

# 1. SPECIFICATIONS

Ceiling concealed (Low static pressure type)

| Model                                            |                         |                        | PEFY-WP10VMS1-E                                                                                                                                                                                                                                                   | PEFY-WP15VMS1-E                                              | PEFY-WP20VMS1-E                                              | PEFY-WP25VMS1-E                                              |                 |
|--------------------------------------------------|-------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-----------------|
| Power source                                     |                         |                        | 1-phase 220-230-240 V 50/60 Hz                                                                                                                                                                                                                                    | 1-phase 220-230-240 V 50/60 Hz                               | 1-phase 220-230-240 V 50/60 Hz                               | 1-phase 220-230-240 V 50/60 Hz                               |                 |
| Cooling capacity (Nominal)                       | *1                      | kW                     | 1.2                                                                                                                                                                                                                                                               | 1.7                                                          | 2.2                                                          | 2.8                                                          |                 |
|                                                  | *1                      | BTU/h                  | 4,100                                                                                                                                                                                                                                                             | 5,800                                                        | 7,500                                                        | 9,600                                                        |                 |
| (220V)                                           | *2                      | Power input            | kW                                                                                                                                                                                                                                                                | 0.030                                                        | 0.051                                                        | 0.060                                                        |                 |
|                                                  | *2                      | Current input          | A                                                                                                                                                                                                                                                                 | 0.21                                                         | 0.49                                                         | 0.51                                                         |                 |
| Heating capacity (Nominal)                       | *3                      | kW                     | 1.4                                                                                                                                                                                                                                                               | 1.9                                                          | 2.5                                                          | 3.2                                                          |                 |
|                                                  | *3                      | BTU/h                  | 4,800                                                                                                                                                                                                                                                             | 6,500                                                        | 8,500                                                        | 10,900                                                       |                 |
| (220V)                                           | *2                      | Power input            | kW                                                                                                                                                                                                                                                                | 0.030                                                        | 0.031                                                        | 0.040                                                        |                 |
|                                                  | *2                      | Current input          | A                                                                                                                                                                                                                                                                 | 0.21                                                         | 0.38                                                         | 0.40                                                         |                 |
| External finish                                  |                         |                        | Galvanized steel plate                                                                                                                                                                                                                                            | Galvanized steel plate                                       | Galvanized steel plate                                       | Galvanized steel plate                                       |                 |
| External dimension H × W × 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)                                                                                                                                                                                                                                                           | 19 (42)                                                      | 20 (45)                                                      | 20 (45)                                                      |                 |
| Heat exchanger                                   |                         |                        | Cross fin (Aluminum fin and copper tube)                                                                                                                                                                                                                          | Cross fin (Aluminum fin and copper tube)                     | Cross fin (Aluminum fin and copper tube)                     | Cross fin (Aluminum fin and copper tube)                     |                 |
|                                                  | Water Volume            | L                      | 0.4                                                                                                                                                                                                                                                               | 0.7                                                          | 0.9                                                          | 0.9                                                          |                 |
| FAN                                              | Type × Quantity         |                        | Sirocco fan x 2                                                                                                                                                                                                                                                   | Sirocco fan x 2                                              | Sirocco fan x 2                                              | Sirocco fan x 2                                              |                 |
|                                                  | *4                      | External static press. | 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                                                                                                                                                                                                                                                          | DC motor                                                     | DC motor                                                     | DC motor                                                     |                 |
|                                                  | Motor output            |                        | kW                                                                                                                                                                                                                                                                | 0.096                                                        | 0.096                                                        | 0.096                                                        |                 |
|                                                  | Driving mechanism       |                        | Direct-driven by motor                                                                                                                                                                                                                                            | Direct-driven by motor                                       | Direct-driven by motor                                       | Direct-driven by motor                                       |                 |
|                                                  | Air flow rate           |                        | (Low-Mid-High)                                                                                                                                                                                                                                                    | (Low-Mid-High)                                               | (Low-Mid-High)                                               | (Low-Mid-High)                                               |                 |
|                                                  |                         |                        | m <sup>3</sup> /min                                                                                                                                                                                                                                               | 4.0 - 4.5 - 5.0                                              | 5.0 - 6.0 - 7.0                                              | 5.5 - 6.5 - 8.0                                              | 5.5 - 7.0 - 9.0 |
