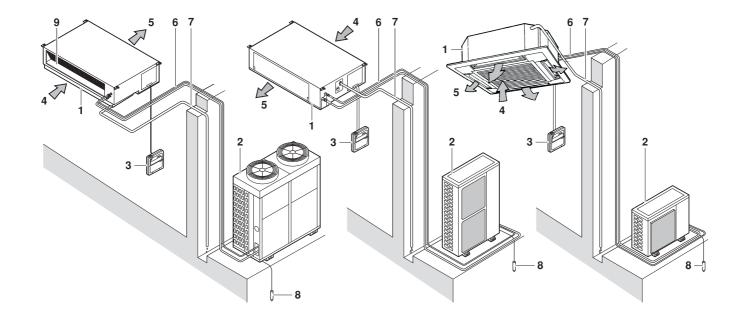


## **OPERATION MANUAL**

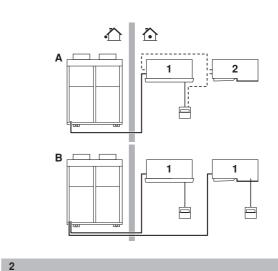
# **Split system air conditioners**

FHB35FK7V1 FHB45FK7V1 FHB60FK7V1	FHB35GZ7V1 FHB45GZ7V1 FHYB35GZ7V1 FHYB45GZ7V1
FHYB35FK7V1	FHYBP35B7V1
FHYB45FK7V1	FHYBP45B7V1
FHYB60FK7V1	FHYBP60B7V1
FHYB71FK7V1	FHYBP71B7V1
FHYB100FK7V1	FHYBP100B7V1
FHYB125FK7V1	FHYBP125B7V1
FHC35B7V1	FHC35BZ7V1
FHC45B7V1	FHC45BZ7V1
FHC60B7V1	FHC60BZ7V1
FHYC35B7V1	FHYC35BZ7V1
FHYC45B7V1	FHYC45BZ7V1
FHYC60B7V1 FHYC71B7V1 FHYC100B7V1 FHYC125B7V1	FHYCP35B7V1 FHYCP45B7V1 FHYCP60B7V1 FHYCP71B7V1 FHYCP100B7V1 FHYCP125B7V1
FDY125B7V1	FDYP125B7V1
FDY200B7V1	FDYP200B7V1
FDY250B7V1	FDYP250B7V1
FBQ35B7V1	FCQ35B7V1
FBQ50B7V1	FCQ50B7V1
FBQ60B7V1	FCQ60B7V1
FBQ71B7V3B	FCQ71B7V3B
FBQ100B7V3B	FCQ100B7V3B
FBQ125B7V3B	FCQ125B7V3B

FDQ125B7V3B



**∙**CR22 **-**△ R**410**A **-**⚠R407C \*\* ŀс 000 ∦°c ∦°c ∦°c °C DB 18-33 R35-45-60 °C WB 12-24 -15~46 -15~43 °C DB 18-35 R(P)71-100-125 ≤80% °C WB 14-25 °C DB 18-35 R(P)200-250 -5~46 -5~43 14-24 °C WB °C DB 18-33 RY35-45-60 °C WB 12-24 -5~46 °C DB 18-35 RY(P)71-100-125 -5~43 ≤80% °C WB 12-25 °C DB 18-35 0~46 RY200-250 °C WB RS50-60 °C DB 21-32 RKS35-50-60 ≤80% -10~46 14-23 °C WB RXS35-50-60 3MKS50 °C DB 4MKS58-75-90 21-32 ≤80% -10~46 3MXS52 °C WB 14-23 4MXS68-80 °C DB 18-35 RZQ71-100-125 ≤80% -15~50 °C WB

