessory required for indoor unit.

Navigation Remote Controller

(Wired Remote Controller)



"Nav Ease"
BRC1E63

Note: Remote controller cable is not included and must be obtained locally.

Wireless LCD remote controller

A signal receiver must be added to the indoor unit.



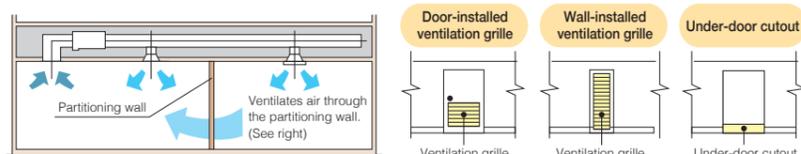
Heat pump BRC4C65



Wireless remote controller is supplied in a set with a signal receiver.

Simultaneous air conditioning of two rooms and ventilation grille (ventilation opening)

When air conditioning two rooms simultaneously, the air discharged into each room must be circulated back to the air conditioner. To achieve this, a ventilation duct should be installed for each room or one of the indicated ventilation grilles should be installed on the partitioning wall or under the door between the rooms.



Note: The under-door cutout method should be used only when there is a small volume of airflow.

Design and Installation Flexibility

Only 245 mm high

Installation is possible even in buildings with narrow ceiling spaces.

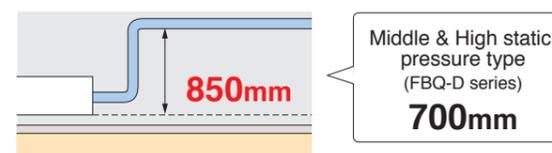


One of the industry's most compact bodies in the mid-static pressure range.

Indoor unit	50/60BA	71B	85/100/125/140B
Height (mm)	245		
Width (mm)	1,000	1,400	
Depth (mm)	800		

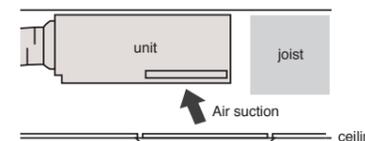
Higher lift is realized

A built-in DC drain pump with standard accessory is utilised.



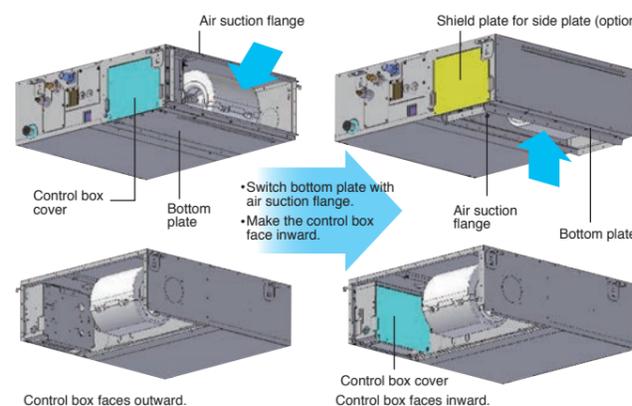
Bottom suction is available

Wiring and servicing can be done from the underside of the unit (an option part required).



Rear suction

Bottom suction



Comfort

Switchable fan speed: 3 steps and Auto

"Auto" is applicable when BRC1E63 is used.

Clean

Silver ion anti-bacterial drain pan

A built-in antibacterial treatment that uses silver ion in the drain pan prevents the growth of slime, bacteria, and mould that cause odours and clogging.

(The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)



Adjustable E.S.P.

External static pressure can be controlled to within a range of 50 Pa to 150 Pa by using a DC fan motor.



Set to low static pressure when ducts are short.

Set to high static pressure for advanced needs such as when using dampers and long ducts.

Comfort airflow is achieved in accordance with conditions such as duct length.

Airflow rate auto adjustment function

Controls the airflow rate using a remote controller during test run.

It is automatically adjusted to approximately ±10% of the rated H tap airflow.

Interlock control

As an energy saving feature, the room air conditioning unit can be interlocked with the hotel key card system. Using a 3rd-party building management system, air conditioning and lighting can be interlocked.



* Field setting with remote controller

DIII-NET communication standard

Connection to a centralised control system is available without need for an optional adaptor.

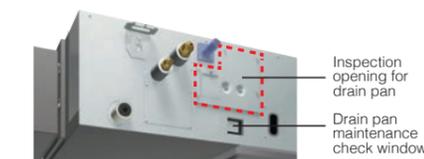
Easy Maintenance

Position of drain pan inspection opening

Modified for easier inspection work.

Drain pan maintenance check window

This makes it possible to inspect for drain pan dirt and to confirm drainage during installation without the use of tools.



High Efficiency

DC fan motor and DC drain pump

These are utilised to improve energy efficiency.

Outdoor unit



Wider product range featuring swing compressor technology New range

RZQS	50 V1	60 V1	71 V1	—	—	—	100 V1	100 Y1	125 V1	125 Y1	140 V1	140 Y1
	Swing compressor						Scroll compressor					

NEW RZAV	50 V1	60 V1	71 V1	71 Y1	85 V1	85 Y1	100 V1	100 Y1	125 V1	125 Y1	140 V1	140 Y1
	Swing compressor											

RZQ	—	—	71 V1	—	—	—	100 V1	—	125 V1	125 Y1	140 V1	140 Y1
	Swing comp.			—			Swing comp.	Scroll compressor				

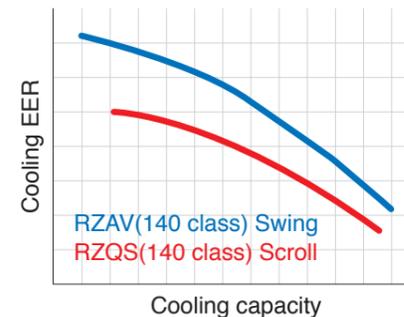
NEW RZAC	—	—	71 V1	—	85 V1	85 Y1	100 V1	100 Y1	125 V1	125 Y1	140 V1	140 Y1
	Swing comp.			Swing compressor								

- > New 85 class available in single phase & three phase models.
- > To better suit commercial product requirements, Daikin has expanded the 3 phase product range from 71 to 140 class.*
- > Benefits of utilising 3 phase models over single phase models include lower minimum circuit amps, allowing for smaller gauge wires therefore reducing installation costs. Furthermore on site electrical load balancing is not required.

*RZAV 3 phase models range from 71-140 class and RZAC 3 phase models range from 85-140 class.

Benefit of swing compressor

- > New swing compressors are more energy efficient than previous scroll compressors, in particular during part load operation.



- > Swing compressor can operate lower minimum capacity compared to scroll compressor.

This makes new RZAV series higher efficiency than RZQS series.

• Comparison of minimum capacity (cooling)

	50	60	71	100	125	140
RZQS (kW)	3.2			5.0	5.7	6.2
NEW RZAV (kW)	1.4		3.2	5.0		5.0

Longer max. piping length

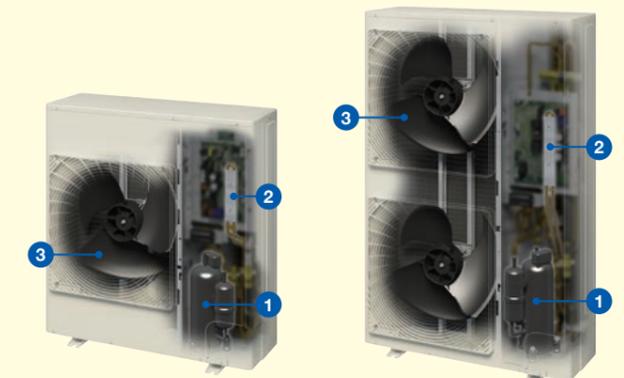
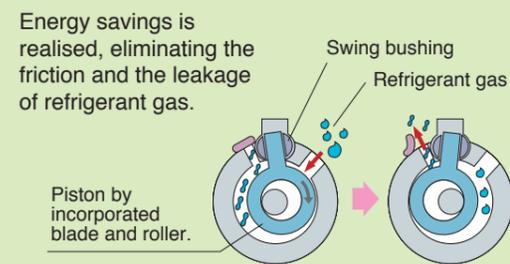
- > In RZAV series, max. piping length of the 71 class is increased from 50m to 75m.

	50	60	71	100	125	140
RZQS (m)	50			75		
NEW RZAV (m)	50		75	75		

Technology for energy efficiency

1 Swing compressor

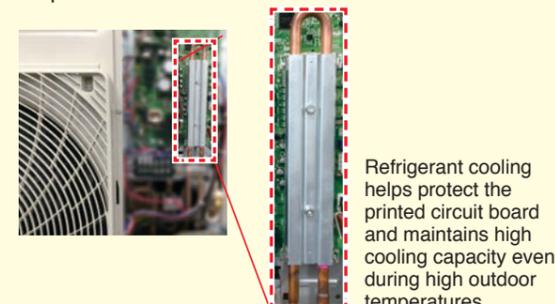
High efficiency during partial load operation.



2 Refrigerant cooling

(RZAV71-140C, RZAC85-140C)

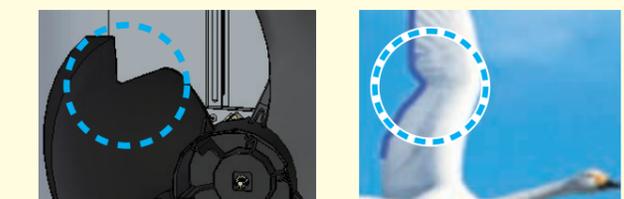
Daikin's unique refrigerant cooling system exhibits high cooling capacity even during high outdoor temperatures.



3 Fan

V-cut Propeller Fan (RZAV50/60C, RZAC71C)

Through use of a V-cut propeller fan that imitates the efficiency of the swan, a migratory bird, airflow becomes smooth and loss is reduced.



V-cut propeller fan (φ440)

Imitating the performance of the swan

Easy-to-read LCD remote controller allows various system control configurations and can control multiple indoor units.

Remote controller options are shown on the page introducing each indoor unit model.

Wired Remote Controller "Nav Ease"

NEW



BRC1E63

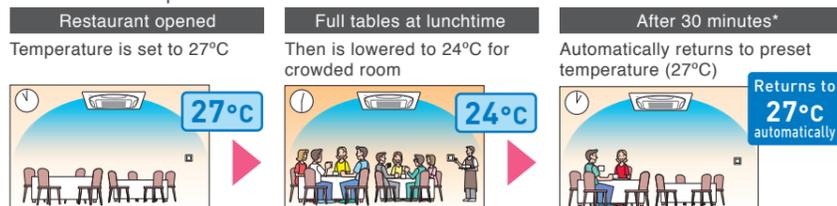
This simple, modern designed remote controller with fresh white colour matches your interior design. Operation is much easier and smoother, just follow the indications on the navigation remote controller.

Energy saving

Setpoint auto reset

- Even if the set temperature is changed, the new set temperature returns to the previous preset value after a preset duration of time.
- Period selectable from 30, 60, 90, or 120 min.

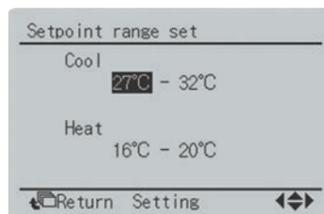
Restaurant example



*Preset-return time can be set at 30, 60, 90, or 120 min

Setpoint range set

- Saves energy by limiting the min. and max. set temperature.
- Avoids excessive heating or cooling.
- This function is convenient if the remote controller is installed where anyone can change the settings.



OFF timer (programmed)

- Sets and saves setting for an increment of time that automatically turns OFF air conditioner after a preset period of time for each time operation starts.
- Period can be preset from 30 to 180 minutes in 10-minute increments.

Convenience

NEW 5-step airflow control

- The number of airflow steps depends on the type of indoor unit.
- 5-step control applies to FCF and FHA series.

Energy consumption monitoring ^{*1,2,3,4}

- Past power consumption for the current and previous days (2-hour intervals), week (1-day intervals), and year (1-month intervals) can be checked.

Note:

^{*1}Availability of this function may vary according to model (limited to partial functionality)

^{*2}Time setting is necessary.

^{*3}This function cannot be used during group control.

^{*4}This is a reference value for comparison and is not intended as a value for investigation purposes in the calculation of electricity bills or contract for electricity. Because it is a simple calculation of power consumption, there are cases when the calculated value differs with the measurement results of a wattmeter.

Setback (default: OFF)

- Maintains the room temperature in a specific range during unoccupied periods by temporarily starting an air conditioner that had been turned OFF.

Weekly schedule

- 5 actions per day can be scheduled for each day of the week.
- The holiday function will disable schedule timer for the days that have been set as holiday.
- 3 independent schedules can be set. (e.g. summer, winter, mid-season)

Schedule nr 1				
Time	Act	Cool	Heat	
Mon 8:30	ON	25°C	---	
10:00	OFF	---	---	
13:00	ON	25°C	---	
15:00	OFF	---	---	

NEW Auto display off

- While operation is stopping, LCD display can be turned OFF. It will be displayed again if any button is pressed.
- Period can be preset from 10, 30, 60 minutes, and OFF. Initial setting is 30 minutes.

Convenience

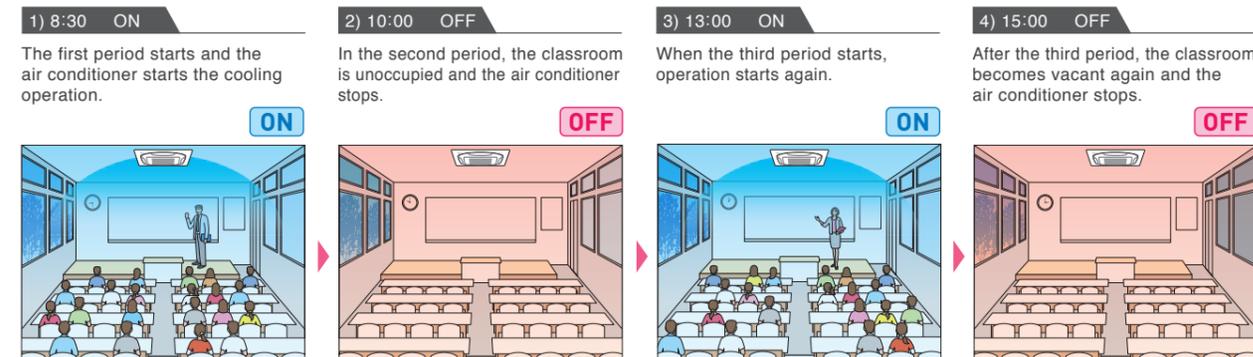
Weekly schedule

- 5 actions per day can be scheduled for each day of the week.
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NEW - 3 independent schedules can be set. (e.g. summer, winter, mid-season)

Schedule nr 1				
Time	Act	Cool	Heat	
Mon 8:30	ON	25°C	---	
10:00	OFF	---	---	
13:00	ON	25°C	---	
15:00	OFF	---	---	

College classroom sample (a summer Monday case)



Multilingual display

Display is available in 11 languages. (English, German, French, Spanish, Italian, Portuguese, Greek, Dutch, Russian, Turkish, and Polish).

Wireless remote controller

NEW



BRC7M635F
Signal receiver unit
(For ceiling mounted cassette type)



- The wireless remote controller is supplied in a set with a signal receiver.
- Signal receiver unit of installed type is contained inside decoration panel or indoor unit.
- Shape of signal receiver unit differs according to the indoor unit.
Note: The signal receiver unit shown in the photograph is for mounting inside the decoration panel of the ceiling mounted cassette type.

NEW ● Backlight LCD of new wireless remote controller

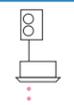
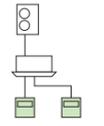
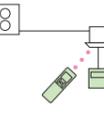
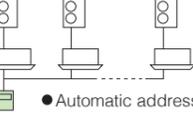
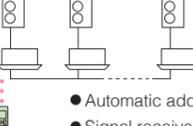
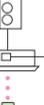
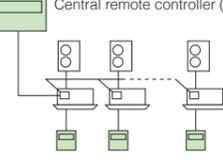
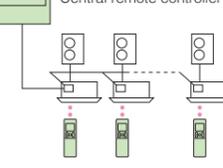
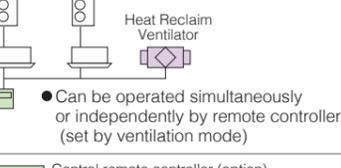
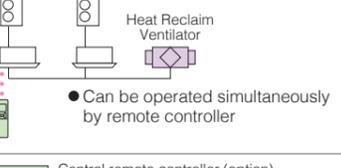
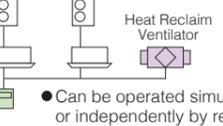
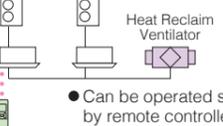


Pressing the backlight button helps operating in dark rooms.

