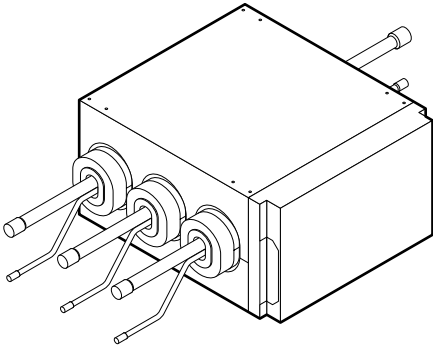


**DAIKIN**

**INVERTER**

# INSTALLATION MANUAL

## BP (Branch Provider) Unit



### Models

**BPMKS967A2B**

**BPMKS967A3B**

**BPMKS967B2B**

**BPMKS967B3B**

Installation manual  
BP (Branch Provider) Unit

**English**

Installationsanleitung  
BP-Gerät (Abzweigdose)

**Deutsch**

Manuel d'installation  
Unité BP (Fournisseur de branchement)

**Français**

Montagehandleiding  
BP (Branch Provider) Unit

**Nederlands**

Manual de instalación  
Unidad BP (Proveedor de ramificaciones)

**Español**

Manuale d'installazione  
Unità BP (Branch Provider)

**Italiano**

Εγχειρίδιο εγκατάστασης  
Μονάδα BP (Παροχέας Διακλάδωσης)

**Ελληνικά**

Manual de Instalação  
Unidade BP (Fornecedora de Ramificação)

**Portugues**

Руководство по установке  
BP-блок (блок провайдера ветви)

**Русский**

CE - DECLARATION-OF-COMFORMITY  
 CE - KONFORMITÄTSEKILÄRNING  
 CE - DECLARATION-DE-CONFORMITE  
 CE - CONFORMITEITSVERKLARING

CE - DECLARACIÓN-DE-CONFORMIDAD  
 CE - ЗАБЯВЛЕНИЕ-О-СООТВЕТСТВИИ  
 CE - ÖPPTYDELSESEKILÄRNING  
 CE - PROHLÁŠENÍ-O-SHODE

CE - FÖRSÄKRAN-OM-ÖVERENSTÄMMELSE  
 CE - ERKLÄRING OM-SÄMSVAR  
 CE - ILMUUTUS-YHDENMUKAISUUEDESTA  
 CE - PROHLÁŠENÍ-O-SHODE

CE - IZJAVA-O-USKLABENOSTI  
 CE - MEGFELŐLÉSEGI-NYILATKOZAT  
 CE - DEKLARACJA-ZGODNOSCI

CE - DECLARATION-DE-CONFORMITATE  
 CE - IZJAVA O SKLADNOSTI  
 CE - VASTAVUSDEKLARATSIOON

CE - ДЕКЛАРАЦИЯ-ЗА-СОТВЕТСТВИЕ  
 CE - АТТИΚΙΤΙΚΕΣ-ΔΕΚΛΑΡΑЦΙΑ  
 CE - АТБІЛСТІБАС-ДЕКЛАРАЦІА  
 CE - VYHLÁŠENIE ZHODY

**DAIKIN INDUSTRIES, LTD.**

- 01 ㊦ declares under its sole responsibility that the air conditioning models to which this declaration relates:
- 02 ㊦ erklärt auf seine alleinige Verantwortung daß die Modelle der Klimaanlage für die diese Erklärung bestimmt ist:
- 03 ㊦ déclare sous sa seule responsabilité que les appareils d'air conditionné visés par la présente déclaration:
- 04 ㊦ verklaart hierbij op eigen exclusieve verantwoordelijkheid dat de airconditioning units waarop deze verklaring betrekking heeft:
- 05 ㊦ dichiara bajo su única responsabilidad que los modelos de aire acondicionado a los cuales hace referencia la declaración:
- 06 ㊦ dichiara sotto sua responsabilità che i condizionatori modello a cui è riferita questa dichiarazione:
- 07 ㊦ δηλώνει με αποκλειστική της ελευθρίας ότι τα προϊόντα των κλιματιστικών συσκευών στα οποία αναφέρεται η παρούσα δήλωση:
- 08 ㊦ déclare sob sua exclusiva responsabilidade que os modelos de ar condicionado a que esta declaração se refere:

**BP1KS967A2B, BP1KS967A3B, BP1KS967B2B, BP1KS967B3B**

- 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 allo/i seguente(i) standard(i) o altro(i) documento(i) a carattere normativo, a patto che vengano usati in conformità alle nostre istruzioni:
- 07 είναι σύμφωνα με τη(α) ακόλουθη(α) πρότυπο(α) ή άλλο(α) έγγραφο(α) κανονισμών, υπό την προϋπόθεση ότι χρησιμοποιούνται σύμφωνα με τις οδηγίες μας.

**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 τη/την των οδηγιών των:
- 08 de acordo com o previsto em:

- 09 a conformitatea cu prevederile:
- 10 under råtgåelse af bestemmelser i:
- 11 enligt villkoren i:
- 12 gitt i henhold til bestemmelserne i:
- 13 noudatulkäytökäytännä:
- 14 za dodržení ustanovení předpisu:
- 15 prema odredbama:
- 16 kóvelei az/:

- 17 zgodnie z postanowieniami Dyrektyw:
- 18 in uma prevederilor:
- 19 ob upoveljenju dobob:
- 20 vastavalt nõuetele:
- 21 suhtutavasti käsuartikli näe:
- 22 laikantis nuostelių, patalikiams:
- 23 težiavojai prasitibus, kas indikatas:
- 24 odzvajavac ustanovena:

- 09 a conformitatea cu prevederile:
- 10 under råtgåelse af bestemmelser i:
- 11 enligt villkoren i:
- 12 gitt i henhold til bestemmelserne i:
- 13 noudatulkäytökäytännä:
- 14 za dodržení ustanovení předpisu:
- 15 prema odredbama:
- 16 kóvelei az/:

- 01 Note \* as set out in the Technical Construction File Daikin.TCF.015 and judged positively by KEIMA according to the Certificate 74736-KRO/ENC97-4957.
- 02 Hinweis \* wie in der Technischen Konstruktionsakte Daikin.TCF.015 aufgeführt und von KEIMA positiv ausgedzeichnet gemäß Zertifikat 74736-KRO/ENC97-4957.
- 03 Remarque \* tel que stipulé dans le Fichier de Construction Technique Daikin.TCF.015 et jugé positivement par KEIMA conformément au Certificat 74736-KRO/ENC97-4957.
- 04 Bemerk \* zoals vermeld in het Technische Constructiedossier Daikin.TCF.015 en in orde bevonden door KEIMA overeenkomstig Certificat 74736-KRO/ENC97-4957.
- 05 Nota \* tal como se avone en el Archivo de Construcción Técnica Daikin.TCF.015 y juzgado positivamente por KEIMA según el Certificado 74736-KRO/ENC97-4957.
- 06 Nota \* delineato nel File Tecnico di Costruzione Daikin.TCF.015 e giudicato positivamente da KEIMA secondo il Certificato 74736-KRO/ENC97-4957.
- 07 Σημείωση \* όπως προορίζεται στο Αρχείο Τεχνικής Κοστοποίησης Daikin.TCF.015 και κρίνεται θετικά από το KEIMA σύμφωνα με το Πρωτόκολλο 74736-KRO/ENC97-4957.
- 08 Nota \* tal como estabelecido no Ficheiro Técnico de Construção Daikin.TCF.015 e com o parecer positivo de KEIMA de acordo com o Certificado 74736-KRO/ENC97-4957.

- 09 ㊦ заявляет, исключительно под своей ответственностью, что модели кондиционеров воздуха, к которым относится настоящее заявление:
- 10 ㊦ erklærer under ensarsvar, at klimaanlægsmodelerne, som denne deklaration vedrører:
- 11 ㊦ deklarerer i egenkap av hunderansvar, att luftkonditioneringsmodellerna som berörs av denna deklaration innebär att:
- 12 ㊦ erklærer at fullelserig ansvar for at de luftkonditioneringsmodeller som berøres af denne deklaration indebærer at:
- 13 ㊦ ilmoittaa yksinomaan omalla vastuullaan, että tämän ilmastuksen tarkoitettamat ilmastointilaitteiden mallit:
- 14 ㊦ prohlásuje ve své plné odpovědnosti, že modely klimatizace, k nimž se toto prohlášení vztahuje:
- 15 ㊦ zjavljuje pod jedliučivo vlastitom odgovornosću da su modeli klima uređaja na koje se ova izjava odnosi:
- 16 ㊦ teljes felelősség tudatában kijelent, hogy a klímaberendezés modellek, melyekre e nyilatkozat vonatkozik:

- 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 соответствует описанию стандарт(ов) или другим нормативным документам, при условии их использования согласно нашим инструкциям:
- 10 overholder følgende standard(er) eller andelandre retningsreglerde dokument(er), brudsat at disse anvendes i henhold til vore instruksur:
- 11 respektive utningning 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 usby er i overensstemmelse med følgende standard(er) eller andre normgivende dokument(er), under forudsætning af at disse bruges i henhold til våre instruksur:
- 13 vastavalt seuraavien standardien ja muiden ohjeellisten dokumenttien vaatimuksia edellytäten, että niitä käytetään ohjeidemme mukaisesti:
- 14 za předpokladu, že jsou využívány v souladu s našimi pokyny, odpovídají následujícím normám nebo normativním dokumentům:

Low Voltage 73/23/EEC  
 Machinery Safety 98/37/EC  
 Electromagnetic Compatibility 89/336/EEC \*

- 01 Directives, as amended.
- 02 Direktiven, med senere ændringer.
- 03 Direktives, telles que modifiées.
- 04 Richtlijnen, zoals geamendard.
- 05 Directivas, según lo emmendado.
- 06 Direttive, come da modifica.
- 07 Ohjuiden, omuk työon pömotjoijä.
- 08 Directivas, conforme alteraçoes em.

