

TECHNICAL CATALOG

AIR CONDITIONERS

airCore 700

SINGLE SPLIT INVERTER SERIES

MODELS

< Indoor Units >

- MESP Ducted Type

PPIM-B09UFA1DQ	PPIM-B12UFA1DQ	PPIM-B18UFA1DQ
PPIM-B24UFA1DQ	PPIM-B30UFA1DQ	PPIM-B36UFA1DQ
PPIM-B48UFA1DQ		
- 4-Way Mini Cassette Type

PCIM-B09UFA1DQ	PCIM-B12UFA1DQ	
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- 4-Way Cassette Type

PCI-B18UFA1DQ	PCI-B24UFA1DQ	PCI-B30UFA1DQ
PCI-B36UFA1DQ	PCI-B48UFA1DQ	
- Ceiling Suspended Type

PPFC-B09UFA1DQ	PPFC-B12UFA1DQ	PPFC-B18UFA1DQ
PPFC-B24UFA1DQ	PPFC-B30UFA1DQ	PPFC-B36UFA1DQ
PPFC-B48UFA1DQ		
- High-wall Type

PPK-B09UFA1DQ	PPK-B12UFA1DQ	PPK-B18UFA1DQ
PPK-B24UFA1DQ	PPK-B30UFA1DQ	
- Air Handlers Type

JPE18B3XB2HS1A	JPE24B3XC2HS1A	JPE30B3XD2HS1A
JPE36B3XD2HS1A	JPE48C3XG2HS1A	

< Outdoor Units >

- | | | |
|----------------|----------------|----------------|
| PAS-09BUFASDQ1 | PAS-12BUFASDQ1 | PAS-18BUFASDQ1 |
| PAS-24BUFASDQ1 | PAS-30BUFASDQ1 | PAS-36BUFASDQ1 |
| PAS-48BUFASDQ1 | | |



EN TECHNICAL CATALOG
Original Instructions

Cooling & Heating

IMPORTANT NOTICE

- HITACHI pursues a policy of continuing improvement in design and performance of products. The right is therefore reserved to vary specifications without notice.
- HITACHI cannot anticipate every possible circumstance that might involve a potential hazard.
- This heat pump air conditioner is designed for human comfort air conditioning only. Do not use this heat pump air conditioner for other purposes such as drying clothes, refrigerating foods or for any other cooling or heating purposes.
- Do not install the unit in the following places. It may cause a fire, deformation, corrosion or failure.
 - * Places where oil (including machinery oil) may be present in quantities.
 - * Places where a lot of sulfide gas drifts such as in a hot spring.
 - * Places where inflammable gas may generate or flow.
 - * Places where strong salty wind blows such as coast regions.
 - * Places with an atmosphere of acidity or alkalinity.
- Do not install the unit in the place where silicon gas drifts. If the silicon gas attaches to the surface of heat exchanger, the fin surface repels water. As a result, drain water splashes outside of the drain pan and splashed water runs inside of electrical box. In the end, water leakage or electrical devices failure may occur.
- Pay attention to the following points when the unit is installed in a hospital or other facilities where an electromagnetic wave generates from a medical equipment.
 - * Do not install the unit in the place where an electromagnetic wave is directly radiated to the electrical box, remote control cable or remote control switch.
 - * Install the unit at least 10ft (3m) away from an electromagnetic wave such as a radio.
- Do not install the unit in the place where the breeze directly catches animals and plants. It could adversely affect animals and plants.
- The installer and system specialist shall secure safety against the refrigerant leakage according to local regulations or standards. The following standards may be applicable, if local regulations are not available. International Organization for Standardization, ISO5149 or European Standard, EN378 or Japan Standard, KHK50010.
- No part of this manual may be reproduced without written permission.
- It is assumed that this heat pump air conditioner will be operated and serviced by persons conversant in English. If this is not the case, the distributor should add safety, caution and operating signs in the native language.
- If you have any questions, contact your distributor or dealer of HITACHI.
- This manual gives a common description and information for this heat pump air conditioner which you operate as well for other models.
- This system has been designed and tested to operate within the outdoor temperature limits as stated below. The manufacturer cannot guarantee satisfactory performance if the unit is operated for prolonged periods outside of these limits.

[°F(°C)]

Operation Temperature Range		Maximum	Minimum
Cooling Operation	Indoor	89.6(32) DB/73.4(23) WB	69.8(21) DB/59(15) WB
	Outdoor	115(46) DB	0(-18) DB
Heating Operation	Indoor	80.6(27) DB	68.0(20) DB
	Outdoor	75(24) DB	-13(-25) DB

DB: Dry Bulb, WB: Wet Bulb

In the heating operation at low outdoor ambient temperature, indoor unit fan may run at the lower speed, which is a normal phenomenon.

CHECKING PRODUCT RECEIVED

- Upon receiving this product, inspect it for any shipping damage.
Claims for damage, either apparent or concealed, should be filed immediately with the shipping company.
- Check the model number, electrical characteristics (power supply, voltage and frequency) and accessories to determine if they are correct.

The standard utilization of the unit shall be explained in these instructions.

Therefore, the utilization of the unit other than those indicated in these instructions is not recommended. Please contact your local agent, as the occasion arises.

HITACHI's liability shall not cover defects arising from the alteration performed by a customer without HITACHI's consent in a written form.

SAFETY SUMMARY

< Signal Words >

- Signal words are used to identify levels of hazard seriousness.
Definitions for identifying hazard levels are provided below with their respective signal words.



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.



CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTE

NOTE indicates useful information for operation and/or maintenance.

SAFETY SUMMARY



- Do not perform the installation work, refrigerant piping work, drain pump, drain piping and electrical wiring connection without referring to our installation manual. If the instructions are not followed, it may result in a water leakage, electric shock or fire.
- Use the specified flammable refrigerant (R32) to the outdoor unit in the refrigerant cycle.
Do not charge material other than R32 into the unit.
- Do not pour water into the indoor or outdoor unit. These products are equipped with electrical parts.
If poured, it will cause a serious electrical shock.
- Do not open the service cover or access panel for the indoor or outdoor unit without turning OFF the main power supply.
- Do not touch or adjust safety devices inside the indoor unit or outdoor unit. If these devices are touched or readjusted, it may cause a serious accident.
- Refrigerant leakage can cause difficulty with breathing due to insufficient air. Turn OFF the main switch, extinguish any naked flames and contact your service contractor, if refrigerant leakage occurs.
- Make sure that the refrigerant leakage test should be performed.
Refrigerant for this unit is flammable, colorless and odorless.
If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
Also because the fluorocarbon is heavier than air, the floor surface will be filled with it, which could cause suffocation.
- The installer and system specialist shall secure safety against refrigerant leakage according to local regulations or standards.
- Use an ELB (Earth Leakage Breaker).
In the event of fault, there is danger of an electric shock or fire if it is not used.
- Do not install the outdoor unit where there is high level of oil mist, flammable gases, salty air or harmful gases such as sulfur.
- For installation, firmly connect the refrigerant pipe before the compressor starts operating.
For maintenance, relocation and disposal, remove the refrigerant pipe after the compressor stops.
- Do not perform a short-circuit of the protection device such as the pressure switch when operating.
It may cause fire and explosion.

SAFETY SUMMARY

WARNING

- Do not use any sprays such as an insecticide, lacquer, hair spray or other flammable gases within approximately 3.3ft (1m) from the system.
- If the circuit breaker or fuse is often activated, stop the system and contact your service contractor.
- Check that the ground wire is securely connected. If the unit is not correctly grounded, it lead electric shock. Do not connect the ground wiring to a gas piping, water piping, lighting conductor or ground wiring for telephone.
- Connect a fuse of specified capacity.
- Before performing any brazing work, check to ensure that there is no flammable material around. When using the refrigerant be sure to wear leather gloves to prevent cold injuries.
- Protect the wires, electrical parts, etc. from rats or other small animals. If not protected, rats may gnaw at unprotected parts and which may lead to fire.
- Fix the cables securely. External forces on the terminals could lead to fire.
- Perform the electrical work according to Installation Manual and all the relevant regulation and standards. If the instructions are not followed, an electrical shock and fire may occur due to insufficient capacity and inadequate performance.
- Use specified cables between units and choose the cables correctly. If not, an electrical shock or fire may occur.
- Ensure that the wiring terminals are tightened securely with the specified torques. If not, generating fire or an electrical shock at the terminal connection part may occur.

CAUTION

- Do not step or put any material on the product.
- Do not put any foreign material on the unit or inside the unit.
- Provide a strong and correct foundation so that;
 - a. The outdoor unit is not on an incline.
 - b. Abnormal sound does not occur.
 - c. The outdoor unit will not fall down due to a strong wind or earthquake.

NOTES:

- It is recommended that the room will be ventilated every 3 to 4 hours.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- As maximum allowable pressure is 602psig (4.15MPa), minimum allowable pressure is 321psig (2.21MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

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1. Features

1.1 System Features

New DC Inverter airCore 700 Single Split Series

HITACHI proudly introduces the New DC Inverter airCore 700 Single Split Series, the highly-efficient and reliable air conditioning system, for the North American market.

This product line covers a capacity range of 9K to 48K. There are various types of indoor units (such as MESP Ducted and 4-Way Mini Cassette, 4-Way Cassette, Ceiling Suspended, High-wall, Air Handlers) suitable for different light commercial air conditioning applications.

New Line-up of Indoor and Outdoor Units

Capacity		9K	12K	18K	24K	30K	36K	48K
Indoor Units								
Ducted	MESP Ducted	PPIM-B09UFA1DQ	PPIM-B12UFA1DQ	PPIM-B18UFA1DQ	PPIM-B24UFA1DQ	PPIM-B30UFA1DQ	PPIM-B36UFA1DQ	PPIM-B48UFA1DQ
Cassette	4-Way Mini Cassette	PCIM-B09UFA1DQ	PCIM-B12UFA1DQ	/	/	/	/	/
	4-Way Cassette	/	/	PCI-B18UFA1DQ	PCI-B24UFA1DQ	PCI-B30UFA1DQ	PCI-B36UFA1DQ	PCI-B48UFA1DQ
Ceiling Suspended		PPFC-B09UFA1DQ	PPFC-B12UFA1DQ	PPFC-B18UFA1DQ	PPFC-B24UFA1DQ	PPFC-B30UFA1DQ	PPFC-B36UFA1DQ	PPFC-B48UFA1DQ
High-wall		PPK-B09UFA1DQ	PPK-B12UFA1DQ	PPK-B18UFA1DQ	PPK-B24UFA1DQ	PPK-B30UFA1DQ	/	/
Air Handlers		/	/	JPE 18B3XB2HS1A	JPE 24B3XC2HS1A	JPE 30B3XD2HS1A	JPE 36B3XD2HS1A	JPE 48C3XG2HS1A
Outdoor Units								
Single Phase		PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1

NOTE:

- For an outdoor unit, it can be used separately with different indoor units, which is beneficial for managing inventory models.

1.2 Appearance

< Indoor Units >

MESP Ducted Type



PPIM-B09~B48UFA1DQ

4-Way Mini Cassette Type



PCIM-B09~B12UFA1DQ

4-Way Cassette Type



PCI-B18~B48UFA1DQ

Ceiling Suspended Type



PPFC-B09~B48UFA1DQ

High-wall Type



PPK-B09~B30UFA1DQ

Air Handlers Type



JPE18B3XB2HS1A
JPE24B3XC2HS1A
JPE30~36B3XD2HS1A
JPE48C3XG2HS1A

< Outdoor Units >



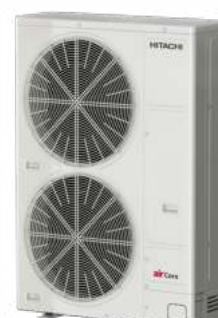
PAS-09BUFASDQ1
PAS-12BUFASDQ1



PAS-18BUFASDQ1
PAS-24BUFASDQ1



PAS-30BUFASDQ1
PAS-36BUFASDQ1



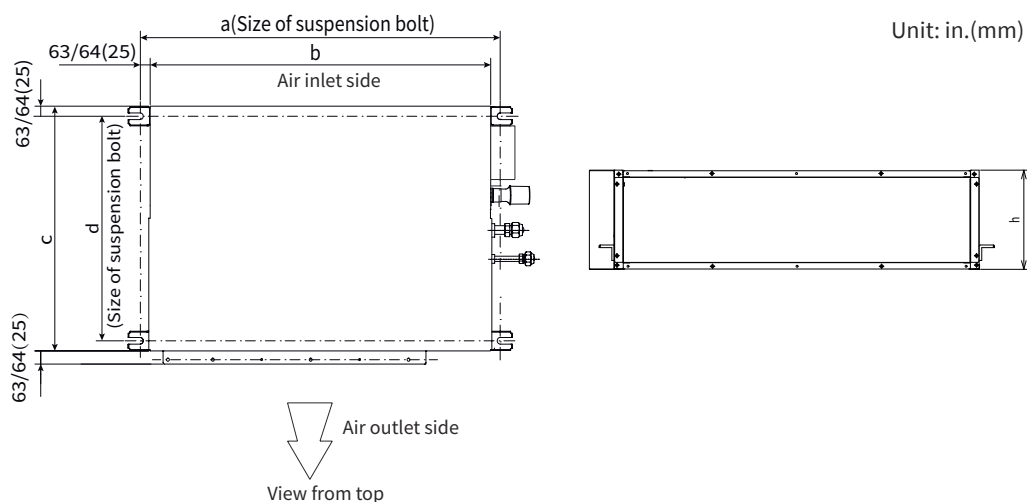
PAS-48BUFASDQ1

1.3 Features on Indoor Units

1.3.1 MESP Ducted Type

☐ Space Saving Design

With a unit height of 11-13/16 inches(300mm), installation size is shown in the following figure (PPIM-B09~B48UFA1DQ).



Size	Unit: in.(mm)				
Indoor Unit Capacity (Btu/h)	a	b	c	d	h
9K~12K	27-9/16 (700)	25-19/32 (650)	28-11/32 (720)	26-39/64 (676)	10-5/8 (270)
18K~30K	45-9/32 (1150)	43-5/16 (1100)	31-1/2 (800)	29-49/64 (756)	11-13/16 (300)
36K~48K	57-3/32 (1450)	55-1/8 (1400)	31-1/2 (800)	29-49/64 (756)	11-13/16 (300)

☐ Adjustable Fan Speed

The air flow volume can be changed according to the external static pressure by setting the item code to C5 from the wired remote controller, please refer to the "chapter6.Function Selection" of Installation & Maintenance Manual of the wired remote controller for details.

Model	External Static Pressure In.WG(Pa)	Setting of Wired remote controller
PPIM-B09UFA1DQ PPIM-B12UFA1DQ	0.3(75)	00
	0.4(90)	01
	0.6(150)	02
PPIM-B18UFA1DQ PPIM-B24UFA1DQ PPIM-B30UFA1DQ PPIM-B36UFA1DQ	0.3(75)	00
	0.6(150)	01
	0.8(200)	02
PPIM-B48UFA1DQ	0.5(125)	00
	0.3(75)	01
	0.8(200)	02

☐ Quiet Operation

The well-balanced centrifugal fan provides a quiet and efficient operation.
Fan Operation Sound (Air Flow Rate:Hi2/SLo)

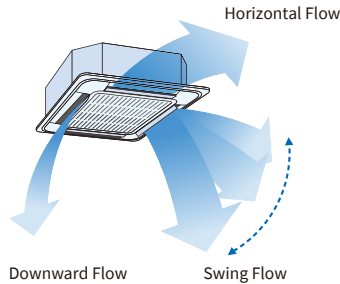
Model Capacity (Btu/h)		9K	12K	18K	24K	30K	36K	48K
Sound Level dB(A) (Standard Pressure Setting)	Hi2	39	40	35	38	41	43	44
	SLo	31	32	26	27	30	32	33

1.3.2 4-Way Cassette Type & 4-Way Mini Cassette Type

□ Comfortable Function (4-Way Cassette Type & 4-Way Mini Cassette Type)

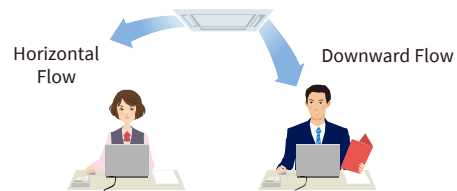
(1) Airflow can be controlled by adjusting four louvers individually.

A comfortable air-conditioned environment can be provided by various louver settings depending on the situation.



Air conditioning comfort is improved using a louver control function to adjust louvers individually for better control of airflow direction. One option adjusts the louver horizontally to avoid direct airflow toward individuals. Another option provides an individual swing operation to discharge enough airflow.

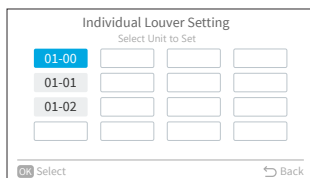
The airflow direction can be selected according to the situation.
Example 1: At Front Desk Example 2: At Office



(2) Easy setting of each louver airflow direction using a wired remote controller (CIW03-H).

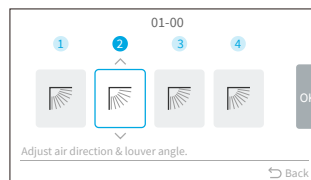


Indoor Unit Selection



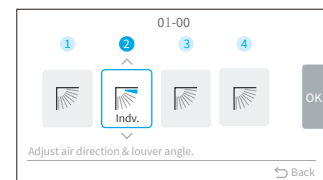
Individual louver setting is possible with one wired remote controller for multiple indoor units.

Louver Selection to Set



After selecting the indoor unit, select one louver to set. At this time, the selected louver of the indoor unit opens.

Louver Angle Adjustment



Louver angle can be selected to fixed airflow direction or swing flow.

FEATURES

□ Motion Sensor (4-Way Cassette Type)

- (1) An air panel with a motion sensor can intelligently detect human activity and furniture heat signatures. Air conditioning comfort is improved with four motion sensors and one heat-detecting sensor equipped with the air panel.

* Motion Sensor

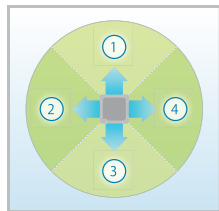
Infrared is always radiated from humans and objects.

The motion sensor uses infrared in a “detecting area” to detect human energy.

* Radiation Sensor

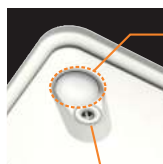
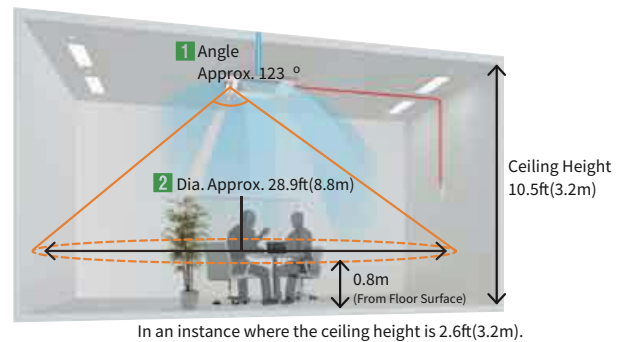
The radiation sensor measures the temperature in its detecting area through radiated infrared from humans and objects.

Detecting Area of Motion Sensors
(Viewed from Ceiling)



The motion sensors' detecting area is divided into four separate areas as shown above.

Detecting Area (Example)



Motion Sensor

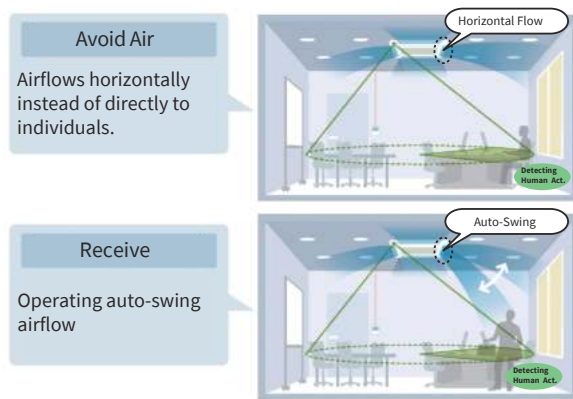
Four motion sensors are installed in this area.

Radiation Sensor

NOTES:

- The motion sensor detects human activity. However, if someone is in a room with very little activity, the motion sensors may not detect motion.
- The motion sensor may detect human activity if the indoor unit with the motion sensor is installed near a moving object which has a temperature different than the environment.
- The motion sensors may detect no activity if the indoor unit is installed on a high ceiling of 13ft(4m) or more, or fingerprints or contaminants are on the motion sensors' lenses, even if someone is in the room.

- (2) Airflow direction for each area can be automatically adjusted by detecting human activity with four motion sensors.



Four motion sensors divide air conditioning space into four areas to detect human activity in each area separately.

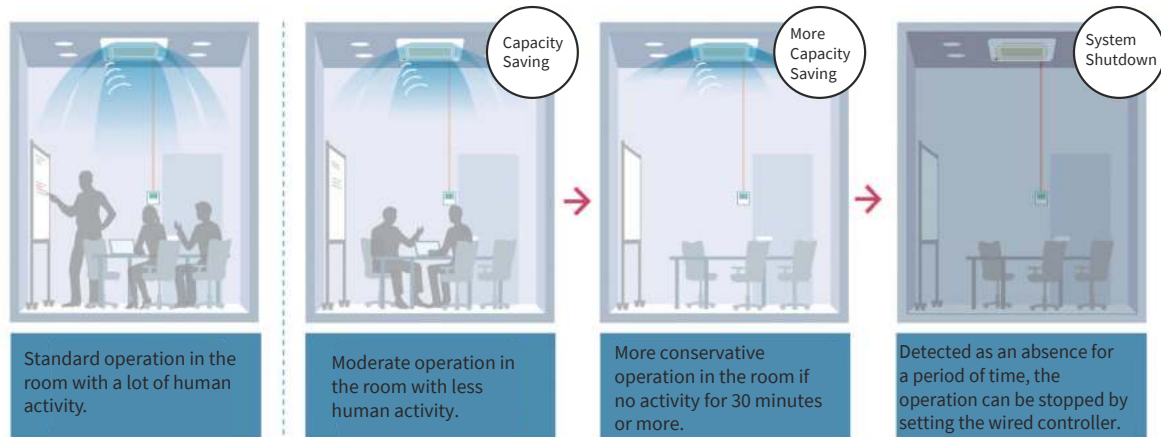
Each louver of the indoor unit is related to an individual area to adjust airflow direction.

The airflow direction for each area where activity is detected automatically is adjusted between “Avoid Air” or “Receive” settings on the wired remote controller.

NOTE:

- When the motion sensor detects no activity, the airflow direction is adjusted by the user setting directions on the wired remote controller.

- (3) With a motion sensor, air conditioning capacity is saved automatically depending on the situation and the amount of detected human activity.



- Setting the motion sensor requires the wired remote controller.
- During heating operation, a correction factor of the temperature setting may make the environment too cool.
- The default setting is “Continuous Running”. However, “Automatic Stop” can be selected using the wired remote controller. In addition, after starting the operation, setting a stop time can be changed by the wired remote controller.

FEATURES

☐ Radiation Sensor (4-Way Cassette Type & 4-Way Mini Cassette Type)

The radiation temperature sensor can adjust airflow direction and airflow volume if there is a big difference between the radiation temperature and setting temperature.

By setting “Floor HEAT Control” in an instance where there is a big difference between radiation temperature and setting temperature, the operation is as below:

(a) Warm air is discharged downward to increase airflow volume. *1)

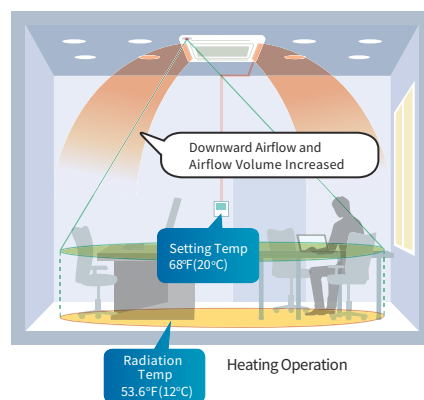
(b) When increased temperature reaches the setpoint, the airflow volume and airflow direction will return to the default setting position. *2)

*1) When there is human activity in a room, the air flows horizontally during the “Avoid Air” setting.

*2) When 60 minutes have passed after starting this function and the setpoint is not reached, the setting will return to the default setting.

NOTICE

- The effect of this function is dependent on the size of the room and air-conditioning load.



1.3.3 Ceiling Suspended Type

☐ Saving Installation Space

The indoor unit is only 9-1/16inches(230mm) high, so it can be installed inside the ceiling conveniently.

☐ 24-hour Timer ON and OFF

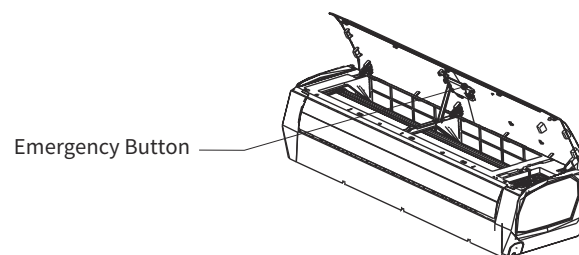
This Timer can be set to automatically turn the unit on or off within a 24-hour period.

☐ Mute Operation

The excellent fan design enables smooth airflow with minimum noise.

1.3.4 High-wall Type

- ☐ 24-hour Timer ON and OFF
This Timer can be set to automatically turn the unit on or off within a 24-hour period.
- ☐ Mute Operation
The excellent fan design enables smooth airflow with minimum noise.
- ☐ Powerful Mode From Hand-Held Remote Controller (HHRC)
In cooling or heating mode, the unit can be raise or lower the temperature immediately by pressing the "Powerful" button on the HHRC, turning on Powerful will change the temperature setting for 30 minutes and automatically set the airflow rate.
- ☐ Emergency Button
Pressing the emergency button can start or stop the unit, and it can also reset the filter indication.



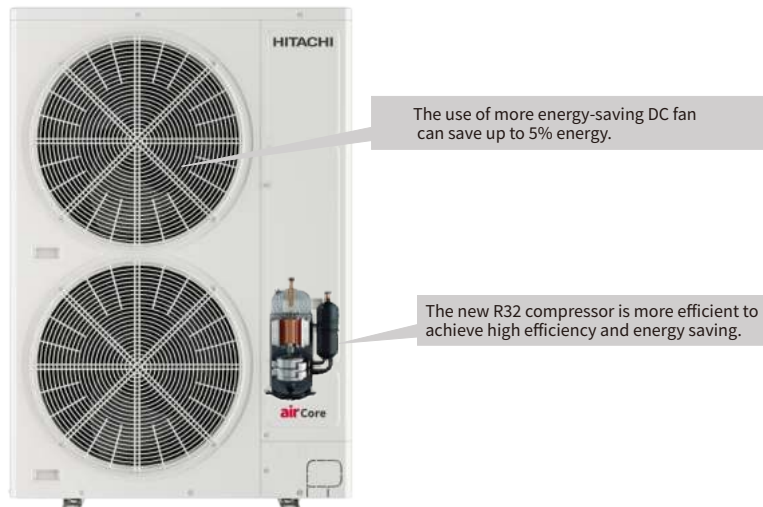
1.3.5 Air Handlers Type

- ☐ Next generation high-efficiency blower
Delivers increased airflow and reduced blower watts by 10%, using a standard ECM motor.
- ☐ Next generation insulation and gasket design
Reduces thermal transmission paths and reduces sweating.
- ☐ Five speed standard ECM blower motor
Provides increased system compatibility.
- ☐ Electric heat kit
8HK field-installed series available for easy installation and service application.
- ☐ Designed for easy installation and service
A casing size of 20.5 in., smooth sides, and rigid construction provide ease of attic access and tight applications. Front facing components, slide out blower, laser cut knock outs and integrated duct flanges shorten install time.
- ☐ Cabinet air leakage
Less than 2% at 1 in. W.C. external static pressure when tested in accordance with ASHRAE Standard 193.
- ☐ Long lasting quality
Structural components made of postpowder painted steel or galvanized steel to prevent corrosion.
- ☐ A2L refrigerant ready
An R32 refrigerant detection sensor (RDS) is factory installed.

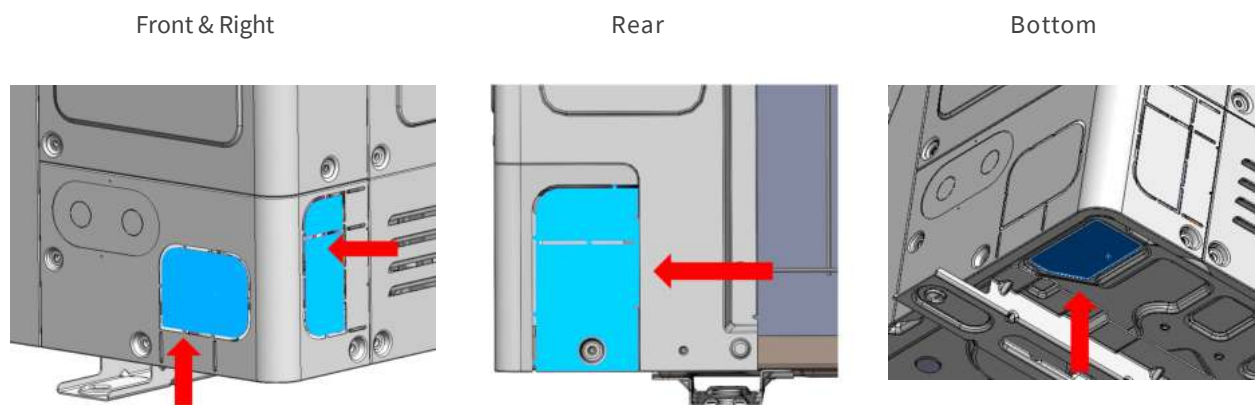
1.4 Features on Outdoor Units

□ Energy-Saving

- (1) The new R32 compressor is more efficient to achieve high efficiency and energy saving.
- (2) The use of more energy-saving DC fan, up to 5% energy saving.



□ Four Directions of Piping in Outdoor Unit



Stop valve built with 4-directional outlet piping for easier pipe installation.

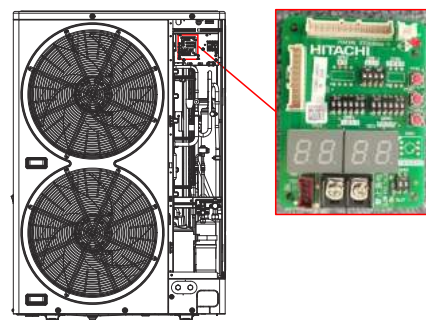
The refrigerant pipes can connect the stop valves from the front and right, rear and bottom of the unit.

□ User-friendly Service Board for Easier Testing and Diagnostics

User-friendly service board with dial code switch and push button is designed for easier testing and diagnostics. The service board, which is located in the front of the outdoor unit, is easy to set.

Functions are as follows:

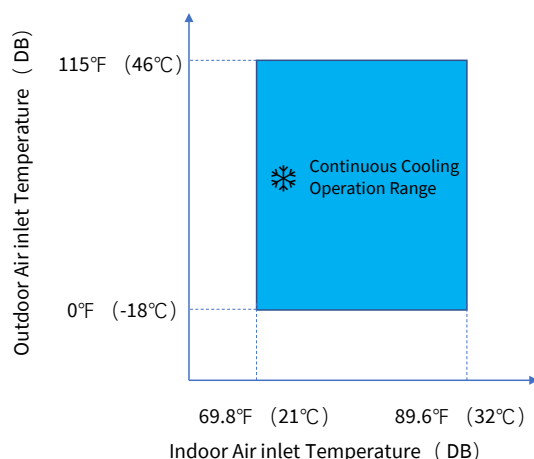
- Monitoring real-time running status
- Displaying the fault code for diagnostics



- Up to 115°F(46°C) Ambient Temperature for Cooling Operations

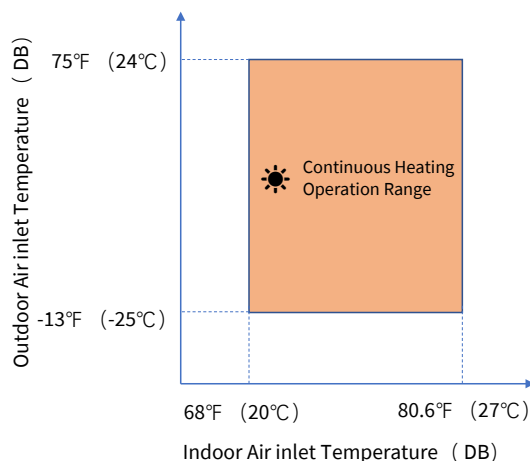
Up to 115°F(46°C) stable running

Special fresh air intake and trapezoid heat sink design are adopted for the inverter driver. This improves heat emission and allows the system to be running stably under high ambient conditions.



- As Low as -13°F(-25°C) Ambient Temperature for Heating Operations

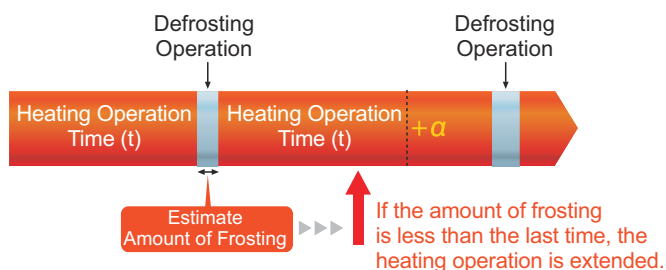
As low as -13°F(-25°C) stable running



- Decreasing Defrosting Operation Time and Extend Heating Operation Time by Control depending on Amount of Frosting

The amount of frosting can be estimated by last defrosting time. If the amount of frosting is less than the last time, the heating operation until the defrosting operation is extended automatically.

As a result, an unnecessary defrosting operation is decreased and the continuous heating operation is available.



- Control the Time to Enter Defrost Mode by the Amount of Frost to Avoid Excessive Frost.

The amount of frost can be estimated by the temperature change of the heat exchanger. When the amount of frost is too large, the unit can enter the defrost mode in advance to avoid excessive frost formation of the heat exchanger and affect the user's comfort.

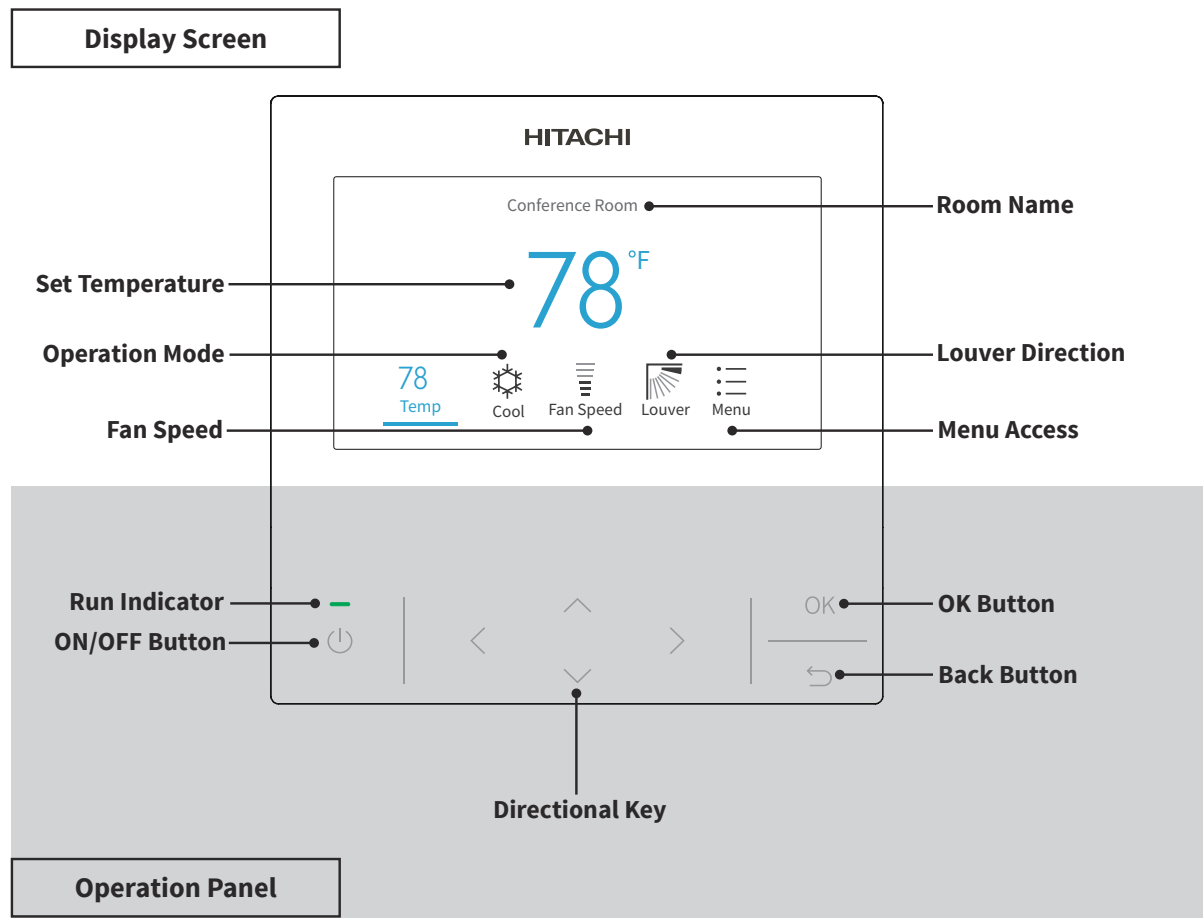
1.5 Features on Controllers

HITACHI provides the optional controllers for airCore 700 system.

Accessory	Model
Wired Remote Controller	CIW03-H
Wireless Remote Controller	PC-LH8QE
airCloud Adapter	GA-WFG-N
IR Receiver Kit	PC-ALH5Q
	PC-ALHC5Q
	PC-ALHZ5Q
Central Station	CCM01
	CCL01
Central Station EX	CCXL02
Remote Control Cable	PRC-5K
	PRC-10K
	PRC-15K

1.5.1 Wired Remote Controller

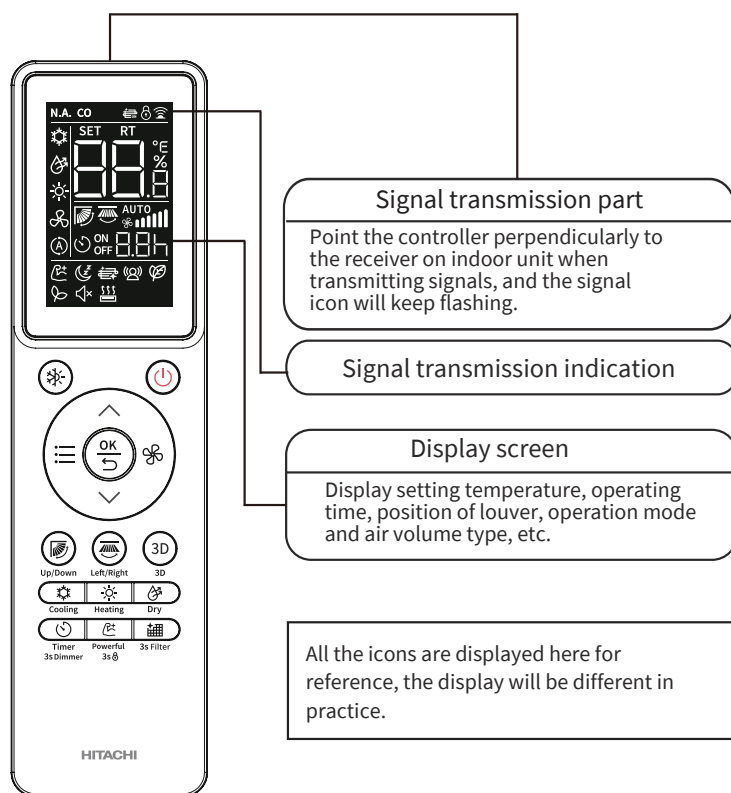
Model: CIW03-H

NOTES:

- If the screen is off or the backlight is dim, press any button to re-energise the screen.
- Make sure to press the buttons lightly with your fingertips.
- Do NOT press the buttons with any sharp objects as it may damage the button.

1.5.2 Wireless Remote Controller

Model: PC-LH8QE



Button Description:

	Mode		ON/OFF
	Temp. setting		Fan
	Louver up/down		Louver left/right
	3D Louver		Cool
	Heat		Dry
	Filter reset		Powerful
	Timer and additional functions setting/cancel		
	Sleep/Self-cleaning setting		
	Timed ON/OFF setting/cancel		

NOTES:

- airCore 700 indoor unit does not support Louver left/right and 3D Louver.
- There is no action when pressing these two buttons.
- Hold " " + " " for over 3s when the controller is OFF to select level 3, 4 or 6. More details see the operation manual of this product.

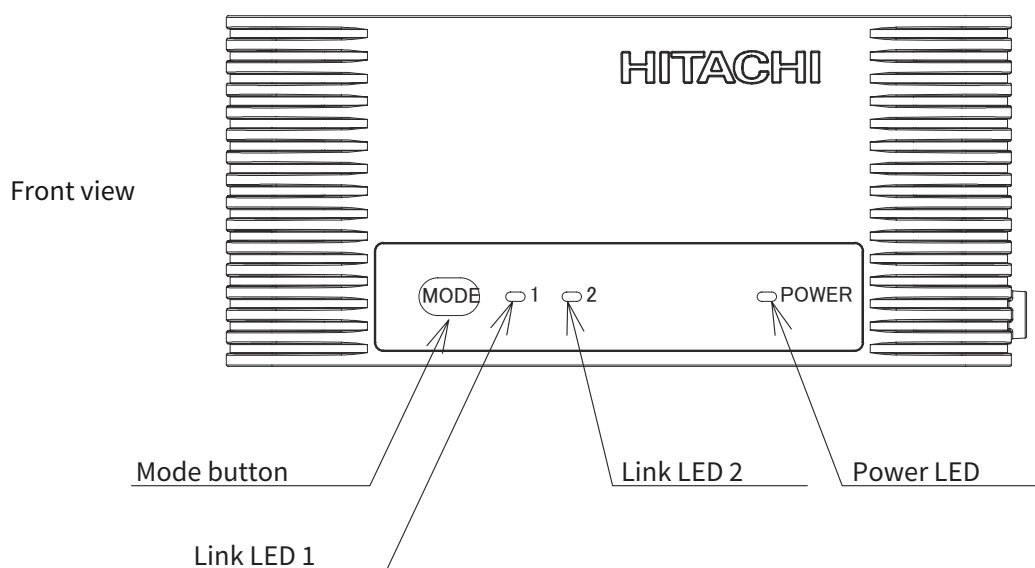
Indoor Unit	MESP Ducted	4-Way Mini Cassette/ 4-Way Cassette	Ceiling Suspended	High-wall
Fan level	6-level	4-level	4-level	4-level

- High-wall indoor unit does not support Sleep/Self-cleaning setting.

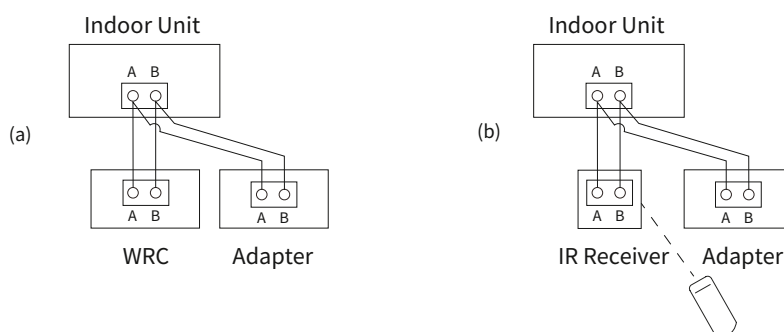
1.5.3 airCloud Adapter (Wi-Fi Adapter)

Model: GA-WFG-N

The figure below shows all the indications for reference. The actual display during operation is different.

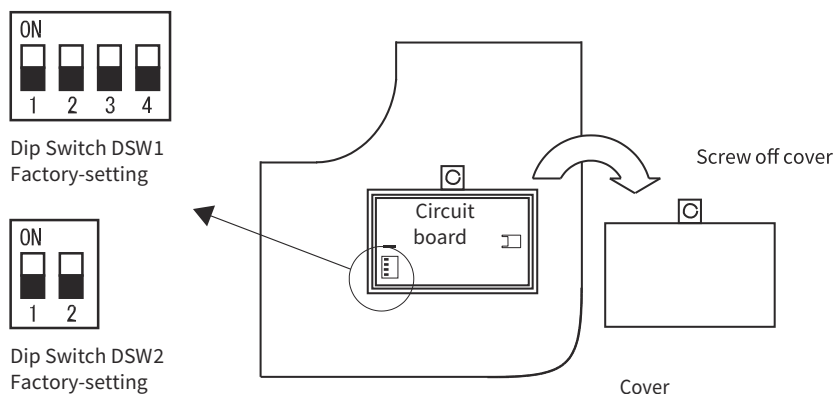
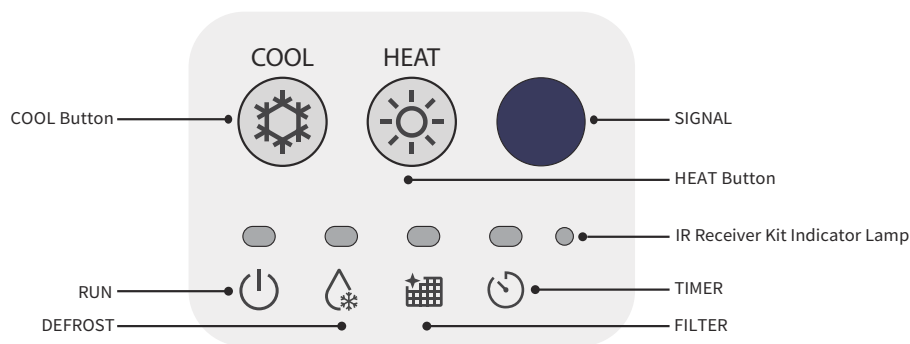


This adapter must be used in conjunction with a Wired Remote Controller (WRC) following (a), or with an IR receiver kit following (b).



1.5.4 IR Receiver Kit

Model: PC-ALH5Q



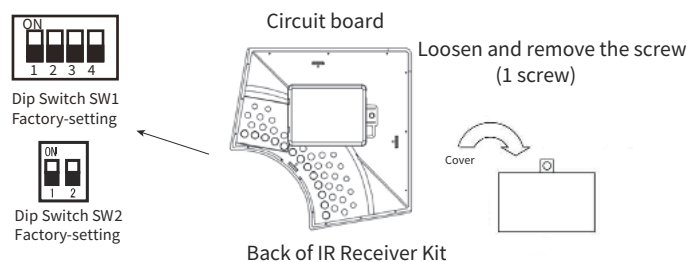
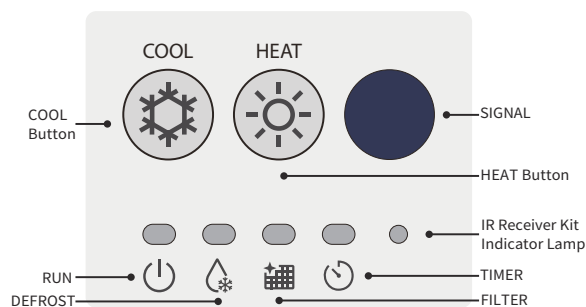
Back of the IR Receiver Kit

The dip switch (DSW1 & DSW2) are optional for function setting and when needed, shall be set as per the following requirements.

DSW1 1st digit	Primary/Secondary setting	
ON	When using 2 remote controllers, set as secondary remote controller.	
OFF	When using 2 remote controllers, set as primary remote controller.	
DSW1 2nd digit	DSW1 3rd digit	Adjacent unit setting mode
OFF	OFF	mode A
ON	OFF	mode B
OFF	ON	mode C
ON	ON	mode D
DSW1 4th digit	Elevator griller setting	
ON	Elevator griller Up/Down is enabled.	
OFF	Elevator griller Up/Down is disabled.	
DSW2 1st digit	Emergency operation setting	
ON	Emergency operation is enabled	
OFF	Emergency operation is disabled.	
DSW2 2nd digit	Reserved	
ON	-	
OFF	-	

1.5.5 IR Receiver Kit

Model: PC-ALHC5Q

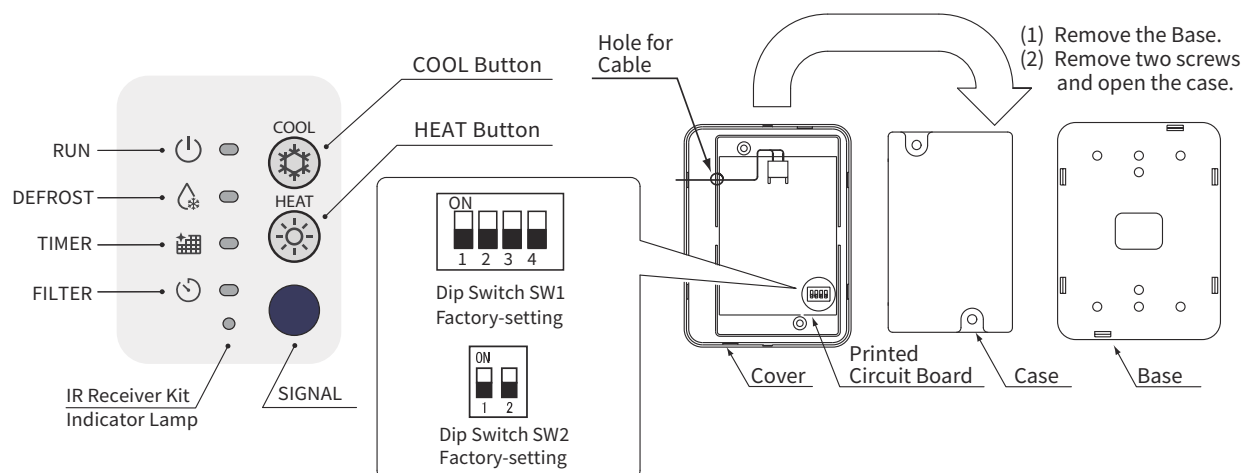


The dip switch (DSW1 & DSW2) are optional for function setting and when needed, shall be set as per the following requirements.

DSW1 1st digit	Primary/Secondary setting	
ON	When using 2 remote controllers, set as secondary remote controller.	
OFF	When using 2 remote controllers, set as primary remote controller.	
DSW1 2nd digit	DSW1 3rd digit	Adjacent unit setting mode
OFF	OFF	mode A
ON	OFF	mode B
OFF	ON	mode C
ON	ON	mode D
DSW1 4th digit	Elevator griller setting	
ON	Elevator griller Up/Down is enabled.	
OFF	Elevator griller Up/Down is disabled.	
DSW2 1st digit	Emergency operation setting	
ON	Emergency operation is enabled	
OFF	Emergency operation is disabled.	
DSW2 2nd digit	Reserved	
ON	-	
OFF	-	

1.5.6 IR Receiver Kit

Model: PC-ALHZ5Q

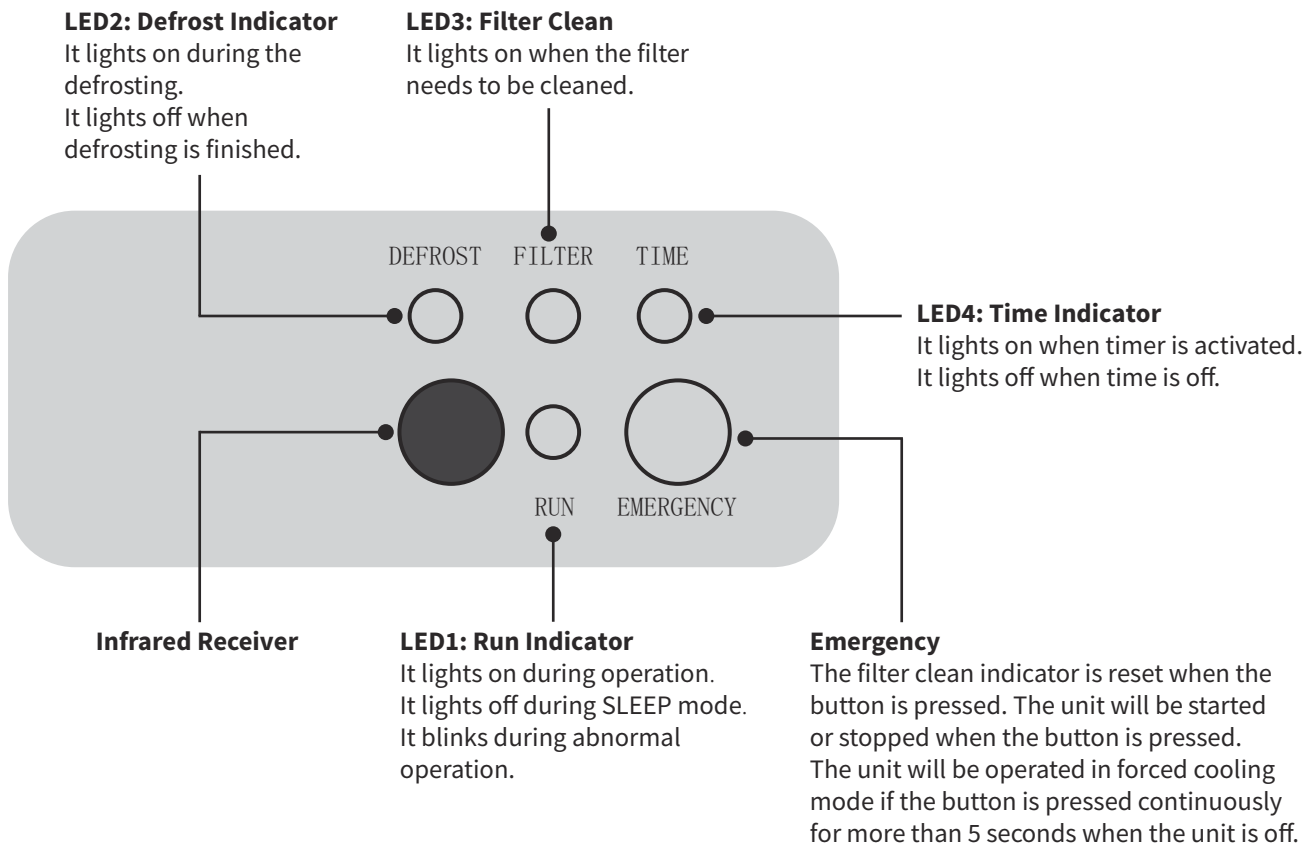


The dip switch (DSW1 & DSW2) are optional for function setting and when needed, shall be set as per the following requirements.

DSW1 1st digit	Primary/Secondary setting	
ON	When using 2 remote controllers, set as secondary remote controller.	
OFF	When using 2 remote controllers, set as primary remote controller.	
DSW1 2nd digit	DSW1 3rd digit	Adjacent unit setting mode
OFF	OFF	mode A
ON	OFF	mode B
OFF	ON	mode C
ON	ON	mode D
DSW1 4th digit	Elevator griller setting	
ON	Elevator griller Up/Down is enabled.	
OFF	Elevator griller Up/Down is disabled.	
DSW2 1st digit	Emergency operation setting	
ON	Emergency operation is enabled	
OFF	Emergency operation is disabled.	
DSW2 2nd digit	Reserved	
ON	-	
OFF	-	

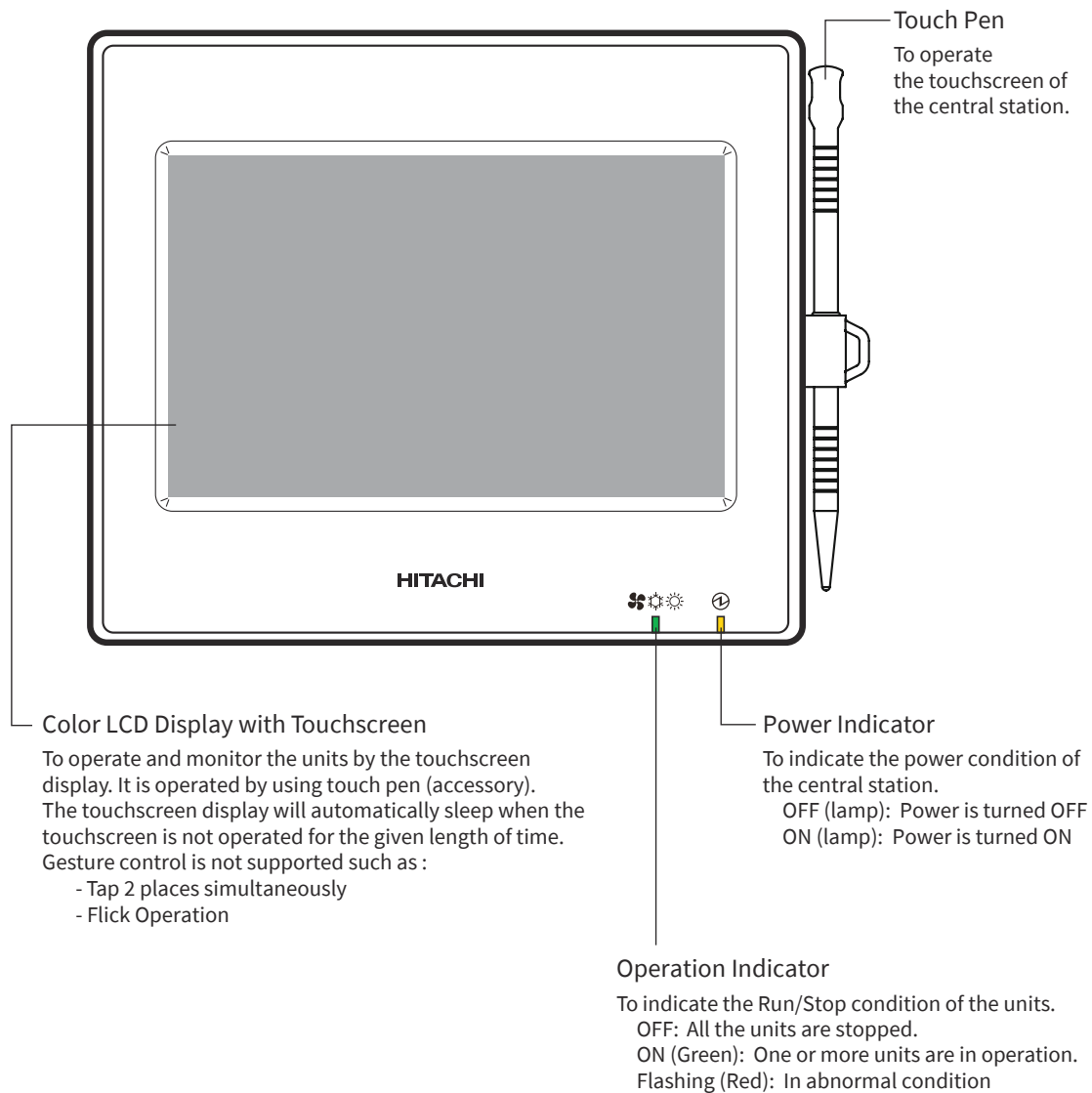
1.5.7 IR Receiver Kit

Model: PI2303H



1.5.8 Central Station

Model: CCM01

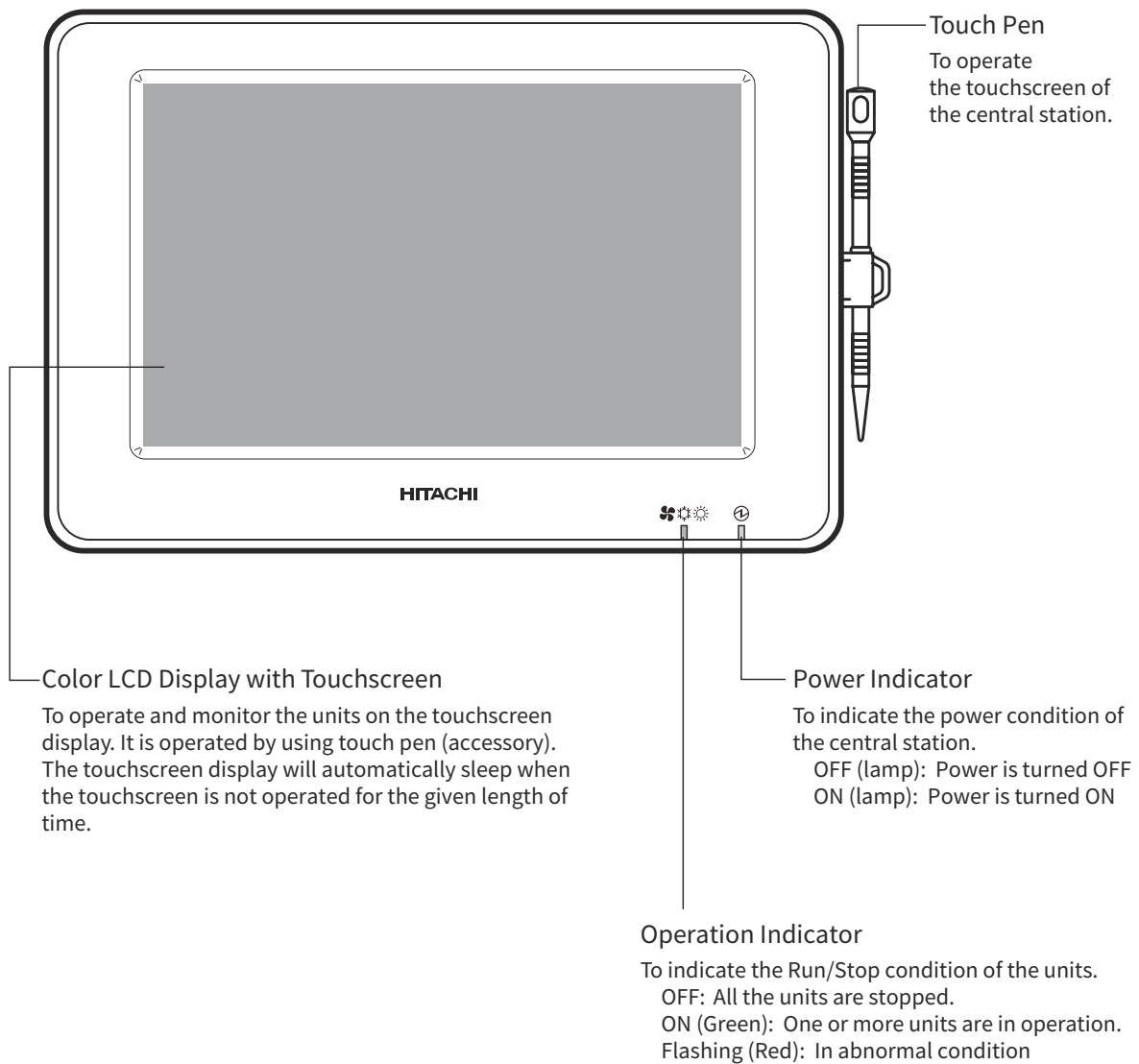


NOTE:

Remove the protection sheet on LCD (liquid crystal display) before using this product.

1.5.9 Central Station

Model: CCL01

**NOTE:**

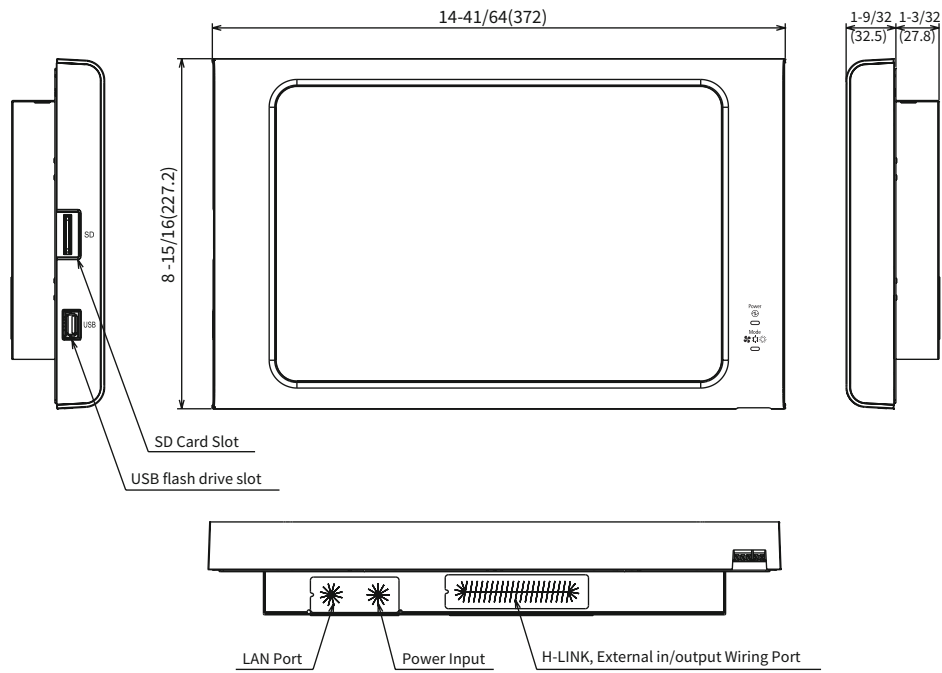
Remove the protection sheet on LCD (liquid crystal display) before using this product.

FEATURES

1.5.10 Central Station EX

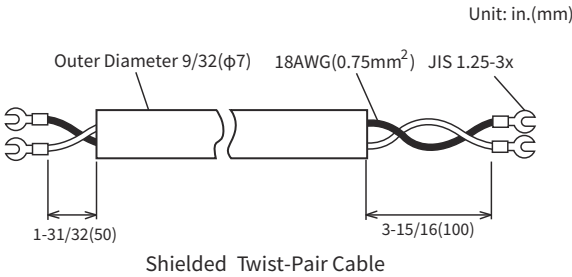
Model: CCXL02

Unit: in.(mm)



1.5.11 Remote Control Cable: PRC-5K to 15K (for Wired Remote Controllers and Central Stations)

As the wired remote controllers and central stations do not include a remote control cable, use PRC-5K to 15K, or prepare one in the field.



Model	Cable Length
PRC-5K	16.4ft(5m)
PRC-10K	32.8t(10m)
PRC-15K	49.2ft(15m)

When the total cable length is within 98.4ft(30m), other type of cable (more than 22AWG[0.3mm^2]) can be used.

2. General Data

2.1 MESP Ducted Type

Indoor Unit Model Name			PPIM-B09UFA1DQ	PPIM-B12UFA1DQ	PPIM-B18UFA1DQ
Outdoor Unit Model Name			PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1
Power Supply	V,ph,Hz		208/230,60	208/230,60	208/230,60
Max. power input	W		1400	1400	3120
Max. current input	A		7.7	7.7	13.5
Cooling	Rated Capacity	Btu/h	9000	12000	18000
	Capacity Range [Min~Max]	Btu/h	3000~12000	3200~13800	6100~20000
	Power Input	W	690	960	1380
	Current	A	3.1	4.3	6.2
	EER2	Btu/h/W	13.0	12.5	13.0
	SEER2	Btu/h/W	20.0	20.5	21.0
Heating	Rated Capacity	Btu/h	11000	14000	20000
	Capacity Range [Min~Max]	Btu/h	3200~13800	3300~17100	4100~23000
	Power Input	W	870	1110	1500
	Current	A	3.9	5.0	6.7
	COP2	W/W	3.7	3.7	3.9
	HSPF2	Btu/h/W	9.6	9.8	9.5
	Rated Capacity Heating at 17°F	Btu/h	10100	13300	18000
	Maximum Heating Capacity at 5°F	Btu/h	9600	10800	14100
	COP at 5°F [Under Maximum Capacity]	W/W	2.0	2.1	2.1
Indoor Unit	External Static Pressure-Range	in.WG[Pa]	0.3-0.6[75-150]	0.3-0.6[75-150]	0.3-0.8[75-200]
	Fan Motor Output	W	150	150	250
	Indoor Air Flow [Hi2/Hi/Med/Low2/Low/Breeze]	CFM	350/300/290/275/260/245	450/390/350/335/280/245	650/590/550/510/460/420
		m³/h	600/516/492/468/444/420	760/660/600/570/470/420	1100/1008/930/864/790/720
	Sound Pressure Level [Hi2/Hi/Med/Low2/Low/Breeze]	dB[A]	40/38/37/36/34/33	40/39/38/36/34/33	35/33/31/29/28/26
	Dimension [W×H×D]	inch	[25-19/32(+2-61/64)]×[10-5/8]×[28-11/32]	[25-19/32(+2-61/64)]×[10-5/8]×[28-11/32]	[43-5/16(+2-61/64)]×[11-13/16]×[31-1/2]
		mm	650(+75)×270×720	650(+75)×270×720	1100(+75)×300×800
	Packing [W×H×D]	inch	[35-7/16]×[14-61/64]×[34-29/64]	[35-7/16]×[14-61/64]×[34-29/64]	[53-5/32]×[16-9/64]×[37-19/32]
		mm	900×380×875	900×380×875	1350×410×955
	Net Weight	lbs[kg]	52.9[24.0]	52.9[24.0]	92.6[42.0]
	Gross Weight	lbs[kg]	63.9[29.0]	63.9[29.0]	103.6[47.0]
	Drainage Water Pipe Diameter	inch[mm]	1-1/4[Φ32]		
Outdoor Unit	Compressor	Type	KSN108D32UFZR	KSN108D32UFZR	KTN150D42UFZD
		R.L.A	5.4	5.4	7.7
	Fan Motor	F.L.A	0.4	0.4	0.34
	Fan Motor Output	W	40	40	80
	Air Flow	CFM	1130	1130	1935
		m³/h	1920	1920	3290
	Sound Pressure Level	dB[A]	55	55	55
	Throttle Type		Electronic Expansion Valve		
	Dimension[W×H×D]	inch	[31-57/64]×[23-1/32]×[11-1/32]	[31-57/64]×[23-1/32]×[11-1/32]	[35-7/16]×[26-3/16]×[12-19/32]
		mm	810×585×280	810×585×280	900×665×320
	Packing [W×H×D]	inch	[37-9/10]×[25-1/10]×[15-1/5]	[37-9/10]×[25-1/10]×[15-1/5]	[41-3/5]×[28-1/5]×[16-4/5]
		mm	963×637×387	963×637×387	1056×717×427
	Net Weight	lbs[kg]	77.2[35.0]	77.2[35.0]	97.0[44.0]
	Gross Weight	lbs[kg]	83.8[38.0]	83.8[38.0]	105.8[48.0]
Refrigerant Type/Quantity	Type		R32		
	Refrigerant Charge	lbs[kg]	1.98[0.9]	1.98[0.9]	2.65[1.2]
Refrigerant Piping	Liquid side	inch[mm]	1/4[Φ6.35]	1/4[Φ6.35]	1/4[Φ6.35]
	Gas side	inch[mm]	1/2[Φ12.7]	1/2[Φ12.7]	1/2[Φ12.7]
	Max. pipe length	ft[m]	164[50]	164[50]	164[50]
	Max. Height difference	ft[m]	98.4[30]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.194[18]	0.194[18]	0.194[18]
	Chargeless	ft[m]	98.4[30]	98.4[30]	98.4[30]
Design Pressure	H/L	PSIG	602/321	602/321	602/321
		MPa	4.15/2.21	4.15/2.21	4.15/2.21
Guaranteed Temperature Operation Range	Cooling	°F[°C]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]

Indoor Unit Model Name			PPIM-B24UFA1DQ	PPIM-B30UFA1DQ	PPIM-B36UFA1DQ	PPIM-B48UFA1DQ
Outdoor Unit Model Name			PAS-24BUFASDQ1	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Power Supply	V,ph,Hz		208/230,60	208/230,60	208/230,60	208/230,60
Max. power input	W		3680	5560	6430	6690
Max. current input	A		16.0	24.2	27.9	27.9
Cooling	Rated Capacity	Btu/h	22000	30000	36000	43500
	Capacity Range [Min~Max]	Btu/h	9900~26300	13000~35300	13700~41600	15400~50900
	Power Input	W	1730	2310	2810	3420
	Current	A	7.7	10.2	12.4	15.2
	EER2	Btu/h/W	12.7	13.0	12.8	12.7
Heating	SEER2	Btu/h/W	20.0	20.0	20.0	21.0
	Rated Capacity	Btu/h	24000	32000	38000	45500
	Capacity Range [Min~Max]	Btu/h	8700~28000	14400~39300	14300~45200	15000~52600
	Power Input	W	1750	2400	2780	3510
	Current	A	7.8	10.6	12.3	15.5
	COP2	W/W	4.0	3.9	4.0	3.8
	HSPF2	Btu/h/W	9.6	10.0	9.8	10.0
	Rated Capacity Heating at 17°F	Btu/h	21800	28600	34400	41000
Indoor Unit	Maximum Heating Capacity at 5°F	Btu/h	19400	30000	32000	34200
	COP at 5°F [Under Maximum Capacity]	W/W	2.1	2.0	2.0	2.0
	External Static Pressure-Range	in.WG[Pa]	0.3-0.8[75-200]	0.3-0.8[75-200]	0.3-0.8[75-200]	0.3-0.8[75-200]
	Fan Motor Output	W	250	250	375	375
	Indoor Air Flow [Hi2/Hi/Med/Lo]	CFM	780/740/670/600/560/530	1060/960/870/770/730/690	1270/1140/1040/950/830/740	1360/1270/1160/1040/950/850
		m³/h	1330/1260/1140/1020/960/900	1800/1638/1476/1320/1250/1180	2160/1950/1770/1620/1410/1260	2320/2160/1980/1764/1620/1450
	Sound Pressure Level [Hi2/Hi/Med/Lo]	dB[A]	38/36/33/30/28/27	41/38/36/34/32/30	43/41/39/37/34/32	44/42/40/37/35/33
	Dimension [W×H×D]	inch	[43-5/16(+ 2-61/64)] ×[11-13/16]×[31-1/2]	[43-5/16(+ 2-61/64)] ×[11-13/16]×[31-1/2]	[55-1/8(+ 2-61/64)] ×[11-13/16]×[31-1/2]	[55-1/8(+ 2-61/64)] ×[11-13/16]×[31-1/2]
		mm	1100(+75)×300×800	1100(+75)×300×800	1400(+75)×300×800	1400(+75)×300×800
	Packing [W×H×D]	inch	[53-5/32]×[16-9/64] ×[37-19/32]	[53-5/32]×[16-9/64] ×[37-19/32]	[64-61/64]×[16-9/64] ×[37-19/32]	[64-61/64]×[16-9/64] ×[37-19/32]
		mm	1350×410×955	1350×410×955	1650×410×955	1650×410×955
Outdoor Unit	Net Weight	lbs[kg]	92.6[42.0]	92.6[42.0]	105.8[48]	92.6[42.0]
	Gross Weight	lbs[kg]	103.6[47]	103.6[47]	123.5[56]	123.5[56]
	Drainage Water Pipe Diameter	inch[mm]	1-1/4[Φ32]			
	Compressor	Type	KTM240D43UKT	ATH356SKRC9EQ	ATH356SKRC9EQ	ATH356SKRC9EQ
		R.L.A	9.3	11.5	11.5	11.5
	Fan Motor	F.L.A	0.34	0.62	0.62	0.62
	Fan Motor Output	W	80	138	138	138
	Air Flow	CFM	1935	2823	2823	4823
		m³/h	3290	4800	4800	8200
	Sound Pressure Level	dB[A]	55	55	55	56
	Throttle Type		Electronic Expansion Valve			
	Dimension[W×H×D]	inch	[35-7/16]×[26-3/16] ×[12-19/32]	[37-13/32]×[38-31/32] ×[12-19/32]	[37-13/32]×[38-31/32] ×[12-19/32]	[37-13/32]×[54-21/64] ×[12-19/32]
		mm	900×665×320	950×990×320	950×990×320	950×1380×320
	Packing [W×H×D]	inch	[41-3/5]×[28-1/5] ×[16-4/5]	[42-1/10]×[44-1/10] ×[18-1/2]	[42-1/10]×[44-1/10] ×[18-1/2]	[42-1/10]×[59-4/5] ×[18-1/2]
		mm	1056×717×427	1070×1120×470	1070×1120×470	1070×1520×470
Refrigerant Type/Quantity	Net Weight	lbs[kg]	101.4[46.0]	194.0[88.0]	194.0[88.0]	250.2[113.5]
	Gross Weight	lbs[kg]	110.2[50.0]	217.2[98.5]	217.2[98.5]	273.4[124.0]
Refrigerant Piping	Type		R32			
	Refrigerant Charge	lbs[kg]	3.09[1.4]	5.73[2.6]	5.73[2.6]	7.50[3.4]
	Liquid side	inch[mm]	1/4[Φ6.35]	3/8[Φ9.53]	3/8[Φ9.53]	3/8[Φ9.53]
	Gas side	inch[mm]	1/2[Φ12.7]	5/8[Φ15.88]	5/8[Φ15.88]	5/8[Φ15.88]
	Max. pipe length	ft[m]	164[50]	246[75]	246[75]	246[75]
Design Pressure	Max. Height difference	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.194[18]	0.376[35]	0.376[35]	0.376[35]
	Chargeless	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
Guaranteed Temperature Operation Range	H/L	PSIG	602/321	602/321	602/321	602/321
		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Cooling	°F[°C]		0-115[-18~46]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]

NOTE:

- Rating conditions:
 Cooling: Indoor: DB80°F (26.7 °C)/ WB67°F (19.4°C) Outdoor: DB95°F (35°C)/WB75°F (23.9°C)
 Heating: Indoor: DB70°F (21.1°C)/ WB60°F (15.6°C) Outdoor: DB47°F (8.3°C)/ WB43°F (6.1°C)

