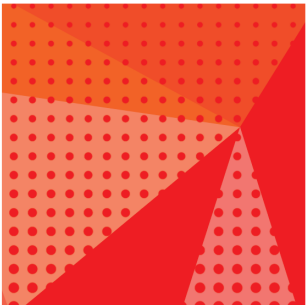


AIR CONDITIONING SYSTEMS

# CITY MULTI



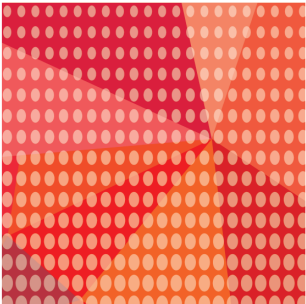
## DATA BOOK

MODEL

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**PKFY-MS-VLM2-E**

**PKFY-MS-VKM2-E**



## PKFY-MS-VLM2-E, PKFY-MS-VKM2-E

|                                                       |    |
|-------------------------------------------------------|----|
| 1. SPECIFICATIONS .....                               | 2  |
| 2. EXTERNAL DIMENSIONS .....                          | 5  |
| 3. CENTER OF GRAVITY .....                            | 8  |
| 4. ELECTRICAL WIRING DIAGRAMS .....                   | 9  |
| 5. SOUND LEVELS .....                                 | 11 |
| 5-1. Sound levels .....                               | 11 |
| 5-2. NC curves .....                                  | 11 |
| 6. TEMPERATURE/AIRFLOW DISTRIBUTIONS .....            | 12 |
| 6-1. Temperature distributions .....                  | 12 |
| 6-2. Airflow distributions .....                      | 13 |
| 7. ELECTRICAL CHARACTERISTICS .....                   | 14 |
| 8. OPTIONAL PARTS .....                               | 15 |
| 8-1. Optional parts line up for the Indoor unit ..... | 15 |
| 8-2. Drain pump .....                                 | 15 |
| 8-3. Plasma Quad Connect .....                        | 15 |
| 8-4. V blocking filter .....                          | 16 |
| 8-5. Sensor and alarm kit .....                       | 16 |
| 8-6. Power supply interface for alarm kit .....       | 16 |

# 1. SPECIFICATIONS

Wall mounted

PKFY-MS-VLM2-E, VKM2-E

| Model                                            |                                      |                      | PKFY-MS10VLM2-E                                                                                                                                                                                                                                                  | PKFY-MS15VLM2-E                             | PKFY-MS20VLM2-E                             |       |
|--------------------------------------------------|--------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|-------|
| Power source                                     |                                      |                      | 1-phase 220-240V 50Hz/60Hz                                                                                                                                                                                                                                       |                                             |                                             |       |
| Cooling capacity<br>(Nominal)                    | *1                                   | kW                   | 1.2                                                                                                                                                                                                                                                              | 1.7                                         | 2.2                                         |       |
|                                                  | *1                                   | BTU / h              | 4,100                                                                                                                                                                                                                                                            | 5,800                                       | 7,500                                       |       |
|                                                  | Power input                          | kW                   | 0.02                                                                                                                                                                                                                                                             | 0.02                                        | 0.02                                        |       |
|                                                  | Current input                        | A                    | 0.20                                                                                                                                                                                                                                                             | 0.20                                        | 0.20                                        |       |
| (220V)                                           |                                      |                      |                                                                                                                                                                                                                                                                  |                                             |                                             |       |
|                                                  | Heating capacity<br>(Nominal)        | *2                   | kW                                                                                                                                                                                                                                                               | 1.4                                         | 1.9                                         | 2.5   |
|                                                  |                                      | *2                   | BTU / h                                                                                                                                                                                                                                                          | 4,800                                       | 6,500                                       | 8,500 |
|                                                  | Power input                          | kW                   | 0.01                                                                                                                                                                                                                                                             | 0.01                                        | 0.01                                        |       |
| (220V)                                           | Current input                        | A                    | 0.15                                                                                                                                                                                                                                                             | 0.15                                        | 0.15                                        |       |
|                                                  | External finish                      |                      | Plastic, MUNSELL (0.7PB 9.2/0.4)                                                                                                                                                                                                                                 | Plastic, MUNSELL (0.7PB 9.2/0.4)            | Plastic, MUNSELL (0.7PB 9.2/0.4)            |       |
| External dimension HxWxD                         |                                      | mm                   | 299x773x237                                                                                                                                                                                                                                                      | 299x773x237                                 | 299x773x237                                 |       |
|                                                  |                                      | in.                  | 11-25/32 x 30-7/16 x 9-11/32                                                                                                                                                                                                                                     | 11-25/32 x 30-7/16 x 9-11/32                | 11-25/32 x 30-7/16 x 9-11/32                |       |
| Net weight                                       |                                      | kg(lbs)              | 11 (25)                                                                                                                                                                                                                                                          | 11 (25)                                     | 11 (25)                                     |       |
| Heat exchanger                                   |                                      |                      | Cross fin<br>(Aluminum fin and copper tube)                                                                                                                                                                                                                      | Cross fin<br>(Aluminum fin and copper tube) | Cross fin<br>(Aluminum fin and copper tube) |       |
| FAN                                              | Type x Quantity                      |                      | Line flow fan x 1                                                                                                                                                                                                                                                | Line flow fan x 1                           | Line flow fan x 1                           |       |
|                                                  | External static press.               | Pa                   | 0                                                                                                                                                                                                                                                                | 0                                           | 0                                           |       |
|                                                  |                                      | mmH <sub>2</sub> O   | 0                                                                                                                                                                                                                                                                | 0                                           | 0                                           |       |
|                                                  | Motor Type                           |                      | DC motor                                                                                                                                                                                                                                                         | DC motor                                    | DC motor                                    |       |
|                                                  | Motor output                         |                      | kW                                                                                                                                                                                                                                                               | 0.030                                       | 0.030                                       | 0.030 |
|                                                  | Driving mechanism                    |                      | Direct-driven                                                                                                                                                                                                                                                    | Direct-driven                               | Direct-driven                               |       |
|                                                  | Airflow rate<br>(Low-Mid2-Mid-High)  | m <sup>3</sup> / min | 3.3-3.5-3.8-4.2                                                                                                                                                                                                                                                  | 4.0-4.2-4.4-4.7                             | 4.0-4.4-4.9-5.4                             |       |
|                                                  |                                      | L/s                  | 55-58-63-70                                                                                                                                                                                                                                                      | 67-70-73-78                                 | 67-73-82-90                                 |       |
| cfm                                              |                                      | 117-124-134-148      | 141-148-155-166                                                                                                                                                                                                                                                  | 141-155-173-191                             |                                             |       |
| Sound pressure level (measured in anechoic room) |                                      | dB <A>               | 22-24-26-28                                                                                                                                                                                                                                                      | 22-24-26-28                                 | 22-26-29-31                                 |       |
| Insulation material                              |                                      |                      | Polyethylene sheet                                                                                                                                                                                                                                               | Polyethylene sheet                          | Polyethylene sheet                          |       |
| Air filter                                       |                                      |                      | PP honeycomb                                                                                                                                                                                                                                                     | PP honeycomb                                | PP honeycomb                                |       |
| Protection device                                |                                      |                      | Fuse                                                                                                                                                                                                                                                             | Fuse                                        | Fuse                                        |       |
| Refrigerant control device                       |                                      |                      | LEV                                                                                                                                                                                                                                                              | LEV                                         | LEV                                         |       |
| Connectable outdoor unit                         |                                      |                      | R32, R410A CITY MULTI                                                                                                                                                                                                                                            | R32, R410A CITY MULTI                       | R32, R410A CITY MULTI                       |       |
| Diameter of refrigerant<br>pipe                  | Liquid                               | mm(in.)              | 6.35(1/4) Flare                                                                                                                                                                                                                                                  | 6.35(1/4) Flare                             | 6.35(1/4) Flare                             |       |
|                                                  | Gas                                  | mm(in.)              | 12.70(1/2) Flare                                                                                                                                                                                                                                                 | 12.70(1/2) Flare                            | 12.70(1/2) Flare                            |       |
| Field drain pipe size                            |                                      | mm(in.)              | I.D. 16(5/8)                                                                                                                                                                                                                                                     | I.D. 16(5/8)                                | I.D. 16(5/8)                                |       |
| Drawing                                          | External                             |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |       |
|                                                  | Wiring                               |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |       |
|                                                  | Refrigerant cycle                    |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |       |
| Standard attachment                              | Document                             |                      | Installation Manual, Instruction Book                                                                                                                                                                                                                            | Installation Manual, Instruction Book       | Installation Manual, Instruction Book       |       |
|                                                  | Accessory                            |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |       |
| Optional parts                                   | Drain pump                           |                      | PAC-SL48DM-E                                                                                                                                                                                                                                                     | PAC-SL48DM-E                                | PAC-SL48DM-E                                |       |
|                                                  | Plasma Quad Connect                  |                      | MAC-100FT-E                                                                                                                                                                                                                                                      | MAC-100FT-E                                 | MAC-100FT-E                                 |       |
|                                                  | V blocking filter                    |                      | MAC-2471FT-E                                                                                                                                                                                                                                                     |                                             |                                             |       |
|                                                  | Sensor and alarm kit                 |                      | PAC-SL72SA-E                                                                                                                                                                                                                                                     |                                             |                                             |       |
|                                                  | Power supply interface for alarm kit |                      | PAC-SL73IFL-E                                                                                                                                                                                                                                                    |                                             |                                             |       |
| Remarks                                          |                                      |                      | * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.<br>* Due to continuing improvement, above specification may be subject to change without notice. |                                             |                                             |       |

|        |                                                       |  |                                                       |  |                                                           |
|--------|-------------------------------------------------------|--|-------------------------------------------------------|--|-----------------------------------------------------------|
| Notes: | *1 Nominal cooling conditions (subject to EN 14511-2) |  | *2 Nominal heating conditions (subject to EN 14511-2) |  | Unit converter                                            |
|        | Indoor: 27°C.D.B./19°C.W.B.                           |  | 20°C.D.B.                                             |  | BTU/h = kW x 3,412                                        |
|        | (81°F.D.B./66°F.W.B.)                                 |  | (68°F.D.B.)                                           |  | cfm = m³/min x 35.31                                      |
|        | Outdoor: 35°C.D.B.                                    |  | 7°C.D.B./6°C.W.B.                                     |  | lbs = kg/0.4536                                           |
|        | (95°F.D.B.)                                           |  | (45°F.D.B./43°F.W.B.)                                 |  | *The specification data is subject to rounding variation. |
|        | Pipe length: 7.5 m (24-9/16 ft.)                      |  | 7.5 m (24-9/16 ft.)                                   |  |                                                           |
|        | Level difference: 0 m (0 ft.)                         |  | 0 m (0 ft.)                                           |  |                                                           |