- 09 Примечание \* как указано в Досье технического проекта Daikin.TCF.015 и в соответствии с положительным решением KEIMA согласно Сертификату 74736-KRO/ENC97-4957.
- 10 Bemærk \* som anført i den Tekniske Konstruktionsfil Daikin.TCF.015 og positivt vurderet af KEIMA i henhold til Certifikat 74736-KRO/ENC97-4957.
- 11 Information \* uanset om der er tilladelse til konstruktionen Daikin.TCF.015 som positivt erklæret af KEIMA i henhold til Certifikat 74736-KRO/ENC97-4957.
- 12 Merk \* som af framkommet i den Tekniske Konstruktionsfil Daikin.TCF.015 og gjennom positivt bedømmes av KEIMA ifølge Serifikat 74736-KRO/ENC97-4957.
- 13 Huom \* jalka on esially tekniässä Asiakirjassa Daikin.TCF.015 ja jalka KEIMA on hyväksynyt Serifikatoin 74736-KRO/ENC97-4957.
- 14 Poznamka \* jak bylo uvedeno v souboru technické konstrukce Daikin.TCF.015 a pozitivně zjišeno KEIMA v souladu s ověřením 74736-KRO/ENC97-4957.
- 15 Napomena \* kako je izloženo u Databazi o tehničkoj konstrukciji Daikin.TCF.015 i pozitivno ocijenjeno od strane KEIMA prema Certifikatu 74736-KRO/ENC97-4957.
- 16 Megjegyzés \* a/z/ Daikin.TCF.015 műszaki konstrukciós dokumentáció alapján a/z/ KEIMA igazolta a megfelelést a/z/ 74736-KRO/ENC97-4957 tanúsítvány szerint.

- 17 Uwaga \* zgodnie z archiwem dokumentacji konstrukcyjnej Daikin.TCF.015, pozytywną opinią KEIMA i Szwedzestwem 74736-KRO/ENC97-4957.
- 18 Notá \* conform eskir stabilis in Databaz technic de constructie Daikin.TCF.015 si apesate pozitiv de KEIMA in conformitate cu Certificatul 74736-KRO/ENC97-4957.
- 19 Opmoiba \* ako je odobeno v tehnični mapi Daikin.TCF.015 in odobeno s strani KEIMA v skladu s certifikatom 74736-KRO/ENC97-4957.

- 20 Märkus \* nagu on näidatud tehnilises dokumentatsioonis Daikin.TCF.015 ja heaks kiidnud KEIMA järg vastavalt sertifikaadile 74736-KRO/ENC97-4957.
- 21 Zabeleška \* kako je zopredstavljeno v Arhivu za tehničko konstrukcijo Daikin.TCF.015 i odobeno potrditveno od KEIMA caritčno Certifikat 74736-KRO/ENC97-4957.
- 22 Pastaba \* kaip nurodyta Techninėje konstrukcijos bylose Daikin.TCF.015 ir patvirtinta KEIMA pagal pažymėjimą 74736-KRO/ENC97-4957.
- 23 Pziamas \* ka noretikas tehniška dokumentacija Daikin.TCF.015, atibilstosi KEIMA pozityviajam lemumam ko apliekina sertifikatis 74736-KRO/ENC97-4957.
- 24 Poznamka \* ako je lo stavoveno v Súbore technické konstrukcie Daikin.TCF.015 a vhodné posúdenie KEIMA podľa Certifikatu 74736-KRO/ENC97-4957.

- 17 ㊦ deklarije na vlastnu i izvještnu odgovornost, že modelé klimatizatorów, których dotyczy niniejsza deklaracja:
- 18 ㊦ déclare pe proprie răspundere că aparatele de aer condiționat la care se referă această declarație:
- 19 ㊦ z vso odgovorností izjavlja, da so modeli klimatskih naprav, na katere se izjava nanaša:
- 20 ㊦ nimlatab oma täieliku vastutuse, et teiseõnere deklaratsioon alla kuuluvad kliimaseadmete mudelid:
- 21 ㊦ deklariirava na savo otvorochnost, že modeléni klimatimata instalatsionni, za korigo se otnasat etaz deklaratsionni:
- 22 ㊦ viskava savo atsakomybe siekbia, kad oro kondicionavimo prietaisų modeliai, kuriems yra taikoma ši deklaracija:
- 23 ㊦ ar plinu atbildību apliekina, ka tālāk uzskaitito modeļu gaisa kondicionēti, uz kuriem attiecas šī deklarācija:
- 24 ㊦ vyhlásuje na vlastnu zodpovednost, že tieto klimatizačné modely, na ktoré sa vzťahuje toto vyhlásenie:

- 15 in skladu sa slijedećim standardima 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 normatywnych, pod warunkiem że używane są zgodnie z naszymi instrukcjami:
- 18 sunt în conformitate cu următorii (următoare) standard(e) sau alte (documente) normative(e), cu condiția ca acestea să fie utilizate în conformitate cu instrucțiunile noastre:
- 19 skladu z naslednjimi standardi in drugim normativi, pod pogojem, da se uporabljajo v skladu z našimi navodili:
- 20 on vastavuses järgmist(ite standard(ite)ga) või teiste normatiivsete dokumentidega, kui need kasutatakse vastavalt meie juhenditele:
- 21 съответства на следните стандарт 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 lad, je letiti atbilstosti razložja normativem, atbisti sekojšim standardem un oštem normativnim dokumentim:
- 24 su vzhod s nasledovnimi (normami) alebo jinými (normativnými) dokumentom(ami), za predpokladu, že sa používajú v súlade s našimi návodmi:

- 09 Директиве со всеми поправками.
- 10 Direktiver, med amendementer respektive.
- 11 Direktive, telles que amendement.
- 12 Direktiv, med foretagne ændringer.
- 13 Direktiv, según lo modificado.
- 14 v plněném znění.
- 15 Snimnica, kako je izmijenjeno.
- 16 irányelvi(ek) és módosítások rendelkezését.

- 09 Директиве со всеми поправками.
- 10 Direktiver, med senere ændringer.
- 11 Direktive, telles que amendement.
- 12 Direktiv, med foretagne ændringer.
- 13 Direktiv, según lo modificado.
- 14 v plněném znění.
- 15 Snimnica, kako je izmijenjeno.
- 16 irányelvi(ek) és módosítások rendelkezését.



**2SB63219-37N**




**Noboru Murata**  
 Manager Quality Control Department  
 Shiga, 1st of Oct. 2005

**DAIKIN INDUSTRIES, LTD.**  
 Umeda Center Bldg., 4-12, Nakazaki-Nishi 2-chome,  
 Kita-ku, Osaka, 530-8323 Japan




# Safety Precautions

- Read these Safety Precautions carefully to ensure correct installation.
- This manual classifies the precautions into WARNING and CAUTION.  
Be sure to follow all the precautions below: they are all important for ensuring safety.





 **WARNING**.....Failure to follow any of WARNING is likely to result in such grave consequences as death or serious injury.




 **CAUTION**.....Failure to follow any of CAUTION may in some cases result in grave consequences.

- The following safety symbols are used throughout this manual:

 Be sure to observe this instruction.	 Be sure to establish an earth connection.	 Never attempt.
--	---	--

