Changes for the Better

MITSUBISHI ELECTRIC

SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS

September 2007

No. OCS08
REVISED EDITION-A

# TECHNICAL DATA BOOK R410A

<Indoor unit>

[Model names]

## INVERTER

**PLA-RP·BA**
**PEAD-RP·EA**
**PEAD-RP·EA2**
**PEAD-RP·GA**
**PEA-RP·GA**
**PKA-RP·GAL**
**PKA-RP·FAL**
**PKA-RP·FAL2**
**PCA-RP·GA**
**PCA-RP·GA2**
**PCA-RP·HA**
**PSA-RP·GA**

Revision:
- PUHZ-P·YHA and PEA-RP·GA are added in REVISED EDITION-A.
- Some descriptions have been modified.

- Please void OCS08.

<Outdoor unit>

[Model names]

**PUHZ-P100/125/140VHA2**
**PUHZ-P200/250YHA**

CONTENTS



kW Model

Mr.SLIM™

# 1 REFERENCE SERVICE MANUAL

For information on service, please refer to the service manual as follows.

## 1-1. INDOOR UNIT

| Model name | Service Ref. | Service Manual No. |
|---|---|---|
| PLA-RP50/60/71/100/125/140BA | PLA-RP50/60/71/100/125/140BA.UK | OCH412<br>OCB412 |
| PCA-RP50/60/71/100/125/140GA<br>PCA-RP50GA2 | PCA-RP50/60/71/100/125/140GA<br>PCA-RP50GA2 | OC328 |
| PCA-RP71/125HA | PCA-RP71/125HA | OC329 |
| PKA-RP50GAL | PKA-RP50GAL | OC330 |
| PKA-RP60/71/100FAL<br>PKA-RP50FAL2 | PKA-RP60/71/100FAL<br>PKA-RP50FAL2 | OC331 |
| PSA-RP71/100/125/140GA | PSA-RP71/100/125/140GA | OC332 |
| PEAD-RP50/60/71/125/140EA<br>PEAD-RP100EA2 | PEAD-RP50/60/71/125/140EA.UK<br>PEAD-RP100EA2.UK | HWE05210 |
| PEAD-RP60/71/100GA | PEAD-RP60/71/100GA.UK | HWE05060 |
| PEA-RP200/250/400/500GA | PEA-RP200/250/400/500GA.TH-AF<br>PEA-RP200/250GA.TH-AFMF | HWE0708A |

## 1-2. OUTDOOR UNIT

| Model name | Service Ref. | Service Manual No. |
|---|---|---|
| PUHZ-P100/125/140VHA2 | PUHZ-P100/125/140VHA2.UK | OCH415<br>OCB415 |
| PUHZ-P200/250YHA | PUHZ-P200/250YHA | OCH424<br>OCB424 |

# 2 SPECIFICATIONS

## 2-1. CEILING CASSETTE TYPE

| Model name | Indoor unit | | PLA-RP100BA | PLA-RP125BA | PLA-RP140BA |
|---|---|---|---|---|---|
| | Outdoor unit | | PUHZ-P100VHA2 | PUHZ-P125VHA2 | PUHZ-P140VHA2 |
| Cooling | Capacity | Btu/h | 32,100 | 42,000 | 46,400 |
| | | kW | 9.4(4.9-11.2) | 12.3(5.5-14.0) | 13.6(5.5-15.0) |
| | Total input | kW | 3.12 | 4.09 | 5.21 |
| | EER | | 3.01 | 3.01 | 2.61 |
| | Energy label class | | B | B | D |
| | SHF | | 0.74 | 0.71 | 0.71 |
| Heating | Capacity | Btu/h | 38,200 | 47,800 | 54,600 |
| | | kW | 11.2(4.5-12.5) | 14.0(5.0-16.0) | 16.0(5.0-18.0) |
| | Total input | kW | 3.28 | 4.11 | 4.98 |
| | COP | | 3.41 | 3.41 | 3.21 |
| | Energy label class | | B | B | C |
| | Booster heater | kW | - | - | - |
| Power supply | Phase | ϕ | 1 | | |
| | Cycle | Hz | 50 | | |
| | Voltage | V | 230 | | |
| | Breaker size | A | 32 | | 40 |
| Indoor unit | Air flow | CMM | 20-23-26-30 | 22-25-28-31 | 24-26-29-32 |
| | (Low-Medium2-Medium1-High) | CFM | 710-810-920-1060 | 780-880-990-1090 | 850-920-1020-1130 |
| | External pressure | Pa | 0 | 0 | 0 |
| | Sound level (Low-Medium2-Medium1-High) | dB(A) | 32-34-37-40 | 34-36-39-41 | 36-39-42-44 |
| | External finish (Panel) | | White Munsell 6.4Y 8.9/0.4 | | |
| | Dimension | W : mm | 840 (950) | | |
| | Unit (Panel) | D : mm | 840 (950) | | |
| | | H : mm | 298 (35) | | |
| | | W : inch | 33-1/16 (37-3/8) | | |
| | | D : inch | 33-1/16 (37-3/8) | | |
| | | H : inch | 11-3/4 (1-3/8) | | |
| | Weight | kg | 25 (6) | | 27 (6) |
| | Unit (Panel) | lbs | 55 (13) | | 60 (13) |
| | Field drain pipe O.D. | mm | 32 | | |
| | | inch | 1-1/4 | | |
| Outdoor unit | Air flow | CMM | 60 | 100 | |
| | | CFM | 2,120 | 3,530 | |
| | Sound level at cooling | dB(A) | 50 | 51 | 52 |
| | Sound level at heating | dB(A) | 54 | 55 | 56 |
| | External finish | | Ivory Munsell 5Y 7/1 | | |
| | Dimension | W : mm | 950 | | |
| | | D : mm | 330+30 | | |
| | | H : mm | 943 | 1350 | |
| | | W : inch | 37-3/8 | | |
| | | D : inch | 13 + 1-3/16 | | |
| | | H : inch | 37-1/8 | 53-1/8 | |
| | Weight | kg | 75 | 99 | |
| | | lbs | 165 | 218 | |
| Refrigerant pipe size | Gas side O.D. | mm | 15.88 | | |
| | | inch | 5/8 | | |
| | Liquid side O.D. | mm | 9.52 | | |
| | | inch | 3/8 | | |
| Refrigerant pipe length | Height difference | m | Max. 30 | | |
| | Length | m | Max. 50 | | |

**NOTE:** 1. Rating conditions (ISO T1)
Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)
Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)
Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46℃ |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5℃ ※ |
| Heating | Upper limit | D.B. 28˚C | D.B. 21℃, W.B. 15℃ |
| | Lower limit | D.B. 17˚C | D.B. -11℃, W.B. -12℃ |

3. Guaranteed voltage
198~264V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit Single phase 230V 50Hz
Outdoor unit Single phase 230V 50Hz

※ If optional air protect guide is installed : D.B.-15℃

## 2-2. CEILING-CONCEALED TYPE

| Model name | Indoor unit | | PEAD-RP100EA2 | PEAD-RP125EA | PEAD-RP140EA |
|---|---|---|---|---|---|
| | Outdoor unit | | PUHZ-P100VHA2 | PUHZ-P125VHA2 | PUHZ-P140VHA2 |
| Cooling | Capacity | Btu/h | 32,100 | 42,000 | 46,400 |
| | | kW | 9.4(4.9-11.2) | 12.3(5.5-14.0) | 13.6(5.5-15.0) |
| | Total input | kW | 3.12 | 4.38 | 5.21 |
| | EER | | 3.01 | 2.81 | 2.61 |
| | Energy label class | | B | C | D |
| | SHF | | 0.86 | 0.83 | 0.84 |
| Heating | Capacity | Btu/h | 38,200 | 47,800 | 54,600 |
| | | kW | 11.2(4.5-12.5) | 14.0(5.0-16.0) | 16.0(5.0-18.0) |
| | Total input | kW | 3.28 | 4.11 | 4.98 |
| | COP | | 3.41 | 3.41 | 3.21 |
| | Energy label class | | B | B | C |
| | Booster heater | kW | - | - | - |
| Power supply | Phase | ϕ | 1 | | |
| | Cycle | Hz | 50 | | |
| | Voltage | V | 230 | | |
| | Breaker size | A | 32 | | 40 |
| Indoor unit | Air flow | CMM | 33.5-42 | 33.5-42 | 36.5-46 |
| | (Low-High) | CFM | 1183-1483 | 1183-1483 | 1288-1624 |
| | External pressure | Pa | 70(130) | | |
| | Sound level (Low-High) | dB(A) | 44-50 (130Pa : 46-52) | 44-50 (130Pa : 46-52) | 46-51 (130Pa : 47-53) |
| | External finish | | Galvanized sheets | | |
| | Dimension | W : mm | 1415 | | 1715 |
| | | D : mm | 740 | | |
| | | H : mm | 325 | | |
| | | W : inch | 55-11/16 | | 67-1/2 |
| | | D : inch | 29-1/8 | | |
| | | H : inch | 12-13/16 | | |
| | Weight | kg | 65 | 65 | 70 |
| | | lbs | 143 | 143 | 154 |
| | Unit drain pipe | | R1(External thread) | | |
| Outdoor unit | Air flow | CMM | 60 | 100 | |
| | | CFM | 2,120 | 3,530 | |
| | Sound level at cooling | dB(A) | 50 | 51 | 52 |
| | Sound level at heating | dB(A) | 54 | 55 | 56 |
| | External finish | | Ivory Munsell 5Y 7/1 | | |
| | Dimension | W : mm | 950 | | |
| | | D : mm | 330+30 | | |
| | | H : mm | 943 | 1350 | |
| | | W : inch | 37-3/8 | | |
| | | D : inch | 13 + 1-3/16 | | |
| | | H : inch | 37-1/8 | 53-1/8 | |
| | Weight | kg | 75 | 99 | |
| | | lbs | 165 | 218 | |
| Refrigerant pipe size | Gas side O.D. | mm | 15.88 | | |
| | | inch | 5/8 | | |
| | Liquid side O.D. | mm | 9.52 | | |
| | | inch | 3/8 | | |
| Refrigerant pipe length | Height difference | m | Max. 30 | | |
| | Length | m | Max. 50 | | |

**NOTE:** 1. Rating conditions (ISO T1)

Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)

Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)

Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46℃ |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5℃ ※ |
| Heating | Upper limit | D.B. 28˚C | D.B. 21℃, W.B. 15℃ |
| | Lower limit | D.B. 17˚C | D.B. -11℃, W.B. -12℃ |

3. Guaranteed voltage
198~264V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit Single phase 230V 50Hz
Outdoor unit Single phase 230V 50Hz

※ If optional air protect guide is installed : D.B.-15℃

| Model name | Indoor unit | | PEAD-RP100GA |
|---|---|---|---|
| | Outdoor unit | | PUHZ-P100VHA2 |
| Cooling | Capacity | Btu/h | 32,100 |
| | | kW | 9.4(4.9-11.2) |
| | Total input | kW | 3.60 |
| | EER | | 2.61 |
| | Energy label class | | D |
| | SHF | | 0.85 |
| Heating | Capacity | Btu/h | 38,200 |
| | | kW | 11.2(4.5-12.5) |
| | Total input | kW | 3.49 |
| | COP | | 3.21 |
| | Energy label class | | C |
| | Booster heater | kW | - |
| Power supply | Phase | $\phi$ | 1 |
| | Cycle | Hz | 50 |
| | Voltage | V | 230 |
| | Breaker size | A | 32 |
| Indoor unit | Air flow | CMM | 26.5-33 |
| | (Low-High) | CFM | 935-1165 |
| | External pressure | Pa | 10/50/70 |
| | Sound level (Low-High) | dB(A) | 40-43/42-45/42-46 (10/50/70Pa) |
| | External finish | | Galvanized sheets |
| | Dimension | W : mm | 1411 |
| | | D : mm | 740 |
| | | H : mm | 275 |
| | | W : inch | 55-9/16 |
| | | D : inch | 29-1/8 |
| | | H : inch | 10-13/16 |
| | Weight | kg | 50 |
| | | lbs | 111 |
| | Unit drain pipe O.D. | mm | 32 |
| | | inch | 1-1/4 |
| Outdoor unit | Air flow | CMM | 60 |
| | | CFM | 2,120 |
| | Sound level at cooling | dB(A) | 50 |
| | Sound level at heating | dB(A) | 54 |
| | External finish | | Ivory Munsell 5Y 7/1 |
| | Dimension | W : mm | 950 |
| | | D : mm | 330+30 |
| | | H : mm | 943 |
| | | W : inch | 37-3/8 |
| | | D : inch | 13 + 1-3/16 |
| | | H : inch | 37-1/8 |
| | Weight | kg | 75 |
| | | lbs | 165 |
| Refrigerant pipe size | Gas side O.D. | mm | 15.88 |
| | | inch | 5/8 |
| | Liquid side O.D. | mm | 9.52 |
| | | inch | 3/8 |
| Refrigerant pipe length | Height difference | m | Max. 30 |
| | Length | m | Max. 50 |

**NOTE:** 1. Rating conditions (ISO T1)

Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)

Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)

Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46˚C |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5˚C ※1 |
| Heating | Upper limit | D.B. 28˚C | D.B. 21˚C, W.B. 15˚C |
| | Lower limit | D.B. 17˚C | D.B. -11˚C, W.B. -12˚C |

3. Guaranteed voltage
198~264V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit Single phase 230V 50Hz
Outdoor unit Single phase 230V 50Hz

※1. If optional air protect guide is installed : D.B.-15℃

| Model name | Indoor unit | | PEA-RP200GA | PEA-RP250GA |
|---|---|---|---|---|
| | Outdoor unit | | PUHZ-P200YHA | PUHZ-P250YHA |
| Cooling | Capacity | Btu/h | 65,000 | 75,000 |
| | | kW | 19.0(9.0-22.4) | 22.0(11.2-28.0) |
| | Total input | kW | 7.21 | 8.44 |
| | EER | | 2.64 | 2.61 |
| | Energy label class | | D | D |
| | SHF | | 0.81 | 0.86 |
| Heating | Capacity | Btu/h | 76,000 | 92,000 |
| | | kW | 22.4(9.5-25.0) | 27.0(12.5-31.5) |
| | Total input | kW | 7.36 | 8.47 |
| | COP | | 3.04 | 3.19 |
| | Energy label class | | D | D |
| | Booster heater | kW | - | - |
| Power supply | Phase | $\phi$ | 3 | |
| | Cycle | Hz | 50 | |
| | Voltage | V | 400 | |
| | Breaker size | A | Indoor 15 / Outdoor 32 | |
| Indoor unit | Air flow | CMM | 52-65 | 64-80 |
| | (Low-High) | CFM | 1835-2295 | 2260-2825 |
| | External pressure | Pa | 150 | |
| | Sound level (Low-High) | dB(A) | 48-51 | 49-52 |
| | External finish | | Galvanized steel | |
| | Dimension | W : mm | 1400 | 1600 |
| | | D : mm | 634 | |
| | | H : mm | 400 | |
| | | W : inch | 55-1/8 | 63 |
| | | D : inch | 25 | |
| | | H : inch | 15-3/4 | |
| | Weight | kg | 70 | 77 |
| | | lbs | 155 | 170 |
| | Unit drain pipe | | R1 | |
| Outdoor unit | Air flow | CMM | 130 | |
| | | CFM | 4590 | |
| | Sound level at cooling | dB(A) | 59 | |
| | Sound level at heating | dB(A) | 59 | |
| | External finish | | Ivory Munsell 3Y 7.8/1.1 | |
| | Dimension | W : mm | 950 | |
| | | D : mm | 330+30 | |
| | | H : mm | 1350 | |
| | | W : inch | 37-3/8 | |
| | | D : inch | 13 + 1-3/16 | |
| | | H : inch | 53-1/8 | |
| | Weight | kg | 126 | 133 |
| | | lbs | 278 | 294 |
| Refrigerant pipe size | Gas side O.D. | mm | 25.4 | |
| | | inch | 1 | |
| | Liquid side O.D. | mm | 9.52 | 12.7 |
| | | inch | 3/8 | 1/2 |
| Refrigerant pipe length | Height difference | m | Max. 30 | |
| | Length | m | Max. 70 | |

**NOTE:** 1. Rating conditions (ISO T1)
Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)
Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)
Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46˚C |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5˚C ※1 |
| Heating | Upper limit | D.B. 28˚C | D.B. 21˚C, W.B. 15˚C |
| | Lower limit | D.B. 17˚C | D.B. -11˚C, W.B. -12˚C |

3. Guaranteed voltage
342~457V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit 3 phase 400V 50Hz
Outdoor unit 3 phase 400V 50Hz

※1. If optional air protect guide is installed : D.B.-15℃

| Model name | Indoor unit | | PEA-RP400GA | PEA-RP500GA |
|---|---|---|---|---|
| | Outdoor unit | | PUHZ-P200YHA×2 | PUHZ-P250YHA×2 |
| Cooling | Capacity | Btu/h | 130,000 | 150,000 |
| | | kW | 38.0(18.0-44.8) | 44.0(22.4-56.0) |
| | Total input | kW | 13.97 | 17.36 |
| | EER | | 2.72 | 2.53 |
| | Energy label class | | D | E |
| | SHF | | 0.75 | 0.77 |
| Heating | Capacity | Btu/h | 153,000 | 184,000 |
| | | kW | 44.8(19.0-50.0) | 54.0(25.0-63.0) |
| | Total input | kW | 14.27 | 17.42 |
| | COP | | 3.14 | 3.10 |
| | Energy label class | | D | D |
| | Booster heater | kW | - | - |
| Power supply | Phase | $\phi$ | 3 | |
| | Cycle | Hz | 50 | |
| | Voltage | V | 400 | |
| | Breaker size | A | Indoor 15 / Outdoor 32 ×2 | |
| Indoor unit | Air flow | CMM | 120 | 160 |
| | (High) | CFM | 4240 | 5650 |
| | External pressure | Pa | 150 | |
| | Sound level (High) | dB(A) | 52 | 53 |
| | External finish | | Galvanized steel | |
| | Dimension | W : mm | 1947 | |
| | | D : mm | 764 | |
| | | H : mm | 595 | |
| | | W : inch | 79-11/16 | |
| | | D : inch | 30-1/8 | |
| | | H : inch | 23-7/16 | |
| | Weight | kg | 130 | 133 |
| | | lbs | 286 | 293 |
| | Unit drain pipe | | R1 | |
| Outdoor unit (Per 1 outdoor unit) | Air flow | CMM | 130 | |
| | | CFM | 4590 | |
| | Sound level at cooling | dB(A) | 59 | |
| | Sound level at heating | dB(A) | 59 | |
| | External finish | | Ivory Munsell 3Y 7.8/1.1 | |
| | Dimension | W : mm | 950 | |
| | | D : mm | 330+30 | |
| | | H : mm | 1350 | |
| | | W : inch | 37-3/8 | |
| | | D : inch | 13 + 1-3/16 | |
| | | H : inch | 53-1/8 | |
| | Weight | kg | 126 | 133 |
| | | lbs | 278 | 294 |
| Refrigerant pipe size | Gas side O.D. | mm | 25.4 × 2 | |
| | | inch | 1 × 2 | |
| | Liquid side O.D. | mm | 9.52 × 2 | 12.7 × 2 |
| | | inch | 3/8 × 2 | 1/2 × 2 |
| Refrigerant pipe length | Height difference | m | Max. 30 | |
| | Length | m | Max. 70 (per 1 outdoor unit) | |

**NOTE:** 1. Rating conditions (ISO T1)
Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)
Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)
Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46˚C |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5˚C ※1 |
| Heating | Upper limit | D.B. 28˚C | D.B. 21˚C, W.B. 15˚C |
| | Lower limit | D.B. 17˚C | D.B. -11˚C, W.B. -12˚C |

3. Guaranteed voltage
342~457V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit 3 phase 400V 50Hz
Outdoor unit 3 phase 400V 50Hz

※1. If optional air protect guide is installed : D.B.-15℃

## 2-3. WALL-MOUNTED TYPE

| Model name | Indoor unit | | PKA-RP100FAL |
|---|---|---|---|
| | Outdoor unit | | PUHZ-P100VHA2 |
| Cooling | Capacity | Btu/h | 32,100 |
| | | kW | 9.4(4.9-11.2) |
| | Total input | kW | 3.12 |
| | EER | | 3.01 |
| | Energy label class | | B |
| | SHF | | 0.79 |
| Heating | Capacity | Btu/h | 38,200 |
| | | kW | 11.2(4.5-12.5) |
| | Total input | kW | 3.49 |
| | COP | | 3.21 |
| | Energy label class | | C |
| | Booster heater | kW | - |
| Power supply | Phase | ϕ | 1 |
| | Cycle | Hz | 50 |
| | Voltage | V | 230 |
| | Breaker size | A | 32 |
| Indoor unit | Air flow | CMM | 22-28 |
| | (Low-High) | CFM | 780-990 |
| | External pressure | Pa | 0 |
| | Sound level (Low-High) | dB(A) | 41-46 |
| | External finish | | Munsell 3.4Y 7.7/0.8 |
| | Dimension | W : mm | 1680 |
| | | D : mm | 235 |
| | | H : mm | 340 |
| | | W : inch | 66-1/8 |
| | | D : inch | 9-1/4 |
| | | H : inch | 13-3/8 |
| | Weight | kg | 28 |
| | | lbs | 62 |
| | Field drain pipe I.D. | mm | 20 |
| | | inch | 13/16 |
| Outdoor unit | Air flow | CMM | 60 |
| | | CFM | 2,120 |
| | Sound level at cooling | dB(A) | 50 |
| | Sound level at heating | dB(A) | 54 |
| | External finish | | Ivory Munsell 5Y 7/1 |
| | Dimension | W : mm | 950 |
| | | D : mm | 330+30 |
| | | H : mm | 943 |
| | | W : inch | 37-3/8 |
| | | D : inch | 13 + 1-3/16 |
| | | H : inch | 37-1/8 |
| | Weight | kg | 75 |
| | | lbs | 165 |
| Refrigerant pipe size | Gas side O.D. | mm | 15.88 |
| | | inch | 5/8 |
| | Liquid side O.D. | mm | 9.52 |
| | | inch | 3/8 |
| Refrigerant pipe length | Height difference | m | Max. 30 |
| | Length | m | Max. 50 |

**NOTE:** 1. Rating conditions (ISO T1)
Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)
Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)
Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46˚C |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5˚C ※1 |
| Heating | Upper limit | D.B. 28˚C | D.B. 21˚C, W.B. 15˚C |
| | Lower limit | D.B. 17˚C | D.B. -11˚C, W.B. -12˚C |

3. Guaranteed voltage
198~264V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit Single phase 230V 50Hz
Outdoor unit Single phase 230V 50Hz

※1. If optional air protect guide is installed : D.B.-15℃

## 2-4. CEILING-SUSPENDED TYPE

| Model name | Indoor unit | | PCA-RP100GA | PCA-RP125GA | PCA-RP140GA |
|---|---|---|---|---|---|
| | Outdoor unit | | PUHZ-P100VHA2 | PUHZ-P125VHA2 | PUHZ-P140VHA2 |
| Cooling | Capacity | Btu/h | 32,100 | 42,000 | 46,400 |
| | | kW | 9.4(4.9-11.2) | 12.3(5.5-14.0) | 13.6(5.5-15.0) |
| | Total input | kW | 3.35 | 4.38 | 5.21 |
| | EER | | 2.81 | 2.81 | 2.61 |
| | Energy label class | | C | C | D |
| | SHF | | 0.77 | 0.78 | 0.76 |
| Heating | Capacity | Btu/h | 38,200 | 47,800 | 54,600 |
| | | kW | 11.2(4.5-12.5) | 14.0(5.0-16.0) | 16.0(5.0-18.0) |
| | Total input | kW | 3.49 | 4.98 | 4.98 |
| | COP | | 3.21 | 2.81 | 3.21 |
| | Energy label class | | C | D | C |
| | Booster heater | kW | - | - | - |
| Power supply | Phase | ϕ | 1 | | |
| | Cycle | Hz | 50 | | |
| | Voltage | V | 230 | | |
| | Breaker size | A | 32 | | 40 |
| Indoor unit | Air flow | CMM | 20-21-23-25 | 27-30-32-34 | |
| | (Low-Medium2-Medium1-High) | CFM | 705-840-810-885 | 955-1060-1130-1200 | |
| | External pressure | Pa | 0 | 0 | |
| | Sound level | dB(A) | 40-41-43-45 | 41-43-45-46 | 42-44-46-48 |
| | (Low-Medium2-Medium1-High) | | | | |
| | External finish | | White Munsell 0.70Y 8.59/0.97 | | |
| | Dimension | W : mm | 1310 | 1620 | |
| | | D : mm | 680 | | |
| | | H : mm | 270 | | |
| | | W : inch | 51-9/16 | 63-3/4 | |
| | | D : inch | 26-3/4 | | |
| | | H : inch | 10-5/8 | | |
| | Weight | kg | 37 | 43 | 45 |
| | | lbs | 82 | 95 | 99 |
| | Field drain pipe O.D. | mm | 26 | | |
| | | inch | 1 | | |
| Outdoor unit | Air flow | CMM | 60 | 100 | |
| | | CFM | 2,120 | 3,530 | |
| | Sound level at cooling | dB(A) | 50 | 51 | 52 |
| | Sound level at heating | dB(A) | 54 | 55 | 56 |
| | External finish | | Ivory Munsell 5Y 7/1 | | |
| | Dimension | W : mm | 950 | | |
| | | D : mm | 330+30 | | |
| | | H : mm | 943 | 1350 | |
| | | W : inch | 37-3/8 | | |
| | | D : inch | 13 + 1-3/16 | | |
| | | H : inch | 37-1/8 | 53-1/8 | |
| | Weight | kg | 75 | 99 | |
| | | lbs | 165 | 218 | |
| Refrigerant pipe size | Gas side O.D. | mm | 15.88 | | |
| | | inch | 5/8 | | |
| | Liquid side O.D. | mm | 9.52 | | |
| | | inch | 3/8 | | |
| Refrigerant pipe length | Height difference | m | Max. 30 | | |
| | Length | m | Max. 50 | | |

**NOTE:** 1. Rating conditions (ISO T1)
Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)
Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)
Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46℃ |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5℃ ※ |
| Heating | Upper limit | D.B. 28˚C | D.B. 21℃, W.B. 15℃ |
| | Lower limit | D.B. 17˚C | D.B. -11℃, W.B. -12℃ |

3. Guaranteed voltage
198~264V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit Single phase 230V 50Hz
Outdoor unit Single phase 230V 50Hz

※ If optional air protect guide is installed : D.B.-15℃

| Model name | Indoor unit | | PCA-RP125HA |
|---|---|---|---|
| | Outdoor unit | | PUHZ-P125VHA2 |
| Cooling | Capacity | Btu/h | 42,000 |
| | | kW | 12.3(5.5-14.0) |
| | Total input | kW | 4.38 |
| | EER | | 2.81 |
| | Energy label class | | C |
| | SHF | | 0.78 |
| Heating | Capacity | Btu/h | 47,100 |
| | | kW | 13.8(5.0-16.0) |
| | Total input | kW | 4.30 |
| | COP | | 3.21 |
| | Energy label class | | C |
| | Booster heater | kW | - |
| Power supply | Phase | ϕ | 1 |
| | Cycle | Hz | 50 |
| | Voltage | V | 230 |
| | Breaker size | A | 25 |
| Indoor unit | Air flow (Low-High) | CMM | 30-38 |
| | | CFM | 1060-1350 |
| | External pressure | Pa | 0 |
| | Sound level (Low-High) | dB(A) | 44-50 |
| | External finish | | Stainless steel |
| | Dimension | W : mm | 1520 |
| | | D : mm | 650 |
| | | H : mm | 280 |
| | | W : inch | 59-7/8 |
| | | D : inch | 25-5/8 |
| | | H : inch | 11 |
| | Weight | kg | 56 |
| | | lbs | 124 |
| | Field drain pipe O.D. | mm | 26 |
| | | inch | 1 |
| Outdoor unit | Air flow | CMM | 100 |
| | | CFM | 3,530 |
| | Sound level at cooling | dB(A) | 51 |
| | Sound level at heating | dB(A) | 55 |
| | External finish | | Ivory Munsell 5Y 7/1 |
| | Dimension | W : mm | 950 |
| | | D : mm | 330+30 |
| | | H : mm | 1350 |
| | | W : inch | 37-3/8 |
| | | D : inch | 13 + 1-3/16 |
| | | H : inch | 53-1/8 |
| | Weight | kg | 99 |
| | | lbs | 218 |
| Refrigerant pipe size | Gas side O.D. | mm | 15.88 |
| | | inch | 5/8 |
| | Liquid side O.D. | mm | 9.52 |
| | | inch | 3/8 |
| Refrigerant pipe length | Height difference | m | Max. 30 |
| | Length | m | Max. 50 |

**NOTE:** 1. Rating conditions (ISO T1)
Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)
Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)
Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46˚C |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5˚C ※1 |
| Heating | Upper limit | D.B. 28˚C | D.B. 21˚C, W.B. 15˚C |
| | Lower limit | D.B. 17˚C | D.B. -11˚C, W.B. -12˚C |

3. Guaranteed voltage
198~264V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit Single phase 230V 50Hz
Outdoor unit Single phase 230V 50Hz

※1. If optional air protect guide is installed : D.B.-15℃

## 2-5. FLOOR STANDING TYPE

| Model name | Indoor unit | | PSA-RP100GA | PSA-RP125GA | PSA-RP140GA |
|---|---|---|---|---|---|
| | Outdoor unit | | PUHZ-P100VHA2 | PUHZ-P125VHA2 | PUHZ-P140VHA2 |
| Cooling | Capacity | Btu/h | 32,100 | 42,000 | 46,400 |
| | | kW | 9.4(4.9-11.2) | 12.3(5.5-14.0) | 13.6(5.5-15.0) |
| | Total input | kW | 3.12 | 4.38 | 5.64 |
| | EER | | 3.01 | 2.81 | 2.41 |
| | Energy label class | | B | C | E |
| | SHF | | 0.83 | 0.76 | 0.75 |
| Heating | Capacity | Btu/h | 38,200 | 47,800 | 54,600 |
| | | kW | 11.2(4.5-12.5) | 14.0(5.0-16.0) | 16.0(5.0-18.0) |
| | Total input | kW | 3.28 | 4.98 | 5.69 |
| | COP | | 3.41 | 2.81 | 2.81 |
| | Energy label class | | B | D | D |
| | Booster heater | kW | - | - | - |
| Power supply | Phase | ϕ | 1 | | |
| | Cycle | Hz | 50 | | |
| | Voltage | V | 230 | | |
| | Breaker size | A | 32 | | 40 |
| Indoor unit | Air flow | CMM | 24-31 | 26-33 | 27-35 |
| | (Low-High) | CFM | 850-1060 | 920-1165 | 955-1240 |
| | External pressure | Pa | 0 | | |
| | Sound level (Low-High) | dB(A) | 44-49 | 46-51 | 47-52 |
| | External finish | | White Munsell 0.70Y 8.59/0.97 | | |
| | Dimension | W : mm | 600 | | |
| | | D : mm | 350 | | |
| | | H : mm | 1900 | | |
| | | W : inch | 23-5/8 | | |
| | | D : inch | 13-3/4 | | |
| | | H : inch | 74-13/16 | | |
| | Weight | kg | 51 | | 53 |
| | | lbs | 112 | | 117 |
| | Field drain pipe I.D. | mm | 20 | | |
| | | inch | 13/16 | | |
| Outdoor unit | Air flow | CMM | 60 | 100 | |
| | | CFM | 2,120 | 3,530 | |
| | Sound level at cooling | dB(A) | 50 | 51 | 52 |
| | Sound level at heating | dB(A) | 54 | 55 | 56 |
| | External finish | | Ivory Munsell 5Y 7/1 | | |
| | Dimension | W : mm | 950 | | |
| | | D : mm | 330+30 | | |
| | | H : mm | 943 | 1350 | |
| | | W : inch | 37-3/8 | | |
| | | D : inch | 13 + 1-3/16 | | |
| | | H : inch | 37-1/8 | 53-1/8 | |
| | Weight | kg | 75 | 99 | |
| | | lbs | 165 | 218 | |
| Refrigerant pipe size | Gas side O.D. | mm | 15.88 | | |
| | | inch | 5/8 | | |
| | Liquid side O.D. | mm | 9.52 | | |
| | | inch | 3/8 | | |
| Refrigerant pipe length | Height difference | m | Max. 30 | | |
| | Length | m | Max. 50 | | |

**NOTE:** 1. Rating conditions (ISO T1)
Cooling Indoor : D.B. 27℃ (80˚F) W.B. 19℃ (66˚F) Outdoor : D.B. 35℃ (95˚F) W.B. 24℃ (75˚F)
Heating Indoor : D.B. 20℃ (68˚F) Outdoor : D.B. 7℃ (45˚F) W.B. 6℃ (43˚F)
Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

| | | Indoor | Outdoor |
|---|---|---|---|
| Cooling | Upper limit | D.B. 35˚C, W.B. 22.5˚C | D.B. 46℃ |
| | Lower limit | D.B. 19˚C, W.B. 15˚C | D.B. -5℃ ※ |
| Heating | Upper limit | D.B. 28˚C | D.B. 21℃, W.B. 15℃ |
| | Lower limit | D.B. 17˚C | D.B. -11℃, W.B. -12℃ |

3. Guaranteed voltage
198~264V, 50Hz

4. Above data are based on the indicated voltage.
Indoor unit Single phase 230V 50Hz
Outdoor unit Single phase 230V 50Hz

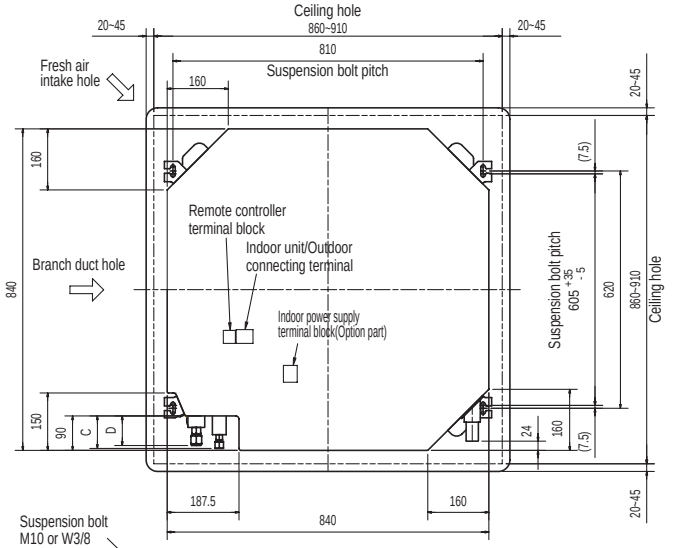
※ If optional air protect guide is installed : D.B.-15℃

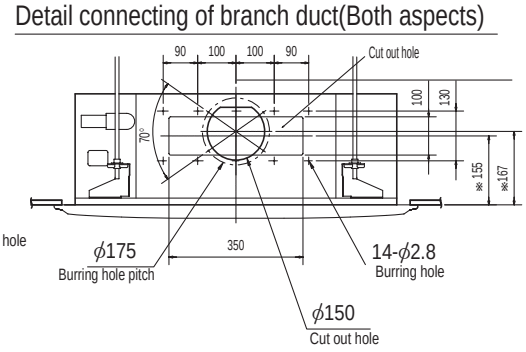
# 3 OUTLINES AND DIMENSIONS

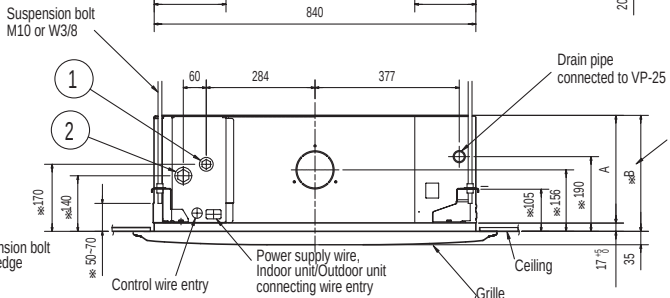
## INDOOR UNIT

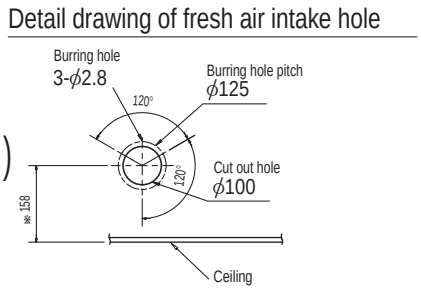
**PLA-RP50BA PLA-RP60BA PLA-RP71BA**
**PLA-RP100BA PLA-RP125BA PLA-RP140BA**

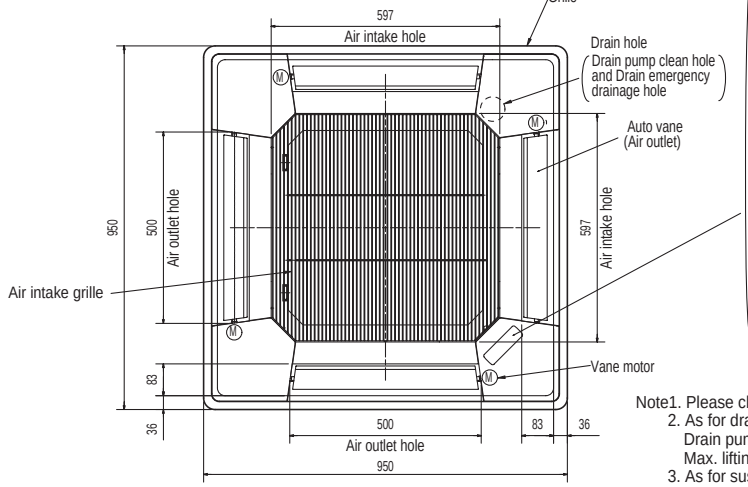
**Unit : mm**

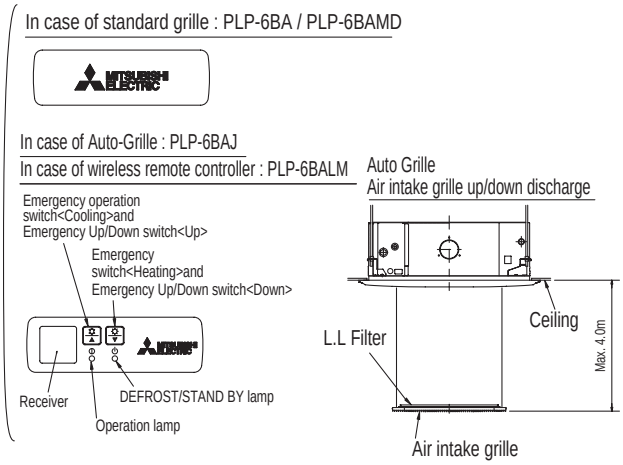


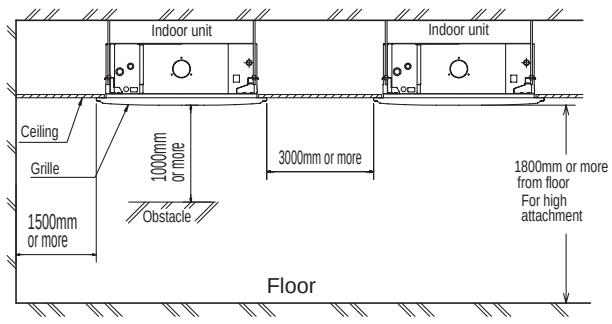




Note1. Please choose the grille from a standard grille or Auto-Grille.
2. As for drain pipe, please use VP-25(O.D. ϕ32 PVC TUBE).
Drain pump is included.
Max. lifting height is 850mm from the ceiling.
3. As for suspension bolt, please use M10 or W3/8.
(Procured at local site)
4. Electrical box may be removed for the service purpose.
Make sure to slack the electrical wire little bit for control/ power wires connection.
5. The height of the indoor unit is able to be adjusted with the grille attached.
6. For the installation of the optional high efficiency filter or optional multi-functional casement.
1) Requires E or more space between transom and ceiling for the installation.
2) Add 135 mm to the dimensions ※ marked on the figure.
3) The optional high efficiency filter becomes optional multi-functional casement and concomitant use.
7. When installing the branch ducts, be sure to insulate adequately.
Otherwise condensation and dripping may occur.
(It becomes the cause of dew drops/Water dew.)
8. As for necessary installation/service space, please refer to the left figure.

| Models | ① | ② | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| PLA-RP50BA | Refrigerant pipe ···ϕ6.35 Flared connection ···1/4 inch | Refrigerant pipe ···ϕ12.7 Flared connection ···1/2 inch | 241 | 258 | 80 | 74 | 400 |
| PLA-RP60BA | Refrigerant pipe ϕ6.35 / ϕ9.52 Flared connection 1/4 inch/3/8 inch (compatible) | Refrigerant pipe ···ϕ15.88 Flared connection ···5/8 inch | | | 87 | | |
| PLA-RP71BA | Refrigerant pipe ···ϕ9.52 Flared connection ···3/8 inch | | | | 85 | 77 | |
| PLA-RP100,125,140BA | | | 281 | 298 | | | 440 |

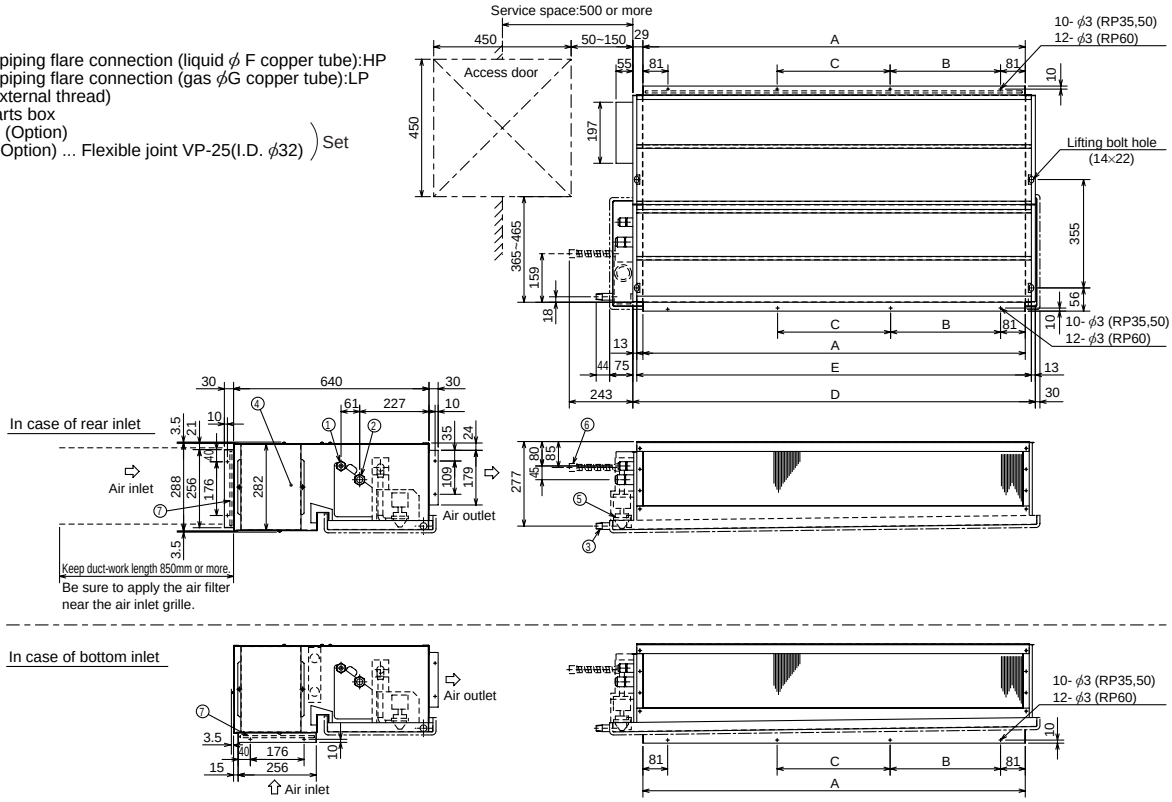
## PEAD-RP50EA
## PEAD-RP60EA

**Unit : mm**

| Model | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| RP50 | 772 | 305 | – | 830 | 804 | R410A Outdoor unit : 6.35 ※<br>R407C Outdoor unit : 9.52 | R410A Outdoor unit : 12.7 ※<br>R407C Outdoor unit : 15.88 |
| RP60 | 1012 | 280 | 290 | 1070 | 1044 | Outdoor unit (SUZ) : 6.35<br>R407C Outdoor unit : 9.52 ※ | 15.88 |

※ Initial setting

① Refrigerant piping flare connection (liquid $\phi$ F copper tube):HP
② Refrigerant piping flare connection (gas $\phi$G copper tube):LP
③ Drain R1(External thread)
④ Electrical parts box
⑤ Drain Pump (Option)
⑥ Drain Pipe (Option) ... Flexible joint VP-25(I.D. $\phi$32) ) Set
⑦ Filter

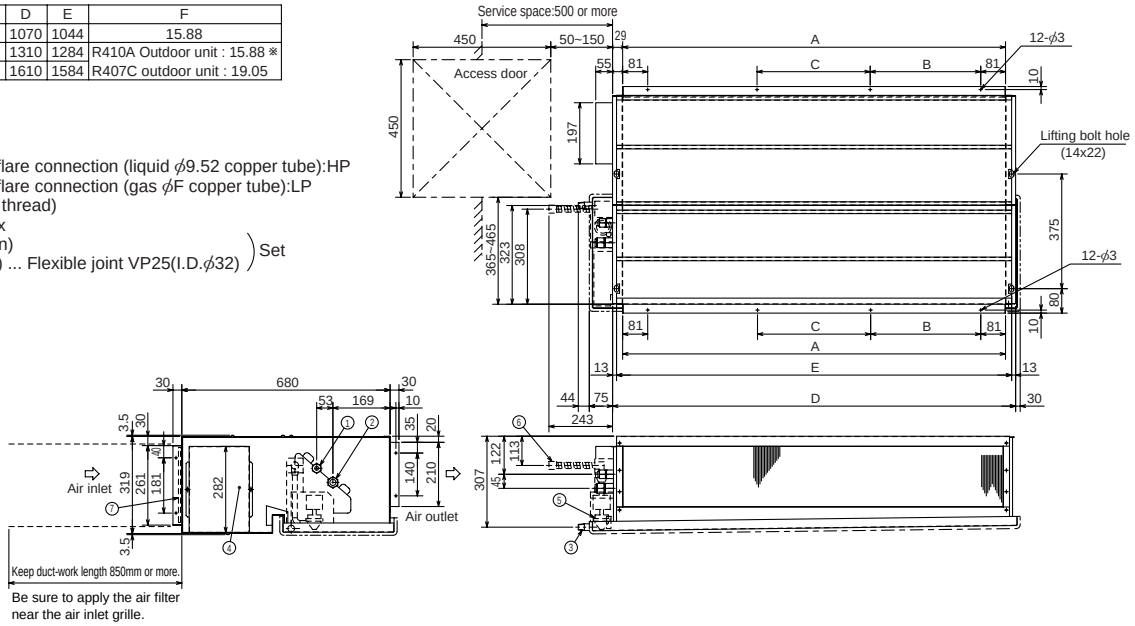



## PEAD-RP71EA
## PEAD-RP100EA2
## PEAD-RP125EA
## PEAD-RP140EA

| Model | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| RP71 | 1012 | 280 | 290 | 1070 | 1044 | 15.88 |
| RP100,125 | 1252 | 360 | 370 | 1310 | 1284 | R410A Outdoor unit : 15.88 ※ |
| RP140 | 1552 | 460 | 470 | 1610 | 1584 | R407C outdoor unit : 19.05 |

