

- EN INSTALLATION AND OPERATION MANUAL
- ES MANUAL DE INSTALACIÓN Y FUNCIONAMIENTO
- DE INSTALLATIONS- UND BETRIEBSHANDBUCH
- FR MANUEL D'INSTALLATION ET DE FONCTIONNEMENT
- IT MANUALE D'INSTALLAZIONE E D'USO

- PT MANUAL DE INSTALAÇÃO E DE FUNCIONAMENTO
- DA BRUGER- OG MONTERINGSVEJLEDNING
- NL INSTALLATIE- EN BEDIENINGSHANDLEIDING
- SV HANDBOK FÖR INSTALLATION OCH ANVÄNDNING
- EL ΕΓΧΕΙΡΙΔΙΟ ΕΓΚΑΤΑΣΤΑΣΗΣ ΚΑΙ ΛΕΙΤΟΥΡΓΙΑΣ

INDOOR UNITS SYSTEM FREE
RPI-(2.0-6.0)FSN4E

Ducted indoor units



EN

Specifications in this manual are subject to change without notice in order that HITACHI may bring the latest innovations to their customers.

Whilst every effort is made to ensure that all specifications are correct, printing errors are beyond Hitachi's control; Hitachi cannot be held responsible for these errors.

ES

Las especificaciones de este manual están sujetas a cambios sin previo aviso a fin de que HITACHI pueda ofrecer las últimas innovaciones a sus clientes.

A pesar de que se hacen todos los esfuerzos posibles para asegurarse de que las especificaciones sean correctas, los errores de impresión están fuera del control de HITACHI, a quien no se hará responsable de ellos.

DE

Bei den technischen Angaben in diesem Handbuch sind Änderungen vorbehalten, damit HITACHI seinen Kunden die jeweils neuesten Innovationen präsentieren kann.

Sämtliche Anstrengungen wurden unternommen, um sicherzustellen, dass alle technischen Informationen ohne Fehler veröffentlicht worden sind. Für Druckfehler kann HITACHI jedoch keine Verantwortung übernehmen, da sie außerhalb ihrer Kontrolle liegen.

FR

Les caractéristiques publiées dans ce manuel peuvent être modifiées sans préavis, HITACHI souhaitant pouvoir toujours offrir à ses clients les dernières innovations.

Bien que tous les efforts sont faits pour assurer l'exactitude des caractéristiques, les erreurs d'impression sont hors du contrôle de HITACHI qui ne pourrait en être tenu responsable.

IT

Le specifiche di questo manuale sono soggette a modifica senza preavviso affinché HITACHI possa offrire ai propri clienti le ultime novità.

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PT

As especificações apresentadas neste manual estão sujeitas a alterações sem aviso prévio, de modo a que a HITACHI possa oferecer aos seus clientes, da forma mais expedita possível, as inovações mais recentes.

Apesar de serem feitos todos os esforços para assegurar que todas as especificações apresentadas são correctas, quaisquer erros de impressão estão fora do controlo da HITACHI, que não pode ser responsabilizada por estes erros eventuais.

DA

Specifikationerne i denne vejledning kan ændres uden varsel, for at HITACHI kan bringe de nyeste innovationer ud til kunderne.

På trods af alle anstrengelser for at sikre at alle specifikationerne er korrekte, har Hitachi ikke kontrol over trykfejl, og Hitachi kan ikke holdes ansvarlig herfor.

NL

De specificaties in deze handleiding kunnen worden gewijzigd zonder verdere kennisgeving zodat HITACHI zijn klanten kan voorzien van de nieuwste innovaties.

Iedere poging wordt ondernomen om te zorgen dat alle specificaties juist zijn. Voorkomende drukfouten kunnen echter niet door Hitachi worden gecontroleerd, waardoor Hitachi niet aansprakelijk kan worden gesteld voor deze fouten.

SV

Specifikationerna i den här handboken kan ändras utan föregående meddelande för att HITACHI ska kunna leverera de senaste innovationerna till kunderna.

Vi på Hitachi gör allt vi kan för att se till att alla specifikationer stämmer, men vi har ingen kontroll över tryckfel och kan därför inte hållas ansvariga för den typen av fel.

EL

Οι προδιαγραφές του εγχειριδίου μπορούν να αλλάξουν χωρίς προειδοποίηση, προκειμένου η HITACHI να παρέχει τις τελευταίες καινοτομίες στους πελάτες της.

Αν και έχει γίνει κάθε προσπάθεια προκειμένου να εξασφαλιστεί ότι οι προδιαγραφές είναι σωστές, η Hitachi δεν μπορεί να ελέγξει τα τυπογραφικά λάθη και, ως εκ τούτου, δεν φέρει καμία ευθύνη για αυτά τα λάθη.

**ATTENTION:**

This product shall not be mixed with general house waste at the end of its life and it shall be retired according to the appropriated local or national regulations in a environmentally correct way.

Due to the refrigerant, oil and other components contained in Air Conditioner, its dismantling must be done by a professional installer according to the applicable regulations.

Contact to the corresponding authorities for more information.

The above regulation is from the WEEE Directive in EU. Therefore, this is applied only for EU.

ATENCIÓN:

Este producto no debe eliminarse con la basura doméstica al final de su vida útil. Debe desecharse de manera respetuosa con el medio ambiente de acuerdo con los reglamentos locales o nacionales aplicables.

