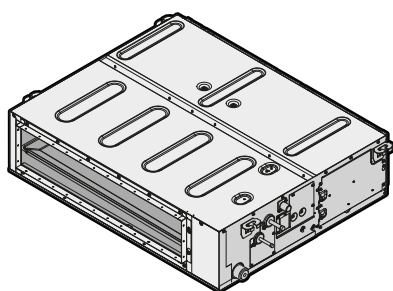




Installation and operation manual

CO₂ VRV system air conditioner



FXSN40B2VEB
FXSN50B2VEB
FXSN63B2VEB
FXSN80B2VEB

Installation and operation manual
CO₂ VRV system air conditioner

English

Table of contents

1	About the documentation	3
1.1	About this document.....	3
2	Specific installer safety instructions	4
For the user		5
3	User safety instructions	5
3.1	General.....	5
3.2	Instructions for safe operation	6
4	About the system	7
4.1	System layout.....	7
5	User interface	7
6	Operation	8
6.1	Operation range.....	8
6.2	About operation modes	8
6.2.1	Basic operation modes	8
6.2.2	Special heating operation modes.....	8
6.3	To operate the system.....	8
7	Maintenance and service	8
7.1	Precautions for maintenance and service	8
7.2	Cleaning the air filter and air outlet.....	9
7.2.1	To clean the air outlet	9
7.2.2	To clean the air filter	9
7.3	About the refrigerant.....	9
8	Troubleshooting	10
9	Relocation	10
10	Disposal	10
For the installer		11
11	About the box	11
11.1	Indoor unit.....	11
11.1.1	To remove the accessories from the indoor unit.....	11
12	Unit installation	11
12.1	Preparing the installation site	11
12.1.1	Installation site requirements of the indoor unit	11
12.2	Mounting the indoor unit.....	12
12.2.1	Guidelines when installing the indoor unit.....	12
12.2.2	Guidelines when installing the ducting.....	13
12.2.3	Guidelines when installing the drain piping.....	13
13	Piping installation	15
13.1	Preparing refrigerant piping	15
13.1.1	Refrigerant piping requirements.....	15
13.1.2	Refrigerant piping insulation	15
13.2	Connecting the refrigerant piping	15
13.2.1	To connect the refrigerant piping to the indoor unit	15
14	Electrical installation	16
14.1	Specifications of standard wiring components	16
14.2	To connect the electrical wiring to the indoor unit	17
15	Commissioning	18
15.1	Checklist before commissioning	18
15.2	To perform a test run	18
16	Configuration	18
16.1	Field setting	18

17	Technical data	20
17.1	Wiring diagram	20
17.1.1	Unified wiring diagram legend.....	20

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 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

2 Specific installer safety instructions

Always observe the following safety instructions and regulations.

General installation requirements



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.



NOTICE

Make sure to install all necessary countermeasures in case of refrigerant leakage according to standard EN378.

Installation site (see "12.1 Preparing the installation site" ▶ 11)



CAUTION

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

This unit, both indoor and outdoor, is suitable for installation in a commercial and light industrial environment.



CAUTION

Excessive concentrations of refrigerant R744 (CO₂) in a closed room can lead to unconsciousness and oxygen deficiency. Take appropriate measures.



CAUTION

This equipment is NOT intended for use in residential locations and will NOT guarantee to provide adequate protection to radio reception in such locations.



WARNING

Install the unit ONLY in locations where the doors of the occupied space are NOT tight fitting.

Installing the ducting (see "12.2.2 Guidelines when installing the ducting" ▶ 13)



CAUTION

- Make sure the installation of the duct does NOT exceed the setting range of the external static pressure for the unit. Refer to the technical datasheet of your model for the setting range.
- Make sure to install the canvas duct so vibrations are NOT transmitted to the duct or ceiling. Use a sound-absorbing material (insulation material) for the lining of the duct and apply vibration insulation rubber to the hanging bolts.
- When welding, make sure NOT to spatter onto the drain pan or the air filter.
- If the metal duct passes through a metal lath, wire lath or metal plate of the wooden structure, separate the duct and wall electrically.
- Install the outlet grille in a position where the airflow will not come into direct contact with people.
- Do NOT use booster fans in the duct. Use the function to adjust the fan rate setting automatically (see "16 Configuration" ▶ 18).

Refrigerant piping installation (see "13 Piping installation" ▶ 15)



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.



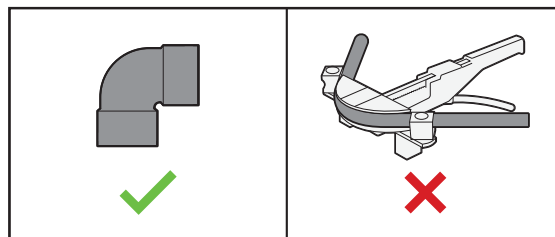
WARNING

- Use K65 piping for high-pressure applications with a working gauge pressure of 120 bar or 90 bar, depending on its location in the system.
- Use K65 unions and fittings approved for a working gauge pressure of 120 bar or 90 bar, depending on its location in the system.
- ONLY brazing is allowed for connection of pipes. No other types of connections are allowed.
- Expanding of pipes is NOT allowed.



CAUTION

NEVER bend high pressure piping! Bending can reduce the pipe thickness and thus weaken the piping. ALWAYS use K65 fittings.



Electrical installation (see "14 Electrical installation" ▶ 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 use taped wires, extension cords, or connections from a star system. They can cause overheating, electrical shocks or fire.
- 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

If NOT factory installed, a main switch or other means for disconnection, having a contact separation in all poles providing full disconnection under overvoltage category III condition, MUST be installed in the fixed wiring.



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.

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.



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.

3 User safety instructions

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.

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.

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.

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.

Maintenance and service (see "7 Maintenance and service" [p 8])

WARNING: **System contains refrigerant under very high pressure.**

The system MUST be serviced by qualified persons ONLY.

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.

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.

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.

⚠ WARNING

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

⚡ 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.

⚠ 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.

About the refrigerant (see "7.3 About the refrigerant" ▶ 9))

⚠ WARNING

The R744 refrigerant (CO₂) inside the unit is odourless, non-flammable and normally does NOT leak.

If the refrigerant leaks in high concentrations in the room, it may have negative effects on its occupants such as asphyxiation and carbon dioxide poisoning. Ventilate the room and contact the dealer 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" ▶ 10))

⚠ 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

The indoor units can be used for heating/cooling applications.

