

# 1. SPECIFICATIONS

Ceiling concealed (Low noise/Low static pressure type)

| Model                                                                                                                                 |                                                       |                                                                                                                                                               | PEFY-P15VMS1(L)-E                                                   | PEFY-P20VMS1(L)-E           | PEFY-P25VMS1(L)-E           | PEFY-P32VMS1(L)-E                                           |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------|-----------------------------|-------------------------------------------------------------|
| Power source                                                                                                                          |                                                       |                                                                                                                                                               | 220-240V (50/60Hz)                                                  |                             |                             |                                                             |
| Cooling capacity<br>(Nominal)                                                                                                         | *1                                                    | kW                                                                                                                                                            | 1.7                                                                 | 2.2                         | 2.8                         | 3.6                                                         |
|                                                                                                                                       | *1                                                    | BTU / h                                                                                                                                                       | 5,800                                                               | 7,500                       | 9,600                       | 12,300                                                      |
|                                                                                                                                       | *4                                                    | Power input                                                                                                                                                   | 0.05<0.03>                                                          | 0.05<0.03>                  | 0.06<0.04>                  | 0.07<0.05>                                                  |
| *4                                                                                                                                    | Current input                                         | A                                                                                                                                                             | 0.42<0.31>                                                          | 0.47<0.36>                  | 0.50<0.39>                  | 0.50<0.39>                                                  |
| Heating capacity<br>(Nominal )                                                                                                        | *3                                                    | kW                                                                                                                                                            | 1.9                                                                 | 2.5                         | 3.2                         | 4.0                                                         |
|                                                                                                                                       | *3                                                    | BTU / h                                                                                                                                                       | 6,500                                                               | 8,500                       | 10,900                      | 13,600                                                      |
|                                                                                                                                       | *4                                                    | Power input                                                                                                                                                   | 0.03<0.03>                                                          | 0.03<0.03>                  | 0.04<0.04>                  | 0.05<0.05>                                                  |
| *4                                                                                                                                    | Current input                                         | A                                                                                                                                                             | 0.31<0.31>                                                          | 0.36<0.36>                  | 0.39<0.39>                  | 0.39<0.39>                                                  |
| External finish                                                                                                                       |                                                       |                                                                                                                                                               | Galvanized                                                          |                             |                             |                                                             |
| External dimension H x W x D                                                                                                          |                                                       | mm                                                                                                                                                            | 200 x 790 x 700                                                     | 200 x 790 x 700             | 200 x 790 x 700             | 200 x 790 x 700                                             |
|                                                                                                                                       |                                                       | in.                                                                                                                                                           | 7-7/8 x 31-1/8 x 27-9/16                                            | 7-7/8 x 31-1/8 x 27-9/16    | 7-7/8 x 31-1/8 x 27-9/16    | 7-7/8 x 31-1/8 x 27-9/16                                    |
| Net weight                                                                                                                            |                                                       | kg (lbs)                                                                                                                                                      | 19(42)<18(40)>                                                      | 19(42)<18(40)>              | 19(42)<18(40)>              | 20(44)<19(42)>                                              |
| Heat exchanger                                                                                                                        |                                                       |                                                                                                                                                               | Cross fin (Aluminum fin and copper tube)                            |                             |                             |                                                             |
| FAN                                                                                                                                   | Type x Quantity                                       |                                                                                                                                                               | Sirocco fan x 2                                                     | Sirocco fan x 2             | Sirocco fan x 2             | Sirocco fan x 2                                             |
|                                                                                                                                       | External (220V)<br>static press.<br>(230, 240V)<br>*5 | Pa                                                                                                                                                            | <5> - 15 - <35> - <50>                                              | <5> - 15 - <35> - <50>      | <5> - 15 - <35> - <50>      | <5> - 15 - <35> - <50>                                      |
|                                                                                                                                       |                                                       | mmH <sub>2</sub> O                                                                                                                                            | <0.5> - 1.5 - <3.6> - <5.1>                                         | <0.5> - 1.5 - <3.6> - <5.1> | <0.5> - 1.5 - <3.6> - <5.1> | <0.5> - 1.5 - <3.6> - <5.1>                                 |
|                                                                                                                                       |                                                       | Pa                                                                                                                                                            | <5> - 15 - <35> - <50>                                              | <5> - 15 - <35> - <50>      | <5> - 15 - <35> - <50>      | <5> - 15 - <35> - <50>                                      |
|                                                                                                                                       | mmH <sub>2</sub> O                                    | <0.5> - 1.5 - <3.6> - <5.1>                                                                                                                                   | <0.5> - 1.5 - <3.6> - <5.1>                                         | <0.5> - 1.5 - <3.6> - <5.1> | <0.5> - 1.5 - <3.6> - <5.1> |                                                             |
|                                                                                                                                       | Motor type                                            |                                                                                                                                                               | DC motor                                                            |                             |                             |                                                             |
|                                                                                                                                       | Motor output                                          |                                                                                                                                                               | 0.096                                                               | 0.096                       | 0.096                       | 0.096                                                       |
