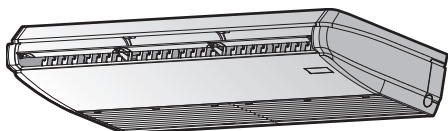




# Installation and operation manual



## Split system air conditioner



FHA35AVEB98  
FHA50AVEB98  
FHA60AVEB98  
FHA71AVEB98  
FHA100AVEB8  
FHA125AVEB8  
FHA140AVEB8

Installation and operation manual  
Split system air conditioner

English

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## 1 About the documentation

### 1.1 About this document



#### WARNING

Make sure installation, servicing, maintenance, repair and applied materials follow the instructions from Daikin (including all documents listed in "Documentation set") and, in addition, comply with applicable legislation and are performed by qualified persons only. In Europe and areas where IEC standards apply, EN/IEC 60335-2-40 is the applicable standard.

#### Target audience

Authorised installers + end users



#### INFORMATION

This appliance is intended to be used by expert or trained users in shops, in light industry, and on farms, or for commercial and household use by lay persons.

#### Documentation set

This document is part of a documentation set. The complete set consists of:

- **General safety precautions:**
  - Safety instructions that you must read before installing
  - Format: Paper (in the box of the indoor unit)
- **Indoor unit installation and operation manual:**
  - Installation and operation instructions
  - Format: Paper (in the box of the indoor unit)
- **Installer and user reference guide:**
  - Preparation of the installation, good practices, reference data,...
  - Detailed step-by-step instructions and background information for basic and advanced usage
  - Format: Digital files on <https://www.daikin.eu>. Use the search function 🔍 to find your model.

The latest revision of the supplied documentation is published on the regional Daikin website and is available via your dealer.

Scan the QR code below to find the full documentation set and more information about your product on the Daikin website.



The original instructions are written in English. All other languages are translations of the original instructions.

#### Technical engineering data

- A **subset** of the latest technical data is available on the regional Daikin website (publicly accessible).
- The **full set** of the latest technical data is available on the Daikin Business Portal (authentication required).

## 2 Specific installer safety instructions

Always observe the following safety instructions and regulations.

### General



#### WARNING

Make sure installation, servicing, maintenance, repair and applied materials follow the instructions from Daikin (including all documents listed in "Documentation set") and, in addition, comply with applicable legislation and are performed by qualified persons only. In Europe and areas where IEC standards apply, EN/IEC 60335-2-40 is the applicable standard.

### Unit installation (see "12 Unit installation" [p 10])



#### WARNING

The appliance using R32 refrigerant shall be stored so as to prevent mechanical damage and in a well-ventilated room without continuously operating ignition sources (e.g. open flames, an operating gas appliance, or an operating electric heater). The room size shall be as specified in the General safety precaution.



#### CAUTION

Appliance NOT accessible to the general public. Install it in a secured area, protected from easy access.

This unit is suitable for installation in a commercial, light industrial, household and residential environment.



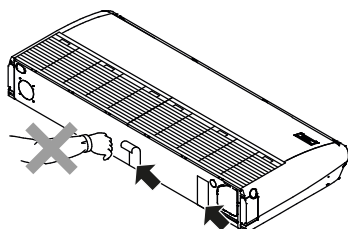
#### WARNING

For units using the R32 refrigerant it is necessary to keep any required ventilation openings clear of obstructions.



#### CAUTION

Do NOT remove the (milky white) tape from the exterior of the indoor unit. Removing the tape may cause an electric shock or a fire.



### Refrigerant piping installation (see "13 Piping installation" [p 14])



#### CAUTION

Piping MUST be installed according to instructions given in "13 Piping installation" [p 14]. Only mechanical joints (e.g. braze+flare connections) that are compliant with the latest version of ISO14903 can be used.



#### CAUTION

Install the refrigerant piping or components in a position where they are unlikely to be exposed to any substance which may corrode components containing refrigerant, unless the components are constructed of materials that are inherently resistant to corrosion or are suitably protected against corrosion.

### Electrical installation (see "14 Electrical installation" [p 16])



#### WARNING

ALWAYS use multicore cable for power supply cables.



#### WARNING

- All wiring MUST be performed by an authorised electrician and MUST comply with the national wiring regulation.
- Make electrical connections to the fixed wiring.
- All components procured on-site and all electrical construction MUST comply with the applicable legislation.



#### WARNING

- If the power supply has a missing or wrong N-phase, equipment might break down.
- Establish proper earthing. Do NOT earth the unit to a utility pipe, surge absorber, or telephone earth. Incomplete earthing may cause electrical shocks.
- Install the required fuses or circuit breakers.
- Secure the electrical wiring with cable ties so that the cables do NOT come in contact with sharp edges or piping, particularly on the high-pressure side.
- Do NOT install a phase advancing capacitor, because this unit is equipped with an inverter. A phase advancing capacitor will reduce performance and may cause accidents.



#### WARNING

Use an all-pole disconnection type breaker with at least 3 mm between the contact point gaps that provides full disconnection under overvoltage category III.



#### WARNING

If the supply cord is damaged, it MUST be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.



#### WARNING

Do NOT extend the power supply or the interconnection cable by using wire connectors, wire connection clamps, taped wires, extension cords.

These can cause overheating, electric shock or fire.

## For the user

## 3 User safety instructions

Always observe the following safety instructions and regulations.

### 3.1 General



#### WARNING

If you are NOT sure how to operate the unit, contact your installer.

### 3 User safety instructions



#### WARNING

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children SHALL NOT play with the appliance.

Cleaning and user maintenance SHALL NOT be made by children without supervision.



#### WARNING

To prevent electrical shocks or fire:

- Do NOT rinse the unit.
- Do NOT operate the unit with wet hands.
- Do NOT place any objects containing water on the unit.



#### CAUTION

- Do NOT place any objects or equipment on top of the unit.
- Do NOT sit, climb or stand on the unit.

- Units are marked with the following symbol:



This means that electrical and electronic products may NOT be mixed with unsorted household waste. Do NOT try to dismantle the system yourself: dismantling the system, treatment of the refrigerant, of oil and of other parts MUST be done by an authorised installer and MUST comply with applicable legislation.

Units MUST be treated at a specialised treatment facility for reuse, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. For more information, contact your installer or local authority.

- Batteries are marked with the following symbol:



This means that the batteries may NOT be mixed with unsorted household waste. If a chemical symbol is printed beneath the symbol, this chemical symbol means that the battery contains a heavy metal above a certain concentration.

Possible chemical symbols are: Pb: lead (>0.004%).

Waste batteries MUST be treated at a specialised treatment facility for reuse. By ensuring waste batteries are disposed of correctly, you will help to prevent potential negative consequences for the environment and human health.



#### CAUTION

- NEVER touch the internal parts of the controller.
- Do NOT remove the front panel. Some parts inside are dangerous to touch and appliance problems may happen. For checking and adjusting the internal parts, contact your dealer.



#### WARNING

This unit contains electrical and hot parts.



#### WARNING

Before operating the unit, be sure the installation has been carried out correctly by an installer.



#### CAUTION

It is unhealthy to expose your body to the air flow for a long time.



#### CAUTION

To avoid oxygen deficiency, ventilate the room sufficiently if equipment with burner is used together with the system.



#### CAUTION

Do NOT operate the system when using a room fumigation-type insecticide. Chemicals could collect in the unit, and endanger the health of people who are hypersensitive to chemicals.



#### WARNING

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.



#### CAUTION

NEVER expose little children, plants or animals directly to the airflow.



#### WARNING

Do NOT place a flammable spray bottle near the air conditioner and do NOT use sprays near the unit. Doing so may result in a fire.



#### WARNING

For units using the R32 refrigerant it is necessary to keep any required ventilation openings clear of obstructions.

#### Maintenance and service (see "7 Maintenance and service" [p 7])



#### CAUTION: Pay attention to the fan!

It is dangerous to inspect the unit while the fan is running. Make sure to turn OFF the main switch before executing any maintenance task.



#### CAUTION

Do NOT insert fingers, rods or other objects into the air inlet or outlet. When the fan is rotating at high speed, it will cause injury.



#### WARNING

NEVER replace a fuse with a fuse of a wrong ampere ratings or other wires when a fuse blows out. Use of wire or copper wire may cause the unit to break down or cause a fire.



#### CAUTION

After a long use, check the unit stand and fitting for damage. If damaged, the unit may fall and result in injury.

### 3.2 Instructions for safe operation



#### WARNING

- Do NOT modify, disassemble, remove, reinstall or repair the unit yourself as incorrect dismantling or installation may cause an electrical shock or fire. Contact your dealer.
- In case of accidental refrigerant leaks, make sure there are no naked flames. The refrigerant itself is entirely safe and non-toxic. R410A is a non-combustible refrigerant, and R32 is a mildly flammable refrigerant, but they will generate a toxic gas when they accidentally leak into a room where combustible air from fan heaters, gas cookers, etc. is present. Always have qualified service personnel confirm that the point of leakage has been repaired or corrected before resuming operation.



## CAUTION

Before accessing terminal devices, make sure to interrupt all power supply.



## DANGER: RISK OF ELECTROCUTION

To clean the air conditioner or air filter, be sure to stop operation and turn all power supplies OFF. Otherwise, an electrical shock and injury may result.



## WARNING

Be careful with ladders when working in high places.



## DANGER: RISK OF ELECTROCUTION

Disconnect the power supply for more than 10 minutes, and measure the voltage at the terminals of main circuit capacitors or electrical components before servicing. The voltage **MUST** be less than 50 V DC before you can touch electrical components. For the location of the terminals, see the warning label for persons performing service and maintenance.



## CAUTION

Turn off the unit before cleaning the unit exterior, air filter and suction grille.



## WARNING

Do **NOT** let the indoor unit get wet. **Possible consequence:** Electrical shock or fire.

About the refrigerant (see "[7.3 About the refrigerant](#)" [p 9])



## WARNING: MILDLY FLAMMABLE MATERIAL

The R32 refrigerant (if applicable) in this unit is mildly flammable. Refer to the outdoor unit specifications for the type of refrigerant to be used.



