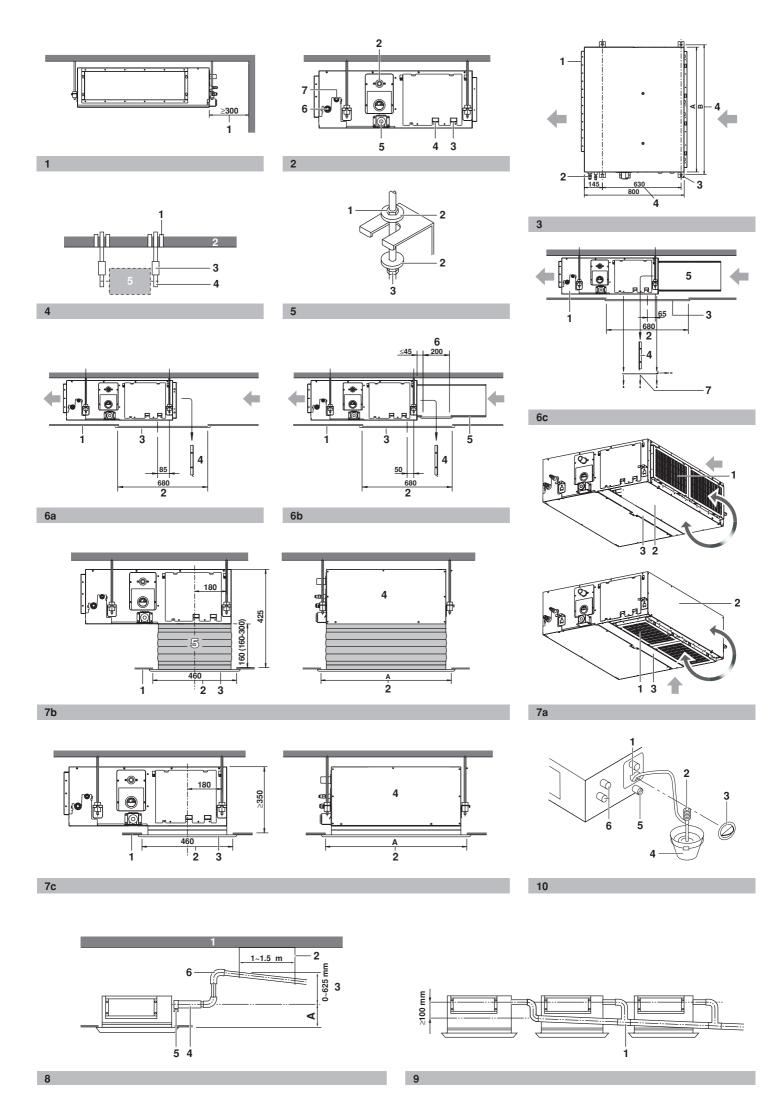


## **INSTALLATION MANUAL**

## **Split System air conditioners**

FHYBP71B8V1 FHYBP100B8V1 FHYBP125B8V1

FBQ35B8V1 FBQ50B8V1 FBQ60B8V1 FBQ71B8V3B FBQ100B8V3B FBQ125B8V3B FBQ140B8V3B



E - DECLARATION-OF-CONFORMITY
E - KONFORMITĂTSERKLĂRUNG
E - DECLARATION-DE-CONFORMITE
E - CONFORMITEITSVERKLARING គុគុគុគ

DECLARACION-DE-CONFORMIDAD
DICHIARAZIONE-DI-CONFORMITA
ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ  $\dot{\Theta}\dot{\Theta}\dot{\Theta}\dot{\Theta}$ 

CE - DECLARAÇÃO-DE-CONFORMIDADE CE - 3ARBJIEHME-O-COOTBETCTBUM CE - OPFYLDELSESERKLÆRING CE - FORSÄKRAN-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-3A-CЪOTBETCTBИE

CE - ATTIKTIES-DEKLARACIJA CE - ATBILSTĪBAS-DEKLARĀCIJA CE - VYHLÁSENIE-ZHODY CE - UYUMLULUK-BİLDİRİSİ

# 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:

04 (NL) verklaart hierbij op eigen exdusieve verantwoordelijkheid dat de airconditioning units waarop deze verklaring betrekking heeft: 03 (F) déclare sous sa seule responsabilité que les appareils d'air conditionné visés par la présente déclar ation:

66 (E) declara baja su única responsabilidad que tos modelos de aire acondidionado a bs cuales hace ref erencia la declaración:
 66 (C) dichiara sotto sua responsabilità che i condizionatori modello a cui è rifenta questa dichiarazione:
 97 (Θ) δηλώνει με αποκλεστική της ευθύλη ότι τα μοντέλο των κλιματιστικών συκεωύν στα οποία οναφέρεται η περούσο δηλωση:

08 (P) declara sob sua exclusiva responsabilidade que os modelos de ar condicionado a que esta declaração se refere:

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 condiționat la care se referă această declarație: 09 (чв.) заявляет, исключительно под свою ответственность, что модели кондиционеров воздуха, к которым относится настоящее заявление:

FHYBP71B8V1\*, FHYBP100B8V1\*, FHYBP125B8V1\*, FBQ35B8V1\*, FBQ50B8V1\*, FBQ60B8V1\*, FBQ71B8V3B\*, FBQ100B8V3B, FBQ125B8V3B\*, FBQ140B8V3B\*, \*= , , 1, 2, 3,...,9

= , ,1,2,3,..