|                                                                                                                                       | Driving mechanism                                     |                                                                                                                                                               | Direct-driven                                                       |                             |                             |                                                             |
|                                                                                                                                       | Airflow rate<br>(Low-Mid-High)                        | m <sup>3</sup> / min                                                                                                                                          | 5 - 6 - 7                                                           | 5.5 - 6.5 - 8               | 5.5 - 7 - 9                 | 6 - 8 - 10                                                  |
| L / s                                                                                                                                 |                                                       | 83 - 100 - 117                                                                                                                                                | 91 - 108 - 133                                                      | 91 - 117 - 150              | 100 - 133 - 167             |                                                             |
| cfm                                                                                                                                   |                                                       | 176 - 212 - 247                                                                                                                                               | 194 - 229 - 282                                                     | 194 - 247 - 317             | 212 - 282 - 353             |                                                             |
| Sound pressure level (Low-Mid-High)<br>(measured in anechoic room) *4                                                                 |                                                       | dB <A>                                                                                                                                                        | 22 - 24 - 28(15Pa,220-240V)                                         | 23 - 25 - 29(15Pa,220-240V) | 24 - 26 - 30(15Pa,220-240V) | 24 - 27 - 32(15Pa,220-240V)                                 |
| Insulation material                                                                                                                   |                                                       |                                                                                                                                                               | Polystyrene foam, Polyethylene foam, Urethane foam                  |                             |                             |                                                             |
| Air filter                                                                                                                            |                                                       |                                                                                                                                                               | PP Honeycomb fabric (washable)                                      |                             |                             |                                                             |
| Protection device                                                                                                                     |                                                       |                                                                                                                                                               | Fuse                                                                |                             |                             |                                                             |
| Refrigerant control device                                                                                                            |                                                       |                                                                                                                                                               | LEV                                                                 |                             |                             |                                                             |
| Connectable outdoor unit                                                                                                              |                                                       |                                                                                                                                                               | R410A CITY MULTI                                                    |                             |                             |                                                             |
| Diameter of<br>refrigerant pipe                                                                                                       | Liquid (R410A)                                        | mm (in.)                                                                                                                                                      | ø6.35 (ø1/4) Brazed                                                 | ø6.35 (ø1/4) Brazed         | ø6.35 (ø1/4) Brazed         | ø6.35 (ø1/4) Brazed                                         |
|                                                                                                                                       | Gas (R410A)                                           | mm (in.)                                                                                                                                                      | ø12.7 (ø1/2) Brazed                                                 | ø12.7 (ø1/2) Brazed         | ø12.7 (ø1/2) Brazed         | ø12.7 (ø1/2) Brazed                                         |
| Field drain pipe size                                                                                                                 |                                                       | mm (in.)                                                                                                                                                      | O.D. 32mm (1-1/4)                                                   |                             |                             |                                                             |
| Drawing                                                                                                                               | External                                              |                                                                                                                                                               | IU-KB94-G728<IU-KB94-G731>                                          | IU-KB94-G728<IU-KB94-G731>  | IU-KB94-G728<IU-KB94-G731>  | IU-KB94-G728<IU-KB94-G731>                                  |
|                                                                                                                                       | Wiring                                                |                                                                                                                                                               | IU-KB94-G668                                                        | IU-KB94-G668                | IU-KB94-G668                | IU-KB94-G668                                                |
|                                                                                                                                       | Refrigerant cycle                                     |                                                                                                                                                               | -                                                                   | -                           | -                           | -                                                           |
| Standard attachment                                                                                                                   | Document                                              | Installation Manual, Instruction Book                                                                                                                         |                                                                     |                             |                             |                                                             |
|                                                                                                                                       | Accessory                                             | Drain hose (flexible joint)                                                                                                                                   |                                                                     |                             |                             |                                                             |
| Remark                                                                                                                                | Optional parts                                        |                                                                                                                                                               |                                                                     |                             |                             |                                                             |
|                                                                                                                                       | Drain pump                                            |                                                                                                                                                               | <PAC-KE07DM-E>                                                      | <PAC-KE07DM-E>              | <PAC-KE07DM-E>              | <PAC-KE07DM-E>                                              |
|                                                                                                                                       | Control Box Replace kit                               |                                                                                                                                                               | <PAC-KE70HS-E>                                                      | <PAC-KE70HS-E>              | <PAC-KE70HS-E>              | <PAC-KE70HS-E>                                              |
|                                                                                                                                       | Plasma Quad Connect                                   |                                                                                                                                                               | MAC-100FT-E                                                         | MAC-100FT-E                 | MAC-100FT-E                 | MAC-100FT-E                                                 |