# 1. SPECIFICATIONS

Wall mounted

| Model                                            |                                      |                      | PKFY-MS25VLM2-E                                                                                                                                                                                                                                                  | PKFY-MS32VLM2-E                             | PKFY-MS40VLM2-E                             |
|--------------------------------------------------|--------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|
| Power source                                     |                                      |                      | 1-phase 220-240V 50Hz/60Hz                                                                                                                                                                                                                                       |                                             |                                             |
| Cooling capacity<br>(Nominal)                    | *1                                   | kW                   | 2.8                                                                                                                                                                                                                                                              | 3.6                                         | 4.5                                         |
|                                                  | *1                                   | BTU / h              | 9,600                                                                                                                                                                                                                                                            | 12,300                                      | 15,400                                      |
|                                                  | Power input                          | kW                   | 0.03                                                                                                                                                                                                                                                             | 0.04                                        | 0.04                                        |
| (220V)                                           | Current input                        | A                    | 0.25                                                                                                                                                                                                                                                             | 0.35                                        | 0.35                                        |
| Heating capacity<br>(Nominal)                    | *2                                   | kW                   | 3.2                                                                                                                                                                                                                                                              | 4.0                                         | 5.0                                         |
|                                                  | *2                                   | BTU / h              | 10,900                                                                                                                                                                                                                                                           | 13,600                                      | 17,100                                      |
|                                                  | Power input                          | kW                   | 0.02                                                                                                                                                                                                                                                             | 0.03                                        | 0.03                                        |
| (220V)                                           | Current input                        | A                    | 0.20                                                                                                                                                                                                                                                             | 0.30                                        | 0.30                                        |
| External finish                                  |                                      |                      | Plastic, MUNSELL (0.7PB 9.2/0.4)                                                                                                                                                                                                                                 | Plastic, MUNSELL (0.7PB 9.2/0.4)            | Plastic, MUNSELL (0.7PB 9.2/0.4)            |
| External dimension HxWxD                         |                                      | mm                   | 299x773x237                                                                                                                                                                                                                                                      | 299x773x237                                 | 299x898x237                                 |
|                                                  |                                      | in.                  | 11-25/32 x 30-7/16 x 9-11/32                                                                                                                                                                                                                                     | 11-25/32 x 30-7/16 x 9-11/32                | 11-25/32 x 35-3/8 x 9-11/32                 |
| Net weight                                       |                                      | kg(lbs)              | 11 (25)                                                                                                                                                                                                                                                          | 11 (25)                                     | 13(29)                                      |
| Heat exchanger                                   |                                      |                      | Cross fin<br>(Aluminum fin and copper tube)                                                                                                                                                                                                                      | Cross fin<br>(Aluminum fin and copper tube) | Cross fin<br>(Aluminum fin and copper tube) |
| FAN                                              | Type x Quantity                      |                      | Line flow fan x 1                                                                                                                                                                                                                                                | Line flow fan x 1                           | Line flow fan x 1                           |
|                                                  | External static press.               | Pa                   | 0                                                                                                                                                                                                                                                                | 0                                           | 0                                           |
|                                                  |                                      | mmH <sub>2</sub> O   | 0                                                                                                                                                                                                                                                                | 0                                           | 0                                           |
|                                                  | Motor Type                           |                      | DC motor                                                                                                                                                                                                                                                         | DC motor                                    | DC motor                                    |
|                                                  | Motor output                         |                      | 0.030                                                                                                                                                                                                                                                            | 0.030                                       | 0.030                                       |
|                                                  | Driving mechanism                    |                      | Direct-driven                                                                                                                                                                                                                                                    | Direct-driven                               | Direct-driven                               |
|                                                  | Airflow rate<br>(Low-Mid2-Mid-High)  | m <sup>3</sup> / min | 4.0-4.6-5.4-6.7                                                                                                                                                                                                                                                  | 4.3-5.4-6.9-8.4                             | 6.3-7.4-8.6-10.0                            |
|                                                  |                                      | L/s                  | 67-77-90-112                                                                                                                                                                                                                                                     | 72-90-115-140                               | 105-123-143-167                             |
| cfm                                              |                                      | 141-162-191-237      | 152-191-244-297                                                                                                                                                                                                                                                  | 222-261-304-353                             |                                             |
| Sound pressure level (measured in anechoic room) |                                      | dB <A>               | 22-27-31-35                                                                                                                                                                                                                                                      | 24-31-37-41                                 | 29-34-37-40                                 |
| Insulation material                              |                                      |                      | Polyethylene sheet                                                                                                                                                                                                                                               | Polyethylene sheet                          | Polyethylene sheet                          |
| Air filter                                       |                                      |                      | PP honeycomb                                                                                                                                                                                                                                                     | PP honeycomb                                | PP honeycomb                                |
| Protection device                                |                                      |                      | Fuse                                                                                                                                                                                                                                                             | Fuse                                        | Fuse                                        |
| Refrigerant control device                       |                                      |                      | LEV                                                                                                                                                                                                                                                              | LEV                                         | LEV                                         |
| Connectable outdoor unit                         |                                      |                      | R32, R410A CITY MULTI                                                                                                                                                                                                                                            | R32, R410A CITY MULTI                       | R32, R410A CITY MULTI                       |
| Diameter of refrigerant<br>pipe                  | Liquid                               | mm(in.)              | 6.35(1/4) Flare                                                                                                                                                                                                                                                  | 6.35(1/4) Flare                             | 6.35(1/4) Flare                             |
|                                                  | Gas                                  | mm(in.)              | 12.70(1/2) Flare                                                                                                                                                                                                                                                 | 12.70(1/2) Flare                            | 12.70(1/2) Flare                            |
| Field drain pipe size                            |                                      | mm(in.)              | I.D. 16(5/8)                                                                                                                                                                                                                                                     | I.D. 16(5/8)                                | I.D. 16(5/8)                                |
| Drawing                                          | External                             |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |
|                                                  | Wiring                               |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |
|                                                  | Refrigerant cycle                    |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |
| Standard attachment                              | Document                             |                      | Installation Manual, Instruction Book                                                                                                                                                                                                                            | Installation Manual, Instruction Book       | Installation Manual, Instruction Book       |
|                                                  | Accessory                            |                      | -                                                                                                                                                                                                                                                                | -                                           | -                                           |
| Optional parts                                   | Drain pump                           |                      | PAC-SL48DM-E                                                                                                                                                                                                                                                     | PAC-SL48DM-E                                | PAC-SL48DM-E                                |
|                                                  | Plasma Quad Connect                  |                      | MAC-100FT-E                                                                                                                                                                                                                                                      | MAC-100FT-E                                 | MAC-100FT-E                                 |
|                                                  | V blocking filter                    |                      | MAC-2471FT-E                                                                                                                                                                                                                                                     |                                             | MAC-2470FT-E                                |
|                                                  | Sensor and alarm kit                 |                      | PAC-SL72SA-E                                                                                                                                                                                                                                                     |                                             |                                             |
|                                                  | Power supply interface for alarm kit |                      | PAC-SL73IFL-E                                                                                                                                                                                                                                                    |                                             |                                             |
| Remarks                                          |                                      |                      | * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.<br>* Due to continuing improvement, above specification may be subject to change without notice. |                                             |                                             |

|        |                                                       |  |                                                       |  |                                                           |
|--------|-------------------------------------------------------|--|-------------------------------------------------------|--|-----------------------------------------------------------|
| Notes: | *1 Nominal cooling conditions (subject to EN 14511-2) |  | *2 Nominal heating conditions (subject to EN 14511-2) |  | Unit converter                                            |
|        | Indoor: 27°CDB./19°CWB.<br>(81°FDB./66°FWB.)          |  | 20°CDB.<br>(68°FDB.)                                  |  | BTU/h = kW x 3,412                                        |
|        | Outdoor: 35°CDB.<br>(95°FDB.)                         |  | 7°CDB./6°CWB.<br>(45°FDB./43°FWB.)                    |  | cfm = m <sup>3</sup> /min x 35.31                         |
|        | Pipe length: 7.5 m (24-9/16 ft.)                      |  | 7.5 m (24-9/16 ft.)                                   |  | lbs = kg/0.4536                                           |
|        | Level difference: 0 m (0 ft.)                         |  | 0 m (0 ft.)                                           |  | *The specification data is subject to rounding variation. |