2.2 4-Way Mini Cassette Type

Indoor Unit Model Name			PCIM-B09UFA1DQ	PCIM-B12UFA1DQ
Outdoor Unit Model Name			PAS-09BUFASDQ1	PAS-12BUFASDQ1
Power Supply		V,ph,Hz	208/230,60	208/230,60
Max. power input		W	1400	1400
Max. current input		A	7.7	7.7
Cooling	Rated Capacity	Btu/h	9000	12000
	Capacity Range [Min~Max]	Btu/h	3100~12300	3200~14200
	Power Input	W	600	850
	Current	A	2.7	3.8
	EER2	Btu/h/W	15.0	14.0
	SEER2	Btu/h/W	23.5	23.5
Heating	Rated Capacity	Btu/h	11000	14000
	Capacity Range [Min~Max]	Btu/h	3300~14200	3400~17400
	Power Input	W	805	950
	Current	A	3.6	4.2
	COP2	W/W	4.0	4.3
	HSPF2	Btu/h/W	11.0	10.0
	Rated Capacity Heating at 17°F	Btu/h	10500	12600
	Maximum Heating Capacity at 5°F	Btu/h	10000	10800
Indoor Unit	COP at 5°F [Under Maximum Capacity]	W/W	2.2	2.2
	Fan Motor Output	W	57	57
	Indoor Air Flow [Hi2/Hi/Med/Lo]	CFM	320/295/275/250	425/390/305/250
		m³/h	540/500/470/420	720/660/520/420
	Sound Pressure Level [Hi2/Hi/Med/Lo]	dB[A]	39/37/36/33	46/44/38/33
	Dimension [W×H×D]	inch	[22-7/16]×[8-15/32]×[22-7/16]	[22-7/16]×[8-15/32]×[22-7/16]
		mm	570×215×570	570×215×570
	Packing [W×H×D]	inch	[28-47/64]×[11-1/2]×[26-19/64]	[22-7/16]×[8-15/32]×[22-7/16]
		mm	730×292×668	730×292×668
	Net Weight	lbs[kg]	34.0[15.4]	34.0[15.4]
Outdoor Unit	Gross Weight	lbs[kg]	39.7[18.0]	39.7[18.0]
	Drainage Water Pipe Diameter	inch[mm]	1-3/16[Φ30]	
	Compressor	Type	KSN108D32UFZR	KSN108D32UFZR
		R.L.A	5.4	5.4
	Fan Motor	F.L.A	0.4	0.4
	Fan Motor Output	W	40	40
	Air Flow	CFM	1130	1130
		m³/h	1920	1920
	Sound Pressure Level	dB[A]	55	55
	Throttle Type	Electronic Expansion Valve		
	Dimension[W×H×D]	inch	[31-57/64]×[23-1/32]×[11-1/32]	[31-57/64]×[23-1/32]×[11-1/32]
		mm	810×585×280	810×585×280
	Packing [W×H×D]	inch	[37-9/10]×[25-1/10]×[15-1/5]	[37-9/10]×[25-1/10]×[15-1/5]
		mm	963×637×387	963×637×387
	Net Weight	lbs[kg]	77.2[35.0]	77.2[35.0]
	Gross Weight	lbs[kg]	83.8[38.0]	83.8[38.0]
Refrigerant Type/Quantity	Type	R32		
	Refrigerant Charge	lbs[kg]	1.98[0.9]	1.98[0.9]
Refrigerant Piping	Liquid side	inch[mm]	1/4[Φ6.35]	1/4[Φ6.35]
	Gas side	inch[mm]	1/2[Φ12.7]	1/2[Φ12.7]
	Max. pipe length	ft[m]	164[50]	164[50]
	Max. Height difference	ft[m]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.194[18]	0.194[18]
	Chargeless	ft[m]	98.4[30]	98.4[30]
Design Pressure	H/L	PSIG	602/321	602/321
		MPa	4.15/2.21	4.15/2.21
Guaranteed Temperature Operation Range	Cooling	°F[°C]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]

NOTE:

- Rating conditions:
Cooling: Indoor: DB80°F (26.7 °C)/ WB67°F (19.4°C) Outdoor: DB95°F (35°C)/WB75°F (23.9°C)
Heating: Indoor: DB70°F (21.1°C)/ WB60°F (15.6°C) Outdoor: DB47°F (8.3°C)/ WB43°F (6.1°C)

2.3 4-Way Cassette Type

Indoor Unit Model Name			PCI-B18UFA1DQ	PCI-B24UFA1DQ	PCI-B30UFA1DQ	PCI-B36UFA1DQ	PCI-B48UFA1DQ
Outdoor Unit Model Name			PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Power Supply	V,ph,Hz		208/230,60	208/230,60	208/230,60	208/230,60	208/230,60
Max. power input	W		3120	3680	5560	6430	6690
Max current input	A		13.5	16	24.2	27.9	29.1
Cooling	Rated Capacity	Btu/h	18000	22000	30000	36000	45000
	Capacity Range [Min~Max]	Btu/h	6570~21100	10620~27000	14300~37500	15000~43000	16050~51700
	Power Input	W	1200	1690	2140	2770	3460
	Current	A	5.3	7.5	9.5	12.3	15.4
	EER2	Btu/h/W	15.0	13.0	14.0	13.0	13.0
	SEER2	Btu/h/W	27.0	24.0	21.0	21.0	22.5
Heating	Rated Capacity	Btu/h	20000	24000	32000	38000	47000
	Capacity Range [Min~Max]	Btu/h	4900~24500	9460~29750	16300~41200	16330~48250	17080~54170
	Power Input	W	1330	1600	2130	2720	3720
	Current	A	5.9	7.1	9.4	12.1	16.5
	COP2	W/W	4.4	4.4	4.4	4.1	3.7
	HSPF2	Btu/h/W	11	10	10	10	10
	Rated Capacity Heating at 17°F	Btu/h	17000	20000	28000	34000	39000
	Maximum Heating Capacity at 5°F	Btu/h	15000	19000	24000	30000	34000
Indoor Unit	COP at 5°F [Under Maximum Capacity]	W/W	2.6	2.5	2.4	2.4	2.2
	Fan Motor Output	W	60	127	127	127	127
	Indoor Air Flow [Hi2/Hi/Med/Lo]	CFM	650/600/570/530	780/740/700/630	1060/940/820/740	1170/1060/950/740	1170/1060/950/740
		m³/h	1100/1030/970/900	1330/1260/1190/1080	1800/1600/1400/1260	1990/1800/1620/1260	1990/1800/1620/1260
	Sound Pressure Level [Hi2/Hi/Med/Lo]	dB[A]	39/37/36/34	41/39/38/35	49/47/43/40	49/48/47/40	49/48/47/40
	Dimension [W×H×D]	inch	[33-5/64]×[9-3/8]×[33-5/64]	[33-5/64]×[11-11/32]×[33-5/64]	[33-5/64]×[11-11/32]×[33-5/64]	[33-5/64]×[11-11/32]×[33-5/64]	[33-5/64]×[11-11/32]×[33-5/64]
		mm	840×238×840	840×288×840	840×288×840	840×288×840	840×288×840
	Packing [W×H×D]	inch	[37-13/64]×[11-1/2]×[37-13/64]	[37-13/64]×[13-15/32]×[37-13/64]	[37-13/64]×[13-15/32]×[37-13/64]	[37-13/64]×[13-15/32]×[37-13/64]	[37-13/64]×[13-15/32]×[37-13/64]
		mm	945×292×945	945×342×945	945×342×945	945×342×945	945×342×945
	Net Weight	lbs[kg]	50.7[23.0]	59.5[27.0]	59.5[27.0]	59.5[27.0]	59.5[27.0]
	Gross Weight	lbs[kg]	59.5[27.0]	68.3[31.0]	68.3[31.0]	68.3[31.0]	68.3[31.0]
Outdoor Unit	Drainage Water Pipe Diameter	inch[mm]	1-3/16[Φ30]				
	Compressor	Type	KTN150D42UFZD	KTM240D43UKT	ATH356SKRC9EQ	ATH356SKRC9EQ	ATH356SKRC9EQ
		R.L.A	7.7	9.3	11	11	11
	Fan Motor	F.L.A	0.34	0.34	0.62	0.62	0.62
	Fan Motor Output	W	80	80	138	138	138
	Air Flow	CFM	1935	1935	2823	2823	4823
		m³/h	3290	3290	4800	4800	8200
	Sound Pressure Level	dB[A]	55	55	55	55	56
	Throttle Type		Electronic Expansion Valve				
	Dimension [W×H×D]	inch	[35-7/16]×[26-3/16]×[12-19/32]	[35-7/16]×[26-3/16]×[12-19/32]	[37-13/32]×[38-31/32]×[12-19/32]	[37-13/32]×[38-31/32]×[12-19/32]	[37-13/32]×[54-21/64]×[12-19/32]
		mm	900×665×320	900×665×320	950×990×320	950×990×320	950×1380×320
	Packing [W×H×D]	inch	[41-3/5]×[28-1/5]×[16-4/5]	[41-3/5]×[28-1/5]×[16-4/5]	[42-1/10]×[44-1/10]×[18-1/2]	[42-1/10]×[44-1/10]×[18-1/2]	[42-1/10]×[59-4/5]×[18-1/2]
		mm	1056×717×427	1056×717×427	1070×1120×470	1070×1120×470	1070×1520×470
	Net Weight	lbs[kg]	97.0[44.0]	101.4[46.0]	194.0[88.0]	194.0[88.0]	250.2[113.5]
	Gross Weight	lbs[kg]	105.8[48.0]	110.2[50.0]	217.2[98.5]	217.2[98.5]	273.4[124.0]
Refrigerant type/Quantity	Type		R32				
	Refrigerant Charge	lbs[kg]	2.65[1.2]	3.09[1.4]	5.73[2.6]	5.73[2.6]	7.50[3.4]

GENERAL DATA

Indoor Unit Model Name			PCI-B18UFA1DQ	PCI-B24UFA1DQ	PCI-B30UFA1DQ	PCI-B36UFA1DQ	PCI-B48UFA1DQ
Outdoor Unit Model Name			PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Refrigerant pipe	Liquid side	inch[mm]	[1/4] Φ6.35	[1/4] Φ6.35	[3/8] Φ9.53	[3/8] Φ9.53	[3/8] Φ9.53
	Gas side	inch[mm]	[1/2] Φ12.7	[1/2] Φ12.7	[5/8] Φ15.88	[5/8] Φ15.88	[5/8] Φ15.88
	Max. pipe length	ft[m]	164[50]	164[50]	246[75]	246[75]	246[75]
	Max. Height difference	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.194[18]	0.194[18]	0.376[35]	0.376[35]	0.376[35]
	Chargeless	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
Design pressure	H/L	PSIG	602/321	602/321	602/321	602/321	602/321
		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Guaranteed Temperature Operation Range	Cooling	°F[°C]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]

NOTE:

- Rating conditions:

Cooling:

Indoor: DB80°F (26.7 °C)/ WB67°F (19.4°C) Outdoor: DB95°F (35°C)/WB75°F (23.9°C)

Heating:

Indoor: DB70°F (21.1°C)/ WB60°F (15.6°C) Outdoor: DB47°F (8.3°C)/ WB43°F (6.1°C)

2.4 Ceiling Suspended Type

Indoor Unit Model Name		PPFC-B09UFA1DQ	PPFC-B12UFA1DQ	PPFC-B18UFA1DQ	PPFC-B24UFA1DQ
Outdoor Unit Model Name		PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1	PAS-24BUFASDQ1
Power Supply	V,ph,Hz	208/230,60	208/230,60	208/230,60	208/230,60
Max. power input	W	14000	14000	3120	3680
Max. current input	A	7.7	7.7	13.5	16
Cooling	Rated Capacity	Btu/h	9000	12000	18000
	Capacity Range [Min~Max]	Btu/h	3000~11800	3200~13800	5900~20000
	Power Input	W	600	890	1380
	Current	A	2.7	3.9	6.1
	EER2	Btu/h/W	15.0	13.5	13.0
	SEER2	Btu/h/W	23.0	22.0	23.0
Heating	Rated Capacity	Btu/h	11000	14000	20000
	Capacity Range [Min~Max]	Btu/h	3200~13300	3300~16700	4200~24100
	Power Input	W	765	1025	1500
	Current	A	3.4	4.5	6.6
	COP2	W/W	4.2	4.0	3.9
	HSPF2	Btu/h/W	9.5	9.8	10.0
	Rated Capacity Heating at 17°F	Btu/h	9900	12800	18000
	Maximum Heating Capacity at 5°F	Btu/h	9900	11000	14500
Indoor Unit	COP at 5°F [Under Maximum Capacity]	W/W	2.2	2.2	2.4
	Fan Motor Output	W	100	100	100
	Indoor Air Flow [Hi2/Hi/Med/Lo]	CFM	320/295/275/250	450/390/320/275	540/520/460/400
		m³/h	540/500/470/420	760/660/540/470	918/880/780/680
	Sound Pressure Level [Hi2/Hi/Med/Lo]	dB[A]	37/35/33/30	45/41/37/33	47/46/43/39
	Dimension [W×H×D]	inch	[38-31/32]×[9-1/16]×[26-49/64]	[38-31/32]×[9-1/16]×[26-49/64]	[38-31/32]×[9-1/16]×[26-49/64]
		mm	990×230×680	990×230×680	1580×230×680
	Packing [W×H×D]	inch	[43-45/64]×[13-25/64]×[32-43/64]	[43-45/64]×[13-25/64]×[32-43/64]	[43-45/64]×[13-25/64]×[32-43/64]
		mm	1110×340×830	1110×340×830	1690×340×830
	Net Weight	lbs[kg]	70.6[32.0]	70.6[32.0]	70.6[32.0]
Outdoor Unit	Gross Weight	lbs[kg]	81.6[37.0]	81.6[37.0]	81.6[37.0]
	Drainage Water Pipe Diameter	inch[mm]	1-3/16[Φ30]		
	Compressor	Type	KSN108D32UFZR	KSN108D32UFZR	KTN150D42UFZD
		R.L.A	5.4	5.4	7.7
	Fan Motor	F.L.A	0.4	0.4	0.34
	Fan Motor Output	W	40	40	80
	Air Flow	CFM	1130	1130	1935
		m³/h	1920	1920	3290
	Sound Pressure Level	dB[A]	55	55	55
	Throttle Type		Electronic Expansion Valve		
	Dimension[W×H×D]	inch	[31-57/64]×[23-1/32]×[11-1/32]	[31-57/64]×[23-1/32]×[11-1/32]	[35-7/16]×[26-3/16]×[12-19/32]
		mm	810×585×280	810×585×280	900×665×320
	Packing [W×H×D]	inch	[37-9/10]×[25-1/10]×[15-1/5]	[37-9/10]×[25-1/10]×[15-1/5]	[41-3/5]×[28-1/5]×[16-4/5]
		mm	963×637×387	963×637×387	1056×717×427
	Net Weight	lbs[kg]	77.2[35.0]	77.2[35.0]	97.0[44.0]
	Gross Weight	lbs[kg]	83.8[38.0]	83.8[38.0]	105.8[48]
Refrigerant Type/Quantity	Type		R32		
	Refrigerant Charge	lbs[kg]	1.98[0.9]	1.98[0.9]	2.65[1.2]
Refrigerant Piping	Liquid side	inch[mm]	1/4[Φ6.35]	1/4[Φ6.35]	1/4 Φ6.35
	Gas side	inch[mm]	1/2[Φ12.7]	1/2[Φ12.7]	1/2 Φ12.7
	Max. pipe length	ft[m]	164[50]	164[50]	164[50]
	Max. Height difference	ft[m]	98.4[30]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.194[18]	0.194[18]	0.194[18]
	Chargeless	ft[m]	98.4[30]	98.4[30]	98.4[30]
Design Pressure	H/L	PSIG	602/321	602/321	602/321
		MPa	4.15/2.21	4.15/2.21	4.15/2.21
Guaranteed Temperature Operation Range	Cooling	°F[°C]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]

GENERAL DATA

Indoor Unit Model Name			PPFC-B30UFA1DQ	PPFC-B36UFA1DQ	PPFC-B48UFA1DQ
Outdoor Unit Model Name			PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Power Supply	V,ph,Hz		208/230,60	208/230,60	208/230,60
Max. power input	W		5560	6430	6690
Max. current input	A		24.2	27.9	29.1
Cooling	Rated Capacity	Btu/h	30000	36000	42000
	Capacity Range [Min~Max]	Btu/h	13100~35830	13200~40800	14800~48750
	Power Input	W	2500	3000	3500
	Current	A	11.1	13.3	15.5
	EER2	Btu/h/W	12.0	12.0	12.0
	SEER2	Btu/h/W	19.6	19.4	20.5
Heating	Rated Capacity	Btu/h	32000	38000	44000
	Capacity Range [Min~Max]	Btu/h	15100~42000	15400~46900	15700~51850
	Power Input	W	2290	2850	3580
	Current	A	10.2	12.6	15.9
	COP2	W/W	4.1	3.9	3.6
	HSPF2	Btu/h/W	10.0	10.0	9.5
	Rated Capacity Heating at 17°F	Btu/h	28000	33000	40000
	Maximum Heating Capacity at 5°F	Btu/h	26000	27000	32000
Indoor Unit	COP at 5°F [Under Maximum Capacity]	W/W	2.5	2.4	2.2
	Fan Motor Output	W	181	181	181
	Indoor Air Flow [Hi2/Hi/Med/Lo]	CFM	1010/940/820/740	1170/1010/890/780	1170/1010/890/780
		m³/h	1720/1600/1400/1260	1990/1720/1510/1330	1990/1720/1510/1330
	Sound Pressure Level [Hi2/Hi/Med/Lo]	dB[A]	50/47/44/42	53/50/47/44	53/50/47/44
	Dimension [W×H×D]	inch	[62-13/64]×[9-1/16]×[26-49/64]	[62-13/64]×[9-1/16]×[26-49/64]	[62-13/64]×[9-1/16]×[26-49/64]
		mm	1580×230×680	1580×230×680	1580×230×680
	Packing [W×H×D]	inch	[66-17/32]×[13-25/64]×[32-43/64]	[66-17/32]×[13-25/64]×[32-43/64]	[66-17/32]×[13-25/64]×[32-43/64]
		mm	1690×340×830	1690×340×830	1690×340×830
	Net Weight	lbs[kg]	105.8[48]	105.8[48]	105.8[48]
Outdoor Unit	Gross Weight	lbs[kg]	121.3[55]	121.3[55]	121.3[55]
	Drainage Water Pipe Diameter	inch[mm]	1-3/16[Φ30]		
	Compressor	Type	ATH356SKRC9EQ	ATH356SKRC9EQ	ATH356SKRC9EQ
		R.L.A	11	11	11
	Fan Motor	F.L.A	0.62	0.62	0.62
	Fan Motor Output	W	138	138	138
	Air Flow	CFM	2823	2823	4823
		m³/h	4800	4800	8200
	Sound Pressure Level	dB[A]	55	55	56
	Throttle Type		Electronic Expansion Valve		
	Dimension [W×H×D]	inch	[37-13/32]×[38-31/32]×[12-19/32]	[37-13/32]×[38-31/32]×[12-19/32]	[37-13/32]×[54-21/64]×[12-19/32]
		mm	950×990×320	950×990×320	950×1380×320
	Packing [W×H×D]	inch	[42-1/10]×[44-1/10]×[18-1/2]	[42-1/10]×[44-1/10]×[18-1/2]	[42-1/10]×[59-4/5]×[18-1/2]
		mm	1070×1120×470	1070×1120×470	1070×1520×470
	Net Weight	lbs[kg]	194.0[88.0]	194.0[88.0]	250.2[113.5]
	Gross Weight	lbs[kg]	217.2[98.5]	217.2[98.5]	273.4[124.0]
Refrigerant Type/Quantity	Type		R32		
Refrigerant Piping	Refrigerant Charge	lbs[kg]	5.73[2.6]	5.73[2.6]	7.50[3.4]
	Liquid side	inch[mm]	[3/8] Φ9.53	[3/8] Φ9.53	[3/8] Φ9.53
	Gas side	inch[mm]	[5/8] Φ15.88	[5/8] Φ15.88	[5/8] Φ15.88
	Max. pipe length	ft[m]	246[75]	246[75]	246[75]
	Max. Height difference	ft[m]	98.4[30]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.376[35]	0.376[35]	0.376[35]
	Chargeless	ft[m]	98.4[30]	98.4[30]	98.4[30]
Design Pressure	H/L	PSIG	602/321	602/321	602/321
		MPa	4.15/2.21	4.15/2.21	4.15/2.21
Guaranteed Temperature Operation Range	Cooling	°F[°C]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]

NOTE:

- Rating conditions:
Cooling:
Indoor: DB80°F (26.7 °C)/ WB67°F (19.4°C) Outdoor: DB95°F (35°C)/WB75°F (23.9°C)
Heating:
Indoor: DB70°F (21.1°C)/ WB60°F (15.6°C) Outdoor: DB47°F (8.3°C)/ WB43°F (6.1°C)

2.5 High-wall Type

Indoor Unit Model Name			PPK-B09UFA1DQ	PPK-B12UFA1DQ	PPK-B18UFA1DQ	PPK-B24UFA1DQ	PPK-B30UFA1DQ
Outdoor Unit Model Name			PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1
Power Supply	V,ph,Hz		208/230,60	208/230,60	208/230,60	208/230,60	208/230,60
Max. power input	W		1400	1400	3120	3680	5560
Max current input	A		7.7	7.7	13.5	16.0	24.2
Cooling	Rated Capacity	Btu/h	9000	12000	18000	22000	30000
	Capacity Range [Min~Max]	Btu/h	3000~11800	3200~13800	5900~20000	9900~26000	13100~35830
	Power Input	W	600	800	1290	1690	2140
	Current	A	2.7	3.6	5.7	7.5	9.5
	EER2	Btu/h/W	15.0	15.0	14.0	13.0	14.0
	SEER2	Btu/h/W	22.0	23.0	23.0	21.5	21.8
Heating	Rated Capacity	Btu/h	11000	14000	20000	24000	32000
	Capacity Range [Min~Max]	Btu/h	3200~13300	3300~16700	4200~24100	9200~29600	15100~42000
	Power Input	W	850	1050	1585	1850	2350
	Current	A	3.8	4.7	7.0	8.2	10.4
	COP2	W/W	3.8	3.9	3.7	3.8	4.0
	HSPF2	Btu/h/W	10.0	9.5	10.0	9.1	10.0
	Rated Capacity Heating at 17°F	Btu/h	8000	9800	14000	16800	22400
	Maximum Heating Capacity at 5°F	Btu/h	7700	9800	14000	16800	22400
Indoor Unit	COP at 5°F [Under Maximum Capacity]	W/W	1.9	2.1	2.3	2.0	2.0
	Fan Motor Output	W	25	35	35	52	52
	Indoor Air Flow [Hi2/Hi/Med/L0]	CFM	350/290/255/220	470/435/390/350	580/545/475/410	885/790/735/680	980/910/845/770
		m³/h	588/495/433/374	798/738/663/589	988/922/804/693	1503/1345/1247/1154	1662/1544/1435/1309
	Sound Pressure Level [Hi2/Hi/Med/L0]	dB[A]	42/37/34/30	40/37/34/31	48/45/42/38	44/42/40/38	47/45/43/41
	Dimension [W×H×D]	inch	[36-49/64]×[10-5/8]×[8-17/64]	[47-3/4]×[12-13/32]×[9-3/8]	[47-3/4]×[12-13/32]×[9-3/8]	[54-21/64]×[14-7/8]×[11-39/64]	[54-21/64]×[14-7/8]×[11-39/64]
		mm	934×270×210	1213×315×238	1213×315×238	1380×378×295	1380×378×295
	Packing [W×H×D]	inch	[39-3/8]×[13-3/16]×[10-15/64]	[50-25/32]×[15-7/16]×[12-33/64]	[50-25/32]×[15-7/16]×[12-33/64]	[58-55/64]×[18-57/64]×[16-9/64]	[58-55/64]×[18-57/64]×[16-9/64]
		mm	1000×335×260	1290×392×318	1290×392×318	1495×480×410	1495×480×410
	Net Weight	lbs[kg]	19.8[9.0]	30.9[14.0]	30.9[14.0]	54.0[24.5]	54.0[24.5]
	Gross Weight	lbs[kg]	23.1[10.5]	37.5[17.0]	37.5[17.0]	63.9[29.0]	63.9[29.0]
	Drainage Water Pipe Diameter	inch[mm]	1-1/4[Φ32]				
Outdoor Unit	Compressor	Type	KSN108D32UFZR	KSN108D32UFZR	KTN150D42UFZD	KTM240D43UKT	ATH356SKRC9EQ
		R.L.A	5.4	5.4	7.7	9.3	11.5
	Fan Motor	F.L.A	0.4	0.4	0.34	0.34	0.62
	Fan Motor Output	W	40	40	80	80	138
	Air Flow	CFM	1130	1130	1935	1935	2823
		m³/h	1920	1920	3290	3290	4800
	Sound Pressure Level	dB[A]	55	55	55	55	55
	Throttle Type		Electronic Expansion Valve				
	Dimension [W×H×D]	inch	[31-57/64]×[23-1/32]×[11-1/32]	[31-57/64]×[23-1/32]×[11-1/32]	[35-7/16]×[26-3/16]×[12-19/32]	[35-7/16]×[26-3/16]×[12-19/32]	[37-13/32]×[38-31/32]×[12-19/32]
		mm	810×585×280	810×585×280	900×665×320	900×665×320	950×990×320
	Packing [W×H×D]	inch	[37-9/10]×[25-1/10]×[15-1/5]	[37-9/10]×[25-1/10]×[15-1/5]	[41-3/5]×[28-1/5]×[16-4/5]	[41-3/5]×[28-1/5]×[16-4/5]	[42-1/10]×[44-1/10]×[18-1/2]
		mm	963×637×387	963×637×387	1056×717×427	1056×717×427	1070×1120×470
	Net Weight	lbs[kg]	77.2[35.0]	77.2[35.0]	97.0[44.0]	101.4[46.0]	194.0[88.0]
	Gross Weight	lbs[kg]	83.8[38.0]	83.8[38.0]	105.8[48.0]	110.2[50.0]	217.2[98.5]
Refrigerant type/Quantity	Type		R32				
	Refrigerant Charge	lbs[kg]	1.98[0.9]	1.98[0.9]	2.65[1.2]	3.09[1.4]	5.73[2.6]

GENERAL DATA

Indoor Unit Model Name			PPK-B09UFA1DQ	PPK-B12UFA1DQ	PPK-B18UFA1DQ	PPK-B24UFA1DQ	PPK-B30UFA1DQ
Outdoor Unit Model Name			PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1
Refrigerant pipe	Liquid side	inch[mm]	1/4[Φ6.35]	1/4[Φ6.35]	[1/4] Φ6.35	1/4[Φ6.35]	3/8[Φ9.53]
	Gas side	inch[mm]	1/2[Φ12.7]	1/2[Φ12.7]	[1/2] Φ12.7	1/2[Φ12.7]	5/8[Φ15.88]
	Max. pipe length	ft[m]	164[50]	164[50]	164[50]	164[50]	246[75]
	Max. Height difference	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.194[18]	0.194[18]	0.194[18]	0.194[18]	0.376[35]
	Chargeless	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
Design pressure	H/L	PSIG	602/321	602/321	602/321	602/321	602/321
		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Guaranteed Temperature Operation Range	Cooling	°F[°C]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]

NOTE:

- Rating conditions:

Cooling:

Indoor: DB80°F (26.7 °C)/ WB67°F (19.4°C) Outdoor: DB95°F (35°C)/WB75°F (23.9°C)

Heating:

Indoor: DB70°F (21.1°C)/ WB60°F (15.6°C) Outdoor: DB47°F (8.3°C)/ WB43°F (6.1°C)

2.6 Air Handlers Type

Indoor Unit Model Name			JPE18B3XB2HS1A	JPE24B3XC2HS1A	JPE30B3XD2HS1A	JPE36B3XD2HS1A	JPE48C3XG2HS1A
Outdoor Unit Model Name			PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Power Supply		V,ph,Hz	208/230,60	208/230,60	208/230,60	208/230,60	208/230,60
Max. power input		W	3120	3680	5560	6430	6690
Max current input		A	13.5	16	24.2	27.9	29.1
Cooling	Rated Capacity	Btu/h	18000	22000	28000	33000	48000
	Capacity Range [Min~Max]	Btu/h	6000~21000	10000~26000	13000~36000	13000~41000	15000~48000
	Power Input	W	1540	1880	2400	3300	4110
	Current	A	6.7	8.2	10.4	14.3	17.9
	EER2	Btu/h/W	11.7	11.7	11.7	10.0	11.7
	SEER2	Btu/h/W	18.0	18.0	18.0	18.0	18.0
Heating	Rated Capacity	Btu/h	19000	24000	32000	38000	48000
	Capacity Range [Min~Max]	Btu/h	4500~24000	10000~28000	15000~42000	15000~46000	15500~53000
	Power Input	W	1465	2010	2735	2930	3910
	Current	A	6.4	8.7	11.9	12.7	17.0
	COP2	W/W	3.80	3.50	3.43	3.80	3.60
	HSPF2	Btu/h/W	8.5	8.5	8.5	8.5	8.5
	Rated Capacity Heating at 17°F	Btu/h	17000	19500	28000	28000	40000
	Maximum Heating Capacity at 5°F	Btu/h	14800	18100	32500	32500	36400
	COP at 5°F [Under Maximum Capacity]	W/W	2.2	1.9	2.0	2.0	2.0
Indoor Unit	Motor	HP	1/3	1/3	1/2	1/2	3/4
	Dimension [W×H×D]	inch	[17-1/2]×[45-5/8]×[21-7/16]	[17-1/2]×[48-3/8]×[21-7/16]	[17-1/2]×[48-3/8]×[21-7/16]	[17-1/2]×[48-3/8]×[21-7/16]	21×60×[21-7/16]
		mm	445×1159×545	445×1229×545	445×1229×545	445×1229×545	533×1524×545
	Packing [W×H×D]	inch	18×49×25	18×52×25	18×52×25	18×52×25	25×63×22
		mm	457×1245×635	457×1321×635	457×1321×635	457×1321×635	635×1600×559
	Net Weight	lbs[kg]	93.0[42.2]	99.0[44.9]	100.0[45.4]	100.0[45.4]	129.0[58.5]
	Gross Weight	lbs[kg]	101.0[45.8]	107.0[48.5]	108.0[49.0]	108.0[49.0]	140.0[63.5]
	Drainage Water Pipe Diameter	inch[mm]	3/4[19.05]				
Outdoor Unit	Compressor	Type	KTN150D42UFZD	KTM240D43UKT	ATH356SKRC9EQ	ATH356SKRC9EQ	ATH356SKRC9EQ
		R.L.A	7.7	9.3	11.5	11.5	11.5
	Fan Motor	F.L.A	0.34	0.34	0.62	0.62	0.62
	Fan Motor Output	W	80	80	138	138	138
	Air Flow	CFM	1935	1935	2823	2823	4823
		m³/h	3290	3290	4800	4800	8200
	Sound Pressure Level	dB[A]	55	55	58	58	59
	Throttle Type		Electronic Expansion Valve				
	Dimension [W×H×D]	inch	[35-7/16]×[26-3/16]×[12-19/32]	[35-7/16]×[26-3/16]×[12-19/32]	[37-13/32]×[38-31/32]×[12-19/32]	[37-13/32]×[38-31/32]×[12-19/32]	[37-13/32]×[54-21/64]×[12-19/32]
		mm	900×665×320	900×665×320	950×990×320	950×990×320	950×1380×320
	Packing [W×H×D]	inch	[41-3/5]×[28-1/5]×[16-4/5]	[41-3/5]×[28-1/5]×[16-4/5]	[42-1/10]×[44-1/10]×[18-1/2]	[42-1/10]×[44-1/10]×[18-1/2]	[42-1/10]×[59-4/5]×[18-1/2]
		mm	1056×717×427	1056×717×427	1070×1120×470	1070×1120×470	1070×1520×470
	Net Weight	lbs[kg]	97.0[44.0]	101.4[46.0]	194.0[88.0]	194.0[88.0]	250.2[113.5]
Gross Weight	lbs[kg]	105.8[48.0]	110.0[50.0]	217.2[98.5]	217.2[98.5]	273.4[124.0]	
Refrigerant type/Quantity	Type		R32				
	Refrigerant Charge	lbs[kg]	2.65[1.2]	3.09[1.4]	5.73[2.6]	5.73[2.6]	7.50[3.4]

GENERAL DATA

Indoor Unit Model Name			JPE18B3XB2HS1A	JPE24B3XC2HS1A	JPE30B3XD2HS1A	JPE36B3XD2HS1A	JPE48C3XG2HS1A
Outdoor Unit Model Name			PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Refrigerant pipe	Liquid side	inch[mm]	[3/8] Φ9.53	[3/8] Φ9.53	[3/8] Φ9.53	[3/8] Φ9.53	[3/8] Φ9.53
	Gas side	inch[mm]	[3/4] Φ19.05	[3/4] Φ19.05	[3/4] Φ19.05	[3/4] Φ19.05	[7/8] Φ22.22
	Max. pipe length	ft[m]	164[50]	164[50]	246[75]	246[75]	246[75]
	Max. Height difference	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
	Add Refrigerant Amount	oz/ft[g/m]	0.194[18]	0.194[18]	0.376[35]	0.376[35]	0.376[35]
	Chargeless	ft[m]	98.4[30]	98.4[30]	98.4[30]	98.4[30]	98.4[30]
Design pressure	H/L	PSIG	602/321	602/321	602/321	602/321	602/321
		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Guaranteed Temperature Operation Range	Cooling	°F[°C]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]	0-115[-18~46]
	Heating	°F[°C]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]	-13-75[-25~24]

NOTE:

- Rating conditions:

Cooling:

Indoor: DB80°F (26.7 °C)/ WB67°F (19.4°C) Outdoor: DB95°F (35°C)/WB75°F (23.9°C)

Heating:

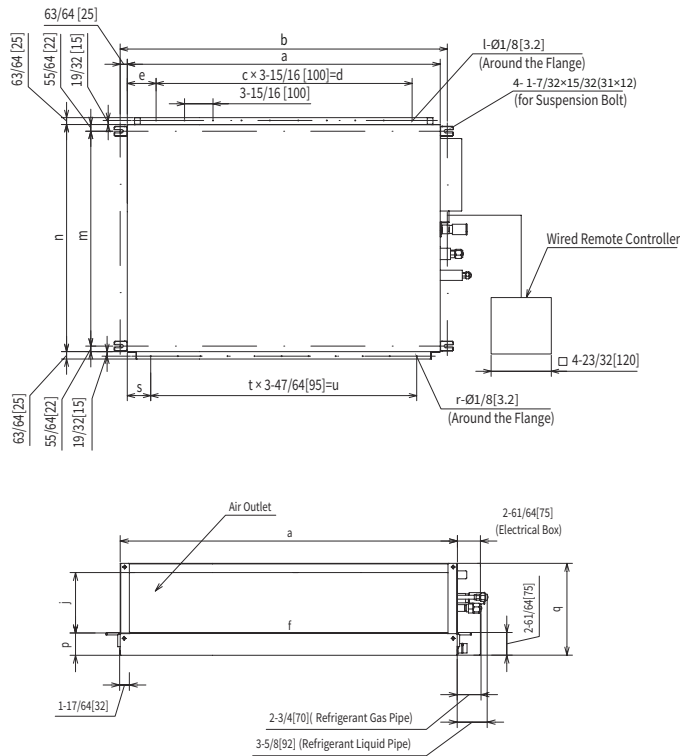
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3. Dimensional Data

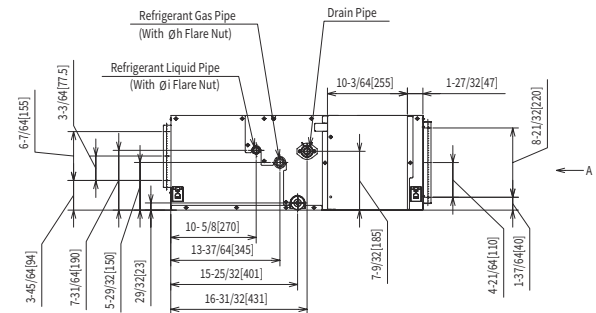
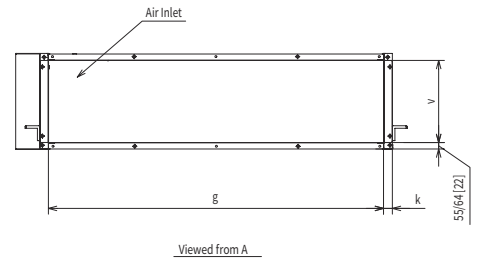
3.1 Indoor Units

< MESP Ducted Type >

Models: PPIM-B09~48UFA1DQ



Unit: in. [mm]



Model Capacity [Btu/h]	a	b	c*	d	e	f	g	h	i	j	k
9K	25-19/32 (650)	27-9/16 (700)	5	19-11/16 (500)	2-61/64 (75)	22-59/64 (582)	23-55/64 (606)	1/2 [12.7]	1/4 [6.35]	5-7/16 (138)	1-1/32 [26]
12K	25-19/32 (650)	27-9/16 (700)	5	19-11/16 (500)	2-61/64 (75)	22-59/64 (582)	23-55/64 (606)	1/2 [12.7]	1/4 [6.35]	5-7/16 (138)	1-1/32 [26]
18K	43-5/16 [1100]	45-9/32 [1150]	10	39-3/8 [1000]	1-31/32 [50]	40-25/32 [1036]	41-7/32 [1047]	1/2 [12.7]	1/4 [6.35]	7-23/32 [196]	1-1/32 [26]
24K	43-5/16 [1100]	45-9/32 [1150]	10	39-3/8 [1000]	1-31/32 [50]	40-25/32 [1036]	41-7/32 [1047]	1/2 [12.7]	1/4 [6.35]	7-23/32 [196]	1-1/32 [26]
30K	43-5/16 [1100]	45-9/32 [1150]	10	39-3/8 [1000]	1-31/32 [50]	40-25/32 [1036]	41-7/32 [1047]	5/8 [15.88]	3/8 [9.53]	7-23/32 [196]	1-1/32 [26]
36K	55-1/8 [1400]	57-3/32 [1450]	12	47-1/4 [1200]	3-55/64 [98]	52-19/32 [1336]	53-1/32 [1347]	5/8 [15.88]	3/8 [9.53]	7-23/32 [196]	1-1/32 [26]
48K	55-1/8 [1400]	57-3/32 [1450]	12	47-1/4 [1200]	3-55/64 [98]	52-19/32 [1336]	53-1/32 [1347]	5/8 [15.88]	3/8 [9.53]	7-23/32 [196]	1-1/32 [26]

Model Capacity [Btu/h]	l	m	n	p	q	r	s	t*	u	v
9K	23/32 [18]	26-39/64 (676)	28-11/32 (720)	1-11/16 [43]	10-5/8 [270]	23/32 [18]	2-61/64 (75)	5	19-11/16 (500)	8-55/64 [225]
12K	23/32 [18]	26-39/64 (676)	28-11/32 (720)	1-11/16 [43]	10-5/8 [270]	23/32 [18]	2-61/64 (75)	5	19-11/16 (500)	8-55/64 [225]
18K	1-1/32 [26]	29-49/64 [756]	31-1/2 [800]	2-7/8 [73]	11-13/16 [300]	1-1/32 [26]	2-23/32 [69]	10	37-13/32 [950]	10-5/64 [256]
24K	1-1/32 [26]	29-49/64 [756]	31-1/2 [800]	2-7/8 [73]	11-13/16 [300]	1-1/32 [26]	2-23/32 [69]	10	37-13/32 [950]	10-5/64 [256]
30K	1-1/32 [26]	29-49/64 [756]	31-1/2 [800]	2-7/8 [73]	11-13/16 [300]	1-1/32 [26]	2-23/32 [69]	10	37-13/32 [950]	10-5/64 [256]
36K	1-17/64 [32]	29-49/64 [756]	31-1/2 [800]	2-7/8 [73]	11-13/16 [300]	1-11/32 [34]	3-15/64 [82]	13	48-5/8 [1235]	10-5/64 [256]
48K	1-17/64 [32]	29-49/64 [756]	31-1/2 [800]	2-7/8 [73]	11-13/16 [300]	1-11/32 [34]	3-15/64 [82]	13	48-5/8 [1235]	10-5/64 [256]

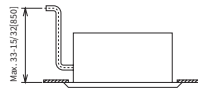
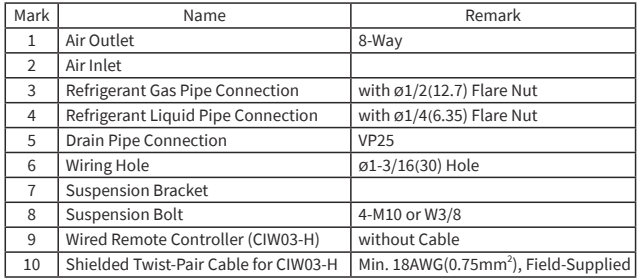
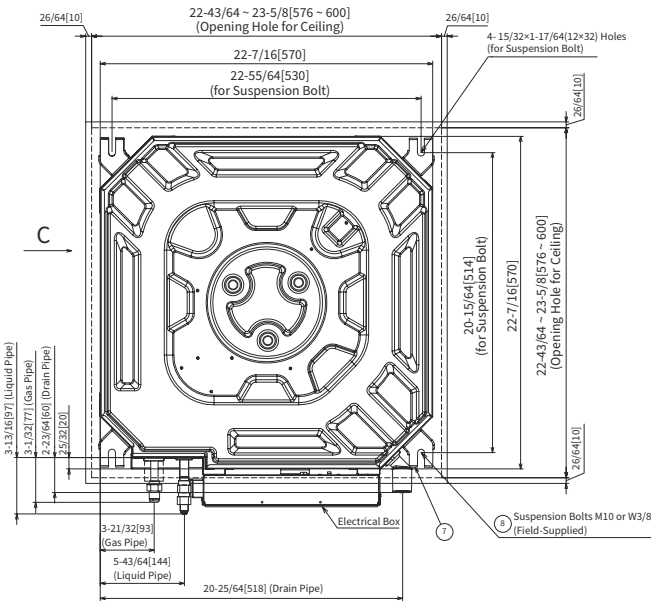
* The number of c and t represents the quantity.

DIMENSIONAL DATA

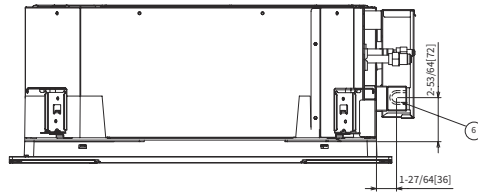
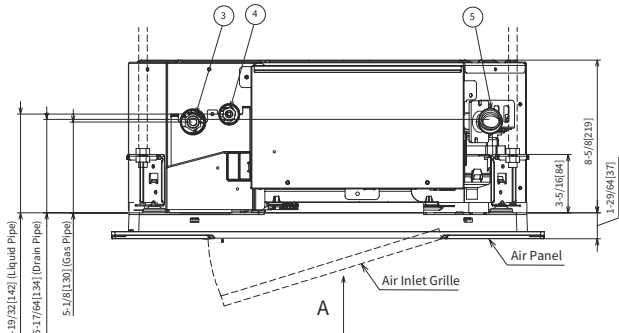
< 4-Way Mini Cassette Type >

Models: PCIM-B09~12UFA1DQ with Air Panel PHKM50PAQ1

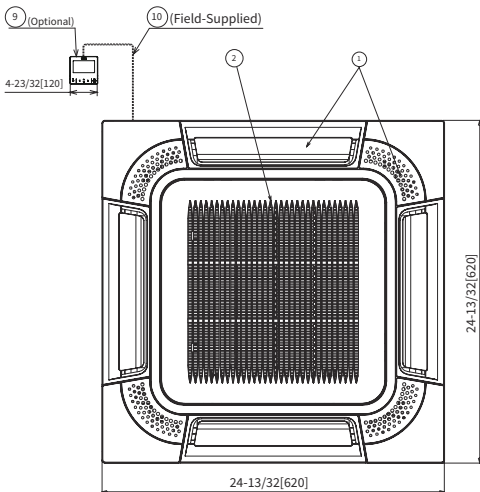
Unit: in.[mm]



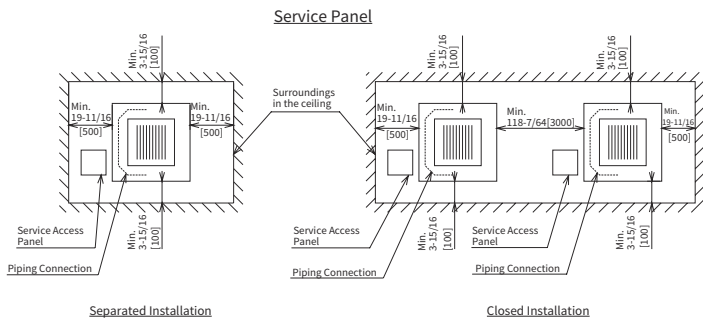
Lifting Drain Piping



Viewed from C



Viewed from A



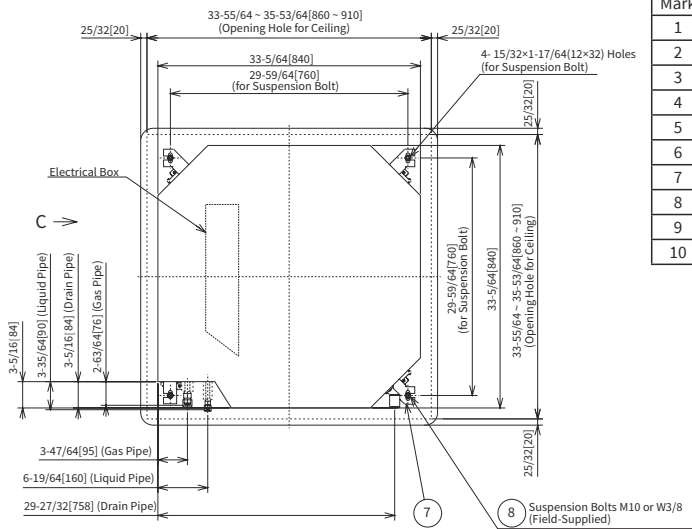
NOTE:

Distance between the wall and panel edge must be
min. 59-1/16inches(1500mm) to prevent short circuiting.

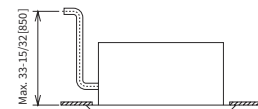
< 4-Way Cassette Type >

Models: PCI-B18UFA1DQ with Air Panel PHKF160PAQ1

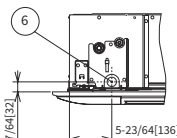
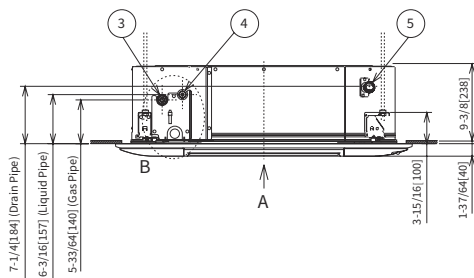
Unit: in.[mm]



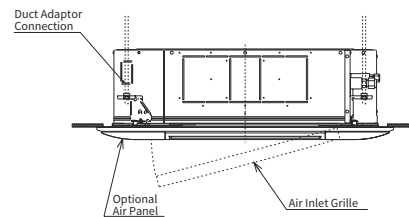
Mark	Name	Remark
1	Air Outlet	4-Way
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with $\phi 1/2(12.7)$ Flare Nut
4	Refrigerant Liquid Pipe Connection	with $\phi 1/4(6.35)$ Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole	$\phi 1-3/16(30)$ Hole
7	Suspension Bracket	
8	Suspension Bolt	4-M10 or W3/8
9	Wired Remote Controller (CIW03-H)	without Cable
10	Shielded Twist-Pair Cable for CIW03-H	Min. 18AWG(0.75mm^2), Field-Supplied



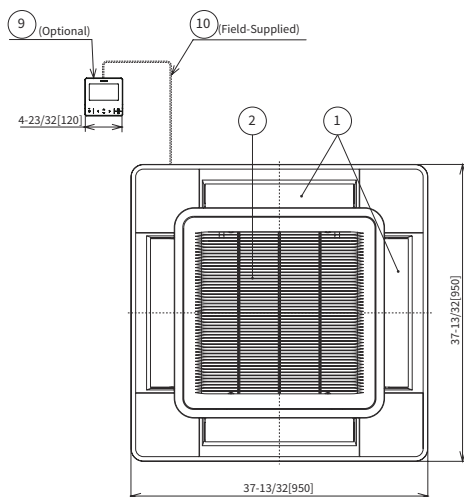
Lifting Drain Piping



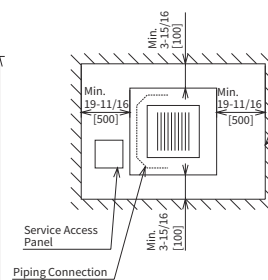
Viewed from B



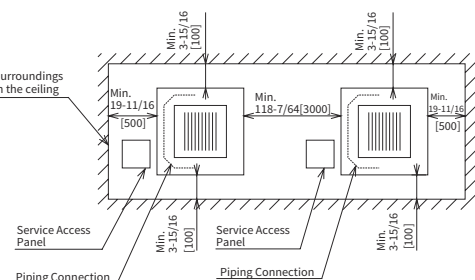
Viewed from C



Viewed from A



Separated Installation



Closed Installation

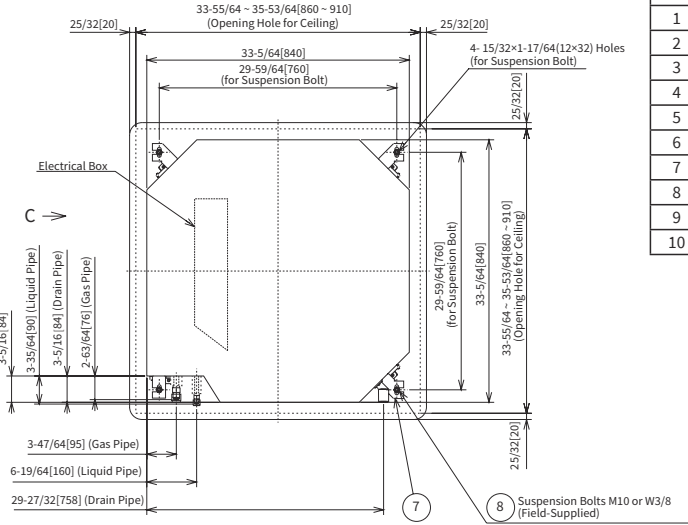
NOTE:

Distance between the wall and panel edge must be min. 59-1/16inches(1500mm) to prevent short circuiting.

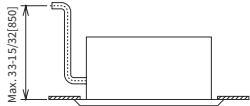
DIMENSIONAL DATA

Models: PCI-B24~48UFA1DQ with Air Panel PHKF160PAQ1

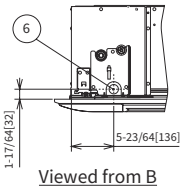
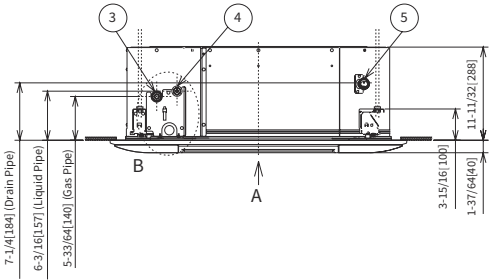
Unit: in.[mm]



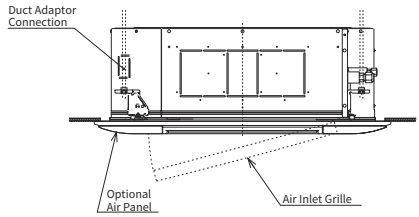
Mark	Name	Remark
1	Air Outlet	4-Way
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with ø5.8(15.88) Flare Nut
4	Refrigerant Liquid Pipe Connection	with ø3/8(9.53) Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole	ø1-3/16(30) Hole
7	Suspension Bracket	
8	Suspension Bolt	4-M10 or W3/8
9	Wired Remote Controller (CIW03-H)	without Cable
10	Shielded Twist-Pair Cable for CIW03-H	Min. 18AWG(0.75mm ²), Field-Supplied



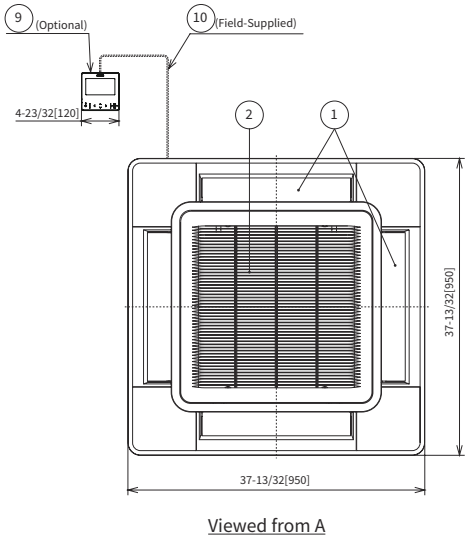
Lifting Drain Piping



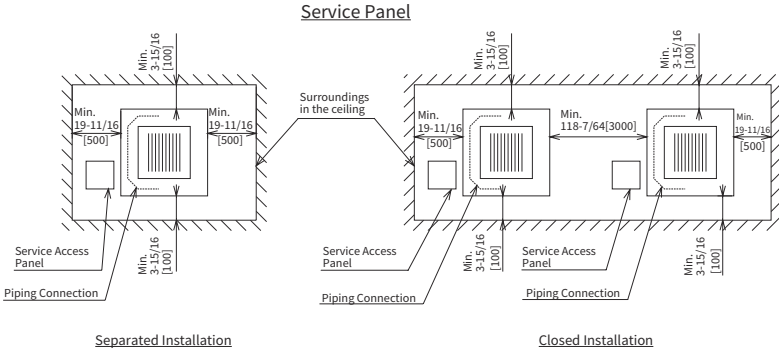
Viewed from E



Viewed from C



Viewed from A



Separated Installation

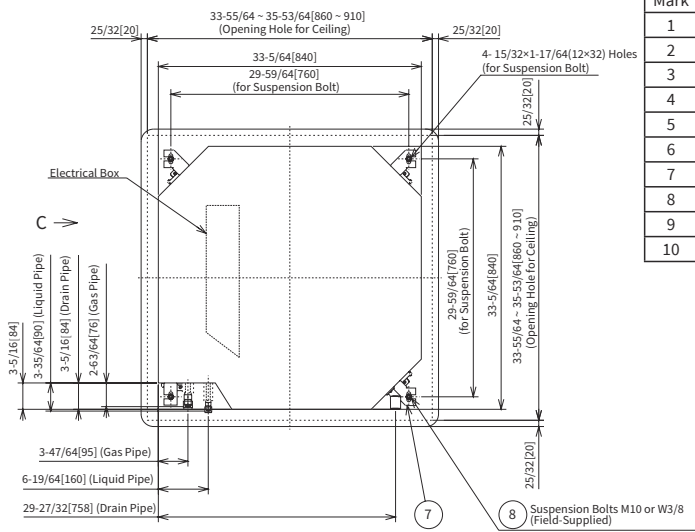
Closed Installation

NOTE:

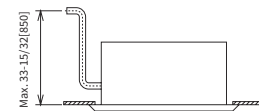
Distance between the wall and panel edge must be
min. 59-1/16inches(1500mm) to prevent short circuiting.

Models: PCI-B18UFA1DQ with Air Panel P-AP160NAE1

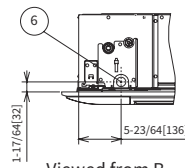
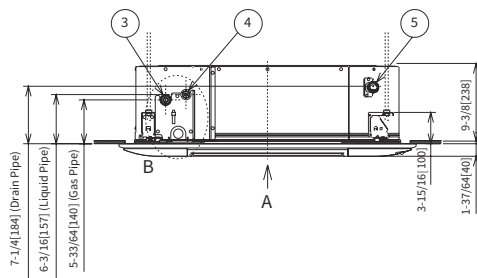
Unit: in[mm]



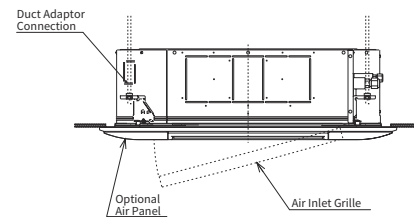
Mark	Name	Remark
1	Air Outlet	4-Way
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with $\phi 1/2(12.7)$ Flare Nut
4	Refrigerant Liquid Pipe Connection	with $\phi 1/4(6.35)$ Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole	$\phi 1-3/16(30)$ Hole
7	Suspension Bracket	
8	Suspension Bolt	4-M10 or W3/8
9	Wired Remote Controller (CIW03-H)	without Cable
10	Shielded Twist-Pair Cable for CIW03-H	Min. 18AWG(0.75mm ²), Field-Supplied



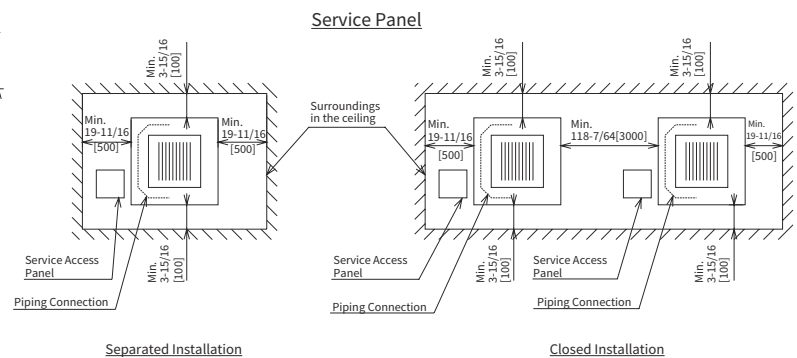
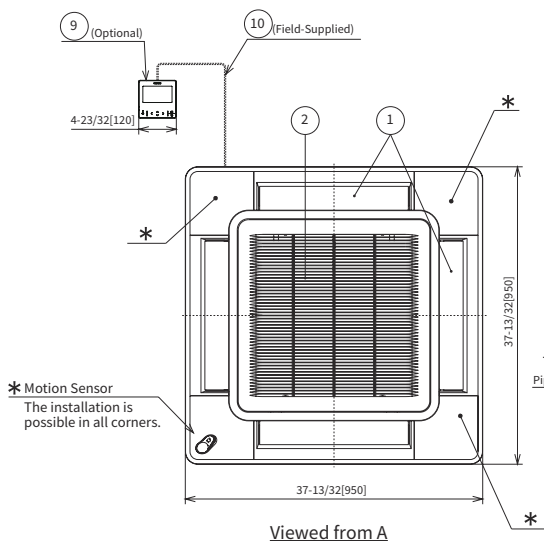
Lifting Drain Piping



Viewed from B



Viewed from C



NOTE:

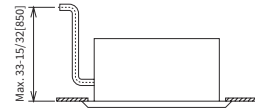
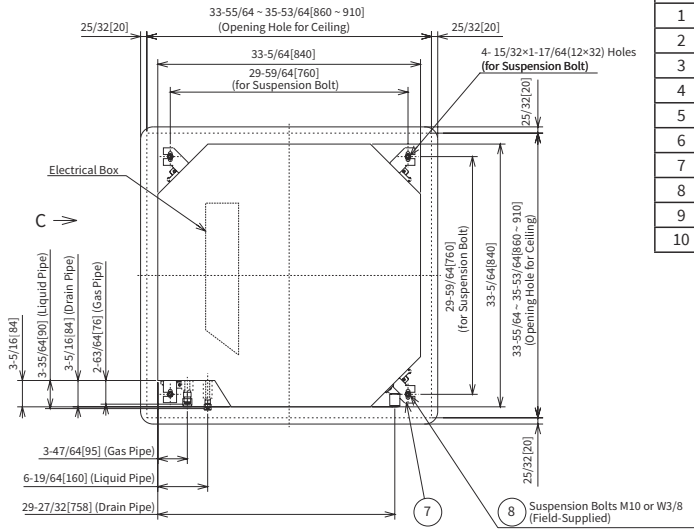
Distance between the wall and panel edge must be
min. 59-1/16inches(1500mm) to prevent short circuiting

DIMENSIONAL DATA

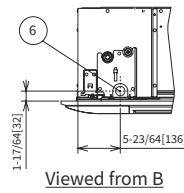
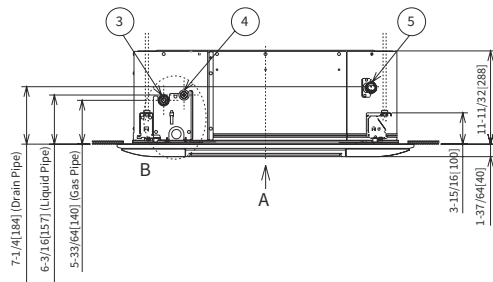
Models: PCI-B24~48UFA1DQ with Air Panel P-AP160NAE1

Unit: in[mm]

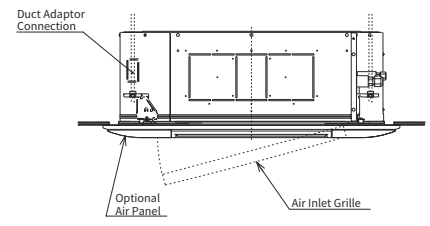
Mark	Name	Remark
1	Air Outlet	4-Way
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with $\phi 5.8(15.88)$ Flare Nut
4	Refrigerant Liquid Pipe Connection	with $\phi 3/8(9.53)$ Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole	$\phi 1-3/16(30)$ Hole
7	Suspension Bracket	
8	Suspension Bolt	4-M10 or W3/8
9	Wired Remote Controller (CIW03-H)	without Cable
10	Shielded Twist-Pair Cable for CIW03-H	Min. 18AWG(0.75mm ²), Field-Supplied



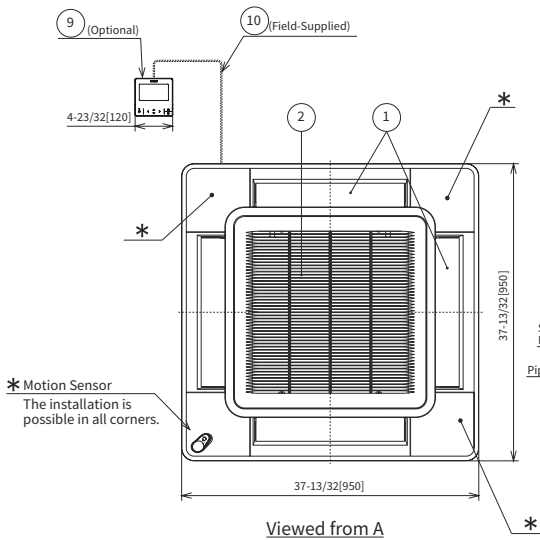
Lifting Drain Piping



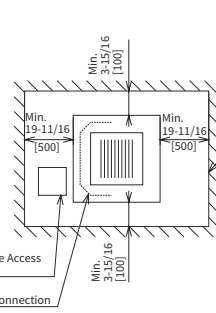
Viewed from B



Viewed from C

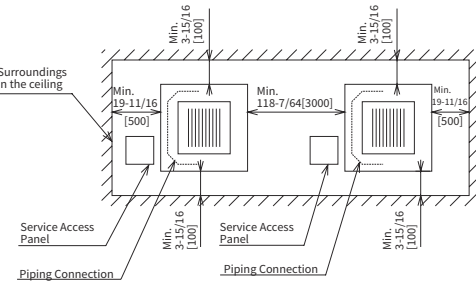


Viewed from A



Separated Installation

Service Panel



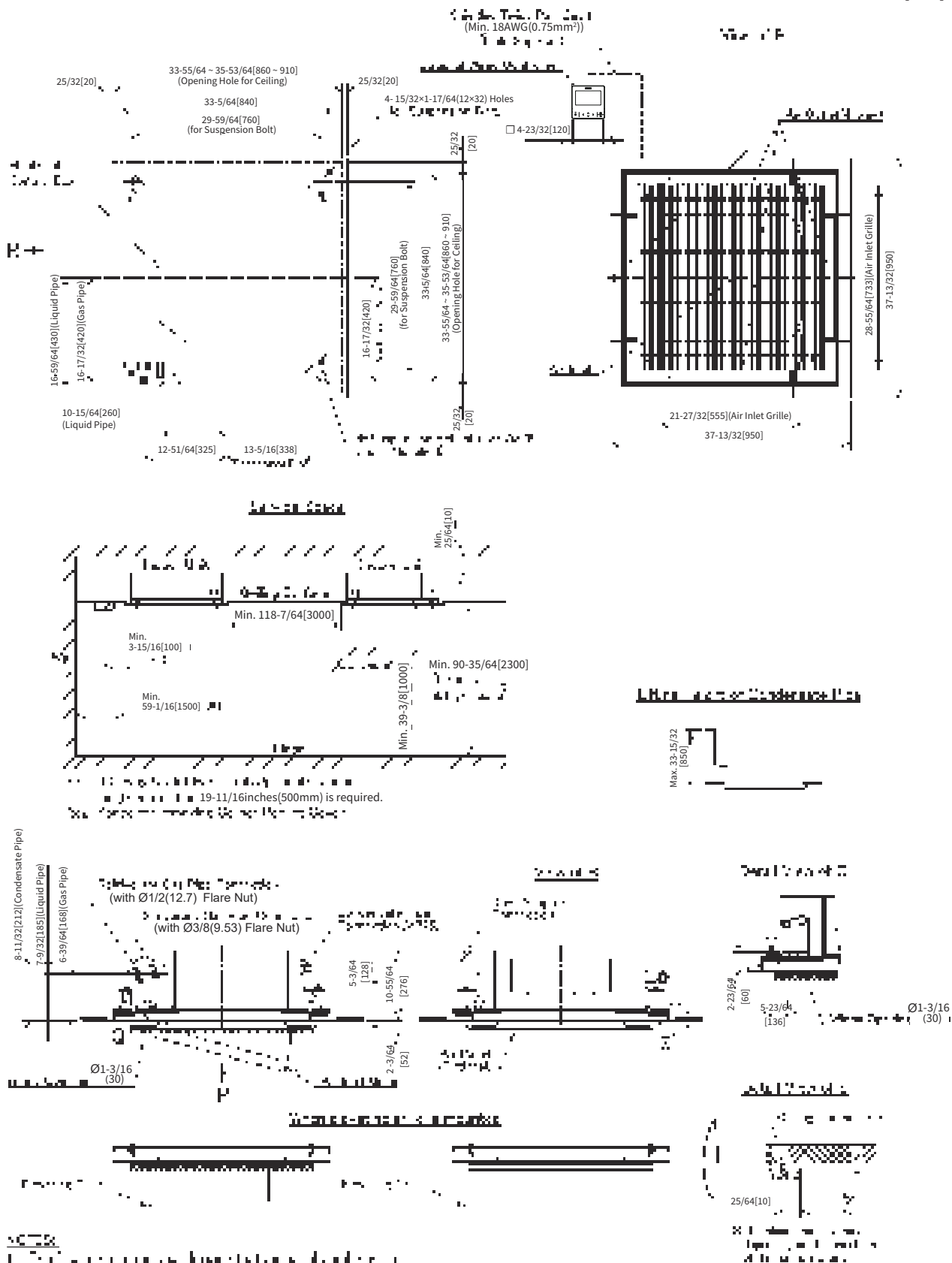
Closed Installation

NOTE:

Distance between the wall and panel edge must be min. 59-1/16inches(1500mm) to prevent short circuiting.

Models: PCI-B18UFA1DQ with Air Panel P-GP160NAP*US

Unit: in[mm]

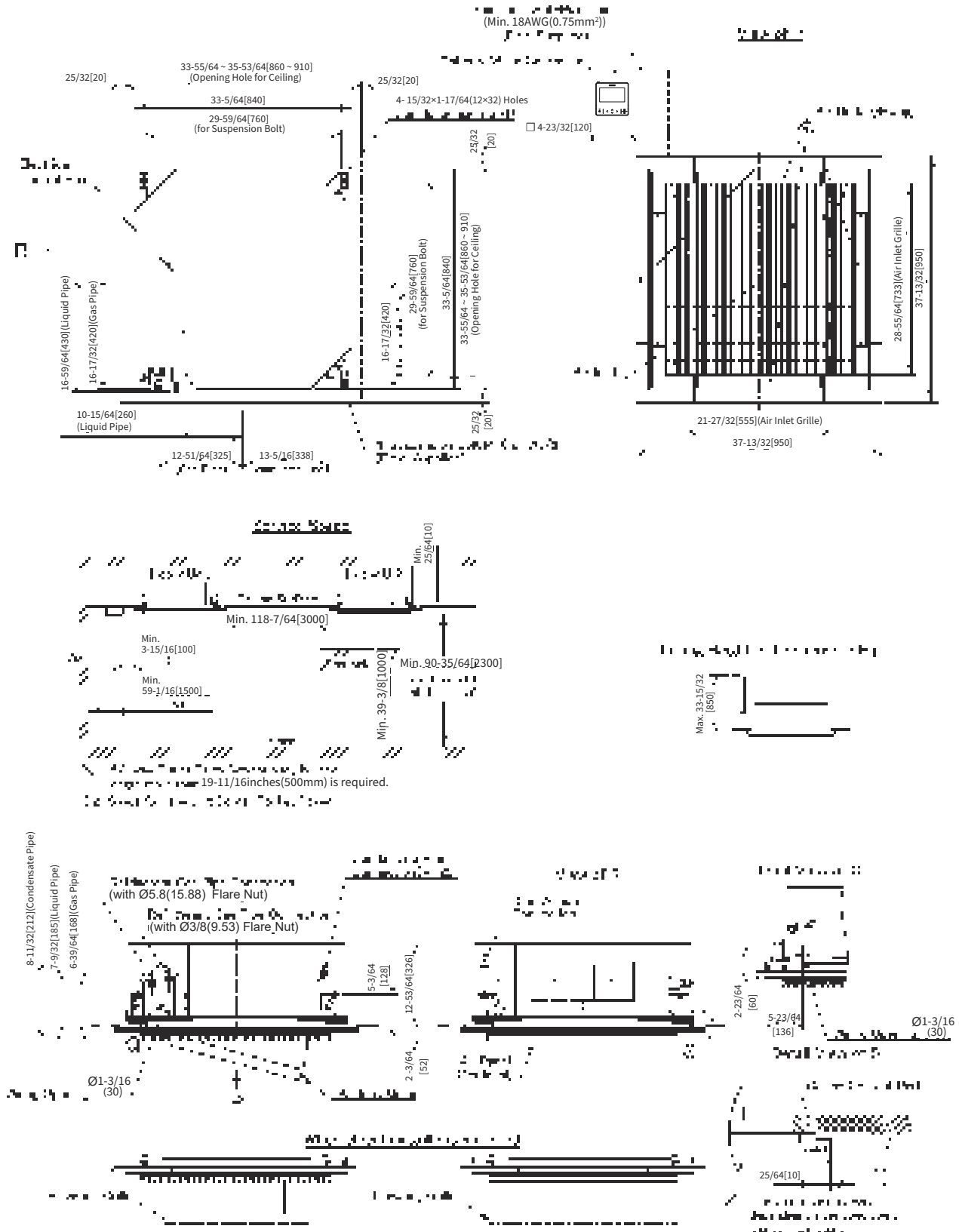


NOTES

1. The unit should be installed on a level surface.
2. The unit should be installed on a surface that is strong enough to support the weight of the unit.

Models: PCI-B24~48UFA1DQ with Air Panel P-GP160NAP*US

Unit: in[mm]



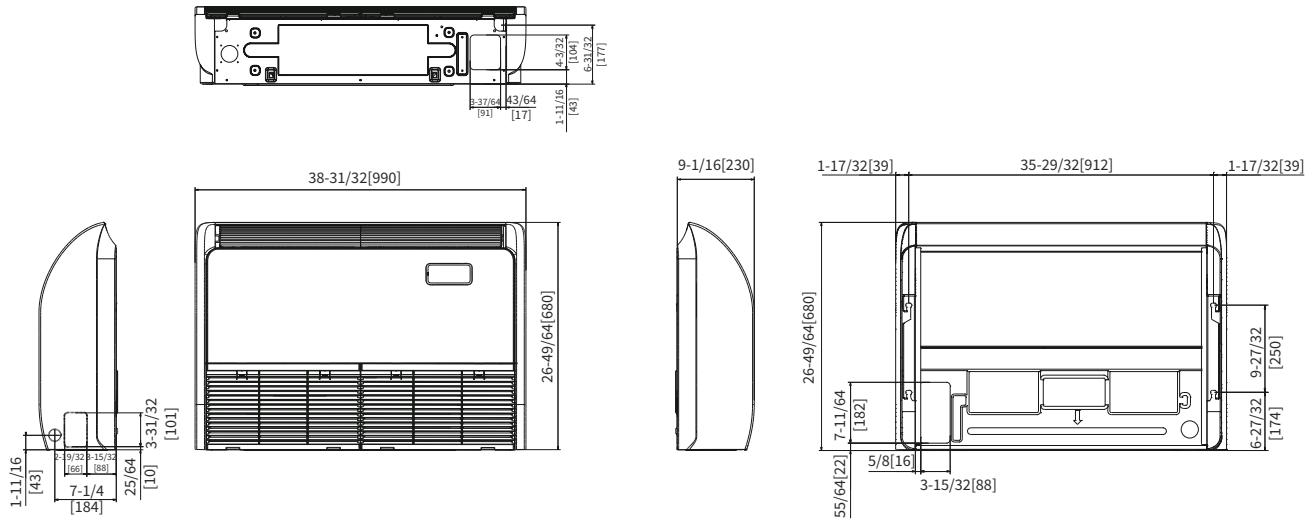
Notes:

1. The top view shows the dimensions of the air panel and the dimensions of the air panel.
2. The side view shows the dimensions of the air panel and the dimensions of the air panel.