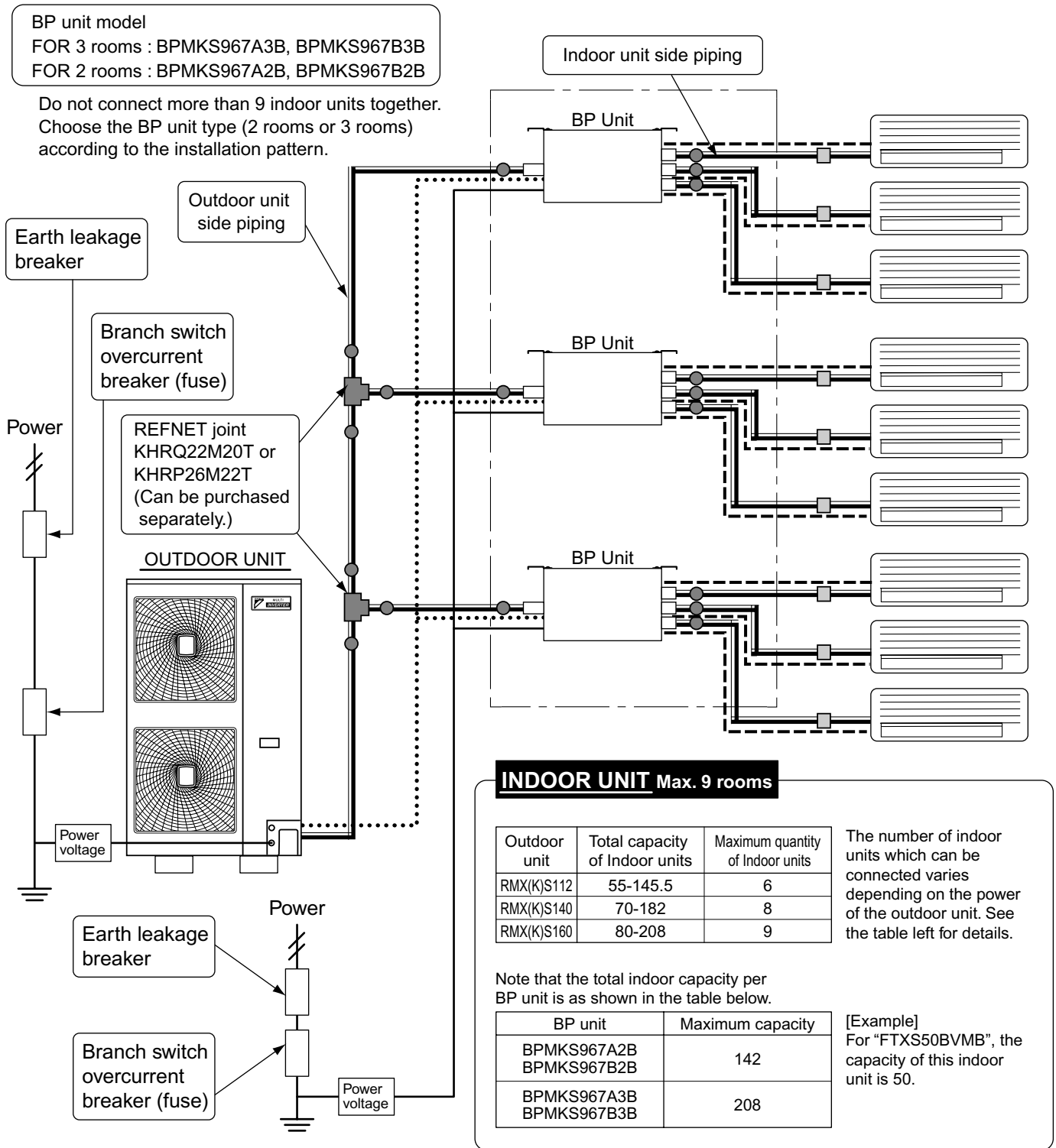
- After completing installation, test the unit to check for installation errors. Give the user adequate instructions concerning the use and cleaning of the unit according to the Operation Manual.

 <b>WARNING</b>	
• Installation should be left to the dealer or another professional. Improper installation may cause water leakage, electrical shock, or fire.	
• Install the air conditioner according to the instructions given in this manual. Incomplete installation may cause water leakage, electrical shock, or fire.	
• Be sure to use the supplied or specified installation parts. Use of other parts may cause the unit to come to lose, water leakage, electrical shock, or fire.	
• Install the air conditioner on a solid base that can support the weight of the unit. An inadequate base or incomplete installation may cause injury in the event the unit falls off the base.	
• Electrical work should be carried out in accordance with the installation manual and the national electrical wiring rules or code of practice. Insufficient capacity or incomplete electrical work may cause electrical shock or fire.	
• Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.	
• For wiring, use a cable length enough to cover the entire distance with no connection. Do not use an extension cord. Do not put other loads on the power supply, use a dedicated power circuit. (Failure to do so may cause abnormal heat, electrical shock or fire.)	
• Use the specified types of wires for electrical connections from the BP unit to the indoor and outdoor units. Firmly clamp the interconnecting wires so their terminals receive no external stresses. Incomplete connections or clamping may cause terminal overheating or fire.	
• After connecting interconnecting and supply wiring be sure to shape the cables so that they do not put undue force on the electrical covers or panels. Install covers over the wires. Incomplete cover installation may cause terminal overheating, electrical shock, or fire.	
• If any refrigerant has leaked out during the installation work, ventilate the room. (The refrigerant produces a toxic gas if exposed to flames.)	
• After all installation is complete, check to make sure that no refrigerant is leaking out. (The refrigerant produces a toxic gas if exposed to flames.)	
• When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air. (Any presence of air or other foreign substance in the refrigerant circuit causes an abnormal pressure rise or rupture, resulting in injury.)	
• During pump-down, stop the compressor before removing the refrigerant piping. If the compressor is still running and the shut-off valve is open during pump-down, air will be sucked in when the refrigerant piping is removed, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.	
• During installation, attach the refrigerant piping securely before running the compressor. If the compressor is not attached and the shut-off valve is open during pump-down, air will be sucked in when the compressor is run, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.	
• Be sure to establish a ground. Do not ground the unit to a utility pipe, arrester, or telephone ground. Incomplete earth may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.	
• Be sure to install an earth leakage breaker. Failure to install an earth leakage breaker may result in electric shocks, or fire.	


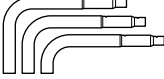
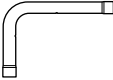
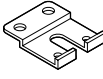






 <b>CAUTION</b>	
• Do not install the air conditioner in a place where there is danger of exposure to inflammable gas leakage. If the gas leaks and builds up around the unit, it may catch fire.	
• This unit is for indoor use. (If installing outdoors, place in a location away from wind and rain.)	

# System Layout

For installation of the indoor and outdoor units, follow the instructions in the Installation manual for each unit.



# Accessories

① Installation Manual 	1pc.	⑥ For indoor unit side piping (gas) (pipe joint) 	BPMKS967A3B BPMKS967B3B (For 3 rooms) : 3pcs. BPMKS967A2B BPMKS967B2B (For 2 rooms) : 2pcs.
② For outdoor unit side piping (gas) (pipe joint) 	1pc.	⑦ Hanger metal 	4pcs.
③ For outdoor unit side piping (gas) (pipe joint) 	1pc.	⑧ Screws 	8pcs.
④ For outdoor unit side piping (liquid) (pipe joint) 	1pc.	⑨ Binding band 	2pcs.
⑤ For Indoor unit side piping (liquid) (pipe joint) 	1pc.	⑩ Heat insulation (2pcs. is 1set) 	BPMKS967A3B BPMKS967B3B (For 3 rooms) : 4sets BPMKS967A2B BPMKS967B2B (For 2 rooms) : 3sets

## Items to be prepared in the field

- Connecting wires between BP unit and indoor unit (H05VV(\*), 4 wires, 1.6mm or 2.0mm)
- Connecting wires (H05VV(\*), 3 wires, 1.6mm or 2.0mm)
- Transmission wires (H05VV(\*), 2 wires, 0.75mm<sup>2</sup> to 1.25mm<sup>2</sup>)
- Installation parts (hanging bolts: 4 × M10 or M8; nuts: 8; flat washers: 8)
- Screws for wall-mounting: 6 × M5
- Heat insulation (joint) [Thermal conductivity: **0.041 - 0.052W/mK (0.035 - 0.045kcal/mh°C)** / thickness **13mm (1/2 inch) or more** / Heat resistance: 100°C or higher]

(\*) Only in protected pipes, use H07RN-F when protected pipes are not use.  
 Specifications for local wiring power cord and branch wiring are in compliance with IEC60245.

# Precautions for Selecting the Location

## The BP unit is for indoor use.

Install in a location such as above a ceiling or behind a wall in accordance with the following conditions:

- That the unit is fully supported, and is in a location with little or no vibration.
- That the refrigerant pipes for the indoor and outdoor units can be repaired with ease, and that the units are placed well within the distance from each other allowed by the pipe length.
- That there is nothing nearby that produces heat or steam (gas).
- When installing, that there is enough room for servicing the unit.
- Do not install in location that is hot or humid for long periods of time.  
 A location where the dry-bulb (DB) temperature around the BP unit reaches 60°C or higher.
- A well-ventilated area.
- Do not install near bedrooms. The sound of refrigerant flowing through the piping may sometimes be audible.  
 For restrictions on installation, refer to P5~6. "Installation".

