

MULTITENANT BUILDING CONNECTION BOARD (PC-AMTB)



English

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.



CAUTION

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.
Contact to the corresponding authorities for more information.

PRECAUCIÓN

Este producto no se debe eliminar con la basura doméstica al final de su vida útil y se debe desechar de manera respetuosa con el medio ambiente de acuerdo con los reglamentos locales o nacionales aplicables.
Para obtener más información, póngase en contacto con las autoridades competentes.

VORSICHT

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.
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 plus d'informations, contacter les autorités compétentes.

AVVERTENZA

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.

CUIDADO

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.

Contacte as autoridades correspondentes para obter mais informações.

FORSIGTIG

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.

Kontakt de pågældende myndigheder for at få yderligere oplysninger.

LET OP

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.

Neem contact op met de betreffende overheidssdienst voor meer informatie.

VARNING

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.

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

ΠΡΟΣΟΧΗ

Σημαίνει 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.

Για περισσότερες λεπτομέρειες, επικοινωνήστε με τις αντίστοιχες αρχές.



DANGER – Hazards or unsafe practices which COULD result in severe personal injuries or death.

PELIGRO – Riesgos o prácticas poco seguras que PODRÍAN producir lesiones personales e incluso la muerte.

GEFAHR – Gefährliche oder unsichere Anwendung, die zu schweren Körperverletzungen oder zum Tod führen kann.

DANGER – Utilisation dangereuse ou sans garantie de sécurité qui PEUT provoquer de sévères blessures personnelles ou la mort.

PERICOLO – Pericoli o azioni pericolose che POTREBBERO avere come esito lesioni fisiche gravi o il decesso.

PERIGO – Riesgos o prácticas poco seguras que PUEDEN producir lesiones personales e incluso la muerte

FARE – Farer eller farlig brug, som KAN resultere i alvorlig personskade eller dødsfald.

GEVAAR – Gevaren of onveilige praktijken die ernstig persoonlijk letsel of de dood tot gevolg KUNNEN hebben.

FARA – Risker eller osäkra tillvägagångssätt som KAN leda till svåra personskador eller dödsfall.

KINAYNO – Κίνδυνοι ή επικίνδυνες πρακτικές, οι οποίες ΜΠΟΡΕΙ να έχουν ως αποτέλεσμα σοβαρές σωματικές βλάβες ή θάνατο.



CAUTION – Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

PRECAUCIÓN – Riesgos o prácticas poco seguras que PODRÍAN provocar lesiones personales de menor importancia o daños en el producto u otros bienes.

VORSICHT – Gefährliche oder unsichere Anwendung, die geringfügigen Personen-, Produkt- oder Sachschaden verursachen kann.

ATTENTION – Utilisation dangereuse ou sans garantie de sécurité qui PEUT provoquer des blessures mineures ou des dommages au produit ou aux biens.

AVVERTENZA – Pericoli o azioni pericolose che POTREBBERO avere come esito lesioni fisiche minori o danni al prodotto o ad altri beni.

CAUIDADO – Perigos e procedimentos perigosos que PODERÃO PROVOCAR danos pessoais ligeiros ou danos em produtos e bens.

FORSIGTIG – Farer eller farlig brug, som KAN resultere i mindre skade på personer, produkt eller ejendom.

LET OP – Gevaren of onveilige praktijken die licht persoonlijk letsel of beschadiging van het product of eigendommen tot gevolg KUNNEN hebben.

VARNING – Risker eller farliga tillvägagångssätt som KAN leda till mindre personskador eller skador på produkten eller på egendom.

ΠΡΟΣΟΧΗ – Κίνδυνοι ή επικίνδυνες πρακτικές, οι οποίες ΜΠΟΡΕΙ να έχουν ως αποτέλεσμα την πρόκληση ελαφρών σωματικών βλαβών ή καταστροφή περιουσίας.



NOTE – The text following this symbol contains information or instructions that may be of use or that require a more thorough explanation.

NOTA – El texto que sigue a este símbolo contiene información o instrucciones que pueden ser de utilidad o requeridas para ampliar una explicación.

HINWEIS – Der diesem Symbol folgende Text enthält konkrete Informationen und Anleitungen, die nützlich sein können oder eine tiefergehende Erklärung benötigen.