< Ceiling Suspended Type >

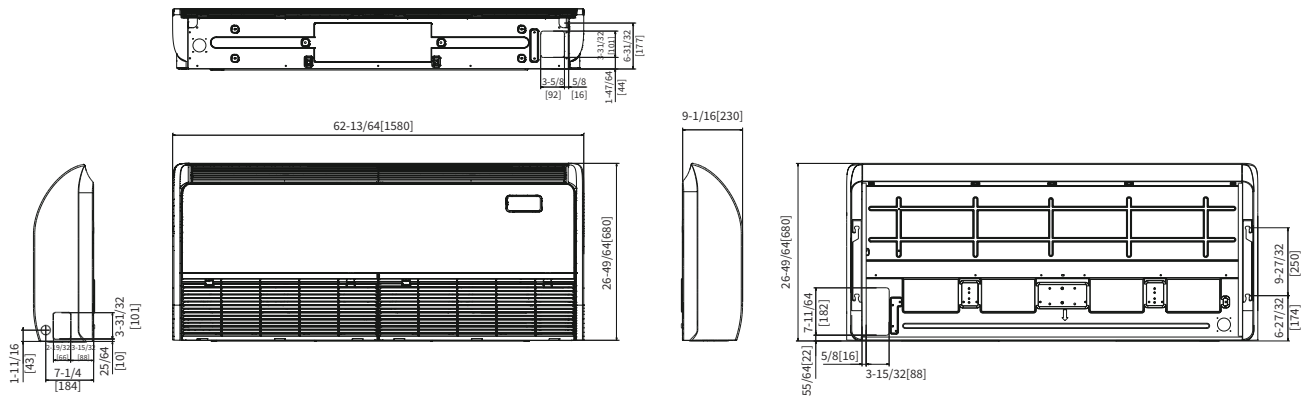
Models: PPFC-B09~18UFA1DQ

Unit: in.[mm]



Models: PPFC-B24~48UFA1DQ

Unit: in.[mm]

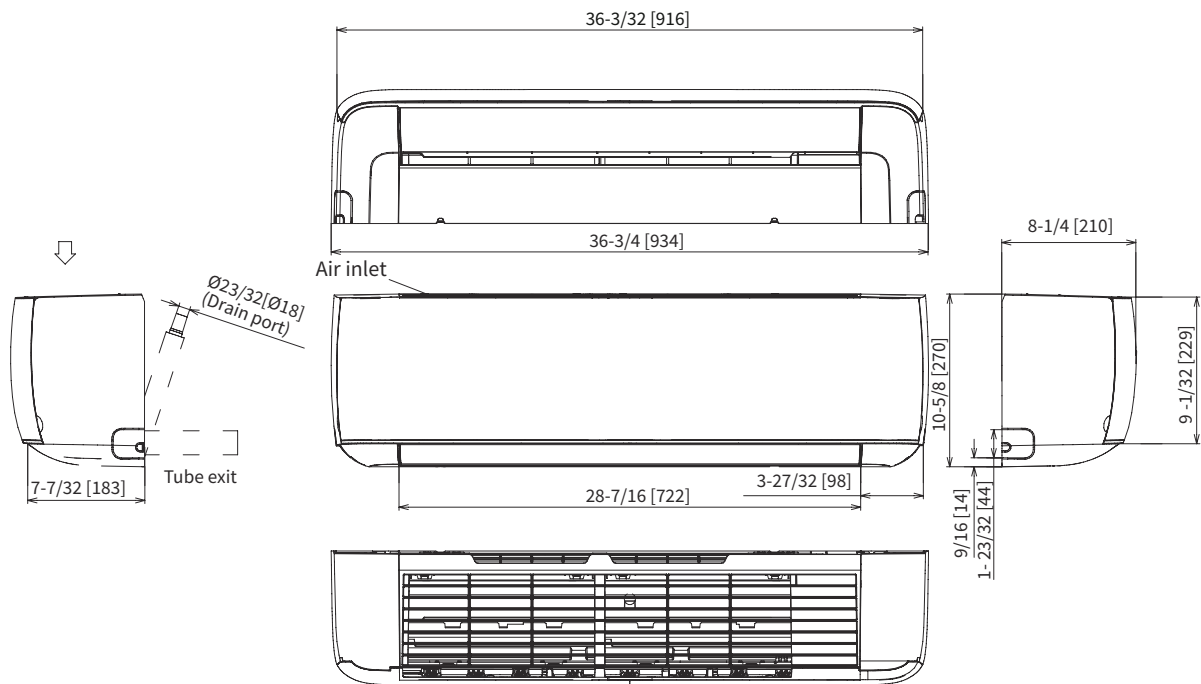


DIMENSIONAL DATA

< High-wall Type >

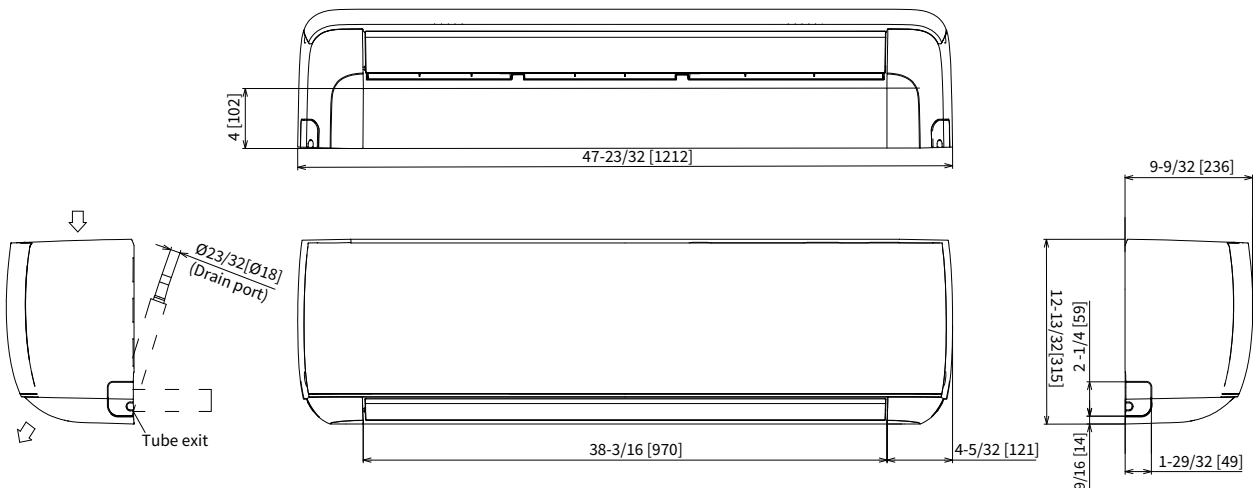
Model: PPK-B09UFA1DQ

Unit: in.[mm]



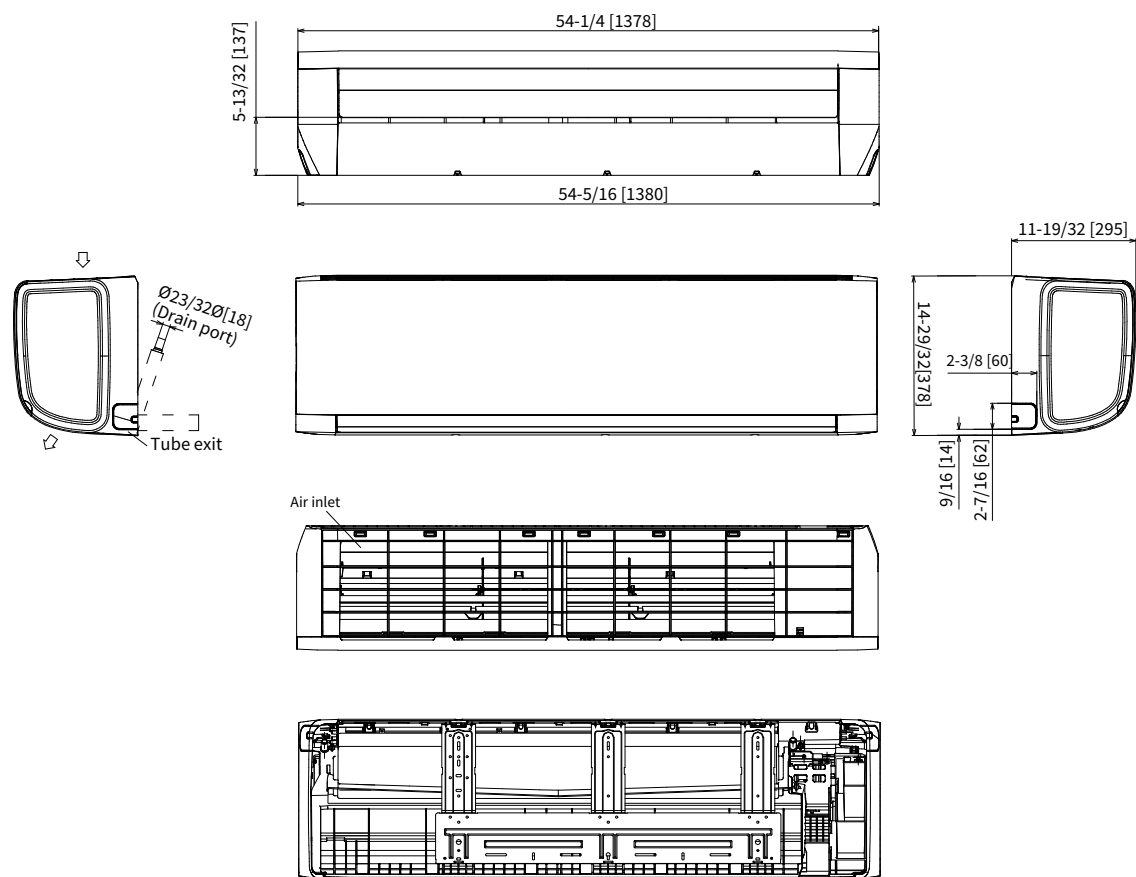
Models: PPK-B12~18UFA1DQ

Unit: in.[mm]



Models: PPK-B24~30UFA1DQ

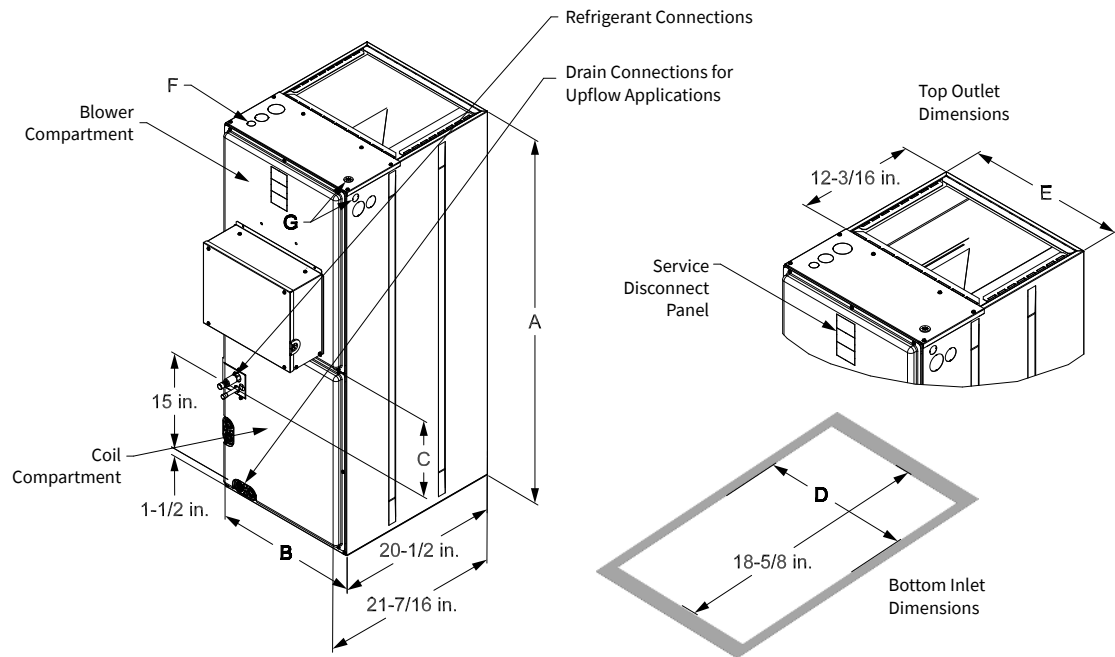
Unit: in.[mm]



DIMENSIONAL DATA

< Air Handlers Type >

Models: JPE18B3XB2HS1A/JPE24B3XC2HS1A/JPE30~36B3XD2HS1A/JPE48C3XG2HS1A



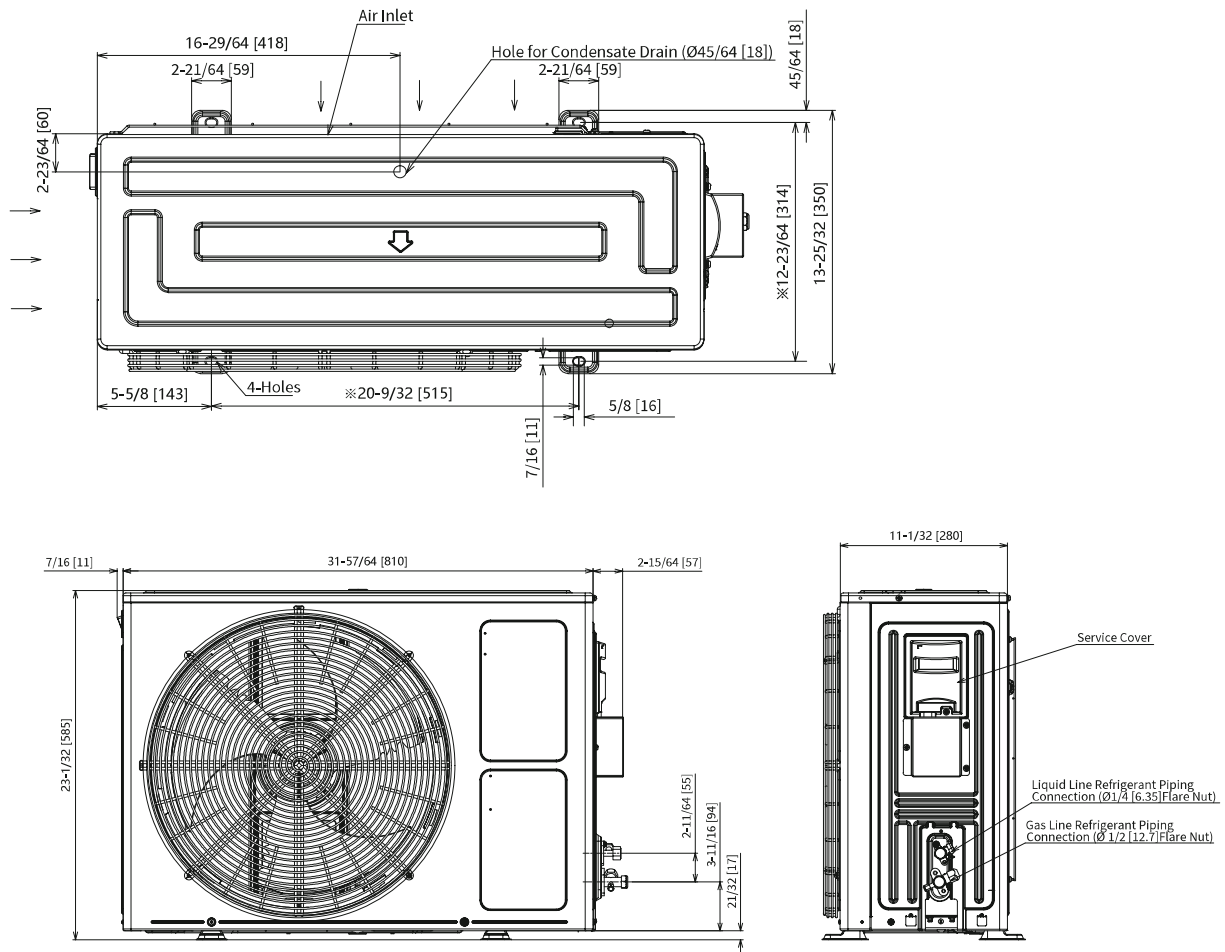
Unit: inch.

Models	Dimensions					Wiring knockouts (actual conduit size)		Refrigerant connections line size	
	A	B	C	D	E	F	G	Liquid	Vapor
	Height	Width	Opening widths			Power	Control		
JPE18B3XB2HS1A	45-5/8	17-1/2	7-1/2	16-1/2	16-1/2	7/8 (1/2) 1 3/8 (1) 1 23/32 (1 1/4)	7/8 (1/2)	3/8	3/4
JPE24B3XC2HS1A	48-3/8	17-1/2	10	16-1/2	16-1/2				
JPE30B3XD2HS1A	48-3/8	17-1/2	10	16-1/2	16-1/2				
JPE36B3XD2HS1A	48-3/8	17-1/2	10	16-1/2	16-1/2				
JPE48C3XG2HS1A	60	21	21-3/4	20	20				7/8

3.2 Outdoor Units

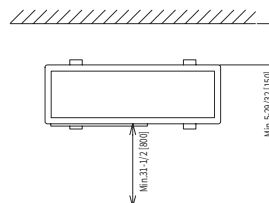
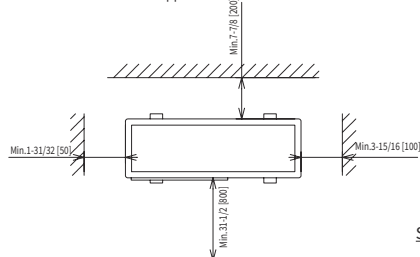
Models: PAS-09~12BUFASDQ1

Unit: in. [mm]



- In case of obstacles on both sides, and no obstacles of upper side

- In case of NO obstacles on both sides, and no obstacles of upper side

Drain Water

Drain water is caused during a defrosting operation.

1. Choose a place where well drainage is available.
Provide a groove for drain.
2. Do not provide an upward slope from the unit to avoid reverse flow of the drain.
Provide a second drain pan under the outdoor unit to collect drain water securely.

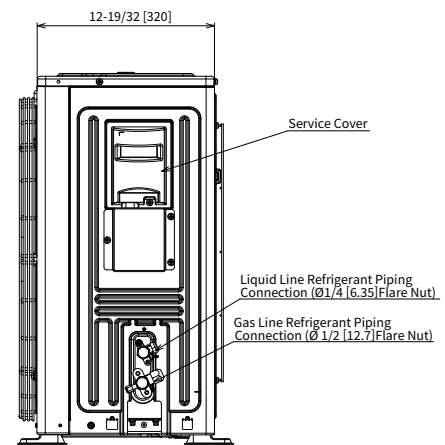
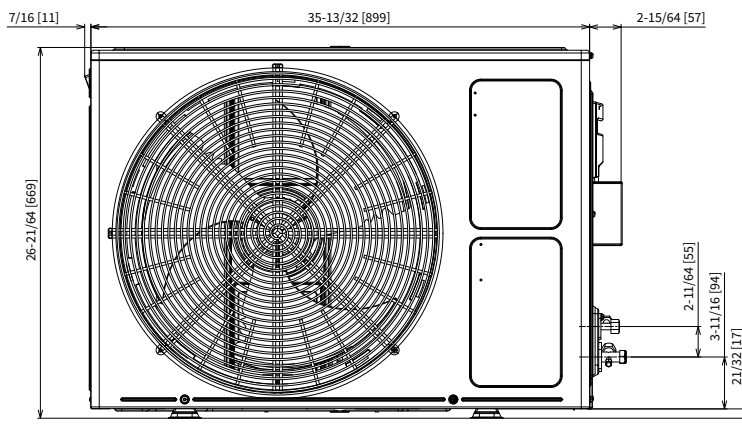
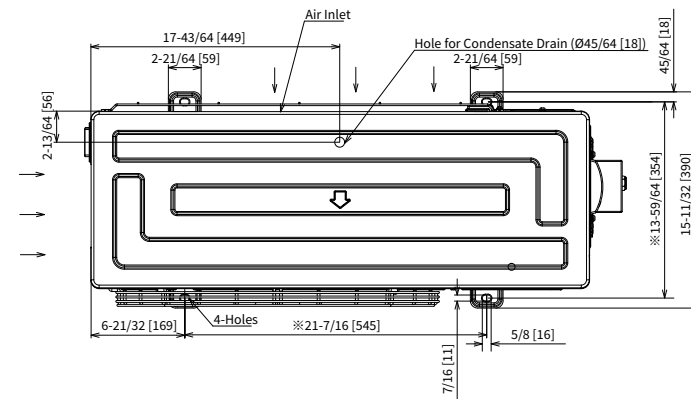
NOTES:

1. Refrigerant is factory charged for actual piping length and no additional charge less than 118-7/64 inches(3000mm) is required in the field.
Additional charge more than 118-7/64 inches(3000mm) is required in the field.
2. The dimension marked with ※ indicates the mounting pitch dimension for anchor bolts.

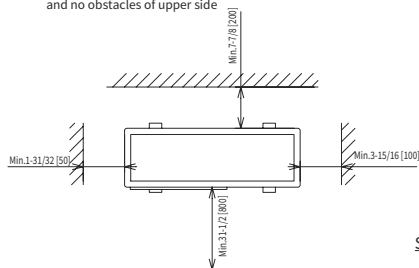
DIMENSIONAL DATA

Models: PAS-18~24BUFASDQ1

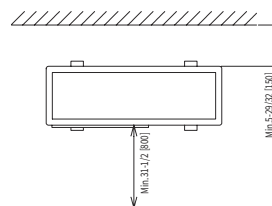
Unit: in. [mm]



- In case of obstacles on both sides, and no obstacles of upper side



- In case of NO obstacles on both sides, and no obstacles of upper side



Service Space

NOTES:

- Refrigerant is factory charged for actual piping length and no additional charge less than 118-7/64 inches(3000mm) is required in the field.
Additional charge more than 118-7/64 inches(3000mm) is required in the field.
- The dimension marked with ※ indicates the mounting pitch dimension for anchor bolts.

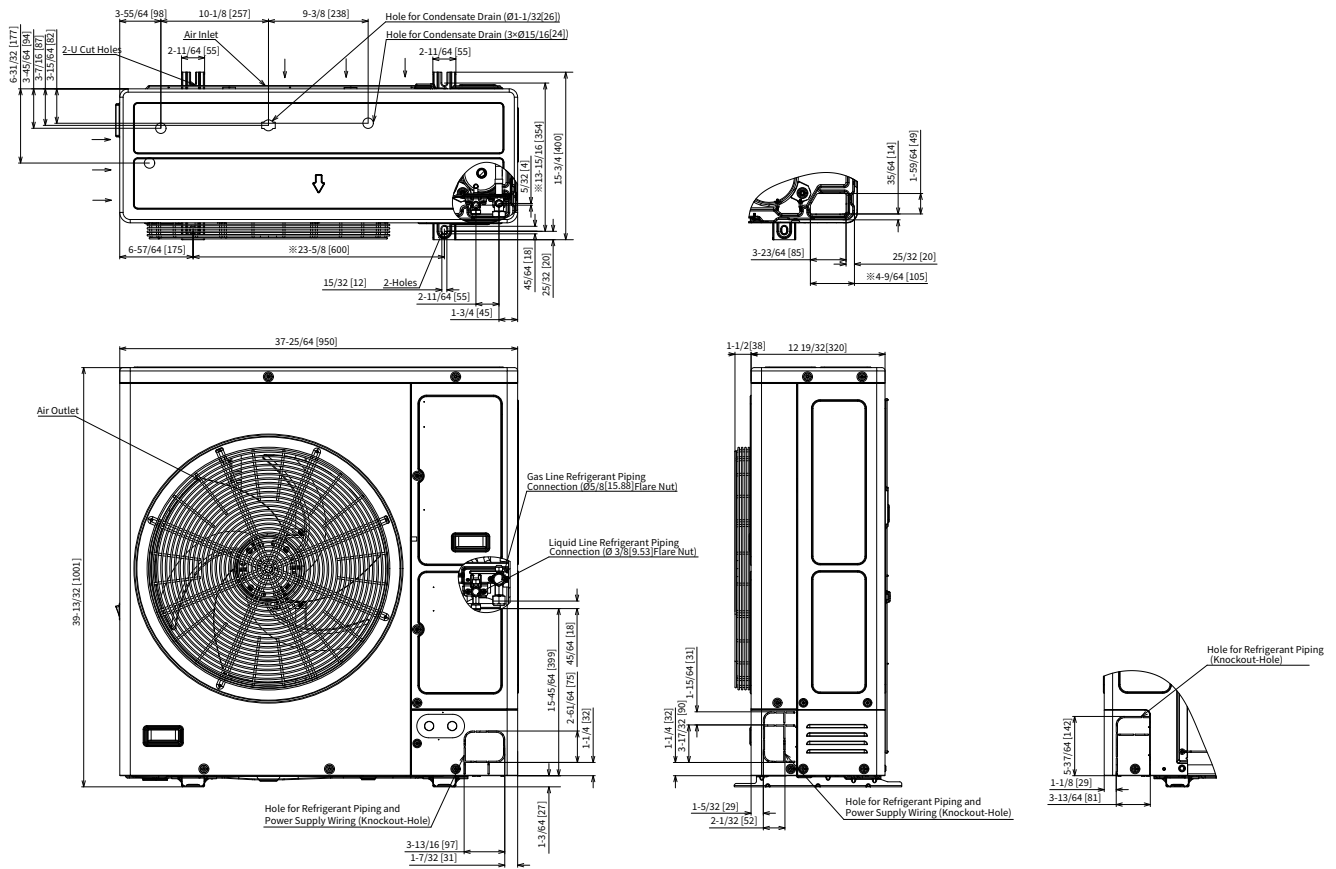
Drain Water

Drain water is caused during a defrosting operation.

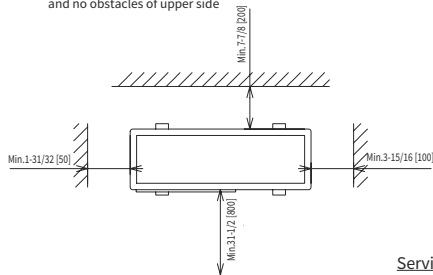
- Choose a place where well drainage is available.
Provide a groove for drain.
- Do not provide an upward slope from the unit to avoid reverse flow of the drain.
Provide a second drain pan under the outdoor unit to collect drain water securely.

Models: PAS-30~36BUFASDQ1

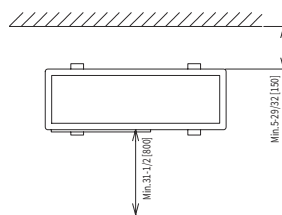
Unit: in. [mm]



- In case of obstacles on both sides, and no obstacles of upper side



- In case of NO obstacles on both sides, and no obstacles of upper side



NOTES:

1. Refrigerant is factory charged for actual piping length and no additional charge less than 118-7/64 inches(3000mm) is required in the field. Additional charge more than 118-7/64 inches(3000mm) is required in the field.
2. In the case that dimension of 105 marked with ≡ is provided, it is possible to perform piping work from the bottom without interference such as foundation, etc.
3. The dimension marked with ≡ indicates the mounting pitch dimension for anchor bolts.

Drain Water

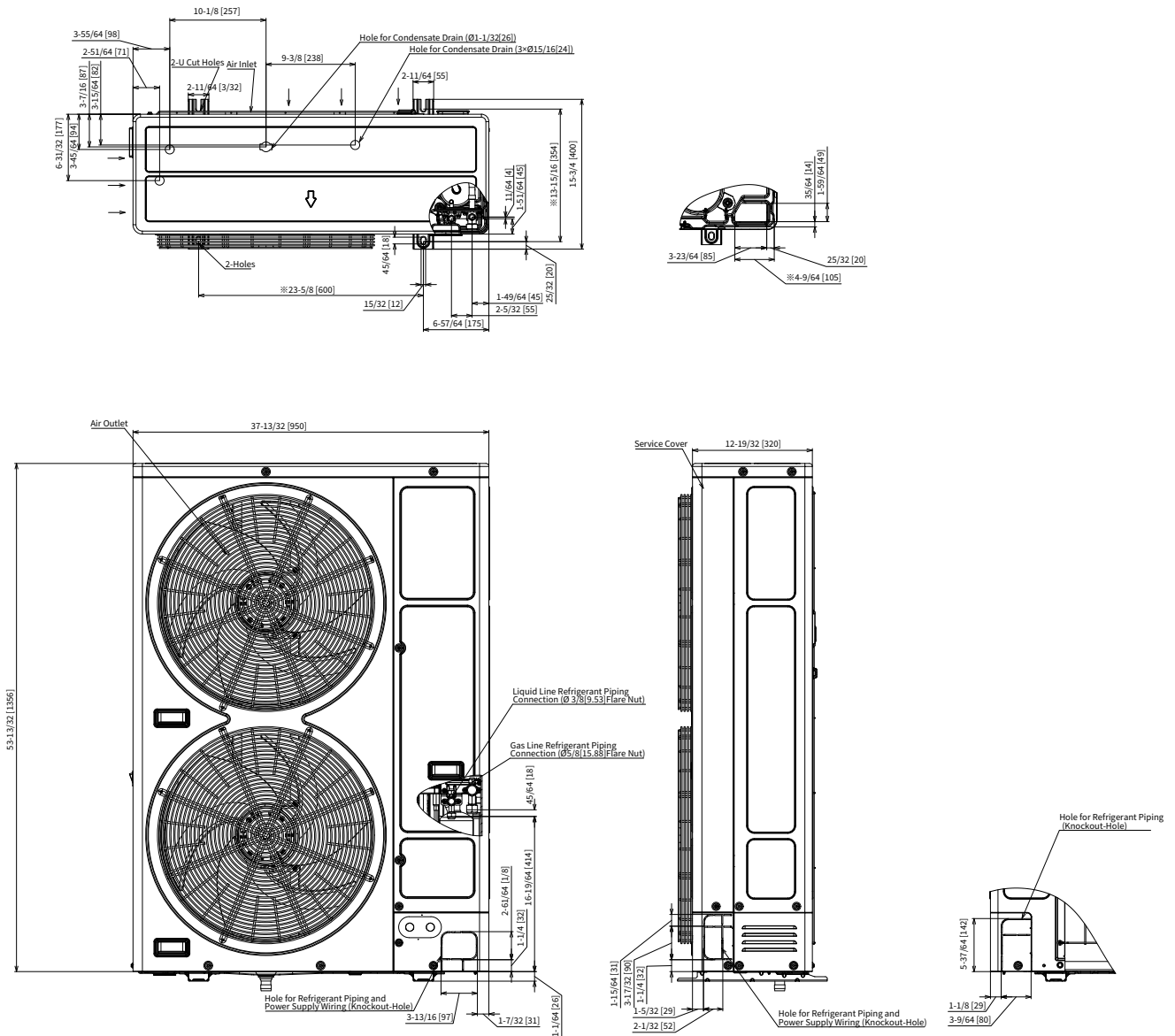
Drain water is caused during a defrosting operation.

1. Choose a place where well drainage is available. Provide a groove for drain.
2. Do not provide an upward slope from the unit to avoid reverse flow of the drain. Provide a second drain pan under the outdoor unit to collect drain water securely.

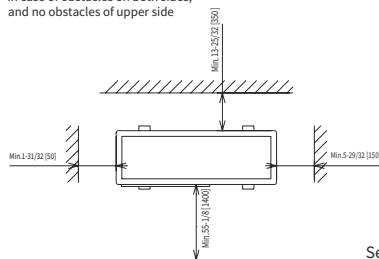
DIMENSIONAL DATA

Models: PAS-48BUFASDQ1

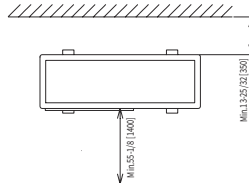
Unit: in. [mm]



- In case of obstacles on both sides, and no obstacles of upper side



- In case of NO obstacles on both sides, and no obstacles of upper side



Service Space

NOTES:

1. Refrigerant is factory charged for actual piping length and no additional charge less than 118-7/64 inches (3000mm) is required in the field. Additional charge more than 118-7/64 inches (3000mm) is required in the field.
2. In the case that dimension of 105 marked with ≡ is provided, it is possible to perform piping work from the bottom.
3. The dimension marked with ≡ indicates the mounting pitch dimension for anchor bolts.

Drain Water

Drain water is caused during a defrosting operation.

1. Choose a place where well drainage is available. Provide a groove for drain.
2. Do not provide an upward slope from the unit to avoid reverse flow of the drain. Provide a second drain pan under the outdoor unit to collect drain water securely.

4. Selection Data

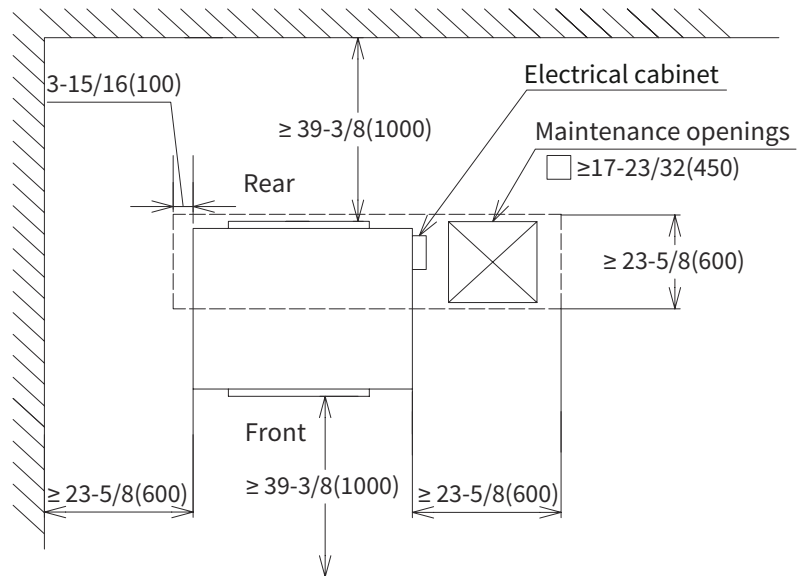
4.1 Service Space

4.1.1 Indoor Units

< MESP Ducted Type >

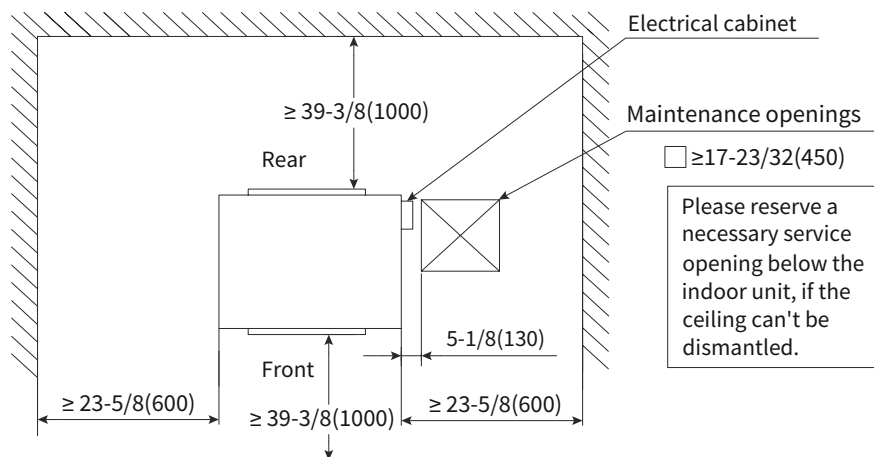
Models: PPIM-B09~B30UFA1DQ

Unit: in. (mm)



Models: PPIM-B36~B48UFA1DQ

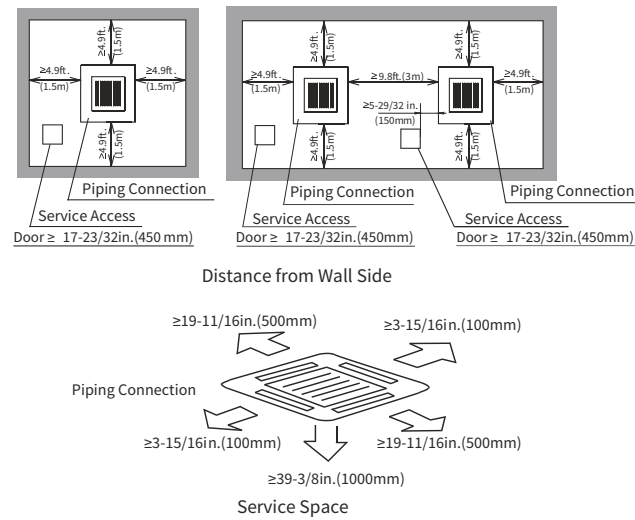
Unit: in. (mm)



< 4-Way Mini Cassette Type >

Models: PCIM-B09~B12UFA1DQ

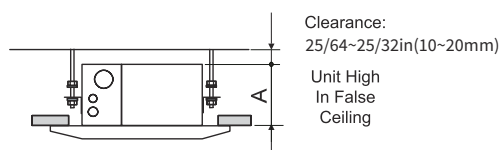
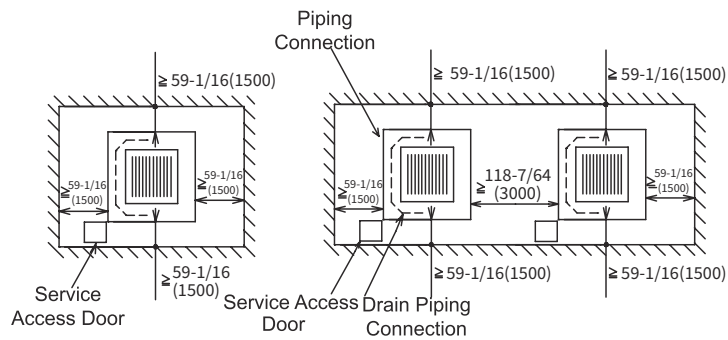
Unit: in.(mm)



< 4-Way Cassette Type >

Models: PCI-B18~B48UFA1DQ

Unit: in.(mm)

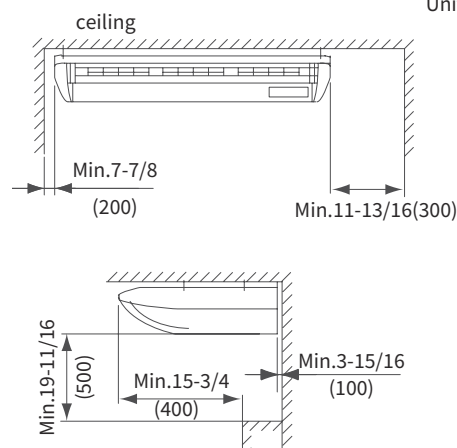


Unit (Kbtu)	A(in.(mm))
PCI-B18UFA1DQ	9-3/8(238)
PCI-B24~48UFA1DQ	11-11/32(288)

< Ceiling Suspended Type >

Models: PPFC-B09~B48UFA1NQ

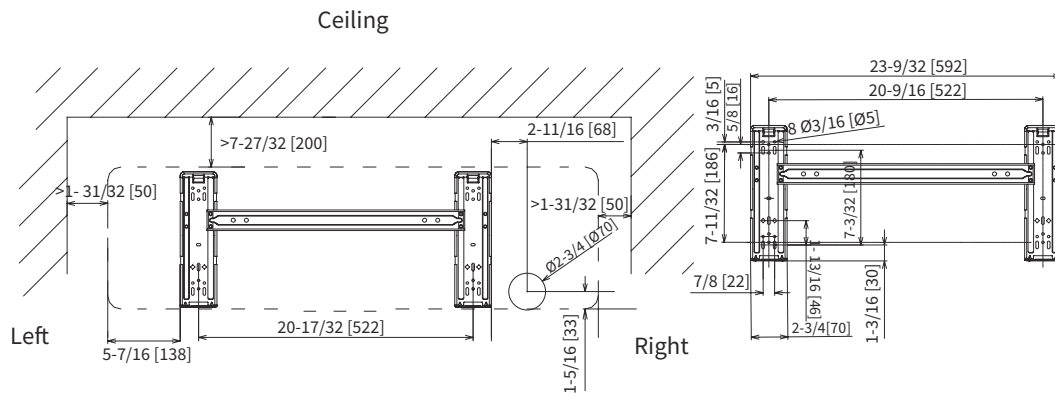
Unit: in.(mm)



< High-wall Type >

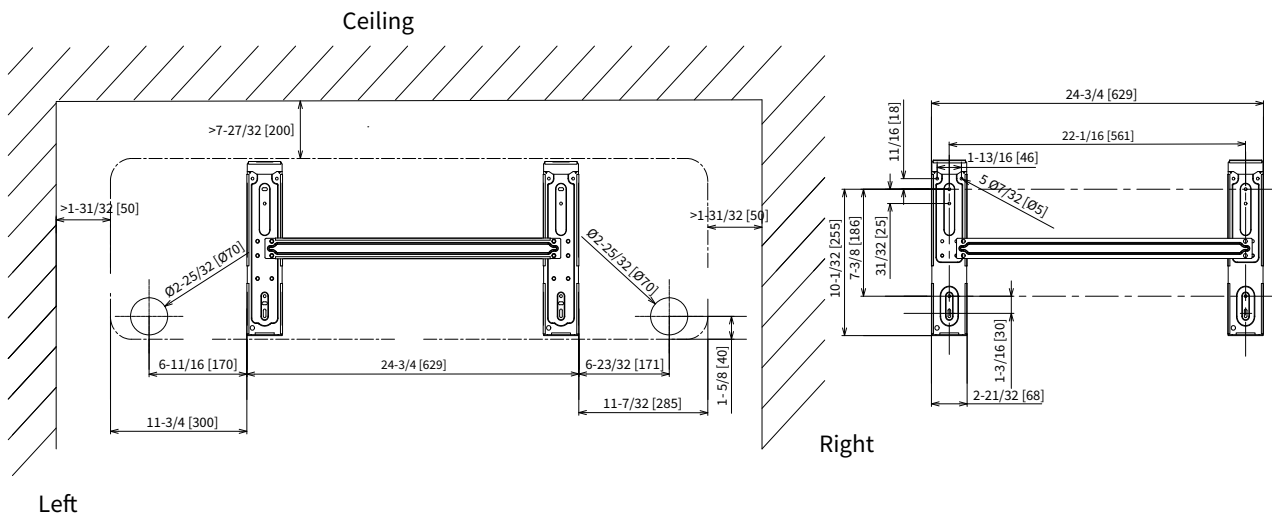
Models: PPK-B09UFA1DQ

Unit: in.(mm)



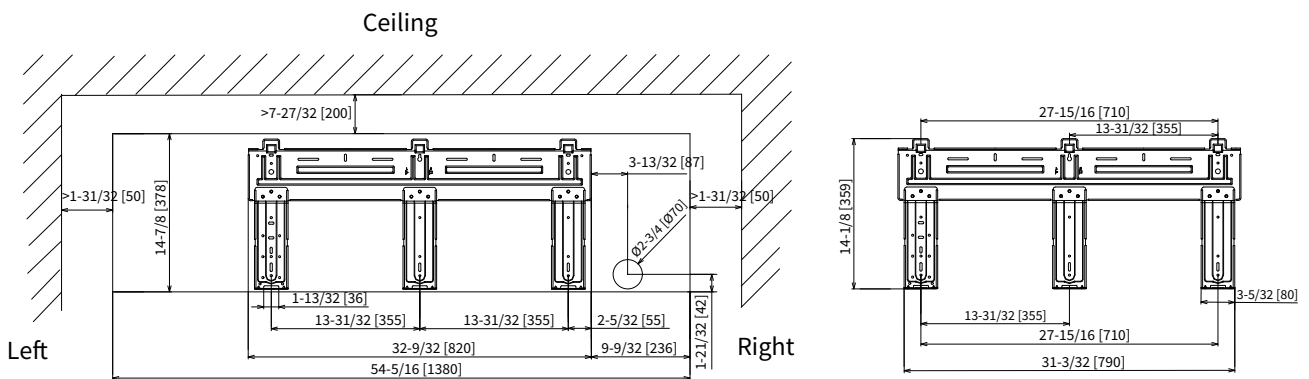
Models: PPK-B12~B18UFA1DQ

Unit: in.(mm)



Models: PPK-B24~B30UFA1DQ

Unit: in.(mm)



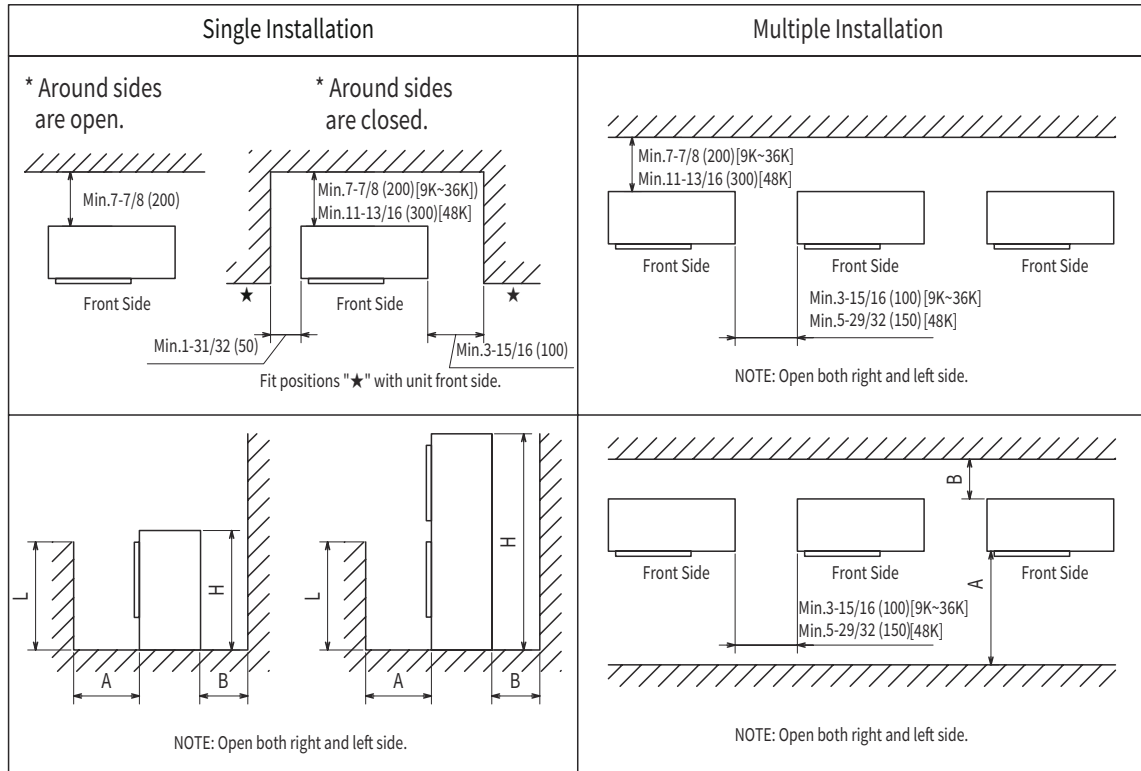
4.1.2 Outdoor Units

Install the outdoor unit with a sufficient space around the outdoor unit for operation and maintenance as shown below.

(1) Obstacles on Inlet Side

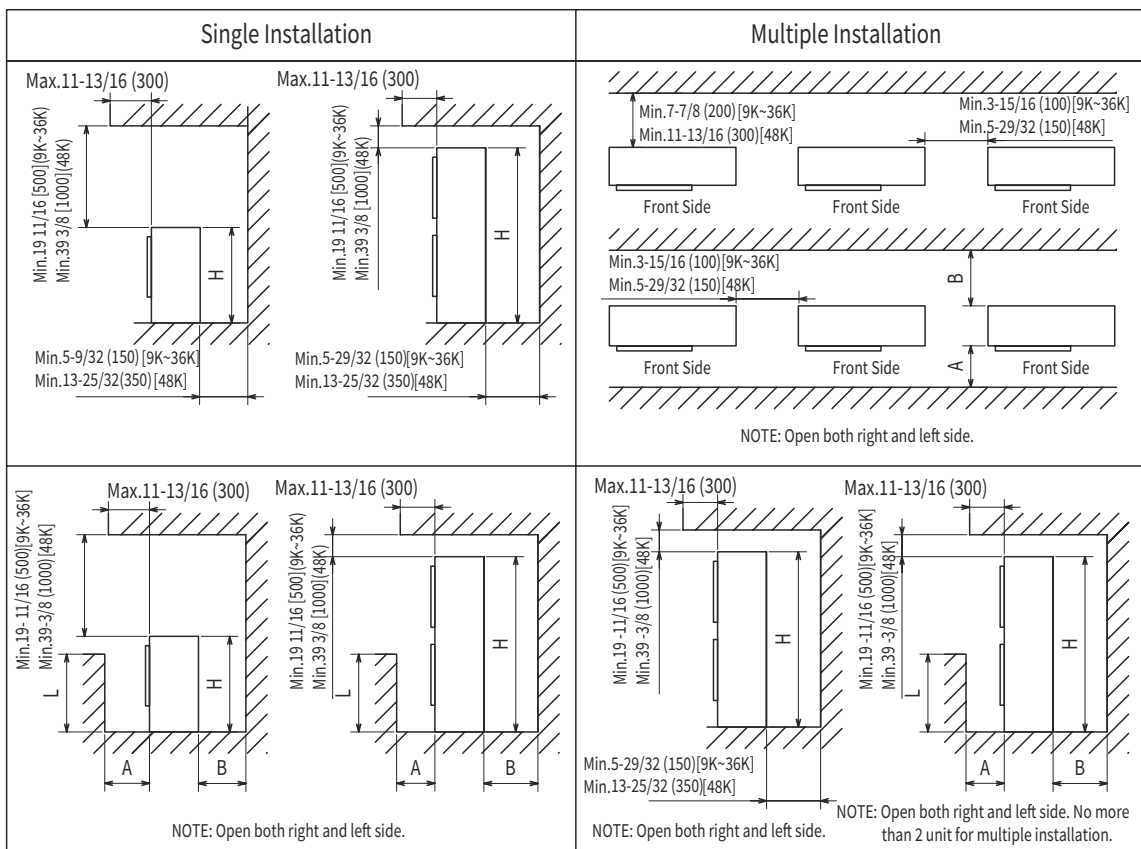
(a) Upper Side is Open.

Unit: in.(mm)



(b) Obstacles in Above

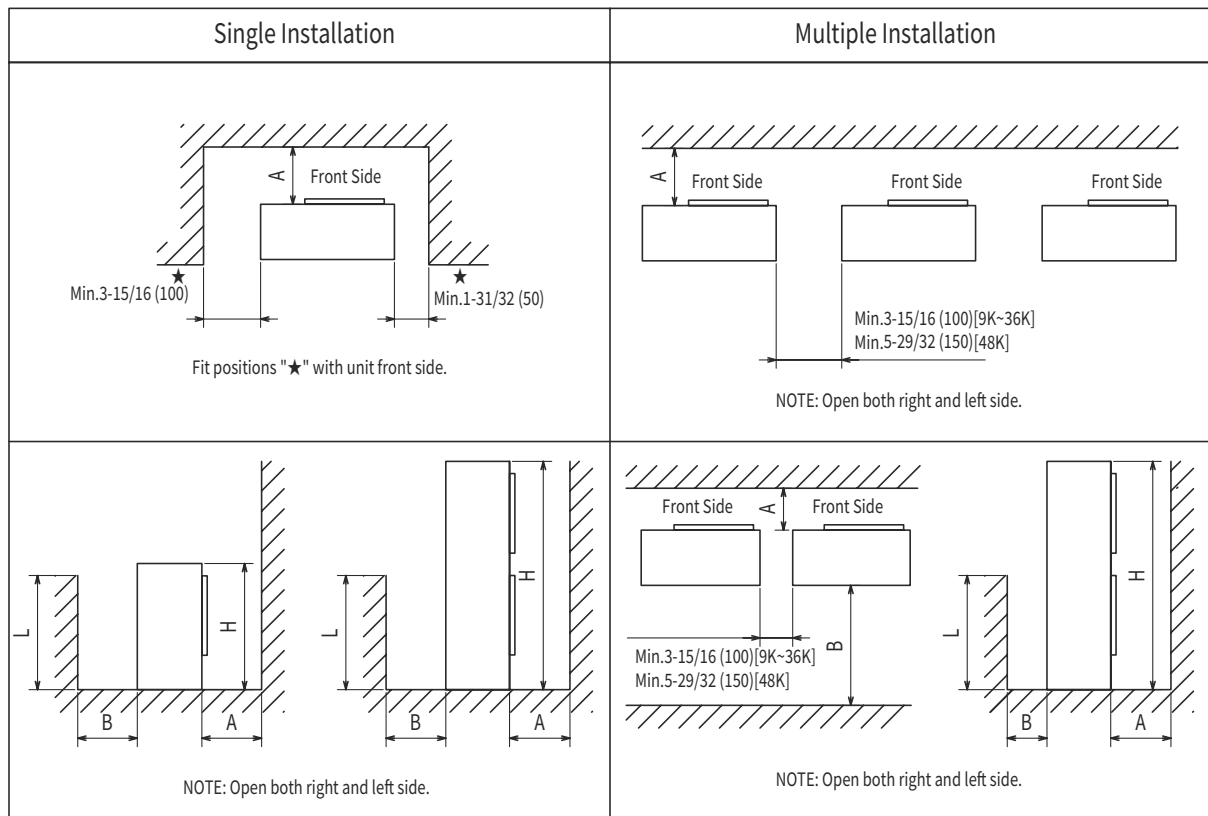
Unit: in.(mm)



(2) Obstacles on Discharge Side

(a) Upper Side is Open.

Unit: in.(mm)

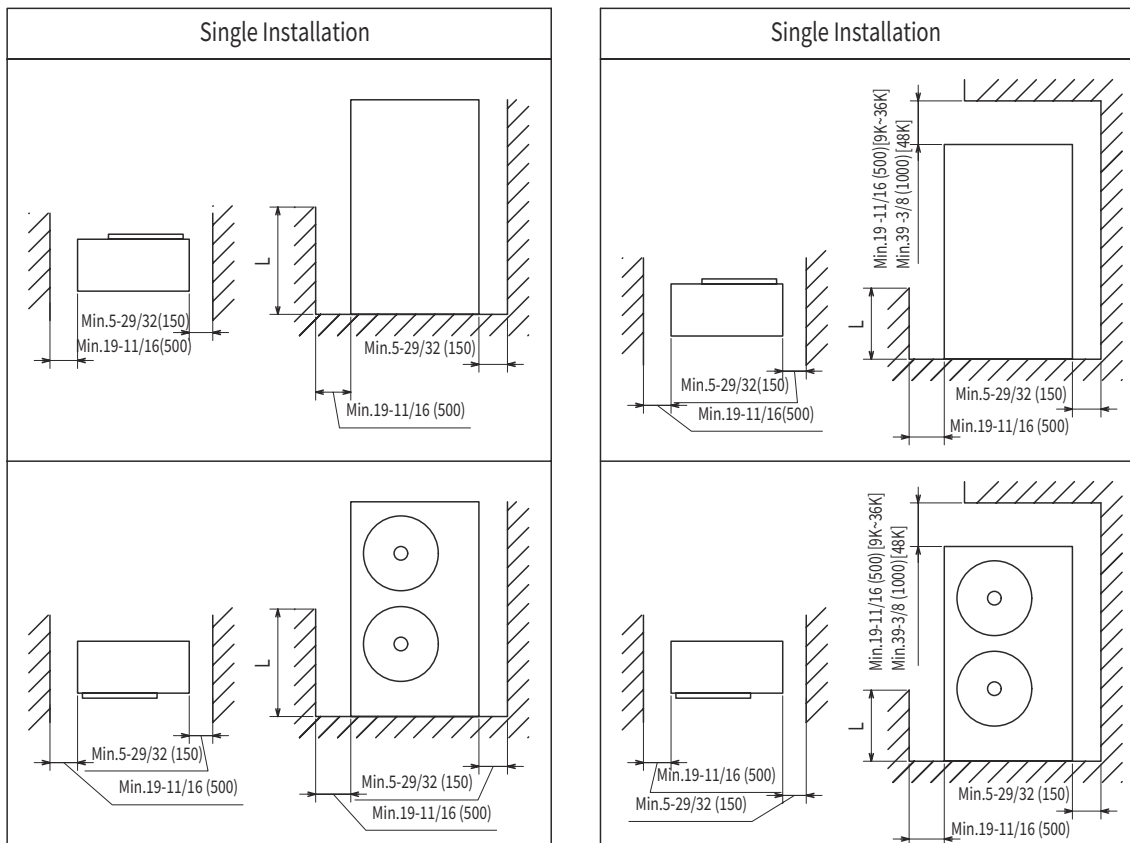


(3) Obstacles in Right and Left

(a) Upper Side is Open.

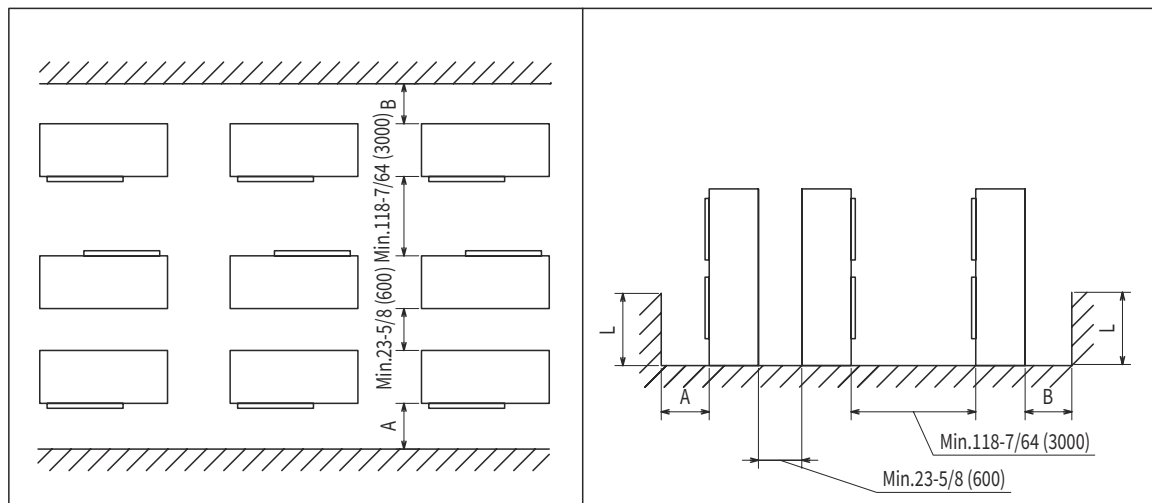
(b) Obstacles in Above

Unit: in.(mm)



(4) Multi-Row and Multiple Installations

Unit: in.(mm)

**NOTE:**

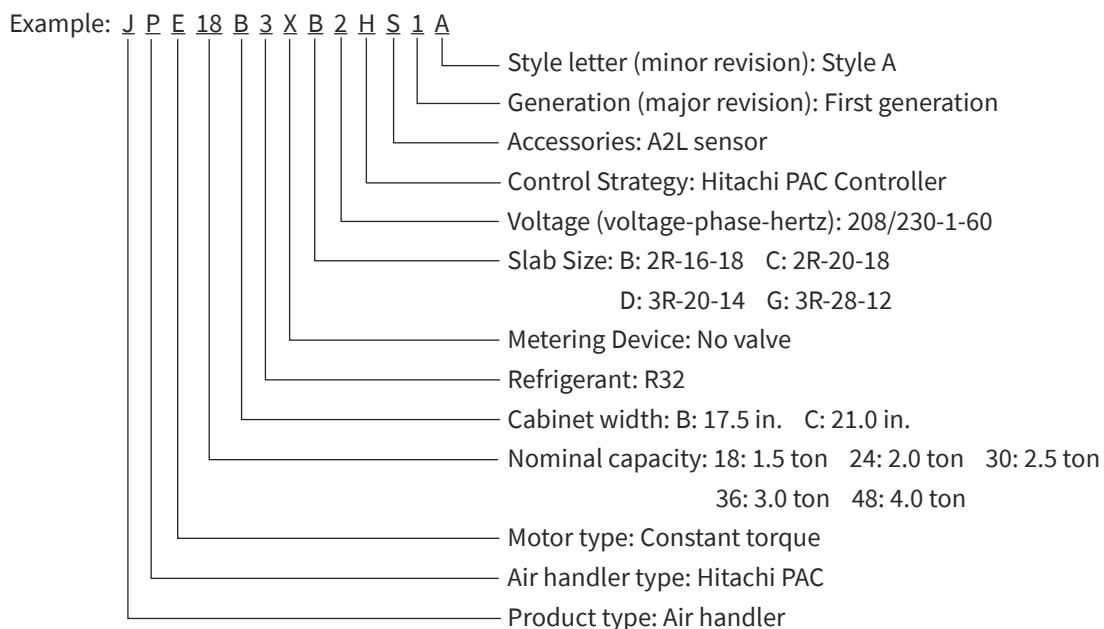
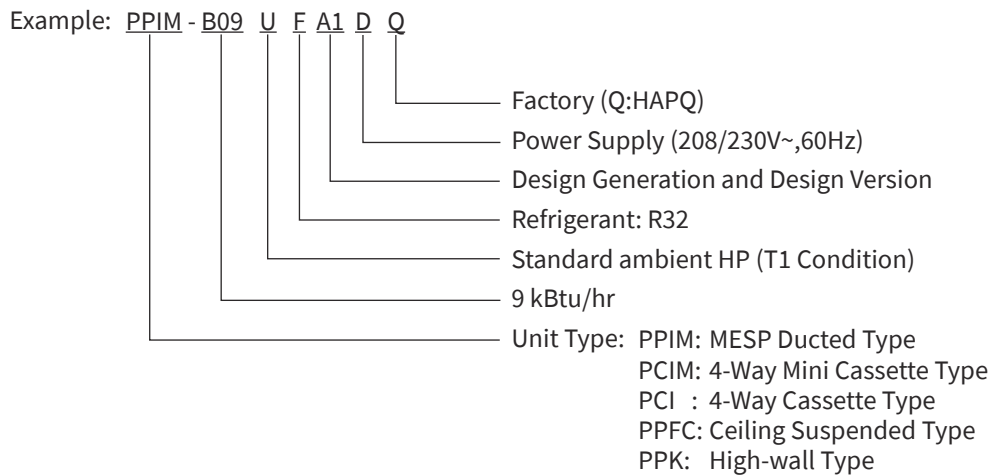
- If L is larger than H, mount the units on a base so that H is greater or equal to L.
In this situation ensure that the base is closed and does not allow the airflow to short circuit.
In each case, install the outdoor unit so that the discharge flow is not short-circuited.

Unit: in.(mm)

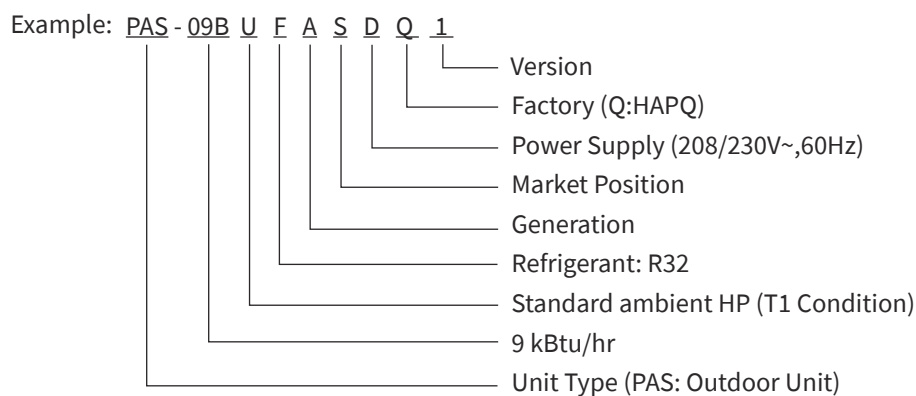
L	A	B
$0 < L \leq 1/2H$	23-5/8(600) or more	11-13/16(300) or more
$1/2H < L \leq H$	55-1/8(1400) or more	13-25/32(350) or more

4.2 Meaning of Model Name

(1) Meaning of Model Name for Indoor Unit



(2) Meaning of Model Name for Outdoor Unit



4.3 Capacity Tables

The following charts show the characteristics of outdoor unit capacity which corresponds with the operation ambient temperature.

Conditions:

Pipe length/height difference: 25ft (7.5m)/0ft (0m);

Fan speed at high fan speed;

Capacity loss due to frost and defrost operation is not included.

NOTES:

TC: Total Capacity(Btu/h) SHC: Sensible heat capacity(Btu/h)

P.C.: Power consumption(kW) DB: Dry-bulb temperature WB: Wet-bulb temperature

4.3.1 Cooling Capacity

< MESP Ducted Type >

PPIM-B09UFA1DQ/PAS-09BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	9625	5341	0.49	9183	5227	0.55	8851	5073	0.61	8619	4987	0.70	8505	4930	0.80	8347	4932	0.92
66(19)	64(18)	10143	4054	0.49	9693	3840	0.54	9349	3693	0.61	9112	3614	0.70	8988	3575	0.80	8804	3519	0.93
68(20)	61(16)	9616	6030	0.50	9175	5789	0.55	8850	5665	0.61	8614	5616	0.70	8505	5570	0.80	8322	5503	0.92
68(20)	64(18)	10134	4682	0.49	9685	4475	0.54	9336	4356	0.61	9100	4265	0.70	8991	4184	0.80	8800	4195	0.93
72(22)	61(16)	9602	7250	0.50	9167	7024	0.55	8837	6923	0.61	8601	6805	0.70	8495	6842	0.80	8305	6738	0.92
72(22)	64(18)	10110	5850	0.49	9666	5738	0.54	9330	5631	0.61	9088	5490	0.70	8979	5457	0.80	8787	5413	0.93
72(22)	68(20)	10637	4532	0.48	10191	4361	0.53	9842	4282	0.61	9603	4139	0.70	9481	4094	0.81	9269	4074	0.93
75(24)	61(16)	9613	8345	0.50	9189	8163	0.55	8870	8100	0.61	8646	8022	0.70	8542	7920	0.80	8389	7936	0.92
75(24)	64(18)	10099	7021	0.49	9655	6921	0.54	9314	6819	0.61	9076	6728	0.70	8964	6649	0.80	8782	6622	0.93
75(24)	68(20)	10628	5677	0.48	10177	5603	0.54	9828	5500	0.61	9589	5351	0.70	9468	5322	0.81	9248	5240	0.93
75(24)	72(22)	11162	4339	0.47	10716	4218	0.53	10365	4165	0.61	10118	4069	0.70	9987	4051	0.81	9752	3927	0.94
79(26)	61(16)	9694	9368	0.49	9305	9305	0.54	9021	9021	0.61	8827	8827	0.70	8735	8735	0.80	8618	8618	0.92
79(26)	64(18)	10087	8243	0.49	9657	8094	0.54	9328	7956	0.61	9101	7833	0.70	8987	7842	0.80	8818	7844	0.93
79(26)	68(20)	10615	6885	0.48	10166	6724	0.53	9820	6681	0.61	9577	6609	0.70	9459	6533	0.81	9237	6518	0.93
79(26)	72(22)	11154	5589	0.47	10708	5408	0.53	10350	5324	0.61	10099	5244	0.70	9980	5216	0.81	9742	5161	0.94
81(27)	61(16)	9809	9809	0.49	9452	9452	0.54	9179	9179	0.61	8988	8988	0.70	8891	8891	0.80	8773	8773	0.93
81(27)	64(18)	10106	8794	0.49	9683	8611	0.54	9354	8529	0.61	9132	8368	0.70	9017	8329	0.80	8855	8363	0.93
81(27)	68(20)	10608	7473	0.48	10165	7347	0.53	9804	7239	0.61	9573	7198	0.70	9450	7097	0.81	9232	7067	0.93
81(27)	72(22)	11151	6168	0.47	10687	5977	0.53	10343	5884	0.61	10099	5875	0.70	9973	5857	0.81	9733	5718	0.94
82(28)	61(16)	9966	9966	0.49	9611	9611	0.54	9334	9334	0.61	9140	9140	0.70	9043	9043	0.80	8926	8926	0.93
82(28)	64(18)	10142	9349	0.49	9723	9127	0.54	9400	8952	0.61	9187	8803	0.70	9084	8794	0.80	8930	8930	0.93
82(28)	68(20)	10603	8073	0.48	10158	7947	0.54	9806	7790	0.61	9569	7731	0.70	9452	7728	0.81	9247	7686	0.93
82(28)	72(22)	11147	6754	0.47	10688	6595	0.53	10338	6518	0.61	10093	6395	0.70	9966	6373	0.81	9728	6359	0.94
86(30)	61(16)	10278	10278	0.48	9927	9927	0.54	9643	9643	0.61	9458	9458	0.70	9357	9357	0.81	9226	9226	0.93
86(30)	64(18)	10279	10279	0.48	9923	9923	0.54	9649	9649	0.61	9462	9252	0.70	9361	9361	0.81	9214	9214	0.93
86(30)	68(20)	10622	9172	0.48	10199	9021	0.53	9865	8892	0.61	9628	8818	0.70	9515	8815	0.81	9312	8712	0.93
86(30)	72(22)	11136	7922	0.47	10679	7811	0.53	10330	7666	0.61	10077	7636	0.70	9961	7599	0.81	9718	7561	0.94
90(32)	61(16)	10591	10591	0.48	10242	10242	0.53	9961	9961	0.61	9780	9780	0.70	9679	9679	0.81	9524	9524	0.94
90(32)	64(18)	10592	10592	0.48	10244	10244	0.53	9962	9962	0.61	9779	9779	0.70	9680	9680	0.81	9525	9525	0.94
90(32)	68(20)	10694	10098	0.48	10299	9908	0.53	9987	9987	0.61	9783	9783	0.70	9682	9400	0.81	9526	9526	0.94
90(32)	72(22)	11123	8969	0.47	10683	8896	0.53	10353	8722	0.61	10112	8694	0.70	9994	8616	0.81	9841	8582	0.94

PPIM-B12UFA1DQ/PAS-12BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	13079	7370	0.70	12477	7145	0.77	12027	6908	0.87	11712	6797	0.99	11557	6741	1.13	11343	6698	1.31
66(19)	64(18)	13782	5491	0.69	13172	5305	0.77	12703	5051	0.87	12382	4955	0.99	12213	4915	1.14	11964	4817	1.32
68(20)	61(16)	13066	8119	0.70	12468	7893	0.77	12025	7774	0.87	11705	7621	0.99	11556	7622	1.14	11308	7511	1.31
68(20)	64(18)	13771	6361	0.69	13160	6135	0.77	12686	5942	0.87	12365	5799	0.99	12217	5737	1.14	11958	5656	1.32
72(22)	61(16)	13047	9841	0.70	12457	9637	0.77	12008	9367	0.87	11687	9270	0.99	11543	9265	1.13	11285	9223	1.31
72(22)	64(18)	13738	7938	0.69	13134	7701	0.77	12678	7572	0.87	12349	7511	0.99	12200	7461	1.14	11940	7307	1.32
72(22)	68(20)	14454	6124	0.68	13847	5869	0.76	13374	5818	0.86	13048	5640	0.99	12884	5659	1.15	12594	5497	1.32
75(24)	61(16)	13063	11308	0.70	12486	11076	0.77	12053	10967	0.87	11749	10881	0.99	11607	10758	1.14	11399	10775	1.31
75(24)	64(18)	13723	9568	0.69	13119	9392	0.77	12657	9231	0.87	12332	9070	0.99	12181	9087	1.14	11933	9000	1.31
75(24)	68(20)	14442	7738	0.68	13829	7639	0.76	13355	7467	0.86	13029	7329	0.99	12865	7261	1.15	12567	7191	1.32
75(24)	72(22)	15167	6005	0.67	14561	5693	0.75	14085	5597	0.86	13748	5551	1.00	13571	5396	1.15	13251	5368	1.33
79(26)	61(16)	13172	12706	0.70	12644	12291	0.77	12258	12258	0.87	11994	11994	0.99	11870	11870	1.14	11710	11710	1.31
79(26)	64(18)	13707	11242	0.69	13122	10990	0.77	12675	10865	0.87	12366	10714	0.99	12212	10703	1.14	11982	10599	1.32
79(26)	68(20)	14424	9449	0.68	13814	9158	0.76	13344	8982	0.86	13014	8933	0.99	12853	8835	1.15	12551	8861	1.32
79(26)	72(22)	15156	7636	0.67	14550	7419	0.75	14063	7306	0.86	13722	7096	0.99	13561	7119	1.15	13237	7001	1.34
81(27)	61(16)	13328	13328	0.70	12844	12844	0.77	12472	12472	0.87	12213	12213	0.99	12082	12082	1.14	11920	11920	1.31
81(27)	64(18)	13732	11927	0.69	13158	11739	0.77	12710	11550	0.87	12409	11375	0.99	12252	11318	1.14	12032	11258	1.32
81(27)	68(20)	14414	10108	0.68	13813	10036	0.76	13323	9790	0.86	13008	9697	0.99	12840	9649	1.15	12545	9679	1.33
81(27)	72(22)	15152	8436	0.67	14522	8213	0.75	14055	8098	0.86	13723	7924	0.99	13551	7892	1.15	13225	7797	1.34
82(28)	61(16)	13542	13542	0.69	13060	13060	0.77	12683	12683	0.87	12420	12420	0.99	12288	12288	1.14	12129	12129	1.32
82(28)	64(18)	13781	12657	0.69	13212	12405	0.77	12773	12196	0.87	12484	12022	0.99	12344	11882	1.14	12135	12135	1.32
82(28)	68(20)	14408	10900	0.68	13803	10724	0.76	13325	10575	0.86	13003	10525	0.99	12843	10473	1.15	12566	10368	1.32
82(28)	72(22)	15147	9133	0.67	14523	8966	0.75	14047	8819	0.86	13714	8777	0.99	13543	8644	1.15	13218	8560	1.34
86(30)	61(16)	13967	13967	0.69	13488	13488	0.76	13103	13103	0.86	12851	12851	0.99	12715	12715	1.15	12537	12537	1.33
86(30)	64(18)	13967	13967	0.69	13484	13484	0.76	13111	13111	0.86	12857	12857	0.99	12721	12721	1.15	12521	12521	1.33
86(30)	68(20)	14434	12484	0.68	13859	12217	0.76	13404	12117	0.86	13083	11990	0.99	12929	11972	1.15	12654	11835	1.33
86(30)	72(22)	15132	10765	0.67	14512	10566	0.75	14037	10475	0.86	13693	10279	0.99	13535	10313	1.15	13205	10264	1.34
90(32)	61(16)	14391	14391	0.68	13917	13917	0.76	13535	13535	0.86	13289	13289	0.99	13152	13152	1.15	12942	12942	1.33
90(32)	64(18)	14393	14393	0.68	13920	13920	0.76	13537	13537	0.86	13287	13287	0.99	13153	13153	1.15	12943	12943	1.33
90(32)	68(20)	14531	13838	0.68	13995	13524	0.76	13571	13571	0.86	13293	13293	0.99	13156	13156	1.15	12944	12944	1.33
90(32)	72(22)	15114	12214	0.67	14516	12051	0.75	14068	11880	0.86	13741	11847	0.99	13581	11812	1.15	13372	11713	1.34

SELECTION DATA

PPIM-B18UFA1DQ/PAS-18BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	18962	11160	0.89	18141	10796	1.03	17197	10381	1.17	16238	9965	1.32	15210	9525	1.47	13975	9003	1.64
66(19)	64(18)	20197	8559	0.89	19278	8176	1.03	18326	7787	1.18	17337	7388	1.33	16246	6952	1.48	14923	6432	1.66
68(20)	61(16)	18944	12401	0.89	18114	12032	1.03	17180	11622	1.17	16230	11210	1.32	15197	10768	1.47	13963	10246	1.64
68(20)	64(18)	20171	9804	0.89	19292	9440	1.03	18288	9029	1.18	17301	8630	1.33	16239	8206	1.48	14919	7686	1.66
72(22)	61(16)	18934	14872	0.89	18060	14483	1.03	17171	14090	1.17	16241	13678	1.32	15248	13238	1.47	14010	12693	1.64
72(22)	64(18)	20145	12286	0.89	19231	11905	1.03	18305	11526	1.18	17273	11108	1.33	16216	10685	1.48	14883	10160	1.66
72(22)	68(20)	21395	9668	0.89	20466	9308	1.04	19413	8907	1.19	18366	8513	1.34	17248	8098	1.50	15857	7589	1.68
75(24)	61(16)	18930	17199	0.89	18177	16869	1.03	17293	16463	1.18	16425	16026	1.32	15525	15478	1.47	14451	14451	1.65
75(24)	64(18)	20116	14733	0.89	19208	14355	1.03	18266	13969	1.18	17265	13563	1.33	16183	13125	1.48	14882	12596	1.66
75(24)	68(20)	21368	12132	0.89	20424	11767	1.04	19395	11375	1.19	18315	10969	1.34	17216	10560	1.50	15826	10051	1.68
75(24)	72(22)	22660	9505	0.89	21619	9132	1.04	20566	8760	1.20	19452	8371	1.35	18275	7967	1.51	16847	7481	1.70
79(26)	61(16)	19167	19059	0.89	18463	18463	1.03	17786	17786	1.18	17011	17011	1.33	16211	16211	1.48	15101	15101	1.66
79(26)	64(18)	20081	17114	0.89	19231	16753	1.04	18317	16364	1.18	17336	15951	1.33	16339	15515	1.48	15147	14926	1.66
79(26)	68(20)	21313	14556	0.89	20382	14196	1.04	19363	13807	1.19	18305	13408	1.34	17202	12998	1.50	15779	12471	1.68
79(26)	72(22)	22595	11941	0.89	21576	11577	1.04	20520	11204	1.20	19419	10819	1.35	18282	10427	1.51	16833	9935	1.70
81(27)	61(16)	19446	19446	0.89	18841	18841	1.04	18178	18178	1.18	17402	17402	1.33	16553	16553	1.49	15452	15452	1.67
81(27)	64(18)	20125	18187	0.89	19283	17903	1.04	18417	17526	1.19	17487	17059	1.33	16541	16491	1.49	15454	15454	1.67
81(27)	68(20)	21296	15761	0.89	20371	15402	1.04	19339	15008	1.19	18303	14613	1.34	17215	14197	1.50	15902	13694	1.68
81(27)	72(22)	22586	13158	0.89	21601	12804	1.04	20500	12415	1.20	19417	12037	1.35	18271	11641	1.51	16835	11153	1.70
82(28)	61(16)	19841	19841	0.89	19207	19207	1.04	18510	18510	1.19	17741	17741	1.34	16892	16892	1.49	15803	15803	1.68
82(28)	64(18)	20204	19298	0.89	19399	18886	1.04	18587	18433	1.19	17759	17759	1.34	16885	16885	1.49	15813	15813	1.68
82(28)	68(20)	21299	16959	0.89	20338	16584	1.04	19351	16195	1.19	18347	15801	1.34	17280	15385	1.50	15951	14866	1.68
82(28)	72(22)	22556	14359	0.89	21598	14014	1.04	20482	13619	1.20	19363	13229	1.35	18235	12839	1.51	16802	12352	1.70
86(30)	61(16)	20529	20529	0.89	19960	19960	1.04	19245	19245	1.19	18481	18481	1.35	17611	17611	1.50	16466	16466	1.69
86(30)	64(18)	20536	20536	0.89	19963	19963	1.04	19255	19255	1.19	18480	18480	1.35	17595	17595	1.50	16471	16471	1.69
86(30)	68(20)	21366	19215	0.89	20495	18867	1.04	19540	18479	1.19	18594	18077	1.35	17590	17512	1.50	16458	16458	1.69
86(30)	72(22)	22527	16748	0.89	21523	16387	1.04	20457	16005	1.20	19378	15619	1.35	18265	15219	1.51	16893	14730	1.70
90(32)	61(16)	21306	21306	0.89	20690	20690	1.04	19961	19961	1.20	19167	19167	1.35	18300	18300	1.51	17146	17146	1.70
90(32)	64(18)	21307	21307	0.89	20713	20713	1.04	19969	19969	1.20	19158	19158	1.35	18301	18301	1.51	17136	17136	1.70
90(32)	68(20)	21512	21060	0.89	20748	20644	1.04	20008	20008	1.20	19171	19171	1.35	18318	18318	1.51	17127	17127	1.70
90(32)	72(22)	22559	19061	0.89	21618	18720	1.04	20603	18356	1.20	19539	17969	1.36	18474	17547	1.51	17180	16948	1.70

PPIM-B24UFA1DQ/PAS-24BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	22706	13342	1.11	21771	12925	1.26	20816	12505	1.42	19704	12021	1.58	18603	11548	1.74	17194	10949	1.92
66(19)	64(18)	24278	10267	1.10	23296	9858	1.26	22265	9435	1.42	21175	8992	1.59	19977	8511	1.75	18483	7920	1.95
68(20)	61(16)	22639	14807	1.11	21783	14425	1.26	20762	13975	1.42	19710	13518	1.58	18606	13042	1.74	17186	12439	1.92
68(20)	64(18)	24235	11754	1.10	23297	11362	1.26	22239	10928	1.42	21151	10486	1.59	19939	9999	1.75	18463	9414	1.95
72(22)	61(16)	22596	17746	1.11	21713	17355	1.26	20740	16925	1.42	19659	16444	1.58	18578	15962	1.74	17184	15339	1.92
72(22)	64(18)	24212	14724	1.10	23250	14323	1.26	22194	13889	1.42	21088	13440	1.59	19911	12967	1.75	18389	12363	1.95
72(22)	68(20)	25854	11645	1.09	24870	11263	1.26	23758	10837	1.43	22564	10385	1.60	21333	9926	1.77	19718	9330	1.97
75(24)	61(16)	22548	20469	1.11	21758	20180	1.26	20783	19718	1.42	19781	19209	1.58	18746	18598	1.74	17537	17537	1.93
75(24)	64(18)	24177	17654	1.10	23204	17248	1.26	22161	16819	1.42	21041	16363	1.59	19872	15890	1.75	18409	15294	1.95
75(24)	68(20)	25783	14583	1.09	24803	14199	1.25	23694	13775	1.43	22517	13329	1.60	21248	12854	1.77	19687	12278	1.97
75(24)	72(22)	27474	11484	1.07	26476	11121	1.25	25299	10703	1.43	24073	10273	1.61	22745	9811	1.78	21077	9240	1.99
79(26)	61(16)	22716	22585	1.11	22039	22039	1.27	21301	21301	1.43	20471	20471	1.59	19584	19584	1.75	18398	18398	1.95
79(26)	64(18)	24060	20449	1.10	23199	20105	1.26	22194	19670	1.43	21090	19197	1.59	19958	18707	1.76	18533	18034	1.95
79(26)	68(20)	25768	17502	1.09	24762	17110	1.25	23662	16689	1.43	22483	16242	1.60	21236	15775	1.77	19665	15193	1.97
79(26)	72(22)	27436	14416	1.07	26447	14056	1.25	25282	13642	1.43	24036	13203	1.61	22734	12751	1.78	21039	12170	1.99
81(27)	61(16)	23094	23094	1.11	22498	22498	1.27	21773	21773	1.43	20945	20945	1.59	20041	20041	1.76	18833	18833	1.96
81(27)	64(18)	24084	21742	1.10	23221	21452	1.26	22224	21017	1.43	21178	20511	1.59	20089	19900	1.76	18829	18829	1.96
81(27)	68(20)	25761	18949	1.09	24738	18551	1.25	23634	18127	1.43	22453	17677	1.60	21235	17210	1.77	19691	16613	1.97
81(27)	72(22)	27434	15874	1.07	26424	15507	1.25	25245	15087	1.43	23987	14645	1.61	22716	14203	1.78	21003	13615	1.99
82(28)	61(16)	23521	23521	1.11	22945	22945	1.27	22192	22192	1.43	21392	21392	1.60	20472	20472	1.77	19245	19245	1.97
82(28)	64(18)	24086	22938	1.11	23260	22591	1.26	22343	22106	1.43	21411	21397	1.60	20463	20463	1.76	19241	19241	1.97
82(28)	68(20)	25665	20343	1.09	24729	19980	1.26	23636	19547	1.43	22521	19102	1.60	21288	18616	1.77	19749	18013	1.97
82(28)	72(22)	27391	17308	1.07	26363	16936	1.25	25235	16534	1.43	23967	16087	1.61	22680	15640	1.78	20994	15061	1.99
86(30)	61(16)	24473	24473	1.10	23809	23809	1.27	23149	23149	1.43	22289	22289	1.61	21362	21362	1.78	20103	20103	1.98
86(30)	64(18)	24439	24439	1.11	23884	23884	1.27	23134	23134	1.43	22311	22311	1.61	21369	21369	1.78	20131	20131	1.98
86(30)	68(20)	25710	23034	1.09	24756	22671	1.26	23720	22276	1.43	22611	21776	1.60	21449	21178	1.78	20111	20111	1.98
86(30)	72(22)	27343	20164	1.07	26362	19810	1.25	25183	19388	1.43	23975	18953	1.61	22676	18485	1.78	21049	17894	1.99
90(32)	61(16)	25440	25440	1.10	24760	24760	1.26	24032	24032	1.44	23215	23215	1.61	22273	22273	1.79	21021	21021	2.00
90(32)	64(18)	25452	25452	1.10	24756	24756	1.26	24050	24050	1.44	23216	23216	1.61	22281	22281	1.79	21013	21013	2.00
90(32)	68(20)	25806	25224	1.09	24895	24658	1.26	24054	24053	1.44	23204	23204	1.61	22276	22276	1.79	21015	21015	2.00
90(32)	72(22)	27283	22878	1.07	26321	22560	1.25	25230	22151	1.43	24039	21707	1.61	22772	21223	1.79	21213	20561	2.00