# Installation

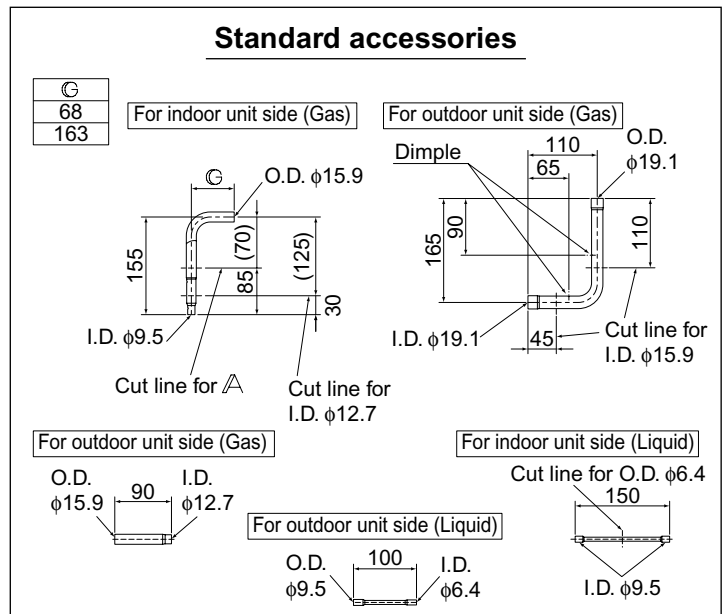
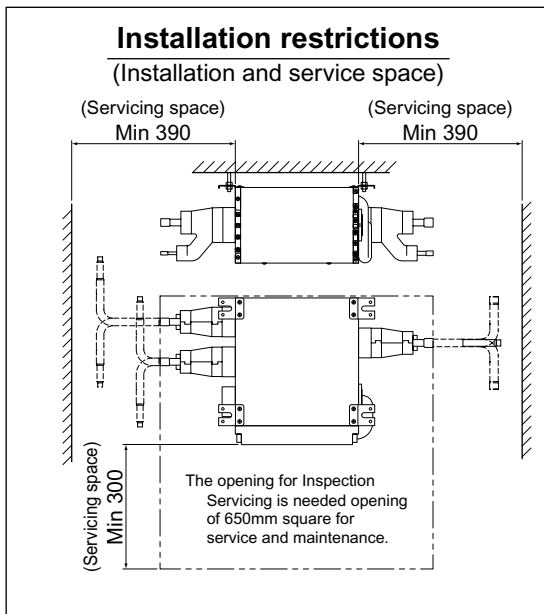
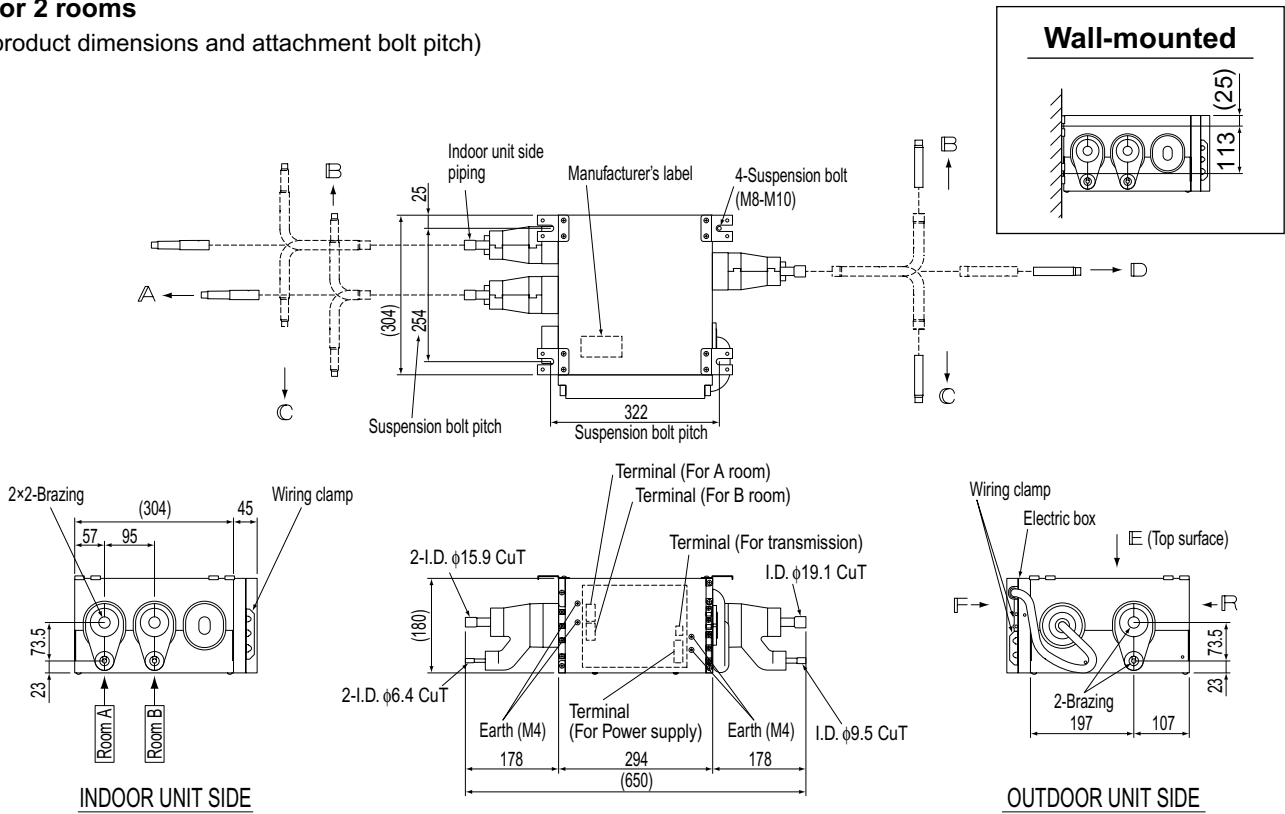
Example of connection (Connection of 8 units heat pump system)			Branch with refnet joint																											
<p>① indoor unit</p> <p>BP ① BP unit</p> <p>△ refrigerant branch kit (refnet joint)</p>																														
Maximum allowable length	Between outdoor and BP units	Total piping length	Pipe length between outdoor and BP units $\leq 55\text{m}$ [Example] $a+b+c+d+e \leq 55\text{m}$																											
	Between BP and indoor units	Total piping length	Piping length between BP and indoor units: RMX(K)S112 $\leq 60\text{m}$ / RMX(K)S140 $\leq 80\text{m}$ / RMX(K)S160 $\leq 90\text{m}$ [Example] RMXS140: $f+g+h+i+j+k+l+m \leq 80\text{m}$																											
	Between BP and indoor unit	1 room length	Piping length between BP and indoor unit $\leq 15\text{m}$ [Example] $f, g, h, i, j, k, l, m \leq 15\text{m}$																											
Allowable height	Between outdoor and indoor units	Difference in height	Difference in height between outdoor and indoor units ( $H1$ ) $\leq 30\text{m}$																											
	Between outdoor and BP units	Difference in height	Difference in height between outdoor and BP units ( $H2$ ) $\leq 30\text{m}$																											
	Between BP and BP units	Difference in height	Difference in height between BP unit and BP units ( $H3$ ) $\leq 15\text{m}$																											
	Between indoor and indoor units	Difference in height	Difference in height between indoor and indoor units ( $H4$ ) $\leq 15\text{m}$																											
Minimum allowable length *1 Since the sound of refrigerant may be transferred from the outdoor unit to the indoor unit, make the pipe length from the outdoor unit to the first junction 5m or longer.	Piping length		Pipe length between outdoor and first refrigerant branch kit (refnet joint) $\geq 5\text{m}$ [Example] $a \geq 5\text{m}$																											
Allowable length after the branch *2 Branch kit are recommended to set as possible as near the BP units. c, d, e are recommended to be as possible as short.	Piping length		Piping length from first refrigerant branch kit (refnet joint) to indoor unit $\leq 40\text{m}$ [Example] unit 8: $b+c+m \leq 40\text{m}$ [Example] unit 6: $b+e+k \leq 40\text{m}$ [Example] unit 3: $d+h \leq 40\text{m}$																											
Refrigerant branch kit selection (refrigerant branch kits can only be used with R410A)	Refrigerant branch kit (refnet joint) name: KHRQ22M20T or KHRP26M22T																													
Piping size selection	<p>• Piping size (Outer diameter <math>\times</math> minimum thickness)</p> <table border="1"> <thead> <tr> <th></th> <th>symbol</th> <th>Gas pipe</th> <th>Liquid pipe</th> </tr> </thead> <tbody> <tr> <td>Between outdoor unit and first refrigerant branch kit</td> <td>a</td> <td><math>\phi 19.1 \times 1.0</math></td> <td><math>\phi 9.5 \times 0.8</math></td> </tr> <tr> <td>Between first refrigerant branch kit and the other branch kit</td> <td>b</td> <td><math>\phi 15.9 \times 1.0</math></td> <td><math>\phi 9.5 \times 0.8</math></td> </tr> <tr> <td>Between refrigerant branch kit and BP unit</td> <td>c, d, e</td> <td colspan="2">See the table A</td> </tr> </tbody> </table> <p>Table A</p> <table border="1"> <thead> <tr> <th>Total indoor capacity Q</th> <th>Gas pipe</th> <th>Liquid pipe</th> </tr> </thead> <tbody> <tr> <td><math>Q_c, Q_d, Q_e \leq 5.0\text{kW}</math></td> <td><math>\phi 12.7 \times 0.8</math></td> <td><math>\phi 6.4 \times 0.8</math></td> </tr> <tr> <td><math>Q_c, Q_d, Q_e &gt; 5.0\text{kW}</math></td> <td><math>\phi 15.9 \times 1.0</math></td> <td><math>\phi 9.5 \times 0.8</math></td> </tr> </tbody> </table> <p>*<math>Q_c, Q_d, Q_e</math> is total connected indoor capacity *Subscript c, d, e indicates the above symbol</p> <p>[Example]</p> <p>indoor 4: 2.5kW } indoor 5: 3.5kW } <math>Q_e = 11.0\text{kW}</math> indoor 6: 5.0kW } =&gt; (Gas pipe) <math>\phi 15.9 \times 1.0</math> / (Liquid pipe) <math>\phi 9.5 \times 0.8</math></p>						symbol	Gas pipe	Liquid pipe	Between outdoor unit and first refrigerant branch kit	a	$\phi 19.1 \times 1.0$	$\phi 9.5 \times 0.8$	Between first refrigerant branch kit and the other branch kit	b	$\phi 15.9 \times 1.0$	$\phi 9.5 \times 0.8$	Between refrigerant branch kit and BP unit	c, d, e	See the table A		Total indoor capacity Q	Gas pipe	Liquid pipe	$Q_c, Q_d, Q_e \leq 5.0\text{kW}$	$\phi 12.7 \times 0.8$	$\phi 6.4 \times 0.8$	$Q_c, Q_d, Q_e > 5.0\text{kW}$	$\phi 15.9 \times 1.0$	$\phi 9.5 \times 0.8$
	symbol	Gas pipe	Liquid pipe																											
Between outdoor unit and first refrigerant branch kit	a	$\phi 19.1 \times 1.0$	$\phi 9.5 \times 0.8$																											
Between first refrigerant branch kit and the other branch kit	b	$\phi 15.9 \times 1.0$	$\phi 9.5 \times 0.8$																											
Between refrigerant branch kit and BP unit	c, d, e	See the table A																												
Total indoor capacity Q	Gas pipe	Liquid pipe																												
$Q_c, Q_d, Q_e \leq 5.0\text{kW}$	$\phi 12.7 \times 0.8$	$\phi 6.4 \times 0.8$																												
$Q_c, Q_d, Q_e > 5.0\text{kW}$	$\phi 15.9 \times 1.0$	$\phi 9.5 \times 0.8$																												

# Installation

- This unit may be installed suspended from the ceiling or mounted on the wall.
- **This unit may only be installed, as shown in the diagram below.** (The side E should be facing upwards.)  
However, it may be freely installed in any direction forward or back, and to the sides.
- Be sure to leave a **650mm square** opening for service and inspection as shown in the diagram below, for both ceiling-suspended installation and wall-mounted installation.
- This unit **“does not require drain treatment”**.
- This unit may be installed with sides F or R facing forward (servicing direction).
- The piping for the indoor unit may be freely led around in directions A, B, C or D.
- The inclination of side E must be within  $\pm 5$  degrees forward or back or to the sides.