REMARQUE – Les textes précédés de ce symbole contiennent des informations ou des indications qui peuvent être utiles, ou qui méritent une explication plus étendue.

NOTA – I testi preceduti da questo simbolo contengono informazioni o indicazioni che possono risultare utili o che meritano una spiegazione più estesa.

NOTA – Os textos precedidos deste símbolo contém informações ou indicações que podem ser úteis, ou que merecem uma explicação mais detalhada.

BEMÆRK – Den tekst, der følger efter dette symbol, indeholder oplysninger eller anvisninger, der kan være til nytte, eller som kræver en mere grundig forklaring.

OPMERKING – De teksten waar dit symbool voorstaat bevatten nuttige informatie en aanwijzingen, of informatie en aanwijzingen meer uitleg behoeven.

OBS! – Texten efter denna symbol innehåller information och anvisningar som kan vara användbara eller som kräver en noggrannare förklaring.

ΣΗΜΕΙΩΣΗ – Το κείμενο που ακολουθεί αυτό το σύμβολο περιέχει πληροφορίες ή οδηγίες που μπορεί να φανούν χρήσιμες ή που απαιτούν μια πιο ενδελεχή εξήγηση.

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INHOUDSOPGAVE

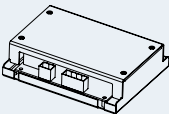
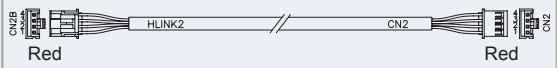
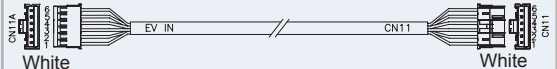
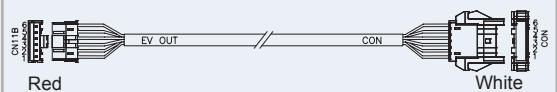
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5. ΑΝΤΙΜΕΤΩΠΙΣΗ ΠΡΟΒΛΗΜΑΤΩΝ

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	Ελληνικά	Μεταφρασμένη έκδοση

1 FACTORY-SUPPLIED COMPONENTS

Item	Description	Qty.	Purpose
Multitenant Box		1	For allowing individual shutdown of indoor units in a multiple indoor unit installation.
Connector wire <1>		1	For the electrical connection between "H-LINK2" connector of PC-AMTB and the "CN2" connector of Indoor unit PCB.
Connector wire <2>		1	For the electrical connection between "EV IN" connector of PC-AMTB and the "CN11" connector of Indoor unit PCB.
Connector wire <3>		1	For the electrical connection between "EV OUT" connector of PC-AMTB and the EVI wire-end previously connected to the "CN11" connector of indoor unit PCB.
Installation and operation manual		1	Installation instructions of the device.

2 GENERAL DATA

Item	Units	Description
Power supply	V	24 VDC/VAC $\pm 10\%$
Rated power	W	2.3
Peak power consumption		
1) Connected to type A models (*)	W	4.7
2) Connected to type B models (*)	W	7
Dimensions (HxWxD)	mm	92 x 115 x 29
Weight (Gross/Net)	g	450/250
Mounting conditions	-	Indoor
Working range		
Temperature	°C	0-60°C
Humidity	%	20-85% RH



NOTE

(*):

- Indoor unit models type A: All indoor units except B and C type.
- Indoor unit models type B: RPI-(8.0/10.0)FSN3E.
- Indoor unit models type C: RPI-(16.0/20.0)FSN3PE, which cannot be used with PC-AMTB.

3 INSTALLATION

PC-AMTB enclosure is furnished with side bored flanges in order to easily screw it to a wall or vertical surface. It can also be left lying on a flat surface such as a false ceiling.



NOTE

- HITACHI cannot anticipate every possible circumstance that might involve a potential hazard.
- Read carefully this document before performing the installation work.