# 1. SPECIFICATIONS

Wall mounted

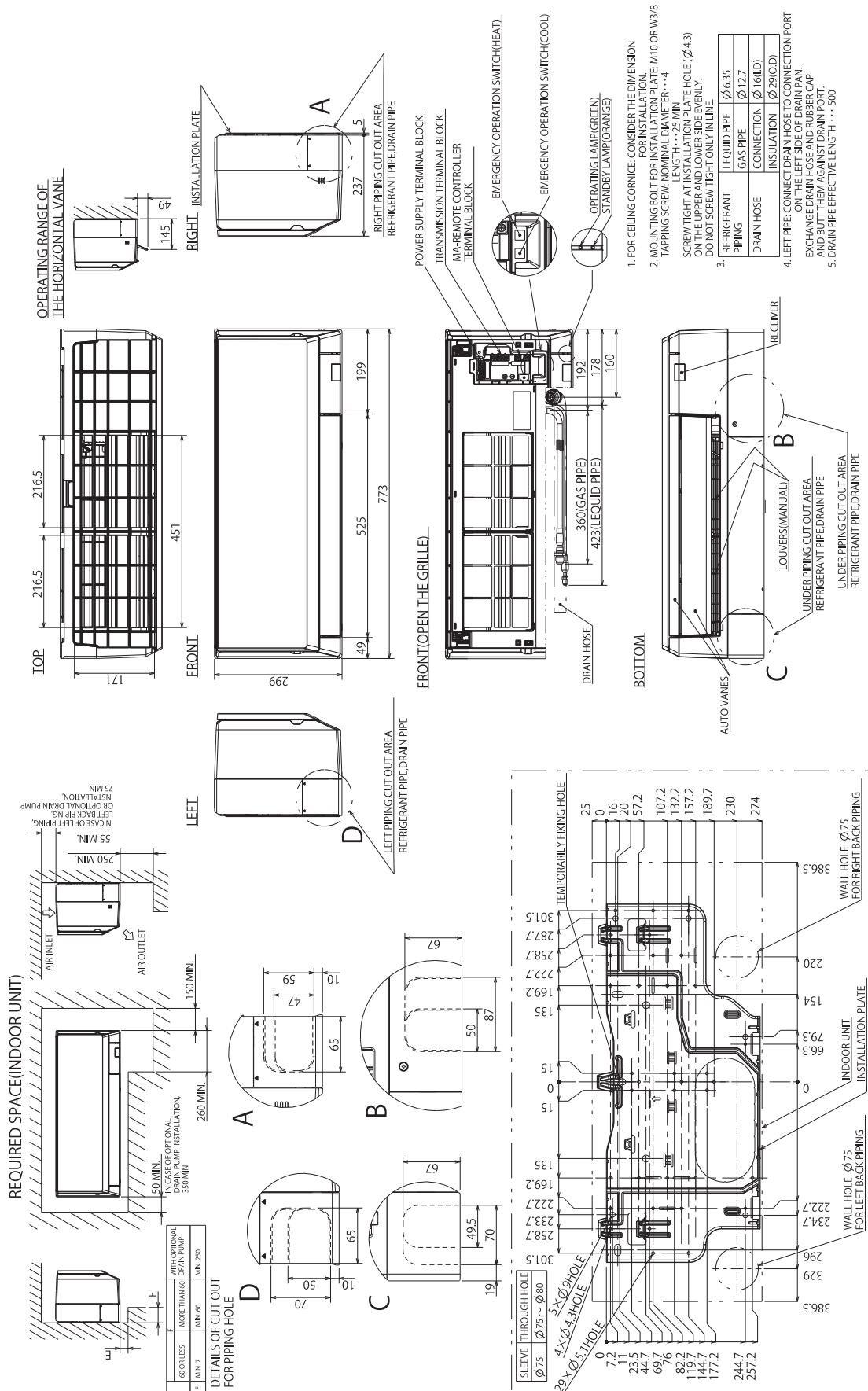
PKFY-MS-VLM2-E, VKM2-E

| Model                                            |                                       |                      | PKFY-MS50VLM2-E                                                                                                                                                                                                                                                  |         | PKFY-MS63VKM2-E                             |         | PKFY-MS100VKM2-E                            |  |
|--------------------------------------------------|---------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------|---------|---------------------------------------------|--|
| Power source                                     |                                       |                      | 1-phase 220-240V 50Hz/60Hz                                                                                                                                                                                                                                       |         |                                             |         |                                             |  |
| Cooling capacity<br>(Nominal)<br><br>(220V)      |                                       | *1                   | kW                                                                                                                                                                                                                                                               | 5.6     | 7.1                                         | 11.2    |                                             |  |
|                                                  |                                       | *1                   | BTU / h                                                                                                                                                                                                                                                          | 19,100  | 24,200                                      | 38,200  |                                             |  |
|                                                  |                                       | Power input          | kW                                                                                                                                                                                                                                                               | 0.05    | 0.05                                        | 0.08    |                                             |  |
|                                                  |                                       | Current input        | A                                                                                                                                                                                                                                                                | 0.45    | 0.40                                        | 0.70    |                                             |  |
| Heating capacity<br>(Nominal)<br><br>(220V)      |                                       | *2                   | kW                                                                                                                                                                                                                                                               | 6.3     | 8.0                                         | 12.5    |                                             |  |
|                                                  |                                       | *2                   | BTU / h                                                                                                                                                                                                                                                          | 21,500  | 27,300                                      | 42,600  |                                             |  |
|                                                  |                                       | Power input          | kW                                                                                                                                                                                                                                                               | 0.04    | 0.04                                        | 0.07    |                                             |  |
|                                                  |                                       | Current input        | A                                                                                                                                                                                                                                                                | 0.40    | 0.40                                        | 0.62    |                                             |  |
| External finish                                  |                                       |                      | Plastic, MUNSELL (0.7PB 9.2/0.4)                                                                                                                                                                                                                                 |         | Plastic, MUNSELL (0.7PB 9.2/0.4)            |         | Plastic, MUNSELL (0.7PB 9.2/0.4)            |  |
| External dimension HxWxD                         |                                       | mm                   | 299x898x237                                                                                                                                                                                                                                                      |         | 365x1170x295                                |         | 365x1170x295                                |  |
|                                                  |                                       | in.                  | 11-25/32 x 35-3/8 x 9-11/32                                                                                                                                                                                                                                      |         | 14-3/8 x 46-1/16 x 11-5/8                   |         | 14-3/8 x 46-1/16 x 11-5/8                   |  |
| Net weight                                       |                                       | kg(lbs)              | 13(29)                                                                                                                                                                                                                                                           |         | 21(46)                                      |         | 21(46)                                      |  |
| Heat exchanger                                   |                                       |                      | Cross fin<br>(Aluminum fin and copper tube)                                                                                                                                                                                                                      |         | Cross fin<br>(Aluminum fin and copper tube) |         | Cross fin<br>(Aluminum fin and copper tube) |  |
| FAN                                              | Type x Quantity                       |                      | Line flow fan x 1                                                                                                                                                                                                                                                |         | Line flow fan x 1                           |         | Line flow fan x 1                           |  |
|                                                  | External static press.                | Pa                   | 0                                                                                                                                                                                                                                                                |         | 0                                           |         | 0                                           |  |
|                                                  |                                       | mmH <sub>2</sub> O   | 0                                                                                                                                                                                                                                                                |         | 0                                           |         | 0                                           |  |
|                                                  | Motor Type                            |                      | DC motor                                                                                                                                                                                                                                                         |         | DC motor                                    |         | DC motor                                    |  |
|                                                  | Motor output                          |                      | kW                                                                                                                                                                                                                                                               | 0.030   | 0.069                                       | 0.069   |                                             |  |
|                                                  | Driving mechanism                     |                      | Direct-driven                                                                                                                                                                                                                                                    |         | Direct-drive                                |         | Direct-drive                                |  |
|                                                  | Airflow rate<br>(Low-(Mid2-Mid)-High) | m <sup>3</sup> / min | 6.8-8.3-10.2-12.4                                                                                                                                                                                                                                                |         | 16-20                                       |         | 20-26                                       |  |
|                                                  |                                       | L/s                  | 113-138-170-207                                                                                                                                                                                                                                                  |         | 267-333                                     |         | 333-433                                     |  |
| cfm                                              |                                       | 240-293-360-438      |                                                                                                                                                                                                                                                                  | 565-706 |                                             | 706-918 |                                             |  |
| Sound pressure level (measured in anechoic room) |                                       | dB <A>               | 31-36-41-46                                                                                                                                                                                                                                                      |         | 39-42                                       |         | 41-49                                       |  |
| Insulation material                              |                                       |                      | Polyethylene sheet                                                                                                                                                                                                                                               |         | Polyethylene sheet                          |         | Polyethylene sheet                          |  |
| Air filter                                       |                                       |                      | PP honeycomb                                                                                                                                                                                                                                                     |         | PP honeycomb                                |         | PP honeycomb                                |  |
| Protection device                                |                                       |                      | Fuse                                                                                                                                                                                                                                                             |         | Fuse                                        |         | Fuse                                        |  |
| Refrigerant control device                       |                                       |                      | LEV                                                                                                                                                                                                                                                              |         | LEV                                         |         | LEV                                         |  |
| Connectable outdoor unit                         |                                       |                      | R32, R410A CITY MULTI                                                                                                                                                                                                                                            |         | R32, R410A CITY MULTI                       |         | R32, R410A CITY MULTI                       |  |
| Diameter of refrigerant pipe                     | Liquid                                | mm(in.)              | 6.35(1/4) Flare                                                                                                                                                                                                                                                  |         | 6.35(1/4) / 9.52(3/8) Flare*3               |         | 9.52(3/8) Flare                             |  |
|                                                  | Gas                                   | mm(in.)              | 12.70(1/2) Flare                                                                                                                                                                                                                                                 |         | 15.88(5/8) Flare                            |         | 15.88(5/8) Flare                            |  |
| Field drain pipe size                            |                                       | mm(in.)              | I.D. 16(5/8)                                                                                                                                                                                                                                                     |         | I.D. 16(5/8)                                |         | I.D. 16(5/8)                                |  |
| Drawing                                          | External                              |                      | -                                                                                                                                                                                                                                                                |         | -                                           |         | -                                           |  |
|                                                  | Wiring                                |                      | -                                                                                                                                                                                                                                                                |         | -                                           |         | -                                           |  |
|                                                  | Refrigerant cycle                     |                      | -                                                                                                                                                                                                                                                                |         | -                                           |         | -                                           |  |
| Standard attachment                              | Document                              |                      | Installation Manual, Instruction Book                                                                                                                                                                                                                            |         | Installation Manual, Instruction Book       |         | Installation Manual, Instruction Book       |  |
|                                                  | Accessory                             |                      | -                                                                                                                                                                                                                                                                |         | -                                           |         | -                                           |  |
| Optional parts                                   | Drain pump                            |                      | PAC-SL48DM-E                                                                                                                                                                                                                                                     |         | PAC-SL48DM-E                                |         | PAC-SL48DM-E                                |  |
|                                                  | Plasma Quad Connect                   |                      | MAC-100FT-E                                                                                                                                                                                                                                                      |         | MAC-100FT-E                                 |         | MAC-100FT-E                                 |  |
|                                                  | V blocking filter                     |                      | MAC-2470FT-E                                                                                                                                                                                                                                                     |         | MAC-1416FT-E                                |         |                                             |  |
|                                                  | Sensor and alarm kit                  |                      | PAC-SL72SA-E                                                                                                                                                                                                                                                     |         |                                             |         |                                             |  |
|                                                  | Power supply interface for alarm kit  |                      | PAC-SL73IFL-E                                                                                                                                                                                                                                                    |         |                                             |         |                                             |  |
| Remarks                                          |                                       |                      | * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.<br>* Due to continuing improvement, above specification may be subject to change without notice. |         |                                             |         |                                             |  |