Debido al refrigerante, el aceite y otros componentes contenidos en el sistema de aire acondicionado, su desmontaje debe realizarlo un instalador profesional de acuerdo con la normativa aplicable.

Para obtener más información, póngase en contacto con las autoridades competentes.

ACHTUNG:

Dass Ihr Produkt am Ende seiner Betriebsdauer nicht in den allgemeinen Hausmüll geworfen werden darf, sondern entsprechend den geltenden örtlichen und nationalen Bestimmungen auf umweltfreundliche Weise entsorgt werden muss.

Aufgrund des Kältemittels, des Öls und anderer in der Klimaanlage enthaltener Komponenten muss die Demontage von einem Fachmann entsprechend den geltenden Vorschriften durchgeführt werden.

Für weitere Informationen setzen Sie sich bitte mit den entsprechenden Behörden in Verbindung.

ATTENTION:

Ne doit pas être mélangé aux ordures ménagères ordinaires à la fin de sa vie utile et qu'il doit être éliminé conformément à la réglementation locale ou nationale, dans le plus strict respect de l'environnement.

En raison du frigorigène, de l'huile et des autres composants que le climatiseur contient, son démontage doit être réalisé par un installateur professionnel conformément aux réglementations en vigueur.

Pour de plus amples informations, contactez les autorités compétentes.

ATTENZIONE:

Indicazioni per il corretto smaltimento del prodotto ai sensi della Direttiva Europea 2002/96/EC e Dlgs 25 luglio 2005 n.151 Il simbolo del cassonetto barrato riportato sull'apparecchiatura indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti.

L'utente dovrà, pertanto, conferire l'apparecchiatura giunta a fine vita agli idonei centri di raccolta differenziata dei rifiuti elettronici ed elettrotecnici, oppure riconsegnarla al rivenditore al momento dell'acquisto di una nuova apparecchiatura di tipo equivalente.

L'adeguata raccolta differenziata delle apparecchiature dismesse, per il loro avvio al riciclaggio, al trattamento ed allo smaltimento ambientalmente compatibile, contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il riciclo dei materiali di cui è composta l'apparecchiatura.

Non tentate di smontare il sistema o l'unità da soli poiché ciò potrebbe causare effetti dannosi sulla vostra salute o sull'ambiente. Vogliate contattare l'installatore, il rivenditore, o le autorità locali per ulteriori informazioni.

Lo smaltimento abusivo del prodotto da parte dell'utente può comportare l'applicazione delle sanzioni amministrative di cui all'articolo 50 e seguenti del D.Lgs. n. 22/1997.

ATENÇÃO:

O seu produto não deve ser misturado com os desperdícios domésticos de carácter geral no final da sua duração e que deve ser eliminado de acordo com os regulamentos locais ou nacionais adequados de uma forma correcta para o meio ambiente.

Devido ao refrigerante, ao óleo e a outros componentes contidos no Ar condicionado, a desmontagem deve ser realizada por um instalador profissional de acordo com os regulamentos aplicáveis.

Contacte as autoridades correspondentes para obter mais informações.

BEMÆRK:

At produktet ikke må smides ud sammen med almindeligt husholdningsaffald, men skal bortskaffes i overensstemmelse med de gældende lokale eller nationale regler på en miljømæssig korrekt måde.

Da klimaanlægget indeholder kølemiddel, olie samt andre komponenter, skal afmontering foretages af en fagmand i overensstemmelse med de gældende bestemmelser.

Kontakt de pågældende myndigheder for at få yderligere oplysninger.

ATTENTIE:

Dit houdt in dat uw product niet wordt gemengd met gewoon huisvuil wanneer u het weg doet en dat het wordt gescheiden op een milieuvriendelijke manier volgens de geldige plaatselijke en landelijke reguleringen.

Vanwege het koelmiddel, de olie en andere onderdelen in de airconditioner moet het apparaat volgens de geldige regulering door een professionele installateur uit elkaar gehaald worden.

Neem contact op met de betreffende overheidsdienst voor meer informatie.

OBS!:

Det innebär att produkten inte ska slängas tillsammans med vanligt hushållsavfall utan kasseras på ett miljövänligt sätt i enlighet med gällande lokal eller nationell lagstiftning.

Luftkonditioneringsaggregatet innehåller kylmedium, olja och andra komponenter, vilket gör att det måste demonteras av en fackman i enlighet med tillämpliga regelverk.

Ta kontakt med ansvarig myndighet om du vill ha mer information.

ΠΡΟΣΟΧΗ:

Σημάνει ότι το προϊόν δεν θα πρέπει να αναμιχθεί με τα διάφορα οικιακά απορρίμματα στο τέλος του κύκλου ζωής του και θα πρέπει να αποσυρθεί σύμφωνα με τους κατάλληλους τοπικούς ή εθνικούς κανονισμούς και με τρόπο φιλικό προς το περιβάλλον.

Λόγω του ψυκτικού, του λαδιού και άλλων στοιχείων που περιέχονται στο κλιματιστικό, η αποσυναρμολόγησή του πρέπει να γίνει από επαγγελματία τεχνικό και σύμφωνα με τους ισχύοντες κανονισμούς.

Για περισσότερες λεπτομέρειες, επικοινωνήστε με τις αντίστοιχες αρχές.