|                                                  |                         |                        | L/s                                                                                                                                                                                                                                                               | 67 - 75 - 83                                                 | 83 - 100 - 117                                               | 92 - 108 - 133                                               | 92 - 117 - 150  |
|                                                  |                         | cfm                    | 141 - 159 - 177                                                                                                                                                                                                                                                   | 177 - 212 - 247                                              | 194 - 230 - 282                                              | 194 - 247 - 318                                              |                 |
| Sound pressure level (measured in anechoic room) |                         |                        | (Low-Mid-High)                                                                                                                                                                                                                                                    | (Low-Mid-High)                                               | (Low-Mid-High)                                               | (Low-Mid-High)                                               |                 |
|                                                  | *2                      | dB <A>                 | 20.0-23.0-25.0                                                                                                                                                                                                                                                    | 22.0-24.0-28.0                                               | 23.0-25.0-29.0                                               | 23.0-26.0-30.0                                               |                 |
| Insulation material                              |                         |                        | EPS, Polyethylene foam, Urethane foam                                                                                                                                                                                                                             | EPS, Polyethylene foam, Urethane foam                        | EPS, Polyethylene foam, Urethane foam                        | EPS, Polyethylene foam, Urethane foam                        |                 |
| Air filter                                       |                         |                        | PP honeycomb fabric.                                                                                                                                                                                                                                              | PP honeycomb fabric.                                         | PP honeycomb fabric.                                         | PP honeycomb fabric.                                         |                 |
| Protection device                                |                         |                        | Fuse                                                                                                                                                                                                                                                              | Fuse                                                         | Fuse                                                         | Fuse                                                         |                 |
| Refrigerant control device                       |                         |                        | -                                                                                                                                                                                                                                                                 | -                                                            | -                                                            | -                                                            |                 |
| Connectable HBC                                  |                         |                        | CMB-WM-V-AA, CMB-WM-F-AA, CMB-WM-V-BB                                                                                                                                                                                                                             | CMB-WM-V-AA, CMB-WM-F-AA, CMB-WM-V-BB                        | CMB-WM-V-AA, CMB-WM-F-AA, CMB-WM-V-BB                        | CMB-WM-V-AA, CMB-WM-F-AA, CMB-WM-V-BB                        |                 |
| Water piping diameter                            |                         |                        | *5, 6                                                                                                                                                                                                                                                             |                                                              |                                                              |                                                              |                 |
|                                                  | Connection size         | Inlet                  | in.                                                                                                                                                                                                                                                               | Rc 3/4 screw                                                 | Rc 3/4 screw                                                 | Rc 3/4 screw                                                 |                 |
|                                                  |                         | Outlet                 | in.                                                                                                                                                                                                                                                               | Rc 3/4 screw                                                 | Rc 3/4 screw                                                 | Rc 3/4 screw                                                 |                 |
|                                                  | Field pipe size         | Inlet                  | mm I.D.                                                                                                                                                                                                                                                           | 20                                                           | 20                                                           | 20                                                           |                 |
|                                                  |                         | Outlet                 | mm I.D.                                                                                                                                                                                                                                                           | 20                                                           | 20                                                           | 20                                                           |                 |
| Field drain pipe size                            |                         | mm (in.)               | O.D.32 (1-1/4)                                                                                                                                                                                                                                                    | O.D.32 (1-1/4)                                               | O.D.32 (1-1/4)                                               | O.D.32 (1-1/4)                                               |                 |
| Drawing                                          | External                |                        | KD94T794                                                                                                                                                                                                                                                          | KD94T794                                                     | KD94T794                                                     | KD94T794                                                     |                 |
|                                                  | Wiring                  |                        | KD94T793                                                                                                                                                                                                                                                          | KD94T793                                                     | KD94T793                                                     | KD94T793                                                     |                 |
|                                                  | Refrigerant cycle       |                        | -                                                                                                                                                                                                                                                                 | -                                                            | -                                                            | -                                                            |                 |
| Standard attachment                              | Document                |                        | Installation Manual, Instruction Book                                                                                                                                                                                                                             | Installation Manual, Instruction Book                        | Installation Manual, Instruction Book                        | Installation Manual, Instruction Book                        |                 |
|                                                  | Accessory               |                        | Insulation pipe for water pipe, Washer, Drain hose, Tie band                                                                                                                                                                                                      | Insulation pipe for water pipe, Washer, Drain hose, Tie band | Insulation pipe for water pipe, Washer, Drain hose, Tie band | Insulation pipe for water pipe, Washer, Drain hose, Tie band |                 |
| Optional parts                                   | 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                                                  |                 |
| 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 specifications may be subject to change without notice. |                                                              |                                                              |                                                              |                 |

