

# Ceiling concealed type

Low static pressure type

PEFY-P VMS1(L)-E **R410A**

• Technologies and functions ..... P.160



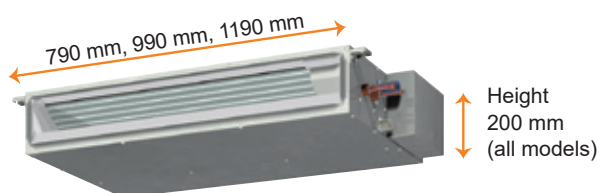
\*This image shows the VMS1 type (equipped with a drain pump as a standard feature).

A thin body 200 mm in height and a maximum external static pressure rating of 50 Pa provide significant flexibility of design and allow installation in narrow ceiling spaces.

The lineup consists of models up to P63 with the same height.

Compact design with a height of no more than 200 mm (all models) and widths of 790 mm (P15-P32).

The thin body with a height of no more than 200 mm (all models) allows installation in a ceiling with small cavity space.



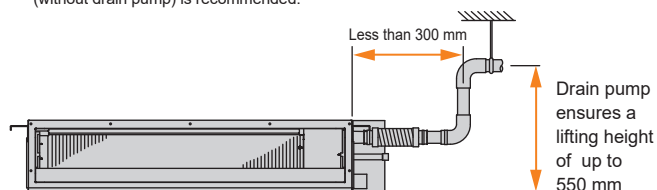
| PEFY-P VMS1(L)-E | P15 | P20 | P25 | P32 | P40 | P50  | P63 |
|------------------|-----|-----|-----|-----|-----|------|-----|
| Height           | mm  | 200 |     |     |     |      |     |
| Width            | mm  | 790 |     |     | 990 | 1190 |     |

## Optional drain pump

For PEFY-P VMS1, the drain pump is equipped as a standard feature and eliminates the need for a drain trap. It has a maximum lifting height of 550 mm.

For PEFY-P VMS1L-E, the drain pump is sold separately.

\*For places where low noise operation is especially required (i.e., hotels), VMS1L (without drain pump) is recommended.



## Low noise design

Owing to a centrifugal fan and coil, low noise operation is realized. It is best suited to places where quietness is required.

- Sound pressure level (standard static pressure) at 15 Pa

|                      |           | dB(A) |     |     |     |     |     |     |    |
|----------------------|-----------|-------|-----|-----|-----|-----|-----|-----|----|
| Sound pressure level | Capacity  | P15   | P20 | P25 | P32 | P40 | P50 | P63 |    |
|                      | Fan Speed | High  | 28  | 29  | 30  | 32  | 33  | 35  | 36 |
|                      |           | Mid   | 24  | 25  | 26  | 27  | 30  | 32  | 33 |
|                      |           | Low   | 22  | 23  | 24  | 24  | 28  | 30  | 30 |

Demonstrates a maximum external static pressure of 50 Pa despite its compact design

External static pressure can be selected from 5, 15, 35 and 50 Pa (set to 15 Pa at the time of factory shipment).

## IT terminal

An IT terminal is available. Contact your local distributor for details.

## Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side. For installation, PQ attachment is required.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN-Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