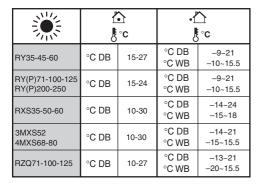


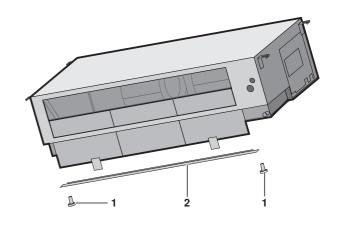






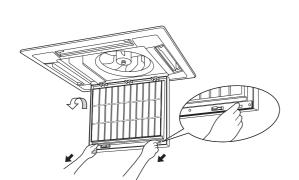
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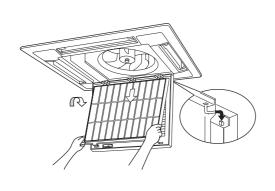


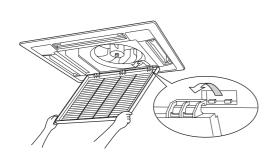


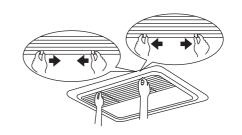
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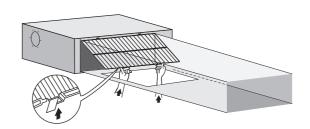


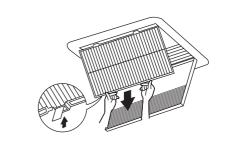


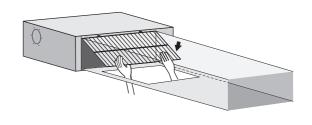














	FHC	FDY
В	FHYC	FDYF
BP	FHYCP	FBQ
		FCQ
		FDO

CONTENTS	Page
What to do before operation	1
Names and functions of parts	1
Operation range	1
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Not a malfunction of the air conditioner	2
Troubleshooting	3
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THANK YOU FOR PURCHASING THIS DAIKIN AIR CONDITIONER. CAREFULLY READ THIS OPERATION MANUAL BEFORE USING THE AIR CONDITIONER. IT WILL TELL YOU HOW TO USE THE UNIT PROPERLY AND HELP YOU IF ANY TROUBLE OCCURS. AFTER READING THE MANUAL, FILE IT AWAY FOR FUTURE REFERENCE.

### WHAT TO DO BEFORE OPERATION (See figure 2)

This operation manual is for the following systems with standard control. Before initiating operation, contact your Daikin dealer for the operation manual that corresponds to your system.

NOTE



These units can be controlled by a remote controller. Refer to the manual of the remote controller for more information.

If your installation has a customized control system, ask your Daikin dealer for the operation that corresponds to your system.

- A Pair system or simultaneous operation system
- B Multi system
- 1 Unit with remote controller
- 2 Unit without remote controller (When used as simultaneous operation)
- Heat pump type

This system provides cooling, heating, automatic, and fan operation modes.

Straight cooling type

This system provides cooling, and fan operation modes.

#### NAMES AND FUNCTIONS OF PARTS (See figure 1)

- 1 Indoor unit
- 2 Outdoor unit
- 3 Remote controller
- 4 Inlet air
- 5 Discharged air
- 6 Refrigerant piping, connection electric wire
- 7 Drain pipe
- 8 Ground wire
  Wire to ground outdoor unit to prevent electrical shocks.
- 9 Air filter



- Never let the indoor unit and the remote controller get wet.
  - It may cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer or paint near the unit. It may cause a fire.
- Never replace a fuse with that of a wrong ampere rating or other wires when the fuse blows out. Use of wire or copper wire may cause the unit to break down or cause a fire.
- Never touch the air outlet or the horizontal blades while the swing flap is in operation. Fingers may become caught or the unit may break down.
- Never insert objects such as sticks into the air inlet or outlet. It is dangerous for an object to touch the fan when it is turning at high speed.
- Never remove the fan guard of the outdoor unit. The rotating fan at high speed without the guard is very dangerous.
- Never inspect or service the unit by yourself.
   Ask a qualified service person to perform this work.

#### **OPERATION RANGE** (See figure 4)

If operating outside the following conditions, safety devices may activate, rendering the air conditioner inoperable or may cause the indoor unit to sweat.