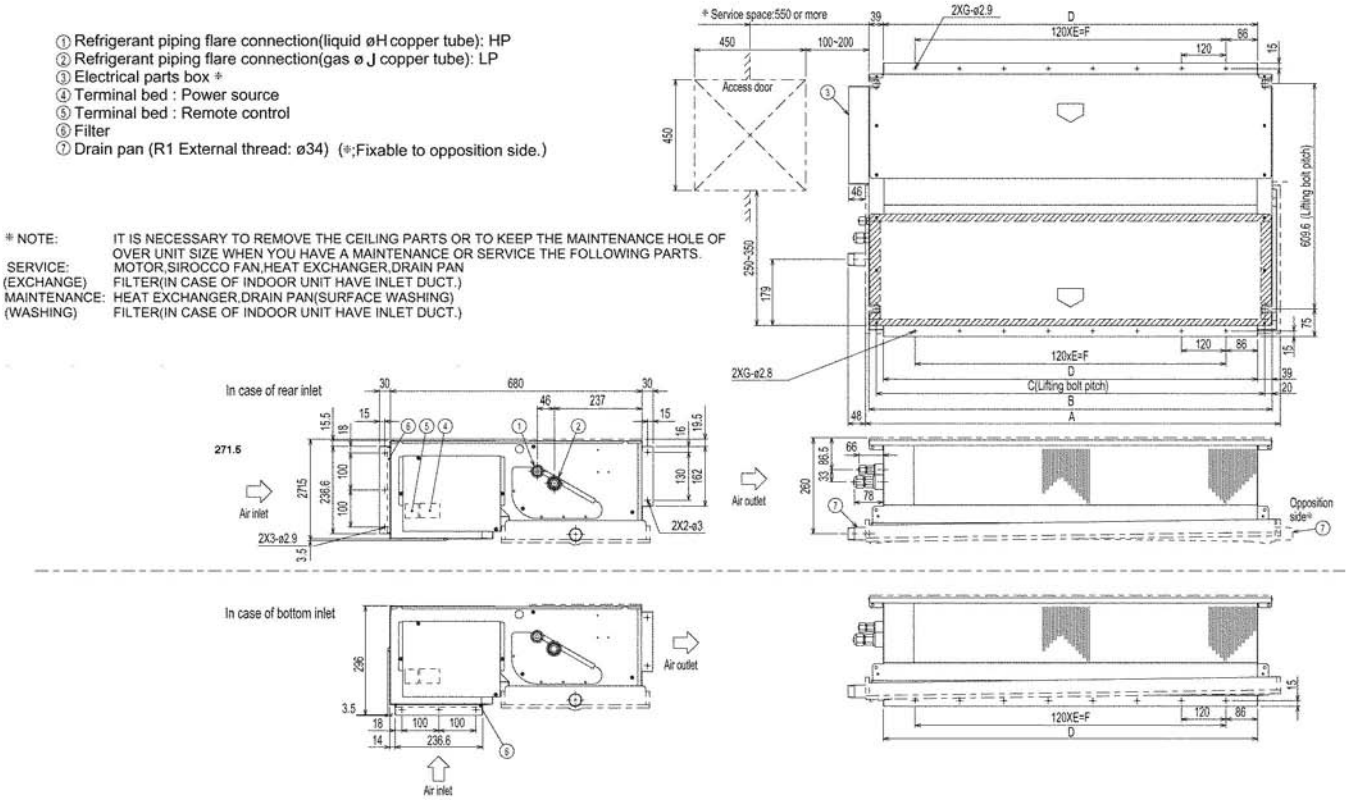
※ Initial setting

① Refrigerant piping flare connection (liquid $\phi$9.52 copper tube):HP
② Refrigerant piping flare connection (gas $\phi$F copper tube):LP
③ Drain R1 (External thread)
④ Electrical parts box
⑤ Drain Pump (Option)
⑥ Drain Pipe (Option) ... Flexible joint VP25(I.D.$\phi$32) ) Set
⑦ Filter



**PEAD-RP60GA**
**PEAD-RP71GA**
**PEAD-RP100GA**

**Unit : mm**

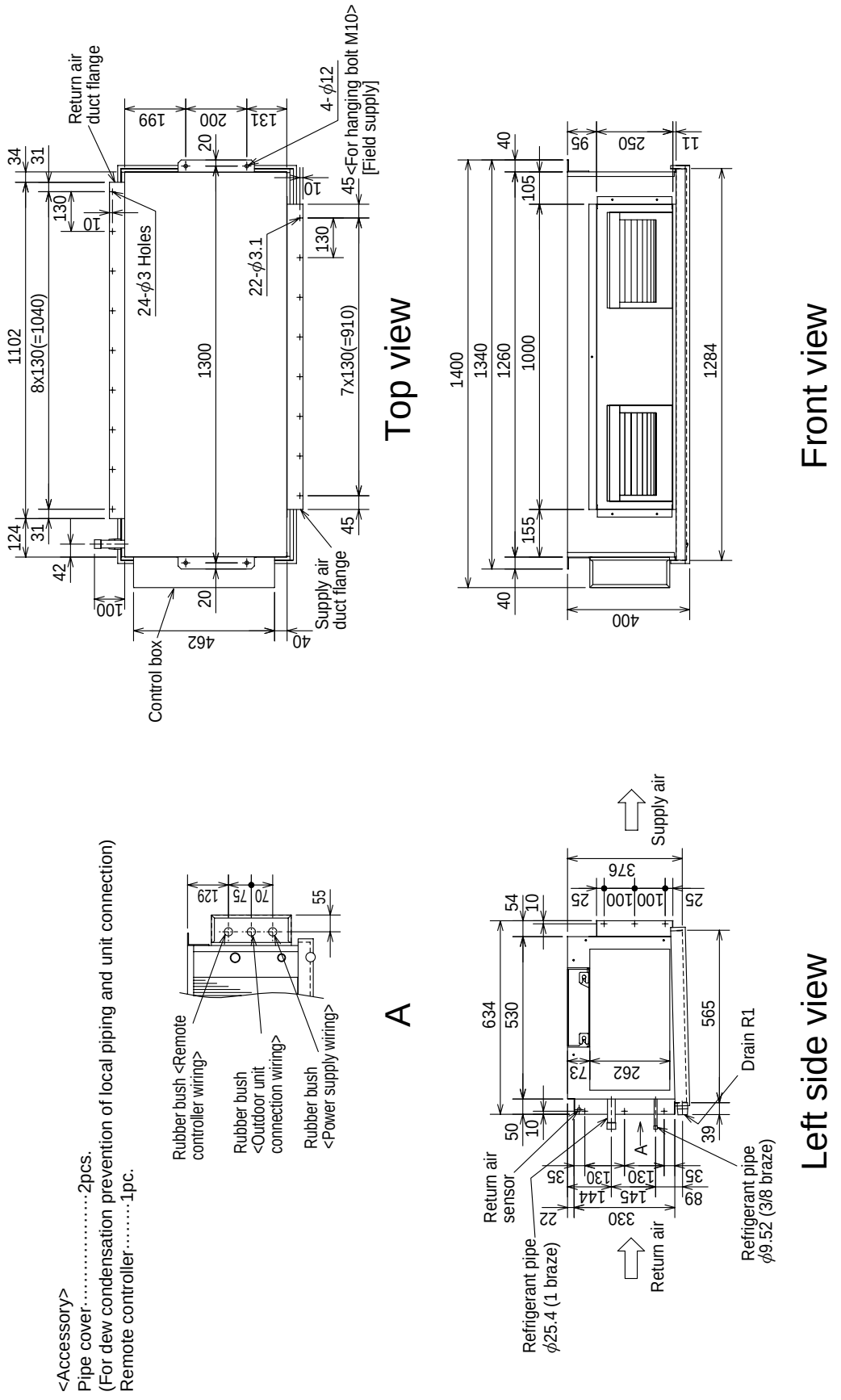



| Model | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| RP60 | 1125 | 1090 | 1050 | 1012 | 7 | 840 | 8 | Outdoor unit(SUZ) : 6.35<br>Other outdoor unit : 9.52 ※ | 15.88 |
| RP71 | 1125 | 1090 | 1050 | 1012 | 7 | 840 | 8 | 9.52 | 15.88 |
| RP100 | 1365 | 1330 | 1290 | 1252 | 9 | 1080 | 10 | 9.52 | R410A Outdoor unit : 15.88 ※<br>R407C Outdoor unit : 19.05 |

※ Initial setting

**PEA-RP200GA**

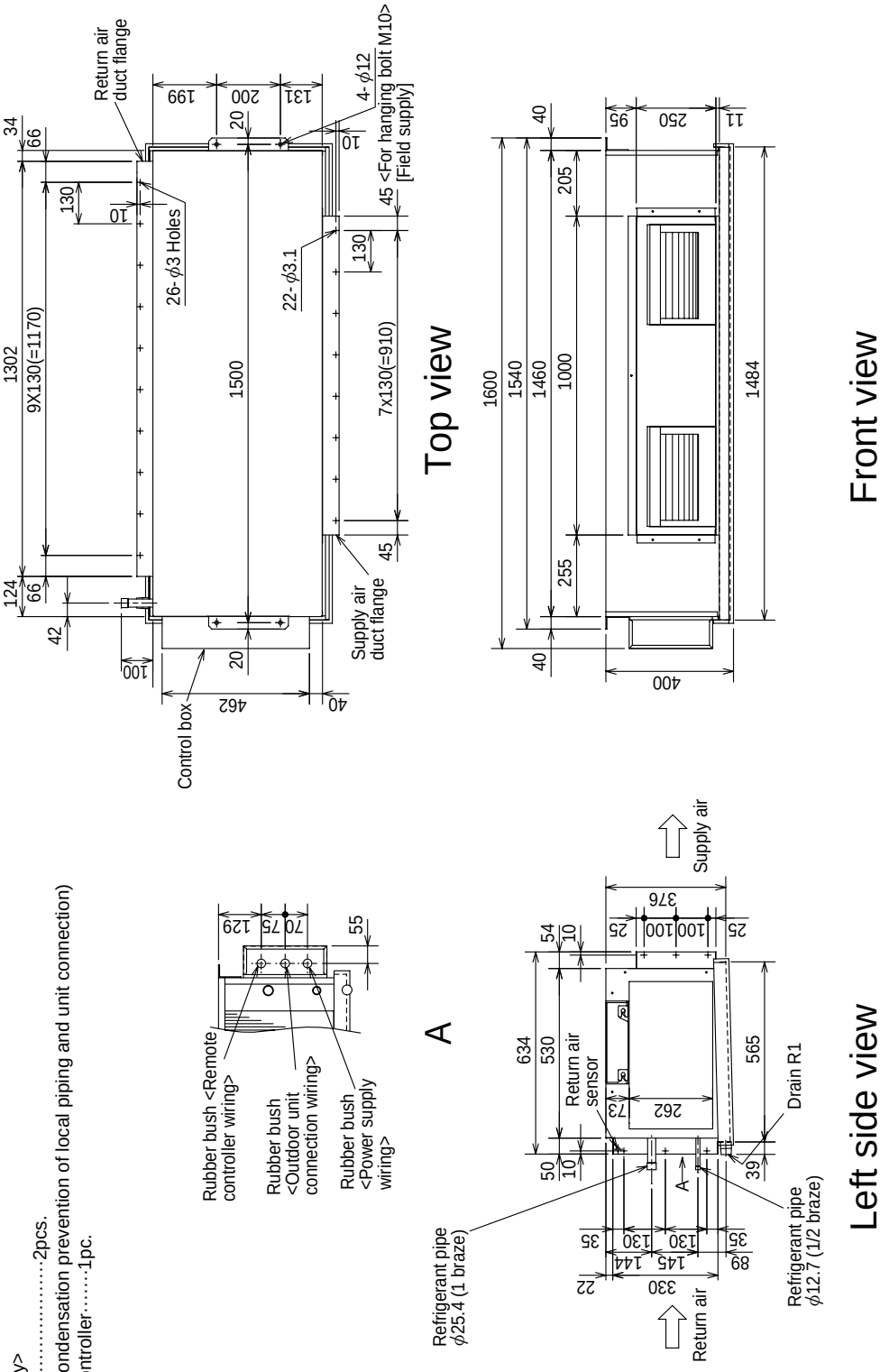
**Unit : mm**




<Accessory>
Pipe cover……2pcs.
(For dew condensation prevention of local piping and unit connection)
Remote controller……1pc.

**PEA-RP250GA**

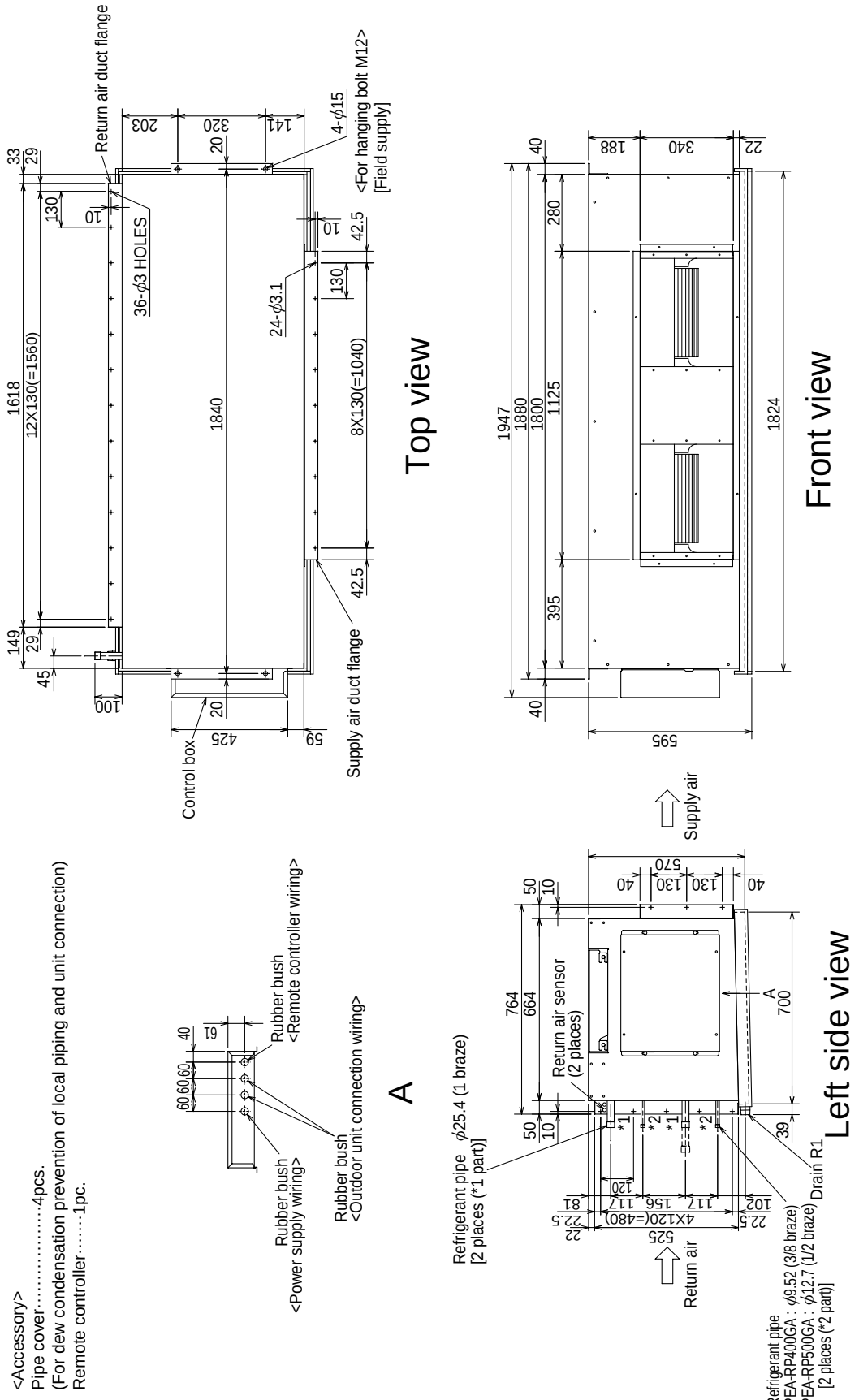
**Unit : mm**




<Accessory>
Pipe cover·····2pcs.
(For dew condensation prevention of local piping and unit connection)
Remote controller·····1pc.

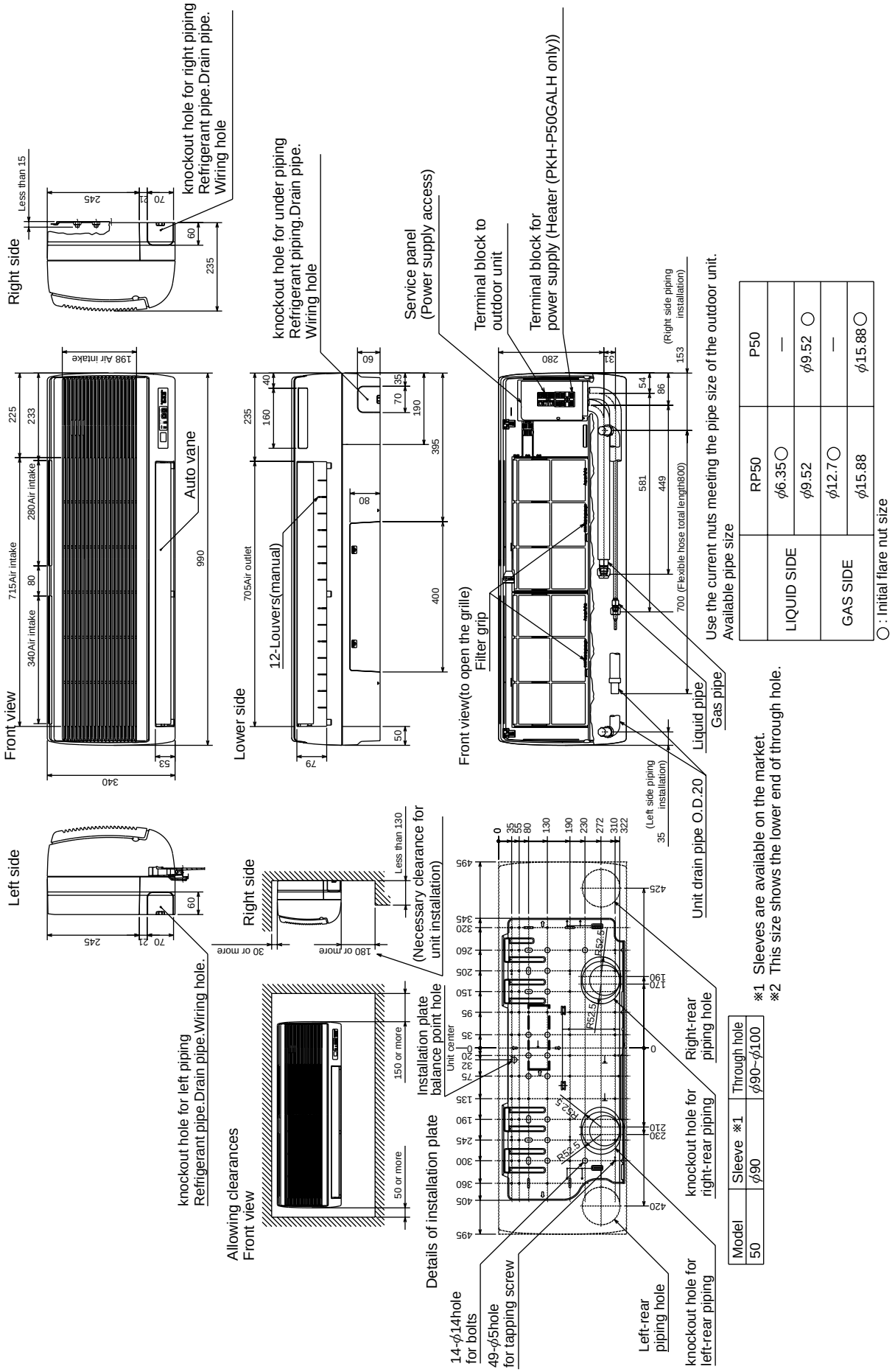
## PEA-RP400, 500GA

**Unit : mm**



## PKA-RP50GAL

Unit : mm



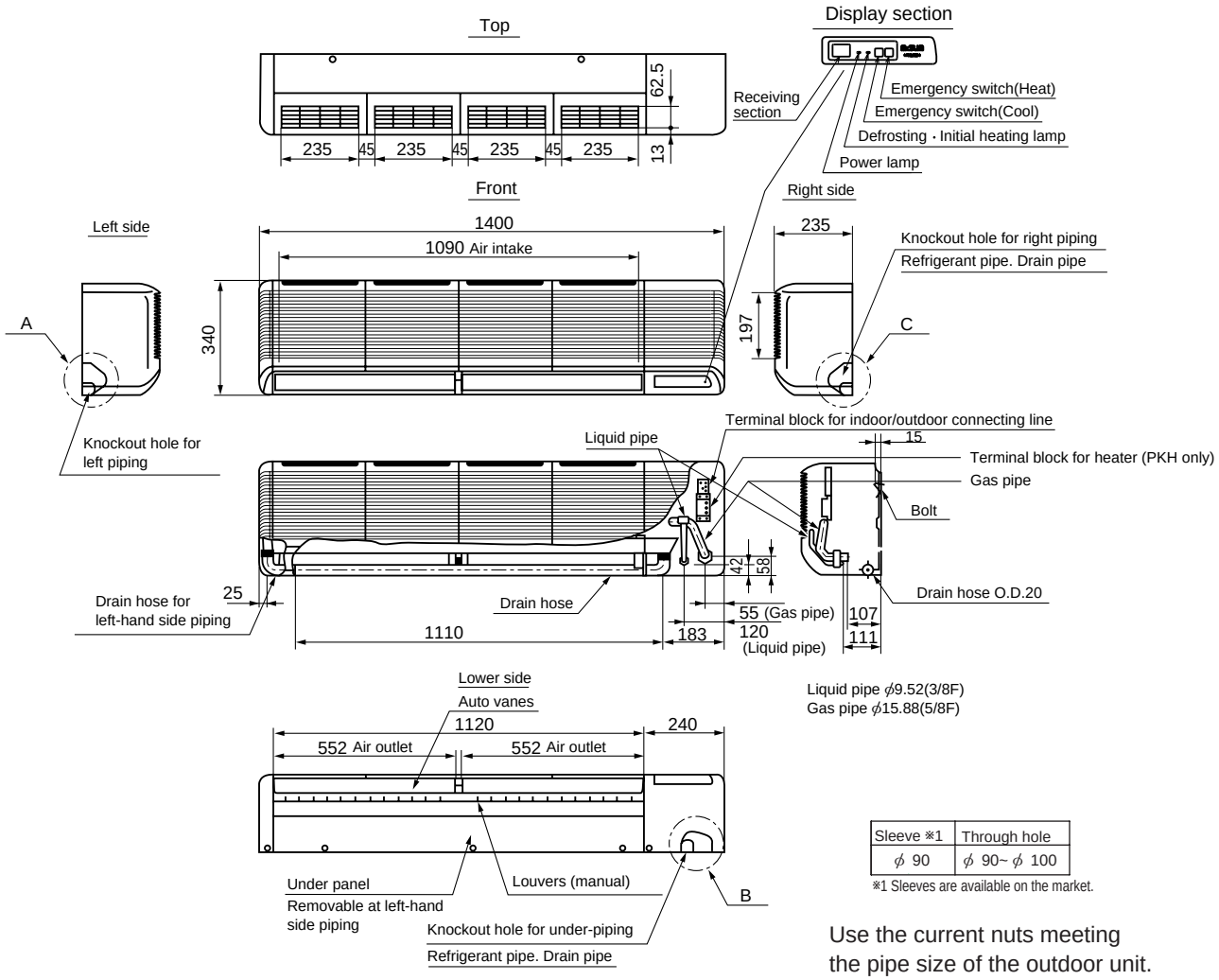

| | RP50 | P50 |
|---|---|---|
| LIQUID SIDE | φ6.35○ | — |
| | φ9.52 | φ9.52 ○ |
| GAS SIDE | φ12.7○ | — |
| | φ15.88 | φ15.88○ |

○ : Initial flare nut size

| Model | Sleeve ※1 | Through hole |
|---|---|---|
| 50 | φ90 | φ90~φ100 |

**PKA-RP50FAL2**
**PKA-RP60FAL**
**PKA-RP71FAL**

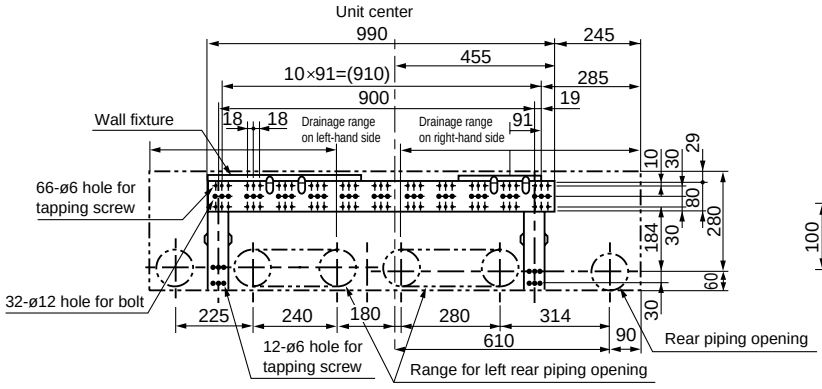
**Unit : mm**

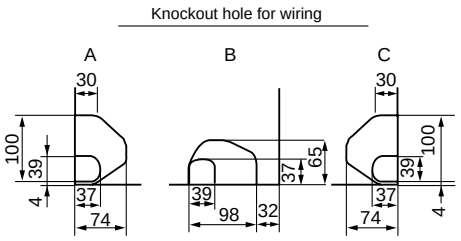



| Sleeve ※1 | Through hole |
|---|---|
| ϕ 90 | ϕ 90~ ϕ 100 |

※1 Sleeves are available on the market.

Use the current nuts meeting the pipe size of the outdoor unit.



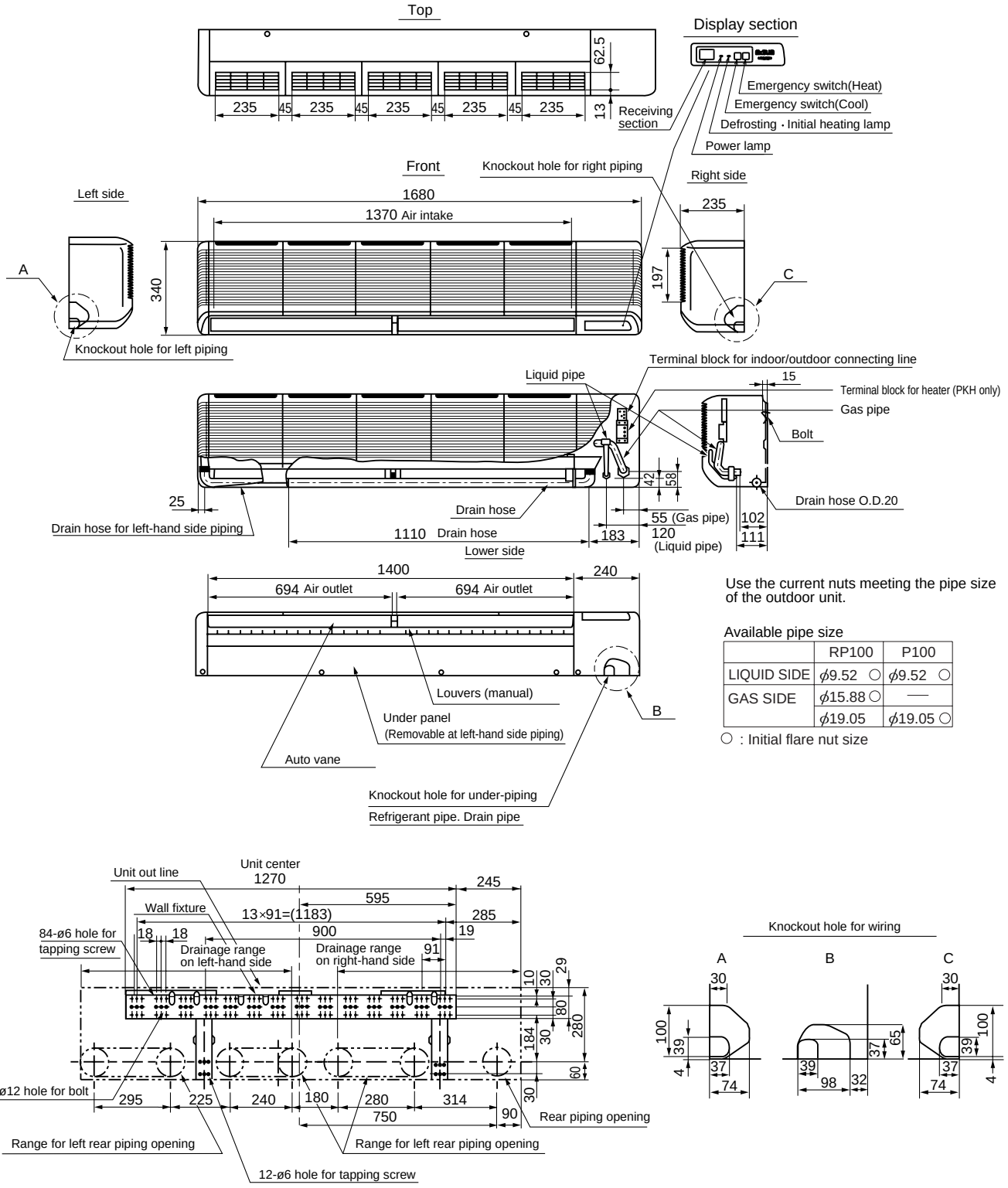

Available pipe size

| | RP50 | RP60,71 / P60,71 |
|---|---|---|
| LIQUID SIDE | ϕ 6.35 ○ | —— |
| | ϕ 9.52 | ϕ 9.52 ○ |
| GAS SIDE | ϕ 12.7 ○ | —— |
| | ϕ 15.88 | ϕ 15.88 ○ |
| | —— | —— |

○ :Initial flare nut size

## PKA-RP100FAL

**Unit : mm**




Use the current nuts meeting the pipe size of the outdoor unit.

Available pipe size

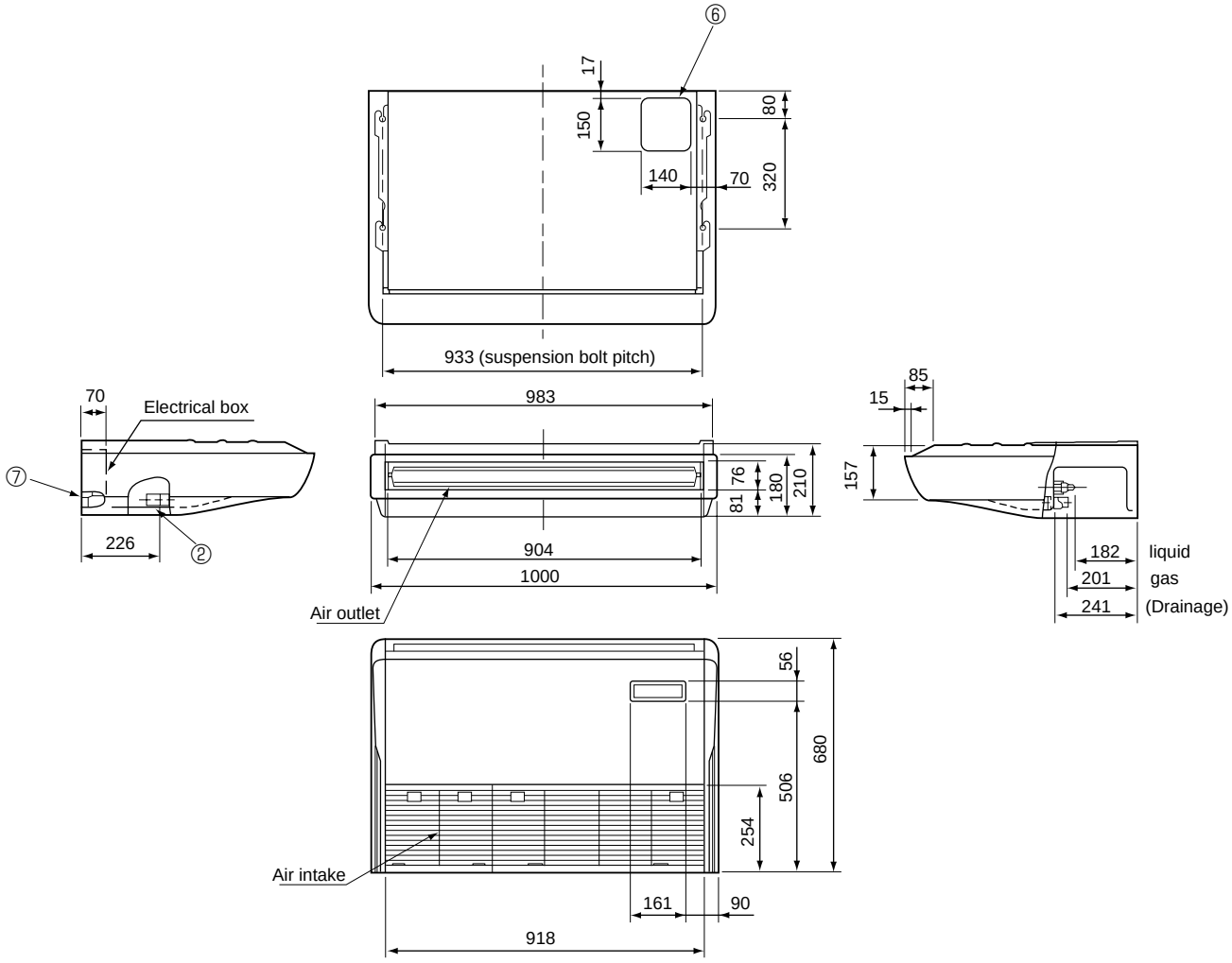
| | RP100 | P100 |
|---|---|---|
| LIQUID SIDE | ϕ9.52 ○ | ϕ9.52 ○ |
| GAS SIDE | ϕ15.88 ○ | — |
| | ϕ19.05 | ϕ19.05 ○ |

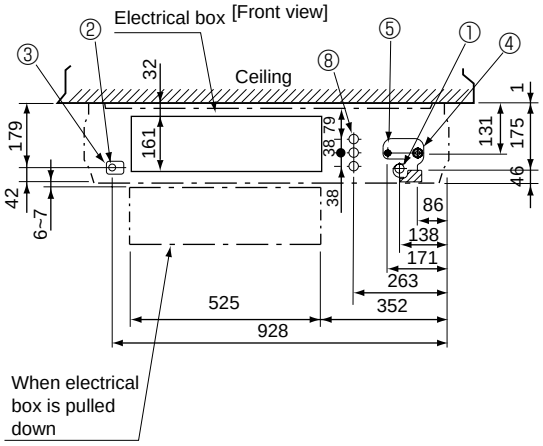
○ : Initial flare nut size

## PCA-RP50GA

**Unit : mm**

NOTES:
1. Use M10 or W3/8 screws for anchor bolt.
2. When optional drain lift-up mechanism is installed, always provide upward piping for refrigerant piping.




① Drainage pipe connection (26mm I.D.)
② Drainage pipe connection (for the left arrangement)
③ Knockout hole for left drain-piping arrangement
④ Refrigerant-pipe connection (gas pipe side/flared connection)
⑤ Refrigerant-pipe connection (liquid pipe side/flared connection)
⑥ Knockout hole for upper drain pipe arrangement
⑦ Knockout hole for left drain pipe arrangement
⑧ Knockout hole for wiring arrangement

Use the current nuts meeting the pipe size of the outdoor unit.

Available pipe size

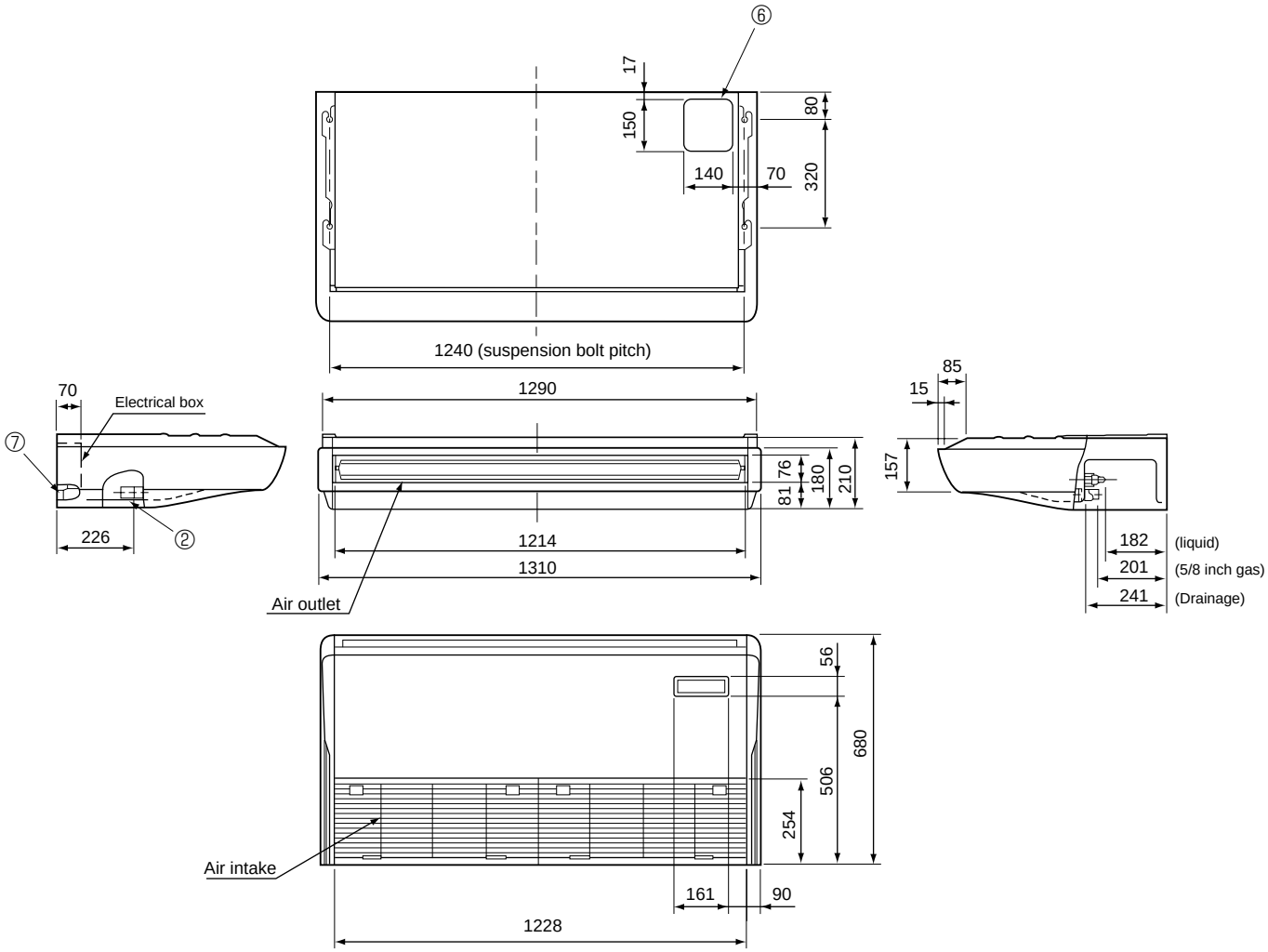
| | RP50 | P50 |
|---|---|---|
| ⑤ LIQUID SIDE | $\phi$6.35 ○ | — |
| | $\phi$9.52 | $\phi$9.52 ○ |
| ④ GAS SIDE | $\phi$12.7 ○ | — |
| | $\phi$15.88 | $\phi$15.88 ○ |

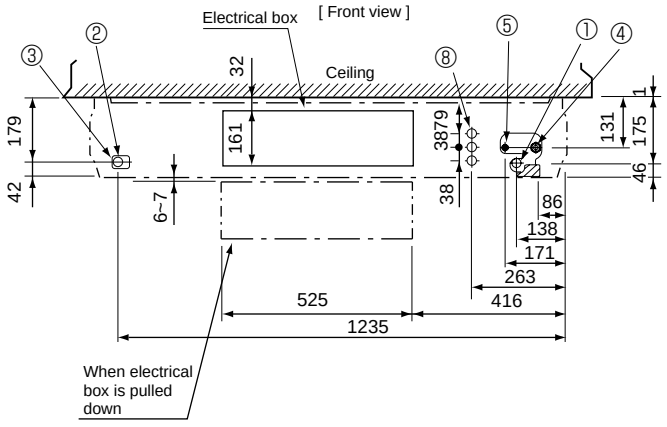
○ : Initial flare nut size

**PCA-RP50GA2**
**PCA-RP60GA**
**PCA-RP71GA**

**Unit : mm**

NOTES:
1. Use M10 or W3/8 screws for anchor bolt.
2. When optional drain lift-up mechanism is installed, always provide upward piping for refrigerant piping.




① Drainage pipe connection (26mm I.D.)
② Drainage pipe connection (for the left arrangement)
③ Knockout hole for left drain-piping arrangement
④ Refrigerant-pipe connection (gas pipe side/flared connection)
⑤ Refrigerant-pipe connection (liquid pipe side/flared connection)
⑥ Knockout hole for upper drain pipe arrangement
⑦ Knockout hole for left drain pipe arrangement
⑧ Knockout hole for wiring arrangement

Use the current nuts meeting the pipe size of the outdoor unit.

Available pipe size

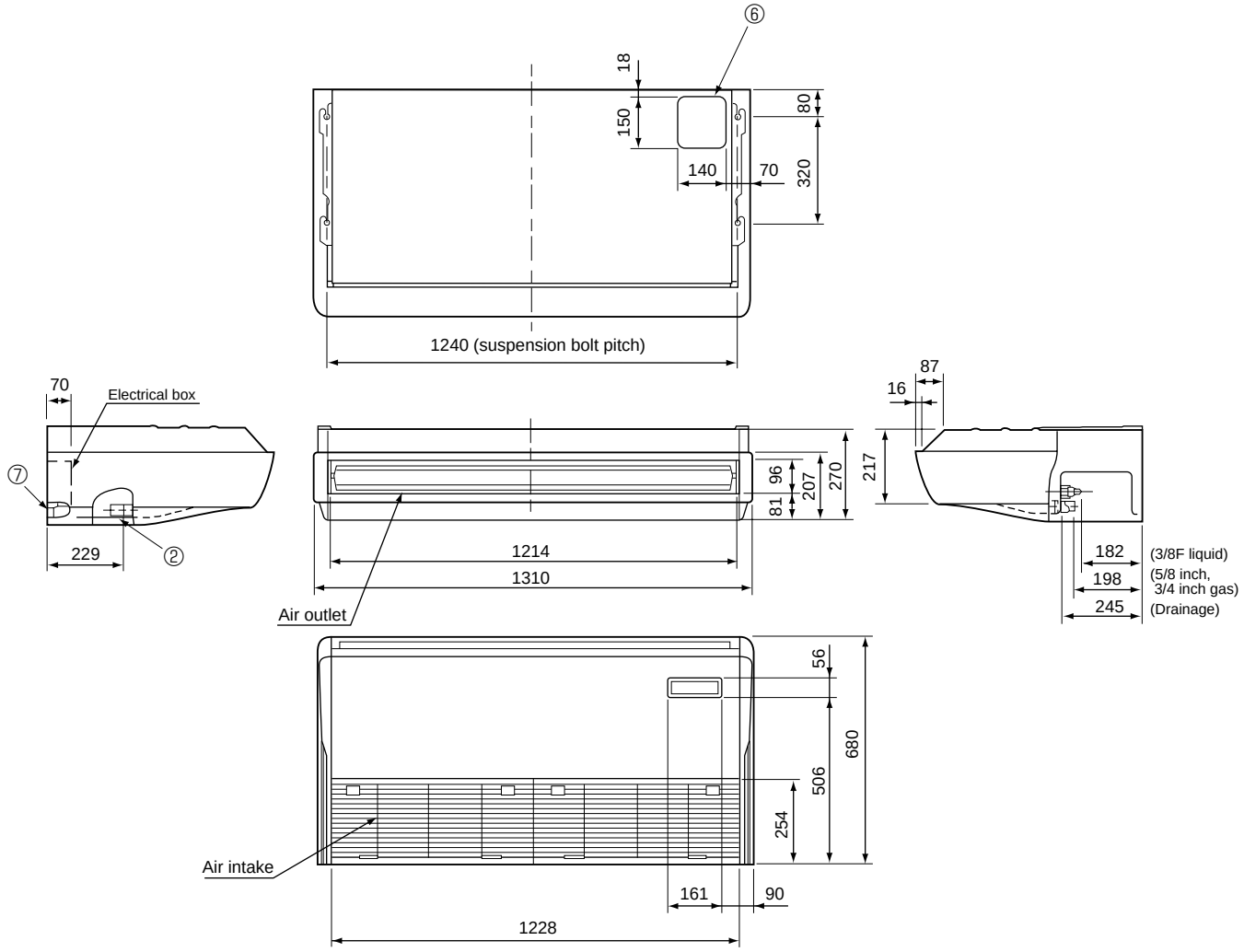
| | RP50 | RP60 | RP71,P60,P71 |
|---|---|---|---|
| ⑤ LIQUID SIDE | $\phi$6.35 ○ | $\phi$6.35 | — |
| | $\phi$9.52 | $\phi$9.52 ○ | $\phi$9.52 ○ |
| ④ GAS SIDE | $\phi$12.7 ○ | — | — |
| | $\phi$15.88 | $\phi$15.88 ○ | $\phi$15.88 ○ |
| | — | — | — |

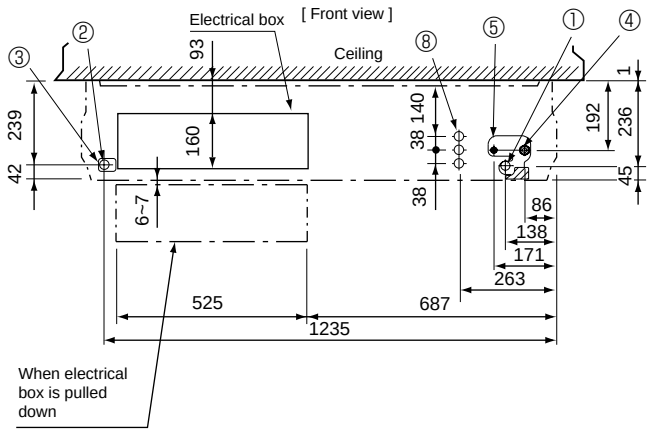
○ : Initial flare nut size

## PCA-RP100GA

**Unit : mm**

NOTES:
1. Use M10 or W3/8 screws for anchor bolt.
2. When optional drain lift-up mechanism is installed, always provide upward piping for refrigerant piping.