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EN	English	Original version
ES	Español	Versión traducida
DE	Deutsch	Übersetzte Version
FR	Français	Version traduite
IT	Italiano	Versione tradotta
PT	Português	Versão traduzida
DA	Dansk	Oversat version
NL	Nederlands	Vertaalde versie
SV	Svenska	Översatt version
EL	ΕΛΛΗΝΙΚΑ	Μεταφρασμένη έκδοση

1 GENERAL INFORMATION

1.1 GENERAL NOTES

No part of this publication may be reproduced, copied, filed or transmitted in any shape or form without the permission of HITACHI Air Conditioning Products Europe, S.A.

Within the policy of continuous improvement of its products, HITACHI Air Conditioning Products Europe, S.A. reserves the right to make changes at any time without prior notification and without being compelled to introducing them into products subsequently sold. This document may therefore have been subject to amendments during the life of the product.

HITACHI makes every effort to offer correct, up-to-date documentation. Despite this, printing errors cannot be controlled by HITACHI and are not its responsibility.

As a result, some of the images or data used to illustrate this document may not refer to specific models. No claims will be accepted based on the data, illustrations and descriptions included in this manual.

No type of modification must be made to the equipment without prior, written authorisation from the manufacturer.

1.2 PRODUCT GUIDE

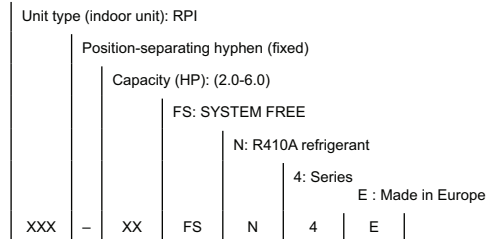
1.2.1 Prior check

NOTE

Check, depending on the name of the model, the type of air conditioning system fitted, the abbreviated code and reference in this instruction manual. This Installation and Operating Manual only refers to RPI-(2.0-6.0)FSN4E units.

Check, in accordance with the Installation and Operating Manuals included with the outdoor and indoor units, that all the information necessary for the correct installation of the system is included. If this is not the case, please contact your distributor.

1.2.2 Classification of indoor unit models



1.3 SAFETY

1.3.1 Symbols used

During normal air conditioning system design work or unit installation, greater attention must be paid in certain situations requiring particular care in order to avoid injuries and damage to the unit, the installation or the building or property.

Situations that jeopardise the safety of those in the surrounding area or that put the unit itself at risk will be clearly indicated in this manual.

To indicate these situations, a series of special symbols will be used to clearly identify these situations.

Pay close attention to these symbols and to the messages following them, as your safety and that of others depends on it.

⚠ DANGER

- The text following this symbol contains information and instructions relating directly to your safety and physical wellbeing.
- Not taking these instructions into account could lead to serious, very serious or even fatal injuries to you and others in the proximities of the unit.

In the texts following the danger symbol you can also find information on safe procedures during unit installation.

⚠ CAUTION

- The text following this symbol contains information and instructions relating directly to your safety and physical wellbeing.
- Not taking these instructions into account could lead to minor injuries to you and others in the proximities of the unit.
- Not taking these instructions into account could lead to unit damage.

In the texts following the caution symbol you can also find information on safe procedures during unit installation.

NOTE

- The text following this symbol contains information or instructions that may be of use or that require a more thorough explanation.
- Instructions regarding inspections to be made on unit parts or systems may also be included.

1.3.2 Additional information about safety

⚠ DANGER

- HITACHI is not able to foresee all the circumstances which may result in a potential danger.
- Do not pour water in the indoor or outdoor unit. These products are fitted with electric components. If water comes into contact with electric components, this will cause a serious electric shock.
- Do not handle or adjust the safety devices inside the indoor and outdoor units. The handling or adjustment of these devices may result in serious accident.
- Do not open the service cover or access panel of the indoor and outdoor units without disconnecting the main supply.
- In the event of fire, switch off the mains, put out the fire immediately and contact your service supplier.
- Check that the earth cable is correctly connected.
- Connect the unit to a circuit breaker of the specified capacity.

2 Name of parts

CAUTION

- Refrigerant leaks may hinder respiration as the gas displaces the air in the room.
- Fit the indoor unit, the outdoor unit, the remote control and the cable at a minimum of 3 metres away from sources of strong radiation from electromagnetic waves, such as medical equipment.
- Do not use sprays, such as insecticides, varnishes or enamels or any other inflammable gas within a metre of the system.
- If the circuit breaker or supply fuse of the unit comes on frequently, stop the system and contact the service supplier.
- Do not carry out maintenance or inspection work yourself. This work must be carried out by qualified service personnel with suitable tools and resources for the work.
- Do not place any foreign material (branches, sticks, etc.) in the air inlet or outlet of the unit. These units are fitted with high speed fans and contact with any object is dangerous.

- This appliance must be used only by adult and capable people, having received the technical information or instructions to handle this appliance properly and safely.
- Children should be supervised to ensure that they do not play with the appliance..

NOTE

- The air in the room should be renewed and the room ventilated every 3 or 4 hours.
- The system fitter and specialist shall provide anti-leak safety in accordance with local regulations.

1.4 PURPOSE OF THIS MANUAL

This air conditioner has been designed for standard air conditioning for human beings. For use in other applications, please contact your HITACHI dealer or service contractor

The air conditioning system should only be installed by qualified personnel, with the necessary resources, tools and equipment, who are familiar with the safety procedures required to successfully carry out the installation.