⚠ 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.

⚠ NOTICE

The appliance shall be stored so as to prevent mechanical damage.

⚠ 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

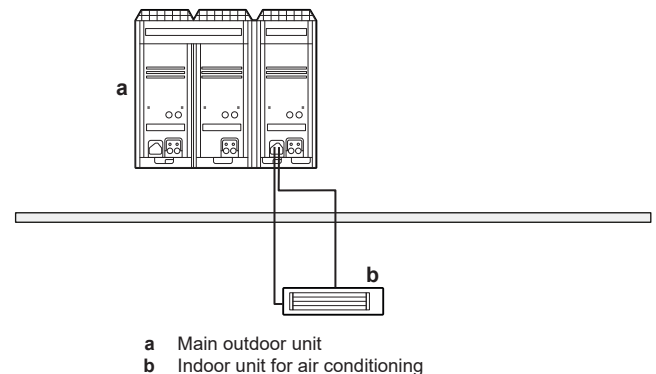
For future modifications or expansions of your system:

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

i INFORMATION

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



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.

⚠ 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.

6 Operation



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.

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

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
	Cooling. In this mode, cooling will be activated as required by the setpoint, or by Setback operation.
	Heating. In this mode, heating will be activated as required by the setpoint, or by Setback operation.
	Fan only. In this mode, air circulates without heating or cooling.
	Dry. 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.
	Auto. 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
Defrost	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.
Hot start	During hot start, the indoor unit fan will stop operation, and the following icon will appear on the home screen:

6.3 To operate the system



INFORMATION

For setting of the operation mode 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



CAUTION

See "[3 User safety instructions](#)" ▶ 5] to acknowledge all related safety instructions.



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, air outlet and outside panels.



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.



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

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.

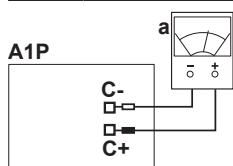
Following symbols may occur on the indoor unit:

Symbol	Explanation
	Measure the voltage at the terminals of main circuit capacitors or electrical components before servicing.



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.



A1P Main printed circuit board
a Multimeter
C Residual voltage measuring points

7.2 Cleaning the air filter and air outlet



CAUTION

Turn off the unit before cleaning the air filter and air outlet.



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.

7.2.1 To clean the air outlet



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 a neutral detergent.

7.2.2 To clean the air filter

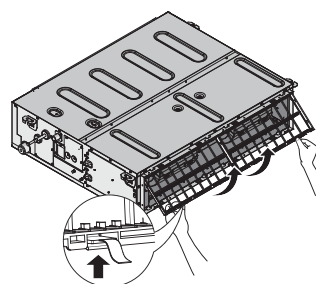
When to clean the air filter:

- 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).

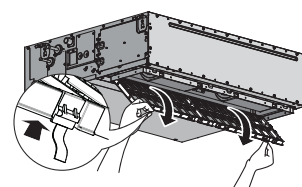
How to clean the air filter:

- 1 Remove the air filter.** Pull its cloth upward (in case of rear suction) or backward (in case of bottom suction).

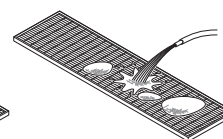
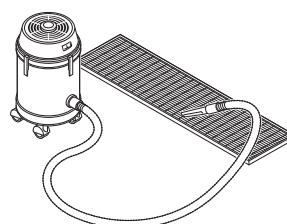
rear suction



bottom suction



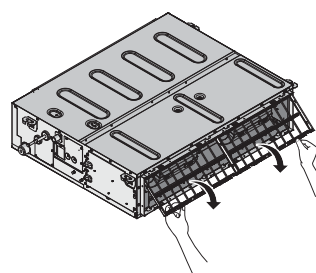
- 2 Clean the air filter.** Use a vacuum cleaner or wash with water. If the air filter is very dirty, use a soft brush and neutral detergent.



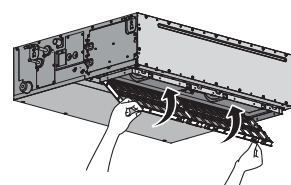
- 3 Dry the air filter in the shadow.**

- 4 Re-attach the air filter.** Align the 2 hanger brackets and push the 2 clips in their place and pull the cloth if necessary.

rear suction



bottom suction



- 5 Confirm that all hangers are fixed.**
- 6 In case of bottom suction, close the air inlet grille. In case of rear suction, close service duct opening.**
- 7 Turn ON the power.**
- 8 To remove warning screens, see the reference guide of the user interface.**

7.3 About the refrigerant

This product contains refrigerant gases.

Refrigerant type: R744 (CO₂)



WARNING

The R744 refrigerant (CO₂) inside the unit is odourless, non-flammable and normally does NOT leak.

If the refrigerant leaks in high concentrations in the room, it may have negative effects on its occupants such as asphyxiation and carbon dioxide poisoning. Ventilate the room and contact the dealer 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

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.

Malfunction	Measure
If the system does not operate at all.	- Check if there is no power failure. Wait until power is restored. If a power failure occurs during operation, the system automatically restarts immediately after power is restored. - Check if no fuse has blown or breaker is activated. Change the fuse or reset the breaker if necessary.
The system stops immediately after starting operation.	- Check if air inlet or outlet of outdoor or indoor unit is not blocked by obstacles. Remove any obstacles and make sure the air can flow freely. - Check if the air filter is clogged (see "7.2.2 To clean the air filter" [p 9]).

Malfunction	Measure
The system operates but cooling or heating is insufficient.	- Check if air inlet or outlet of outdoor or indoor unit is not blocked by obstacles. Remove any obstacles and make sure the air can flow freely. - Check if the air filter is clogged (see "7.2.2 To clean the air filter" [p 9]). - Check the temperature setting. Refer to the manual of the user interface. - Check if the fan speed setting is set to low speed. Refer to the manual of the user interface. - Check if the air flow angle is proper. Refer to the manual of the user interface. - Check for open doors or windows. Close doors and windows to prevent wind from coming in. - Check if direct sunlight enters the room. Use curtains or blinds. - Check if there are too many occupants in the room during cooling operation. Check if the heat source of the room is excessive. - If the heat source of the room is excessive (when cooling). Cooling effect decreases if heat gain of the room is too large.
Operation stops suddenly. (user interface operation lamp or display blinks)	- Check if the air filter is clogged (see "7.2.2 To clean the air filter" [p 9]). - Check if air inlet or outlet of outdoor or indoor unit is not blocked by obstacles. Remove any obstacles, turn the breaker OFF and back ON. If the lamp or display still blinks, contact your dealer.
An abnormal function happens during operation.	The air conditioner may malfunction because of lightning or radio waves. Turn the breaker OFF and back ON.