Wireless remote controller for each indoor unit type

	Heat pump
CEILING MOUNTED CASSETTE TYPE	BRC7M634F (Fresh white) BRC7M634K (Black)
CEILING SUSPENDED TYPE	BRC7M53
WALL MOUNTED TYPE	BRC7E518
DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE	BRC4C65

System variation to control multiple indoor units

	Control pattern	Wired remote controller	Wireless remote controller
Control by 1 remote controller	(Basic system)	 <ul style="list-style-type: none"> ● Non-polar, double-core (max. wiring length 500 m) 	 <ul style="list-style-type: none"> ● Signal receiver unit installed on indoor unit
Control by 2 remote controllers	For control from 2 locations such as in room and control room, exits, etc.	 <ul style="list-style-type: none"> ● Connects 2 wired remote controllers (See note 1) 	 <ul style="list-style-type: none"> ● Control by 1 wireless remote controller and 1 wired remote controller (See note 2) ● Signal receiver unit installed on indoor unit
Group control	For simultaneous control of up to 16 indoor units.	 <ul style="list-style-type: none"> ● Automatic address setting function 	 <ul style="list-style-type: none"> ● Automatic address setting function ● Signal receiver unit installed on 1 indoor unit
Control by external command	Operation and monitoring is carried out using the contact signal from the operation control box in the monitoring room.	 (Command from outside) <ul style="list-style-type: none"> ● Optional wiring adaptor for electrical appendices is necessary 	 (Command from outside) <ul style="list-style-type: none"> ● Optional wiring adaptor for electrical appendices is necessary
Centralised remote control	Centralised control of up to 64 indoor groups from remote location up to 1 km away.	 Central remote controller (option) <ul style="list-style-type: none"> ● Heat Reclaim Ventilator for indoor units within a zone is operated by interlocking. Can also be operated independently by remote controller. 	 Central remote controller (option) <ul style="list-style-type: none"> ● Heat Reclaim Ventilator for indoor units within a zone is operated by interlocking.
Interlock control with Heat Reclaim Ventilator	Zone link control by centralised control.	 Central remote controller (option) <ul style="list-style-type: none"> ● Heat Reclaim Ventilator for indoor units within a zone is operated by interlocking. Can also be operated independently by remote controller. 	 Central remote controller (option) <ul style="list-style-type: none"> ● Heat Reclaim Ventilator for indoor units within a zone is operated by interlocking.
	Link by remote controller group control.	 Heat Reclaim Ventilator <ul style="list-style-type: none"> ● Can be operated simultaneously or independently by remote controller (set by ventilation mode) 	 Heat Reclaim Ventilator <ul style="list-style-type: none"> ● Can be operated simultaneously by remote controller

Note: *BRC1E63 can connect BRC1E63 only.
 2 When a wireless remote controller is used, it is not possible to use 2 wireless remote controllers. Combination of BRC1E63 (main) and BRC7M (sub) is available.

Whatever your space, give it the comfort it deserves



Easily adaptable to large-scale, high-function, centralised remote control system.

Central remote controller

DCS302CA61 (Option)



Centralised control, with setting as simple as it is with a standard remote controller, of up to 64 groups (1,024 indoor units) is possible.

Unified on/off controller

DCS301BA61 (Option)



Centralised control of on/off by group or all at once for up to 256 indoor units.

Schedule timer

DST301BA61 (Option)



Unified control of weekly schedule for up to 1,024 indoor units. Schedule timer sets on/off time in 1 minute units to be executed twice a day for a week at a time.

Intelligent Controller

DCS601C51 (Option)



With its high functionality, the full colour "all-in-one" graphic controller facilitates management of SkyAir System in a variety of ways.

Functions overview

Heat pump

		CEILING MOUNTED CASSETTE TYPE (Round Flow)		CEILING SUSPENDED TYPE		
						
		FCA50-71CAVMA FCA85-140CVMA		FHA50/60BAVMA FHA71-140BVMA		
		RZAV50-140CV1, 71-140CY1 RZAC71-140CV1, 85-140CY1		RZAV50-140CV1 RZAV71-140CY1		
		BRC1E63		BRC1E63		
		—		—		
		BRC7M634F (K)		BRC7M53		
		—		—		
Energy Saving	1	Energy consumption monitoring *1	●			
	2	Sensing sensor stop mode *1	● Sensing panel			
	3	Sensing sensor low mode *1, 2	● Sensing panel			
	4	Auto display OFF *1	●		●	
	5	Setpoint auto reset *1	●		●	
	6	Setpoint range set *1	●		●	
	7	OFF timer (programmed) *1	●		●	
	8	Weekly schedule timer *1	●		●	
	9	ON/OFF timer		●		●
Comfort	10	Circulation airflow *1	●			
	11	Setback *1	●		●	
	12	Quick start *1	●		●	
	13	Individual airflow control *1	●			
	14	Infrared presence sensor		● Sensing panel		
	15	Infrared floor sensor		● Sensing panel		
	16	Auto airflow function *1	● Sensing panel			
	17	Auto swing	●	●	●	●
	18	Swing pattern selection	●			
	19	Draft prevention function (heating)		●		●
	20	Switchable fan speed	● 5 step	● 5 step	● 5 step	● 5 step
	21	Auto airflow rate	●	●	●	●
	22	High fan speed mode				
	23	Two selectable temperature-sensors *1	●		●	
	24	High ceiling application	● 3.5m / 4.2m		● 3.5m / 4.3m	
	25	Hot start		●		●
	26	Year-round cooling applicable		●		●
	27	Night quiet operation *3	●		●	
	Cleanliness	28	Anti-bacterial air filter		●	
29		Mould-proof air filter				
30		Silver ion anti-bacterial drain pan		●		
Work & Servicing	31	Auto grille panel	●			
	32	Drain pump mechanism	●		● *6	
	33	Pre-charged for up to 30 m *3	●		●	
	34	Long-life filter	●		●	
	35	Filter sign	●	●	●	●
	36	Low gas pressure detection *3	●		●	
	37	Emergency operation	●		●	
	38	Self-diagnosis function	●	●	●	●
	39	Service contact display *1	●		●	
Control	40	Auto-restart	●		●	
	41	Auto-cooling / heating change-over	●	●	●	●
	42	Control by 2 remote controllers	●	● *7	●	● *7
	43	Group control by 1 remote controller	●	●	●	●
	44	External equipment interlock *4		● Sensing panel		
	45	External signal forced OFF and ON/OFF operation	●		●	
	46	External command control *5	●		●	
	47	Central remote control	●		●	
	48	Interlock control with Heat Reclaim Ventilator	●		●	
49	DIII-NET communication standard	●		●		
Options	50	High-efficiency filter	●			
	51	Ultra long-life filter	●			
	52	Fresh air intake kit	●		●	
Others	53	Anti corrosion treated heat exchanger *3	●		●	

		WALL MOUNTED TYPE		DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE	
					
		FAA50/60BAVMA FAA71-100BVMA		FBA50/60BAVMA FBA71-140BVMA	
		RZAV50-100CV1 RZAV71-100CY1		RZAV50-140CV1, 71-140CY1 RZAC71/85CV1, 85CY1	
		BRC1E63		BRC1E63	
		—		—	
		BRC7EB518		BRC4C65	
		—		—	
	1				
	2				
	3				
	4	●		●	
	5	●		●	
	6	●		●	
	7	●		●	
	8	●		●	
	9		●		●
	10				
	11	●		●	
	12	●		●	
	13				
	14				
	15				
	16				
	17	●	●		
	18				
	19		●		
	20	● 3 step	● 3 step	● 3 step	● 3 step
	21	●		●	
	22	●			
	23	●		●	
	24				
	25		●		●
	26		●		●
	27	●		●	
	28				● *6
	29	●			
	30				●
	31				
	32		● *6		●
	33		●		●
	34				● *6
	35	●	●	●	●
	36	●		●	
	37	●		●	
	38	●	●	●	●
	39	●		●	
	40	●		●	
	41	●	●	●	●
	42	●		●	
	43	●	●	●	●
	44				
	45		●		●
	46		●		●
	47		●		●
	48		●		●
	49		●		●
	50				●
	51				
	52				
	53		●		●

Note:
 *1: Applicable when BRC1E63 is used
 *2: Not applicable when group control
 *3: For outdoor units
 *4: Adaptor for Wiring (and installation box) is necessary
 *5: Wiring adaptor for electrical appendices (and installation box) is necessary
 *6: Option is required
 *7: It is not possible to use 2 wireless remote controllers.
 Combination of BRC1E63 (main) and BRC7M (sub) is available

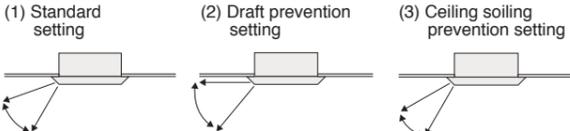
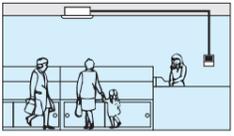
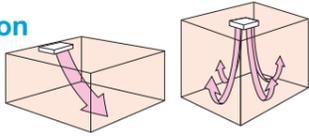
Abundance of functions that provide comfortable air-conditioning in stores and offices

Note: Some features are only available on selected models. See overview pages for full list of features applicable to each unit.

Energy Saving

- 1. Energy consumption monitoring**
Past power consumption is displayed for the current and previous days as well as in weekly and yearly intervals.
- 2. Sensing sensor stop mode**
When the room is unoccupied, the system stops automatically.
- 3. Sensing sensor low mode**
When the room is unoccupied, the set temperature is shifted automatically.
- 4. Auto display OFF**
While operation is stopping, the LCD display can be turned off. It can be displayed again when any button is pressed.
- 5. Setpoint auto reset**
Even if the set temperature is changed, the new set temperature returns to the previous preset value after a preset duration of time.
- 6. Setpoint range set**
Saves energy by limiting the minimum and maximum set temperatures. Avoids excessive heating and cooling.
- 7. OFF timer (programmed)**
Sets and saves setting for an increment of time that automatically turns off air conditioner after a preset period of time for each time operation starts.
- 8. Weekly schedule timer**
Up to five operation ON/OFF settings can be programmed per day for each day of the week. Not only can the time be set for the operation ON setting, but also the temperature.
- 9. ON/OFF timer**
Operation starts when the preset time of the ON timer elapses and stops when the preset time of the OFF timer elapses.

Comfort

- 10. Circulation airflow**
At the start of operation, airflow changes repeatedly between horizontal flow and downward flow (swing during cool operation), and air is sent throughout the room to eliminate uneven temperatures.
- 11. Setback**
Maintains the room temperature in a specific range during unoccupied periods by temporarily starting an air conditioner that had been turned OFF.
- 12. Quick start**
At operation start, capacity priority operation is possible.
- 13. Individual airflow control**
Airflow direction can be individually adjusted for each air discharge outlet to deliver optimal air distribution.
- 14. Infrared presence sensor**
The sensor detects the presence of people in each of the 4 areas.
- 15. Infrared floor sensor**
The sensor detects the floor temperature and automatically adjusts operation of the indoor unit to reduce the temperature difference between the ceiling and the floor.
- 16. Auto airflow function**
When this function is set, airflow direction can be directed toward or away from people when human presence is detected.
- 17. Auto swing**
Delivers comfortable air-conditioning to all areas, near to and far from the air-conditioner.
■ The air flow direction can be fixed at your desired angle by the remote controller.
- 18. Swing pattern selection**
You can freely set air discharge settings by remote controller.

- 19. Draft prevention function (heating)**
To prevent cold air drafts, automatically adjusts airflow to near horizontal position when heating initially starts or when the thermo off.
- 20. Switchable fan speed**
High setting provides maximum reach while low setting minimises drafts.
- 21. Auto airflow rate**
Airflow rate is automatically controlled in accordance with the difference between room temperature and set temperature.
- 22. High fan speed mode**
You can increase fan speed approximately 10% higher than the "high" setting.
- 23. Two selectable temperature-sensors**
Temperature-sensors are included in the indoor unit and optional wired remote controller. Temperature sensing closer to target area is possible to further increase the comfort level.
● Use the temperature-sensor in the indoor unit when controlling air conditioning from another room.

Note: Wireless remote controllers have no temperature-sensor.
- 24. High ceiling application**
Delivers air-conditioning comfort all the way down to the floor in air-conditioning zones with high ceilings.

Note: When units are installed on high ceilings, depending on the model, various restrictions concerning maximum height, air discharge direction, and choice of options may apply.
- 25. Hot start**
Cold air flow is avoided when heating operation starts or when switching to heat after defrosting.
- 26. Year-round cooling applicable**
Efficient cooling even in winter when the indoor temperatures are higher than those outside, such as in underground public spaces or offices with many computers.
- 27. Night quiet operation**
The Automatic night quiet mode will initiate 8 hours after the peak temperature is reached in the daytime, and normal operation will resume 10 hours after that.

Cleanliness

- 28. Anti-bacterial air filter**
The air filter has an anti-bacterial treatment to help prevent the growth of bacteria and mould on it.
- 29. Mould-proof air filter**
Sanitary filter has mould-resistant treatment.
- 30. Silver ion anti-bacterial drain pan**
A built-in antibacterial treatment that uses silver ion in the drain pan prevents the growth of slime, bacteria, and mould that cause odours and clogging.

Work & Servicing

- 31. Auto grille panel**
Grille and air filter cleaning can be performed without need for a stepladder by lowering the grille.
- 32. Drain pump mechanism**
Steeper gradient realises more efficient condensate drainage. High-lift is especially useful for long lengths of drain piping.

- 33. Pre-charged for up to 30 m**
If refrigerant piping length does not exceed 30 m, there is no need for on-site gas charging.
- 34. Long-life filter**
Maintenance is not required for one year*. The filter is washable and can be reused.
*For dust concentration of 0.15 mg/m³
- 35. Filter sign**
The filter sign warns you when it is time to clean the filter.
*When using a wired remote controller the sign is displayed in the LCD.
When using a wireless remote controller the filter sign lamp illuminates on the signal receiver unit.
- 36. Low gas pressure detection**
Insufficient gas charging is normally hard to detect. During test run after installation and regular inspection, the refrigerant level is monitored by a microprocessor to maintain proper gas pressure. Reliability is assured and maintenance and inspection can be carried out more quickly.
- 37. Emergency operation**
Even if there is a malfunction elsewhere in the system, the fan or compressor can still be operated. (depending on the malfunction)
- 38. Self-diagnosis function**
The operating parameters of indoor and outdoor units, and sensor data at critical locations throughout the system, are constantly monitored using a microcomputer. To facilitate quick response in the event of a malfunction, a message appears on the LCD of the remote controller and an LED on the unit illuminates.
- 39. Service contact display**
When installing the unit, registration of the service contact is available to the wired remote controller.

Control

- 40. Auto-restart**
If there is a power outage while the equipment is operating, operations will restart in the same mode as before the power cut when electricity is restored.
- 41. Auto-cooling / heating change-over**
Detects difference in preset temperature and actual room temperature and automatically switches to cooling or heating accordingly.
- 42. Control by 2 remote controllers**
Using 2 remote controllers you can operate the equipment locally or from a remote location.
*When a wireless remote controller is used, it is not possible to use 2 wireless remote controllers.
Combination of BRC1E63 (main) and BRC7M (sub) is available.
- 43. Group control by 1 remote controller**
You can turn up to 16 indoor units ON/OFF with a single remote controller. (When using connected indoor units, the settings must all be the same and on/off will be simultaneous.)
- 44. External equipment interlock**
Human presence is detected by the built-in infrared presence sensor in the sensing panel, and the presence detection signal can be output and interlocked with external equipment. Power conservation is possible though the interlock of external equipment, such as lighting, with the infrared presence sensor.
*Adaptor for Wiring (and installation box) is necessary.
- 45. External signal forced OFF and ON/OFF operation**
The air conditioner can be interlocked with the keycard system and turned ON/OFF by locking and unlocking the room. The air conditioner can be also be turned OFF by the interlock with the ventilation and lighting OFF signal.
*Field setting with remote controller.
- 46. External command control**
Operation and monitoring is carried out using the contact signal from the operation control box in the building monitoring room.
*Wiring adaptor for electrical appendices (and installation box) is necessary.
- 47. Central remote control**
Optional central remote controller enables centralised control of up to 1024 indoor units (64 groups) from up to 1 km away.
- 48. Interlock control with Heat Reclaim Ventilator**
Enables interlocking control with external equipment such as Heat Reclaim Ventilator.
- 49. DIII-NET communication standard**
Connection to a centralised control system is available without need for an optional adaptor.

Options

- 50. High-efficiency filter**
Two types are available: 65% and 90% colorimetry.
- 51. Ultra long-life filter**
Requires no maintenance for about 4 years* (10,000h) in stores and offices.
*For dust concentration of 0.15 mg/m³
- 52. Fresh air intake kit**
You can provide air-conditioning with fresh air from outside. Convenient for places where a ventilation fan cannot be installed.

Others

- 53. Anti corrosion treated heat exchanger**
To achieve increased durability by improved resistance to salt corrosion and atmospheric pollution, Anti corrosion treated fin for heat exchangers (with special coating) are used for the heat exchanger of the outdoor unit. In high corrosive areas, regular maintenance needs to be carried out.