|                                                                                                                                                                                                                                                                            |                                                       |                                                       |                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------|
| Notes:                                                                                                                                                                                                                                                                     | *1 Nominal cooling conditions (subject to EN 14511-2) | *2 Nominal heating conditions (subject to EN 14511-2) | Unit converter                                            |
|                                                                                                                                                                                                                                                                            | Indoor: 27°C.D.B./19°C.W.B.<br>(81°F.D.B./66°F.W.B.)  | 20°C.D.B.<br>(68°F.D.B.)                              | BTU/h = kW x 3,412                                        |
|                                                                                                                                                                                                                                                                            | Outdoor: 35°C.D.B.<br>(95°F.D.B.)                     | 7°C.D.B./6°C.W.B.<br>(45°F.D.B./43°F.W.B.)            | cfm = m <sup>3</sup> /min x 35.31                         |
|                                                                                                                                                                                                                                                                            | Pipe length: 7.5 m (24-9/16 ft.)                      | 7.5 m (24-9/16 ft.)                                   | lbs = kg/0.4536                                           |
|                                                                                                                                                                                                                                                                            | Level difference: 0 m (0 ft.)                         | 0 m (0 ft.)                                           | *The specification data is subject to rounding variation. |
| *3 It is possible to reduce the pipe size to ø6.35 using a "Flare nut for ø6.35" included in the accessory bag.<br>The pipe size required depends on the connected outdoor unit, so check the Outdoor Unit Installation Manual to confirm whether the Reducer can be used. |                                                       |                                                       |                                                           |

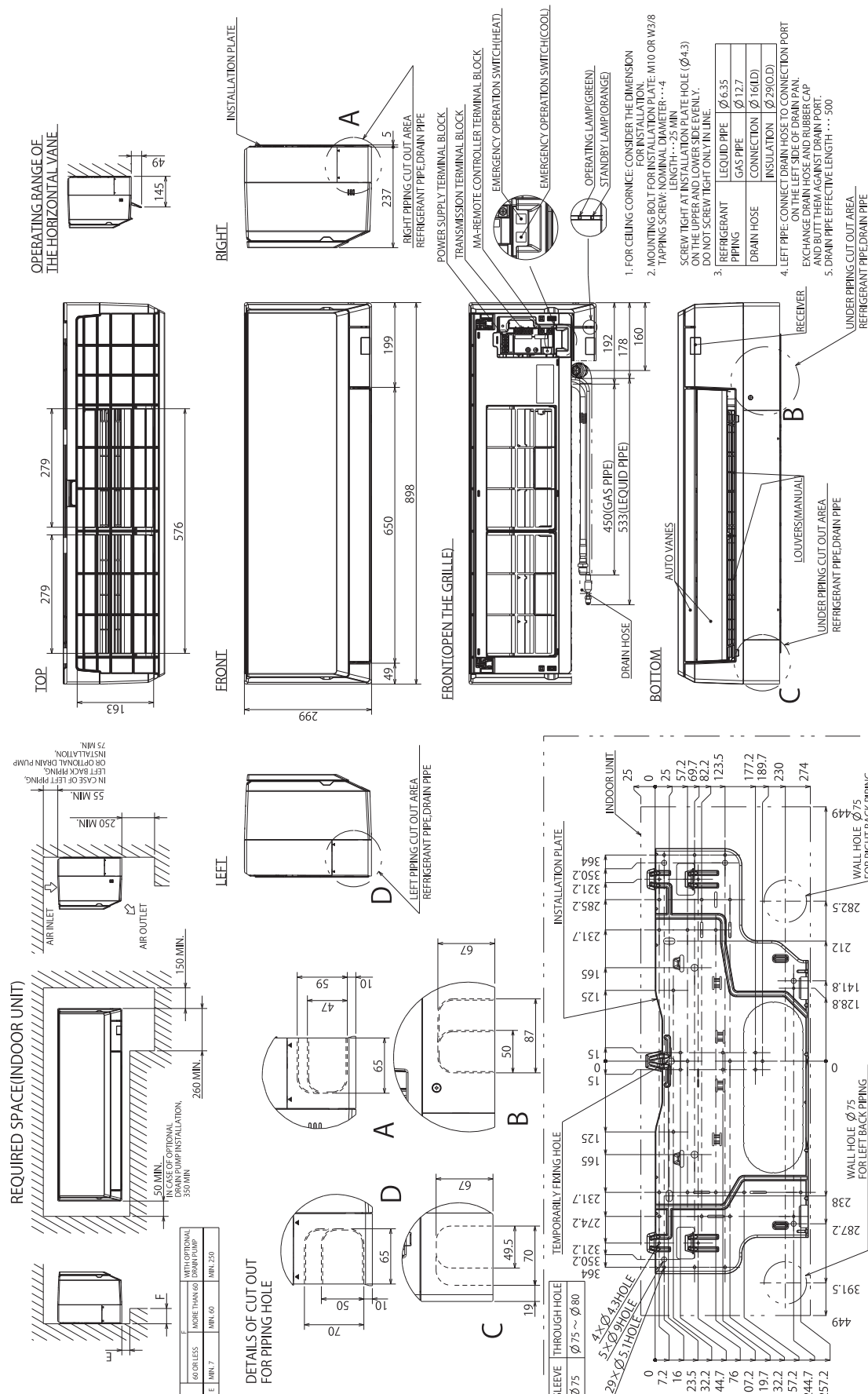
## PKFY-MS10, 15, 20, 25, 32VLM2-E

Unit: mm



## PKFY-MS40, 50VLM2-E

Unit: mm



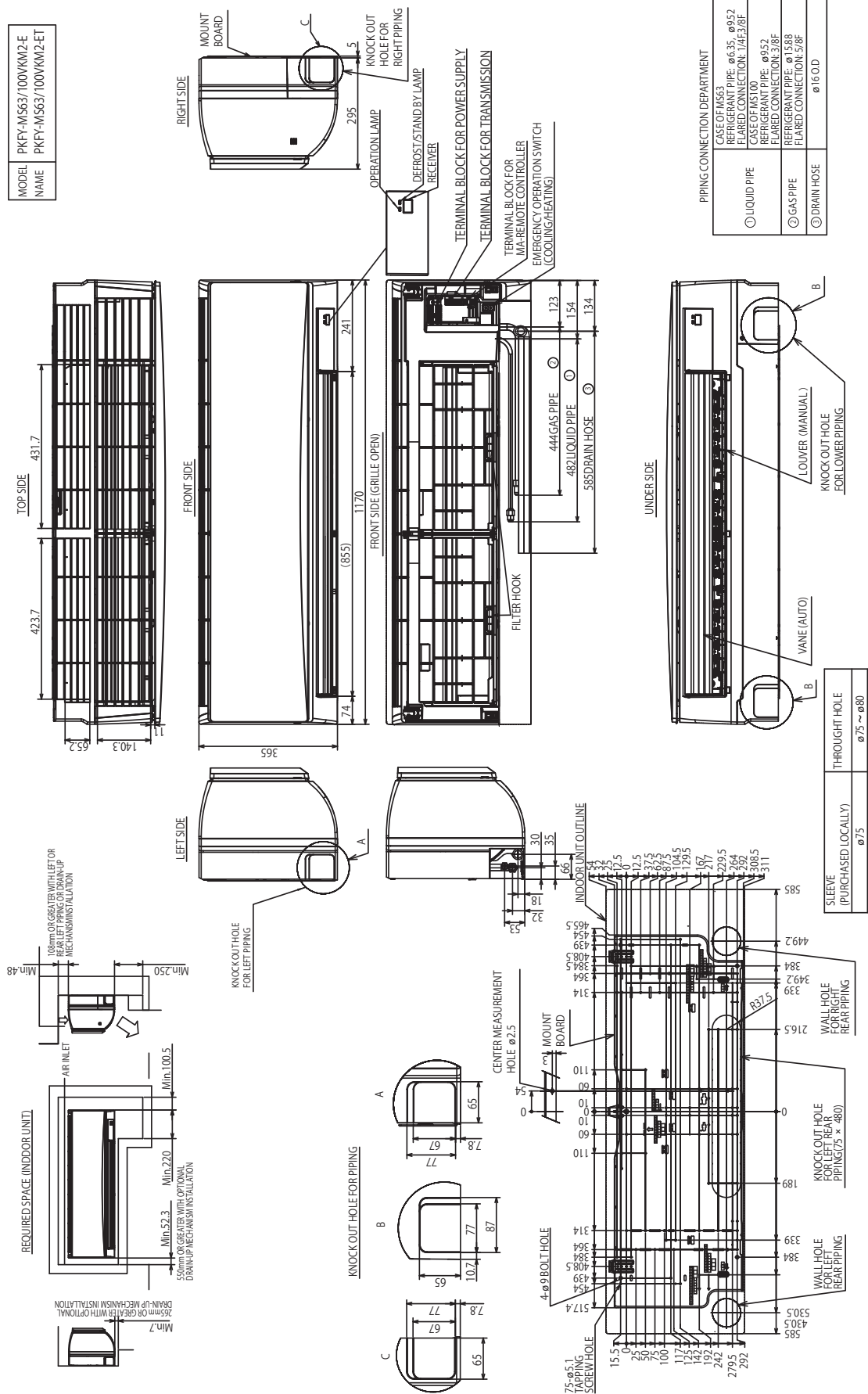
## 2. EXTERNAL DIMENSIONS

Wall mounted

**PKFY-MS-VLM2-E, VKM2-E**

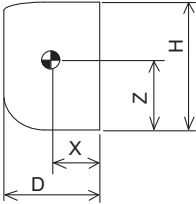
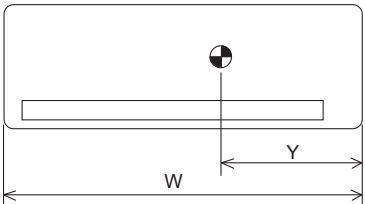
PKFY-MS63, 100VKM2-E