PLEASE READ AND FAMILIARISE YOURSELF WITH THE MANUAL BEFORE STARTING WORK ON THE INSTALLATION OF THE AIR CONDITIONING SYSTEM. Failure to observe the instructions for installation, use and operation described in this Manual may result in operating failure including potentially serious faults, or even the destruction of the air conditioning system.

It is assumed that the air conditioning system will be installed and maintained by responsible personnel trained for the purpose. If this is not the case, the customer should include all the safety, caution and operating signs in the native language of the personnel responsible.

Do not install the unit in the following places, as this may lead to a fire, deformities, rusting or faults:

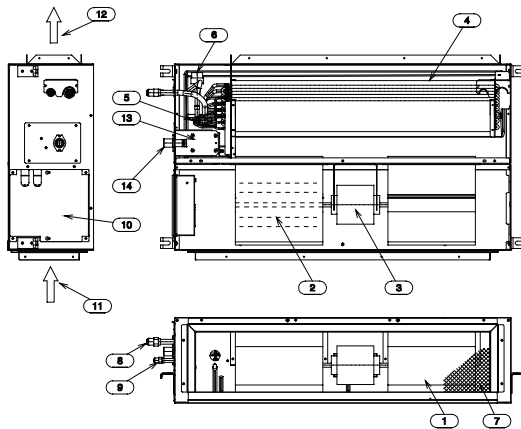
- Places where oil is present (including oil for machinery).
- Places with a high concentration of sulphurous gas, such as spas.
- Places where flammable gases may be generated or circulate.
- Places with a saline, acidic or alkaline atmosphere.

Do not install the unit in places where silicon gas is present. Any silicon gas deposited on the surface of the heat exchanger will repel water. As a result, the condensate water will splash out of the collection tray and into the electrical box. Water leaks or electrical faults may eventually be caused.

Do not install the unit in a place where the current of expelled air directly affects animals or plants as they could be adversely affected.

2 NAME OF PARTS

◆ RPI



No.	Part Name
1	Fan Casing
2	Fan
3	Fan Motor
4	Heat Exchanger
5	Header
6	Expansion Valve
7	Air Filter
8	Refrigerant Gas Pipe Connection
9	Refrigerant Liquid Pipe Connection
10	Electrical Control Box
11	Air Inlet
12	Air Outlet
13	Drain Pump mechanism
14	Drain pipe connection

3 Units installation

3 UNITS INSTALLATION

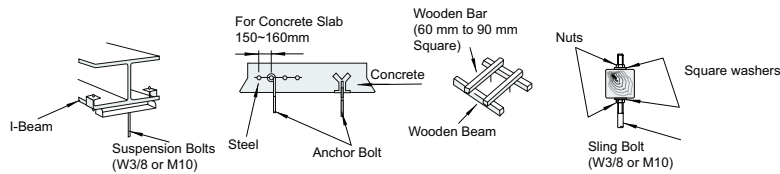
⚠ DANGER

- Check to ensure that the accessories are packed with the indoor unit.
- Do not install the indoor units outdoors. If installed outdoors, an electric hazard or electric leakage will occur.
- Consider the air distribution from each indoor unit to the space of the room, and select a suitable location so that uniform air temperature in the room can be obtained. It is recommended that the indoor units be installed 2.3 to 3 meters from the floor level. If the unit is installed higher than 3 meters, it is also recommended that a fan be utilised to obtain uniform air temperature in the room.
- Avoid obstacles which may hamper the air intake or the air discharge flow.
- Pay attention to the following points when the indoor units are installed in a hospital or other places where there are electronic waves from medical equipment, etc.
- Do not install the indoor units where electromagnetic wave is directly radiated to the electrical box, remote control cable or remote control switch.
- Install the indoor units and components as far as practical or at least 3 meters from the electromagnetic wave radiator.
- Prepare a steel box and install the remote control switch in it. Prepare a steel conduit tube and wire the remote control cable in it. Then connect the ground wire with the box and tube.
- Install a noise filter when the power supply emits harmful noises.
- This unit is exclusive non electrical heater type indoor unit. It is prohibited to install a electrical heater in the field.
- Mount suspension bolts using M10 (W3/8) as size, as shown below:

- Do not put any foreign material into the indoor unit and check to ensure that none exist in the indoor unit before the installation and test running. Otherwise a fire or failure, etc., may occur.

⚠ CAUTION

- Do not install the indoor units in a flammable environment to avoid a fire or an explosion.
- Check to ensure that the ceiling slab is strong enough. If not strong enough, the indoor unit may fall down on you.
- Do not install the indoor units, outdoor unit, remote control switch and cable within approximately 3 meters of strong electromagnetic wave radiators such as medical equipment.
- Do not install the indoor units in a machinery shop or kitchen where vapor from oil or mist flows to the indoor units. The oil will deposit on the heat exchanger, thereby reducing the indoor unit performance, and may deform. In the worst case, the oil damages the plastic parts of the indoor unit.
- To avoid any corrosive action to the heat exchangers, do not install the indoor units in an acid or alkaline environment.
- When lifting or moving the indoor unit, use appropriate slings to avoid damage and be careful not to damage the insulation material on units surface.