|                                                                                                                                                                                                                  |  |                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------|
| Notes:                                                                                                                                                                                                           |  | Unit converter                                              |
| 1.Nominal cooling conditions<br>Indoor: 27°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. (95°FDB.)<br>Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)                                         |  | BTU/h =kW x 3,412                                           |
| 2.The values are measured at the factory setting of external static pressure.                                                                                                                                    |  | cfm =m <sup>3</sup> /min x 35.31                            |
| 3.Nominal heating conditions<br>Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.)<br>Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)                                           |  | lbs =kg/0.4536                                              |
| 4.The factory setting of external static pressure is shown without < >.<br>Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate. |  |                                                             |
| 5.Be sure to install a valve on the water outlet.                                                                                                                                                                |  |                                                             |
| 6.Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.                                                                                                              |  |                                                             |
| 7.Please group units that operate on 1 branch.                                                                                                                                                                   |  |                                                             |
|                                                                                                                                                                                                                  |  | *Above specification data is subject to rounding variation. |

# 1. SPECIFICATIONS

Ceiling concealed (Low static pressure type)

| Model                                            |                         |                        | PEFY-WP32VMS1-E                                                                                                                                                                                                                                                   | PEFY-WP40VMS1-E                                              | PEFY-WP50VMS1-E                                              |                             |
|--------------------------------------------------|-------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-----------------------------|
| Power source                                     |                         |                        | 1-phase 220-230-240 V 50/60 Hz                                                                                                                                                                                                                                    | 1-phase 220-230-240 V 50/60 Hz                               | 1-phase 220-230-240 V 50/60 Hz                               |                             |
| Cooling capacity<br>(Nominal)                    | *1                      | kW                     | 3.6                                                                                                                                                                                                                                                               | 4.5                                                          | 5.6                                                          |                             |
|                                                  | *1                      | BTU/h                  | 12,300                                                                                                                                                                                                                                                            | 15,400                                                       | 19,100                                                       |                             |
| (220V)                                           | *2                      | Power input            | kW                                                                                                                                                                                                                                                                | 0.071                                                        | 0.090                                                        | 0.090                       |
|                                                  | *2                      | Current input          | A                                                                                                                                                                                                                                                                 | 0.61                                                         | 0.73                                                         | 0.77                        |
| Heating capacity<br>(Nominal)                    | *3                      | kW                     | 4.0                                                                                                                                                                                                                                                               | 5.0                                                          | 6.3                                                          |                             |
|                                                  | *3                      | BTU/h                  | 13,600                                                                                                                                                                                                                                                            | 17,100                                                       | 21,500                                                       |                             |
| (220V)                                           | *2                      | Power input            | kW                                                                                                                                                                                                                                                                | 0.051                                                        | 0.070                                                        | 0.070                       |
|                                                  | *2                      | Current input          | A                                                                                                                                                                                                                                                                 | 0.50                                                         | 0.62                                                         | 0.66                        |
| External finish                                  |                         |                        | Galvanized steel plate                                                                                                                                                                                                                                            | Galvanized steel plate                                       | Galvanized steel plate                                       |                             |
| External dimension H × W × D                     |                         | mm                     | 200 x 990 x 700                                                                                                                                                                                                                                                   | 200 x 990 x 700                                              | 200 x 1,190 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)               | 25 (56)                                                                                                                                                                                                                                                           | 25 (56)                                                      | 27 (60)                                                      |                             |
| Heat exchanger                                   |                         |                        | Cross fin (Aluminum fin and copper tube)                                                                                                                                                                                                                          | Cross fin (Aluminum fin and copper tube)                     | Cross fin (Aluminum fin and copper tube)                     |                             |
| FAN                                              | Water Volume            |                        | L                                                                                                                                                                                                                                                                 | 1.0                                                          | 1.0                                                          | 1.7                         |
|                                                  | Type × Quantity         |                        | Sirocco fan x 3                                                                                                                                                                                                                                                   |                                                              |                                                              | Sirocco fan x 4             |
|                                                  | *4                      | External static press. | 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                                                                                                                                                                                                                                                          |                                                              |                                                              | DC motor                    |
|                                                  | Motor output            |                        | kW                                                                                                                                                                                                                                                                | 0.096                                                        | 0.096                                                        | 0.096                       |
|                                                  | Driving mechanism       |                        | Direct-driven by motor                                                                                                                                                                                                                                            |                                                              |                                                              | Direct-driven by motor      |
|                                                  | Air flow rate           |                        | (Low-Mid-High)                                                                                                                                                                                                                                                    |                                                              |                                                              | (Low-Mid-High)              |
|                                                  |                         |                        | m <sup>3</sup> /min                                                                                                                                                                                                                                               | 8.0 - 9.0 - 11.0                                             | 9.5 - 11.0 - 13.0                                            | 12.0 - 14.0 - 16.5          |