CEILING MOUNTED CASSETTE TYPE <Round Flow> Premium Inverter series (1 Phase)

Model Name	Indoor unit		50	60	71	85	100	125	140		
	Outdoor unit		FCA50CAVMA	FCA60CAVMA	FCA71CAVMA	FCA85CVMA	FCA100CVMA	FCA125CVMA	FCA140CVMA		
Power supply			1 Phase, 220-240V, 50Hz								
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		5.0 (1.4-6.0)	6.0 (1.4-7.1)	7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)		
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		6.0 (1.4-7.1)	7.1 (1.4-8.0)	8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)	14.0 (5.1-16.0)	16.0 (5.1-18.0)		
Power consumption	Cooling ¹	kW	1.11	1.43	1.81	2.00	2.38	3.25	3.70		
	Heating ²	kW	1.27	1.54	1.81	2.13	2.40	3.28	4.02		
EER	Cooling	kW/kW	4.51	4.21	3.93	4.25	4.21	3.85	3.78		
COP	Heating	kW/kW	4.73	4.61	4.42	4.70	4.67	4.27	3.98		
Indoor unit	Colour	Unit	Fresh White								
	Decoration panel	mm	256x840x840								
	Airflow rate (H / HM / M / ML / L)	ℓ/s	383 / 350 / 308 / 267 / 225			575 / 517 / 458 / 400 / 333		608 / 558 / 500 / 442 / 383			
		m ³ /min	23.0 / 21.0 / 18.5 / 16.0 / 13.5			34.5 / 31.0 / 27.5 / 24.0 / 20.0		36.5 / 33.5 / 30.0 / 26.5 / 23.0			
	Sound pressure level ⁴ (H / HM / M / ML / L)	dB(A)	37.0 / 36.0 / 34.0 / 31.0 / 27.5			45.0 / 42.0 / 39.0 / 36.5 / 34.0		46.0 / 43.5 / 41.0 / 38.5 / 36.0			
	Dimensions (HxWxD)	Unit	256x840x840			50x950x950		298x840x840			
	Machine weight	Unit	22			26		26			
	Certified	Cooling	°CWB	14 to 25							
	Operation range	Heating	°CDB	15 to 27							
	Outdoor unit	Colour	Unit	Ivory White							
Compressor		Type	Hermetically sealed swing type								
Motor output		kW	1.30		2.40		3.30		3.30		
Refrigerant charge (R-32)		kg	1.35 (Charged for 30 m)		2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		3.75 (Charged for 30 m)		
Sound pressure level ⁴		Cooling / Heating	dB(A)	48 / 51		48 / 50		52 / 53		51 / 53	
Night quiet mode		dB(A)	44		48		47		48		
Sound power level		dB(A)	68		67		71		70		
Dimensions (HxWxD)		mm	595x845x300		990x940x320		1,430x940x320				
Machine weight		kg	45		69		78		93		
Certified		Cooling	°CDB	-5 to 50							
Operation range	Heating	°CWB	-15 to 15.5								
Piping connections	Liquid (Flare)	mm	φ6.4		φ9.5		φ15.9				
	Gas (Flare)	mm	φ12.7		φ15.9						
	Drain	Indoor unit	mm		VP25 (I.D.φ25xO.D.φ32)						
	Outdoor unit	mm		φ26.0 (Hole)							
Max. interunit piping length	m	50 (Equivalent length 70)			75 (Equivalent length 90)						
Max. installation level difference	m	30									
Heat insulation	Both liquid and gas piping										



CEILING MOUNTED CASSETTE TYPE <Round Flow> Inverter series (1 Phase)

Model Name	Indoor unit		71	85	100	125	140		
	Outdoor unit		FCA71CAVMA	FCA85CVMA	FCA100CVMA	FCA125CVMA	FCA140CVMA		
Power supply			1 Phase, 220-240V, 50Hz						
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		7.1 (1.8-8.0)	8.5 (3.2-10.0)	10.0 (3.2-11.2)	12.5 (4.0-14.0)	14.0 (5.0-16.0)		
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		8.0 (2.0-9.0)	10.0 (3.5-11.2)	11.2 (3.5-12.5)	14.0 (4.1-16.0)	16.0 (5.1-18.0)		
Power consumption	Cooling ¹	kW	1.83	2.25	2.67	3.53	4.18		
	Heating ²	kW	1.95	2.42	2.74	3.63	4.32		
EER	Cooling	kW/kW	3.87	3.78	3.74	3.54	3.35		
COP	Heating	kW/kW	4.11	4.13	4.09	3.86	3.70		
Indoor unit	Colour	Unit	Fresh White						
	Decoration panel	mm	256x840x840						
	Airflow rate (H / HM / M / ML / L)	ℓ/s	383 / 350 / 308 / 267 / 225		575 / 517 / 458 / 400 / 333		608 / 558 / 500 / 442 / 383		
		m ³ /min	23.0 / 21.0 / 18.5 / 16.0 / 13.5		34.5 / 31.0 / 27.5 / 24.0 / 20.0		36.5 / 33.5 / 30.0 / 26.5 / 23.0		
	Sound pressure level ⁴ (H / HM / M / ML / L)	dB(A)	37.0 / 36.0 / 34.0 / 31.0 / 27.5		45.0 / 42.0 / 39.0 / 36.5 / 34.0		46.0 / 43.5 / 41.0 / 38.5 / 36.0		
	Dimensions (HxWxD)	Unit	256x840x840		50x950x950		298x840x840		
	Machine weight	Unit	22		26		26		
	Certified	Cooling	°CWB	14 to 25					
	Operation range	Heating	°CDB	15 to 27					
	Outdoor unit	Colour	Unit	Ivory White					
Compressor		Type	Hermetically sealed swing type						
Motor output		kW	1.30		2.40		3.30		
Refrigerant charge (R-32)		kg	1.70 (Charged for 30 m)		2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		
Sound pressure level ⁴		Cooling / Heating	dB(A)	48 / 51		51 / 54		52 / 54	
Night quiet mode		dB(A)	44		47		48		
Sound power level		dB(A)	68		70		71		
Dimensions (HxWxD)		mm	595x840x300		990x940x320		1,430x940x320		
Machine weight		kg	45		69		78		
Certified		Cooling	°CDB	-5 to 46					
Operation range	Heating	°CWB	-15 to 15.5						
Piping connections	Liquid (Flare)	mm	φ6.4		φ9.5		φ15.9		
	Gas (Flare)	mm	φ12.7		φ15.9				
	Drain	Indoor unit	mm		VP25 (I.D.φ25xO.D.φ32)				
	Outdoor unit	mm		φ26.0 (Hole)					
Max. interunit piping length	m	50 (Equivalent length 70)							
Max. installation level difference	m	30							
Heat insulation	Both liquid and gas piping								

CEILING MOUNTED CASSETTE TYPE <Round Flow> Premium Inverter series (3 Phase)

Model Name	Indoor unit		71	85	100	125	140		
	Outdoor unit		FCA71CAVMA	FCA85CVMA	FCA100CVMA	FCA125CVMA	FCA140CVMA		
Power supply			3 Phase, 380-415V, 50Hz						
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)		
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)	14.0 (5.1-16.0)	16.0 (5.1-18.0)		
Power consumption	Cooling ¹	kW	1.81	2.00	2.38	3.25	3.70		
	Heating ²	kW	1.81	2.13	2.40	3.28	4.02		
EER	Cooling	kW/kW	3.93	4.25	4.21	3.85	3.78		
COP	Heating	kW/kW	4.42	4.70	4.67	4.27	3.98		
Indoor unit	Colour	Unit	Fresh White						
	Decoration panel	mm	256x840x840						
	Airflow rate (H / HM / M / ML / L)	ℓ/s	383 / 350 / 308 / 267 / 225		575 / 517 / 458 / 400 / 333		608 / 558 / 500 / 442 / 383		
		m ³ /min	23.0 / 21.0 / 18.5 / 16.0 / 13.5		34.5 / 31.0 / 27.5 / 24.0 / 20.0		36.5 / 33.5 / 30.0 / 26.5 / 23.0		
	Sound pressure level ⁴ (H / HM / M / ML / L)	dB(A)	37.0 / 36.0 / 34.0 / 31.0 / 27.5		45.0 / 42.0 / 39.0 / 36.5 / 34.0		46.0 / 43.5 / 41.0 / 38.5 / 36.0		
	Dimensions (HxWxD)	Unit	256x840x840		50x950x950		298x840x840		
	Machine weight	Unit	22		26		26		
	Certified	Cooling	°CWB	14 to 25					
	Operation range	Heating	°CDB	15 to 27					
	Outdoor unit	Colour	Unit	Ivory White					
Compressor		Type	Hermetically sealed swing type						
Motor output		kW	2.40		3.30		3.30		
Refrigerant charge (R-32)		kg	2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		3.75 (Charged for 30 m)		
Sound pressure level ⁴		Cooling / Heating	dB(A)	48 / 50		52 / 53		51 / 53	
Night quiet mode		dB(A)	44		48		47		
Sound power level		dB(A)	67		71		70		
Dimensions (HxWxD)		mm	990x940x320		1,430x940x320		1,430x940x320		
Machine weight		kg	69		78		93		
Certified		Cooling	°CDB	-5 to 50					
Operation range	Heating	°CWB	-15 to 15.5						
Piping connections	Liquid (Flare)	mm	φ6.4		φ9.5		φ15.9		
	Gas (Flare)	mm	φ12.7		φ15.9				
	Drain	Indoor unit	mm		VP25 (I.D.φ25xO.D.φ32)				
	Outdoor unit	mm		φ26.0 (Hole)					
Max. interunit piping length	m	75 (Equivalent length 90)							
Max. installation level difference	m	30							
Heat insulation	Both liquid and gas piping								



CEILING MOUNTED CASSETTE TYPE <Round Flow> Inverter series (3 Phase)

Model Name	Indoor unit		85	100	125	140	
	Outdoor unit		FCA85CVMA	FCA100CVMA	FCA125CVMA	FCA140CVMA	
Power supply			3 Phase, 380-415V, 50Hz				
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		8.5 (3.2-10.0)	10.0 (3.2-11.2)	12.5 (4.0-14.0)	14.0 (5.0-16.0)	
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		10.0 (3.5-11.2)	11.2 (3.5-12.5)	14.0 (4.1-16.0)	16.0 (5.1-18.0)	
Power consumption	Cooling ¹	kW	2.25	2.67	3.53	4.18	
	Heating ²	kW	2.42	2.74	3.63	4.32	
EER	Cooling	kW/kW	3.78	3.74	3.54	3.35	
COP	Heating	kW/kW	4.13	4.09	3.86	3.70	
Indoor unit	Colour	Unit	Fresh White				
	Decoration panel	mm	256x840x840				
	Airflow rate (H / HM / M / ML / L)	ℓ/s	575 / 517 / 458 / 400 / 333		608 / 558 / 500 / 442 / 383		
		m ³ /min	34.5 / 31.0 / 27.5 / 24.0 / 20.0		36.5 / 33.5 / 30.0 / 26.5 / 23.0		
	Sound pressure level ⁴ (H / HM / M / ML / L)	dB(A)	45.0 / 42.0 / 39.0 / 36.5 / 34.0		46.0 / 43.5 / 41.0 / 38.5 / 36.0		
	Dimensions (HxWxD)	Unit	256x840x840		50x950x950		
	Machine weight	Unit	22		26		
	Certified	Cooling	°CWB	14 to 25			
	Operation range	Heating	°CDB	15 to 27			
	Outdoor unit	Colour	Unit	Ivory White			
Compressor		Type	Hermetically sealed swing type				
Motor output		kW	2.40		3.30		
Refrigerant charge (R-32)		kg	2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		
Sound pressure level ⁴		Cooling / Heating	dB(A)	51 / 54		52 / 54	
Night quiet mode		dB(A)	47		48		
Sound power level		dB(A)	70		71		
Dimensions (HxWxD)		mm	990x940x320		1,430x940x320		
Machine weight		kg	69		78		
Certified		Cooling	°CDB	-5 to 46			
Operation range	Heating	°CWB	-15 to 15.5				
Piping connections	Liquid (Flare)	mm	φ6.4		φ9.5		
	Gas (Flare)	mm	φ12.7		φ15.9		
	Drain	Indoor unit	mm		VP25 (I.D.φ25xO.D.φ32)		
	Outdoor unit	mm		φ26.0 (Hole)			
Max. interunit piping length	m	50 (Equivalent length 70)					
Max. installation level difference	m	30					
Heat insulation	Both liquid and gas piping						

Note :
¹Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19.0°CWB; outdoor temp., 35°CDB, 24°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
²Rated heating capacities are based on the following conditions: Indoor temp., 20°CDB, 15°CWB; outdoor temp., 7°CDB, 6°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
³Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
⁴The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.



CEILING SUSPENDED TYPE Premium Inverter series (1 Phase)

Model Name	Indoor unit		50	60	71	85	100	125	140				
	Outdoor unit		FHA50BAVMA	FHA60BAVMA	FHA71BVMA	FHA85BVMA	FHA100BVMA	FHA125BVMA	FHA140BVMA				
Power supply	1 Phase, 220-240V, 50Hz												
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		5.0 (1.4-6.0)	6.0 (1.4-7.1)	7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)				
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		6.0 (1.4-7.1)	7.1 (1.4-8.0)	8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)	14.0 (5.1-16.0)	16.0 (5.1-18.0)				
Power consumption	Cooling ¹	kW	1.42	1.80	2.12	2.51	2.78	3.65	4.13				
	Heating ²	kW	1.66	2.09	2.26	2.75	3.09	4.06	4.76				
EER	Cooling	kW/kW	3.51	3.33	3.35	3.38	3.60	3.42	3.39				
	Heating	kW/kW	3.62	3.39	3.54	3.63	3.62	3.45	3.36				
Indoor unit	Colour	White											
	Airflow rate (H / HM / M / ML / L)	ℓ/s	250 / 225 / 200 / 183 / 167		342 / 313 / 283 / 258 / 233		467 / 433 / 400 / 367 / 333		517 / 483 / 450 / 417 / 383		567 / 525 / 483 / 442 / 400		
		m ³ /min	15.0 / 13.5 / 12.0 / 11.0 / 10.0		20.5 / 18.8 / 17.0 / 15.5 / 14.0		28.0 / 26.0 / 24.0 / 22.0 / 20.0		31.0 / 29.0 / 27.0 / 25.0 / 23.0		34.0 / 31.5 / 29.0 / 26.5 / 24.0		
	Sound pressure level ⁴ (H / HM / M / ML / L)	dB(A)	37.0 / 36.0 / 35.0 / 33.5 / 32.0		38.0 / 37.0 / 36.0 / 35.0 / 34.0		42.0 / 40.0 / 38.0 / 36.0 / 34.0		44.0 / 42.5 / 41.0 / 39.0 / 37.0		46.0 / 44.0 / 42.0 / 40.0 / 38.0		
	Dimensions (H×W×D)	mm	235×960×690		235×1,270×690		235×1,590×690		235×1,590×690		235×1,590×690		
	Machine weight	kg	25		32		38		38		38		
	Certified Operation range	Cooling	°CWB	14 to 25									
		Heating	°CDB	15 to 27									
	Outdoor unit	Colour	Ivory White										
		Compressor	Type	Hermetically sealed swing type									
Motor output		kW	1.30		2.40		3.30		3.30		3.90		
Refrigerant charge (R-32)		kg	1.35 (Charged for 30 m)		2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		3.75 (Charged for 30 m)		3.90 (Charged for 30 m)		
Sound pressure level ⁴		Cooling/Heating	dB(A)	48 / 51		48 / 50		52 / 53		51 / 53		52 / 54	
		Night quiet mode	dB(A)	44		48		47		48		52	
Sound power level		dB(A)	68		67		71		70		70		
Dimensions (H×W×D)		mm	595×845×300		990×940×320		1,430×940×320		1,430×940×320		1,430×940×320		
Machine weight		kg	45		69		78		93		99		
Certified Operation range		Cooling	°CDB	-5 to 50									
	Heating	°CWB	-15 to 15.5										
Piping connections	Liquid (Flare)	mm	φ6.4		φ9.5		φ9.5		φ9.5		φ9.5		
	Gas (Flare)	mm	φ12.7		φ15.9		φ15.9		φ15.9		φ15.9		
	Drain	Indoor unit Outdoor unit	VP20 (I.D.φ20×O.D.φ26) φ26.0 (Hole)										
Max. interunit piping length	m	50 (Equivalent length 70)			75 (Equivalent length 90)			75 (Equivalent length 90)					
Max. installation level difference	m	30											
Heat insulation	Both liquid and gas piping												



WALL MOUNTED TYPE Premium Inverter series (1 Phase)

Model Name	Indoor unit		50	60	71	85	100				
	Outdoor unit		FAA50BAVMA	FAA60BAVMA	FAA71BVMA	FAA85BVMA	FAA100BVMA				
Power supply	1 Phase, 220-240V, 50Hz										
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		5.0 (1.4-6.0)	6.0 (1.4-7.1)	7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)				
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		6.0 (1.4-7.1)	7.1 (1.4-8.0)	8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)				
Power consumption	Cooling ¹	kW	1.45	1.80	2.22	2.59	3.11				
	Heating ²	kW	1.61	2.05	2.37	3.01	3.48				
EER	Cooling	kW/kW	3.45	3.34	3.20	3.28	3.22				
	Heating	kW/kW	3.73	3.46	3.38	3.32	3.22				
Indoor unit	Colour	Fresh White									
	Airflow rate (H / M / L)	ℓ/s	300 / 267 / 233		433 / 383 / 317		433 / 383 / 317				
		m ³ /min	18.0 / 16.0 / 14.0		26.0 / 23.0 / 19.0		26.0 / 23.0 / 19.0				
	Sound pressure level ⁴ (H / HM / M / ML / L)	dB(A)	45.0 / 42.0 / 40.0		49.0 / 45.0 / 41.0		49.0 / 45.0 / 41.0				
	Dimensions (H×W×D)	mm	290×1,050×238		340×1,200×240		340×1,200×240				
	Machine weight	kg	13		17		17				
	Certified Operation range	Cooling	°CWB	14 to 25							
		Heating	°CDB	15 to 27							
	Outdoor unit	Colour	Ivory White								
		Compressor	Type	Hermetically sealed swing type							
Motor output		kW	1.30		2.40		3.30				
Refrigerant charge (R-32)		kg	1.35 (Charged for 30 m)		2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		3.75 (Charged for 30 m)		
Sound pressure level ⁴		Cooling/Heating	dB(A)	48 / 51		48 / 50		52 / 53		51 / 53	
		Night quiet mode	dB(A)	44		48		47		48	
Sound power level		dB(A)	68		67		71		70		
Dimensions (H×W×D)		mm	595×845×300		990×940×320		1,430×940×320		1,430×940×320		
Machine weight		kg	45		69		78		93		
Certified Operation range		Cooling	°CDB	-5 to 50							
	Heating	°CWB	-15 to 15.5								
Piping connections	Liquid (Flare)	mm	φ6.4		φ9.5		φ9.5		φ9.5		
	Gas (Flare)	mm	φ12.7		φ15.9		φ15.9		φ15.9		
	Drain	Indoor unit Outdoor unit	VP13 (I.D.φ13×O.D.φ18) φ26.0 (Hole)								
Max. interunit piping length	m	50 (Equivalent length 70)			75 (Equivalent length 90)			75 (Equivalent length 90)			
Max. installation level difference	m	30									
Heat insulation	Both liquid and gas piping										

CEILING SUSPENDED TYPE Premium Inverter series (3 Phase)