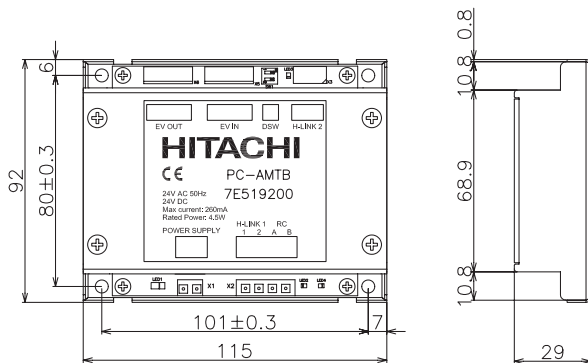


CAUTION

- DANGER**
 - Do not install this device in places accessible to the general public. Install it in enclosures or other places which not are accessible.
 - Do not connect power supply before the device installation is correctly done. Always disconnect power supply from the device before any maintenance or servicing action.
- The device installation must be performed by qualified professionals.
- Check to ensure that the field supplied electrical components (mains power switches, circuit breakers, wires, connectors and wire terminals) have been properly selected according to the electrical data indicated on this document and they comply with national and local codes. If it is necessary, contact with your local authority in regards to standards, rules, regulations, etc.

3.1 DIMENSIONS AND FIXING POINTS

Units: mm

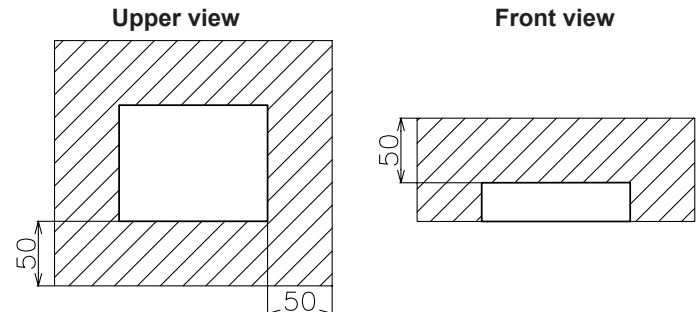


The device shall be fixed by using 4 screws M4 or 4 mm diameter, tapping type (field supplied).

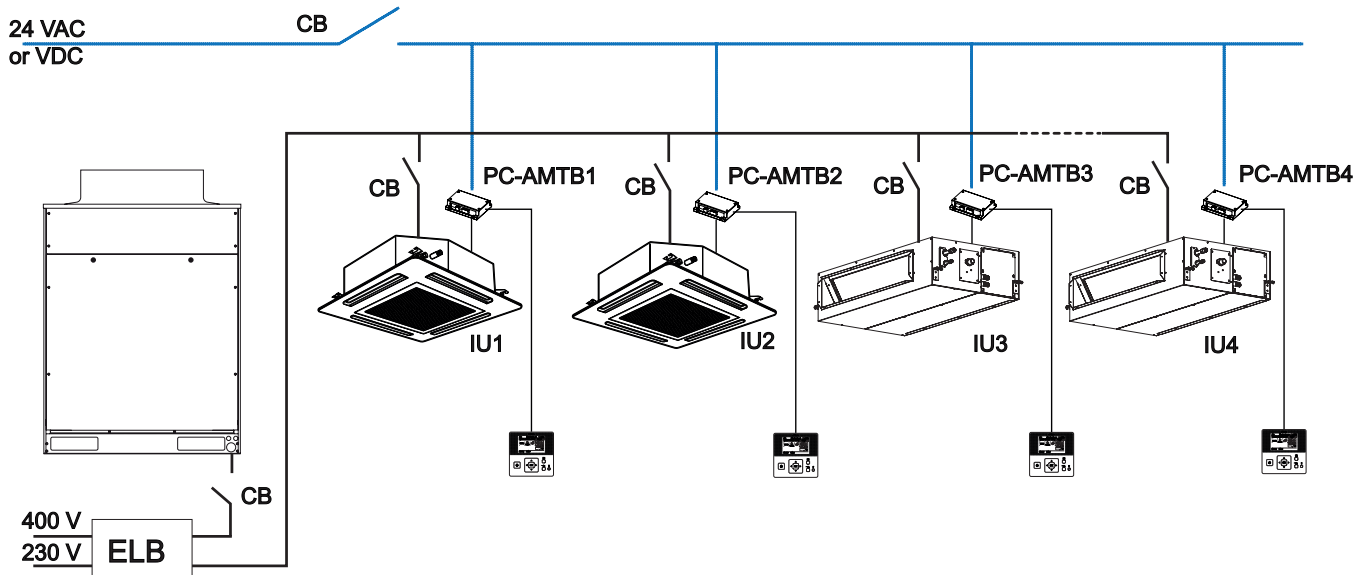
3.2 INSTALLATION SPACE

Please consider that installation space must be wide enough for wiring connection.