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.

11.1 Indoor unit

The diagram illustrates the assembly of the rear panel. On the left, a perspective view of the rear panel shows a large curved arrow indicating the direction of assembly. To the right, a list of components is provided, each with a label and a quantity:

- a** 1x: A thin rectangular plate.
- b** 1x: A thin rectangular plate.
- c** 8x: A circular ring.
- d** 40x: A long screw.
- e** 1x: A circular component with a small protrusion.
- f** 3x: Three rectangular plates.
- g** 1x: A curved cable or hose.
- h** 2x: Two vertical rectangular plates.
- i** 1x: A horizontal rectangular plate.
- j** 1x: A horizontal rectangular plate.
- k** 4x: Four curved cables or hoses.

- ## 12 Unit installation



Make sure to install all necessary countermeasures in case of refrigerant leakage according to standard EN378.

12.1.1 Installation site requirements of the indoor unit



This equipment is NOT intended for use in residential locations and will NOT guarantee to provide adequate protection to radio reception in such locations.



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

This unit, both indoor and outdoor, is suitable for installation in a commercial and light industrial environment.



- The professional installer shall evaluate the EMC situation before installation, if the equipment is installed closer than 30 m to a residential location.
- Special installation measures are NOT required to minimize EMC (electro-magnetic) emissions.



This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



Equipment meets the requirement for commercial and light-industrial location when professionally installed and maintained.

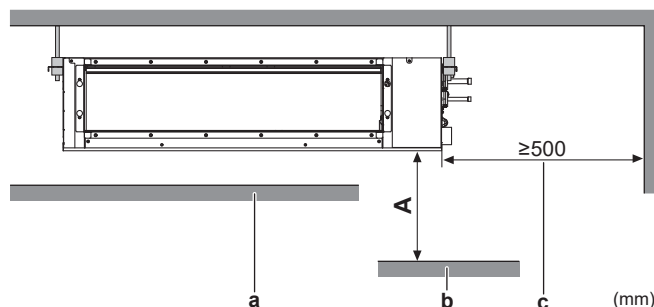


Excessive concentrations of refrigerant R744 (CO₂) in a closed room can lead to unconsciousness and oxygen deficiency. Take appropriate measures.



Mind the following dimensions of the space necessary for the correct appliance installation, including the minimum permissible distances to adjacent structures.

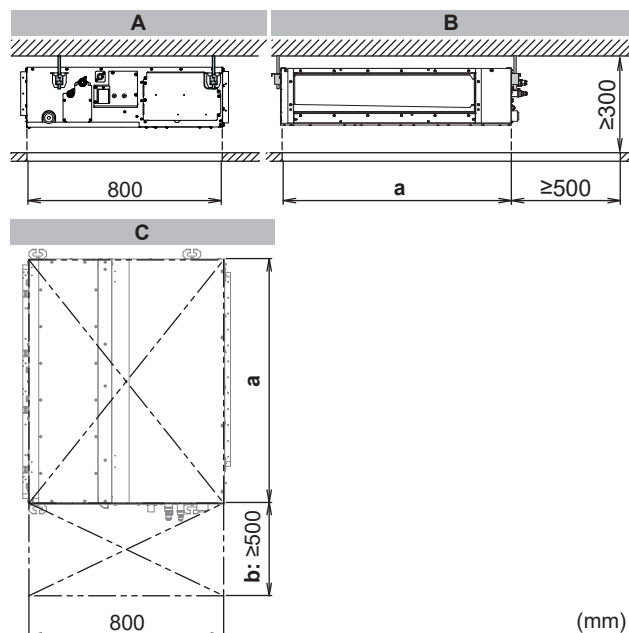
- **Spacing.** Mind the following requirements:



- A** Minimum distance to the floor is 2.5 m in case the fan is covered (e.g. false ceiling, grille, ...)
- a** Ceiling
- b** Floor surface
- c** Maintenance space

Service space and ceiling opening size

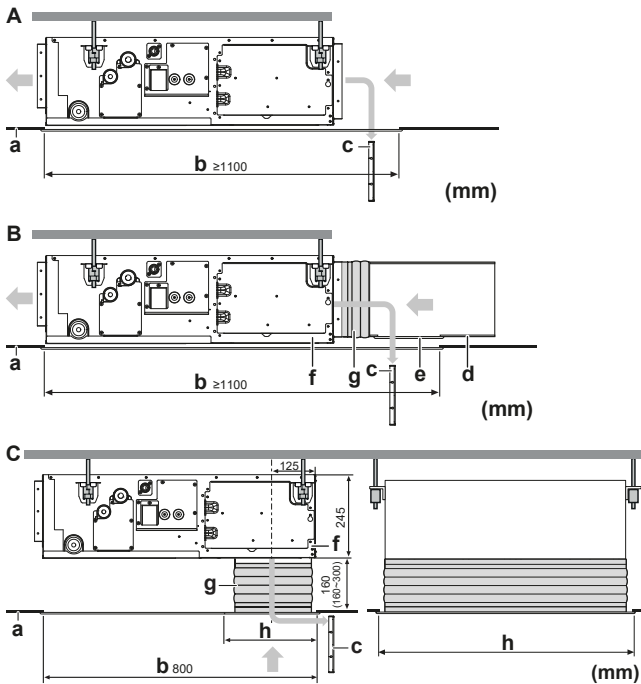
Make sure ceiling opening is big enough to ensure a sufficient clearance for maintenance and service.