Model Name	Indoor unit		71	85	100	125	140				
	Outdoor unit		FHA71BVMA	FHA85BVMA	FHA100BVMA	FHA125BVMA	FHA140BVMA				
Power supply	3 Phase, 380-415V, 50Hz										
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)				
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)	14.0 (5.1-16.0)	16.0 (5.1-18.0)				
Power consumption	Cooling ¹	kW	2.12	2.51	2.78	3.65	4.13				
	Heating ²	kW	2.26	2.75	3.09	4.06	4.76				
EER	Cooling	kW/kW	3.35	3.38	3.60	3.42	3.39				
	Heating	kW/kW	3.54	3.63	3.62	3.45	3.36				
Indoor unit	Colour	White									
	Airflow rate (H / HM / M / ML / L)	ℓ/s	342 / 313 / 283 / 258 / 233		467 / 433 / 400 / 367 / 333		517 / 483 / 450 / 417 / 383		567 / 525 / 483 / 442 / 400		
		m ³ /min	20.5 / 18.8 / 17.0 / 15.5 / 14.0		28.0 / 26.0 / 24.0 / 22.0 / 20.0		31.0 / 29.0 / 27.0 / 25.0 / 23.0		34.0 / 31.5 / 29.0 / 26.5 / 24.0		
	Sound pressure level ⁴ (H / HM / M / ML / L)	dB(A)	38.0 / 37.0 / 36.0 / 35.0 / 34.0		42.0 / 40.0 / 38.0 / 36.0 / 34.0		44.0 / 42.5 / 41.0 / 39.0 / 37.0		46.0 / 44.0 / 42.0 / 40.0 / 38.0		
	Dimensions (H×W×D)	mm	235×1,270×690		235×1,590×690		235×1,590×690		235×1,590×690		
	Machine weight	kg	32		38		38		38		
	Certified Operation range	Cooling	°CWB	14 to 25							
		Heating	°CDB	15 to 27							
	Outdoor unit	Colour	Ivory White								
		Compressor	Type	Hermetically sealed swing type							
Motor output		kW	2.40		3.30		3.30		3.90		
Refrigerant charge (R-32)		kg	2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		3.75 (Charged for 30 m)		3.90 (Charged for 30 m)		
Sound pressure level ⁴		Cooling/Heating	dB(A)	48 / 50		52 / 53		51 / 53		52 / 54	
		Night quiet mode	dB(A)	44		48		47		48	
Sound power level		dB(A)	67		71		70		70		
Dimensions (H×W×D)		mm	990×940×320		1,430×940×320		1,430×940×320		1,430×940×320		
Machine weight		kg	69		78		93		99		
Certified Operation range		Cooling	°CDB	-5 to 50							
	Heating	°CWB	-15 to 15.5								
Piping connections	Liquid (Flare)	mm	φ9.5		φ15.9		φ15.9		φ15.9		
	Gas (Flare)	mm	φ12.7		φ15.9		φ15.9		φ15.9		
	Drain	Indoor unit Outdoor unit	VP20 (I.D.φ20×O.D.φ26) φ26.0 (Hole)								
Max. interunit piping length	m	75 (Equivalent length 90)									
Max. installation level difference	m	30									
Heat insulation	Both liquid and gas piping										



WALL MOUNTED TYPE Premium Inverter series (3 Phase)

Model Name	Indoor unit		71	85	100				
	Outdoor unit		FAA71BVMA	FAA85BVMA	FAA100BVMA				
Power supply	3 Phase, 380-415V, 50Hz								
Cooling capacity ^{1,3} Rated (Min. - Max.)	kW		7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)				
Heating capacity ^{2,3} Rated (Min. - Max.)	kW		8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)				
Power consumption	Cooling ¹	kW	2.22	2.59	3.11				
	Heating ²	kW	2.37	3.01	3.48				
EER	Cooling	kW/kW	3.20	3.28	3.22				
	Heating	kW/kW	3.38	3.32	3.22				
Indoor unit	Colour	Fresh White							
	Airflow rate (H / M / L)	ℓ/s	300 / 267 / 233		433 / 383 / 317				
		m ³ /min	18.0 / 16.0 / 14.0		26.0 / 23.0 / 19.0				
	Sound pressure level ⁴ (H / M / L)	dB(A)	45.0 / 42.0 / 40.0		49.0 / 45.0 / 41.0				
	Dimensions (H×W×D)	mm	290×1,050×238		340×1,200×240				
	Machine weight	kg	13		17				
	Certified Operation range	Cooling	°CWB	14 to 25					
		Heating	°CDB	15 to 27					
	Outdoor unit	Colour	Ivory White						
		Compressor	Type	Hermetically sealed swing type					
Motor output		kW	2.40		3.30				
Refrigerant charge (R-32)		kg	2.60 (Charged for 30 m)		2.90 (Charged for 30 m)		3.75 (Charged for 30 m)		
Sound pressure level ⁴		Cooling/Heating	dB(A)	48 / 50		52 / 53		51 / 53	
		Night quiet mode	dB(A)	44		48		47	
Sound power level		dB(A)	67		71		70		
Dimensions (H×W×D)		mm	990×940×320		1,430×940×320		1,430×940×320		
Machine weight		kg	69		78		93		
Certified Operation range		Cooling	°CDB	-5 to 50					
	Heating	°CWB	-15 to 15.5						
Piping connections	Liquid (Flare)	mm	φ9.5		φ15.9		φ15.9		
	Gas (Flare)	mm	φ12.7		φ15.9		φ15.9		
	Drain	Indoor unit Outdoor unit	VP13 (I.D.φ13×O.D.φ18) φ26.0 (Hole)						
Max. interunit piping length	m	75 (Equivalent length 90)							
Max. installation level difference	m	30							
Heat insulation	Both liquid and gas piping								

Note :
¹Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19°CWB; outdoor temp. 35°CDB, 24°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
²Rated heating capacities are based on the following conditions: Indoor temp., 20°CDB, 15°CWB; outdoor temp., 7°CDB, 6°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
³Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
⁴The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.

Note :
¹Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19°CWB; outdoor temp. 35°CDB, 24°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
²Rated heating capacities are based on the following conditions: Indoor temp., 20°CDB, 15°CWB; outdoor temp., 7°CDB, 6°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
³Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
⁴The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.

DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE

Premium Inverter series

(1 Phase)



Model Name	Indoor unit		50	60	71	85	100	125	140
	Outdoor unit		FBA50BAVMA	FBA60BAVMA	FBA71BVMA	FBA85BVMA	FBA100BVMA	FBA125BVMA	FBA140BVMA
Power supply	Indoor unit	1 Phase, 220-240V, 50Hz							
	Outdoor unit	1 Phase, 220-240V, 50Hz							
Cooling capacity ^{1,3} Rated (Min. - Max.)			5.0 (1.4-6.0)	6.0 (1.4-7.1)	7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)
	Heating capacity ^{2,3} Rated (Min. - Max.)		6.0 (1.4-7.1)	7.1 (1.4-8.0)	8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)	14.0 (5.1-16.0)	16.0 (5.1-18.0)
Power consumption	Cooling ¹	kW	1.37	1.67	2.02	2.30	2.72	3.68	4.08
	Heating ²	kW	1.41	1.71	1.99	2.50	2.81	3.72	4.51
EER	Cooling	kW/kW	3.65	3.60	3.51	3.70	3.68	3.40	3.43
COP	Heating	kW/kW	4.26	4.14	4.02	4.00	3.99	3.76	3.55
Indoor unit	Colour	Unit	Ivory White						
		Fan	Airflow rate (H / M / L)	ℓ/s	300 / 250 / 208	383 / 325 / 267	533 / 450 / 375	600 / 508 / 417	
	External static pressure ⁴	Indoor unit	m ² /min	18.0 / 15.0 / 12.5	23.0 / 19.5 / 16.0	32.0 / 27.0 / 22.5	36.0 / 30.5 / 25.0		
		Outdoor unit	Rated 50 (50-150)						
	Sound pressure level ⁵ (H / M / L)	dB(A)	35.0 / 33.0 / 31.0	38.0 / 35.0 / 33.0	38.0 / 35.5 / 33.0	40.0 / 37.5 / 35.0			
	Sound power level (H)	dB(A)	63	66	66	68			
	Air filter ⁶	—							
	Dimensions (H×W×D)	mm	245×1,000×800			245×1,400×800			
	Machine weight	kg	37			47			
	Certified	Cooling	°CWB	14 to 25					
Operation range	Heating	°CDB	15 to 27						
Outdoor unit	Colour	Unit	Ivory White						
		Compressor	Type	Hermetically sealed swing type					
	Refrigerant charge (R-32)	Motor output	kW	1.30	2.40	3.30	3.75	3.90	
		kg	1.35 (Charged for 30 m)	2.60 (Charged for 30 m)	2.90 (Charged for 30 m)	3.75 (Charged for 30 m)	3.90 (Charged for 30 m)		
	Sound pressure level ⁴	Cooling / Heating	dB(A)	48 / 51	48 / 50	52 / 53	51 / 53	52 / 54	56 / 58
		Night quiet mode	dB(A)	44	48	47	48	52	
	Sound power level	dB(A)	68	67	71	70	70		
	Dimensions (H×W×D)	mm	595×845×300	990×940×320	1,430×940×320				
	Machine weight	kg	45	69	78	93	99		
	Certified	Cooling	°CDB	-5 to 50					
Operation range	Heating	°CWB	-15 to 15.5						
Piping connections	Liquid (Flare)	mm	φ6.4		φ9.5				
	Gas (Flare)	mm	φ12.7		φ15.9				
	Drain	Indoor unit	mm	VP25 (I.D.φ25×O.D.φ32)					
		Outdoor unit	mm	φ26.0 (Hole)					
Max. interunit piping length	m	50 (Equivalent length 70)			75 (Equivalent length 90)				
Max. installation level difference	m	30							
Heat insulation	Both liquid and gas piping								

DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE

Inverter series

(1 Phase)



Model Name	Indoor unit		71	85	
	Outdoor unit		FBA71BVMA	FBA85BVMA	
Power supply	Indoor unit	1 Phase, 220-240V, 50Hz			
	Outdoor unit	1 Phase, 220-240V, 50Hz			
Cooling capacity ^{1,3} Rated (Min. - Max.)			7.1 (1.8-8.0)	8.5 (3.2-10.0)	
	Heating capacity ^{2,3} Rated (Min. - Max.)		8.0 (2.0-9.0)	10.0 (3.5-11.2)	
Power consumption	Cooling ¹	kW	2.15	2.64	
	Heating ²	kW	2.30	2.95	
EER	Cooling	kW/kW	3.30	3.22	
COP	Heating	kW/kW	3.47	3.39	
Indoor unit	Colour	Unit	Ivory White		
		Fan	Airflow rate (H / M / L)	ℓ/s	383 / 325 / 267
	External static pressure ⁴	Indoor unit	m ² /min	23.0 / 19.5 / 16.0	32.0 / 27.0 / 22.5
		Outdoor unit	Rated 50 (50-150)		
	Sound pressure level ⁵ (H / M / L)	dB(A)	38.0 / 35.0 / 33.0	38.0 / 35.5 / 33.0	
	Sound power level (H)	dB(A)	66	66	
	Air filter ⁶	—			
	Dimensions (H×W×D)	mm	245×1,000×800		
	Machine weight	kg	37		
	Certified	Cooling	°CWB	14 to 25	
Operation range	Heating	°CDB	15 to 27		
Outdoor unit	Colour	Unit	Ivory White		
		Compressor	Type	Hermetically sealed swing type	
	Refrigerant charge (R-32)	Motor output	kW	1.30	2.40
		kg	1.70 (Charged for 30 m)	2.60 (Charged for 30 m)	2.60 (Charged for 30 m)
	Sound pressure level ⁴	Cooling / Heating	dB(A)	48 / 51	51 / 54
		Night quiet mode	dB(A)	44	47
	Sound power level	dB(A)	68	70	
	Dimensions (H×W×D)	mm	595×845×300	990×940×320	
	Machine weight	kg	45	69	
	Certified	Cooling	°CDB	-5 to 46	
Operation range	Heating	°CWB	-15 to 15.5		
Piping connections	Liquid (Flare)	mm	φ9.5		
	Gas (Flare)	mm	φ15.9		
	Drain	Indoor unit	mm	VP25 (I.D.φ25×O.D.φ32)	
		Outdoor unit	mm	φ26.0 (Hole)	
Max. interunit piping length	m	50 (Equivalent length 70)			
Max. installation level difference	m	30			
Heat insulation	Both liquid and gas piping				

DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE

Premium Inverter series

(3 Phase)



Model Name	Indoor unit		71	85	100	125	140	
	Outdoor unit		FBA71BVMA	FBA85BVMA	FBA100BVMA	FBA125BVMA	FBA140BVMA	
Power supply	Indoor unit	1 Phase, 220-240V, 50Hz						
	Outdoor unit	3 Phase, 380-415V, 50Hz						
Cooling capacity ^{1,3} Rated (Min. - Max.)			7.1 (3.2-8.0)	8.5 (4.0-10.0)	10.0 (5.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)	
	Heating capacity ^{2,3} Rated (Min. - Max.)		8.0 (3.5-9.0)	10.0 (4.1-11.2)	11.2 (5.1-12.5)	14.0 (5.1-16.0)	16.0 (5.1-18.0)	
Power consumption	Cooling ¹	kW	2.02	2.30	2.72	3.68	4.08	
	Heating ²	kW	1.99	2.50	2.81	3.72	4.51	
EER	Cooling	kW/kW	3.51	3.70	3.68	3.40	3.43	
COP	Heating	kW/kW	4.02	4.00	3.99	3.76	3.55	
Indoor unit	Colour	Unit	Ivory White					
		Fan	Airflow rate (H / M / L)	ℓ/s	383 / 325 / 267	533 / 450 / 375	600 / 508 / 417	
	External static pressure ⁴	Indoor unit	m ² /min	23.0 / 19.5 / 16.0	32.0 / 27.0 / 22.5	36.0 / 30.5 / 25.0		
		Outdoor unit	Rated 50 (50-150)					
	Sound pressure level ⁵ (H / M / L)	dB(A)	38.0 / 35.0 / 33.0	38.0 / 35.5 / 33.0	40.0 / 37.5 / 35.0			
	Sound power level (H)	dB(A)	66	66	68			
	Air filter ⁶	—						
	Dimensions (H×W×D)	mm	245×1,000×800		245×1,400×800			
	Machine weight	kg	37		47			
	Certified	Cooling	°CWB	14 to 25				
Operation range	Heating	°CDB	15 to 27					
Outdoor unit	Colour	Unit	Ivory White					
		Compressor	Type	Hermetically sealed swing type				
	Refrigerant charge (R-32)	Motor output	kW	2.40	3.30	3.75	3.90	
		kg	2.60 (Charged for 30 m)	2.90 (Charged for 30 m)	3.75 (Charged for 30 m)	3.90 (Charged for 30 m)		
	Sound pressure level ⁴	Cooling / Heating	dB(A)	48 / 50	52 / 53	51 / 53	52 / 54	56 / 58
		Night quiet mode	dB(A)	44	48	47	48	52
	Sound power level	dB(A)	67	71	70	70		
	Dimensions (H×W×D)	mm	990×940×320		1,430×940×320			
	Machine weight	kg	69	78	93	99		
	Certified	Cooling	°CDB	-5 to 50				
Operation range	Heating	°CWB	-15 to 15.5					
Piping connections	Liquid (Flare)	mm	φ9.5					
	Gas (Flare)	mm	φ15.9					
	Drain	Indoor unit	mm	VP25 (I.D.φ25×O.D.φ32)				
		Outdoor unit	mm	φ26.0 (Hole)				
Max. interunit piping length	m	75 (Equivalent length 90)						
Max. installation level difference	m	30						
Heat insulation	Both liquid and gas piping							

DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE

Inverter series

(3 Phase)



Model Name	Indoor unit		85	
	Outdoor unit		FBA85BVMA	
Power supply	Indoor unit	1 Phase, 220-240V, 50Hz		
	Outdoor unit	3 Phase, 380-415V, 50Hz		
Cooling capacity ^{1,3} Rated (Min. - Max.)			8.5 (3.2-10.0)	
	Heating capacity ^{2,3} Rated (Min. - Max.)		10.0 (3.5-11.2)	
Power consumption	Cooling ¹	kW	2.64	
	Heating ²	kW	2.95	
EER	Cooling	kW/kW	3.22	
COP	Heating	kW/kW	3.39	
Indoor unit	Colour	Unit	Ivory White	
		Fan	Airflow rate (H / M / L)	ℓ/s
	External static pressure ⁴	Indoor unit	m ² /min	32.0 / 27.0 / 22.5
		Outdoor unit	Rated 50 (50-150)	
	Sound pressure level ⁵ (H / M / L)	dB(A)	38.0 / 35.5 / 33.0	
	Sound power level (H)	dB(A)	66	
	Air filter ⁶	—		
	Dimensions (H×W×D)	mm	245×1,400×800	
	Machine weight	kg	47	
	Certified	Cooling	°CWB	14 to 25
Operation range	Heating	°CDB	15 to 27	
Outdoor unit	Colour	Unit	Ivory White	
		Compressor	Type	Hermetically sealed swing type
	Refrigerant charge (R-32)	Motor output	kW	2.40
		kg	2.60 (Charged for 30 m)	2.60 (Charged for 30 m)
	Sound pressure level ⁴	Cooling / Heating	dB(A)	51 / 54
		Night quiet mode	dB(A)	47
	Sound power level	dB(A)	70	
	Dimensions (H×W×D)	mm	990×940×320	
	Machine weight	kg	69	
	Certified	Cooling	°CDB	-5 to 46
Operation range	Heating	°CWB	-15 to 15.5	
Piping connections	Liquid (Flare)	mm	φ9.5	
	Gas (Flare)	mm	φ15.9	
	Drain	Indoor unit	mm	VP25 (I.D.φ25×O.D.φ32)
		Outdoor unit	mm	φ26.0 (Hole)
Max. interunit piping length	m	50 (Equivalent length 70)		
Max. installation level difference	m	30		
Heat insulation	Both liquid and gas piping			

Note :

¹Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19°CWB; outdoor temp. 35°CDB, 24°CWB. Equiv. refrigeration piping, 7.5 m (horizontal)

²Rated heating capacities are based on the following conditions: Indoor temp., 20°CDB, 15°CWB; outdoor temp., 7°CDB, 6°CWB. Equiv. refrigeration piping, 7.5 m (horizontal)

³Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

⁴External static pressure is changeable in 11 stages by remote controller.

⁵The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.

⁶Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its dust collection efficiency (gravity method) 50% or more.