The setting temperature range of the remote controller is 16°C-32°C.

(DB=dry bulb, WB=wet bulb, ♣=cooling, ♣=heating, ♣=indoor, ♣=outdoor, ♣°C=temperature, ०00=humidity)

## INSTALLATION SITE

sound.



- Never place anything under the indoor unit that you don't want to get wet.
  - The unit may sweat when the humidity is over 80% or when the drain outlet is clogged.
- Never place other heating equipment directly beneath the indoor unit. Subject to deformation caused by heat.
- Do not place TV, radio, stereo, etc. within 1 meter from the indoor unit and remote controller.
   Doing so may cause interference in the picture or

### **OPERATION PROCEDURE**



- If a function that is not available is selected, the message NOT AVAILABLE will appear.
- Operating procedure varies with heat pump type and straight cooling type. Contact your Daikin dealer to confirm your system type.
- To protect the unit, turn on the main power switch 6 hours before operation.
- If the main power supply is turned off during operation, operation will restart automatically after the power turns back on again.



Set the temperature within the ranges mentioned under "Operation range" on page 1.

## Precautions for group control system or two remote controller control system

This system provides two other control systems beside individual control (one remote controller controls one indoor unit) system. Confirm the following if your unit is of the following control system type.

- Group control system
   One remote controller controls up to 16 indoor units.
   All indoor units are equally set.
- Two remote controller control system Two remote controllers control one indoor unit (In case of group control system, one group of indoor units). The unit is individually operated.

NOTE

Contact your Daikin dealer in case of changing the combination or setting of group control and two remote controller control systems.

#### **OPTIMUM OPERATION**

Observe the following precautions to ensure the system operates properly.

- Adjust the air outlet properly and avoid direct air flow to room inhabitants.
- Adjust the room temperature properly for a comfortable environment. Avoid excessive heating or cooling.
- Prevent direct sunlight from entering a room during cooling operation by using curtains or blinds.
- Keep doors and windows closed. If the doors and windows remain open, room air will flow out and decrease the effect of cooling and heating.
- Never place objects near the air inlet and the air outlet of the unit. It may retard effectiveness or cause operation to stop.
- Turn off the main power supply switch when not using for long periods of time. Electricity is consumed as long as the switch is on. Turn off the main power supply switch in order to save energy. Turn on the main power supply switch 6 hours before restarting operation in order to ensure smooth operation. (Refer to "Maintenance" on page 4.)
- When the display shows ". " (TIME TO CLEAN AIR FILTER), have a qualified service person to clean the filters. (Refer to "Maintenance" on page 4.)

#### **N**OT A MALFUNCTION OF THE AIR CONDITIONER

The following symptoms do not indicate air conditioner malfunction.

#### The system does not operate

The system does not restart immediately after the ON/OFF button is pressed.

If the OPERATION lamp lights, the system is in its normal operating condition.

It does not restart immediately because one of its safety devices actuates to prevent the system from being overloaded.

The system will turn on again automatically after three minutes.

■ The system does not restart immediately when the TEMPERATURE SETTING button is returned to its former position after pushing.

It does not restart immediately because one of its safety devices actuates to prevent the system from being overloaded.

The system will turn on again automatically after three minutes.

■ The system does not start when the display shows " \_\_\_\_," (EXTERNAL CONTROL ICON) and it flashes for a few seconds after pressing an operation button.

This is because the system is controlled or disabled by another controller with a higher priority.

When the display flashes, it indicates that the system cannot be controlled by this indoor unit.

The system does not start immediately after the power supply is turned on.

Wait one minute until the micro computer is prepared for operation.

■ The outdoor unit has stopped.

This is because the room temperature has reached the set temperature. The unit switches to fan operation.

" (EXTERNAL CONTROL ICON) is displayed on the remote controller and the actual operation is different from the remote controller setting.

For multi split models, the micro computer executes the following control depending on the operation mode of other indoor units.