## WARNING

The appliance using R32 refrigerant shall be stored so as to prevent mechanical damage and in a well-ventilated room without continuously operating ignition sources (e.g. open flames, an operating gas appliance, or an operating electric heater). The room size shall be as specified in the General safety precaution.



## WARNING

- Do **NOT** pierce or burn refrigerant cycle parts.
- Do **NOT** use cleaning materials or means to accelerate the defrosting process other than those recommended by the manufacturer.
- Be aware that the refrigerant inside the system is odourless.



## WARNING

- R410A is a non-combustible refrigerant, and R32 is a mildly flammable refrigerant; they normally do **NOT** leak. If the refrigerant leaks in the room and comes into contact with fire from a burner, a heater, or a cooker, this may result in a fire (in case of R32), or the formation of a harmful gas.
- Turn **OFF** any combustible heating devices, ventilate the room, and contact the dealer from where you purchased the unit.
- Do **NOT** use the unit until a service person confirms that the part from which the refrigerant leaked has been repaired.

Troubleshooting (see "[8 Troubleshooting](#)" [p 9])



## WARNING

**Stop operation and shut OFF the power if anything unusual occurs (burning smells etc.).**

Leaving the unit running under such circumstances may cause breakage, electrical shock or fire. Contact your dealer.

# 4 About the system



## WARNING

- Do **NOT** modify, disassemble, remove, reinstall or repair the unit yourself as incorrect dismantling or installation may cause an electrical shock or fire. Contact your dealer.
- In case of accidental refrigerant leaks, make sure there are no naked flames. The refrigerant itself is entirely safe and non-toxic. R410A is a non-combustible refrigerant, and R32 is a mildly flammable refrigerant, but they will generate a toxic gas when they accidentally leak into a room where combustible air from fan heaters, gas cookers, etc. is present. Always have qualified service personnel confirm that the point of leakage has been repaired or corrected before resuming operation.



## NOTICE

Do **NOT** use the system for other purposes. In order to avoid any quality deterioration, do **NOT** use the unit for cooling precision instruments, food, plants, animals, or works of art.



## NOTICE

For future modifications or expansions of your system:

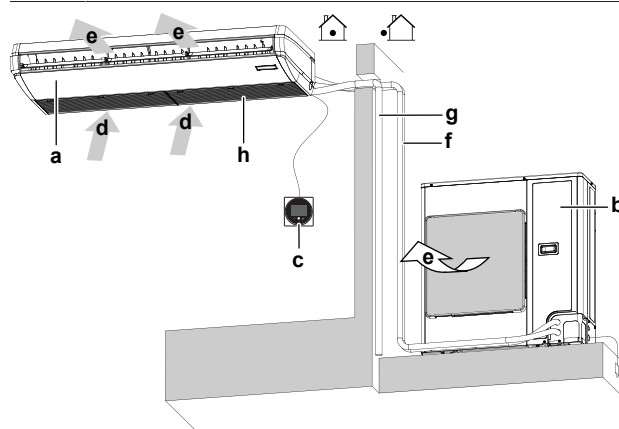
A full overview of allowable combinations (for future system extensions) is available in technical engineering data and should be consulted. Contact your installer to receive more information and professional advice.

## 4.1 System layout



## INFORMATION

The following figure is an example and may **NOT** completely match your system layout.



- a Indoor unit
- b Outdoor unit
- c User interface
- d Suction air
- e Discharge air
- f Refrigerant piping + interconnection cable
- g Drain pipe
- h Suction grille and air filter

## 5 User interface

### 5 User interface



#### CAUTION

- NEVER touch the internal parts of the controller.
- Do NOT remove the front panel. Some parts inside are dangerous to touch and appliance problems may happen. For checking and adjusting the internal parts, contact your dealer.

This operation manual offers a non-exhaustive overview of the main functions of the system.



#### NOTICE

Do NOT wipe the controller operation panel with benzine, thinner, chemical dust cloth, etc. The panel may get discoloured or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Wipe it with another dry cloth.



#### NOTICE

NEVER press the button of the user interface with a hard, pointed object. The user interface may be damaged.



#### NOTICE

NEVER pull or twist the electric wire of the user interface. It may cause the unit to malfunction.

For more information about the user interface, see the operation manual of the installed user interface.

## 6 Operation

### 6.1 Operation range



#### INFORMATION

For the operation limits see the technical data of the connected outdoor unit.

### 6.2 About operation modes



#### INFORMATION

Depending on the installed system, some operation modes will not be available.

- The air flow rate may adjust itself depending on the room temperature or the fan may stop immediately. This is not a malfunction.
- If the main power supply is turned off during operation, operation will restart automatically after the power turns back on again.
- Setpoint.** Target temperature for the Cooling, Heating, and Auto operation modes.
- Setback.** A function that keeps the room temperature in a specific range when the system is turned off (by the user, the schedule function, or the OFF timer).

#### 6.2.1 Basic operation modes

The indoor unit can operate in various operation modes.

Icon	Operation mode
	<b>Cooling.</b> In this mode, cooling will be activated as required by the setpoint, or by Setback operation.
	<b>Heating.</b> In this mode, heating will be activated as required by the setpoint, or by Setback operation.

Icon	Operation mode
	<b>Fan only.</b> In this mode, air circulates without heating or cooling.
	<b>Dry.</b> In this mode, the air humidity will be lowered with a minimal temperature decrease. The temperature and fan speed are controlled automatically and cannot be controlled by the controller. Dry operation will not function if the room temperature is too low.
	<b>Auto.</b> In Auto mode, the indoor unit automatically switches between heating and cooling mode, as required by the setpoint.

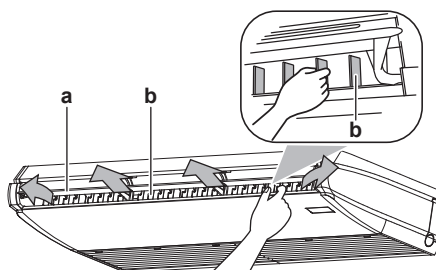
#### 6.2.2 Special heating operation modes

Operation	Description
<b>Defrost</b>	To prevent a loss of heating capacity due to frost accumulation in the outdoor unit, the system will automatically switch to defrost operation. During defrost operation, the indoor unit fan will stop operation, and the following icon will appear on the home screen:  The system will resume normal operation after approximately 6 to 8 minutes.
<b>Hot start</b>	During hot start, the indoor unit fan will stop operation, and the following icon will appear on the home screen: 

#### 6.2.3 Adjusting the airflow direction

The following airflow directions can be set:

- Up and down direction** (horizontal blades): Using user interface (fixed position or swing)
- Left and right direction** (vertical blades): Manually (fixed position only)



- a Horizontal blades (up and down direction)  
b Vertical blades (left and right direction)

#### Up and down airflow direction setting





#### INFORMATION

For setting procedure of the airflow direction, see the reference guide or the manual of the used user interface.

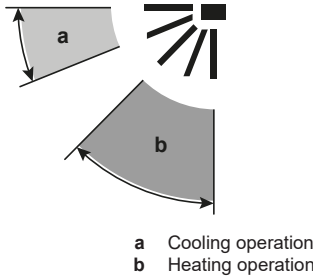
When the operation stops, the horizontal blades at the air outlet close automatically.

The following airflow directions can be set:



Direction	Display
<b>Fixed position.</b> The indoor unit blows air in 1 of 5 fixed positions.	
<b>Swing.</b> The indoor unit alternates between the 5 positions.	

**Note:** The recommended position of the horizontal blades (flaps) varies according to the operation mode.



#### WARNING

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.



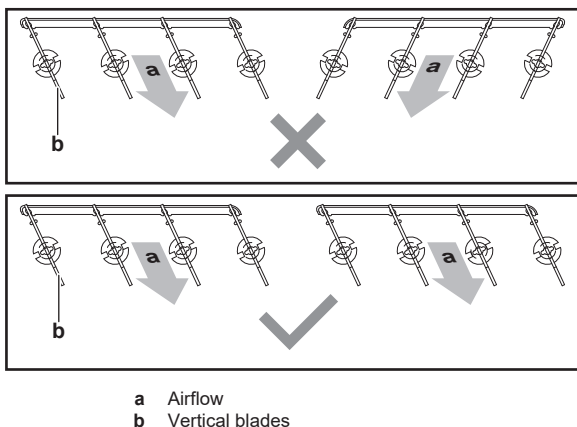
#### NOTICE

Avoid operating in the horizontal direction. It may cause dew or dust to settle on the ceiling or flap.

#### Left and right airflow direction setting

The left and right airflow direction can be set only manually in fixed position.

Make adjustments only after stopping the horizontal blade in order to avoid injury and damage to the appliance. Set both groups of vertical blades in a way so airflows do not cross; otherwise condensate may drip.



## 6.3 To operate the system



#### INFORMATION

For setting of the operation mode, airflow direction or other settings, see the reference guide or operation manual of the user interface.

## 7 Maintenance and service

### 7.1 Precautions for maintenance and service



#### NOTICE

Maintenance **MUST** be done by an authorised installer or service agent.

We recommend performing maintenance at least once a year. However, applicable legislation might require shorter maintenance intervals.



#### CAUTION: Pay attention to the fan!

It is dangerous to inspect the unit while the fan is running.

Make sure to turn OFF the main switch before executing any maintenance task.



#### CAUTION

Do NOT insert fingers, rods or other objects into the air inlet or outlet. When the fan is rotating at high speed, it will cause injury.



#### NOTICE

NEVER inspect or service the unit by yourself. Ask a qualified service person to perform this work. However, as end user, you may clean the air filter, suction grille and the unit exterior.



#### WARNING

NEVER replace a fuse with a fuse of a wrong ampere ratings or other wires when a fuse blows out. Use of wire or copper wire may cause the unit to break down or cause a fire.



#### CAUTION

After a long use, check the unit stand and fitting for damage. If damaged, the unit may fall and result in injury.



#### NOTICE

Do NOT wipe the controller operation panel with benzine, thinner, chemical dust cloth, etc. The panel may get discoloured or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Wipe it with another dry cloth.



#### CAUTION

Before accessing terminal devices, make sure to interrupt all power supply.



#### DANGER: RISK OF ELECTROCUTION

To clean the air conditioner or air filter, be sure to stop operation and turn all power supplies OFF. Otherwise, an electrical shock and injury may result.