① Drainage pipe connection (26mm I.D.)
② Drainage pipe connection (for the left arrangement)
③ Knockout hole for left drain-piping arrangement
④ Refrigerant-pipe connection (gas pipe side/flared connection)
⑤ Refrigerant-pipe connection (liquid pipe side/flared connection)
⑥ Knockout hole for upper drain pipe arrangement
⑦ Knockout hole for left drain pipe arrangement
⑧ Knockout hole for wiring arrangement

Use the current nuts meeting the pipe size of the outdoor unit.

Available pipe size

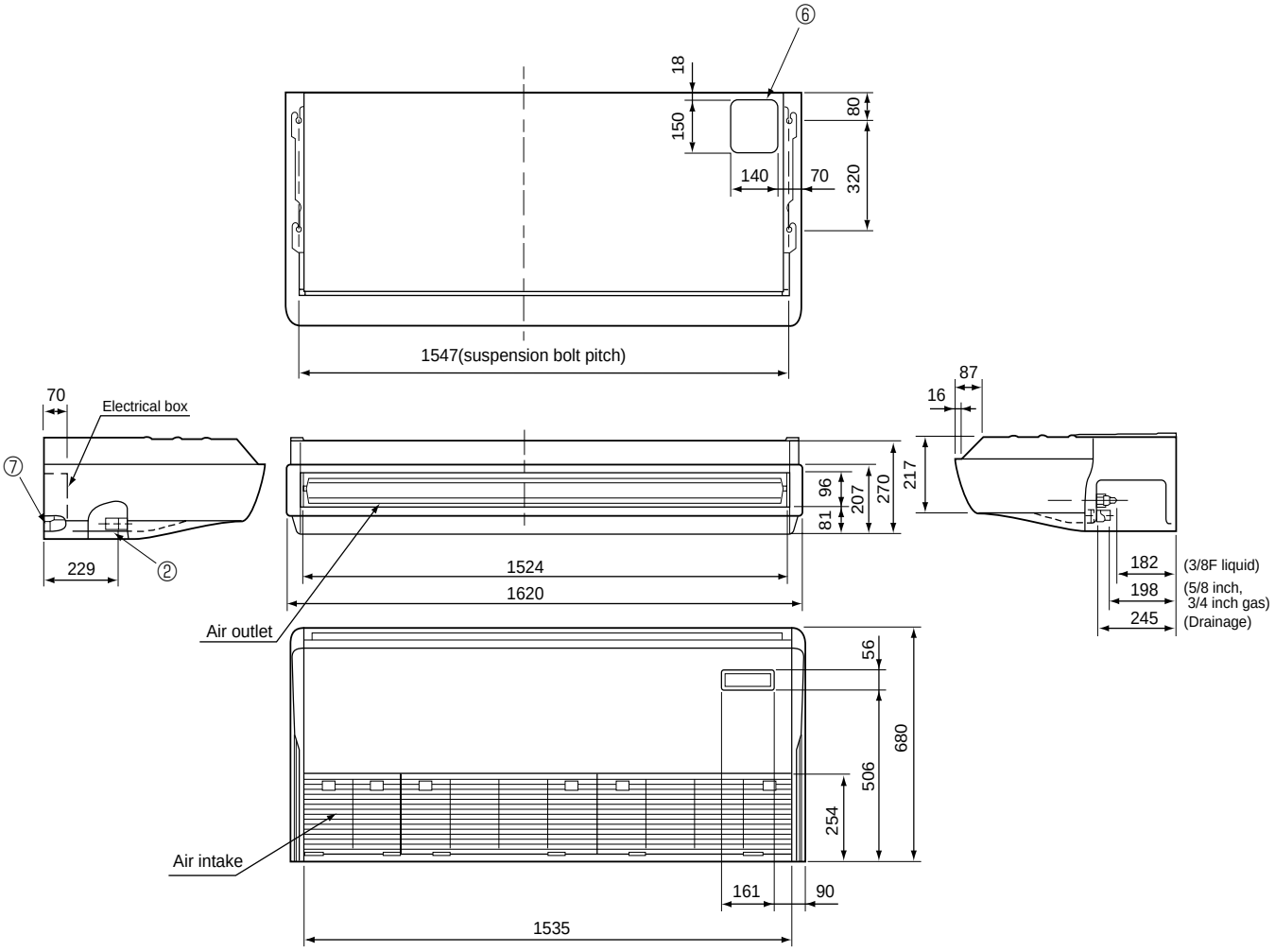
| | RP100 | P100 |
|---|---|---|
| ⑤ LIQUID SIDE | — | — |
| | $\phi$9.52 ○ | $\phi$9.52 ○ |
| ④ GAS SIDE | — | — |
| | $\phi$15.88 ○ | — |
| | $\phi$19.05 | $\phi$19.05 ○ |

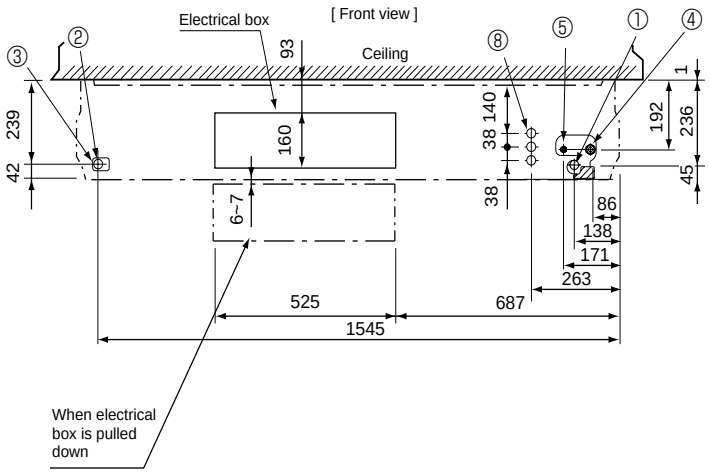
○ :Initial flare nut size

## PCA-RP125GA
## PCA-RP140GA

**Unit : mm**

NOTES:
1. Use M10 or W3/8 screws for anchor bolt.
2. When optional drain lift-up mechanism is installed, always provide upward piping for refrigerant piping.



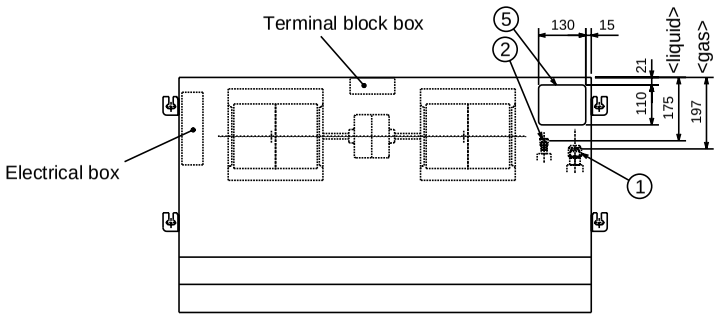

① Drainage pipe connection (26mm I.D.)
② Drainage pipe connection (for the left arrangement)
③ Knockout hole for left drain-piping arrangement
④ Refrigerant-pipe connection (gas pipe side/flared connection)
⑤ Refrigerant-pipe connection (liquid pipe side/flared connection)
⑥ Knockout hole for upper drain pipe arrangement
⑦ Knockout hole for left drain pipe arrangement
⑧ Knockout hole for wiring arrangement

Use the current nuts meeting the pipe size of the outdoor unit.

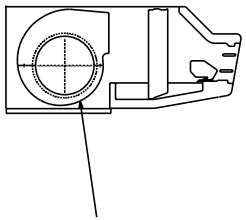
Available pipe size

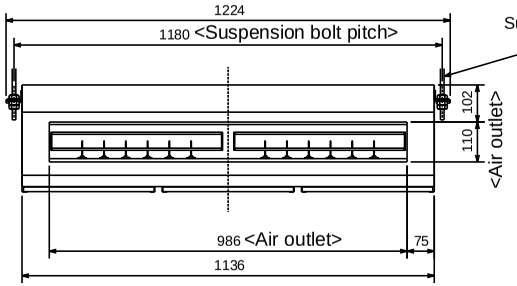
| | RP125,140 | P125,140 |
|---|---|---|
| ⑤ LIQUID SIDE | — | — |
| | ϕ9.52 ○ | ϕ9.52 ○ |
| ④ GAS SIDE | — | — |
| | ϕ15.88○ | — |
| | ϕ19.05 | ϕ19.05○ |

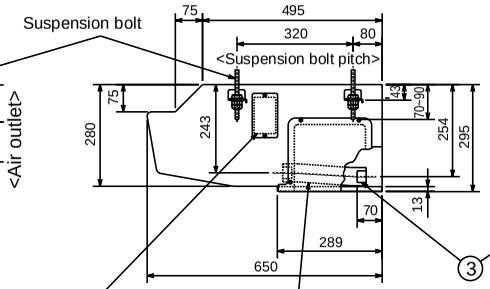
○ : Initial flare nut size

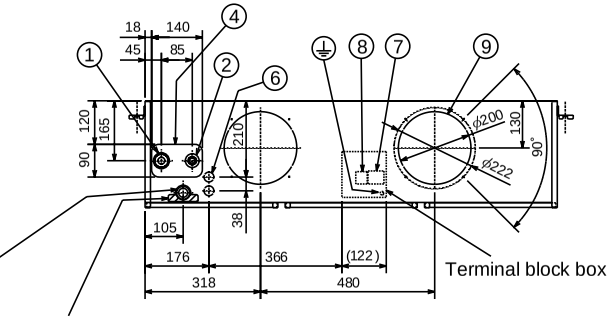


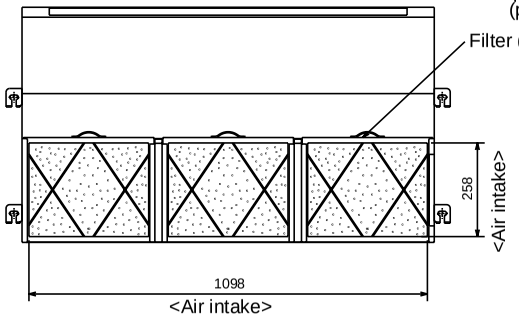

① Refrigerant-pipe connection(gas pipe side/flared connection : 5/8 inch)
② Refrigerant-pipe connection(liquid pipe side/flared connection : 3/8 inch)
③ Flexible hose(accessory)→Drainage pipe connection(26mm I.D.)
④ Knockout hole for behind refrigerant-piping arrangement
⑤ Knockout hole for upper refrigerant-pipe arrangement
⑥ Knockout hole for wiring arrangement : 2- $\phi$ 27
⑦ Terminal block(indoor/outdoor connecting line)
⑧ Terminal block(remote controller)
⑨ Knockout hole (duct for fresh air intake): 2- $\phi$ 200
Optional parts:duct flange( $\phi$ 200). model: PAC-SF28OF-E(1 pc.)



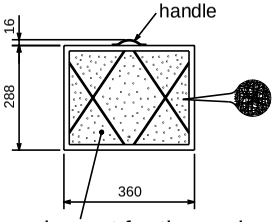



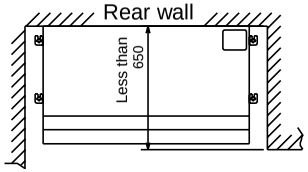



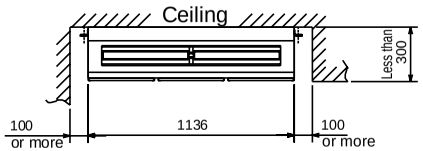

<Filter contour dimension>

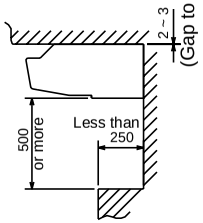



Filter element for the exchange
model:PAC-SG38KF-E (12pcs.)

Allowing clearances

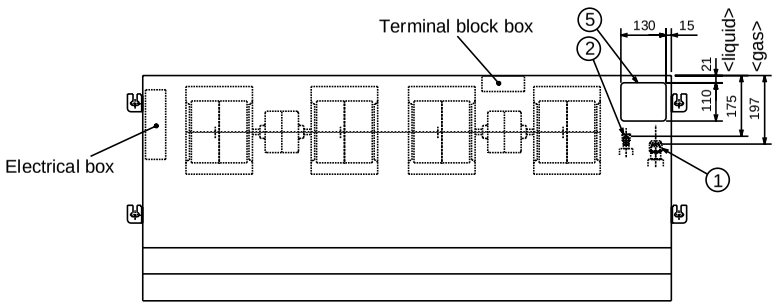


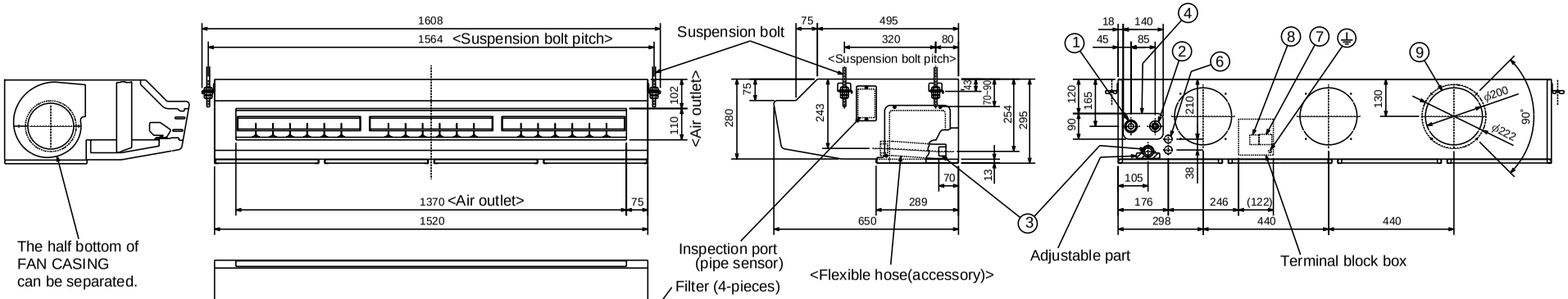



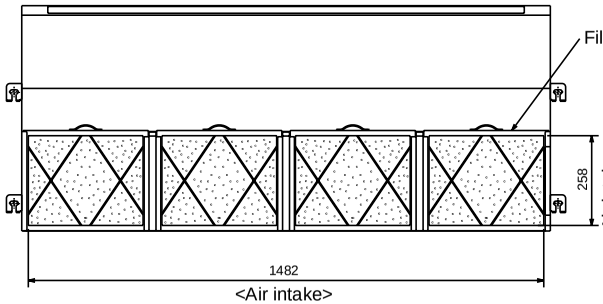

NOTES.
1.Use M10 or W3/8 screw for anchor bolt.

Unit : mm

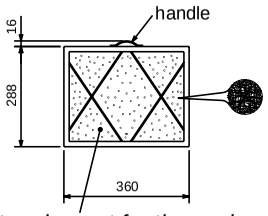



① Refrigerant-pipe connection(gas pipe side/flared connection : 5/8 inch, 3/4 inch)
② Refrigerant-pipe connection(liquid pipe side/flared connection : 3/8 inch)
③ Flexible hose(accessory)→ Drainage pipe connection(26mm I.D.)
④ Knockout hole for behind refrigerant-piping arrangement
⑤ Knockout hole for upper refrigerant-pipe arrangement
⑥ Knockout hole for wiring arrangement : 2- $\phi$ 27
⑦ Terminal block(indoor/outdoor connecting line)
⑧ Terminal block(remote controller)
⑨ Knockout hole (duct for fresh air intake) : 2- $\phi$ 200
Optional parts:duct flange( $\phi$ 200). model: PAC-SF28OF-E(1 pc.)



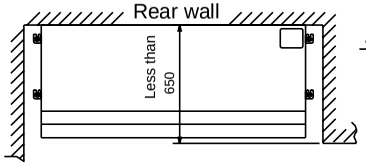



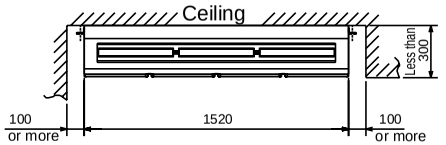

<Filter contour dimension>

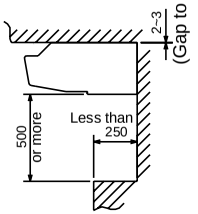



Filter element for the exchange
model:PAC-SG38KF-E (12pcs.)

Allowing clearances




NOTES.
1.Use M10 or W3/8 screw for anchor bolt.

Use the current nuts meeting the pipe size of the outdoor unit.

Available pipe size

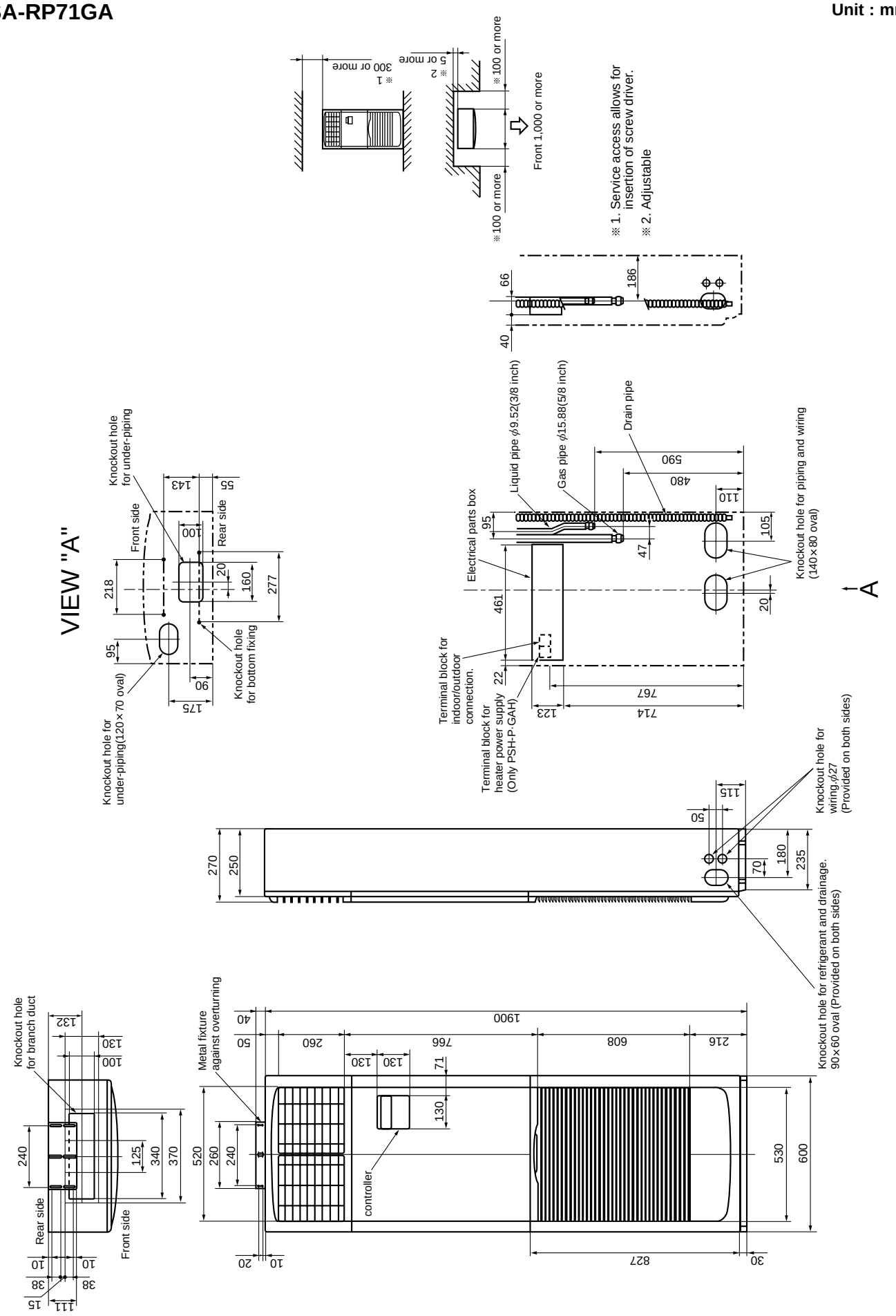
| | RP125 |
|---|---|
| ② LIQUID SIDE | $\phi$ 9.52 ○ |
| ① GAS SIDE | $\phi$ 15.88 ○ |
| | $\phi$ 19.05 |

○: Initial flare nut size

Unit : mm

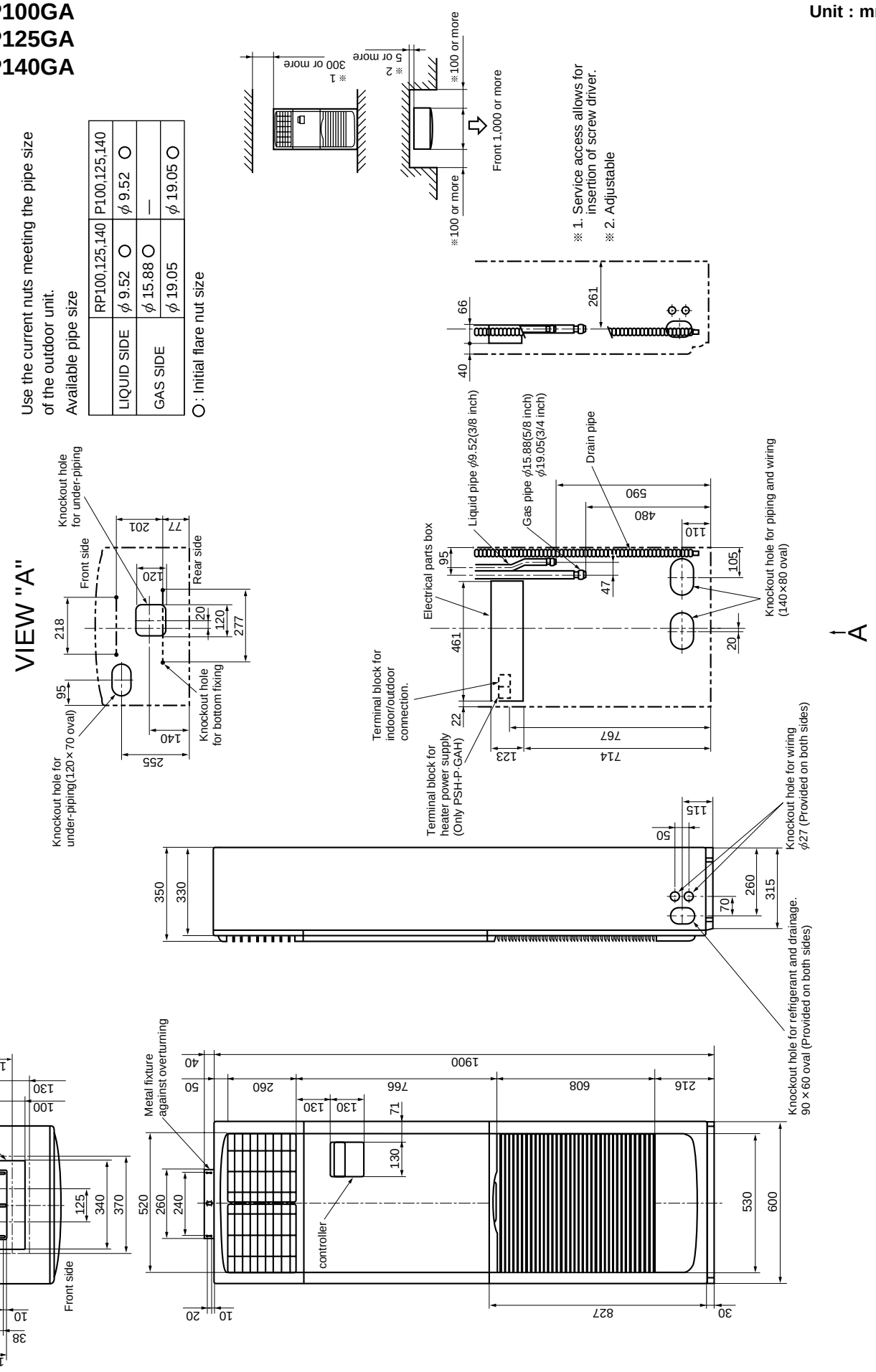
## PSA-RP71GA

**Unit : mm**



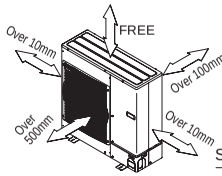
**PSA-RP100GA**
**PSA-RP125GA**
**PSA-RP140GA**

**Unit : mm**



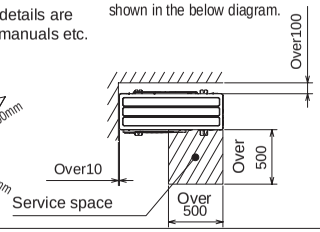
## 1 FREE SPACE (Around the unit)

The diagram below shows a basic example.
Explantion of particular details are given in the installation manuals etc.




## 2 SERVICE SPACE

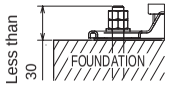
Dimensions of space needed for service access are shown in the below diagram.




## 3 FOUNDATION BOLTS

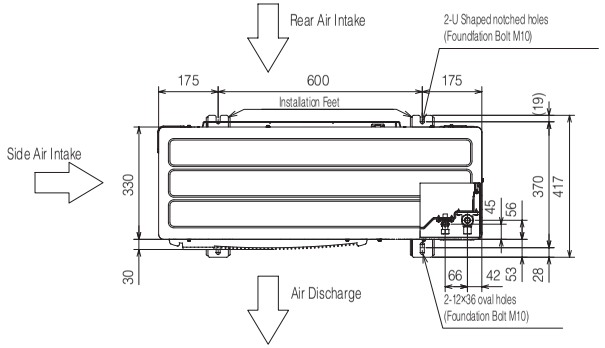
Please secure the unit firmly with 4 foundation (M10) bolts. (Bolts and washers must be purchased locally.)

<Foundation bolt height>



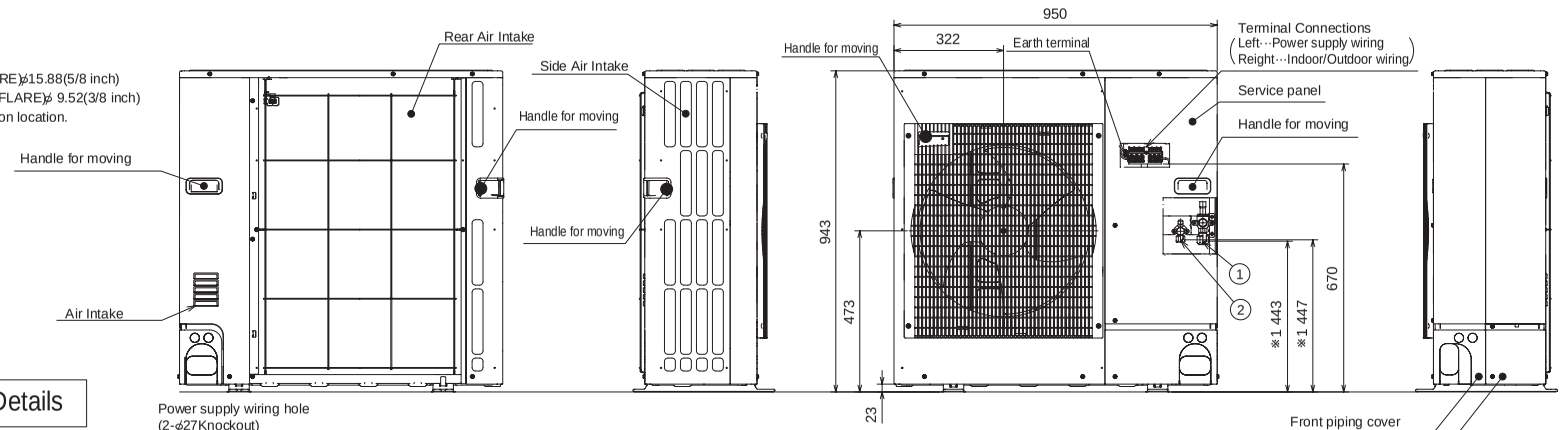

## 4 PIPING-WIRING DIRECTIONS

Piping and wiring connections can be made from 4 directions: front, right, rear and below.

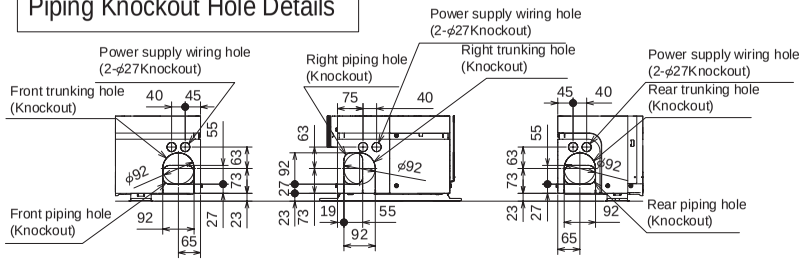


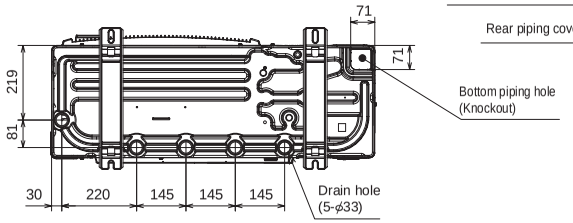

## Example of Notes

①···Refrigerant GAS pipe connction (FLARE)ø15.88(5/8 inch)
②···Refrigerant LIQUID pipe connection (FLARE)ø 9.52(3/8 inch)
※1 ···Indication of STOP VALVE connection location.




## Piping Knockout Hole Details

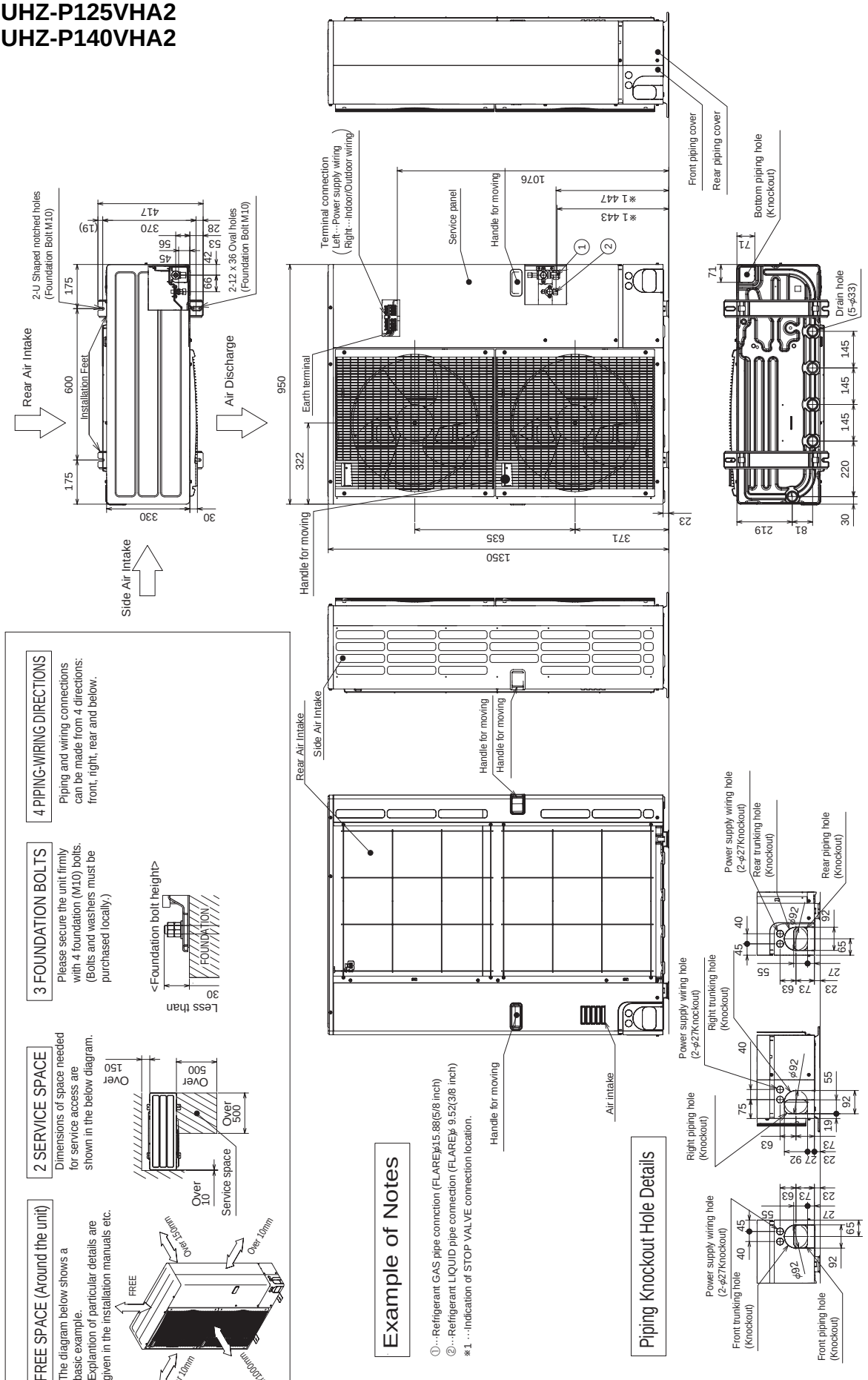



Unit : mm

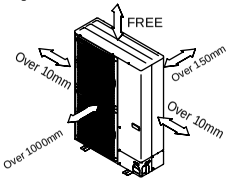
**PUHZ-P125VHA2**
**PUHZ-P140VHA2**

**Unit : mm**



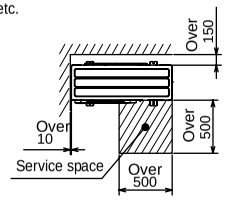
## 1 FREE SPACE (Around the unit)

The diagram below shows a basic example.
Explantion of particular details are given in the installation manuals etc.



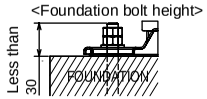

## 2 SERVICE SPACE

Dimensions of space needed for service access are shown in the below diagram.



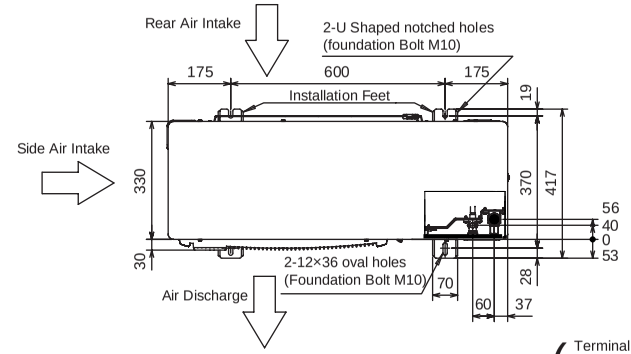

## 3 FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10) bolts. (Bolts and washers must be purchased locally.)




## 4 PIPING-WIRING DIRECTIONS

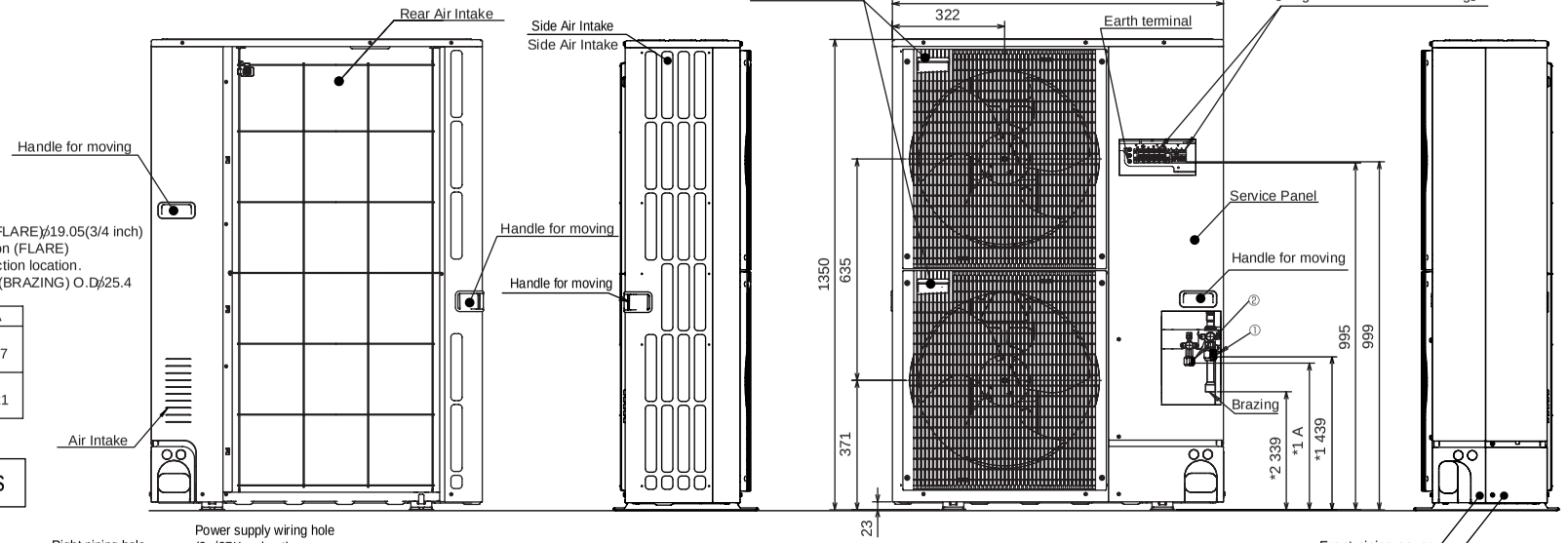
Piping and wiring connections can be made from 4 directions: front, right, rear and below.



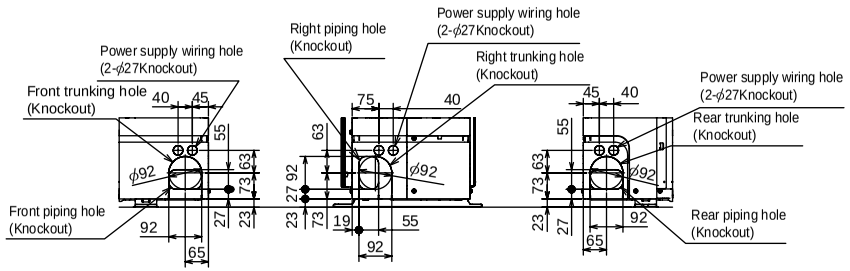

## Example of Notes

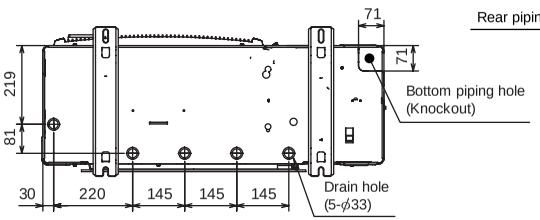
①· · · ·Refrigerant GAS pipe connction (FLARE)ϕ19.05(3/4 inch)
②· · · ·Refrigerant LIQUID pipe connection (FLARE)
*1· · · ·Indication of STOP VALVE connection location.
*2· · · ·Refrigerant GAS PIPE connention(BRAZING) O.Dϕ25.4

| | ② | A |
|---|---|---|
| PUHZ-P200YHA | ϕ9.52 (3/8 inch) | 447 |
| PUHZ-P250YHA | ϕ12.7 (1/2 inch) | 421 |




## Piping Knockout Hole Details

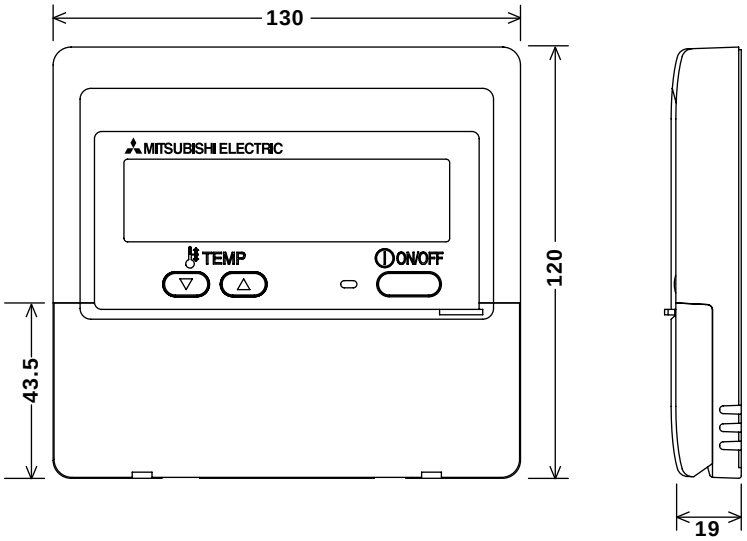


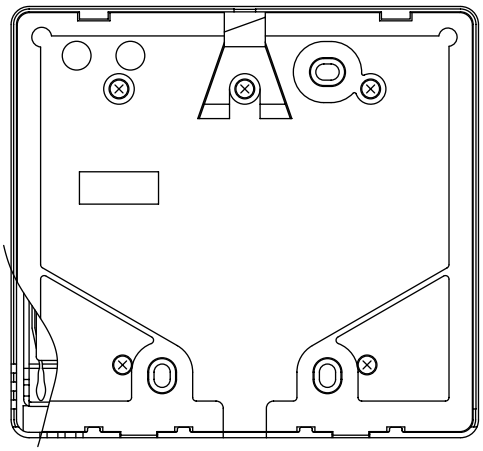




Unit : mm

## WIRED REMOTE CONTROLLER

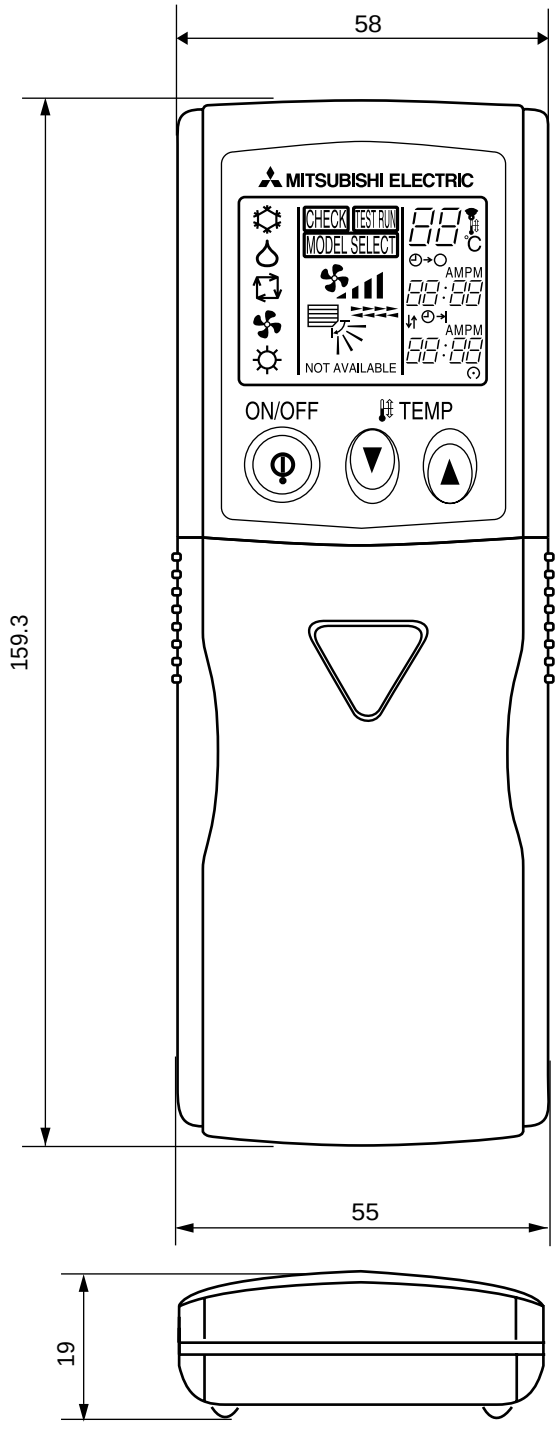
Unit : mm



## WIRELESS REMOTE CONTROLLER

**Unit : mm**

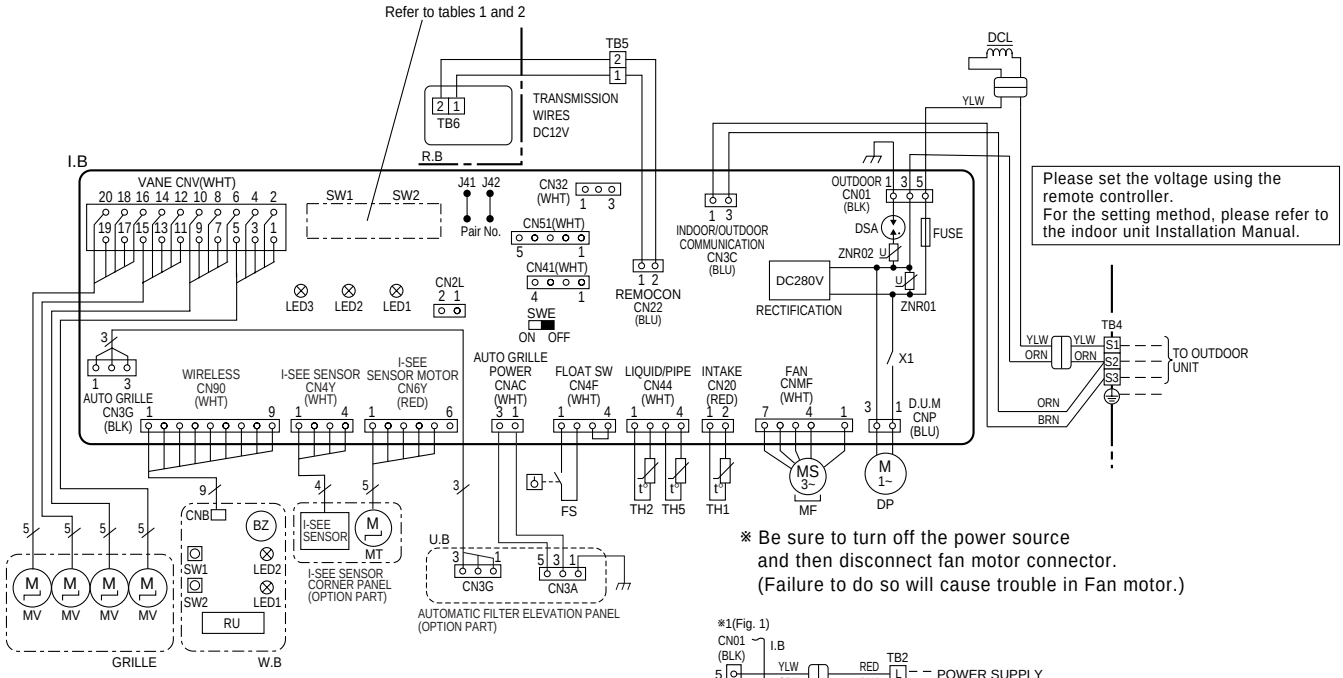


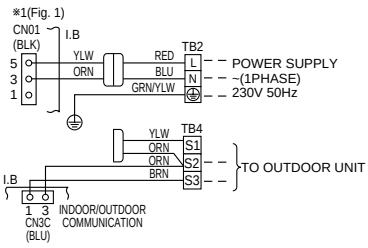
# 4 WIRING DIAGRAM

## PLA-RP50BA PLA-RP60BA PLA-RP71BA
## PLA-RP100BA PLA-RP125BA PLA-RP140BA

[LEGEND]

| SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|
| I.B | INDOOR CONTROLLER BOARD | MF | FAN MOTOR |
| CN2L | CONNECTOR (LOSSNAY) | MV | VANE MOTOR |
| CN32 | CONNECTOR (REMOTE SWITCH) | TB2 | TERMINAL BLOCK (Indoor unit Power (option)) |
| CN41 | CONNECTOR (HA TERMINAL-A) | TB4 | TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE) |
| CN51 | CONNECTOR (CENTRALLY CONTROL) | TB5,TB6 | TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE) |
| DSA | SURGE ABSORBER | | |
| FUSE | FUSE (T6.3AL250V) | TH1 | ROOM TEMP. THERMISTOR (0℃ / 15kΩ, 25℃ / 5. 4kΩ DETECT) |
| LED1 | POWER SUPPLY (I.B) | | |
| LED2 | POWER SUPPLY (R.B) | TH2 | PIPE TEMP. THERMISTOR/LIQUID (0℃ / 15kΩ, 25℃ / 5. 4kΩ DETECT) |
| LED3 | TRANSMISSION (INDOOR-OUTDOOR) | | |
| SW1 | SWITCH (MODEL SELECTION) ※See table 1 | TH5 | COND. / EVA. TEMP. THERMISTOR (0℃ / 15kΩ, 25℃ / 5. 4kΩ DETECT) |
| SW2 | SWITCH (CAPACITY CORD) ※See table 2 | | |
| SWE | CONNECTOR (EMERGENCY OPERATION) | OPTION PART | |
| X1 | RELAY (DRAIN PUMP) | W.B | PCB FOR WIRELESS REMOTE CONTROLLER |
| ZNR01,02 | VARISTOR | BZ | BUZZER |
| DCL | REACTOR | LED1 | LED (OPERATION INDICATION : GREEN) |
| DP | DRAIN-UP MACHINE | LED2 | LED (PREPARATION FOR HEATING : ORANGE) |
| FS | DRAIN FLOAT SWITCH | RU | RECEIVING UNIT |
| | | SW1 | EMERGENCY OPERATION (HEAT / DOWN) |
| | | SW2 | EMERGENCY OPERATION (COOL / UP) |




<Table 1>SW1(MODEL SELECTION)

| SW1 |
|---|
| Manufacture/Service |

<Table 2>SW2(CAPACITY CODE)

| SW2 | | | |
|---|---|---|---|
| MODELS | Manufacture/Service | MODELS | Manufacture/Service |
| PLA-RP35BA | | PLA-RP100BA | |
| PLA-RP50BA | | PLA-RP125BA | |
| PLA-RP60BA | | PLA-RP140BA | |
| PLA-RP71BA | | | |

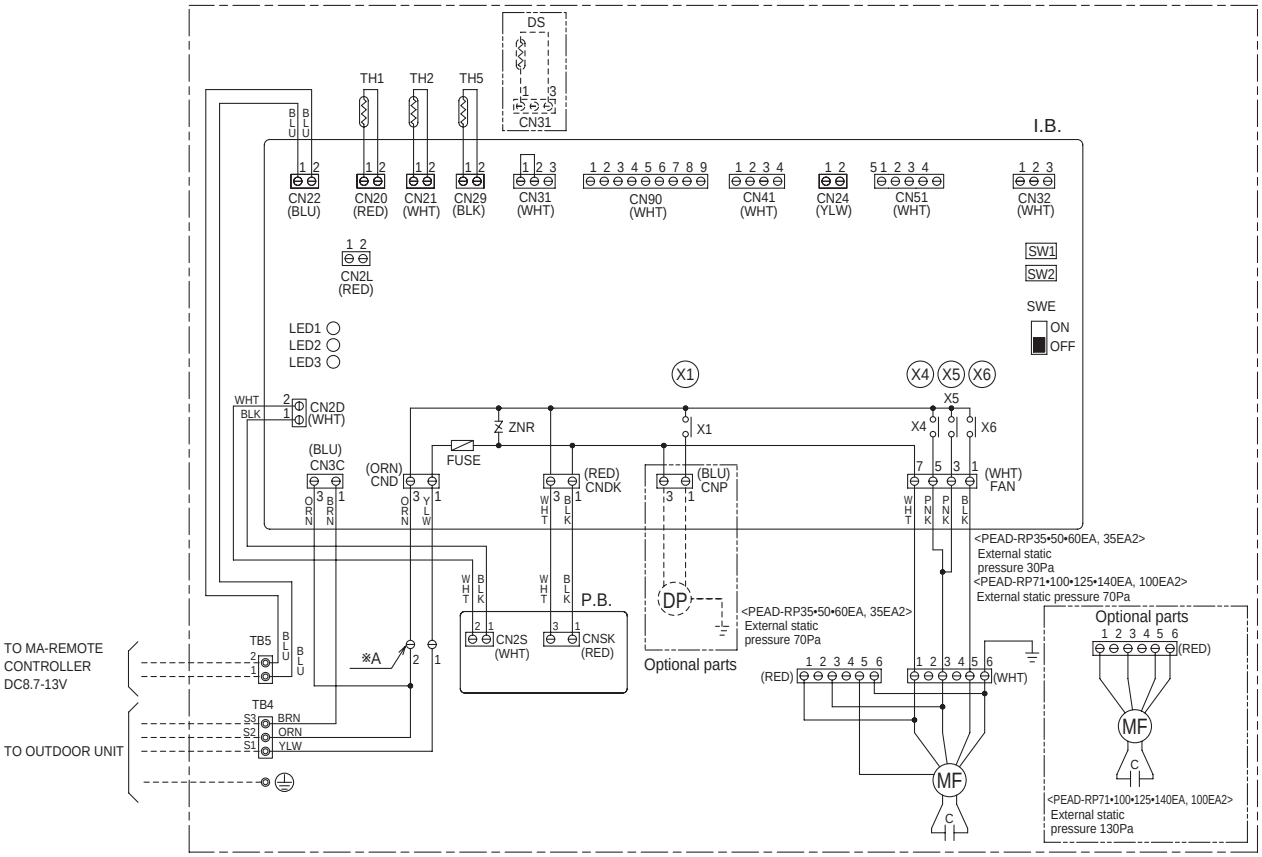
Notes:
1. Symbols used in wiring diagram above are, ○○○: Connector, □□□: Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
   ※1: When work to supply power separately to indoor and outdoor units was applied, refer to Fig 1.
   ※2: For power supply system of this unit, refer to the caution label located near this diagram.