01 are in conformity with the following standard(s) or other normative document(s), provided that these are used in accordance with our

02 deriden folgenden Norm(en) oder einem anderen Normdokument oder -dokumenten entsprichtlentsprechen, 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 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 χρησιμοπαιούνται σύμφωνα με πς οδηγίες μας:

## EN60335-2-40

10 under i agttagelse af bestemmelserne i: 12 gitt i henhold til bestemmelsene i: 14 za dodržení ustanovení předpisu: noudattaen määräyksiä: 15 prema odredbama: 11 enligt villkoren 16 követi a(z): 03 conformément aux stipulations des: 04 overeenkomstig de bepalingen van: 07 με τήρηση των διατάξεων των: 05 siguiendo las disposiciones de: 08 de acordo com o previsto em: 02 gemäß den Vorschriften der: 06 secondo le prescrizioni per: 01 following the provisions of:

23 ievērojot prasības, kas noteiktas: 25 bunun koşullarına uygun olarak: 22 laikantis nuostatų, pateikiamų: 21 следвайки клаузите на: 24 održiavajúc ustanovenia: 19 ob upoštevanju določb: 20 vastavalt nõuetele:

17 zgodnie z postanowieniami Dyrektyw: 18 în urma prevederilor: 09 в соответствии с положениями:

wie in der Technischen Konstruktionsakte DAIKIN.TCF.016+DAIKIN.TCF.021 aufgeführt und von KEMA positiv ausgezeichnet as set out in the Technical Construction File DAIKIN.TCF.016+DAIKIN.TCF.021 and judged positively by KEMA according to gemäß Zertifikat 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565. the Certificate 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565. Hinweis \* 01 Note\*

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utrustningen är utförd i enighet med den Tekniska Konstruktionsfilen **DAIKIN.TCF.016-DAIKIN.TCF.021** som positivi intygas av KEMA vilket också tramgår av **Certifikat 81728-KROJEMC984341 + 2024351-QUAIEMC02-4565.** 

11 Information \*

10 Bemærk\*

som anført i den Tekniske Konstruktionstil DAIKIN TCF.016-DAIKIN TCF.021 og positivt vurderet af KEMA i henhold til Certifikat 81728-KROEMC98-4341 + 2024351-QUAEMC02-4565.

som det fremkommer i den Tekniske Konstruksjonsfilen DAIKIN.TCF.016+DAIKIN.TCF.021 og gjennom positiv bedømmelse av

KEMA itolge Sertifikat 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565.

jotka on esitetty Teknisessä Asiakirjassa DAIKIN TCE016+DAIKIN TCE021 jai jotka KEMA on hyväksynyt Sertifikaatin 81726+KRQEMC98-4341 + 2024351-QUA/EMO024365 mukaisesti.

kako je izloženo u Datoteci o tehničkoj konstrukciji DAIKIN.TCF.016+DAIKIN.TCF.021 i pozitivno ocijenjeno od strane KEMA jak bylo uvedeno v souboru technické konstrukce DAIKIN.TCF.016+DAIKIN.TCF.021 a pozitivně zjíštěno KEMA v souladu

prema Certifikatu 81728-KRQ/EMC96-4341 + 2024351-QUA/EMC02-4565. s osvědčením 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565.

a(z) DAIKIN TCF.016+DAIKIN T CF.021 műszaki konstrukciós dokumentáció alapján, a(z) KEMA igazolta a megfelelést

a(z) 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565 tanúsitvány szerint.

16 Megjegyzés\*

17 Uwaga\*

14 Poznámka \* 15 Napomena\*

13 Huom\* Merk \*

zgodnie z archwalną dokumentacją konstrukcyjną DAKIN.TCF.016-DAIKIN.TCF.021, pozytywną opinią KEMA i świadectwem 81728-KRQIEMC98-4341 + 2024381-QUA/EMC02-4565.

tel que stipulé dans le Tichier de Construction Technique DAIKIN TOF.016-0AIKIN TOF.021 et jugé positivement par KEMA conformément au Certificat 81728-KRQTBNC98-4341 + 2024351-0UATEM002-4565. tal como se expone en el Archino de Construcción Técnica DAKINITCF.016+DAIKIN.TCF.021 y juzgado positivamente por KEIMA según el Centificado 81728-KRQ.EMC96-4341 + 2024351-QUA IEMC02-4565. coals vermeld in het Technisch Constructiedossier DAIKIN.T CF.016+DAIKIN.T CF.021 en in orde bevonden door KEMA deineab nei File Tecnico d'Ostruzone DAIKINITOE016. DAIKINITOE021 e guidrato postinamente da KEMA secondo il Certificato 81729.KRQ.EMIC98-4341 + 2024351-QUA.IBN.C02-4565. overeenkomstig Certificaat 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565. Remarque \* 04 Bemerk \* 05 Nota\*

tal como estabelecido no Ficheiro Técnico de Construção DAKINITOF.016-DAKINITOF.021 e com o parecer positivo de KBNA de acordo com o Certificado 81728-KRO/EMC98-4341 + 2024351-QUAEMC02-4365. όπως προοδιορίζεται στο Αρχείο Τεχνικής Κατασκευής **DΑΚΙΝΤΟΓ2016-DΑΚΙΝΤΟΓ202** και κρίνεται θετικά από το ΚΕΜΑ σύμφωνα με το Π**ατοποσητικό 81729-ΚΒΟΙΕΜC99-4341 + 2024351-ΟUA,ΕΝΙΟΩ-4565.** . Σημείωση <sup>\*</sup> Nota \*

как указано в Досье технического толкования **DAIKIN.TCF.016+DAIKIN.TCF.021** и в соответствии с положительным

Примечание

8 8

06 Nota\*

решением КЕМА согласно Свидетельству 81728-К RQ/EMC98-4341 + 2024351-QUA/EMC02-4565

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 10 overholder labgende standard(er) eller andet/andre retningsgivende dokument(er), forudsat at disse anvendes i henhold til vore инструкциям:

11 respektive utrustning är utförd i överensstämmelse med och följer följande standard(er) eller andra normgivande dokument, under instrukser:

12 respektive utstyr er i overensstemmelse med følgende standard(er) eller andre normgivende dokument(er), under forutssetning av at förutsättning att användning sker i överensstämmelse med våra instruktioner: disse brukes i henhold til våre instrukser:

14 za předpokladu, že jsou využívány v souladu s našími pokyny, odpovídají následujícím normám nebo normatívním dokumentům: 15 u skladu sa slijedečím standardom(ima) ili drugim normatívním obkumentom(ima), uz vyjet da se oni koriste u skladu s naším uputama: mukaisesti:

21съответстват на следните стандарти или други нормативни документи, при условие, че се използват съпласно нашите 24 sú v zhode s nasledovnou(ými) normou(ami) alebo iným(i) normatívnym(i) dokumentom(ami), za predpokladu, že sa používajú v súlade 20 on vastavuses järgmist() e standardi(te)ga või teiste normatiivsete dokumentidega, kui neid kasutatakse vastavalt meie juhenditele: 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: 19 skladni z naslednjimi standardi in drugimi normativi, pod pogojem, da se uporabljajo v skladu z našimi navodili: 13 vastaavat seuraavien standardien ja muiden ohjeellisten dokumenttien vaatimuksia edellyttäen, että niikä käytetään ohjeidemme

17 spełniają wymogi następujących norm i innych dokumentów normalizacyjnych, pod warunkiem że używane są zgodnie z naszymi

16 megfelelnek az alábbi szabvány(ok)nak vagy egyéb irányadó dokumentum(ok)nak, ha azokat előírás szerint használják:

25 (币) tamamen kendi sorumluluğunda olmak üzere bu bildirinin ilgili olduğu klima modellerinin aşağıdaki gibi olduğunu beyan eder.