12 Unit installation

- A Side view: refrigerant piping, drain piping, control box
- B Side view: air inlet
- C Top view
- a Ceiling opening
- For classes 40, 50: 1000 mm
- For classes 63, 80: 1400 mm
- b Service space

Installation options



- A Standard rear suction
- B Installation with rear canvas duct and duct service opening
- C Installation with bottom canvas duct and air inlet grill
- a Ceiling surface
- b Ceiling opening
- c Air filter removal route for air filter maintenance
- d Air inlet filter
- e Duct service opening
- f Interchangeable plate
- g Canvas connection for air inlet panel (field supply)
- h Minimum opening for protective guard (field supply)
- For classes 40, 50: 954×210 mm
- For classes 63, 80: 1354×210 mm



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



INFORMATION

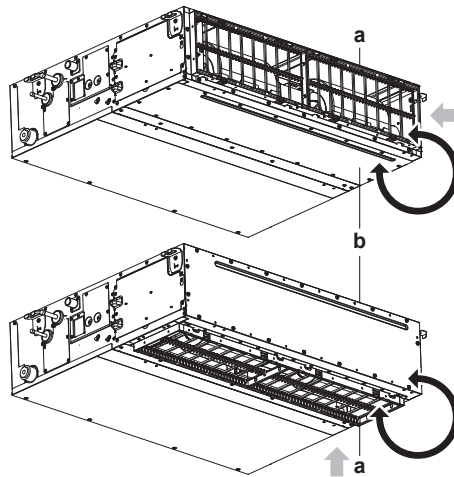
Optional equipment. When installing optional equipment, also read the installation manual of the optional equipment. Depending on the field conditions, it might be easier to install the optional equipment first.

Installation options



INFORMATION

The unit can be used with bottom suction by replacing the interchangeable plate by the air filter holding plate.

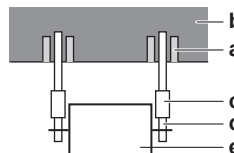


- a Air filter holding plate with air filter(s)
- b Interchangeable plate

- **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.

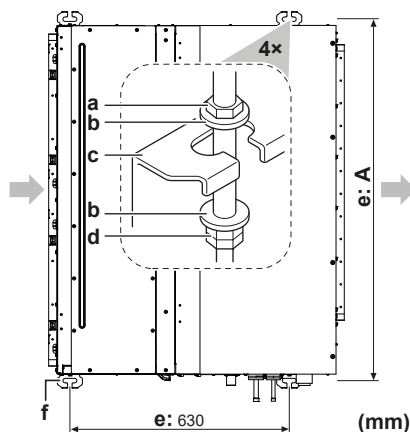
- For existing ceilings, use anchors.

- For new ceilings, use sunken inserts, sunken anchors or other field supplied parts.



- a Anchor
- b Ceiling slab
- c Long nut or turn-buckle
- d Suspension bolt
- e Indoor unit

- **Suspension bolts.** Use M10 suspension bolts for installation. Attach the hanger bracket to the suspension bolt. Fix it securely using a nut and washer from the upper and lower sides of the hanger bracket.

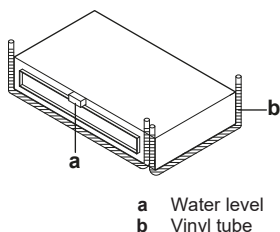


- a Nut (field supply)
- b Washer (accessories)
- c Hanger bracket
- d Double nut (field supply)
- e Suspension bolt spacing
- f Suspension bolt

12-1 Suspension bolt spacing (A)

Class	A (mm)
40, 50	1038
63, 80	1438

- **Level.** Make sure the unit is level at all four corners using a level or a water-filled vinyl tube.



NOTICE

Do NOT install the unit tilted. **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.

12.2.2 Guidelines when installing the ducting

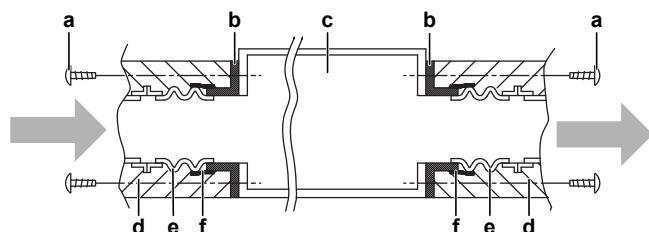


CAUTION

- Make sure the installation of the duct does NOT exceed the setting range of the external static pressure for the unit. Refer to the technical datasheet of your model for the setting range.
- Make sure to install the canvas duct so vibrations are NOT transmitted to the duct or ceiling. Use a sound-absorbing material (insulation material) for the lining of the duct and apply vibration insulation rubber to the hanging bolts.
- When welding, make sure NOT to spatter onto the drain pan or the air filter.
- If the metal duct passes through a metal lath, wire lath or metal plate of the wooden structure, separate the duct and wall electrically.
- Install the outlet grille in a position where the airflow will not come into direct contact with people.
- Do NOT use booster fans in the duct. Use the function to adjust the fan rate setting automatically (see "16 Configuration" ▶ 18).

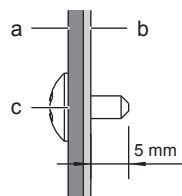
The ducting is to be field supplied.

- 1 Connect the canvas duct to the inside of the flange on both inlet and outlet sides. Connect the canvas duct using the accessory screws.
- 2 Connect the duct to the canvas duct.



- a Screws for duct flanges (accessory)
b Flange (located on the unit)
c Main unit
d Insulation (field supply)
e Canvas duct (field supply)
f Aluminium tape (field supply)

- **Fixing screws.** When installing an air inlet duct, select fixing screws that stick out 5 mm on the inside of the flange to protect the air filter from damage during maintenance of the filter.



- a Air inlet duct
b Inside of the flange
c Fixing screw

- 3 Wind aluminium tape around the flange and duct connection. Make sure there are no air leaks at any other connection.
 - 4 Insulate the duct to prevent condensation from forming. Use glass wool or polyethylene foam 25 mm thick.
- **Filter.** Be sure to attach an air filter inside the air passage on the air inlet side. Use an air filter with dust collecting efficiency $\geq 50\%$ (gravimetric method).

