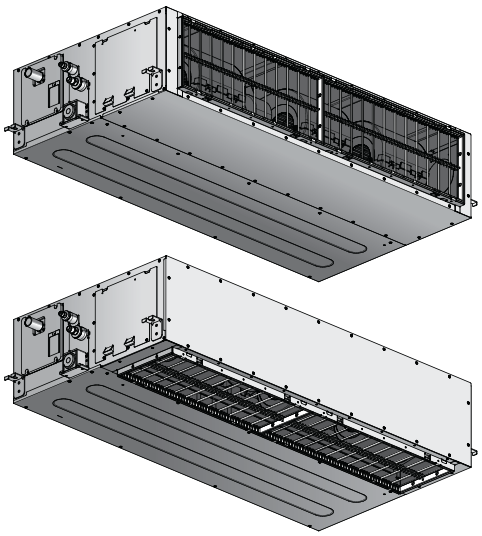
Installation and operation manual

Split system air conditioners



FDA125A5VEB

Installation and operation manual
Split system air conditioners

English

CE - DECLARATION-OF-CONFORMITY
CE - KONFORMITÄTSERKLÄRUNG
CE - DECLARATION-DE-CONFORMITE
CE - CONFORMITEITSVERKLARING

CE - DECLARACION-DE-CONFORMIDAD
CE - DICHIARAZIONE-DI-CONFORMITA
CE - ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ

CE - DECLARAÇÃO-DE-CONFORMIDADE
CE - ЗАЯВЛЕНИЕ-О-СООТВЕТСТВИИ
CE - OVERENSSTEMMELSESERKLÆRING
CE - FÖRSÄKRAN-OM-ÖVERENSTÄMMELSE

CE - ERKLÆRING OM-SAMSVAR
CE - ILMOITUS-YHDENMUKAISUUDESTA
CE - PROHLÁŠENÍ-O-SHODĚ

CE - IZJAVA-O-USKLAĐENOSTI
CE - MEGFELELŐSÉGI-NYILATKOZAT
CE - DEKLARACJA-ZGODNOŚCI
CE - DECLARAŢIE-DE-CONFORMITATE

CE - IZJAVA O SKLADNOSTI
CE - VASTAVUSDEKLARATSIOON
CE - ДЕКЛАРАЦИЯ-ЗА-СЪОТВЕТСТВИЕ

CE - ATITIKTIES-DEKLARACIJA
CE - ATBILSTĪBAS-DEKLARĀCIJA
CE - VYHLÁSENIE-ZHODY
CE - UYGUNLUK-BEYANI

Daikin Europe N.V.

01 (GB) declares under its sole responsibility that the air conditioning models to which this declaration relates:
02 (D) erklärt auf seine alleinige Verantwortung daß die Modelle der Klimageräte für die diese Erklärung bestimmt ist:
03 (F) déclare sous sa seule responsabilité que les appareils d'air conditionné visés par la présente déclaration:
04 (NL) verklaart hierbij op eigen exclusieve verantwoordelijkheid dat de airconditioning units waarop deze verklaring betrekking heeft:
05 (E) declara baja su única responsabilidad que los modelos de aire acondicionado a los cuales hace referencia la declaración:
06 (I) dichiara sotto sua responsabilità che i condizionatori modello a cui è riferita questa dichiarazione:
07 (GR) δηλώνει με αποκλειστική της ευθύνη ότι τα μοντέλα των κλιματιστικών συσκευών στα οποία αναφέρεται η παρούσα δήλωση:
08 (P) declara sob sua exclusiva responsabilidade que os modelos de ar condicionado a que esta declaração se refere:
09 (RUS) заявляет, исключительно под свою ответственность, что модели кондиционеров воздуха, к которым относится настоящее заявление:
10 (DK) erklærer under eneansvar, at klimaanlægmodellerne, som denne deklaration vedrører:
11 (S) deklarerar i egenskap av huvudansvarig, att luftkonditioneringsmodellerna som berörs av denna deklaration innebär att:
12 (N) erklærer et fullstendig ansvar for at de luftkondisjoneringsmodeller som berøres av denne deklarasjon, innebærer at:
13 (FIN) ilmoittaa yksinomaan omalla vastuullaan, että tämän ilmoituksen tarkoittamat ilmastointilaitteiden mallit:
14 (CZ) prohlašuje ve své plné odpovědnosti, že modely klimatizace, k nimž se toto prohlášení vztahuje:
15 (GR) izjavljuje pod isključivo vlastitom odgovornošću da su modeli klima uređaja na koje se ova izjava odnosi:
16 (H) teljes felelősségе tudatában kijelenti, hogy a klímaberendezés modellek, melyekre e nyilatkozat vonatkozik:
17 (PL) deklaruje na własną i wyłączną odpowiedzialność, że modele klimatyzatorów, których dotyczy niniejsza deklaracja:
18 (RO) declară pe proprie răspundere că aparatele de aer conditionat la care se referă această declarație:
19 (SLO) z vso odgovornostjo izjavlja, da so modeli klimatskih naprav, na katere se izjava nanaša:
20 (EST) kinnitab oma täielikul vastutusel, et käesoleva deklaratsiooni alla kuuluvad kliimaseadmete mudelid:
21 (BG) декларира на своя отговорност, че моделите климатична инсталация, за които се отнася тази декларация:
22 (LT) visiška savo atsakomybe skelbia, kad oro kondicionavimo prietaisų modeliai, kuriems yra taikoma ši deklaracija:
23 (LV) ar pilnu atbildību apliecina, ka tālāk uzskaitīto modeļu gaisa kondicionētāji, uz kuriem attiecas šī deklarācija:
24 (SK) vyhlasuje na vlastnú zodpovednosť, že tieto klimatizačné modely, na ktoré sa vzťahuje toto vyhlásenie:
25 (TR) tamamen kendi sorumluluğunda olmak üzere bu bildirinin ilgili olduğu klima modellerinin aşağıdaki gibi olduğunu beyan eder:

FDA125A5VEB,

01 are in conformity with the following standard(s) or other normative document(s), provided that these are used in accordance with our instructions:
02 der/den folgenden Norm(en) oder einem anderen Normdokument oder -dokumenten entspricht/entsprechen, unter der Voraussetzung, daß sie gemäß unseren Anweisungen eingesetzt werden:
03 sont conformes à la/aux norme(s) ou autre(s) document(s) normatif(s), pour autant qu'ils soient utilisés conformément à nos instructions:
04 conform de volgende norm(en) of één of meer andere bindende documenten zijn, op voorwaarde dat ze worden gebruikt overeenkomstig onze instructies:
05 están en conformidad con la(s) siguiente(s) norma(s) u otro(s) documento(s) normativo(s), siempre que sean utilizados de acuerdo con nuestras instrucciones:
06 sono conformi al(i) seguente(i) standard(s) o altro(i) documento(i) a carattere normativo, a patto che vengano usati in conformità alle nostre istruzioni:
07 είναι σύμφωνα με το(α) ακόλουθο(α) πρότυπο(α) ή άλλο έγγραφο(α) κανονισμών, υπό την προϋπόθεση ότι χρησιμοποιούνται σύμφωνα με τις οδηγίες μας:
08 estão em conformidade com a(s) seguinte(s) norma(s) ou outro(s) documento(s) normativo(s), desde que estes sejam utilizados de acordo com as nossas instruções:
09 соответствуют следующим стандартам или другим нормативным документам, при условии их использования согласно нашим инструкциям:
10 overholder følgende standard(er) eller andet/andre retningsgivende dokument(er), forudsat at disse anvendes i henhold til vore instrukser:
11 respektive utrustning är utförd i överensstämmelse med och följer följande standard(er) eller andra normgivande dokument, under förutsättning att användning sker i överensstämmelse med våra instruktioner:
12 respektive utstyr er i overensstemmelse med følgende standard(er) eller andre normgivende dokument(er), under forutsetning av at disse brukes i henhold til våre instrukser:
13 vastaavat seuraavien standardien ja muiden ohjeellisten dokumenttien vaatimuksia edellyttäen, että niitä käytetään ohjeidemme mukaisesti:
14 za předpokladu, že jsou využívány v souladu s našimi pokyny, odpovídají následujícím normám nebo normativním dokumentům:
15 u skladu sa slijedećim standardom(ima) ili drugim normativnim dokumentom(ima), uz uvjet da se oni koriste u skladu s našim uputama:
16 megfelelnek az alábbi szabvány(ok)nak vagy egyéb irányadó dokumentum(ok)nak, ha azokat előírás szerint használják:
17 spełniają wymogi następujących norm i innych dokumentów normalizacyjnych, pod warunkiem że używane są zgodnie z naszymi instrukcjami:
18 sunt în conformitate cu următorul (următoarele) standard(e) sau alt(e) document(e) normativ(e), cu condiția ca acestea să fie utilizate în conformitate cu instrucțiunile noastre:
19 skladni z naslednjimi standardi in drugimi normativi, pod pogojem, da se uporabljajo v skladu z našimi navodili:
20 on vastavuses järgmis(t)e standardi(te)ga või teiste normatiivsete dokumentidega, kui neid kasutatakse vastavalt meie juhenditele:
21 съответстват на следните стандарти или други нормативни документи, при условие, че се използват съгласно нашите инструкции:
22 atitinka žemiau nurodytus standartus ir (arba) kitus norminius dokumentus su sąlyga, kad yra naudojami pagal mūsų nurodymus:
23 tad, ja lietoti atbilstoši ražotāja norādījumiem, atbilst sekojošiem standartiem un citiem normatīviem dokumentiem:
24 sú v zhode s nasledovnou(ými) normou(ami) alebo iným(i) normatívnym(i) dokumentom(ami), za predpokladu, že sa používajú v súlade s našim návodom:
25 ürünün, talimatlarımıza göre kullanılması koşuluyla aşağıdaki standartlar ve norm belirten belgelerle uyumludur:

EN60335-2-40,

01 following the provisions of:
02 gemäß den Vorschriften der:
03 conformément aux stipulations des:
04 overeenkomstig de bepalingen van:
05 siguiendo las disposiciones de:
06 secondo le prescrizioni per:
07 με τήρηση των διατάξεων των:
08 de acordo com o previsto em:
09 в соответствии с положениями:
10 under iagttagelse af bestemmelserne i:
11 enligt villkoren i:
12 gitt i henhold til bestemmelsene i:
13 noudattaen määräyksiä:
14 za dodržení ustanovení předpisu:
15 prema odredbama:
16 követi a(z):
17 zgodnie z postanowieniami Dyrektyw:
18 în urma prevederilor:
19 ob upoštevanju določb:
20 vastavalt nõuetele:
21 съгласно клаузите на:
22 laikantis nuostatų, pateikiamų:
23 ievērojot prasības, kas noteiktas:
24 održiavajúc ustanovenia:
25 bunun koşullarına uygun olarak:

Machinery 2006/42/EC **
Electromagnetic Compatibility 2014/30/EU *
Low Voltage 2014/35/EU

01 Directives, as amended.
02 Direktiven, gemäß Änderung.
03 Directives, telles que modifiées.
04 Richtlijnen, zoals geamendeerd.
05 Directivas, según lo enmendado.
06 Direttive, come da modifica.
07 Οδηγιών, όπως έχουν τροποποιηθεί.
08 Directivas, conforme alteração em.
09 Директив со всеми поправками.
10 Direktiver, med senere ændringer.
11 Direktiv, med företagna ändringar.
12 Direktiver, med foretatte endringer.
13 Direktiivejä, sellaisina kuin ne ovat muutettuina.
14 v platném znění.
15 Smjernice, kako je izmijenjeno.
16 irányelv(ek) és módosításaik rendelkezéseit.
17 z późniejszymi poprawkami.
18 Directivelor, cu amendamentele respective.
19 Direktive z vsemi spremembami.
20 Direktiivid koos muudatustega.
21 Директиви, с техните изменения.
22 Direktyvose su papildymais.
23 Direktīvās un to papildinājumos.
24 Smernice, v platnom znení.
25 Değiştirilmiş halleriyle Yönetmelikler.

01 Note* as set out in <A> and judged positively by <B> according to the **Certificate <C>**.
02 Hinweis* wie in <A> aufgeführt und von <B> positiv beurteilt gemäß **Zertifikat <C>**.
03 Remarque* tel que défini dans <A> et évalué positivement par <B> conformément au **Certificat <C>**.
04 Bemerk* zoals vermeld in <A> en positief beoordeeld door <B> overeenkomstig **Certificaat <C>**.
05 Nota* como se establece en <A> y es valorado positivamente por <B> de acuerdo con el **Certificado <C>**.
06 Nota* delineato nel <A> e giudicato positivamente da <B> secondo il **Certificato <C>**.
07 Σημείωση* όπως καθορίζεται στο <A> και κρίνεται θετικά από το <B> σύμφωνα με το **Πιστοποιητικό <C>**.
08 Nota* tal como estabelecido em <A> e com o parecer positivo de <B> de acordo com o **Certificado <C>**.
09 Примечание* как указано в <A> и в соответствии с положительным решением <B> согласно **Свидетельству <C>**.
10 Bemærk* som anført i <A> og positivt vurderet af <B> i henhold til **Certifikat <C>**.
11 Information* enligt <A> och godkänts av <B> enligt **Certifikatet <C>**.
12 Merk* som det fremkommer i <A> og gjennom positiv bedømmelse av <B> ifølge **Sertifikat <C>**.
13 Huom* jotka on esitetty asiakirjassa <A> ja jotka <B> on hyväksynyt **Sertifikaatin <C>** mukaisesti.
14 Poznámka* jak bylo uvedeno v <A> a pozitivně zjištěno <B> v souladu s **osvědčením <C>**.
15 Napomena* kako je izloženo u <A> i pozitivno ocijenjeno od strane <B> prema **Certifikatu <C>**.
16 Megjegyzés* a(z) <A> alapján, a(z) <B> igazolta a megfelelést, a(z) **<C> tanúsítvány** szerint.
17 Uwaga* zgodnie z dokumentacją <A>, pozytywną opinią <B> i **Świadectwem <C>**.
18 Notă* așa cum este stabilit în <A> și apreciat pozitiv de <B> în conformitate cu **Certificatul <C>**.
19 Opomba* kot je določeno v <A> in odobreno s strani <B> v skladu s **certifikatom <C>**.
20 Märkus* nagu on näidatud dokumendis <A> ja heaks kiidetud <B> järgi vastavalt **sertifikaadile <C>**.
21 Забележка* както е изложено в <A> и оценено положително от <B> съгласно **Сертификата <C>**.
22 Pastaba* kaip nustatyta <A> ir kaip teigiamai nuspręsta <B> pagal **Sertifikatą <C>**.
23 Piezīmes* kā norādīts <A> un atbilstoši <B> pozitīvajam vērtējumam saskaņā ar **sertifikātu <C>**.
24 Poznámka* ako bolo uvedené v <A> a pozitívne zistené <B> v súlade s **osvedčením <C>**.
25 Not* <A>'da belirtildiği gibi ve <C> **Sertifikasına** göre <B> tarafından olumlu olarak değerlendirildiği gibi.