#### WARNING

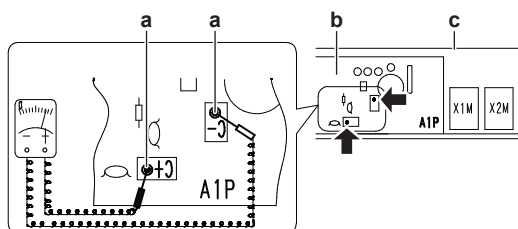
Be careful with ladders when working in high places.



#### DANGER: RISK OF ELECTROCUTION

Disconnect the power supply for more than 10 minutes, and measure the voltage at the terminals of main circuit capacitors or electrical components before servicing. The voltage **MUST** be less than 50 V DC before you can touch electrical components. For the location of the terminals, see the warning label for persons performing service and maintenance.

## 7 Maintenance and service



- a Residual voltage measuring points
- b Printed circuit board
- c Control box



### NOTICE

When cleaning the heat exchanger, make sure to remove the electronic components above it. Water or detergent might deteriorate the insulation of electronic components and result in burnout of these components.

## 7.2 Cleaning the unit exterior, air filter and suction grille



### CAUTION

Turn off the unit before cleaning the unit exterior, air filter and suction grille.



### NOTICE

- Do NOT use gasoline, benzene, thinner polishing powder or liquid insecticide. **Possible consequence:** Discoloration and deformation.
- Do NOT use water or air of 50°C or higher. **Possible consequence:** Discoloration and deformation.
- Do NOT scrub firmly when washing the blade with water. **Possible consequence:** The surface sealing peels off.

### 7.2.1 To clean the exterior



### WARNING

Do NOT let the indoor unit get wet. **Possible consequence:** Electrical shock or fire.

Clean with a soft cloth. If it is difficult to remove stains, use water or neutral detergent and wipe with a dry cloth.

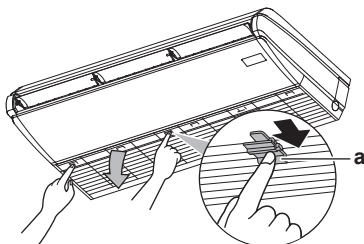
### 7.2.2 To clean the air filter

#### When to clean the air filter:

- Rule of thumb: Clean every 6 months. If the air in the room is extremely contaminated, increase the cleaning frequency.
- Depending on the settings, the user interface can display the "Time to clean filter" notification. Clean the air filter when the notification is displayed.
- If the dirt becomes impossible to clean, change the air filter (= optional equipment).

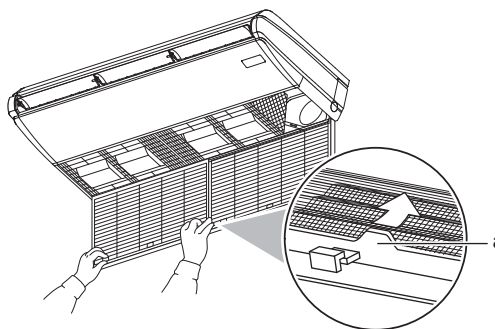
#### How to clean the air filter:

- 1 **Open the suction grille.** Simultaneously slide all knobs (2 for class 35+50, 3 for class 60~140) in the direction of the arrow and carefully open the suction grille.



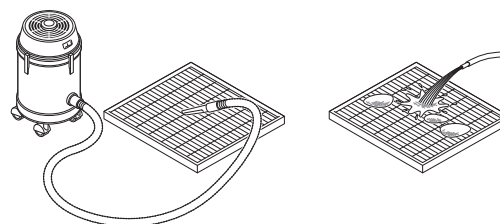
a Knob

- 2 **Remove the air filter.** Push up the filter knobs at 2 places and take out the air filter.



a Filter knob

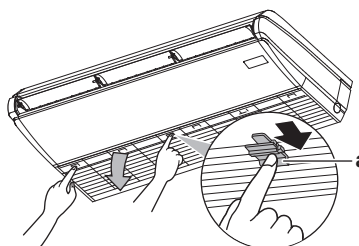
- 3 **Clean the air filter.** Use a vacuum cleaner or wash with water. If the air filter is very dirty, use a soft brush and neutral detergent.



- 4 Dry the air filter in the shadow.
- 5 Reattach the air filter and close the suction grille.
- 6 Turn ON the power.
- 7 To remove warning screens, see the reference guide of the user interface.

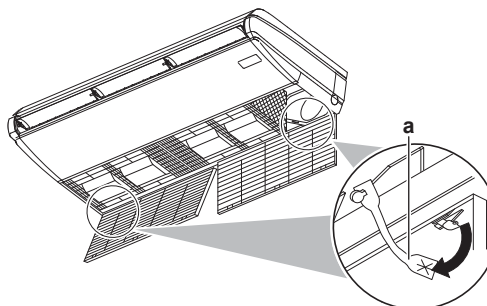
### 7.2.3 To clean the suction grille

- 1 **Open the suction grille.** Simultaneously slide all knobs (2 for class 35+50, 3 for class 60~140) in the direction of the arrow and carefully open the suction grille.



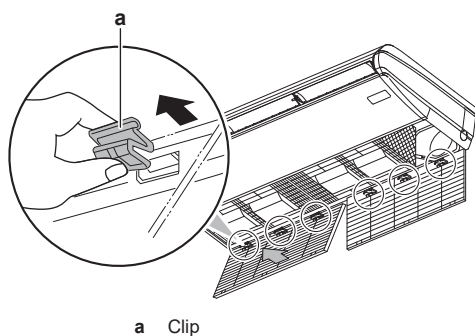
a Knob

- 2 **Remove the suction grille.** While keeping the suction grille open, unhook the straps from the indoor unit. Then remove the clips (2 for class 35+50, 3 for class 60~140) holding the suction grille.



a Strap





a Clip

- 3 **Remove the air filter.** Refer to "7.2.2 To clean the air filter" [p. 8].
- 4 **Clean the suction grille.** Wash with a soft bristle brush and water or neutral detergent. If the suction grille is very dirty, use a typical kitchen cleaner, leave it on for 10 min, then wash it with water.
- 5 **Reattach the air filter.** Refer to "7.2.2 To clean the air filter" [p. 8].
- 6 **Reattach the suction grille and close it.** (steps 2 and 1 in reverse order).

**INFORMATION**

When closing the suction grille, make sure the straps of the suction grille are not pinched anywhere.

### 7.3 About the refrigerant

This product contains fluorinated greenhouse gases. Do NOT vent gases into the atmosphere.

Refrigerant type: R32

Global warming potential (GWP) value: 675

Refrigerant type: R410A

Global warming potential (GWP) value: 2087.5

**NOTICE**

Applicable legislation on **fluorinated greenhouse gases** requires that the refrigerant charge of the unit is indicated both in weight and CO<sub>2</sub> equivalent.

**Formula to calculate the quantity in CO<sub>2</sub> equivalent tonnes:** GWP value of the refrigerant × total refrigerant charge [in kg]/1000

Contact your installer for more information.

**WARNING: MILDLY FLAMMABLE MATERIAL**

The R32 refrigerant (if applicable) in this unit is mildly flammable. Refer to the outdoor unit specifications for the type of refrigerant to be used.

**WARNING**

The appliance using R32 refrigerant shall be stored so as to prevent mechanical damage and in a well-ventilated room without continuously operating ignition sources (e.g. open flames, an operating gas appliance, or an operating electric heater). The room size shall be as specified in the General safety precaution.

**WARNING**

- Do NOT pierce or burn refrigerant cycle parts.
- Do NOT use cleaning materials or means to accelerate the defrosting process other than those recommended by the manufacturer.
- Be aware that the refrigerant inside the system is odourless.

**WARNING**

- R410A is a non-combustible refrigerant, and R32 is a mildly flammable refrigerant; they normally do NOT leak. If the refrigerant leaks in the room and comes into contact with fire from a burner, a heater, or a cooker, this may result in a fire (in case of R32), or the formation of a harmful gas.
- Turn OFF any combustible heating devices, ventilate the room, and contact the dealer from where you purchased the unit.
- Do NOT use the unit until a service person confirms that the part from which the refrigerant leaked has been repaired.

## 8 Troubleshooting

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

**WARNING**

**Stop operation and shut OFF the power if anything unusual occurs (burning smells etc.).**

Leaving the unit running under such circumstances may cause breakage, electrical shock or fire. Contact your dealer.

The system MUST be repaired by a qualified service person.

Malfunction	Measure
If a safety device such as a fuse, a circuit breaker or a residual current device frequently actuates or the ON/OFF switch does NOT function properly.	Turn OFF all main power supply switches to the unit.
If water leaks from the unit.	Stop operation.
The operation switch does NOT function properly.	Turn OFF the power supply.
If the user interface displays	Notify your installer and report the error code. To display an error code see the reference guide of the user interface.

If the system does NOT operate properly except for the above mentioned cases and none of the above mentioned malfunctions is evident, investigate the system in accordance with the following procedures.

**INFORMATION**

Refer to the reference guide located on <https://www.daikin.eu> for more troubleshooting tips. Use the search function 🔍 to find your model.

After checking all the items above, if it is impossible to fix the problem yourself, contact your installer and state the symptoms, the complete model name of the unit (with manufacturing number if possible) and the installation date.

## 9 Relocation

Contact your dealer to remove and reinstall the entire unit. Moving units requires technical expertise.

## 10 Disposal



### NOTICE

Do NOT try to dismantle the system yourself: dismantling of the system, treatment of the refrigerant, oil and other parts **MUST** comply with applicable legislation. Units **MUST** be treated at a specialised treatment facility for reuse, recycling and recovery.