Indoor unit

CEILING MOUNTED CASSETTE TYPE <Round Flow>



No.	Name of option	Remark	Kit name					
			FCA50CAVMA	FCA60CAVMA	FCA71CAVMA	FCA85CVMA	FCA100CVMA	FCA125CVMA
1	Standard panel with Sensing	Fresh white	BYCQ125EEF					
		Black	BYCQ125EEK					
	Standard panel	Fresh white	BYCQ125EAF					
		Black	BYCQ125EAK					
Auto grille panel ^{1,2}	Fresh white	BYCQ125EASF						
	For usage of 3-, 4-way flow	KDBH551C160						
2	Sealing material of air discharge outlet ³	For usage of 3-, 4-way flow	KDBH551C160					
		For usage of 2-way flow	KDBH552C160					
3	Panel spacer		KDB55J160F					
4	Fresh air intake kit	Chamber type ^{4,5}	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) ⁷					
		Without T-duct joint	KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) ⁷					
		With T-duct joint	KDDP55X160A					
5	High-efficiency filter unit ⁶ (Including filter chamber)	(Colorimetric method 65%)	KAF556D80		KAF556D160			
		(Colorimetric method 90%)	KAF557D80		KAF557D160			
6	Replacement high-efficiency filter ^{8,9}	(Colorimetric method 65%)	KAF552D80		KAF552D160			
		(Colorimetric method 90%)	KAF553D80		KAF553D160			
7	Filter chamber	KDDFP55C160						
8	Replacement long-life filter	KAF551D160						
9	Replacement long-life filter (Auto grille panel)	KAF5512D160						
10	Ultra long-life filter unit (Including filter chamber) ⁸	KAF555D160						
11	Replacement ultra long-life filter ^{8,9}	KAF550D160						
12	Branch duct chamber ³	KDJP55C80		KDJP55C160				
13	Insulation kit for high humidity ^{8,10}	KDTP55K80A		KDTP55K160A				
14	Remote controller	Wireless type	Heat pump	BRC7M634F (Fresh white) / BRC7M634K (Black)				
15	Navigation remote controller	Wired type ¹¹ "Nav Ease"		BRC1E63				
16	Central remote controller ¹²	DCS302CA61						
17	Unified ON/OFF controller ¹²	DCS301BA61						
18	Schedule timer ¹²	DST301BA61						
19	intelligent Touch Controller ¹²	DCS601C51						
20	Adaptor for wiring ¹³	KRP1C11A						
21	Wiring adaptor for electrical appendices ¹³	KRP4AA53						
22	Installation box for adaptor PCB	KRP1H98A						
23	Remote sensor (for indoor temperature)	KRCS01-5B						

Note: ¹A dedicated remote controller (BRC16A2) for the auto grille panel is included for lowering and raising the suction grille.
²When installing auto grille panel, body height (ceiling required dimension) is 55 mm higher than standard panel.
³Circulation airflow is not available with this option.
⁴When installing a fresh air intake kit (chamber type), two air outlet corners are closed.
⁵It is recommended that the volume of outdoor air introduced through the kit is limited to 10% of the maximum airflow rate of the indoor unit. Introducing higher quantities will increase the operating sound and may also influence temperature sensing.
⁶The volume of fresh air for direct installation type is approximately 1% of the indoor unit airflow. The chamber type is recommended when more fresh air is necessary.
⁷Please order using the names of both components instead of set name.
⁸This option cannot be installed to auto grille panel.
⁹Filter chamber is required.
¹⁰Please use in case temperature/humidity inside ceiling may get over 30°C, 80% RH.
¹¹Wiring for wired remote controller should be obtained locally.
¹²The indoor unit is equipped standardly with the interface adaptor for SkyAir series. An option is unnecessary.
¹³Installation box for adaptor PCB(KRP1H98A) is necessary.

Round flow type: List of optional parts required to achieve different flow patterns

For each flow pattern – all round, 4-way, 3-way, 2-way, branch duct connection – the compatibility of each independently installed option (shown in the column on the left) to accessory options (listed across the top of each table) is shown in the cells where the relevant row and column intersect. A circle (O) indicates compatibility, and a cross (X) indicates incompatibility. Any options not shown below are not suitable for independent or accessory installation.

All-round flow 4-way flow		Optional accessory parts						
Independently installable optional parts		Auto grille panel	Panel spacer ¹	Fresh air intake kit (Chamber type) ^{1,2}	Fresh air intake kit (Direct installation type)	Insulation kit for high humidity	High-efficiency filter unit ²	Ultra long-life filter unit ²
Panel/grille related	Auto grille panel		O	O	O	X	X	X
	Panel spacer ¹	O		O	O	X	O	O
Auxiliary function related	Fresh air intake kit (Chamber type) ^{1,2}	O	O		X	X	O	O
	Fresh air intake kit (Direct installation type)	O	O	X		O	O	O
	Insulation kit for high humidity	X	X	X	O		X	X
Filter related	High-efficiency filter unit ²	X	O	O	O	X		X
	Ultra long-life filter unit ²	X	O	O	O	X	X	

3-way flow 2-way flow ⁵		Optional accessory parts						
Independently installable optional parts		Auto grille panel	Panel spacer ¹	Fresh air intake kit (Chamber type) ^{1,2}	Fresh air intake kit (Direct installation type)	Insulation kit for high humidity	High-efficiency filter unit ²	Ultra long-life filter unit ²
Panel/grille related	Auto grille panel		Δ	O	O	X	X	X
	Panel spacer ^{1,3}	Δ		Δ	Δ	X	X	Δ
Auxiliary function related	Fresh air intake kit (Chamber type) ^{1,2}	O	Δ		X	X	X	O
	Fresh air intake kit (Direct installation type)	O	Δ	X		O	X	O
	Insulation kit for high humidity	X	X	X	O		X	X
Filter related	Ultra long-life filter unit ²	X	Δ	O	O	X	X	

Branch duct connection		Optional accessory parts						
Independently installable optional parts		Auto grille panel	Panel spacer ¹	Fresh air intake kit (Chamber type) ^{1,2}	Fresh air intake kit (Direct installation type)	Insulation kit for high humidity	High-efficiency filter unit ²	Ultra long-life filter unit ²
Branch duct chamber ¹	1-way branch / unit 3-way flow	O	O	O	O ⁺	X	X	O
	2-way branch / unit 2-way flow	O	X	O	O ⁺	X	X	O
	1-way branch / unit 2-way flow	O	X	O	O ⁺	X	X	O

1. In some cases, depending on how the unit is embedded in the ceiling, use of branch ducts and fresh air intake kits may not be possible. Before starting installation work make sure to check whether or not joint installation is possible. In particular, ensure that the lower fixing position caused by the addition of panel spacers is acceptable. When branch ducts are used, circulation airflow is not available.
2. When two different types of optional chambers are used together, a fresh air intake kit must be installed in the upper position.
3. It is not possible to use panel spacers in a 2-way flow installation. (Δ)
4. It is not possible to install a branch duct on the same side to which a fresh air intake kit (direct mount) is installed.
5. When 3-way or 2-way flow is selected, circulation airflow is not available.

Indoor unit

CEILING SUSPENDED TYPE



No.	Name of option	Remark	Kit name						
			FHA50BAVMA	FHA60BAVMA	FHA71BVMA	FHA85BVMA	FHA100BVMA	FHA125BVMA	FHA140BVMA
1	Replacement long-life filter	Resin net	KAF501B56		KAF501B80		KAF501B160		
2	Fresh air intake kit		KDDQ50A140						
3	Drain pump kit		KDU50R160						
4	L-type piping kit (for upward direction)		KHFP5N160						
5	Remote controller	Wireless type	Heat pump		BRC7M53				
6	Navigation Remote Controller	Wired type ¹ "Nav Ease"		BRC1E63					
7	Central remote controller ²	DCS302CA61							
8	Unified ON/OFF controller ²	DCS301BA61							
9	Schedule timer ²	DST301BA61							
10	intelligent Touch Controller ²	DCS601C51							
11	Adaptor for wiring	KRP1BA54							
12	Wiring adaptor for electrical appendices ³	KRP4AA52							
13	Installation box for adaptor PCB	KRP1D93A							
14	Adaptor box mounting plate	KKSAP50A56		—					
15	Remote sensor (for indoor temperature)	BRCS01A-4							
16	Electrical box with earth terminal (3 blocks)	KJB311AA							
17	Electrical box with earth terminal (2 blocks)	KJB212AA							

Note: ¹Wiring for wired remote controller should be obtained locally.
²The indoor unit is equipped standardly with the interface adaptor for SkyAir series. An option is unnecessary.
³Installation box for adaptor PCB (KRP1D93A) is necessary.

WALL MOUNTED TYPE



No.	Name of option	Remark	Kit name				
			FAA50BAVMA	FAA60BAVMA	FAA71BVMA	FAA85BVMA	FAA100BVMA
1	Drain-up kit		K-KDU572EVE				
2	Remote controller	Wireless type	Heat pump		BRC7EB518		
3	Navigation Remote Controller	Wired type ¹ "Nav Ease"		BRC1E63			
4	Wiring adaptor for electrical appendices(2)	KRP4AA51 *					
5	Installation box for adaptor PCB ²	KRP4AA93					
6	Central remote controller ³	DCS302CA61					
7	Unified ON/OFF controller ³	DCS301BA61					
8	Schedule timer ³	DST301BA61					
9	intelligent Touch Controller ³	DCS601C51					
10	Remote sensor (for indoor temperature)	BRCS01A-4					
11	Electrical box with earth terminal (3 blocks)	KJB311AA					
12	Electrical box with earth terminal (2 blocks)	KJB212AA					

Note: ¹Wiring for wired remote controller should be obtained locally.
²Installation box is necessary for each adaptor marked ★.
³The indoor unit is equipped standardly with the interface adaptor for SkyAir series. An option is unnecessary.

DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE



No.	Name of option	Remark	Kit name					
			FBA50BAVMA	FBA60BAVMA	FBA71BVMA	FBA85BVMA	FBA100BVMA	FBA125BVMA
1	High-efficiency filter ¹	65%	KAF632C80		KAF632C160			
		90%	KAF633C80		KAF633C160			
2	Filter chamber(for rear suction) ¹	KDDFP63B80						
3	Long-life filter ¹	KAF631C80		KAF631C160				
4	Service panel	White	KTBJ25K80W		KTBJ25K160W			
		Fresh white	KTBJ25K80F		KTBJ25K160F			
		Brown	KTBJ25K80T		KTBJ25K160T			
5	Air discharge adaptor	KDAP25A71A		KDAP25A140A				
6	Shield plate for side plate	KDBD63A160						
7	Remote controller	Wireless type	Heat pump		BRC4C65			
8	Navigation Remote Controller	Wired type ² "Nav Ease"		BRC1E63				
9	Adaptor for wiring	KRP1C64 *						
10	Wiring adaptor for electrical appendices(2)	KRP4AA51 *						
11	Mounting plate for adaptor PCB. ^{3,4,5}	KRP4A98						
12	Remote sensor (for indoor temperature)	BRCS01A-4						
13	Central remote controller ⁶	DCS302CA61						
14	Unified ON/OFF controller ⁶	DCS301BA61						
15	Schedule timer ⁶	DST301BA61						
16	intelligent Touch Controller ⁶	DCS601C51						

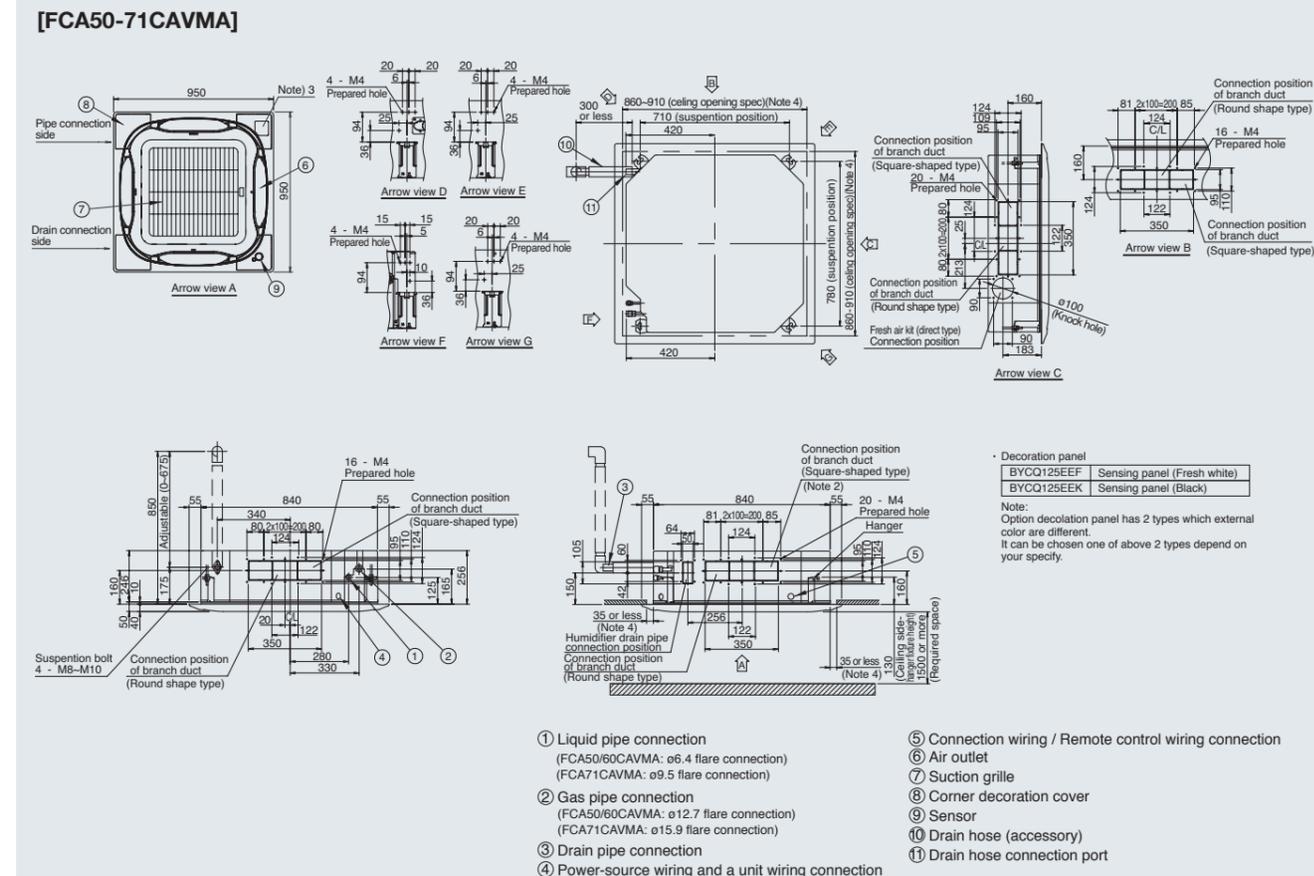
Note: ¹If installing high efficiency filter and long-life filter to the unit, filter chamber is required.
²Wiring for wired remote controller should be obtained locally.
³Mounting plate is necessary for each adaptor marked ★.
⁴Up to 2 adaptors can be fixed for each mounting plate.
⁵Only one mounting plate can be installed for each indoor unit.
⁶The indoor unit is equipped standardly with the interface adaptor for SkyAir series. An option is unnecessary.

Outdoor unit



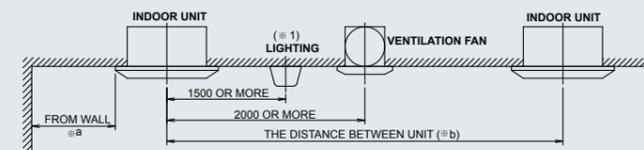
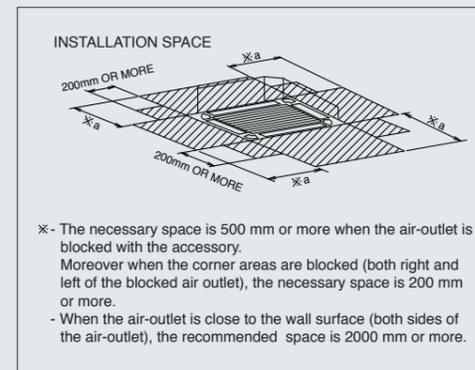
No.	Name of option	Premium Inverter series	Kit name			
			1 Phase	RZAV50/60CV1	RZAV71/85CV1	RZAV100/125/140CV1
			3 Phase	-----	RZAV71/85CV1	RZAV100/125/140CV1
		Inverter series	1 Phase	RZAC71CV1	RZAC85/100/125CV1	RZAC140CV1
			3 Phase	-----	RZAC85/100/125CV1	RZAC140CV1
1	Central drain plug			KKP014A4	KKPJ5G280	
2	Fixture for preventing overturning			-----	KKTP5B112	
3	Wire fixture for preventing overturning			-----	K-KYZP15C	
4	Demand adaptor			KRP58M6	KRP58M51+EKMKA2	

CEILING MOUNTED CASSETTE TYPE / Standard panel with Sensing



Note:

- Sticking location for Manufacture's label
 Manufacture's label for Indoor unit : Suction grille inner side's electric components box's lid surface.
 Manufacture's label for Decoration panel : Decoration panel's corner decoration cover inner surface.
- In case of having option part built-in, please refer outside drawing of option part.
 Fresh air intake kit.....inspection hole Need
 Natural evaporate type humidifier.....inspection hole Need
 Air purifier unit.....inspection hole No Need
 High efficiency filter unit.....inspection hole No Need
 Branch duct chamber.....inspection hole No Need
 (both angle duct + circle duct)
- In case of using wireless remote controller, this position will be a signal receiver.
 Refer to the drawing of wireless remote controller in detail.
- Though the installation is acceptable up to maximum of 910 mm square ceiling opening, keep the clearance of 35mm or less between the indoor unit and the ceiling opening so that the panel overlap allowance can be ensured.
- When the temperature and humidity in the ceiling exceed 30°C and 80% RH or the fresh air is inducted into the ceiling or the unit continues 24 hour operation, an additional insulation (thickness 10mm or more of glasswool or polyethylene form) is required.
- Please do not place the thing been damp and troubled under an indoor unit, when the case where humidity is 80% or more, and the drain outlet are choked up and the air filter are dirty, dew may fall.
- If put vent hole, lighting, equipment near the air flow disturb equipment, ceiling surface may get dirty, therefore shall install following to diagram as below.