21 (вс) декларира на своя отговорност, че моделите климатична инсталация, за които се отнася тази декларация;

20 (EST) kinnitab oma täielikul vastutusel, et käesoleva deklaratsiooni alla kuuluvad kliimaseadmete mudelid: 19 (st.) z vso odgovomostjo izjavlja, da so modeli klimatskih naprav, na katere se izjava nanaša:

11 (s) deklarerar i egenskap av huvudansvarig, att luftkonditioneringsmodellerna som berörs av denna deklaration innebär att:

10 0x) erklærer under eneansvar, at klimaanlægmodellerne, som denne deklaration vedrører:

12 (n) erklærer et fullstendig ansvar for at de luftkondisjoneringsmodeller som berøres av denne deklarasjon innebærer at:

16 (H) teljes felelőssége tudatában kijelenti, hogy a klímaberendezés modellek, melyekre e nyilatkozat vonatkozik: 15 (HR) izjavljuje pod isključivo vlastitom odgovomošću da su modeli klima uređaja na koje se ova izjava odnosi: 13 (FIV) 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:

22 (LT) visiška savo atsakomybe skelbia, kad oro kondicionavimo prietaisų modeliai, kuriems yra taikoma ši deklaracija:

23 🕑 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:

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:

25 ürünün, talimatlarımıza göre kullanılması koşuluyla aşağıdaki standartlar ve nom belirten belgelerle uyumludur: s našim návodom:

07 Οδηγιών, όπως έχουν τροποποιηθεί. 08 Directivas, conforme alteração em. 04 Richtlijnen, zoals geamendeerd. 05 Directivas, según lo enmendado. Direktiven, gemäß Änderung.
 Directives, telles que modifiées. 06 Direttive, come da modifica. Electromagnetic Compatibility 89/336/EEC Machinery Safety 98/37/EEC Low Voltage 73/23/EEC

 Direktiivejä, sellaisina kuin ne ovat muutettuina. 16 irányelv(ek) és módosításaik rendelkezéseit. 18 Directivelor, cu amendamentele respective. 12 Direktiver, med foretatte endringer. 11 Direktiv, med företagna ändringar. 15 Smjernice, kako je izmijenjeno. 17 z późniejszymi poprawkami. 14 v platném znění. 09 Директив со всеми поправками.

25 Değiştirilmiş halleriyle Yönetmelikler

24 Smernice, v platnom znení.

21 Директиви, с техните изменения. 19 Direktive z vsemi spremembami.

20 Direktiivid koos muudatustega. 22 Direktyvose su papildymais.

10 Direktiver, med senere ændringer.

23 Direktīvās un to papildinājumos.

както е заложено в Акта за техническа конструкция **DAIKIN TCF.016-DAIKIN TCF.021** и оценено положително от **KEMA** съгласно С**ертификат 81728-KR0/EMC984341 + 2024551-QUA/EMC024565.** oonform celor stabilite în Dosanul tehnic de construcție DAIKIN I CF.016+DAIKIN I CF.021 și apreciate pozitiv de KEMA în conformitate cu Certificatul 81728-KR.0[EMC98-4341 + 2024551-QUA/EMC02-4566. kā notelikts tehniskajā dokumentācijā DAIKIN.TCF.016+DAIKIN.T.CF.021, atbilstoši KEMA pozitīvajam lēmumam ko apliecina nagu on näidalud tehnilises dokumentatisioonis DAIKNI TOF.016-DAIKIN TOF.021 ja heatis kiidetud KEMA järgi vastaralt sertifikaadile 81728-KROJEMC98-4311 + 2024351-0UA.EMC02-4565. ako je to stanovené v Súbore technickej konštrukcje DAIKIN.TCF.016+DAIKIN.TCF.021 a kladne posúdené KEMA podľa kot je določeno v tehnični mapi **DAIKIN.T.CF.D16-DAKIN.T.CF.D21** in odobreno s strani **KEMA** v skladu s oertifikatom 81728-K RQ.EMC98-4341 + 2024951-QUA,EMC02-4565. kaip nurodyta Techninėje konstrukcijos byloje DAIKIN.TCF.016+DAIKIN.TCF.021 ir patvirtinia KEMA pagal pazymėjimą 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565. sertifikāts 81728-K/RQ/EMC98-4341 + 2024351-QUA/EMC02-4565. 21 Забележка \* 24 Poznámka\* 19 Opomba \* 22 Pastaba\* 23 Piezīmes\* 20 Märkus\* 18 Notă\*

DAIKIN.TCF.016+DAIKIN.TCF.021 Teknik Yapı Dosyasında belirtildiği gibi ve 81728-KRQ/EMC98-4341 + 2024351-QUA EMC02-4565 sertifikasına göre KEMA tarafından olumlu olarak değerlendirilmiştir. Certifikátu 81728-KRQ/EMC98-4341 + 2024351-QUA/EMC02-4565. \* V

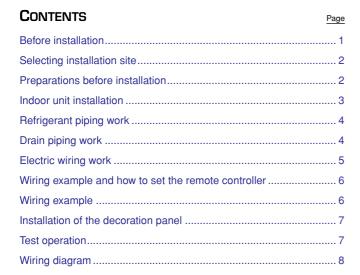
DAIKIN

Jiro Tomita

Ostend, 1st of February 2007 Director Quality Assurance

Zandvoordestraat 300, B-8400 Oostende, Belgium

3PW25005-6A





READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION. KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

IMPROPER INSTALLATION OR ATTACHMENT OF EQUIPMENT OR ACCESSORIES COULD RESULT IN ELECTRIC SHOCK, SHORT-CIRCUIT, LEAKS, FIRE OR OTHER DAMAGE TO THE EQUIPMENT. BE SURE ONLY TO USE ACCESSORIES MADE BY DAIKIN WHICH ARE SPECIFICALLY DESIGNED FOR USE WITH THE EQUIPMENT AND HAVE THEM INSTALLED BY A PROFESSIONAL.