Unit : mm



PKFY-MS-VLM2-E, VKM2-E

PKFY-MS-VLM2-E, VKM2-E

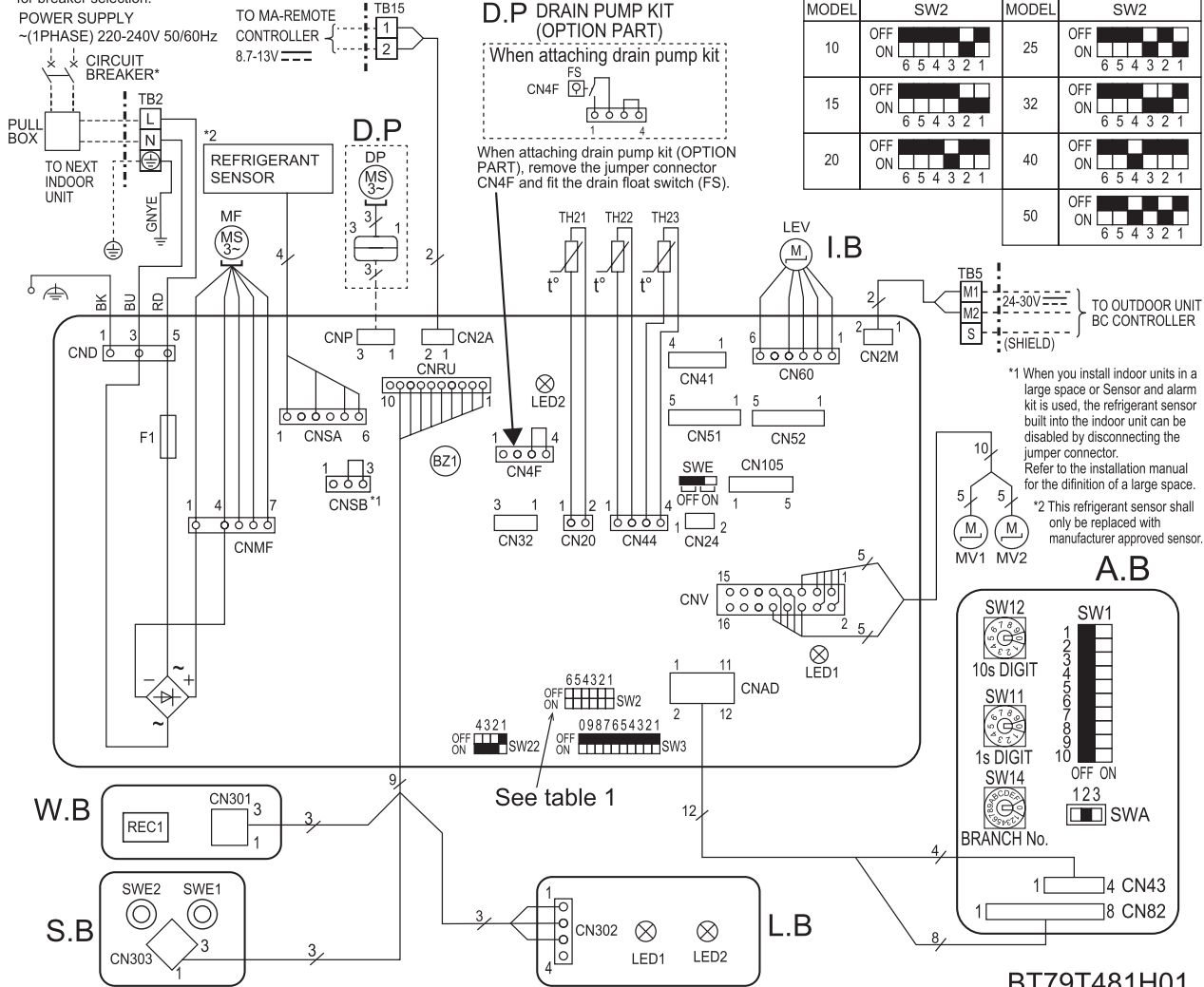


| (mm)             |      |     |     |     |     |     |
|------------------|------|-----|-----|-----|-----|-----|
| Model            | W    | D   | H   | X   | Y   | Z   |
| PKFY-MS10VLM2-E  | 773  | 237 | 299 | 130 | 340 | 150 |
| PKFY-MS15VLM2-E  | 773  | 237 | 299 | 130 | 340 | 150 |
| PKFY-MS20VLM2-E  | 773  | 237 | 299 | 130 | 340 | 150 |
| PKFY-MS25VLM2-E  | 773  | 237 | 299 | 130 | 340 | 150 |
| PKFY-MS32VLM2-E  | 773  | 237 | 299 | 130 | 340 | 150 |
| PKFY-MS40VLM2-E  | 898  | 237 | 299 | 120 | 390 | 150 |
| PKFY-MS50VLM2-E  | 898  | 237 | 299 | 120 | 390 | 150 |
| PKFY-MS63VKM2-E  | 1170 | 295 | 365 | 190 | 460 | 190 |
| PKFY-MS100VKM2-E | 1170 | 295 | 365 | 190 | 460 | 190 |

PKFY-MS10, 15, 20, 25, 32, 40, 50VLM2-E

## PKFY-MS.VLM SERIES WIRING DIAGRAM

\*Refer to the installation manual for breaker selection.

POWER SUPPLY  
~(1PHASE) 220-240V 50/60Hz

## [LEGEND]

| SYMBOL | NAME                       | SYMBOL | NAME                                                   |
|--------|----------------------------|--------|--------------------------------------------------------|
| I.B    | INDOOR CONTROLLER BOARD    | TH21   | THERMISTOR ROOM TEMP. DETECTION (0°C/15kΩ, 25°C/5.4kΩ) |
| CN32   | CONNECTOR REMOTE SWITCH    | TH22   | PIPE TEMP. DETECTION / LIQUID (0°C/15kΩ, 25°C/5.4kΩ)   |
| CN51   | CENTRALLY CONTROL          | TH23   | PIPE TEMP. DETECTION / GAS (0°C/15kΩ, 25°C/5.4kΩ)      |
| CN52   | REMOTE INDICATION          |        |                                                        |
| CN105  | IT TERMINAL                |        |                                                        |
| BZ1    | BUZZER                     | A.B    | ADDRESS BOARD                                          |
| F1     | FUSE (T3.15A/250V)         | SWA    | SWITCH FAN SPEED SELECTOR                              |
| SW2    | SWITCH CAPACITY CODE       | SW1    | MODE SELECTION                                         |
| SW3    | MODE SELECTION             | SW11   | ADDRESS SETTING 1s DIGIT                               |
| SW22   | PAIR NO. SETTING           | SW12   | ADDRESS SETTING 10s DIGIT                              |
| SWE    | FAN-DRAIN PUMP (TEST MODE) | SW14   | BRANCH No.                                             |
| LEV    | LINEAR EXPANSION VALVE     | S.B    | SWITCH BOARD                                           |
| MF     | FAN MOTOR                  | SWE1   | EMERGENCY OPERATION(HEAT)                              |
| MV1    | VANE MOTOR (UPPER)         | SWE2   | EMERGENCY OPERATION(COOL)                              |
| MV2    | VANE MOTOR (LOWER)         | W.B    | PCB FOR WIRELESS REMOTE CONTROLLER                     |
| TB2    | TERMINAL POWER SUPPLY      | REC1   | RECEIVING UNIT                                         |
| TB5    | BLOCK TRANSMISSION         | L.B    | LED BOARD                                              |
| TB15   | BLOCK MA-REMOTE CONTROLLER | LED1   | LED(OPERATING INDICATOR:GREEN)                         |
|        |                            | LED2   | LED(STANDBY FOR HEATING: ORANGE)                       |
|        |                            | D.P    | DRAIN PUMP KIT (OPTIONAL PARTS)                        |
|        |                            | FS     | DRAIN FLOAT SWITCH                                     |
|        |                            | DP     | DRAIN PUMP                                             |

## NOTES:

- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
- In case of using MA-Remote controller, please connect to TB15. (Remote controller wire is non-polar.)
- In case of using M-NET, please connect to TB5. (Transmission line is non-polar.)
- Symbol [S] of TB5 is the shield wire connection.
- Symbols used in wiring diagram are, : terminal block, : connector.
- The setting of the SW2 dip switches differs in the capacity. For the detail, see table 1.
- The black square (■) in the wiring diagram indicates a switch position.