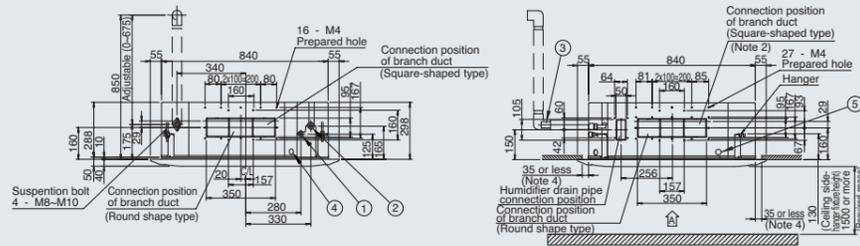
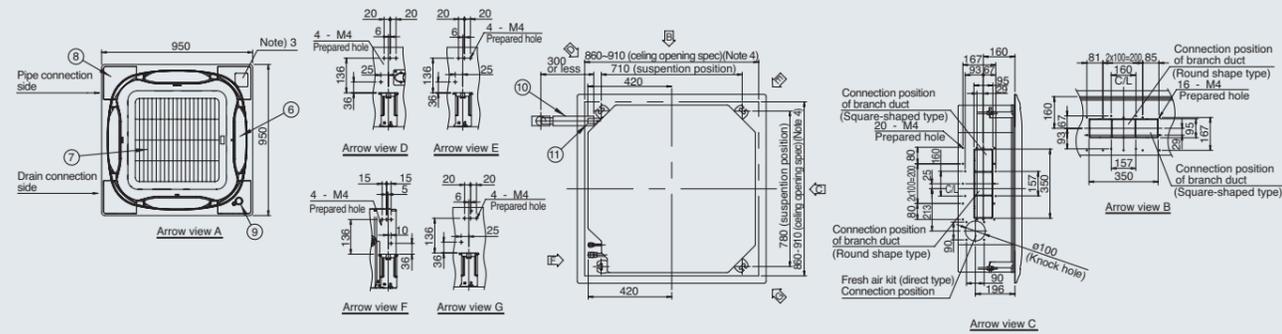
8. For fixing position of human detection and temp sensor will be follow to diagram instruction (can not change position).

Circulation air flow	Valid	※a	1500-5000
		※b	5000 or more
	Invalid	※a	1500 or more
		※b	4000 or more

(※1)Lighting is targeted for exposed type (inverse fuji-shape etc.), for embedded type (type that not expose to ceiling surface), there is no restriction.

CEILING MOUNTED CASSETTE TYPE / Standard panel with Sensing

[FCA85-140CVMA]



• Decoration panel

BYCQ125EEF	Sensing panel (Fresh white)
BYCQ125EEK	Sensing panel (Black)

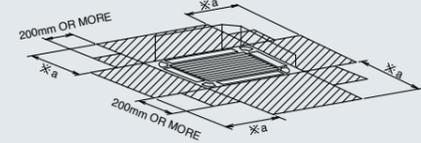
Note:
Option decoration panel has 2 types which external color are different.
It can be chosen one of above 2 types depend on your specify.

- ① Liquid pipe connection (ø9.5)
- ② Gas pipe connection (ø15.9)
- ③ Drain pipe connection
- ④ Power-source wiring and a unit wiring connection
- ⑤ Connection wiring / Remote control wiring connection
- ⑥ Air outlet
- ⑦ Suction grille
- ⑧ Corner decoration cover
- ⑨ Sensor
- ⑩ Drain hose (accessory)
- ⑪ Drain hose connection port

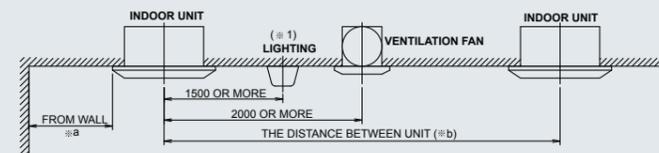
Note:

1. Sticking location for Manufacture's label
 Manufacture's label for Indoor unit : Suction grille inner side's electric components box's lid surface.
 Manufacture's label for Decoration panel : Decoration panel's corner decoration cover inner surface.
2. In case of having option part built-in, please refer outside drawing of option part.
 Fresh air intake kit.....inspection hole Need
 Natural evaporate type humidifier.....inspection hole Need
 Air purifier unit.....inspection hole No Need
 High efficiency filter unit.....inspection hole No Need
 Branch duct chamber.....inspection hole No Need
 (both angle duct • circle duct)
3. In case of using wireless remote controller, this position will be a signal receiver.
 Refer to the drawing of wireless remote controller in detail.
4. Though the installation is acceptable up to maximum of 910 mm square ceiling opening, keep the clearance of 35mm or less between the indoor unit and the ceiling opening so that the panel overlap allowance can be ensured.
5. When the temperature and humidity in the ceiling exceed 30°C and 80% RH or the fresh air is inducted into the ceiling or the unit continues 24 hour operation, an additional insulation (thickness 10mm or more of glasswool or polyethylene form) is required.
6. Please do not place the thing been damp and troubled under an indoor unit, when the case where humidity is 80% or more, and the drain outlet are choked up and the air filter are dirty, dew may fall.
7. If put vent hole, lighting, equipment near the air flow disturb equipment, ceiling surface may get dirty, therefore shall install following to diagram as below.

INSTALLATION SPACE



※ - The necessary space is 500 mm or more when the air-outlet is blocked with the accessory.
 Moreover when the corner areas are blocked (both right and left of the blocked air outlet), the necessary space is 200 mm or more.
 - When the air-outlet is close to the wall surface (both sides of the air-outlet), the recommended space is 2000 mm or more.



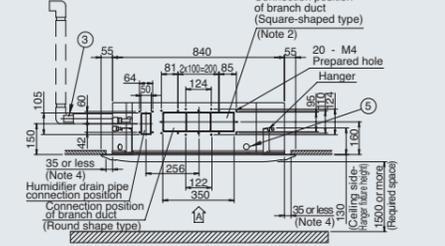
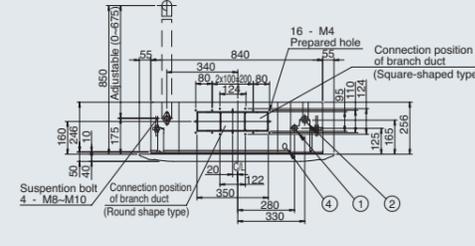
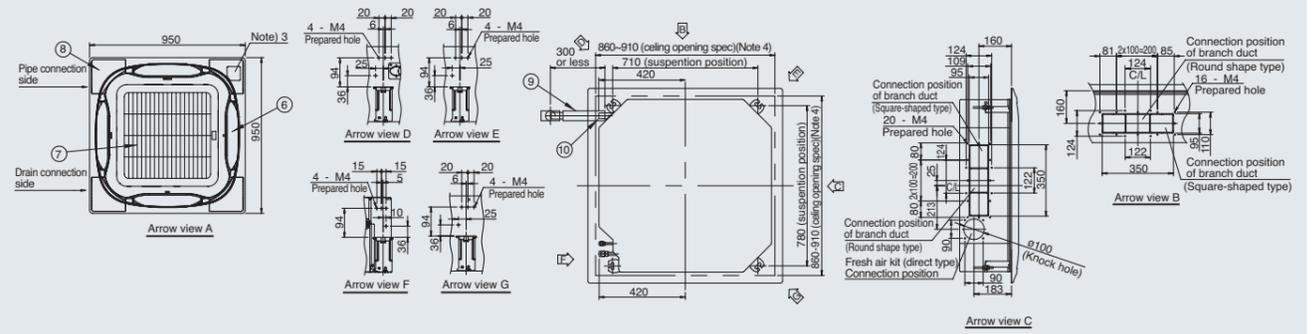
8. For fixing position of human detection and temp sensor will be follow to diagram instruction (can not change position).

Circulation air flow	Valid	※a	1500-7000
		※b	7000 or more
	Invalid	※a	1500 or more
		※b	4000 or more

(※ 1) Lighting is targeted for exposed type (inverse fuji-shape etc.), for embedded type (type that not expose to ceiling surface), there is no restriction.

CEILING MOUNTED CASSETTE TYPE / Standard panel

[FCA50-71CAVMA]



• Decoration panel

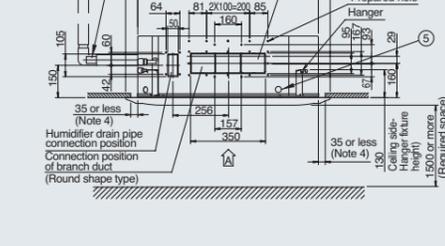
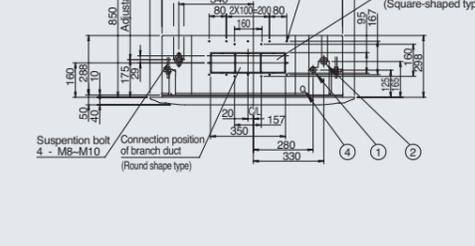
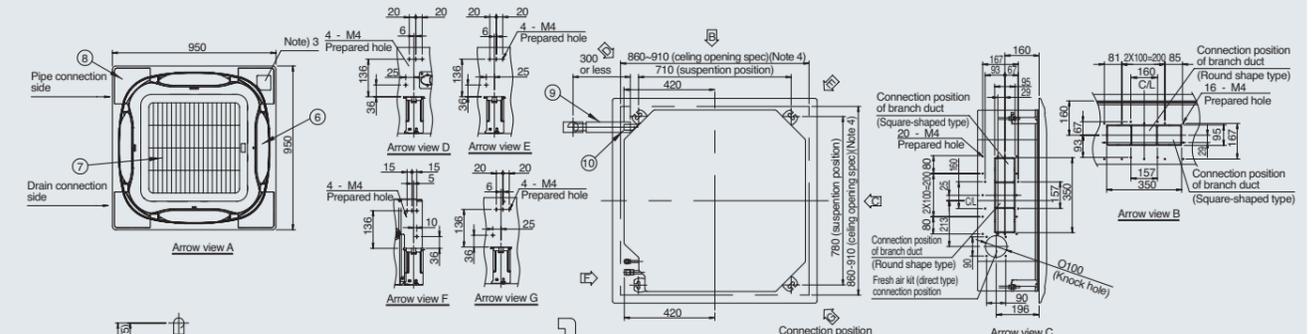
BYCQ125EAF	Standard panel (Fresh white)
BYCQ125EAK	Standard panel (Black)

Note:
Option decoration panel has 2 types which external color are different.
It can be chosen one of above 2 types depend on your specify.

- ① Liquid pipe connection
 (FCA50/60CAVMA: ø6.4 flare connection)
 (FCA71CAVMA: ø9.5 flare connection)
- ② Gas pipe connection
 (FCA50/60CAVMA: ø12.7 flare connection)
 (FCA71CAVMA: ø15.9 flare connection)
- ③ Drain pipe connection
- ④ Power-source wiring and a unit wiring connection
- ⑤ Connection wiring / Remote control wiring connection
- ⑥ Air outlet
- ⑦ Suction grille
- ⑧ Corner decoration cover
- ⑨ Sensor
- ⑩ Drain hose (accessory)
- ⑪ Drain hose connection port

CEILING MOUNTED CASSETTE TYPE / Standard panel

[FCA85-140CVMA]



• Decoration panel

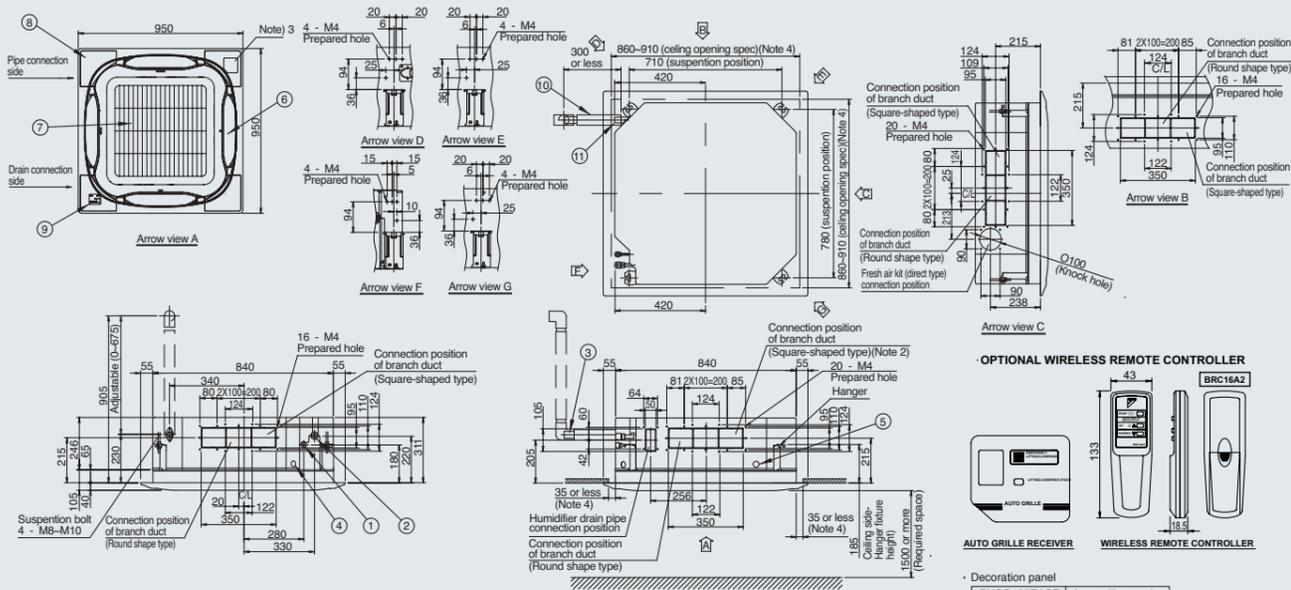
BYCQ125EAF	Standard panel (Fresh white)
BYCQ125EAK	Standard panel (Black)

Note:
Option decoration panel has 2 types which external color are different.
It can be chosen one of above 2 types depend on your specify.

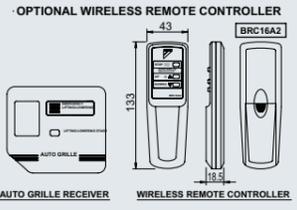
- ① Liquid pipe connection (ø9.5)
- ② Gas pipe connection (ø15.9)
- ③ Drain pipe connection
- ④ Power-source wiring and a unit wiring connection
- ⑤ Connection wiring / Remote control wiring connection
- ⑥ Air outlet
- ⑦ Suction grille
- ⑧ Corner decoration cover
- ⑨ Drain hose(accessory)
- ⑩ Drain hose connection port

CEILING MOUNTED CASSETTE TYPE / Auto grille panel

[FCA50-71CAVMA]



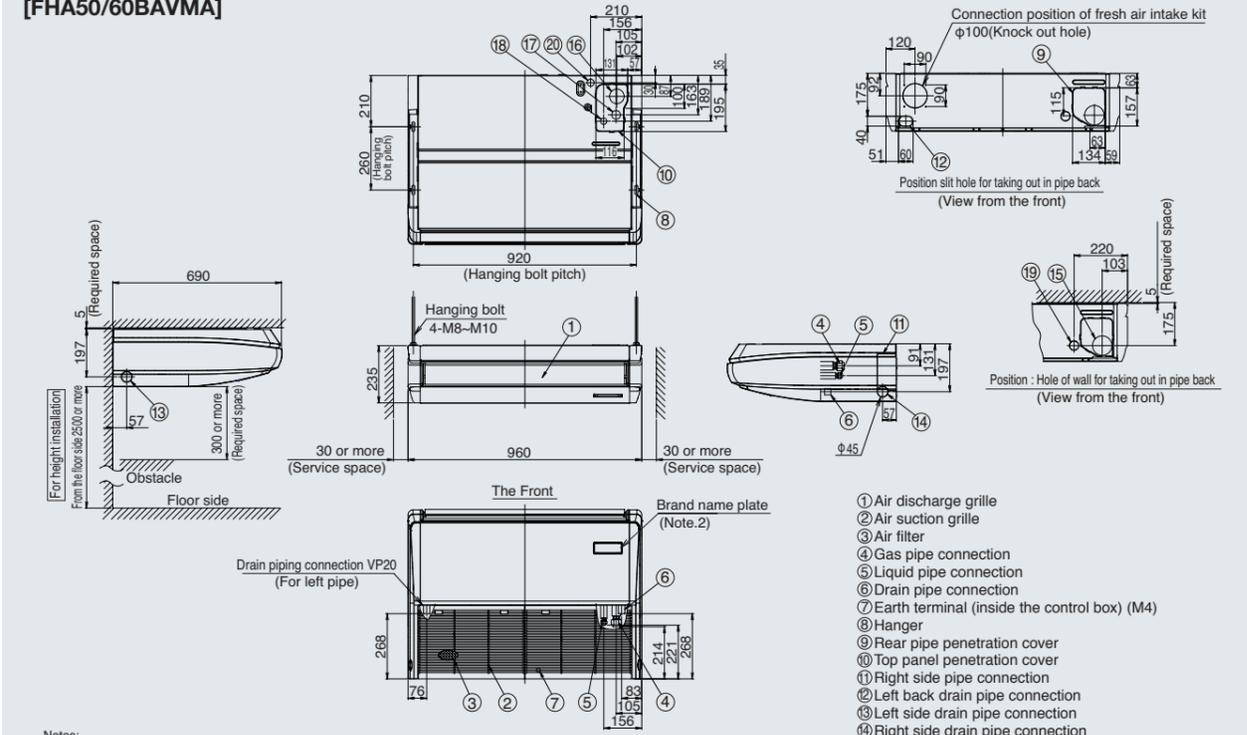
- ① Liquid pipe connection (FCA50/60CAVMA: ø6.4 flare connection) (FCA71CAVMA: ø9.5 flare connection)
- ② Gas pipe connection (FCA50/60CAVMA: ø12.7 flare connection) (FCA71CAVMA: ø15.9 flare connection)
- ③ Drain pipe connection
- ④ Power-source wiring and a unit wiring connection
- ⑤ Connection wiring / Remote control wiring connection
- ⑥ Air outlet
- ⑦ Suction grille
- ⑧ Corner decoration cover
- ⑨ Sensor
- ⑩ Drain hose (accessory)
- ⑪ Drain hose connection port