# Ceiling concealed type **R410A**

## Low static pressure type **PEFY-P VMS1(L)-E**

|                                                                    |                             |            | PEFY-P15VMS1(L)-E                             | PEFY-P20VMS1(L)-E | PEFY-P25VMS1(L)-E | PEFY-P32VMS1(L)-E | PEFY-P40VMS1(L)-E    | PEFY-P50VMS1(L)-E | PEFY-P63VMS1(L)-E        |
|--------------------------------------------------------------------|-----------------------------|------------|-----------------------------------------------|-------------------|-------------------|-------------------|----------------------|-------------------|--------------------------|
| Power source                                                       |                             |            | 1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz |                   |                   |                   |                      |                   |                          |
| Cooling capacity                                                   | *1                          | kW         | 1.7                                           | 2.2               | 2.8               | 3.6               | 4.5                  | 5.6               | 7.1                      |
|                                                                    | *1                          | BTU/h      | 5,800                                         | 7,500             | 9,600             | 12,300            | 15,400               | 19,100            | 24,200                   |
| Heating capacity                                                   | *1                          | kW         | 1.9                                           | 2.5               | 3.2               | 4.0               | 5.0                  | 6.3               | 8.0                      |
|                                                                    | *1                          | BTU/h      | 6,500                                         | 8,500             | 10,900            | 13,600            | 17,100               | 21,500            | 27,300                   |
| Power consumption                                                  | *3                          | Cooling kW | 0.05 [0.03]                                   | 0.05 [0.03]       | 0.06 [0.04]       | 0.07 [0.05]       | 0.07 [0.05]          | 0.09 [0.07]       | 0.09 [0.07]              |
|                                                                    |                             | Heating kW | 0.03 [0.03]                                   | 0.03 [0.03]       | 0.04 [0.04]       | 0.05 [0.05]       | 0.05 [0.05]          | 0.07 [0.07]       | 0.07 [0.07]              |
| Current                                                            | *3                          | Cooling A  | 0.42 [0.31]                                   | 0.47 [0.36]       | 0.50 [0.39]       | 0.50 [0.39]       | 0.56 [0.45]          | 0.67 [0.56]       | 0.72 [0.61]              |
|                                                                    |                             | Heating A  | 0.31 [0.31]                                   | 0.36 [0.36]       | 0.39 [0.39]       | 0.39 [0.39]       | 0.45 [0.45]          | 0.56 [0.56]       | 0.61 [0.61]              |
| External finish                                                    |                             |            | Galvanized                                    |                   |                   |                   |                      |                   |                          |
| Dimension                                                          |                             | mm         | 200 x 790 x 700                               |                   |                   |                   | 200 x 990 x 700      |                   | 200 x 1,190 x 700        |
| H x W x D                                                          |                             | in.        | 7-7/8 x 31-1/8 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                                                         | *3                          | kg(lbs.)   | 19(42) [18(40)]                               |                   |                   | 20(45) [19(42)]   | 24(53) [23(51)]      |                   | 28(62) [27(60)]          |
| Heat exchanger                                                     |                             |            | Cross fin (Aluminium fin and copper tube)     |                   |                   |                   |                      |                   |                          |
| FAN                                                                | Type x Quantity             |            | Sirocco fan x 2                               |                   |                   |                   | Sirocco fan x 3      |                   | Sirocco fan x 4          |
|                                                                    | Airflow rate<br>(Lo-Mid-Hi) | m³/min     | 5-6-7                                         | 5.5-6.5-8         | 5.5-7-9           | 6-8-10            | 8-9.5-11             | 9.5-11-13         | 12-14-16.5               |
|                                                                    |                             | L/s        | 83-100-117                                    | 91-108-133        | 91-117-150        | 100-133-167       | 133-158-183          | 158-183-217       | 200-233-275              |
|                                                                    |                             | cfm        | 176-212-247                                   | 194-229-282       | 194-247-317       | 212-282-353       | 282-335-388          | 335-388-459       | 424-494-583              |
|                                                                    | External static press.      | Pa         | 5-15-35-50                                    |                   |                   |                   |                      |                   |                          |
| Motor                                                              | Type                        |            | DC motor                                      |                   |                   |                   |                      |                   |                          |
|                                                                    | Output                      | kW         | 0.096                                         |                   |                   |                   |                      |                   |                          |
| Air filter                                                         |                             |            | PP Honeycomb fabric (washable)                |                   |                   |                   |                      |                   |                          |
| Refrigerant                                                        | Gas                         | mm(in.)    | ø12.7 (ø1/2) Brazed                           |                   |                   |                   |                      |                   | ø15.88 (ø5/8) Brazed     |
| pipe diameter                                                      | Liquid                      | mm(in.)    | ø6.35 (ø1/4) Brazed                           |                   |                   |                   |                      |                   | ø9.52 (ø3/8) Brazed      |
| Field drain pipe diameter                                          |                             |            | O.D. 32 (1-1/4)                               |                   |                   |                   |                      |                   |                          |
| Sound pressure level<br>(Lo-Mid-Hi)<br>(measured in anechoic room) |                             | dB<A>      | 22-24-28                                      | 23-25-29          | 24-26-30          | 24-27-32          | 28-30-33             | 30-32-35          | 30-33-36                 |

### Notes:

- \*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.  
Cooling : Indoor : 27°CDB./19°CWB. (81°FDB. / 66°FWB.) Outdoor : 35°CDB. (95°FDB. )  
Heating : Indoor : 20°CDB. (68°FDB.) Outdoor : 7°CDB. / 6°CWB. (45°FDB. / 43°FWB.)  
Pipe length : 7.5m (24-9/16ft) Height difference : 0m (0ft)
- \*2 The external static pressure is set to 15 Pa at factory shipment.
- \*3 [ ] is in case of PEFY-P15-63VMS1L-E