## LED on indoor controller board for service

| Symbol | Meaning                               | Function                                                  |
|--------|---------------------------------------|-----------------------------------------------------------|
| LED1   | Main power supply                     | Main power supply (Indoor unit)<br>Power on → lamp is lit |
| LED2   | Power supply for MA-Remote controller | Power supply for MA-Remote controller<br>on → lamp is lit |

PKFY-MS63, 100VKM2-E

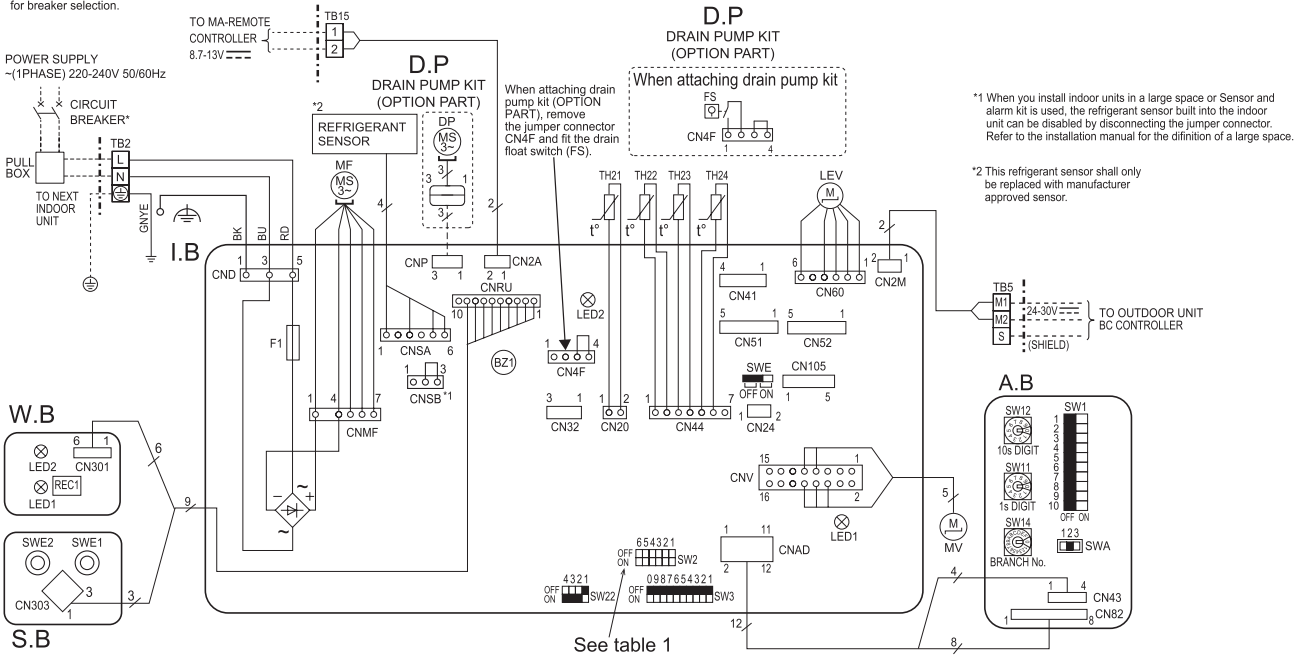
[LEGEND]

| SYMBOL | NAME                      | SYMBOL | NAME                                  |
|--------|---------------------------|--------|---------------------------------------|
| I.B    | INDOOR CONTROLLER BOARD   | TH23   | THERMISTOR                            |
| CN32   | CONNECTOR                 | TH24   | THERMISTOR                            |
| CN51   | CENTRALLY CONTROL         |        |                                       |
| CN52   | REMOTE INDICATION         |        |                                       |
| CN105  | IT TERMINAL               | A.B    | ADDRESS BOARD                         |
| BZ1    | BUZZER                    | SWA    | SWITCH                                |
| F1     | FUSE (T3.15A/250V)        | SW1    | FAN SPEED SELECTOR                    |
| SW2    | SWITCH                    | SW11   | MODE SELECTION                        |
| SW3    | CAPACITY CODE             | SW12   | ADDRESS SETTING 1s DIGIT              |
| SW22   | MODE SELECTION            | SW14   | ADDRESS SETTING 10s DIGIT             |
| SWE    | PAIR NO. SETTING          |        | BRANCH No.                            |
|        | FAN DRAIN PUMP(TEST MODE) | S.B    | SWITCH BOARD                          |
| LEV    | LINEAR EXPANSION VALVE    | SWE1   | EMERGENCY OPERATION(HEAT)             |
| MF     | FAN MOTOR                 | SWE2   | EMERGENCY OPERATION(COOL)             |
| MV     | VANE MOTOR                | W.B    | PCB FOR WIRELESS REMOTE CONTROLLER    |
| TB2    | TERMINAL                  | LED1   | LED(OPERATION INDICATOR : GREEN)      |
| TB5    | BLOCK                     | LED2   | LED(PREPARATION FOR HEATING : ORANGE) |
| TB15   | MA-REMOTE CONTROLLER      | REC1   | RECEIVING UNIT                        |
| TH21   | THERMISTOR                | D.P    | DRAIN PUMP KIT (OPTIONAL PARTS)       |
| TH22   | THERMISTOR                | DP     | DRAIN PUMP                            |
|        |                           | FS     | DRAIN FLOAT SWITCH                    |

NOTES:

- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
- In case of using MA-Remote controller, please connect to TB15.  
(Remote controller wire is non-polar.)
- In case of using M-NET, please connect to TB5. (Transmission line is non-polar.)
- Symbol [S] of TB5 is the shield wire connection.
- Symbols used in wiring diagram are, : terminal block, : connector.
- The setting of the SW2 dip switches differs in the capacity. For the detail, see table 1.
- The black square in the wiring diagram indicates a switch position.

\*Refer to the installation manual for breaker selection.



<Table 1>

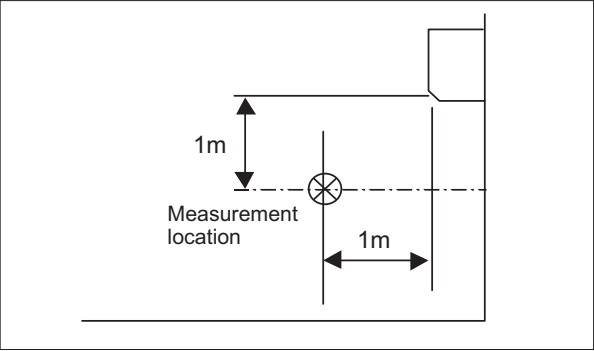
| MODEL | SW2            |
|-------|----------------|
| 63    | OFF ON  654321 |
| 100   | OFF ON  654321 |

LED on indoor board for service

| Mark | Meaning                               | Function                                                  |
|------|---------------------------------------|-----------------------------------------------------------|
| LED1 | Main power supply                     | Main power supply (Indoor unit)<br>Power on → lamp is lit |
| LED2 | Power supply for MA-Remote controller | Power supply for MA-Remote controller<br>on → lamp is lit |

5-1. Sound levels

Wall mounted

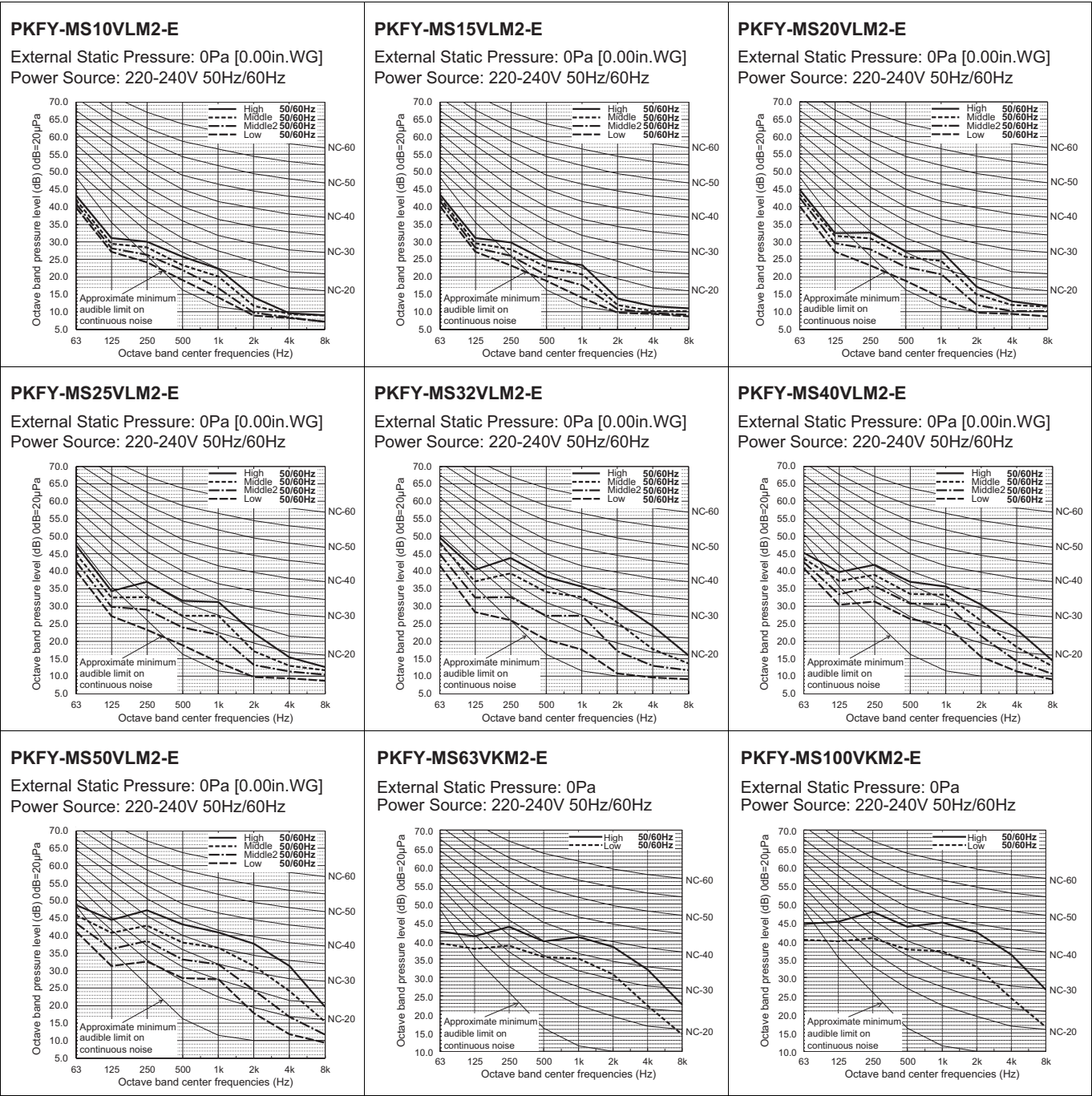


\* Measured in anechoic room.