• Decoration panel
BYCQ125EASF Auto grille panel

CEILING SUSPENDED TYPE

[FHA50/60BAVMA]

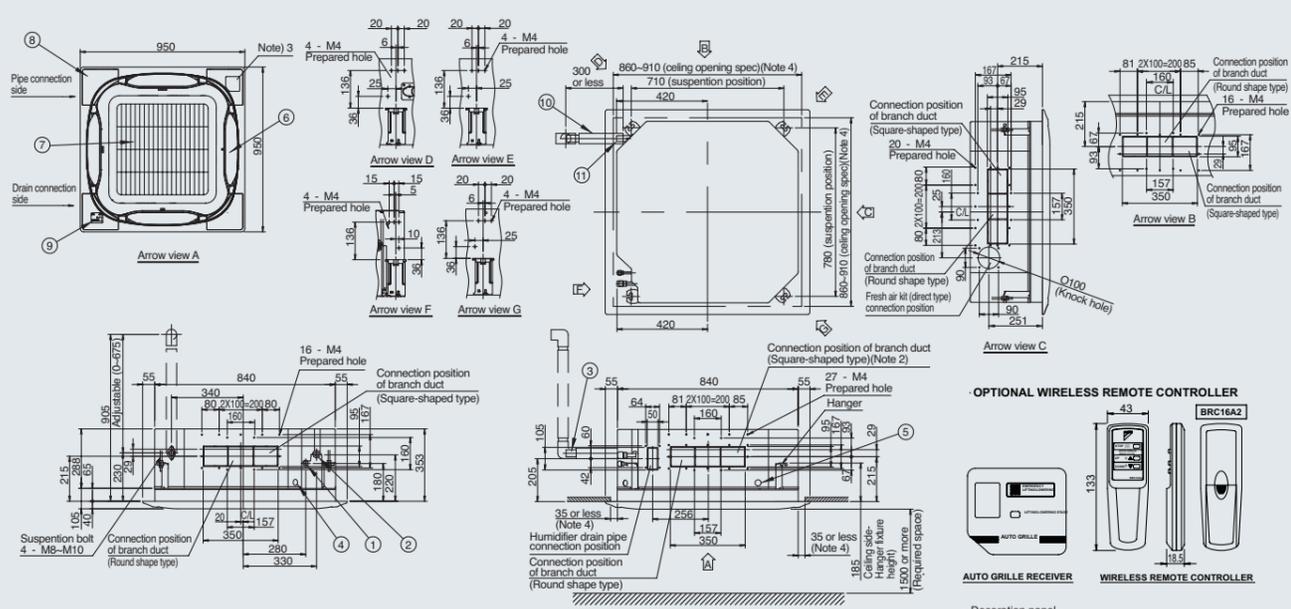


- ① Air discharge grille
- ② Air suction grille
- ③ Air filter
- ④ Gas pipe connection
- ⑤ Liquid pipe connection
- ⑥ Drain pipe connection
- ⑦ Earth terminal (inside the control box) (M4)
- ⑧ Hanger
- ⑨ Rear pipe penetration cover
- ⑩ Top panel penetration cover
- ⑪ Right side pipe connection
- ⑫ Left back drain pipe connection
- ⑬ Left side drain pipe connection
- ⑭ Right side drain pipe connection
- ⑮ Hole of wall for taking out in pipe back
- ⑯ Upward drain pipe connection
- ⑰ Upward gas pipe connection
- ⑱ Upward liquid pipe connection
- ⑲ Power supply wiring and a unit wiring back connection
- ⑳ Power supply wiring and a unit wiring upper connection

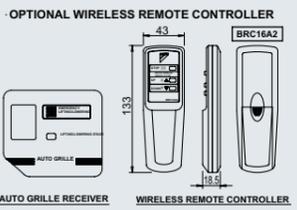
Notes:
 1 Location of unit's Name Plate: Bottom of fan housing inside the suction grille.
 2 In case of using wireless remote controller, this position will be a signal receiver. Refer to the drawing of wireless remote controller in detail.
 3 Please do not place the thing been damp and troubled under an indoor unit.
 When the case where humidity is 80% or more, and the drain outlet are choked up and the air filter are dirty, dew may fall.

CEILING MOUNTED CASSETTE TYPE / Auto grille panel

[FCA85-140CVMA]



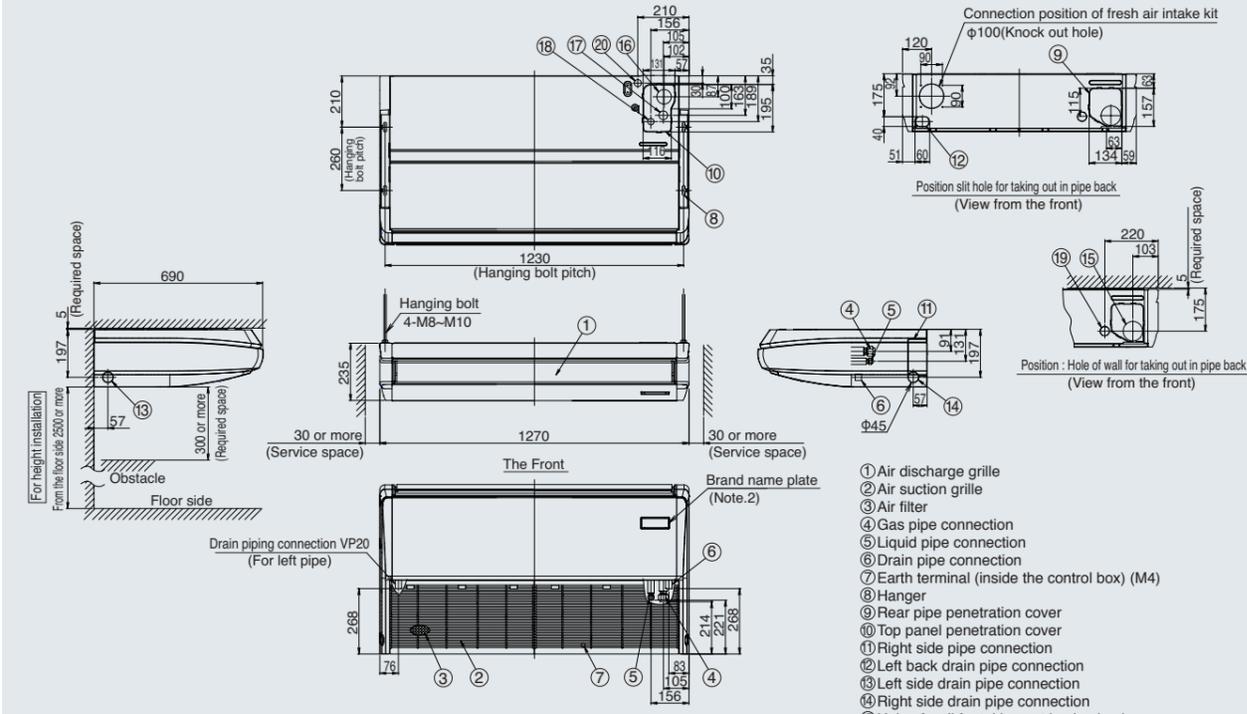
- ① Liquid pipe connection (ø9.5)
- ② Gas pipe connection (ø15.9)
- ③ Drain pipe connection
- ④ Power-source wiring and a unit wiring connection
- ⑤ Connection wiring / Remote control wiring connection
- ⑥ Air outlet
- ⑦ Suction grille
- ⑧ Corner decoration cover
- ⑨ Auto grille receiver
- ⑩ Drain hose (accessory)
- ⑪ Drain hose connection port



• Decoration panel
BYCQ125EASF Auto grille panel

CEILING SUSPENDED TYPE

[FHA71BVMA]

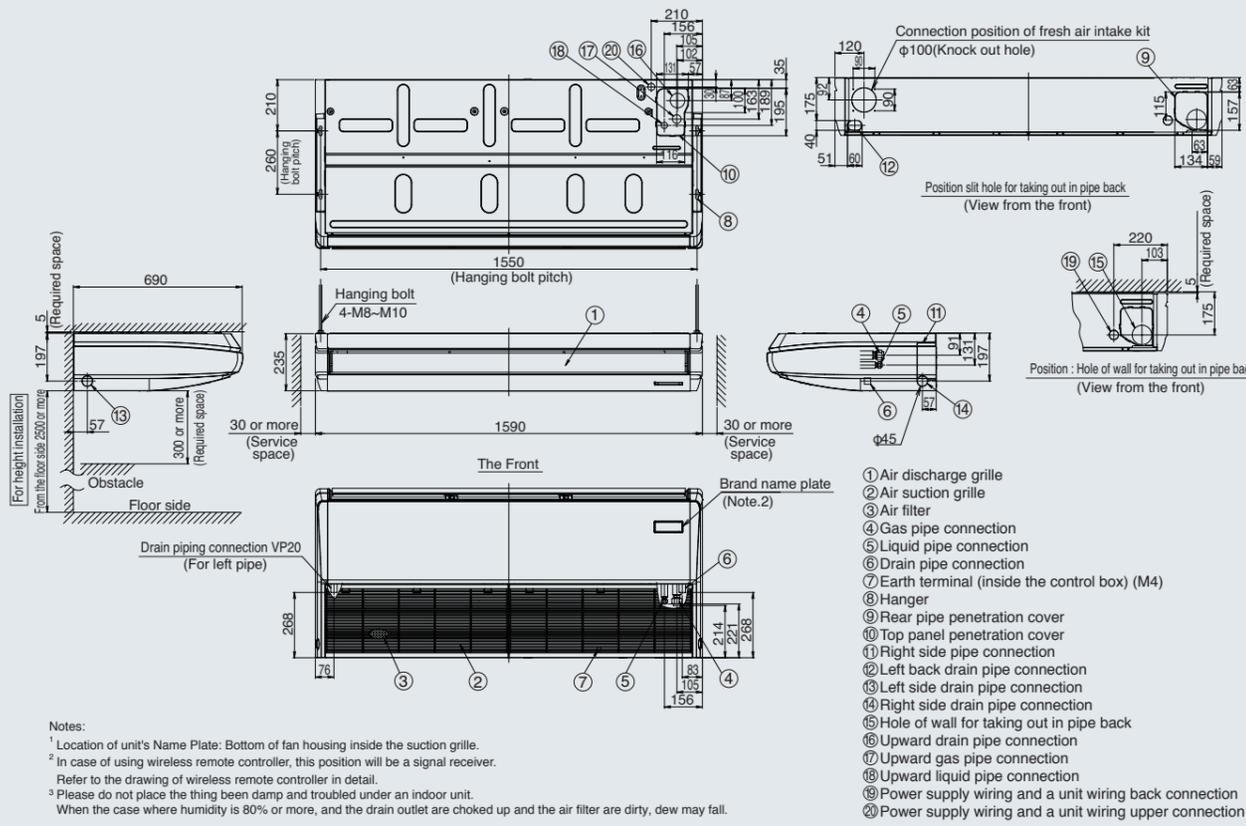


- ① Air discharge grille
- ② Air suction grille
- ③ Air filter
- ④ Gas pipe connection
- ⑤ Liquid pipe connection
- ⑥ Drain pipe connection
- ⑦ Earth terminal (inside the control box) (M4)
- ⑧ Hanger
- ⑨ Rear pipe penetration cover
- ⑩ Top panel penetration cover
- ⑪ Right side pipe connection
- ⑫ Left back drain pipe connection
- ⑬ Left side drain pipe connection
- ⑭ Right side drain pipe connection
- ⑮ Hole of wall for taking out in pipe back
- ⑯ Upward drain pipe connection
- ⑰ Upward gas pipe connection
- ⑱ Upward liquid pipe connection
- ⑲ Power supply wiring and a unit wiring back connection
- ⑳ Power supply wiring and a unit wiring upper connection

Notes:
 1 Location of unit's Name Plate: Bottom of fan housing inside the suction grille.
 2 In case of using wireless remote controller, this position will be a signal receiver. Refer to the drawing of wireless remote controller in detail.
 3 Please do not place the thing been damp and troubled under an indoor unit.
 When the case where humidity is 80% or more, and the drain outlet are choked up and the air filter are dirty, dew may fall.

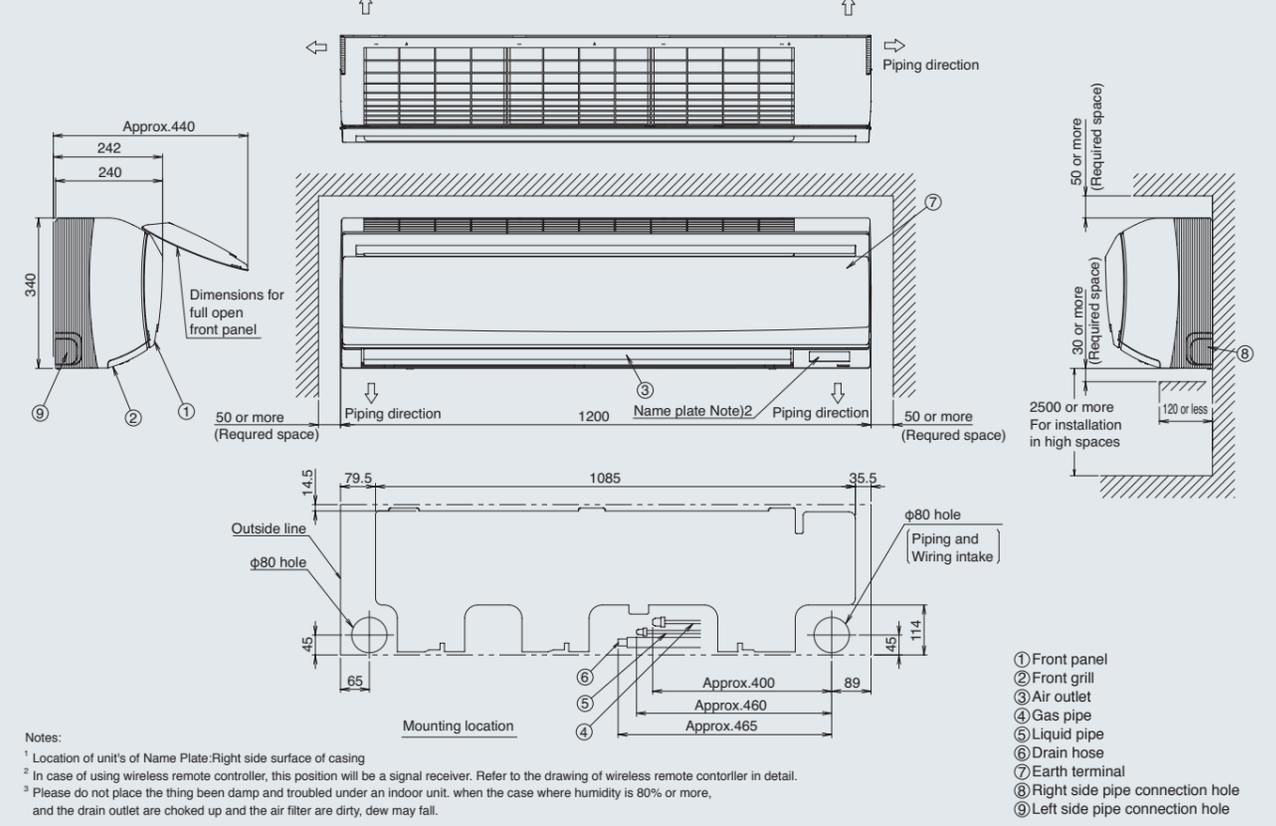
CEILING SUSPENDED TYPE

[FHA85-140BVMA]



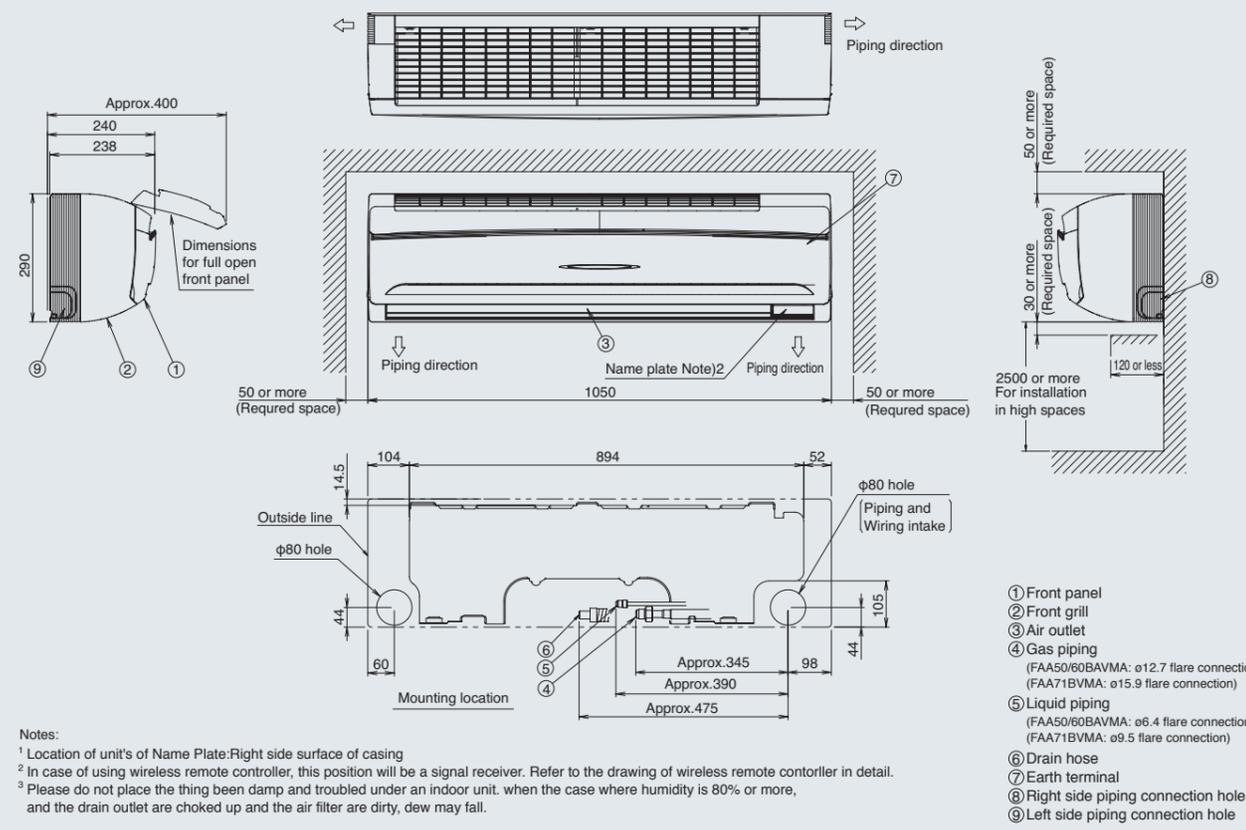
WALL MOUNTED TYPE

[FAA85/100BVMA]