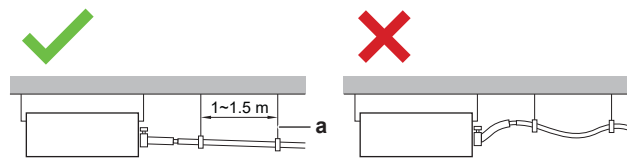
12.2.3 Guidelines when installing the drain piping

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

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

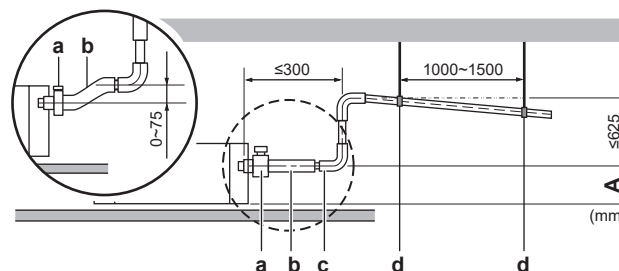
General guidelines

- **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

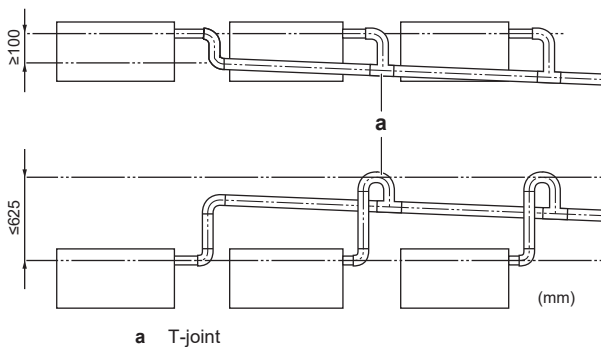
- **Condensation.** Take measures against condensation. Insulate the complete drain piping in the building.
- **Rising piping.** If necessary to make the slope possible, you can install rising piping.
 - Drain hose inclination: 0~75 mm to avoid stress on the piping and to avoid air bubbles.
 - Rising piping: ≤ 300 mm from the unit, ≤ 625 mm perpendicular to the unit.



12 Unit installation

- A** In case of rear suction installation 231 mm
In case of installation with canvas duct (field supply)
350~530 mm
- a** Metal clamp (accessory)
b Drain hose (accessory)
c Rising drain piping (vinyl pipe of 25 mm nominal diameter
and 32 mm outer diameter) (field supply)
d Hanging bars (field supply)

- **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.

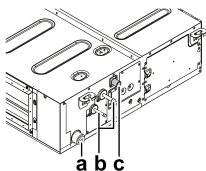


To connect the drain pipe to the indoor unit



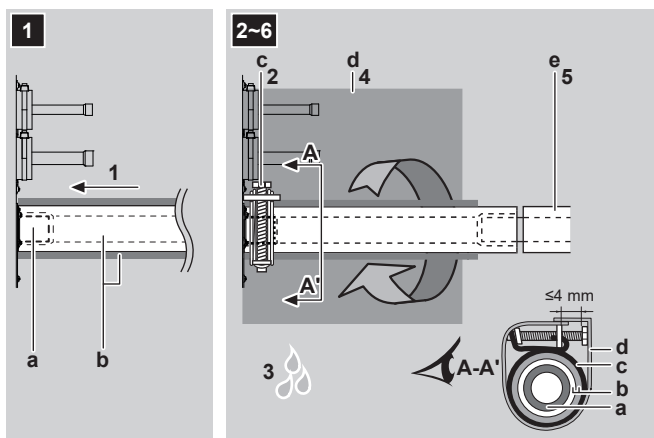
NOTICE

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



- a** Drain outlet for maintenance
b Refrigerant pipes
c Drain pipe connection

- 1 Push the drain hose as far as possible over the drain pipe connection.
- 2 Tighten the metal clamp until the screw head is less than 4 mm from the metal clamp part.
- 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 (accessory).
- 5 Connect the drain piping to the drain hose.



- 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)

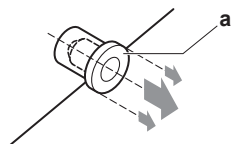


NOTICE

- Do NOT remove the drain pipe plug. Water might leak out.
- Use the drain outlet only to discharge the water before maintenance.
- Insert and remove the drain plug gently. Excessive force may deform the drain socket of the drain pan.

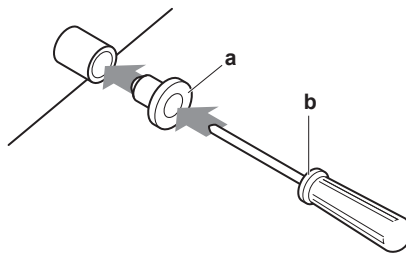
Pull out the plug.

- Do NOT wiggle the plug up and down.



Push in the plug.

- Set the plug and push it in using a Phillips screwdriver.



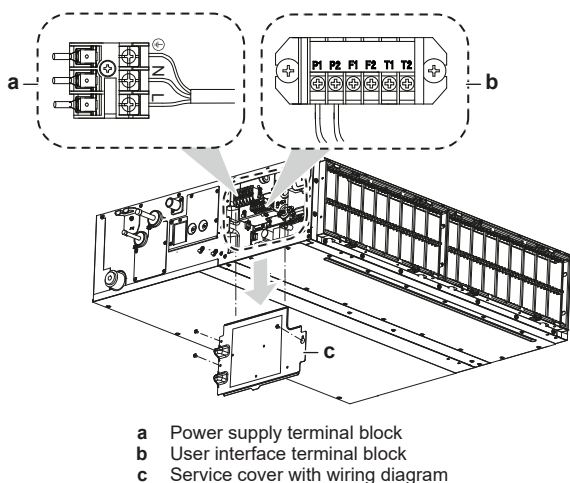
- a** Drain plug
b Phillips screwdriver

To check for water leaks

The procedure differs depending on whether installation of the system is already completed. When installation of the system is not yet completed, temporarily connect the user interface and power supply to the unit.

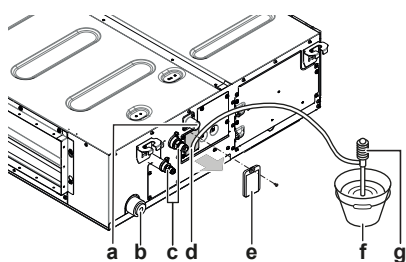
When installation of the system is not yet completed

- 1 Temporarily connect electrical wiring.
 - Remove the service cover.
 - Connect the power supply.
 - Connect the user interface.
 - Reattach the service cover.



- a** Power supply terminal block
b User interface terminal block
c Service cover with wiring diagram

- 2 Turn ON the power supply.
- 3 Start fan only operation (see the reference guide or the service manual of the user interface).
- 4 Remove the water inlet cover (1 screw).
- 5 Gradually pour approximately 1 l of water through the water inlet, and check for leaks.



- a Drain connection
- b Drain outlet for maintenance
- c Refrigerant pipes
- d Water inlet
- e Water inlet cover
- f Bucket (adding water through water inlet)
- g Portable pump

- 6 Turn OFF the power.
- 7 Disconnect the electrical wiring.

- Remove the service cover.
- Disconnect the power supply.
- Disconnect the user interface.
- Reattach the service cover.