|                                                                                                                                       | PQ attachment                                         |                                                                                                                                                               | PAC-HA11PAR                                                         | PAC-HA11PAR                 | PAC-HA11PAR                 | PAC-HA11PAR                                                 |
|                                                                                                                                       |                                                       |                                                                                                                                                               |                                                                     |                             |                             |                                                             |
|                                                                                                                                       |                                                       |                                                                                                                                                               |                                                                     |                             |                             |                                                             |
| Installation                                                                                                                          |                                                       | Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. |                                                                     |                             |                             |                                                             |
| <b>Note :</b>                                                                                                                         |                                                       |                                                                                                                                                               |                                                                     |                             |                             | Unit converter                                              |
| *1 Nominal cooling conditions                                                                                                         |                                                       |                                                                                                                                                               | *3 Nominal heating conditions                                       |                             |                             | BTU/h = kW x 3,412                                          |
| Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)                                                                                                |                                                       |                                                                                                                                                               | 20°CDB (68°FDB)                                                     |                             |                             | cfm = m <sup>3</sup> /min x 35.31                           |
| Outdoor : 35°CDB (95°FDB)                                                                                                             |                                                       |                                                                                                                                                               | 7°CDB/6°CWB (45°FDB/43°FWB)                                         |                             |                             | lbs = kg / 0.4536                                           |
| 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)                                                          |                             |                             |                                                             |
| * Nominal conditions *1, *3 are subject to JIS B8615-2.                                                                               |                                                       |                                                                                                                                                               | * The external static pressure is set to 15 Pa at factory shipment. |                             |                             | *Above specification data is subject to rounding variation. |
| * Due to continuing improvement, above specification may be subject to change without notice.                                         |                                                       |                                                                                                                                                               | * < > is in case of PEFY-P-VMS1L-E model.                           |                             |                             |                                                             |
| *4 The values are measured at the factory setting of external static pressure.                                                        |                                                       |                                                                                                                                                               |                                                                     |                             |                             |                                                             |
| *5 The factory setting of external static pressure is shown without < > .                                                             |                                                       |                                                                                                                                                               |                                                                     |                             |                             |                                                             |
| Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate. |                                                       |                                                                                                                                                               |                                                                     |                             |                             |                                                             |

PEFY-P-VMS1(L)-E

# 1. SPECIFICATIONS

Ceiling concealed (Low noise/Low static pressure type)

PEFY-P-VMS1(L)-E

| Model                                                                                                                                 |                                                       |                                                                                                                                                               | PEFY-P40VMS1(L)-E                                                    | PEFY-P50VMS1(L)-E            | PEFY-P63VMS1(L)-E            |            |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------|------------------------------|------------|
| Power source                                                                                                                          |                                                       |                                                                                                                                                               | 220-240V (50/60Hz)                                                   |                              |                              |            |
| Cooling capacity<br>(Nominal)                                                                                                         | *1                                                    | kW                                                                                                                                                            | 4.5                                                                  | 5.6                          | 7.1                          |            |
|                                                                                                                                       | *1                                                    | BTU / h                                                                                                                                                       | 15,400                                                               | 19,100                       | 24,200                       |            |
|                                                                                                                                       | *4                                                    | Power input                                                                                                                                                   | kW                                                                   | 0.07<0.05>                   | 0.09<0.07>                   | 0.09<0.07> |
|                                                                                                                                       | *4                                                    | Current input                                                                                                                                                 | A                                                                    | 0.56<0.45>                   | 0.67<0.56>                   | 0.72<0.61> |
| Heating capacity<br>(Nominal )                                                                                                        | *3                                                    | kW                                                                                                                                                            | 5.0                                                                  | 6.3                          | 8.0                          |            |
|                                                                                                                                       | *3                                                    | BTU / h                                                                                                                                                       | 17,100                                                               | 21,500                       | 27,300                       |            |
|                                                                                                                                       | *4                                                    | Power input                                                                                                                                                   | kW                                                                   | 0.05<0.05>                   | 0.07<0.07>                   | 0.07<0.07> |