Before you start to operate, the other indoor unit(s) is (are) already operating. When the operation mode of this unit is different from your choice, the indoor unit of your room may be put in waiting condition. (Fan: Stop, Horizontal flap: Horizontal position)

Operation mode					
Your room	Other room(s)				
	Cooling	Dry	Fan only	Heating	
Cooling	0	0	0	W	
Dry	0	0	0	W	
Fan only	0	0	0	W	
Heating	W	W	W	0	

O: your unit can operate
W: your unit in waiting mode

- When the total cooling capacity of all indoor units which are operating is beyond the capacity limit of the outdoor unit, your indoor unit will be put in waiting condition. (Fan and horizontal flap: Same as setting: (cooling only model only))
- After cooling mode operation of the unit of your room, when other unit(s) start to operate, the unit of your room may operate as follows: Fan: L tab, Horizontal flap: Horizontal position.
- The fan speed is different from the setting. Pressing the fan speed contol button does not change the fan speed.

When the room temperature reaches the set temperature in heating mode, the capacity supply from the outdoor unit has stopped and the indoor unit operates in fan only mode (L tab). In case of multi split, the indoor unit alternately operates fan stop and fan only mode (L tab).

This is to prevent the cool air from being blown directly onto anyone present in the room.

#### Air blow direction is not as specified

- Actual air blow direction is not as shown on the remote controller.
- Automatic swing setting does not work.

Refer to the manual of the remote controller.

#### White mist comes out of a unit

When humidity is high during cooling operation (In oily or dusty places).

If the inside of an indoor unit is extremely contaminated, the temperature distribution inside a room becomes uneven. It is necessary to clean the inside of the indoor unit. Ask your Daikin dealer for details on cleaning the unit. This operation requires a qualified service person.

When the system is changed over to HEATING OPERATION after DEFROST OPERATION.

Moisture generated by DEFROST becomes steam and exits.

#### Noise of air conditioners

 A continuous low "hissing" sound is heard when the system is in COOLING or DEFROST OPERATION.

This is the sound of refrigerant gas flowing through both indoor and outdoor units.

A "hissing" sound which is heard at the start or immediately after the stop of operation or which is heard at the start or immediately after the stop of DEFROST OPERATION. This is the noise of refrigerant caused by flow stop and flow

change.

A continuous low "swishing" sound is heard when the system is

The noise is heard when the drain pump is in operation.

in COOLING OPERATION or at a stop.

 A "squeaking" sound is heard when the system is in operation or after the stop of operation.

Expansion and contraction of plastic parts caused by temperature change makes this noise.

#### Dust from the units

 Dust may blow out from the unit after starting operation from long resting time. Dust absorbed by the unit blows out.

#### The units give off odours

The unit absorbs the smell of rooms, furniture, cigarettes, etc., and then emits them.

## The liquid crystal display of the remote controller shows "

 Happens immediately after the main power supply switch is turned on.

Shows that the remote controller is in normal condition. Continues temporarily.

#### **TROUBLESHOOTING**

If one of the following malfunctions occurs, take the measures shown below and contact your Daikin dealer.

The system must be repaired by a qualified service person.

- If a safety device such as a fuse, a breaker, or an earth leakage breaker frequently actuates, or ON/OFF switch does not properly work.
  - Measure: Turn off the main power switch.
- If water leaks from unit.
  - Measure: Stop the operation.
- If the display "☆" (INSPECTION), "UNIT No.", and the OPERATION lamp flashes and the "MALFUNCTION CODE" appears.

Measure: Notify your Daikin dealer and inform him/her of the display.

If the system does not operate properly, except for the above mentioned case, and none of the above mentioned malfunctions are evident, investigate the system according to the following procedures.

#### If the system does not operate at all.

- Check if there is a power failure.
  - Wait until power is restored. If power failure occurs during operation, the system automatically restarts immediately after the power supply recovers.
- Check if the fuse has blown or breaker has been tripped. Change the fuse or set the breaker.