When installation of the system is already completed

- 1 Start cooling operation (see the reference guide or the service manual of the user interface).
- 2 Gradually pour approximately 1 l of water through the water inlet, and check for leaks (see "When installation of the system is not yet completed" ▶ 14).

13 Piping installation

13.1 Preparing refrigerant piping

13.1.1 Refrigerant piping requirements



NOTICE

Refrigerant R744 requires strict cautions for keeping the system clean and dry. Foreign materials (including mineral oils or moisture) should be prevented from getting mixed into the system.



NOTICE

The piping and other pressure-containing parts shall be suitable for refrigerant and oil. Use K65 (or equivalent) copper-iron alloy tube system for high-pressure applications with a working pressure of 120 bar gauge at the air conditioner side and 90 bar gauge at the refrigeration side.

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



NOTICE

If the ability to close the stop valves for field piping is wanted, the installer MUST install a pressure relief valve on the liquid AND gas piping between the outdoor unit and the air conditioning indoor units.

Refrigerant piping diameter

Liquid piping	Gas piping
Ø9.5 mm	Ø12.7 mm

Refrigerant piping material

Piping material

K65 copper-iron alloy (CuFe2P), maximum operating pressure = 120 bar

Piping temper grade and thickness

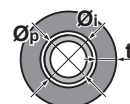
Outer diameter (Ø)	Temper grade	Thickness (t) ^(a)	
9.5 mm (3/8")	R420 (drawn)	≥0.65 mm	
12.7 mm (1/2")		≥0.85 mm	

^(a) 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 _p)	Insulation inner diameter (Ø _i)	Insulation thickness (t)
9.5 mm (3/8")	10~14 mm	≥10 mm
12.7 mm (1/2")	14~16 mm	≥10 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.

- **Pipe length.** Keep refrigerant piping as short as possible.



WARNING

- Use K65 piping for high-pressure applications with a working gauge pressure of 120 bar or 90 bar, depending on its location in the system.
- Use K65 unions and fittings approved for a working gauge pressure of 120 bar or 90 bar, depending on its location in the system.
- ONLY brazing is allowed for connection of pipes. No other types of connections are allowed.
- Expanding of pipes is NOT allowed.

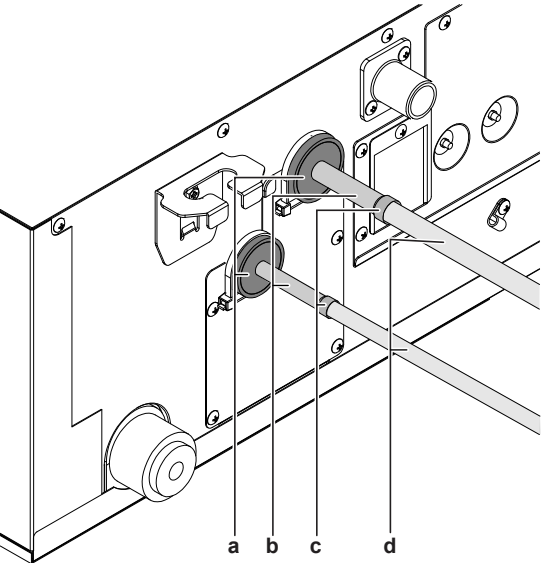
- 1 Insert the field pipe into the piping on the indoor unit side.

14 Electrical installation

2 Connect refrigerant piping to the unit using only **brazed connections**.

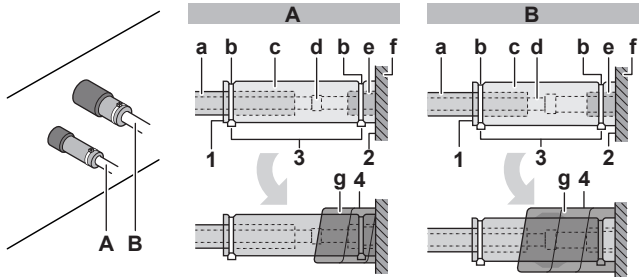
NOTICE

When brazing, place a wet cloth on the insulation attached on the unit (a) and make sure the temperature does not exceed 200°C.



- a Insulation attached on the unit
- b Piping on the indoor unit side
- c Brazed connection
- d Field piping

3 Insulate the refrigerant piping on the indoor unit as follows:



- A Liquid piping
- B Gas piping
- a Insulation material (field supply)
- b Tie wraps (accessory)
- c Insulation pieces: Large (gas pipe), small (liquid pipe) (accessory)
- d Brazed connection
- e Refrigerant pipe connection (attached to the unit)
- f Unit
- g Sealing pads: Medium 1 (gas pipe), medium 2 (liquid pipe) (accessories)
- 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 brazed connection.

NOTICE

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

CAUTION

See "2 Specific installer safety instructions" [▶ 4] to acknowledge all related safety instructions.

WARNING

ALWAYS use multicore cable for power supply cables.

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.

NOTICE

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

14.1 Specifications of standard wiring components

NOTICE

We recommend using solid (single-core) 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.

Power supply of the product	
Voltage	220~240 V/220 V
Frequency	50/60 Hz
Phase	1~
MCA ^(a)	FXSN40: 1.5 A FXSN50: 1.8 A FXSN63: 2.1 A FXSN80: 2.6 A

^(a) MCA=Minimum circuit ampacity. Stated values are maximum values (see electrical data of indoor unit for exact values).

Wiring / circuit breaker (field supplied)	
Power supply cable	MUST comply with national wiring regulation. 3-core cable Wire size based on the current, but not less than 1.5 mm ²
Interconnection cable	Only use harmonised wire providing double insulation and suitable for applicable voltage 2-core cable Minimum size 0.75 mm ²
User interface cable	Only use harmonised wire providing double insulation and suitable for applicable voltage 2-core cable Minimum size 0.75 mm ² Maximum length 500 m
Recommended circuit breaker	6 A
Residual current device	MUST comply with national wiring regulation