Sound level at anechoic room: Low-(Middle2-Middle)-High

| Model            | Sound level dB (A) |
|------------------|--------------------|
| PKFY-MS10VLM2-E  | 22-24-26-28        |
| PKFY-MS15VLM2-E  | 22-24-26-28        |
| PKFY-MS20VLM2-E  | 22-26-29-31        |
| PKFY-MS25VLM2-E  | 22-27-31-35        |
| PKFY-MS32VLM2-E  | 24-31-37-41        |
| PKFY-MS40VLM2-E  | 29-34-37-40        |
| PKFY-MS50VLM2-E  | 31-36-41-46        |
| PKFY-MS63VKM2-E  | 39-42              |
| PKFY-MS100VKM2-E | 41-49              |

5-2. NC curves

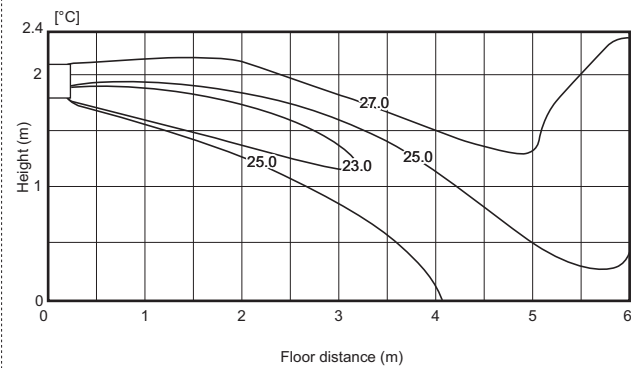


## 6-1. Temperature distributions

## PKFY-MS32VLM2-E

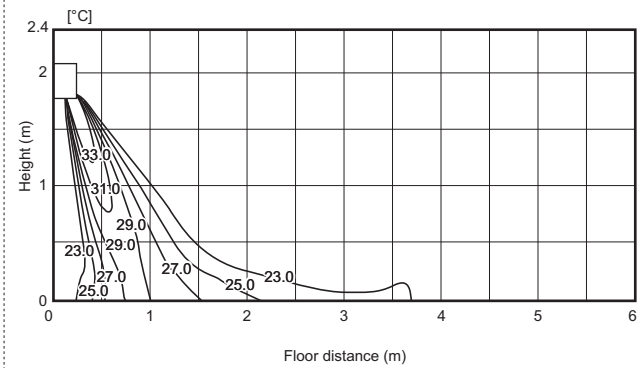
&lt;Cooling mode&gt;

Horizontal air flow



&lt;Heating mode&gt;

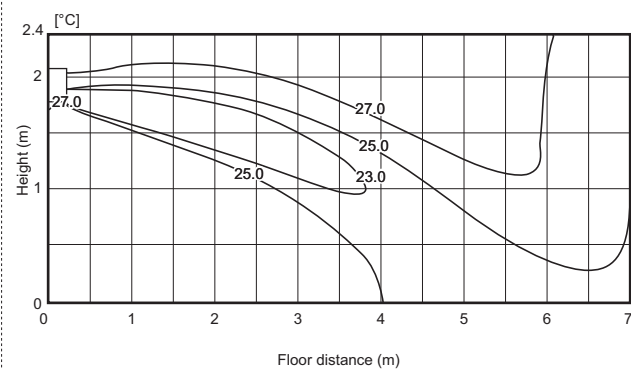
Downward air flow



## PKFY-MS50VLM2-E

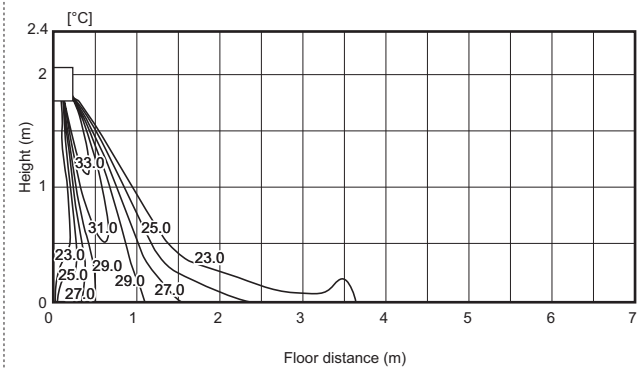
&lt;Cooling mode&gt;

Horizontal air flow



&lt;Heating mode&gt;

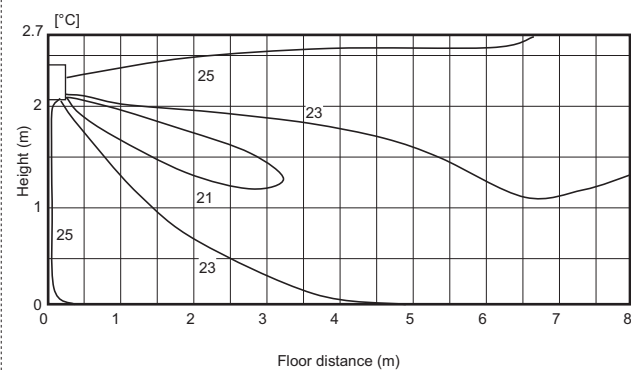
Downward air flow



## PKFY-MS63, 100VKM2-E

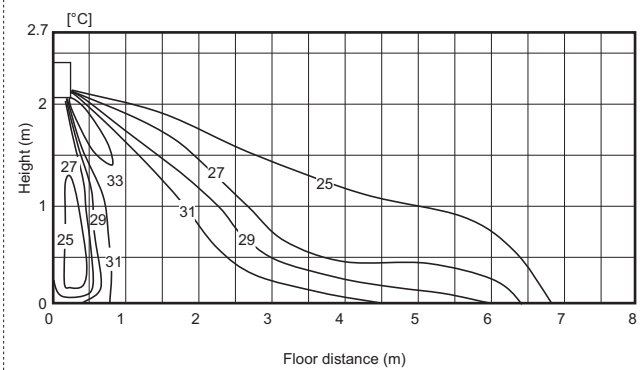
&lt;Cooling mode&gt;

Horizontal air flow



&lt;Heating mode&gt;

Downward air flow



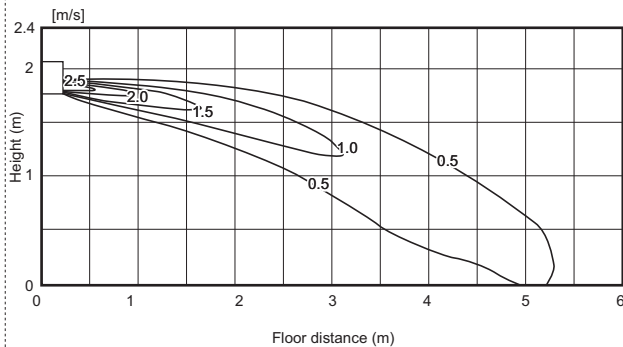
Note : These figures show typical temperature distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

## 6-2. Airflow distributions

## PKFY-MS32VLM2-E

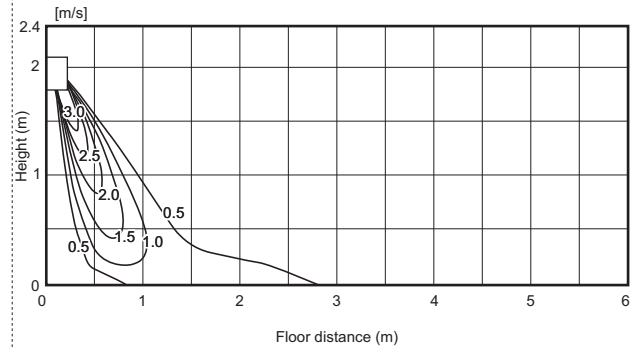
&lt;Cooling mode&gt;

Horizontal air flow



&lt;Heating mode&gt;

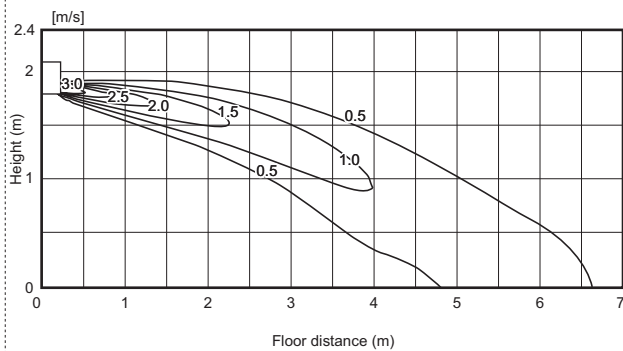
Downward air flow



## PKFY-MS50VLM2-E

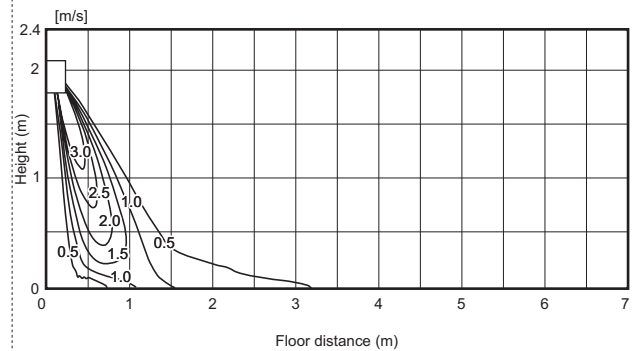
&lt;Cooling mode&gt;