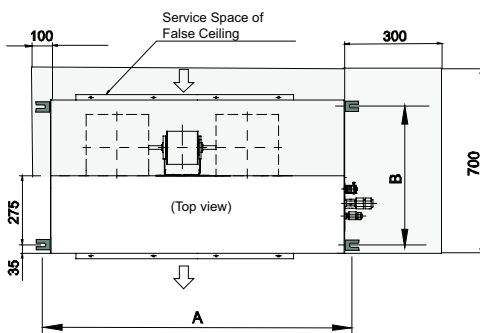


3.1 UNIT INSTALLATION

3.1.1 Installation

Install the indoor unit with a proper clearance around it paying careful attention of installation direction for the piping, wiring and maintenance working space, as shown below.

◆ **Service Space**



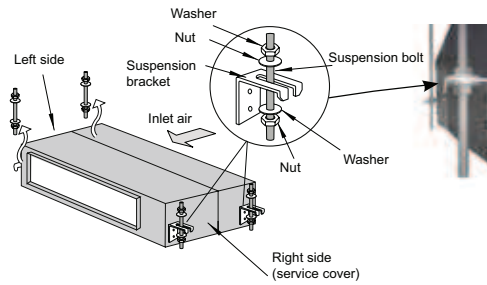
Unit HP	(mm)	
	A	B
2.0-3.0	1123	600
4.0-6.0	1514	600

◆ **Mounting the suspension bolts**

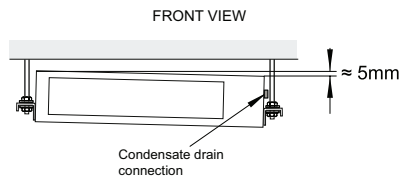
- Using the dimension shown above select the final location and installation direction of the Indoor Unit paying careful attention to the space for the piping, wiring and maintenance.
- Install the sling bolts, M10 or greater are also recommended, and suspend the indoor unit using the following steps:

- 1 Hook suspension bracket to the nut and washer of each sling bolt, as shown, starting from one side
- 2 After check the nut and washer are correctly fixes by the retainers of the suspension bracket, hook the suspension bracket of the other side to nut and washer.

3 Units installation



◆ Drain pan level



- Make sure that the foundation is flat, taking into account the maximum foundation gradient.
- The unit should be installed so that one side of the unit is slightly (approximately 5 mm) lower than the other side, in order to avoid the incorrect position of the drain discharge.

Tighten the nuts of the suspension bolts with the suspension brackets after adjustment is completed. Special plastic paint must be applied to the bolts and nuts in order to prevent them from loosening.

NOTE:

Keep the unit as well as relevant equipment covered with the vinyl cover during installation work.

3.1.2 Connecting Field Supply DUCT and Suction Air Filter Servicing

◆ Field Supply Duct installation

Fix the Flexible Air Duct to External Faces of unit flanges (the unit is equipped with factory supply flanges for this purpose).

It is recommended to use a Flexible field supply Duct portion in order to avoid any abnormal sound vibration.

RPI units are supplied with standard Air Filter at the suction side. This filter is provided for the cases in which no Suction Duct is applied (or it is very short).

Fig. 1



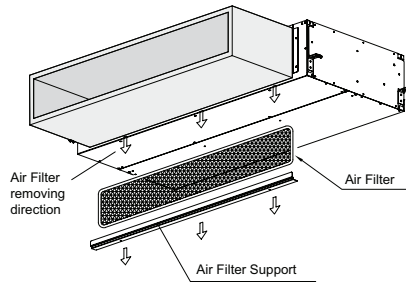
Fig. 2



It is recommended the following indications depending on the installation.

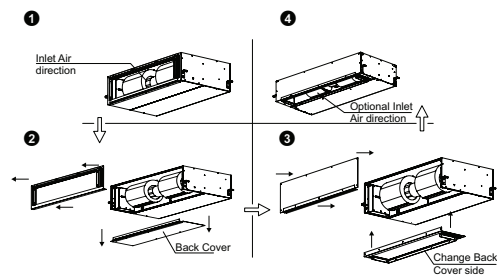
- Keep the standard Air Filter in case of no Suction Duct is applied (fig. 1)
- In case of applying Suction Duct, it is recommended to apply Air Filter at the inlet point of Suction Duct, removing the standard Air Filter of the unit (fig. 2)

◆ Suction Air Filter Servicing



Remove the stay support (3 screws) from the unit and pull down the Air Filter.