Units: mm



3.3 CONNECTION SCHEME



NOTE

Each Indoor Unit needs a PC-AMTB and a remote control.

◆ Power supply installation

The installation must be provided with an independent low voltage power supply circuit of 24 V AC or DC type.

Power supply cable sizes must be designed considering that max. voltage dropped is not exceeding the 10%.

The power supply must be capable enough to supply the necessary power required base on the following formula:

$$P_{\text{power supply}} (\text{watt}) \geq (N\text{Atype} \times 4.7 + N\text{Btype} \times 7) \times 0.7$$



NOTE

- It is recommended to use 0.75 mm² wires as minimum cable size, not lighter than the polychloroprene sheathed flexible cord (code designation 60245 IEC 57) type.
- Do not connect more than 8 devices in serial or increase power supply cable size accordingly.

Where:

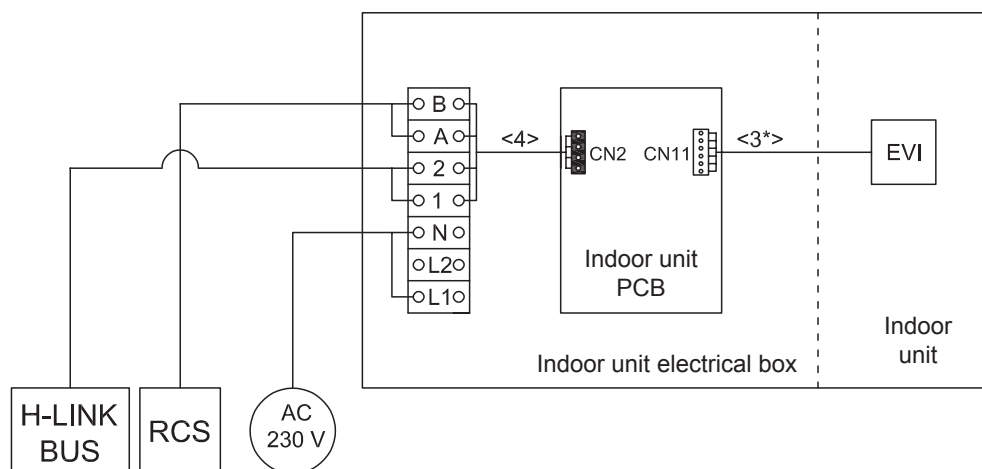
- NAtype: Number of multitenant devices installed to A type indoor units.
- NBtype: Number of multitenant devices installed to B type indoor units.

The installation must be equipped with disconnection devices permitting any servicing operation without power.