Horizontal air flow



&lt;Heating mode&gt;

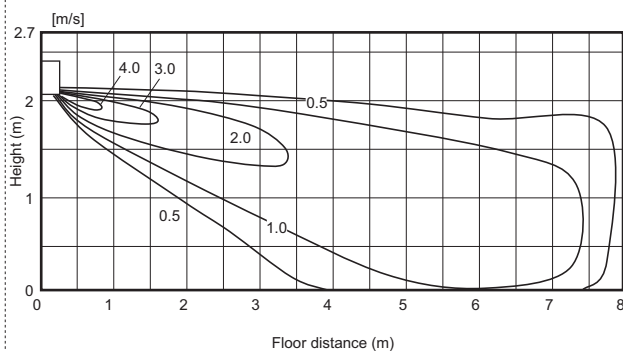
Downward air flow



## PKFY-MS63, 100VKM2-E

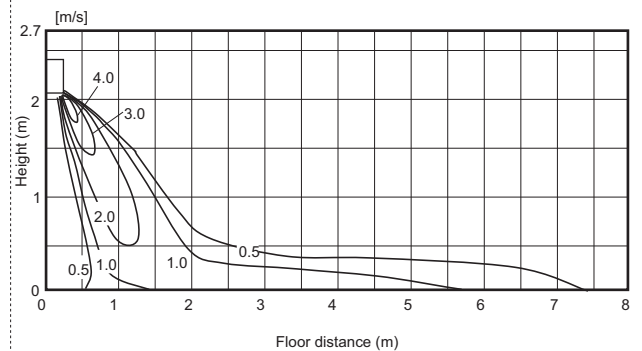
&lt;Fan mode&gt;

Horizontal air flow



&lt;Fan mode&gt;

Downward air flow



Note : These figures show typical airflow distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

Symbols: MCA (Max.Circuit Amps =1.25xFLA), FLA (Full Load Amps)  
IFM (Indoor Fan Motor), Output (Fan motor rated output)

| Model name       | Power supply                   |                          |        | IFM         |        |
|------------------|--------------------------------|--------------------------|--------|-------------|--------|
|                  | Volts/Hz                       | Range +-10%              | MCA(A) | Output (kW) | FLA(A) |
| PKFY-MS10VLM2-E  | 220-240V/50Hz<br>220-240V/60Hz | Max.: 264V<br>Min.: 198V | 0.25   | 0.030       | 0.20   |
| PKFY-MS15VLM2-E  |                                |                          | 0.25   | 0.030       | 0.20   |
| PKFY-MS20VLM2-E  |                                |                          | 0.25   | 0.030       | 0.20   |
| PKFY-MS25VLM2-E  |                                |                          | 0.32   | 0.030       | 0.25   |
| PKFY-MS32VLM2-E  |                                |                          | 0.44   | 0.030       | 0.35   |
| PKFY-MS40VLM2-E  |                                |                          | 0.44   | 0.030       | 0.35   |
| PKFY-MS50VLM2-E  |                                |                          | 0.57   | 0.030       | 0.45   |
|                  |                                |                          |        |             |        |
| Model name       | Power supply                   |                          |        | IFM         |        |
|                  | Volts/Hz                       | Range +-10%              | MCA(A) | Output (kW) | FLA(A) |
| PKFY-MS63VKM2-E  | 220-240V/50Hz                  | Max.: 264V               | 0.36   | 0.069       | 0.29   |
| PKFY-MS100VKM2-E | 220-240V/60Hz                  | Min.: 198V               | 0.63   | 0.069       | 0.50   |

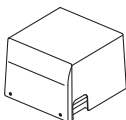
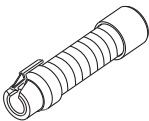
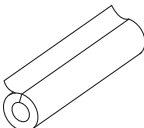
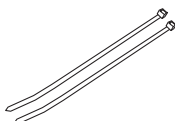
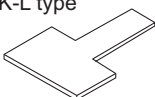
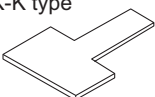
PKFY-MS-VLM2-E, VKM2-E

## 8-1. Optional parts line up for the Indoor unit

|                                 | Drain pump   | Plasma Quad Connect | V blocking filter | Sensor and alarm kit | Power supply interface for alarm kit |
|---------------------------------|--------------|---------------------|-------------------|----------------------|--------------------------------------|
| PKFY-MS10, 15, 20, 25, 32VLM2-E | PAC-SL48DM-E | MAC-100FT-E         | MAC-2471FT-E      | PAC-SL72SA-E         | PAC-SL73IFL-E                        |
| PKFY-MS40, 50VLM2-E             | PAC-SL48DM-E | MAC-100FT-E         | MAC-2470FT-E      | PAC-SL72SA-E         | PAC-SL73IFL-E                        |
| PKFY-MS63, 100VKM2-E            | PAC-SL48DM-E | MAC-100FT-E         | MAC-1416FT-E      | PAC-SL72SA-E         | PAC-SL73IFL-E                        |

## 8-2. Drain pump

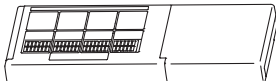
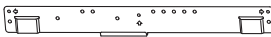
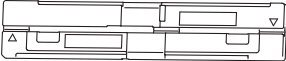
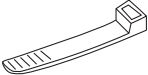
If drain water can not flow out the Indoor unit by gravity and gradient, a Drain-pump for draining is needed.  
Drain pump PAC-SL48DM-E can pump water up to 850mm high from the drain pan.

| Item     | Drain pump                                                                                     | Screw                                                                                          | Drain hose                                                                        | Flexible hose cover                                                                 | Band                                                                                |
|----------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Quantity | 1                                                                                              | (M4×16)×1, (M4×35)×6                                                                           | 1                                                                                 | 1                                                                                   | 2                                                                                   |
| Shape    |               |               |  |  |  |
| Item     | Paper gauge                                                                                    | Paper gauge                                                                                    |                                                                                   |                                                                                     |                                                                                     |
| Quantity | 1                                                                                              | 1                                                                                              |                                                                                   |                                                                                     |                                                                                     |
| Shape    | PK-L type<br> | PK-K type<br> |                                                                                   |                                                                                     |                                                                                     |

For detailed installation information, refer to the Installation Manual.

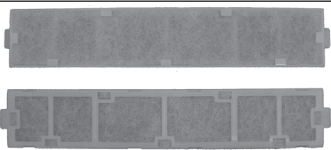
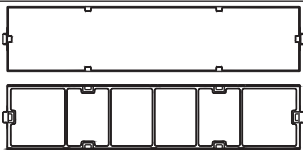
## 8-3. Plasma Quad Connect

## MAC-100FT-E

| Item     | Plasma Quad Connect (with connecting cable)                                           | Installation plate                                                                   | Fixing screw for Plasma Quad Connect and Installation plate 4 × 25 mm                 |
|----------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Quantity | 1                                                                                     | 1                                                                                    | 5                                                                                     |
| Shape    |    |  |  |
| Item     | Spacer<br>Note: The spacer is used as packaging material.                             | Mounting cord clamp                                                                  | Cable tie                                                                             |
| Quantity | 1                                                                                     | 1                                                                                    | 1                                                                                     |
| Shape    |    |   |  |
| Item     | Screw for Mounting cord clamp 4 × 16<br>(Use when joining room air conditioner parts) |                                                                                      |                                                                                       |
| Quantity | 1                                                                                     |                                                                                      |                                                                                       |
| Shape    |    |                                                                                      |                                                                                       |

For detailed installation information, refer to the Installation Manual.

## 8-4. V blocking filter

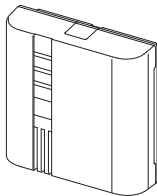
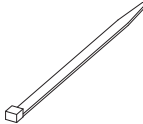
| Item        | MAC-2471FT-E                    | MAC-2470FT-E                                                                      | MAC-1416FT-E                                                                        |
|-------------|---------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Indoor unit | PKFY-MS10, 15, 20, 25, 32VLM2-E | PKFY-MS40, 50VLM2-E                                                               | PKFY-MS63, 100VKM2-E                                                                |
| Shape       |                                 |  |  |
| Filter size | 171×39 (mm)                     | 222×39 (mm)                                                                       | 343×74 (mm)                                                                         |

For detailed installation information, refer to the Installation Manual.

## 8-5. Sensor and alarm kit

This sensor and alarm kit is a semiconductor based refrigerant leak detector.

- Connected from Power supply interface
- Sensor and alarm in the device
- Have 3 types of LED (operation, detection, error)
- Detection of refrigerant leakage, a kit alerts and LED flashes in red
- Alarm can be stopped only by a kit in a room that refrigerant leakage occurred

| Item     | Sensor and alarm kit                                                               | Fixing screw                                                                      | Fastener                                                                           |  |
|----------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|
| Quantity | 1                                                                                  | 2                                                                                 | 1                                                                                  |  |
| Shape    |  |  |  |  |

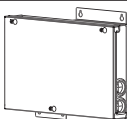
For detailed installation information, refer to the Installation Manual.

## 8-6. Power supply interface for alarm kit

Independent power supply to S&A kit.

Detection of refrigerant leakage and error in S&A kit, an IF outputs information to an outdoor unit and a branch box.

PCB board and a box for protection.

| Item     | Power supply interface for alarm kit                                                | Band                                                                                | Washer                                                                              | Metal fitting                                                                         | Screw                                                                                 |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Quantity | 1                                                                                   | 7                                                                                   | 4                                                                                   | 2                                                                                     | 4                                                                                     |
| Shape    |  |  |  |  |  |

For detailed installation information, refer to the Installation Manual.

**⚠ Warning**

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
  - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, repair, or at the time of disposal of the unit.
  - It may also be in violation of applicable laws.
  - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R32 or R410A.

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