# PEAD-RP50EA PEAD-RP60EA PEAD-RP71EA
# PEAD-RP100EA2 PEAD-RP125EA PEAD-RP140EA

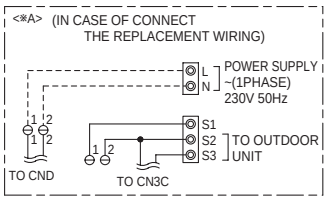
[LEGEND]

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| I.B. | INDOOR CONTROLLER BOARD | SW2 | SWITCH(CAPACITY CORD) | TB4 | TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE) |
| FUSE | FUSE(T6.3AL250V) | SWE | SWITCH(EMERGENCY OPERATION) | | |
| ZNR | VARISTOR | X1 | RELAY(DRAIN PUMP) | TB5 | TERMINAL BLOCK(REMOTE CONTROLLER) |
| CN2L | CONNECTOR(LOSSNAY) | X4 | RELAY(FAN MOTOR) | TH1 | INTAKE AIR TEMP. THERMISTOR (0℃ /15kΩ,25℃/5.4kΩ DETECT) |
| CN24 | CONNECTOR(HEATER) | X5 | RELAY(FAN MOTOR) | | |
| CN32 | CONNECTOR(REMOTE SWITCH) | X6 | RELAY(FAN MOTOR) | TH2 | PIPE TEMP. THERMISTOR/LIQUID (0℃ /15kΩ,25℃/5.4kΩ DETECT) |
| CN41 | CONNECTOR(HA TERMINAL-A) | P.B. | INDOOR POWER BOARD | | |
| CN51 | CONNECTOR(CENTRALLY CONTROL) | DRAIN PUMP | (OPTIONAL PARTS) | TH5 | COND./EVA. TEMP. THERMISTOR (0℃ /15kΩ,25℃/5.4kΩ DETECT) |
| CN90 | CONNECTOR(WIRELESS) | DP | DRAIN PUMP | | |
| LED1 | POWER SUPPLY(I.B.) | DS | DRAIN SENSOR | | |
| LED2 | POWER SUPPLY(REMOTE CONTROLLER) | C | CAPACITOR(FAN MOTOR) | | |
| LED3 | TRANSMISSION(INDOOR•OUTDOOR) | MF | FAN MOTOR | | |
| SW1 | SWITCH(MODEL SELECTION) | | | | |

INSIDE SECTION OF CONTROL BOX




| MODELS | SW1 Model selection switch | SW2 Capacity cord switch |
|---|---|---|
| 35EA(2) | 1 2 3 4 5 ON OFF | 1 2 3 4 5 ON OFF |
| 50EA | | 1 2 3 4 5 ON OFF |
| 60EA | | 1 2 3 4 5 ON OFF |
| 71EA | 1 2 3 4 5 ON OFF | 1 2 3 4 5 ON OFF |
| 100EA(2) | | 1 2 3 4 5 ON OFF |
| 125EA | | 1 2 3 4 5 ON OFF |
| 140EA | | 1 2 3 4 5 ON OFF |

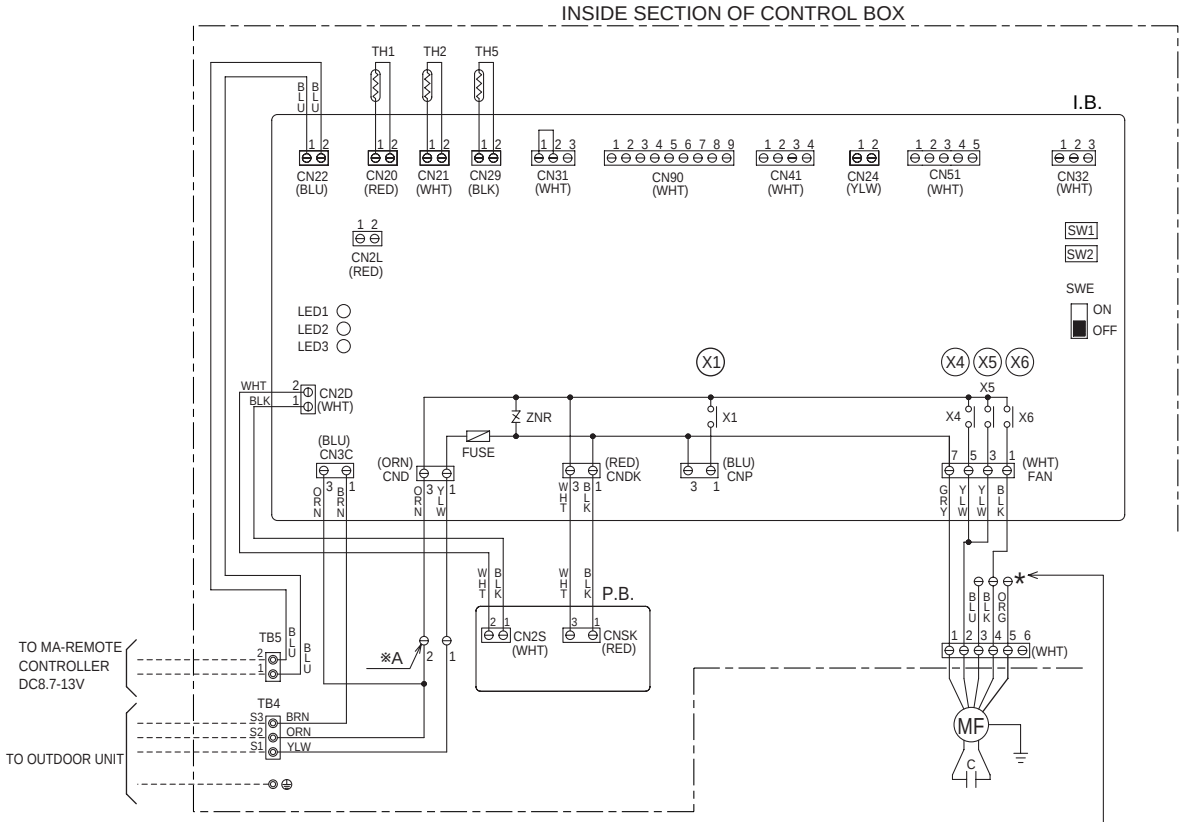


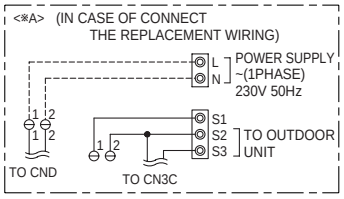

Notes:
1. Symbols used in wiring diagram above are, ⊖⊖⊖: Connector, ◎◎◎: Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
   ※1: When work to supply power separately to indoor and outdoor units was applied, refer to ※A.
   ※2: For power supply system of this unit, refer to the caution label located near this diagram.

## PEAD-RP60GA PEAD-RP71GA PEAD-RP100GA

[LEGEND]

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| I.B. | INDOOR CONTROLLER BOARD | SW1 | SWITCH(MODEL SELECTION) | TB5 | TERMINAL BLOCK(REMOTE CONTROLLER) |
| FUSE | FUSE(T6.3AL250V) | SW2 | SWITCH(CAPACITY CORD) | TH1 | INTAKE AIR TEMP.THERMISTOR (0℃ /15kΩ,25℃/5.4kΩ DETECT) |
| ZNR | VARISTOR | SWE | SWITCH(EMERGENCY OPERATION) | | |
| CN2L | CONNECTOR(LOSSNAY) | X1 | RELAY(DRAIN PUMP) | TH2 | PIPE TEMP. THERMISTOR/LIQUID (0℃ /15kΩ,25℃/5.4kΩ DETECT) |
| CN24 | CONNECTOR(HEATER) | X4 | RELAY(FAN MOTOR) | | |
| CN32 | CONNECTOR(REMOTE SWITCH) | X5 | RELAY(FAN MOTOR) | TH5 | COND./EVA. TEMP. THERMISTOR (0℃ /15kΩ,25℃/5.4kΩ DETECT) |
| CN41 | CONNECTOR(HA TERMINAL-A) | X6 | RELAY(FAN MOTOR) | | |
| CN51 | CONNECTOR(CENTRALLY CONTROL) | P.B. | INDOOR POWER BOARD | | |
| CN90 | CONNECTOR(WIRELESS) | C | CAPACITOR(FAN MOTOR) | | |
| LED1 | POWER SUPPLY(I.B.) | MF | FAN MOTOR | | |
| LED2 | POWER SUPPLY(REMOTE CONTROLLER) | TB4 | TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE) | | |
| LED3 | TRANSMISSION(INDOOR•OUTDOOR) | | | | |




| MODELS | SW1 Model selection switch | SW2 Capacity cord switch |
|---|---|---|
| 60GA | | 1 2 3 4 5 ON OFF |
| 71GA | 1 2 3 4 5 ON OFF | 1 2 3 4 5 ON OFF |
| 100GA | | 1 2 3 4 5 ON OFF |

*External static pressure

| CONNECTOR COLOR | 220V | 230V | 240V |
|---|---|---|---|
| BLU | 5Pa | 10Pa | 20Pa |
| WHT (INITIAL SETTING) | 35Pa | 50Pa | 60Pa |
| RED | 50Pa | 70Pa | 75Pa |

Notes:
1. Symbols used in wiring diagram above are, ⊖⊖⊖: Connector, ◎◎◎: Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
※1: When work to supply power separately to indoor and outdoor units was applied, refer to ※A.
※2: For power supply system of this unit, refer to the caution label located near this diagram.

## PEA-RP200, 250GA

INDOOR UNIT

| SYMBOL | NAME |
|---|---|
| MF1 | FAN MOTOR (INDOOR) |
| 51F | OVER CURRENT RELAY (INDOOR FAN MOTOR) |
| 52FLo | MAGNETIC CONTACTOR (INDOOR FAN MOTOR<LOW SPEED>) |
| 52FHi | MAGNETIC CONTACTOR (INDOOR FAN MOTOR<HIGH SPEED>) |
| 49F | INTERNAL THERMOSTAT (INDOOR FAN MOTOR) |
| TB2,4,5 | TERMINAL BLOCK |
| TH1 | THERMISTOR — ROOM TEMP. |
| TH2 | THERMISTOR — LIQUID PIPE TEMP. |
| TH5 | THERMISTOR — COND./EVA. TEMP. |
| X1 | AUXILIARY RELAY |
| CR1,2 | SURGE KILLER |
| FB | FERRITE CORE |
| FUSE | FUSE (T6.3AL250V) |
| ZNR | VARISTOR |
| X4-6 | AUXILIARY RELAY |
| SW1 | SWITCH (MODEL SELECTION) |
| SW2 | SWITCH (CAPACITY CODE) |
| SWE | CONNECTOR (EMERGENCY OPERATION) |
| LED1 | LED (POWER SUPPLY) |
| LED2 | LED (POWER SUPPLY<REMOTE CONTROLLER>) |
| LED3 | LED (TRANSMISSION<INDOOR-OUTDOOR>) |
| CN2L | CONNECTOR (LOSSNAY) |
| CN31 | CONNECTOR (DRAIN SENSOR) |
| CN32 | CONNECTOR (REMOTE SWITCH) |
| CN41 | CONNECTOR (HA TERMINAL-A) |
| CN51 | CONNECTOR (CENTRALLY CONTROL) |
| CN90 | CONNECTOR (WIRELESS REMOTE CONTROLLER) |
| ZNR5~7 | VARISTOR |
| DSA,DSR | ARRESTER |

INDOOR CONTROLLER BOARD

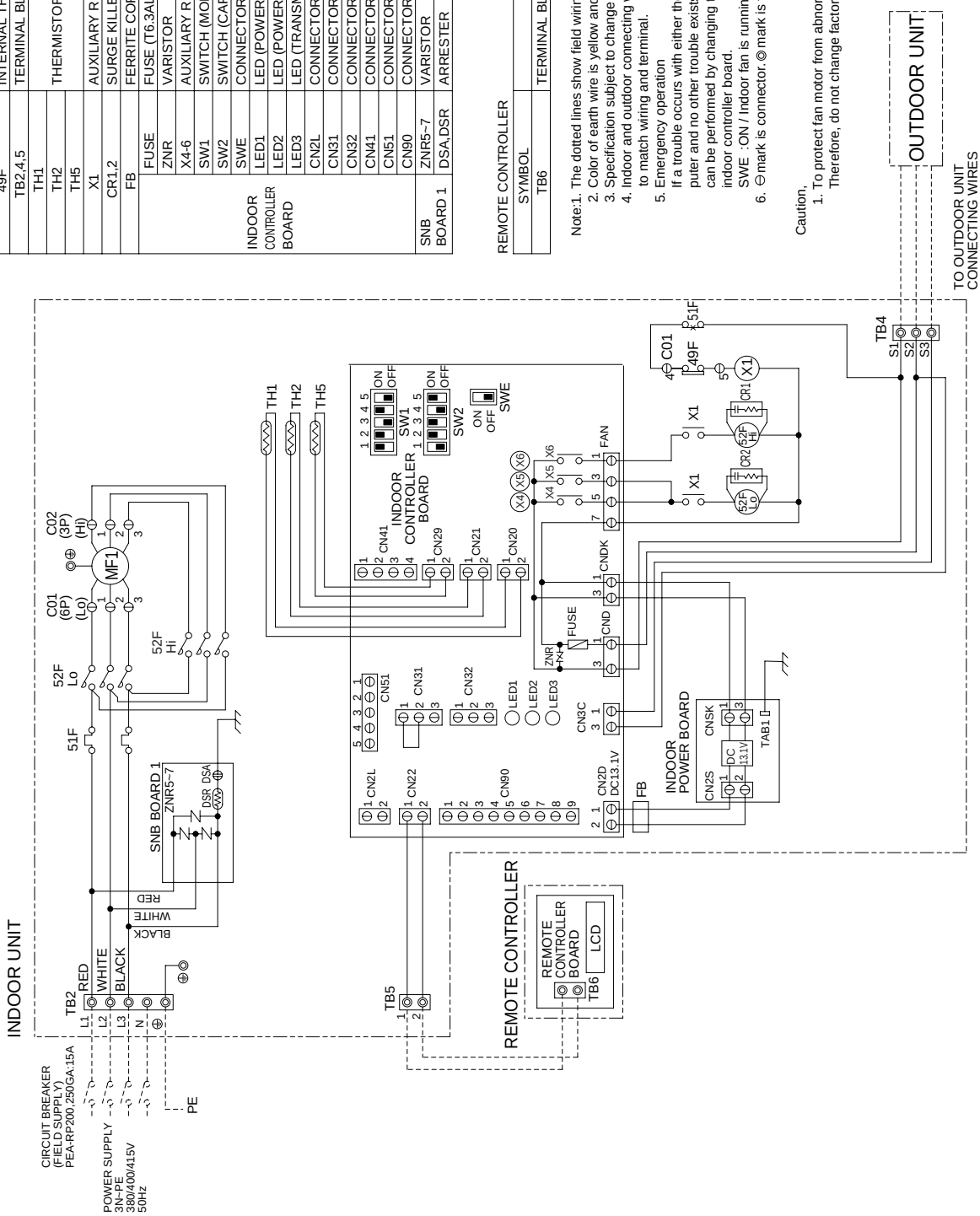
SNB BOARD 1

REMOTE CONTROLLER

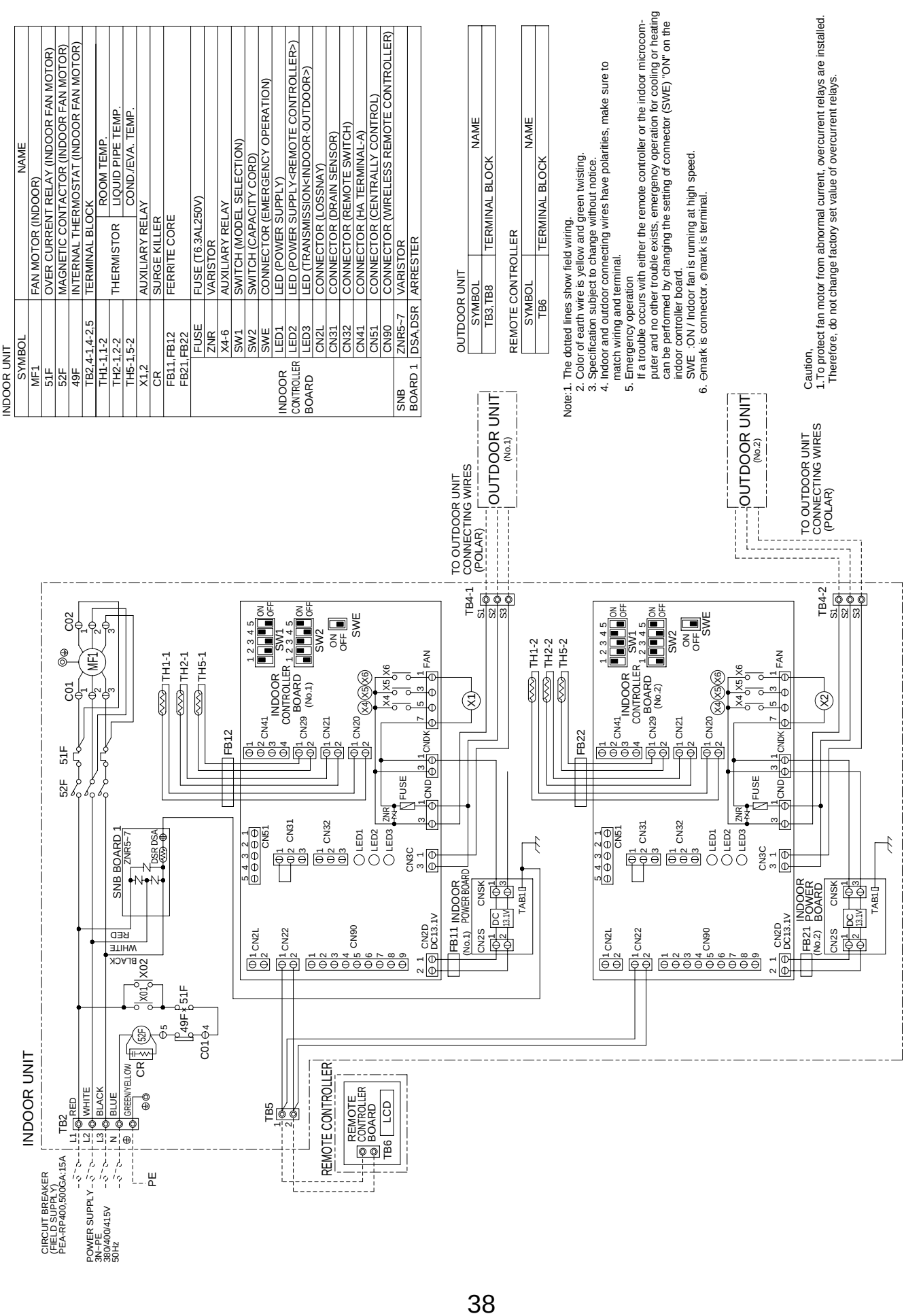
| SYMBOL | NAME |
|---|---|
| TB6 | TERMINAL BLOCK |

Note:1. The dotted lines show field wiring.
2. Color of earth wire is yellow and green twisting.
3. Specification subject to change without notice.
4. Indoor and outdoor connecting wires have polarities, make sure to match wiring and terminal.
5. Emergency operation
If a trouble occurs with either the remote controller or the indoor microcomputer and no other trouble exists, emergency operation for cooling or heating can be performed by changing the setting of connector (SWE) "ON" on the indoor controller board.
SWE :ON / Indoor fan is running at high speed.
6. ⊖ mark is connector. ◎ mark is terminal.

Caution,
1. To protect fan motor from abnormal current, overcurrent relays are installed. Therefore, do not change factory set value of overcurrent relays.



## PEA-RP400, 500GA




| INDOOR UNIT | | |
|---|---|---|
| SYMBOL | | NAME |
| MF1 | | FAN MOTOR (INDOOR) |
| 51F | | OVER CURRENT RELAY (INDOOR FAN MOTOR) |
| 52F | | MAGNETIC CONTACTOR (INDOOR FAN MOTOR) |
| 49F | | INTERNAL THERMOSTAT (INDOOR FAN MOTOR) |
| TB2,4-1,4-2,5 | | TERMINAL BLOCK |
| TH1-1,1-2 | THERMISTOR | ROOM TEMP. |
| TH2-1,2-2 | | LIQUID PIPE TEMP. |
| TH5-1,5-2 | | COND./EVA. TEMP. |
| X1,2 | | AUXILIARY RELAY |
| CR | | SURGE KILLER |
| FB11,FB12 | | FERRITE CORE |
| FB21,FB22 | | |
| INDOOR CONTROLLER BOARD | FUSE | FUSE (T6.3AL250V) |
| | ZNR | VARISTOR |
| | X4-6 | AUXILIARY RELAY |
| | SW1 | SWITCH (MODEL SELECTION) |
| | SW2 | SWITCH (CAPACITY CORD) |
| | SWE | CONNECTOR (EMERGENCY OPERATION) |
| | LED1 | LED (POWER SUPPLY) |
| | LED2 | LED (POWER SUPPLY<REMOTE CONTROLLER>) |
| | LED3 | LED (TRANSMISSION<INDOOR↔OUTDOOR>) |
| | CN2L | CONNECTOR (LOSSNAY) |
| | CN31 | CONNECTOR (DRAIN SENSOR) |
| | CN32 | CONNECTOR (REMOTE SWITCH) |
| | CN41 | CONNECTOR (HA TERMINAL-A) |
| | CN51 | CONNECTOR (CENTRALLY CONTROL) |
| | CN90 | CONNECTOR (WIRELESS REMOTE CONTROLLER) |
| SNB BOARD 1 | ZNR5~7 | VARISTOR |
| | DSA,DSR | ARRESTER |

| OUTDOOR UNIT | |
|---|---|
| SYMBOL | NAME |
| TB3, TB8 | TERMINAL BLOCK |

| REMOTE CONTROLLER | |
|---|---|
| SYMBOL | NAME |
| TB6 | TERMINAL BLOCK |

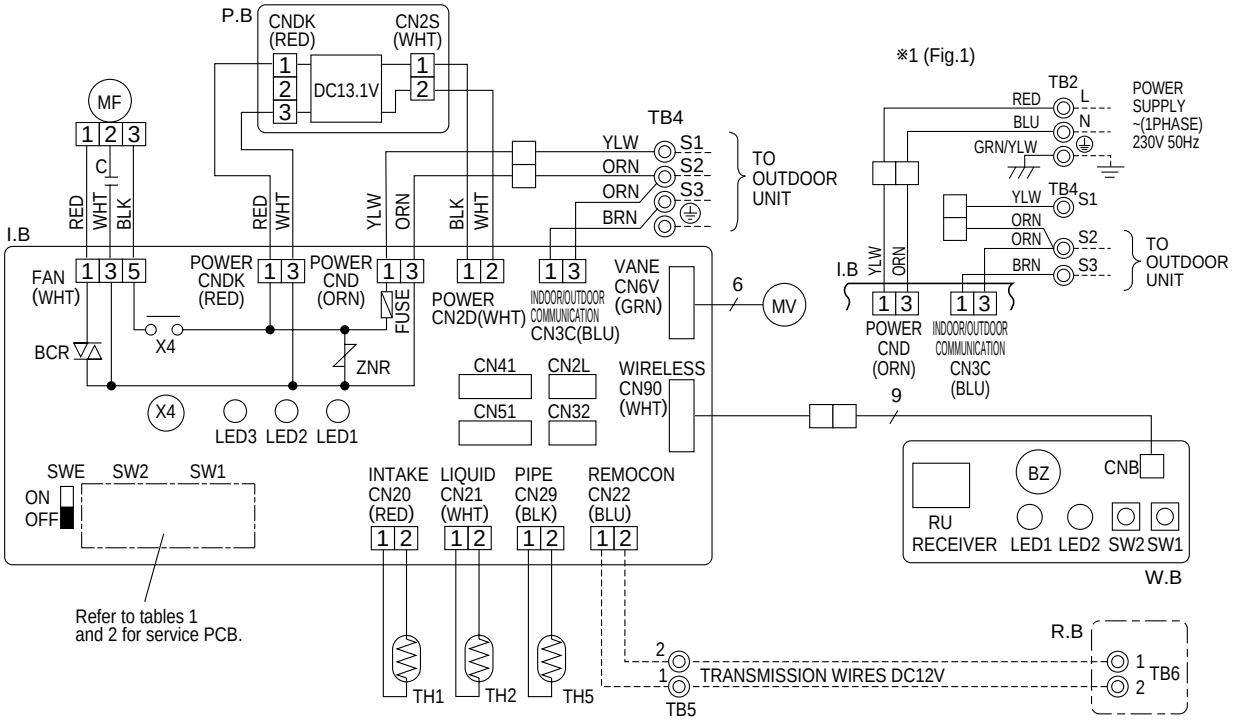
Note:1. The dotted lines show field wiring.
2. Color of earth wire is yellow and green twisting.
3. Specification subject to change without notice.
4. Indoor and outdoor connecting wires have polarities, make sure to match wiring and terminal.
5. Emergency operation
If a trouble occurs with either the remote controller or the indoor microcomputer and no other trouble exists, emergency operation for cooling or heating can be performed by changing the setting of connector (SWE) "ON" on the indoor controller board.
SWE : ON / Indoor fan is running at high speed.
6. ⊖mark is connector. ⊙mark is terminal.

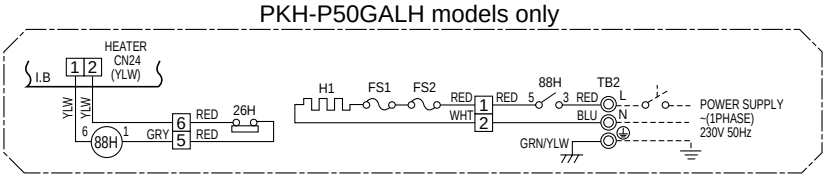
Caution,
1. To protect fan motor from abnormal current, overcurrent relays are installed. Therefore, do not change factory set value of overcurrent relays.

## PKA-RP50GAL

[LEGEND]

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| P.B | INDOOR POWER BOARD | C | CAPACITOR <FAN MOTOR> | W.B | WIRELESS REMOTE CONTROLLER BOARD |
| I.B | INDOOR CONTROLLER BOARD | MF | FAN MOTOR | RU | RECEIVING UNIT |
| FUSE | FUSE (T6.3AL250V) | MV | VANE MOTOR | BZ | BUZZER |
| ZNR | VARISTOR | TB2 | TERMINAL BLOCK (HEATER) ※PKH-P.GALH | LED1 | LED <RUN INDICATOR> |
| CN2L | CONNECTOR <LOSSNAY> | | models only or option for PKA-RP.GAL models. | LED2 | LED <HOT ADJUST> |
| CN32 | CONNECTOR <REMOTE SWITCH> | TB4 | TERMINAL BLOCK <INDOOR/ OUTDOOR | SW1 | SWITCH (HEATING ON/ OFF> |
| CN41 | CONNECTOR <HA TERMINAL-A> | | CONNECTING LINE> | SW2 | SWITCH (COOLING ON/ OFF> |
| CN51 | CONNECTOR <CENTRALLY CONTROL> | TB5,TB6 | TERMINAL BLOCK <REMOTE CONTROLLER | R.B | WIRED REMOTE CONTROLLER BOARD |
| SW1 | SWITCH <MODEL SELECTION>※See Table 1. | | TRANSMISSION LINE> <OPTION> | HEATER | |
| SW2 | SWITCH <CAPACITY CODE>※See Table 2. | TH1 | ROOM TEMP.THERMISTOR | FS1 | THERMAL FUSE <104℃ 10A> |
| SWE | SWITCH <EMERGENCY OPERATION> | | <0℃/ 15kΩ, 25℃/ 5.4kΩ DETECT> | FS2 | THERMAL FUSE <84℃ 10A> |
| X4 | RELAY <FAN MOTOR> | TH2 | PIPE TEMP.THERMISTOR/ LIQUID | H1 | HEATER |
| BCR | FAN CONTROL ELEMENT | | <0℃/ 15kΩ, 25℃/ 5.4kΩ DETECT> | 26H | HEATER THERMAL SWITCH |
| LED1 | POWER SUPPLY <I.B> | TH5 | COND./ EVA.TEMP.THERMISTOR | 88H | HEATER CONTACTOR |
| LED2 | POWER SUPPLY <R.B> | | <0℃/ 15kΩ, 25℃/ 5.4kΩ DETECT> | | |
| LED3 | TRANSMISSION <INDOOR-OUTDOOR> | | | | |




Please set the voltage using the remote controller.
For the setting method, please refer to the indoor unit Installation Manual.

| SW1 |
|---|
| Service board |
| 1 2 3 4 5 ON OFF |

| SW2 | |
|---|---|
| MODELS | Service board |
| PKA-RP50GAL<br>PKH-P50GALH | 1 2 3 4 5 ON OFF |

Notes:
1. Symbols used in wiring diagram above are, □□□: Connector, ◎: Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
   ※1: When work to supply power separately to indoor and outdoor units was applied, refer to Fig 1.
   ※2: For power supply system of this unit, refer to the caution label located near this diagram.

## PKA-RP50FAL2 PKA-RP60FAL PKA-RP71FAL PKA-RP100FAL

[LEGEND]

| SYMBOL | | NAME | SYMBOL | NAME | SYMBOL | | NAME |
|---|---|---|---|---|---|---|---|
| P.B | | INDOOR POWER BOARD | C | CAPACITOR(FAN MOTOR) | W.B | | WIRELESS REMOTE CONTROLLER BOARD |
| I.B | | INDOOR CONTROLLER BOARD | MF | FAN MOTOR | | RU | RECEIVING UNIT |
| | FUSE | FUSE(T6.3AL250V) | MV | VANE MOTOR | | BZ | BUZZER |
| | ZNR | VARISTOR | TB2 | TERMINAL BLOCK (HEATER) ※PKH-P.FALH models only or option for PKA-RP.FAL models. | | LED1 | LED(RUN INDICATOR ) |
| | CN2L | CONNECTOR(LOSSNAY) | | | | LED2 | LED(HOT ADJUST) |
| | CN32 | CONNECTOR(REMOTE SWITCH) | TB4 | TERMINAL BLOCK(INDOOR/OUTDOOR CONNECTING LINE) | | SW1 | SWITCH(HEATING ON/OFF) |
| | CN41 | CONNECTOR(HA TERMINAL-A) | | | | SW2 | SWITCH(COOLING ON/OFF) |
| | CN51 | CONNECTOR(CENTRALLY CONTROL) | TB5 | TERMINAL BLOCK(REMOTE CONTROLLER TRANSMISSION LINE )(OPTION) | R.B | | WIREDREMOTE CONTROLLER BOARD(OPTION) |
| | SW1 | SWITCH (MODEL SELECTION) ※ See Table 1. | | | | TB6 | TERMINAL BLOCK(REMOTE CONTROLLER TRANSMISSION LINE) |
| | SW2 | SWITCH (CAPACITY CODE) ※ See Table 2. | TH1 | ROOM TEMP.THERMISTOR (0℃/15kΩ, 25℃/5.4kΩ DETECT) | HEATER | | |
| | SWE | SWITCH(EMERGENCY OPERATION) | | | | FS1,2 | THERMAL FUSE(117℃ 10A:60,71FALH/ 117℃ 16A:100FALH) |
| | X4 | RELAY(FAN MOTOR) | TH2 | PIPE TEMP.THERMISTOR/LIQUID (0℃/15kΩ, 25℃/5.4kΩ DETECT) | | H1 | HEATER |
| | BCR | FAN CONTROL ELEMENT | | | | 26H | HEATER THERMAL SWITCH |
| | LED1 | POWER SUPPLY(I.B) | TH5 | COND./EVA.TEMP.THERMISTOR (0℃/15kΩ, 25℃/5.4kΩ DETECT) | | | |
| | LED2 | POWER SUPPLY(R.B) | | | | | |
| | LED3 | TRANSMISSION(INDOOR-OUTDOOR) | | | | 88H | HEATER CONTACTOR |

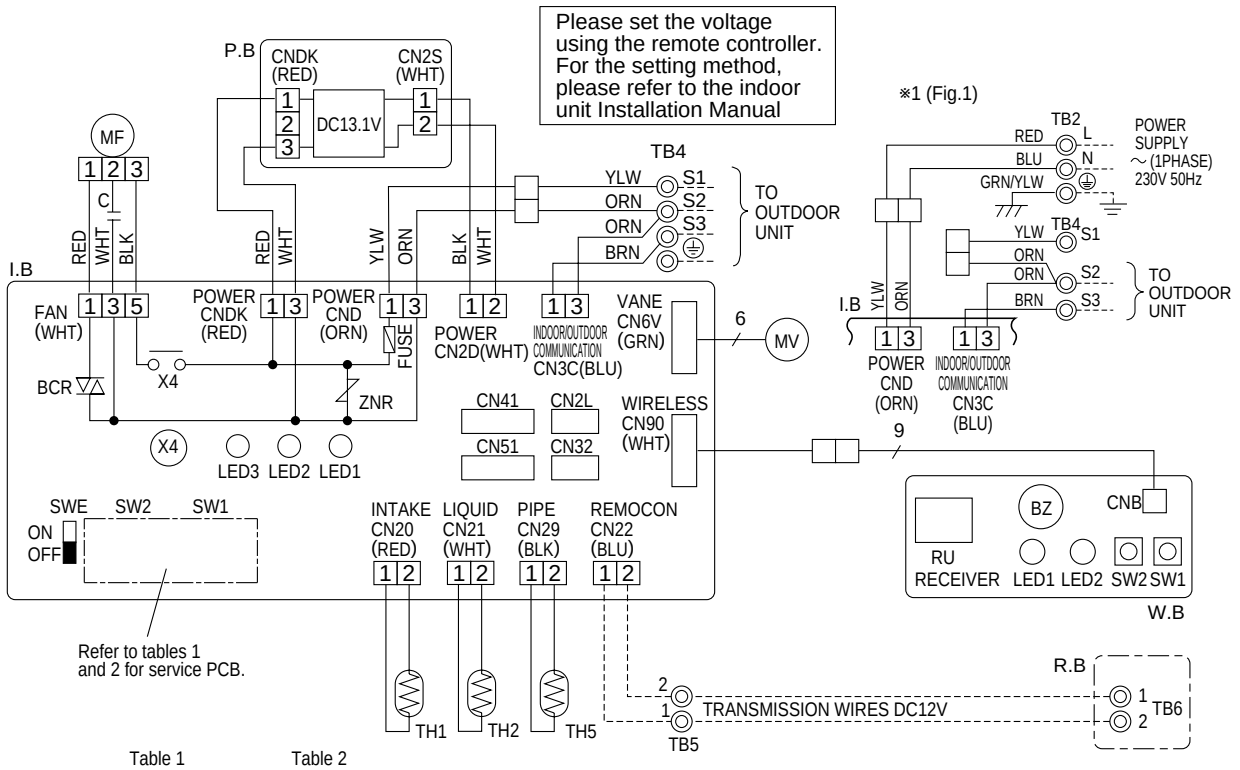


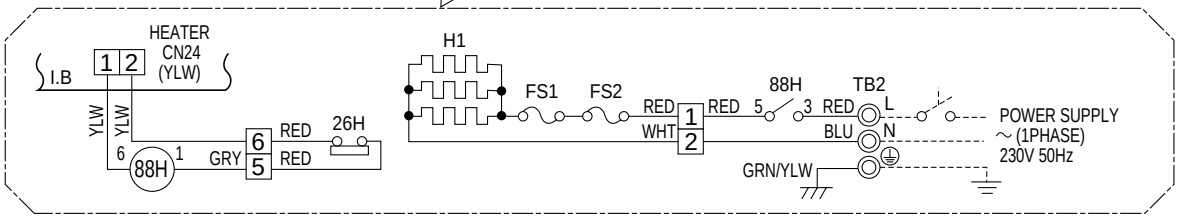

Table 1

| SW1 |
|---|
| Service board |
| 1 2 3 4 5 ON OFF |

Table 2

| SW2 | | | | | |
|---|---|---|---|---|---|
| MODELS | Service board | MODELS | Service board | MODELS | Service board |
| PKA-RP50FAL2 PKA-RP60FAL PKH-P60FALH | 1 2 3 4 5 ON OFF | PKA-RP71FAL PKH-P71FALH | 1 2 3 4 5 ON OFF | PKA-RP100FAL PKH-P100FALH | 1 2 3 4 5 ON OFF |

PKH-P60～P100FALH models only

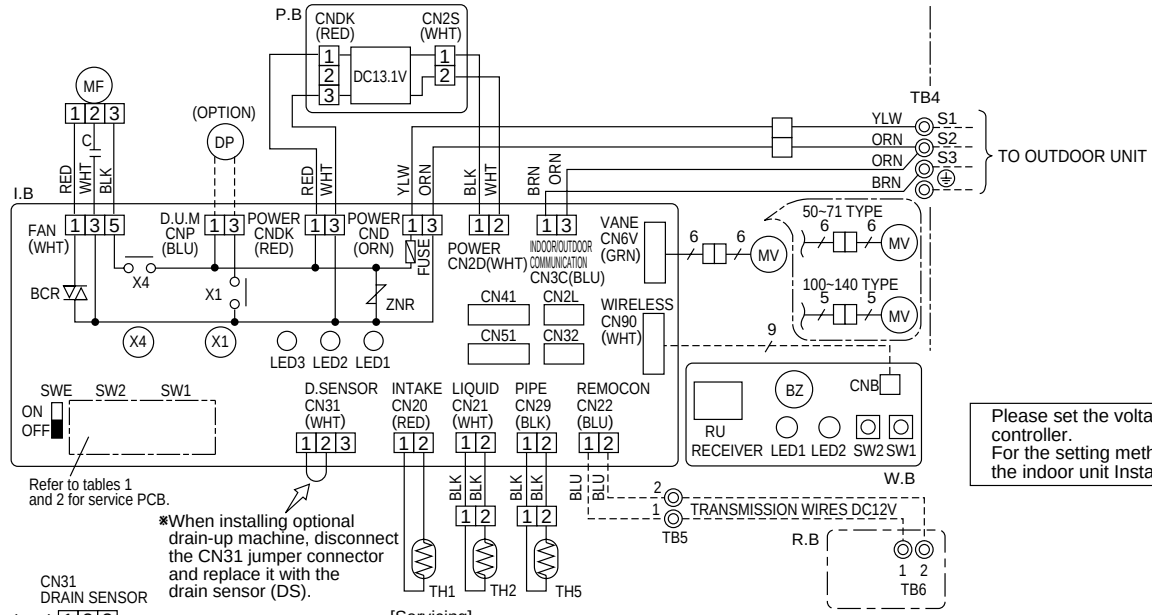



Notes:
1. Symbols used in wiring diagram above are, □□□: Connector, ◎: Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
※1: When work to supply power separately to indoor and outdoor units was applied, refer to Fig 1.
※2: For power supply system of this unit, refer to the caution label located near this diagram.