SELECTION DATA

PPIM-B30UFA1DQ/PAS-30BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	31140	18027	1.70	29328	17209	1.86	27953	16594	2.07	27089	16214	2.35	26825	16100	2.71	26691	16045	3.13
66(19)	64(18)	33160	13959	1.68	31260	13161	1.84	29907	12601	2.07	28966	12215	2.36	28660	12089	2.73	28439	11998	3.17
68(20)	61(16)	31089	19929	1.70	29314	19119	1.86	27922	18494	2.07	27048	18108	2.35	26798	18003	2.70	26655	17943	3.13
68(20)	64(18)	33127	15921	1.68	31240	15128	1.84	29880	14563	2.07	28935	14175	2.36	28598	14037	2.73	28398	13955	3.17
72(22)	61(16)	31028	23682	1.71	29267	22875	1.86	27916	22267	2.07	27033	21874	2.35	26752	21758	2.70	26635	21711	3.13
72(22)	64(18)	33055	19752	1.68	31207	18972	1.84	29823	18390	2.07	28925	18016	2.36	28561	17867	2.73	28375	17795	3.17
72(22)	68(20)	35158	15702	1.65	33272	14964	1.83	31807	14398	2.07	30870	14039	2.37	30529	13909	2.75	30219	13791	3.21
75(24)	61(16)	31011	27345	1.71	29286	26435	1.86	27943	25738	2.07	27133	25308	2.35	26885	25206	2.71	26760	25141	3.13
75(24)	64(18)	32982	23496	1.68	31197	22736	1.84	29779	22134	2.07	28902	21770	2.36	28551	21626	2.73	28324	21531	3.17
75(24)	68(20)	35077	19520	1.65	33225	18788	1.83	31744	18214	2.07	30812	17851	2.37	30442	17710	2.75	30193	17620	3.21
75(24)	72(22)	37329	15467	1.63	35359	14751	1.81	33837	14206	2.07	32900	13872	2.39	32454	13714	2.77	32105	13591	3.25
79(26)	61(16)	31207	30463	1.70	29572	29264	1.86	28340	28302	2.07	27618	27618	2.36	27437	27437	2.71	27300	27300	3.14
79(26)	64(18)	32963	27204	1.68	31114	26405	1.84	29726	25772	2.07	28875	25341	2.36	28548	25194	2.73	28354	25108	3.17
79(26)	68(20)	35042	23271	1.65	33160	22523	1.83	31730	21971	2.07	30780	21593	2.37	30383	21435	2.75	30150	21352	3.21
79(26)	72(22)	37277	19288	1.63	35295	18562	1.82	33870	18047	2.07	32841	17680	2.39	32418	17530	2.77	32067	17408	3.25
81(27)	61(16)	31504	31455	1.70	29976	29976	1.85	28919	28919	2.07	28247	28247	2.36	27969	27969	2.72	27866	27866	3.16
81(27)	64(18)	32942	28940	1.68	31152	28043	1.84	29814	27367	2.07	28978	26964	2.36	28644	26811	2.73	28469	26728	3.17
81(27)	68(20)	35026	25131	1.65	33142	24382	1.83	31710	23810	2.07	30739	23419	2.37	30394	23299	2.75	30125	23193	3.21
81(27)	72(22)	37182	21137	1.63	35264	20437	1.82	33808	19907	2.07	32810	19549	2.39	32418	19407	2.77	32051	19281	3.25
82(28)	61(16)	32049	32049	1.69	30579	30579	1.85	29472	29472	2.07	28790	28790	2.36	28535	28535	2.73	28435	28435	3.17
82(28)	64(18)	33087	30593	1.68	31271	29633	1.84	29911	28928	2.07	29112	28470	2.36	28793	28239	2.73	28641	28132	3.17
82(28)	68(20)	34923	26915	1.66	33129	26209	1.83	31685	25644	2.07	30703	25240	2.37	30348	25114	2.75	30107	25024	3.21
82(28)	72(22)	37135	22986	1.63	35236	22293	1.82	33779	21759	2.07	32790	21403	2.39	32390	21257	2.77	32034	21134	3.24
86(30)	61(16)	33209	33209	1.68	31799	31799	1.84	30673	30673	2.07	29930	29930	2.37	29687	29687	2.74	29555	29555	3.19
86(30)	64(18)	33382	33114	1.67	31815	31815	1.84	30711	30711	2.07	29956	29956	2.37	29749	29749	2.74	29554	29554	3.20
86(30)	68(20)	34981	30492	1.65	33185	29648	1.83	31782	28976	2.07	30873	28551	2.37	30535	28403	2.75	30283	28286	3.21
86(30)	72(22)	37125	26689	1.63	35202	25974	1.82	33689	25411	2.07	32763	25069	2.38	32335	24917	2.77	31989	24796	3.24
90(32)	61(16)	34484	34484	1.66	33010	33010	1.83	31863	31863	2.07	31148	31148	2.38	30894	30894	2.76	30692	30692	3.22
90(32)	64(18)	34489	34489	1.66	32974	32974	1.83	31880	31880	2.07	31157	31157	2.38	30870	30870	2.76	30694	30694	3.22
90(32)	68(20)	35199	33623	1.65	33394	32612	1.83	32088	31698	2.07	31276	31098	2.38	30986	30905	2.76	30726	30683	3.22
90(32)	72(22)	37087	30321	1.63	35124	29543	1.82	33716	28930	2.07	32807	28536	2.38	32398	28370	2.77	32078	28231	3.25

PPIM-B36UFA1DQ/PAS-36BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	37094	21695	2.07	35068	20785	2.27	33551	20111	2.53	32489	19640	2.87	31966	19411	3.28	31245	19124	3.77
66(19)	64(18)	39464	16684	2.06	37407	15830	2.27	35828	15181	2.55	34747	14741	2.91	34178	14511	3.34	33337	14170	3.84
68(20)	61(16)	37051	24049	2.08	35035	23135	2.27	33544	22466	2.53	32467	21982	2.87	31965	21762	3.29	31129	21462	3.77
68(20)	64(18)	39426	19081	2.06	37369	18226	2.27	35770	17569	2.55	34690	17129	2.90	34189	16925	3.34	33317	16573	3.84
72(22)	61(16)	36988	28682	2.08	34999	27774	2.27	33488	27082	2.53	32405	26592	2.87	31921	26372	3.28	31052	26104	3.77
72(22)	64(18)	39316	23802	2.06	37280	22943	2.27	35743	22298	2.55	34636	21833	2.90	34134	21627	3.34	33257	21320	3.84
72(22)	68(20)	41728	18777	2.04	39683	17986	2.26	38088	17376	2.56	36991	16960	2.94	36436	16750	3.39	35462	16384	3.90
75(24)	61(16)	37040	33147	2.08	35097	32172	2.27	33638	31434	2.53	32613	30909	2.87	32135	30667	3.29	31435	30376	3.78
75(24)	64(18)	39263	28425	2.06	37230	27559	2.27	35672	26895	2.55	34579	26427	2.90	34069	26219	3.33	33235	25986	3.83
75(24)	68(20)	41687	23507	2.04	39621	22698	2.27	38023	22075	2.56	36927	21652	2.94	36375	21437	3.39	35368	21093	3.90
75(24)	72(22)	44130	18436	2.02	42089	17704	2.26	40483	17134	2.58	39349	16735	2.98	38753	16526	3.44	37673	16149	3.97
79(26)	61(16)	37408	36914	2.07	35629	35552	2.27	34328	34328	2.54	33439	33439	2.89	33020	33020	3.31	32482	32482	3.81
79(26)	64(18)	39211	32961	2.06	37241	32059	2.27	35735	31356	2.55	34694	30866	2.90	34173	30632	3.34	33399	30401	3.84
79(26)	68(20)	41626	28125	2.04	39571	27304	2.26	37988	26675	2.56	36874	26240	2.94	36334	26023	3.39	35317	25720	3.90
79(26)	72(22)	44092	23144	2.02	42051	22407	2.26	40411	21817	2.58	39262	21404	2.97	38717	21209	3.44	37628	20851	3.97
81(27)	61(16)	37934	37934	2.07	36302	36302	2.27	35051	35051	2.54	34177	34177	2.90	33735	33735	3.33	33191	33191	3.83
81(27)	64(18)	39296	35097	2.06	37361	34170	2.27	35851	33445	2.55	34839	32967	2.91	34309	32703	3.34	33567	32383	3.84
81(27)	68(20)	41593	30405	2.04	39566	29585	2.26	37915	28924	2.56	36857	28507	2.94	36291	28284	3.39	35296	28003	3.90
81(27)	72(22)	44078	25468	2.02	41955	24691	2.26	40383	24118	2.58	39263	23715	2.97	38686	23507	3.44	37587	23159	3.97
82(28)	61(16)	38655	38655	2.06	37030	37030	2.27	35760	35760	2.55	34875	34875	2.91	34428	34428	3.34	33895	33895	3.85
82(28)	64(18)	39459	37218	2.06	37542	36198	2.27	36064	35262	2.55	35089	34571	2.91	34618	34212	3.35	33913	33804	3.86
82(28)	68(20)	41573	32664	2.04	39533	31840	2.27	37924	31176	2.56	36839	30727	2.94	36300	30496	3.39	35365	30200	3.90
82(28)	72(22)	44061	27767	2.02	41961	26990	2.26	40356	26399	2.58	39235	25992	2.97	38657	25782	3.44	37563	25450	3.97
86(30)	61(16)	40085	40085	2.05	38474	38474	2.27	37176	37176	2.56	36327	36327	2.93	35868	35868	3.38	35267	35267	3.90
86(30)	64(18)	40087	40079	2.05	38459	38459	2.27	37204	37204	2.56	36348	36348	2.93	35887	35887	3.38	35214	35214	3.90
86(30)	68(20)	41660	36984	2.04	39723	36113	2.27	38191	35416	2.57	37107	34923	2.94	36589	34685	3.39	35663	34292	3.91
86(30)	72(22)	44010	32292	2.02	41921	31511	2.26	40321	30913	2.58	39162	30490	2.97	38632	30284	3.44	37518	29966	3.97
90(32)	61(16)	41514	41514	2.04	39917	39917	2.27	38632	38632	2.57	37802	37802	2.95	37339	37339	3.41	36633	36633	3.94
90(32)	64(18)	41520	41520	2.04	39929	39929	2.27	38636	38636	2.57	37797	37797	2.95	37344	37344	3.41	36637	36637	3.94
90(32)	68(20)	41988	40884	2.04	40179	39649	2.27	38753	38601	2.57	37815	37800	2.95	37354	37354	3.41	36640	36640	3.94
90(32)	72(22)	43951	36685	2.02	41937	35855	2.26	40427	35233	2.58	39324	34756	2.97	38785	34538	3.44	38083	34236	3.99

SELECTION DATA

PPIM-B48UFA1DQ/PAS-48BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	44126	25185	2.39	42481	24431	2.74	40815	23674	3.10	39093	22900	3.46	37329	22114	3.83	34522	20881	4.21
66(19)	64(18)	47098	19882	2.37	45403	19156	2.74	43611	18395	3.11	41818	17642	3.48	39946	16864	3.85	37257	15760	4.27
68(20)	61(16)	44028	27699	2.39	42428	26964	2.74	40788	26215	3.10	39003	25407	3.46	37287	24642	3.83	34536	23443	4.21
68(20)	64(18)	47089	22455	2.37	45374	21720	2.74	43547	20944	3.10	41795	20208	3.48	39896	19418	3.85	37203	18312	4.27
72(22)	61(16)	43992	32708	2.39	42366	31952	2.74	40704	31180	3.10	38980	30390	3.46	37222	29602	3.83	34466	28439	4.20
72(22)	64(18)	46991	27520	2.37	45270	26781	2.74	43477	26018	3.11	41709	25272	3.48	39810	24479	3.85	37114	23376	4.27
72(22)	68(20)	50088	22196	2.35	48251	21462	2.73	46423	20740	3.11	44489	19982	3.49	42529	19224	3.88	39935	18231	4.33
75(24)	61(16)	43931	37582	2.39	42346	36788	2.74	40754	35993	3.10	39060	35143	3.46	37390	34326	3.83	34749	33082	4.21
75(24)	64(18)	46862	32480	2.37	45189	31756	2.74	43422	30988	3.10	41626	30223	3.48	39778	29445	3.85	37056	28361	4.27
75(24)	68(20)	49984	27233	2.35	48212	26524	2.73	46366	25793	3.11	44414	25027	3.49	42471	24272	3.88	39889	23284	4.33
75(24)	72(22)	53230	21886	2.33	51319	21177	2.72	49403	20473	3.12	47352	19727	3.51	45279	18981	3.91	42707	18067	4.38
79(26)	61(16)	44234	42145	2.39	42719	41244	2.74	41181	40244	3.10	39611	39130	3.47	38025	37922	3.84	35869	35869	4.24
79(26)	64(18)	46829	37377	2.37	45142	36637	2.74	43373	35865	3.10	41583	35061	3.48	39775	34244	3.85	37253	33150	4.27
79(26)	68(20)	49920	32207	2.35	48127	31484	2.73	46268	30735	3.11	44340	29973	3.49	42437	29223	3.88	39854	28252	4.33
79(26)	72(22)	53145	26904	2.33	51292	26216	2.72	49348	25501	3.12	47280	24747	3.51	45230	24008	3.91	42703	23108	4.38
81(27)	61(16)	44540	43892	2.39	43072	42789	2.74	41639	41611	3.10	40250	40250	3.47	38798	38798	3.84	36717	36717	4.26
81(27)	64(18)	46782	39740	2.37	45186	38989	2.74	43457	38171	3.11	41755	37369	3.48	39935	36515	3.85	37411	35407	4.28
81(27)	68(20)	49849	34644	2.35	48085	33924	2.73	46228	33172	3.11	44324	32412	3.49	42391	31651	3.88	39798	30682	4.33
81(27)	72(22)	53089	29384	2.33	51218	28688	2.72	49278	27973	3.12	47221	27217	3.51	45192	26483	3.91	42635	25570	4.38
82(28)	61(16)	45127	45127	2.38	43821	43821	2.74	42439	42439	3.10	41065	41065	3.48	39602	39602	3.85	37527	37527	4.28
82(28)	64(18)	46902	42014	2.37	45322	41244	2.74	43592	40417	3.11	41895	39606	3.48	40144	38647	3.86	37769	37182	4.28
82(28)	68(20)	49838	37083	2.35	48045	36345	2.73	46228	35603	3.11	44284	34825	3.49	42367	34065	3.88	39803	33063	4.33
82(28)	72(22)	53078	31861	2.33	51198	31156	2.72	49237	30428	3.11	47189	29672	3.51	45150	28932	3.91	42592	28019	4.38
86(30)	61(16)	46826	46826	2.37	45553	45553	2.74	44138	44138	3.11	42725	42725	3.49	41202	41202	3.87	39228	39228	4.32
86(30)	64(18)	47326	46180	2.37	45870	45174	2.74	44273	44007	3.11	42720	42707	3.49	41215	41215	3.87	39252	39252	4.32
86(30)	68(20)	49779	41828	2.35	48044	41056	2.73	46261	40260	3.11	44493	39470	3.49	42613	38650	3.88	40147	37619	4.34
86(30)	72(22)	52988	36720	2.33	51095	36001	2.72	49132	35261	3.12	47148	34517	3.51	45083	33763	3.91	42538	32857	4.38
90(32)	61(16)	48596	48596	2.36	47234	47234	2.73	45857	45857	3.11	44388	44388	3.50	42834	42834	3.89	40893	40893	4.35
90(32)	64(18)	48598	48598	2.36	47237	47237	2.73	45852	45852	3.11	44377	44377	3.50	42841	42841	3.89	40889	40889	4.35
90(32)	68(20)	50063	46298	2.35	48374	45535	2.73	46623	44627	3.11	44873	43599	3.50	43148	42471	3.89	40923	40850	4.35
90(32)	72(22)	52867	41485	2.33	50993	40765	2.72	49103	40020	3.11	47126	39230	3.51	45176	38439	3.91	42744	37465	4.38

< 4-Way Mini Cassette Type >

PCIM-B09UFA1DQ/PAS-09BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	10163	5739	0.44	9695	5471	0.49	9345	5351	0.55	9101	5232	0.62	8980	5263	0.71	8814	5139	0.82
66(19)	64(18)	10709	4245	0.44	10235	4034	0.48	9871	3934	0.55	9621	3875	0.62	9490	3817	0.72	9296	3697	0.83
68(20)	61(16)	10153	6311	0.44	9688	6136	0.49	9344	6050	0.55	9095	5966	0.62	8980	5871	0.72	8787	5858	0.82
68(20)	64(18)	10700	4963	0.44	10226	4782	0.48	9857	4585	0.55	9608	4516	0.62	9493	4431	0.72	9291	4411	0.83
72(22)	61(16)	10138	7586	0.44	9679	7466	0.49	9331	7309	0.55	9081	7265	0.62	8970	7166	0.71	8769	7196	0.82
72(22)	64(18)	10675	6204	0.44	10205	6036	0.48	9851	5910	0.55	9596	5797	0.62	9480	5765	0.72	9278	5682	0.83
72(22)	68(20)	11231	4808	0.43	10760	4657	0.48	10392	4458	0.54	10139	4423	0.62	10011	4320	0.72	9786	4296	0.83
75(24)	61(16)	10150	8784	0.44	9702	8667	0.49	9366	8480	0.55	9129	8433	0.62	9019	8386	0.72	8857	8324	0.82
75(24)	64(18)	10663	7442	0.44	10194	7277	0.48	9835	7160	0.55	9583	7055	0.62	9465	7021	0.72	9273	6986	0.83
75(24)	68(20)	11222	5994	0.43	10745	5907	0.48	10377	5749	0.54	10124	5731	0.63	9997	5681	0.72	9765	5577	0.83
75(24)	72(22)	11785	4674	0.42	11315	4482	0.47	10944	4334	0.54	10683	4304	0.63	10545	4270	0.73	10296	4131	0.84
79(26)	61(16)	10235	9856	0.44	9825	9825	0.49	9525	9525	0.55	9320	9320	0.62	9223	9223	0.72	9099	9099	0.83
79(26)	64(18)	10651	8655	0.44	10196	8568	0.48	9849	8398	0.55	9609	8262	0.62	9489	8258	0.72	9310	8267	0.83
79(26)	68(20)	11208	7251	0.43	10734	7145	0.48	10369	6977	0.54	10112	6964	0.63	9987	6882	0.72	9753	6904	0.83
79(26)	72(22)	11777	5830	0.42	11306	5783	0.47	10928	5664	0.54	10663	5523	0.63	10537	5499	0.73	10286	5430	0.84
81(27)	61(16)	10356	10356	0.44	9980	9980	0.49	9691	9691	0.55	9490	9490	0.62	9388	9388	0.72	9262	9262	0.83
81(27)	64(18)	10670	9292	0.44	10224	9089	0.48	9876	8959	0.55	9642	8839	0.62	9520	8829	0.72	9349	8768	0.83
81(27)	68(20)	11200	7865	0.43	10733	7725	0.48	10352	7617	0.54	10108	7563	0.63	9977	7552	0.72	9748	7530	0.83
81(27)	72(22)	11773	6519	0.42	11284	6396	0.47	10921	6204	0.54	10663	6157	0.63	10530	6114	0.73	10276	6093	0.84
82(28)	61(16)	10523	10523	0.44	10148	10148	0.48	9855	9855	0.55	9651	9651	0.62	9548	9548	0.72	9425	9425	0.83
82(28)	64(18)	10708	9886	0.44	10266	9671	0.48	9925	9428	0.54	9700	9352	0.62	9592	9249	0.72	9429	9204	0.83
82(28)	68(20)	11196	8555	0.43	10725	8323	0.48	10354	8276	0.54	10104	8137	0.63	9979	8093	0.72	9764	8047	0.83
82(28)	72(22)	11769	7074	0.42	11285	7017	0.47	10915	6856	0.54	10656	6777	0.63	10523	6731	0.73	10271	6749	0.84
86(30)	61(16)	10852	10852	0.43	10481	10481	0.48	10181	10181	0.54	9986	9986	0.62	9880	9880	0.72	9741	9741	0.83
86(30)	64(18)	10853	10853	0.43	10477	10188	0.48	10188	10188	0.54	9991	9991	0.62	9884	9884	0.72	9729	9729	0.83
86(30)	68(20)	11216	9630	0.43	10769	9533	0.48	10416	9399	0.54	10166	9310	0.62	10046	9253	0.72	9833	9234	0.83
86(30)	72(22)	11758	8373	0.42	11276	8238	0.47	10907	8101	0.54	10640	8038	0.63	10517	8016	0.73	10260	7949	0.84
90(32)	61(16)	11182	11182	0.43	10814	10814	0.48	10517	10517	0.54	10326	10326	0.62	10219	10219	0.72	10056	10056	0.84
90(32)	64(18)	11183	11183	0.43	10816	10816	0.48	10518	10518	0.54	10325	10325	0.62	10220	10220	0.72	10057	10057	0.84
90(32)	68(20)	11291	10678	0.43	10874	10447	0.48	10545	10190	0.54	10329	10329	0.62	10223	10223	0.72	10058	10058	0.84
90(32)	72(22)	11744	9461	0.42	11280	9378	0.47	10931	9267	0.54	10677	9176	0.63	10553	9155	0.72	10391	9081	0.84

SELECTION DATA

PCIM-B12UFA1DQ/PAS-12BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	13173	7385	0.62	12567	7130	0.68	12113	6926	0.77	11796	6872	0.87	11640	6739	1.00	11424	6732	1.15
66(19)	64(18)	13881	5540	0.61	13266	5300	0.68	12794	5129	0.76	12471	4967	0.88	12301	4898	1.01	12049	4817	1.16
68(20)	61(16)	13160	8163	0.62	12557	8002	0.68	12111	7862	0.77	11789	7691	0.87	11639	7601	1.00	11389	7571	1.15
68(20)	64(18)	13870	6326	0.61	13255	6069	0.68	12777	5989	0.76	12454	5850	0.87	12304	5756	1.01	12044	5647	1.16
72(22)	61(16)	13141	9925	0.62	12546	9653	0.68	12095	9477	0.77	11771	9374	0.87	11626	9314	1.00	11366	9286	1.15
72(22)	64(18)	13837	8062	0.61	13228	7795	0.68	12769	7600	0.76	12438	7531	0.87	12288	7487	1.01	12026	7356	1.16
72(22)	68(20)	14558	6190	0.60	13947	5941	0.67	13470	5794	0.76	13142	5659	0.88	12976	5687	1.01	12685	5595	1.17
75(24)	61(16)	13156	11412	0.62	12576	11266	0.68	12139	11004	0.77	11833	10887	0.87	11690	10842	1.00	11481	10758	1.16
75(24)	64(18)	13821	9599	0.61	13213	9390	0.68	12748	9315	0.76	12421	9184	0.87	12268	9147	1.00	12019	9149	1.16
75(24)	68(20)	14546	7788	0.60	13928	7569	0.67	13450	7439	0.76	13123	7326	0.88	12958	7368	1.01	12657	7253	1.17
75(24)	72(22)	15276	6010	0.59	14666	5784	0.66	14186	5639	0.76	13847	5485	0.88	13669	5492	1.02	13346	5338	1.18
79(26)	61(16)	13266	12810	0.62	12735	12443	0.68	12346	12346	0.77	12080	12080	0.88	11955	11955	1.00	11794	11794	1.16
79(26)	64(18)	13805	11196	0.61	13217	11066	0.68	12766	10897	0.76	12455	10720	0.87	12299	10762	1.01	12068	10691	1.16
79(26)	68(20)	14527	9512	0.60	13913	9208	0.67	13440	9144	0.76	13107	9065	0.88	12945	8944	1.01	12641	8877	1.17
79(26)	72(22)	15265	7564	0.59	14655	7462	0.66	14164	7225	0.76	13821	7253	0.88	13658	7135	1.02	13332	7102	1.18
81(27)	61(16)	13424	13424	0.62	12936	12936	0.68	12562	12562	0.76	12301	12301	0.87	12168	12168	1.01	12006	12006	1.16
81(27)	64(18)	13831	11939	0.61	13252	11817	0.68	12801	11654	0.76	12498	11549	0.87	12340	11448	1.01	12118	11368	1.16
81(27)	68(20)	14518	10282	0.60	13912	10089	0.67	13418	9962	0.76	13102	9835	0.88	12933	9764	1.01	12635	9685	1.17
81(27)	72(22)	15260	8464	0.59	14626	8199	0.66	14156	8148	0.76	13821	7993	0.88	13649	7952	1.02	13320	7840	1.18
82(28)	61(16)	13639	13639	0.61	13153	13153	0.68	12774	12774	0.76	12509	12509	0.87	12376	12376	1.01	12216	12216	1.16
82(28)	64(18)	13880	12745	0.61	13307	12472	0.68	12865	12271	0.76	12573	12053	0.87	12432	11975	1.01	12222	12222	1.16
82(28)	68(20)	14512	11038	0.60	13902	10861	0.67	13421	10756	0.76	13096	10544	0.88	12935	10553	1.01	12656	10492	1.17
82(28)	72(22)	15255	9198	0.59	14628	8976	0.66	14148	8936	0.76	13813	8777	0.88	13640	8729	1.02	13313	8700	1.18
86(30)	61(16)	14067	14067	0.60	13585	13585	0.67	13197	13197	0.76	12943	12943	0.87	12806	12806	1.01	12626	12626	1.17
86(30)	64(18)	14067	14067	0.60	13581	13581	0.67	13206	13206	0.76	12950	12950	0.87	12812	12812	1.01	12611	12611	1.17
86(30)	68(20)	14538	12581	0.60	13959	12289	0.67	13501	12226	0.76	13177	12046	0.88	13022	12041	1.01	12745	11894	1.17
86(30)	72(22)	15240	10860	0.59	14616	10617	0.66	14137	10466	0.76	13791	10393	0.88	13632	10343	1.02	13299	10229	1.18
90(32)	61(16)	14494	14494	0.60	14017	14017	0.67	13632	13632	0.76	13384	13384	0.88	13246	13246	1.01	13035	13035	1.17
90(32)	64(18)	14496	14496	0.60	14020	14020	0.67	13634	13634	0.76	13383	13383	0.88	13247	13247	1.01	13036	13036	1.17
90(32)	68(20)	14636	13858	0.60	14095	13623	0.67	13669	13244	0.76	13388	13388	0.88	13250	13250	1.01	13037	13037	1.17
90(32)	72(22)	15223	12370	0.59	14620	12160	0.66	14169	12050	0.76	13839	11883	0.88	13678	11884	1.02	13468	11719	1.18

< 4-Way Cassette Type >

PCI-B18UFA1DQ/PAS-18BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	28747	28395	1.40	29857	29520	1.43	28818	28487	1.45	28904	28568	1.48	27483	27164	1.52	27682	27216	1.54
66(19)	64(18)	30585	26331	1.43	31713	27849	1.46	31087	27513	1.48	31182	26650	1.51	29297	24974	1.55	30028	25497	1.57
68(20)	61(16)	26489	26011	1.40	26803	26461	1.43	26385	26131	1.45	27228	26808	1.48	25658	25315	1.52	25112	24714	1.54
68(20)	64(18)	28606	25204	1.43	29269	24749	1.46	28828	24955	1.48	29293	25407	1.51	27542	23754	1.55	27550	23811	1.57
72(22)	61(16)	24086	23730	1.40	25192	24752	1.43	24648	24279	1.45	24495	24295	1.48	23554	23238	1.52	23161	22711	1.54
72(22)	64(18)	26370	23202	1.43	27421	24046	1.46	26842	22784	1.48	26960	22635	1.51	25438	20442	1.55	25555	21494	1.57
72(22)	68(20)	28166	23348	1.45	29406	25354	1.48	28921	24086	1.50	28775	24511	1.53	27604	22770	1.57	27749	23328	1.59
75(24)	61(16)	20809	20499	1.40	20641	20186	1.43	20353	19914	1.45	20229	19932	1.48	19441	19019	1.52	19681	19313	1.54
75(24)	64(18)	22895	18019	1.43	22721	17823	1.46	22600	17678	1.48	22363	17924	1.51	21902	17019	1.55	21551	17837	1.57
75(24)	68(20)	24599	20231	1.45	24960	20321	1.48	24695	20491	1.50	24647	19934	1.53	23626	18764	1.57	23510	18531	1.59
75(24)	72(22)	26353	22068	1.48	27380	22979	1.51	26866	22197	1.53	26888	22092	1.56	25610	21576	1.60	25955	20975	1.62
79(26)	61(16)	19090	18808	1.40	18571	18106	1.43	18343	18018	1.45	18529	18227	1.48	18156	17942	1.52	17632	17164	1.54
79(26)	64(18)	20944	17388	1.43	20828	16651	1.46	20504	16198	1.48	20461	16357	1.51	20024	16208	1.55	19607	16386	1.57
79(26)	68(20)	22982	18857	1.45	23140	18777	1.48	22887	18117	1.50	22872	18112	1.53	22352	17938	1.57	21858	17718	1.59
79(26)	72(22)	25205	20409	1.48	25209	20299	1.51	24774	19882	1.53	25030	20630	1.56	24334	20122	1.60	23591	19471	1.62
81(27)	61(16)	16050	15754	1.40	16190	15943	1.43	15984	15665	1.45	15838	15516	1.48	15539	15050	1.52	15186	14982	1.54
81(27)	64(18)	18536	14607	1.43	18432	15327	1.46	18320	15285	1.48	18000	14592	1.51	17860	14512	1.55	17560	13862	1.57
81(27)	68(20)	20800	15880	1.45	20394	15448	1.48	20348	16064	1.50	19971	15395	1.53	20285	16280	1.57	19559	14634	1.59
81(27)	72(22)	23017	18632	1.48	22378	18340	1.51	22592	18362	1.53	22201	17360	1.56	22409	18119	1.60	22014	17822	1.62
82(28)	61(16)	14805	14542	1.40	14393	14120	1.43	14369	13981	1.45	13755	13463	1.48	13516	13272	1.52	13562	13237	1.54
82(28)	64(18)	16731	12614	1.43	16608	13114	1.46	16258	13178	1.48	16074	11490	1.51	15544	11682	1.55	15475	11296	1.57
82(28)	68(20)	18780	14280	1.45	18357	13976	1.48	18698	14550	1.50	18309	13931	1.53	17875	13560	1.57	17483	13107	1.59
82(28)	72(22)	20692	16649	1.48	20496	16130	1.51	21165	17069	1.53	20623	15760	1.56	20228	15949	1.60	19745	15126	1.62
86(30)	61(16)	12728	12456	1.40	12235	11920	1.43	11319	11083	1.45	11385	11009	1.48	11176	10747	1.52	11565	11287	1.54
86(30)	64(18)	14670	10457	1.43	14210	10882	1.46	13804	10722	1.48	13882	9189	1.51	13284	9293	1.55	13597	10066	1.57
86(30)	68(20)	16979	12812	1.45	16341	12159	1.48	15795	11210	1.50	15991	11084	1.53	15691	10985	1.57	16060	11697	1.59
86(30)	72(22)	19314	15240	1.48	18334	13936	1.51	18141	13740	1.53	17799	13075	1.56	17941	13171	1.60	17962	13405	1.62
90(32)	61(16)	10316	10060	1.40	10024	9722	1.43	10179	9762	1.45	9303	8877	1.48	9329	9109	1.52	9273	8975	1.54
90(32)	64(18)	12534	7800	1.43	11857	8006	1.46	12065	9015	1.48	11389	8286	1.51	11039	6783	1.55	11109	6422	1.57
90(32)	68(20)	14615	10401	1.45	13567	8569	1.48	13967	9227	1.50	13090	9066	1.53	12866	8340	1.57	13422	9186	1.59
90(32)	72(22)	16551	11709	1.48	15765	11054	1.51	15763	11332	1.53	15157	10308	1.56	14929	10065	1.60	15913	10915	1.62

SELECTION DATA

PCI-B24UFA1DQ/PAS-24BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	30935	29156	1.78	35457	32822	1.79	29857	27431	1.81	30068	28402	1.82	29551	27603	1.84	28635	26397	1.85
66(19)	64(18)	32103	27262	1.81	36541	31723	1.82	30985	25864	1.83	31107	26156	1.85	30495	25378	1.87	29706	24900	1.88
68(20)	61(16)	29597	27478	1.78	34208	32540	1.79	28593	25979	1.81	28884	27098	1.82	28017	25582	1.84	27381	24814	1.85
68(20)	64(18)	30796	25688	1.81	35519	30358	1.82	29893	24855	1.83	30091	25225	1.85	29205	23931	1.87	28655	23780	1.88
72(22)	61(16)	28209	25844	1.78	33037	30398	1.79	27762	26150	1.81	27483	25344	1.82	26945	24667	1.84	26506	23856	1.85
72(22)	64(18)	29529	24497	1.81	34235	29290	1.82	28765	23631	1.83	28758	23519	1.85	27924	22987	1.87	27437	22289	1.88
72(22)	68(20)	30770	25306	1.82	35518	29871	1.83	29846	24390	1.84	29998	24531	1.86	29152	23444	1.88	28597	22885	1.89
75(24)	61(16)	25691	23923	1.78	31155	29196	1.79	25192	22978	1.81	25390	23167	1.82	24589	22695	1.84	24156	22358	1.85
75(24)	64(18)	26986	21970	1.81	32281	26982	1.82	26253	21411	1.83	26505	21337	1.85	25841	20929	1.87	25386	20206	1.88
75(24)	68(20)	28268	22792	1.82	33215	27349	1.83	27575	22154	1.84	27499	21950	1.86	26889	21169	1.88	26454	20651	1.89
75(24)	72(22)	29352	23501	1.83	34292	28805	1.85	28878	23455	1.86	28446	22931	1.87	28056	22623	1.90	27455	21754	1.91
79(26)	61(16)	24944	22975	1.78	30239	27923	1.79	24182	22328	1.81	24326	22673	1.82	23522	21811	1.84	23441	21671	1.85
79(26)	64(18)	26008	21189	1.81	31257	26174	1.82	25275	20140	1.83	25243	20002	1.85	24783	19565	1.87	24455	19225	1.88
79(26)	68(20)	27061	21574	1.82	32269	26550	1.83	26599	21006	1.84	26403	20621	1.86	25931	20139	1.88	25391	19660	1.89
79(26)	72(22)	28172	22596	1.83	33595	28025	1.85	27614	22182	1.86	27434	21777	1.87	27255	21393	1.90	26526	20915	1.91
81(27)	61(16)	24066	21704	1.78	29224	27237	1.79	23125	20542	1.81	22982	20678	1.82	22551	20334	1.84	22237	19668	1.85
81(27)	64(18)	25068	19762	1.81	30259	25225	1.82	24175	18962	1.83	24000	19052	1.85	23766	18677	1.87	23466	18414	1.88
81(27)	68(20)	26286	20629	1.82	31460	25720	1.83	25217	19786	1.84	24925	19321	1.86	25076	19575	1.88	24400	18791	1.89
81(27)	72(22)	27563	22056	1.83	32773	26908	1.85	26419	20806	1.86	26067	20376	1.87	26303	20532	1.90	25351	19793	1.91
82(28)	61(16)	22644	20829	1.78	28348	26421	1.79	21972	20069	1.81	21876	19783	1.82	21608	19442	1.84	21227	19399	1.85
82(28)	64(18)	23835	18813	1.81	29256	24276	1.82	23096	17924	1.83	22817	17511	1.85	22733	17755	1.87	22426	17622	1.88
82(28)	68(20)	25038	19429	1.82	30224	24616	1.83	24234	18709	1.84	23797	18279	1.86	23948	18198	1.88	23693	18256	1.89
82(28)	72(22)	26323	20505	1.83	31434	25708	1.85	25156	19809	1.86	24927	19446	1.87	25164	19793	1.90	24863	19011	1.91
86(30)	61(16)	21838	19865	1.78	26870	25071	1.79	20906	19122	1.81	20308	17927	1.82	20692	18870	1.84	20265	18075	1.85
86(30)	64(18)	22821	17692	1.81	28138	23113	1.82	21882	16658	1.83	21490	16689	1.85	21617	16683	1.87	21234	16138	1.88
86(30)	68(20)	23917	18367	1.82	29343	23584	1.83	23025	17529	1.84	22482	17129	1.86	22652	16931	1.88	22223	16739	1.89
86(30)	72(22)	24930	19252	1.83	30334	24691	1.85	24001	18213	1.86	23653	17948	1.87	23823	18098	1.90	23266	17734	1.91
90(32)	61(16)	20795	18481	1.78	26122	24267	1.79	19218	16969	1.81	19058	16499	1.82	19407	17587	1.84	18955	16791	1.85
90(32)	64(18)	21843	16668	1.81	27098	22027	1.82	20550	15447	1.83	20303	14986	1.85	20679	15455	1.87	20087	15079	1.88
90(32)	68(20)	22934	17460	1.82	28073	22591	1.83	21552	15992	1.84	21290	15702	1.86	21871	16401	1.88	21140	15692	1.89
90(32)	72(22)	24061	18725	1.83	29060	23333	1.85	22602	16955	1.86	22448	16654	1.87	23007	17581	1.90	22406	16907	1.91

PCI-B30UFA1DQ/PAS-30BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	47936	46681	1.92	49787	48530	1.97	48054	46832	1.99	48197	46965	2.03	45828	44657	2.09	46160	44743	2.12
66(19)	64(18)	51000	43288	1.97	52881	45783	2.01	51838	45231	2.03	51996	43812	2.08	48853	41057	2.13	50072	41917	2.16
68(20)	61(16)	44170	42762	1.92	44694	43501	1.97	43997	42959	1.99	45403	44072	2.03	42785	41617	2.09	41874	40629	2.12
68(20)	64(18)	47701	41435	1.97	48806	40687	2.01	48071	41026	2.03	48846	41769	2.08	45926	39051	2.13	45940	39145	2.16
72(22)	61(16)	40163	39012	1.92	42008	40692	1.97	41101	39914	1.99	40845	39941	2.03	39276	38203	2.09	38621	37336	2.12
72(22)	64(18)	43972	38144	1.97	45725	39531	2.01	44759	37457	2.03	44956	37212	2.08	42418	33606	2.13	42613	35336	2.16
72(22)	68(20)	46967	38384	1.99	49035	41682	2.03	48226	39597	2.06	47982	40296	2.10	46030	37433	2.16	46271	38351	2.19
75(24)	61(16)	34699	33700	1.92	34419	33185	1.97	33939	32738	1.99	33732	32768	2.03	32418	31267	2.09	32818	31750	2.12
75(24)	64(18)	38177	29623	1.97	37887	29301	2.01	37686	29062	2.03	37290	29467	2.08	36522	27979	2.13	35936	29324	2.16
75(24)	68(20)	41019	33259	1.99	41621	33407	2.03	41179	33687	2.06	41099	32771	2.10	39396	30848	2.16	39203	30465	2.19
75(24)	72(22)	43944	36279	2.03	45656	37777	2.08	44799	36491	2.10	44836	36319	2.14	42705	35471	2.20	43280	34483	2.23
79(26)	61(16)	31833	30920	1.92	30967	29766	1.97	30587	29621	1.99	30897	29965	2.03	30275	29496	2.09	29401	28217	2.12
79(26)	64(18)	34924	28586	1.97	34731	27374	2.01	34190	26629	2.03	34119	26891	2.08	33390	26646	2.13	32695	26938	2.16
79(26)	68(20)	38322	31001	1.99	38586	30869	2.03	38164	29784	2.06	38139	29776	2.10	37272	29490	2.16	36448	29128	2.19
79(26)	72(22)	42029	33552	2.03	42036	33371	2.08	41311	32686	2.10	41738	33915	2.14	40577	33080	2.20	39338	32010	2.23
81(27)	61(16)	26763	25899	1.92	26997	26210	1.97	26653	25753	1.99	26410	25508	2.03	25911	24742	2.09	25323	24630	2.12
81(27)	64(18)	30909	24014	1.97	30735	25197	2.01	30549	25128	2.03	30015	23989	2.08	29782	23857	2.13	29281	22789	2.16
81(27)	68(20)	34684	26106	1.99	34007	25396	2.03	33930	26409	2.06	33302	25309	2.10	33825	26764	2.16	32615	24058	2.19
81(27)	72(22)	38381	30631	2.03	37315	30151	2.08	37672	30187	2.10	37020	28540	2.14	37367	29787	2.20	36708	29299	2.23
82(28)	61(16)	24687	23907	1.92	24000	23213	1.97	23960	22985	1.99	22936	22133	2.03	22538	21819	2.09	22615	21761	2.12
82(28)	64(18)	27899	20737	1.97	27694	21559	2.01	27110	21664	2.03	26803	18889	2.08	25920	19205	2.13	25805	18570	2.16
82(28)	68(20)	31316	23476	1.99	30610	22976	2.03	31179	23920	2.06	30530	22902	2.10	29807	22292	2.16	29153	21548	2.19
82(28)	72(22)	34504	27371	2.03	34177	26517	2.08	35293	28061	2.10	34389	25909	2.14	33730	26220	2.20	32925	24867	2.23
86(30)	61(16)	21224	20477	1.92	20402	19596	1.97	18874	18220	1.99	18984	18099	2.03	18636	17668	2.09	19285	18556	2.12
86(30)	64(18)	24462	17191	1.97	23695	17890	2.01	23018	17627	2.03	23148	15107	2.08	22151	15278	2.13	22673	16548	2.16
86(30)	68(20)	28312	21063	1.99	27249	19989	2.03	26338	18429	2.06	26665	18222	2.10	26165	18059	2.16	26780	19230	2.19
86(30)	72(22)	32206	25054	2.03	30572	22911	2.08	30250	22588	2.10	29680	21495	2.14	29917	21653	2.20	29952	22038	2.23
90(32)	61(16)	17202	16538	1.92	16715	15983	1.97	16973	16049	1.99	15513	14594	2.03	15556	14975	2.09	15463	14755	2.12
90(32)	64(18)	20900	12823	1.97	19772	13162	2.01	20118	14821	2.03	18991	13622	2.08	18408	11151	2.13	18524	10558	2.16
90(32)	68(20)	24371	17099	1.99	22623	14087	2.03	23290	15169	2.06	21828	14904	2.10	21454	13711	2.16	22381	15102	2.19
90(32)	72(22)	27599	19249	2.03	26288	18173	2.08	26285	18630	2.10	25274	16946	2.14	24894	16547	2.20	26535	17944	2.23

SELECTION DATA

PCI-B36UFA1DQ/PAS-36BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	36861	20708	2.02	35166	19841	2.24	33897	19302	2.51	33009	19034	2.86	32571	18828	3.28	31968	18857	3.79
66(19)	64(18)	38844	15343	1.99	37123	14741	2.21	35802	14132	2.50	34898	13982	2.87	34422	13909	3.30	33718	13415	3.81
68(20)	61(16)	36825	22850	2.03	35138	22241	2.24	33891	21791	2.51	32990	21489	2.86	32570	21520	3.29	31871	21286	3.79
68(20)	64(18)	38812	17942	1.99	37091	17319	2.21	35753	16739	2.50	34850	16445	2.86	34431	16164	3.30	33701	15892	3.81
72(22)	61(16)	36772	27460	2.03	35108	26906	2.24	33844	26460	2.51	32938	26345	2.87	32533	25964	3.28	31806	25911	3.79
72(22)	64(18)	38720	22605	1.99	37017	21827	2.21	35731	21473	2.50	34805	21105	2.86	34385	20982	3.30	33651	20712	3.81
72(22)	68(20)	40738	17204	1.96	39027	16733	2.18	37692	16310	2.49	36775	16089	2.87	36310	15643	3.32	35496	15339	3.83
75(24)	61(16)	36816	32119	2.03	35190	31403	2.24	33970	30811	2.51	33112	30720	2.86	32712	30260	3.29	32127	30223	3.79
75(24)	64(18)	38675	26963	1.99	36975	26454	2.22	35671	25914	2.50	34757	25768	2.86	34330	25394	3.29	33633	25480	3.80
75(24)	68(20)	40703	21732	1.96	38975	21401	2.19	37638	20787	2.49	36721	20775	2.87	36259	20408	3.32	35417	20106	3.83
75(24)	72(22)	42747	16871	1.92	41040	16221	2.17	39696	15865	2.49	38747	15600	2.88	38249	15340	3.33	37345	14922	3.86
79(26)	61(16)	37124	35799	2.02	35635	35635	2.23	34547	34547	2.51	33803	33803	2.87	33453	33453	3.29	33003	33003	3.80
79(26)	64(18)	38632	31532	1.99	36984	31006	2.22	35724	30511	2.50	34853	30105	2.86	34417	29901	3.30	33770	29905	3.81
79(26)	68(20)	40652	26419	1.96	38933	25907	2.18	37609	25383	2.49	36677	25363	2.87	36225	24993	3.32	35374	24867	3.83
79(26)	72(22)	42715	21217	1.92	41008	20745	2.17	39636	20579	2.49	38675	20191	2.87	38219	20019	3.33	37308	19697	3.86
81(27)	61(16)	37564	37564	2.01	36198	36198	2.22	35152	35152	2.50	34421	34421	2.87	34051	34051	3.30	33596	33596	3.81
81(27)	64(18)	38703	33589	1.99	37084	32975	2.21	35821	32554	2.50	34974	32326	2.87	34531	32028	3.30	33910	32029	3.81
81(27)	68(20)	40625	28548	1.96	38929	28070	2.19	37548	27766	2.49	36663	27533	2.87	36189	27275	3.32	35357	27327	3.84
81(27)	72(22)	42704	23650	1.92	40927	23235	2.17	39612	22818	2.49	38675	22579	2.87	38193	22070	3.33	37273	21866	3.86
82(28)	61(16)	38167	38167	2.00	36807	36807	2.22	35745	35745	2.50	35005	35005	2.87	34631	34631	3.30	34185	34185	3.81
82(28)	64(18)	38839	35771	1.99	37236	34824	2.21	35999	34346	2.50	35184	33803	2.87	34790	33374	3.31	34200	34200	3.82
82(28)	68(20)	40608	30729	1.96	38901	30503	2.19	37555	29972	2.49	36648	29762	2.87	36197	29516	3.32	35415	29376	3.83
82(28)	72(22)	42689	25810	1.92	40932	25383	2.17	39590	24731	2.49	38652	24644	2.87	38168	24445	3.33	37253	24283	3.87
86(30)	61(16)	39363	39363	1.98	38015	38015	2.20	36930	36930	2.50	36219	36219	2.87	35835	35835	3.32	35333	35333	3.84
86(30)	64(18)	39365	39365	1.98	38003	38003	2.20	36953	36953	2.50	36237	36237	2.87	35851	34837	3.32	35288	35288	3.84
86(30)	68(20)	40681	35208	1.96	39060	34519	2.19	37779	34196	2.50	36872	33917	2.87	36438	33770	3.31	35664	33477	3.84
86(30)	72(22)	42647	30205	1.92	40899	29876	2.17	39561	29263	2.49	38591	29216	2.87	38148	28852	3.34	37216	28627	3.87
90(32)	61(16)	40559	40559	1.96	39223	39223	2.19	38148	38148	2.49	37453	37453	2.87	37066	37066	3.32	36475	36475	3.85
90(32)	64(18)	40564	40564	1.96	39233	39233	2.19	38151	38151	2.49	37449	37449	2.87	37070	37070	3.32	36479	36479	3.85
90(32)	68(20)	40955	38904	1.96	39442	37857	2.19	38249	38249	2.49	37464	37464	2.87	37078	37078	3.32	36481	36481	3.85
90(32)	72(22)	42597	34478	1.92	40912	33891	2.17	39649	33536	2.49	38726	33364	2.87	38276	33220	3.33	37688	32845	3.88

PCI-B48UFA1DQ/PAS-48BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	58004	54668	3.71	66481	61541	3.74	55981	51434	3.76	56378	53254	3.79	55409	51755	3.83	53691	49495	3.85
66(19)	64(18)	60194	51116	3.76	68515	59480	3.79	58096	48495	3.81	58326	49043	3.84	57179	47583	3.88	55698	46687	3.90
68(20)	61(16)	55495	51522	3.71	64140	61013	3.74	53612	48710	3.76	54157	50809	3.79	52531	47967	3.83	51340	46527	3.85
68(20)	64(18)	57743	48165	3.76	66598	56922	3.79	56049	46603	3.81	56421	47296	3.84	54759	44870	3.88	53728	44587	3.90
72(22)	61(16)	52891	48457	3.71	61944	56996	3.74	52054	49031	3.76	51530	47520	3.79	50521	46251	3.83	49699	44730	3.85
72(22)	64(18)	55366	45931	3.76	64191	54919	3.79	53935	44308	3.81	53921	44099	3.84	52357	43101	3.88	51444	41792	3.90
72(22)	68(20)	57694	47448	3.78	66597	56008	3.81	55962	45731	3.83	56247	45995	3.86	54660	43958	3.90	53619	42909	3.92
75(24)	61(16)	48170	44856	3.71	58415	54742	3.74	47235	43083	3.76	47606	43439	3.79	46104	42554	3.83	45293	41922	3.85
75(24)	64(18)	50599	41193	3.76	60527	50592	3.79	49224	40146	3.81	49696	40007	3.84	48451	39242	3.88	47598	37886	3.90
75(24)	68(20)	53002	42735	3.78	62279	51279	3.81	51704	41539	3.83	51561	41156	3.86	50416	39692	3.90	49601	38721	3.92
75(24)	72(22)	55035	44065	3.81	64297	54010	3.84	54147	43978	3.86	53336	42996	3.89	52605	42418	3.93	51478	40788	3.95
79(26)	61(16)	46770	43078	3.71	56699	52355	3.74	45342	41865	3.76	45611	42512	3.79	44103	40896	3.83	43951	40633	3.85
79(26)	64(18)	48765	39730	3.76	58606	49077	3.79	47390	37762	3.81	47330	37504	3.84	46468	36685	3.88	45853	36046	3.90
79(26)	68(20)	50740	40452	3.78	60504	49782	3.81	49873	39386	3.83	49506	38664	3.86	48621	37760	3.90	47609	36862	3.92
79(26)	72(22)	52822	42367	3.81	62990	52547	3.84	51776	41591	3.86	51439	40832	3.89	51103	40111	3.93	49737	39215	3.95
81(27)	61(16)	45123	40695	3.71	54795	51069	3.74	43359	38517	3.76	43092	38772	3.79	42283	38127	3.83	41694	36878	3.85
81(27)	64(18)	47002	37053	3.76	56736	47297	3.79	45329	35554	3.81	45000	35722	3.84	44561	35020	3.88	43999	34527	3.90
81(27)	68(20)	49286	38680	3.78	58988	48225	3.81	47282	37098	3.83	46735	36226	3.86	47017	36703	3.90	45750	35234	3.92
81(27)	72(22)	51681	41355	3.81	61449	50453	3.84	49536	39012	3.86	48875	38205	3.89	49319	38498	3.93	47533	37111	3.95
82(28)	61(16)	42458	39054	3.71	53152	49540	3.74	41198	37630	3.76	41018	37094	3.79	40515	36453	3.83	39801	36374	3.85
82(28)	64(18)	44690	35275	3.76	54855	45517	3.79	43305	33608	3.81	42781	32833	3.84	42624	33291	3.88	42048	33041	3.90
82(28)	68(20)	46946	36430	3.78	56670	46155	3.81	45439	35080	3.83	44620	34273	3.86	44902	34121	3.90	44425	34230	3.92
82(28)	72(22)	49355	38446	3.81	58939	48202	3.84	47168	37142	3.86	46738	36461	3.89	47183	37112	3.93	46618	35645	3.95
86(30)	61(16)	40946	37246	3.71	50381	47008	3.74	39199	35853	3.76	38078	33614	3.79	38797	35382	3.83	37997	33891	3.85
86(30)	64(18)	42790	33172	3.76	52758	43337	3.79	41028	31234	3.81	40294	31291	3.84	40531	31281	3.88	39813	30258	3.90
86(30)	68(20)	44844	34438	3.78	55018	44220	3.81	43172	32867	3.83	42153	32116	3.86	42473	31746	3.90	41669	31385	3.92
86(30)	72(22)	46744	36097	3.81	56876	46295	3.84	45002	34149	3.86	44350	33653	3.89	44669	33933	3.93	43623	33251	3.95
90(32)	61(16)	38991	34652	3.71	48979	45500	3.74	36033	31817	3.76	35733	30935	3.79	36388	32975	3.83	35541	31483	3.85
90(32)	64(18)	40955	31252	3.76	50808	41301	3.79	38531	28963	3.81	38069	28099	3.84	38773	28979	3.88	37663	28274	3.90
90(32)	68(20)	43002	32738	3.78	52637	42358	3.81	40410	29985	3.83	39918	29441	3.86	41008	30752	3.90	39638	29422	3.92
90(32)	72(22)	45114	35109	3.81	54487	43749	3.84	42379	31790	3.86	42090	31226	3.89	43138	32964	3.93	42011	31700	3.95

SELECTION DATA

< Ceiling Suspended Type >

PPFC-B09UFA1DQ/PAS-09BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	9806	5528	0.46	9355	5330	0.51	9018	5138	0.57	8782	5111	0.65	8665	5027	0.75	8505	5019	0.86
66(19)	64(18)	10334	4163	0.45	9876	3928	0.50	9525	3817	0.57	9284	3745	0.65	9157	3685	0.75	8970	3591	0.87
68(20)	61(16)	9797	6110	0.46	9348	5937	0.51	9016	5801	0.57	8777	5754	0.65	8665	5719	0.75	8479	5673	0.86
68(20)	64(18)	10325	4765	0.45	9868	4562	0.50	9512	4455	0.57	9271	4376	0.65	9160	4333	0.75	8966	4217	0.87
72(22)	61(16)	9783	7297	0.46	9340	7199	0.51	9004	7058	0.57	8763	6937	0.65	8655	6903	0.75	8462	6896	0.86
72(22)	64(18)	10301	5983	0.45	9848	5846	0.50	9506	5704	0.57	9259	5632	0.65	9148	5527	0.75	8952	5549	0.87
72(22)	68(20)	10838	4585	0.45	10383	4416	0.50	10028	4310	0.57	9783	4250	0.65	9660	4195	0.75	9443	4133	0.87
75(24)	61(16)	9794	8489	0.46	9362	8359	0.51	9037	8178	0.57	8809	8086	0.65	8703	8051	0.75	8547	8084	0.86
75(24)	64(18)	10289	7174	0.45	9837	7028	0.50	9490	6914	0.57	9247	6847	0.65	9133	6823	0.75	8948	6781	0.86
75(24)	68(20)	10829	5839	0.45	10369	5707	0.50	10013	5518	0.57	9769	5498	0.65	9646	5412	0.75	9422	5343	0.87
75(24)	72(22)	11372	4503	0.44	10918	4298	0.49	10561	4158	0.57	10308	4114	0.66	10176	4086	0.76	9935	4006	0.88
79(26)	61(16)	9876	9539	0.46	9480	9480	0.51	9191	9191	0.57	8993	8993	0.65	8900	8900	0.75	8780	8780	0.86
79(26)	64(18)	10277	8423	0.45	9839	8212	0.50	9504	8074	0.57	9272	7986	0.65	9156	8025	0.75	8984	7932	0.87
79(26)	68(20)	10815	6988	0.45	10358	6846	0.50	10005	6733	0.57	9757	6686	0.65	9637	6708	0.75	9411	6607	0.87
79(26)	72(22)	11364	5662	0.44	10910	5496	0.49	10545	5477	0.57	10289	5346	0.65	10168	5342	0.76	9925	5230	0.88
81(27)	61(16)	9993	9993	0.46	9630	9630	0.51	9352	9352	0.57	9157	9157	0.65	9059	9059	0.75	8938	8938	0.86
81(27)	64(18)	10296	8954	0.45	9866	8744	0.50	9530	8636	0.57	9304	8561	0.65	9187	8572	0.75	9021	8512	0.86
81(27)	68(20)	10808	7600	0.45	10356	7519	0.50	9989	7419	0.57	9754	7296	0.65	9628	7246	0.75	9406	7227	0.87
81(27)	72(22)	11361	6261	0.44	10888	6149	0.49	10538	6041	0.57	10289	5983	0.65	10161	5945	0.76	9916	5853	0.88
82(28)	61(16)	10154	10154	0.46	9792	9792	0.51	9509	9509	0.57	9313	9313	0.65	9213	9213	0.75	9094	9094	0.87
82(28)	64(18)	10333	9447	0.45	9906	9329	0.50	9577	9095	0.57	9360	8993	0.65	9255	8869	0.75	9098	9098	0.87
82(28)	68(20)	10803	8269	0.45	10349	8088	0.50	9991	7937	0.57	9750	7851	0.65	9630	7841	0.75	9422	7771	0.87
82(28)	72(22)	11357	6829	0.44	10889	6701	0.49	10532	6654	0.57	10283	6514	0.65	10154	6490	0.76	9911	6438	0.88
86(30)	61(16)	10472	10472	0.45	10113	10113	0.50	9825	9825	0.57	9636	9636	0.65	9534	9534	0.75	9400	9400	0.87
86(30)	64(18)	10472	10472	0.45	10110	10110	0.50	9831	9831	0.57	9640	9640	0.65	9538	9538	0.75	9388	9388	0.87
86(30)	68(20)	10822	9324	0.45	10391	9214	0.50	10050	9034	0.57	9809	8981	0.65	9694	8954	0.75	9488	8890	0.87
86(30)	72(22)	11345	7989	0.44	10881	7897	0.49	10525	7806	0.57	10267	7701	0.65	10149	7671	0.76	9901	7630	0.88
90(32)	61(16)	10790	10790	0.45	10435	10435	0.50	10149	10149	0.57	9964	9964	0.65	9861	9861	0.76	9704	9704	0.87
90(32)	64(18)	10791	10791	0.45	10437	10437	0.50	10150	10150	0.57	9963	9963	0.65	9862	9862	0.76	9705	9705	0.87
90(32)	68(20)	10895	10301	0.45	10493	10047	0.50	10176	10176	0.57	9967	9967	0.65	9864	9864	0.76	9705	9705	0.87
90(32)	72(22)	11332	9149	0.44	10884	9022	0.49	10548	8940	0.57	10303	8826	0.65	10183	8857	0.76	10026	8800	0.88

PPFC-B12UFA1DQ/PAS-12BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	12964	7314	0.63	12368	7047	0.70	11922	6837	0.78	11609	6673	0.89	11455	6647	1.02	11243	6604	1.17
66(19)	64(18)	13661	5415	0.62	13056	5189	0.69	12591	4972	0.78	12273	4960	0.89	12106	4851	1.02	11859	4735	1.18
68(20)	61(16)	12951	8065	0.63	12358	7856	0.70	11919	7690	0.78	11603	7620	0.89	11455	7501	1.02	11209	7467	1.18
68(20)	64(18)	13650	6242	0.62	13045	6008	0.69	12574	5817	0.78	12257	5718	0.89	12109	5695	1.02	11853	5625	1.18
72(22)	61(16)	12933	9643	0.63	12348	9538	0.70	11903	9379	0.78	11584	9183	0.89	11442	9121	1.02	11186	9094	1.18
72(22)	64(18)	13618	7956	0.62	13019	7745	0.69	12566	7546	0.78	12241	7423	0.89	12093	7421	1.03	11835	7238	1.18
72(22)	68(20)	14327	6049	0.61	13726	5938	0.68	13256	5689	0.77	12934	5611	0.89	12770	5590	1.03	12484	5449	1.19
75(24)	61(16)	12948	11199	0.63	12376	10976	0.70	11947	10886	0.78	11646	10713	0.89	11505	10741	1.02	11299	10687	1.18
75(24)	64(18)	13602	9489	0.62	13004	9340	0.69	12546	9191	0.78	12224	9076	0.89	12074	8971	1.02	11829	8973	1.18
75(24)	68(20)	14315	7659	0.61	13707	7542	0.68	13237	7384	0.77	12915	7221	0.89	12752	7175	1.03	12456	7126	1.19
75(24)	72(22)	15034	5937	0.60	14434	5764	0.67	13961	5493	0.77	13627	5469	0.89	13452	5416	1.03	13134	5343	1.20
79(26)	61(16)	13056	12601	0.63	12533	12533	0.69	12150	12150	0.78	11889	11889	0.89	11765	11765	1.02	11607	11607	1.18
79(26)	64(18)	13587	11143	0.62	13007	10839	0.69	12564	10674	0.78	12258	10562	0.89	12105	10592	1.02	11877	10492	1.18
79(26)	68(20)	14297	9244	0.61	13693	9104	0.68	13227	8914	0.77	12899	8880	0.89	12740	8814	1.03	12441	8756	1.19
79(26)	72(22)	15023	7438	0.60	14422	7292	0.67	13940	7156	0.77	13602	7072	0.89	13441	6998	1.03	13121	6980	1.20
81(27)	61(16)	13211	13211	0.63	12731	12731	0.69	12363	12363	0.78	12106	12106	0.89	11976	11976	1.02	11816	11816	1.18
81(27)	64(18)	13612	11883	0.62	13042	11587	0.69	12598	11483	0.78	12300	11315	0.89	12145	11293	1.02	11926	11259	1.18
81(27)	68(20)	14288	10134	0.61	13691	9865	0.68	13205	9718	0.77	12894	9630	0.89	12728	9573	1.03	12435	9544	1.19
81(27)	72(22)	15019	8312	0.60	14394	8178	0.67	13932	7905	0.77	13602	7932	0.89	13432	7786	1.03	13109	7794	1.20
82(28)	61(16)	13423	13423	0.62	12945	12945	0.69	12571	12571	0.78	12311	12311	0.89	12180	12180	1.02	12023	12023	1.18
82(28)	64(18)	13660	12523	0.62	13096	12308	0.69	12661	12003	0.78	12374	11942	0.89	12235	11765	1.03	12028	11722	1.19
82(28)	68(20)	14282	10795	0.61	13682	10660	0.68	13208	10518	0.77	12889	10434	0.89	12730	10429	1.03	12455	10309	1.19
82(28)	72(22)	15014	9040	0.60	14396	8882	0.67	13924	8740	0.77	13594	8715	0.89	13424	8583	1.03	13102	8507	1.20
86(30)	61(16)	13844	13844	0.62	13370	13370	0.69	12988	12988	0.78	12738	12738	0.89	12603	12603	1.03	12426	12426	1.19
86(30)	64(18)	13845	13845	0.62	13366	13366	0.69	12996	12996	0.78	12744	12744	0.89	12609	12609	1.03	12411	12411	1.19
86(30)	68(20)	14307	12393	0.61	13737	12170	0.68	13287	12026	0.78	12968	11867	0.89	12815	11891	1.03	12543	11775	1.19
86(30)	72(22)	14999	10572	0.60	14384	10444	0.67	13913	10303	0.77	13572	10232	0.89	13416	10234	1.03	13089	10080	1.20
90(32)	61(16)	14264	14264	0.61	13795	13795	0.68	13416	13416	0.77	13172	13172	0.89	13036	13036	1.03	12828	12828	1.19
90(32)	64(18)	14266	14266	0.61	13798	13798	0.68	13418	13418	0.77	13171	13171	0.89	13037	13037	1.03	12829	12829	1.19
90(32)	68(20)	14404	13660	0.61	13872	13318	0.68	13452	13452	0.77	13176	13176	0.89	13040	13040	1.03	12830	12830	1.19
90(32)	72(22)	14981	12058	0.60	14389	12013	0.67	13945	11755	0.77	13620	11652	0.89	13461	11703	1.03	13255	11531	1.20

SELECTION DATA

PPFC-B18UFA1DQ/PAS-18BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	30355	29884	1.42	28731	28389	1.45	28775	28295	1.48	28309	27860	1.49	28085	27616	1.53	27363	26932	1.55
66(19)	64(18)	32462	27481	1.46	30955	27454	1.49	30677	27393	1.52	30128	25245	1.53	29939	25261	1.57	29838	26038	1.59
68(20)	61(16)	27978	27490	1.42	26527	26277	1.45	26604	26318	1.48	26397	26034	1.49	25913	25528	1.53	26284	26077	1.55
68(20)	64(18)	30295	26477	1.46	28575	24295	1.49	28961	25161	1.52	28147	24204	1.53	27881	24497	1.57	28054	24406	1.59
72(22)	61(16)	26266	25873	1.42	24422	24033	1.45	25214	24841	1.48	23574	23321	1.49	23946	23638	1.53	23575	23115	1.55
72(22)	64(18)	28126	23303	1.46	26785	22443	1.49	27123	22167	1.52	25772	22655	1.53	26170	22203	1.57	25692	21702	1.59
72(22)	68(20)	30086	25476	1.48	28887	24563	1.51	29100	25020	1.54	28265	23999	1.55	28656	24384	1.59	27637	22840	1.61
75(24)	61(16)	21443	20949	1.42	20509	20269	1.45	20951	20487	1.48	20004	19643	1.49	19719	19318	1.53	19199	18767	1.55
75(24)	64(18)	23359	19158	1.46	22410	18967	1.49	22731	18781	1.52	22252	17620	1.53	21550	17270	1.57	21297	17570	1.59
75(24)	68(20)	25807	20947	1.48	24408	20306	1.51	25057	20175	1.54	24033	19334	1.55	23747	19452	1.59	23569	19377	1.61
75(24)	72(22)	27762	23010	1.49	26290	21993	1.52	27498	22897	1.55	25914	21708	1.56	26013	21650	1.60	25281	20516	1.62
79(26)	61(16)	19616	19146	1.42	18714	18262	1.45	18146	17790	1.48	18206	17882	1.49	17595	17350	1.53	17122	16734	1.55
79(26)	64(18)	21451	17624	1.46	20422	16876	1.49	20436	16029	1.52	20325	15875	1.53	19715	15171	1.57	19587	15176	1.59
79(26)	68(20)	23787	19206	1.48	22405	18104	1.51	22907	18459	1.54	22098	17102	1.55	22107	17763	1.59	21358	16365	1.61
79(26)	72(22)	26207	22076	1.49	24567	20019	1.52	24948	20107	1.55	24062	19400	1.56	24500	19677	1.60	23380	18714	1.62
81(27)	61(16)	16612	16114	1.42	15998	15536	1.45	16063	15668	1.48	15683	15388	1.49	15997	15553	1.53	15179	14824	1.55
81(27)	64(18)	18965	14574	1.46	18369	14152	1.49	18132	13852	1.52	18000	13546	1.53	17831	13499	1.57	17532	13917	1.59
81(27)	68(20)	21220	16517	1.48	20710	16705	1.51	20053	15575	1.54	20060	15121	1.55	19842	15218	1.59	19989	15332	1.61
81(27)	72(22)	23270	18535	1.49	22869	18522	1.52	22350	17485	1.55	21798	17091	1.56	21935	17771	1.60	22376	17415	1.62
82(28)	61(16)	14353	14088	1.42	13953	13491	1.45	14008	13672	1.48	14245	13876	1.49	13390	12978	1.53	13652	13359	1.55
82(28)	64(18)	16768	12194	1.46	15897	11544	1.49	15720	11147	1.52	16052	13049	1.53	15810	11954	1.57	15553	12281	1.59
82(28)	68(20)	19229	14650	1.48	17693	13303	1.51	18064	13133	1.54	17862	13079	1.55	18144	13317	1.59	17841	12846	1.61
82(28)	72(22)	21411	16434	1.49	20099	15159	1.52	20017	15817	1.55	19861	15848	1.56	20039	15590	1.60	20322	15373	1.62
86(30)	61(16)	13169	12764	1.42	11380	10970	1.45	11635	11255	1.48	12059	11628	1.49	11437	11213	1.53	11643	11246	1.55
86(30)	64(18)	15026	10677	1.46	13494	8623	1.49	13675	10479	1.52	14027	9805	1.53	13723	9418	1.57	13544	9124	1.59
86(30)	68(20)	17369	12640	1.48	15292	10788	1.51	15964	11896	1.54	16174	11351	1.55	15724	11144	1.59	15678	10945	1.61
86(30)	72(22)	19488	14715	1.49	17205	12507	1.52	17812	12863	1.55	18674	14496	1.56	18042	13255	1.60	18125	13398	1.62
90(32)	61(16)	10778	10367	1.42	8975	8592	1.45	9676	9405	1.48	10465	10165	1.49	9715	9248	1.53	9648	9446	1.55
90(32)	64(18)	12865	7936	1.46	11289	7232	1.49	11396	6514	1.52	12197	8049	1.53	12022	8898	1.57	11741	8539	1.59
90(32)	68(20)	14980	10366	1.48	13291	9277	1.51	13340	8947	1.54	14491	9577	1.55	13978	9604	1.59	14145	9509	1.61
90(32)	72(22)	17078	12539	1.49	15494	10891	1.52	15328	10791	1.55	16538	11846	1.56	15707	11028	1.60	16459	11772	1.62

PPFC-B24UFA1DQ/PAS-24BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	40473	39845	1.65	38308	37852	1.69	38367	37727	1.73	37745	37147	1.75	37447	36821	1.80	36484	35909	1.83
66(19)	64(18)	43283	36641	1.71	41273	36605	1.75	40903	36524	1.79	40171	33660	1.80	39919	33681	1.85	39784	34717	1.88
68(20)	61(16)	37304	36653	1.65	35369	35036	1.69	35472	35091	1.73	35196	34712	1.75	34551	34037	1.80	35045	34769	1.83
68(20)	64(18)	40393	35303	1.71	38100	32393	1.75	38615	33548	1.79	37529	32272	1.80	37175	32663	1.85	37405	32541	1.88
72(22)	61(16)	35021	34497	1.65	32563	32044	1.69	33619	33121	1.73	31432	31095	1.75	31928	31517	1.80	31433	30820	1.83
72(22)	64(18)	37501	31071	1.71	35713	29924	1.75	36164	29556	1.79	34363	30207	1.80	34893	29604	1.85	34256	28936	1.88
72(22)	68(20)	40115	33968	1.73	38516	32751	1.77	38800	33360	1.81	37687	31999	1.83	38208	32512	1.88	36849	30453	1.91
75(24)	61(16)	28591	27932	1.65	27345	27025	1.69	27935	27316	1.73	26672	26191	1.75	26292	25757	1.80	25599	25023	1.83
75(24)	64(18)	31145	25544	1.71	29880	25289	1.75	30308	25041	1.79	29669	23493	1.80	28733	23027	1.85	28396	23427	1.88
75(24)	68(20)	34409	27929	1.73	32544	27075	1.77	33409	26900	1.81	32044	25779	1.83	31663	25936	1.88	31425	25836	1.91
75(24)	72(22)	37016	30680	1.75	35053	29324	1.79	36664	30529	1.83	34552	28944	1.84	34684	28867	1.89	33708	27355	1.92
79(26)	61(16)	26155	25528	1.65	24952	24349	1.69	24195	23720	1.73	24275	23843	1.75	23460	23133	1.80	22829	22312	1.83
79(26)	64(18)	28601	23499	1.71	27229	22501	1.75	27248	21372	1.79	27100	21167	1.80	26287	20228	1.85	26116	20235	1.88
79(26)	68(20)	31716	25608	1.73	29873	24139	1.77	30543	24612	1.81	29464	22803	1.83	29476	23684	1.88	28477	21820	1.91
79(26)	72(22)	34943	29435	1.75	32756	26692	1.79	33264	26809	1.83	32083	25867	1.84	32667	26236	1.89	31173	24952	1.92
81(27)	61(16)	22149	21485	1.65	21331	20715	1.69	21417	20891	1.73	20911	20517	1.75	21329	20737	1.80	20239	19765	1.83
81(27)	64(18)	25287	19432	1.71	24492	18869	1.75	24176	18469	1.79	24000	18061	1.80	23775	17999	1.85	23376	18556	1.88
81(27)	68(20)	28293	22023	1.73	27613	22273	1.77	26737	20767	1.81	26747	20161	1.83	26456	20291	1.88	26652	20443	1.91
81(27)	72(22)	31027	24713	1.75	30492	24696	1.79	29800	23313	1.83	29064	22788	1.84	29247	23695	1.89	29835	23220	1.92
82(28)	61(16)	19137	18784	1.65	18604	17988	1.69	18677	18229	1.73	18993	18501	1.75	17853	17304	1.80	18203	17812	1.83
82(28)	64(18)	22357	16259	1.71	21196	15392	1.75	20960	14863	1.79	21403	17399	1.80	21080	15939	1.85	20737	16375	1.88
82(28)	68(20)	25639	19533	1.73	23591	17737	1.77	24085	17511	1.81	23816	17439	1.83	24192	17756	1.88	23788	17128	1.91
82(28)	72(22)	28548	21912	1.75	26799	20212	1.79	26689	21089	1.83	26481	21131	1.84	26719	20787	1.89	27096	20497	1.92
86(30)	61(16)	17559	17019	1.65	15173	14627	1.69	15513	15007	1.73	16079	15504	1.75	15249	14951	1.80	15524	14995	1.83
86(30)	64(18)	20035	14236	1.71	17992	11497	1.75	18233	13972	1.79	18703	13073	1.80	18297	12557	1.85	18059	12165	1.88
86(30)	68(20)	23159	16853	1.73	20389	14384	1.77	21285	15861	1.81	21565	15135	1.83	20965	14859	1.88	20904	14593	1.91
86(30)	72(22)	25984	19620	1.75	22940	16676	1.79	23749	17151	1.83	24899	19328	1.84	24056	17673	1.89	24167	17864	1.92
90(32)	61(16)	14371	13823	1.65	11967	11456	1.69	12901	12540	1.73	13953	13553	1.75	12953	12331	1.80	12864	12595	1.83
90(32)	64(18)	17153	10581	1.71	15052	9643	1.75	15195	8685	1.79	16263	10732	1.80	16029	11864	1.85	15655	11385	1.88
90(32)	68(20)	19973	13821	1.73	17721	12369	1.77	17787	11929	1.81	19321	12769	1.83	18637	12805	1.88	18860	12679	1.91
90(32)	72(22)	22771	16719	1.75	20659	14521	1.79	20437	14388	1.83	22051	15795	1.84	20943	14704	1.89	21945	15696	1.92

SELECTION DATA

PPFC-B30UFA1DQ/PAS-30BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	47889	46681	1.98	49738	48530	2.03	48008	46832	2.05	48151	46965	2.10	45784	44657	2.15	46115	44743	2.18
66(19)	64(18)	50951	43288	2.03	52830	45783	2.07	51787	45231	2.10	51946	43812	2.14	48806	41057	2.20	50023	41917	2.23
68(20)	61(16)	44128	42762	1.98	44651	43501	2.03	43954	42959	2.05	45359	44072	2.10	42743	41617	2.15	41834	40629	2.18
68(20)	64(18)	47654	41435	2.03	48759	40687	2.07	48024	41026	2.10	48799	41769	2.14	45882	39051	2.20	45895	39145	2.23
72(22)	61(16)	40125	39012	1.98	41967	40692	2.03	41061	39914	2.05	40806	39941	2.10	39238	38203	2.15	38584	37336	2.18
72(22)	64(18)	43929	38144	2.03	45680	39531	2.07	44716	37457	2.10	44912	37212	2.14	42377	33606	2.20	42572	35336	2.23
72(22)	68(20)	46921	38384	2.05	48987	41682	2.10	48179	39597	2.13	47936	40296	2.17	45985	37433	2.23	46227	38351	2.25
75(24)	61(16)	34665	33700	1.98	34386	33185	2.03	33906	32738	2.05	33699	32768	2.10	32387	31267	2.15	32786	31750	2.18
75(24)	64(18)	38141	29623	2.03	37851	29301	2.07	37649	29062	2.10	37254	29467	2.14	36486	27979	2.20	35902	29324	2.23
75(24)	68(20)	40979	33259	2.05	41581	33407	2.10	41139	33687	2.13	41059	32771	2.17	39358	30848	2.23	39165	30465	2.25
75(24)	72(22)	43901	36279	2.10	45612	37777	2.14	44756	36491	2.17	44792	36319	2.21	42663	35471	2.27	43238	34483	2.30
79(26)	61(16)	31802	30920	1.98	30937	29766	2.03	30557	29621	2.05	30867	29965	2.10	30246	29496	2.15	29373	28217	2.18
79(26)	64(18)	34890	28586	2.03	34697	27374	2.07	34157	26629	2.10	34086	26891	2.14	33358	26646	2.20	32663	26938	2.23
79(26)	68(20)	38285	31001	2.05	38549	30869	2.10	38127	29784	2.13	38102	29776	2.17	37236	29490	2.23	36413	29128	2.25
79(26)	72(22)	41989	33552	2.10	41995	33371	2.14	41271	32686	2.17	41697	33915	2.21	40538	33080	2.27	39300	32010	2.30
81(27)	61(16)	26738	25899	1.98	26971	26210	2.03	26628	25753	2.05	26384	25508	2.10	25886	24742	2.15	25298	24630	2.18
81(27)	64(18)	30879	24014	2.03	30706	25197	2.07	30519	25128	2.10	29986	23989	2.14	29753	23857	2.20	29253	22789	2.23
81(27)	68(20)	34650	26106	2.05	33974	25396	2.10	33898	26409	2.13	33269	25309	2.17	33793	26764	2.23	32583	24058	2.25
81(27)	72(22)	38344	30631	2.10	37279	30151	2.14	37636	30187	2.17	36984	28540	2.21	37331	29787	2.27	36673	29299	2.30
82(28)	61(16)	24663	23907	1.98	23977	23213	2.03	23937	22985	2.05	22914	22133	2.10	22516	21819	2.15	22593	21761	2.18
82(28)	64(18)	27872	20737	2.03	27667	21559	2.07	27084	21664	2.10	26777	18889	2.14	25895	19205	2.20	25780	18570	2.23
82(28)	68(20)	31285	23476	2.05	30581	22976	2.10	31149	23920	2.13	30501	22902	2.17	29778	22292	2.23	29125	21548	2.25
82(28)	72(22)	34471	27371	2.10	34144	26517	2.14	35259	28061	2.17	34356	25909	2.21	33698	26220	2.27	32893	24867	2.30
86(30)	61(16)	21203	20477	1.98	20382	19596	2.03	18856	18220	2.05	18966	18099	2.10	18618	17668	2.15	19266	18556	2.18
86(30)	64(18)	24439	17191	2.03	23672	17890	2.07	22996	17627	2.10	23126	15107	2.14	22130	15278	2.20	22651	16548	2.23
86(30)	68(20)	28285	21063	2.05	27222	19989	2.10	26313	18429	2.13	26639	18222	2.17	26139	18059	2.23	26754	19230	2.25
86(30)	72(22)	32175	25054	2.10	30542	22911	2.14	30221	22588	2.17	29651	21495	2.21	29888	21653	2.27	29923	22038	2.30
90(32)	61(16)	17185	16538	1.98	16699	15983	2.03	16957	16049	2.05	15498	14594	2.10	15541	14975	2.15	15448	14755	2.18
90(32)	64(18)	20880	12823	2.03	19752	13162	2.07	20099	14821	2.10	18973	13622	2.14	18390	11151	2.20	18506	10558	2.23
90(32)	68(20)	24347	17099	2.05	22601	14087	2.10	23267	15169	2.13	21806	14904	2.17	21433	13711	2.23	22360	15102	2.25
90(32)	72(22)	27572	19249	2.10	26263	18173	2.14	26259	18630	2.17	25250	16946	2.21	24870	16547	2.27	26509	17944	2.30