## Optional parts

| Description             | Model        | Applicable capacity                              |
|-------------------------|--------------|--------------------------------------------------|
| Drain pump              | PAC-KE07DM-E | P15, 20, 25, 32, 40, 50, 63 *For PEFY-VMS1L only |
| Control box replace kit | PAC-KE70HS-E | P15, 20, 25, 32, 40, 50, 63                      |
| Plasma quad connect*    | MAC-100FT-E  | P15, 20, 25, 32, 40, 50, 63                      |
| PQ attachment*          | PAC-HA11PAR  | P15, 20, 25, 32, 40, 50, 63                      |

\* Plasma Quad Connect (MAC-100FT-E) should be used together with PQ attachment.

# Ceiling concealed type

Medium static pressure type

PEFY-M VMA(L)-A **R32** **R410A**

PEFY-M VMA(L)-A1 **R32** **R410A**

• Technologies and functions ..... P.160



A wide range of external static pressure and the slim 250-mm-height body provide design flexibility for narrow ceiling spaces. The lineup consists of up to M140 with the same height.

## Five levels of external static pressure settings

Five-stage external static pressure settings provide flexibility for duct extension, branching, and air outlet configuration and are adjustable to meet different application conditions. Settings range to a maximum of 150Pa.

### • External static pressure setting

| Series           | 20                  | 25 | 32 | 40 | 50 | 63 | 71                  | 80 | 100 | 125 | 140 |
|------------------|---------------------|----|----|----|----|----|---------------------|----|-----|-----|-----|
| PEFY-M VMA(L)-A  | 35/50/70/100/150 Pa |    |    |    |    |    | 40/50/70/100/150 Pa |    |     |     |     |
| PEFY-M VMA(L)-A1 | 35/50/70/100/150 Pa |    |    |    |    |    | 40/50/70/100/150 Pa |    |     |     |     |

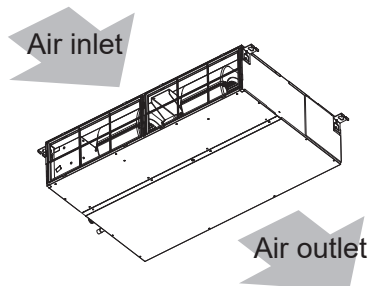
## Four fan speeds to choose from

The conventional models had three levels of fan speed, but the new models offer four levels (Low/Mid2/Mid1/High). Combined with a wider selection of external static pressure levels, the new models offer optimal operation settings to suit the air-conditioning load of the installation space.

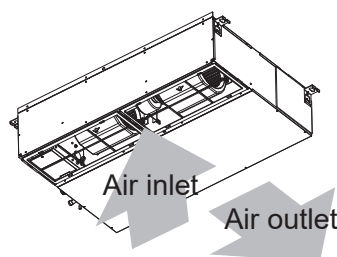
## Air inlet direction can be easily changed

By simply switching the closing board and air filter, the inlet layout can be changed from the rear inlet to the bottom inlet. (At factory shipment: Rear inlet)

### • Rear inlet



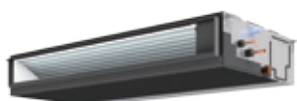
### • Bottom inlet



\* Units with a bottom inlet make more noise than those with a rear inlet. The rear inlet is recommended for rooms that need to be quiet, such as bedrooms.

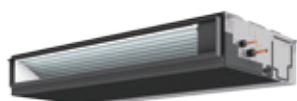
## Optional drain pump

The lineup consists of two types of models, with or without a built-in drain pump, for more flexibility in piping layout design.



Built-in drain pump

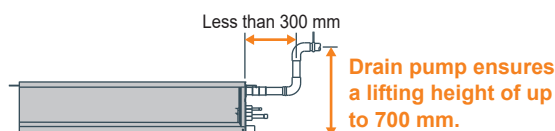
PEFY-M VMA-A  
PEFY-M VMA-A1



No drain pump

PEFY-M VMAL-A  
PEFY-M VMAL-A1

\*Units with an "L" at the end of the model name are not equipped with a drain pump.



## Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side (PEFY-M VMAL-A1 only). For installation, PQ attachment or PQ box is required.