<A>	DAIKIN.TCF.033A4/04-2017
<B>	DEKRA (NB0344)
<C>	2178265.0551-EMC

01** Daikin Europe N.V. is authorised to compile the Technical Construction File.
02** Daikin Europe N.V. hat die Berechtigung die Technische Konstruktionsakte zusammenzustellen.
03** Daikin Europe N.V. est autorisé à compiler le Dossier de Construction Technique.
04** Daikin Europe N.V. is bevoegd om het Technisch Constructiedossier samen te stellen.
05** Daikin Europe N.V. está autorizado a compilar el Archivo de Construcción Técnica.
06** Daikin Europe N.V. è autorizzata a redigere il File Tecnico di Costruzione.
07** Η Daikin Europe N.V. είναι εξουσιοδοτημένη να συντάξει τον Τεχνικό φάκελο κατασκευής.
08** A Daikin Europe N.V. está autorizada a compilar a documentação técnica de fabrico.
09** Компания Daikin Europe N.V. уполномочена составить Комплект технической документации.
10** Daikin Europe N.V. er autoriseret til at udarbejde de tekniske konstruktionsdata.
11** Daikin Europe N.V. är bemyndigade att sammanställa den tekniska konstruktionsfilen.
12** Daikin Europe N.V. har tillatelse til å kompilere den Tekniske konstruksjonsfilen.
13** Daikin Europe N.V. on valtuutettu laatimaan Teknisen asiakirjan.
14** Společnost Daikin Europe N.V. má oprávnění ke kompilaci souboru technické konstrukce.
15** Daikin Europe N.V. je ovlašten za izradu Datoteke o tehničkoj konstrukciji.
16** A Daikin Europe N.V. jogosult a műszaki konstrukciós dokumentáció összeállítására.
17** Daikin Europe N.V. ma upoważnienie do zbierania i opracowywania dokumentacji konstrukcyjnej.
18** Daikin Europe N.V. este autorizat să compileze Dosarul tehnic de construcție.
19** Daikin Europe N.V. je pooblaščen za sestavo datoteke s tehnično mapo.
20** Daikin Europe N.V. on volitatud koostama tehnilist dokumentatsiooni.
21** Daikin Europe N.V. е оторизирана да състави Акта за техническа конструкция.
22** Daikin Europe N.V. yra įgaliota sudaryti šį techninės konstrukcijos failą.
23** Daikin Europe N.V. ir autorizēts sastādīt tehnisko dokumentāciju.
24** Spoločnosť Daikin Europe N.V. je oprávnená vytvoriť súbor technickej konštrukcie.
25** Daikin Europe N.V. Teknik Yapı Dosyasını derlemeye yetkilidir.

3P471028-10A

DAIKIN

Shigeki Morita
Director
Ostend, 1st of August 2017

DAIKIN EUROPE N.V.
Zandvoordestraat 300, B-8400 Oostende, Belgium

Table of Contents

1 About the documentation

1.1 About this document

INFORMATION

Make sure that the user has the printed documentation and ask him/her to keep it for future reference.

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 http://www.daikineurope.com/support-and-manuals/product-information/

Latest revisions of the supplied documentation may be available on the regional Daikin website or via your dealer.

The original documentation is written in English. All other languages are translations.

Technical engineering data

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

For the installer

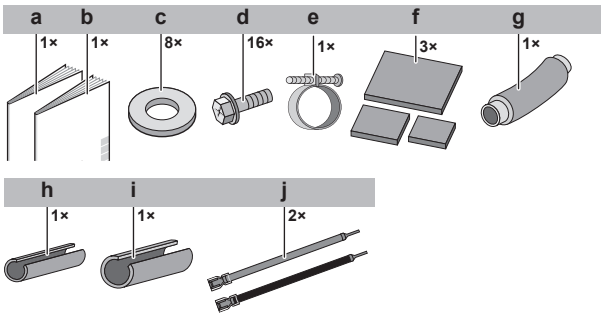
2 About the box

2.1 Indoor unit

WARNING: 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.

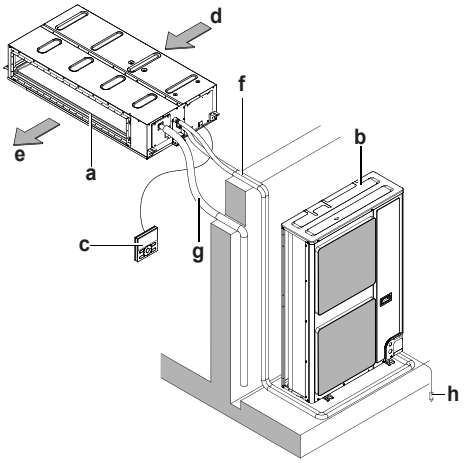
2.1.1 To remove the accessories from the indoor unit



a Installation manual and operation manual
b General safety precautions
c Washers for hanger bracket
d Screws for duct flanges
e Metal clamp
f Sealing pads: Large (drain pipe), medium 1 (gas pipe), medium 2 (liquid pipe)
g Drain hose
h Insulation piece: Small (liquid pipe)
i Insulation piece: Large (gas pipe)
l Wire for common power supply

3 About the units and options

3.1 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 Earth wiring

4 Preparation

4.1 Preparing the installation site

- Provide sufficient space around the unit for servicing and air circulation.
- Choose the installation location with sufficient space for carrying the unit in and out of the site.

WARNING

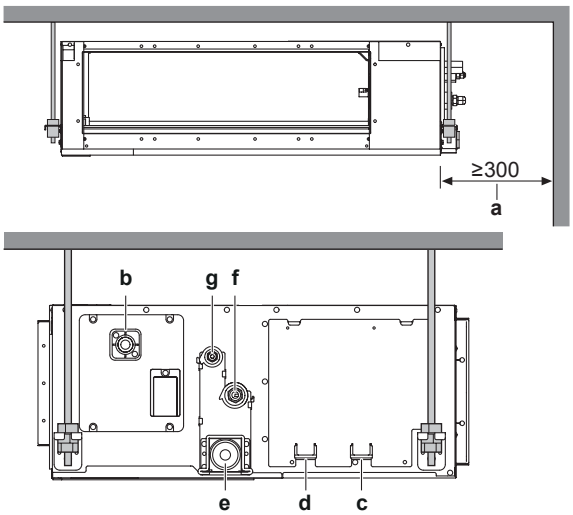
Do NOT install the air conditioner at any place where flammable gas may leak out. If the gas leaks out and stays around the air conditioner, a fire may break out.

4.1.1 Installation site requirements of the indoor unit

INFORMATION

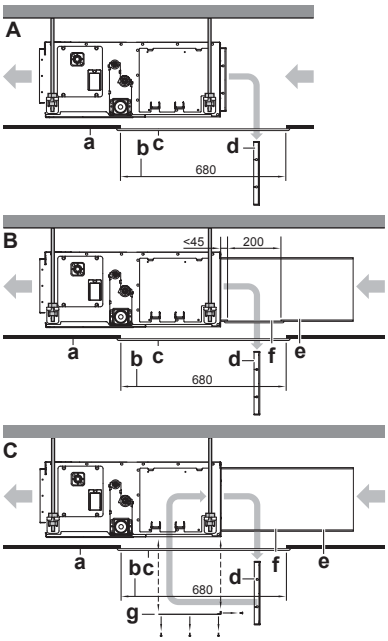
The sound pressure level is less than 70 dBA.

- Use **suspension bolts** for installation.
- **Spacing**. Mind the following requirements:



a Service space
b Drain pipe
c Power supply wiring port
d Transmission wiring port
e Maintenance drain outlet
f Gas pipe
g Liquid pipe

- **Installation options:**



A Standard rear suction
B Installation with rear duct and duct service opening
C Installation with rear duct, no duct service opening
a Ceiling surface
b Ceiling opening
c Service access panel (optional accessory)
d Air filter
e Air inlet filter
f Duct service opening
g Interchangeable plate

5 Installation

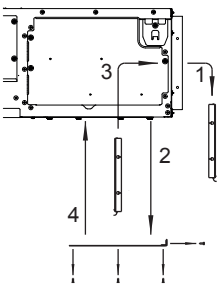
5.1 Mounting the indoor unit

5.1.1 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.

- **In case of installation with duct, but no duct service opening.** Modify the position of the air filters.



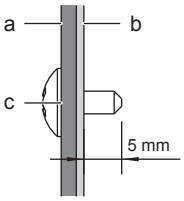
1 Remove the air filter(s) from the outside of the unit.

2 Remove the interchangeable plate.

3 Install the air filter(s) on the inside of the unit.

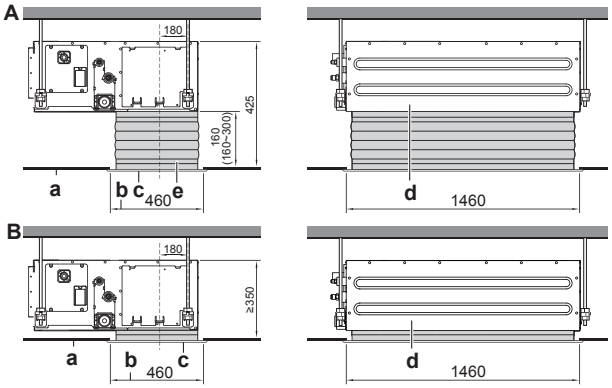
4 Reinstall the interchangeable plate.