## For the installer

## 11 About the box

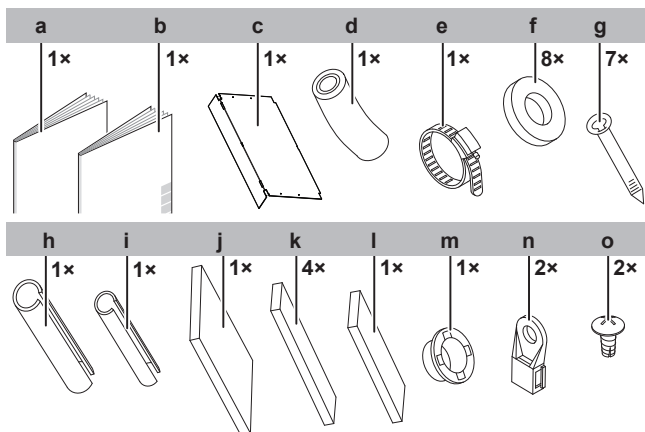
### 11.1 Indoor unit



#### WARNING: MILDLY FLAMMABLE MATERIAL

The R32 refrigerant (if applicable) in this unit is mildly flammable. Refer to the outdoor unit specifications for the type of refrigerant to be used.

#### 11.1.1 To remove the accessories from the indoor unit



- a General safety precautions
- b Indoor unit installation and operation manual
- c Paper pattern for installation (part of the packing)
- d Drain hose
- e Metal clamp
- f Washer for hanger bracket
- g Tie wraps
- h Insulation piece: Large (gas pipe)
- i Insulation piece: Small (liquid pipe)
- j Large sealing pad
- k Sealing material for gaps around pipes and cables
- l Small sealing pad
- m Resin bushing
- n Wiring fixture
- o Screw for wiring fixture

## 12 Unit installation



#### WARNING

Installation shall be done by an installer, the choice of materials and installation shall comply with the applicable legislation. In Europe, EN378 is the applicable standard.

### 12.1 Preparing the installation site



#### WARNING

The appliance using R32 refrigerant shall be stored so as to prevent mechanical damage and in a well-ventilated room without continuously operating ignition sources (e.g. open flames, an operating gas appliance, or an operating electric heater). The room size shall be as specified in the General safety precaution.

#### 12.1.1 Installation site requirements of the indoor unit



#### INFORMATION

The sound pressure level is less than 70 dBA.



#### CAUTION

Appliance **NOT** accessible to the general public. Install it in a secured area, protected from easy access.

This unit is suitable for installation in a commercial, light industrial, household and residential environment.

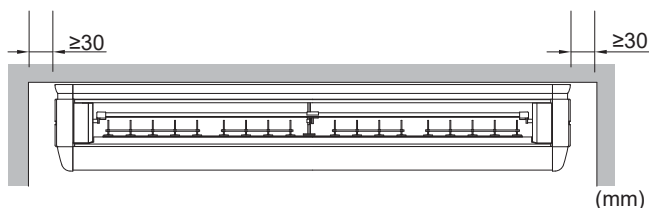


#### WARNING

For units using the R32 refrigerant it is necessary to keep any required ventilation openings clear of obstructions.

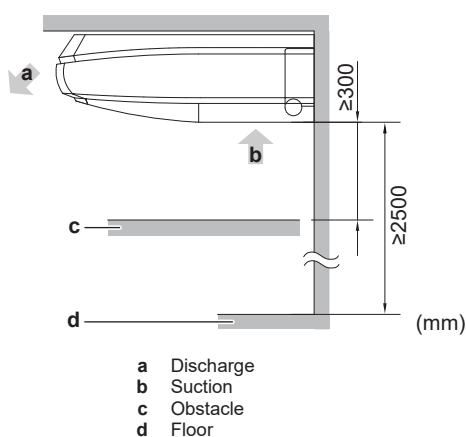
- **Paper pattern for installation** (accessory). Use the paper pattern when selecting the installation location. It contains the dimensions of the unit and the locations of suspension bolts, piping outlet, drain piping outlet and electric wiring inlet.
- **Spacing**. Mind the following requirements:

**Minimum distance to the wall:** 30 mm left and right of the unit, however,  $\geq 200$  mm is recommended for easier servicing.



#### Minimum and maximum distance to the floor:

- Minimum: 2.5 m to avoid accidental touching.
- Maximum: Depends on the capacity class. See "[17.1 Field setting](#)" [p. 19].



### *i* INFORMATION

Some options may require additional service space. See the installation manual of the used option before installation.

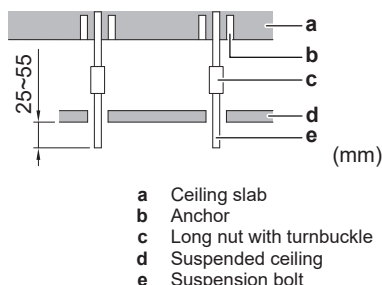
## 12.2 Mounting the indoor unit

### 12.2.1 Guidelines when installing the indoor unit

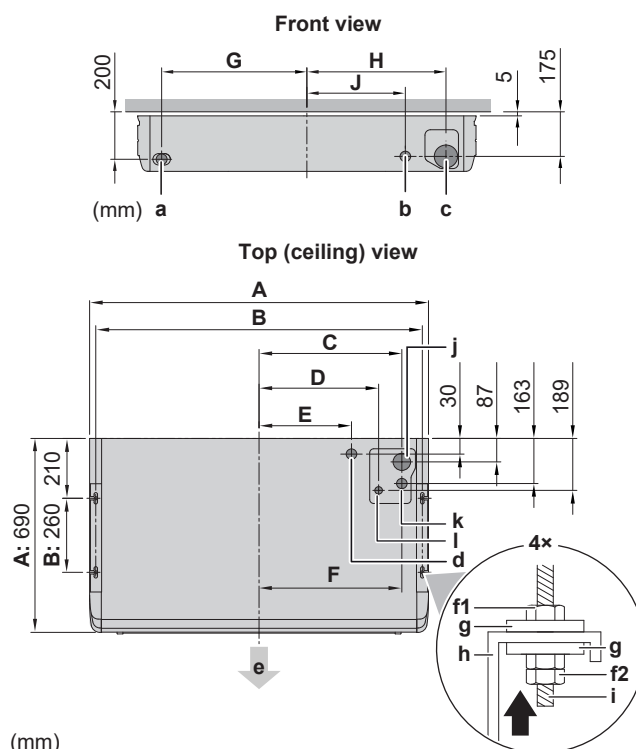
### *i* INFORMATION

**Optional equipment.** When installing optional equipment, also read the installation manual of the optional equipment. Depending on the field conditions, it might be easier to install the optional equipment first.

- **Ceiling strength.** Check whether the ceiling is strong enough to support the weight of the unit. If there is a risk, reinforce the ceiling before installing the unit.
  - For existing ceilings, use anchors.
  - For new ceilings, use sunken inserts, sunken anchors or other field supplied parts.



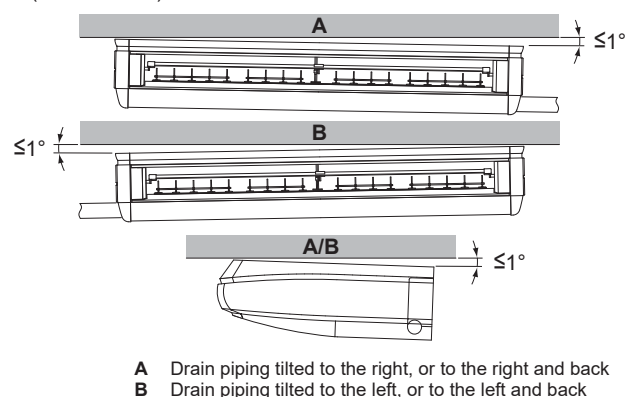
- **Suspension bolts and unit.** Use M8~M10 suspension bolts for installation. Attach the hanger bracket to the suspension bolt. Fix it securely using a nut and washer on the top and bottom of the hanger bracket.



	A	B	C	D	E	F	G	H	J
<b>FHA35+50</b>	960	920	378	324	270	375	398	377	260
<b>FHA60+71</b>	1270	1230	533	479	425	530	553	532	415
<b>FHA100~140</b>	1590	1550	693	639	585	690	713	692	575

- A Unit dimension  
B Suspension bolt pitch  
a Rear left drain piping outlet hole  
b Rear wiring outlet location  
c Wall hole for rear piping outlet (φ100 mm)  
d Top panel wiring outlet position  
e Discharge  
f1 Nut (field supply)  
f2 Double nut (field supply)  
h Hanger bracket  
g Washer for hanger bracket (accessory)  
i Suspension bolt  
j Top panel drain piping connection position  
k Top panel gas side piping connection position  
l Top panel liquid side piping connection positions

- **Level.** Use the level to make sure the unit is installed horizontally. If possible, install the unit so the drain piping side is slightly tilted (maximum 1°)



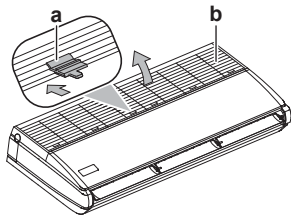
### NOTICE

Do NOT install the unit tilted in other ways than specified.  
**Possible consequence:** If the unit is tilted against the direction of the condensate flow (the drain piping side is raised), the float switch might malfunction and cause water to drip.

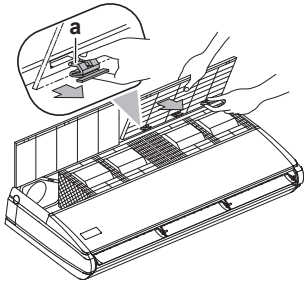
## 12 Unit installation

### To open the indoor unit

- **Remove the suction grille.** Slide the fixing knobs to the back (2 for class 35+50, 3 for class 60~140), open the suction grille wide and hold the rear knob. Pull the suction grille to the front to remove it.