# Ceiling concealed type **R32** **R410A**

## Medium static pressure type **PEFY-M VMA-A** (built-in drain pump)

|                                                                    |                     | PEFY-M20VMA-A                            | PEFY-M25VMA-A                         | PEFY-M32VMA-A                         | PEFY-M40VMA-A                         | PEFY-M50VMA-A                         | PEFY-M63VMA-A                         |
|--------------------------------------------------------------------|---------------------|------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Power source                                                       |                     | 1-phase 220-230-240 V 50 Hz              | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           |
| Cooling capacity                                                   | *1 kW               | 2.2                                      | 2.8                                   | 3.6                                   | 4.5                                   | 5.6                                   | 7.1                                   |
| (Nominal)                                                          | *1 BTU/h            | 7,500                                    | 9,600                                 | 12,300                                | 15,400                                | 19,100                                | 24,200                                |
|                                                                    | *2 Power input kW   | 0.032                                    | 0.032                                 | 0.044                                 | 0.047                                 | 0.066                                 | 0.087                                 |
|                                                                    | *2 Current input A  | 0.26-0.25-0.24                           | 0.26-0.25-0.24                        | 0.36-0.34-0.33                        | 0.39-0.37-0.36                        | 0.53-0.51-0.49                        | 0.69-0.66-0.63                        |
| Heating capacity                                                   | *3 kW               | 2.5                                      | 3.2                                   | 4.0                                   | 5.0                                   | 6.3                                   | 8.0                                   |
| (Nominal)                                                          | *3 BTU/h            | 8,500                                    | 10,900                                | 13,600                                | 17,100                                | 21,500                                | 27,300                                |
|                                                                    | *2 Power input kW   | 0.030                                    | 0.030                                 | 0.042                                 | 0.045                                 | 0.064                                 | 0.085                                 |
|                                                                    | *2 Current input A  | 0.26-0.25-0.24                           | 0.26-0.25-0.24                        | 0.36-0.34-0.33                        | 0.39-0.37-0.36                        | 0.53-0.51-0.49                        | 0.69-0.66-0.63                        |
| External finish                                                    |                     | Galvanized steel plate                   | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                |
| External dimension                                                 | mm                  | 250 x 700 x 732                          | 250 x 700 x 732                       | 250 x 700 x 732                       | 250 x 900 x 732                       | 250 x 900 x 732                       | 250 x 900 x 732                       |
| H x W x D                                                          | in.                 | 9-7/8 x 27-9/16 x 28-7/8                 | 9-7/8 x 27-9/16 x 28-7/8              | 9-7/8 x 27-9/16 x 28-7/8              | 9-7/8 x 35-7/16 x 28-7/8              | 9-7/8 x 35-7/16 x 28-7/8              | 9-7/8 x 35-7/16 x 28-7/8              |
| Net weight                                                         | kg (lbs)            | 21 (47)                                  | 21 (47)                               | 21 (47)                               | 25 (56)                               | 25 (56)                               | 27 (60)                               |
| Heat exchanger                                                     |                     | Cross fin (Aluminum fin and copper tube) |                                       |                                       |                                       |                                       |                                       |
| FAN                                                                | Type x Quantity     | Sirocco fan x 1                          | Sirocco fan x 1                       | Sirocco fan x 1                       | Sirocco fan x 2                       | Sirocco fan x 2                       | Sirocco fan x 2                       |
| *4 External static press.                                          | Pa                  | 35 - <50> - <70> - <100> - <150>         | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      |
|                                                                    | mmH <sub>2</sub> O  | 3.6 - <5.1> - <7.1> - <10.2> - <15.3>    | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> |
|                                                                    | Motor Type          | DC motor                                 | DC motor                              | DC motor                              | DC motor                              | DC motor                              | DC motor                              |
|                                                                    | Motor output kW     | 0.085                                    | 0.085                                 | 0.085                                 | 0.121                                 | 0.121                                 | 0.121                                 |
|                                                                    | Driving mechanism   | Direct-driven by motor                   | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                |
|                                                                    | Air flow rate       | (Low-Mid-High)                           |                                       |                                       |                                       |                                       |                                       |
|                                                                    | m <sup>3</sup> /min | 6.0 - 7.5 - 8.5                          | 6.0 - 7.5 - 8.5                       | 7.5 - 9.0 - 10.5                      | 10.0 - 12.0 - 14.0                    | 12.0 - 14.5 - 17.0                    | 13.5 - 16.0 - 19.0                    |
|                                                                    | L/s                 | 100 - 125 - 142                          | 100 - 125 - 142                       | 125 - 150 - 175                       | 167 - 200 - 233                       | 200 - 242 - 283                       | 225 - 267 - 317                       |
|                                                                    | cfm                 | 212 - 265 - 300                          | 212 - 265 - 300                       | 265 - 318 - 371                       | 353 - 424 - 494                       | 424 - 512 - 600                       | 477 - 565 - 671                       |
| Sound pressure level (measured in *2 *5 *7 anechoic room) *2 *6 *7 | dB<A>               | 21.0-25.0-27.0                           | 21.0-25.0-27.0                        | 23.0-27.0-30.0                        | 23.0-28.0-31.0                        | 24.0-31.0-34.0                        | 27.0-31.0-35.0                        |
|                                                                    |                     | 18.0-22.0-24.0                           | 18.0-22.0-24.0                        | 20.0-24.0-27.0                        | 20.0-25.0-28.0                        | 21.0-28.0-31.0                        | 24.0-28.0-32.0                        |
| Air filter                                                         |                     | PP honeycomb fabric.                     | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  |
| Connectable outdoor unit                                           |                     | R32, R410A CITY MULTI                    | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 |
| Refrigerant                                                        | Liquid              | mm (in.)                                 | 6.35 (1/4) Braze                      | 6.35 (1/4) Braze                      | 6.35 (1/4) Braze                      | 6.35 (1/4) Braze                      | 9.52 (3/8) Braze                      |
| piping diameter                                                    | Gas                 | mm (in.)                                 | 12.7 (1/2) Braze                      | 12.7 (1/2) Braze                      | 12.7 (1/2) Braze                      | 12.7 (1/2) Braze                      | 15.88 (5/8) Braze                     |
| 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")                       | O.D.32 (1-1/4")                       | O.D.32 (1-1/4")                       |
| Optional parts                                                     | Filter box          | PAC-KE91TB-E                             | PAC-KE91TB-E                          | PAC-KE91TB-E                          | PAC-KE92TB-E                          | PAC-KE92TB-E                          | PAC-KE92TB-E                          |