14 Electrical installation

DANGER: RISK OF ELECTROCUTION

14.2 To connect the electrical wiring to the indoor unit

NOTICE

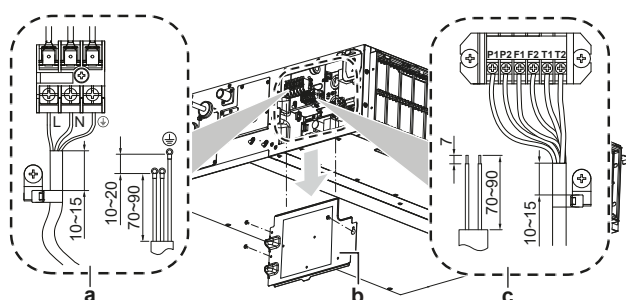
- Follow the wiring diagram (delivered with the unit, located at the inside of the service cover).
- For instructions on how to connect the optional equipment, see the installation manual delivered with the optional equipment.
- Make sure the electrical wiring does NOT obstruct proper reattachment of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

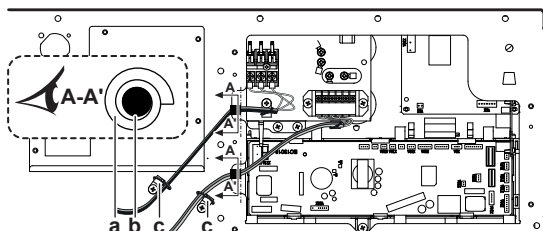
Be sure to keep the power line and interconnection line apart from each other. Interconnection wiring and power supply wiring may cross, but may NOT run parallel.

- Remove the service cover.
- User interface cable:** Route the cable through the frame, connect the cable to the terminal block (symbols P1, P2) and fix the cable with a tie wrap.
- Interconnection cable:** Route the cable through the frame, connect the cable to the terminal block (make sure the symbols F1, F2 match with the symbols on the outdoor unit), and fix the cable with a tie wrap.
- Power supply cable:** Route the cable through the frame and connect the cable to the terminal block (L, N, earth).



- a Power supply and earth wiring
- b Service cover with wiring diagram
- c Interconnection and user interface wiring

- Fix the cables with a tie wrap.
- Plastic clamp for tie wrap:** Pass tie wraps through the plastic clamps and fasten to fix the cables.

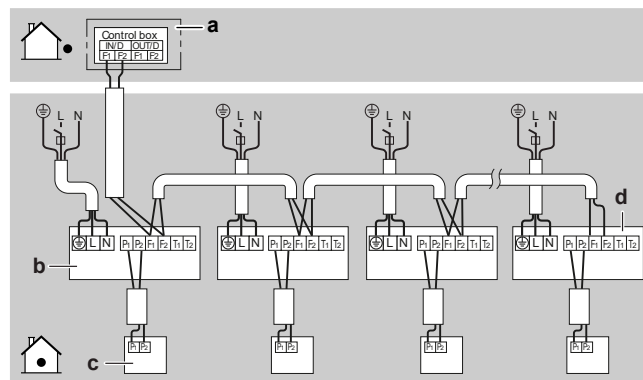


- a Small sealing (accessory)
- b Wiring
- c Plastic clamp for tie wrap

- Divide the small sealing (accessory) and wrap it around the cables to prevent water from entering the unit. Seal all gaps to prevent small animals from entering the system.
- Reattach the service cover.

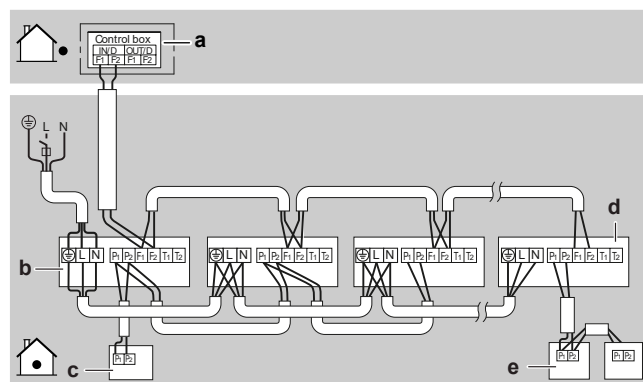
Complete system example

- Example:** 1 user interface controls 1 indoor unit.



- a Outdoor unit
- b Indoor unit
- c User interface
- d Most downstream indoor unit

- Example:** Group control or use with 2 user interfaces.



- a Outdoor unit
- b Indoor unit
- c User interface (controls 3 indoor units)
- d Most downstream indoor unit
- e For use with 2 user interfaces

- Setting master unit (Cooling/Heating masterhood).** In case of group control, connect the user interface wiring directly to the master unit. Do not connect user interfaces directly to slave units. Slave units are restricted in their operation by the master unit (e.g. 1 outdoor unit does not allow for 1 indoor unit to run in cooling operation while another runs in heating operation). For setting using the user interface, refer to the manual or reference guide of the user interface.
- 2 or more user interfaces:** When using 2 or more user interfaces, one must be set to "MAIN" and the other to "SUB". For setting procedure see the installation and operation manual of the used user interface.



INFORMATION

In case of group control, it is not necessary to assign a group address to the indoor unit. The group address is automatically set when the power is turned on.

15 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.

15.1 Checklist before commissioning

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

☐	You have read the complete installation and operation instructions described in the installer and user reference guide .
☐	Installation Check that the unit is properly installed, to avoid abnormal noises and vibrations when starting up the unit.
☐	Drainage Make sure drainage flows smoothly. Possible consequence: Condensate water might drip.
☐	Field wiring Check that the field wiring has been carried out according to the instructions described in the chapter " 14 Electrical installation " [▶ 16], according to the wiring diagrams and according to the applicable national wiring regulation.
☐	Power supply voltage Check the power supply voltage on the local supply panel. The voltage MUST correspond to the voltage on the nameplate of the unit.
☐	Earth wiring Be sure that the earth wires have been connected properly and that the earth terminals are tightened.
☐	Fuses, circuit breakers, or protection devices Check that the fuses, circuit breakers, or the locally installed protection devices are of the size and type specified in the chapter " 14 Electrical installation " [▶ 16]. Be sure that no fuse or protection device is bypassed.
☐	Internal wiring Visually check the switch box and the inside of the unit for loose connections or damaged electrical components.
☐	Pipe size and pipe insulation Be sure that correct pipe sizes are installed and that the insulation work is properly executed.

☐	Damaged equipment Check the inside of the unit for damaged components or squeezed pipes.
☐	Field settings Make sure all field settings you want are set. See " 16.1 Field setting " [▶ 18].

15.2 To perform a test run



INFORMATION

- Perform the test run according to the instructions in the outdoor unit manual.
- The test run is only completed if there is no malfunction code displayed on the user interface or the outdoor unit 7-segment display.
- 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.