IF UNSURE OF INSTALLATION PROCEDURES OR USE, ALWAYS CONTACT YOUR DAIKIN DEALER FOR ADVICE AND INFORMATION.

#### **BEFORE INSTALLATION**

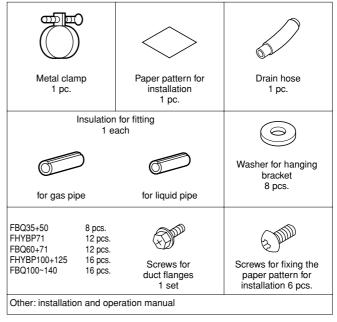
- Leave the unit inside its packaging until you reach the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, this to avoid damage or scratches to the unit.
- Refer to the installation manual of the outdoor unit for items not described in this manual.
- Caution concerning refrigerant series R407C:
  - The connectable outdoor units must be designed exclusively for R407C
  - If outdoor units for R22, R410A are connected, the system will not work properly.
- Caution concerning refrigerant series R410A:
  - The connectable outdoor units must be designed exclusively for R410A.
  - If outdoor units for R22, R407C are connected, the system will not work properly.

#### **Precautions**

- Do not install or operate the unit in rooms mentioned below.
  - Places with mineral oil, or filled with oil vapour or spray like in kitchens. (Plastic parts may deteriorate.)
  - Where corrosive gas like sulphurous gas exists. (Copper tubing and brazed spots may corrode.)
  - · Where volatile flammable gas like thinner or gasoline is used.
  - Where machines generating electromagnetic waves exist. (Control system may malfunction.)
  - · The unit should be installed at least 2.5 m from the floor.
  - Where the air contains high levels of salt such as air near the ocean and where voltage fluctuates a lot (e.g. in factories).
     Also in vehicles or vessels.
- When selecting the installation site, use the supplied paper pattern for installation.
- Do not install accessories on the casing directly. Drilling holes in the casing may damage electrical wires and consequently cause fire

#### Accessories

Check if the following accessories are included with your unit.



Screws for fixing panels are attached to the air inlet panel.

#### Optional accessories

- Select an optional remote controller according to customer request and install in an appropriate place.
  - Refer to catalogues and technical literature for selecting a suitable remote controller.
- When installing bottom suction: air inlet panel and canvas connection for the air inlet panel.

### For the following items, take special care during construction and check after installation is finished

Tick ✓ when checked	
	ls the indoor unit fixed firmly? The unit may drop, vibrate or make noise.
	Is the gas leak test finished? It may result in insufficient cooling.
	Is the unit fully insulated? Condensate water may drip.
	Does drainage flow smoothly? Condensate water may drip.
	Does the power supply voltage correspond to that shown on the name plate?  The unit may malfunction or components may burn out.
	Are wiring and piping correct? The unit may malfunction or components may burn out.
	ls the unit safely grounded? Dangerous at electric leakage.
	Is the wiring size according to specifications? The unit may malfunction or components may burn out.
	Is nothing blocking the air outlet or inlet of either the indoor or outdoor units? It may result in insufficient cooling.
	Are refrigerant piping length and additional refrigerant charge noted down?  The refrigerant charge in the system might not be clear.  This to avoid confusion for future maintenance and serving of the installation.
	Are the air filters fixed properly (when installing with rear duct)? Maintenance of the air filters can be impossible.

#### Notes to the installer

- Read this manual carefully to ensure correct installation. Be sure to instruct the customer how to properly operate the system and show him/her the enclosed operation manual.
- Explain to the customer what system is installed on the site. Be sure to fill out the appropriate installation specifications in the chapter "What to do before operation" of the operation manual.

#### SELECTING INSTALLATION SITE (See figure 1 and 2)

- Select an installation site where the following conditions are fulfilled and that meets your customer's approval.
  - · Where optimum air distribution can be ensured.
  - · Where nothing blocks air passage.
  - · Where condensate water can be properly drained.
  - · Where the false ceiling is not noticeably on an incline.
  - Where sufficient clearance for maintenance and service can be ensured.
  - Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual of the outdoor unit.)
  - Keep indoor unit, outdoor unit, power supply wiring and transmission wiring at least 1 meter away from televisions and radios. This is to prevent image interference and noise interference in those electrical appliances.

(Electric noise may be generated depending on the conditions under which the electric wave is generated, even if 1 meter is kept.)

- Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the indoor unit. If there is a risk, reinforce the ceiling before installing the unit.
  - 1 Service space ≥300
  - 2 Drain pipe
  - 3 Power supply wiring port
  - 4 Transmission wiring port
  - 5 Maintenance drain outlet
  - 6 Gas pipe
  - 7 Liquid pipe

#### PREPARATIONS BEFORE INSTALLATION

 Relation of ceiling opening to unit and suspension bolt position. (See figure 3)

Model	Α	В
35+50	700	750
60+71	1000	1050
100~140	1400	1450

- 1 Indoor unit
- 2 Pipe
- 3 Suspension bolt pitch (x4)
- 4 Suspension bolt pitch distance

For installation, choose one of the possibilities as listed further.

#### Standard rear suction (See figure 6a)

- Ceiling surface
- 2 Ceiling opening
- 3 Service access panel (optional accessory)
- 4 Air filter
- 5 Air inlet duct
- 6 Duct service opening
- 7 Interchangeable plate

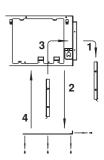
Installation with rear duct and duct service opening (See figure 6b)

Installation with rear duct, no duct service opening (See figure 6c)

NOTE

Before installation of the unit (in case of installation with duct, but no duct service opening): modify the position of the air filters.