#### If the system stops operating after operation is complete.

- Check if the air inlet or outlet of outdoor or indoor unit is blocked by obstacles.
  - Remove the obstacle and make it well-ventilated.
- Check if the air filter is clogged.
   Ask a qualified service person to clean the air filter.

#### The system operates but it does not sufficiently cool or heat.

- If the air inlet or outlet of the indoor or the outdoor unit is blocked with obstacles.
  - Remove the obstacle and make it well-ventilated.
- If the air filter is clogged.
  - Ask a qualified service person to clean the air filter.
- If the set temperature is not proper. (Refer to the manual of the remote controller)
- If the FAN SPEED CONTROL button is set to LOW SPEED. (Refer to the manual of the remote controller)
- If the air flow angle is not proper. (Refer to the manual of the remote controller)
- If the doors or the windows are open. Shut doors or windows to prevent wind from coming in.
- If direct sunlight enters the room (when cooling). Use curtains or blinds.
- When there are too many inhabitants in the room. Cooling effect decreases if heat gain of the room is too large.
- If the heat source of the room is excessive (when cooling).Cooling effect decreases if heat gain of the room is too large.

### **MAINTENANCE**



#### Caution

- Only a qualified service person is allowed to perform maintenance.
- Before obtaining access to terminal devices, all power supply circuits must be interrupted.
- Do not use water or air of 50°C or higher for cleaning air filters and outside panels.
- When cleaning the heat exchanger, be sure to remove the switchbox, fan motor, auxiliary electric heater and drain pump. Water or detergent may deteriorate the insulation of electronic components and result in burnout of these components.



#### Caution for drain socket

Do not remove the drain pipe plug. Water might leak out.

The drain outlet is only used to discharge water if the drain pump is not used or before maintenance. Gently put in and out the drain plug. Excessive force may deform the drain socket of the drain pan.

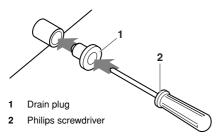
Pulling out the plug



1 Drain plug

Do not wiggle the plug up and down

Pushing in the plug



Set the plug and push it by using a Philips screwdriver

#### How to clean the air filter

Clean the air filter when the display shows "... (TIME TO CLEAN AIR FILTER).

Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.

(As a yardstick for yourself, consider cleaning the filter once half a year.)

If the dirt becomes impossible to clean, change the air filter. (Air filter for exchange is optional.)

## For FHYC and FCQ-units (See figure 6)

1 Open the suction grille.

Push both knobs simultaneously and carefully lower the grille. (Identical procedure for closing.)

2 Remove the air filters.

Pull the air filter clips toward you, and detach the filter.

3 Clean the air filter. (Refer to figure 3 air flow direction over filter.)

Use vacuum cleaner or wash the air filter with water.

When the air filter is very dirty, use soft brush and neutral detergent.

- 4 Remove water and dry in the shade.
- 5 Fix the air filter.

Attach the air filter to the suction grille by hanging it to the projected portion above the suction grille.

Press the bottom of the air filter against the projections on the bottom of the grille to snap the air filter into its place.

6 Shut the air inlet grille.

Refer to item 1 "Open the suction grille." on page 4.

7 After turning on the power, press the FILTER SIGN RESET button.

The "TIME TO CLEAN AIR FILTER" display vanishes.

#### For FHYB and FBQ-units (See figure 7)

1 Open the suction grille. (Only for bottom suction.)

Slide both knobs simultaneously as shown and then pull them downward.

If chains are present, unhook the chains.

2 Remove the air filters.

Remove the air filters by pulling its cloth upward (rear suction) or backward (bottom suction).

3 Clean the air filter. (Refer to figure 3 air flow direction over filter.)

Use vacuum cleaner or wash the air filter with water.

When the air filter is very dirty, use soft brush and neutral detergent.

Remove water and dry in the shade.