|                                                  |                         |                        | L/s                                                                                                                                                                                                                                                               | 133 - 150 - 183                                              | 158 - 183 - 217                                              | 200 - 233 - 275             |
| cfm                                              |                         |                        | 282 - 318 - 388                                                                                                                                                                                                                                                   | 335 - 388 - 459                                              | 424 - 494 - 583                                              |                             |
| Sound pressure level (measured in anechoic room) |                         |                        | (Low-Mid-High)                                                                                                                                                                                                                                                    | (Low-Mid-High)                                               | (Low-Mid-High)                                               |                             |
| *2                                               |                         | dB <A>                 | 28.0-30.0-33.0                                                                                                                                                                                                                                                    | 30.0-32.0-35.0                                               | 30.0-33.0-36.0                                               |                             |
| Insulation material                              |                         |                        | EPS, Polyethylene foam, Urethane foam                                                                                                                                                                                                                             | EPS, Polyethylene foam, Urethane foam                        | EPS, Polyethylene foam, Urethane foam                        |                             |
| Air filter                                       |                         |                        | PP honeycomb fabric.                                                                                                                                                                                                                                              | PP honeycomb fabric.                                         | PP honeycomb fabric.                                         |                             |
| Protection device                                |                         |                        | Fuse                                                                                                                                                                                                                                                              | Fuse                                                         | Fuse                                                         |                             |
| Refrigerant control device                       |                         |                        | -                                                                                                                                                                                                                                                                 | -                                                            | -                                                            |                             |
| Connectable HBC                                  |                         |                        | CMB-WM-V-AA, CMB-WM-F-AA, CMB-WM-V-BB                                                                                                                                                                                                                             | CMB-WM-V-AA, CMB-WM-F-AA, CMB-WM-V-BB                        | CMB-WM-V-AA, CMB-WM-F-AA, CMB-WM-V-BB                        |                             |
| Water piping diameter *5, 6                      |                         |                        |                                                                                                                                                                                                                                                                   |                                                              |                                                              |                             |
|                                                  | Connection size         | Inlet                  | in.                                                                                                                                                                                                                                                               | Rc 3/4 screw                                                 | Rc 3/4 screw                                                 | Rc 3/4 screw                |
|                                                  |                         | Outlet                 | in.                                                                                                                                                                                                                                                               | Rc 3/4 screw                                                 | Rc 3/4 screw                                                 | Rc 3/4 screw                |
|                                                  | Field pipe size         | Inlet                  | mm I.D.                                                                                                                                                                                                                                                           | 20                                                           | 20                                                           | 20                          |
|                                                  |                         | Outlet                 | mm I.D.                                                                                                                                                                                                                                                           | 20                                                           | 20                                                           | 20                          |
| Field drain pipe size                            |                         | mm (in.)               | O.D.32 (1-1/4)                                                                                                                                                                                                                                                    | O.D.32 (1-1/4)                                               | O.D.32 (1-1/4)                                               |                             |
| Drawing                                          | External                |                        | KD94T794                                                                                                                                                                                                                                                          | KD94T794                                                     | KD94T794                                                     |                             |
|                                                  | Wiring                  |                        | KD94T793                                                                                                                                                                                                                                                          | KD94T793                                                     | KD94T793                                                     |                             |
|                                                  | Refrigerant cycle       |                        | -                                                                                                                                                                                                                                                                 | -                                                            | -                                                            |                             |
| Standard attachment                              | Document                |                        | Installation Manual, Instruction Book                                                                                                                                                                                                                             | Installation Manual, Instruction Book                        | Installation Manual, Instruction Book                        |                             |
|                                                  | Accessory               |                        | Insulation pipe for water pipe, Washer, Drain hose, Tie band                                                                                                                                                                                                      | Insulation pipe for water pipe, Washer, Drain hose, Tie band | Insulation pipe for water pipe, Washer, Drain hose, Tie band |                             |
| Optional parts                                   | 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                                                  |                             |
| 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 specifications may be subject to change without notice. |                                                              |                                                              |                             |

|                                                                                                                                                                                                                   |  |                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------|
| Notes:                                                                                                                                                                                                            |  | Unit converter                                              |
| 1.Nominal cooling conditions<br>Indoor: 27°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. (95°FDB.)<br>Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)                                          |  | BTU/h =kW x 3,412                                           |
| 2.The values are measured at the factory setting of external static pressure.                                                                                                                                     |  | cfm =m <sup>3</sup> /min x 35.31                            |
| 3.Nominal heating conditions<br>Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.)<br>Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)                                            |  | lbs =kg/0.4536                                              |
| 4.The factory setting of external static pressure is shown without < > .<br>Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate. |  |                                                             |
| 5.Be sure to install a valve on the water outlet.                                                                                                                                                                 |  |                                                             |
| 6.Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.                                                                                                               |  |                                                             |
| 7.Please group units that operate on 1 branch.                                                                                                                                                                    |  |                                                             |
|                                                                                                                                                                                                                   |  | *Above specification data is subject to rounding variation. |