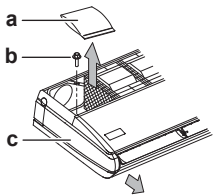


a Fixing knob  
b Suction grille



a Rear knob

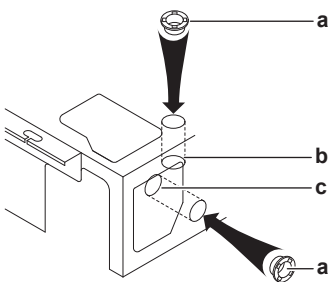
- **Remove the decoration side covers (right, left).** Remove the fixing screw from both side covers, pull the decoration panel to the front and remove the accessories.



a Accessories  
b Fixing screw for side covers  
c Decoration side cover

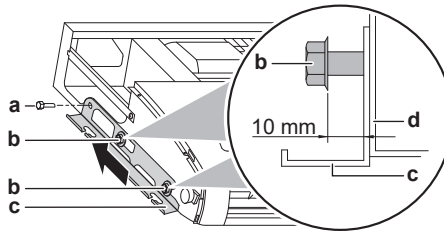
### To mount the indoor unit

- 1 Open the knockout hole at the wiring inlet at the rear or the top of the unit, and install the resin bushing (accessory).



a Resin bushing (accessory)  
b Knockout hole (for leading in from the top)  
c Knockout hole (for leading in from the rear)

- 2 Remove the hanger bracket. Loosen the 2 hanger bracket installation bolts (M8) on both sides (total 4 places) within 10 mm. Remove the fixing screw (M5) from the rear hanger bracket and pull the hanger bracket backward in the direction of the arrow in order to remove it.

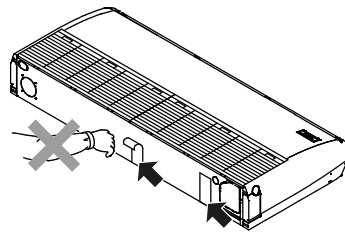


a Hanger bracket fixing screw (M5)  
b Hanger bracket installation bolt (M8)  
c Hanger bracket  
d Indoor unit

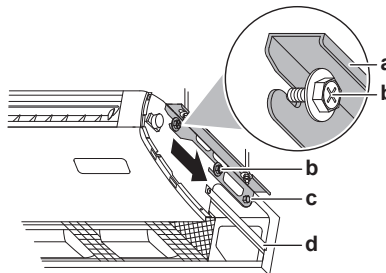


#### CAUTION

Do NOT remove the (milky white) tape from the exterior of the indoor unit. Removing the tape may cause an electric shock or a fire.



- 3 Fix the hanger bracket to the suspension bolts. ["12.2.1 Guidelines when installing the indoor unit" \[p 11\]](#).
- 4 Lift up the indoor unit and slide it to the back. Fix the hanger bracket installation bolt (M8) for temporary hanging. Do NOT hold the unit by the reinforcing plate.



a Hanger bracket  
b Hanger bracket installation bolt (M8)  
c Hanger bracket fixing screw (M5)  
d Reinforcing plate

- 5 Install the hanger bracket fixing screws (M5) on both sides back (2 screws in total).
- 6 Fully tighten all hanger bracket installation bolts (M8) (4 screws in total).
- 7 Make sure the unit is level. Refer to ["12.2.1 Guidelines when installing the indoor unit" \[p 11\]](#).

### 12.2.2 Guidelines when installing the drain piping

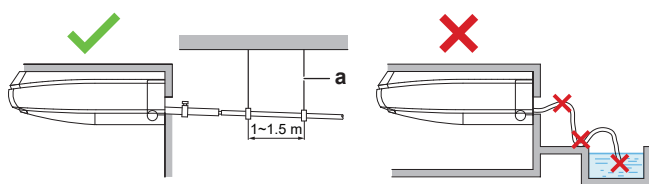
Make sure condensation water can be evacuated properly. This involves:

- General guidelines
- Connecting the drain piping to the indoor unit
- Checking for water leaks

#### General guidelines

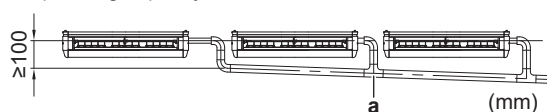
- **Pipe length.** Keep drain piping as short as possible.
- **Pipe size.** Keep the pipe size equal to or greater than that of the connecting pipe (vinyl pipe of 20 mm nominal diameter and 26 mm outer diameter).

- **Slope.** Make sure the drain piping slopes down (at least 1/100) to prevent air from being trapped in the piping. Use hanging bars as shown.



- a Hanging bar  
 ✓ Allowed  
 ✗ Not allowed

- **Condensation.** Take measures against condensation. Insulate the complete drain piping in the building.
- **Combining drain pipes.** You can combine drain pipes. Make sure to use drain pipes and T-joints with the correct gauge for the operating capacity of the units.



a T-joint

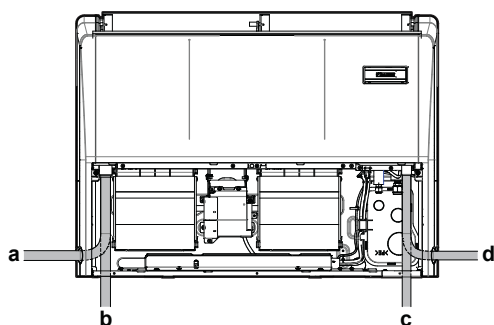
## To connect the drain piping to the indoor unit



### NOTICE

Incorrect connection of the drain hose might cause leaks, and damage the installation space and surroundings.

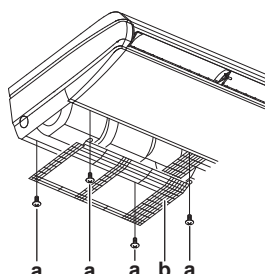
Drain piping can be connected from following directions:



- a Left drain piping  
 b Rear left drain piping  
 c Rear right drain piping  
 d Right drain piping

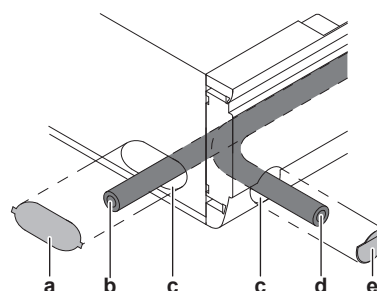
### Rear left or left drain piping

- 1 Remove the protective grille (35+50 class: 7 screws, 60+71 class: 11 screws, 100+125+140 class: 10 screws).



- a Fixing screw for protective grille  
 b Protective grille

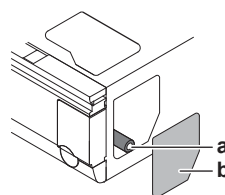
- 2 Remove the cap from the drain socket and remove the insulation material from the left side and apply it to the right side. Make sure the drain socket is fully pushed in to avoid water leakage.
- 3 Remove the knockout part.



- a Rear left knockout part (sheet metal)  
 b Rear left drain piping  
 c Putty or insulation (field supply)  
 d Left drain piping  
 e Left knockout part on decoration side panel

### Rear right drain piping

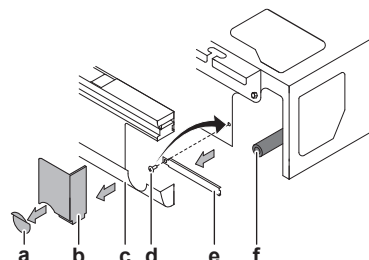
- 1 Remove the rear piping pipe port cover and cut out the holes for piping. When cutting out the holes, make sure to avoid the knob part of the cover.



- a Rear right drain piping  
 b Rear piping pipe port cover

### Right drain piping

- 1 Remove the reinforcing plate from the right side and put back the screw in the original position on the indoor unit.
- 2 Remove the rectangular part from the decoration side panel (when installing only drain piping on the right side, remove the round part only).

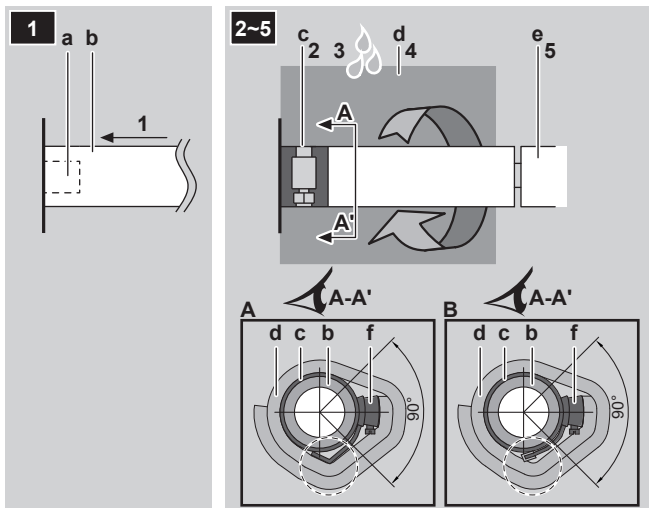


- a Round part  
 b Rectangular part of the decoration side panel  
 c Decoration side panel  
 d Screw  
 e Reinforcing plate  
 f Right drain piping



## 13 Piping installation

### Drain piping connection

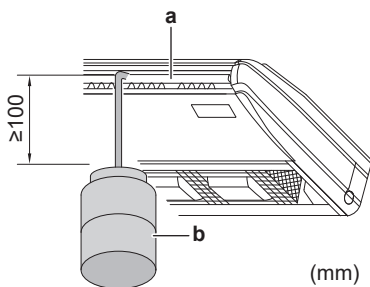


- a Drain pipe connection (attached to the unit)
- b Drain hose (accessory)
- c Metal clamp (accessory)
- d Large sealing pad (accessory)
- e Drain piping (field supply)
- f Tightened part of metal clamp
- A In case of bending the end of the metal clamp
- B In case of wrapping the end of the metal clamp with vinyl tape

- 1 Push the drain hose as far as possible over the drain pipe connection.
- 2 Tighten the metal clamp at the base of the drain socket. Wrap the end of the metal clamp with vinyl tape or bend the end inwards to avoid damaging the sealing pad.
- 3 Check for water leaks (see "To check for water leaks" [▶ 14]).
- 4 Wind the large sealing pad (= insulation) around the metal clamp and drain hose, and fix it with tie wraps. Start wrapping from the tightened part of the metal clamp so that the end of the metal clamp is wrapped twice.
- 5 Connect the drain piping to the drain hose.

### To check for water leaks

Make sure the unit is level in accordance with the instructions in "12.2.1 Guidelines when installing the indoor unit" [▶ 11]. Gradually pour approximately 1 l of water through the air discharge outlet, and check for leaks.