PPFC-B36UFA1DQ/PAS-36BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	36861	20649	2.02	35166	19979	2.24	33897	19370	2.51	33009	19153	2.86	32571	18952	3.28	31968	18819	3.79
66(19)	64(18)	38844	15385	1.99	37123	14764	2.21	35802	14186	2.50	34898	14041	2.87	34422	13703	3.30	33718	13645	3.81
68(20)	61(16)	36825	23019	2.03	35138	22452	2.24	33891	21963	2.51	32990	21561	2.86	32570	21230	3.29	31871	21177	3.79
68(20)	64(18)	38812	17643	1.99	37091	17134	2.21	35753	16642	2.50	34850	16264	2.86	34431	16247	3.30	33701	16047	3.81
72(22)	61(16)	36772	27750	2.03	35108	26962	2.24	33844	26555	2.51	32938	26371	2.87	32533	26062	3.28	31806	25819	3.79
72(22)	64(18)	38720	22381	1.99	37017	21790	2.21	35731	21512	2.50	34805	21223	2.86	34385	20834	3.30	33651	20611	3.81
72(22)	68(20)	40738	17477	1.96	39027	16756	2.18	37692	16231	2.49	36775	15887	2.87	36310	15857	3.32	35496	15428	3.83
75(24)	61(16)	36816	32012	2.03	35190	31287	2.24	33970	30766	2.51	33112	30598	2.86	32712	30253	3.29	32127	30200	3.79
75(24)	64(18)	38675	27079	1.99	36975	26406	2.22	35671	25985	2.50	34757	25792	2.86	34330	25593	3.29	33633	25497	3.80
75(24)	68(20)	40703	22049	1.96	38975	21303	2.19	37638	21092	2.49	36721	20775	2.87	36259	20637	3.32	35417	20191	3.83
75(24)	72(22)	42747	16952	1.92	41040	16110	2.17	39696	15805	2.49	38747	15383	2.88	38249	15420	3.33	37345	14945	3.86
79(26)	61(16)	37124	35673	2.02	35635	35635	2.23	34547	34547	2.51	33803	33803	2.87	33453	33453	3.29	33003	33003	3.80
79(26)	64(18)	38632	31474	1.99	36984	30980	2.22	35724	30607	2.50	34853	30109	2.86	34417	29919	3.30	33770	29773	3.81
79(26)	68(20)	40652	26293	1.96	38933	25836	2.18	37609	25454	2.49	36677	25293	2.87	36225	25148	3.32	35374	24718	3.83
79(26)	72(22)	42715	21469	1.92	41008	20667	2.17	39636	20436	2.49	38675	20253	2.87	38219	19932	3.33	37308	19809	3.86
81(27)	61(16)	37564	37564	2.01	36198	36198	2.22	35152	35152	2.50	34421	34421	2.87	34051	34051	3.30	33596	33596	3.81
81(27)	64(18)	38703	33790	1.99	37084	33001	2.21	35821	32518	2.50	34974	32098	2.87	34531	32180	3.30	33910	32023	3.81
81(27)	68(20)	40625	28739	1.96	38929	28307	2.19	37548	27766	2.49	36663	27621	2.87	36189	27141	3.32	35357	27111	3.84
81(27)	72(22)	42704	23581	1.92	40927	22863	2.17	39612	22529	2.49	38675	22509	2.87	38193	22356	3.33	37273	22127	3.86
82(28)	61(16)	38167	38167	2.00	36807	36807	2.22	35745	35745	2.50	35005	35005	2.87	34631	34631	3.30	34185	34185	3.81
82(28)	64(18)	38839	35760	1.99	37236	34850	2.21	35999	34227	2.50	35184	33845	2.87	34790	33384	3.31	34200	34200	3.82
82(28)	68(20)	40608	30769	1.96	38901	30273	2.19	37555	30009	2.49	36648	29733	2.87	36197	29440	3.32	35415	29468	3.83
82(28)	72(22)	42689	26028	1.92	40932	25457	2.17	39590	24873	2.49	38652	24740	2.87	38168	24594	3.33	37253	24201	3.87
86(30)	61(16)	39363	39363	1.98	38015	38015	2.20	36930	36930	2.50	36219	36219	2.87	35835	35835	3.32	35333	35333	3.84
86(30)	64(18)	39365	39365	1.98	38003	38003	2.20	36953	36953	2.50	36237	36237	2.87	35851	35851	3.32	35288	35288	3.84
86(30)	68(20)	40681	35111	1.96	39060	34417	2.19	37779	34230	2.50	36872	33740	2.87	36438	33500	3.31	35664	33298	3.84
86(30)	72(22)	42647	30350	1.92	40899	29578	2.17	39561	29219	2.49	38591	29023	2.87	38148	28875	3.34	37216	28862	3.87
90(32)	61(16)	40559	40559	1.96	39223	39223	2.19	38148	38148	2.49	37453	37453	2.87	37066	37066	3.32	36475	36475	3.85
90(32)	64(18)	40564	40564	1.96	39233	39233	2.19	38151	38151	2.49	37449	37449	2.87	37070	37070	3.32	36479	36479	3.85
90(32)	68(20)	40955	39027	1.96	39442	37944	2.19	38249	38249	2.49	37464	37464	2.87	37078	37078	3.32	36481	36481	3.85
90(32)	72(22)	42597	34495	1.92	40912	33805	2.17	39649	33489	2.49	38726	33136	2.87	38276	32941	3.33	37688	32984	3.88

SELECTION DATA

PPFC-B48UFA1DQ/PAS-48BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	54621	50115	3.39	54976	50423	3.42	52276	48362	3.46	52987	49096	3.56	50475	46904	3.60	47731	44282	3.62
66(19)	64(18)	56601	46953	3.43	56685	47105	3.46	54441	44894	3.49	55235	45261	3.57	52956	43476	3.61	50157	40452	3.63
68(20)	61(16)	52277	47975	3.39	52294	49258	3.42	50383	45956	3.46	51162	46731	3.56	49291	45803	3.60	46195	41615	3.62
68(20)	64(18)	54454	44478	3.43	54742	45649	3.46	52675	43073	3.49	53124	43281	3.57	51095	41784	3.61	48348	38855	3.63
72(22)	61(16)	50591	47215	3.39	50850	46076	3.42	49016	45289	3.46	48519	44569	3.56	47154	43031	3.60	43986	40009	3.62
72(22)	64(18)	52675	43549	3.43	52565	42762	3.46	50957	41542	3.49	50908	41628	3.57	49122	39540	3.61	46184	36923	3.63
72(22)	68(20)	54689	44546	3.47	54411	43582	3.50	53289	42486	3.53	52704	41927	3.59	51417	41124	3.63	48316	37720	3.65
75(24)	61(16)	46327	41431	3.39	46408	42283	3.42	44522	40109	3.46	44574	39608	3.56	43221	39891	3.60	40359	36381	3.62
75(24)	64(18)	48654	39020	3.43	48129	38327	3.46	46450	36497	3.49	46307	37079	3.57	45200	35289	3.61	42579	32738	3.63
75(24)	68(20)	50488	40195	3.47	50245	39366	3.50	48692	38531	3.53	48688	38070	3.59	46955	36211	3.63	44414	34118	3.65
75(24)	72(22)	52421	41934	3.49	52344	41401	3.52	50474	39982	3.56	50786	39805	3.62	48705	38704	3.66	46814	36628	3.68
79(26)	61(16)	44717	40272	3.39	43458	38624	3.42	42037	37990	3.46	41734	37590	3.56	41168	38119	3.60	39124	35680	3.62
79(26)	64(18)	46655	37277	3.43	45939	36223	3.46	44273	34955	3.49	44005	34220	3.57	43271	33610	3.61	40829	31453	3.63
79(26)	68(20)	48447	38445	3.47	48078	38054	3.50	46703	36183	3.53	46172	35502	3.59	45068	34902	3.63	42862	32023	3.65
79(26)	72(22)	50480	39587	3.49	50388	40068	3.52	49054	38867	3.56	48636	37992	3.62	46797	35822	3.66	44562	34310	3.68
81(27)	61(16)	42401	38990	3.39	41432	37073	3.42	40426	36419	3.46	39562	36370	3.56	38452	34902	3.60	36792	33118	3.62
81(27)	64(18)	44444	34540	3.43	43560	33932	3.46	42500	33325	3.49	42000	32855	3.57	40896	31094	3.61	39123	29617	3.63
81(27)	68(20)	46615	36434	3.47	45746	35063	3.50	44217	33594	3.53	44127	33198	3.59	43347	32990	3.63	41352	30754	3.65
81(27)	72(22)	48652	38040	3.49	47841	37196	3.52	45928	35224	3.56	45946	35040	3.62	45415	34763	3.66	43615	33545	3.68
82(28)	61(16)	40435	35627	3.39	39598	36563	3.42	38249	34100	3.46	37691	33384	3.56	35955	32904	3.60	34968	30664	3.62
82(28)	64(18)	42293	33219	3.43	41794	32742	3.46	40013	30780	3.49	39762	29962	3.57	38419	28533	3.61	37395	27717	3.63
82(28)	68(20)	44597	34005	3.47	44075	33196	3.50	42104	31643	3.53	41571	31438	3.59	40844	30218	3.63	39384	29370	3.65
82(28)	72(22)	46940	36734	3.49	46074	35281	3.52	44416	33955	3.56	43343	32447	3.62	42835	32590	3.66	41755	31704	3.68
86(30)	61(16)	38007	33337	3.39	37824	33629	3.42	35595	30940	3.46	35799	31754	3.56	34947	31883	3.60	32975	28436	3.62
86(30)	64(18)	39863	30021	3.43	39641	30008	3.46	37783	28753	3.49	37665	28570	3.57	36670	27366	3.61	34902	24976	3.63
86(30)	68(20)	42271	31591	3.47	42090	31303	3.50	39610	29164	3.53	39546	29207	3.59	38650	28274	3.63	37225	26748	3.65
86(30)	72(22)	44605	33925	3.49	43919	33164	3.52	41548	31083	3.56	41323	31134	3.62	40561	29937	3.66	39541	29068	3.68
90(32)	61(16)	35827	31952	3.39	35117	31396	3.42	33501	29964	3.46	34123	29198	3.56	32441	28642	3.60	30466	25502	3.62
90(32)	64(18)	37772	28326	3.43	37611	27751	3.46	35547	25793	3.49	35844	26615	3.57	34939	24986	3.61	32646	23404	3.63
90(32)	68(20)	39716	29015	3.47	39890	29176	3.50	37998	27660	3.53	38212	27727	3.59	37360	26363	3.63	34897	24415	3.65
90(32)	72(22)	42052	31069	3.49	42343	32014	3.52	39915	28984	3.56	40086	29086	3.62	39171	28852	3.66	37373	27086	3.68

< High-wall Type >

PPK-B09UFA1DQ/PAS-09BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	9806	5528	0.46	9355	5330	0.51	9018	5138	0.57	8782	5111	0.65	8665	5027	0.75	8505	5019	0.86
66(19)	64(18)	10334	4163	0.45	9876	3928	0.50	9525	3817	0.57	9284	3745	0.65	9157	3685	0.75	8970	3591	0.87
68(20)	61(16)	9797	6110	0.46	9348	5937	0.51	9016	5801	0.57	8777	5754	0.65	8665	5719	0.75	8479	5673	0.86
68(20)	64(18)	10325	4765	0.45	9868	4562	0.50	9512	4455	0.57	9271	4376	0.65	9160	4333	0.75	8966	4217	0.87
72(22)	61(16)	9783	7297	0.46	9340	7199	0.51	9004	7058	0.57	8763	6937	0.65	8655	6903	0.75	8462	6896	0.86
72(22)	64(18)	10301	5983	0.45	9848	5846	0.50	9506	5704	0.57	9259	5632	0.65	9148	5527	0.75	8952	5549	0.87
72(22)	68(20)	10838	4585	0.45	10383	4416	0.50	10028	4310	0.57	9783	4250	0.65	9660	4195	0.75	9443	4133	0.87
75(24)	61(16)	9794	8489	0.46	9362	8359	0.51	9037	8178	0.57	8809	8086	0.65	8703	8051	0.75	8547	8084	0.86
75(24)	64(18)	10289	7174	0.45	9837	7028	0.50	9490	6914	0.57	9247	6847	0.65	9133	6823	0.75	8948	6781	0.86
75(24)	68(20)	10829	5839	0.45	10369	5707	0.50	10013	5518	0.57	9769	5498	0.65	9646	5412	0.75	9422	5343	0.87
75(24)	72(22)	11372	4503	0.44	10918	4298	0.49	10561	4158	0.57	10308	4114	0.66	10176	4086	0.76	9935	4006	0.88
79(26)	61(16)	9876	9539	0.46	9480	9480	0.51	9191	9191	0.57	8993	8993	0.65	8900	8900	0.75	8780	8780	0.86
79(26)	64(18)	10277	8423	0.45	9839	8212	0.50	9504	8074	0.57	9272	7986	0.65	9156	8025	0.75	8984	7932	0.87
79(26)	68(20)	10815	6988	0.45	10358	6846	0.50	10005	6733	0.57	9757	6686	0.65	9637	6708	0.75	9411	6607	0.87
79(26)	72(22)	11364	5662	0.44	10910	5496	0.49	10545	5477	0.57	10289	5346	0.65	10168	5342	0.76	9925	5230	0.88
81(27)	61(16)	9993	9993	0.46	9630	9630	0.51	9352	9352	0.57	9157	9157	0.65	9059	9059	0.75	8938	8938	0.86
81(27)	64(18)	10296	8954	0.45	9866	8744	0.50	9530	8636	0.57	9304	8561	0.65	9187	8572	0.75	9021	8512	0.86
81(27)	68(20)	10808	7600	0.45	10356	7519	0.50	9989	7419	0.57	9754	7296	0.65	9628	7246	0.75	9406	7227	0.87
81(27)	72(22)	11361	6261	0.44	10888	6149	0.49	10538	6041	0.57	10289	5983	0.65	10161	5945	0.76	9916	5853	0.88
82(28)	61(16)	10154	10154	0.46	9792	9792	0.51	9509	9509	0.57	9313	9313	0.65	9213	9213	0.75	9094	9094	0.87
82(28)	64(18)	10333	9447	0.45	9906	9329	0.50	9577	9095	0.57	9360	8993	0.65	9255	8869	0.75	9098	9098	0.87
82(28)	68(20)	10803	8269	0.45	10349	8088	0.50	9991	7937	0.57	9750	7851	0.65	9630	7841	0.75	9422	7771	0.87
82(28)	72(22)	11357	6829	0.44	10889	6701	0.49	10532	6654	0.57	10283	6514	0.65	10154	6490	0.76	9911	6438	0.88
86(30)	61(16)	10472	10472	0.45	10113	10113	0.50	9825	9825	0.57	9636	9636	0.65	9534	9534	0.75	9400	9400	0.87
86(30)	64(18)	10472	10472	0.45	10110	10110	0.50	9831	9831	0.57	9640	9640	0.65	9538	9538	0.75	9388	9388	0.87
86(30)	68(20)	10822	9324	0.45	10391	9214	0.50	10050	9034	0.57	9809	8981	0.65	9694	8954	0.75	9488	8890	0.87
86(30)	72(22)	11345	7989	0.44	10881	7897	0.49	10525	7806	0.57	10267	7701	0.65	10149	7671	0.76	9901	7630	0.88
90(32)	61(16)	10790	10790	0.45	10435	10435	0.50	10149	10149	0.57	9964	9964	0.65	9861	9861	0.76	9704	9704	0.87
90(32)	64(18)	10791	10791	0.45	10437	10437	0.50	10150	10150	0.57	9963	9963	0.65	9862	9862	0.76	9705	9705	0.87
90(32)	68(20)	10895	10301	0.45	10493	10047	0.50	10176	10176	0.57	9967	9967	0.65	9864	9864	0.76	9705	9705	0.87
90(32)	72(22)	11332	9149	0.44	10884	9022	0.49	10548	8940	0.57	10303	8826	0.65	10183	8857	0.76	10026	8800	0.88

SELECTION DATA

PPK-B12UFA1DQ/PAS-12BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	12964	7314	0.63	12368	7047	0.70	11922	6837	0.78	11609	6673	0.89	11455	6647	1.02	11243	6604	1.17
66(19)	64(18)	13661	5415	0.62	13056	5189	0.69	12591	4972	0.78	12273	4960	0.89	12106	4851	1.02	11859	4735	1.18
68(20)	61(16)	12951	8065	0.63	12358	7856	0.70	11919	7690	0.78	11603	7620	0.89	11455	7501	1.02	11209	7467	1.18
68(20)	64(18)	13650	6242	0.62	13045	6008	0.69	12574	5817	0.78	12257	5718	0.89	12109	5695	1.02	11853	5625	1.18
72(22)	61(16)	12933	9643	0.63	12348	9538	0.70	11903	9379	0.78	11584	9183	0.89	11442	9121	1.02	11186	9094	1.18
72(22)	64(18)	13618	7956	0.62	13019	7745	0.69	12566	7546	0.78	12241	7423	0.89	12093	7421	1.03	11835	7238	1.18
72(22)	68(20)	14327	6049	0.61	13726	5938	0.68	13256	5689	0.77	12934	5611	0.89	12770	5590	1.03	12484	5449	1.19
75(24)	61(16)	12948	11199	0.63	12376	10976	0.70	11947	10886	0.78	11646	10713	0.89	11505	10741	1.02	11299	10687	1.18
75(24)	64(18)	13602	9489	0.62	13004	9340	0.69	12546	9191	0.78	12224	9076	0.89	12074	8971	1.02	11829	8973	1.18
75(24)	68(20)	14315	7659	0.61	13707	7542	0.68	13237	7384	0.77	12915	7221	0.89	12752	7175	1.03	12456	7126	1.19
75(24)	72(22)	15034	5937	0.60	14434	5764	0.67	13961	5493	0.77	13627	5469	0.89	13452	5416	1.03	13134	5343	1.20
79(26)	61(16)	13056	12601	0.63	12533	12533	0.69	12150	12150	0.78	11889	11889	0.89	11765	11765	1.02	11607	11607	1.18
79(26)	64(18)	13587	11143	0.62	13007	10839	0.69	12564	10674	0.78	12258	10562	0.89	12105	10592	1.02	11877	10492	1.18
79(26)	68(20)	14297	9244	0.61	13693	9104	0.68	13227	8914	0.77	12899	8880	0.89	12740	8814	1.03	12441	8756	1.19
79(26)	72(22)	15023	7438	0.60	14422	7292	0.67	13940	7156	0.77	13602	7072	0.89	13441	6998	1.03	13121	6980	1.20
81(27)	61(16)	13211	13211	0.63	12731	12731	0.69	12363	12363	0.78	12106	12106	0.89	11976	11976	1.02	11816	11816	1.18
81(27)	64(18)	13612	11883	0.62	13042	11587	0.69	12598	11483	0.78	12300	11315	0.89	12145	11293	1.02	11926	11259	1.18
81(27)	68(20)	14288	10134	0.61	13691	9865	0.68	13205	9718	0.77	12894	9630	0.89	12728	9573	1.03	12435	9544	1.19
81(27)	72(22)	15019	8312	0.60	14394	8178	0.67	13932	7905	0.77	13602	7932	0.89	13432	7786	1.03	13109	7794	1.20
82(28)	61(16)	13423	13423	0.62	12945	12945	0.69	12571	12571	0.78	12311	12311	0.89	12180	12180	1.02	12023	12023	1.18
82(28)	64(18)	13660	12523	0.62	13096	12308	0.69	12661	12003	0.78	12374	11942	0.89	12235	11765	1.03	12028	11722	1.19
82(28)	68(20)	14282	10795	0.61	13682	10660	0.68	13208	10518	0.77	12889	10434	0.89	12730	10429	1.03	12455	10309	1.19
82(28)	72(22)	15014	9040	0.60	14396	8882	0.67	13924	8740	0.77	13594	8715	0.89	13424	8583	1.03	13102	8507	1.20
86(30)	61(16)	13844	13844	0.62	13370	13370	0.69	12988	12988	0.78	12738	12738	0.89	12603	12603	1.03	12426	12426	1.19
86(30)	64(18)	13845	13845	0.62	13366	13366	0.69	12996	12996	0.78	12744	12744	0.89	12609	12609	1.03	12411	12411	1.19
86(30)	68(20)	14307	12393	0.61	13737	12170	0.68	13287	12026	0.78	12968	11867	0.89	12815	11891	1.03	12543	11775	1.19
86(30)	72(22)	14999	10572	0.60	14384	10444	0.67	13913	10303	0.77	13572	10232	0.89	13416	10234	1.03	13089	10080	1.20
90(32)	61(16)	14264	14264	0.61	13795	13795	0.68	13416	13416	0.77	13172	13172	0.89	13036	13036	1.03	12828	12828	1.19
90(32)	64(18)	14266	14266	0.61	13798	13798	0.68	13418	13418	0.77	13171	13171	0.89	13037	13037	1.03	12829	12829	1.19
90(32)	68(20)	14404	13660	0.61	13872	13318	0.68	13452	13452	0.77	13176	13176	0.89	13040	13040	1.03	12830	12830	1.19
90(32)	72(22)	14981	12058	0.60	14389	12013	0.67	13945	11755	0.77	13620	11652	0.89	13461	11703	1.03	13255	11531	1.20

PPK-B18UFA1DQ/PAS-18BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	30355	29884	1.42	28731	28389	1.45	28775	28295	1.48	28309	27860	1.49	28085	27616	1.53	27363	26932	1.55
66(19)	64(18)	32462	27481	1.46	30955	27454	1.49	30677	27393	1.52	30128	25245	1.53	29939	25261	1.57	29838	26038	1.59
68(20)	61(16)	27978	27490	1.42	26527	26277	1.45	26604	26318	1.48	26397	26034	1.49	25913	25528	1.53	26284	26077	1.55
68(20)	64(18)	30295	26477	1.46	28575	24295	1.49	28961	25161	1.52	28147	24204	1.53	27881	24497	1.57	28054	24406	1.59
72(22)	61(16)	26266	25873	1.42	24422	24033	1.45	25214	24841	1.48	23574	23321	1.49	23946	23638	1.53	23575	23115	1.55
72(22)	64(18)	28126	23303	1.46	26785	22443	1.49	27123	22167	1.52	25772	22655	1.53	26170	22203	1.57	25692	21702	1.59
72(22)	68(20)	30086	25476	1.48	28887	24563	1.51	29100	25020	1.54	28265	23999	1.55	28656	24384	1.59	27637	22840	1.61
75(24)	61(16)	21443	20949	1.42	20509	20269	1.45	20951	20487	1.48	20004	19643	1.49	19719	19318	1.53	19199	18767	1.55
75(24)	64(18)	23359	19158	1.46	22410	18967	1.49	22731	18781	1.52	22252	17620	1.53	21550	17270	1.57	21297	17570	1.59
75(24)	68(20)	25807	20947	1.48	24408	20306	1.51	25057	20175	1.54	24033	19334	1.55	23747	19452	1.59	23569	19377	1.61
75(24)	72(22)	27762	23010	1.49	26290	21993	1.52	27498	22897	1.55	25914	21708	1.56	26013	21650	1.60	25281	20516	1.62
79(26)	61(16)	19616	19146	1.42	18714	18262	1.45	18146	17790	1.48	18206	17882	1.49	17595	17350	1.53	17122	16734	1.55
79(26)	64(18)	21451	17624	1.46	20422	16876	1.49	20436	16029	1.52	20325	15875	1.53	19715	15171	1.57	19587	15176	1.59
79(26)	68(20)	23787	19206	1.48	22405	18104	1.51	22907	18459	1.54	22098	17102	1.55	22107	17763	1.59	21358	16365	1.61
79(26)	72(22)	26207	22076	1.49	24567	20019	1.52	24948	20107	1.55	24062	19400	1.56	24500	19677	1.60	23380	18714	1.62
81(27)	61(16)	16612	16114	1.42	15998	15536	1.45	16063	15668	1.48	15683	15388	1.49	15997	15553	1.53	15179	14824	1.55
81(27)	64(18)	18965	14574	1.46	18369	14152	1.49	18132	13852	1.52	18000	13546	1.53	17831	13499	1.57	17532	13917	1.59
81(27)	68(20)	21220	16517	1.48	20710	16705	1.51	20053	15575	1.54	20060	15121	1.55	19842	15218	1.59	19989	15332	1.61
81(27)	72(22)	23270	18535	1.49	22869	18522	1.52	22350	17485	1.55	21798	17091	1.56	21935	17771	1.60	22376	17415	1.62
82(28)	61(16)	14353	14088	1.42	13953	13491	1.45	14008	13672	1.48	14245	13876	1.49	13390	12978	1.53	13652	13359	1.55
82(28)	64(18)	16768	12194	1.46	15897	11544	1.49	15720	11147	1.52	16052	13049	1.53	15810	11954	1.57	15553	12281	1.59
82(28)	68(20)	19229	14650	1.48	17693	13303	1.51	18064	13133	1.54	17862	13079	1.55	18144	13317	1.59	17841	12846	1.61
82(28)	72(22)	21411	16434	1.49	20099	15159	1.52	20017	15817	1.55	19861	15848	1.56	20039	15590	1.60	20322	15373	1.62
86(30)	61(16)	13169	12764	1.42	11380	10970	1.45	11635	11255	1.48	12059	11628	1.49	11437	11213	1.53	11643	11246	1.55
86(30)	64(18)	15026	10677	1.46	13494	8623	1.49	13675	10479	1.52	14027	9805	1.53	13723	9418	1.57	13544	9124	1.59
86(30)	68(20)	17369	12640	1.48	15292	10788	1.51	15964	11896	1.54	16174	11351	1.55	15724	11144	1.59	15678	10945	1.61
86(30)	72(22)	19488	14715	1.49	17205	12507	1.52	17812	12863	1.55	18674	14496	1.56	18042	13255	1.60	18125	13398	1.62
90(32)	61(16)	10778	10367	1.42	8975	8592	1.45	9676	9405	1.48	10465	10165	1.49	9715	9248	1.53	9648	9446	1.55
90(32)	64(18)	12865	7936	1.46	11289	7232	1.49	11396	6514	1.52	12197	8049	1.53	12022	8898	1.57	11741	8539	1.59
90(32)	68(20)	14980	10366	1.48	13291	9277	1.51	13340	8947	1.54	14491	9577	1.55	13978	9604	1.59	14145	9509	1.61
90(32)	72(22)	17078	12539	1.49	15494	10891	1.52	15328	10791	1.55	16538	11846	1.56	15707	11028	1.60	16459	11772	1.62

SELECTION DATA

PPK-B24UFA1DQ/PAS-24BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	40473	39845	1.65	38308	37852	1.69	38367	37727	1.73	37745	37147	1.75	37447	36821	1.80	36484	35909	1.83
66(19)	64(18)	43283	36641	1.71	41273	36605	1.75	40903	36524	1.79	40171	33660	1.80	39919	33681	1.85	39784	34717	1.88
68(20)	61(16)	37304	36653	1.65	35369	35036	1.69	35472	35091	1.73	35196	34712	1.75	34551	34037	1.80	35045	34769	1.83
68(20)	64(18)	40393	35303	1.71	38100	32393	1.75	38615	33548	1.79	37529	32272	1.80	37175	32663	1.85	37405	32541	1.88
72(22)	61(16)	35021	34497	1.65	32563	32044	1.69	33619	33121	1.73	31432	31095	1.75	31928	31517	1.80	31433	30820	1.83
72(22)	64(18)	37501	31071	1.71	35713	29924	1.75	36164	29556	1.79	34363	30207	1.80	34893	29604	1.85	34256	28936	1.88
72(22)	68(20)	40115	33968	1.73	38516	32751	1.77	38800	33360	1.81	37687	31999	1.83	38208	32512	1.88	36849	30453	1.91
75(24)	61(16)	28591	27932	1.65	27345	27025	1.69	27935	27316	1.73	26672	26191	1.75	26292	25757	1.80	25599	25023	1.83
75(24)	64(18)	31145	25544	1.71	29880	25289	1.75	30308	25041	1.79	29669	23493	1.80	28733	23027	1.85	28396	23427	1.88
75(24)	68(20)	34409	27929	1.73	32544	27075	1.77	33409	26900	1.81	32044	25779	1.83	31663	25936	1.88	31425	25836	1.91
75(24)	72(22)	37016	30680	1.75	35053	29324	1.79	36664	30529	1.83	34552	28944	1.84	34684	28867	1.89	33708	27355	1.92
79(26)	61(16)	26155	25528	1.65	24952	24349	1.69	24195	23720	1.73	24275	23843	1.75	23460	23133	1.80	22829	22312	1.83
79(26)	64(18)	28601	23499	1.71	27229	22501	1.75	27248	21372	1.79	27100	21167	1.80	26287	20228	1.85	26116	20235	1.88
79(26)	68(20)	31716	25608	1.73	29873	24139	1.77	30543	24612	1.81	29464	22803	1.83	29476	23684	1.88	28477	21820	1.91
79(26)	72(22)	34943	29435	1.75	32756	26692	1.79	33264	26809	1.83	32083	25867	1.84	32667	26236	1.89	31173	24952	1.92
81(27)	61(16)	22149	21485	1.65	21331	20715	1.69	21417	20891	1.73	20911	20517	1.75	21329	20737	1.80	20239	19765	1.83
81(27)	64(18)	25287	19432	1.71	24492	18869	1.75	24176	18469	1.79	24000	18061	1.80	23775	17999	1.85	23376	18556	1.88
81(27)	68(20)	28293	22023	1.73	27613	22273	1.77	26737	20767	1.81	26747	20161	1.83	26456	20291	1.88	26652	20443	1.91
81(27)	72(22)	31027	24713	1.75	30492	24696	1.79	29800	23313	1.83	29064	22788	1.84	29247	23695	1.89	29835	23220	1.92
82(28)	61(16)	19137	18784	1.65	18604	17988	1.69	18677	18229	1.73	18993	18501	1.75	17853	17304	1.80	18203	17812	1.83
82(28)	64(18)	22357	16259	1.71	21196	15392	1.75	20960	14863	1.79	21403	17399	1.80	21080	15939	1.85	20737	16375	1.88
82(28)	68(20)	25639	19533	1.73	23591	17737	1.77	24085	17511	1.81	23816	17439	1.83	24192	17756	1.88	23788	17128	1.91
82(28)	72(22)	28548	21912	1.75	26799	20212	1.79	26689	21089	1.83	26481	21131	1.84	26719	20787	1.89	27096	20497	1.92
86(30)	61(16)	17559	17019	1.65	15173	14627	1.69	15513	15007	1.73	16079	15504	1.75	15249	14951	1.80	15524	14995	1.83
86(30)	64(18)	20035	14236	1.71	17992	11497	1.75	18233	13972	1.79	18703	13073	1.80	18297	12557	1.85	18059	12165	1.88
86(30)	68(20)	23159	16853	1.73	20389	14384	1.77	21285	15861	1.81	21565	15135	1.83	20965	14859	1.88	20904	14593	1.91
86(30)	72(22)	25984	19620	1.75	22940	16676	1.79	23749	17151	1.83	24899	19328	1.84	24056	17673	1.89	24167	17864	1.92
90(32)	61(16)	14371	13823	1.65	11967	11456	1.69	12901	12540	1.73	13953	13553	1.75	12953	12331	1.80	12864	12595	1.83
90(32)	64(18)	17153	10581	1.71	15052	9643	1.75	15195	8685	1.79	16263	10732	1.80	16029	11864	1.85	15655	11385	1.88
90(32)	68(20)	19973	13821	1.73	17721	12369	1.77	17787	11929	1.81	19321	12769	1.83	18637	12805	1.88	18860	12679	1.91
90(32)	72(22)	22771	16719	1.75	20659	14521	1.79	20437	14388	1.83	22051	15795	1.84	20943	14704	1.89	21945	15696	1.92

PPK-B30UFA1DQ/PAS-30BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	47889	46681	1.98	49738	48530	2.03	48008	46832	2.05	48151	46965	2.10	45784	44657	2.15	46115	44743	2.18
66(19)	64(18)	50951	43288	2.03	52830	45783	2.07	51787	45231	2.10	51946	43812	2.14	48806	41057	2.20	50023	41917	2.23
68(20)	61(16)	44128	42762	1.98	44651	43501	2.03	43954	42959	2.05	45359	44072	2.10	42743	41617	2.15	41834	40629	2.18
68(20)	64(18)	47654	41435	2.03	48759	40687	2.07	48024	41026	2.10	48799	41769	2.14	45882	39051	2.20	45895	39145	2.23
72(22)	61(16)	40125	39012	1.98	41967	40692	2.03	41061	39914	2.05	40806	39941	2.10	39238	38203	2.15	38584	37336	2.18
72(22)	64(18)	43929	38144	2.03	45680	39531	2.07	44716	37457	2.10	44912	37212	2.14	42377	33606	2.20	42572	35336	2.23
72(22)	68(20)	46921	38384	2.05	48987	41682	2.10	48179	39597	2.13	47936	40296	2.17	45985	37433	2.23	46227	38351	2.25
75(24)	61(16)	34665	33700	1.98	34386	33185	2.03	33906	32738	2.05	33699	32768	2.10	32387	31267	2.15	32786	31750	2.18
75(24)	64(18)	38141	29623	2.03	37851	29301	2.07	37649	29062	2.10	37254	29467	2.14	36486	27979	2.20	35902	29324	2.23
75(24)	68(20)	40979	33259	2.05	41581	33407	2.10	41139	33687	2.13	41059	32771	2.17	39358	30848	2.23	39165	30465	2.25
75(24)	72(22)	43901	36279	2.10	45612	37777	2.14	44756	36491	2.17	44792	36319	2.21	42663	35471	2.27	43238	34483	2.30
79(26)	61(16)	31802	30920	1.98	30937	29766	2.03	30557	29621	2.05	30867	29965	2.10	30246	29496	2.15	29373	28217	2.18
79(26)	64(18)	34890	28586	2.03	34697	27374	2.07	34157	26629	2.10	34086	26891	2.14	33358	26646	2.20	32663	26938	2.23
79(26)	68(20)	38285	31001	2.05	38549	30869	2.10	38127	29784	2.13	38102	29776	2.17	37236	29490	2.23	36413	29128	2.25
79(26)	72(22)	41989	33552	2.10	41995	33371	2.14	41271	32686	2.17	41697	33915	2.21	40538	33080	2.27	39300	32010	2.30
81(27)	61(16)	26738	25899	1.98	26971	26210	2.03	26628	25753	2.05	26384	25508	2.10	25886	24742	2.15	25298	24630	2.18
81(27)	64(18)	30879	24014	2.03	30706	25197	2.07	30519	25128	2.10	29986	23989	2.14	29753	23857	2.20	29253	22789	2.23
81(27)	68(20)	34650	26106	2.05	33974	25396	2.10	33898	26409	2.13	33269	25309	2.17	33793	26764	2.23	32583	24058	2.25
81(27)	72(22)	38344	30631	2.10	37279	30151	2.14	37636	30187	2.17	36984	28540	2.21	37331	29787	2.27	36673	29299	2.30
82(28)	61(16)	24663	23907	1.98	23977	23213	2.03	23937	22985	2.05	22914	22133	2.10	22516	21819	2.15	22593	21761	2.18
82(28)	64(18)	27872	20737	2.03	27667	21559	2.07	27084	21664	2.10	26777	18889	2.14	25895	19205	2.20	25780	18570	2.23
82(28)	68(20)	31285	23476	2.05	30581	22976	2.10	31149	23920	2.13	30501	22902	2.17	29778	22292	2.23	29125	21548	2.25
82(28)	72(22)	34471	27371	2.10	34144	26517	2.14	35259	28061	2.17	34356	25909	2.21	33698	26220	2.27	32893	24867	2.30
86(30)	61(16)	21203	20477	1.98	20382	19596	2.03	18856	18220	2.05	18966	18099	2.10	18618	17668	2.15	19266	18556	2.18
86(30)	64(18)	24439	17191	2.03	23672	17890	2.07	22996	17627	2.10	23126	15107	2.14	22130	15278	2.20	22651	16548	2.23
86(30)	68(20)	28285	21063	2.05	27222	19989	2.10	26313	18429	2.13	26639	18222	2.17	26139	18059	2.23	26754	19230	2.25
86(30)	72(22)	32175	25054	2.10	30542	22911	2.14	30221	22588	2.17	29651	21495	2.21	29888	21653	2.27	29923	22038	2.30
90(32)	61(16)	17185	16538	1.98	16699	15983	2.03	16957	16049	2.05	15498	14594	2.10	15541	14975	2.15	15448	14755	2.18
90(32)	64(18)	20880	12823	2.03	19752	13162	2.07	20099	14821	2.10	18973	13622	2.14	18390	11151	2.20	18506	10558	2.23
90(32)	68(20)	24347	17099	2.05	22601	14087	2.10	23267	15169	2.13	21806	14904	2.17	21433	13711	2.23	22360	15102	2.25
90(32)	72(22)	27572	19249	2.10	26263	18173	2.14	26259	18630	2.17	25250	16946	2.21	24870	16547	2.27	26509	17944	2.30

SELECTION DATA

< Air Handlers Type >

JPE18B3XB2HS1A/PAS-18BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	28777	2724	0.72	29889	2832	0.74	28848	2733	0.75	28935	2741	0.76	27512	2606	0.79	27711	2611	0.8
66(19)	64(18)	30617	2526	0.74	31746	2672	0.75	31120	2640	0.76	31215	2557	0.78	29328	2396	0.8	30060	2446	0.81
68(20)	61(16)	26517	2496	0.72	26831	2539	0.74	26413	2507	0.75	27257	2572	0.76	25685	2429	0.79	25139	2371	0.8
68(20)	64(18)	28636	2418	0.74	29300	2374	0.75	28858	2394	0.76	29324	2438	0.78	27571	2279	0.8	27579	2284	0.81
72(22)	61(16)	24111	2277	0.72	25219	2375	0.74	24674	2329	0.75	24521	2331	0.76	23579	2230	0.79	23185	2179	0.8
72(22)	64(18)	26398	2226	0.74	27450	2307	0.75	26870	2186	0.76	26988	2172	0.78	25465	1961	0.8	25582	2062	0.81
72(22)	68(20)	28196	2240	0.75	29437	2433	0.76	28952	2311	0.77	28805	2352	0.79	27633	2185	0.81	27778	2238	0.82
75(24)	61(16)	20831	1967	0.72	20663	1937	0.74	20374	1911	0.75	20250	1912	0.76	19462	1825	0.79	19702	1853	0.8
75(24)	64(18)	22919	1729	0.74	22745	1710	0.75	22624	1696	0.76	22387	1720	0.78	21925	1633	0.8	21574	1711	0.81
75(24)	68(20)	24625	1941	0.75	24986	1950	0.76	24721	1966	0.77	24673	1913	0.79	23651	1800	0.81	23535	1778	0.82
75(24)	72(22)	26381	2117	0.76	27409	2205	0.78	26894	2130	0.79	26916	2120	0.81	25637	2070	0.83	25982	2012	0.84
79(26)	61(16)	19110	1804	0.72	18591	1737	0.74	18362	1729	0.75	18549	1749	0.76	18175	1721	0.79	17651	1647	0.8
79(26)	64(18)	20966	1668	0.74	20850	1598	0.75	20526	1554	0.76	20483	1569	0.78	20045	1555	0.8	19628	1572	0.81
79(26)	68(20)	23006	1809	0.75	23164	1802	0.76	22911	1738	0.77	22896	1738	0.79	22376	1721	0.81	21881	1700	0.82
79(26)	72(22)	25232	1958	0.76	25236	1948	0.78	24800	1908	0.79	25056	1979	0.81	24360	1931	0.83	23616	1868	0.84
81(27)	61(16)	16067	1511	0.72	16207	1530	0.74	16001	1503	0.75	15855	1489	0.76	15555	1444	0.79	15202	1437	0.8
81(27)	64(18)	18556	1401	0.74	18451	1471	0.75	18339	1466	0.76	18019	1400	0.78	17879	1392	0.8	17579	1330	0.81
81(27)	68(20)	20822	1524	0.75	20416	1482	0.76	20369	1541	0.77	19992	1477	0.79	20306	1562	0.81	19580	1404	0.82
81(27)	72(22)	23041	1788	0.76	22402	1760	0.78	22616	1762	0.79	22224	1666	0.81	22433	1738	0.83	22037	1710	0.84
82(28)	61(16)	14821	1395	0.72	14408	1355	0.74	14384	1341	0.75	13770	1292	0.76	13530	1273	0.79	13576	1270	0.8
82(28)	64(18)	16749	1210	0.74	16626	1258	0.75	16275	1264	0.76	16091	1102	0.78	15560	1121	0.8	15491	1084	0.81
82(28)	68(20)	18800	1370	0.75	18376	1341	0.76	18718	1396	0.77	18328	1337	0.79	17894	1301	0.81	17501	1258	0.82
82(28)	72(22)	20714	1597	0.76	20518	1548	0.78	21187	1638	0.79	20645	1512	0.81	20249	1530	0.83	19766	1451	0.84
86(30)	61(16)	12741	1195	0.72	12248	1144	0.74	11331	1063	0.75	11397	1056	0.76	11188	1031	0.79	11577	1083	0.8
86(30)	64(18)	14685	1003	0.74	14225	1044	0.75	13819	1029	0.76	13897	882	0.78	13298	892	0.8	13611	966	0.81
86(30)	68(20)	16997	1229	0.75	16358	1167	0.76	15812	1076	0.77	16008	1063	0.79	15708	1054	0.81	16077	1122	0.82
86(30)	72(22)	19334	1462	0.76	18353	1337	0.78	18160	1318	0.79	17818	1254	0.81	17960	1264	0.83	17981	1286	0.84
90(32)	61(16)	10327	965	0.72	10035	933	0.74	10190	937	0.75	9313	852	0.76	9339	874	0.79	9283	861	0.8
90(32)	64(18)	12547	748	0.74	11870	768	0.75	12078	865	0.76	11401	795	0.78	11051	651	0.8	11121	616	0.81
90(32)	68(20)	14630	998	0.75	13581	822	0.76	13982	885	0.77	13104	870	0.79	12880	800	0.81	13436	881	0.82
90(32)	72(22)	16568	1123	0.76	15782	1061	0.78	15780	1087	0.79	15173	989	0.81	14945	966	0.83	15930	1047	0.84

JPE24B3XC2HS1A/PAS-24BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	35868	3608	0.7	37253	3751	0.72	35957	3619	0.73	36064	3630	0.74	34291	3451	0.77	34539	3458	0.78
66(19)	64(18)	38162	3346	0.72	39569	3538	0.73	38788	3496	0.74	38906	3386	0.76	36555	3173	0.78	37467	3240	0.79
68(20)	61(16)	33051	3305	0.7	33443	3362	0.72	32921	3320	0.73	33973	3406	0.74	32014	3216	0.77	31333	3140	0.78
68(20)	64(18)	35692	3202	0.72	36520	3145	0.73	35969	3171	0.74	36550	3228	0.76	34365	3018	0.78	34375	3025	0.79
72(22)	61(16)	30053	3015	0.7	31433	3145	0.72	30754	3085	0.73	30563	3087	0.74	29389	2953	0.77	28898	2886	0.78
72(22)	64(18)	32902	2948	0.72	34214	3055	0.73	33491	2895	0.74	33639	2876	0.76	31740	2597	0.78	31886	2731	0.79
72(22)	68(20)	35143	2967	0.73	36691	3221	0.74	36085	3060	0.75	35903	3114	0.77	34442	2893	0.79	34623	2964	0.8
75(24)	61(16)	25964	2605	0.7	25754	2565	0.72	25395	2530	0.73	25240	2532	0.74	24257	2416	0.77	24556	2454	0.78
75(24)	64(18)	28567	2289	0.72	28349	2265	0.73	28199	2246	0.74	27903	2277	0.76	27328	2162	0.78	26890	2266	0.79
75(24)	68(20)	30693	2570	0.73	31143	2582	0.74	30813	2604	0.75	30753	2533	0.77	29479	2384	0.79	29334	2354	0.8
75(24)	72(22)	32881	2804	0.74	34163	2920	0.76	33521	2820	0.77	33549	2807	0.79	31954	2741	0.81	32385	2665	0.82
79(26)	61(16)	23819	2390	0.7	23171	2300	0.72	22887	2289	0.73	23119	2316	0.74	22654	2280	0.77	22000	2181	0.78
79(26)	64(18)	26132	2209	0.72	25988	2116	0.73	25583	2058	0.74	25530	2078	0.76	24984	2059	0.78	24464	2082	0.79
79(26)	68(20)	28675	2396	0.73	28872	2386	0.74	28557	2302	0.75	28538	2301	0.77	27889	2279	0.79	27273	2251	0.8
79(26)	72(22)	31449	2593	0.74	31454	2579	0.76	30911	2526	0.77	31230	2621	0.79	30362	2557	0.81	29435	2474	0.82
81(27)	61(16)	20026	2002	0.7	20201	2026	0.72	19944	1990	0.73	19761	1971	0.74	19388	1912	0.77	18948	1904	0.78
81(27)	64(18)	23128	1856	0.72	22998	1947	0.73	22858	1942	0.74	22459	1854	0.76	22284	1844	0.78	21910	1761	0.79
81(27)	68(20)	25953	2018	0.73	25446	1963	0.74	25389	2041	0.75	24918	1956	0.77	25310	2068	0.79	24404	1859	0.8
81(27)	72(22)	28719	2367	0.74	27922	2330	0.76	28189	2333	0.77	27701	2206	0.79	27960	2302	0.81	27467	2264	0.82
82(28)	61(16)	18473	1848	0.7	17958	1794	0.72	17929	1776	0.73	17162	1711	0.74	16864	1686	0.77	16922	1682	0.78
82(28)	64(18)	20876	1603	0.72	20722	1666	0.73	20285	1674	0.74	20056	1460	0.76	19395	1484	0.78	19309	1435	0.79
82(28)	68(20)	23432	1814	0.73	22904	1776	0.74	23330	1849	0.75	22845	1770	0.77	22303	1723	0.79	21814	1665	0.8
82(28)	72(22)	25818	2115	0.74	25573	2049	0.76	26408	2169	0.77	25732	2002	0.79	25239	2026	0.81	24636	1922	0.82
86(30)	61(16)	15881	1583	0.7	15266	1515	0.72	14123	1408	0.73	14205	1399	0.74	13945	1365	0.77	14430	1434	0.78
86(30)	64(18)	18304	1329	0.72	17730	1383	0.73	17224	1362	0.74	17321	1168	0.76	16575	1181	0.78	16965	1279	0.79
86(30)	68(20)	21185	1628	0.73	20389	1545	0.74	19708	1424	0.75	19952	1408	0.77	19578	1396	0.79	20038	1486	0.8
86(30)	72(22)	24099	1936	0.74	22876	1771	0.76	22635	1746	0.77	22208	1661	0.79	22385	1673	0.81	22412	1703	0.82
90(32)	61(16)	12872	1278	0.7	12507	1235	0.72	12701	1240	0.73	11608	1128	0.74	11640	1157	0.77	11570	1140	0.78
90(32)	64(18)	15639	991	0.72	14794	1017	0.73	15054	1145	0.74	14210	1053	0.76	13774	862	0.78	13861	816	0.79
90(32)	68(20)	18235	1322	0.73	16928	1089	0.74	17427	1172	0.75	16333	1152	0.77	16053	1060	0.79	16747	1167	0.8
90(32)	72(22)	20651	1488	0.74	19670	1404	0.76	19668	1440	0.77	18912	1310	0.79	18627	1279	0.81	19855	1387	0.82

SELECTION DATA

JPE30B3XD2HS1A/PAS-30BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	36091	34016	2.08	41366	38292	2.09	34833	32003	2.11	35080	33136	2.12	34477	32203	2.15	33408	30797	2.16
66(19)	64(18)	37454	31806	2.11	42632	37010	2.12	36149	30175	2.14	36292	30516	2.16	35578	29607	2.18	34657	29050	2.19
68(20)	61(16)	34530	32058	2.08	39909	37964	2.09	33359	30308	2.11	33698	31614	2.12	32686	29846	2.15	31945	28950	2.16
68(20)	64(18)	35929	29969	2.11	41439	35418	2.12	34875	28997	2.14	35106	29429	2.16	34072	27919	2.18	33431	27743	2.19
72(22)	61(16)	32910	30151	2.08	38543	35464	2.09	32389	30508	2.11	32063	29568	2.12	31435	28778	2.15	30924	27832	2.16
72(22)	64(18)	34450	28579	2.11	39941	34172	2.12	33560	27569	2.14	33551	27439	2.16	32578	26818	2.18	32010	26004	2.19
72(22)	68(20)	35898	29523	2.12	41438	34849	2.14	34821	28455	2.15	34998	28619	2.17	34011	27352	2.19	33363	26699	2.21
75(24)	61(16)	29972	27910	2.08	36347	34062	2.09	29391	26807	2.11	29622	27029	2.12	28687	26478	2.15	28182	26085	2.16
75(24)	64(18)	31484	25631	2.11	37661	31479	2.12	30628	24980	2.14	30922	24893	2.16	30147	24417	2.18	29617	23574	2.19
75(24)	68(20)	32979	26591	2.12	38751	31907	2.14	32171	25846	2.15	32082	25608	2.17	31370	24697	2.19	30863	24093	2.21
75(24)	72(22)	34244	27418	2.14	40007	33606	2.16	33691	27364	2.17	33187	26753	2.19	32732	26393	2.21	32031	25379	2.22
79(26)	61(16)	29101	26804	2.08	35279	32576	2.09	28213	26049	2.11	28380	26452	2.12	27442	25446	2.15	27347	25283	2.16
79(26)	64(18)	30343	24721	2.11	36466	30537	2.12	29487	23496	2.14	29450	23336	2.16	28913	22826	2.18	28531	22429	2.19
79(26)	68(20)	31572	25170	2.12	37647	30975	2.14	31032	24507	2.15	30804	24058	2.17	30253	23495	2.19	29623	22936	2.21
79(26)	72(22)	32867	26362	2.14	39194	32696	2.16	32216	25879	2.17	32006	25407	2.19	31797	24958	2.21	30947	24400	2.22
81(27)	61(16)	28077	25321	2.08	34095	31776	2.09	26979	23966	2.11	26813	24125	2.12	26309	23723	2.15	25943	22946	2.16
81(27)	64(18)	29246	23055	2.11	35302	29429	2.12	28205	22122	2.14	28000	22227	2.16	27727	21790	2.18	27377	21483	2.19
81(27)	68(20)	30667	24068	2.12	36704	30007	2.14	29420	23083	2.15	29080	22541	2.17	29255	22837	2.19	28467	21923	2.21
81(27)	72(22)	32157	25732	2.14	38235	31393	2.16	30822	24274	2.17	30411	23772	2.19	30687	23954	2.21	29576	23091	2.22
82(28)	61(16)	26418	24300	2.08	33072	30825	2.09	25634	23414	2.11	25522	23081	2.12	25209	22682	2.15	24765	22633	2.16
82(28)	64(18)	27807	21949	2.11	34132	28322	2.12	26945	20912	2.14	26619	20429	2.16	26522	20714	2.18	26163	20559	2.19
82(28)	68(20)	29211	22668	2.12	35261	28719	2.14	28273	21828	2.15	27764	21325	2.17	27939	21231	2.19	27642	21299	2.21
82(28)	72(22)	30710	23922	2.14	36673	29992	2.16	29349	23111	2.17	29081	22687	2.19	29358	23092	2.21	29007	22179	2.22
86(30)	61(16)	25478	23175	2.08	31348	29249	2.09	24390	22309	2.11	23693	20915	2.12	24140	22015	2.15	23643	21088	2.16
86(30)	64(18)	26625	20640	2.11	32827	26965	2.12	25529	19434	2.14	25072	19470	2.16	25219	19464	2.18	24773	18827	2.19
86(30)	68(20)	27903	21428	2.12	34233	27515	2.14	26863	20451	2.15	26229	19983	2.17	26428	19753	2.19	25927	19528	2.21
86(30)	72(22)	29085	22460	2.14	35390	28806	2.16	28001	21248	2.17	27596	20940	2.19	27794	21114	2.21	27143	20690	2.22
90(32)	61(16)	24261	21561	2.08	30476	28311	2.09	22421	19797	2.11	22234	19248	2.12	22641	20518	2.15	22114	19589	2.16
90(32)	64(18)	25483	19446	2.11	31614	25698	2.12	23975	18021	2.14	23687	17484	2.16	24125	18031	2.18	23435	17593	2.19
90(32)	68(20)	26757	20370	2.12	32752	26356	2.14	25144	18657	2.15	24838	18319	2.17	25516	19135	2.19	24664	18307	2.21
90(32)	72(22)	28071	21846	2.14	33903	27222	2.16	26369	19780	2.17	26189	19430	2.19	26841	20511	2.21	26140	19724	2.22

JPE36B3XD2HS1A/PAS-36BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	42536	40090	2.45	48753	45130	2.47	41053	37718	2.48	41344	39053	2.5	40633	37954	2.53	39373	36296	2.55
66(19)	64(18)	44142	37485	2.48	50244	43619	2.5	42604	35563	2.52	42772	35965	2.54	41931	34894	2.57	40845	34237	2.59
68(20)	61(16)	40696	37783	2.45	47036	44743	2.47	39315	35721	2.48	39715	37260	2.5	38523	35176	2.53	37649	34120	2.55
68(20)	64(18)	42345	35321	2.48	48839	41743	2.5	41103	34176	2.52	41375	34684	2.54	40157	32905	2.57	39401	32697	2.59
72(22)	61(16)	38787	35535	2.45	45426	41797	2.47	38173	35956	2.48	37789	34848	2.5	37049	33917	2.53	36446	32802	2.55
72(22)	64(18)	40602	33683	2.48	47073	40274	2.5	39552	32493	2.52	39542	32339	2.54	38395	31607	2.57	37726	30647	2.59
72(22)	68(20)	42309	34795	2.5	48838	41073	2.52	41039	33536	2.53	41248	33730	2.56	40084	32236	2.59	39321	31467	2.6
75(24)	61(16)	35325	32894	2.45	42838	40144	2.47	34639	31594	2.48	34911	31855	2.5	33810	31206	2.53	33215	30743	2.55
75(24)	64(18)	37106	30208	2.48	44386	37101	2.5	36098	29440	2.52	36444	29338	2.54	35531	28777	2.57	34905	27783	2.59
75(24)	68(20)	38868	31339	2.5	45671	37605	2.52	37916	30462	2.53	37811	30181	2.56	36972	29107	2.59	36374	28395	2.6
75(24)	72(22)	40359	32314	2.52	47151	39607	2.54	39708	32251	2.56	39113	31530	2.58	38577	31107	2.61	37751	29911	2.62
79(26)	61(16)	34298	31591	2.45	41579	38394	2.47	33251	30701	2.48	33448	31175	2.5	32342	29990	2.53	32231	29798	2.55
79(26)	64(18)	35761	29135	2.48	42978	35990	2.5	34753	27692	2.52	34709	27503	2.54	34077	26902	2.57	33626	26434	2.59
79(26)	68(20)	37209	29665	2.5	44370	36507	2.52	36574	28883	2.53	36304	28354	2.56	35655	27691	2.59	34913	27032	2.6
79(26)	72(22)	38736	31069	2.52	46193	38534	2.54	37969	30500	2.56	37722	29943	2.58	37476	29415	2.61	36474	28758	2.62
81(27)	61(16)	33090	29843	2.45	40183	37451	2.47	31797	28246	2.48	31601	28433	2.5	31008	27960	2.53	30576	27044	2.55
81(27)	64(18)	34468	27172	2.48	41606	34684	2.5	33241	26073	2.52	33000	26196	2.54	32678	25681	2.57	32266	25320	2.59
81(27)	68(20)	36143	28365	2.5	43258	35365	2.52	34673	27205	2.53	34272	26566	2.56	34479	26916	2.59	33550	25838	2.6
81(27)	72(22)	37899	30327	2.52	45063	36999	2.54	36326	28609	2.56	35842	28017	2.58	36167	28232	2.61	34858	27215	2.62
82(28)	61(16)	31136	28640	2.45	38978	36329	2.47	30212	27595	2.48	30080	27202	2.5	29711	26732	2.53	29187	26674	2.55
82(28)	64(18)	32773	25868	2.48	40227	33379	2.5	31757	24646	2.52	31373	24078	2.54	31258	24413	2.57	30835	24230	2.59
82(28)	68(20)	34427	26715	2.5	41558	33847	2.52	33322	25725	2.53	32721	25134	2.56	32928	25022	2.59	32578	25102	2.6
82(28)	72(22)	36194	28194	2.52	43222	35348	2.54	34590	27237	2.56	34275	26738	2.58	34601	27215	2.61	34187	26140	2.62
86(30)	61(16)	30027	27314	2.45	36946	34473	2.47	28746	26292	2.48	27924	24650	2.5	28451	25947	2.53	27864	24853	2.55
86(30)	64(18)	31379	24326	2.48	38689	31780	2.5	30087	22905	2.52	29549	22947	2.54	29723	22939	2.57	29196	22189	2.59
86(30)	68(20)	32886	25255	2.5	40347	32428	2.52	31659	24102	2.53	30912	23552	2.56	31147	23280	2.59	30557	23016	2.6
86(30)	72(22)	34279	26471	2.52	41709	33950	2.54	33001	25043	2.56	32523	24679	2.58	32757	24884	2.61	31990	24384	2.62
90(32)	61(16)	28593	25411	2.45	35918	33367	2.47	26424	23332	2.48	26204	22686	2.5	26685	24182	2.53	26063	23088	2.55
90(32)	64(18)	30034	22918	2.48	37259	30287	2.5	28256	21240	2.52	27917	20606	2.54	28434	21251	2.57	27620	20734	2.59
90(32)	68(20)	31535	24008	2.5	38600	31063	2.52	29634	21989	2.53	29273	21590	2.56	30073	22551	2.59	29068	21576	2.6
90(32)	72(22)	33084	25747	2.52	39957	32083	2.54	31078	23313	2.56	30866	22899	2.58	31635	24174	2.61	30808	23247	2.62

SELECTION DATA

JPE48C3XG2HS1A/PAS-48BUFASDQ1

Indoor intake air DB °F(°C)	Indoor intake air WB °F(°C)	Outdoor intake air DB °F(°C)																	
		68(20)			77(25)			86(30)			95(35)			104(40)			115(46)		
		TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.	TC	SHC	P.C.
66(19)	61(16)	61871	58313	3.96	70913	65644	3.99	59713	54863	4.01	60137	56804	4.04	59103	55205	4.09	57270	52795	4.11
66(19)	64(18)	64207	54524	4.01	73083	63445	4.04	61969	51728	4.06	62214	52313	4.1	60991	50755	4.14	59411	49799	4.16
68(20)	61(16)	59195	54957	3.96	68416	65081	3.99	57186	51957	4.01	57767	54196	4.04	56033	51165	4.09	54763	49629	4.11
68(20)	64(18)	61593	51376	4.01	71038	60717	4.04	59786	49710	4.06	60182	50449	4.1	58410	47861	4.14	57310	47559	4.16
72(22)	61(16)	56417	51687	3.96	66074	60796	3.99	55524	52300	4.01	54965	50688	4.04	53889	49334	4.09	53012	47712	4.11
72(22)	64(18)	59057	48993	4.01	68470	58580	4.04	57531	47262	4.06	57516	47039	4.1	55847	45974	4.14	54874	44578	4.16
72(22)	68(20)	61540	50611	4.03	71037	59742	4.06	59693	48780	4.09	59997	49061	4.12	58304	46889	4.16	57194	45770	4.18
75(24)	61(16)	51381	47846	3.96	62309	58391	3.99	50384	45955	4.01	50780	46335	4.04	49178	45391	4.09	48313	44717	4.11
75(24)	64(18)	53972	43939	4.01	64562	53965	4.04	52506	42822	4.06	53009	42674	4.1	51681	41858	4.14	50771	40412	4.16
75(24)	68(20)	56535	45584	4.03	66431	54698	4.06	55151	44308	4.09	54998	43900	4.12	53777	42338	4.16	52908	41302	4.18
75(24)	72(22)	58704	47003	4.06	68583	57611	4.1	57757	46910	4.12	56892	45862	4.15	56112	45246	4.19	54910	43507	4.21
79(26)	61(16)	49888	45950	3.96	60479	55845	3.99	48365	44656	4.01	48652	45346	4.04	47043	43622	4.09	46881	43342	4.11
79(26)	64(18)	52016	42379	4.01	62513	52349	4.04	50549	40279	4.06	50485	40004	4.1	49566	39131	4.14	48910	38449	4.16
79(26)	68(20)	54123	43149	4.03	64538	53101	4.06	53198	42012	4.09	52806	41242	4.12	51862	40277	4.16	50783	39319	4.18
79(26)	72(22)	56343	45191	4.06	67189	56050	4.1	55228	44364	4.12	54868	43554	4.15	54510	42785	4.19	53053	41829	4.21
81(27)	61(16)	48131	43408	3.96	58448	54474	3.99	46250	41085	4.01	45965	41357	4.04	45102	40669	4.09	44474	39337	4.11
81(27)	64(18)	50135	39523	4.01	60518	50450	4.04	48351	37924	4.06	48000	38103	4.1	47532	37355	4.14	46932	36829	4.16
81(27)	68(20)	52572	41259	4.03	62921	51440	4.06	50434	39571	4.09	49851	38641	4.12	50151	39150	4.16	48800	37583	4.18
81(27)	72(22)	55126	44112	4.06	65546	53817	4.1	52838	41613	4.12	52133	40752	4.15	52607	41065	4.19	50702	39585	4.21
82(28)	61(16)	45289	41658	3.96	56695	52843	3.99	43945	40139	4.01	43753	39567	4.04	43216	38883	4.09	42454	38799	4.11
82(28)	64(18)	47669	37627	4.01	58512	48551	4.04	46192	35849	4.06	45633	35022	4.1	45466	35510	4.14	44851	35244	4.16
82(28)	68(20)	50076	38859	4.03	60448	49232	4.06	48468	37419	4.09	47595	36558	4.12	47895	36396	4.16	47387	36512	4.18
82(28)	72(22)	52645	41009	4.06	62868	51415	4.1	50313	39618	4.12	49854	38892	4.15	50329	39586	4.19	49726	38021	4.21
86(30)	61(16)	43676	39729	3.96	53740	50142	3.99	41812	38243	4.01	40617	35855	4.04	41383	37741	4.09	40530	36150	4.11
86(30)	64(18)	45643	35383	4.01	56275	46226	4.04	43763	33316	4.06	42980	33377	4.1	43233	33366	4.14	42467	32275	4.16
86(30)	68(20)	47834	36734	4.03	58686	47168	4.06	46050	35058	4.09	44963	34257	4.12	45305	33862	4.16	44447	33477	4.18
86(30)	72(22)	49860	38503	4.06	60668	49381	4.1	48002	36426	4.12	47307	35897	4.15	47647	36195	4.19	46531	35468	4.21
90(32)	61(16)	41590	36962	3.96	52244	48533	3.99	38435	33938	4.01	38115	32997	4.04	38814	35173	4.09	37910	33582	4.11
90(32)	64(18)	43685	33335	4.01	54195	44054	4.04	41100	30894	4.06	40607	29972	4.1	41358	30911	4.14	40174	30159	4.16
90(32)	68(20)	45869	34921	4.03	56146	45182	4.06	43104	31984	4.09	42579	31404	4.12	43742	32802	4.16	42281	31383	4.18
90(32)	72(22)	48122	37450	4.06	58119	46666	4.1	45204	33909	4.12	44896	33308	4.15	46014	35162	4.19	44812	33813	4.21

4.3.2 Heating Capacity

< MESP Ducted Type >

Model	Rated Capacity (Btu/h)	Indoor intake air DB °F(°C)	Outdoor intake air WB °F(°C)																			
			-13(-25)		-4(-20)		5(-15)		14(-10)		23(-5)		32(0)		41(5)		50(10)		59(15)		68(20)	
			TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.
9K	11000	60(16)	6760	0.91	8135	0.98	9467	1.15	9603	1.16	9796	1.02	10136	0.74	11420	0.76	12013	0.85	14532	0.83	16431	0.94
		70(21)	6449	0.96	7377	1.02	9032	1.21	9333	1.19	9559	1.06	9688	0.79	10973	0.82	11589	0.92	14163	0.91	16403	0.99
		80(27)	5974	0.99	6874	1.06	8449	1.26	8834	1.25	9279	1.14	9389	0.87	10732	0.92	11360	0.96	13956	1.04	16231	1.15
12K	14000	60(16)	8705	1.16	10475	1.26	12190	1.48	12365	1.49	12614	1.31	13052	0.95	14705	0.98	15469	1.09	18713	1.06	21158	1.21
		70(21)	8304	1.23	9499	1.31	11630	1.56	12018	1.53	12309	1.36	12475	1.01	14130	1.05	14923	1.18	18237	1.17	21122	1.28
		80(27)	7692	1.28	8852	1.36	10879	1.62	11375	1.61	11949	1.47	12089	1.12	13820	1.18	14628	1.24	17971	1.34	20900	1.48
18K	20000	60(16)	10341	1.46	12101	1.45	14326	1.69	15376	1.64	16703	1.50	17168	1.15	19565	1.21	21848	1.25	25167	1.33	28755	1.42
		70(21)	9992	1.58	11815	1.58	13971	1.84	15061	1.79	16164	1.64	16563	1.26	18998	1.33	21176	1.38	24494	1.48	28056	1.59
		80(27)	9627	1.69	11689	1.76	13580	2.03	14437	1.98	15428	1.82	15725	1.39	18027	1.46	20079	1.52	23228	1.63	26627	1.74
24K	24000	60(16)	12425	1.64	14726	1.69	17704	2.00	18818	1.98	20040	1.84	20535	1.41	23505	1.49	26182	1.55	30523	1.65	35321	1.76
		70(21)	11810	1.73	14362	1.78	16782	2.14	17946	2.12	19573	1.98	19950	1.53	22844	1.62	25483	1.69	29627	1.80	34176	1.92
		80(27)	11184	1.85	13523	1.91	16240	2.30	17442	2.30	18754	2.16	19157	1.67	22043	1.78	24572	1.86	28517	1.99	32867	2.12
30K	32000	60(16)	19895	2.69	23211	2.90	27316	3.26	28434	3.17	28789	2.83	29565	2.11	30630	2.08	34985	2.16	41826	2.33	47940	2.58
		70(21)	19442	2.77	21970	3.01	26042	3.36	27179	3.30	28408	2.98	28831	2.27	30260	2.28	34088	2.40	40424	2.63	47155	2.91
		80(27)	18420	2.95	20895	3.17	25203	3.59	26681	3.59	27374	3.30	27954	2.54	29787	2.60	33365	2.77	39659	3.08	46249	3.28
36K	38000	60(16)	21984	2.84	26612	3.10	31094	3.66	31551	3.68	32202	3.24	33346	2.35	37665	2.41	39663	2.70	48141	2.64	54532	3.02
		70(21)	20938	3.00	24059	3.21	29630	3.85	30643	3.76	31404	3.36	31839	2.50	36162	2.59	38237	2.92	46898	2.90	54436	3.18
		80(27)	19337	3.10	22368	3.32	27667	3.98	28964	3.96	30462	3.62	30830	2.75	35352	2.91	37466	3.06	46202	3.33	53858	3.68
48K	45500	60(16)	29125	4.46	30981	4.14	34040	4.40	37208	4.61	38552	4.20	39552	3.17	45232	3.31	50428	3.43	58173	3.60	66236	3.73
		70(21)	28438	4.81	30680	4.65	33793	4.91	36494	4.86	37772	4.41	38642	3.35	44183	3.52	49229	3.64	57110	3.85	65771	4.08
		80(27)	26936	5.06	28840	4.92	31870	5.22	35025	5.16	36542	4.68	37387	3.53	42739	3.70	47564	3.85	55110	4.08	63567	4.32

9K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.61	0.74	0.86	0.87	0.89	0.92	1.04	1.09	1.32	1.49
Indoor DB 70°F(21°C)	0.59	0.67	0.82	0.85	0.87	0.88	1.00	1.05	1.29	1.49
Indoor DB 80°F(27°C)	0.54	0.62	0.77	0.80	0.84	0.85	0.98	1.03	1.27	1.48

12K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.75	0.87	0.88	0.90	0.93	1.05	1.10	1.34	1.51
Indoor DB 70°F(21°C)	0.59	0.68	0.83	0.86	0.88	0.89	1.01	1.07	1.30	1.51
Indoor DB 80°F(27°C)	0.55	0.63	0.78	0.81	0.85	0.86	0.99	1.04	1.28	1.49

18K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.52	0.61	0.72	0.77	0.84	0.86	0.98	1.09	1.26	1.44
Indoor DB 70°F(21°C)	0.50	0.59	0.70	0.75	0.81	0.83	0.95	1.06	1.22	1.40
Indoor DB 80°F(27°C)	0.48	0.58	0.68	0.72	0.77	0.79	0.90	1.00	1.16	1.33

24K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.52	0.61	0.74	0.78	0.83	0.86	0.98	1.09	1.27	1.47
Indoor DB 70°F(21°C)	0.49	0.60	0.70	0.75	0.82	0.83	0.95	1.06	1.23	1.42
Indoor DB 80°F(27°C)	0.47	0.56	0.68	0.73	0.78	0.80	0.92	1.02	1.19	1.37

SELECTION DATA

30K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.73	0.85	0.89	0.90	0.92	0.96	1.09	1.31	1.50
Indoor DB 70°F(21°C)	0.61	0.69	0.81	0.85	0.89	0.90	0.95	1.07	1.26	1.47
Indoor DB 80°F(27°C)	0.58	0.65	0.79	0.83	0.86	0.87	0.93	1.04	1.24	1.45

36K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.58	0.70	0.82	0.83	0.85	0.88	0.99	1.04	1.27	1.44
Indoor DB 70°F(21°C)	0.55	0.63	0.78	0.81	0.83	0.84	0.95	1.01	1.23	1.43
Indoor DB 80°F(27°C)	0.51	0.59	0.73	0.76	0.80	0.81	0.93	0.99	1.22	1.42

48K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.64	0.68	0.75	0.82	0.85	0.87	0.99	1.11	1.28	1.46
Indoor DB 70°F(21°C)	0.63	0.67	0.74	0.80	0.83	0.85	0.97	1.08	1.26	1.45
Indoor DB 80°F(27°C)	0.59	0.63	0.70	0.77	0.80	0.82	0.94	1.05	1.21	1.40

< 4-Way Mini Cassette Type >

Model	Rated Capacity (Btu/h)	Indoor intake air DB °F(°C)	Outdoor intake air WB °F(°C)																					
			-13(-25)		-4(-20)		5(-15)		14(-10)		23(-5)		32(0)		41(5)		50(10)		59(15)		68(20)			
			TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.
9K	11000	60(16)	6553	0.88	7886	0.95	9177	1.12	9309	1.12	9496	0.99	9826	0.72	11070	0.74	11645	0.82	14087	0.80	15928	0.91		
		70(21)	6252	0.93	7151	0.99	8755	1.18	9047	1.15	9266	1.03	9392	0.77	10637	0.79	11234	0.89	13729	0.88	15900	0.96		
		80(27)	5791	0.96	6664	1.02	8190	1.22	8564	1.21	8995	1.11	9101	0.84	10404	0.89	11012	0.93	13529	1.01	15734	1.11		
12K	14000	60(16)	8667	1.07	10431	1.16	12138	1.37	12312	1.37	12560	1.21	12996	0.88	14642	0.90	15403	1.00	18633	0.98	21068	1.12		
		70(21)	8269	1.13	9458	1.21	11580	1.44	11966	1.40	12256	1.25	12422	0.93	14069	0.96	14859	1.09	18159	1.07	21031	1.18		
		80(27)	7659	1.17	8814	1.25	10833	1.49	11327	1.48	11897	1.35	12038	1.03	13760	1.08	14566	1.14	17894	1.23	20811	1.36		

9K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.60	0.72	0.83	0.85	0.86	0.89	1.01	1.06	1.28	1.45
Indoor DB 70°F(21°C)	0.57	0.65	0.80	0.82	0.84	0.85	0.97	1.02	1.25	1.45
Indoor DB 80°F(27°C)	0.53	0.61	0.74	0.78	0.82	0.83	0.95	1.00	1.23	1.43

12K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.75	0.87	0.88	0.90	0.93	1.05	1.10	1.33	1.50
Indoor DB 70°F(21°C)	0.59	0.68	0.83	0.85	0.88	0.89	1.00	1.06	1.30	1.50
Indoor DB 80°F(27°C)	0.55	0.63	0.77	0.81	0.85	0.86	0.98	1.04	1.28	1.49

< 4-Way Cassette Type >

Model	Rated Capacity (Btu/h)	Indoor intake air DB °F(°C)	Outdoor intake air WB °F(°C)																			
			-13(-25)		-4(-20)		5(-15)		14(-10)		23(-5)		32(0)		41(5)		50(10)		59(15)		68(20)	
			TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.
18K	20000	60(16)	10449	1.43	12195	1.12	14426	1.66	15469	1.61	16795	1.47	17268	1.12	19674	1.18	21956	1.22	25260	1.30	28863	1.39
		70(21)	10093	1.55	11918	1.55	14074	1.81	15170	1.76	16257	1.61	16665	1.23	19092	1.30	21271	1.35	24587	1.45	28159	1.56
		80(27)	9732	1.66	11780	1.73	13683	2.00	14532	1.95	15531	1.79	15824	1.36	18129	1.43	20182	1.49	23322	1.60	26731	1.71
24K	24000	60(16)	12414	1.72	14488	1.34	17139	1.99	18378	1.93	19953	1.76	20515	1.34	23374	1.42	25956	1.46	30010	1.56	34291	1.67
		70(21)	11991	1.86	14159	1.86	16721	2.17	18023	2.11	19314	1.93	19799	1.48	22682	1.56	25271	1.62	29211	1.74	33454	1.87
		80(27)	11562	1.99	13995	2.08	16256	2.40	17265	2.34	18452	2.15	18800	1.63	21538	1.72	24182	1.79	27708	1.92	31758	2.05
30K	32000	60(16)	20018	2.14	23607	2.28	27084	2.65	27438	2.66	27943	2.33	28830	1.68	32180	1.71	33730	1.91	40306	1.84	45263	2.08
		70(21)	19207	2.28	21627	2.40	25948	2.80	26734	2.73	27324	2.43	27662	1.81	31014	1.84	32624	2.07	39341	2.02	45189	2.19
		80(27)	17965	2.39	20316	2.50	24426	2.92	25431	2.89	26594	2.63	26879	1.99	30387	2.07	32026	2.17	38802	2.32	44740	2.53
36K	38000	60(16)	23624	2.80	27860	2.98	31963	3.46	32381	3.47	32977	3.05	34024	2.20	37978	2.23	39807	2.49	47567	2.40	53417	2.72
		70(21)	22667	2.98	25523	3.13	30623	3.66	31550	3.56	32247	3.17	32645	2.36	36602	2.41	38501	2.70	46429	2.64	53330	2.86
		80(27)	21201	3.12	23976	3.27	28826	3.81	30013	3.77	31385	3.43	31721	2.60	35861	2.71	37796	2.84	45792	3.03	52800	3.31
48K	47000	60(16)	30690	4.44	32710	4.12	35672	4.38	38859	4.59	40166	4.18	41116	3.15	46946	3.29	52019	3.41	59733	3.58	67848	3.71
		70(21)	30135	4.79	32424	4.63	35387	4.89	38163	4.84	39375	4.39	40276	3.33	45903	3.50	50918	3.62	58796	3.83	67339	4.06
		80(27)	28672	5.04	30409	4.90	33499	5.20	36690	5.14	38287	4.66	39056	3.61	44311	3.68	49258	3.83	56781	4.06	65123	4.30

18K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.52	0.61	0.72	0.77	0.84	0.86	0.98	1.10	1.26	1.44
Indoor DB 70°F(21°C)	0.50	0.60	0.70	0.76	0.81	0.83	0.95	1.06	1.23	1.41
Indoor DB 80°F(27°C)	0.49	0.59	0.68	0.73	0.78	0.79	0.91	1.01	1.17	1.34

24K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.52	0.60	0.71	0.77	0.83	0.85	0.97	1.08	1.25	1.43
Indoor DB 70°F(21°C)	0.50	0.59	0.70	0.75	0.80	0.82	0.95	1.05	1.22	1.39
Indoor DB 80°F(27°C)	0.48	0.58	0.68	0.72	0.77	0.78	0.90	1.01	1.15	1.32

30K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.63	0.74	0.85	0.86	0.87	0.90	1.01	1.05	1.26	1.41
Indoor DB 70°F(21°C)	0.60	0.68	0.81	0.84	0.85	0.86	0.97	1.02	1.23	1.41
Indoor DB 80°F(27°C)	0.56	0.63	0.76	0.79	0.83	0.84	0.95	1.00	1.21	1.40

36K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.73	0.84	0.85	0.87	0.90	1.00	1.05	1.25	1.41
Indoor DB 70°F(21°C)	0.60	0.67	0.81	0.83	0.85	0.86	0.96	1.01	1.22	1.40
Indoor DB 80°F(27°C)	0.56	0.63	0.76	0.79	0.83	0.83	0.94	0.99	1.21	1.39

48K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.65	0.70	0.76	0.83	0.85	0.87	1.00	1.11	1.27	1.44
Indoor DB 70°F(21°C)	0.64	0.69	0.75	0.81	0.84	0.86	0.98	1.08	1.25	1.43
Indoor DB 80°F(27°C)	0.61	0.65	0.71	0.78	0.81	0.83	0.94	1.05	1.21	1.39

SELECTION DATA

< Ceiling Suspended Type >

Model	Rated Capacity (Btu/h)	Indoor intake air DB °F(°C)	Outdoor intake air WB °F(°C)																			
			-13(-25)		-4(-20)		5(-15)		14(-10)		23(-5)		32(0)		41(5)		50(10)		59(15)		68(20)	
			TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.
9K	11000	60(16)	6796	0.80	8179	0.87	9518	1.02	9654	1.03	9849	0.91	10190	0.66	11481	0.67	12077	0.75	14610	0.73	16519	0.84
		70(21)	6484	0.85	7416	0.90	9080	1.08	9383	1.05	9610	0.94	9740	0.70	11032	0.72	11651	0.81	14239	0.81	16491	0.88
		80(27)	6005	0.88	6911	0.94	8494	1.12	8881	1.11	9329	1.01	9439	0.77	10790	0.81	11421	0.85	14031	0.92	16318	1.02
12K	14000	60(16)	8708	1.03	10479	1.11	12195	1.31	12369	1.32	12619	1.16	13056	0.84	14710	0.86	15474	0.96	18719	0.94	21165	1.07
		70(21)	8307	1.09	9502	1.16	11634	1.38	12022	1.35	12313	1.20	12480	0.90	14134	0.93	14928	1.04	18244	1.03	21129	1.13
		80(27)	7694	1.13	8855	1.20	10883	1.43	11379	1.42	11953	1.30	12093	0.99	13824	1.04	14633	1.09	17977	1.18	20907	1.30
18K	20000	60(16)	10251	1.48	11992	1.17	14230	1.71	15276	1.66	16605	1.52	17072	1.17	19464	1.23	21746	1.27	25072	1.35	28649	1.44
		70(21)	9895	1.60	11718	1.60	13879	1.86	14957	1.81	16069	1.66	16471	1.28	18898	1.35	21071	1.40	24388	1.50	27953	1.61
		80(27)	9534	1.71	11589	1.78	13488	2.05	14345	2.00	15335	1.84	15632	1.41	17931	1.48	19969	1.54	23119	1.65	26524	1.76
24K	24000	60(16)	11773	1.78	13773	1.40	16343	2.05	17544	1.99	19071	1.82	19607	1.40	22354	1.48	24946	1.52	28795	1.62	32903	1.73
		70(21)	11364	1.92	13458	1.92	15940	2.23	17178	2.17	18455	1.99	18917	1.54	21704	1.62	24271	1.68	28010	1.80	32104	1.93
		80(27)	10950	2.05	13310	2.14	15491	2.46	16475	2.40	17612	2.21	17953	1.69	20594	1.78	23169	1.85	26552	1.98	30463	2.11
30K	32000	60(16)	19818	4.87	23371	5.18	26813	6.01	27164	6.03	27664	5.30	28542	3.82	31859	3.88	33394	4.33	39903	4.17	44811	4.73
		70(21)	19015	5.18	21411	5.44	25689	6.36	26467	6.19	27052	5.51	27385	4.10	30705	4.19	32298	2.27	38949	4.59	44738	4.97
		80(27)	17785	5.42	20113	5.68	24182	6.62	25177	6.55	26328	5.96	26610	4.52	30083	4.71	31707	4.94	38414	5.27	44293	5.75
36K	38000	60(16)	22241	2.97	26766	3.22	31148	3.78	31595	3.80	32231	3.35	33350	2.43	37572	2.48	39526	2.78	47814	2.71	54063	3.09
		70(21)	21219	3.14	24270	3.34	29717	3.99	30707	3.89	31451	3.47	31876	2.59	36103	2.67	38131	3.01	46599	2.98	53969	3.26
		80(27)	19653	3.25	22617	3.47	27797	4.13	29066	4.10	30530	3.75	30890	2.85	35311	3.00	37378	3.15	45919	3.42	53404	3.77
48K	44000	60(16)	27504	4.50	29425	4.18	32475	4.44	35532	4.65	36847	4.24	37868	3.21	43668	3.35	48679	3.47	56582	3.64	64622	3.77
		70(21)	26793	4.85	28986	4.69	32100	4.95	34914	4.90	36159	4.45	37045	3.39	42585	3.56	47532	3.68	55550	3.89	64107	4.12
		80(27)	25259	5.10	27249	4.96	30166	5.26	33374	5.20	34885	4.72	35672	3.67	41079	3.74	45949	3.89	53382	4.12	61819	4.36