3.1.3 Air Suction Direction Change

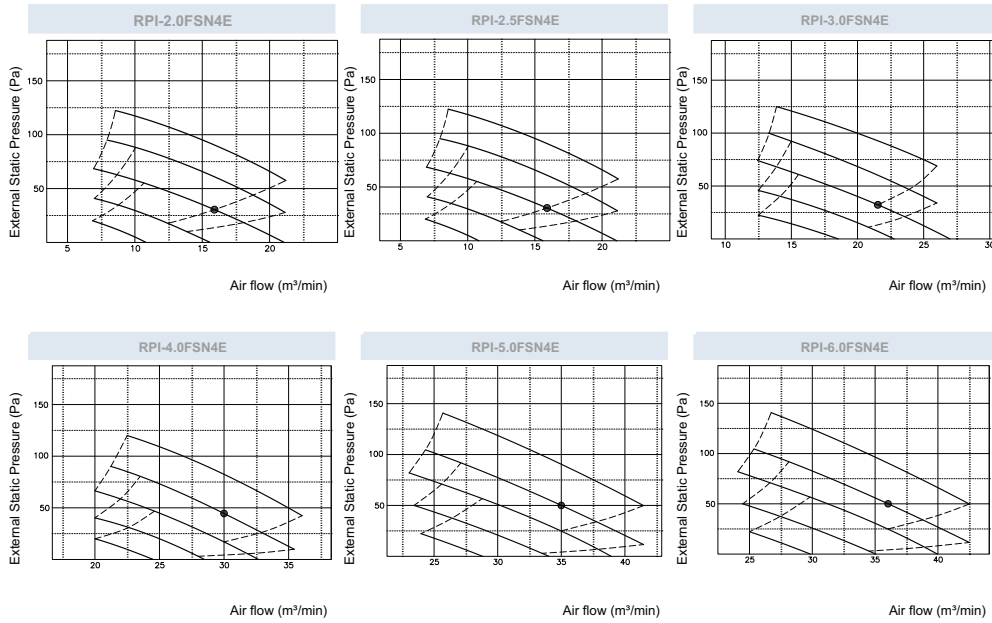


For RPI-(2.0-6.0) FSN4E units, Air Suction direction could be modified by changing Back Cover direction as shown in the diagram.

3 Units installation

3.1.4 Fan Performance Curve

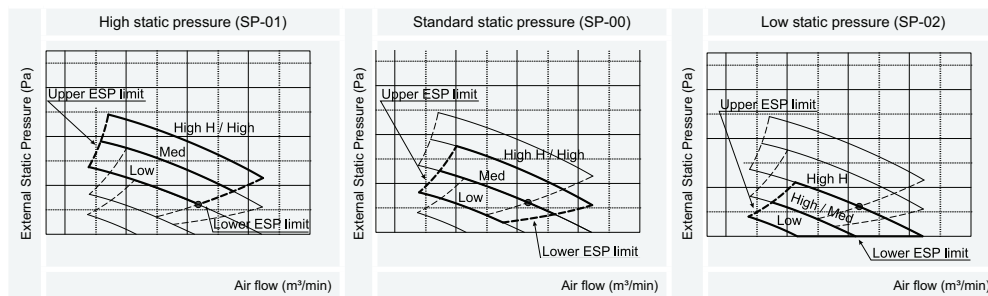
These units provide three options for the installation: High static pressure, standard static pressure or Low static pressure conditions in each particular installation, as shown below Fan Performance Curve.



NOTE:
"•": Nominal Point

◆ Fan speed availability according to the selected external static pressure

According to the selected of External Static Pressure configuration (through the optional function C5) the fan speed available in the Remote Control Switch are the ones show as example in the following pictures.



NOTE:
"High H" speed available only with PC-ARF remote control switch

3 Units installation

3.1.5 Static pressure setting

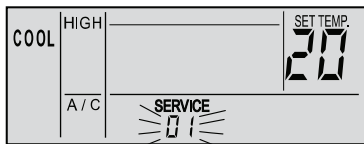
RPI units have been provided by three Static Pressure levels regulation depending on the installation requirements.

High Static Pressure, Standard Static Pressure (**Factory setting**) and Low Static Pressure conditions are available.

Static Pressure setting shall be made from the Remote Control Switch. For changing to High and Low Static Pressure level, refer to Installation and Operation Manual remote control. Examples of configuration with PC-ART remote control are shown below.

◆ **Field Setting Mode**

Check to ensure that the unit is stopped, press the «OK» switch and the «RESET» switch on the remote control switch simultaneously more than 3 seconds, and the remote control switch is changed to the field setting mode. When the remote control switch is at the field setting mode, the «SERVICE» indication is indicated and the «01» flickers below the «SERVICE» indication.

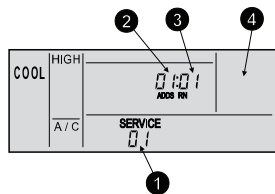


◆ **Optional Setting Mode**

At the field setting mode as described in the above item, press the «TEMP ▽» switch or the «TEMP ▲» switch and the number flickering below the «SERVICE» indication is changed (01 <=> 02). Set the flickering number at "01", press the "OK" switch, and the remote control switch is changed to the optional setting mode.

◆ **Selection of Indoor Unit**

- a. At the optional setting mode, the indication on the remote control switch is changed as shown in the figure below



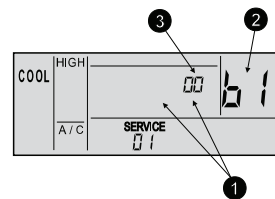
- 1 The indication of "01" is turned ON
 - 2 The address of the indoor unit which the optional function is to be set, is indicated at the segments for timer setting time indication, and the "ADDN" is indicated below.
 - 3 The refrigerant cycle number of the outdoor unit for which the optional function is to be set is indicated at the segments for timer setting time indication and the "RN" is indicated below.
 - 4 The indication of the setting temperature is turned OFF.
- b. At the condition of the above item (a), press the «TEMP ▽» switch or the «TEMP ▲» switch of the remote control switch and the indoor unit for which the optional function is to be set, can be changed.

NOTE

- The indoor unit can be selected among the indoor units connected to the remote control switch.
- In case that both the indications of the address and the refrigerant cycle number is "AA", the settings of all the indoor units is same.
- c. After selecting the indoor unit, press the "OK" switch, the remote control switch is changed to the optional setting mode.

◆ **Changing of Optional Functions and Setting Conditions**

- a. At the optional setting mode, the indication on the remote control switch is changed as shown below.