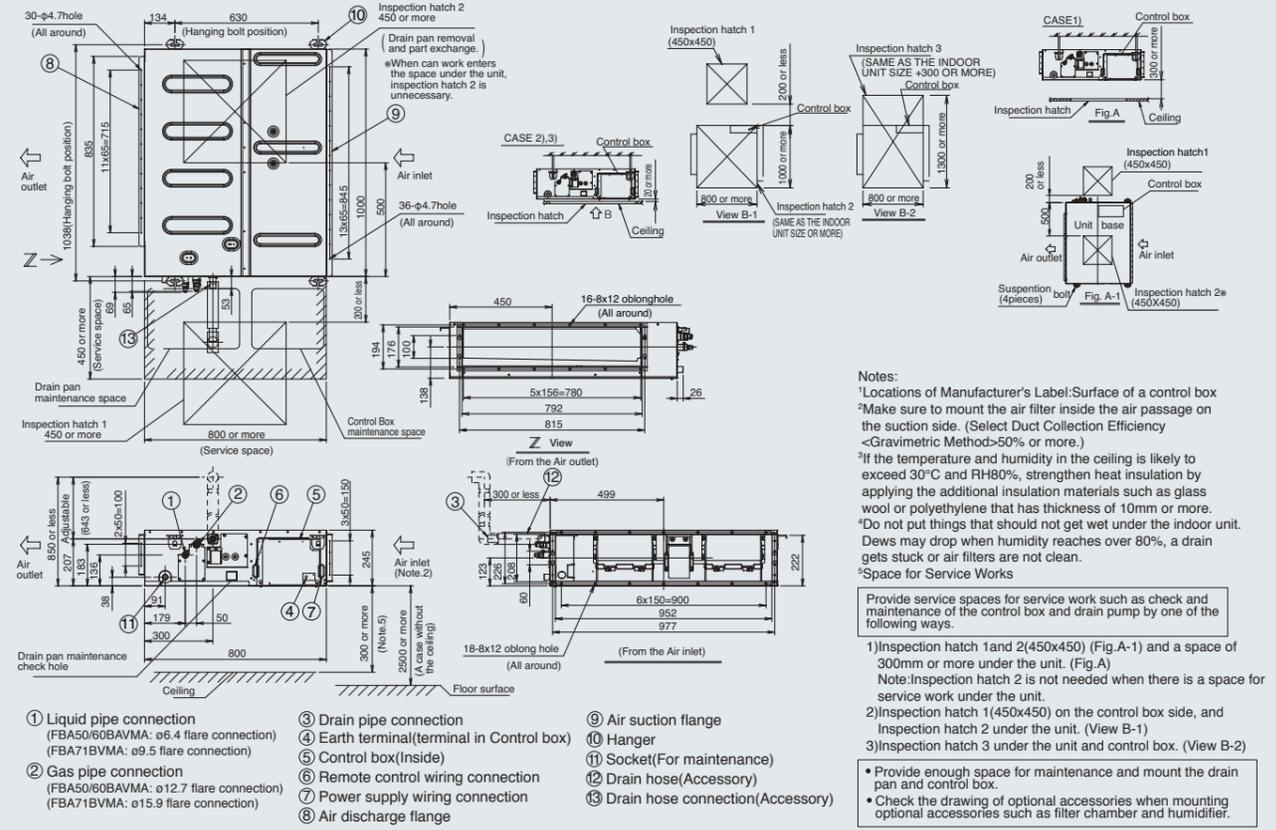
WALL MOUNTED TYPE

[FAA50/60BAVMA, 71BVMA]

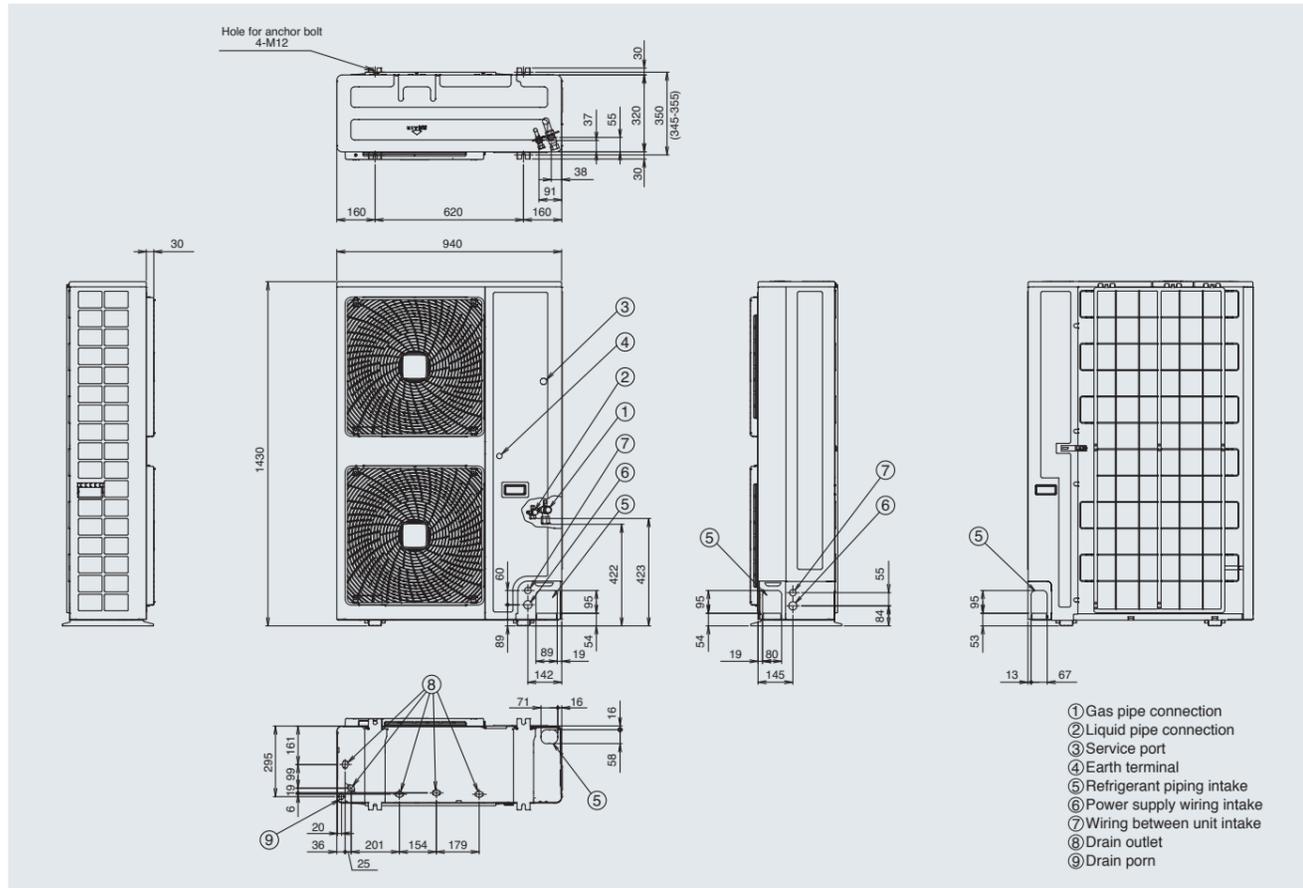


DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE

[FBA50/60BAVMA, 71BVMA]



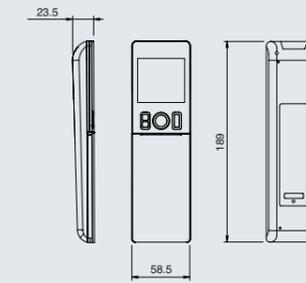
OUTDOOR UNIT // RZAV100-140CV1 / CY1, RZAC140CV1 / CY1



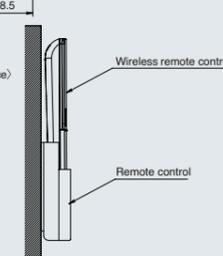
REMOTE CONTROLLER

<Wireless type>

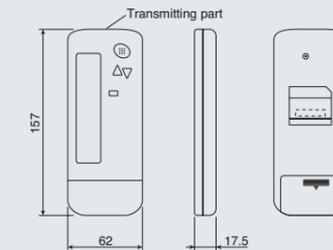
Remote controller dimensions



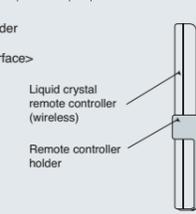
Remote controller holder installation procedure (Installation to wall surface)



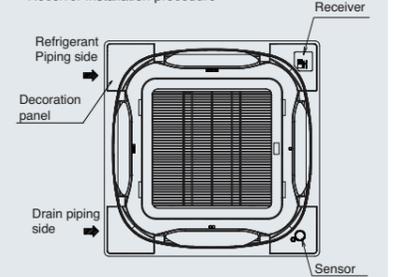
Remote controller dimensions



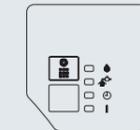
Remote controller holder installation procedure <installation to wall surface>



CEILING MOUNTED CASSETTE TYPE <Round Flow>
Receiver installation procedure



Receiver detail



CEILING SUSPENDED TYPE

Receiver installation procedure

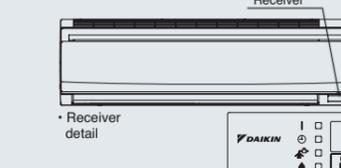


Receiver detail



WALL MOUNTED TYPE

Receiver installation procedure

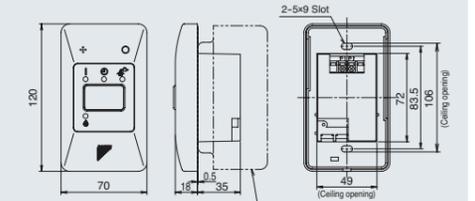


Receiver detail

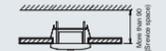


DUCT CONNECTION MIDDLE STATIC PRESSURE TYPE

Receiver detail



Service space for ceiling installation

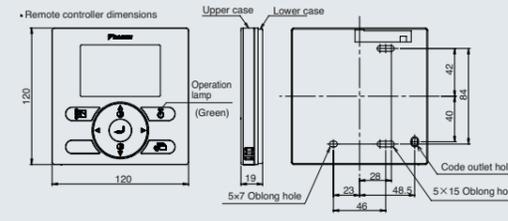


Note: Do not install more than 3 receivers in the vicinity of one another. With 4 or more units, there is always the possibility of malfunction.

<Wired type> Remote controller dimensions

BRC1E63

Remote controller dimensions



Installation method

Ⓐ Exposed cord

Ⓑ Embedded cord

Ⓒ Embedded cord (use switch box)

Conduit

Switch box for one switch Ex. KJB111A (optional accessory)

Switch box for two switch Ex. KJB211A (optional accessory)

Between remote controller and control box

Switch box [field supplied part]

Note

- Remote controller cord and staple are not attached. They are field supplied parts.
- If the hole size is too large or the location is not proper, the hole may come out from the remote controller.

Specifications of cord

Type	Vinyl cord with sheath or cable (insulated thickness: 1mm or more)
Size	0.75~1.25 mm ²
Total length	500 m

■ For RZAV50-140CV1/CY1, RZAC71-140CV1/CY1

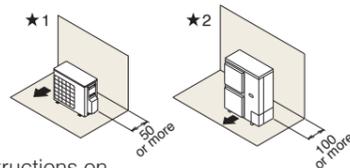
★1.RZAV50/60CV1, RZAC71CV1 ★2.RZAV71-140CV1/CY1, RZAC85-140CV1/CY1

1 When there is an obstruction on the inlet side

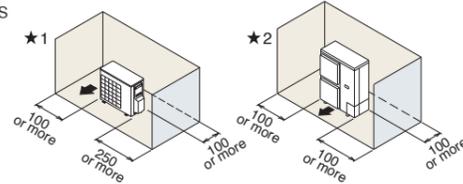
1) When the overhead space is open

1. For single unit installation

When there is an obstruction only on the inlet side

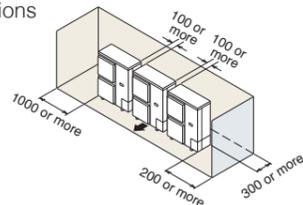


When there are obstructions on both sides



2. For series installation (more than two units)

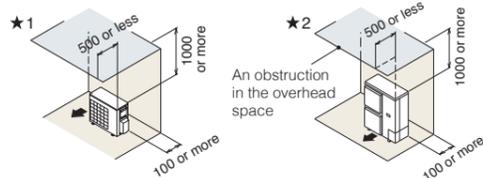
When there are obstructions on both sides



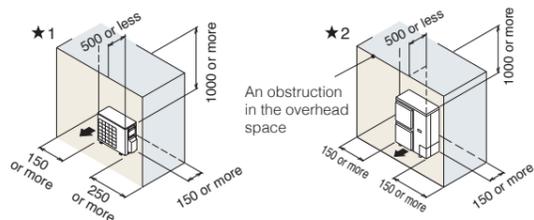
2) When there is an obstruction in the overhead space

1. For single unit installation

When there is an obstruction on the inlet side

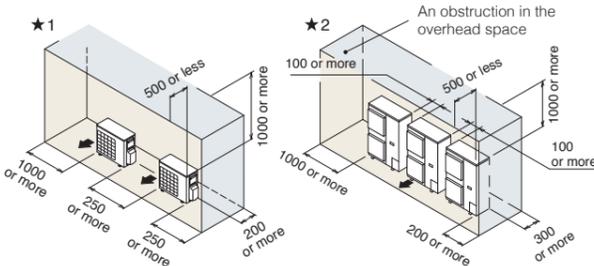


When there are obstructions on the inlet side and both lateral sides



2. For series installation (more than two units)

When there are obstructions on the inlet side and both lateral sides



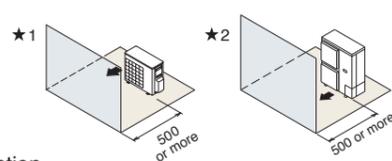
Note : As for other patterns of installation, please refer to Installation manual or Engineering Data Book.

MEMO

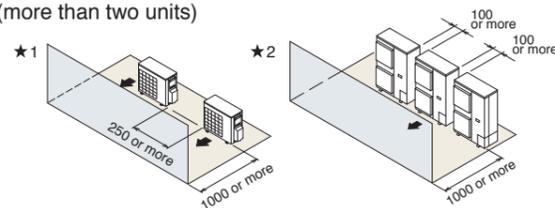
2 When there is an obstruction on the outlet side

1) When the overhead space is open

1. For single unit installation

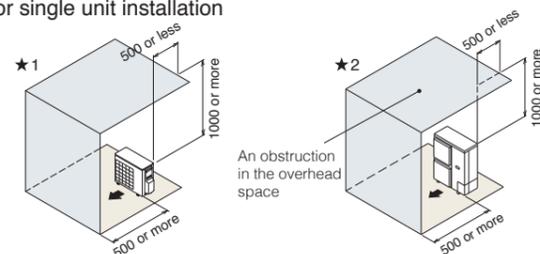


2. For series installation (more than two units)

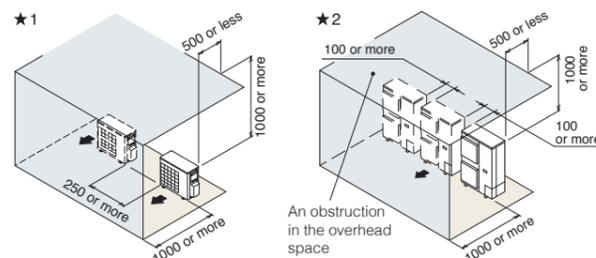


2) When there is an obstruction in the overhead space

1. For single unit installation



2. For series installation (more than two units)



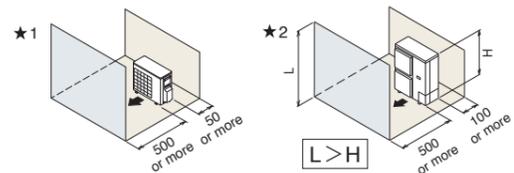
3 When there are obstructions on both the inlet and outlet sides

(When the obstruction on the outlet side is higher than the unit itself)

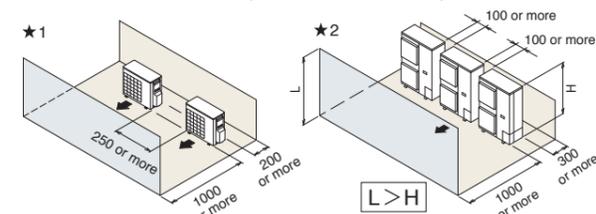
1) When the overhead space is open

(There is no limit to the height of the obstruction on the outlet side.)

1. For single unit installation



2. For series installation (more than two units)





Warning



- Ask a qualified installer or contractor to install this product. Do not try to install the product by yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as an acidic or alkaline gas, are produced.
2. When installing outdoor units in coastal areas, be sure to contact your local distributor and avoid direct exposure of the units to sea breezes.