- a Air outlet
- b Plastic water container with tube length ≥100 mm

## 13 Piping installation

### 13.1 Preparing refrigerant piping

#### 13.1.1 Refrigerant piping requirements



#### CAUTION

Piping **MUST** be installed according to instructions given in "13 Piping installation" [▶ 14]. Only mechanical joints (e.g. braze+flare connections) that are compliant with the latest version of ISO14903 can be used.



#### NOTICE

The piping and other pressure-containing parts shall be suitable for refrigerant. Use phosphoric acid deoxidised seamless copper for refrigerant piping.

- Foreign materials inside pipes (including oils for fabrication) must be ≤30 mg/10 m.

### Refrigerant piping diameter

For piping connection of the indoor unit, use the following piping diameters:

Class	Pipe outer diameter (mm)	
	Liquid pipe	Gas pipe
35	Ø6.4	Ø9.5
50+60	Ø6.4	Ø12.7
71~140	Ø9.5	Ø15.9

### Refrigerant piping material

#### Piping material

Phosphoric acid deoxidised seamless copper

#### Flare connections

Only use annealed material.

#### Piping temper grade and thickness

Outer diameter (Ø)	Temper grade	Thickness (t) <sup>(a)</sup>	
6.4 mm (1/4")	Annealed (O)	≥0.8 mm	
9.5 mm (3/8")			
12.7 mm (1/2")			
15.9 mm (5/8")			

<sup>(a)</sup> Depending on the applicable legislation and the maximum working pressure of the unit (see "PS High" on the unit name plate), larger piping thickness might be required.

#### 13.1.2 Refrigerant piping insulation

- Use polyethylene foam as insulation material:
  - with a heat transfer rate between 0.041 and 0.052 W/mK (0.035 and 0.045 kcal/mh°C)
  - with a heat resistance of at least 120°C
- Insulation thickness:

Pipe outer diameter (Ø <sub>p</sub> )	Insulation inner diameter (Ø <sub>i</sub> )	Insulation thickness (t)
6.4 mm (1/4")	8~10 mm	≥10 mm
9.5 mm (3/8")	12~15 mm	≥13 mm
12.7 mm (1/2")	14~16 mm	≥13 mm
15.9 mm (5/8")	17~20 mm	≥13 mm



If the temperature is higher than 30°C and the humidity is higher than RH 80%, the thickness of the insulation materials should be at least 20 mm to prevent condensation on the surface of the insulation.

## 13.2 Connecting the refrigerant piping



**DANGER: RISK OF BURNING/SCALDING**

### 13.2.1 To connect the refrigerant piping to the indoor unit



#### CAUTION

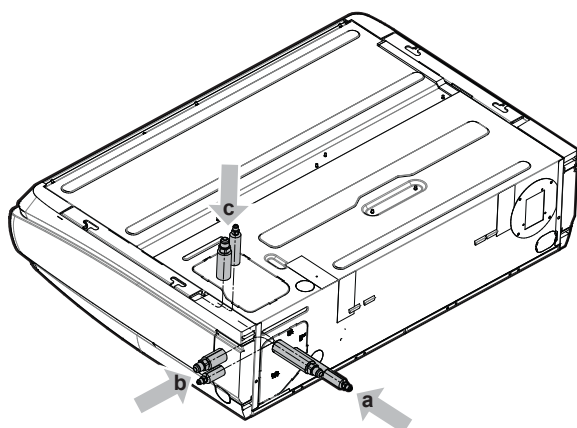
Install the refrigerant piping or components in a position where they are unlikely to be exposed to any substance which may corrode components containing refrigerant, unless the components are constructed of materials that are inherently resistant to corrosion or are suitably protected against corrosion.



#### WARNING: MILDLY FLAMMABLE MATERIAL

The R32 refrigerant (if applicable) in this unit is mildly flammable. Refer to the outdoor unit specifications for the type of refrigerant to be used.

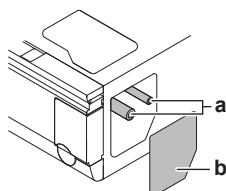
Refrigerant piping can be connected from following directions:



- a Rear right piping
- b Right piping
- c Upward piping

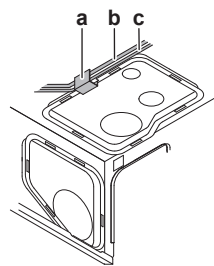
#### Rear right piping

- 1 Remove the rear piping pipe port cover and cut out the holes for piping. When cutting out the holes, make sure to avoid the knob part of the cover.



- a Rear refrigerant piping
- b Rear piping pipe port cover

- 2 Run the field supply pipes through the cut out holes.
- 3 After the drain and refrigerant piping is finished, install the pipe port cover back. Run all the cables through the clamp of the pipe port cover and fix.



- a Clamp of the pipe port cover
- b Cables

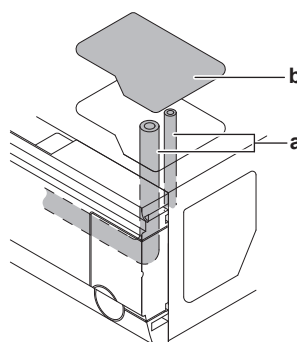
#### Upward piping



#### INFORMATION

L-shaped connection piping kit (optional accessory) is required.

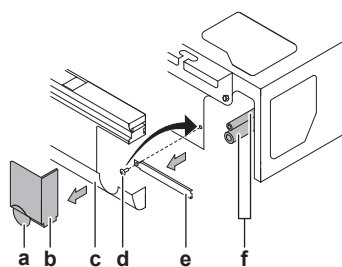
- 1 Remove the top pipe port cover and cut out the holes for piping. When cutting out the holes, make sure to avoid the knob part of the cover. Use an L-shaped connection piping kit (optional accessory) for the piping. Run the pipes through the cut out holes.



- a Upward refrigerant piping
- b Top pipe port cover

#### Right piping

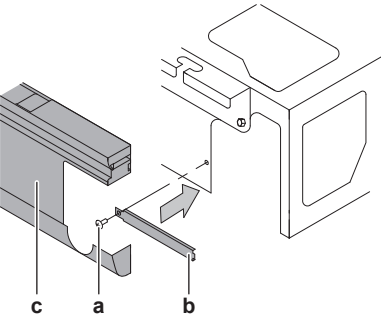
- 1 Remove the reinforcing plate at the right side and put back the screw in the original position on the indoor unit.
- 2 Remove the decoration side panel.
- 3 Remove the rectangular part of the decoration side panel.



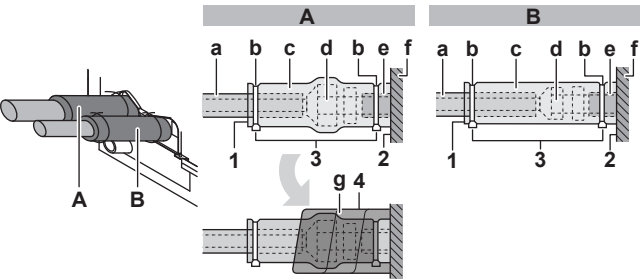
- a Round part
- b Rectangular part of the decoration side panel
- c Decoration side panel
- d Screw
- e Reinforcing plate
- f Right refrigerant piping

- 4 After the drain and refrigerant piping is finished, install the reinforcing plate (optional step) and the decoration side panel back.

14 Electrical installation



- a Screw
  - b Reinforcing plate
  - c Decoration side panel
- **Pipe length.** Keep refrigerant piping as short as possible.
  - **Flare connections.** Connect refrigerant piping to the unit using flare connections.
  - **Insulation.** Insulate the refrigerant piping on the indoor unit as follows:



- A Gas piping
  - B Liquid piping
- a Insulation material (field supply)
  - b Tie wrap (accessory)
  - c Insulation pieces: Large (gas pipe), small (liquid pipe) (accessory)
  - d Flare nut (attached to the unit)
  - e Refrigerant pipe connection (attached to the unit)
  - f Unit
  - g Small sealing pad (accessory)
- 1 Turn up the seams of the insulation pieces.
  - 2 Attach to the base of the unit.
  - 3 Tighten the tie wrap on the insulation pieces.
  - 4 Wrap the sealing pad from the base of the unit to the top of the flare nut.

**NOTICE**  
Make sure to insulate all refrigerant piping. Any exposed piping might cause condensation.

14 Electrical installation

**DANGER: RISK OF ELECTROCUTION**

**WARNING**  
ALWAYS use multicore cable for power supply cables.

**WARNING**  
Use an all-pole disconnection type breaker with at least 3 mm between the contact point gaps that provides full disconnection under overvoltage category III.

**WARNING**  
If the supply cord is damaged, it MUST be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

14.1 Specifications of standard wiring components

**NOTICE**  
We recommend using solid wires. If stranded wires are used, slightly twist the strands to consolidate the end of the conductor for either direct use in the terminal clamp or insertion in a round crimp-style terminal. Details are described in "Guidelines when connecting the electrical wiring" in the installer reference guide.

Component	Specification
Interconnection cable (indoor↔outdoor)	Only use harmonized wire providing double insulation and suitable for applicable voltage  4-core cable  Minimum size 2.5 mm²
User interface cable	Only use harmonized wire providing double insulation and suitable for applicable voltage  2-core cable  Minimum size 0.75 mm²  Maximum length 500 m

14.2 To connect the electrical wiring to the indoor unit

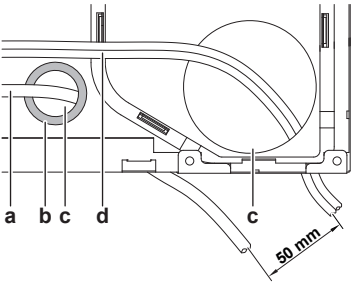
**WARNING**  
Do NOT extend the power supply or the interconnection cable by using wire connectors, wire connection clamps, taped wires, extension cords. These can cause overheating, electric shock or fire.

- NOTICE**
- Follow the wiring diagram (delivered with the unit, located at the inside of the service cover).
  - For instructions on how to connect the optional equipment, see the installation manual delivered with the optional equipment.
  - Make sure the electrical wiring does NOT obstruct proper reattachment of the service cover.

It is important to keep the power supply and the interconnection wiring separated from each other. In order to avoid any electrical interference, the distance between both wirings should ALWAYS be at least 50 mm.