- 1 The indications of "ADDN" and "RN" are turned OFF.
 - 2 The item number of the optional RN function is indicated at the segment for the setting temperature indication.
 - 3 The setting condition of the optional function item is indicated at the segments for timer setting time indication.
- b. Press the "SELECT ▽" switch or the "SELECT ▲" switch, the optional function item is changed as shown below.

When pressing the "SELECT ▲" switch



When pressing the "SELECT ▽" switch



In this optional function it must press the "SELECT ▽" switch until E5

- c. Press the "OK" switch, and the setting condition of the optional function is changed as shown below.

When pressing the "OK" switch



In this optional function is the next position :

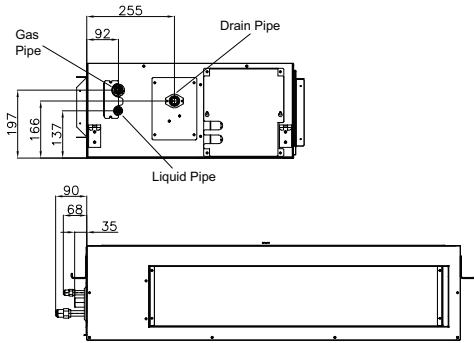
- 00 Medium Static Pressure (Factory Setting)
- 01 High Static Pressure
- 02 Low Static Pressure

◆ **Return from Optional Function Setting Mode**

Press the "RESET" switch, the optional function setting is memorized and the mode is returned to the normal condition

4 REFRIGERANT PIPING CONNECTION

Position of piping connection is the following:



4.1.1 Size of piping connection

◆ Piping size

Model RPI	mm (in)		
	2.0	2.5/3.0	4.0/5.0/6.0
Gas Piping	Ø 15.88 (5/8")	Ø 15.88 (5/8")	Ø 15.88 (5/8")
Liquid Piping	Ø 6.35 (1/4")	Ø 9.53 (3/8")	Ø 9.53 (3/8")

◆ Thickness of Copper Pipes

Nominal Diameters	Outer Diameters	Thickness
1/4	6.35	0.80
3/8	9.53	0.80
1/2	12.70	0.80
5/8	15.88	1.00

◆ Flare Pipe Dimensions

Nominal Diameters	Outer Diameters	A _{A ± 0.4}
1/4	6.35	9.1
3/8	9.53	13.2
1/2	12.70	16.6
5/8	15.88	19.7

◆ Flare Nut Dimensions

Nominal Diameters	Outer Diameters	B
1/4	6.35	17
3/8	9.53	22
1/2	12.70	26
5/8	15.88	29

5 Drain piping

5 DRAIN PIPING

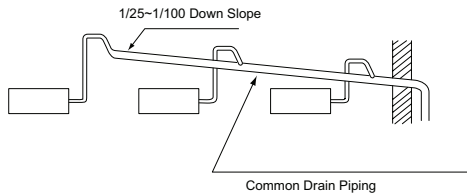
5.1 GENERAL

NOTE

Install drainage in accordance with national and local codes.

CAUTION

- Do not create an upper-slope or rise for the drain piping, since drain water will flow back to the unit and leakage to the room will occur when the unit operation is stopped.
- Do not connect the drain pipe with sanitary or sewage piping or any other drainage piping.
- When the common drain piping is connected with other indoor units, the connected position of each indoor unit must be higher than the common piping. The pipe size of the common drain pipe must be large enough according to the unit size and number of unit.



- Drain piping will require insulating if the drain is installed in a location where condensation forming on the outside of drain pipe may drop and cause damage. The insulation for the drain pipe must be selected to insure vapor sealing and prevent condensation forming.
- Drain trap should be installed next to indoor unit. This trap must be designed to good practice and be checked with water (charged) and tested for correct flow. Do not tie or clamp the drain pipe and refrigerant pipe together.

After performing drain piping work and electrical wiring, check to ensure that water flows smoothly as in the following procedure:

Checking with Drain-Up Mechanism and Float Switch

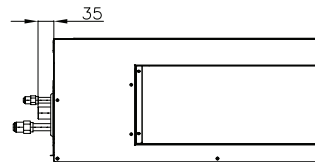
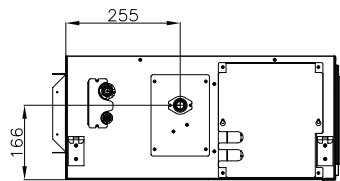
- Switch ON the power supply.
- Pour approximately 1.8 liters of water into the drain pan. Then float switch stops the system automatically. In this operations the drain pump do not stops.
- Check to ensure that the water flows smoothly or whether no water leakage occurs. When water cannot be found at the end of the drain piping, pour another approximately 1.8 liters of water into the drain pan.
- Switch OFF the power supply after.

NOTE

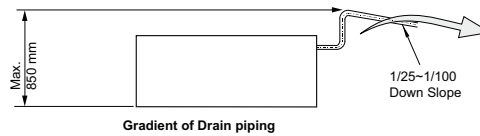
Pay attention to the thickness of the insulation when the left side piping is performed. If it is too thick, piping can not be installed in the unit.

5.2 DRAIN PIPE CONNECTION

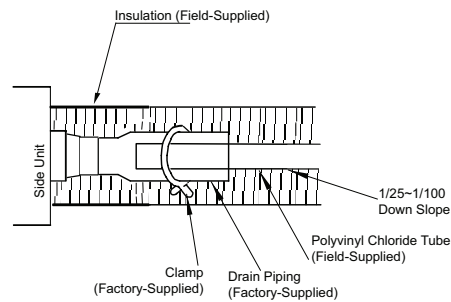
- 1 The position of the drain pipe connection is shown below.