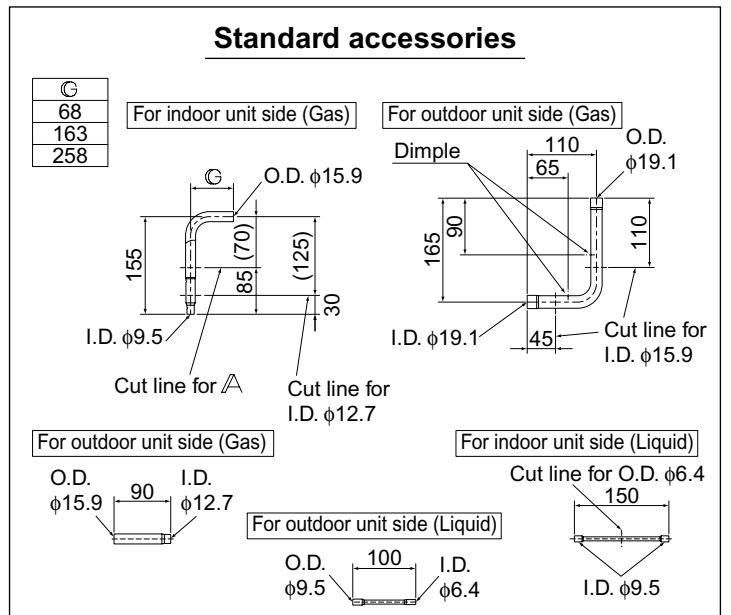
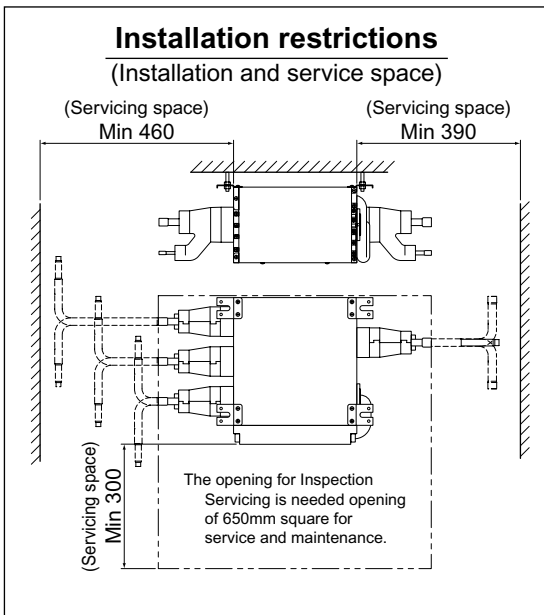
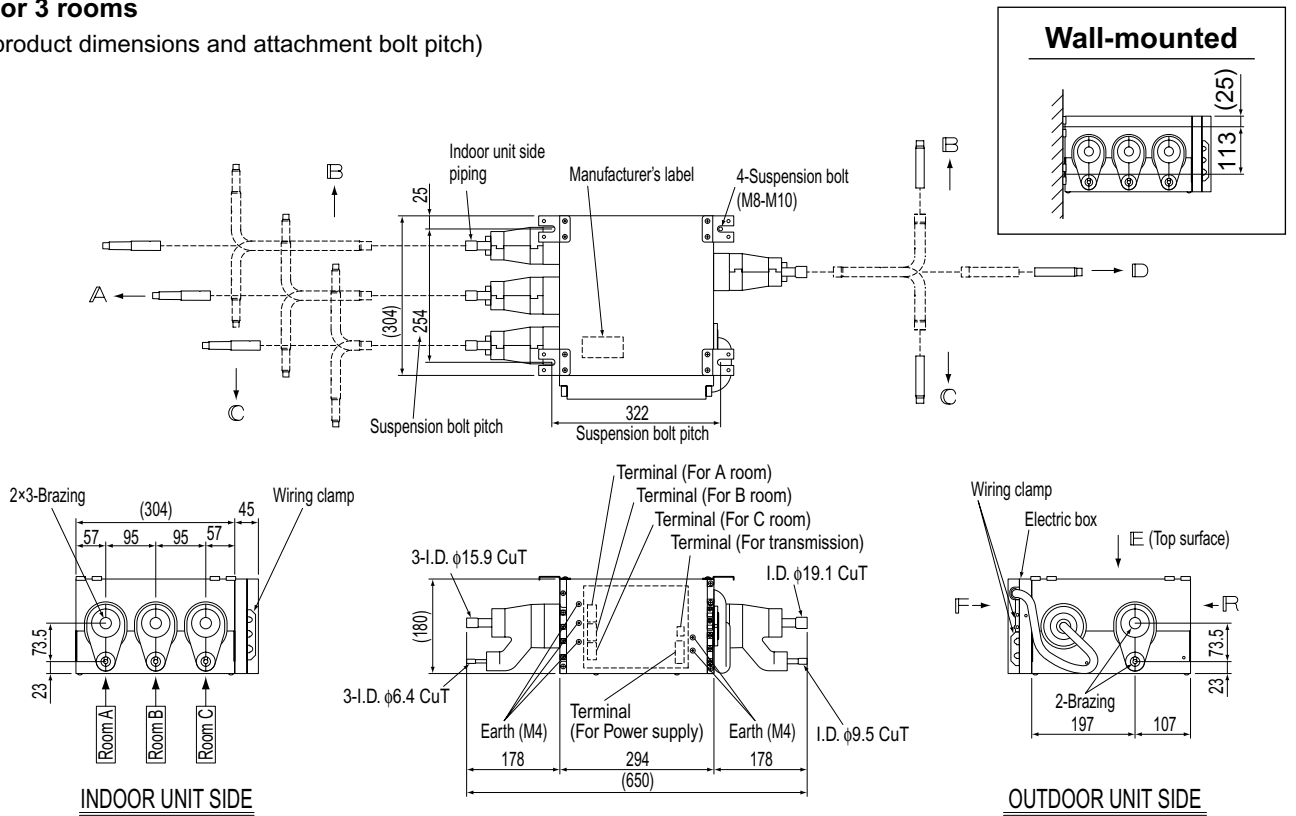
## ◆ For 2 rooms

(product dimensions and attachment bolt pitch)



◆ For 3 rooms

(product dimensions and attachment bolt pitch)



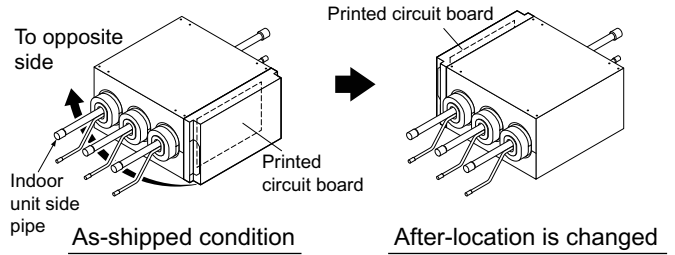


# Installation of the Unit

## 1. Replacing the printed circuit board

- This unit has two different installation types: (1) ceiling-suspended type and (2) wall-mounted type.
- Choose the proper installation pattern according to the location of installation.
- The installation location for the printed circuit board can be changed.
- **Procedure for changing the installation location of the printed circuit board.**

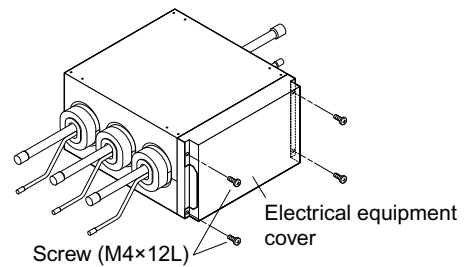
If the installation location of the printed circuit board needs to be changed because of the installation conditions, perform the following:



### ⚠ Caution

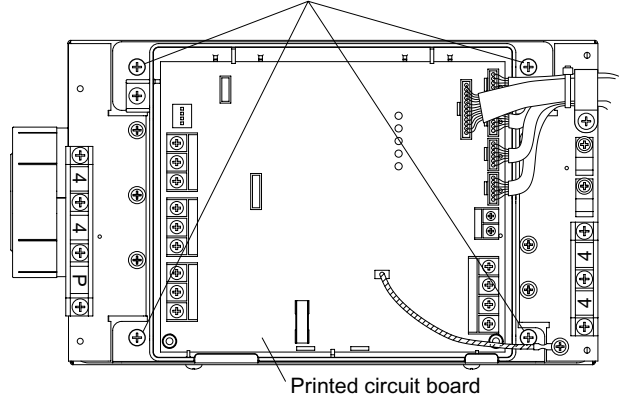
- Before doing any wiring on site, replace the printed circuit board.