9K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.74	0.87	0.88	0.90	0.93	1.04	1.10	1.33	1.50
Indoor DB 70°F(21°C)	0.59	0.67	0.83	0.85	0.87	0.89	1.00	1.06	1.29	1.50
Indoor DB 80°F(27°C)	0.55	0.63	0.77	0.81	0.85	0.86	0.98	1.04	1.28	1.48

12K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.75	0.87	0.88	0.90	0.93	1.05	1.11	1.34	1.51
Indoor DB 70°F(21°C)	0.59	0.68	0.83	0.86	0.88	0.89	1.01	1.07	1.30	1.51
Indoor DB 80°F(27°C)	0.55	0.63	0.78	0.81	0.85	0.86	0.99	1.05	1.28	1.49

18K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.51	0.60	0.71	0.76	0.83	0.85	0.97	1.09	1.25	1.43
Indoor DB 70°F(21°C)	0.49	0.59	0.69	0.75	0.80	0.82	0.94	1.05	1.22	1.40
Indoor DB 80°F(27°C)	0.48	0.58	0.67	0.72	0.77	0.78	0.90	1.00	1.16	1.33

24K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.49	0.57	0.68	0.73	0.79	0.82	0.93	1.04	1.20	1.37
Indoor DB 70°F(21°C)	0.47	0.56	0.66	0.72	0.77	0.79	0.90	1.01	1.17	1.34
Indoor DB 80°F(27°C)	0.46	0.55	0.65	0.69	0.73	0.75	0.86	0.97	1.11	1.27

30K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.73	0.84	0.85	0.86	0.89	1.00	1.04	1.25	1.40
Indoor DB 70°F(21°C)	0.59	0.67	0.80	0.83	0.85	0.86	0.96	1.01	1.22	1.40
Indoor DB 80°F(27°C)	0.56	0.63	0.76	0.79	0.82	0.83	0.94	0.99	1.20	1.38

36K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.59	0.70	0.82	0.83	0.85	0.88	0.99	1.04	1.26	1.42
Indoor DB 70°F(21°C)	0.56	0.64	0.78	0.81	0.83	0.84	0.95	1.00	1.23	1.42
Indoor DB 80°F(27°C)	0.52	0.60	0.73	0.76	0.80	0.81	0.93	0.98	1.21	1.41

48K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.63	0.67	0.74	0.81	0.84	0.86	0.99	1.11	1.29	1.47
Indoor DB 70°F(21°C)	0.61	0.66	0.73	0.79	0.82	0.84	0.97	1.08	1.26	1.46
Indoor DB 80°F(27°C)	0.57	0.62	0.69	0.76	0.79	0.81	0.93	1.04	1.21	1.40

< High-wall Type >

Model	Rated Capacity (Btu/h)	Indoor intake air DB °F(°C)	Outdoor intake air WB °F(°C)																			
			-13(-25)		-4(-20)		5(-15)		14(-10)		23(-5)		32(0)		41(5)		50(10)		59(15)		68(20)	
			TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.
9K	11000	60(16)	6796	0.80	8179	0.87	9518	1.02	9654	1.03	9849	0.91	10190	0.66	11481	0.67	12077	0.75	14610	0.73	16519	0.84
		70(21)	6484	0.85	7416	0.90	9080	1.08	9383	1.05	9610	0.94	9740	0.70	11032	0.72	11651	0.81	14239	0.81	16491	0.88
		80(27)	6005	0.88	6911	0.94	8494	1.12	8881	1.11	9329	1.01	9439	0.77	10790	0.81	11421	0.85	14031	0.92	16318	1.02
12K	14000	60(16)	8708	1.03	10479	1.11	12195	1.31	12369	1.32	12619	1.16	13056	0.84	14710	0.86	15474	0.96	18719	0.94	21165	1.07
		70(21)	8307	1.09	9502	1.16	11634	1.38	12022	1.35	12313	1.20	12480	0.90	14134	0.93	14928	1.04	18244	1.03	21129	1.13
		80(27)	7694	1.13	8855	1.20	10883	1.43	11379	1.42	11953	1.30	12093	0.99	13824	1.04	14633	1.09	17977	1.18	20907	1.30
18K	20000	60(16)	10251	1.48	11992	1.17	14230	1.71	15276	1.66	16605	1.52	17072	1.17	19464	1.23	21746	1.27	25072	1.35	28649	1.44
		70(21)	9895	1.60	11718	1.60	13879	1.86	14957	1.81	16069	1.66	16471	1.28	18898	1.35	21071	1.40	24388	1.50	27953	1.61
		80(27)	9534	1.71	11589	1.78	13488	2.05	14345	2.00	15335	1.84	15632	1.41	17931	1.48	19969	1.54	23119	1.65	26524	1.76
24K	24000	60(16)	11773	1.78	13773	1.40	16343	2.05	17544	1.99	19071	1.82	19607	1.40	22354	1.48	24946	1.52	28795	1.62	32903	1.73
		70(21)	11364	1.92	13458	1.92	15940	2.23	17178	2.17	18455	1.99	18917	1.54	21704	1.62	24271	1.68	28010	1.80	32104	1.93
		80(27)	10950	2.05	13310	2.14	15491	2.46	16475	2.40	17612	2.21	17953	1.69	20594	1.78	23169	1.85	26552	1.98	30463	2.11
30K	32000	60(16)	19818	4.87	23371	5.18	26813	6.01	27164	6.03	27664	5.30	28542	3.82	31859	3.88	33394	4.33	39903	4.17	44811	4.73
		70(21)	19015	5.18	21411	5.44	25689	6.36	26467	6.19	27052	5.51	27385	4.10	30705	4.19	32298	2.27	38949	4.59	44738	4.97
		80(27)	17785	5.42	20113	5.68	24182	6.62	25177	6.55	26328	5.96	26610	4.52	30083	4.71	31707	4.94	38414	5.27	44293	5.75

9K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.74	0.87	0.88	0.90	0.93	1.04	1.10	1.33	1.50
Indoor DB 70°F(21°C)	0.59	0.67	0.83	0.85	0.87	0.89	1.00	1.06	1.29	1.50
Indoor DB 80°F(27°C)	0.55	0.63	0.77	0.81	0.85	0.86	0.98	1.04	1.28	1.48

12K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.75	0.87	0.88	0.90	0.93	1.05	1.11	1.34	1.51
Indoor DB 70°F(21°C)	0.59	0.68	0.83	0.86	0.88	0.89	1.01	1.07	1.30	1.51
Indoor DB 80°F(27°C)	0.55	0.63	0.78	0.81	0.85	0.86	0.99	1.05	1.28	1.49

18K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.51	0.60	0.71	0.76	0.83	0.85	0.97	1.09	1.25	1.43
Indoor DB 70°F(21°C)	0.49	0.59	0.69	0.75	0.80	0.82	0.94	1.05	1.22	1.40
Indoor DB 80°F(27°C)	0.48	0.58	0.67	0.72	0.77	0.78	0.90	1.00	1.16	1.33

24K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.49	0.57	0.68	0.73	0.79	0.82	0.93	1.04	1.20	1.37
Indoor DB 70°F(21°C)	0.47	0.56	0.66	0.72	0.77	0.79	0.90	1.01	1.17	1.34
Indoor DB 80°F(27°C)	0.46	0.55	0.65	0.69	0.73	0.75	0.86	0.97	1.11	1.27

SELECTION DATA

30K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.73	0.84	0.85	0.86	0.89	1.00	1.04	1.25	1.40
Indoor DB 70°F(21°C)	0.59	0.67	0.80	0.83	0.85	0.86	0.96	1.01	1.22	1.40
Indoor DB 80°F(27°C)	0.56	0.63	0.76	0.79	0.82	0.83	0.94	0.99	1.20	1.38

< Air Handlers Type >

Model	Rated Capacity (Btu/h)	Indoor intake air DB °F(°C)	Outdoor intake air WB °F(°C)																					
			-13(-25)		-4(-20)		5(-15)		14(-10)		23(-5)		32(0)		41(5)		50(10)		59(15)		68(20)			
			TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.	TC	P.C.
18K	19000	60(16)	11905	1.55	14040	1.64	16107	1.91	16318	1.91	16618	1.68	17146	1.21	19138	1.23	20060	1.37	23971	1.32	26919	1.50		
		70(21)	11423	1.64	12862	1.73	15432	2.02	15899	1.96	16250	1.75	16451	1.30	18445	1.33	19402	1.49	23397	1.46	26875	1.58		
		80(27)	10684	1.72	12082	1.80	14526	2.10	15125	2.08	15816	1.89	15985	1.43	18072	1.50	19047	1.57	23076	1.67	26608	1.83		
24K	24000	60(16)	14556	2.08	17166	2.22	19694	2.58	19951	2.58	20318	2.27	20964	1.64	23400	1.66	24527	1.85	29308	1.79	32912	2.02		
		70(21)	13966	2.22	15726	2.33	18868	2.72	19439	2.65	19869	2.36	20114	1.76	22552	1.79	23722	2.01	28607	1.97	32859	2.13		
		80(27)	13063	2.32	14773	2.43	17761	2.84	18492	2.81	19338	2.55	19545	1.94	22095	2.02	23288	2.11	28214	2.26	32532	2.46		
30K	32000	60(16)	15779	2.16	18416	1.69	21785	2.51	23360	2.43	25362	2.22	26077	1.69	29710	1.78	33156	1.84	38145	1.96	43586	2.10		
		70(21)	15242	2.34	17997	2.34	21253	2.73	22908	2.66	24550	2.43	25166	1.86	28831	1.96	32122	2.04	37129	2.19	42523	2.36		
		80(27)	14696	2.51	17789	2.61	20663	3.02	21945	2.94	23453	2.70	23896	2.05	27377	2.16	30477	2.25	35219	2.42	40367	2.58		
36K	38000	60(16)	23624	2.80	27860	2.98	31963	3.46	32381	3.47	32977	3.05	34024	2.20	37978	2.23	39807	2.49	47567	2.40	53417	2.72		
		70(21)	22667	2.98	25523	3.13	30623	3.66	31550	3.56	32247	3.17	32645	2.36	36602	2.41	38501	2.70	46429	2.64	53330	2.86		
		80(27)	21201	3.12	23976	3.27	28826	3.81	30013	3.77	31385	3.43	31721	2.60	35861	2.71	37796	2.84	45792	3.03	52800	3.31		
48K	48000	60(16)	30690	4.44	32710	4.12	35672	4.38	38859	4.59	40166	4.18	41116	3.15	46946	3.29	52019	3.41	59733	3.58	67848	3.71		
		70(21)	30135	4.79	32424	4.63	35387	4.89	38163	4.84	39375	4.39	40276	3.33	45903	3.50	50918	3.62	58796	3.83	67339	4.06		
		80(27)	28672	5.04	30409	4.90	33499	5.20	36690	5.14	38287	4.66	39056	3.61	44311	3.68	49258	3.83	56781	4.06	65123	4.30		

18K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.63	0.74	0.85	0.86	0.87	0.90	1.01	1.06	1.26	1.42
Indoor DB 70°F(21°C)	0.60	0.68	0.81	0.84	0.86	0.87	0.97	1.02	1.23	1.41
Indoor DB 80°F(27°C)	0.56	0.64	0.76	0.80	0.83	0.84	0.95	1.00	1.21	1.40

24K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.61	0.72	0.82	0.83	0.85	0.87	0.97	1.02	1.22	1.37
Indoor DB 70°F(21°C)	0.58	0.66	0.79	0.81	0.83	0.84	0.94	0.99	1.19	1.37
Indoor DB 80°F(27°C)	0.54	0.62	0.74	0.77	0.81	0.81	0.92	0.97	1.18	1.36

30K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.49	0.58	0.68	0.73	0.79	0.81	0.93	1.04	1.19	1.36
Indoor DB 70°F(21°C)	0.48	0.56	0.66	0.72	0.77	0.79	0.90	1.00	1.16	1.33
Indoor DB 80°F(27°C)	0.46	0.56	0.65	0.69	0.73	0.75	0.86	0.95	1.10	1.26

36K

Capacity(Ratio)

Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.62	0.73	0.84	0.85	0.87	0.90	1.00	1.05	1.25	1.41
Indoor DB 70°F(21°C)	0.60	0.67	0.81	0.83	0.85	0.86	0.96	1.01	1.22	1.40
Indoor DB 80°F(27°C)	0.56	0.63	0.76	0.79	0.83	0.83	0.94	0.99	1.21	1.39

48K

Capacity(Ratio)

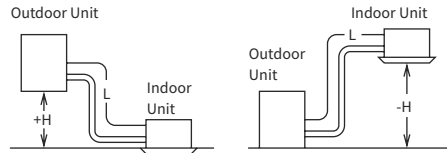
Outdoor WB °F(°C)	-13(-25)	-4(-20)	5(-15)	14(-10)	23(-5)	32(0)	41(5)	50(10)	59(15)	68(20)
Indoor DB 60°F(16°C)	0.64	0.68	0.74	0.81	0.84	0.86	0.98	1.08	1.24	1.41
Indoor DB 70°F(21°C)	0.63	0.68	0.74	0.80	0.82	0.84	0.96	1.06	1.22	1.40
Indoor DB 80°F(27°C)	0.60	0.63	0.70	0.76	0.80	0.81	0.92	1.03	1.18	1.36

4.4 Correction Factor According to Piping Length

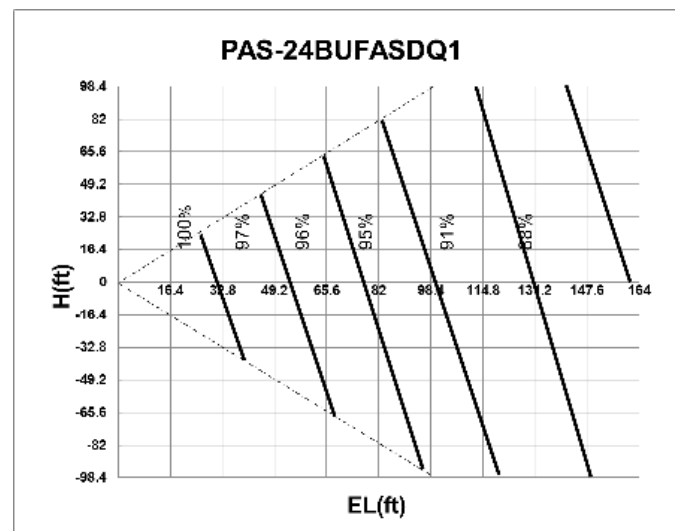
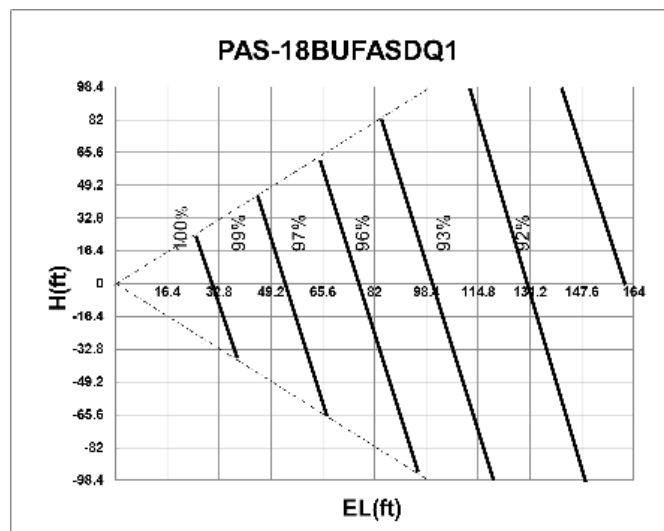
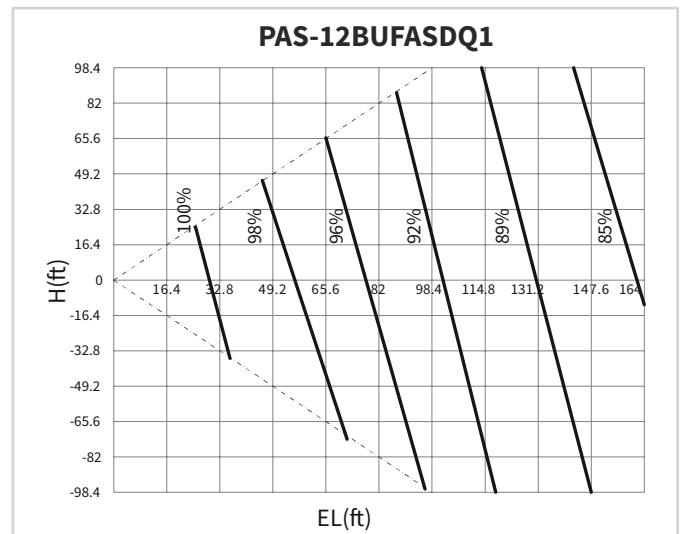
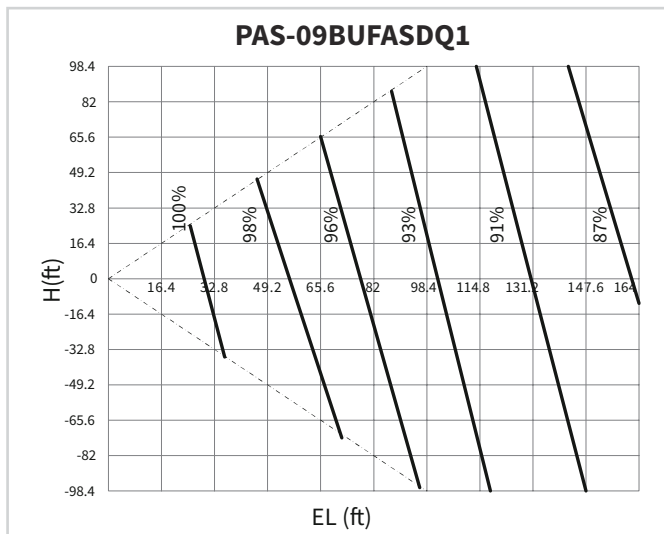
4.4.1 Correction Factor for Cooling Capacity

The correction factors are shown in the following figure.
Equivalent Piping Length for

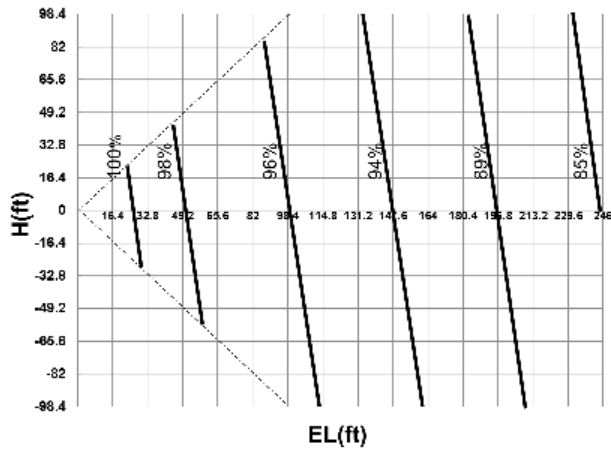
- One 90° Elbow is 1.6ft(0.5m).
- One 180° Bend is 4.9ft(1.5m).



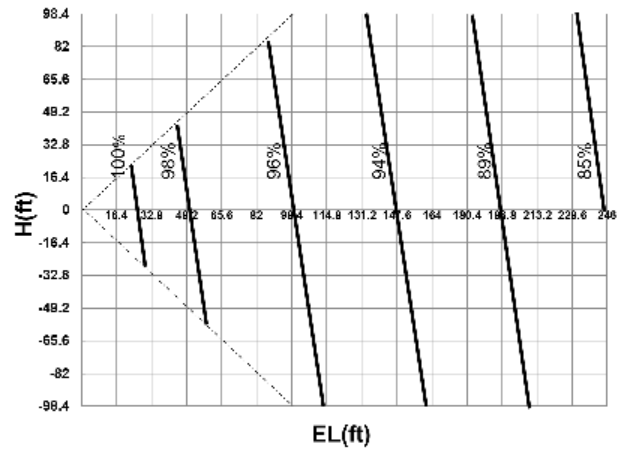
H: Vertical Distance Between Indoor Unit and Outdoor Unit
EL: Equivalent Total Distance Between Indoor Unit and Outdoor Unit (Equivalent One-Way Piping Length)
H>0: Position of Outdoor Unit Higher Than Position of Indoor Unit
L: Actual One-Way Piping Length Between Indoor Unit and Outdoor Unit



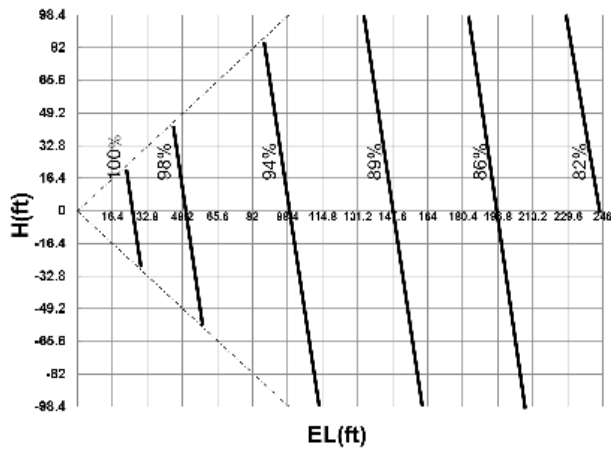
PAS-30BUFASDQ1



PAS-36BUFASDQ1



PAS-48BUFASDQ1

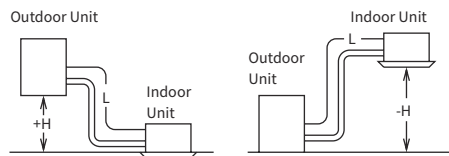


4.4.2 Correction Factor for Heating Capacity

The correction factors are shown in the following figure.

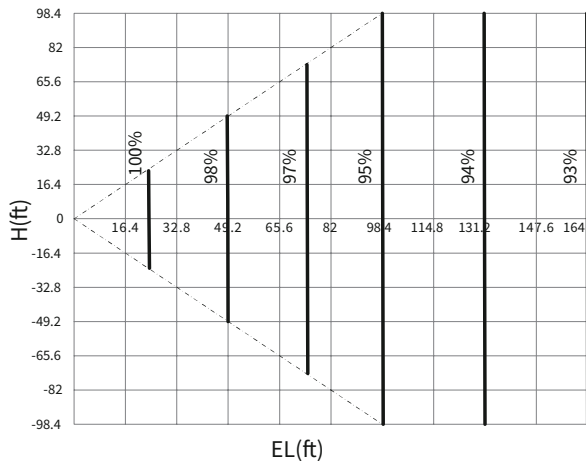
Equivalent Piping Length for

- One 90° Elbow is 1.6ft(0.5m).
- One 180° Bend is 4.9ft(1.5m).

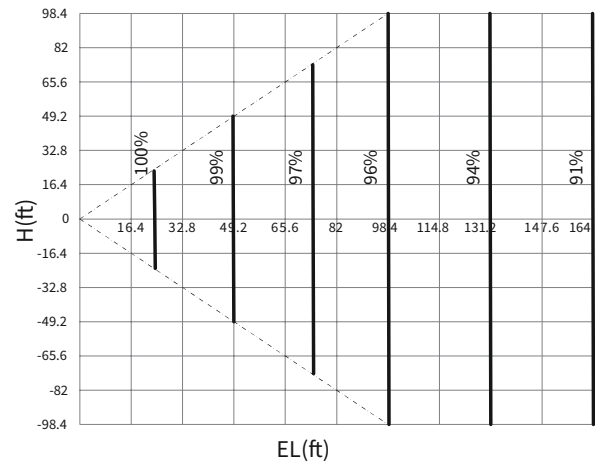


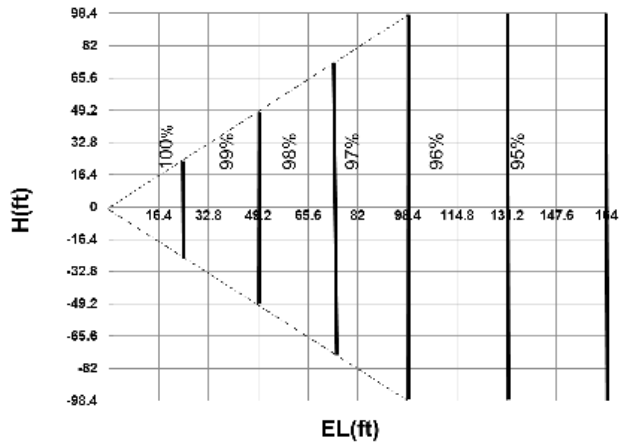
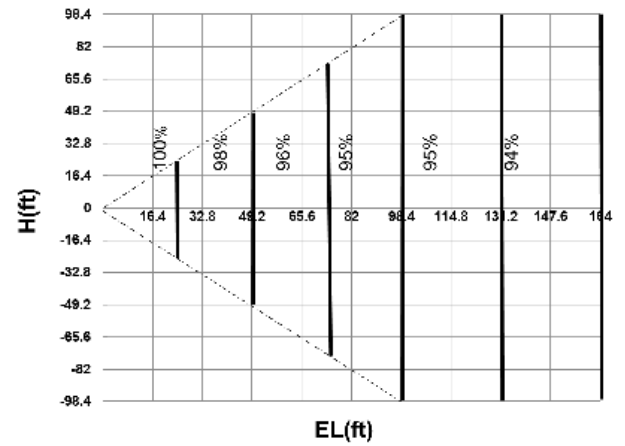
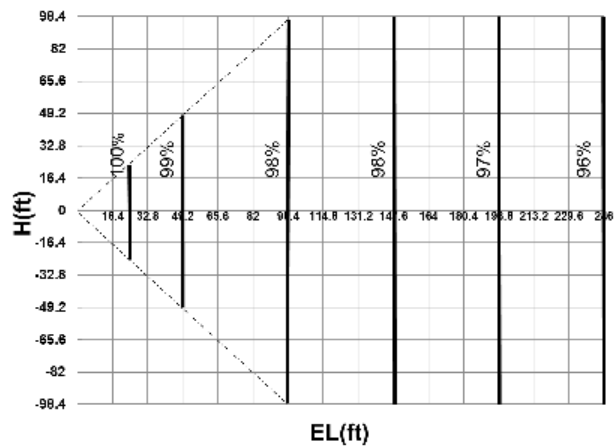
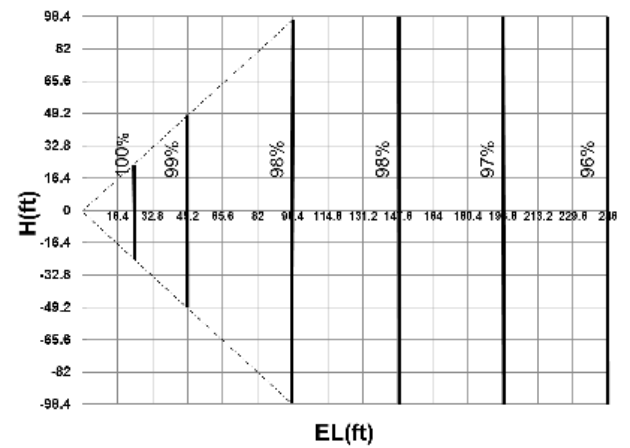
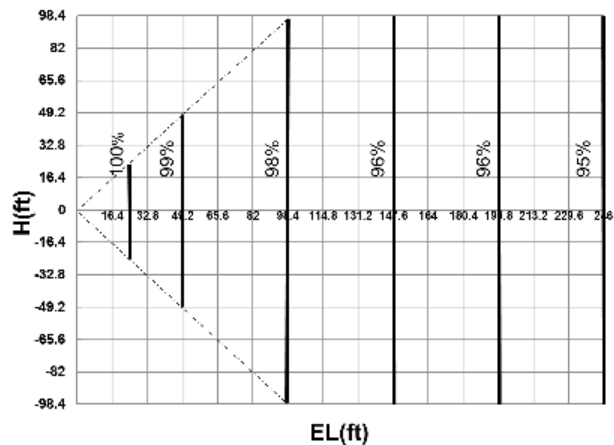
- H: Vertical Distance Between Indoor Unit and Outdoor Unit
 EL: Equivalent Total Distance Between Indoor Unit and Outdoor Unit (Equivalent One-Way Piping Length)
 H>0: Position of Outdoor Unit Higher Than Position of Indoor Unit
 L: Actual One-Way Piping Length Between Indoor Unit and Outdoor Unit

PAS-09BUFASDQ1



PAS-12BUFASDQ1



PAS-18BUFASDQ1**PAS-24BUFASDQ1****PAS-30BUFASDQ1****PAS-36BUFASDQ1****PAS-48BUFASDQ1**

4.4.3 Addition of Refrigerant

Additional charging is not necessary if the refrigerant piping length does not exceed 98.4ft(30m).

If the refrigerant piping length exceeds 98.4ft(30m), charge the unit with additional R32 refrigerant according to the permitted piping length in the chart below.

- When the unit is stopped, charge the unit with the additional refrigerant through the liquid stop valve after the pipe extensions and indoor unit have been vacuumized.
- When the unit is operating, add refrigerant to the gas check valve using a safety charger. Do not add liquid refrigerant directly to the check valve.

After charging the unit with refrigerant, note the added refrigerant amount on the service label (attached to the unit).

Model	Max. piping length	Max. height difference	Additional refrigerant charging amount
PAS-09BUFASDQ1	164ft (50m)	98.4ft (30m)	0.194oz/ft (18g/m)
PAS-12BUFASDQ1	164ft (50m)	98.4ft (30m)	0.194oz/ft (18g/m)
PAS-18BUFASDQ1	164ft (50m)	98.4ft (30m)	0.194oz/ft (18g/m)
PAS-24BUFASDQ1	164ft (50m)	98.4ft (30m)	0.194oz/ft (18g/m)
PAS-30BUFASDQ1	246ft (75m)	98.4ft (30m)	0.376oz/ft (35g/m)
PAS-36BUFASDQ1	246ft (75m)	98.4ft (30m)	0.376oz/ft (35g/m)
PAS-48BUFASDQ1	246ft (75m)	98.4ft (30m)	0.376oz/ft (35g/m)

NOTE:

- When PAS-24BUFASDQ1 is connected with High-wall type indoor unit, when the piping length exceeds 98.4ft (30m), the excess part is charged at the amount of 0.194oz/ft (18g/m), besides, an additional amount of 14.109oz(400g) refrigerant is required also.

4.5 Correction Factor According to Defrosting Operation

The heating capacity in the preceding paragraph, excludes the condition of the frost or the defrosting operation period.

In consideration of the frost or the defrosting operation, the heating capacity is corrected by the equation below.

Corrected Heating Capacity = Correction Factor × Heating Capacity

Outdoor Inlet Air Temp. [°F(°C) DB] (Humidity=85% RH)	19.4(-7)	23(-5)	26.6(-3)	32(0)	37.4(3)	41(5)	44.6(7)
Correction Factor	0.95	0.93	0.88	0.85	0.88	0.92	1.0

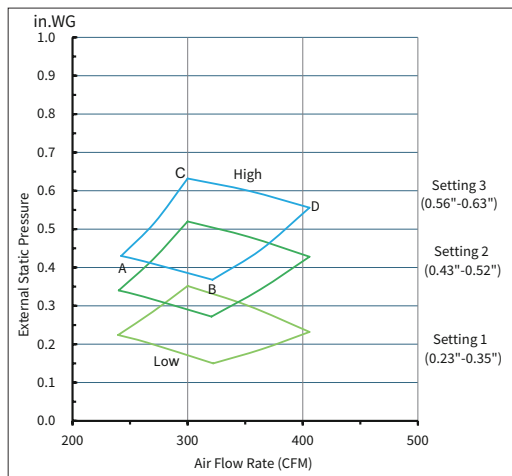
NOTE:

- The correction factor is not available for the special condition like a snowfall or a operation in a transitional period.

4.6 Fan Performance

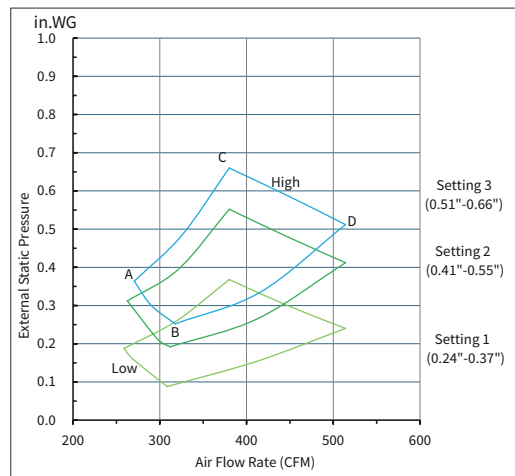
< MESP Ducted Type >

< PPIM-B09UFA1DQ >



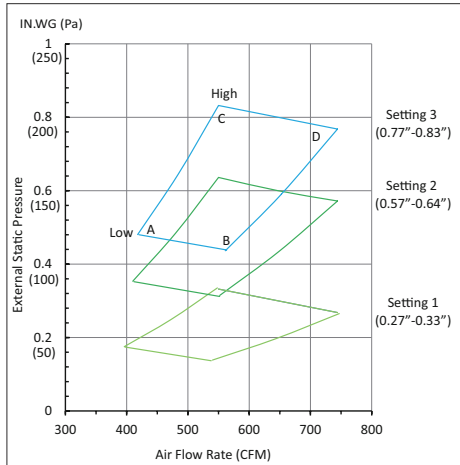
Indoor Unit ESP Setting	Point A		Point B		Point C		Point D	
	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM
1 (0.23"-0.35")	0.22	240	0.15	322	0.35	300	0.23	406
2 (0.43"-0.52")	0.34	240	0.27	321	0.52	300	0.43	406
3 (0.56"-0.63")	0.43	242	0.37	322	0.63	300	0.56	406

< PPIM-B12UFA1DQ >



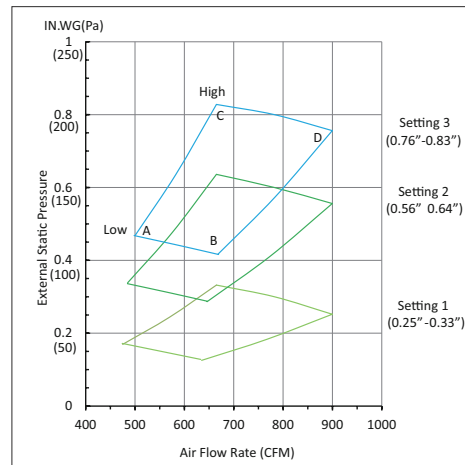
Indoor Unit ESP Setting	Point A		Point B		Point C		Point D	
	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM
1 (0.24"-0.37")	0.19	259	0.09	308	0.37	380	0.24	514
2 (0.41"-0.55")	0.31	263	0.19	312	0.55	380	0.41	514
3 (0.51"-0.66")	0.36	271	0.25	318	0.66	380	0.51	514

< PPIM-B18UFA1DQ >



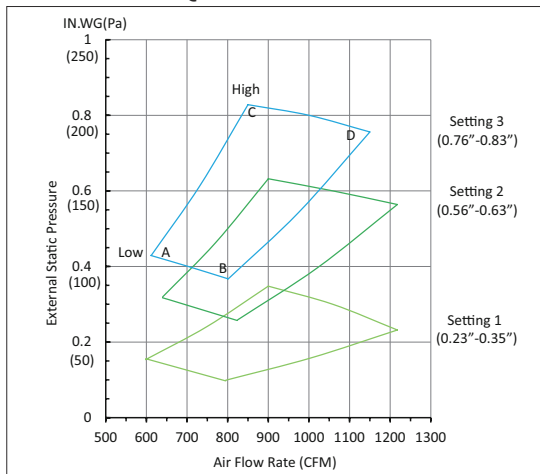
Indoor Unit ESP Setting	Point A		Point B		Point C		Point D	
	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM
1 (0.27"-0.33")	0.17	397	0.14	538	0.33	550	0.27	744
2 (0.57"-0.64")	0.35	412	0.31	552	0.64	550	0.57	744
3 (0.77"-0.83")	0.48	420	0.44	563	0.83	550	0.77	744

< PPIM-B24UFA1DQ >



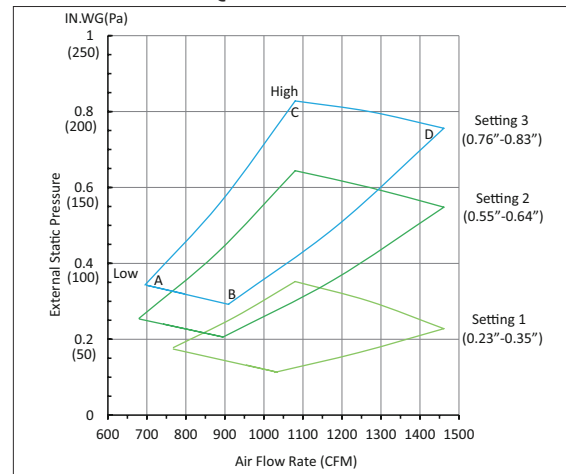
Indoor Unit ESP Setting	Point A		Point B		Point C		Point D	
	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM
1 (0.25"-0.33")	0.17	474	0.13	633	0.33	665	0.25	900
2 (0.56"-0.64")	0.34	485	0.29	646	0.64	665	0.56	900
3 (0.76"-0.83")	0.47	498	0.42	669	0.83	665	0.76	900

< PPIM-B30UFA1DQ >



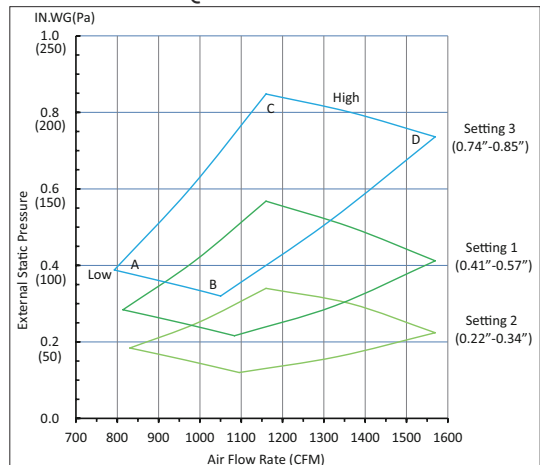
Indoor Unit ESP Setting	Point A		Point B		Point C		Point D	
	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM
1 (0.23"-0.35")	0.16	598	0.10	795	0.35	900	0.23	1218
2 (0.56"-0.63")	0.32	640	0.26	824	0.63	900	0.56	1218
3 (0.76"-0.83")	0.43	610	0.37	799	0.83	850	0.76	1150

< PPIM-B36UFA1DQ >



Indoor Unit ESP Setting	Point A		Point B		Point C		Point D	
	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM
1 (0.23"-0.35")	0.17	768	0.11	1034	0.35	1080	0.23	1461
2 (0.55"-0.64")	0.25	681	0.21	895	0.64	1080	0.55	1461
3 (0.76"-0.83")	0.34	699	0.29	910	0.83	1080	0.76	1461

< PPIM-B48UFA1DQ >



Indoor Unit ESP Setting	Point A		Point B		Point C		Point D	
	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM	IN.WG	CFM
1 (0.41"-0.57")	0.28	814	0.22	1083	0.57	1160	0.41	1569
2 (0.22"-0.34")	0.18	830	0.12	1095	0.34	1160	0.22	1569
3 (0.74"-0.85")	0.39	793	0.32	1050	0.85	1160	0.74	1569

5. Electrical Data

5.1 Indoor Units

Model		Unit Main Power			Application Voltage(V)		MCA(A)	MOP(A)	MAX Current(A)	Max Power Input(kW)
		VOL	PH	HZ	Maximum	Minimum				
MESP Ducted	PPIM-B09UFA1DQ	AC 208/230V	1	60	253	187	1.36	15	1.09	0.163
	PPIM-B12UFA1DQ						1.54	15	1.23	0.193
	PPIM-B18UFA1DQ						1.75	15	1.56	0.220
	PPIM-B24UFA1DQ						2.05	15	1.83	0.262
	PPIM-B30UFA1DQ						2.39	15	2.12	0.310
	PPIM-B36UFA1DQ						3.14	15	2.78	0.417
	PPIM-B48UFA1DQ						3.44	15	3.05	0.462
4-Way Mini Cassette	PCIM-B09UFA1DQ	AC 208/230V	1	60	253	187	0.63	15	0.52	0.029
	PCIM-B12UFA1DQ						0.84	15	0.67	0.041
4-Way Cassette	PCI-B18UFA1DQ	AC 208/230V	1	60	253	187	0.49	15	0.41	0.039
	PCI-B24UFA1DQ						0.61	15	0.51	0.051
	PCI-B30UFA1DQ						0.93	15	0.77	0.090
	PCI-B36UFA1DQ						1.36	15	1.11	0.140
	PCI-B48UFA1DQ						1.36	15	1.11	0.140
Ceiling Suspended	PPFC-B09UFA1DQ	AC 208/230V	1	60	253	187	0.51	15	0.41	0.025
	PPFC-B12UFA1DQ						0.69	15	0.55	0.045
	PPFC-B18UFA1DQ						0.80	15	0.66	0.074
	PPFC-B24UFA1DQ						0.80	15	0.66	0.074
	PPFC-B30UFA1DQ						0.80	15	0.66	0.074
	PPFC-B36UFA1DQ						1.26	15	1.03	0.128
	PPFC-B48UFA1DQ						1.26	15	1.03	0.128
High-wall	PPK-B09UFA1DQ	AC 208/230V	1	60	253	187	0.33	15	0.26	0.027
	PPK-B12UFA1DQ						0.36	15	0.29	0.028
	PPK-B18UFA1DQ						0.56	15	0.45	0.049
	PPK-B24UFA1DQ						0.69	15	0.55	0.063
	PPK-B30UFA1DQ						0.80	15	0.64	0.082

VOL: Rated Unit Power Supply Voltage (Plated)(V)

PH: Phase (φ)

HZ: Frequency (Hz)

MCA: Minimum Circuit Ampacity (A)

MOP: Maximum Overcurrent Protection (A)

Air Handlers Type:

Electrical data for single source power supply: 1 phase(208/230-1-60)

Air handler models	Heater Models ^{1,2}	Heater Amps @240V	Field Wiring			
			Min. Circuit Ampacity		MOP. ³	
			208V	230V	208V	230V
JPE18B3XB2HS1A	8HK(0,1)6500206	10.0	14.1	15.2	15	20
	8HK(0,1)6500506	20.0	24.9	27.2	25	30
	8HK(0,1)6500806	32.1	38.1	41.8	40	45
	8HK(0,1)6501006	40.0	46.5	51.1	50	60
JPE24B3XC2HS1A	8HK(0,1)6500206	10.0	14.1	15.2	15	20
	8HK(0,1)6500506	20.0	24.9	27.2	25	30
	8HK(0,1)6500806	32.1	38.1	41.8	40	45
	8HK(0,1)6501006	40.0	46.5	51.1	50	60
	8HK(1,2)6501506	60.0	68.2	75	70	80
JPE30B3XD2HS1A	8HK(0,1)6500206	10.0	15.6	16.7	20	20
	8HK(0,1)6500506	20.0	26.4	28.7	30	30
	8HK(0,1)6500806	32.1	39.6	43.3	40	45
	8HK(0,1)6501006	40.0	48	52.6	50	60
	8HK(1,2)6501506	60.0	69.7	76.5	70	80
	8HK(1,2)6502006	80.0	91.3	100.4	100	110
JPE36B3XD2HS1A	8HK(0,1)6500206	10.0	15.6	16.7	20	20
	8HK(0,1)6500506	20.0	26.4	28.7	30	30
	8HK(0,1)6500806	32.1	39.6	43.3	40	45
	8HK(0,1)6501006	40.0	48	52.6	50	60
	8HK(1,2)6501506	60.0	69.7	76.5	70	80
	8HK(1,2)6502006	80.0	91.3	100.4	100	110

Air handler models	Heater Models ^{1,2}	Heater Amps @240V	Field Wiring			
			Min. Circuit Ampacity		MOP. ³	
			208V	230V	208V	230V
JPE48C3XG2HS1A	8HK(0,1)6500206	10.0	17.6	18.7	20	20
	8HK(0,1)6500506	20.0	28.4	30.7	30	35
	8HK(0,1)6500806	32.1	41.6	45.3	45	50
	8HK(0,1)6501006	40.0	50	54.6	60	60
	8HK(1,2)6501506	60.0	71.7	78.5	80	80
	8HK(1,2)6502006	80.0	93.3	102.4	100	110

1 (0,1) - 0 = no service disconnect OR 1 = with service disconnect.

2 (1,2) - 1 = with service disconnect, no breaker jumper bar OR 2 = with service disconnect & breaker jumper bar.

3 MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

Electrical data for multi-source power supply: 208/230-1-60

Air handler models	Heater Models ¹	Heater Amps @240V	Min. circuit ampacity						MOP. ²					
			208V			230V			208V			230V		
			Circuit						Circuit					
			1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
JPE24B3XC2HS1A	8HK16501506	60	24.7	43.5	–	26.9	48.1	–	25	45	–	30	50	–
JPE30B3XD2HS1A	8HK16501506	60	26.2	43.5	–	28.4	48.1	–	30	45	–	30	50	–
	8HK16502006	80	48.0	43.3	–	52.6	47.8	–	50	45	–	60	50	–
JPE36B3XD2HS1A	8HK16501506	60	26.2	43.5	–	28.4	48.1	–	30	45	–	30	50	–
	8HK16502006	80	48.0	43.3	–	52.6	47.8	–	50	45	–	60	50	–
JPE48C3XG2HS1A	8HK16501506	60	26.2	43.5	–	28.4	48.1	–	30	45	–	30	50	–
	8HK16502006	80	50.0	43.3	–	54.6	47.8	–	50	45	–	60	50	–

1 8HK1 = with service disconnect, no breaker jumper bar.

2 MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

5.2 Outdoor Units

Model	Unit Main Power			Application Voltage(V)		MCA(A)	MOP(A)	MAX Current(A)	Max Power Input(kW)
	VOL	PH	HZ	Maximum	Minimum				
PAS-09BUFASDQ1	AC 208/230V	1	60	253	187	9.3	15	7.7	1.4
PAS-12BUFASDQ1						9.3	15	7.7	1.4
PAS-18BUFASDQ1						13.9	20	13.5	3.12
PAS-24BUFASDQ1						14.3	20	16.0	3.68
PAS-30BUFASDQ1						15.7	25	24.2	5.56
PAS-36BUFASDQ1						18.5	30	27.9	6.43
PAS-48BUFASDQ1						22.2	35	29.1	6.69

VOL: Rated Unit Power Supply Voltage (Plated)(V)

HZ: Frequency (Hz)

MOP: Maximum Overcurrent Protection (A)

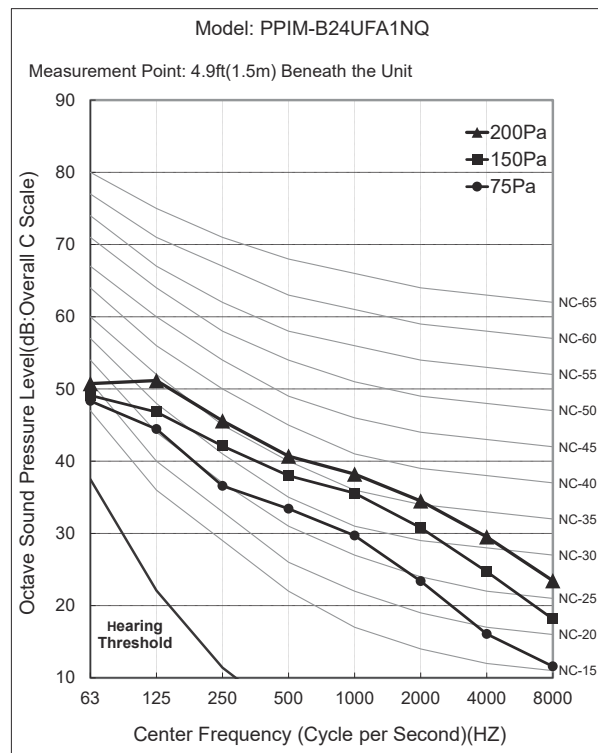
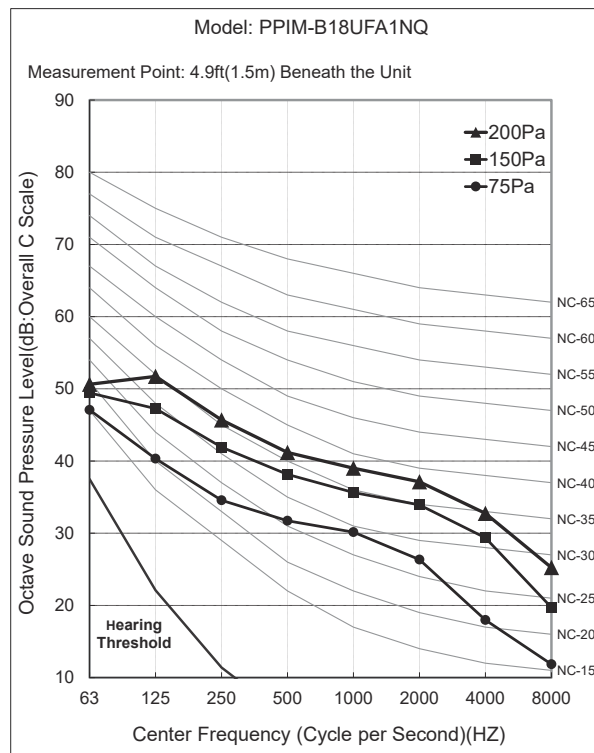
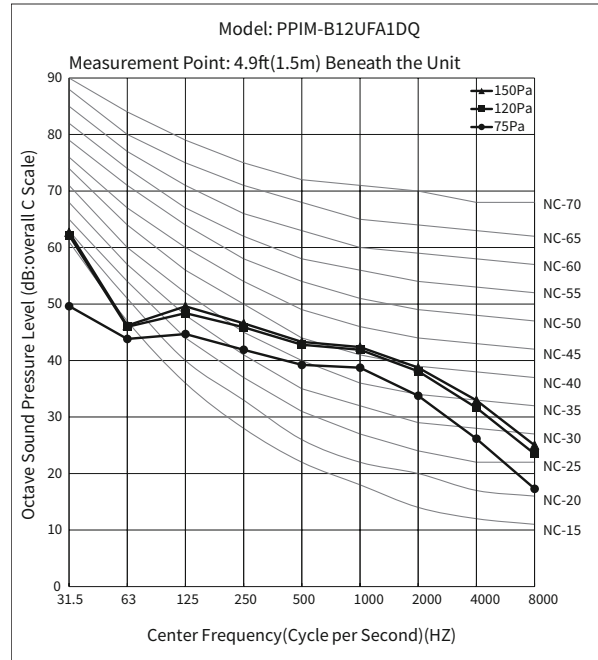
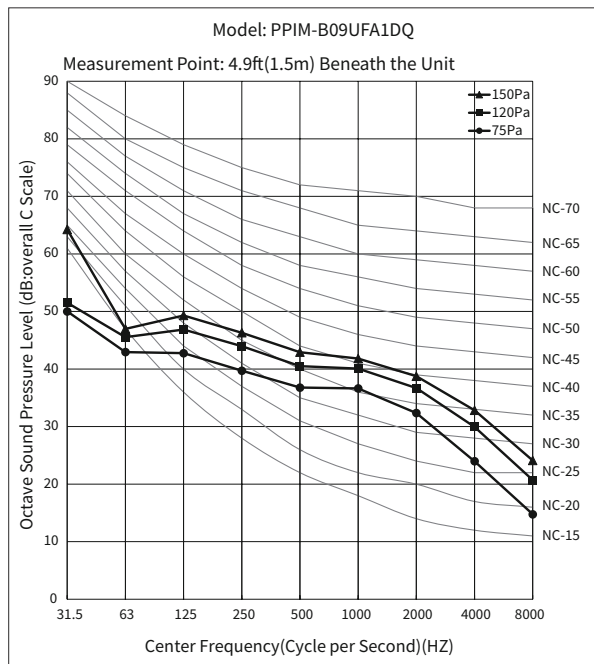
PH: Phase (φ)

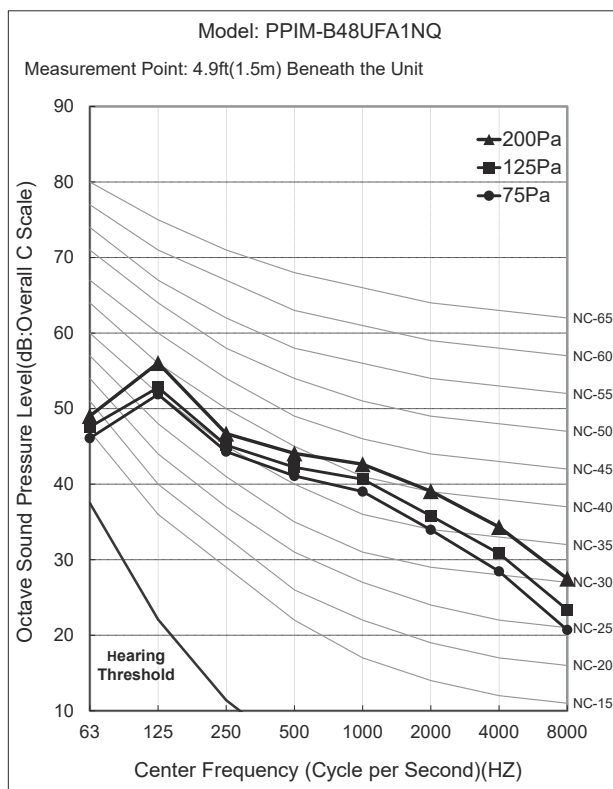
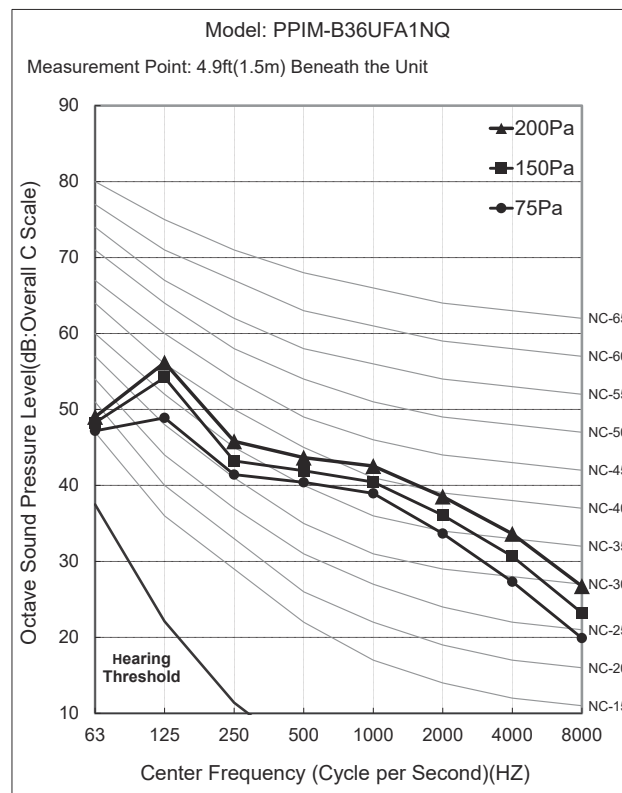
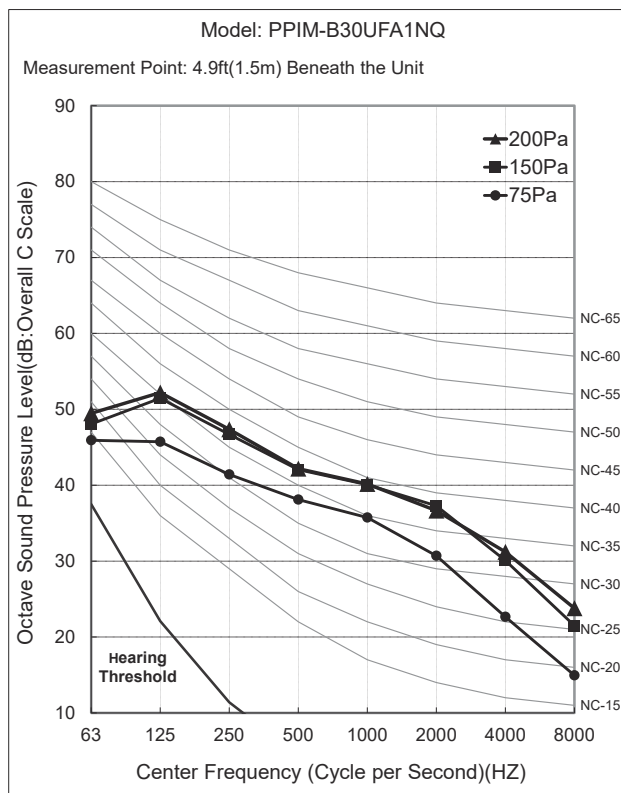
MCA: Minimum Circuit Ampacity (A)

6. Sound Data

6.1 Indoor Units

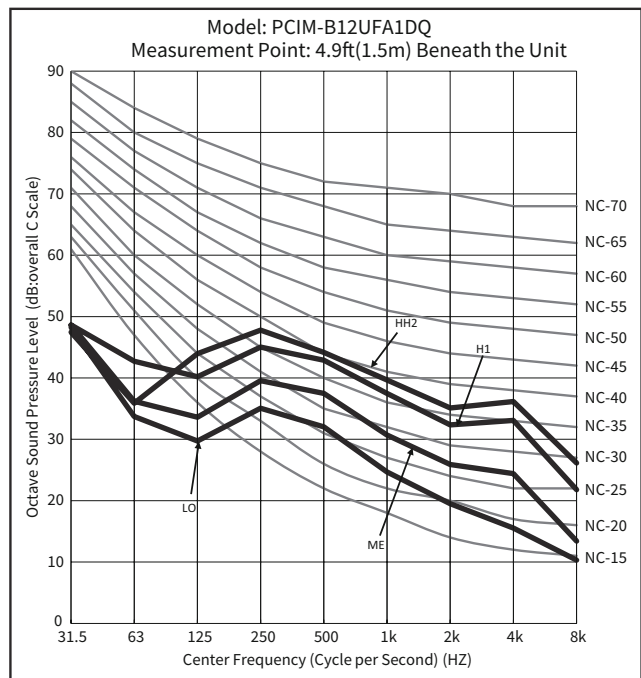
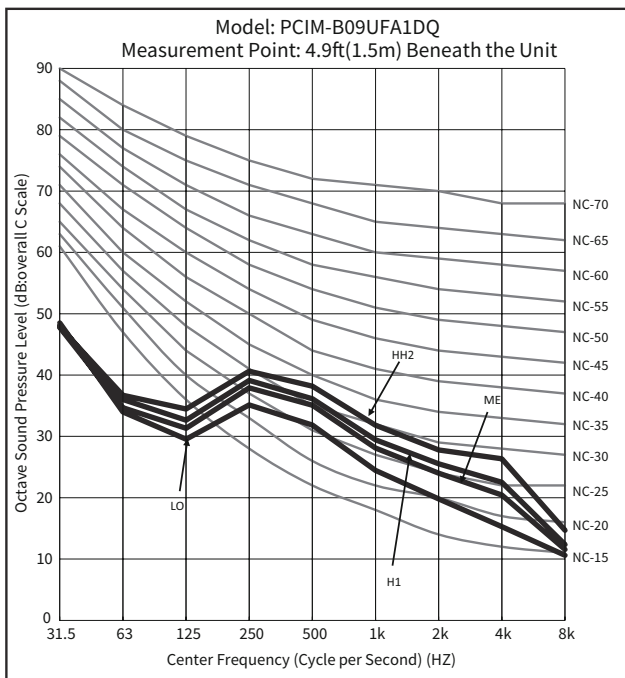
< MESP Ducted Type >



**NOTES:**

- Operation sound is equivalent to a semi-anechoic chamber.
- Noise level shall be increased by the surrounding noise and echoes.

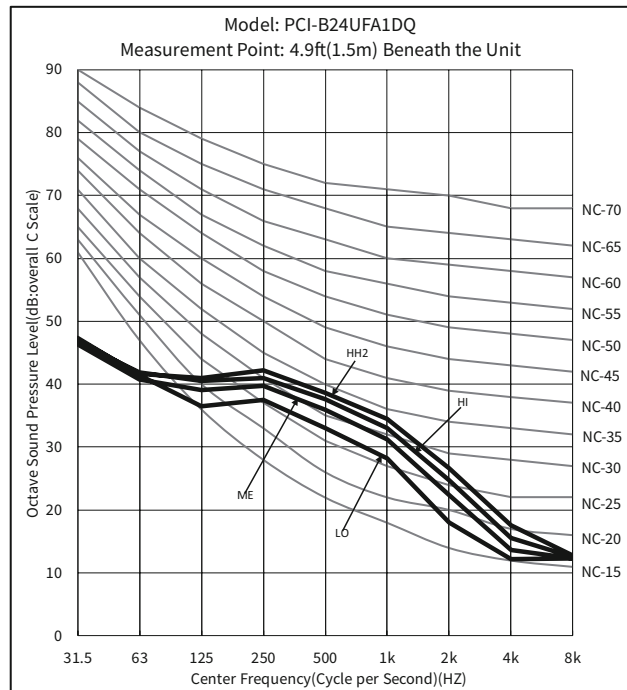
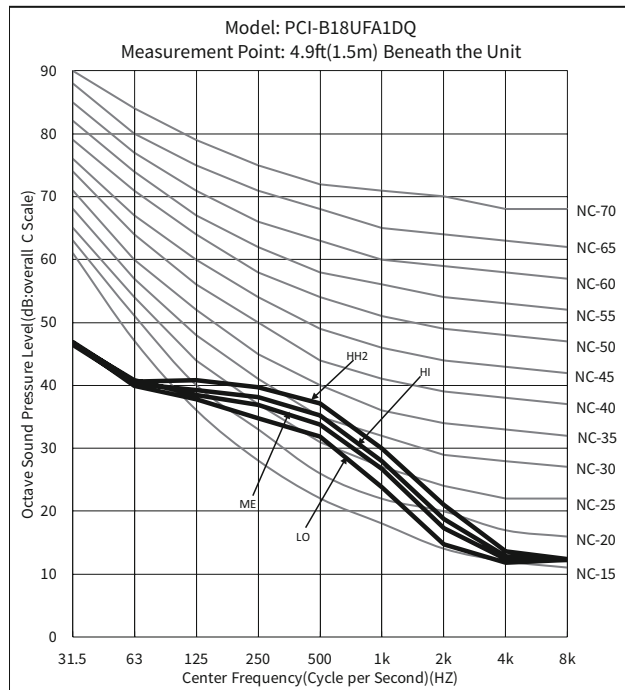
< 4-Way Mini Cassette Type >

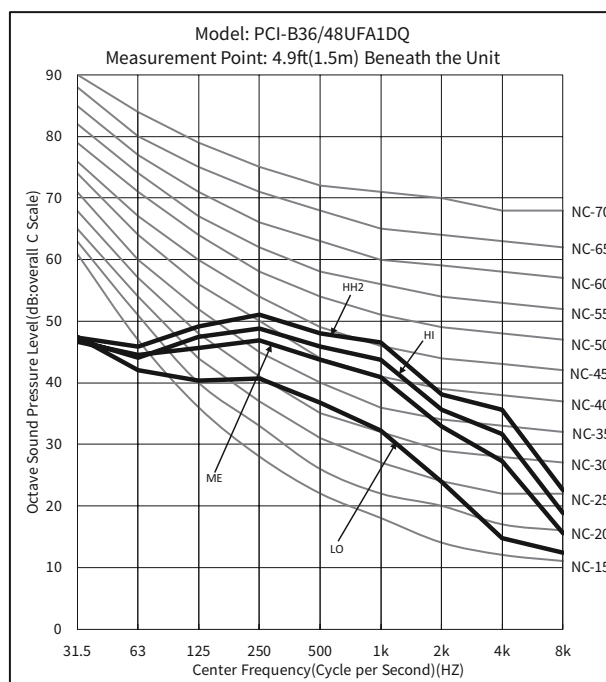
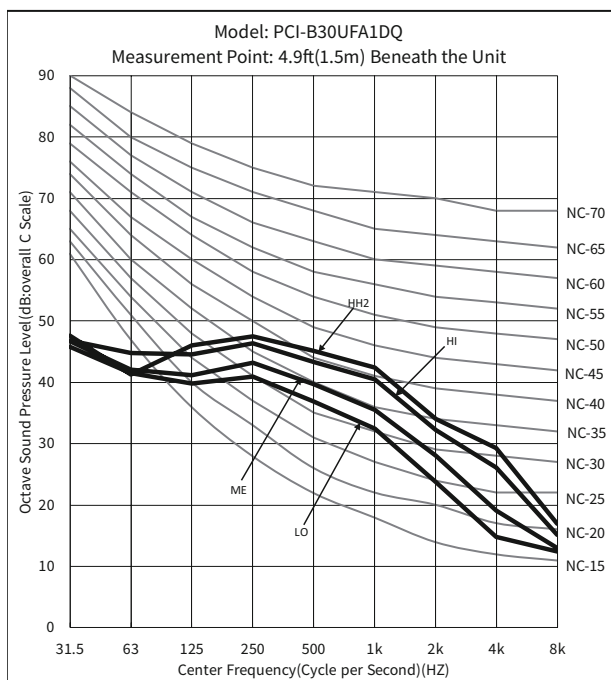


NOTES:

- Operation sound is equivalent to a semi-anechoic chamber.
- Noise level shall be increased by the surrounding noise and echoes.

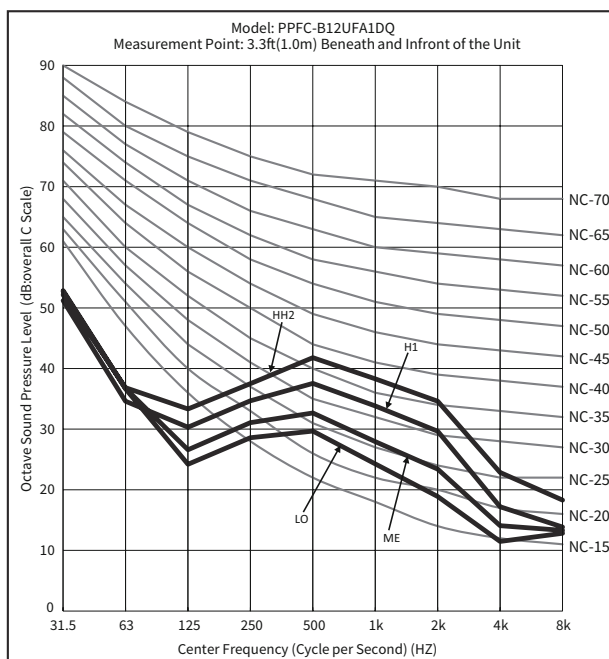
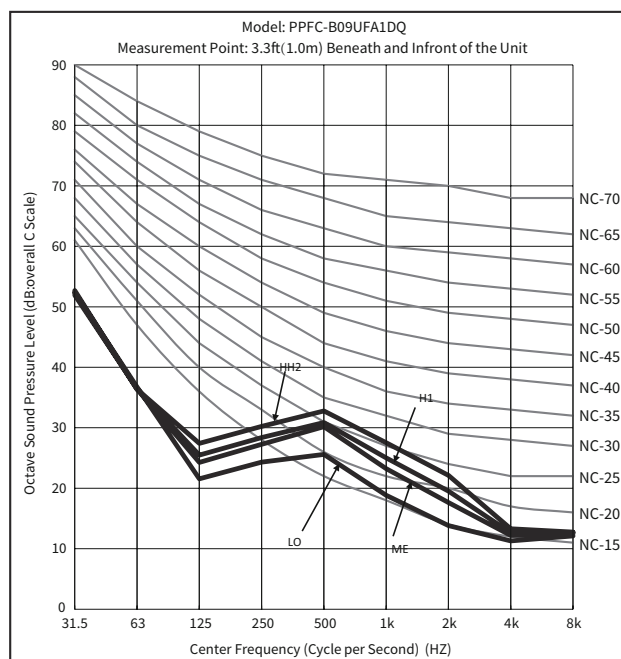
< 4-Way Cassette Type >



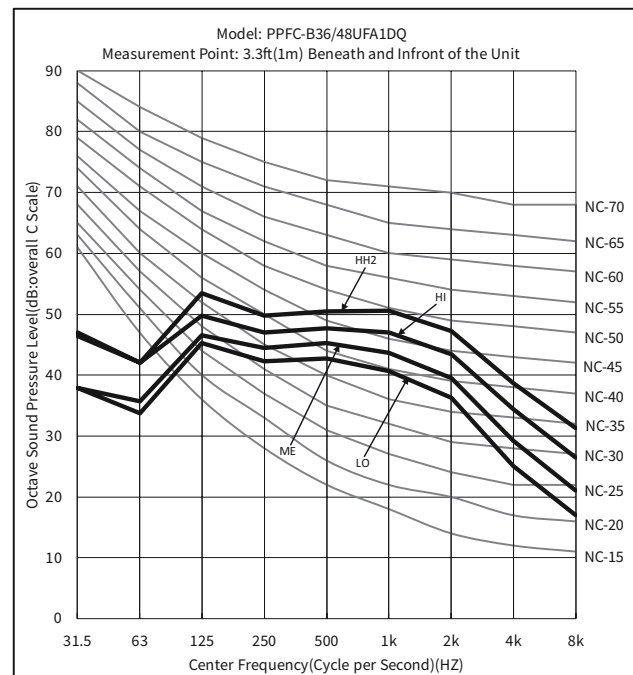
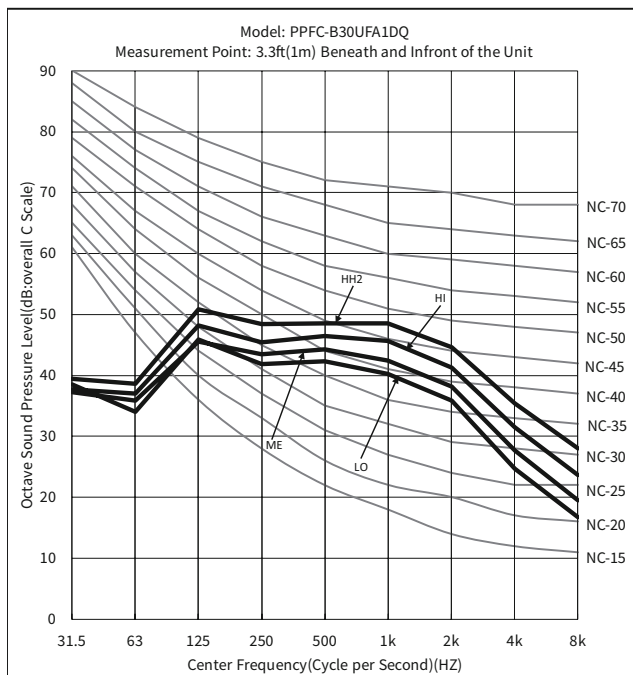
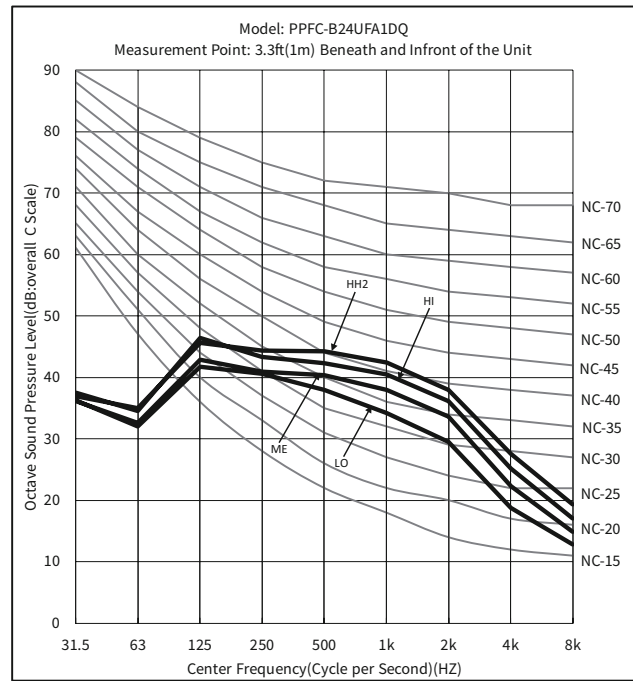
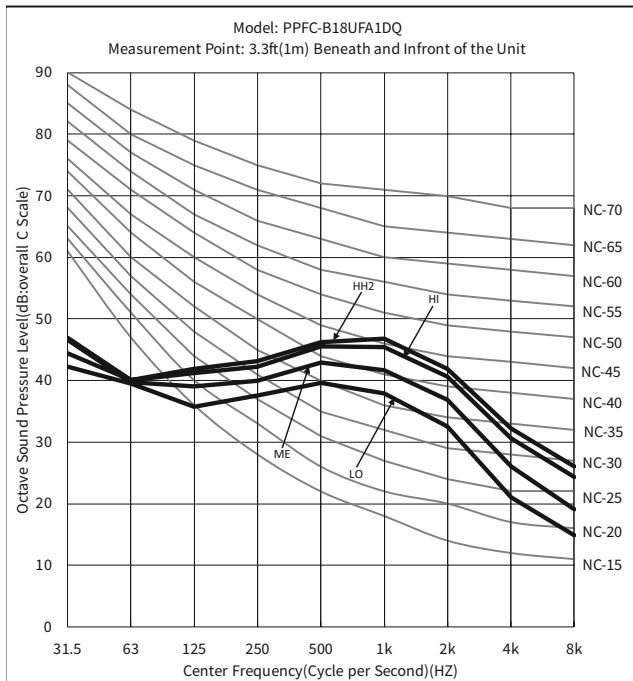
**NOTES:**

- Operation sound is equivalent to a semi-anechoic chamber.
- Noise level shall be increased by the surrounding noise and echoes.

< Ceiling Suspended Type >



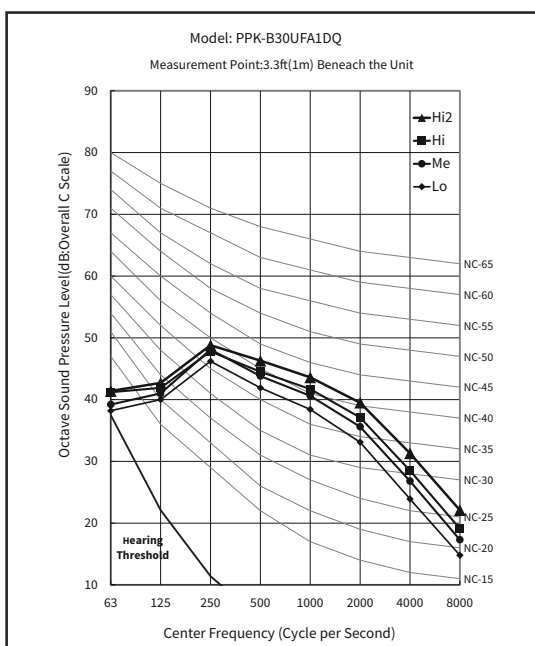
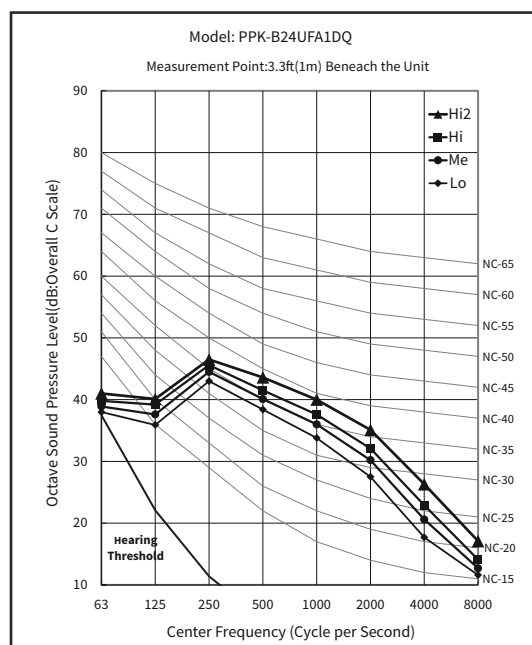
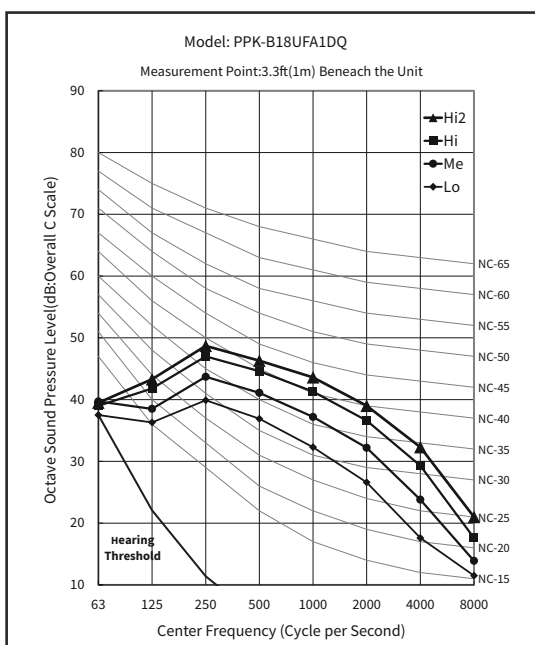
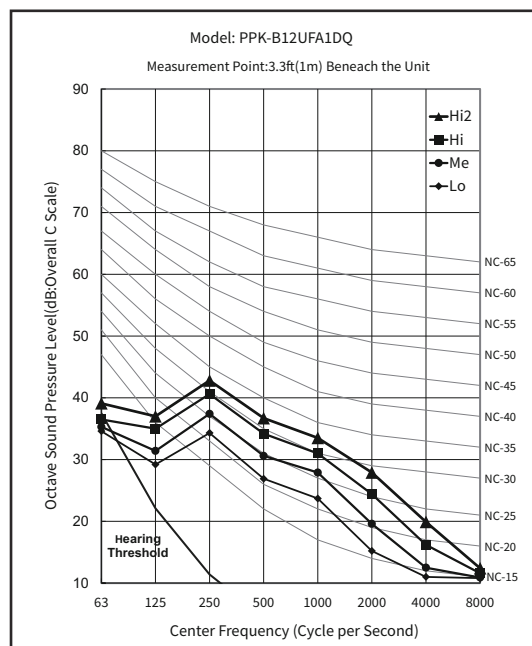
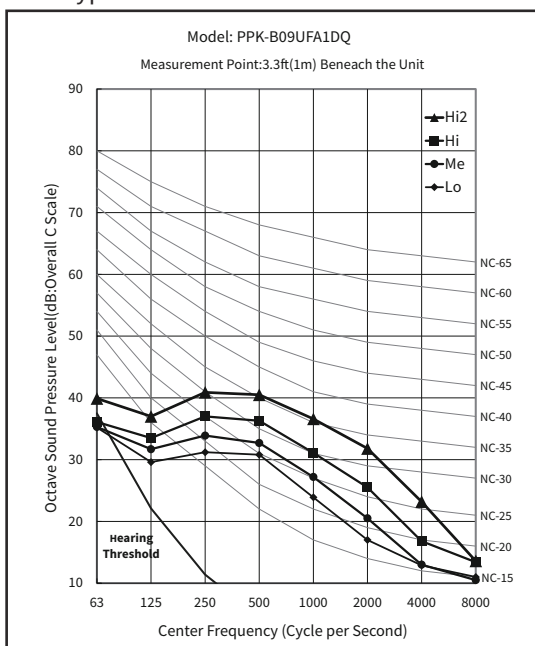
SOUND DATA



NOTES:

- Operation sound is equivalent to a semi-anechoic chamber.
- Noise level shall be increased by the surrounding noise and echoes.