- 1 Remove the air filter(s) at the outside of the unit
- 2 Remove the interchangeable plate
- 3 Install the air filter(s) from the inside of the unit
- 4 Reinstall the interchangeable plate



#### Bottom suction (See figure 7a)



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

- 1 Air filter holding plate with air filter(s)
- 2 Interchangeable plate
- 3 Small bottom plate

Mounting the air inlet panel with a canvas connection (See figure 7b)

#### Mounting the air inlet panel directly (See figure 7c)

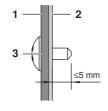
- 1 Ceiling surface
- 2 Ceiling opening
- 3 Air inlet panel (Optional accessory)
- 4 Indoor unit (Back side)
- 5 Canvas connection for air inlet panel (Optional accessory)

Model	Α
35+50	760
60+71	1060
100~140	1460



When installing an air inlet duct, select fixing screws that shall stick out maximum 5 mm at the inside of the flange.

- 1 Air inlet duct
- 2 Inside of the flange
- 3 Fixing screw



This is to protect the air filter from damage during maintenance of the filter.

- For other installation than standard installation, contact your Daikin dealer for details.
- 2. The fan speed for this indoor unit is preset to provide standard external static pressure.

If higher or lower external static pressure is required, reset the external static pressure by changing the initial setting from the remote controller.

Refer to "Setting of static pressure" on page 6.

3. Install the suspension bolts.

(Use M10 size bolt for the suspension bolt.) Use anchors for existing ceilings, and a sunken insert, sunken anchors or other field supplied parts for new ceilings to reinforce the ceiling in order to bear the weight of the unit.

#### Installation example (See figure 4)

- 1 Anchor
- 2 Ceiling slab
- 3 Long nut or turn-buckle
- 4 Suspension bolt
- 5 Indoor unit

NOTE

All the above parts are field supplied.



#### INDOOR UNIT INSTALLATION

When installing optional accessories (except for the air inlet panel), read also the installation manual of the optional accessories. Depending on the field conditions, it may be easier to install optional accessories before the indoor unit is installed.

- 1. Install the indoor unit temporarily.
  - Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and washer from the upper and lower sides of the hanger bracket. (See figure 5)
    - 1 Nut (field supply)
    - 2 Washer for hanger bracket (supplied with the unit)
    - 3 Tighten (double nut)
- Check if the unit is horizontally levelled.
  - Do not install the unit tilted. The indoor unit is equipped with a built-in drain pump and float switch.
    - (If the unit is tilted against condensate flow, the float switch may malfunction and cause water to drip.)
  - Check if the unit is levelled at all four corners with a water level or a water-filled vinyl tube as shown in figure 12.
    - Water level
    - 2 Vinyl tube
- 3. Tighten the upper nut.
- 4. Fix the paper pattern for installation.
  - The paper pattern for installation corresponds with the measurements of the ceiling opening. Consult the builder for details.
  - Attach the paper pattern for installation to the unit with the attached screws as shown in figure 17.

The paper pattern for installation is marked for 3 types of ceiling openings. Read the notations carefully when installing.

- 1 Paper pattern for installation (supplied with the unit)
- 2 Screws for fixing the paper pattern for installation (supplied with the unit (6))

#### REFRIGERANT PIPING WORK

For refrigerant piping of outdoor unit, refer to the installation manual supplied with the outdoor unit.

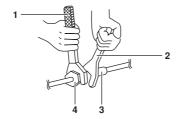
Execute heat insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, this can sometimes result in water leakage.

Before rigging tubes, check which type of refrigerant is used.



All field piping must be provided by a licensed refrigeration technician and must comply with the relevant local and national codes.

- Use a pipe cutter and flare suitable for the used refrigerant.
- If R407C or R410A refrigerant is used, apply ether or ester oil around the flare portions before connecting.
- To prevent dust, moisture or other foreign matters from entering the tube, either pinch the end or cover it with tape.
- Use copper alloy seamless pipes (ISO 1337).
- The outdoor unit is charged with refrigerant.
- Be sure to use both a spanner and torque wrench together when connecting or disconnecting pipes to/from the unit.
  - 1 Torque wrench
  - 2 Spanner
  - 3 Piping union
  - 4 Flare nut



Refer to Table 1 for the dimensions of flare nut spaces and the appropriate tightening torque. (Overtightening may damage the flare and cause leaks.)

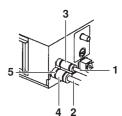
Table 1

Pipe		Flare dimen	sion A (mm)	
gauge	Tightening torque	R407C	R410A	Flare shape
Ø6.4	14.2~17.2 N•m (144~176 kgf•cm)	8.3~8.7	8.7~9.1	
Ø9.5	32.7~39.9 N•m (333~407 kgf•cm)	12.0~12.4	12.8~13.2	90°±2
Ø12.7	49.5~60.3 N•m (504~616 kgf•cm)	15.4~15.8	16.2~16.6	A See
Ø15.9	61.8~75.4 N•m (630~770 kgf•cm)	18.6~19.0	19.3~19.7	R0.4~0.8
Ø19.1	97.2~118.6 N•m (990~1210 kgf•cm)	22.9~23.3	_	

When connecting the flare nut, coat the flare both inside and outside with refrigerating ether or ester oil and initially tighten by hand 3 or 4 turns before tightening firmly. Coat here with ether oil or ester oil

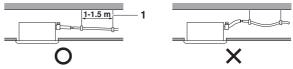


- Check the pipe connector for gas leaks, then insulate it.
  - 1 Liquid pipe
  - 2 Gas pipe
  - 3 Insulation for fitting of liquid line (supplied with the unit)
  - 4 Insulation for fitting of gas line (supplied with the unit)
  - 5 Clamps (use 2 clamps per insulation)

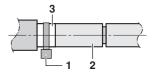


#### DRAIN PIPING WORK

Rig the drain piping as shown in the figure and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.



- Hanging bar
- 1. Install the drain pipes.
  - Keep piping as short as possible and slope it downwards so that air may not remain trapped inside the pipe.
  - Keep pipe size equal to or greater than that of the connecting pipe (vinyl pipe of 25 mm nominal diameter and 32 mm outer diameter).
  - Use the supplied drain hose and metal clamp. Tighten the clamp firmly.
    - 1 Metal clamp
    - 2 Drain hose
    - 3 White tape (field supply)



- Insulate the drain hose inside the building.
- If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).