# PCA-RP50GA PCA-RP50GA2 PCA-RP60GA PCA-RP71GA
# PCA-RP100GA PCA-RP125GA PCA-RP140GA

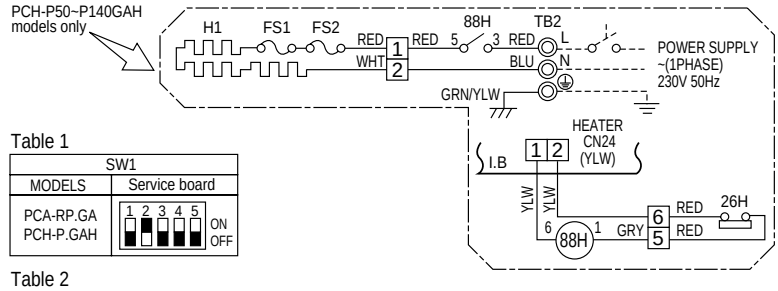
[LEGEND]

| SYMBOL | | NAME | SYMBOL | NAME | SYMBOL | | NAME |
|---|---|---|---|---|---|---|---|
| P.B | | INDOOR POWER BOARD | MF | FAN MOTOR | W.B | | WIRELESS REMOTE CONTROLLER BOARD(OPTION) |
| I.B | | INDOOR CONTROLLER BOARD | MV | VANE MOTOR | | RU | RECEIVING UNIT |
| | FUSE | FUSE (T6.3AL250V) | DP | DRAIN-UP MACHINE (OPTION) | | BZ | BUZZER |
| | ZNR | VARISTOR | DS | DRAIN SENSOR (OPTION) | | LED1 | LED(RUN INDICATOR) |
| | CN2L | CONNECTOR(LOSSNAY) | TB2 | TERMINAL BLOCK (HEATER) ※PCH-P.GAH models only or option for PCA RP.GA models. | | LED2 | LED(HOT ADJUST) |
| | CN32 | CONNECTOR(REMOTE SWITCH) | | | | SW1 | SWITCH(HEATING ON/OFF) |
| | CN41 | CONNECTOR(HA TERMINAL-A) | TB4 | TERMINAL BLOCK(INDOOR/OUTDOOR CONNECTING LINE) | | SW2 | SWITCH(COOLING ON/OFF) |
| | CN51 | CONNECTOR(CENTRALLY CONTROL) | TB5,TB6 | TERMINAL BLOCK(REMOTE CONTROLLER TRANSMISSION LINE ) | HEATER | | |
| | SW1 | SWITCH (MODEL SELECTION) ※See Table 1. | | | | FS1,2 | THERMAL FUSE(98℃10A:50GAH/117℃16A:100GAH 110℃16A:60,71,125,140GAH) |
| | SW2 | SWITCH (CAPACITY CODE) ※See Table 2. | TH1 | ROOM TEMP.THERMISTOR (0℃/15kΩ, 25℃/5.4kΩ DETECT) | | H1 | HEATER |
| | SWE | SWITCH(EMERGENCY OPERATION) | | | | 26H | HEATER THERMAL SWITCH |
| | X1 | RELAY(DRAIN PUMP) | TH2 | PIPE TEMP.THERMISTOR/LIQUID (0℃/15kΩ, 25℃/5.4kΩ DETECT) | | 88H | HEATER CONTACTOR |
| | X4 | RELAY(FAN MOTOR) | | | | | |
| | BCR | FAN CONTROL ELEMENT | TH5 | COND./EVA.TEMP.THERMISTOR (0℃/15kΩ, 25℃/5.4kΩ DETECT) | | | |
| | LED1 | POWER SUPPLY(I.B) | | | | | |
| | LED2 | POWER SUPPLY(R.B) | R.B | WIRED REMOTE CONTROLLER BOARD | | | |
| | LED3 | TRANSMISSION(INDOOR-OUTDOOR) | | | | | |
| C | | CAPACITOR(FAN MOTOR) | | | | | |




Please set the voltage using the remote controller.
For the setting method, please refer to the indoor unit Installation Manual.

[Servicing]
Fasten terminal of the terminal board "TB4" that equips lock system.
To remove the fastened terminal, pull it while pressing the protruding portion (locking lever) of the terminal. The fastened terminal protruding portion should face upward.



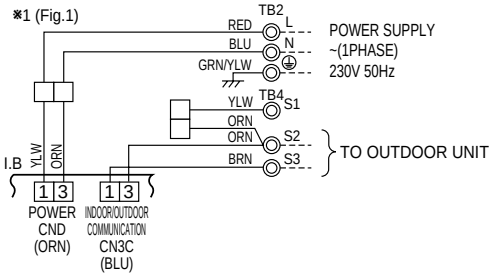




Table 1

| SW1 | |
|---|---|
| MODELS | Service board |
| PCA-RP.GA PCH-P.GAH | 1 2 3 4 5 ON OFF |

Table 2

| SW2 | | | |
|---|---|---|---|
| MODELS | Service board | MODELS | Service board |
| PCA-RP50GA PCH-P50GAH | 1 2 3 4 5 ON OFF | PCA-RP100GA PCH-P100GAH | 1 2 3 4 5 ON OFF |
| PCA-RP50GA2 PCA-RP60GA PCH-P60GAH | 1 2 3 4 5 ON OFF | PCA-RP125GA PCH-P125GAH | 1 2 3 4 5 ON OFF |
| PCA-RP71GA PCH-P71GAH | 1 2 3 4 5 ON OFF | PCA-RP140GA PCH-P140GAH | 1 2 3 4 5 ON OFF |

Notes:
1. Symbols used in wiring diagram above are, □□□ : Connector, ◎ : Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
   ※1: When work to supply power separately to indoor and outdoor units was applied, refer to Fig 1.
   ※2: For power supply system of this unit, refer to the caution label located near this diagram.

## PCA-RP71HA PCA-RP125HA

[ LEGEND ]

| SYMBOL | | NAME | SYMBOL | NAME |
|---|---|---|---|---|
| P. B | | INDOOR POWER BOARD | MF1, MF2 | FAN MOTOR |
| I. B | | INDOOR CONTROLLER BOARD | C1, C2 | CAPACITOR(FAN MOTOR) |
| | FUSE | FUSE (T6.3AL250V) | H2 | DEW PREVENTION HEATER |
| | ZNR | VARISTOR | TB2 | TERMINAL BLOCK(INDOOR UNIT |
| | CN2L | CONNECTOR (LOSSNAY) | | POWER (OPTION)) |
| | CN32 | CONNECTOR (REMOTE SWITCH) | TB4 | TERMINAL BLOCK(INDOOR/OUTDOOR |
| | CN41 | CONNECTOR (HA TERMINAL-A) | | CONNECTING LINE) |
| | CN51 | CONNECTOR (CENTRALLY CONTROLL) | TB5,TB6 | TERMINAL BLOCK(REMOTE CONTROLLER |
| | LED1 | POWER SUPPLY (I. B) | | TRANSMISSION LINE) |
| | LED2 | POWER SUPPLY (R. B) | TH1 | ROOM TEMP.THERMISTOR |
| | LED3 | TRANSMISSION(INDOOR-OUTDOOR) | | (0˚C/15kΩ, 25˚C/5.4kΩ DETECT) |
| | X1 | RELAY (DEW PREVENTION HEATER) | TH2 | PIPE TEMP.THERMISTOR/LIQUID |
| | X4 | RELAY(FAN MOTOR) | | (0˚C/15kΩ, 25˚C/5.4kΩ DETECT) |
| | X5 | RELAY(FAN MOTOR) | TH5 | COND./ EVA.TEMP.THERMISTOR |
| | X6 | RELAY(FAN MOTOR) | | (0˚C/15kΩ, 25˚C/5.4kΩ DETECT) |
| | SW1 | SWITCH (MODEL SELECTION) ※See Table 1. | R. B | WIRED REMOTE CONTROLLER BOARD |
| | SW2 | SWITCH (CAPACITY CODE) ※See Table 2. | | |
| | SWE | SWITCH (EMERGENCY OPERATION) | | |

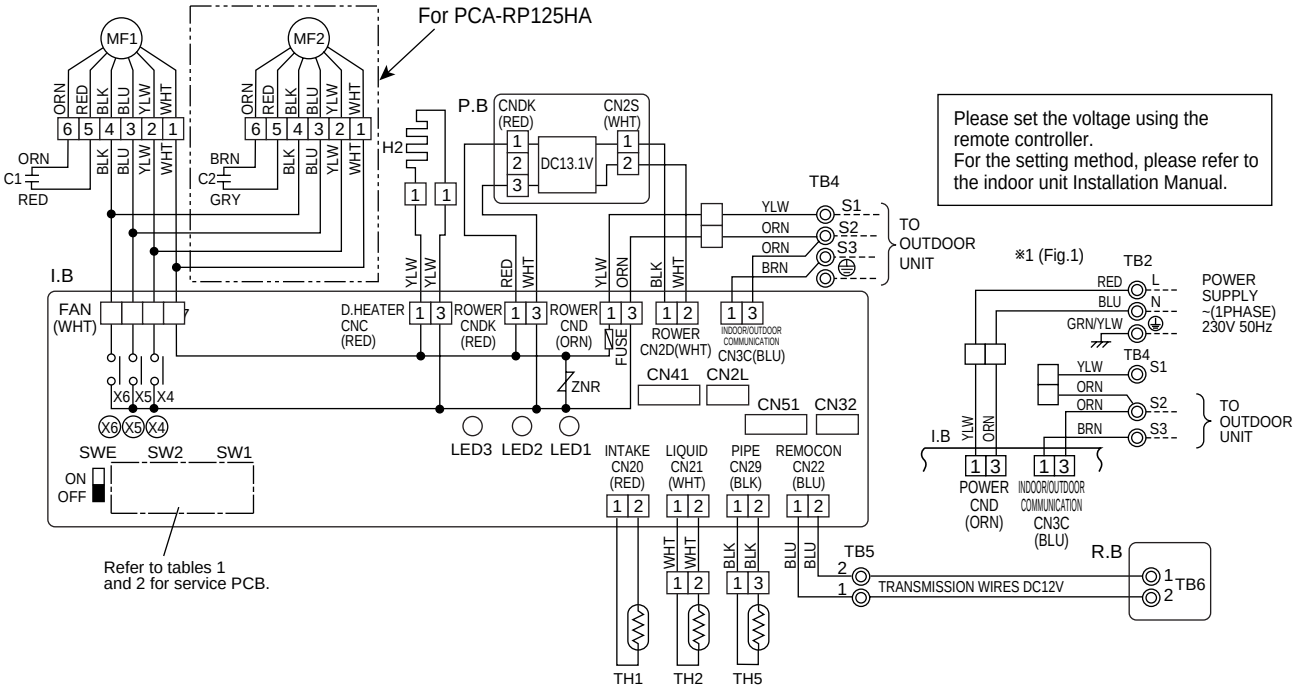



Table 1

| SW1 |
|---|
| Service board |
| 1 2 3 4 5 ON OFF |

Table 2

| SW2 | | | |
|---|---|---|---|
| MODELS | Service board | MODELS | Service board |
| PCA-RP71HA | 1 2 3 4 5 ON OFF | PCA-RP125HA | 1 2 3 4 5 ON OFF |

Notes:
1. Symbols used in wiring diagram above are, □□□: Connector, ◎: Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
   ※1: When work to supply power separately to indoor and outdoor units was applied, refer to Fig 1.
   ※2: For power supply system of this unit, refer to the caution label located near this diagram.

## PSA-RP71GA PSA-RP100GA PSA-RP125GA PSA-RP140GA

[LEGEND]

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| P.B | INDOOR POWER BOARD | I.B | SW1 | SWITCH (MODEL SELECTION) ※See Table 1. | C | CAPACITOR (FAN MOTOR) |
| I.B | INDOOR CONTROLLER BOARD | | SW2 | SWITCH (CAPACITY CODE) ※See Table 2. | MF | FAN MOTOR |
| FUSE | FUSE (T6.3AL250V) | | SWE | SWITCH (EMERGENCY OPERATION) | ML | LOUVER MOTOR |
| ZNR | VARISTOR | | X2 | RELAY (LOUVER) | TB2 | TERMINAL BLOCK (HEATER) ※PSH-P.GAH models only or option for PSA-RP.GA models. |
| CN2L | CONNECTOR (LOSSNAY) | | X4 | RELAY (FAN MOTOR) | | |
| CN32 | CONNECTOR (REMOTE SWITCH) | | X5 | RELAY (FAN MOTOR) | TB4 | TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE) |
| CN41 | CONNECTOR (HA TERMINAL-A) | | X6 | RELAY (FAN MOTOR) | | |
| CN51 | CONNECTOR (CENTRALLY CONTROL) | R.B | | WIRED REMOTE CONTROLLER BOARD | TH1 | ROOM TEMP.THERMISTOR (0˚C/15kΩ, 25˚C/5.4kΩ DETECT) |
| LED1 | POWER SUPPLY (I.B) | | TB6 | TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE) | | |
| LED2 | POWER SUPPLY (R.B) | | | | TH2 | PIPE TEMP.THERMISTOR/LIQUID (0˚C/15kΩ, 25˚C/5.4kΩ DETECT) |
| LED3 | TRANSMISSION (INDOOR-OUTDOOR) | HEATER | | | | |
| | | | FS1,2 | THERMAL FUSE (110˚C16A) | TH5 | COND./EVA.TEMP.THERMISTOR (0˚C/15kΩ, 25˚C/5.4kΩ DETECT) |
| | | | H | HEATER | | |
| | | | 26H | HEATER THERMAL SWITCH | | |
| | | | 88H | HEATER CONTACTOR | | |

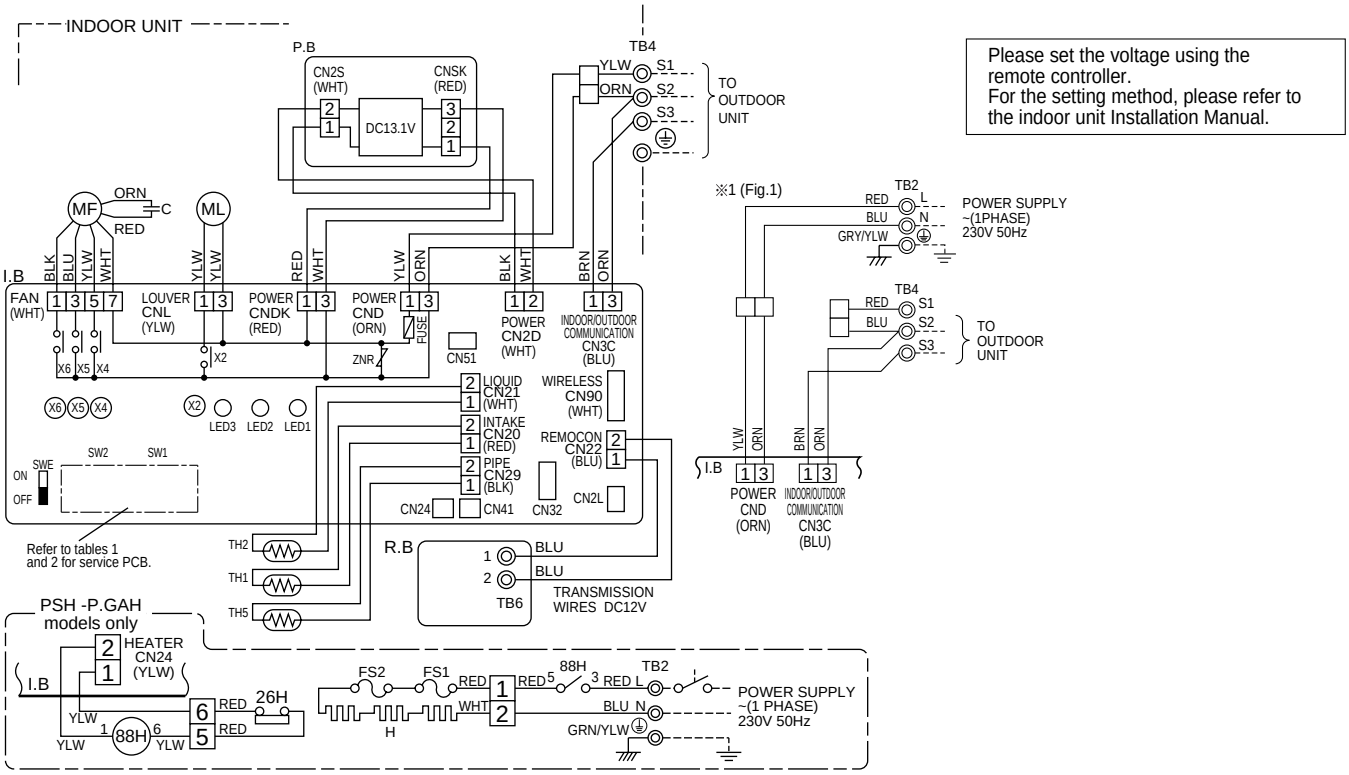



Table 1

| SW2 | |
|---|---|
| MODELS | Service board |
| PSA-RP.GA<br>PSH-P.GAH | 1 2 3 4 5 ON OFF |

Table 2

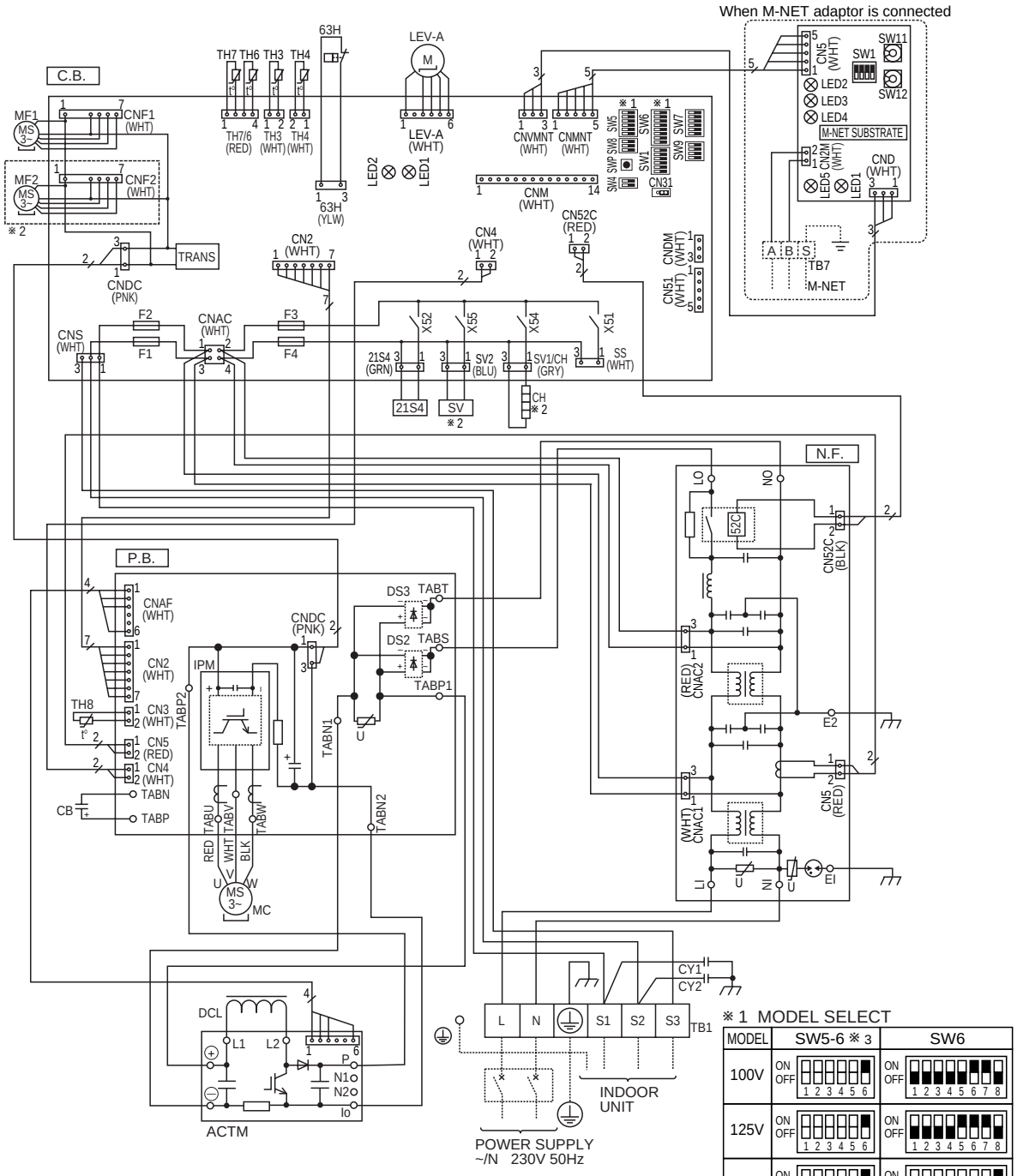
| SW2 | |
|---|---|
| MODELS | Service board |
| PSA-RP71GA<br>PSH-P71GAH | 1 2 3 4 5 ON OFF |
| PSA-RP100GA<br>PSH-P100GAH | 1 2 3 4 5 ON OFF |
| PSA-RP125GA<br>PSH-P125GAH | 1 2 3 4 5 ON OFF |
| PSA-RP140GA<br>PSH-P140GAH | 1 2 3 4 5 ON OFF |

Notes:
1. Symbols used in wiring diagram above are, □□□ : Connector, ◎ : Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of indoor and outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
   ※1: When work to supply power separately to indoor and outdoor units was applied, refer to Fig 1.
   ※2: For power supply system of this unit, refer to the caution label located near this diagram.

## PUHZ-P100VHA2 PUHZ-P125VHA2 PUHZ-P140VHA2

[LEGEND]

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| TB1 | Terminal Block<Power Supply, Indoor/Outdoor > | P.B. | Power Circuit Board | SW8 | Switch |
| MC | Motor Compressor | TABU/V/W | Connection Terminal<U/V/W-Phase> | SW9 | Switch |
| MF1,MF2 | Fan Motors | TABS/T | Connection Terminal<L/N- Phase> | SWP | Switch<Pump Down> |
| 21S4 | Solenoid Valve (Four-Way Valve) | TABP1/P2/P | Connection Terminal<DC Voltage> | CN31 | Connector<Emergency Operation> |
| SV | Solenoid Valve (Bypass Valve) | TABN1/N2/N | Connection Terminal<DC Voltage> | LED1,LED2 | Light Emitting Diodes <Operation Inspection Indicators> |
| CH | Crankcase Heater | DS2,3 | Diode Bridge | CNM | Connector<A-Control Service Inspection Kit> |
| 63H | High Pressure Switch | IPM | Power Module | CNMNT | Connector<Connected to Optional M-NET Adapter Board> |
| TH3 | Thermistor<Outdoor Pipe> | N.F. | Noise Filter Circuit Board | CNVMNT | Connector<Connected to Optional M-NET Adapter Board> |
| TH4 | Thermistor<Discharge> | C.B. | Controller Circuit Board | CNDM | Connector< Connected for Option (Contact Input)> |
| TH6 | Thermistor<Outdoor 2-Phase Pipe> | F1~F4 | Fuse<T6.3AL250V> | X51,X52,X54,X55 | Relay |
| TH7 | Thermistor<Outdoor> | SW1 | Switch<Forced Defrost, Defect History Record Reset, Refrigerant Address> | | |
| TH8 | Thermistor<Heatsink> | SW4 | Switch<Test Operation> | | |
| LEV-A | Electronic Expansion Valve | SW5 | Switch<Function Switch> | | |
| DCL | Reactor | SW6 | Switch<Model Select> | | |
| ACTM | Active Filter Module | SW7 | Switch<Function Setup> | | |
| CB | Main Smoothing Capacitor | | | | |




※1 MODEL SELECT

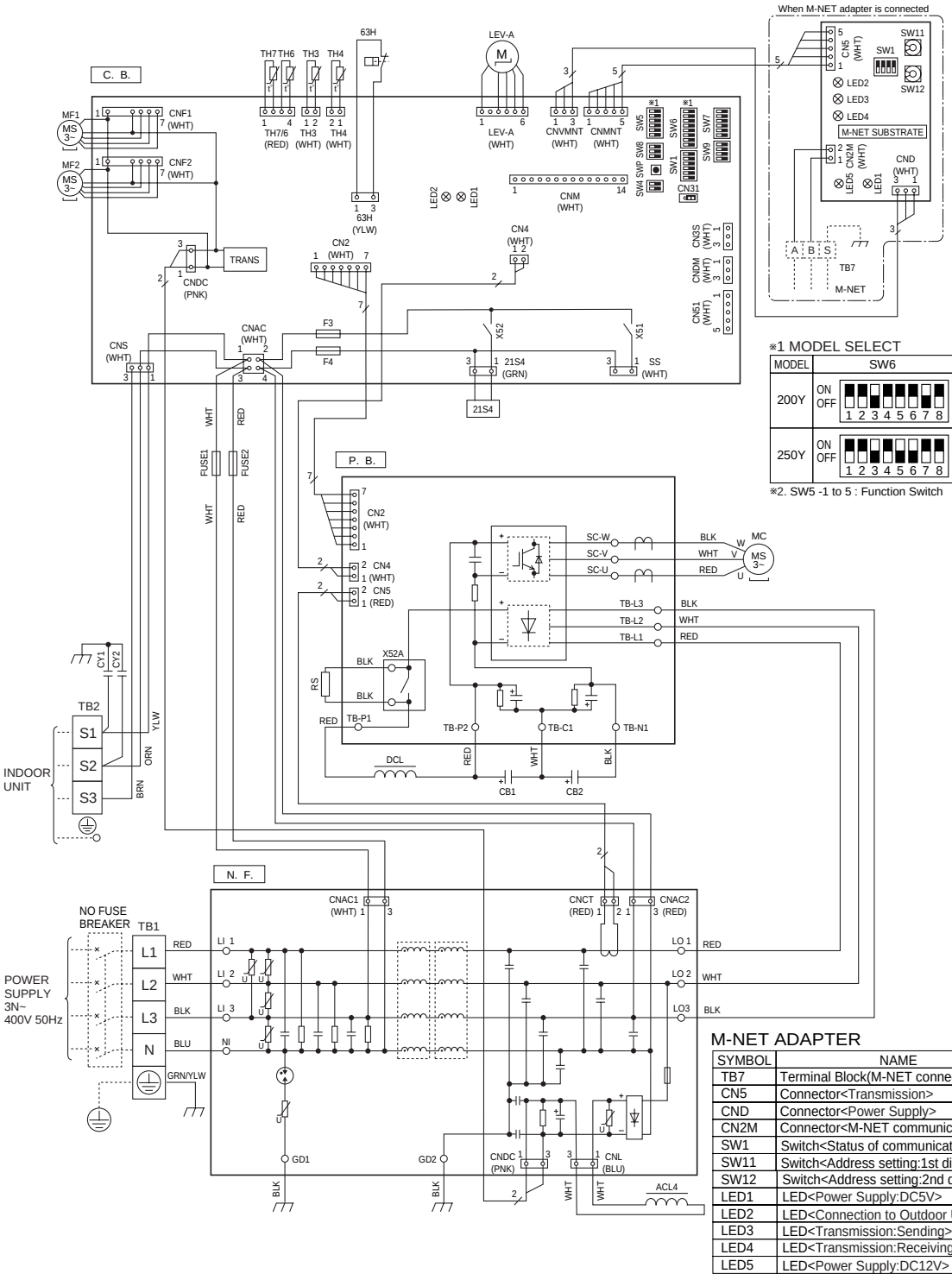
| MODEL | SW5-6 ※3 | SW6 |
|---|---|---|
| 100V | ON OFF 1 2 3 4 5 6 | ON OFF 1 2 3 4 5 6 7 8 |
| 125V | ON OFF 1 2 3 4 5 6 | ON OFF 1 2 3 4 5 6 7 8 |
| 140V | ON OFF 1 2 3 4 5 6 | ON OFF 1 2 3 4 5 6 7 8 |

※2 P125,P140 only
※3 SW5-1 to 5 : Function Switch

# PUHZ-P200YHA PUHZ-P250YHA

[LEGEND]

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| TB1 | Terminal Block<Power Supply> | TB-L1/L2/L3 | Connection Terminal<L1/L2/L3-Power supply> | SWP | Switch<Pump Down> |
| TB2 | Terminal Block<Indoor/Outdoor> | TB-P1 | Connection Terminal | CN31 | Connector<Emergency Operation> |
| MC | Motor for Compressor | TB-P2 | Connection Terminal | LED1,LED2 | LED<Operation Inspection Indicators> |
| MF1,MF2 | Fan Motor | TB-C1 | Connection Terminal | F3,F4 | Fuse< T6.3AL250V> |
| 21S4 | Solenoid Valve (Four-Way Valve) | TB-N1 | Connection Terminal | SS | Connector<Connection for Option> |
| 63H | High Pressure Switch | X52A | 52C Relay | CNM | Connector<A-Control Service Inspection Kit> |
| TH3 | Thermistor<Outdoor Pipe> | N.F. | Noise Filter Circuit Board | CNMNT | Connector <Connected to Optional M-NET Adapter Board> |
| TH4 | Thermistor<Discharge> | LI1/ LI2/LI3/NI | Connection Terminal<L1/L2/L3/NI-Power supply> | CNVMNT | Connector <Connected to Optional M-NET Adapter Board> |
| TH6 | Thermistor<Outdoor 2-Phase Pipe> | LO1/ LO2/LO3 | Connection Terminal<L1/L2/L3-Power supply> | CNDM | Connector < Connected for Option (Contact Input)> |
| TH7 | Thermistor<Outdoor> | GD1,GD2 | Connection Terminal<Ground> | CN3S | Connector<Connection for Option> |
| LEV-A | Electronic Expansion Valve | C.B. | Controller Circuit Board | CN51 | Connector<Connection for Option> |
| ACL4 | Reactor | SW1 | Switch<Forced Defrost, Defect History Record Reset, Refrigerant Address> | X51,X52 | Relay |
| DCL | Reactor | SW4 | Switch<Test Operation> | | |
| CB1,CB2 | Main Smoothing Capacitor | SW5 | Switch<Function Switch> | | |
| RS | Rush Current Protect Resistor | SW6 | Switch<Model Select> | | |
| FUSE1, FUSE2 | Fuse<T15AL250V> | SW7 | Switch<Function Setup> | | |
| CY1,CY2 | Capacitor | SW8 | Switch<Function Setup> | | |
| P.B. | Power Circuit Board | SW9 | Switch | | |
| SC-U/V/W | Connection Terminal<U/V/W-Phase> | | | | |



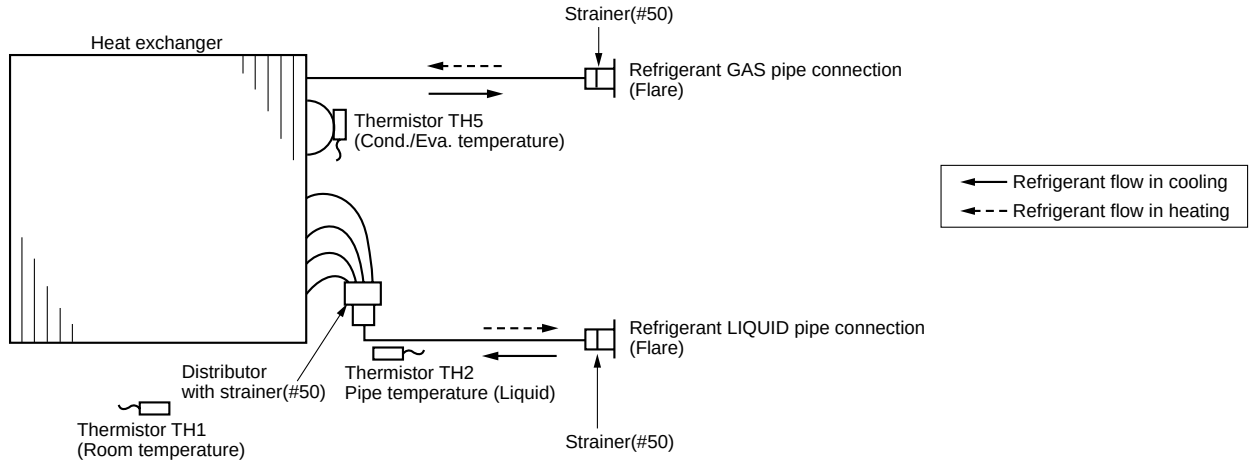

## M-NET ADAPTER

| SYMBOL | NAME |
|---|---|
| TB7 | Terminal Block(M-NET connection) |
| CN5 | Connector<Transmission> |
| CND | Connector<Power Supply> |
| CN2M | Connector<M-NET communication> |
| SW1 | Switch<Status of communication> |
| SW11 | Switch<Address setting:1st digit> |
| SW12 | Switch<Address setting:2nd digit> |
| LED1 | LED<Power Supply:DC5V> |
| LED2 | LED<Connection to Outdoor Unit> |
| LED3 | LED<Transmission:Sending> |
| LED4 | LED<Transmission:Receiving> |
| LED5 | LED<Power Supply:DC12V> |

# 5 REFRIGERANT SYSTEM DIAGRAM

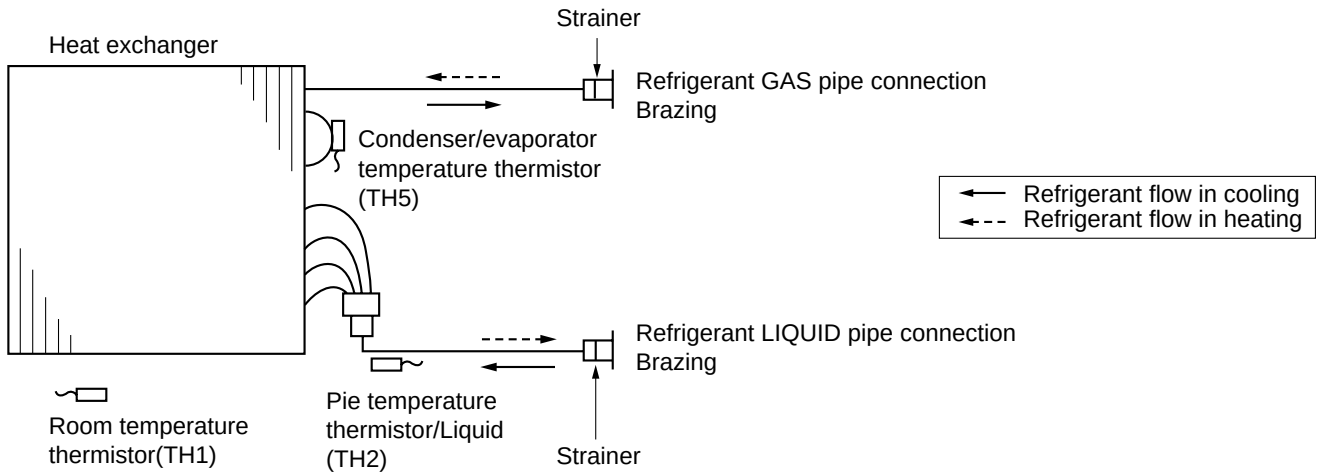
## 5-1. INDOOR UNIT

**PLA-RP·BA** **PCA-RP·GA(2)** **PCA-RP·HA**
**PKA-RP·GAL** **PKA-RP·FAL(2)** **PSA-RP·GA**
**PEAD-RP·EA(2)** **PEAD-RP·GA**