- 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

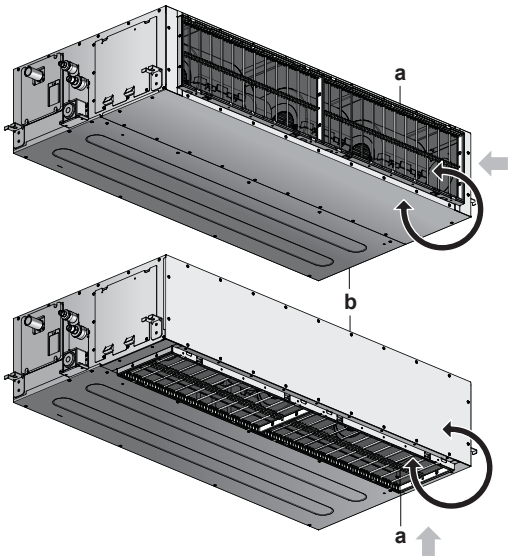
- **Ceiling strength**. Check whether the ceiling is strong enough to support the weight of the unit. If there is a risk, reinforce the ceiling before installing the unit.
- **Installation options**:



A Mounting the air inlet with a canvas connection
B Mounting the air inlet panel directly
a Ceiling surface
b Ceiling opening
c Air inlet panel (optional accessory)
d Indoor unit (back side)
e Canvas connection for air inlet panel (optional accessory)

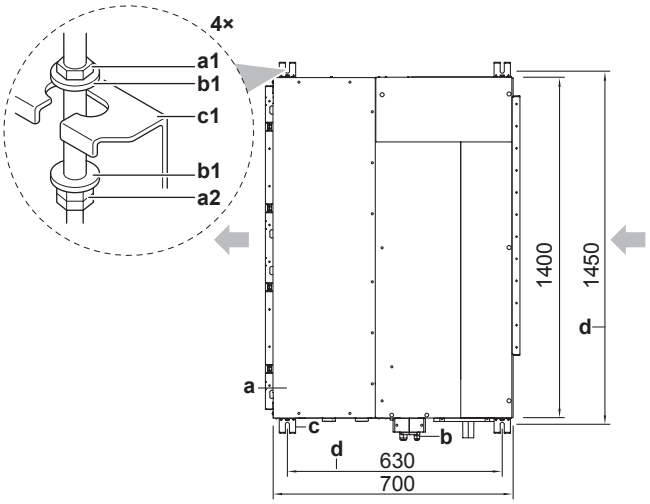
NOTICE

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

- **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.
- **Ceiling opening size.** Make sure the ceiling opening is within the following limits:

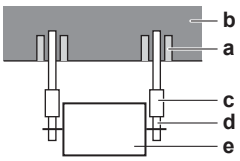


a1 Nut (field supply)
a2 Double nut (field supply)
b1 Washer (accessories)
c1 Hanger bracket (attached to the unit)
a Indoor unit
b Pipe
c Hanger bracket pitch (suspension)
d Suspension bolt spacing

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.

- **Installation example:**



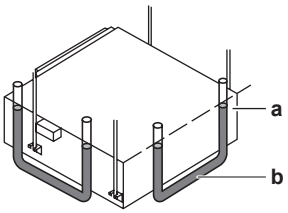
a Anchor
b Ceiling slab
c Long nut or turn-buckle
d Suspension bolt
e Indoor unit

- **Install the unit temporarily.**

5 Attach the hanger bracket to the suspension bolt.

6 Fix it securely.

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



a Water level
b Vinyl tube

7 Tighten the upper nut.

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.

5.1.2 Guidelines when installing the ducting

WARNING

If one or more rooms are connected to the unit using a duct system, make sure:

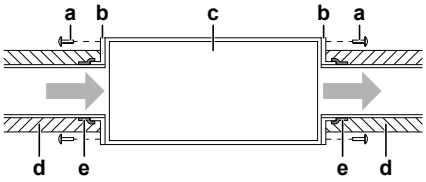
- there are no operating ignition sources (example: open flames, an operating gas appliance or an operating electric heater) in case the floor area is less than A_{min} specified in the General safety precautions;
- no auxiliary devices, which may be a potential ignition source, are installed in the duct work (example: hot surfaces with a temperature exceeding 700°C and electric switching device);
- only auxiliary devices approved by the manufacturer are used in the duct work;
- an air inlet or outlet is connected directly with a room by ducting. Do NOT use spaces such as a false ceiling as a duct for the air inlet or outlet.

WARNING

Do NOT install operating ignition sources (example: open flames, an operating gas appliance or an operating electric heater) in the duct work.

The ducting is to be field supplied.

- **Air inlet side.** Attach the duct and intake-side flange (field supply). For connecting the flange, use 7 accessory screws.



a Connection screw (accessory)
b Flange (field supply)
c Main unit
d Insulation (field supply)
e Aluminium tape (field supply)

- **Filter.** Be sure to attach an air filter inside the air passage on the intake side. Use an air filter with dust collecting efficiency ≥50% (gravimetric method). The included filter is not used when the intake duct is attached.
- **Air outlet side.** Connect the duct according to the inside dimension of the outlet-side flange.
- **Air leaks.** Wind aluminium tape around the intake side flange and duct connection. Make sure there are no air leaks at any other connection.
- **Insulation.** Insulate the duct to prevent condensation from forming. Use glass wool or polyethylene foam 25 mm thick.

5.1.3 Guidelines when installing the drain piping

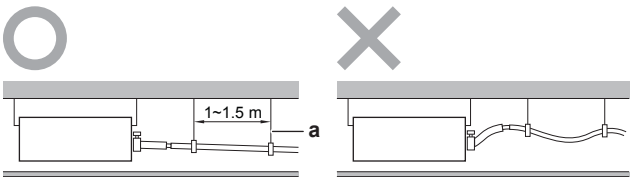
Make sure condensation water can be evacuated properly. This involves:

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

General guidelines

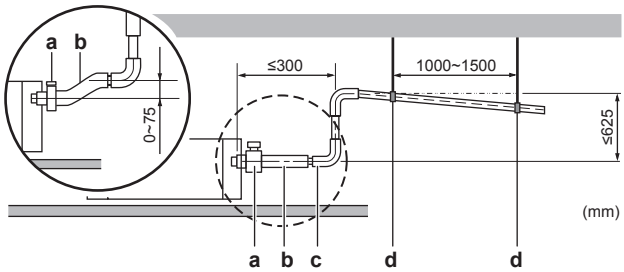
- **Drain pump.** For this "high lift type", the drainage sounds will be reduced when the drain pump is installed in a higher location. Recommended height is 300 mm.
- **Pipe length.** Keep drain piping as short as possible.

- **Pipe size.** Keep the pipe size equal to or greater than that of the connecting pipe (vinyl pipe of 25 mm nominal diameter and 32 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.



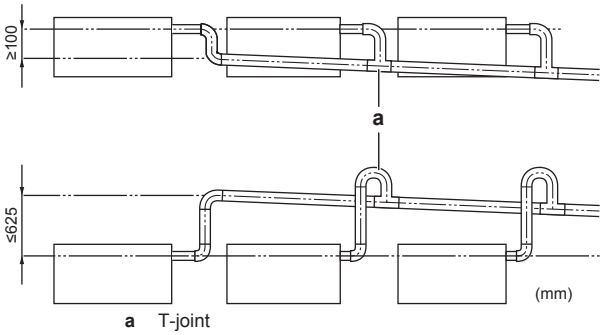
a Hanging bar
O Allowed
X Not allowed

- **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.



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.



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.

1 Push the drain hose as far as possible over the drain pipe connection.

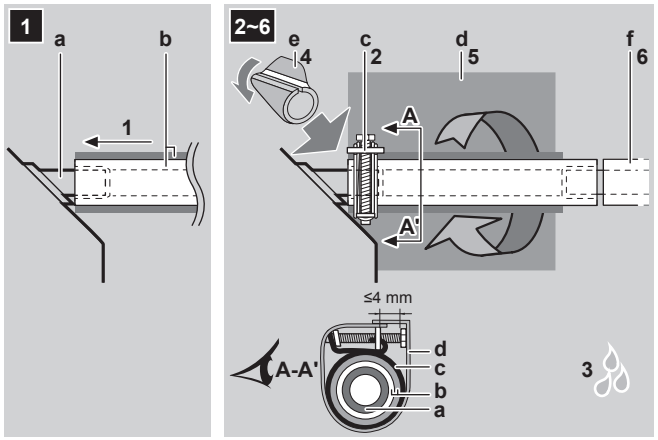
2 Tighten the metal clamp until the screw head is less than 4 mm from the metal clamp part.