#### How to perform piping (See figure 8)

- 1 Ceiling slab
- 2 Hanger bar
- 3 Adjustable range
- 4 Drain hose (supplied with the unit)
- 5 Metal clamp (supplied with the unit)
- 6 Drain rising pipe (supplied with the unit)
- 1 Connect the drain hose to the drain raising pipes, and insulate them.
- 2 Connect the drain hose to the drain pipe on the indoor unit, and tighten it with the metal clamp.

Installation	Α
Rear suction installation	275
When canvas duct is installed	350-530
When air inlet panel is directly installed	275

- To ensure a downward slope of 1:100, install hanging bars every 1 to 1.5 m.
- If unifying multiple drain pipes, install the pipes as shown in figure 9.
  - Multiple drain piping

- After piping work is finished, check if drainage flows smoothly.
  - Open the water inlet lid, add approximately 1 l of water gradually and check the drainage flow. (See figure 10)
    - Water inlet 1
    - 2 Portable pump
    - 3 Water inlet lid
    - 4 Bucket (adding water from water inlet)
    - 5 Drain outlet for maintenance (with rubber drain plug)
    - 6 Refrigerant pipes

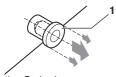


#### Caution for drain socket

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

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

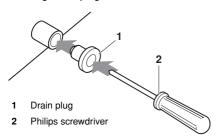
Pulling out the plug



Drain plug

Do not wiggle the plug up and down

Pushing in the plug



Set the plug and push it by using a Philips screwdriver

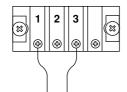
#### When electric wiring work is finished

Check drainage flow during COOL running, explained in "Test operation" on page 7.

When electric wiring work is not finished

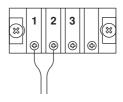
#### For FHYBP only

- Remove the switch box cover and connect the single-phase power supply and the remote controller to the terminals. (Refer to chapter "Electric wiring work" on page 5 for switch box attachment/detachment) (Refer to figure 11a and 11b)
- Remove the switch box cover and change the emergency switch on the PC board of the indoor unit from "NORMAL" to "EMERGENCY". Be sure to change the switch to "EMERGENCY" before turning on the power.
- Connect the single-phase power supply (50 Hz; 230 V) to connections 1 and 3 (see figure below) on the power supply terminal board and confirm drain operation.
- Be aware that the fan will turn during the operation.
- After confirming drainage, turn off the power and be sure to change the emergency switch back to "NORMAL".



#### For FBQ only

- Remove the switch box cover and connect the single-phase power supply and the remote controller to the terminals. (Refer to chapter "Electric wiring work" on page 5 for switch box attachment/detachment) (Refer to figure 11a and 11b)
- Connect the single-phase power supply (50 Hz; 230 V) to connections 1 and 2 (see figure below) on the power supply terminal board and confirm drain operation.
- Be aware that the fan will turn during the operation.
- After confirming drainage, turn off the power.
  - 1 Switch box cover
  - 2 Power supply wiring port
  - 3 Transmission wiring port
  - 4 Wiring diagram
  - 5 Switch box
  - 6 Plastic clamp
  - 7 Remote controller wiring
  - 8 Terminal board for unit transmission wiring
  - 9 Power supply wiring
  - 10 Emergency switch
  - Power supply terminal board 11
  - 12 Earth screw

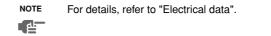


#### **ELECTRIC WIRING WORK**

#### General instructions

- All field supplied parts and materials and electric works must conform to local codes.
- Use copper wire only.
- Follow the "Wiring diagram" attached to the switch box cover to wire the outdoor unit, indoor units and the remote controller. For details on hooking up the remote controller, refer to the "Installation manual of the remote controller".
- All wiring must be performed by an authorized electrician.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.

#### **Electrical characteristics**



#### Specifications for field wire

	Wire	Size (mm²)	Length
Between indoor units	H05VV-U4G <sup>(1),(2)</sup>	2.5	_
Unit-Remote controller	Sheathed wire (2 wire) <sup>(3)</sup>	0.75–1.25	Max. 500 m <sup>(4)</sup>

- Shows only in case of protected pipes. Use H07RN-F in case of no protection.
- Run transmission wiring between the indoor and outdoor units through a conduit to protect against external forces, and feed the conduit through the wall together
- with refrigerant piping.
  Use double insulation wire for remote controller (sheath thickness: ≥1 mm) or run
- wires through a wall or conduit so that the user cannot come in contact with them.

  (4) This length shall be the total extended length in the system of the group control.

## WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER

#### How to connect wiring

#### From the outside of the unit

Remove the switch box cover as shown in figure 11b, and make the connections.

#### From the inside of the unit

Remove the small bottom plate and the interchangeable plate (in case of rear suction) or the air filter holding plate (in case of bottom suction). Lower the switch box as shown in figure 11c. Put the wires through the wiring ports of the switch box cover before connecting them.

- 1 Small bottom plate
- 2 Air filter holding plate
- 3 Switch box
- 4 Interchangeable plate
- 5 Square hole (covered by the switch box cover)

#### **Precautions**

- Observe the notes mentioned below when wiring to the power supply terminal board.
  - Do not connect wires of different gauge to the same power supply terminal. (Looseness in the connection may cause overheating.)
  - When connecting wires of the same gauge, connect them according to the figure.







- Do not connect wires of different gauge to the same grounding terminal. Looseness in the connection may deteriorate the protection.
- Remote controller cords and wires connecting the units should be located at least 50 mm away from power supply wiring. Not following this guideline may result in malfunction due to electrical noise.
- For the remote controller wiring, refer to the "Installation manual of the remote controller" supplied with the remote controller.

NOTE

The customer has the ability to select the remote controller thermistor.

- Never connect the power supply wiring to the terminal board for transmission wiring. This mistake could damage the entire system.
- 6. Use only specified wires and tightly connect wires to the terminals. Be careful that wires do not place external stress on the terminals. Keep wiring in neat order so that they do not obstruct other equipment such as popping open the switch box cover. Make sure the cover closes tight. Incomplete connections could result in overheating, and in the worse case, electric shock or fire.

#### WIRING EXAMPLE

- Fit the power supply wiring of each system with a switch and fuse as shown in figure 14.
  - 1 Power supply
  - 2 Main switch
  - 3 Fuse
  - 4 Outdoor unit
  - 5 Indoor unit
  - 6 Remote controller (optional accessory)

Complete system example (3 systems)

When using 1 remote controller for 1 indoor unit. (Normal operation) (See figure 14)

For group control (See figure 16)

Use with 2 remote controllers (See figure 15)



It is not necessary to designate an indoor unit address when using group control. The address is automatically set when the power is activated.