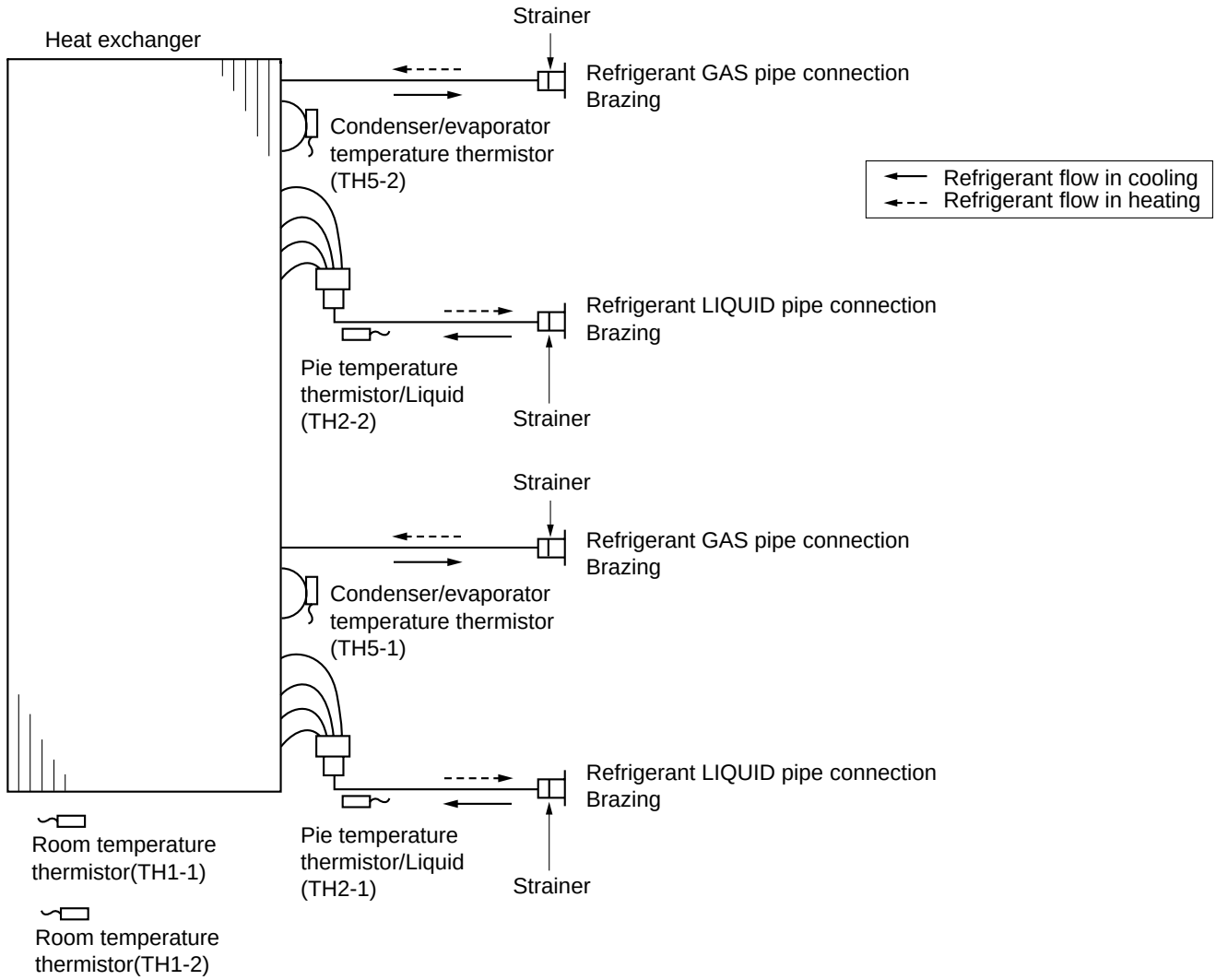


Unit : mm

## PEA-RP200, 250GA



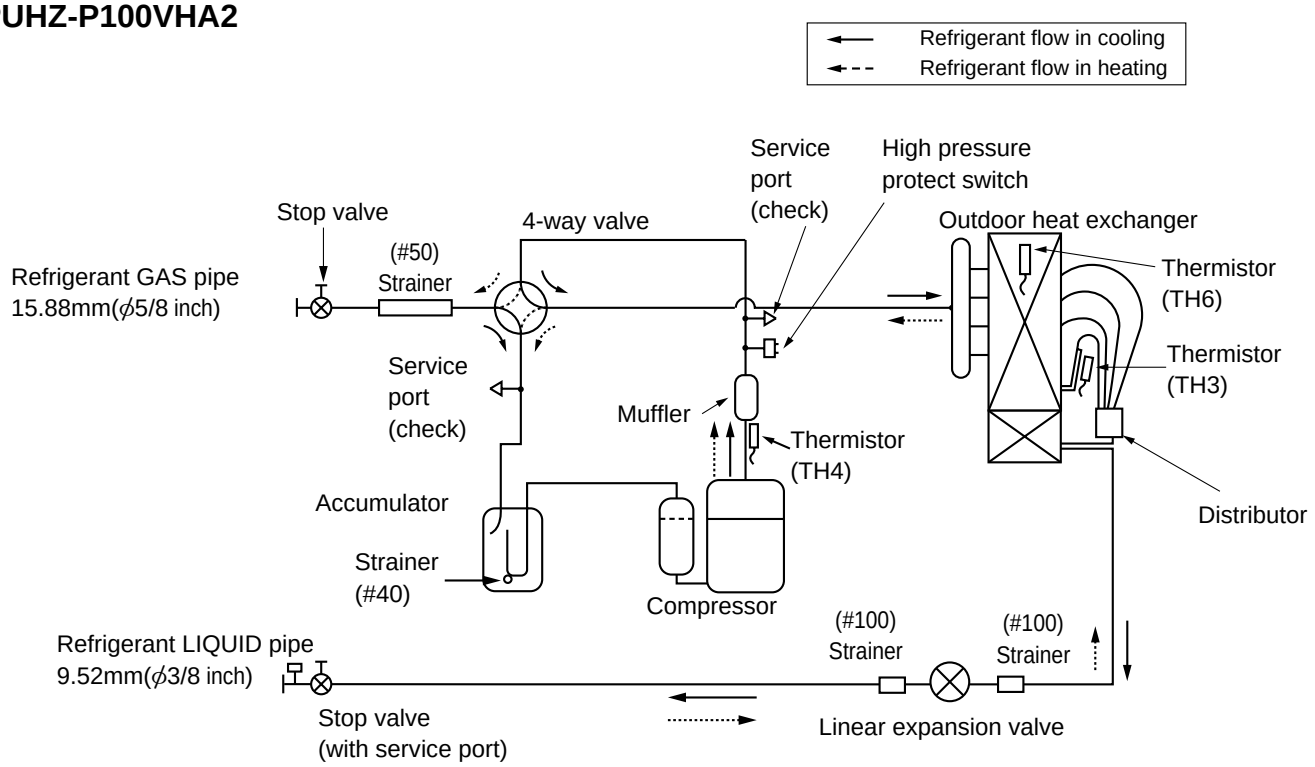

## PEA-RP400GA PEA-RP500GA



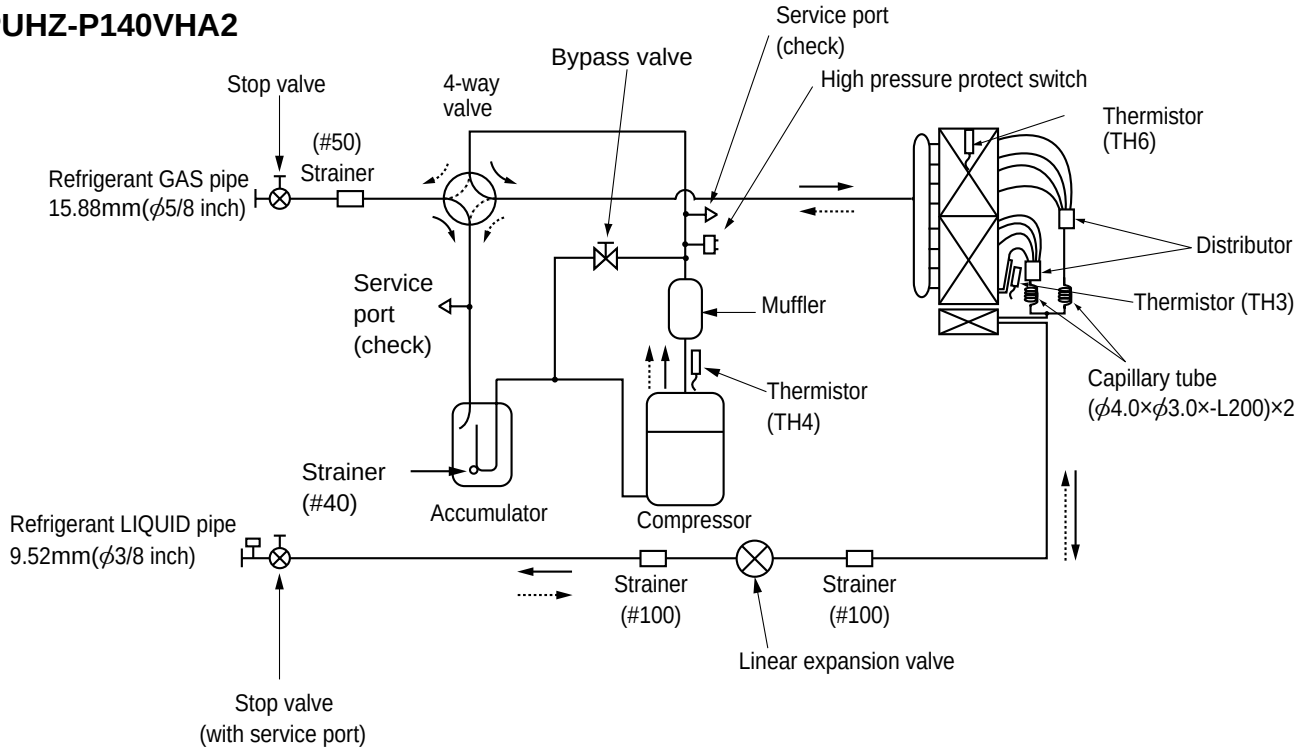
## 5-2. OUTDOOR UNIT

**Unit : mm**

### PUHZ-P100VHA2

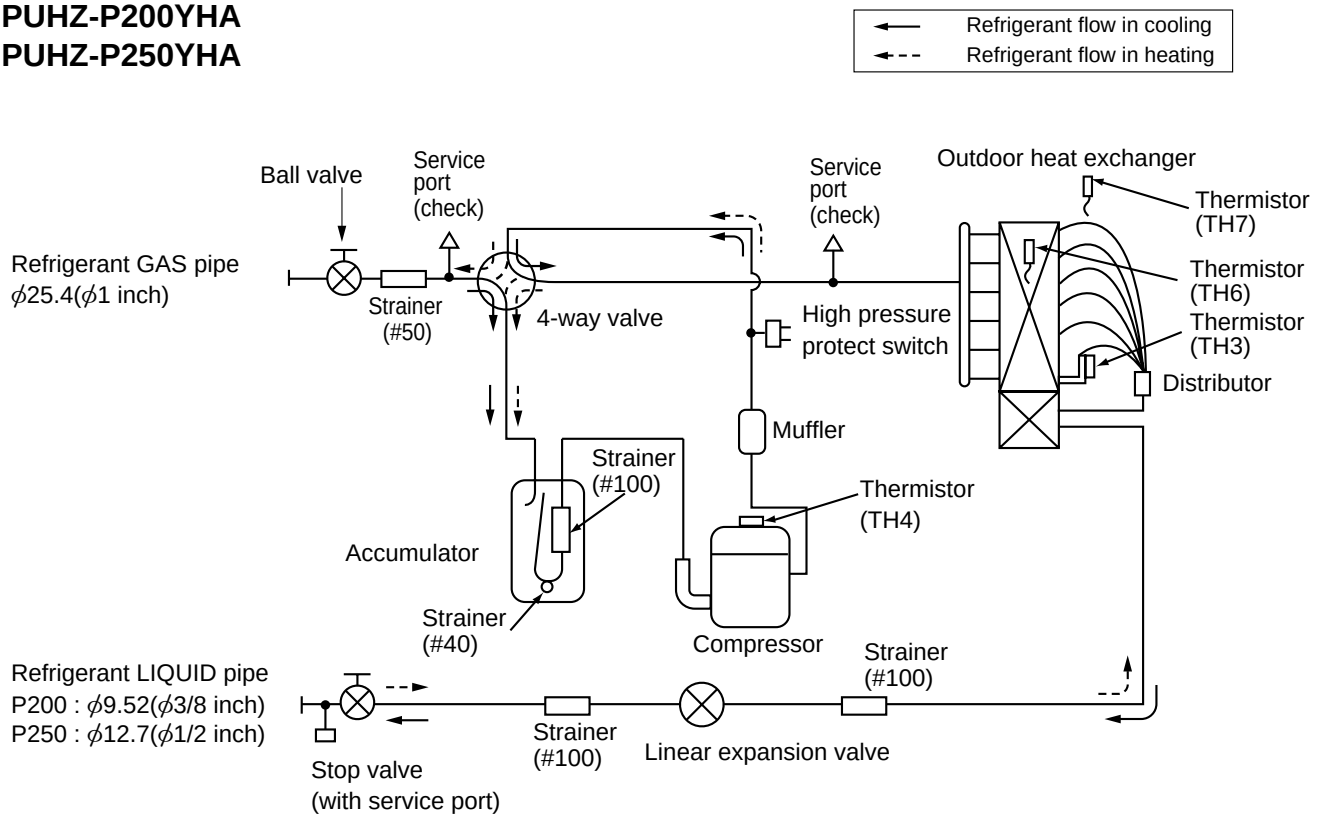



### PUHZ-P125VHA2
### PUHZ-P140VHA2



Unit : mm

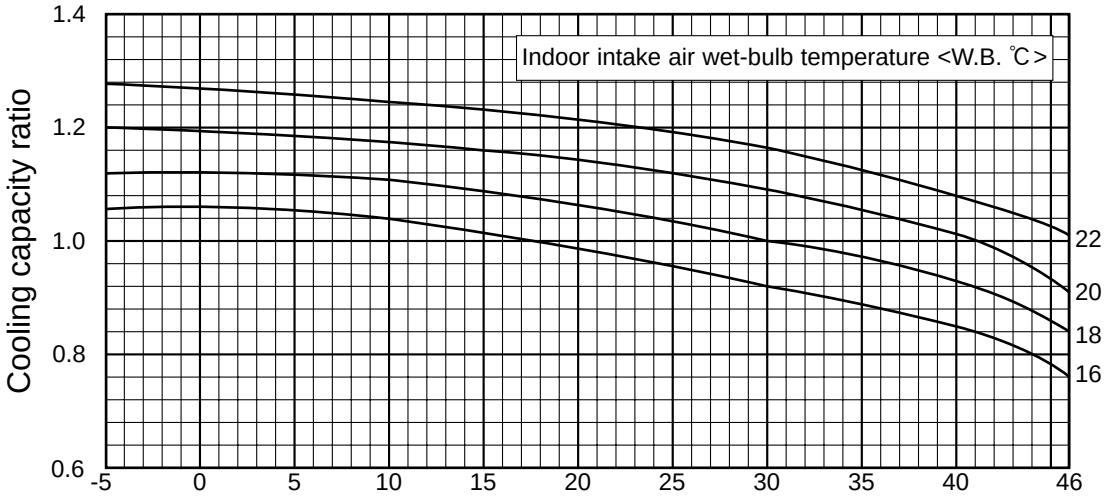
## PUHZ-P200YHA
## PUHZ-P250YHA



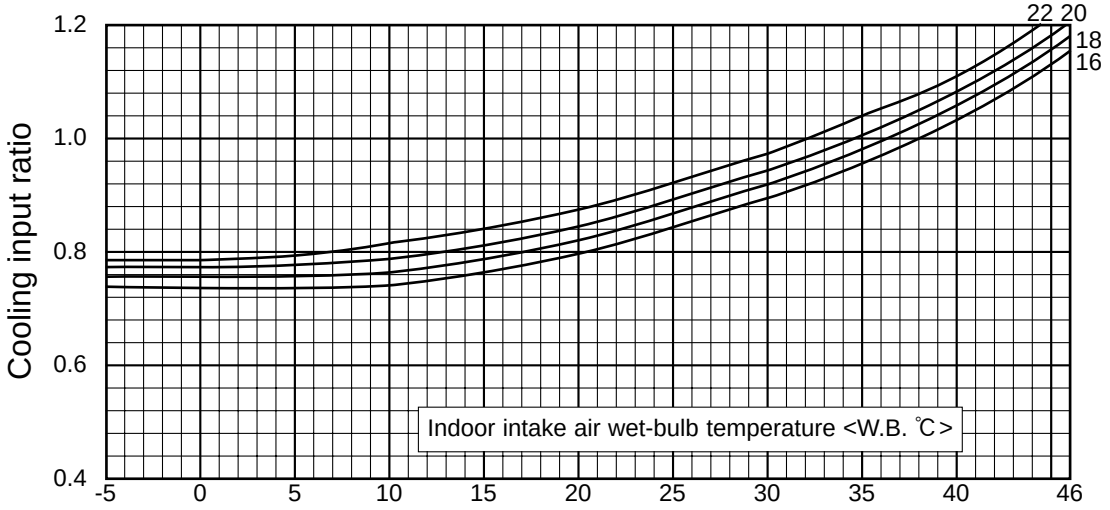
# 6 PERFORMANCE CURVES

## FOR THE COMBINATION OF OUTDOOR UNIT PUHZ-P·VHA2, PUHZ-P·YHA

### Cooling capacity

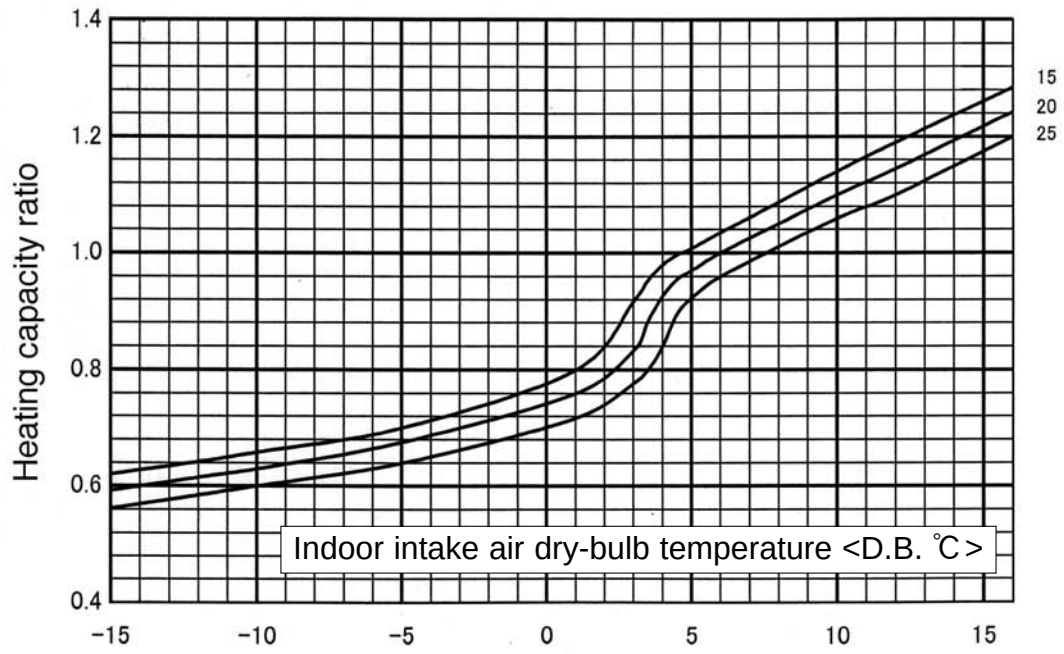



### Cooling input

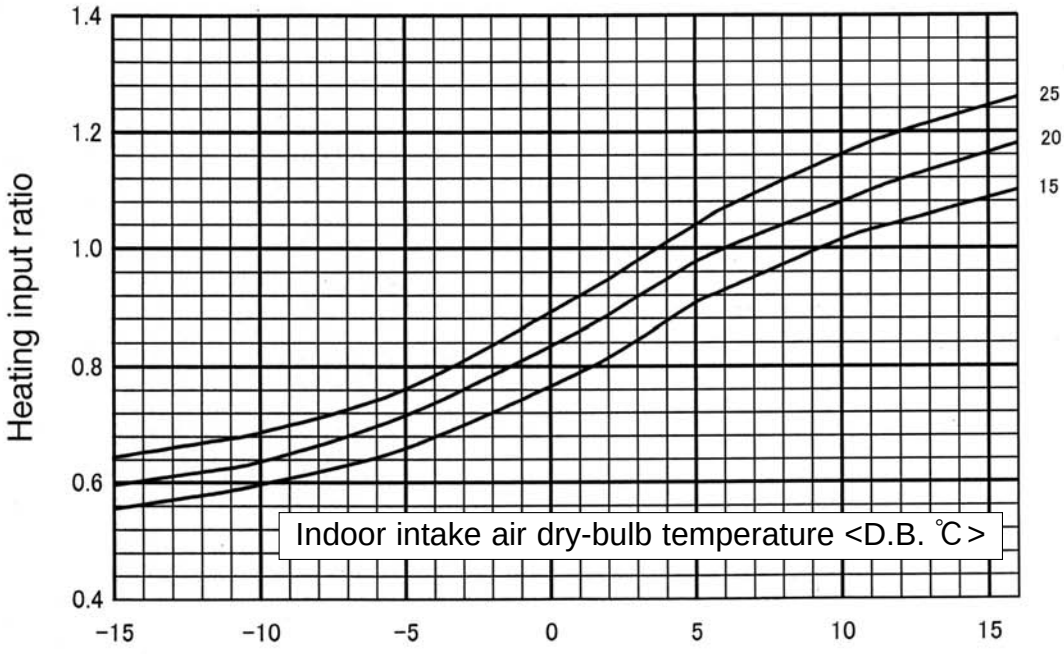



**Note :** These diagrams show the case where the operation frequency of a compressor is fixed.

## Heating capacity




## Heating input




**Note :** These diagrams show the case where the operation frequency of a compressor is fixed.

# 7 CORRECTION FACTORS

## PUHZ-P·VHA2 PUHZ-P·YHA

**Cooling capacity correction factors**

| Outdoor unit | Refrigerant piping length (one way) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 5m | 10m | 20m | 30m | 40m | 50m | 55m | 60m | 70m | 75m |
| PUHZ-P100VHA2 | 1.00 | 0.985 | 0.957 | 0.931 | 0.908 | 0.886 | 0.876 | — | — | — |
| PUHZ-P125VHA2 | 1.00 | 0.981 | 0.946 | 0.914 | 0.885 | 0.858 | 0.845 | — | — | — |
| PUHZ-P140VHA2 | 1.00 | 0.976 | 0.931 | 0.893 | 0.858 | 0.827 | 0.813 | — | — | — |
| PUHZ-P200YHA | 1.00 | 0.985 | 0.958 | 0.931 | 0.908 | 0.887 | 0.876 | 0.865 | 0.847 | 0.838 |
| PUHZ-P250YHA | 1.00 | 0.981 | 0.946 | 0.914 | 0.885 | 0.858 | 0.845 | 0.834 | 0.812 | 0.802 |

**Heating capacity correction factors**

| Outdoor unit | Refrigerant piping length (one way) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 5m | 10m | 20m | 30m | 40m | 50m | 55m | 60m | 70m | 75m |
| PUHZ-P100VHA2 | 1.00 | 0.997 | 0.991 | 0.985 | 0.979 | 0.973 | 0.970 | — | — | — |
| PUHZ-P125VHA2 | 1.00 | 0.997 | 0.991 | 0.985 | 0.979 | 0.973 | 0.970 | — | — | — |
| PUHZ-P140VHA2 | 1.00 | 0.997 | 0.991 | 0.985 | 0.979 | 0.973 | 0.970 | — | — | — |
| PUHZ-P200YHA | 1.00 | 0.997 | 0.991 | 0.985 | 0.979 | 0.973 | 0.970 | 0.967 | 0.961 | 0.958 |
| PUHZ-P250YHA | 1.00 | 0.997 | 0.991 | 0.985 | 0.979 | 0.973 | 0.970 | 0.967 | 0.961 | 0.958 |

# 8 APPLICABLE EXTENSION PIPE FOR EACH MODEL

## 8-1. PIPE LENGTH

### 8-1-1. 1:1 SYSTEM and 1:2(1 indoor / 2 outdoor) SYSTEM

<Table 1-1> Maximum pipe length (P100-140)

| Liquid pipe (mm) | OD | ø9.52 | | | ø12.7 | |
|---|---|---|---|---|---|---|
| | Thickness | t0.8 | | | t0.8 | |
| Gas pipe (mm) | OD | ø12.7 | ø15.88 | ø19.05 | ø15.88 | ø19.05 |
| | Thickness | t0.8 | t1.0 | t1.0 | t1.0 | t1.0 |
| P100 | | | Standard size 50m [20m] | ○ 50m [20m] | △ 25m [10m] | △ 25m [10m] |
| P125,P140 | | | Standard size 50m [30m] | ○ 50m [30m] | △ 30m [10m] | △ 30m [10m] |

<Marks in the table>

○: It can be used.
□: Cooling capacity is lowered.
△: Additional refrigerant charge is required when the pipe length exceeds 10m(P100-140)/20m(P200, 250).

50m [20m] — The maximum pipe length / Charge-less pipe length

<Table 1-2> Maximum pipe length (P200, 250)

| Liquid pipe (mm) | OD | ϕ9.52 | | | ϕ12.7 | | | ϕ15.88 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thickness | t0.8 | | | t0.8 | | | t1.0 | | | |
| Gas pipe (mm) | OD | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ31.75 |
| | Thickness | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 |
| P200 | | □ 50m [30m] | Normal piping 70m [30m] | ○ 70m [30m] | □△ 50m [20m] | ○ 50m [20m] | ○ 50m [20m] | □△ 40m [20m] | △ 40m [20m] | △ 40m [20m] | △ 40m [20m] |
| P250 | | □ 50m [30m] | ○ 70m [30m] | ○ 70m [30m] | □ 50m [30m] | Nomal piping 70m [30m] | ○ 70m [30m] | □△ 45m [20m] | △ 45m [20m] | △ 45m [20m] | △ 45m [20m] |

Note : Be sure to use hard (tempered) one for pipe over ϕ22.2.(Do not use soft (annealed) one.)

### 8-1-2. TWIN TRIPLE AND QUADRUPLE SYSTEM
### (1) TWIN SYSTEM

<Table 2-1> Maximum pipe length(P100-140)

| | | | P100(RP50×2) | | | P125(RP60×2)·P140(RP71×2) | | |
|---|---|---|---|---|---|---|---|---|
| Main pipe (mm) [A] | Liquid pipe | | ø9.52 | ø9.52 | ø12.7 | ø9.52 | ø9.52 | ø12.7 |
| | Gas pipe | | ø15.88 | ø19.05 | ø19.05 | ø15.88 | ø19.05 | ø19.05 |
| Branch pipe (mm) [B, C] | Liquid pipe | ø6.35 | Standard size 50m [20m] | ○ 50m [20m] | △ 25m [10m] | | | |
| | Gas pipe | ø12.7 | | | | | | |
| | Liquid pipe | ø9.52 | ○ 50m [20m] | ○ 50m [20m] | △ 25m [10m] | Standard size 50m [30m] | ○ 50m [30m] | △ 30m [10m] |
| | Gas pipe | ø15.88 | | | | | | |

<Table 2-2> Maximum pipe length(P200, 250)

| | | | | P200(RP100x2) | | | | | | | | | | P250(RP125x2) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Main pipe (mm) [A] | Liquid pipe | O.D. | | ϕ9.52 | | | ϕ12.7 | | | ϕ15.88 | | | | ϕ9.52 | | | ϕ12.7 | | | ϕ15.88 | | | |
| | | Thickness | | t0.8 | | | t0.8 | | | t1.0 | | | | t0.8 | | | t0.8 | | | t1.0 | | | |
| | Gas pipe | O.D. | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ31.75 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ31.75 | | |
| | | Thickness | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.1 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.1 | | |
| Branch pipe (mm) [B,C] | Liquid pipe | ϕ9.52 | □ | Standard size | ○ | □△ | △ | △ | □△ | △ | △ | △ | □ | ○ | ○ | □ | Standard size | ○ | □△ | △ | △ | △ | | |
| | Gas pipe | ϕ15.88 | 50m [30m] | 70m [30m] | 70m [30m] | 50m [20m] | 50m [20m] | 50m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | 50m [30m] | 70m [30m] | 70m [30m] | 50m [30m] | 70m [30m] | 70m [30m] | 45m [20m] | 45m [20m] | 45m [20m] | 45m [20m] | | |

### (2) TRIPLE SYSTEM

<Table 3-1> Maximum pipe length(P140)

| | | | P140(RP50×3) | | |
|---|---|---|---|---|---|
| Main pipe (mm) [A] | Liquid pipe | | ø9.52 | ø9.52 | ø12.7 |
| | Gas pipe | | ø15.88 | ø19.05 | ø19.05 |
| Branch pipe (mm) [B, C, D] | Liquid pipe | ø6.35 | Standard size 50m [30m] | ○ 50m [30m] | △ 30m [10m] |
| | Gas pipe | ø12.7 | | | |
| | Liquid pipe | ø9.52 | ○ 50m [30m] | ○ 50m [30m] | △ 30m [10m] |
| | Gas pipe | ø15.88 | | | |

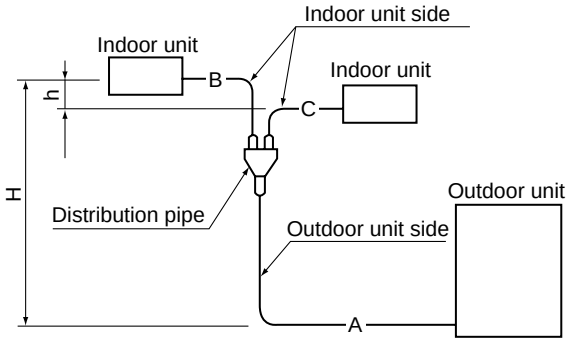
<Table 3-2> Maximum pipe length(P200, 250)

| | | | | P200(RP60x3) | | | | | | | | | | P250(RP71x3) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Main pipe (mm) [A] | Liquid pipe | O.D. | | ϕ9.52 | | | ϕ12.7 | | | ϕ15.88 | | | | ϕ9.52 | | | ϕ12.7 | | | ϕ15.88 | | | |
| | | Thickness | | t0.8 | | | t0.8 | | | t1.0 | | | | t0.8 | | | t0.8 | | | t1.0 | | | |
| | Gas pipe | O.D. | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ31.75 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ31.75 | | |
| | | Thickness | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.1 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.1 | | |
| Branch pipe (mm) [B,C] | Liquid pipe | ϕ9.52 | □ | Standard size | ○ | □△ | △ | △ | □△ | △ | △ | △ | □ | ○ | ○ | □ | Standard size | ○ | □△ | △ | △ | △ | | |
| | Gas pipe | ϕ15.88 | 50m [30m] | 70m [30m] | 70m [30m] | 50m [20m] | 50m [20m] | 50m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | 50m [30m] | 70m [30m] | 70m [30m] | 50m [30m] | 70m [30m] | 70m [30m] | 45m [20m] | 45m [20m] | 45m [20m] | 45m [20m] | | |

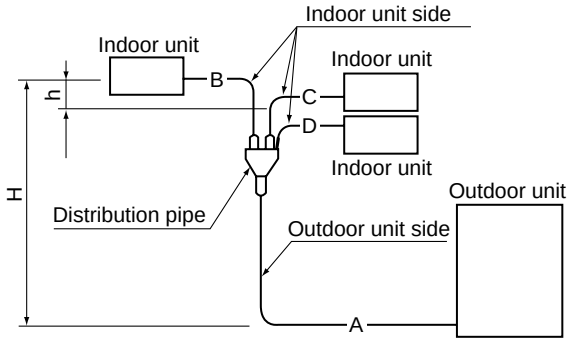
### (3) QUADRUPLE SYSTEM

<Table 2-2> Maximum pipe length(P200, 250)

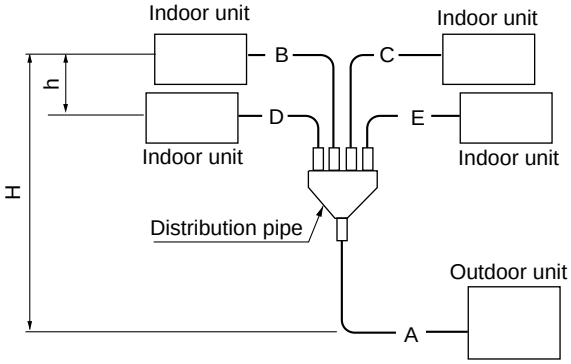
| | | | P200(RP50x4) | | | | | | | | | | P250(RP60x4) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Main pipe (mm) [A] | Liquid pipe | O.D. | ϕ9.52 | | | ϕ12.7 | | | ϕ15.88 | | | | ϕ9.52 | | | ϕ12.7 | | | ϕ15.88 | | | |
| | | Thickness | t0.8 | | | t0.8 | | | t1.0 | | | | t0.8 | | | t0.8 | | | t1.0 | | | |
| | Gas pipe | O.D. | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ31.75 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ22.2 | ϕ25.4 | ϕ28.58 | ϕ31.75 |
| | | Thickness | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.1 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.0 | t1.1 |
| Branch pipe (mm) [B,C] | Liquid pipe | ϕ6.35 | □ | Standard size | ○ | □△ | △ | △ | □△ | △ | △ | △ | | | | | | | | | | |
| | Gas pipe | ϕ12.7 | 50m [30m] | 70m [30m] | 70m [30m] | 50m [20m] | 50m [20m] | 50m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | | | | | | | | | | |
| | Liquid pipe | ϕ9.52 | □ | ○ | ○ | □△ | △ | △ | □△ | △ | △ | △ | □ | ○ | ○ | □ | Standard size | ○ | □△ | △ | △ | △ |
| | Gas pipe | ϕ15.88 | 50m [30m] | 70m [30m] | 70m [30m] | 50m [20m] | 50m [20m] | 50m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | 40m [20m] | 50m [30m] | 70m [30m] | 70m [30m] | 50m [30m] | 70m [30m] | 70m [30m] | 45m [20m] | 45m [20m] | 45m [20m] | 45m [20m] |




<TWIN SYSTEM>
Total length A + B + C
P100-140: 50 m
P200, 250: 70 m




<TRIPLE SYSTEM>
Total length A + B + C + D
P140: 50 m
P200, 250: 70 m




<QUADRUPLE SYSTEM>
Total length A + B + C + D + E
P200, 250 : 70 m

### (4) Pipe size and refrigerant pipe limits

| | Outdoor unit | Pipe size (mm) | | | | Actual piping length <m> | | | Height deffence <m> | | (Note 1) No. of bend |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gas side | | Liquid side | | Total length | Indoor ~ Indoor | Branch pipe B, C, D | Indoor ~ Outdoor | Indoor ~ Indoor | |
| | | Outdoor unit side | Indoor unit side | Outdoor unit side | Indoor unit side | A+B+C+D+E | | | | | |
| TWIN | 100-140 | ϕ15.88 <5/8> | RP50 ϕ12.7<1/2> RP60,71 ϕ15.88<5/8> | ϕ9.52<3/8> | RP50 ϕ6.35<1/4> RP60,71 ϕ9.52<3/8> | 50m | \|B-C\| 8m | 20m | H30m | h 1m | 15 |
| TRIPLE | 140 | | | | | | \|B-C\|\|C-D\|\|B-D\| 8m | | | | |
| TWIN | 200, 250 | ϕ25.4 <1> | RP60,71 100, 125 ϕ15.88<5/8> | ϕ9.52<3/8> (P200) ϕ12.7<1/2> (P250) | RP60,71 100, 125 ϕ9.52<3/8> | 70m | \|B-C\| 8m | 30m | | | |
| TRIPLE | | | | | | | \|B-C\|\|C-D\|\|B-D\| 8m | | | | |
| QUADRUPLE | | | RP50 ϕ12.7<1/2> RP60 ϕ15.88<5/8> | | RP50 ϕ6.35<1/4> RP60 ϕ9.52<3/8> | | \|B-C\|\|B-D\|\|B-E\| \|C-D\|\|C-D\|\|C-E\| 8m | | | | |

Note1. The number of bends in the refrigerant pipe is respectively 8 or less in the range of <A+B> <A+C> <A+D>.
2. PUHZ-P100: 20 m chargeless PUHZ-P125-250: 30 m chargeless

## 8-2. ADJUSTING THE AMOUNT OF REFRIGERANT

• Check additional refrigerant charging amount referring to table 5, 6 when liquid pipe is one size larger than standard diameter.

<Table 5> Required additional charge when the liquid pipe is one size larger than the standard diameter (1:1 SYSTEM)

| | Liquid pipe dia. | Chargeless | Max. pipe length | Refrigerant amount to be added |
|---|---|---|---|---|
| P100 | ϕ12.7 | 10m | 25m | 100 g per 1 m longer than 10 m |
| P125,140 | ϕ12.7 | 10m | 30m | 100 g per 1 m longer than 10 m |
| P200 | ϕ15.88 | 20m | 40m | Additional refrigerant amount (Longer than 20 m) |
| P250 | ϕ15.88 | 20m | 45m | △W(g) = 180 × pipe length(m) - 3000 |

If the calculation produces a negative number (△W ≦ 0), additional charging is not necessary.

<Table 6> Required additional charge when the liquid pipe is one size larger than the standard diameter (TWIN/TRIPLE/QUADRUPLE SYSTEM)

| Capacity | When the extension pipe length (main piping + branch piping) exceeds 10 m(P100-140)/20m(P200, 250) |
|---|---|
| P100,125,140 | Additional refrigerant amount △W(g) = (100 × L2) + (60 × L3) + (30 × L4) - 2000 |
| P200, 250 | Additional refrigerant amount △W(g) = (180 × L1) + (120 × L2) + (90 × L3) + (30 × L4)- 3000 |

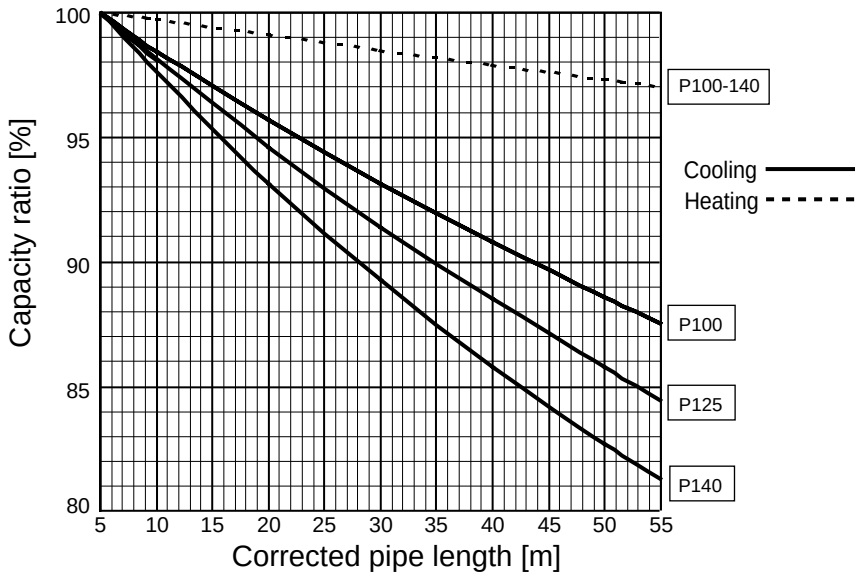
If the calculation produces a negative number (△W ≦ 0), additional charging is not necessary.
L1: ϕ15.88 liquid pipe length (m) L2: ϕ12.7 liquid pipe length (m)
L3: ϕ9.52 liquid pipe length (m) L4: ϕ6.35 liquid pipe length (m)

<Table 7> Additional refrigerant charging amount for pipe of standard diameter

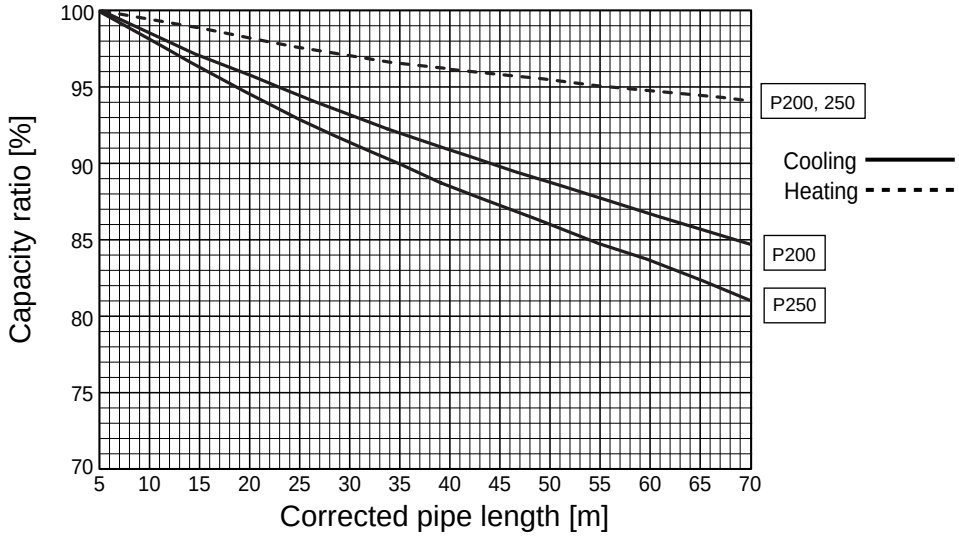
| Outdoor unit | Max. pipe length | Amount of unit filling refrigerant (kg) | Additional refrigerant charging amount for pipe length exceeding 30 m (kg) | | | | |
|---|---|---|---|---|---|---|---|
| | | | 21 — 30m | 31 — 40m | 41 — 50m | 51 — 60m | 61 — 70m |
| PUHZ-P100VHA2 | 50m | 3.0kg | 0.6kg | 1.2kg | 1.8kg | | |
| PUHZ-P125VHA2 | 50m | 4.5kg | | 0.6kg | 1.2kg | | |
| PUHZ-P140VHA2 | 50m | 4.5kg | | 0.6kg | 1.2kg | | |
| PUHZ-P200YHA | 70m | 5.8kg | | 0.9kg | 1.8kg | 2.7kg | 3.6kg |
| PUHZ-P250YHA | 70m | 7.1kg | | 1.2kg | 2.4kg | 3.6kg | 4.8kg |

## 8-3. CAPACITY CURVE

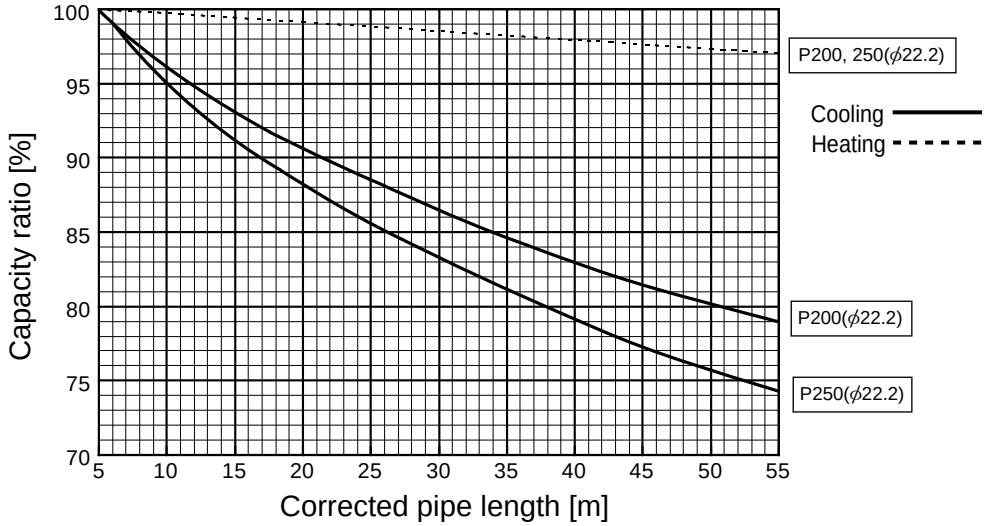
### ■ PUHZ-P100, 125, 140 VHA2<Standard size>




### ■ PUHZ-P200, 250YHA<Standard size>




### ■ PUHZ-P200, 250YHA<Gas pipe's diameter is one size smaller than the standard size.>



# 9 AIR FLOW DATA

## 9-1. OUTLET AIR SPEED AND COVERAGE RANGE

| | | PLA-RP50BA | PLA-RP60BA | PLA-RP71BA | PLA-RP100BA | PLA-RP125BA | PLA-RP140BA |
|---|---|---|---|---|---|---|---|
| Airflow | $m^3$/min. | 18 | 18 | 21 | 30 | 31 | 32 |
| Air speed | m/sec. | 3.2 | 3.2 | 3.7 | 5.3 | 5.4 | 5.6 |
| Coverage range | m | 4.8 | 4.8 | 5.6 | 8.0 | 8.2 | 8.5 |

| | | PCA-RP50GA | PCA-RP50GA2<br>PCA-RP60GA | PCA-RP71GA | PCA-RP100GA | PCA-RP125GA | PCA-RP140GA |
|---|---|---|---|---|---|---|---|
| Airflow | $m^3$/min | 13 | 18 | 18 | 25 | 34 | 34 |
| Air speed | m/sec | 3.7 | 3.8 | 3.8 | 4.1 | 4.4 | 4.4 |
| Coverage range | m | 8.8 | 10.4 | 10.4 | 12.6 | 15.2 | 15.2 |

| | | PCA-RP71HA | PCA-RP125HA |
|---|---|---|---|
| Airflow | $m^3$/min | 19 | 38 |
| Air speed | m/sec | 2.9 | 4.2 |
| Coverage range | m | 7.9 | 13.2 |

| | | PKA-RP50GAL |
|---|---|---|
| Airflow | $m^3$/min | 12 |
| Air speed | m/sec | 5.3 |
| Coverage range | m(ft) | 10(32.8) |

| | | PKA-RP50FAL2<br>PKA-RP60FAL | PKA-RP71FAL | PKA-RP100FAL |
|---|---|---|---|---|
| Airflow | $m^3$/min | 20 | 20 | 28 |
| Air speed | m/sec | 4.9 | 4.9 | 5.4 |
| Coverage range | m(ft) | 12.4(40.7) | 12.4(40.7) | 15.3(50.2) |

| | | PSA-RP71GA | PSA-RP100GA | PSA-RP125GA | PSA-RP140GA |
|---|---|---|---|---|---|
| Airflow | $m^3$/min | 18 | 31 | 33 | 35 |
| Air speed | m/sec | 2.6 | 4.5 | 4.8 | 4.9 |
| Coverage range | m | 8.3 | 14.3 | 15.2 | 16.1 |

※ The air coverage range is the distance to which the 0.25m/sec air can reach, when air is blown out horizontally from the unit at the High notch position.
The coverage range should be used only as a general guideline since it varies according to the size of the room and the furniture inside the room.

## 9-2. PLA-RP·BA

### 9-2-1 FRESH AIR INTAKE AND BRANCH DUCT

### 1. Branch duct hole and fresh air intake hole (Fig. 1)

At the time of installation, use the duct holes (cut out) located at the positions shown in Fig.1, as and when required.
• A fresh air intake hole for the optional multi function casement can also be made.

**Note:**
**The figure marked with * in the drawing represent the dimensions of the main unit excluding those of the optional multi function casement.**
**When installing the optional multi function casement, add 135 mm to the dimensions marked on the figure.**
**When installing the branch ducts, be sure to insulate adequately.**
**Otherwise condensation and dripping may occur.**

Unit : mm

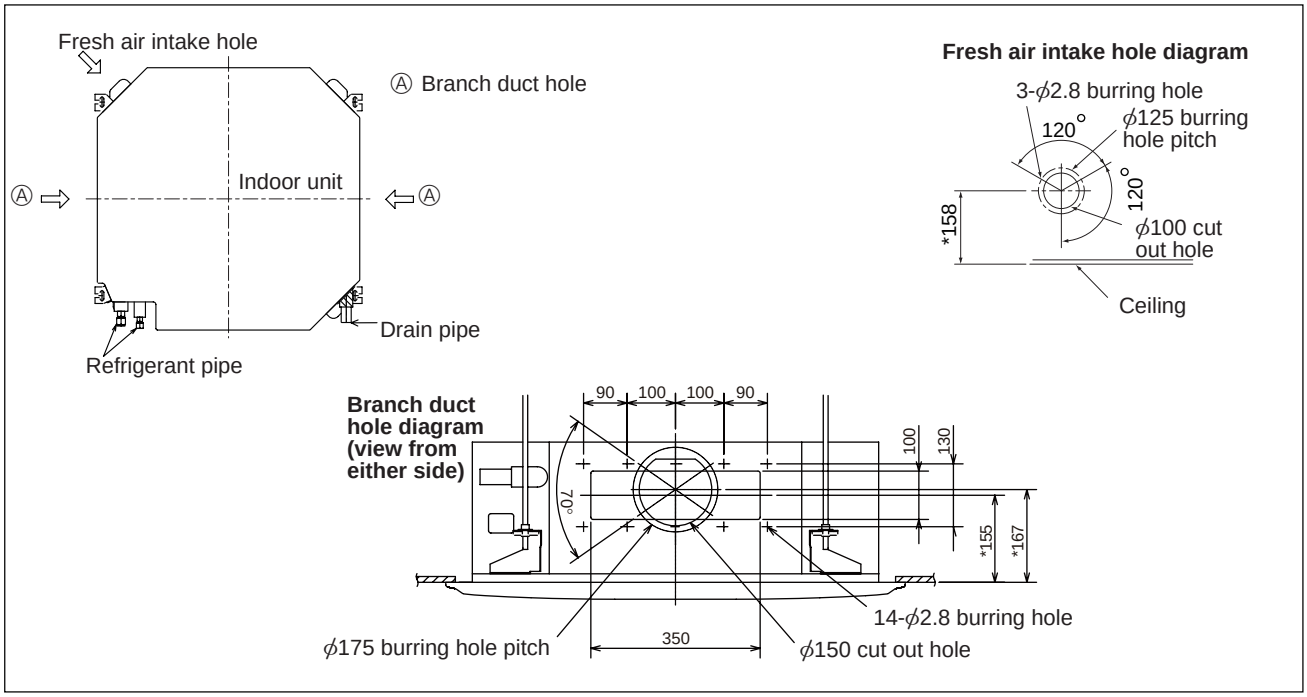
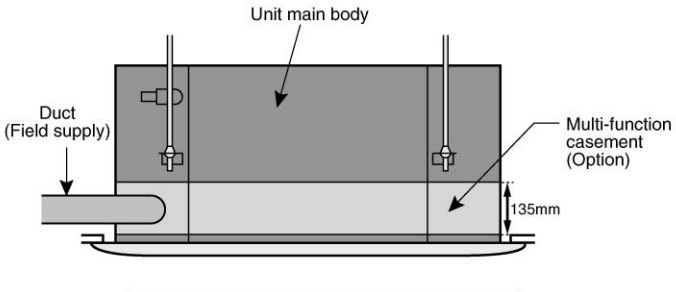



**Fig. 1**

### 2. Fresh air intake (Installation at site)

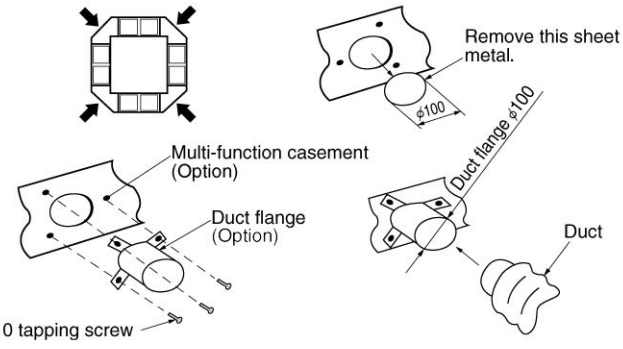
- By mounting the optional multi-function casement to the indoor unit main body, and mounting the duct and duct flange (option) onto it further, fresh exterior air intake can be accomplished.
  (The mounting of the multi-function casement increases the height of the ceiling plenum by 135mm.)




Direct exterior air intake into the main body is also possible.

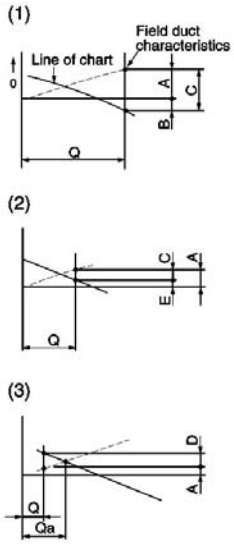
**Knockout hole for fresh air intake**

**Preparation of knockout hole**



## 3. Fresh air intake volume & static pressure characteristics

**How to read the chart**




Q .... Design fresh air intake volume (m³/min)

A ..... Static pressure loss [Pa] of fesh air intake duct at airflow rate of Q

B ..... Required boost pressure [Pa] of air conditioner inlet at airflow rate of Q

C ..... Required static pressure [Pa] of booster fan at airflow rate of Q

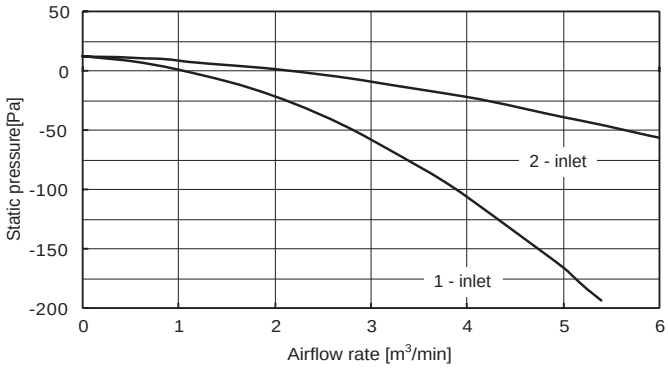
D ..... Required compensation [Pa] for static prssure loss of fresh air intake duct to make airflow rate Q

E ..... Static pressure [Pa] of indoor unit at airflow rate of Q

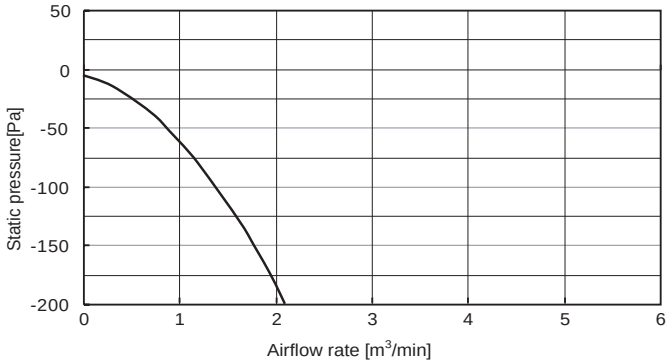
Qa .. Estimated fresh air intake [m³/min] without compensation of D

### PLA-RP50~71BA

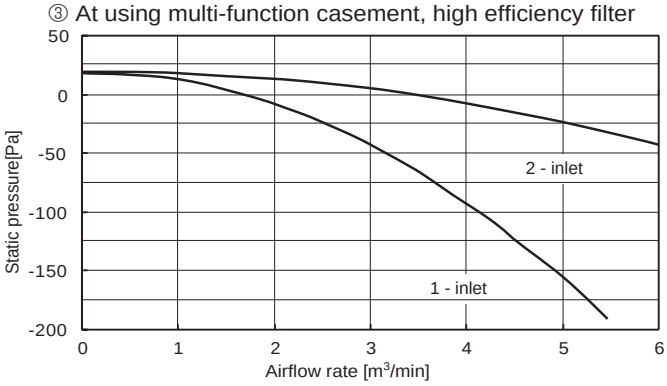
① At using multi-function casement, standard filter




② Direct intake to unit

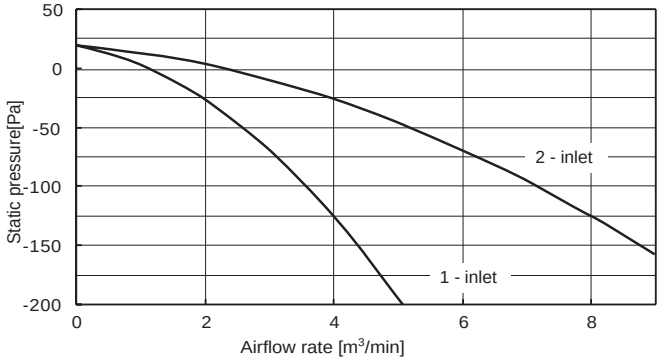



③ At using multi-function casement, high efficiency filter

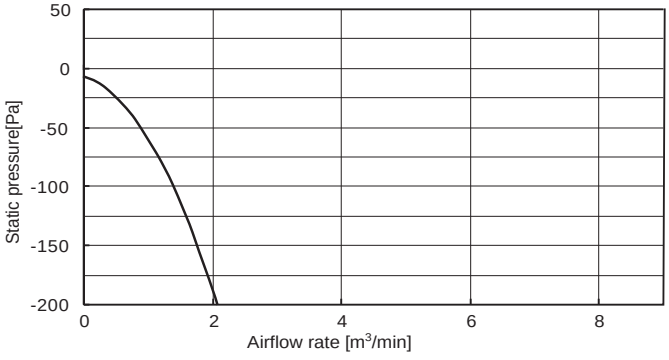



### PLA-RP100~140BA

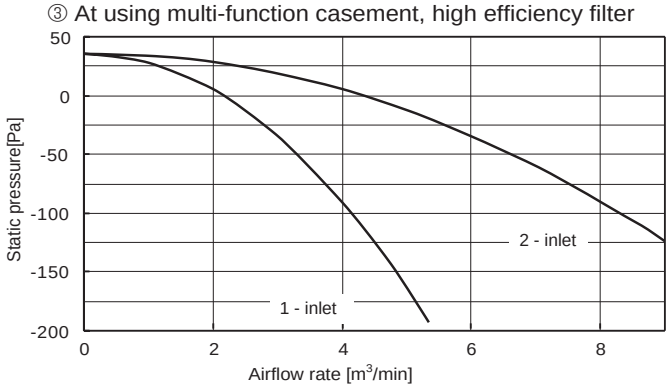
① At using multi-function casement, standard filter




② Direct intake to unit



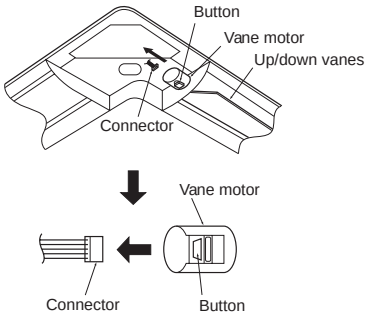

③ At using multi-function casement, high efficiency filter

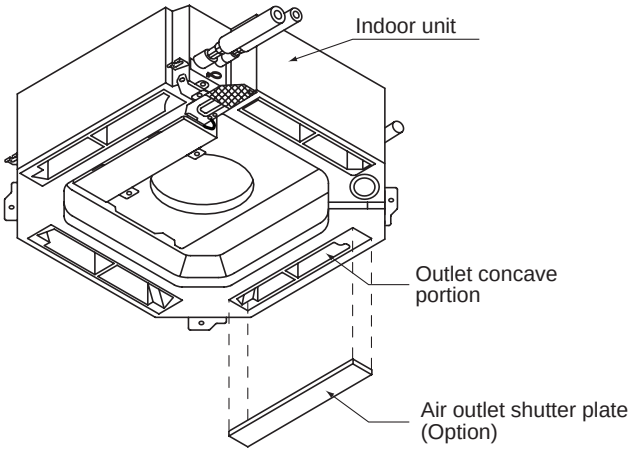


## 4. Change of outlet numbers

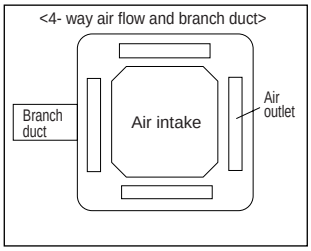
[The optional air outlet is necessary.]
To change the air outlet number to 3-, or 2-way outlet, the outlet number should be closed with the operational air outlet shutter.

(When the air outlets are closed, close the vane by removing the vane connector.)