16 Configuration

16.1 Field setting

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

- Ceiling height
- Bottom suction or rear suction installation
- External static pressure setting using:
 - Airflow automatic adjustment setting
 - User interface
- Air volume when thermostat control is OFF
- Time to clean air filter
- Thermostat sensor selection
- Thermostat differential changeover (if remote sensor is used)
- Differential for automatic changeover
- Auto-restart after power failure

Setting: Ceiling height

This setting must correspond with the actual distance to the floor, capacity class and air flow directions.

If the distance to the floor is (m)	Then ⁽¹⁾		
	M	SW	—
≤2.7	13 (23)	0	01
2.7<x≤3.0			02
3.0<x≤3.5			03

Setting: Bottom suction or rear suction installation

This setting must correspond with the installation type: rear suction (default) or bottom suction.

⁽¹⁾ Field settings are defined as follows:

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

If you have the installation with...	Then ⁽¹⁾		
	M	SW	—
Rear suction	13(23)	11	01
Bottom suction			02

Setting: External static pressure



INFORMATION

- The fan speed of the indoor unit is preset to ensure the standard external static pressure.
- To set a higher or lower external static pressure, reset the initial setting with the user interface.

Settings for external static pressure can be achieved in 2 ways:

- Using the airflow automatic adjustment function
- Using the user interface

To set external static pressure by airflow automatic adjustment function



NOTICE

- Do NOT adjust the dampers during the fan only operation for airflow automatic adjustment.
- For the external static pressure higher than 100 Pa, do NOT use airflow automatic adjustment function.
- If the ventilation paths have been changed, perform the airflow automatic adjustment again.

- Test run MUST be done with a dry coil, run the unit for 2 hours with fan only to dry the coil.

- Check if the power supply wiring, duct, air filter are properly attached. If the closing damper is installed in the unit, make sure it is open.

- If there is more than one air inlet and outlet, adjust the dampers so that the airflow rate of each air inlet and outlet is conform with the designed airflow rate.

1 Operate the unit in **fan only mode** prior to using the airflow automatic adjustment function.

2 **Stop** the air conditioning unit.

3 **Set the value** number “—” to 03 for **M** 11(21) and **SW** 7.

4 **Start** the air conditioning unit.

Result: The operation lamp lights up and the unit starts the fan operation for airflow automatic adjustment.

- 5 After airflow automatic adjustment is finished (air conditioning unit will stop) check if the value number “—” is set to 02. If there is no change, perform the setting again.

Setting content:	Then ⁽¹⁾		
	M	SW	—
Airflow adjustment is OFF	11(21)	7	01
Completion of automatic airflow adjustment			02
Start of automatic airflow adjustment			03

To set external static pressure by the user interface

Check the indoor unit setting: the value number “—” must be set to 01 for **M** 11(21) and **SW** 6.

- 1 Change the value number “—” according to the external static pressure of the duct to be connected as in table below.

External static pressure (Pa) ⁽¹⁾				
M	SW	—	Class	
			40, 50, 63	80
13(23)	6	01	30	40
		02	—	—
		03	30	—
		04	40	40
		05	50	50
		06	60	60
		07	70	70
		08	80	80
		09	90	90
		10	100	100
		11	110	110
		12	120	120
		13	—	—
		14	—	—
		15	—	—

Setting: Air volume 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 air volume speed:

If you want...		Then ⁽¹⁾		
		M	SW	—
During thermostat OFF at cooling operation	LL ⁽²⁾	12 (22)	6	01
	Setup volume ⁽²⁾			02
	OFF ^(a)			03
	Monitoring 1 ⁽²⁾			04
	Monitoring 2 ⁽²⁾			05
During thermostat OFF at heating operation	LL ⁽²⁾	12 (22)	3	01
	Setup volume ⁽²⁾			02
	OFF ^(a)			03
	Monitoring 1 ⁽²⁾			04
	Monitoring 2 ⁽²⁾			05

^(a) Only use in combination with optional remote sensor or when setting **M** 10 (20), **SW** 2, — 03 is used.

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.

⁽¹⁾ Field settings are defined as follows:

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

⁽²⁾ 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 (low, medium, high) using the fan speed button on the user interface.
- Monitoring 1, 2:** The fan is OFF, but runs for a short time every 6 minutes to detect the room temperature by **LL** (Monitoring 1) or by **L** (Monitoring 2).

17 Technical data

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

Setting: Thermostat sensor selection

This setting must correspond with how/if the remote controller thermostat sensor is used.

When the remote controller thermostat sensor is...	Then ⁽¹⁾		
	M	SW	—
Used in combination with indoor unit thermistor	10 (20)	2	01
Not used (indoor unit thermistor only)			02
Used exclusively			03

Setting: Thermostat differential changeover (if remote sensor is used)

If the system contains a remote sensor, set the increase/decrease increments.

If you want to change increments to...	Then ⁽¹⁾		
	M	SW	—
1°C	12 (22)	2	01
0.5°C			02

Setting: Differential for automatic changeover

Set temperature difference between cooling setpoint and heating setpoint in automatic mode (availability depends on the system type). Differential is cooling setpoint minus heating setpoint.

If you want to set...	Then ⁽¹⁾			Example
	M	SW	—	
0°C	12 (22)	4	01	cooling 24°C/heating 24°C
1°C			02	cooling 24°C/heating 23°C
2°C			03	cooling 24°C/heating 22°C
3°C			04	cooling 24°C/heating 21°C
4°C			05	cooling 24°C/heating 20°C
5°C			06	cooling 24°C/heating 19°C
6°C			07	cooling 24°C/heating 18°C
7°C			08	cooling 24°C/heating 17°C

Setting: Auto-restart after power failure

Depending on the needs of the user, you may disable/enable the automatic restart after a power failure.

If you want auto-restart after power failure...	Then ⁽¹⁾		
	M	SW	—
Disabled	12 (22)	5	01
Enabled			02

⁽¹⁾ Field settings are defined as follows:

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

17 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).

17.1 Wiring diagram

17.1.1 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
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

Symbol	Meaning
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
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

Symbol	Meaning
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







Copyright 2024 Daikin

DAIKIN INDUSTRIES CZECH REPUBLIC s.r.o.

U Nové Hospody 1155/1, 301 00 Plzeň Skvrňany, Czech Republic

DAIKIN EUROPE N.V.

Zandvoordestraat 300, B-8400 Oostende, Belgium

3P672850-3C 2024.11