3 Check for water leaks (see "To check for water leaks" on page 7).

4 Install the insulation piece (drain pipe).

5 Wind the large sealing pad (= insulation) around the metal clamp and drain hose, and fix it with cable ties.

6 Connect the drain piping to the drain hose.



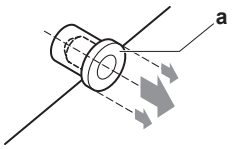
a Drain pipe connection (attached to the unit)
b Drain hose (accessory)
c Metal clamp (accessory)
d Large sealing pad (accessory)
e Insulation piece (drain pipe) (accessory)
f Drain piping (field supply)

NOTICE

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

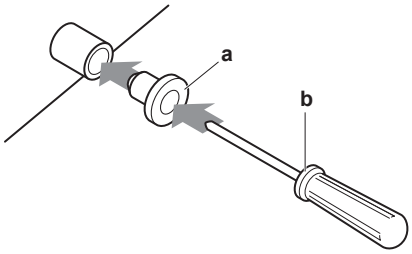
Pull out the plug.

- 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 electrical wiring is already finished. When electrical wiring is not finished yet, you need to temporarily connect the user interface and power supply to the unit.

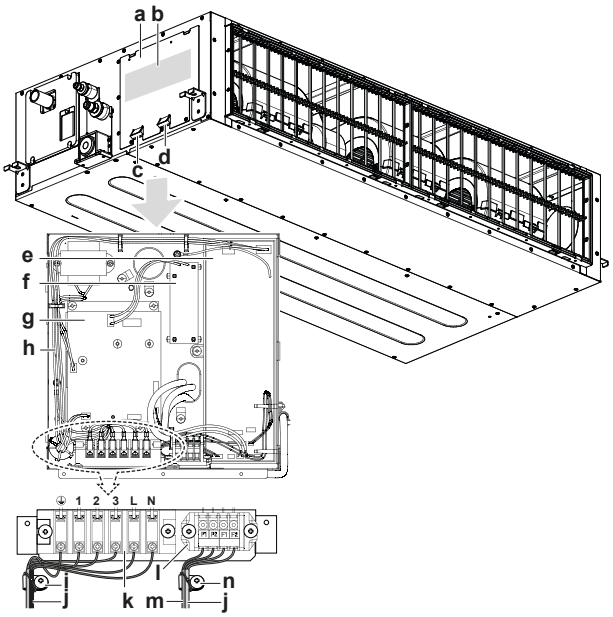
When electrical wiring is not finished yet

1 Temporarily connect electrical wiring.

2 Remove the switch box cover (a).

3 Connect the single-phase power supply (50 Hz, 230 V) to connections No. 1 and No. 2 on the terminal block for power supply and earth.

4 Reattach the switch box cover (a).

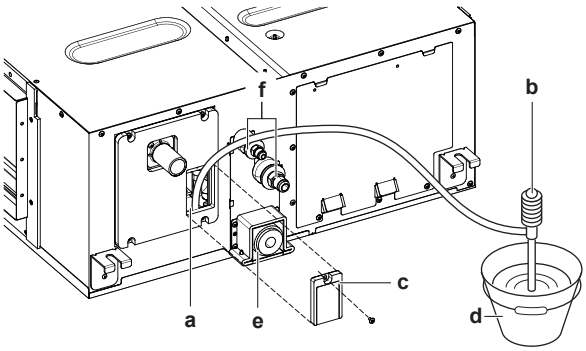


a	Switch box cover
b	Wiring diagram
c	Power supply wiring port
d	Transmission wiring port
e	Indoor PCB 2
f	Indoor PCB 3
g	Indoor PCB 1
h	Switch box
i	Plastic clamp
j	Power supply wiring
k	Power supply terminal board
l	Terminal board for unit transmission wiring
m	User interface wiring
n	Transmission wiring between units

5 Turn ON the power.

6 Start cooling operation (see "7.2 To perform a test run" on page 11).

7 Gradually pour approximately 1 l of water through the air discharge outlet, and check for leaks.



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

8 Turn OFF the power.

9 Disconnect the electrical wiring.

10 Remove the control box cover.

11 Disconnect the power supply and earth.

12 Reattach the control box cover.

When electrical wiring is finished already

1 Start cooling operation (see "7.2 To perform a test run" on page 11).

2 Gradually pour approximately 1 l of water through the air discharge outlet, and check for leaks (see "When electrical wiring is not finished yet" on page 7).

5.2 Connecting the refrigerant piping

DANGER: RISK OF BURNING

5.2.1 To connect the refrigerant piping to the indoor unit

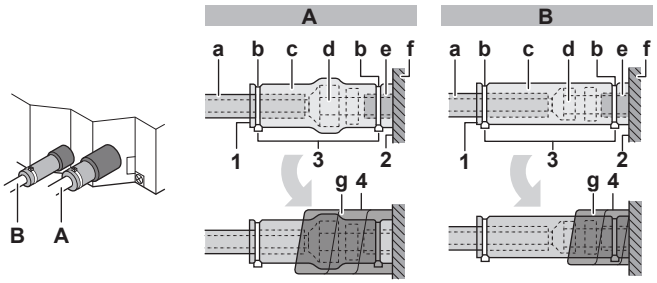
CAUTION

Install the refrigerating 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: 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.

- **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	Cable tie (accessory)
c	Insulation pieces: Large (gas pipe), small (liquid pipe) (accessories)
d	Flare nut (attached to the unit)
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 cable ties 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.

5.2.2 To check for leaks

NOTICE

Do NOT exceed the unit's maximum working pressure (see "PS High" on the unit name plate).

NOTICE

Make sure to use a recommended bubble test solution from your wholesaler. Do not use soap water, which may cause cracking of flare nuts (soap water may contain salt, which absorbs moisture that will freeze when the piping gets cold), and/or lead to corrosion of flared joints (soap water may contain ammonia which causes a corrosive effect between the brass flare nut and the copper flare).

1 Charge the system with nitrogen gas up to a gauge pressure of at least 200 kPa (2 bar). It is recommended to pressurize to 3000 kPa (30 bar) in order to detect small leaks.

2 Check for leaks by applying the bubble test solution to all connections.

3 Discharge all nitrogen gas.

5.3 Connecting the electrical wiring

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 provide 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

Prevent hazards due to inadvertent resetting of the thermal cut-out: power to this appliance MUST NOT be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly turned ON and OFF by the utility.

5.3.1 Specifications of standard wiring components

Component		FDA125A
Power supply cable	MCA(a)	2.1 A
	Voltage	220~240 V
	Phase	1~
	Frequency	50/60 Hz
	Wire sizes	Must comply with applicable legislation
Interconnection cable (indoor↔outdoor)		4-core cable 1.5 mm²~2.5 mm² and applicable for 220~240 V H05RN-F (60245 IEC 57)
User interface cable		Vinyl cord with 0.75 to 1.25 mm² sheath or cables (2 core wires) Maximum 500 m H03VV-F (60227 IEC 52)
Recommended field fuse		16 A
Earth leakage circuit breaker		Must comply with applicable legislation

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

5.3.2 To connect the electrical wiring on the indoor unit

NOTICE

- Follow the wiring diagram (delivered with the unit, located on the switch box cover).
- Make sure the electrical wiring does NOT obstruct proper reattachment of the service cover.

It is important to keep the power supply and the transmission 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 transmission line apart from each other. Transmission wiring and power supply wiring may cross, but may NOT run parallel.

1 Remove the service cover.

2 **User interface cable**: Route the cable through the frame, connect the cable to the terminal block, and fix the cable with a cable tie.

3 **Interconnection cable** (indoor↔outdoor): Route the cable through the frame, connect the cable to the terminal block (make sure the numbers match with the numbers on the outdoor unit, and connect the earth wire), and fix the cable with a cable tie.