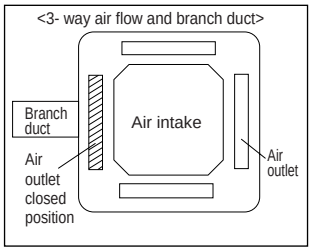


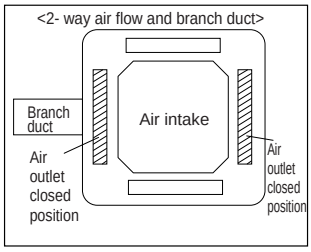

## 5. Branch duct and change of outlet numbers




※ Branch duct should be connected to one of the branch duct holes on the main unit.



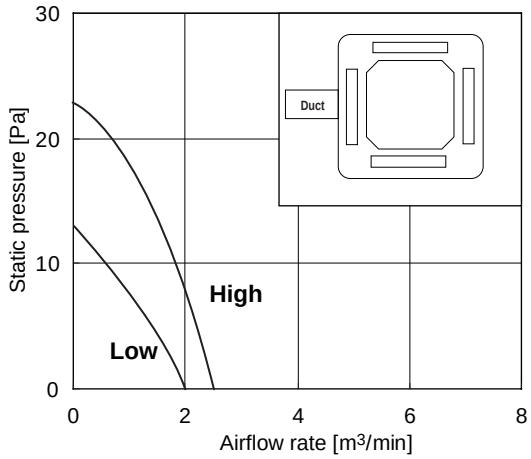

※ Close the outlet on the side of branch duct and air flows in 3 directions.



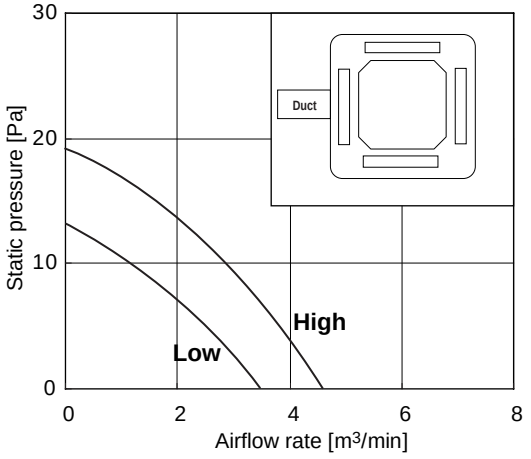

※ Close the outlet on the side of branch duct and one of the other outlets.
Air flows in 2 directions.

## PLA-RP71BA

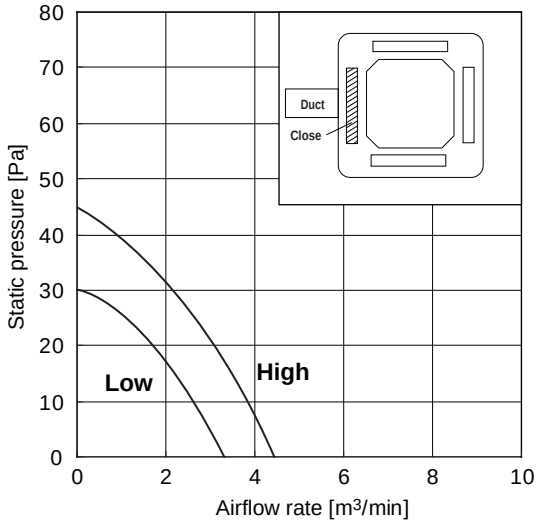
●4-way airflow (horizontal vane) Round duct



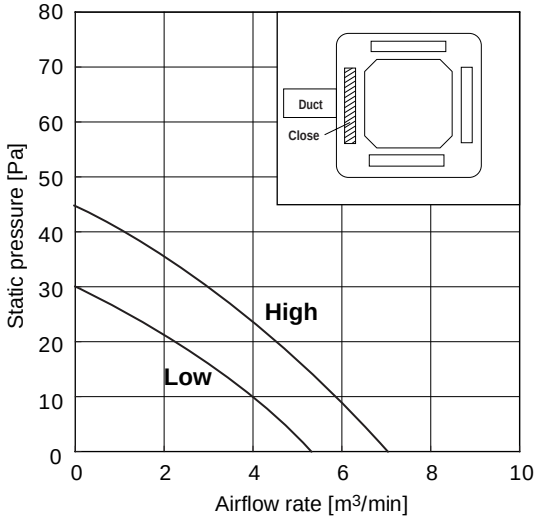

●4-way airflow (horizontal vane) Rectangular duct



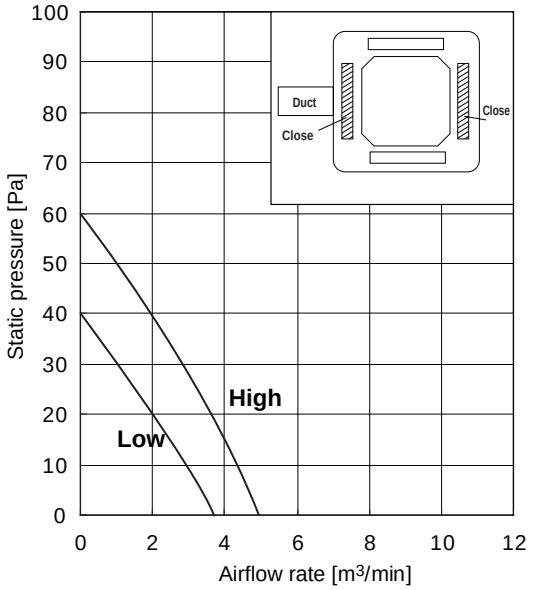

●3-way airflow (horizontal vane) Round duct



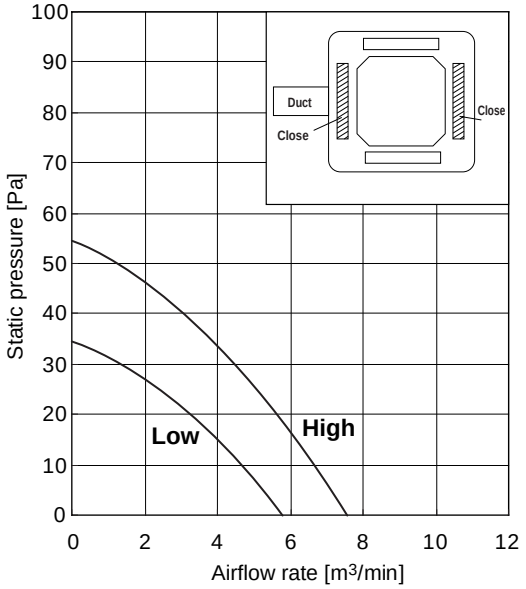

●3-way airflow (horizontal vane) Rectangular duct




●2-way airflow (horizontal vane) Round duct



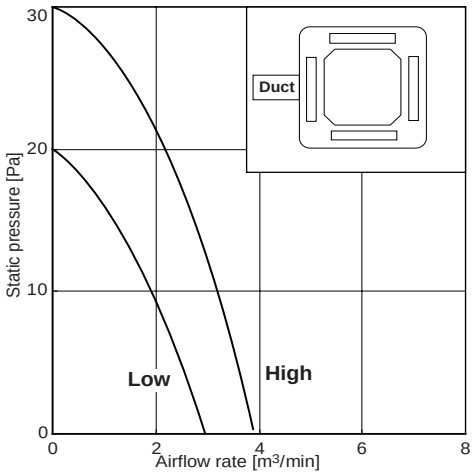

●2-way airflow (horizontal vane) Rectangular duct



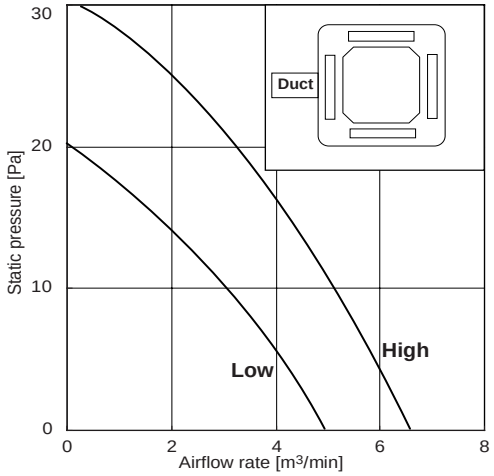

- Use 1 of the 2 duct holes on the indoor unit.
- Airflow rate of PLA-RP50, 60BA can be calculated from the airflow rate based on the characteristic of the duct for PLA-RP71BA.
- Use the optional air outlet shutter plate (PAC-SH51SP-E) for 3-way and 2-way airflow.

## PLA-RP125BA

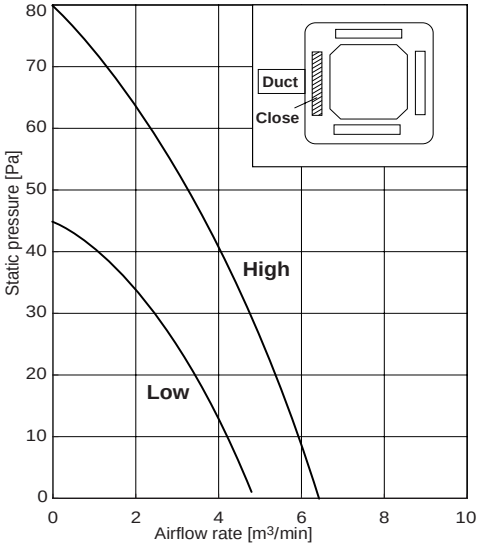
●4-way airflow (horizontal vane) Round duct



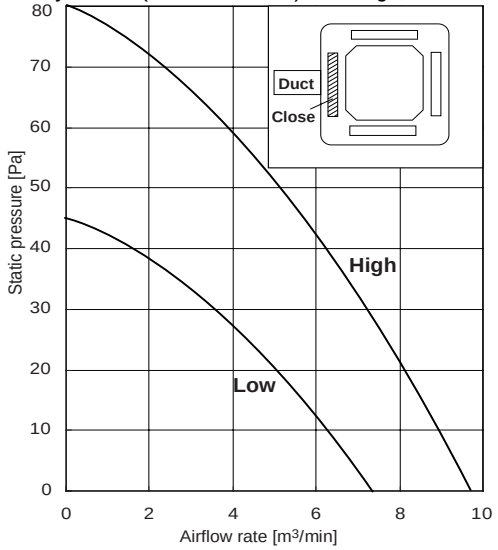

●4-way airflow (horizontal vane) Rectangular duct



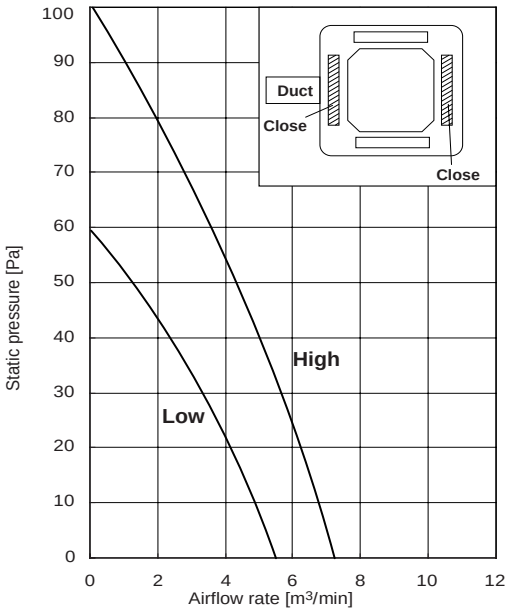

●3-way airflow (horizontal vane) Round duct



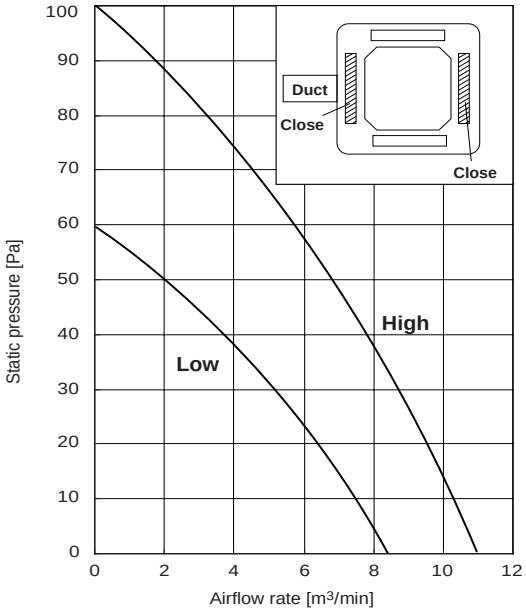

●3-way airflow (horizontal vane) Rectangular duct




●2-way airflow (horizontal vane) Round duct




●2-way airflow (horizontal vane) Rectangular duct

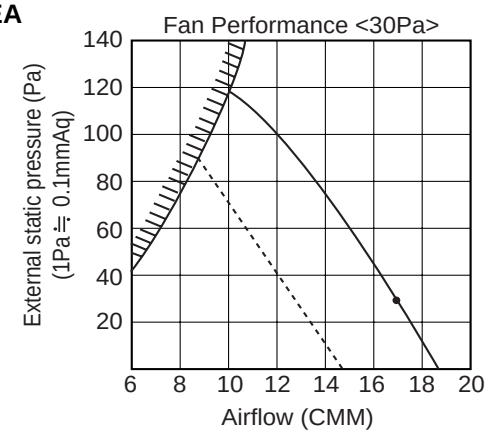


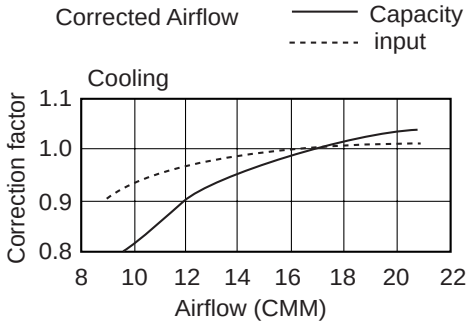

- Use 1 of the 2 duct holes on the indoor unit.
- Airflow rate of PLA-RP100BA, PLA-RP140BA can be calculated from the airflow rate based on the characteristic of the duct for PLA-RP125BA.
- Use the optional air outlet shutter plate (PAC-SH51SP-E) for 3-way and 2-way airflow.

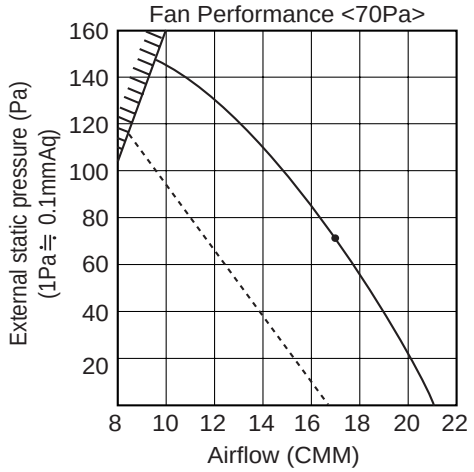
## 9-3. PEAD-RP·EA,EA2,GA

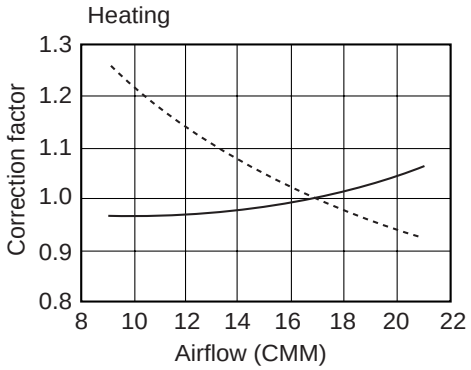
### 9-3-1. FAN PERFORMANCE AND CORRECTED AIRFLOW

**PEAD-RP50EA**

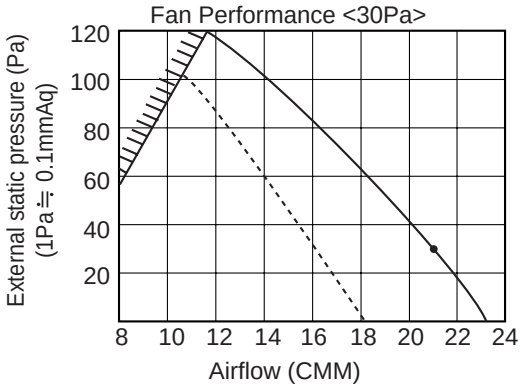


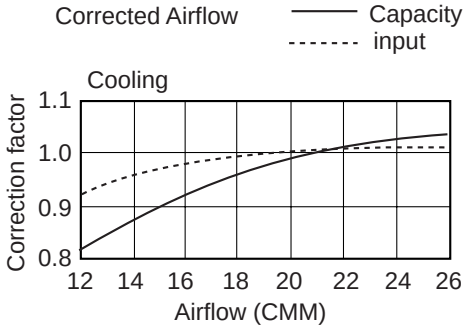



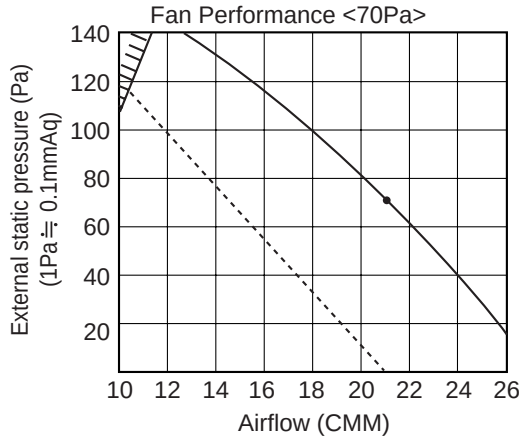



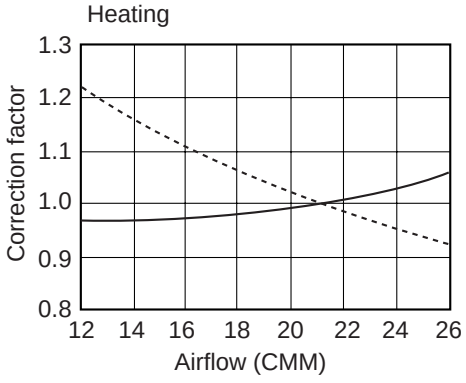




**PEAD-RP60EA**



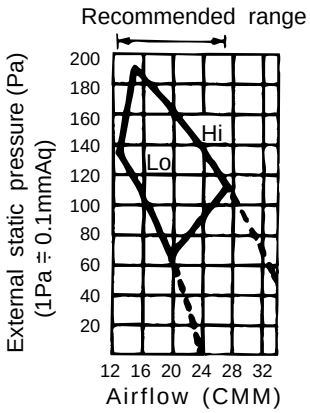



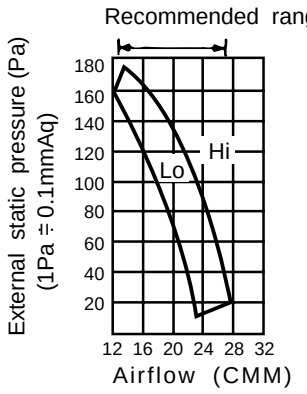



**PEAD-RP71EA**

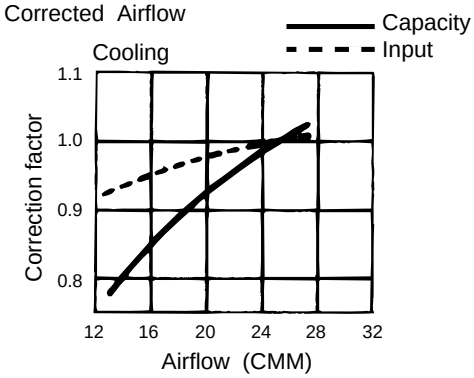
Fan performance <130Pa>

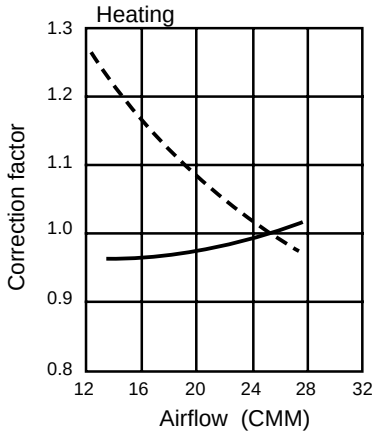



Fan performance <70Pa>



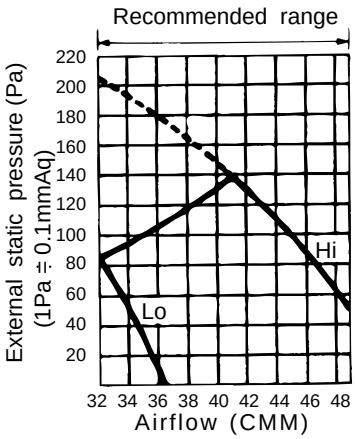

Corrected Airflow



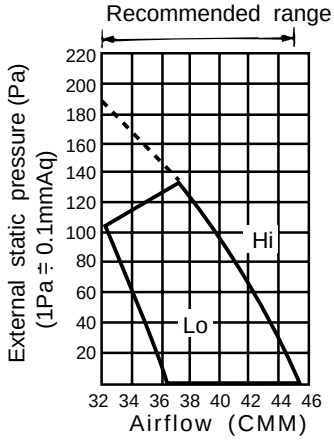




**PEAD-RP100EA2**
**PEAD-RP125EA**

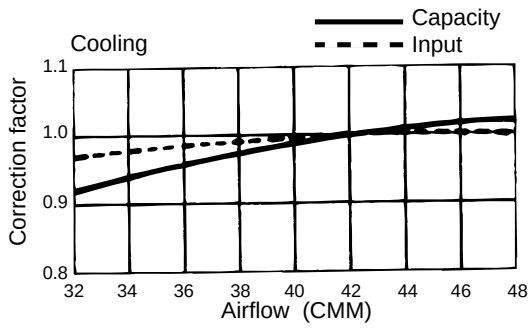
Fan performance <130Pa>

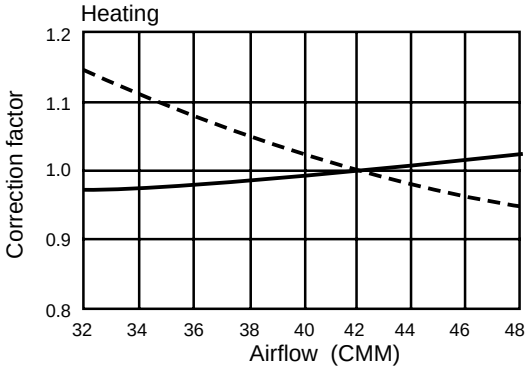



Fan performance <70Pa>



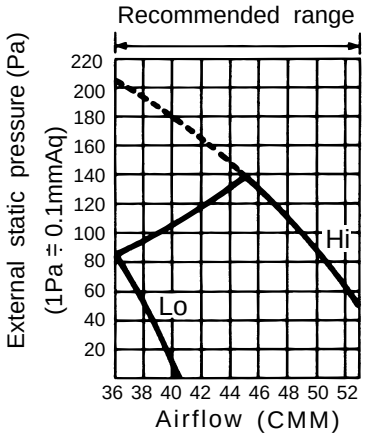

Corrected Airflow



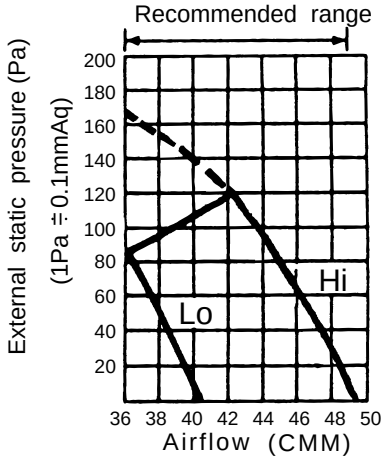



**PEAD-RP140EA**

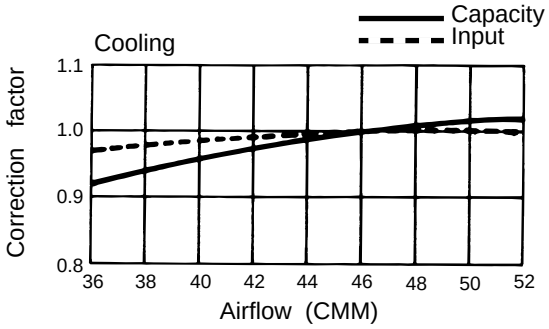
Fan performance <130Pa>

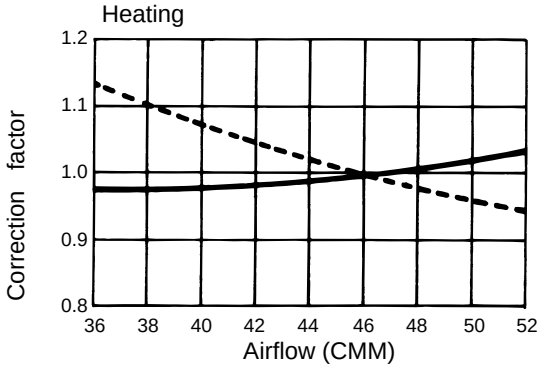



Fan performance <70Pa>



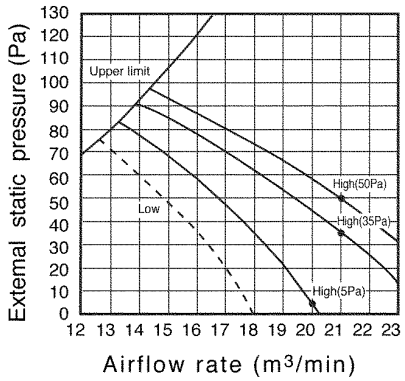

Corrected Airflow



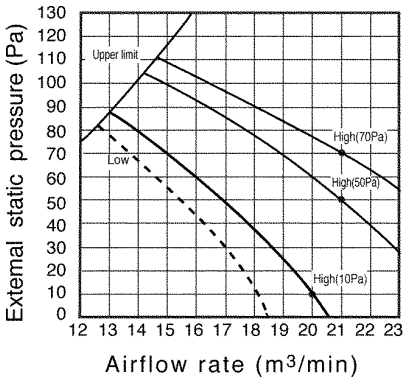



## PEAD-RP60GA

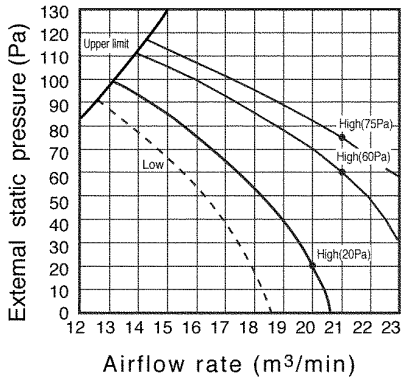
Fan performance <220V>



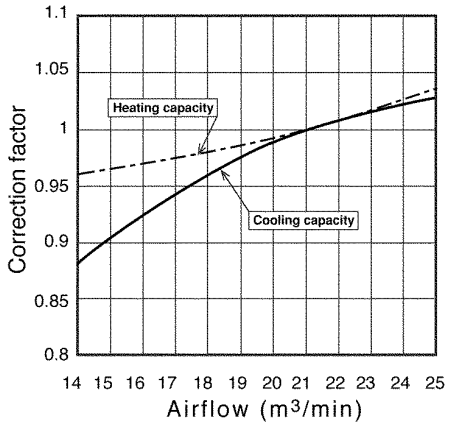

Fan performance <230V>




Fan performance <240V>

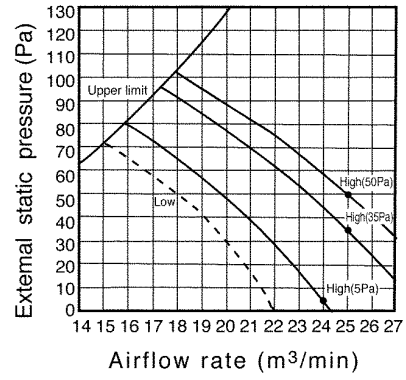



Corrected air flow

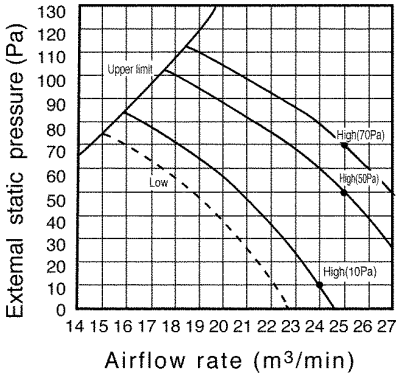



## PEAD-RP71GA

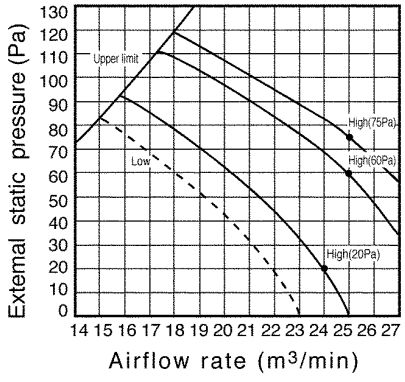
Fan performance <220V>



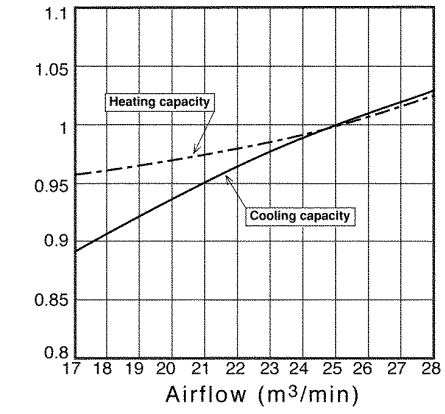

Fan performance <230V>




Fan performance <240V>

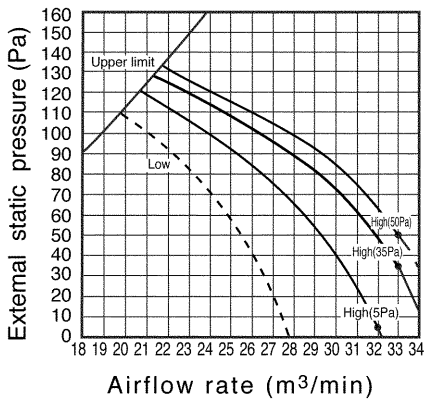



Corrected air flow

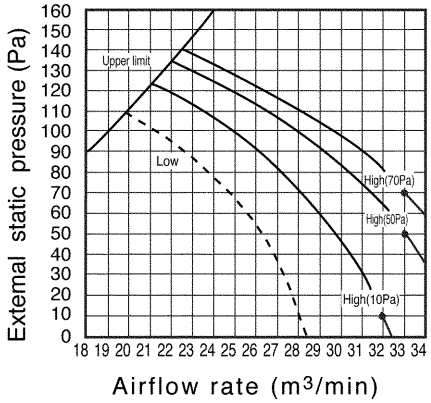


## PEAD-RP100GA

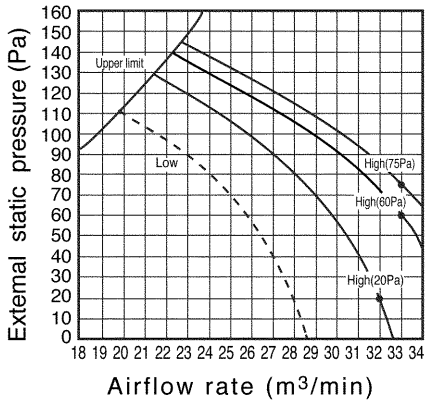
Fan performance <220V>



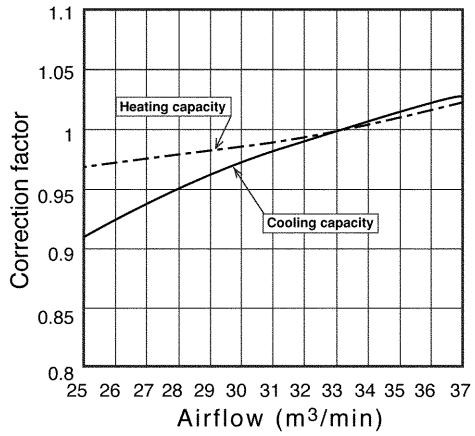

Fan performance <230V>




Fan performance <240V>

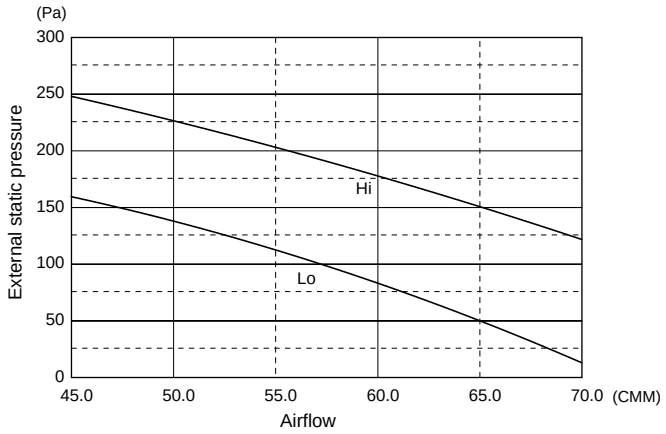



Corrected air flow

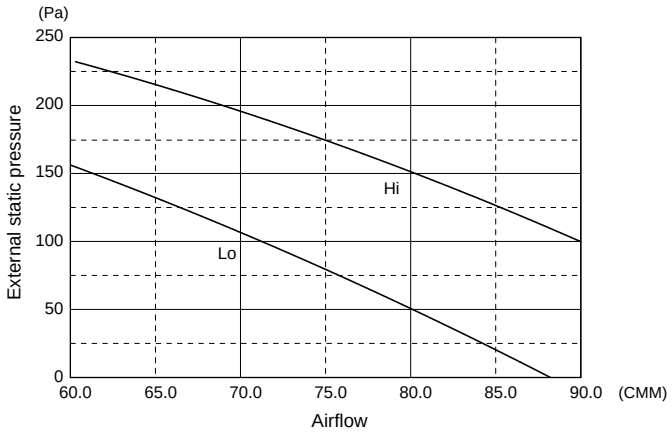


## 9-4. PEA-RP·GA
## Fan Performance Curve

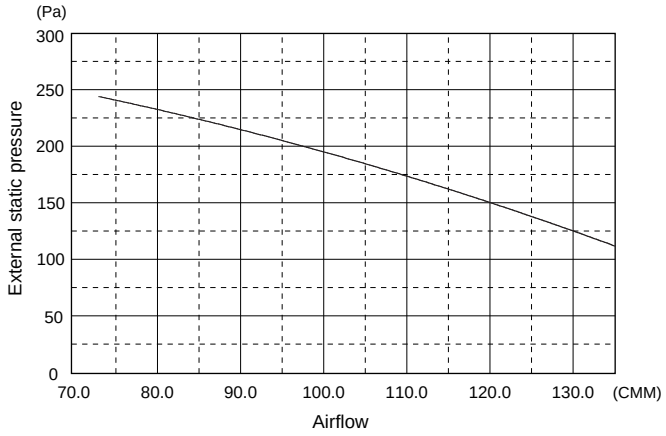
**PEA-RP200GA**
**Fan Performance Curve 50Hz**



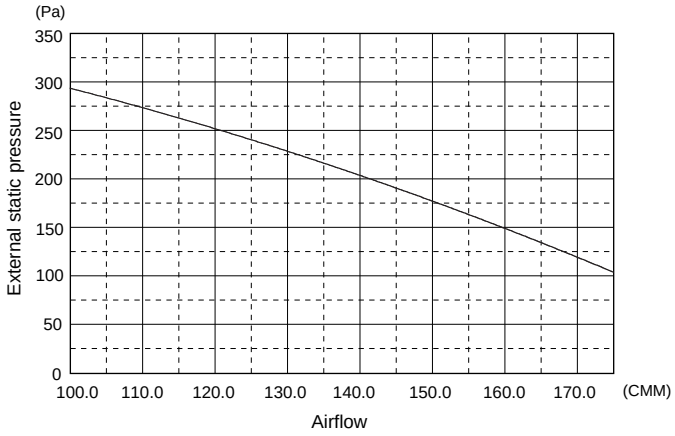

**PEA-RP250GA**
**Fan Performance Curve 50Hz**




**PEA-RP400GA**
**Fan Performance Curve 50Hz**




**PEA-RP500GA**
**Fan Performance Curve 50Hz**

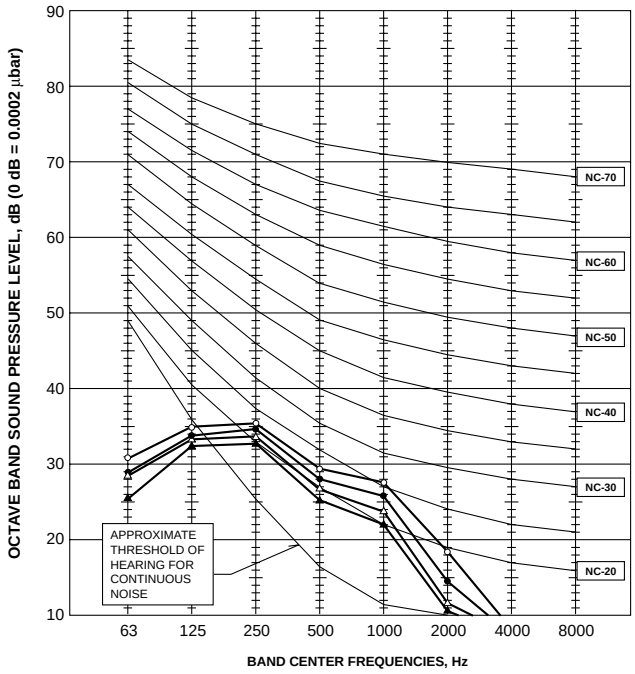


# 10 NOISE CRITERION CURVES

## 10-1. INDOOR UNIT

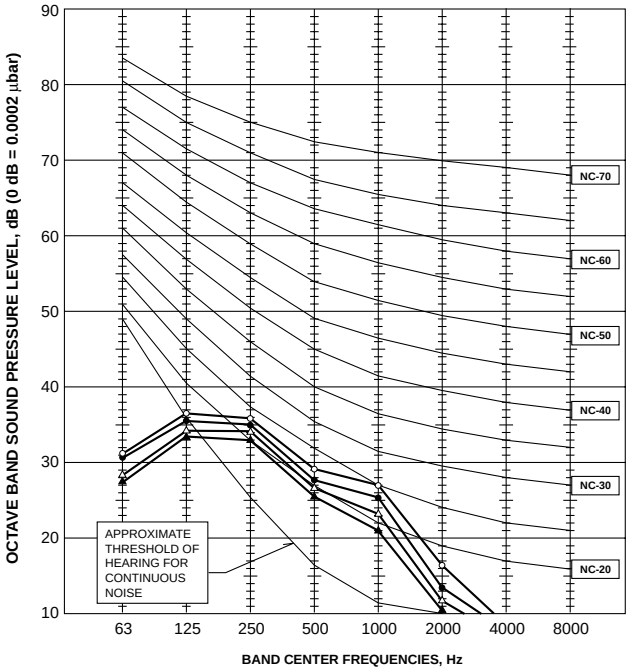
### PLA-RP50BA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 32 | |
| Medium1 | 31 | |
| Medium2 | 29 | |
| Low | 28 | |



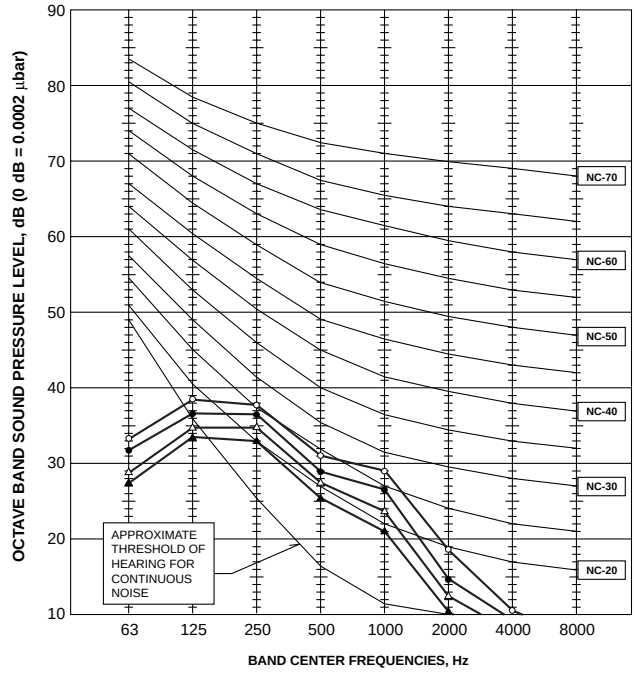

### PLA-RP60BA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 32 | |
| Medium1 | 31 | |
| Medium2 | 29 | |
| Low | 28 | |



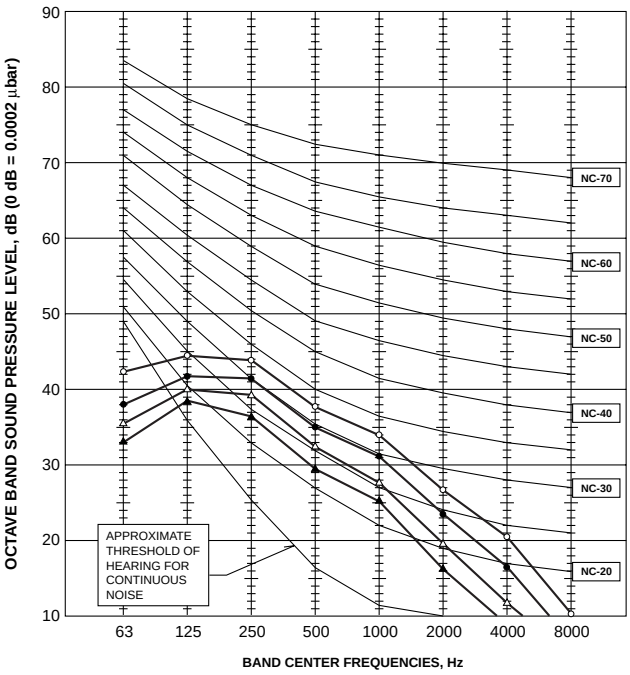

### PLA-RP71BA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 34 | |
| Medium1 | 32 | |
| Medium2 | 30 | |
| Low | 28 | |



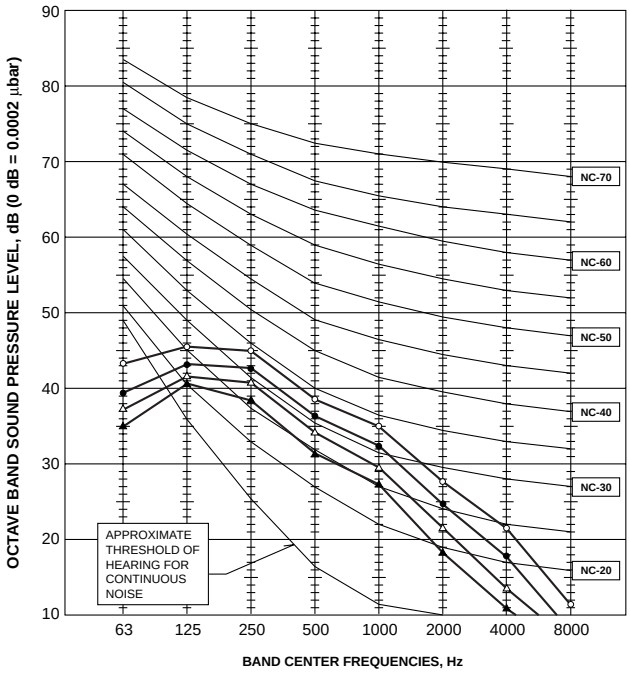

### PLA-RP100BA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 40 | |
| Medium1 | 37 | |
| Medium2 | 34 | |
| Low | 32 | |



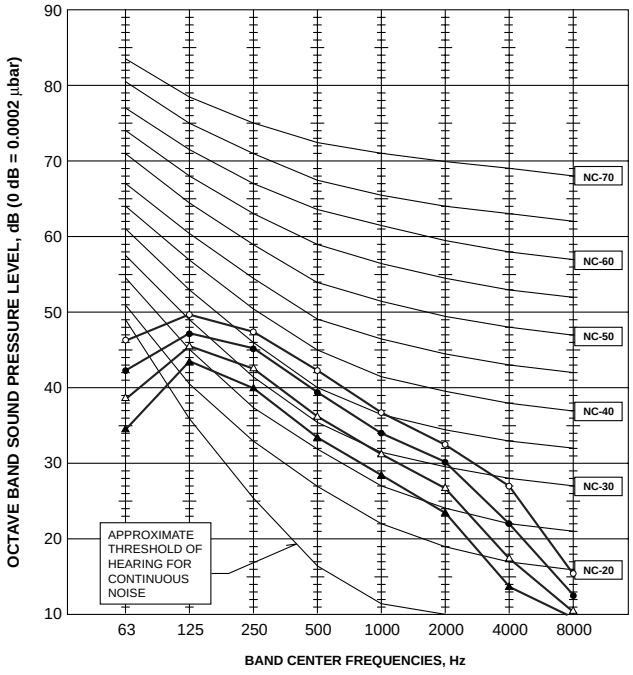
## PLA-RP125BA

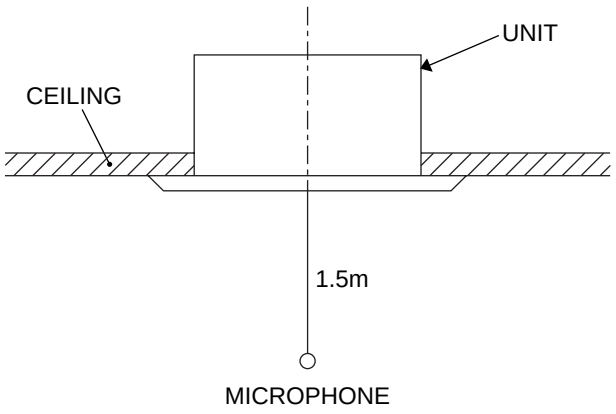
| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 41 | |
| Medium1 | 39 | |
| Medium2 | 36 | |
| Low | 34 | |



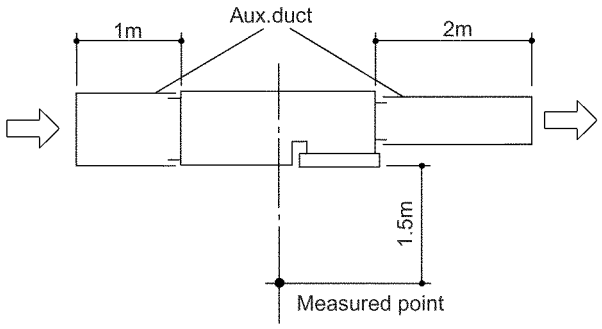

## PLA-RP140BA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 44 | |
| Medium1 | 42 | |
| Medium2 | 39 | |
| Low | 36 | |