#### **Precautions**

- A single switch can be used to supply power to units on the same system. However, branch switches and branch circuit breakers must be selected carefully.
- For a group control remote controller, choose the remote controller that suits the indoor unit which has the most functions.
- Do not ground the equipment on gas pipes, water pipes, lightning rods or crossground with telephones. Improper grounding could result in electric shock.

#### Field setting

Field setting must be made from the remote controller in accordance with the installation condition.

- Setting can be made by changing the "Mode number", "FIRST CODE No." and "SECOND CODE No.".
- For setting and operation, refer to "Field setting" in the installation manual of the remote controller.

#### Setting of static pressure

Change the SECOND CODE No. according to Table 2 depending on the resistance of the connection duct.

#### Table 2

External static pressure	Mode No.	FIRST CODE No.	SECOND CODE No.
Standard: 49 Pa (5 mm H <sub>2</sub> O)			01
High static pressure: 88/108 Pa (9/11 mm H <sub>2</sub> O)	13 (23)	6	02
Low static pressure: 20 Pa (2 mm H <sub>2</sub> O) (NOTE)			03

NOTE

Low static pressure is only able to set for FHYBP71, FBQ35~71.

The unit is factory set for standard static pressure (SECOND CODE No. 01) at the time of shipping.

#### Setting air filter sign

- Remote controllers are equipped with liquid crystal display air filter signs to display the time to clean air filters.
- Change the SECOND CODE No. According to Table 3 depending on the amount of dirt or dust in the room. (SECOND CODE No. Is factory set to "01" for filter contamination-light.)

Table 3

Setting	Spacing time of display air filter sign (long life type)	Mode No.	FIRST CODE No.	SECOND CODE No.
Air filter contamination - light	±2500 hrs	10 (20)	0	01
Air filter contamination - heavy	±1250 hrs	10 (20)	U	02

## Control by 2 Remote Controllers (Controlling 1 indoor unit by 2 remote controllers)

When using 2 remote controllers, one must be set to "MAIN" and the other to "SUB".

#### Computerised control (forced off and on/off operation)

- 1 Wire specifications and how to perform wiring
  - Connect the input wire (option) to connector X40A on the indoor PCB.

Wire specifications (to extend the optional wire):

Wire specification	Sheathed vinyl cord or cable (2 wire)
Gauge	0.75-1.25 mm <sup>2</sup>
Length	Max. 100 m
External terminal	Contact that can ensure the minimum applicable load of 15 V DC, 10 mA

#### (See figure 13)

Input A (Input "ON" = closed contact)

#### 2 Actuation

 The following table explains "forced off" and "on/off operations" in response to input A.

Forced off	on/off operation
Input "on" stops operation + disables control	input off → on: starts operation remote, control is still enabled
Input "off" enables control	input on → off: stops operation remote, control is still enabled

3 How to select forced off and on/off operation

Change the second code No. according to the table below. (Second code No. is factory set to "01" for forced off.)

Setting	Mode No.	FIRST CODE No.	SECOND CODE No.
Forced off			01
ON/OFF operation	12 (22)	1	02

#### INSTALLATION OF THE DECORATION PANEL

Refer to the installation manual attached to the decoration panel.

After installing the decoration panel, ensure that there is no space between the unit body and decoration panel.

#### **TEST OPERATION**

Refer to the section of "For the following items, take special care during construction and check after installation is finished" on page 2.

- After finishing the construction of refrigerant piping, drain piping, and electric wiring, conduct test operation accordingly to protect the unit.
- 1 Open the gas side stop valve.
- 2 Open the liquid side stop valve.
- 3 Electrify crank case heater for 6 hours. (Not necessary for the straight cooling type.)
- 4 Set to cooling operation with the remote controller and start operation by pushing ON/OFF button.
- 5 Press Inspection/Test Operation button 4 times and operate at Test Operation mode for 3 minutes.
- 6 Press Inspection/Test Operation button and operate normally.
- 7 Confirm function of unit according to the operation manual.

NOTE	If the main power supply is turned off during operation,
	operation will restart automatically after the power
	turns back on again.

#### **Precautions**

In case something is wrong with the unit and it does not operate, refer to the malfunction diagnosis label attached to the unit.

#### WIRING DIAGRAM

: FIELD WIRING BLK : BLACK :TERMINAL BLU : BLUE 00 : CONNECTOR BRN : BROWN : WIRE CLAMP **GRN** : GREEN 0, —(  $\oplus$ **GRY** : GRAY : PROTECTIVE EARTH (SCREW) ORG : ORANGE RED : RED WHT : WHITE

33H	.FLOAT SWITCH
A1P	PRINTED CIRCUIT BOARD
C1R	.CAPACITOR (FAN MOTOR)
F1T	.THERMAL FUSE 152°C (M1F EMBEDDED)
F1U	.FUSE (250 V/5 A) (only for FBQ35~60)
H1P,H2P,HAP	LIGHT EMITTING DIODE (SERVICE MONITOR GREEN)
M1F	.MOTOR (FAN)
M1P	.MOTOR (DRAIN PUMP)
R1T	.THERMISTOR (AIR)
R2T	.THERMISTOR (LIQUID)
R3T	.THERMISTOR (COIL) (only for FBQ35~60)
RyC	MAGNETIC RELAY (OUTDOOR UNIT COMPRESSOR)
RyF1-4	.MAGNETIC RELAY (FAN)
RyP	.MAGNETIC RELAY (DRAIN PUMP)
SS1	.SELECTOR SWITCH (EMERGENCY)
X1M,X2M	.TERMINAL STRIP
RC	.SIGNAL RECEIVER CIRCUIT
T1R	.TRANSFORMER (for FHYBP71~125 only)
TC	.SIGNAL TRANSMISSION CIRCUIT