< High-wall Type >

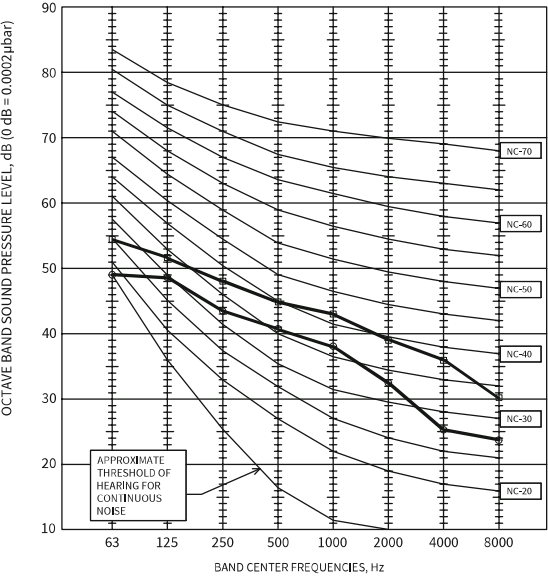
**NOTES:**

- Operation sound is equivalent to a semi-anechoic chamber.
- Noise level shall be increased by the surrounding noise and echoes.

6.2 Outdoor Units

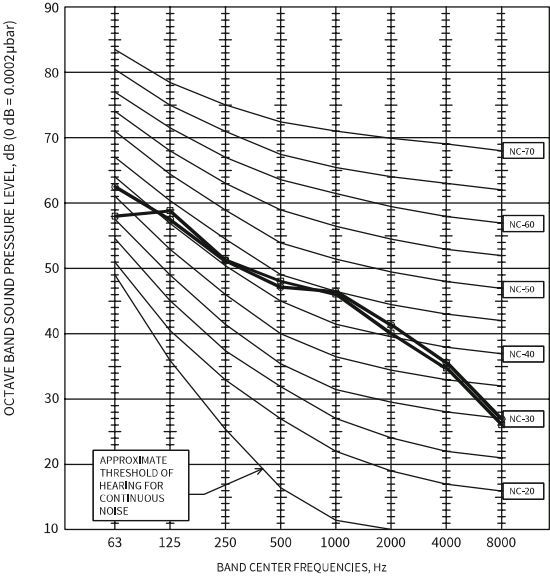
PAS-09BUFASDQ1

NOTCH	SPL(dB)	LINE
Cooling	41.4	
Heating	47.5	



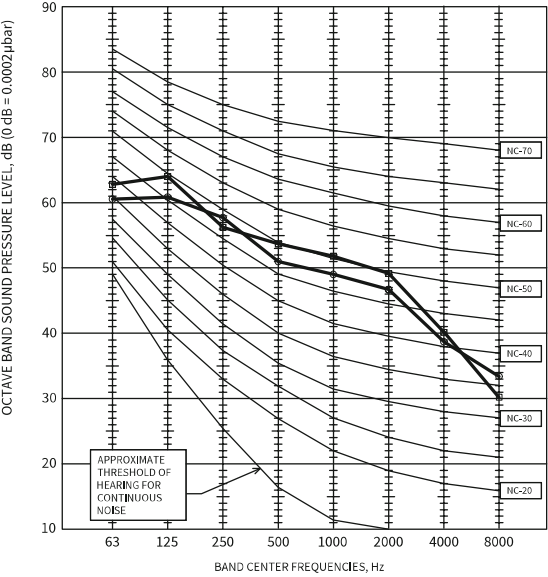
PAS-12BUFASDQ1

NOTCH	SPL(dB)	LINE
Cooling	48.5	
Heating	49.7	



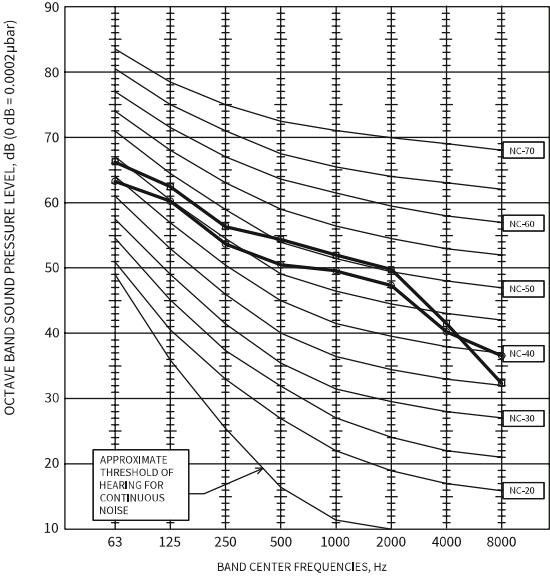
PAS-18BUFASDQ1

NOTCH	SPL(dB)	LINE
Cooling	52.3	
Heating	54.9	



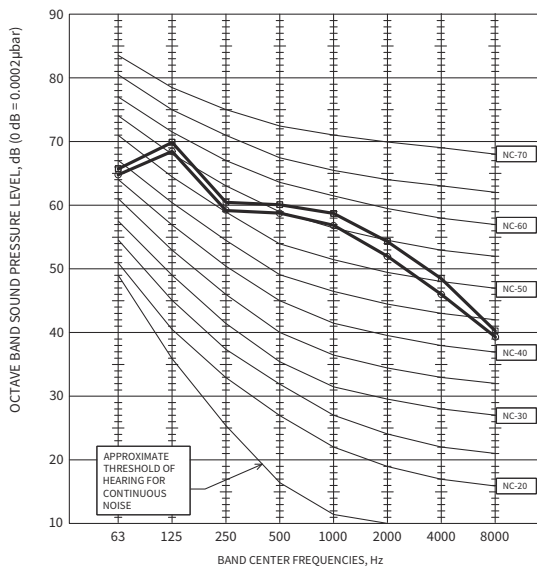
PAS-24BUFASDQ1

NOTCH	SPL(dB)	LINE
Cooling	51.9	
Heating	54.2	



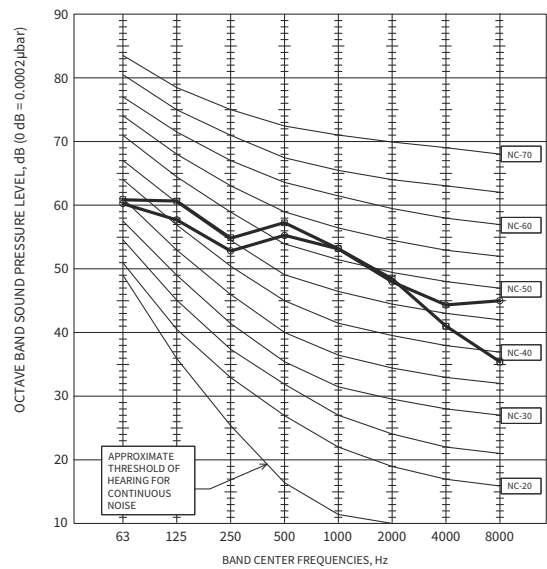
PAS-30BUFASDQ1

NOTCH	SPL(dB)	LINE
Cooling	55.1	
Heating	56.2	



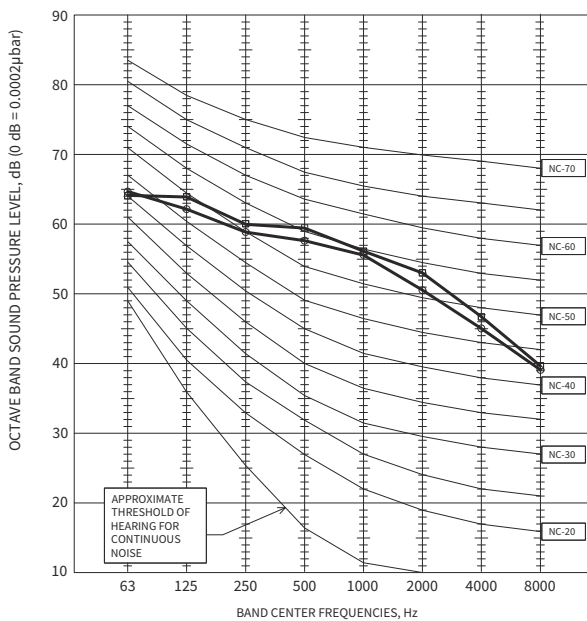
PAS-36BUFASDQ1

NOTCH	SPL(dB)	LINE
Cooling	55.3	
Heating	55.9	



PAS-48BUFASDQ1

NOTCH	SPL(dB)	LINE
Cooling	57.2	
Heating	58.8	



7. Working Range

Power Supply: 208/230V~, 60Hz
 Working Voltage: 90% to 110% of the Rated Voltage
 Voltage Imbalance: Within a 3% Deviation from Each Voltage at the Main Terminal
 Starting Voltage: Higher than 85% of the Rated Voltage

Temperature Range

The temperature range are given in the following table.

		[°F(°C)]	
Operation Temperature Range		Maximum	Minimum
Cooling Operation	Indoor	89.6(32) DB/73.4(23) WB	69.8(21) DB/59(15) WB
	Outdoor	115(46) DB	0(-18) DB
Heating Operation	Indoor	80.6(27) DB	68.0(20) DB
	Outdoor	75(24) DB	-13(-25) DB

DB: Dry Bulb, WB: Wet Bulb

8. Optional Accessories

8.1 For Control Systems

HITACHI provides the optional accessories for indoor units.

Accessory	Model
Wired Remote Controller	CIW03-H
Wireless Remote Controller	PC-LH8QE
airCloud Adapter	GA-WFG-N
IR Receiver Kit	PC-ALH5Q
	PC-ALHC5Q
	PC-ALHZ5Q
	PI2303H
Central Station	CCM01
	CCL01
Central Station EX	CCXL02
Remote Control Cable	PRC-5K
	PRC-10K
	PRC-15K

8.1.1 Wired Remote Controller: CIW03-H

Refer to chapter 1.5.1 for details.

8.1.2 Wireless Remote Controller: PC-LH8QE

Refer to chapter 1.5.2 for details.

8.1.3 airCloud Adapter: GA-WFG-N

Refer to chapter 1.5.3 for details.

8.1.4 IR Receiver Kit: PC-ALH5Q

Refer to chapter 1.5.4 for details.

8.1.5 IR Receiver Kit: PC-ALHC5Q

Refer to chapter 1.5.5 for details.

8.1.6 IR Receiver Kit: PC-ALHZ5Q

Refer to chapter 1.5.6 for details.

8.1.7 IR Receiver Kit: PI2303H

Refer to chapter 1.5.7 for details.

8.1.8 Central Station: CCM01

Refer to chapter 1.5.8 for details.

8.1.9 Central Station: CCL01

Refer to chapter 1.5.9 for details.

8.1.10 Central Station EX: CCXL02

Refer to chapter 1.5.10 for details.

8.1.11 Remote Control Cable: PRC-5K to 15K

Refer to chapter 1.5.11 for details.

OPTIONAL ACCESSORIES

8.2 For Indoor Units

HITACHI provides the optional accessories for indoor unit type.

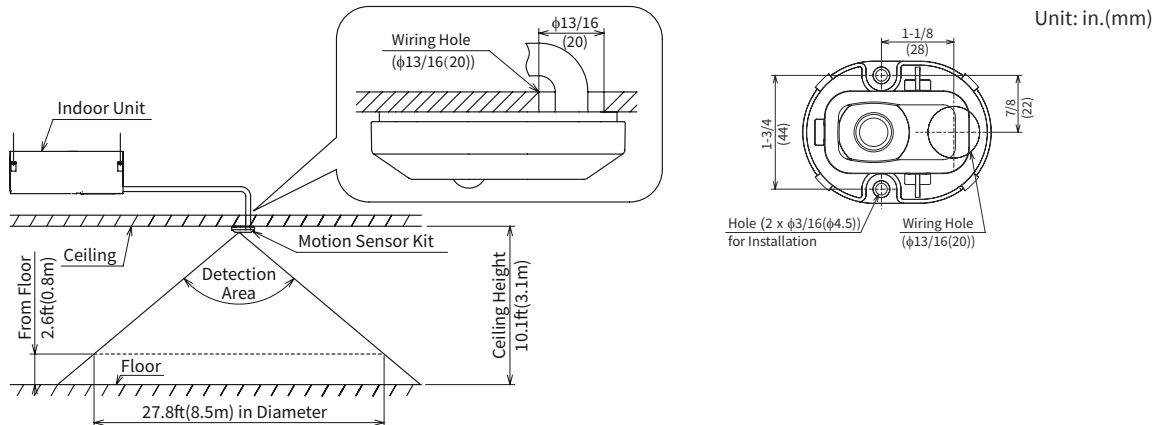
Optional Accessories		Indoor Unit Model					
		PPIM-B**UFA1DQ	PCIM-B**UFA1DQ	PCI-B**UFA1DQ	PPFC-B**UFA1DQ	PPK-B**UFA1DQ	JPE *****HS1A
Air Panel(Standard)	PHKF160PAQ1	×	×	○	×	×	×
Air Panel(Standard)	PHKM50PAQ1	×	○	×	×	×	×
Air Panel(with motion sensor and radiation sensor)	P-AP160NAE1	×	×	○	×	×	×
Silent-Iconic Panel(White)	P-GP160NAP*US	×	×	○	×	×	×
airCloud Adapter	GA-WFG-N	○	○	○	○	○	×
IR Receiver Kit	PC-ALH5Q	×	×	○	×	×	×
	PC-ALHC5Q	×	○	×	×	×	×
	PC-ALHZ5Q	○	×	×	×	×	×
	PI2303H	×	×	×	○	×	×
Motion Sensor Kit	SOR-NEZ*US	○	○	×	○	○	×
Drain Pump	DURPFC-16AQ DURPFC-16BQ	×	×	×	○	×	×
Air Filter(for ducted type)	KW-PP7Q#E KW-PP9Q#E KW-PP10Q#E	○	×	×	×	×	×
Filter Rack for MERV13	FB-12PIE FB-30PIE FB-48PIE	○	×	×	×	×	×
Remote Sensor	THM-R2A	○	○	○	○	○	×
Electric heaters	8HK	×	×	×	×	×	○
Breaker moisture seal accessory	S1-02435672000	×	×	×	×	×	○
Filter rack	1BR01117 1BR01121 1BR01124	×	×	×	×	×	○

○: Available ×: Not Available

8.2.1 For MESP Ducted Type

8.2.1.1 Motion Sensor Kit: SOR-NEZ*US

Install the motion sensor kit in the center of the room as much as possible. When the motion sensor is installed after the indoor unit's installation, be sure to turn off the power supply completely before starting installation.



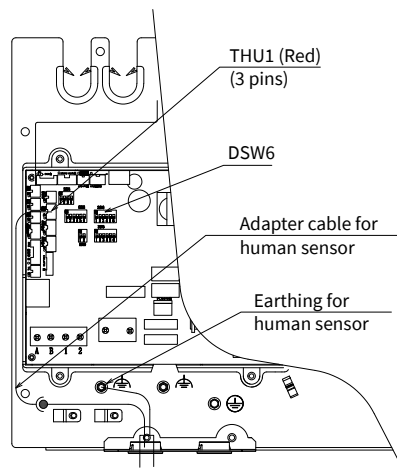
<Specification>

Model		SOR-NEZ*US
Applied Indoor Unit Model	-	PPIM-B09~B48UFA1DQ
Material	-	PS
Size(H×W×D)	in.(mm)	45/64 × 3-5/64 × 2-23/64(17.7×78×60)
Cord Length	in.(mm)	3-35/64(90)

<Electrical Wiring>

For PPIM-B09~B48UFA1DQ indoor unit, connecting cable to THU1 of PCB in the electrical box. (*1)

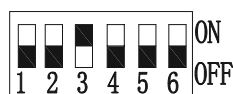
Fix the earth wiring to screw for earth wiring connection as the following figure.



(*1) Use a 5pin to 3pin conversion cable to connect THU1 of PCB.

<DSW Setting for Indoor Unit>

Setting the DSW6 on the indoor unit PCB. (*2)

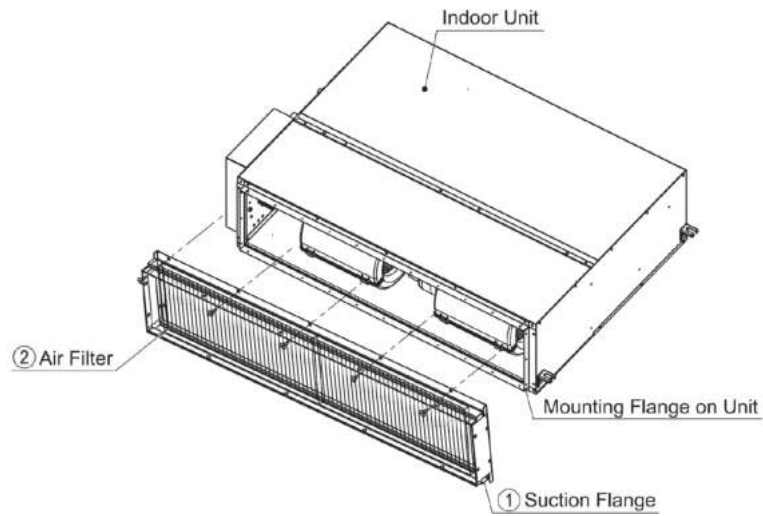


(*2): DSW6 all be set to OFF in the factory. Setting the No.3 digit to ON when installing the Motion Sensor Kit: SOR-NEZ*US in PPIM-B09~B48UFA1DQ indoor unit.

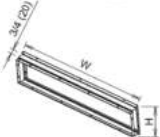
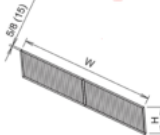
OPTIONAL ACCESSORIES

8.2.1.2 Air Filter: KW-PP7Q#E/KW-PP8Q#E/KW-PP9Q#E/KW-PP10Q#E

<Installation Position>



<Specification>

Model			KW-PP7Q#E	KW-PP9Q#E	KW-PP10Q#E
Applied Indoor Unit Model		-	PPIM-B09~B12UFA1DQ	PPIM-B18~B30UFA1DQ	PPIM-B36~B48UFA1DQ
Suction Flange 	W*H	in.(mm)	[25-7/16]*[10-7/16] (646*265)	[43-17/64]*[11-21/32] (1099*296)	[55-5/64]*[11-21/32] (1399*296)
Air Filter 	W*H	in.(mm)	[24-1/64]*[9-17/32] (610*242)	[41-27/32]*[10-45/64] 1063*272	[53-5/8]*[10-45/64] 1362*272

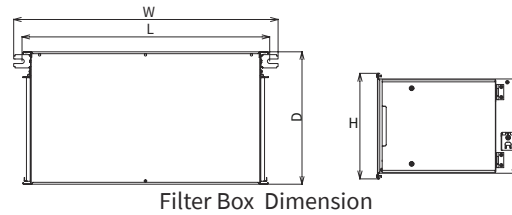
8.2.1.3 airCloud Adapter: GA-WFG-N

Refer to chapter 1.5.3 for details.

8.2.1.4 IR Receiver Kit: PC-ALHZ5Q

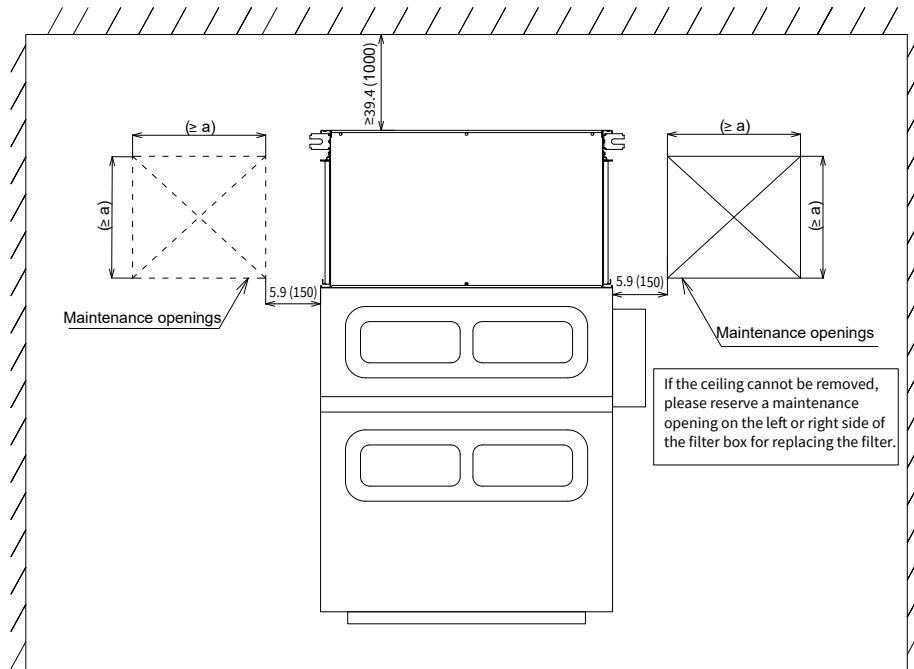
Refer to chapter 1.5.6 for details.

8.2.1.5 Filter Rack for MERV13: FB-12PIE/FB-30PIE/FB-48PIE



[unit:inch(mm)]

Filter Box Model	Indoor Unit Model	Filter Box Dimension				Filter Dimension (Recommended)	Filter Q'ty
		H	W	D	L		
FB-12PIE	PPIM-B09UFA1DQ	10.4	27.6	13.8	25.8	12x12x2	2
	PPIM-B12UFA1DQ	(265)	(700)	(350)	(655)	(304.8x304.8x50.8)	
FB-30PIE	PPIM-B18UFA1DQ	11.6	45.3	13.8	43.7	12x20x2	2
	PPIM-B24UFA1DQ	(295)	(1150)	(350)	(1110)	(304.8x508x50.8)	
	PPIM-B30UFA1DQ						
FB-48PIE	PPIM-B36UFA1DQ	11.6	57.0	13.8	55.5	12x26.5x2	2
	PPIM-B48UFA1DQ	(295)	(1450)	(350)	(1410)	(304.8x673.1x50.8)	



Model	Dimension a (inch/mm)
FB-12PIE	15.7/400
FB-30PIE	23.6/600
FB-48PIE	31.5/800

NOTES:

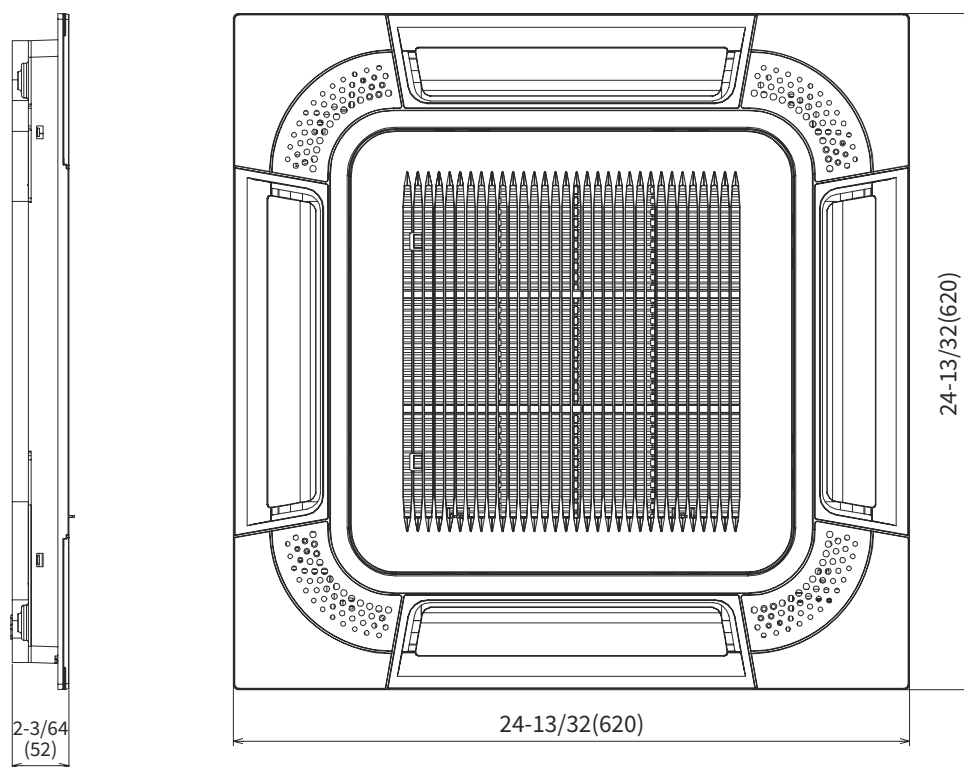
1. The current filter box is based on a structural design with a filter thickness of 2 inches. Filters of other thicknesses cannot be used.
2. Currently, the highest recommended filter level for airCore 700 series is MERV-13. The use of other, more efficient filters will affect reliability and comfort, so field installation of higher efficiency filters is not recommended.
3. After installing the filter, the air volume will decrease, so the external static pressure code should be selected from "C5=00", "C5=01" and "C5=02" according to the actual needs of the customer.

OPTIONAL ACCESSORIES

8.2.2 For 4-Way Mini Cassette Type

8.2.2.1 Air Panel (Standard): PHKM50PAQ1

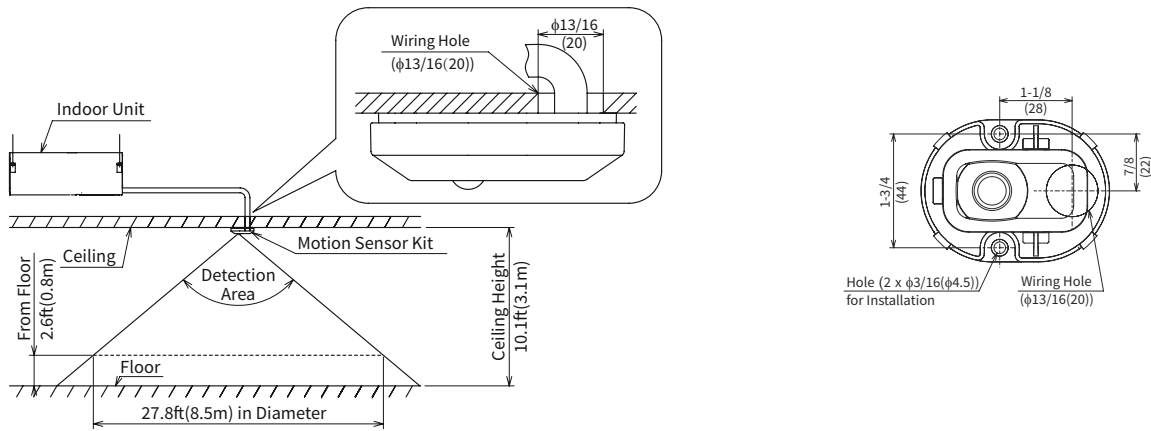
Unit: in.(mm)



8.2.2.2 Motion Sensor Kit: SOR-NEZ*US

Install the motion sensor kit in the center of the room as much as possible. When the motion sensor is installed after the indoor unit's installation, be sure to turn off the power supply completely before starting installation.

Unit: in.(mm)

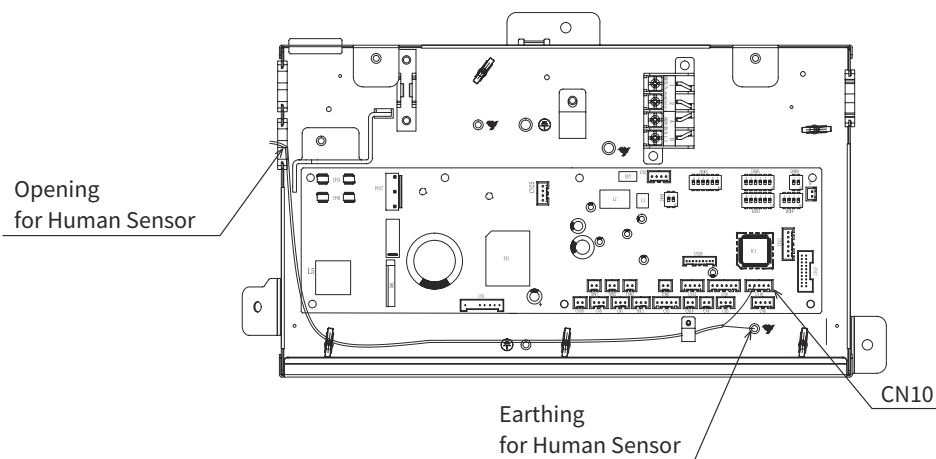


<Specification>

Model		SOR-NEZ*US
Applied Indoor Unit Model	-	PCIM-B09~B12UFA1DQ
Material	-	PS
Size(H×W×D)	in.(mm)	45/64 × 3-5/64 × 2-23/64 (17.7×78×60)
Cord Length	in.(mm)	3-35/64 (90)

<Electrical Wiring>

For PCIM-B09~B12UFA1DQ indoor unit, connecting cable to CN10 of PCB in the electrical box.
Fix the earth wiring to screw for earth wiring connection as the following figure.



8.2.2.3 airCloud Adapter: GA-WFG-N

Refer to chapter 1.5.3 for details.

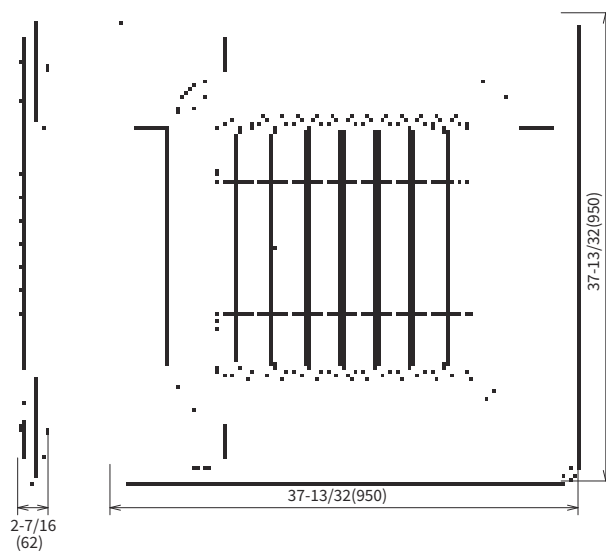
8.2.2.4 IR Receiver Kit: PC-ALHC5Q

Refer to chapter 1.5.5 for details.

8.2.3 For 4-Way Cassette Type

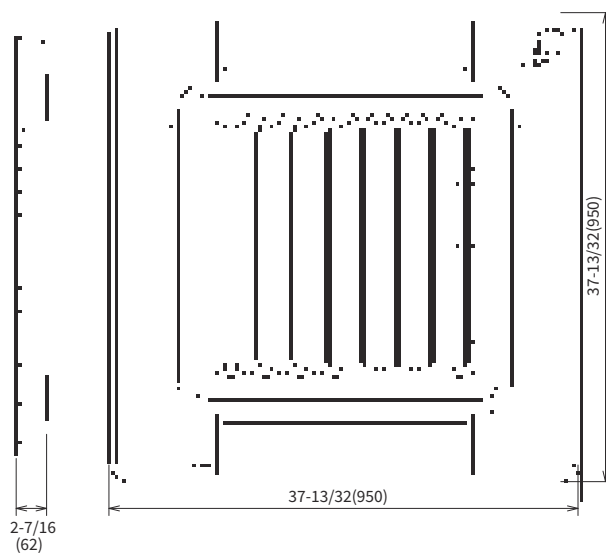
8.2.3.1 Air Panel (Standard): PHKF160PAQ1

Unit: in.(mm)



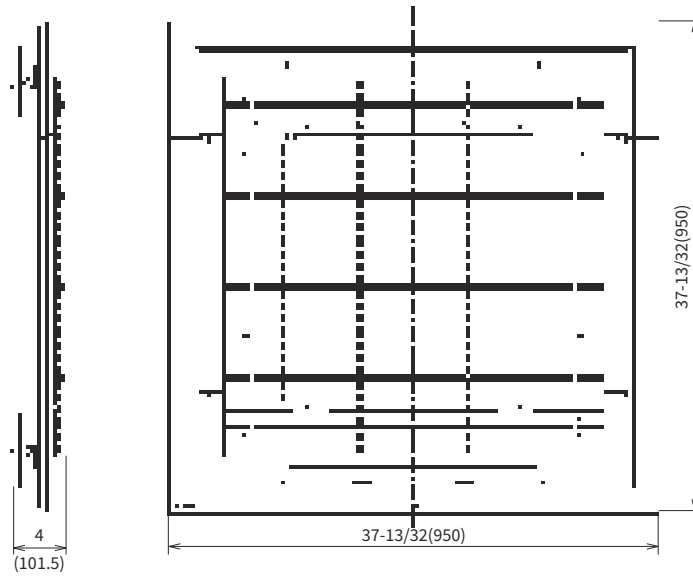
8.2.3.2 Air Panel (with motion sensor and radiation sensor): P-AP160NAE1

Unit: in.(mm)



8.2.3.3 Silent-Iconic Panel(White): P-GP160NAP*US

Unit: in.(mm)



8.2.3.4 airCloud Adapter: GA-WFG-N

Refer to chapter 1.5.3 for details.

8.2.3.5 IR Receiver Kit: PC-ALH5Q

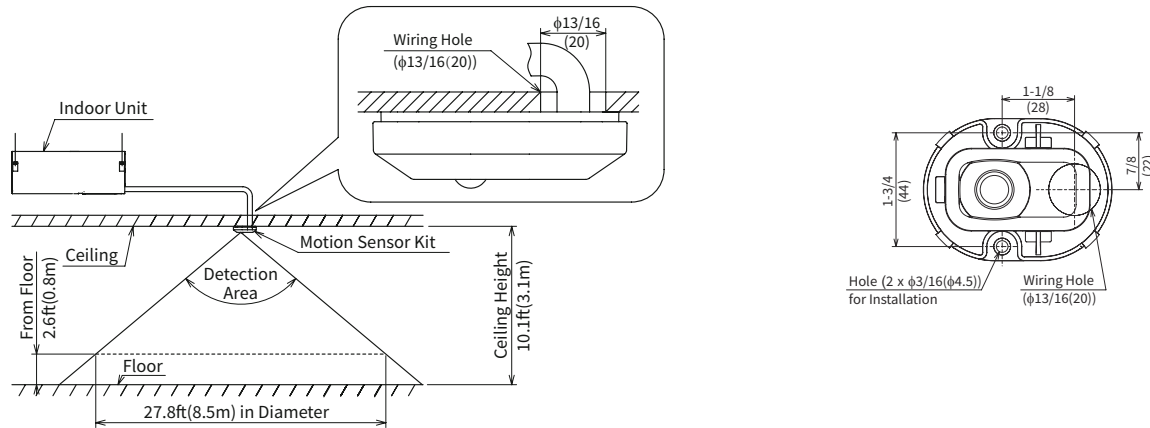
Refer to chapter 1.5.4 for details.

8.2.4 For Ceiling Suspended Type

8.2.4.1 Motion Sensor Kit: SOR-NEZ*US

Install the motion sensor kit in the center of the room as much as possible. when the motion sensor is installed after the indoor unit's installation, be sure to turn off the power supply completely before starting installation.

Unit:in.(mm)



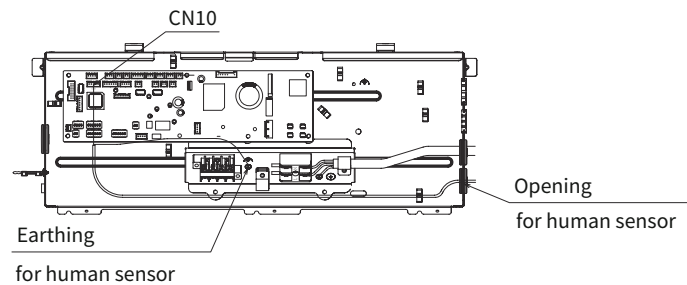
<Specification>

Model		SOR-NEZ*US
Applied Indoor Unit Model	-	PPFC-B09~B48UFA1DQ
Material	-	PS
Size(H*W*D)	in.(mm)	45/64 × 3-5/64 × 2-23/64(17.7×78×60)
Cord Length	in.(mm)	3-35/64(90)

<Electrical Wiring>

For PPFC-B09~B48UFA1DQ indoor unit, connecting cable to CN10 of PCB in the electrical box.

Fix the earth wiring to screw for earth wiring connection as the following figure.



8.2.4.2 Drain Pump: DURPFC-16AQ/DURPFC-16BQ

<Installation Position>

Refer to Operation & Installation Manual(Model:DURPFC-16AQ, DURPFC-16BQ) for details.

<Specification>

Model		DURPFC-16AQ	DURPFC-16BQ
Applied Indoor Unit Model	-	PPFC-B09~B18UFA1DQ	PPFC-B24~B48UFA1DQ
Drain pump head	in.(mm)	44-19/64(1125)	
Power Source	-	DC13V	
Power Consumption	W	4.2	
Drain Piping Connection	-	PVC Tube,VP25	

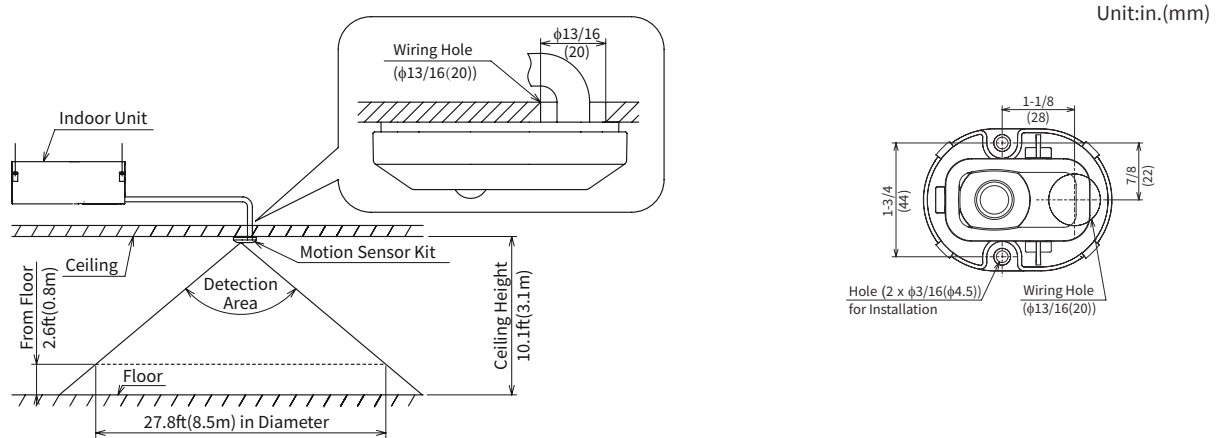
8.2.4.3 airCloud Adapter: GA-WFG-N

Refer to chapter 1.5.3 for details.

8.2.5 For High-wall Type

8.2.5.1 Motion Sensor Kit: SOR-NEZ*US

Install the motion sensor kit in the center of the room as much as possible. when the motion sensor is installed after the indoor unit's installation, be sure to turn off the power supply completely before starting installation.

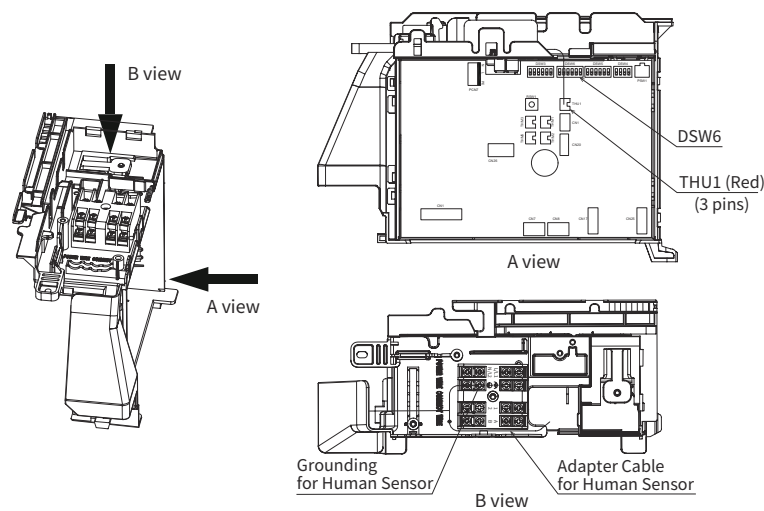


<Specification>

Model		SOR-NEZ*US
Applied Indoor Unit Model	-	PPK-B09~B30UFA1DQ
Material	-	PS
Size(H*W*D)	in.(mm)	45/64 × 3-5/64 × 2-23/64(17.7×78×60)
Cord Length	in.(mm)	3-35/64(90)

<Electrical Wiring>

For PPK-B09~B30UFA1DQ indoor unit, connecting cable to THU1 of PCB in the electrical box. (*1)
Fix the earth wiring to screw for earth wiring connection as the following figure.



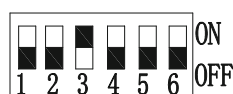
NOTES:

- The above drawings are for PPK-B12UFA1DQ and PPK-B18UFA1DQ.
- The electrical boxes of other models are slightly different, but the port for wiring are the same.

(*1) Use a 5pin to 3pin conversion cable to connect THU1 of PCB.

<DSW Setting for Indoor Unit>

Setting the DSW6 on the indoor unit PCB. (*2)



(*2): DSW6 all be set to OFF in the factory. Setting the No.3 digit to ON when installing the Motion Sensor Kit: SOR-NEZ*US in PPK-B09~B30UFA1DQ indoor unit.

8.2.5.2 airCloud Adapter: GA-WFG-N

Refer to chapter 1.5.3 for details.

8.2.6 For Air Handlers Type

8.2.6.1 Electric heaters

8HK models shown under electrical data include sequential operation and temperature dual limit switches for safe, efficient operation. Service disconnects are provided where shown.

For details, please refer to Installation & Maintenance Manual of the Air Handlers type.



Scan the QR code to get the manual.

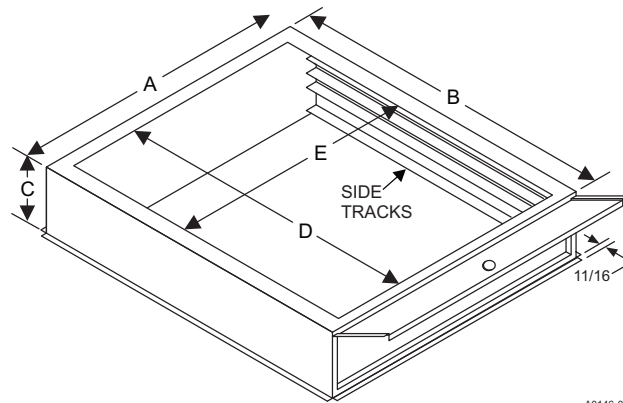
8.2.6.2 Breaker moisture seal accessory

A clear circuit breaker moisture barrier seals the breakers from humidity and dust. The flexibility of the clear cover allows circuit breakers to be turned ON or OFF without removing the cover.

The cover firmly attaches to the access panel around the circuit breakers with the use of double backed adhesive tape. To ensure that moisture or dust does not contaminate circuit breakers, an S1-02435672000, circuit breaker, cover seal may be ordered.

8.2.6.3 Filter rack

Filtration must be installed external to the unit using an accessory filter rack kit. See the filter rack dimensions below.



A0146-003

Unit: inch.

Galvanised model	A	B	C	D	E	Filter size
1BR01117	17.5	21.56	4	18.63	14.25	16 x 20 x 1 or 2
1BR01121	21	21.56	4	18.63	17.75	20 x 20 x 1 or 2
1BR01124	24.5	21.56	4	18.63	21.25	20 x 24 x 1 or 2

NOTE:

- The filter is not supplied.

9. Component Data

9.1 Indoor Heat Exchanger and Fan

< MESP Ducted Type >

Model		PPIM-B09UFA1DQ	PPIM-B12UFA1DQ	PPIM-B18UFA1DQ	PPIM-B24UFA1DQ	PPIM-B30UFA1DQ	PPIM-B36UFA1DQ	PPIM-B48UFA1DQ
Heat Exchanger Type		Multi-Pass Cross Finned Tube						
Tube Material		Copper Tube						
Tube Outer Diameter	in	9/32	9/32	9/32	9/32	9/32	9/32	9/32
	mm	7	7	7	7	7	7	7
Rows		3	3	3	3	3	3	3
Number of Tube/Coil		50	50	50	50	50	50	50
Fin Material		Aluminum						
Fin Pitch	in	5/64	5/64	5/64	5/64	5/64	5/64	5/64
	mm	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Maximum Operating Pressure	Psig	601.92	601.92	601.92	601.92	601.92	601.92	601.92
	MPa	4.15	4.15	4.15	4.15	4.15	4.15	4.15
Total Face Area	ft ²	76.1	76.1	173.3	173.3	173.3	230.4	230.4
	m ²	7.07	7.07	16.1	16.1	16.1	21.4	21.4
Number of Coil/Unit		1	1	1	1	1	1	1
Revolution High Pressure Setting2	rpm	1460/1370/1310/1245/1185/1120	1486/1395/1275/1210/1025/920	1395/1280/1200/1130/1050/965	1425/1340/1235/1145/1085/1015	1462/1410/1285/1160/1100/1046	1510/1380/1250/1141/1025/930	1530/1435/1340/1190/1130/1030
Revolution High Pressure Setting1	rpm	1340/1222/1180/1125/1070/1020	1430/1344/1165/1115/950/860	1230/1155/1065/995/920/845	1265/1199/1090/1000/930/880	1340/1230/1130/990/940/900	1375/1255/1155/1025/925/845	1140/1080/1000/875/813/760
Standard Pressure Setting	rpm	1140/1045/1000/950/910/880	1230/1130/1000/950/820/735	925/865/795/740/695/645	965/930/835/765/705/680	1070/990/890/810/780/730	1110/1012/940/860/780/700	1300/1235/1135/1015/940/855
Nominal Air Flow High Pressure Setting2	CFM	350/300/290/275/260/245	450/390/350/335/280/245	650/590/550/510/460/420	780/740/670/600/560/530	1060/960/870/770/730/690	1270/1140/1040/950/830/740	1360/1270/1160/1040/950/850
	m ³ /h	600/516/492/468/444/420	760/660/600/570/470/420	1100/1008/930/864/790/720	1330/1260/1140/1020/960/900	1800/1638/1476/1320/1250/1180	2160/1950/1770/1620/1410/1260	2320/2160/1980/1764/1620/1450
Nominal Air Flow High Pressure Setting1	CFM	350/300/290/275/260/245	450/390/350/335/280/245	650/590/550/510/460/420	780/740/670/600/560/530	1060/960/870/770/730/690	1270/1140/1040/950/830/740	1360/1270/1160/1040/950/850
	m ³ /h	600/516/492/468/444/420	760/660/600/570/470/420	1100/1008/930/864/790/720	1330/1260/1140/1020/960/900	1800/1638/1476/1320/1250/1180	2160/1950/1770/1620/1410/1260	2320/2160/1980/1764/1620/1450
Standard Pressure Setting	CFM	350/300/290/275/260/245	450/390/350/335/280/245	650/590/550/510/460/420	780/740/670/600/560/530	1060/960/870/770/730/690	1270/1140/1040/950/830/740	1360/1270/1160/1040/950/850
	m ³ /h	600/516/492/468/444/420	760/660/600/570/470/420	1100/1008/930/864/790/720	1330/1260/1140/1020/960/900	1800/1638/1476/1320/1250/1180	2160/1950/1770/1620/1410/1260	2320/2160/1980/1764/1620/1450
Indoor Fan		Multi-Blade Centrifugal Fan						
Number/Unit		2	2	2	2	2	2	2
Outer Diameter	in	7-3/32	7-3/32	7-7/8	7-7/8	7-7/8	7-7/8	7-7/8
	mm	180	180	200	200	200	200	200
Indoor Fan Motor		Drip-Proof Type Enclosure						
Starting Method		DC Motor						
Nominal Output	W	150	150	250	250	250	375	375
Quantity		1	1	1	1	1	1	1
Insulation Class		B	B	B	B	B	B	B

COMPONENT DATA

< 4-Way Mini Cassette Type & 4-Way Cassette Type >

Model		PCIM- B09UFA1DQ	PCIM- B12UFA1DQ	PCI- B18UFA1DQ	PCI- B24UFA1DQ	PCI- B30UFA1DQ	PCI- B36UFA1DQ	PCI- B48UFA1DQ
Heat Exchanger Type		Multi-Pass Cross Finned Tube						
Tube Material		Copper Tube						
Tube Outer Diameter	in	13/64	13/64	13/64	13/64	13/64	13/64	13/64
	mm	5	5	5	5	5	5	5
Rows		3	3	3	3	3	3	3
Number of Tube/Coil		36	36	42	54	54	54	54
Fin Material		Aluminum						
Fin Pitch	in	3/64	3/64	3/64	3/64	3/64	3/64	3/64
	mm	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Maximum Operating Pressure	psi	601.92	601.92	601.92	601.92	601.92	601.92	601.92
	MPa	4.15	4.15	4.15	4.15	4.15	4.15	4.15
Total Face Area	ft ²	25.8	25.8	51.8	66.6	66.6	66.6	66.6
	m ²	7.88	7.88	15.8	20.3	20.3	20.3	20.3
Number of Coil/Unit		1	1	1	1	1	1	1
Standard	rpm	635/590/ 565/510	830/755/ 610/510	450/420/ 400/375	500/470/ 445/410	670/580/ 515/470	710/645/ 590/470	710/645/ 590/470
	CFM	320/295/ 275/250	425/390/ 305/250	650/600/ 570/530	780/740/ 700/630	1060/940/ 820/740	1170/1060/ 950/740	1170/1060/ 950/740
Standard	m ³ /h	540/500/ 470/420	720/660/ 520/420	1100/1030/ 970/900	1330/1260/ 1190/1080	1800/1600/ 1400/1260	1990/1800/ 1620/1260	1990/1800/ 1620/1260
Indoor Fan		Turbofan						
Number/Unit		1	1	1	1	1	1	1
Outer Diameter	in	12-43/64	12-43/64	19-19/64	19-19/64	19-19/64	19-19/64	19-19/64
	mm	322	322	490	490	490	490	490
Indoor Fan Motor		Drip-Proof Type Enclosure						
Starting Method		DC Motor						
Nominal Output	W	57	57	60	127	127	127	127
Quantity		1	1	1	1	1	1	1
Insulation Class		E	E	E	E	E	E	E

< Ceiling Suspended Type >

Model		PPFC-B09UFA1DQ	PPFC-B12UFA1DQ	PPFC-B18UFA1DQ	PPFC-B24UFA1DQ	PPFC-B30UFA1DQ	PPFC-B36UFA1DQ	PPFC-B48UFA1DQ
Heat Exchanger Type		Multi-Pass Cross Finned Tube						
Tube Material		Copper Tube						
Tube Outer Diameter	in	9/32	9/32	9/32	9/32	9/32	9/32	9/32
	mm	7	7	7	7	7	7	7
Rows		3	3	3	3	3	3	3
Number of Tube/Coil		46	46	46	46	46	46	46
Fin Material		Aluminum						
Fin Pitch	in	1/16	1/16	1/16	1/16	1/16	1/16	1/16
	mm	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Maximum Operating Pressure	psi	601.92	601.92	601.92	601.92	601.92	601.92	601.92
	MPa	4.15	4.15	4.15	4.15	4.15	4.15	4.15
Total Face Area	ft ²	36.7	65.6	36.7	65.6	65.6	65.6	65.6
	m ²	11.2	20.0	11.2	20.0	20.0	20.0	20.0
Number of Coil/Unit		1	1	1	1	1	1	1
Standard	rpm	690/650/ 615/560	920/810/ 690/615	1100/1060/ 945/840	950/900/ 830/704	1170/1060/ 968/900	1270/1140/ 1000/920	1270/1140/ 1000/920
Standard	CFM	320/295/ 275/250	450/390/ 320/275	540/520/ 460/400	780/740/ 680/560	1010/940/ 820/740	1170/1010/ 890/780	1170/1010/ 890/780
	m ³ /h	540/500/ 470/420	760/660/ 540/470	918/880/ 780/680	1330/1260/ 1150/960	1720/1600/ 1400/1260	1990/1720/ 1510/1330	1990/1720/ 1510/1330
Indoor Fan		Multi-Blade Centrifugal Fan						
Number/Unit		2	2	2	4	4	4	4
Outer Diameter	in	6-3/8	6-3/8	6-3/8	6-3/8	6-3/8	6-3/8	6-3/8
	mm	162	162	162	162	162	162	162
Indoor Fan Motor		Drip-Proof Type Enclosure						
Starting Method		DC Motor						
Nominal Output	W	100	100	100	181	181	181	181
Quantity		1	1	1	1	1	1	1
Insulation Class		E	E	E	E	E	E	E

COMPONENT DATA

< High-wall Type >

Model		PPK-B09UFA1DQ	PPK-B12UFA1DQ	PPK-B18UFA1DQ	PPK-B24UFA1DQ	PPK-B30UFA1DQ
Heat Exchanger Type		Multi-Pass Cross Finned Tube				
Tube Material		Copper Tube				
Tube Outer Diameter	in	9/32	9/32	9/32	9/32	9/32
	mm	7	7	7	7	7
Rows		2	2	2	3	3
Number of Tube/Coil		28	36	36	60	60
Fin Material		Aluminum				
Fin Pitch	in	1/16	1/16	1/16	1/16	1/16
	mm	1.4	1.4	1.4	1.6	1.6
Maximum Operating Pressure	psi	601.92	601.92	601.92	601.92	601.92
	MPa	4.15	4.15	4.15	4.15	4.15
Total Face Area	ft ²	69.10	120.66	120.66	220.01	220.01
	m ²	6.42	11.21	11.21	20.44	20.44
Number of Coil/Unit		1	1	1	1	1
Standard	rpm	1150/990/895/800	936/858/779/723	1200/1121/1000/880	921/843/799/747	1020/964/908/851
Standard	CFM	350/290/255/220	470/435/390/350	580/545/475/410	885/790/735/680	980/910/845/770
	m ³ /h	588/495/433/374	798/738/663/589	988/922/804/693	1503/1345/1247/1154	1662/1544/1435/1309
Indoor Fan		Multi-Blade Centrifugal Fan				
Number/Unit		2	2	2	4	4
Outer Diameter	in	6-3/8	6-3/8	6-3/8	6-3/8	6-3/8
	mm	162	162	162	162	162
Indoor Fan Motor		Drip-Proof Type Enclosure				
Starting Method		DC Motor				
Nominal Output	W	25	35	35	52	52
Quantity		1	1	1	1	1
Insulation Class		E	E	E	E	E

< Air Handlers Type >

Coil technical data

Model	Application	Refrigerant connection type	Face area (sq. ft.)	Rows deep	Fins per in.	Coil size (in.)	Tube geometry (in.)	Tube diameter (in.)	Fin type
JPE18B3XB2HS1A	Cooling /Heat Pump	Sweat/ Zoomlock	3.8	2	18	(2) 16 x 17	1 x 0.675	3/8	Lanced
JPE24B3XC2HS1A	Cooling /Heat Pump	Sweat/ Zoomlock	4.7	2	18	(2) 20 x 17	1 x 0.675	3/8	Lanced
JPE30B3XD2HS1A	Cooling /Heat Pump	Sweat/ Zoomlock	4.7	3	14	(2) 20 x 17	1 x 0.675	3/8	Lanced
JPE36B3XD2HS1A	Cooling /Heat Pump	Sweat/ Zoomlock	4.7	3	14	(2) 20 x 17	1 x 0.675	3/8	Lanced
JPE48C3XG2HS1A	Cooling /Heat Pump	Sweat/ Zoomlock	6.6	3	12	(2) 28 x 17	1 x 0.675	3/8	Lanced

Physical and electrical data

Model		JPE18B3XB2HS1A	JPE24B3XC2HS1A	JPE30B3XD2HS1A	JPE36B3XD2HS1A	JPE48C3XG2HS1A
Blower - Diameter x Width (in.)		11 x 8	11 x 8	11 x 8	11 x 8	11 x 10
Motor	HP	1/3 HP	1/3 HP	1/2 HP	1/2 HP	3/4 HP
	Nominal RPM	1050	1050	1050	1050	1050
Voltage (V)		208/230	208/230	208/230	208/230	208/230
Full Load Amps @230V		2.6	2.6	3.8	3.8	5.4
Filter	Type	DISPOSABLE OR CLEANABLE				
	Size (in.)	16 x 20 x 1	16 x 20 x 1	16 x 20 x 1	20 x 20 x 1	20 x 20 x 1
Shipping / Operating Weight (lbs.)		101/93	107/99	108/100	108/100	140/129

9.2 Outdoor Heat Exchanger and Fan

Model		PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Heat Exchanger Type		Multi-Pass Cross Finned Tube						
Tube Material		Copper Tube						
Tube Outer Diameter	in	9/32	9/32	9/32	9/32	9/32	9/32	9/32
	mm	7	7	7	7	7	7	7
Rows		2	2	2	2	3	3	3
Number of Tube/Coil		64	64	64	64	144	144	201
Fin Material		Aluminum						
Fin Pitch	in	1/16	1/16	1/16	1/16	1/16	1/16	1/16
	mm	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Maximum Operating Pressure	Psig	602	602	602	602	602	602	602
	MPa	4.15	4.15	4.15	4.15	4.15	4.15	4.15
Number of Coil/Unit		1	1	1	1	1	1	1
Outdoor Fan		Direct Drive Propeller Fan						
Outdoor Fan Number		1	1	1	1	1	1	2
Outdoor Fan Outer Diameter	in	17-43/64	17-43/64	19-3/8	19-3/8	21-27/64	21-27/64	21-27/64
	mm	449	449	492	492	544	544	544
Nominal Air Flow	CFM	850	850	1935	1935	2823	2823	4823
	m ³ /h	2210	2210	3290	3290	4800	4800	8200
Nominal Output	W	40	40	80	80	138	138	138+138
Insulation Class		E	E	E	E	E	E	E

Component Detailed Data

Compressor

Compressor Model		KSN108D32UFZR	KSN108D32UFZR	KTN150D42UFZD	KTM240D43UKT	ATH356SKRC9EQ
Applicable Model		PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1	PAS-24BUFASDQ1	PAS-30~48BUFASDQ1
Type		Rotary				
Air Tight Pressure Discharge	Psig	621	621	602	602	602
	MPa	4.28	4.28	4.15	4.15	4.15
Suction	Psig	22-171	22-171	321	321	321
	MPa	0.15-1.18	0.15-1.18	2.21	2.21	2.21
Motor Type Starting Method		Inverter-Driven				
Motor Poles		6	6	6	6	8
Insulation		E	E	E	E	B
Oil Type		ESTER OIL RM-P75EK	ESTER OIL RM-P75EK	ESTER OIL VG74	ESTER OIL VG74	RmM68EA

10. Control System

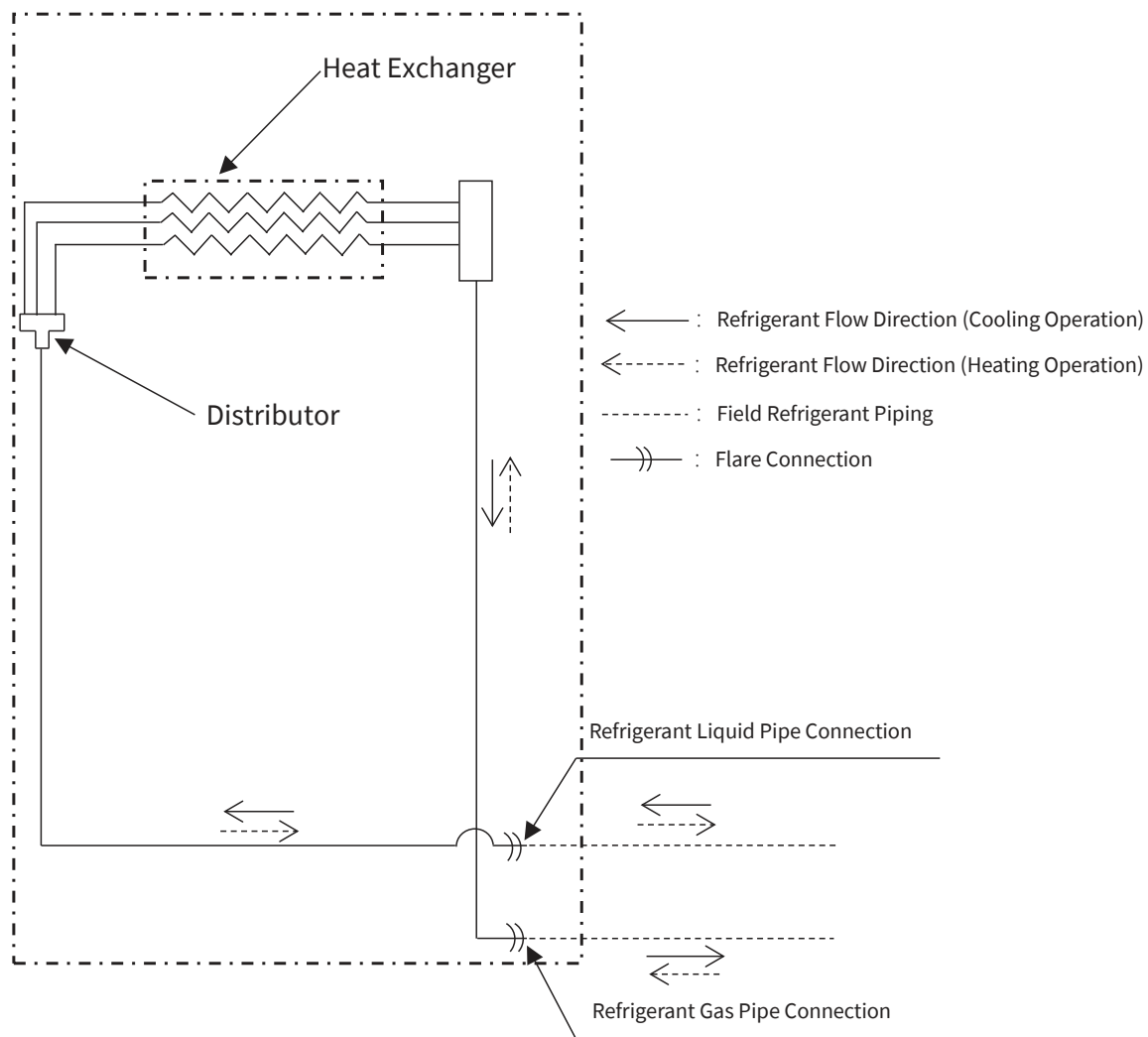
10.1 Refrigeration Cycle

10.1.1 Indoor Units

<MESP Ducted Type >

Models: PPIM-B09~B48UFA1DQ

INDOOR UNIT

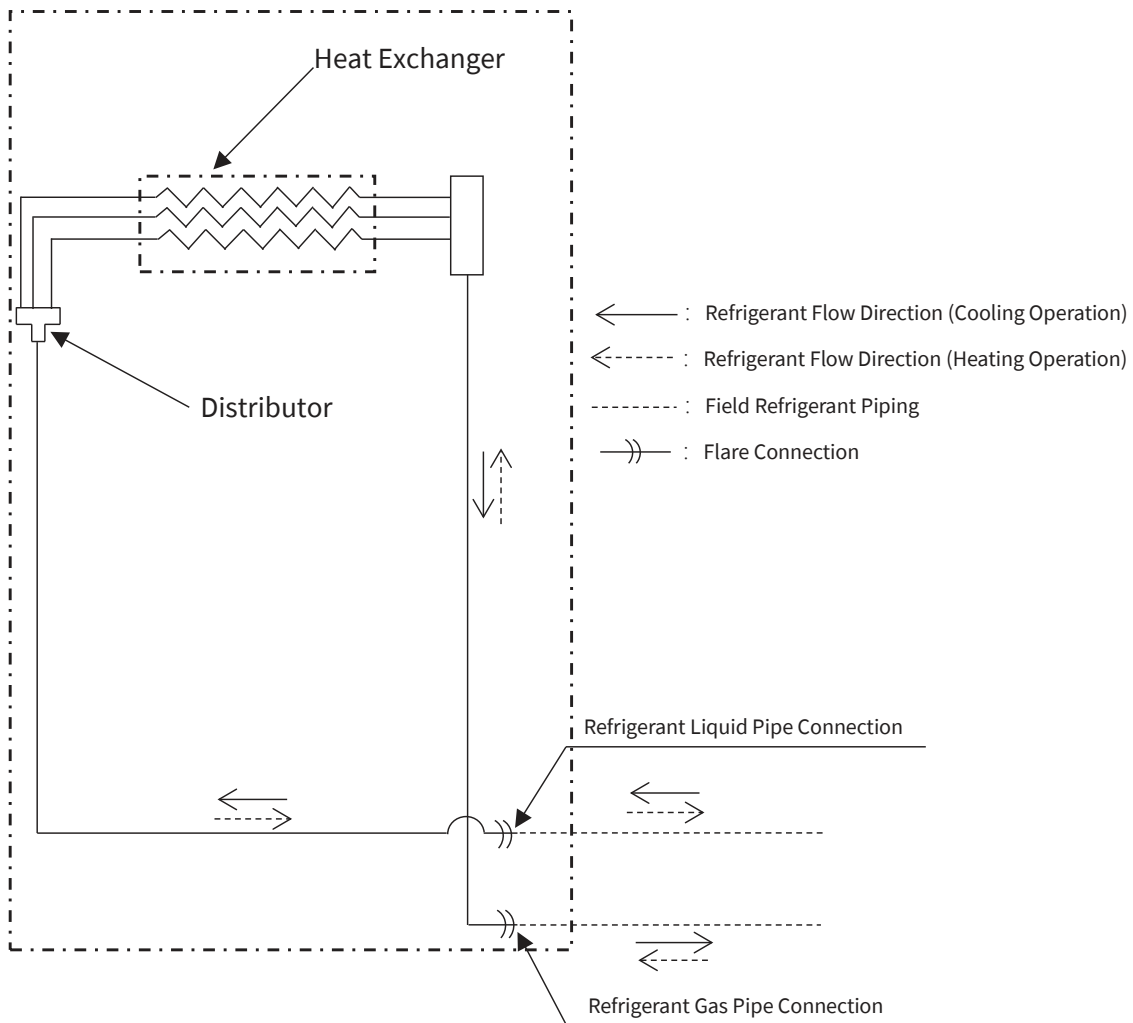


Model	PPIM-B09UFA1DQ PPIM-B12UFA1DQ	PPIM-B18UFA1DQ PPIM-B24UFA1DQ	PPIM-B30UFA1DQ PPIM-B36UFA1DQ PPIM-B48UFA1DQ
Distributor	4Pass	8Pass	8Pass
Liquid Pipe Connection [in.(mm)]	1/4(Ø6.35)	1/4(Ø6.35)	3/8(Ø9.53)
Gas Pipe Connection [in.(mm)]	1/2(Ø12.7)	1/2(Ø12.7)	5/8(Ø15.88)

< 4-Way Mini Cassette Type/4-Way Cassette Type >

Models: PCIM-B09~B12UFA1DQ/PCI-B18~B48UFA1DQ

INDOOR UNIT

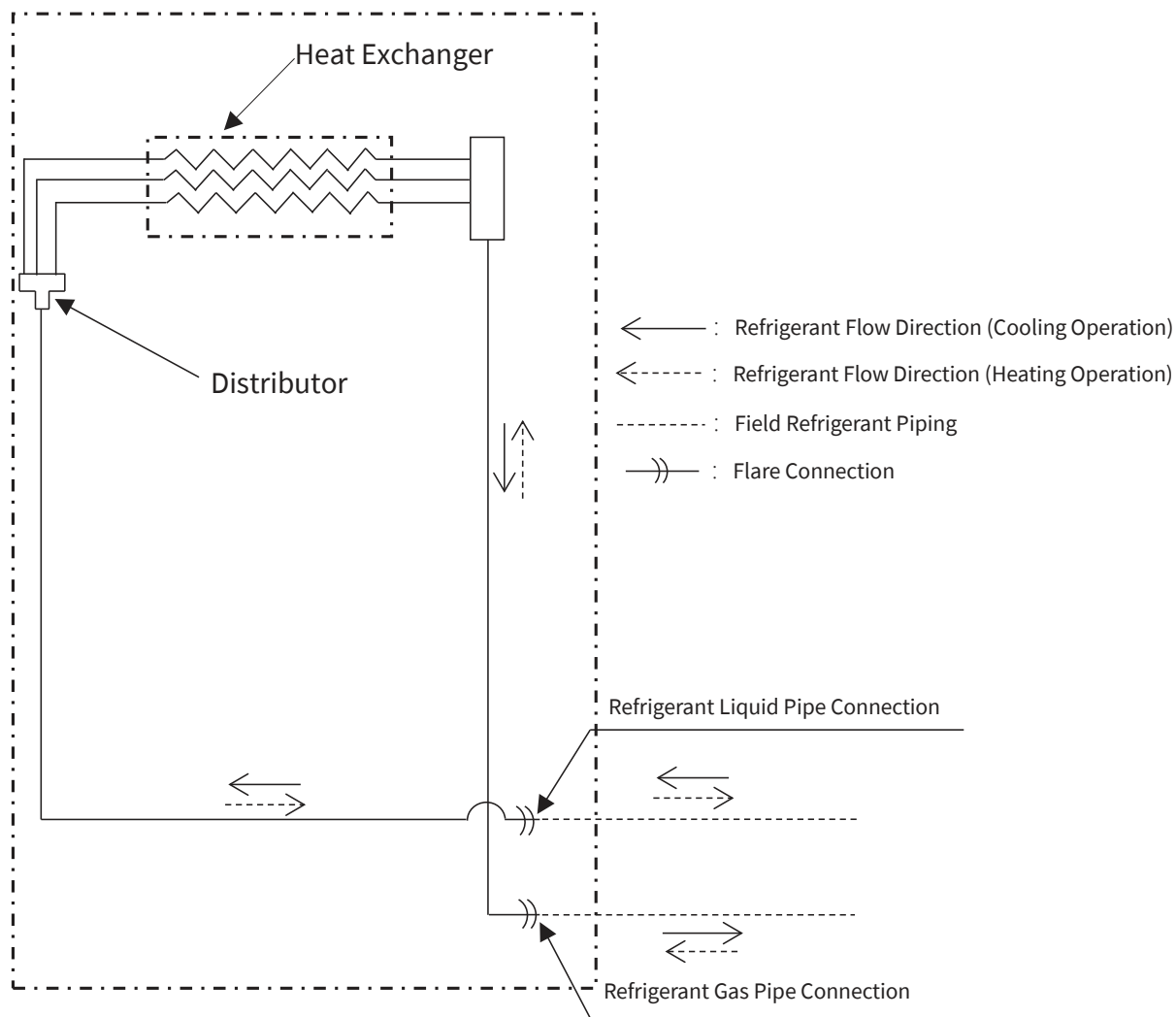


Model	PCIM-B09UFA1DQ PCIM-B12UFA1DQ	PCI-B18UFA1DQ	PCI-B24UFA1DQ	PCI-B30UFA1DQ PCI-B36UFA1DQ PCI-B48UFA1DQ
Distributor	4Pass	7Pass	9Pass	9Pass
Liquid Pipe Connection [in.(mm)]	1/4(Ø6.35)	1/4(Ø6.35)	1/4(Ø6.35)	3/8(Ø9.53)
Gas Pipe Connection [in.(mm)]	1/2(Ø12.7)	1/2(Ø12.7)	1/2(Ø12.7)	5/8(Ø15.88)

< Ceiling Suspended Type >

Models: PPFC-B09~B48UFA1DQ

INDOOR UNIT

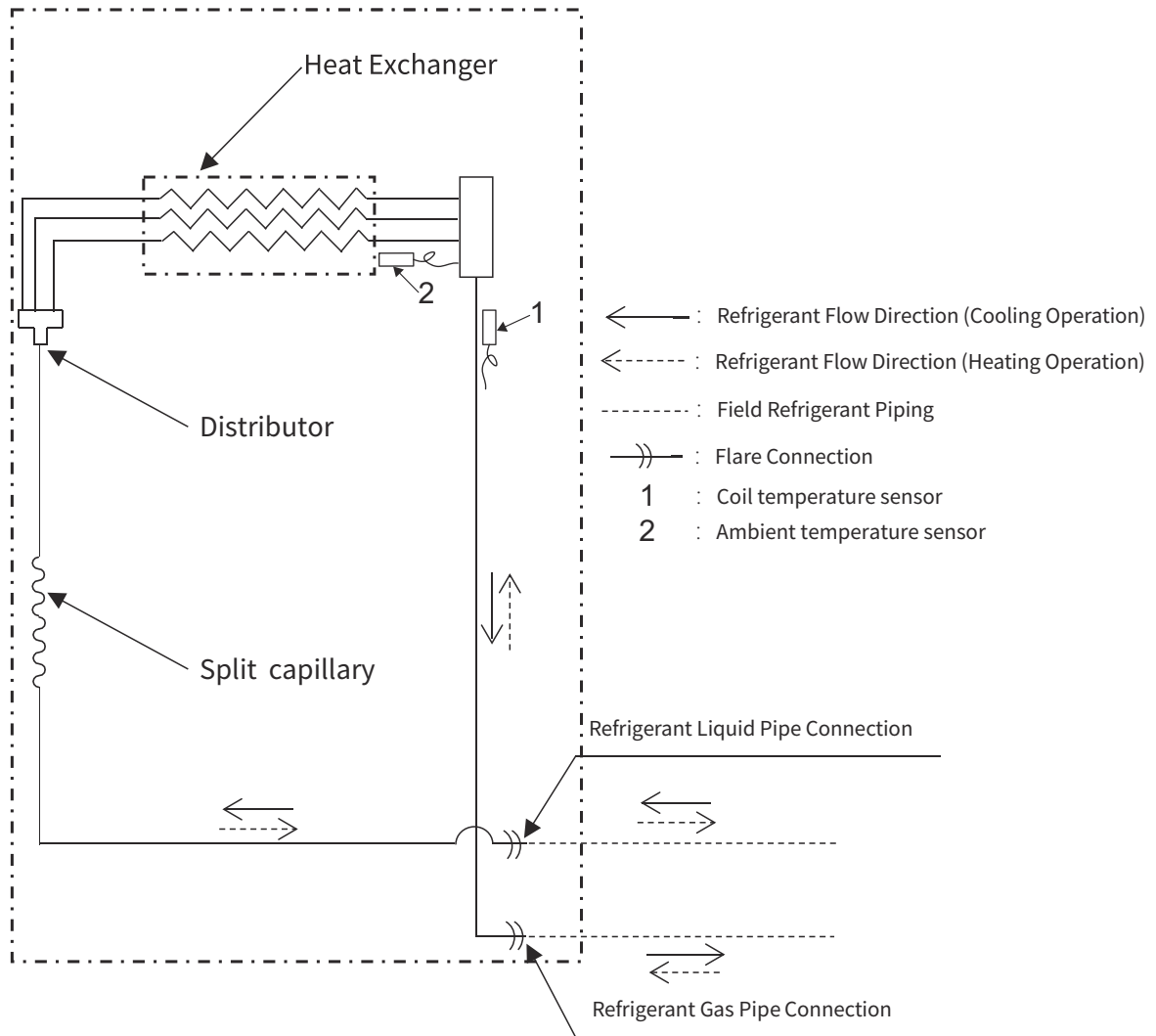


Model	PPFC-B09UFA1DQ PPFC-B12UFA1DQ PPFC-B18UFA1DQ	PPFC-B24UFA1DQ	PPFC-B30UFA1DQ PPFC-B36UFA1DQ PPFC-B48UFA1DQ
Distributor	5Pass	8Pass	8Pass
Liquid Pipe Connection [in.(mm)]	1/4(Ø6.35)	1/4(Ø6.35)	3/8(Ø9.53)
Gas Pipe Connection [in.(mm)]	1/2(Ø12.7)	1/2(Ø12.7)	5/8(Ø15.88)