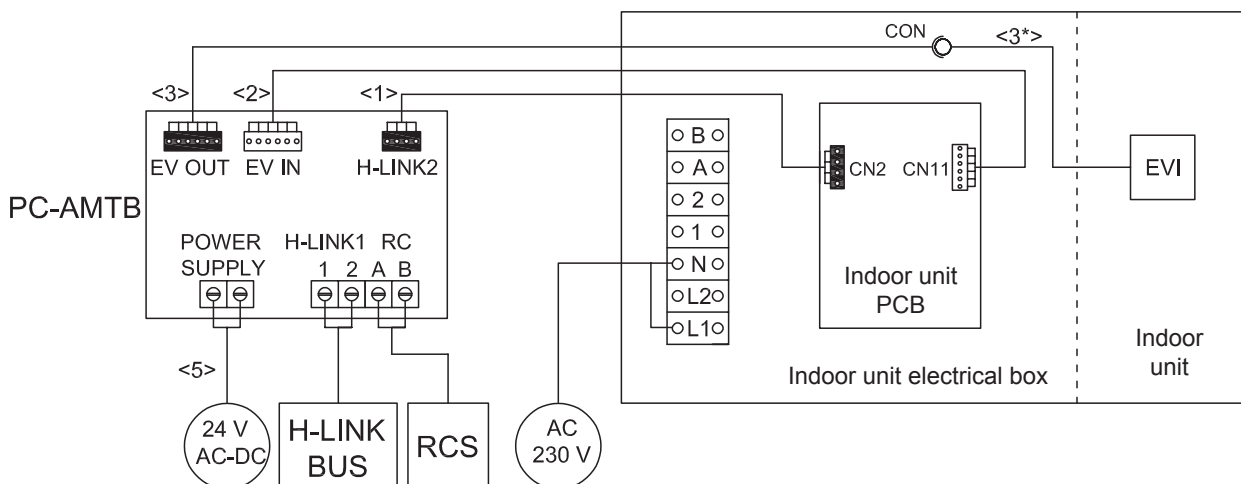
3.4 ELECTRICAL INSTALLATION

- 1 Make sure that indoor unit is switched off, and then, open the electrical box.
- 2 Disconnect the Remote Control (RCS) cable from the electrical box terminals of the indoor unit and connect it into the PC-AMTB screw terminals "RC-A,B".
- 3 Disconnect the H-LINK cable from the electrical box terminals of the indoor unit and connect it into the PC-AMTB screw terminals "HLINK1-1,2".
- 4 Remove wire <4> from IU electrical box (from terminal box and "CN2" connector).
- 5 Connect wire <1> from PC-AMTB "HLINK 2" connector to IU PCB "CN2".
- 6 Disconnect EVI wire <3*> from IU PCB "CN11" and switch it to connector wire <3>. The other ending of wire <3> must be switched to PC-AMTB "EV OUT".
- 7 Connect wire <2> between PC-AMTB "EV IN" and IU PCB "CN11".
- 8 Connect power wires <5> to PC-AMTB screw terminals "POWER SUPPLY".

INDOOR UNIT BEFORE PC-AMTB CONNECTION



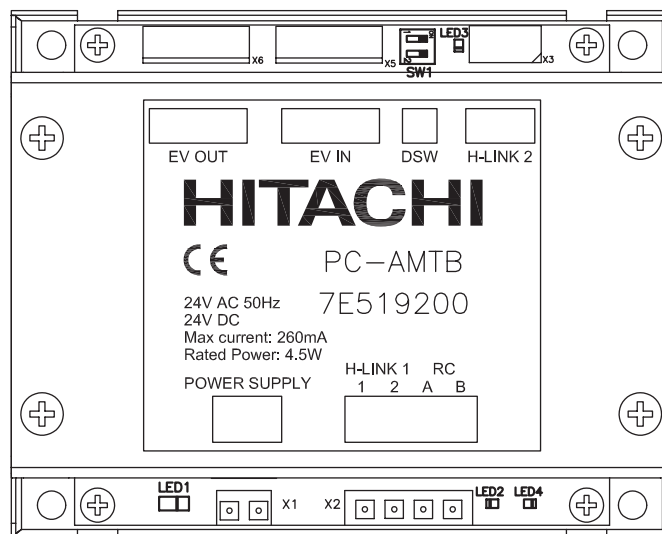
INDOOR UNIT AFTER PC-AMTB CONNECTION



NOTE

- PCB: Printed circuit board.
- EVI: Indoor unit expansion valve.
- Connectors in wires named after connectors in PC-AMTB and IU PCB.

4 DSW SETTING AND LED INDICATION



◆ Setting of DIP switches



◆ LED indication

- Monitor led 1 is ON while PC-AMTB is power supplied.
- Monitor led 2 flickers from time to time when there is traffic at HLINK bus 1.
- Monitor led 3 flickers from time to time when IU is ON and there is traffic at HLINK bus 2.
- Monitor led 4 is used for system diagnosis.

5 TROUBLESHOOTING

The indoor unit is not recognized by the outdoor unit despite being powered ON.

Check that PC-AMTB is power-supplied by checking monitor LED1. If it is OFF, please check fuse state, and in case it is fused, replace it by a 5x20 mm, 250mA, 250V compatible fuse.

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