- 1) Remove the screws and pull off the electrical equipment cover.

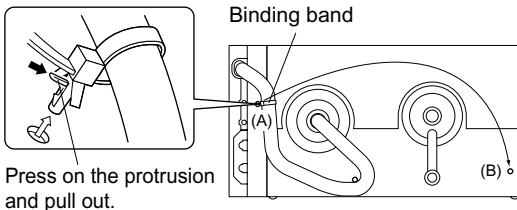


- 2) Remove 4 screws shown in the figure on the below, remove the printed circuit board.

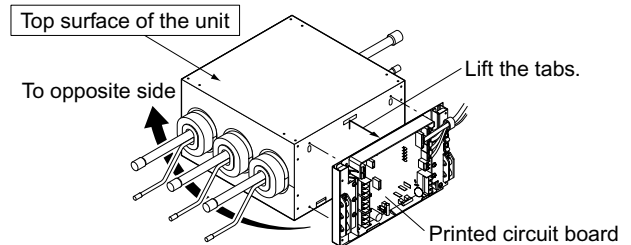
Remove 4 screws. (M4x8L)



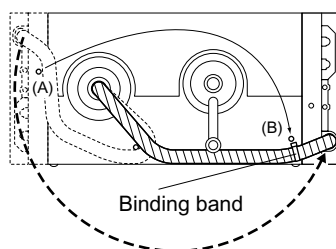
- 3) Remove the binding band (A) which holds the wires.



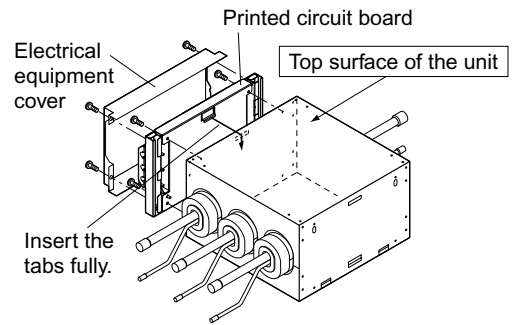
- 4) Remove the printed circuit board, and reattach as shown in the figure.



- 5) Reattach the binding band to position (B).



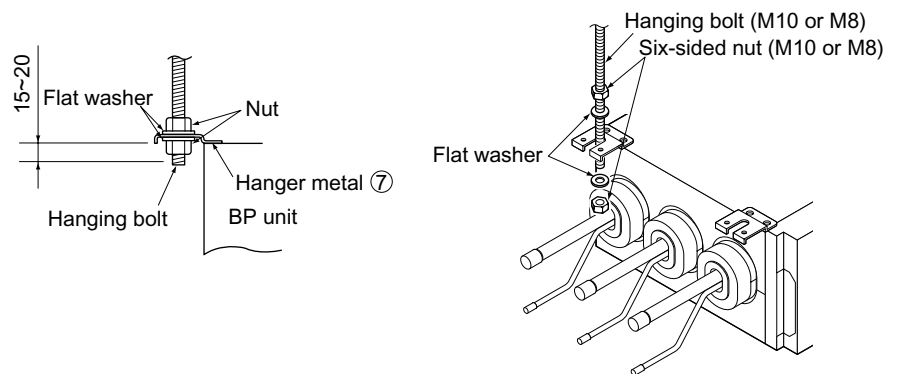
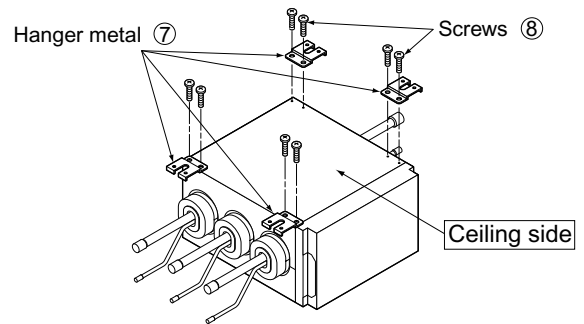
- 6) Attach the printed circuit board and electrical equipment cover to the other side and secure with the screws.



## 2. Ceiling-suspended type

### Procedure:

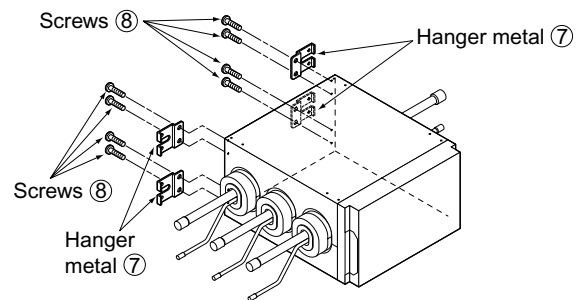
- 1) Fix the furnished hanger metal ⑦ with two screws ⑧. (4 locations in total)
  - 2) Using an insert-hole-in-anchor, hang the hanging bolt.
  - 3) Install a hexagon nut and a flat washer (field supply) to the hanging bolt as shown in the figure in the below, and lift the unit to hang on the hanger metal.
  - 4) After checking with a level that the unit is level, tighten the hexagon nut.
- \* The tilt of the unit should be within  $\pm 5^\circ$  in front/ back and left/right.



## 3. Wall-mounted type

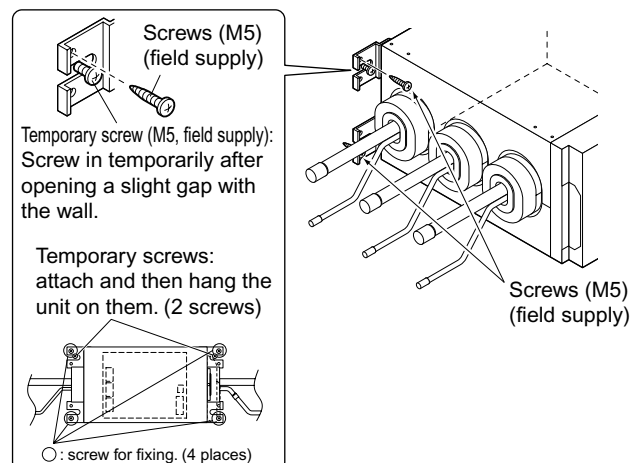
### Procedure:

- 1) Fix the furnished hanger metal ⑦ with two screws ⑧. (4 locations in total)
  - 2) Create a gap with the wall and screw in the temporary screws (M5, field supply), and hang the BP unit.
  - 3) After checking with a level that the unit is level, fix the unit with screws (M5, field supply).
- \* The tilt of the unit should be within  $\pm 5^\circ$  in front/ back and left/right.



### CAUTION

- Be sure to install the unit with the top surface up.
- Do not install near bedrooms. The sound of refrigerant flowing through the piping may sometimes be audible.

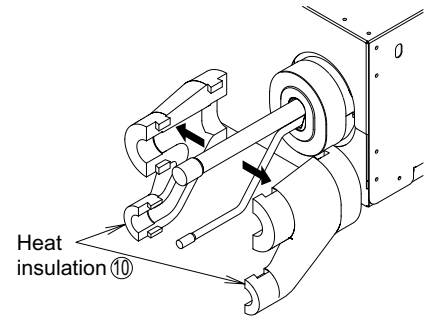


# Connection of Refrigerant Piping

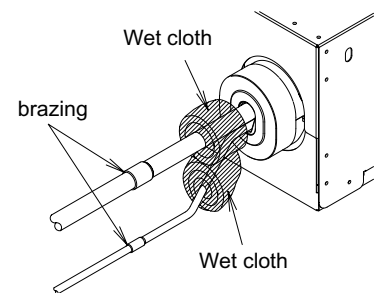
See the indoor and outdoor units installation manual for details on the size of connection piping to the indoor and outdoor units.

## 1. About brazing pipes on site

- 1) Before brazing, remove the heat insulation.
- 2) Remove the blue-colored tape, and throw it out.

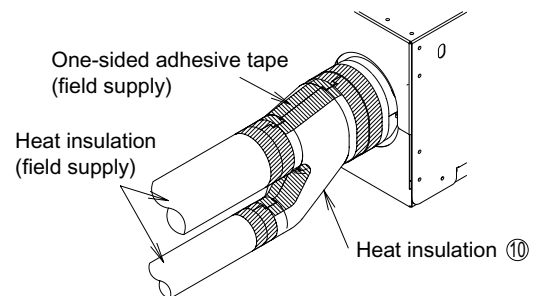


- 3) Wrap the pipes to be brazed with sufficient wet cloths so that brazing does not affect the unit.
- 4) After brazing, use wet cloths or spray mist to sufficiently cool off all pipes.
- 5) When brazing, be careful that the flame of the torch does not come in contact with the unit.  
(Since the inside of the unit is made of plastic, it may become deformed or melt, destroying its heat-insulation performance.)



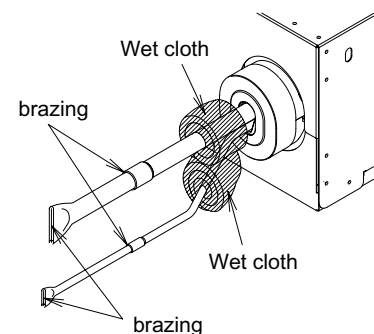
## 2. Insulation of pipes

- 1) Attach heat insulation to each pipe.
- 2) When attaching insulation to the pipes, use one-sided adhesive tape or similar materials to thoroughly prevent air from entering the heat insulation.
- 3) Eliminate any gaps in the heat insulation.