- 2 Prepare a polyvinyl chloride pipe with a 32 mm outer diameter.
- 3 Fasten the tubing to the drain hose with an adhesive and the factory-supplied clamp. The drain piping must be performed with a down-slope pitch of 1/25 to 1/100.



- 4 Insulate the drain pipe after connecting the drain hose.

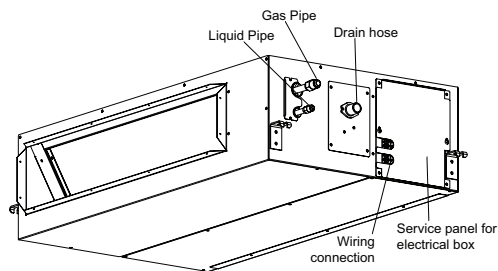


6 ELECTRICAL WIRING

6.1 ELECTRICAL WIRING CONNECTION FOR INDOOR UNIT

Electrical box location

The service panel for the fan motor of the indoor unit is provided at the bottom side of the unit, and the service panel for the electrical box is provided at the right side of the unit as shown below.



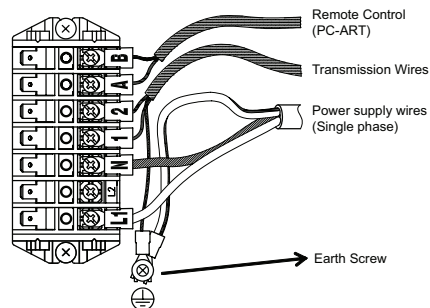
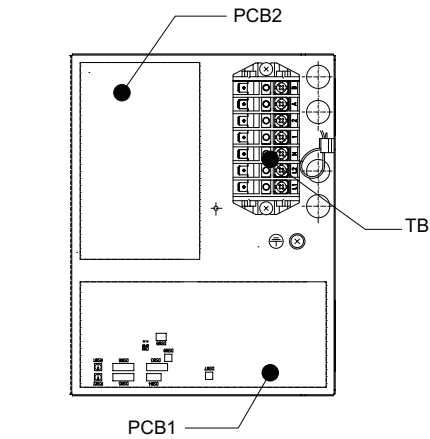
Electrical wiring installation

- 1 Open the bottom side Service Panel
- 2 Cut out the centre of the rubber bushing in the wiring connection hole of the unit showed above and of the electrical box shown below.
- 3 Connect the power supply and ground wires to the terminals in the electrical box as shown below
- 4 Connect the wires between the indoor unit and the outdoor unit to the terminals 1 and 2 in the electrical box.
- 5 Connect the cable of the Remote Control Switch to the terminals A and B in electrical box.
- 6 Tightly fix the wires with the cord clamp inside the indoor units.
- 7 Seal the wiring connection hole after running the cables with the seal material (cover plate) to protect the unit from condensed water and insects

CAUTION

Use twisted shielded pair cable or shield pair cable for transmission wires between the indoor and the outdoor units, and connect the shielded part to the earth screw in the electrical box of the indoor unit as shown in the figure

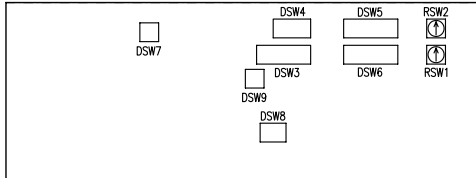
Electrical box layout



6.2 SETTINGS OF DIP SWITCHES

Quantity and Position of Dip Switches

Dips switches position is the following:



CAUTION

Before setting dips switches, firstly turn off power source and set the position of the dips switches. If the switches are set without turning off the power source, the contents of the setting are invalid.

DSW3: Indoor unit capacity setting

No setting is required, due to setting before shipment. This dip switch is utilized for setting the capacity code which corresponds to the Horse Power of the indoor unit.

HP	2.0	2.5	3.0
Factory setting			
HP	4.0	5.0	6.0
Factory setting			

DSW4: Model setting

No setting is required. This switch is utilized for setting the model code which corresponds to the indoor unit type.

Indoor Unit Model	DSW4 Setting
RPI	

DSW5 and RSW2: Refrigerant system No. Setting

Setting is required. Setting position before shipment in

DSW5	RSW2
Here is set DSW5 and RSW2 before shipment up to 63 can be set.	
Ex. Setting 5 system	RSW2
All pins are OFF	Fix to 5

DSW6 and RSW1: Indoor unit No. Setting

The below figure indicates the position before shipment.

DSW6	RSW1
Here is set DSW6 and RSW1 before shipment up to 63 can be set.	
Ex. Setting n°16	RSW1

DSW7: Fuse Recover

Factory setting	
In case of applying high voltage to the terminal 1,2 of TB1, the fuse on the PCB1(M) is cut. In such a case, firstly correct the wiring to TB1 and then turn ON #1 (as showing beside)	

DSW8: Optional function

Factory setting	
-----------------	--

DSW9: Optional function

Factory setting	
-----------------	--

NOTE

- The mark "■" indicates position of dips switches. Figures show setting before shipment or after selection.
- To set the position of the rotary switches, insert a screwdriver into the groove of the RSW