**NOTICE**  
Be sure to keep the power line and interconnection line apart from each other. Interconnection wiring and power supply wiring may cross, but may NOT run parallel.

- 1 Remove the service cover.
- 2 Open the knockout hole and install the resin bushing (accessory). Refer to: "To mount the indoor unit" [p. 12].



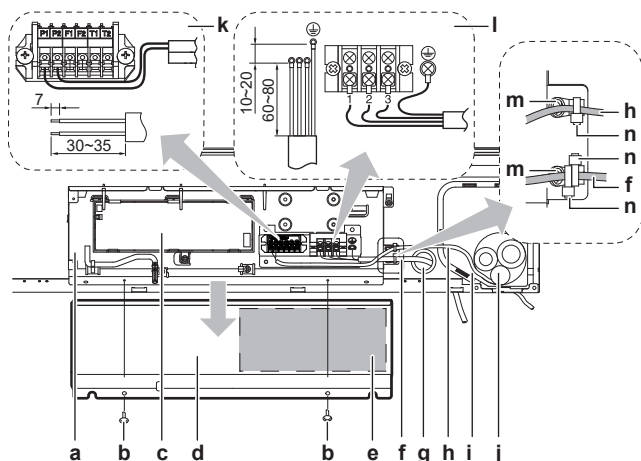
- a Power supply wiring
- b Resin bushing (accessory)
- c Sealing material for gaps around pipes and cables (accessory)

d User interface cable and transmission cable

3 Install the 2 wiring fixtures with screws for wiring fixture (accessory).

4 **User interface cable:** Route the cable through the large cut out hole and connect it to the terminal block (symbols P1, P2). Fix the cable with a tie wrap on the wiring fixture.

5 **Interconnection cable** (indoor↔outdoor): Route the cable through the small cut out hole, connect it to the terminal block (make sure the numbers 1~3 match with the numbers on the outdoor unit) and connect the earth wiring. Fix the cable with a tie wrap on the wiring fixture.



- a Control box
- b Service cover screw
- c Printed circuit board
- d Service cover
- e Wiring diagram label
- f Power supply wiring
- g Small cut out hole
- h User interface cable
- i Rear piping cover
- j Large cut out hole
- k Connection of user interface cable
- l Connection of power supply cable
- m Wiring fixture fixed with a screw (accessory)
- n Tie wrap (accessory)

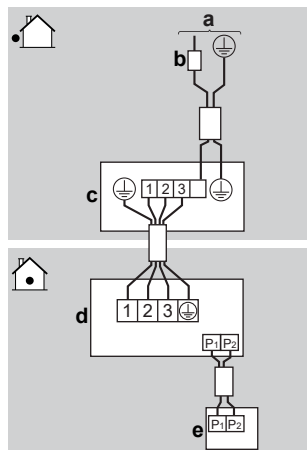
6 Seal all gaps with sealing material (accessory) to prevent small animals from entering the system.

7 Reattach the service cover.

### Complete system wiring example

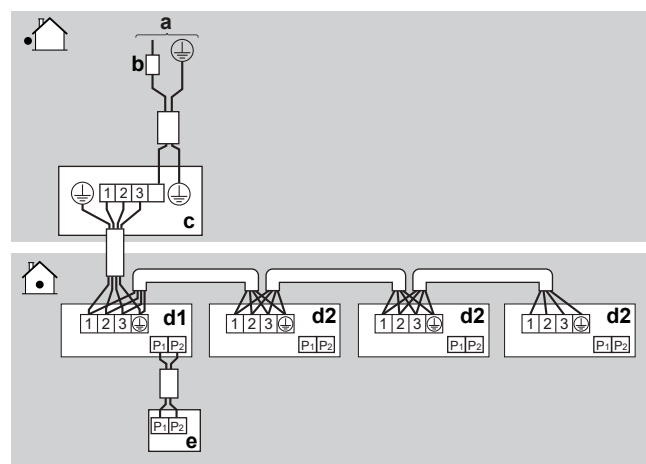
For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.

### Pair type: 1 remote controller controls 1 indoor unit (standard)



- a Power supply
- b Residual current device
- c Outdoor unit
- d Indoor unit
- e User interface

### Simultaneous operation system: 1 user interface controls up to 4 indoor units in 1 pair system (all indoor units operates equally)



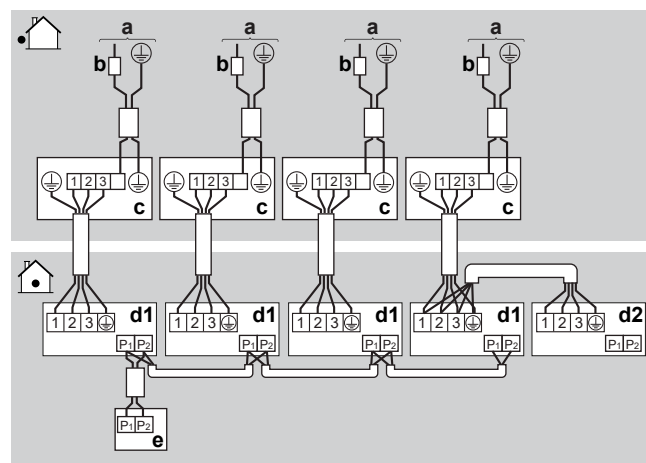
- a Power supply
- b Residual current device
- c Outdoor unit
- d1 Indoor unit (master)
- d2 Indoor unit (slave)
- e User interface

Connect the remote controller only to the master indoor unit. The thermistor reading of room temperature is effective only for the indoor unit connected to the user interface.

Refer to "17.1 Field setting" [p 19] for following settings:

- Number of the connected indoor units as simultaneous operation system
- Simultaneous operation system individual setting

### Group control: 1 user interface controls up to 4 pair systems (all indoor units operate according to the user interface)

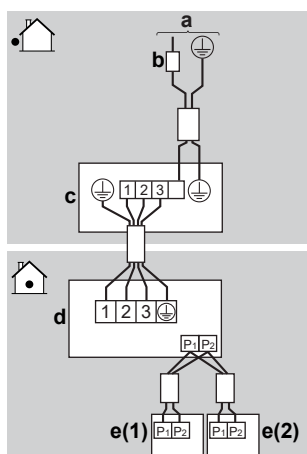


- a Power supply
- b Residual current device
- c Outdoor unit
- d1 Indoor unit (master)
- d2 Indoor unit (slave)
- e User interface

- You may control up to 16 units with 1 remote controller (combination of simultaneous operation and group control)
- All indoor units operate according to the user interface
- The thermistor reading of room temperature is effective only for the indoor unit connected to the user interface.

### Control with 2 user interfaces: 2 user interfaces control 1 indoor unit

## 15 Finishing the indoor unit installation



- a Power supply
- b Residual current device
- c Outdoor unit
- d Indoor unit
- e1 User interface (main)
- e2 User interface (sub)



### INFORMATION

When using 2 user interfaces, one must be set to "MAIN" and the other to "SUB". For setting refer to the installation manual of the connected user interface.

## 15 Finishing the indoor unit installation



### NOTICE

Block any gaps around pipes and cables with sealing material (accessory) to avoid dust from entering the indoor unit.

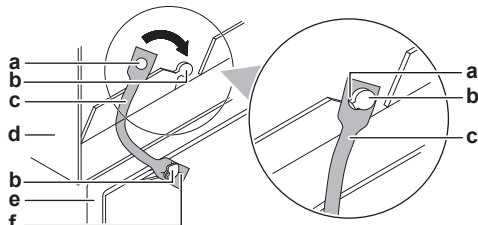
### 15.1 To mount the suction grille and decoration side panel

- 1 Install securely in the reverse order. Refer to "To open the indoor unit" [▶ 12].
- 2 When installing the suction grille, attach the strap of the suction grille to the hook on the indoor unit.



### INFORMATION

When closing the suction grille, make sure the straps of the suction grille are not pinched anywhere.



- a Round hole
- b Hook
- c Strap
- d Indoor unit
- e Suction grille
- f Cross-shaped hole

## 16 Commissioning



### NOTICE

**General commissioning checklist.** Next to the commissioning instructions in this chapter, a general commissioning checklist is also available on the Daikin Business Portal (authentication required).

The general commissioning checklist is complementary to the instructions in this chapter and can be used as a guideline and reporting template during commissioning and hand-over to the user.



### NOTICE

ALWAYS operate the unit with thermistors and/or pressure sensors/switches. If NOT, burning of the compressor might be the result.

### 16.1 Checklist before commissioning

- 1 After the installation of the unit, check the items listed below.
- 2 Close the unit.
- 3 Power up the unit.

<input type="checkbox"/>	You have read the complete installation and operation instructions described in the <b>installer and user reference guide</b> .
<input type="checkbox"/>	The <b>indoor unit</b> is properly mounted.
<input type="checkbox"/>	The <b>outdoor unit</b> is properly mounted.
<input type="checkbox"/>	The <b>drain piping</b> is properly installed and insulated, and drainage flows smoothly. Check for water leaks. <b>Possible consequence:</b> condensate water might drip.
<input type="checkbox"/>	The <b>refrigerant pipes</b> (gas and liquid) are installed correctly and thermally insulated.
<input type="checkbox"/>	There are <b>NO refrigerant leaks</b> .
<input type="checkbox"/>	There are <b>NO missing phases</b> or <b>reversed phases</b> .
<input type="checkbox"/>	The system is properly <b>earthed</b> and the earth terminals are tightened.
<input type="checkbox"/>	The <b>fuses</b> or locally installed protection devices are installed according to this document, and have NOT been bypassed.
<input type="checkbox"/>	The <b>power supply voltage</b> matches the voltage on the identification label of the unit.
<input type="checkbox"/>	There are <b>NO loose connections</b> or damaged electrical components in the switch box.
<input type="checkbox"/>	There are <b>NO damaged components</b> or <b>squeezed pipes</b> on the inside of the indoor and outdoor units.
<input type="checkbox"/>	The <b>stop valves</b> (gas and liquid) on the outdoor unit are fully open.

### 16.2 To perform a test run



### INFORMATION

- Perform the test run according to the instructions in the connected user interface manual.
- The test run is only completed if there is no malfunction code displayed on the user interface.
- See the service manual for the complete list of error codes and a detailed troubleshooting guideline for each error.