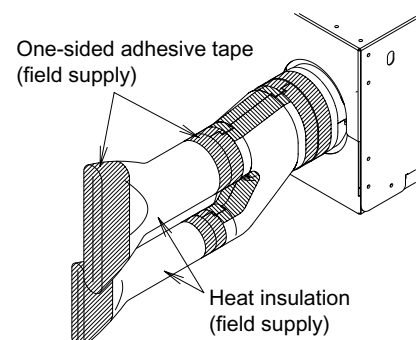


## 3. Unconnected pipes

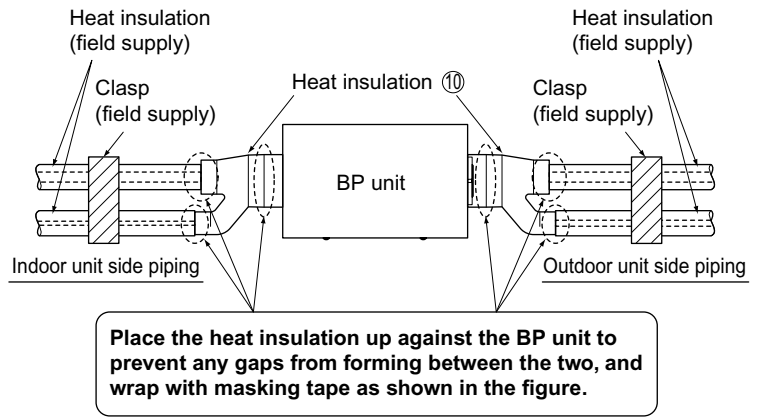
- 1) For pipes not yet connected to a room, pinch the end of the pipe and braze them.
- 2) When brazing this area too, wrap the pipes with sufficient wet cloths to protect the unit.
- 3) After brazing this area too, cool the pipes sufficiently.



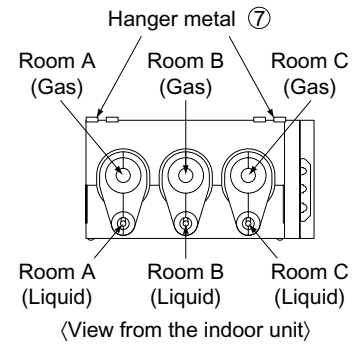
- 4) Attach heat insulation, and use one-sided adhesive tape to thoroughly prevent air from entering the heat insulation.
- 5) Cover the ends of the pipes with sufficient heat insulation.



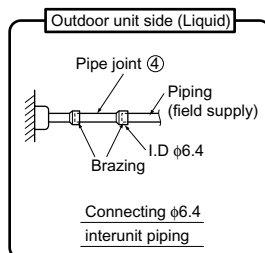
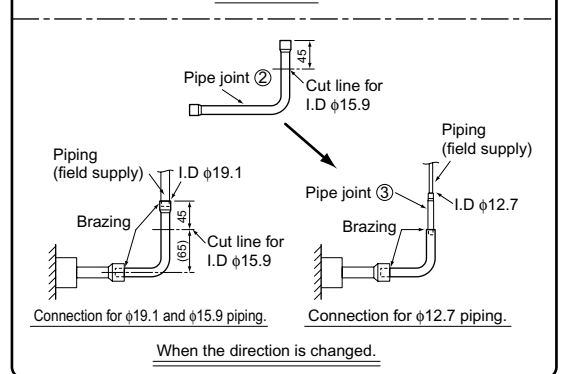
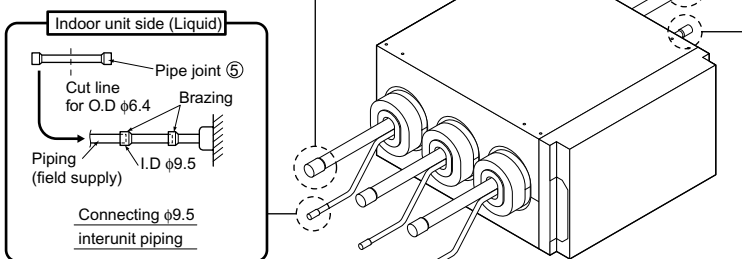
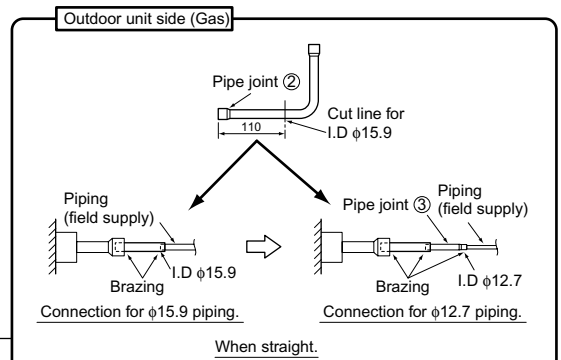
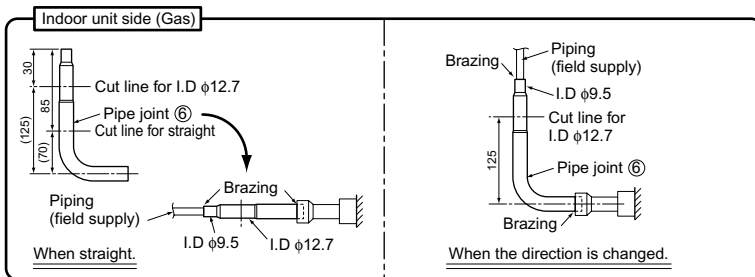
- After brazing and system leakage check, connect a heat insulation (field supply), and let it cure completely following the procedure illustrated right. Use the heat insulation with the following specifications:  
Thermal conductivity: **0.041-0.052W/mK (0.035-0.045kcal/mh°C)** / thickness 13mm or more  
Heat resistance = 100°C or higher
- To ensure that the weight of the local interunit piping does not bear on directly on the BP unit, secure it near the BP unit using the clasp (field supply).



- When connecting indoor units, make sure to connect refrigerant pipes and connection wires to the appropriate connection ports marked with matching alphabets (A, B and C).



- When changing the routing direction, use the pipe joints ② and ⑥ (accessories). Use pipe joints ③, ④ and ⑤ to connect refrigerant pipes with different diameters.

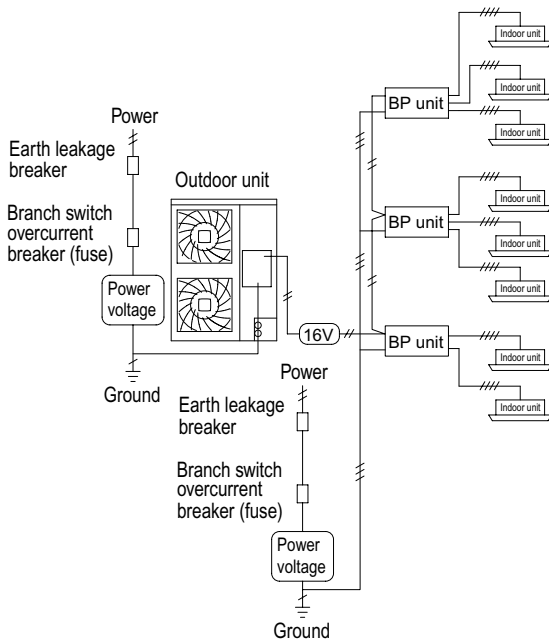


### NOTE

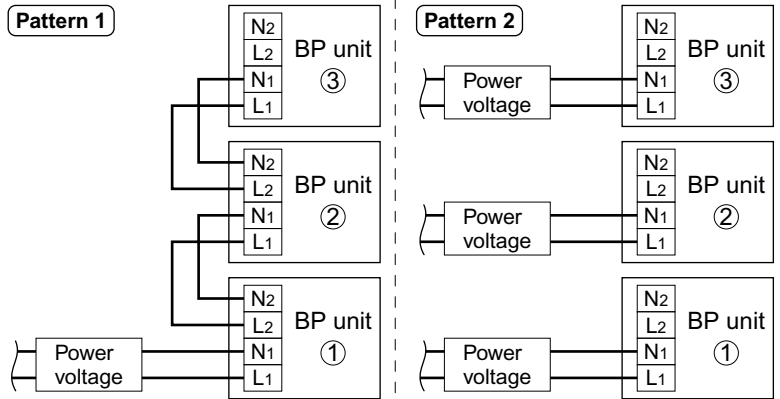
When changing the direction of the piping to something other than the above, bend the piping on site.

# Connecting the Wiring

## Connection example of total system wiring



The following kind of wiring methods is okay for the power line.



- Crossover wiring is possible for the power line.

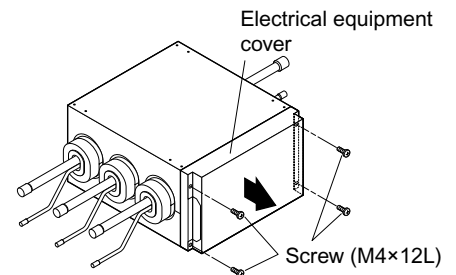
- It is also possible to supply power from the BP units themselves.

### CAUTION

- Be sure to connect the power line to L1 and N1.
- For crossover wiring, take the line from L2 and N2 and connect it to L1 and N1 on the other BP unit.