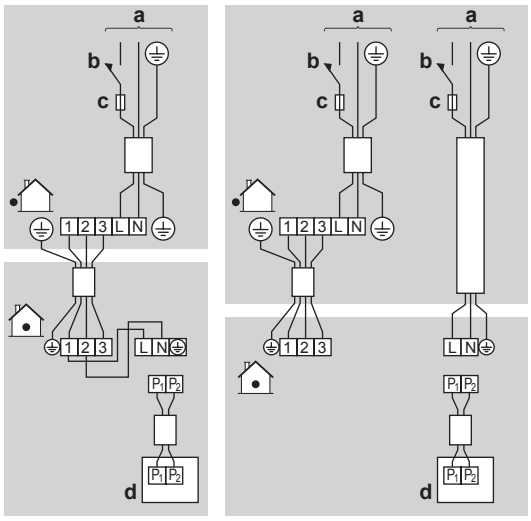
4 Divide the small sealing (accessory) and wrap it around the cables to prevent water from entering the unit. Seal all gaps to prevent small animals from entering the system.

WARNING

Provide adequate measures to prevent that the unit can be used as a shelter by small animals. Small animals that make contact with electrical parts can cause malfunctions, smoke or fire.

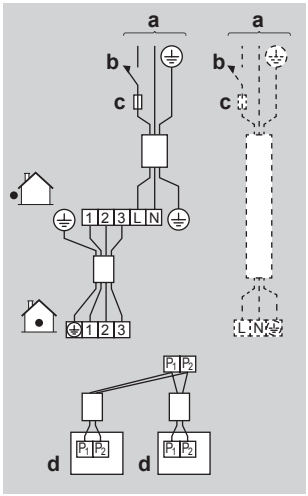
5 Reattach the service cover.

- **When using 1 user interface with 1 indoor unit.**

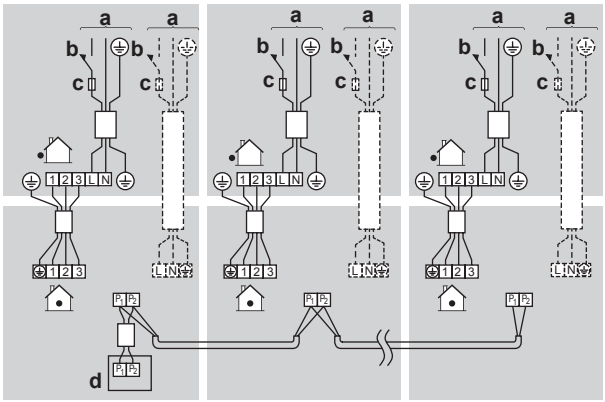


- **When using 2 user interfaces**[2]

(2) Dashed line represents separate power supply.



- **When using group control**[2]

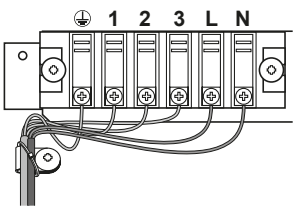


a Power supply
b Main switch
c Fuse
d User interface

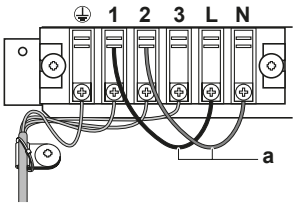
- **Master unit:** Be sure to connect the wiring when combining with a simultaneously operating multi-type in group control.
- **EN/IEC 61000-3-12** provided that the short-circuit power S_{sc} is greater than or equal to the minimum S_{sc} value at the interface point between the user's supply and the public system.
  - EN/IEC 61000-3-12 = European/International Technical Standard setting the limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and ≤75 A per phase.
  - It is the responsibility of the installer or user of the equipment to ensure, by consultation with the distribution network operator if necessary, that the equipment is connected only to a supply with a short-circuit power S_{sc} greater than or equal to the minimum S_{sc} value.

To comply with EN/IEC 61000-3-12, following rules must be considered:

- In case of combination of units 2x FDA125A + RZQ250, use separate power supplies.



- Otherwise, refer to the table with S_{sc} values for FDA125A on the extranet.
  - If the S_{sc} value is NOT mentioned in the table for the used combination, use the common power supply wire delivered with the unit.
  - If the S_{sc} value is mentioned in the table, both the common power supply wire or a separate power supply can be used, but a separate power supply is preferred.



a Wire for common power supply (accessory)

INFORMATION

In case of group control it is not necessary to assign an address to the indoor unit. The address is automatically set when the power is activated.

6 Configuration

6.1 Field settings

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

- External static pressure setting using:
  - Airflow automatic adjustment setting
  - User interface
- Time to clean air filter

To set airflow automatic adjustment

- When the air conditioning unit is running in fan operation mode:

1 Stop the air conditioning unit.

2 Set second code number to 03.

(2) Dashed line represents separate power supply.

Setting content:	Then[3]		
	M	C1	C2
Airflow adjustment is OFF	11(21)	7	01
Press ON/OFF to return to normal operating mode. **Possible consequence:** The operation lamp will light up and the unit will start the fan operation for airflow automatic adjustment.			03
Operation stops after 1 to 8 minutes. **Possible consequence:** Setting is finished and the operation lamp will be off.			02

If there is no change after airflow adjustment, perform the setting again.

User interface

Check the indoor unit setting: the second code number of mode 11(21) must be set to 01.

Change the second code number according to the external static pressure of the duct to be connected as in table below.

M	C1	C2	External static pressure
13(23)	6	01	40
		02	50
		03	60
		04	70
		05	80
		06	90
		07	100
		08	110
		09	120
		10	130
		11	140
		12	150
		13	160
		14	180
		15	200

Time to clean air filter

This setting must correspond with the air contamination in the room. It determines the interval at which the **TIME TO CLEAN AIR FILTER** notification is displayed on the user interface. When using a wireless user interface, you must also set the address (see the installation manual of the user interface).

If you want an interval of… (air contamination)	Then[3]		
	M	C1	C2
±2500 h (light)	10(20)	0	01
±1250 h (heavy)			02
No notification		3	02

- **2 user interfaces:** When using 2 user interfaces, one must be set to "MAIN" and the other to "SUB".

7 Commissioning

NOTICE

NEVER operate the unit without thermistors and/or pressure sensors/switches. Burning of the compressor might result.

7.1 Checklist before commissioning

After the installation of the unit, first check the following items. Once all below checks are fulfilled, the unit MUST be closed, ONLY then can the unit be powered up.

☐	You read the complete installation instructions, as described in the **installer reference guide**.
☐	The **indoor units** are properly mounted.
☐	In case a wireless user interface is used: The **indoor unit decoration panel** with infrared receiver is installed.
☐	The **outdoor unit** is properly mounted.
☐	There are NO **missing phases** or **reversed phases**.
☐	The system is properly **earthed** and the earth terminals are tightened.
☐	The **fuses** or locally installed protection devices are installed according to this document, and have NOT been bypassed.
☐	The **power supply voltage** matches the voltage on the identification label of the unit.
☐	There are NO **loose connections** or damaged electrical components in the switch box.
☐	The **insulation resistance** of the compressor is OK.
☐	There are NO **damaged components** or **squeezed pipes** on the inside of the indoor and outdoor units.
☐	There are NO **refrigerant leaks**.
☐	The correct pipe size is installed and the **pipes** are properly insulated.
☐	The **stop valves** (gas and liquid) on the outdoor unit are fully open.

7.2 To perform a test run

This task is only applicable when using the BRC1E52 or BRC1E53 user interface. When using any other user interface, see the installation manual or service manual of the user interface.

NOTICE

Do not interrupt the test run.

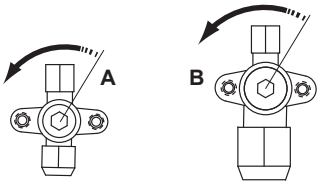
INFORMATION

Backlight. To perform an ON/OFF action on the user interface, the backlight does not need to be lit. For any other action, it needs to be lit first. The backlight is lit for ±30 seconds when you press a button.

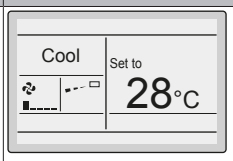
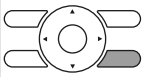
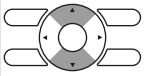
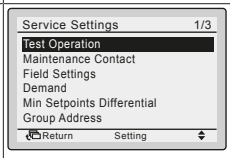
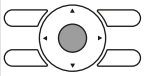
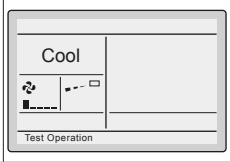
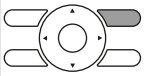
1 Perform introductory steps.