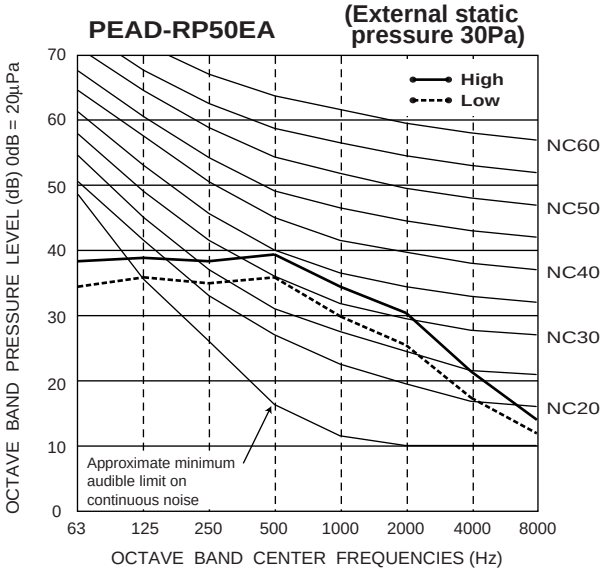
Ceiling concealed

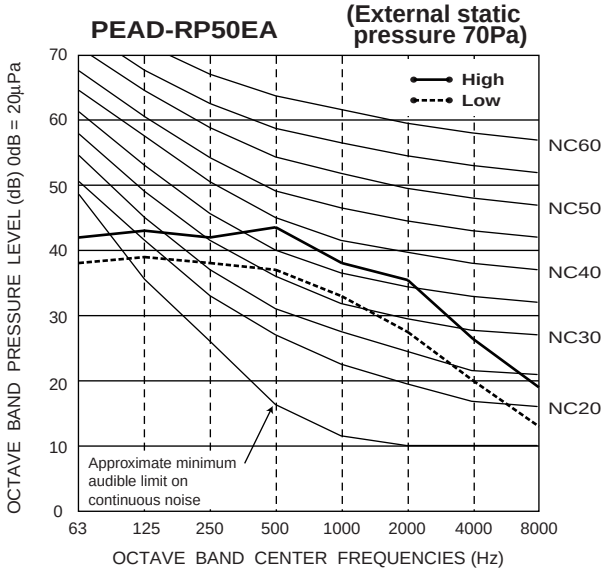


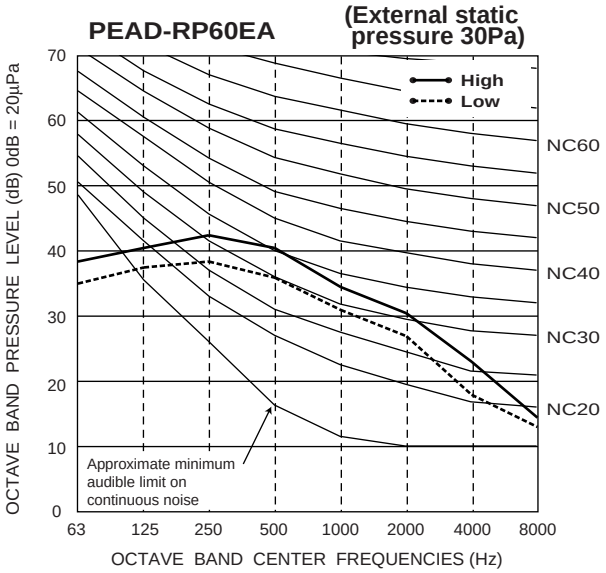

Noise level at anechoic room (Low-High) Unit : dB(A)

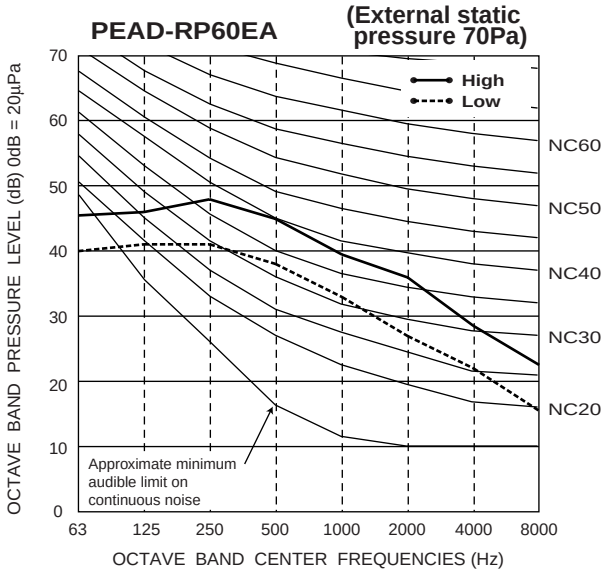
| Model | External static pressure | | |
|---|---|---|---|
| | 30Pa | 70Pa | 130Pa |
| PEAD-RP50EA | 36-40 | 38-44 | - |
| PEAD-RP60EA | 37-41 | 39-46 | - |
| PEAD-RP71EA | - | 37-41 | 40-45 ❊ |
| PEAD-RP100EA2 | - | 44-50 | 46-52 ❊ |
| PEAD-RP125EA | - | 44-50 | 46-52 ❊ |
| PEAD-RP140EA | - | 46-51 | 47-53 ❊ |

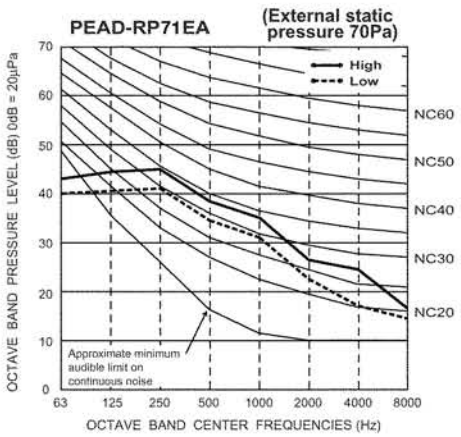
❊ Optional motor

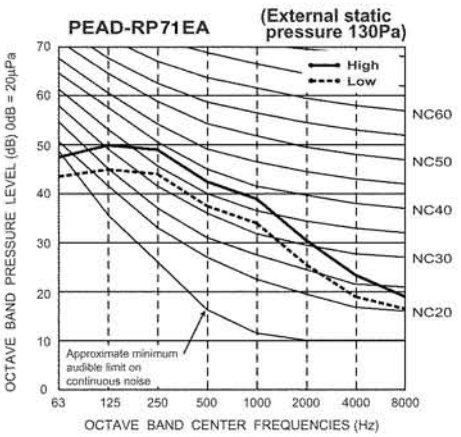


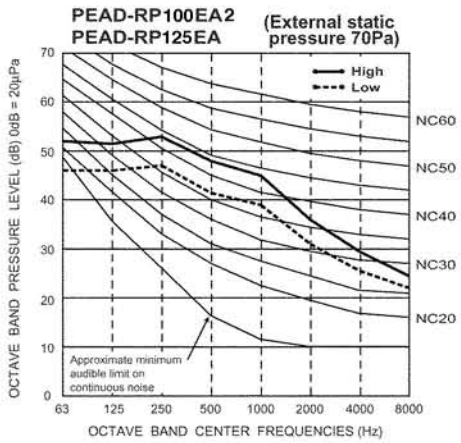



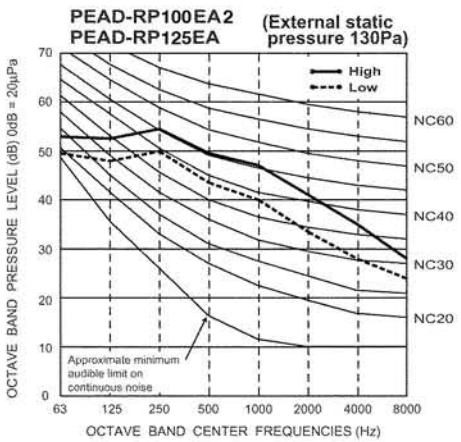



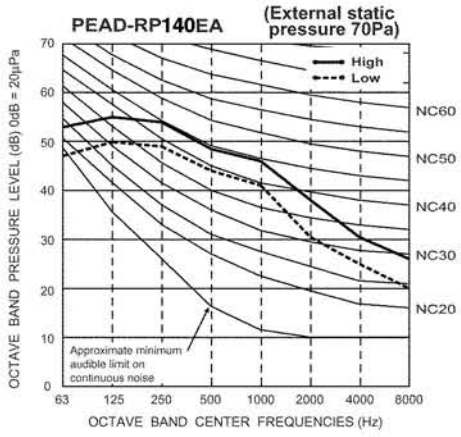



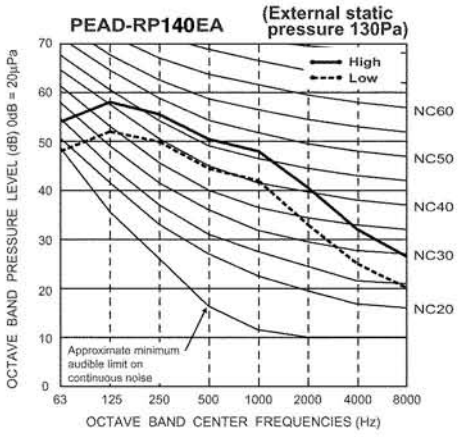

PEAD-RP71EA
(External static pressure 70Pa)
High
Low
NC60
NC50
NC40
NC30
NC20
Approximate minimum audible limit on continuous noise
OCTAVE BAND PRESSURE LEVEL (dB) 0dB = 20μPa
OCTAVE BAND CENTER FREQUENCIES (Hz)
63 125 250 500 1000 2000 4000 8000
0 10 20 30 40 50 60 70


PEAD-RP71EA
(External static pressure 130Pa)
High
Low
NC60
NC50
NC40
NC30
NC20
Approximate minimum audible limit on continuous noise
OCTAVE BAND PRESSURE LEVEL (dB) 0dB = 20μPa
OCTAVE BAND CENTER FREQUENCIES (Hz)
63 125 250 500 1000 2000 4000 8000
0 10 20 30 40 50 60 70


PEAD-RP100EA2
PEAD-RP125EA
(External static pressure 70Pa)
High
Low
NC60
NC50
NC40
NC30
NC20
Approximate minimum audible limit on continuous noise
OCTAVE BAND PRESSURE LEVEL (dB) 0dB = 20μPa
OCTAVE BAND CENTER FREQUENCIES (Hz)
63 125 250 500 1000 2000 4000 8000
0 10 20 30 40 50 60 70


PEAD-RP100EA2
PEAD-RP125EA
(External static pressure 130Pa)
High
Low
NC60
NC50
NC40
NC30
NC20
Approximate minimum audible limit on continuous noise
OCTAVE BAND PRESSURE LEVEL (dB) 0dB = 20μPa
OCTAVE BAND CENTER FREQUENCIES (Hz)
63 125 250 500 1000 2000 4000 8000
0 10 20 30 40 50 60 70


PEAD-RP140EA
(External static pressure 70Pa)
High
Low
NC60
NC50
NC40
NC30
NC20
Approximate minimum audible limit on continuous noise
OCTAVE BAND PRESSURE LEVEL (dB) 0dB = 20μPa
OCTAVE BAND CENTER FREQUENCIES (Hz)
63 125 250 500 1000 2000 4000 8000
0 10 20 30 40 50 60 70


PEAD-RP140EA
(External static pressure 130Pa)
High
Low
NC60
NC50
NC40
NC30
NC20
Approximate minimum audible limit on continuous noise
OCTAVE BAND PRESSURE LEVEL (dB) 0dB = 20μPa
OCTAVE BAND CENTER FREQUENCIES (Hz)
63 125 250 500 1000 2000 4000 8000
0 10 20 30 40 50 60 70

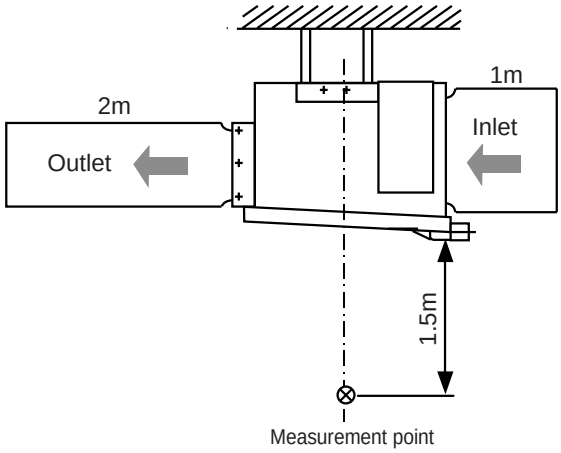
## Sound Data

PEA-RP200, 250 : Upper High/Lower Low

| Model | SPL dB(A) | OCTAVE BAND FREQ.Hz | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 63Hz | 125Hz | 250Hz | 500Hz | 1000Hz | 2000Hz | 4000Hz | 8000Hz |
| PEA-RP200GA | 51 | 55 | 54 | 51 | 49 | 47 | 43 | 33 | 27 |
| | 48 | 50 | 50 | 47 | 46 | 44 | 40 | 29 | 21 |
| PEA-RP250GA | 52 | 56 | 55 | 52 | 50 | 48 | 44 | 34 | 28 |
| | 49 | 51 | 51 | 48 | 47 | 45 | 41 | 30 | 22 |
| PEA-RP400GA | 52 | 53 | 51 | 52 | 50 | 46 | 44 | 39 | 30 |
| PEA-RP500GA | 53 | 55 | 54 | 51 | 50 | 48 | 44 | 40 | 31 |

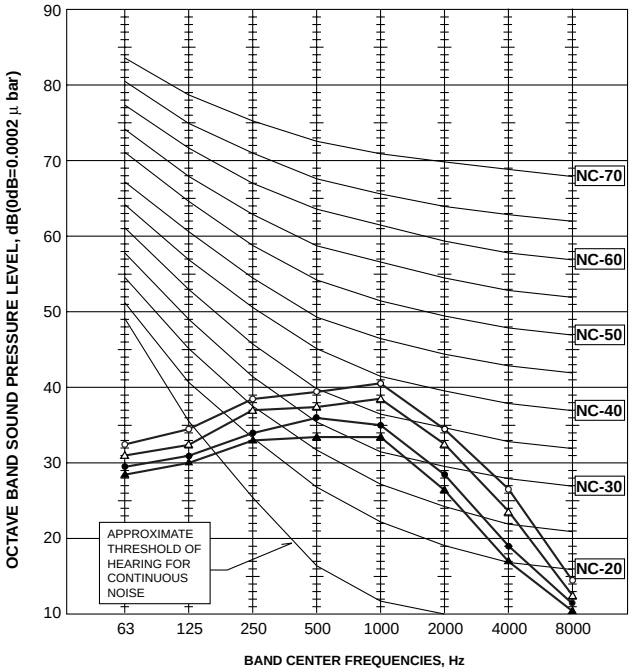
## Position measurement

**Indoor unit**



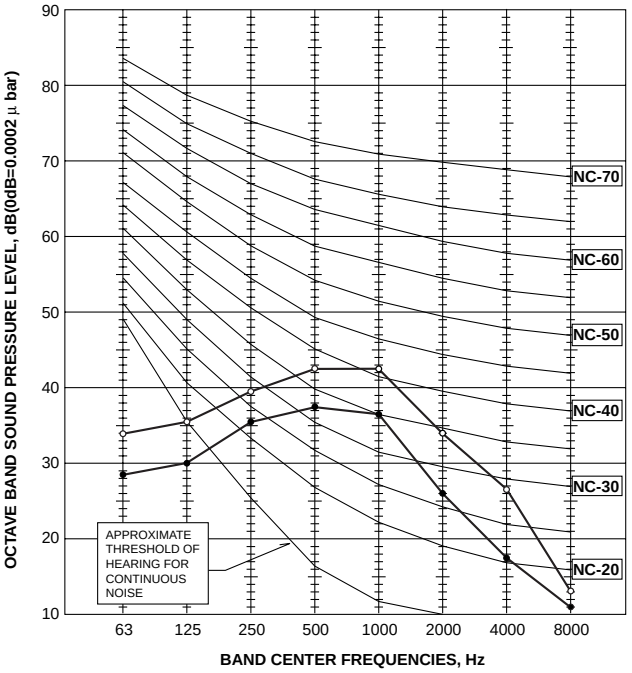
## PKA-RP50GAL

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 43 | ○—○ |
| Medium1 | 41 | △—△ |
| Medium2 | 38 | ●—● |
| Low | 36 | ▲—▲ |



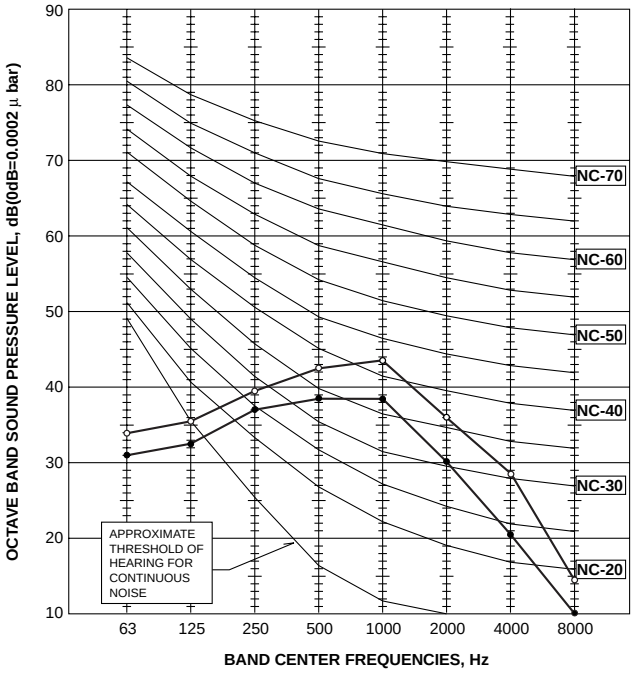

## PKA-RP50FAL2
## PKA-RP60FAL
## PKA-RP71FAL

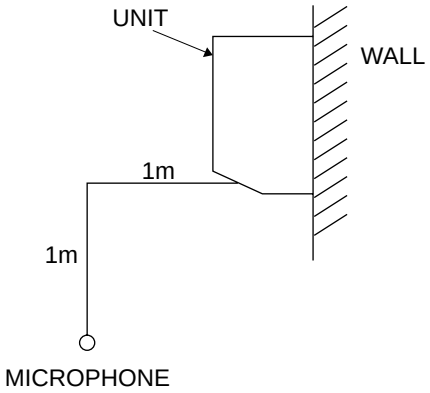
| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 45 | ○—○ |
| Low | 39 | ●—● |




## PKA-RP100FAL

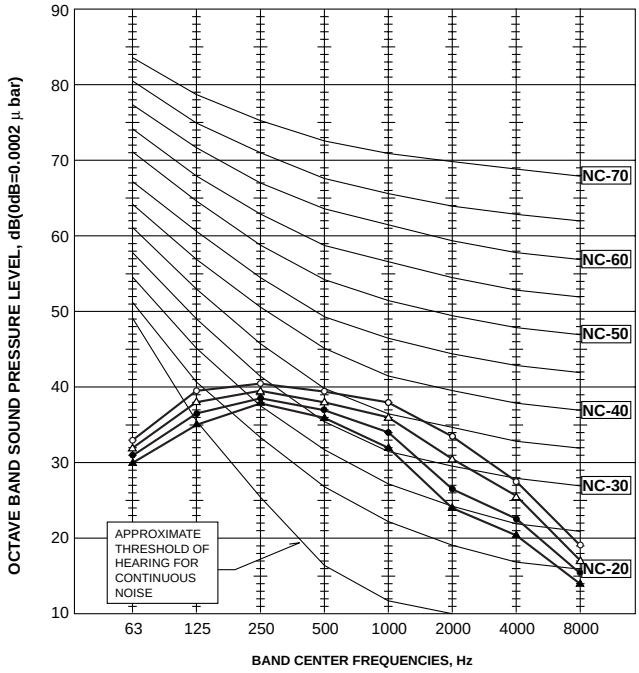
| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 46 | ○—○ |
| Low | 41 | ●—● |



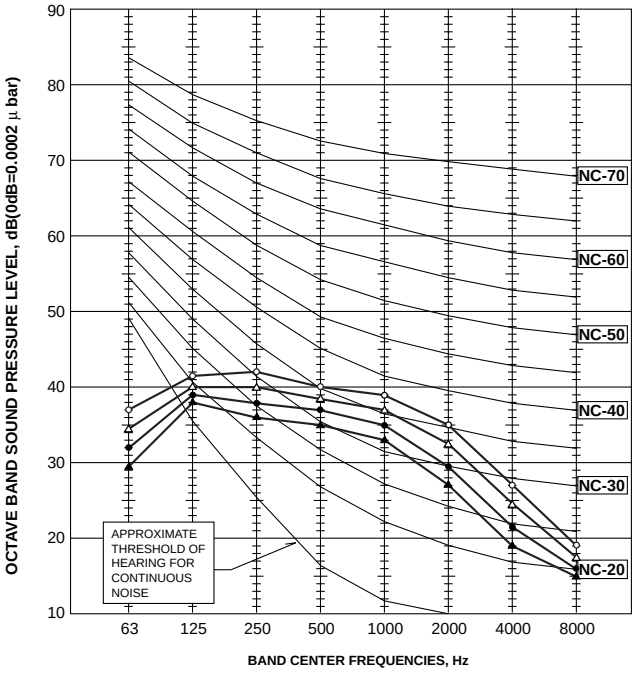
## PCA-RP50GA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 42 | |
| Medium1 | 40 | |
| Medium2 | 38 | |
| Low | 37 | |



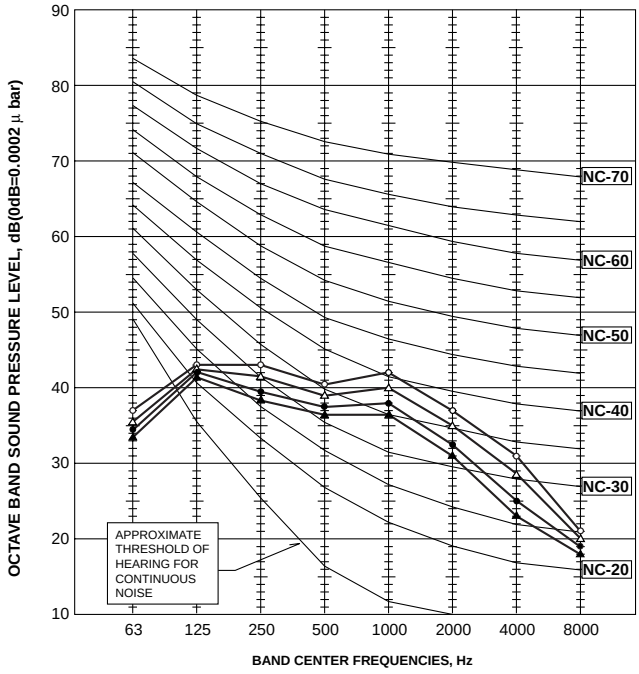

## PCA-RP50GA2
## PCA-RP60GA
## PCA-RP71GA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 43 | |
| Medium1 | 41 | |
| Medium2 | 39 | |
| Low | 37 | |



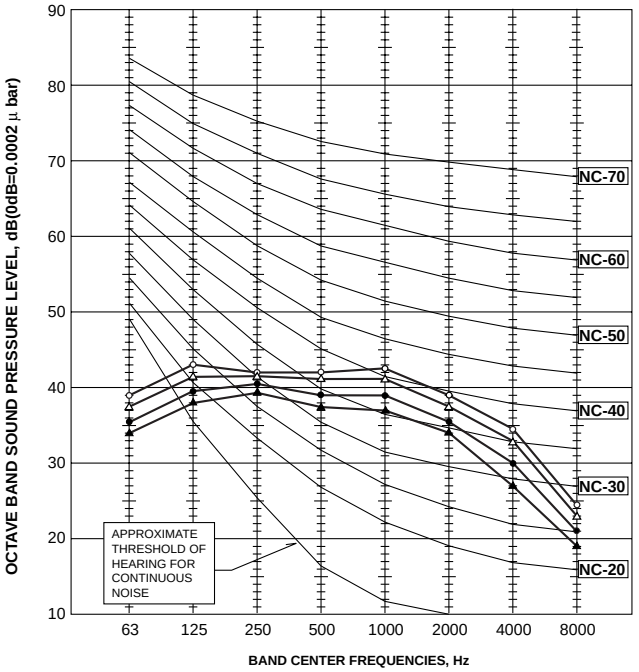

## PCA-RP100GA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 45 | |
| Medium1 | 43 | |
| Medium2 | 41 | |
| Low | 40 | |



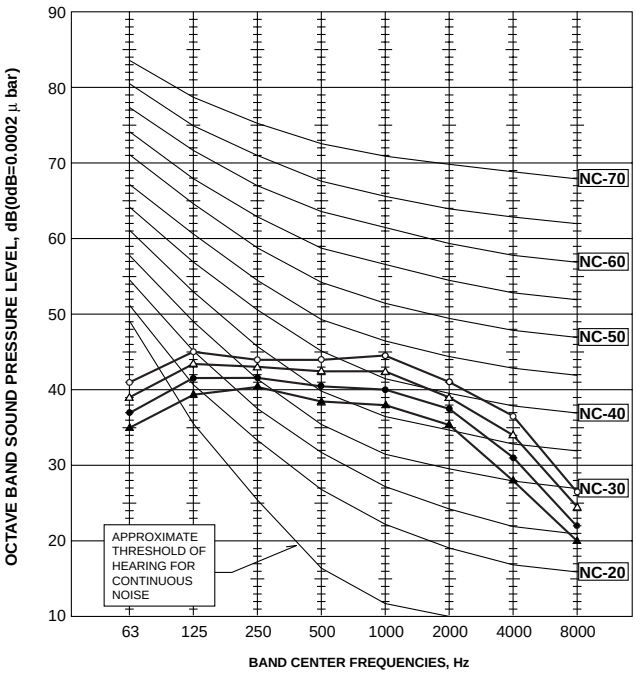

## PCA-RP125GA

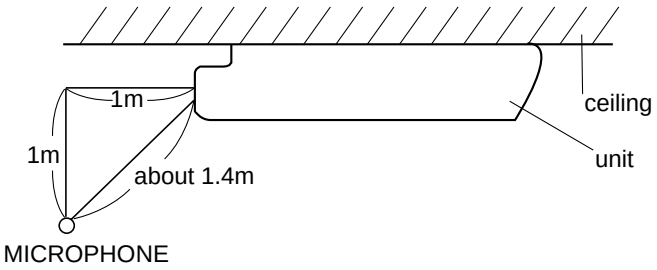
| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 46 | |
| Medium1 | 45 | |
| Medium2 | 43 | |
| Low | 41 | |



## PCA-RP140GA

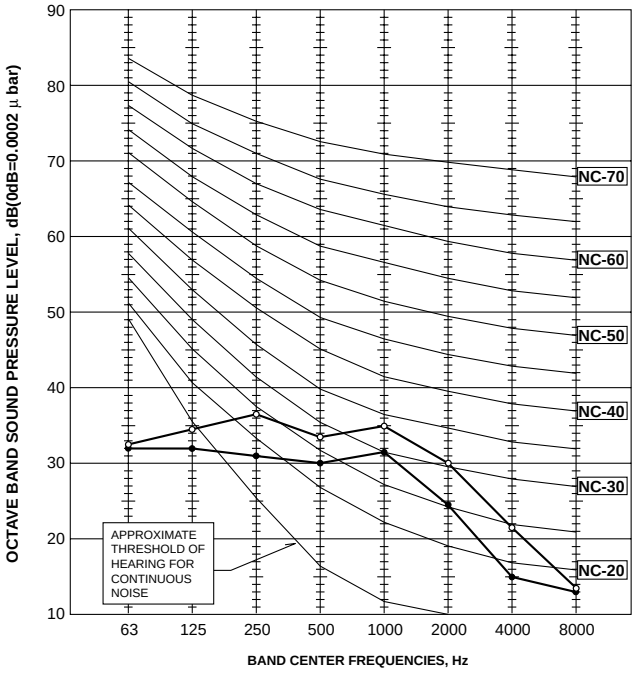
| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 48 | ○—○ |
| Medium1 | 46 | △—△ |
| Medium2 | 44 | ●—● |
| Low | 42 | ▲—▲ |



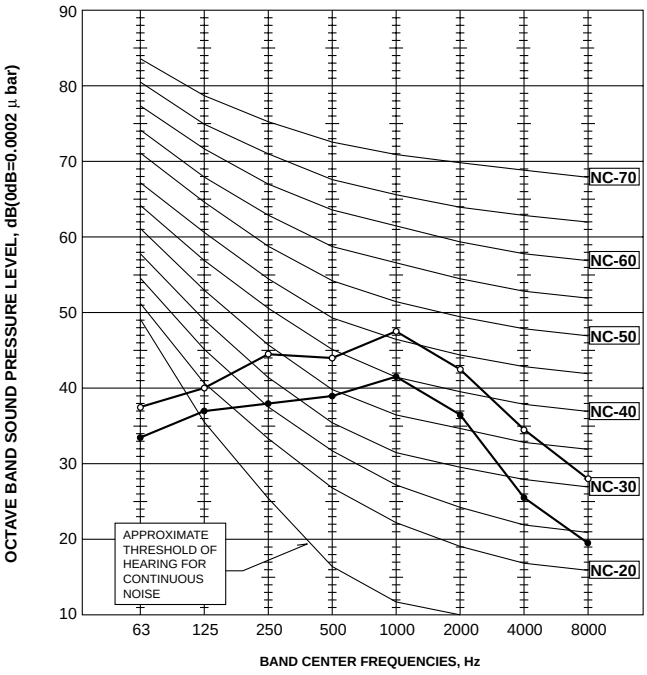

## PCA-RP71HA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 38 | ○—○ |
| Low | 34 | ●—● |



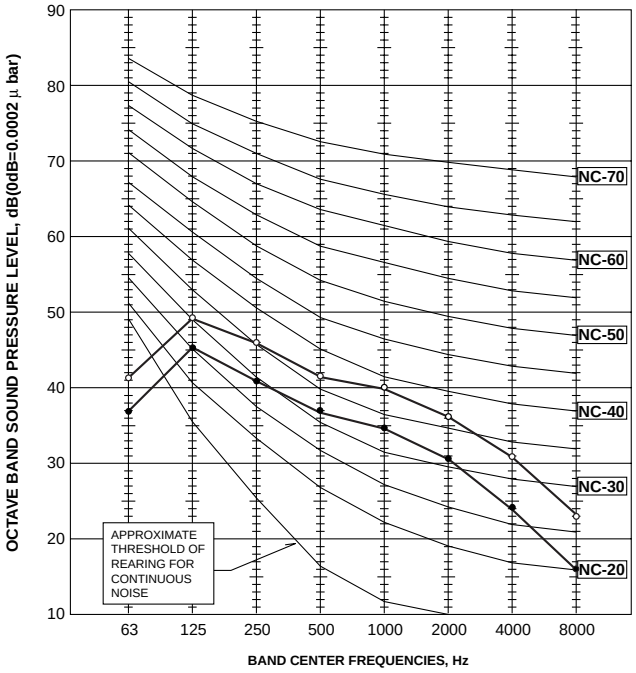

## PCA-RP125HA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 50 | ○—○ |
| Low | 44 | ●—● |



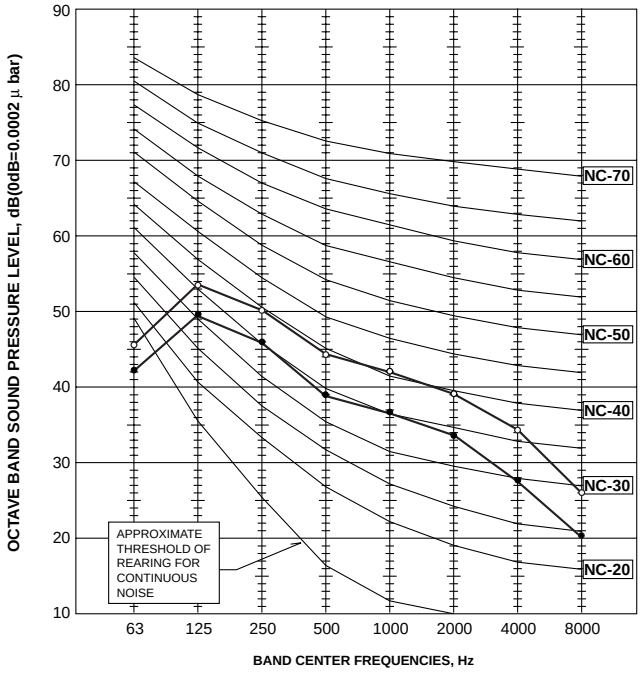
## PSA-RP71GA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 45 | ○—○ |
| Low | 40 | ●—● |



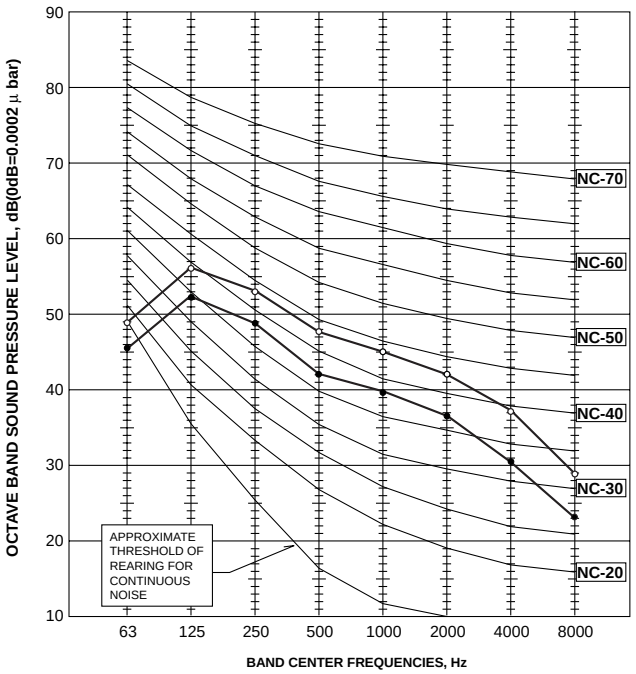

## PSA-RP100GA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 49 | ○—○ |
| Low | 44 | ●—● |



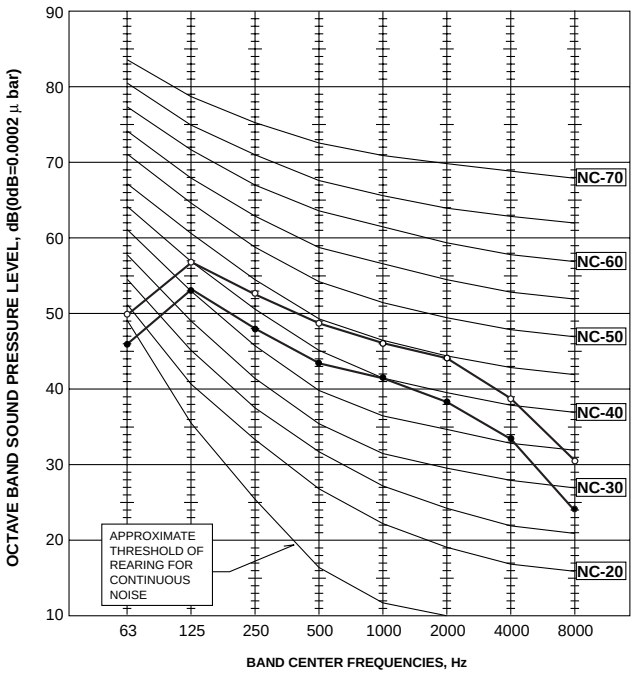

## PSA-RP125GA

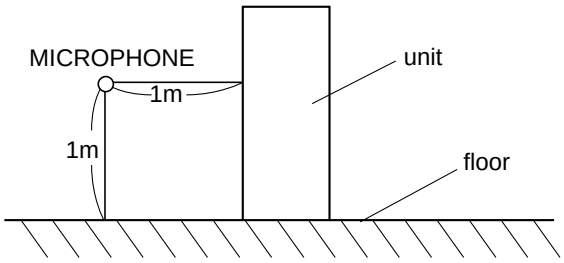
| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 51 | ○—○ |
| Low | 46 | ●—● |



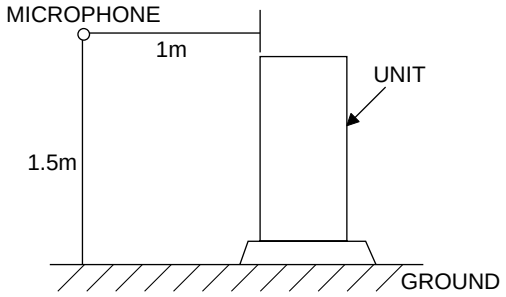
## PSA-RP140GA

| NOTCH | SPL(dB) | LINE |
|---|---|---|
| High | 52 | ○—○ |
| Low | 47 | ●—● |



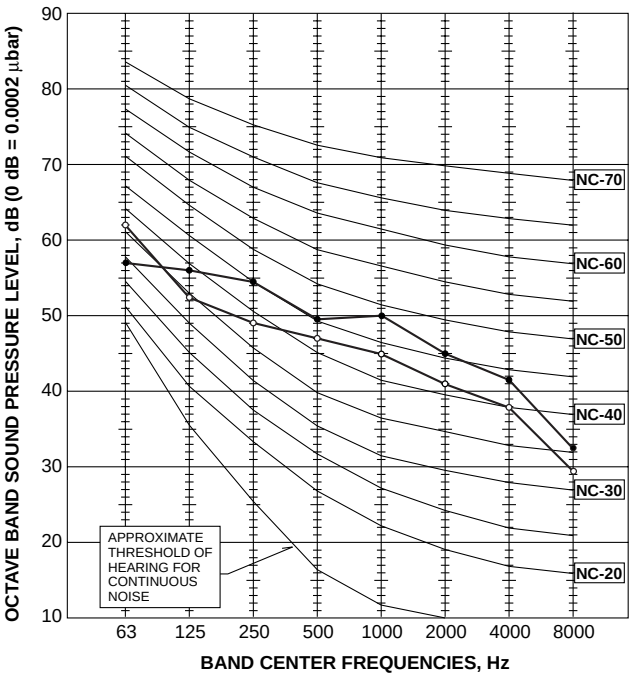



## 10-2. OUTDOOR UNIT



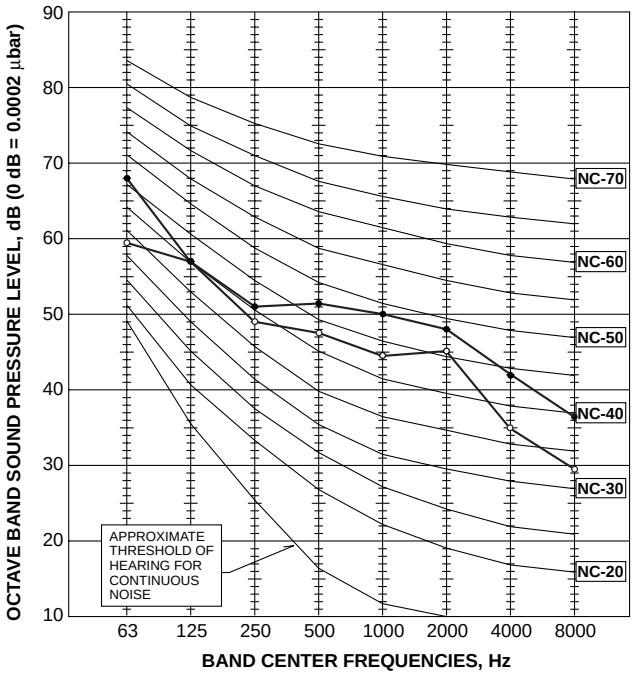

### PUHZ-P100VHA2

| MODE | SPL(dB) | LINE |
|---|---|---|
| COOLING | 50 | ○—○ |
| HEATING | 54 | ●—● |



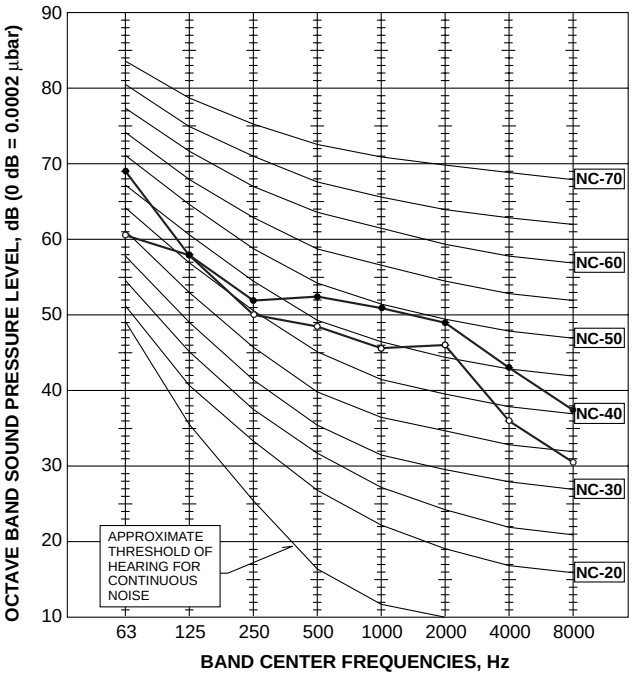

### PUHZ-P125VHA2

| MODE | SPL(dB) | LINE |
|---|---|---|
| COOLING | 51 | ○—○ |
| HEATING | 55 | ●—● |



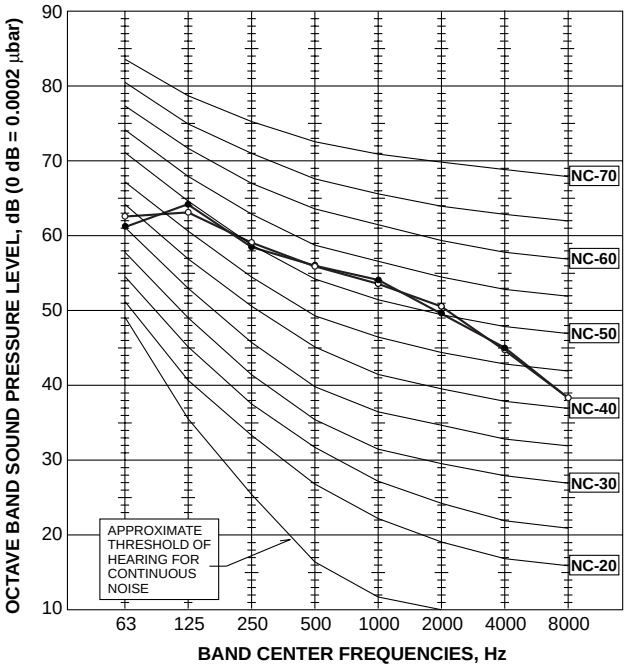

### PUHZ-P140VHA2

| MODE | SPL(dB) | LINE |
|---|---|---|
| COOLING | 52 | ○—○ |
| HEATING | 56 | ●—● |




### PUHZ-P200YHA
### PUHZ-P250YHA

| MODE | SPL(dB) | LINE |
|---|---|---|
| COOLING | 59 | ○—○ |
| HEATING | 59 | ●—● |



# 11 OPTIONAL PARTS

## 11-1. INDOOR UNIT

| Part Name | | Model Name | Applicable model |
|---|---|---|---|
| Remote sensor | | PAC-SE41TS-E | All models |
| Remote operation adapter | | PAC-SF40RM-E | |
| Multiple remote controller adapter | | PAC-SA88HA-E (1pc.) | |
| | | PAC-725AD (10pcs.) | |
| Remote on/off adapter | | PAC-SE55RA-E | |
| Power supply terminal kit | L/N/Earth | PAC-SG96HR-E | PEAD-RP·EA(2), PCA-RP·GA(2)<br>PKA-RP·GAL/FAL(2)<br>PSA-RP·GA |
| | | PAC-SH52HR-E | PLA-RP·BA |
| | L/N | PAC-SG97HR-E | PCA-RP·HA<br>PEAD-RP·GA |
| Decoration panel | | PLP-6BA | PLA-RP·BA |
| Decoration panel with Wireless remote controller | | PLP-6BALM | |
| Decoration panel with Wired remote controller | | PLP-6BAMD | |
| Automatic filter elevation panel | | PLP-6BAJ | |
| i-see sensor corner panel | | PAC-SA1ME-E | |
| Wireless signal receiver | | PAR-SA9FA-E | |
| Space panel | | PAC-SH48AS-E | |
| Multi-function casement | | PAC-SH53TM-E | |
| Flange for fresh air intake | | PAC-SH65OF-E | |
| High-efficiency filter element<br>(PAC-SH53TM-E is needed.) | | PAC-SH59KF-E | |
| Air outlet shutter plate | | PAC-SH51SP-E | |
| Wireless remote controller + Wireless Adapter | | PAR-SL99B-E | PCA-RP·GA(2) |
| Drain lift up mechanism | | PAC-SH20DM-E | PCA-RP50,60GA(2) |
| | | PAC-SH21DM-E | PCA-RP71GA |
| | | PAC-SH22DM-E | PCA-RP100,125,140GA |
| High-efficiency filter | | PAC-SE80KF-E | PCA-RP50GA |
| | | PAC-SE81KF-E | PCA-RP60,71,100GA,50GA2 |
| | | PAC-SE82KF-E | PCA-RP125,140GA |
| Duct flange for fresh air | | PAC-SF28OF-E | PCA-RP·HA |
| Oil mist filter element (12pcs) | | PAC-SG38KF-E | |
| Decoration cover | | PAC-SF81KC-E | PCA-RP71HA |
| (Front + Suspending bracket cover) | | PAC-SF82KC-E | PCA-RP125HA |
| Wired remote controller | | PAR-21MAAT-E | PKA-RP·GAL |
| (with terminal bed) | | | PKA-RP·FAL(2) |
| Drain lift up mechanism | | PAC-SE90DM-E | PKA-RP·FAL(2) |
| Motor | | PAC-SK003MT-F | PEAD-RP125,140EA |
| (for high external static pressure) | | | PEAD-RP100EA2 |
| Drain lift up mechanism | | PAC-KE03DM-F | PEAD-RP·EA,EA2 |
| Insulation kit | | PAC-SK010DK | PEAD-RP·GA |

## 11-2. OUTDOOR UNIT

| Part Name | | Model Name | Applicable model |
|---|---|---|---|
| M-NET adapter | | PAC-SF80MA-E | PUHZ-P100-250 |
| A-control service tool | | PAC-SK52ST | PUHZ-P100-250 |
| Drain socket | | PAC-SG61DS-E | PUHZ-P100-250 |
| Air outlet guide (P125-250 need 2 pieces.) | | PAC-SG59SG-E | PUHZ-P100-250 |
| Air protect guide (P125-250 need 2 pieces.) | | PAC-SG57AG-E | PUHZ-P100-250 |
| Drain pan | | PAC-SG64DP-E | PUHZ-P100-250 |
| Filter dryer | ($\phi$9.52) | PAC-SG82DR-E | PUHZ-P100-250 |
| | ($\phi$12.7) | PAC-SG85DR-E | PUHZ-P250 |
| Distribution pipe | (Twin) | MSDD-50SR-E | PUHZ-P100-140 |
| | | MSDD-50WR-E | PUHZ-P200, 250 |
| | (Triple) | MSDT-111R-E | PUHZ-P140-250 |
| | (Quadruple) | MSDF-1111R-E | PUHZ-P200, 250 |
| Joint pipe (Unit → Extension pipe) | ($\phi$15.88 → $\phi$19.05) | PAC-SG75RJ-E | PUHZ-P100-140 |

Mr.SLIM™

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