|                                                                                                                                       | *4                                                    | Current input                                                                                                                                                 | A                                                                    | 0.45<0.45>                   | 0.56<0.56>                   | 0.61<0.61> |
| External finish                                                                                                                       |                                                       |                                                                                                                                                               | Galvanized                                                           |                              |                              |            |
| External dimension H x W x D                                                                                                          |                                                       | mm                                                                                                                                                            | 200 x 990 x 700                                                      | 200 x 990 x 700              | 200 x 1190 x 700             |            |
|                                                                                                                                       |                                                       | in.                                                                                                                                                           | 7-7/8 x 39 x 27-9/16                                                 | 7-7/8 x 39 x 27-9/16         | 7-7/8 x 46-7/8 x 27-9/16     |            |
| Net weight                                                                                                                            |                                                       | kg (lbs)                                                                                                                                                      | 24(53)<23(51)>                                                       | 24(53)<23(51)>               | 28(62)<27(60)>               |            |
| Heat exchanger                                                                                                                        |                                                       |                                                                                                                                                               | Cross fin (Aluminum fin and copper tube)                             |                              |                              |            |
| FAN                                                                                                                                   | Type x Quantity                                       |                                                                                                                                                               | Sirocco fan x 3                                                      | Sirocco fan x 3              | Sirocco fan x 4              |            |
|                                                                                                                                       | External (220V)<br>static press.<br>(230, 240V)<br>*5 | Pa                                                                                                                                                            | <5> - 15 - <35> - <50>                                               | <5> - 15 - <35> - <50>       | <5> - 15 - <35> - <50>       |            |
|                                                                                                                                       |                                                       | mmH <sub>2</sub> O                                                                                                                                            | <0.5> - 1.5 - <3.6> - <5.1>                                          | <0.5> - 1.5 - <3.6> - <5.1>  | <0.5> - 1.5 - <3.6> - <5.1>  |            |
|                                                                                                                                       |                                                       | Pa                                                                                                                                                            | <5> - 15 - <35> - <50>                                               | <5> - 15 - <35> - <50>       | <5> - 15 - <35> - <50>       |            |
|                                                                                                                                       |                                                       | mmH <sub>2</sub> O                                                                                                                                            | <0.5> - 1.5 - <3.6> - <5.1>                                          | <0.5> - 1.5 - <3.6> - <5.1>  | <0.5> - 1.5 - <3.6> - <5.1>  |            |
|                                                                                                                                       | Motor type                                            |                                                                                                                                                               | DC motor                                                             |                              |                              |            |
|                                                                                                                                       | Motor output                                          |                                                                                                                                                               | kW                                                                   | 0.096                        | 0.096                        | 0.096      |
|                                                                                                                                       | Driving mechanism                                     |                                                                                                                                                               | Direct-driven                                                        |                              |                              |            |
|                                                                                                                                       | Airflow rate<br>(Low-Mid-High)                        | m <sup>3</sup> / min                                                                                                                                          | 8 - 9.5 - 11                                                         | 9.5 - 11 - 13                | 12 - 14 - 16.5               |            |
|                                                                                                                                       |                                                       | L / s                                                                                                                                                         | 133 - 158 - 183                                                      | 158 - 183 - 217              | 200 - 233 - 275              |            |
| cfm                                                                                                                                   |                                                       | 282 - 335 - 388                                                                                                                                               | 335 - 388 - 459                                                      | 424 - 494 - 583              |                              |            |
| Sound pressure level (Low-Mid-High)<br>(measured in anechoic room) *4                                                                 |                                                       | dB <A>                                                                                                                                                        | 28 - 30 - 33 (15Pa,220-240V)                                         | 30 - 32 - 35 (15Pa,220-240V) | 30 - 33 - 36 (15Pa,220-240V) |            |
| Insulation material                                                                                                                   |                                                       |                                                                                                                                                               | Polystyrene foam, Polyethylene foam, Urethane foam                   |                              |                              |            |
| Air filter                                                                                                                            |                                                       |                                                                                                                                                               | PP Honeycomb fabric (washable)                                       |                              |                              |            |
| Protection device                                                                                                                     |                                                       |                                                                                                                                                               | Fuse                                                                 |                              |                              |            |
| Refrigerant control device                                                                                                            |                                                       |                                                                                                                                                               | LEV                                                                  |                              |                              |            |
| Connectable outdoor unit                                                                                                              |                                                       |                                                                                                                                                               | R410A CITY MULTI                                                     |                              |                              |            |
| Diameter of<br>refrigerant pipe                                                                                                       | Liquid (R410A)                                        | mm (in.)                                                                                                                                                      | ø6.35 (ø1/4) Brazed                                                  | ø6.35 (ø1/4) Brazed          | ø9.52 (ø3/8) Brazed          |            |