(3) Field settings are defined as follows:

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

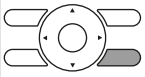
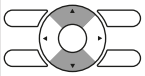
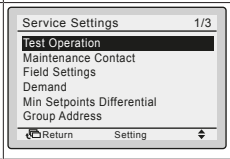
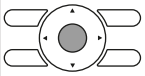
#	Action
1	Open the liquid stop valve (A) and gas stop valve (B) by removing the stem cap and turning counterclockwise with a hex wrench until it stops. 
2	Close the service cover to prevent electric shocks.
3	Turn ON power for at least 6 hours before starting operation to protect the compressor.
4	On the user interface, set the unit to cooling operation mode.

2 Start the test run

#	Action	Result
1	Go to the home menu.	
2	Press at least 4 seconds. 	The Service Settings menu is displayed.
3	Select Test Operation. 	
4	Press. 	Test Operation is displayed on the home menu. 
5	Press within 10 seconds. 	Test run starts.

3 Check operation for 3 minutes.

4 Stop the test run.

#	Action	Result
1	Press at least 4 seconds. 	The Service Settings menu is displayed.
2	Select Test Operation. 	
3	Press. 	The unit returns to normal operation, and the home menu is displayed.

7.3 Error codes when performing a test run

If the installation of the outdoor unit has NOT been done correctly, the following error codes may be displayed on the user interface:

Error code	Possible cause
Nothing displayed (the currently set temperature is not displayed)	▪ The wiring is disconnected or there is a wiring error (between power supply and outdoor unit, between outdoor unit and indoor units, between indoor unit and user interface). ▪ The fuse on the outdoor or indoor unit PCB has blown.
E3, E4 or L8	▪ The stop valves are closed. ▪ The air inlet or air outlet is blocked.
E7	There is a missing phase in case of three-phase power supply units. **Note:** Operation will be impossible. Turn OFF the power, recheck the wiring, and switch two of the three electrical wires.
L4	The air inlet or air outlet is blocked.
U0	The stop valves are closed.
U2	▪ There is a voltage imbalance. ▪ There is a missing phase in case of three-phase power supply units. **Note:** Operation will be impossible. Turn OFF the power, recheck the wiring, and switch two of the three electrical wires.
U4 or UF	The inter-unit branch wiring is not correct.
UA	The outdoor and indoor unit are incompatible.

8 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.

9 Technical data

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

9.1 Wiring diagram

9.1.1 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 symbol "*" in the part code.

Symbols:

	Circuit breaker		Protective earth
	Connection		Protective earth (screw)

	Connector	Ⓐ	Rectifier
	Earth		Relay connector
	Field wiring		Short-circuit connector
	Fuse		Terminal
INDOOR	Indoor unit		Terminal strip
OUTDOOR	Outdoor unit	○ ●	Wire clamp

Colors:

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

Legends:

A*P	Printed circuit board
BS*	Pushbutton ON/OFF, operation switch
BZ, H*C	Buzzer
C*	Capacitor
AC*, CN*, E*, HA*, HE*, HL*, HN*, HR*, MR*_A, MR*_B, S*, U, V, W, X*A, K*R_*	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*	Thermistor PTC
Q*	Insulated gate bipolar transistor (IGBT)
Q*DI	Earth leak circuit breaker
Q*L	Overload protector
Q*M	Thermo switch
R*	Resistor
R*T	Thermistor
RC	Receiver
S*C	Limit switch
S*L	Float switch
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 arrestor
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
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

For the user

10 About the system

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.

INFORMATION

The sound pressure level is less than 70 dBA.

WARNING: 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

- Do NOT modify, disassemble, remove, reinstall or repair the unit yourself as incorrect dismantling or installation may cause an electric 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.

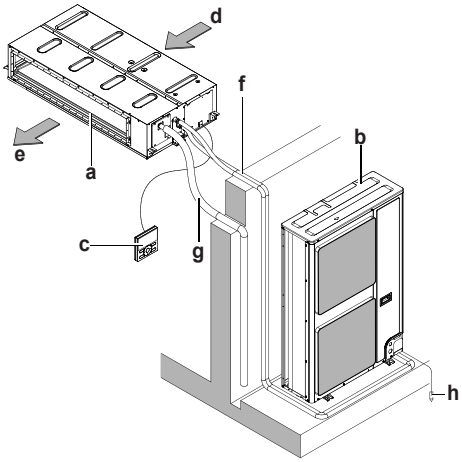
NOTICE

Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Only use accessories, optional equipment and spare parts made or approved by Daikin.

10.1 Components

INFORMATION

The following illustration is an example and might NOT match your system layout.



a Indoor unit
b Outdoor unit
c User interface
d Air inlet
e Air outlet
f Refrigerant piping and electric wiring
g Drain pipe
h Earth wire to ground outdoor unit to prevent electric shocks.

CAUTION

Do NOT insert fingers, rods or other objects into the air inlet or outlet. Do NOT remove the fan guard. 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.

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.

11 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 will give 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.

12 Operation

12.1 Operation range

For combination with R410A outdoor unit, refer to the following table:

Outdoor units		Cooling	Heating
RZQ250	Outdoor temperature	–5~46°C DB	–15~15°C WB
	Indoor temperature	14~28°C WB	10~27°C DB
RZQG125	Outdoor temperature	–15~50°C DB	–20~15.5°C WB
	Indoor temperature	12~28°C WB	10~27°C DB
RZQSG125	Outdoor temperature	–15~46°C DB	–15~15.5°C WB
	Indoor temperature	14~28°C WB	10~27°C DB
RR125	Outdoor temperature	–15~46°C DB	—
	Indoor temperature	12~28°C WB	—

Outdoor units		Cooling	Heating
RQ125	Outdoor temperature	–5~46°C DB	–10~15°C WB
	Indoor temperature	12~28°C WB	10~27°C DB
Indoor humidity		≤80%(a)	

For combination with R32 outdoor unit, refer to the following table:

Outdoor units		Cooling	Heating
RZAG125	Outdoor temperature	–20~52°C DB	–20~24°C DB –20~18°C WB
	Indoor temperature	17~38°C DB 12~28°C WB	10~27°C DB
RZASG125	Outdoor temperature	–15~46°C DB	–15~21°C DB –15~15.5°C WB
	Indoor temperature	20~38°C DB 14~28°C WB	10~27°C DB
Indoor humidity		≤80%(a)	

(a) To avoid condensation and water dripping out of the unit. If the temperature or the humidity is beyond these conditions, safety devices may be put in action and the air conditioner may not operate.

12.2 Operation procedure

- Turn on the power at least 6 hours before operating the unit in order to ensure smoother operation. As soon as the power is turned on, the user interface display appears.
- If there was a power failure during operation, the system automatically restarts immediately after the power supply is recovered.
- The setting temperature range of the user interface is described in chapter "Operation range".
- If you select a function which is not available, the message **NOT AVAILABLE** appears on the user interface.
- Read the documentation carefully before operating the user interface to ensure the best possible performance.

13 Maintenance and service

13.1 Overview: Maintenance and service

The installer has to perform a yearly maintenance.

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_2 equivalent.

Formula to calculate the quantity in CO2 equivalent tonnes: GWP value of the refrigerant × total refrigerant charge [in kg] / 1000

Please contact your installer for more information.

WARNING

R410A is a non-combustible refrigerant, and R32 is a mildly flammable refrigerant; they normally don't 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.

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.

NOTICE

Maintenance MUST be done by an authorized installer or service agent.

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

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 electric shock and injury may result.

WARNING

To prevent electric 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

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

CAUTION

Do NOT touch the heat exchanger fins. These fins are sharp and could result in cutting injuries.

NOTICE

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

WARNING

Be careful with ladders when working in high places.

13.2 Cleaning the air filter, suction grille, air outlet and outside panels

13.2.1 To clean the air outlet and outside panels

WARNING

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

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.

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

13.2.2 To clean the air filter

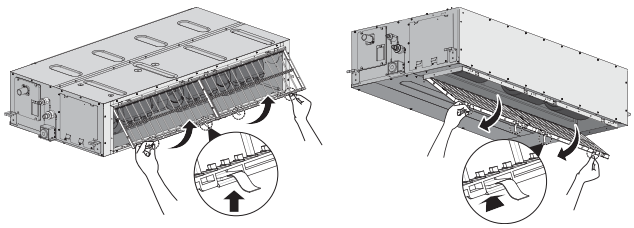
When to clean the air filter:

- 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 AIR FILTER** notification. Clean the air filter when the notification is displayed.
- If the dirt becomes impossible to clean, change the air filter (= optional equipment).