< High-wall Type >

Models: PPK-B09~B30UFA1DQ

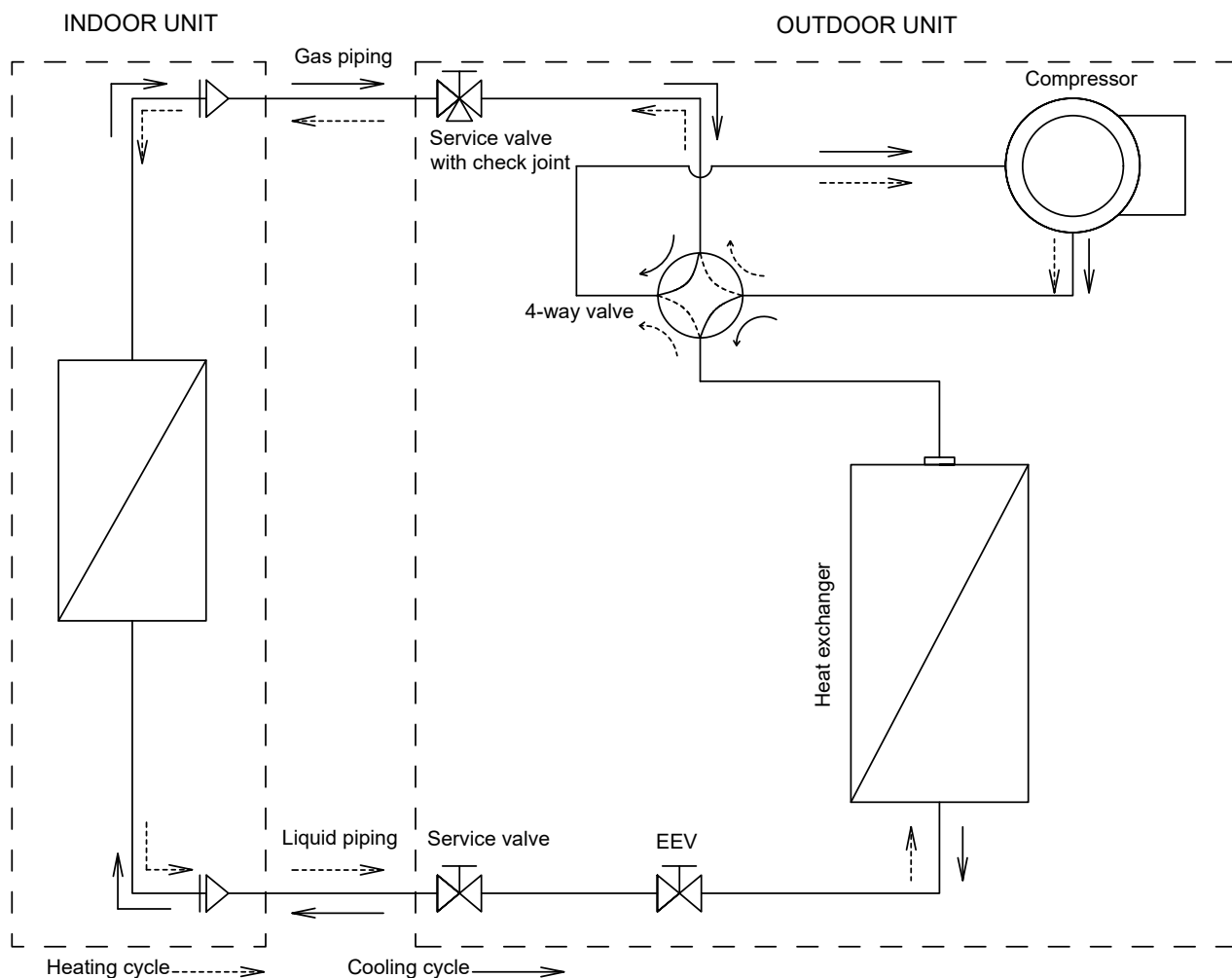
INDOOR UNIT



Model	PPK-B09UFA1DQ	PPK-B12UFA1DQ PPK-B18UFA1DQ PPK-B24UFA1DQ	PPK-B30UFA1DQ
Distributor	3Pass	6Pass	6Pass
Liquid Pipe Connection [in.(mm)]	1/4(Ø6.35)	1/4(Ø6.35)	3/8(Ø9.53)
Gas Pipe Connection [in.(mm)]	1/2(Ø12.7)	1/2(Ø12.7)	5/8(Ø15.88)

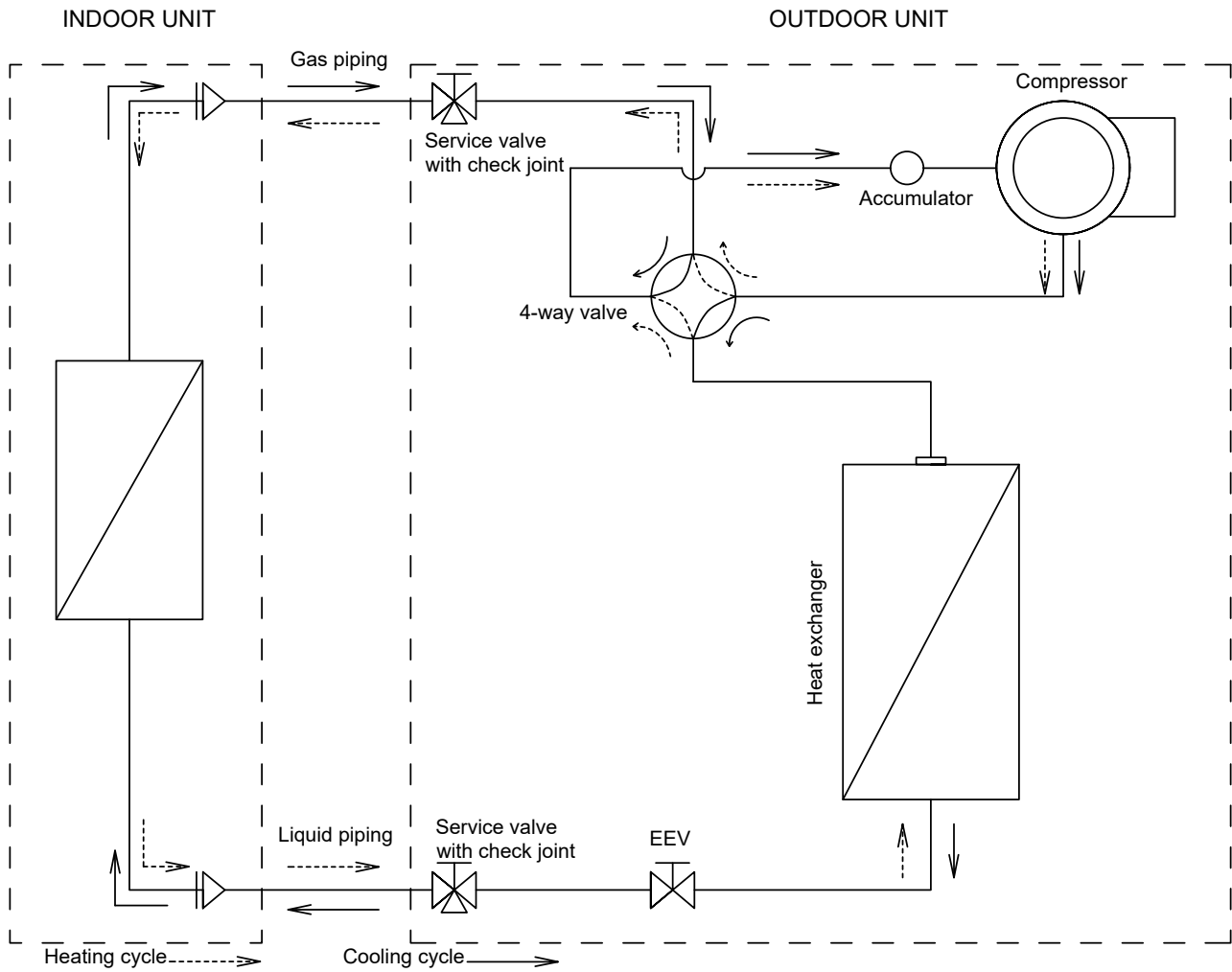
10.1.2 Outdoor Units

Models: PAS-09BUFASDQ1, PAS-12BUFASDQ1, PAS-18BUFASDQ1, PAS-24BUFASDQ1



Model	PAS-09BUFASDQ1	PAS-12BUFASDQ1	PAS-18BUFASDQ1	PAS-24BUFASDQ1
Liquid Pipe Connection [in.(mm)]	1/4(Φ6.35)	1/4(Φ6.35)	1/4(Φ6.35)	1/4(Φ6.35)
Gas Pipe Connection [in.(mm)]	1/2(Φ12.7)	1/2(Φ12.7)	1/2(Φ12.7)	1/2(Φ12.7)

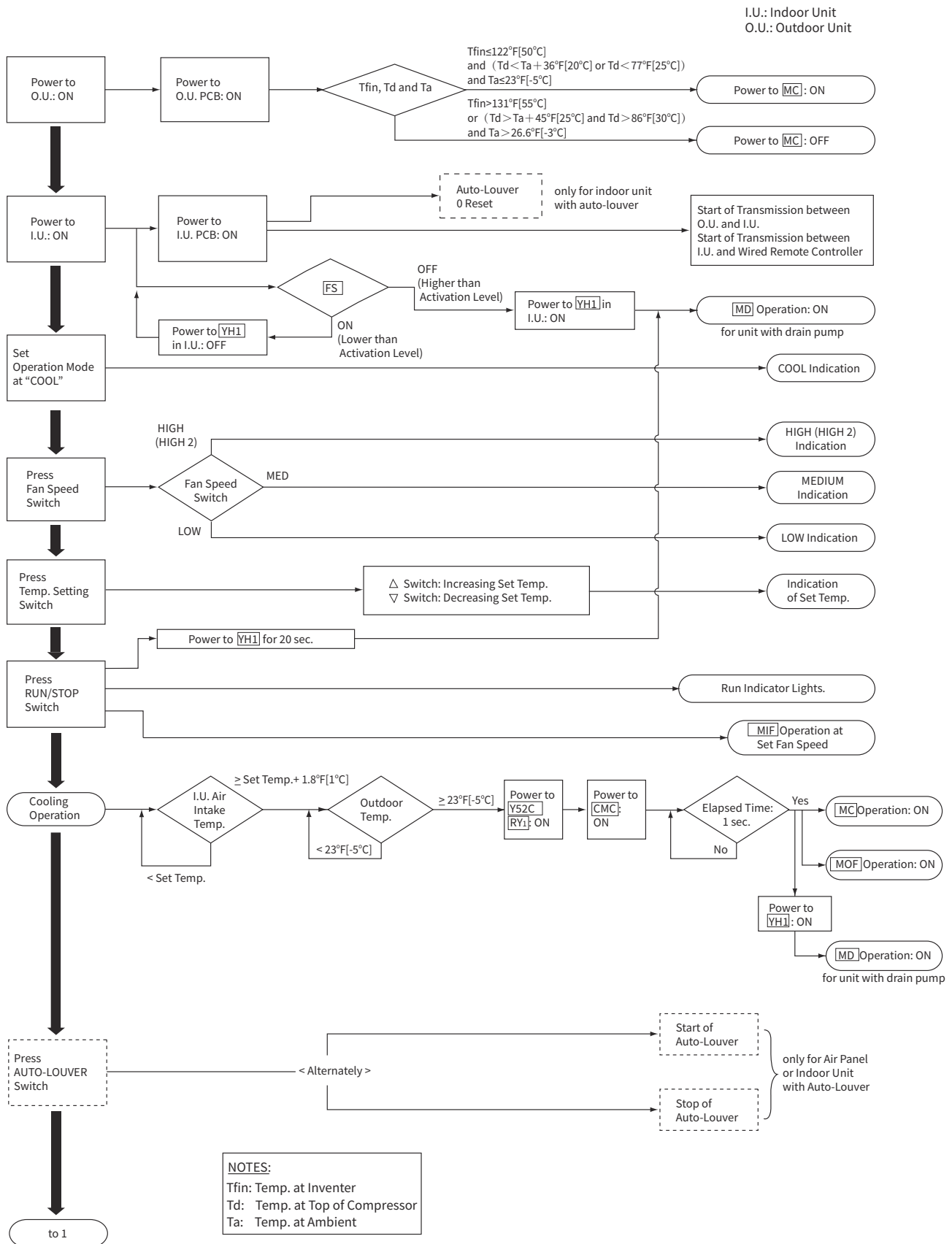
Models: PAS-30BUFASDQ1, PAS-36BUFASDQ1, PAS-48BUFASDQ1



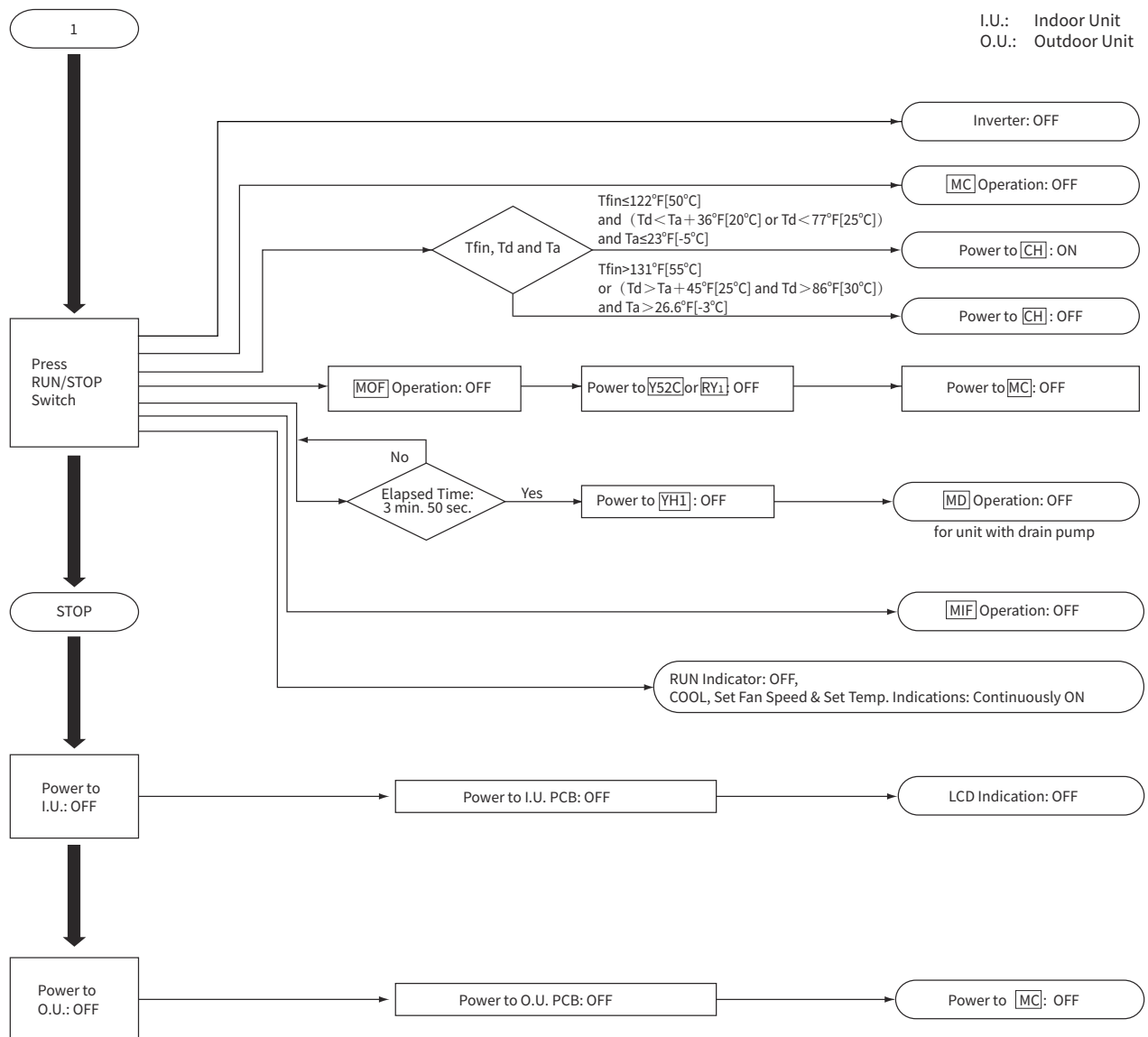
Model	PAS-30BUFASDQ1	PAS-36BUFASDQ1	PAS-48BUFASDQ1
Liquid Pipe Connection [in.(mm)]	3/8(Φ9.53)	3/8(Φ9.53)	3/8(Φ9.53)
Gas Pipe Connection [in.(mm)]	5/8(Φ15.88)	5/8(Φ15.88)	5/8(Φ15.88)

10.2 Standard Operation Sequence

■ Cooling Operation



■ Cooling Operation

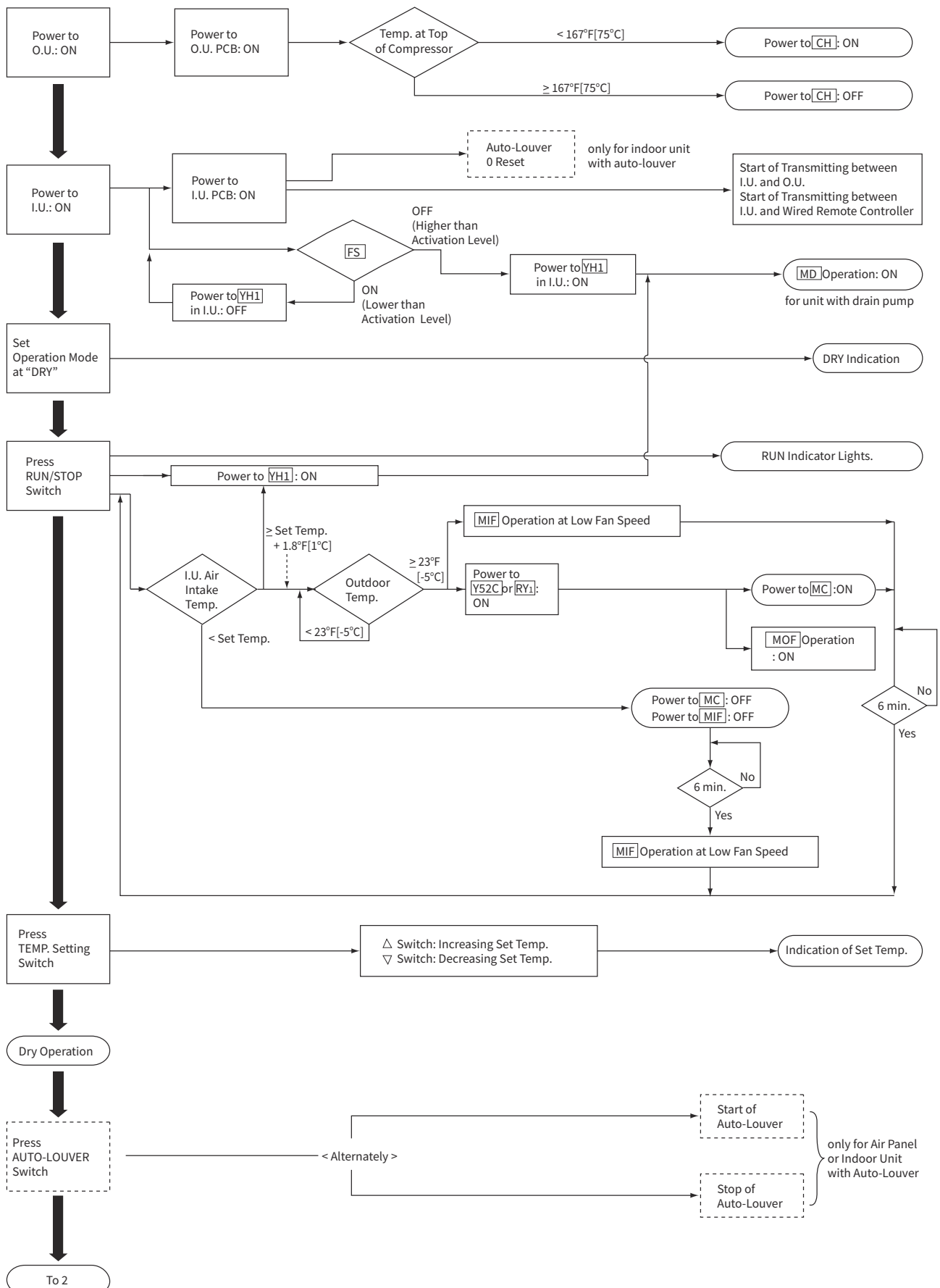


NOTES:

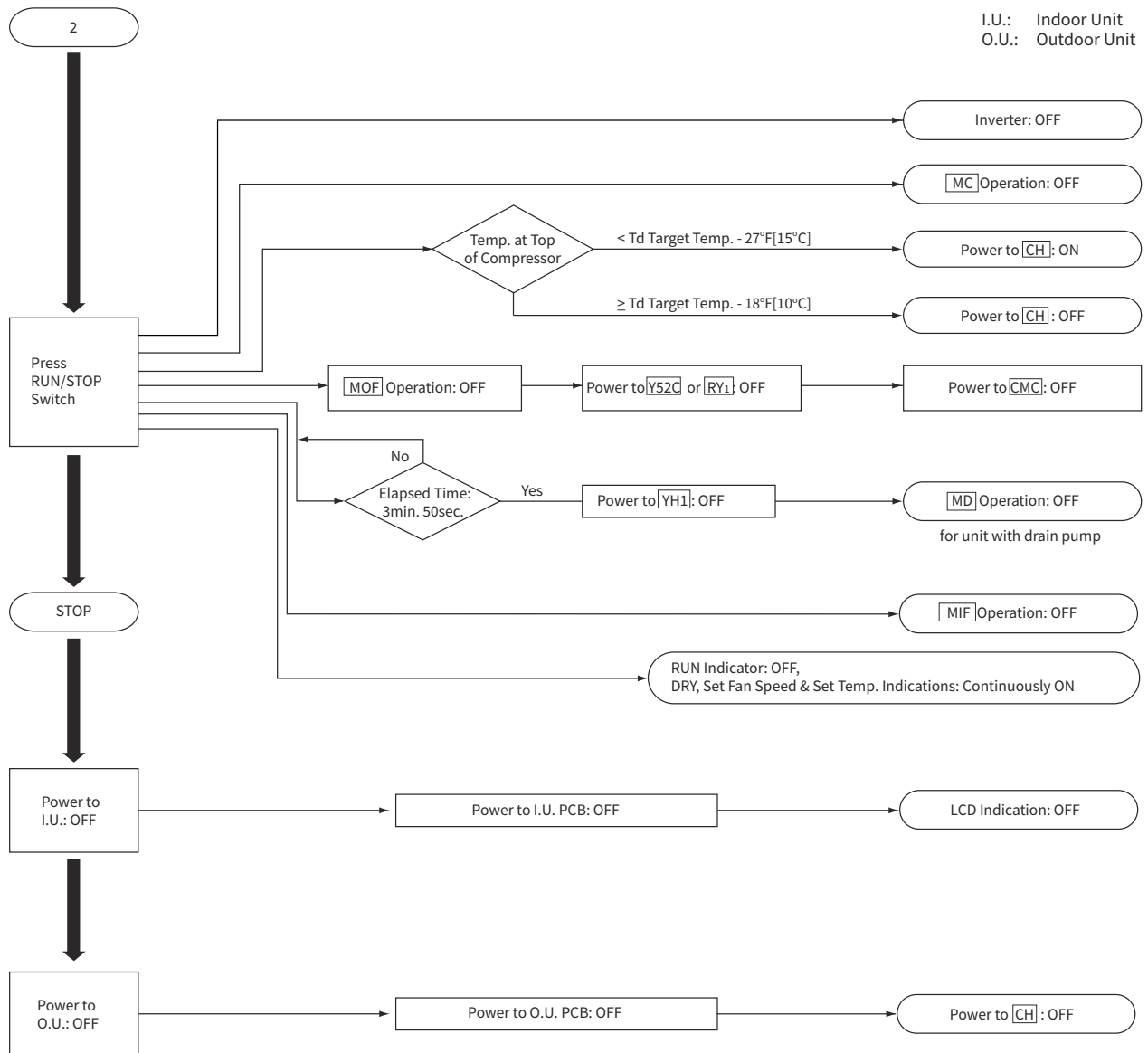
Tfin: Temp. at Inverter
Td: Temp. at Top of Compressor
Ta: Temp. at Ambient

■ Dry Operation

I.U.: Indoor Unit
O.U.: Outdoor Unit

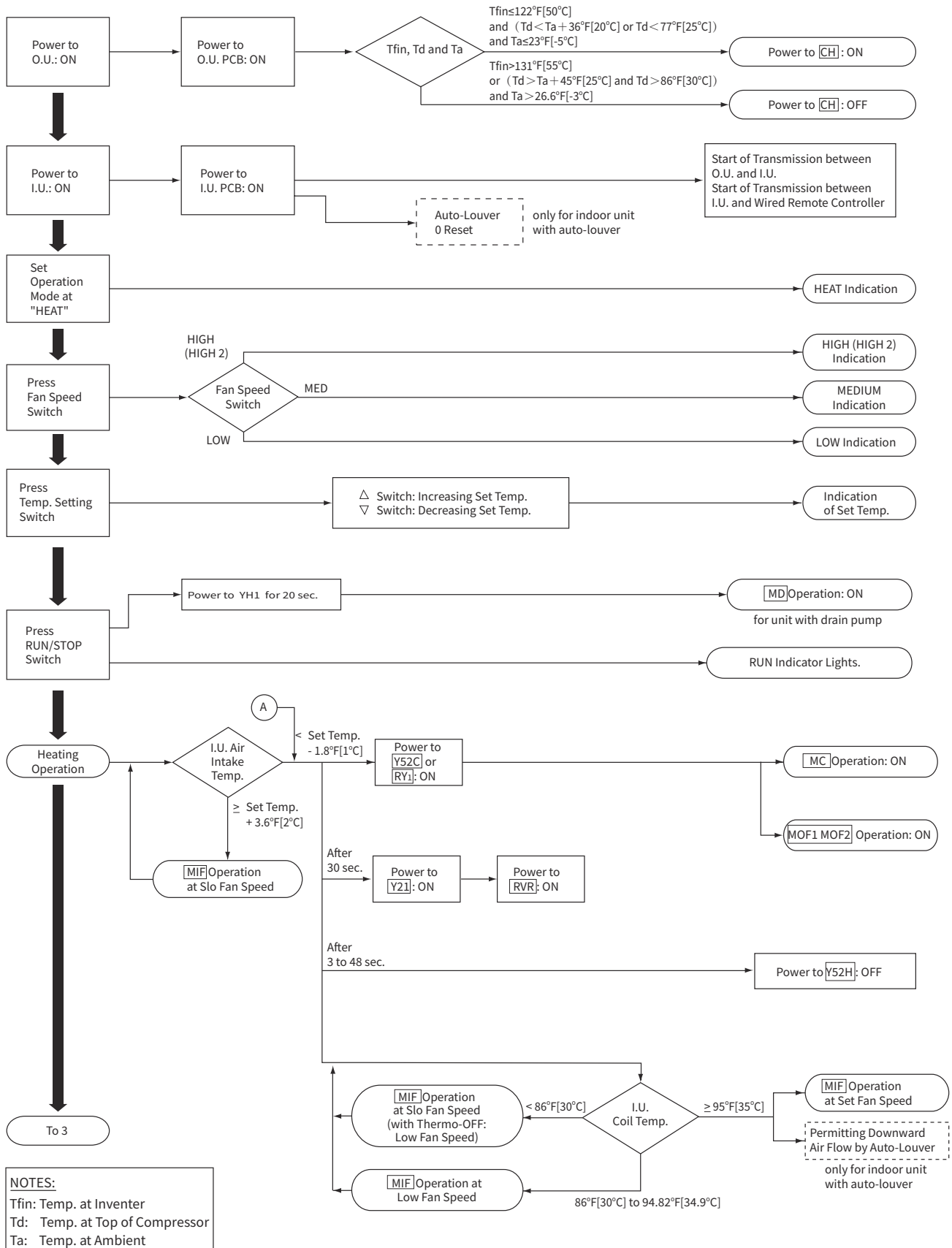


■ Dry Operation

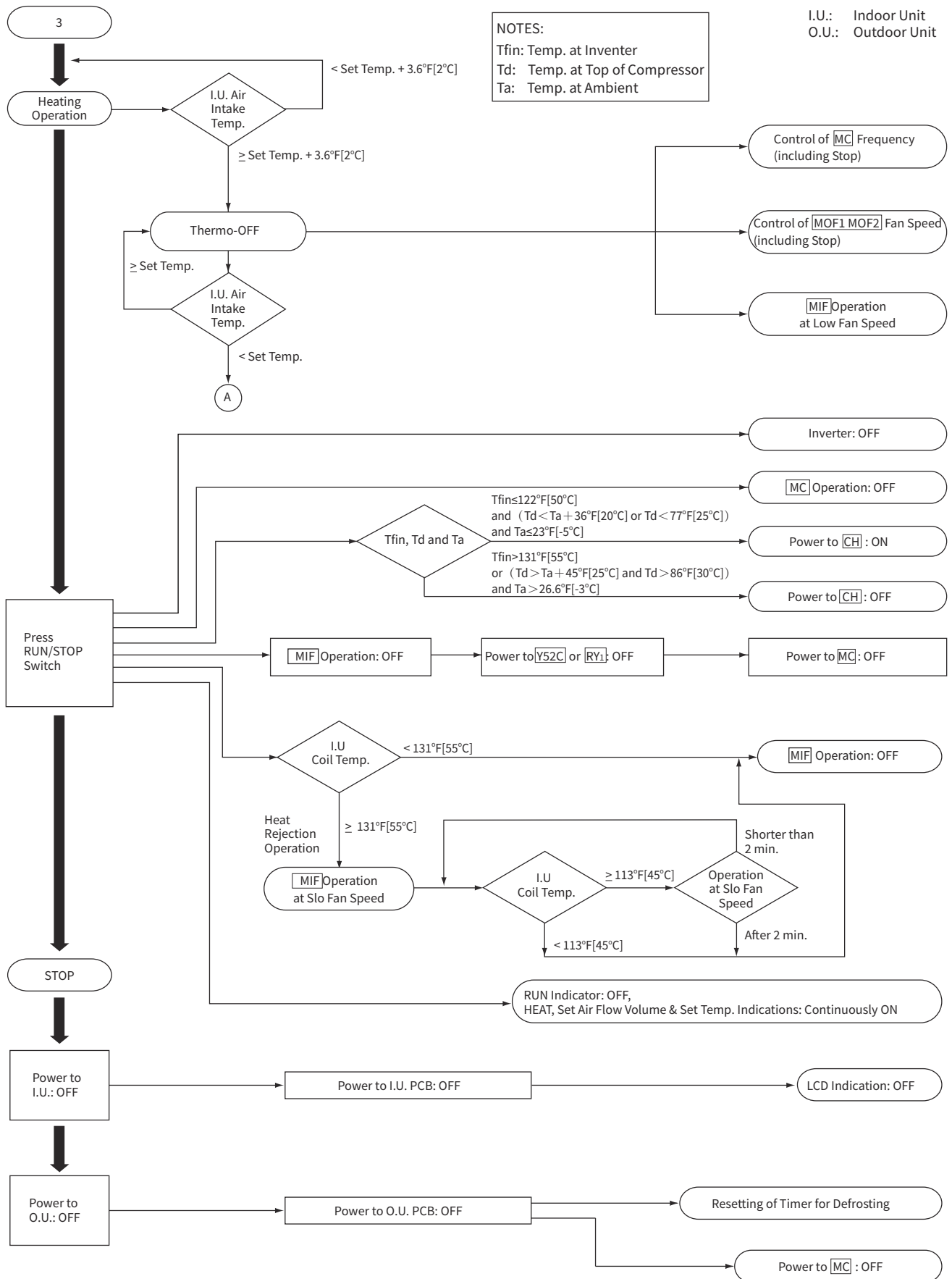


■ Heating Operation

I.U.: Indoor Unit
O.U.: Outdoor Unit

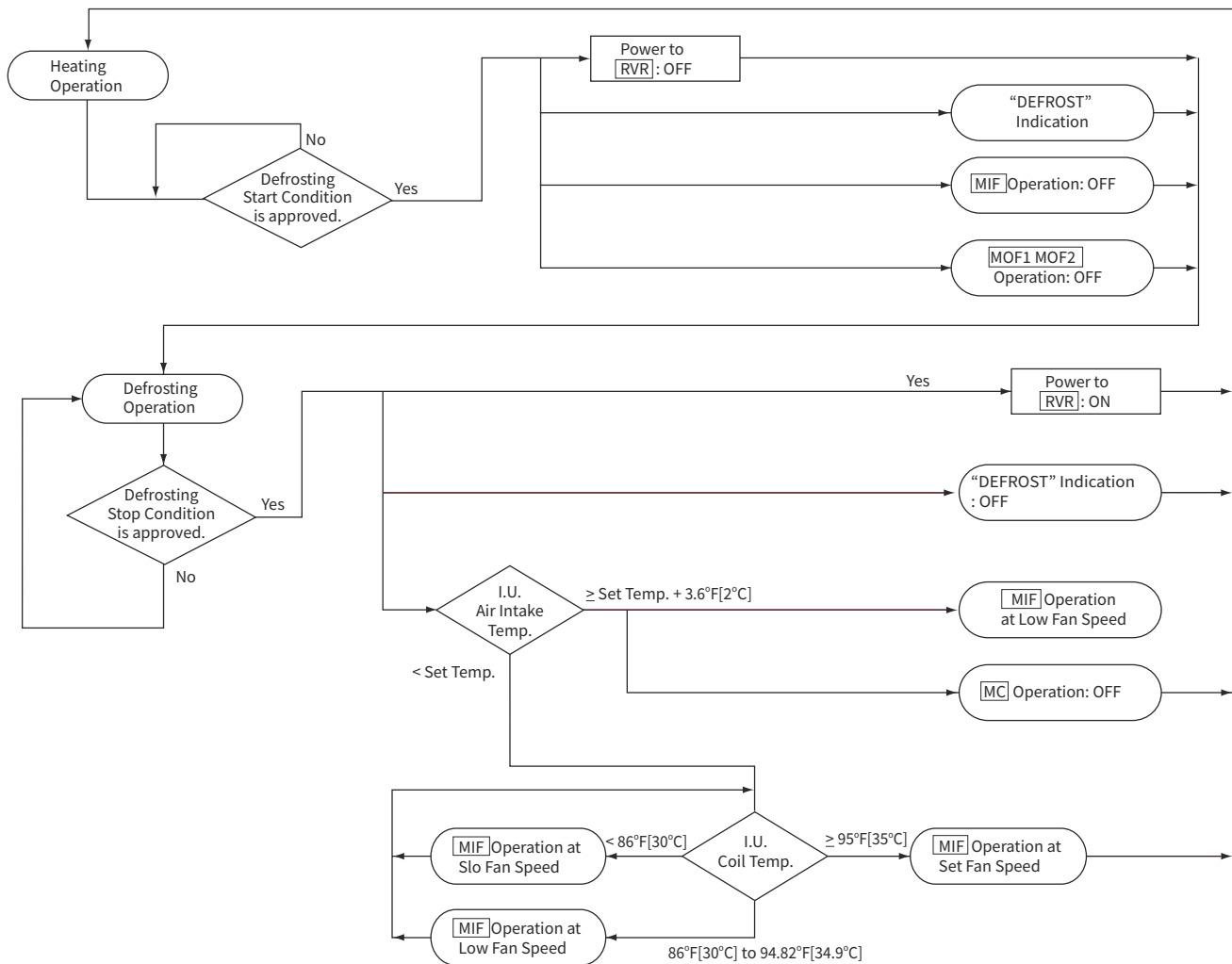


■ Heating Operation



■ Defrosting Operation

I.U.: Indoor Unit



10.2.1 Defrosting Operation

The following defrosting operations, “Standard Defrost”, “Forced Defrost” and “Manual Defrost” are available.

- (1) Standard Defrost
This operation is started according to the outdoor temperature, the outdoor evaporating temperature and operating time.
- (2) Forced Defrost
This operation starts when the indoor unit is operated Thermo-ON/OFF repeatedly and the standard defrost is not used.
- (3) Manual Defrost
This operation starts when the push switch “PSW1” on the outdoor PCB is pressed and hold for more than 3 seconds during the maintenance work. (It is not performed when the defrosting operation is started, the high pressure and the outdoor evaporating temperature is high.)

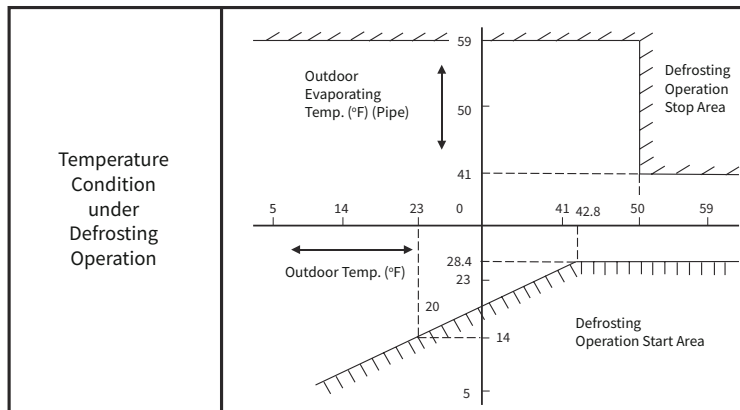
NOTE:

- Do not repeat defrost operation frequently.

10.2.2 Condition for Starting Defrost

(1) Standard Defrost

(a) Temperature Condition



(b) Condition for Operating Time of Defrost Operation Start

The defrosting operation is started when the temperature condition is met “(a) Temperature Condition” after the heating operation is performed for 30 to 120 minutes. The heating operation time is determined by estimating the amount of frosting on the heat exchanger.

(2) Forced Defrost

< Condition for Starting >

The forced defrosting operation is started when all the following conditions are met.

- 120 minutes are passed after the reversing valve is “ON”.
- The outdoor temperature is lower than 50°F(10°C).
- The accumulated heating operation time is more than 120 minutes.
(The accumulated time is reset when the operation is stopped or the defrosting operation is performed.)
- The compressor is operated continuously for more than 1 and half minutes.
- The outdoor evaporating temperature is lower than 41°F(5°C) right before starting the operation.
- The pressure switch for control is “OFF”.

10.2.3 Condition for Completing Defrost Operation

The defrosting operation is stopped when any of following conditions are met.

- The outdoor evaporating temperature becomes more than 77°F(25°C) for 2 minutes from starting the defrosting operation.
- The outdoor evaporating temperature becomes more than 59°F(15°C) (the outdoor temperature < 50°F[10°C]) after passing 2 minutes from starting the defrosting operation.
- The outdoor evaporating temperature becomes more than 41°F(5°C) (the outdoor temperature ≥ 50°F[10°C]) after passing 2 minutes from starting the defrosting operation.
- The pressure switch for control is “ON”.
- More than 9 minutes are passed after starting the defrosting operation.

NOTES:

- The defrosting operation is not started immediately even if the above conditions are met.
(The defrosting condition may be met temporally depending on the refrigerant cycle variability.)
- The defrosting operation is started when the conditions are met continuously for period of time.

□ Prevention Control for High Pressure Increase during Cooling Operation

This function is performed to prevent the abnormal condition (Alarm Code: 02) when the air flow volume is decreased by a seasonal wind against air outlet of the outdoor unit. When the following conditions are met, the forced Thermo-OFF operation will be performed.

The cause of stoppage will be 13 during Thermo-OFF.

- (1) **Y52C** is turned "ON" during the cooling operation, or **RY1** is turned "ON" (during the compressor operation).
- (2) High Pressure $\geq 602\text{Psig}(4.15\text{MPa})$

10.3 Protection and Safety Control

Compressor Protection

The compressor is protected by the following devices and their combinations.

Pressure Switch-High

This switch cuts out the operation of the compressor when the discharge pressure exceeds the setting.

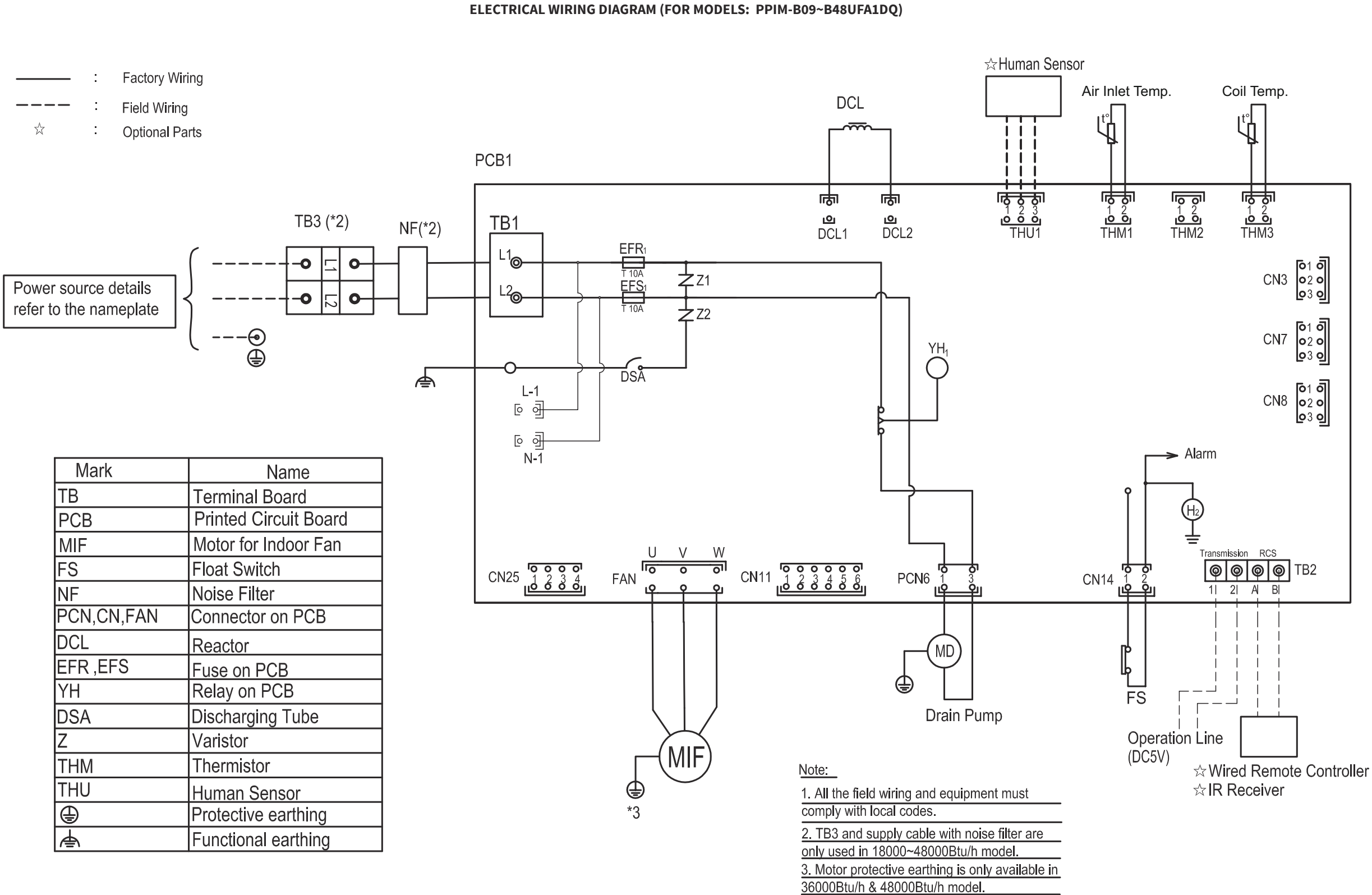
Indoor Unit Safety and Control Device Setting

Model		PPIM-B09UFA1DQ PPIM-B12UFA1DQ PPIM-B18UFA1DQ PPIM-B24UFA1DQ PPIM-B30UFA1DQ	PPIM-B36UFA1DQ PPIM-B48UFA1DQ	PCIM-B09UFA1DQ PCIM-B12UFA1DQ PCI-B18UFA1DQ PCI-B24UFA1DQ PCI-B30UFA1DQ PCI-B36UFA1DQ PCI-B48UFA1DQ	PPFC-B09UFA1DQ PPFC-B12UFA1DQ PPFC-B18UFA1DQ PPFC-B24UFA1DQ PPFC-B30UFA1DQ PPFC-B36UFA1DQ PPFC-B48UFA1DQ	PPK-B09UFA1DQ PPK-B12UFA1DQ PPK-B18UFA1DQ PPK-B24UFA1DQ PPK-B30UFA1DQ	
For Control Circuit Fuse Capacity		A	10	10	5	5	5
Freeze Protection Thermostat	Cut-Out	°F(°C)	32(0)				
	Cut-In	°F(°C)	57.2(14)				
Thermostat Differential		°F(°C)	3.6(2)				

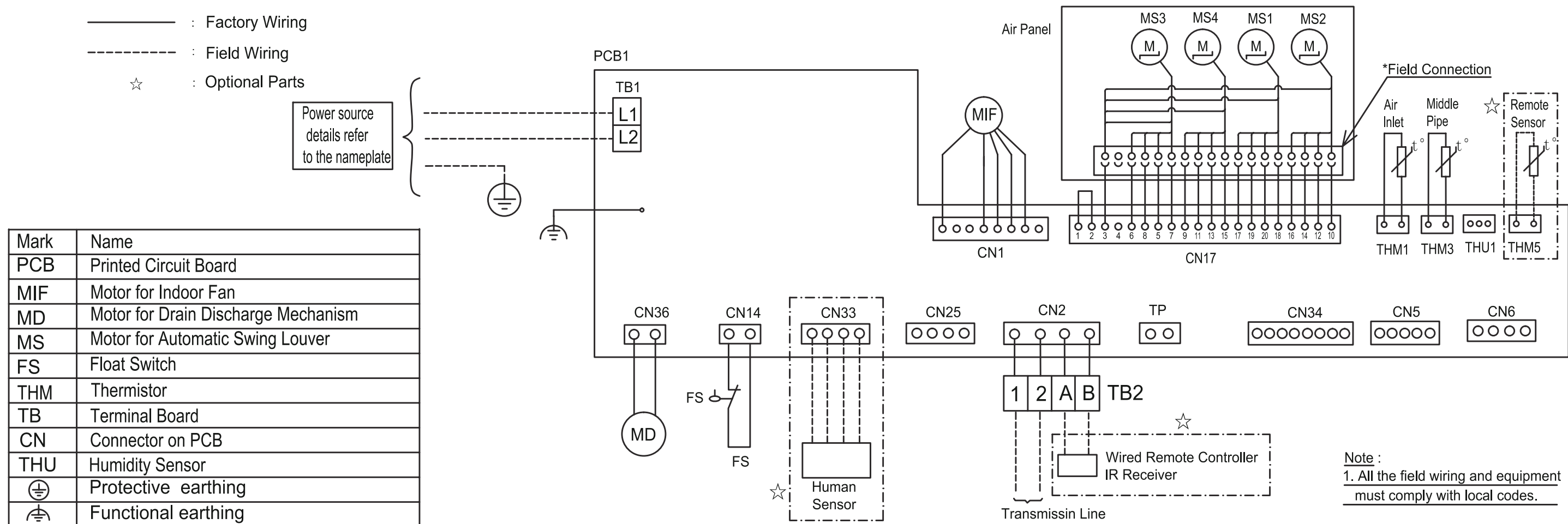
Outdoor Unit Safety and Control Device Setting

Model		PAS-09BUFASDQ1 PAS-12BUFASDQ1 PAS-18BUFASDQ1 PAS-24BUFASDQ1	PAS-30BUFASDQ1 PAS-36BUFASDQ1 PAS-48BUFASDQ1
For compressor Pressure Switch High	Psig [MPa]	602[4.15]/464[3.2](OFF/ON)	
Discharge Gas Thermistor	°F [°C]	239[115](OFF) Cooling 239[115](OFF) Heating	
For Power Source Fuse Capacity	A	30	50

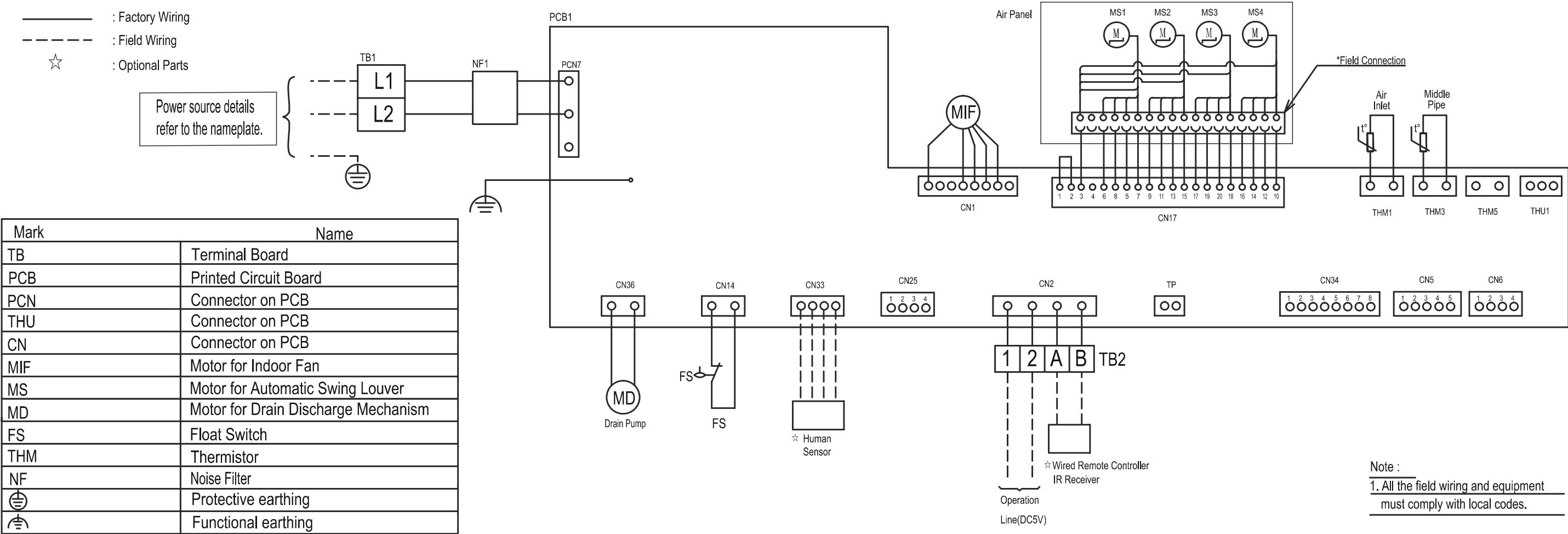
10.4 Electrical Wiring Diagram
10.4.1 Indoor Units



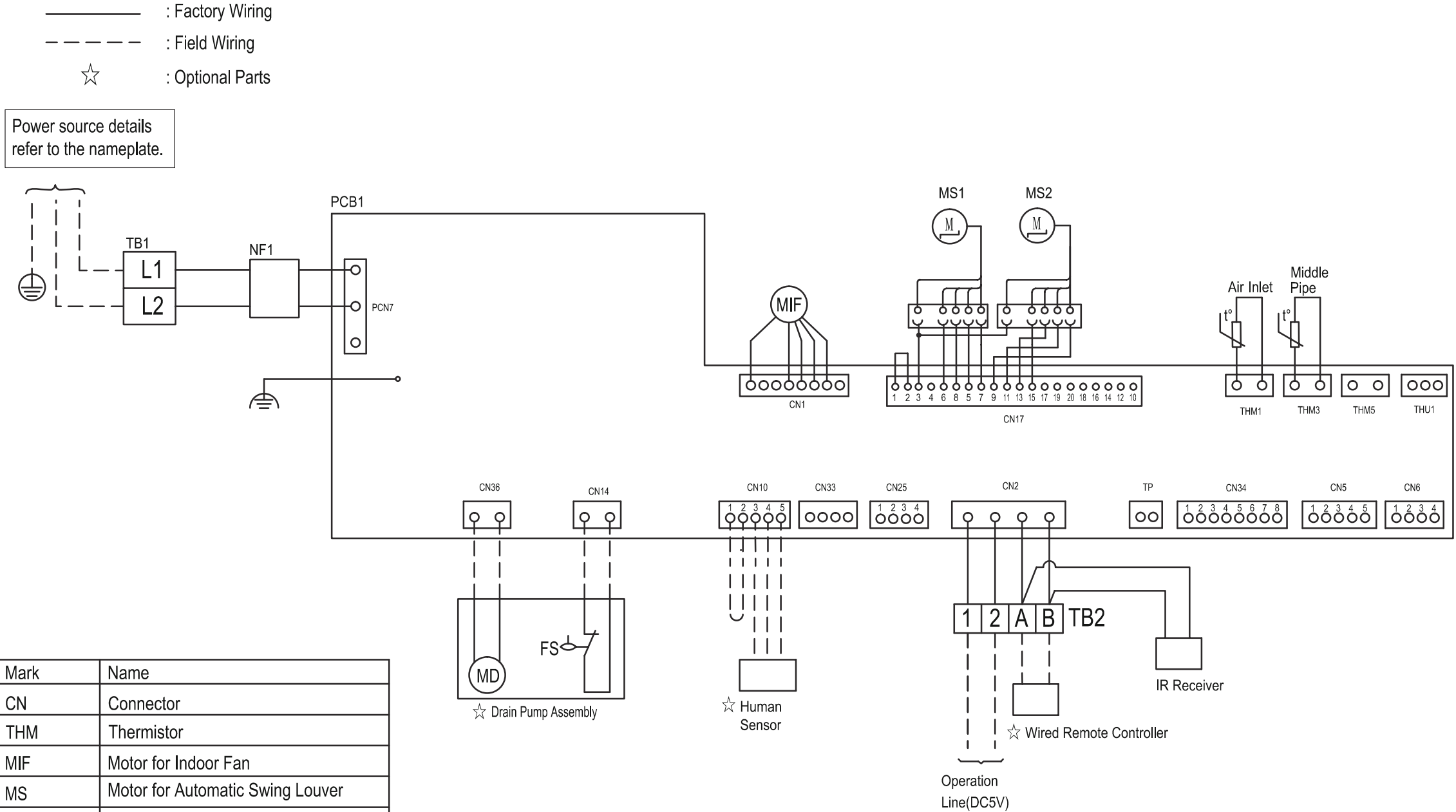
ELECTRICAL WIRING DIAGRAM (FOR MODELS: PCIM-B09~B12UFA1DQ)



ELECTRICAL WIRING DIAGRAM (FOR MODELS: PCI-B12~B48UFA1DQ)

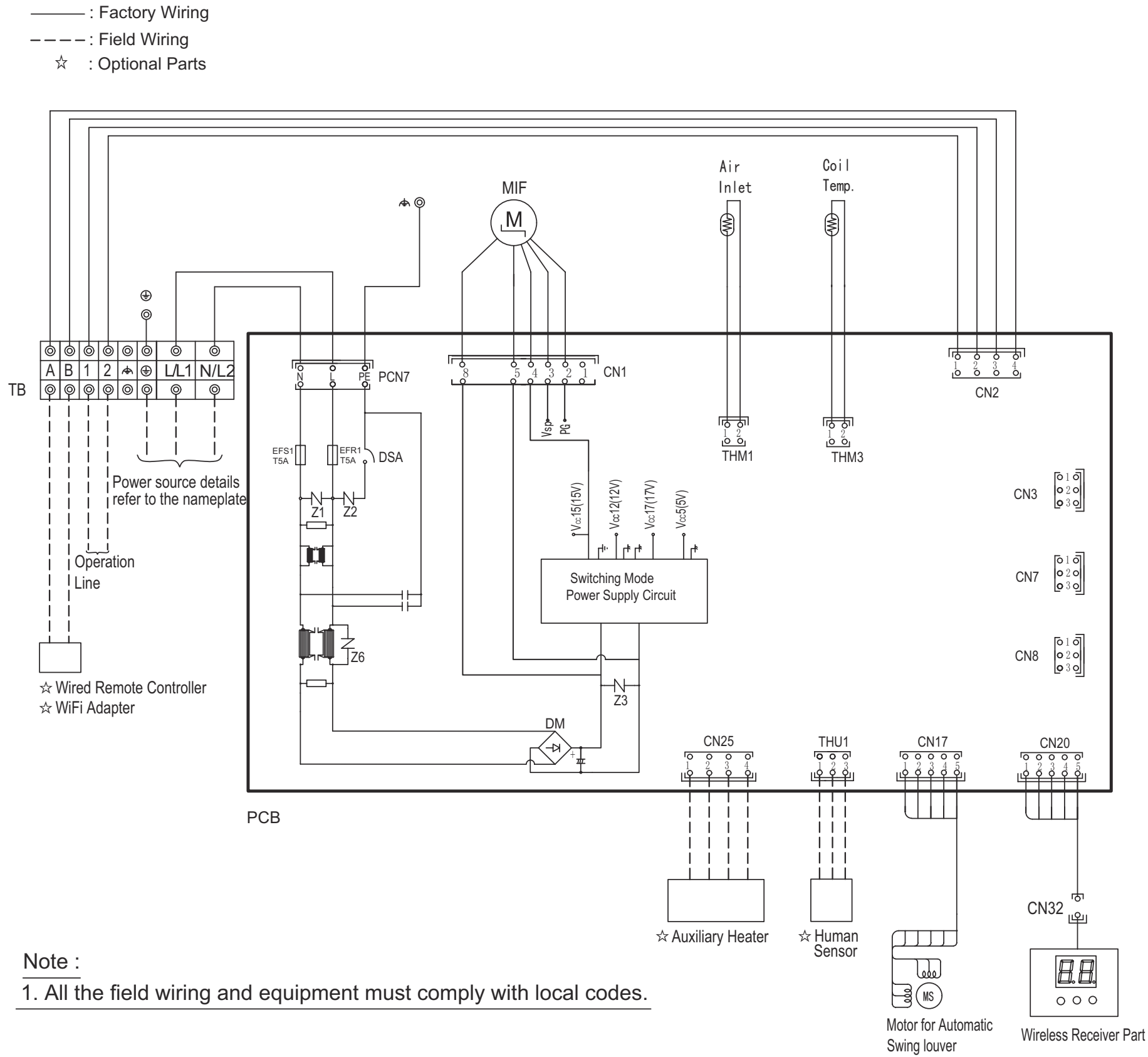


ELECTRICAL WIRING DIAGRAM (FOR MODELS: PPFC-B09~B48UFA1DQ)



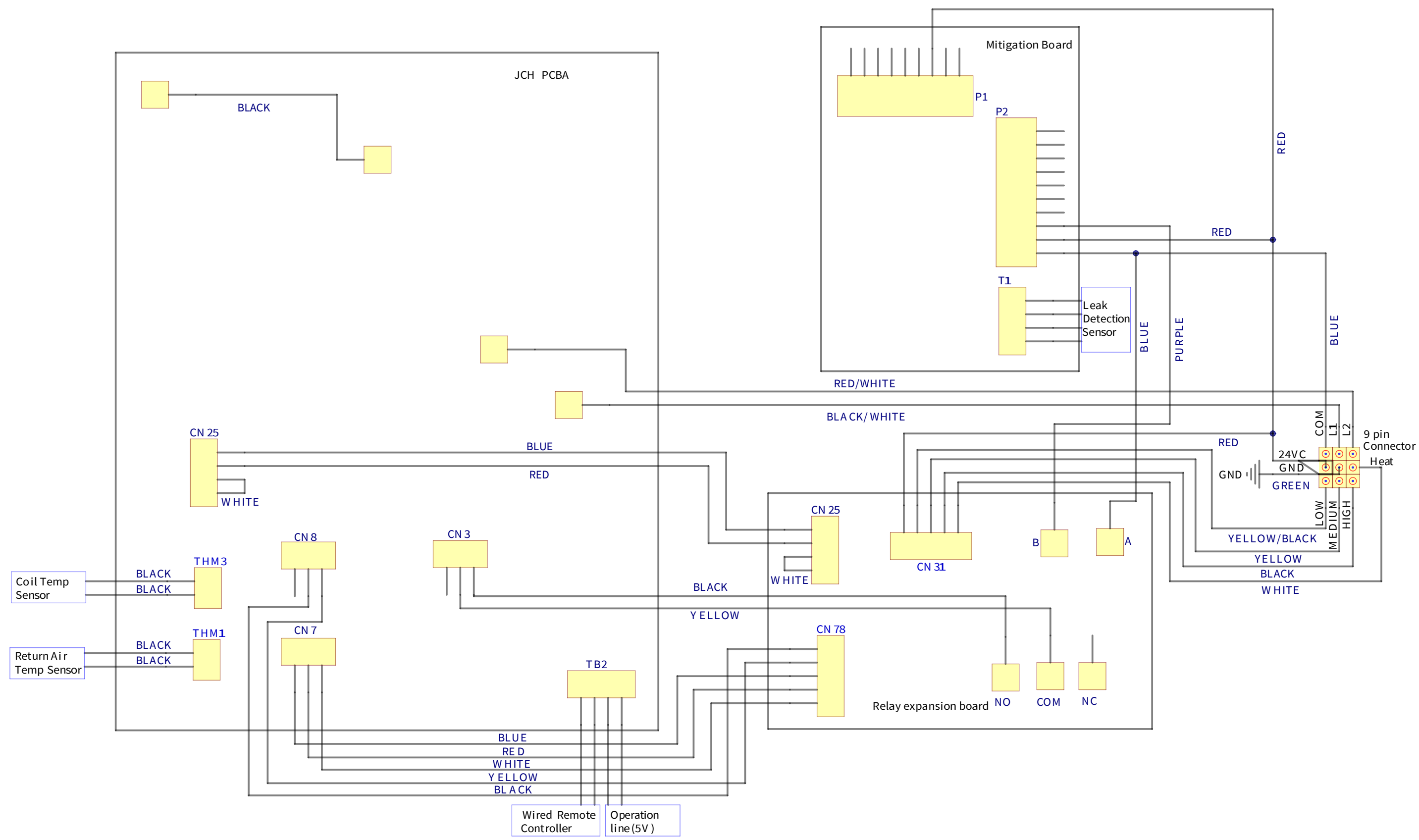
Note:
1.All the field wiring and equipment must comply with local codes.

ELECTRICAL WIRING DIAGRAM (FOR MODELS: PPK-B09~B30UFA1DQ)



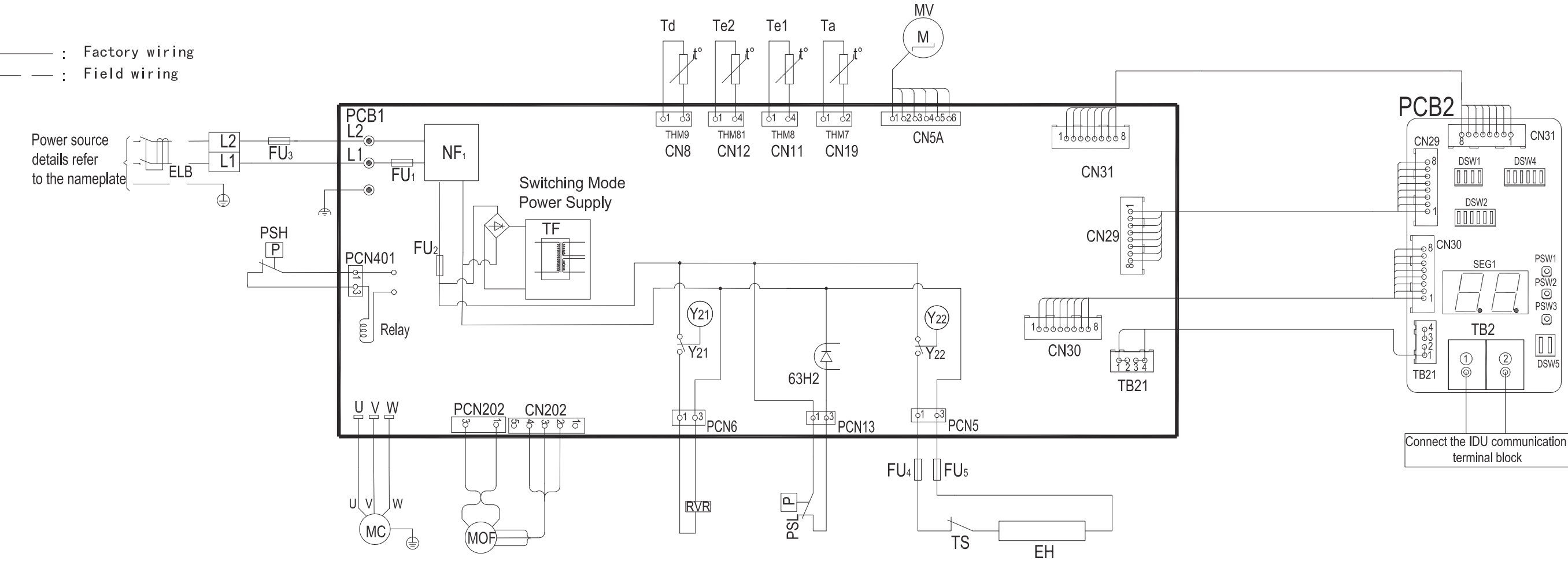
Mark	Name
PCB	Printed Circuit Board
MIF	Motor for Indoor Fan
THM1,3	Connector
THU1	Connector
CN	Connector
PCN7	Connector
EFR1	Fuse
EFS1	Fuse
Z	Varistor
DM	Bridge Rectifier
DSA	Discharging Tube
TB	Terminal Board
	Protective Earthing
	Functional Earthing
Air Inlet	Temperature Thermistor
Coil Temp.	Temperature Thermistor

ELECTRICAL WIRING DIAGRAM (FOR MODELS: JPE18B3XB2HS1A/JPE24B3XC2HS1A/JPE30~36B3XD2HS1A/JPE48C3XG2HS1A)



10.4.2 Outdoor Units

ELECTRICAL WIRING DIAGRAM (FOR MODELS: PAS-09~24BUFASDQ1)



[Fault code description]

Fault codes	Fault content	Main reason
01	Indoor protection device action	High water level, abnormal drainage pipe, abnormal float switch, abnormal water tray
02	ODU Pressure Switch-High protection	Pressure Switch-High protection
03	IDU interruption of communication	Abnormal communication line ODU fuse blown
04	Communication failure of frequency converter	Abnormal communication line between the main control board and the driver board; ODU fuse blown
05	Power phase abnormality	Reverse phase of power wiring and missing phase of power wiring
06	Abnormal voltage of frequency converter	ODU substrate abnormality, frequency conversion substrate abnormality, DM, CB abnormality
07	TdSH too low	Excessive refrigerant, expansion valve locked open (connection detached) Wiring errors in refrigerant and electrical systems between indoor and outdoor units
08	Abnormal temperature rise at the top of the compressor (Td)	Insufficient refrigerant, leakage, blocked piping, blocked expansion valve
(11)	Abnormal return air temperature sensor	Sensor wiring error, disconnection, short circuit
(12)	Abnormal air outlet temperature sensor	
(13)	Abnormal temperature sensor in indoor pipe	
(14)	Abnormal resistance of air duct temperature sensor	
(16)	Remote control temperature sensor abnormal	
(17)	The built-in temperature sensor of the wire controller is abnormal	
(19)	Abnormal indoor fan motor	Indoor fan motor overheated and blocked
20	Td sensor failure	Sensor wiring error, disconnection, short circuit
22	Ta sensor failure	Sensor wiring error, disconnection, short circuit
24	Te1 sensor failure	Sensor wiring error, disconnection, short circuit
26	Te2 sensor failure	Sensor wiring error, disconnection, short circuit
31	Internal and external machine capacity mismatch	Incorrect outdoor and indoor capacity settings, total indoor capacity too large or too small, incorrect outdoor unit series and electrical system settings
35	Indoor and outdoor unit number setting error	Different indoor units within the same refrigerant piping system are set to the same unit number
36	Indoor unit combination error	Inconsistent brand or series of indoor and outdoor units
38	Abnormal detection circuit of outdoor unit protection	The wiring of the outdoor unit substrate has incorrect wiring
47	Pressure Switch-Low alarm	Insufficient refrigerant, blocked refrigerant piping, expansion valve locked closed (connection detached)
48	Inverter overcurrent protection action	Overload operation, abnormal compressor
5c	Abnormal current sensor	Current sensor fault, Motor failure, motor drive board failure
53	Frequency converter error signal detection	Abnormal compressor, ISPM (SIPM), blocked heat exchanger, etc
54	Abnormal temperature of the heat sink fins of the frequency converter	Abnormal heat sink temperature sensor, blocked heat exchanger, abnormal fan motor
55	The frequency converter does not operate	Abnormal frequency conversion substrate
57	Outdoor fan motor protection action	The connection wiring between the frequency conversion substrate and the fan motor is broken, incorrectly wired, and the fan motor is abnormal
58	Pressure Switch-Low alarm	Pressure Switch-Low protection action
EE	Compressor protection alarm (cannot be reset through wire control)	The alarm code that causes damage to the compressor appears three times within 6 hours: 02、07、08、39、43~45、47
b1	Address · refrigerant system setting error	When the address · refrigerant system setting exceeds 64

ICON	ICON Meaning
MC	Compressor
MOF	Fan motor
FU _{1~5}	Fuse
RVR	Four-way valve
PSL	Pressure Switch-Low
PSH	Pressure Switch-High
DCL	Inductor
PCB ₁	Main control board
PCB ₂	Expansion board
TB ₁	Power terminal block
TB ₂	Communication terminal block
NF ₁	Filter
CN,PCN	Wiring port
Ta	Ambient Temperature Sensor
Td	Discharge temperature sensor
Te1	Temperature sensor at the bottom of the coil
Te2	Temperature sensor in the middle of the coil
MV	Electronic expansion valve
	Protective Earthing
	Functional Earthing
TS	Temperature Switch
EH	Electrical Heating

[DSW settings (at the factory)]

■ Indicates the position of the Dip switch.

DSW1

ON

OFF

1

2

3

4

Test Run

DSW2

ON

OFF

1

2

3

4

5

6

Functional selection

DSW4

ON

OFF

1

2

3

4

5

6

Refrigerant selection

DSW5

ON

OFF

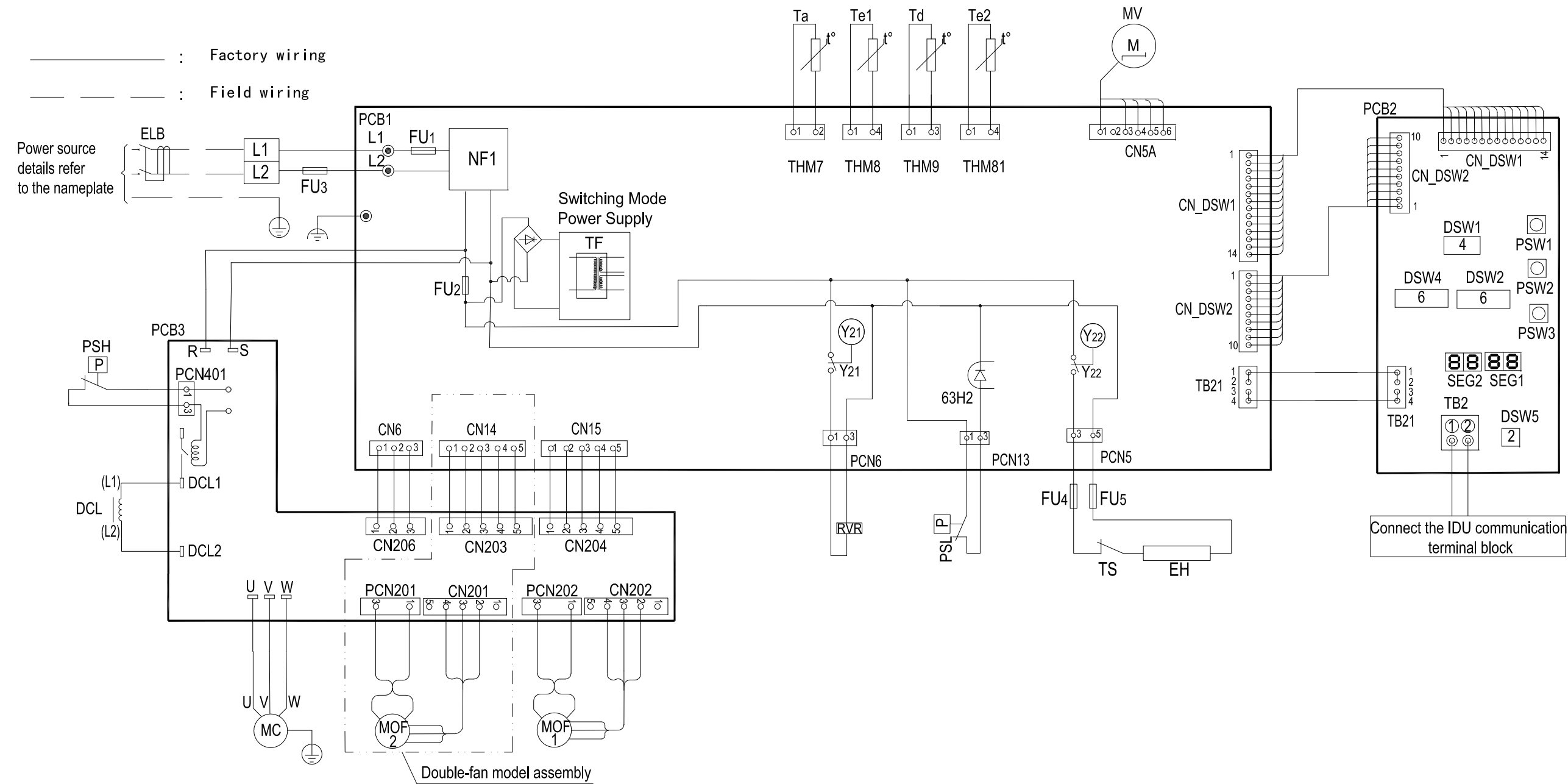
1

2

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153

ELECTRICAL WIRING DIAGRAM (FOR MODELS: PAS-30~48BUFASDQ1)



[Fault code description]

Fault codes	Fault content	Main reason
01	Indoor protection device action	High water level, abnormal drainage pipe, abnormal float switch, abnormal water tray
02	ODU Pressure Switch-High protection	Pressure Switch-High protection
03	IDU interruption of communication	Abnormal communication line ODU fuse blown
04	Communication failure of frequency converter	Abnormal communication line between the main control board and the driver board; ODU fuse blown
05	Power phase abnormality	Reverse phase of power wiring and missing phase of power wiring
06	Abnormal voltage of frequency converter	ODU substrate abnormality, frequency conversion substrate abnormality, DM, CB abnormality
07	TdSH too low	Excessive refrigerant, expansion valve locked open (connection detached) Wiring errors in refrigerant and electrical systems between indoor and outdoor units
08	Abnormal temperature rise at the top of the compressor (Td)	Insufficient refrigerant, leakage, blocked piping, blocked expansion valve
(11)	Abnormal return air temperature sensor	Sensor wiring error, disconnection, short circuit
(12)	Abnormal air outlet temperature sensor	
(13)	Abnormal temperature sensor in indoor pipe	
(14)	Abnormal resistance of air duct temperature sensor	
(16)	Remote control temperature sensor abnormal	
(17)	The built-in temperature sensor of the wire controller is abnormal	
(19)	Abnormal indoor fan motor	Indoor fan motor overheated and blocked
20	Td sensor failure	Sensor wiring error, disconnection, short circuit
22	Ta sensor failure	Sensor wiring error, disconnection, short circuit
24	Te1 sensor failure	Sensor wiring error, disconnection, short circuit
26	Te2 sensor failure	Sensor wiring error, disconnection, short circuit
31	Internal and external machine capacity mismatch	Incorrect outdoor and indoor capacity settings, total indoor capacity too large or too small, incorrect outdoor unit series and electrical system settings
35	Indoor and outdoor unit number setting error	Different indoor units within the same refrigerant piping system are set to the same unit number
36	Indoor unit combination error	Inconsistent brand or series of indoor and outdoor units
38	Abnormal detection circuit of outdoor unit protection	The wiring of the outdoor unit substrate has incorrect wiring
47	Pressure Switch-Low alarm	Insufficient refrigerant, blocked refrigerant piping, expansion valve locked closed (connection detached)
48	Inverter overcurrent protection action	Overload operation, abnormal compressor
5c	Abnormal current sensor	Current sensor fault, Motor failure, motor drive board failure
53	Frequency converter error signal detection	Abnormal compressor, ISPM (SIPM), blocked heat exchanger, etc
54	Abnormal temperature of the heat sink fins of the frequency converter	Abnormal heat sink temperature sensor, blocked heat exchanger, abnormal fan motor
55	The frequency converter does not operate	Abnormal frequency conversion substrate
57	Outdoor fan motor protection action	The connection wiring between the frequency conversion substrate and the fan motor is broken, incorrectly wired, and the fan motor is abnormal
58	Pressure Switch-Low alarm	Pressure Switch-Low protection action
EE	Compressor protection alarm (cannot be reset through wire control)	The alarm code that causes damage to the compressor appears three times within 6 hours: 02、07、08、39、43~45、47
b1	Address · refrigerant system setting error	When the address · refrigerant system setting exceeds 64

ICON	ICON Meaning
MC	Compressor
MOF	Fan motor
FU _{1~5}	Fuse
RVR	Four-way valve
PSL	Pressure Switch-Low
PSH	Pressure Switch-High
DCL	Inductor
PCB ₁	Main control board
PCB ₂	Expansion board
TB ₁	Power terminal block
TB ₂	Communication terminal block
NF ₁	Filter
CN,PCN	Wiring port
Ta	Ambient Temperature Sensor
Td	Discharge temperature sensor
Te1	Temperature sensor at the bottom of the coil
Te2	Temperature sensor in the middle of the coil
MV	Electronic expansion valve
	Protective Earthing
	Functional Earthing
PCB ₃	Drive board
TS	Temperature Switch
EH	Electrical Heating

[DSW settings (at the factory)]

■ Indicates the position of the Dip switch.

DSW1	DSW2	DSW4	DSW5
ON  OFF 1 2 3 4	ON  OFF 1 2 3 4 5 6	ON  OFF 1 2 3 4 5 6	ON  OFF 1 2
Test Run	Functional selection	Refrigerant selection	

11. Miscellaneous Notes

Special Notes

1. Avoid obstacles which may restrict the air intake or the discharge flow.
2. Do not install the unit in a machinery shop or kitchen where vapor from oil or its mist can enter to the unit.
The oil will deposit on the heat exchanger, thereby reducing the unit performance, and may deform, in the worst case, break the plastic parts of the unit.
3. Pay attention to the following points when the unit is installed in a hospital or other facilities where electromagnetic wave is radiated from medical equipment.
 - (a) Do not install the unit where the electromagnetic wave is directly radiated to the electrical box, remote control cable or remote control switch.
 - (b) Install the unit and component as far as practical (at least 10ft(3m)) from the electromagnetic wave radiator.
 - (c) Prepare a steel box and install the remote control switch in it. Prepare a steel conduit pipe and wire the remote control cable in it. And then, connect earth wire with the box and the pipe.
 - (d) Install a noise filter when the power supply emits harmful noise.
4. Do not install the units in an acid or alkaline environment due to the corrosive action on the heat exchanger. In the case that outdoor units are installed near the sea, it is recommended that optional corrosion-resistant type outdoor unit be used.
5. Do not install the units in a flammable environment due to the danger of an explosion.
6. During heating operation, the outdoor heat exchanger produces condensate dew or melting water from frost. Install the outdoor unit where drainage of such water is convenient, or provide a drain passage.
7. Heating Performance: The heating capacity normally decreases when outdoor temperatures decrease.
8. In the case that an outdoor temperature is low and humidity is high, the outdoor heat exchanger will covered with frost, resulting in lower heating capacity. In order to remove the frost, the unit is automatically changed to the defrosting mode. During this defrosting operation, the unit is stopped for approximately 3 to 9 minutes.
9. As this unit is of heat pump type by circulating hot air in the whole room space, it takes time to heat up the room temperature.
10. The operating sound data is based on an anechoic chamber. Therefore, the actual operating sound will be higher due to reflected sound from the floor and wall.
11. In the case that the unit is operated for a long time higher than the indoor temperature of 80.6°F(27°C) DB or the humidity of 80%, dewing may occur on the cabinets resulting in dew drops.
If dewing, it is required to add thermal insulator on the cabinets.
12. Provide snow-protection hoods to prevent the outdoor heat exchanger from snow clogging.
If the unit is operated in an area where it snows heavily, provide a base under the outdoor unit which should be 1.6ft(0.5m) higher than the presumable maximum snow height.
13. It is recommended that periodical service and maintenance be performed by authorized service engineers before air conditioning seasons, in order to avoid performance decrease due to dust or dirt.
14. This heat pump air conditioner has been designed for human comfort air conditioning only. Do not apply to other purposes such as for food, animals, plants, high precision machines or work of art. Also do not apply to vehicles or vessels. It will results in water leakage or electrical leakage.
15. It is recommended that the system be installed by authorized engineers. If not, it may cause water leakage, electric shock or fire.
16. In a place where fibers or dusts are floating, the air filter or heat exchangers or the drain pipe may be clogged, resulting in water leakage from the drain pan.

Specifications in this document are subject to change without notice, in order that Hitachi-Johnson Controls Air Conditioning, Inc. may bring the latest innovations to their customers.

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