|                                                                                                                                       | Gas (R410A)                                           | mm (in.)                                                                                                                                                      | ø12.7 (ø1/2) Brazed                                                  | ø12.7 (ø1/2) Brazed          | ø15.88 (ø5/8) Brazed         |            |
| Field drain pipe size                                                                                                                 |                                                       | mm (in.)                                                                                                                                                      | O.D. 32mm (1-1/4)                                                    |                              |                              |            |
| Drawing                                                                                                                               | External                                              |                                                                                                                                                               | IU-KB94-G728<IU-KB94-G731>                                           | IU-KB94-G728<IU-KB94-G731>   | IU-KB94-G728<IU-KB94-G731>   |            |
|                                                                                                                                       | Wiring                                                |                                                                                                                                                               | IU-KB94-G668                                                         | IU-KB94-G668                 | IU-KB94-G668                 |            |
|                                                                                                                                       | Refrigerant cycle                                     |                                                                                                                                                               | -                                                                    | -                            | -                            |            |
| Standard<br>attachment                                                                                                                | Document                                              |                                                                                                                                                               | Installation Manual, Instruction Book<br>Drain hose (flexible joint) |                              |                              |            |
|                                                                                                                                       | Accessory                                             |                                                                                                                                                               |                                                                      |                              |                              |            |
| Remark                                                                                                                                | Optional parts                                        |                                                                                                                                                               |                                                                      |                              |                              |            |
|                                                                                                                                       | Drain pump                                            |                                                                                                                                                               | <PAC-KE07DM-E>                                                       | <PAC-KE07DM-E>               | <PAC-KE07DM-E>               |            |
|                                                                                                                                       | Control Box Replace kit                               |                                                                                                                                                               | <PAC-KE70HS-E>                                                       | <PAC-KE70HS-E>               | <PAC-KE70HS-E>               |            |
|                                                                                                                                       | Plasma Quad Connect                                   |                                                                                                                                                               | MAC-100FT-E                                                          | MAC-100FT-E                  | MAC-100FT-E                  |            |
|                                                                                                                                       | PQ attachment                                         |                                                                                                                                                               | PAC-HA11PAR                                                          | PAC-HA11PAR                  | PAC-HA11PAR                  |            |
|                                                                                                                                       |                                                       |                                                                                                                                                               |                                                                      |                              |                              |            |
|                                                                                                                                       |                                                       |                                                                                                                                                               |                                                                      |                              |                              |            |
| Installation                                                                                                                          |                                                       | Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. |                                                                      |                              |                              |            |
| Note :                                                                                                                                |                                                       |                                                                                                                                                               | Unit converter                                                       |                              |                              |            |
| *1 Nominal cooling conditions                                                                                                         |                                                       |                                                                                                                                                               | *3 Nominal heating conditions                                        |                              |                              |            |
| Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)                                                                                                |                                                       |                                                                                                                                                               | 20°CDB (68°FDB)                                                      |                              |                              |            |
| Outdoor : 35°CDB (95°FDB)                                                                                                             |                                                       |                                                                                                                                                               | 7°CDB/6°CWB (45°FDB/43°FWB)                                          |                              |                              |            |
| 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)                                                           |                              |                              |            |
| * Nominal conditions *1, *3 are subject to JIS B8615-2.                                                                               |                                                       |                                                                                                                                                               | * The external static pressure is set to 15 Pa at factory shipment.  |                              |                              |            |
| * Due to continuing improvement, above specification may be subject to change without notice.                                         |                                                       |                                                                                                                                                               | * < > is in case of PEFY-P-VMS1L-E model.                            |                              |                              |            |
| *4 The values are measured at the factory setting of external static pressure.                                                        |                                                       |                                                                                                                                                               | *Above specification data is subject to rounding variation           |                              |                              |            |
| *5 The factory setting of external static pressure is shown without < >.                                                              |                                                       |                                                                                                                                                               |                                                                      |                              |                              |            |
| Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate. |                                                       |                                                                                                                                                               |                                                                      |                              |                              |            |