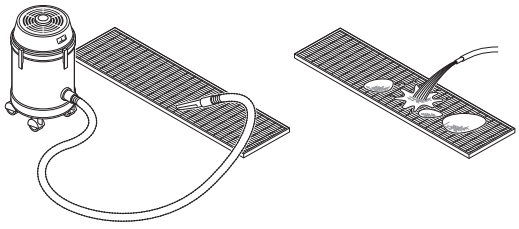
How to clean the air filter:

1 Remove the air filters by pulling their cloth upward (in case of rear suction) or backward (in case of bottom suction).

rear suction bottom suction



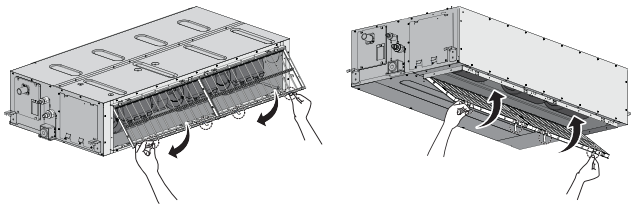
2 Clean the air filter. Use a vacuum cleaner or wash with water. If the air filter is very dirty, use a soft brush and neutral detergent.



3 Dry the air filter in the shadow.

4 Reattach 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 4 hangers are fixed.

6 In case of bottom suction, close the air inlet grille.

7 Turn ON the power.

8 Press the **FILTER SIGN RESET** button.

Result: The **TIME TO CLEAN AIR FILTER** notification disappears from the user interface.

13.3 Maintenance before a long stop period

E.g., at the end of the season.

- Let the indoor units run in fan only operation for about half a day in order to dry the interior of the units.
- Turn off the power. The user interface display disappears. When the main power is turned on, the air conditioner will use some power, even if it is not operating.
- Clean air filters and casings of indoor units. Contact your installer or maintenance person to clean air filters and casings of the indoor unit. Maintenance tips and procedures for cleaning are provided in the installation/operation manuals of dedicated indoor units. Make sure to install cleaned air filters back in the same position.
- Remove the batteries from the user interface.

13.4 Maintenance after a long stop period

E.g., at the beginning of the season.

- Check and remove everything that might be blocking inlet and outlet vents of indoor units and outdoor units.
- Check if the earth is connected properly.
- Check if there is somewhere a broken wire. Contact your dealer in case of problems.
- Clean air filters and casings of indoor units. Contact your installer or maintenance person to clean air filters and casings of the indoor unit. Maintenance tips and procedures for cleaning are provided in the installation/operation manuals of dedicated indoor units. Make sure to install cleaned air filters back in the same position.
- Turn on the power at least 6 hours before operating the unit in order to ensure smoother operation. As soon as the power is turned on, the user interface display appears.

14 Troubleshooting

If one of the following malfunctions occur, 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, electric 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 breaker or an earth leakage breaker frequently actuates or the ON/OFF switch does NOT properly work.	Turn OFF the main power switch.
If water leaks from the unit.	Stop the operation.
The operation switch does NOT work well.	Turn OFF the power supply.
If the user interface display indicates the unit number, the operation lamp flashes and the malfunction code appears.	Notify your installer and report the malfunction code.

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

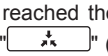
Malfunction	Measure
If the system does not operate at all.	▪ Check if there is no power failure. Wait until power is restored. If a power failure occurs during operation, the system automatically restarts immediately after power is restored. ▪ Check if no fuse has blown or breaker is activated. Change 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. Contact your dealer to clean the air filter.
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. Contact your dealer to clean the air filter (refer to "Maintenance" in the indoor unit manual). ▪ 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. (Operation lamp blinks.)	▪ Check if the air filter is clogged. Contact your dealer to clean the air filter (refer to "Maintenance" in the indoor unit manual). ▪ 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 still blinks, contact your dealer. ▪ Check if all indoor units connected to outdoor unit in the multi-system are operating in the same mode.
An abnormal function happens during operation.	▪ The air conditioner may malfunction because of lightning or radio waves. Turn the breaker OFF and back ON.

If after checking all above items, 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 (possibly listed on the warranty card).

14.1 Symptoms that are NOT system malfunctions

The following symptoms are NOT system malfunctions:

14.1.1 Symptom: The system does not operate

- The air conditioner does not start immediately after the ON/OFF button on the user interface is pressed. If the operation lamp lights, the air conditioner is in normal condition. It does not restart immediately because one of its safety devices actuates to prevent the air conditioner from being overloaded. The air conditioner will turn on again automatically after 3 minutes.
- The air conditioner does not start immediately after the power supply is turned on. Wait 1 minute until the microcomputer is prepared for operation.
- The air conditioner does not restart immediately when the temperature setting button is returned to its former position after pushing. It does not restart immediately because one of its safety devices actuates to prevent the air conditioner from being overloaded. The air conditioner will turn on again automatically after 3 minutes.
- The outdoor unit has stopped. This is because the room temperature has reached the set temperature. The unit switches to fan operation. "  " (external control icon) is displayed on the user interface and the actual operation is different from the user interface setting. For multi-split models, the microcomputer executes the following control depending on the operation mode of other indoor units.
- The fan speed is different from the setting. Pressing the fan speed control button does not change the fan speed. When the room temperature reaches the set temperature in heating mode or the unit's maximum capacity is reached, the outdoor unit will stop operation and the indoor unit will operate in fan only mode (low fan speed). In case of multi-split, the indoor unit alternately operates in fan stop mode and fan only mode (LL= low fan speed). This is to prevent the cool air from being blown directly onto anyone present in the room.

14.1.2 Symptom: Air blow direction is not as specified

Actual air blow direction is not as shown on the user interface. Automatic swing setting does not work.

Refer to the manual of the user interface.

14.1.3 Symptom: White mist comes out of a unit (Indoor unit)

- When humidity is high during cooling operation (in oily and dusty places). If the interior of an indoor unit is extremely contaminated, the temperature distribution inside a room becomes uneven. It is necessary to clean the interior of the indoor unit. Ask your dealer for details on cleaning the unit. This operation requires a qualified service person.
- When the air conditioner is changed over to heating operation after defrost operation. Moisture generated by defrost becomes steam and exits.

14.1.4 Symptom: Noise of air conditioners (indoor unit)

- A "ringing" sound is heard after the unit is started. This sound is generated by the temperature regulator working. It will quiet down after about a minute.
- A continuous low "hissing" sound is heard when the system is in cooling or defrost operation. This is the sound of refrigerant gas flowing through both indoor and outdoor units.
- A hissing sound which is heard at the start or immediately after stopping operation or defrost operation. This is the noise of refrigerant caused by flow stop or flow change.
- A "squeaking" sound is heard when the system is in operation or after the stop of operation. Expansion and contraction of plastic parts caused by temperature change makes this noise.

14.1.5 Symptom: Dust comes out of the unit

When the unit is used for the first time in a long time. This is because dust has gotten into the unit.

14.1.6 Symptom: The units can give off odours

The unit can absorb the smell of rooms, furniture, cigarettes, etc., and then emit it again.

14.1.7 Symptom: The display shows "88"

This is the case immediately after the main power supply switch is turned on and means that the user interface is in normal condition. This continues for 1 minute.

14.1.8 Symptom: The operation stopped suddenly (Operation lamp is on)

The air conditioner may stop for system protection due to large voltage fluctuation. It automatically resumes operation after about 3 minutes.

14.1.9 Symptom: The outdoor fan rotates while the air conditioner is not in operation

- **After operation has stopped.** The outdoor fan continues to rotate for another 30 seconds for system protection.
- **While the air conditioner is not in operation.** When the outdoor temperature is very high, the outdoor fan starts to rotate for system protection.

14.1.10 Symptom: The heating operation stops suddenly and a flowing sound is heard

The system is removing frost on the outdoor unit. You should wait for about 3 to 8 minutes.

15 Relocation

Contact your dealer for removing and reinstalling the total unit. Moving units requires technical expertise.

16 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.

EAC

DAIKIN EUROPE N.V.

Zandvoordestraat 300, B-8400 Oostende, Belgium

4P494410-1B 2019.03