4 Fix the air filter.

Align the two hanger brackets and push the two clips in their place (pull the cloth if necessary, rear, bottom suction). Confirm that the four hangers are fixed.

- 5 Shut the air inlet grille. (Only for bottom suction.)
- After turning on the power, press FILTER SIGN RESET button.
  The "TIME TO CLEAN AIR FILTER" display is turned off.

## For FDY and FDQ-units (See figure 5)

- 1 Remove the screws from the bottom of the filter frame and remove the filter frame downwards.
- 2 Clean the air filter. (Refer to figure 3 air flow direction over filter.)

Use compressed air for blowing dust particles of the filter. When the air filter is very dirty, use soft brush and neutral detergent or wash with hot (30-40°C) water if needed. Do not rub or wring.

- 3 Remove water and dry in the shade.
- 4 Fix the air filter. Put the air filter frame back in its position and fix firmly with the screws.

#### How to clean the suction grille

(See figure 6) (for FH(Y)C and FCQ only)

1 Open the suction grille.

Push both knobs simultaneously and carefully lower the grille. (Identical procedure for closing.)

2 Detach the suction grille.

Open the suction grille 45 degrees and lift it upward.

3 Detach the air filter.

Refer to "How to clean the air filter" on page 4.

4 Clean the suction grille.

Wash with a soft bristle brush and neutral detergent or water, and dry thoroughly.

NOTE

When the suction grille is very dirty, use a typical kitchen cleaner and let it sit for about 10 minutes. Then, wash it with water.

5 Reattach the suction grille.

See item 2 "Detach the suction grille." on page 5.

6 Close the suction grille

See item 1 "Open the suction grille." on page 5.

#### How to clean air outlet and outside panels

- Clean with soft cloth.
- When it is difficult to remove stains, use water or neutral detergent.
- When the blade is extremely contaminated, remove it and clean or exchange it. (For FH(Y)C and FCQ only.) (Blade for exchange is optional.)

NOTE

Do not use gasoline, benzene, thinner, polishing powder, liquid insecticide. It may cause discoloring or warping.

Do not let the indoor unit get wet. It may cause an electric shock or a fire.

#### Start-up after a long stop

- Confirm the following.
  - Check that the air inlet and outlet are not blocked. Remove any obstacle.
  - Check if the earth is connected.
- Clean the air filter and outside panels.
  - After cleaning the air filter, make sure to attach it.
- Turn on the main power supply switch.
  - The control panel display lights when the power is turned on.
  - To protect the unit, turn on the main power switch at least 6 hours before operation.

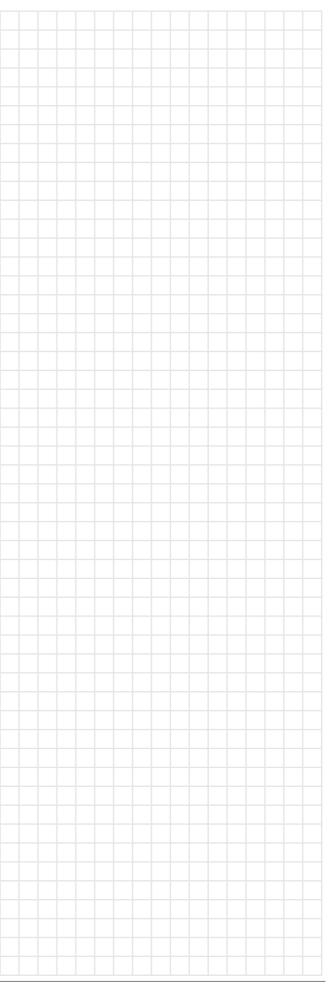
#### What to do when stopping the system for a long period

- Turn on FAN OPERATION for a half day and dry the unit.
  - Refer to the manual of the remote controller.
- Cut off the power supply.
  - When the main power switch is turned on, some wattage is being consumed even if the system is not operating.
  - The remote controller display is turned off when the main power switch is turned off.

#### Disposal requirements

Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

## **N**otes



## **NOTES**