WIRED REMOTE CONTROLLER
BS1 ...... ON/OFF BUTTON

:YELLOW

YLW

BS2 ...... TIMER MODE START/STOP BUTTON
BS3,BS8 ..... PROGRAMMING TIME BUTTON
BS4,BS9 ..... TEMPERATURE SETTING BUTTON
BS6 ..... OPERATION MODE SELECTOR BUTTON
BS7 ..... TIMER ON/OFF BUTTON
BS11 .... FAN SPEED CONTROL BUTTON
BS12 .... INSPECTION/TEST OPERATION BUTTON
BS14 .... FILTER SIGN RESET BUTTON
H1P ..... LIGHT EMITTING DIODE (SERVICE MONITOR -

LCD......LIQUID CRYSTAL DISPLAY
SS1 ......SELECTOR SWITCH (MAIN/SUB)

RED)

#### **ADAPTOR FOR WIRING**

RyC,RyF ..... MAGNETIC RELAY

#### **CONNECTOR FOR OPTIONAL PARTS**

X30A	CONNECTOR ( SKY AIR SERIE			FOR
X33A	CONNECTOR (	ADAPTOR F	OR WIRING	G)
X35A	CONNECTOR (	GROUP CO	NTROL AD	APTOR)
X40A	CONNECTOR OFF)	(REMOTE	ON/OFF,	FORCED
X60A,X61A	CONNECTOR (			FOR

WIRED REMOTE CONTROLLER

DETAILS OF WIRED REMOTE CONTROLLER

ADAPTOR FOR WIRING

TERMINALS FOR OPERATION INDICATOR

FAN OPERATION

COMPRESSOR OPERATION

SWITCH BOX

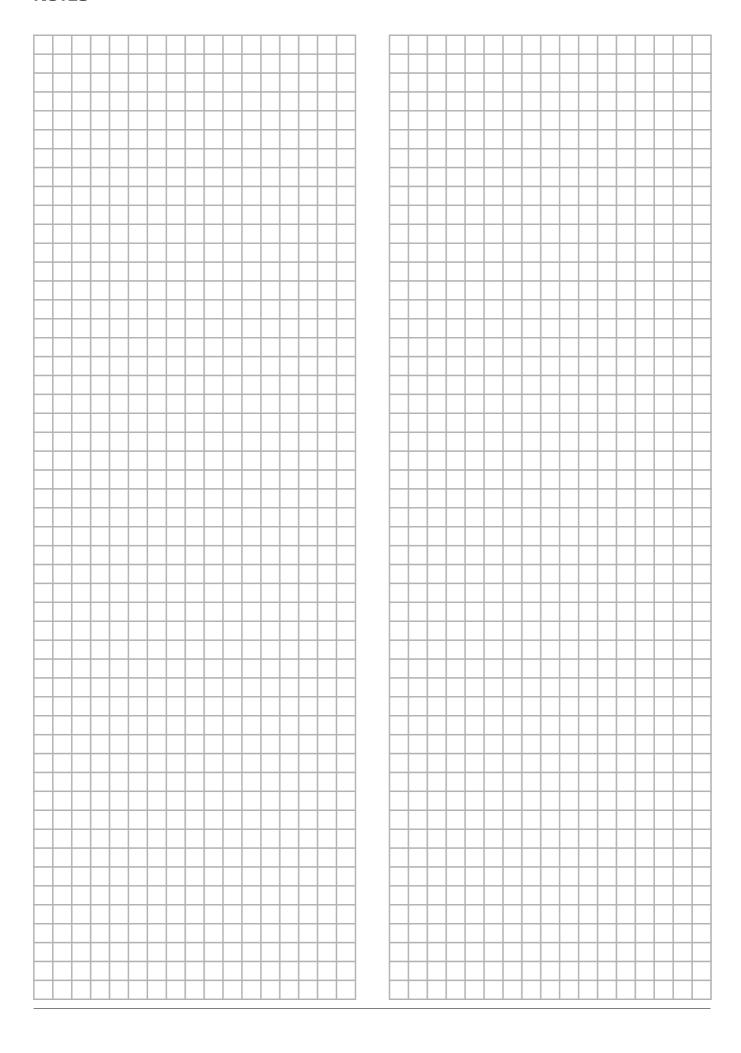
NOTE

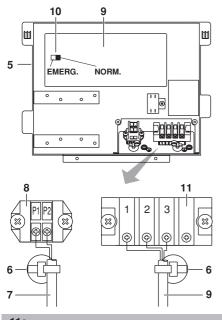
I. WHEN USING THE CENTRAL REMOTE CONTROLLER, SEE MANUAL FOR CONNECTION TO THE UNIT.

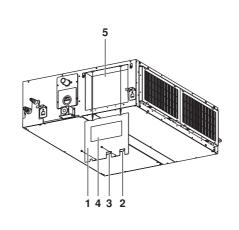


2. THE REMOTE CONTROLLER MODEL VARIES ACCORDING TO THE COMBINATION SYSTEM. SEE TECHNICAL MATERIALS AND CATALOGS, ETC. BEFORE CONNECTING.

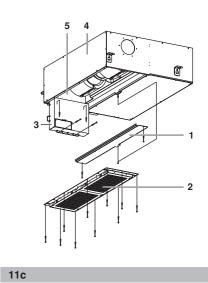
### **NOTES**



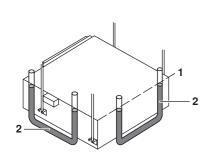


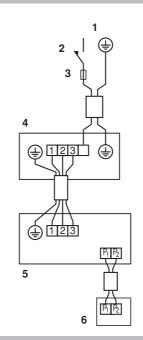


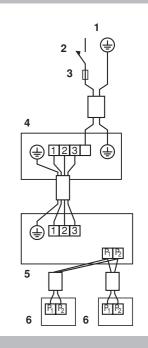
11b



11a



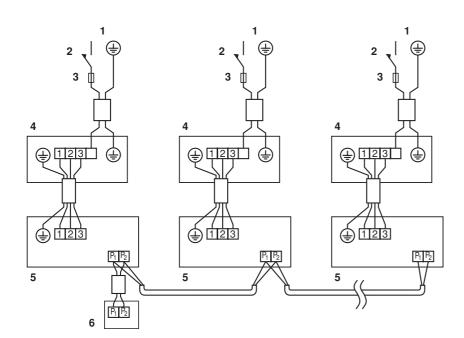


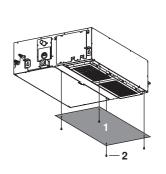


X40A

12

13





16