## Work procedure

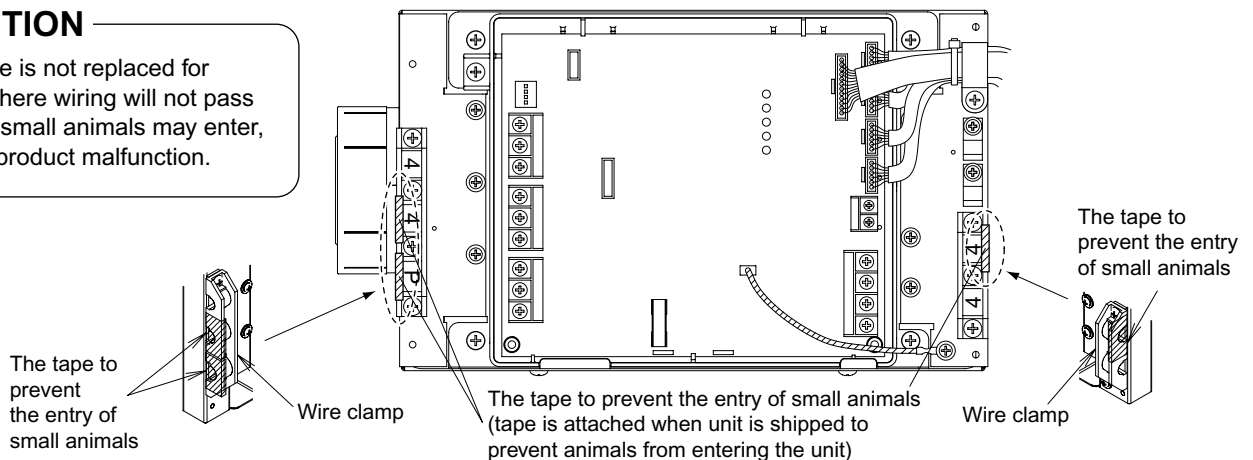
- 1) Remove the screws and pull off the electrical equipment cover.



- 2) Tape is attached to the wire binding band. The purpose of the tape is to prevent small animals from entering the unit. Only remove the tape from places where wiring it to be passed through.

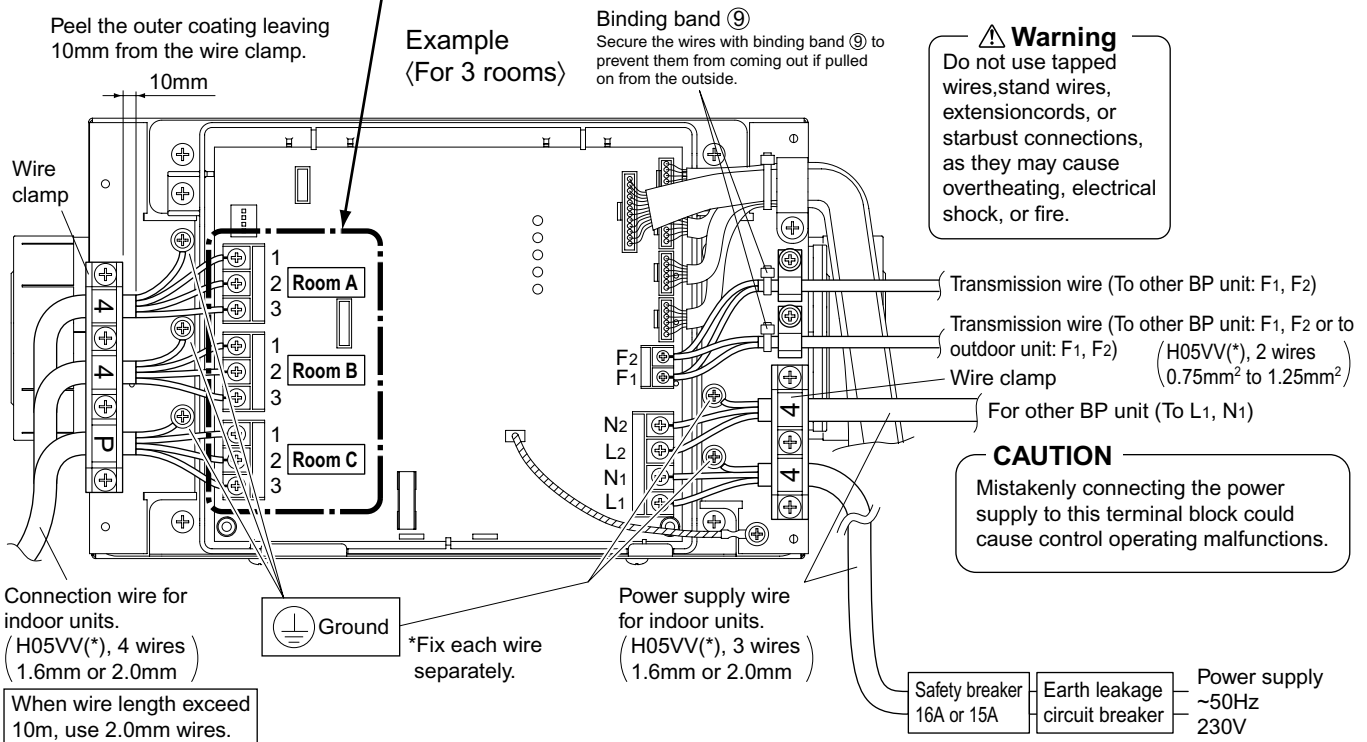
### CAUTION

If the tape is not replaced for places where wiring will not pass through, small animals may enter, causing product malfunction.



3) Follow the instructions on the wiring nameplate to connect the connection wires of indoor/outdoor units to terminal block numbers. (1, 2, 3, F1 and F2) Always fix each ground wire separately with a ground screw. (See the figure below.)

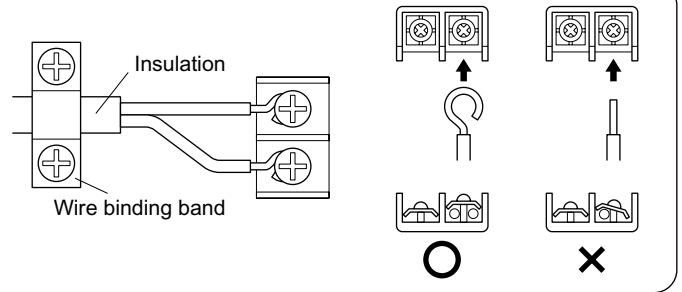
**NOTE: The terminal block numbers are arranged from top to bottom in order of 1, 2 and 3.**



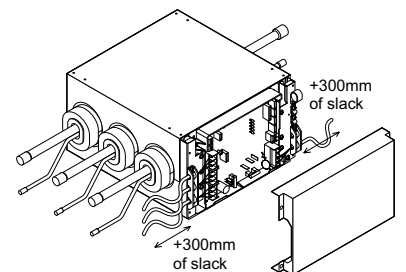
(\*) Only in protected pipes, use H07RN-F when protected pipes are not use.  
Specifications for local wiring power cord and branch wiring are in compliance with IEC60245.

**CAUTION**

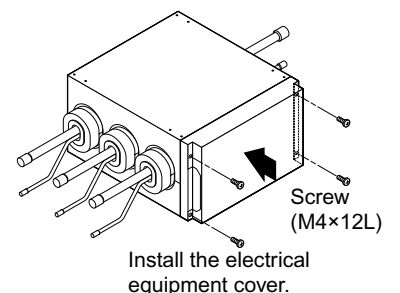
- All local interunit wiring must be secured using the wire binding band over the insulation, as shown in the figure.
- When connecting the connection wires to the terminal block using a single core wire, be sure to perform curling. Problems with the work may cause heat and fires.



4) Allow 300mm for the pulling-out section of harness.



5) Return the electrical equipment cover to its original position, and fix it with the screws.



# Operating Test

Follow the “Operating test” as described in the installation manual of the outdoor unit.

If the BP unit does not operate normally during the test run, the error can be checked on the remote controller display for the indoor unit.

## Error codes displayed on the remote controller

Malfunction code	Nonconformity during installation	Remedial action
A9	Electric expansion valve connector not connected (BP unit)	Please contact your dealer.
E2	Printed circuit board faulty (BP unit)	
J0	Liquid and gas thermistor faulty (BP unit)	
U4	Transmission error between BP unit and indoor unit	Connect correctly the interconnections between BP unit and indoor unit.
U9	Transmission error between outdoor unit and other BP unit	Connect correctly the interconnections between outdoor and other BP unit.
UJ	Transmission error between outdoor unit and this BP unit connecting with the indoor unit of error code displayed	Connect correctly the interconnections between outdoor and this BP unit connecting with the indoor unit of error code displayed.

## The BP Unit

Simple diagnosis can be done using the LEDs on the BP unit's circuit board.

For details, see the label on the inside of the BP unit's electrical equipment cover.

**DAIKIN INDUSTRIES, LTD.**

Head office:  
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,  
Kita-ku, Osaka, 530-8323 Japan

Tokyo office:  
JR Shinagawa East Bldg., 2-18-1, Konan,  
Minato-ku, Tokyo, 108-0075 Japan  
<http://www.daikin.com/global/>

**DAIKIN EUROPE NV**

Zandvoordestraat 300, B-8400 Oostende, Belgium



Two-dimensional bar code is a code for manufacturing.

**3P155380-1E** **M04B237D** (0701) **HT**