**NOTICE**

Do NOT interrupt the test run.

## 17 Configuration

### 17.1 Field setting

Make the following field settings so that they correspond with the actual installation setup and with the needs of the user:

- Wireless remote controller address (if applicable)
- Ceiling height
- Airflow rate when thermostat control is OFF
- Time to clean air filter
- Number of the connected indoor units as simultaneous operation system
- Simultaneous operation system individual setting
- Computerised control (forced OFF and ON/OFF operation)

**INFORMATION**

- The connection of optional accessories to the indoor unit might cause changes to some field settings. For more information, see the installation manual of the optional accessory.
- Following setting are only applicable when using the BRC1H52\* user interface. When using any other user interface, see the installation manual or service manual of the user interface.

**Setting: Wireless remote controller address (if applicable)**

When using wireless remote controller, set the wireless remote controller address. Refer to the installation manual of the connected wireless remote controller.

**Setting: Ceiling height**

This setting must correspond with the actual distance to the floor and the capacity class.

If the distance to the floor is (m)		Then <sup>(1)</sup>		
FHA35~71	FHA100~140	M	C1/SW	C2/—
≤2.7	≤3.8	13 (23)	0	01
2.7<x≤3.5	3.8<x≤4.3			02

**Setting: Airflow rate when thermostat control is OFF**

This setting must correspond with the needs of the user. It determines the fan speed of the indoor unit during thermostat OFF condition.

- 1 If you have set the fan to operate, set the airflow rate speed:

If you want			Then <sup>(1)</sup>		
	Outdoor unit		M	C1/SW	C2/—
	General	2MX/3MX/ 4MX/5MX			
During cooling operation	LL <sup>(2)</sup>		12 (22)	6	01
	Setup volume <sup>(2)</sup>				02
	OFF				03
	Monitoring 1 <sup>(2)</sup>				04
	Monitoring 2 <sup>(2)</sup>				05
During heating operation	LL <sup>(2)</sup>	Monitoring 1 <sup>(2)</sup>	12 (22)	3	01
	Setup volume <sup>(2)</sup>	Monitoring 2 <sup>(2)</sup>			02
	OFF				03
	Monitoring 1 <sup>(2)</sup>				04
	Monitoring 3 <sup>(2)</sup>				05

**Setting: Time to clean air filter**

This setting must correspond with the air contamination in the room. It determines the interval at which "Time to clean filter" notification is displayed on the user interface.

If you want an interval of... (air contamination)	Then <sup>(1)</sup>		
	M	C1/SW	C2/—
±2500 h (light)	10 (20)	0	01
±1250 h (heavy)			02
Notification ON		3	01
Notification OFF			02

**Setting: Number of the connected indoor units as simultaneous operation system****INFORMATION**

Pair/Twin/Trippl/Double Twin - not needed to set anymore. ODU can detect this setting automatically.

For simultaneous operation system mode made following field setting:

If the system mode is...	Then <sup>(1)</sup>		
	M	C1/SW	C2/—
Pair (1 unit)	11 (21)	0	01
Twin (2 units)			02
Triple (3 units)			03
Double twin (4 units)			04

When using in **simultaneous operation** system mode, refer to "simultaneous operation system individual setting" section to set master and slave units separately.

**Setting: Simultaneous operation system individual setting**

Perform the following procedure when setting the master and slave unit separately.

- 1 Change setting:

<sup>(1)</sup> Field settings are defined as follows:

- **M**: Mode number – **First number**: for group of units – **Number between brackets**: for individual unit
- **SW**: Setting number / **C1**: First code number
- **—**: Value number / **C2**: Second code number
- **■**: Default

<sup>(2)</sup> Fan speed:

- **LL**: Low fan speed (set during thermostat OFF)
- **L**: Low fan speed (set by the user interface)
- **Setup volume**: The fan speed corresponds to the speed the user has set using the fan speed button on the user interface.
- **Monitoring 1, 2, 3**: The fan is OFF, but runs for a short time every 6 minutes to detect the room temperature by **LL** (Monitoring 1), **Setup volume** (Monitoring 2) or **L** (Monitoring 3).

## 18 Technical data

If you want...	Then <sup>(1)</sup>		
	M	C1/SW	C2/—
Unified setting	11 (21)	1	01
Individual setting			02

- 2 Perform field setting for the master unit.
- 3 Turn off main power supply.
- 4 Detach user interface from the master unit and connect it to the slave unit.
- 5 Turn on the main power supply switch and set individual setting to 11(21)-1-02.
- 6 Perform field setting for slave unit.
- 7 Turn off the main power supply.
- 8 If there is more than one slave unit, repeat setting for each.
- 9 Detach user interface from the slave unit and reattach to the master unit.



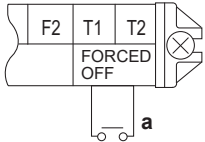
### INFORMATION

- You do NOT need to rewire the user interface from the master unit if the optional user interface for slave unit is used. However, remove the wires attached to the user interface of the master unit.
- After the slave unit is set up, re-connect the user interface to master unit.
- The system does not operate properly when two or more user interfaces are attached in the simultaneous operation system mode.

### Setting: Computerised control (forced OFF and ON/OFF operation)

#### Wire specifications and how to perform wiring

Connect input from outside to terminals T1 and T2 of the terminal block for user interface (there is no polarity).



a Input A

Wire specification	
Wire specification	Sheathed vinyl cord or cable (2 wire)
Gauge	0.75~1.25 mm <sup>2</sup>
External terminal	Contact that can ensure the minimum applicable load of 15 V DC, 10 mA.

#### Actuation

Forced OFF	ON/OFF operation	Input from protection device
Input ON stops operation (impossible by user interface)	Input OFF → ON: Turns the unit ON	Input ON enables control by user interface
Input OFF enables control by user interface	Input ON → OFF: Turns the unit OFF	Input OFF stops operation: Triggers A0 error code

#### How to select FORCED OFF and ON/OFF OPERATION

- 1 Turn on the power and then use the user interface to select operation.

#### 2 Change setting:

If you want...	Then <sup>(1)</sup>		
	M	C1/SW	C2/—
Forced OFF	12 (22)	1	01
ON/OFF operation			02
Input from protection device			03

## 18 Technical data

- A **subset** of the latest technical data is available on the regional Daikin website (publicly accessible).
- The **full set** of the latest technical data is available on the Daikin Business Portal (authentication required).

### 18.1 Wiring diagram

#### 18.1.1 Unified wiring diagram legend

For applied parts and numbering, refer to the wiring diagram on the unit. Part numbering is by Arabic numbers in ascending order for each part and is represented in the overview below by "" in the part code.

Symbol	Meaning	Symbol	Meaning
	Circuit breaker		Protective earth
			Noiseless earth
	Connection		Protective earth (screw)
	Connector		Rectifier
	Earth		Relay connector
	Field wiring		Short-circuit connector
	Fuse		Terminal
	Indoor unit		Terminal strip
	Outdoor unit		Wire clamp
	Residual current device		Heater

Symbol	Colour	Symbol	Colour
BLK	Black	ORG	Orange
BLU	Blue	PNK	Pink
BRN	Brown	PRP, PPL	Purple
GRN	Green	RED	Red
GRY	Grey	WHT	White
SKY BLU	Sky blue	YLW	Yellow

Symbol	Meaning
A*P	Printed circuit board
BS*	Pushbutton ON/OFF, operation switch
BZ, H*O	Buzzer

<sup>(1)</sup> Field settings are defined as follows:

- M**: Mode number – **First number**: for group of units – **Number between brackets**: for individual unit
- SW**: Setting number / **C1**: First code number
- : Value number / **C2**: Second code number
- : Default

Symbol	Meaning
C*	Capacitor
AC*, CN*, E*, HA*, HE*, HL*, HN*, HR*, MR*_A, MR*_B, S*, U, V, W, X*A, K*R_*, NE	Connection, connector
D*, V*D	Diode
DB*	Diode bridge
DS*	DIP switch
E*H	Heater
FU*, F*U, (for characteristics, refer to PCB inside your unit)	Fuse
FG*	Connector (frame ground)
H*	Harness
H*P, LED*, V*L	Pilot lamp, light emitting diode
HAP	Light emitting diode (service monitor green)
HIGH VOLTAGE	High voltage
IES	Intelligent eye sensor
IPM*	Intelligent power module
K*R, KCR, KFR, KHuR, K*M	Magnetic relay
L	Live
L*	Coil
L*R	Reactor
M*	Stepper motor
M*C	Compressor motor
M*F	Fan motor
M*P	Drain pump motor
M*S	Swing motor
MR*, MRCW*, MRM*, MRN*	Magnetic relay
N	Neutral
n=*, N=*	Number of passes through ferrite core
PAM	Pulse-amplitude modulation
PCB*	Printed circuit board
PM*	Power module
PS	Switching power supply
PTC*	PTC thermistor
Q*	Insulated gate bipolar transistor (IGBT)
Q*C	Circuit breaker
Q*DI, KLM	Earth leak circuit breaker
Q*L	Overload protector
Q*M	Thermo switch
Q*R	Residual current device
R*	Resistor
R*T	Thermistor
RC	Receiver
S*C	Limit switch
S*L	Float switch
S*NG	Refrigerant leak detector
S*NPH	Pressure sensor (high)
S*NPL	Pressure sensor (low)
S*PH, HPS*	Pressure switch (high)
S*PL	Pressure switch (low)
S*T	Thermostat
S*RH	Humidity sensor
S*W, SW*	Operation switch

Symbol	Meaning
SA*, F1S	Surge arrester
SR*, WLU	Signal receiver
SS*	Selector switch
SHEET METAL	Terminal strip fixed plate
T*R	Transformer
TC, TRC	Transmitter
V*, R*V	Varistor
V*R	Diode bridge, Insulated-gate bipolar transistor (IGBT) power module
WRC	Wireless remote controller
X*	Terminal
X*M	Terminal strip (block)
Y*E	Electronic expansion valve coil
Y*R, Y*S	Reversing solenoid valve coil
Z*C	Ferrite core
ZF, Z*F	Noise filter