|                                                                    |                     | PEFY-M71VMA-A                            | PEFY-M80VMA-A                         | PEFY-M100VMA-A                        | PEFY-M125VMA-A                        | PEFY-M140VMA-A                        |
|--------------------------------------------------------------------|---------------------|------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Power source                                                       |                     | 1-phase 220-230-240 V 50 Hz              | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           |
| Cooling capacity                                                   | *1 kW               | 8.0                                      | 9.0                                   | 11.2                                  | 14.0                                  | 16.0                                  |
| (Nominal)                                                          | *1 BTU/h            | 27,300                                   | 30,700                                | 38,200                                | 47,800                                | 54,600                                |
|                                                                    | *2 Power input kW   | 0.080                                    | 0.080                                 | 0.142                                 | 0.199                                 | 0.208                                 |
|                                                                    | *2 Current input A  | 0.60-0.57-0.55                           | 0.60-0.57-0.55                        | 1.01-0.97-0.93                        | 1.29-1.23-1.18                        | 1.40-1.34-1.28                        |
| Heating capacity                                                   | *3 kW               | 9.0                                      | 10.0                                  | 12.5                                  | 16.0                                  | 18.0                                  |
| (Nominal)                                                          | *3 BTU/h            | 30,700                                   | 34,100                                | 42,700                                | 54,600                                | 61,400                                |
|                                                                    | *2 Power input kW   | 0.078                                    | 0.078                                 | 0.140                                 | 0.197                                 | 0.206                                 |
|                                                                    | *2 Current input A  | 0.60-0.57-0.55                           | 0.60-0.57-0.55                        | 1.01-0.97-0.93                        | 1.29-1.23-1.18                        | 1.40-1.34-1.28                        |
| External finish                                                    |                     | Galvanized steel plate                   | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                |
| External dimension                                                 | mm                  | 250 x 1,100 x 732                        | 250 x 1,100 x 732                     | 250 x 1,400 x 732                     | 250 x 1,400 x 732                     | 250 x 1,600 x 732                     |
| H x W x D                                                          | in.                 | 9-7/8 x 43-5/16 x 28-7/8                 | 9-7/8 x 43-5/16 x 28-7/8              | 9-7/8 x 55-1/8 x 28-7/8               | 9-7/8 x 55-1/8 x 28-7/8               | 9-7/8 x 63 x 28-7/8                   |
| Net weight                                                         | kg (lbs)            | 30 (67)                                  | 30 (67)                               | 37 (82)                               | 38 (84)                               | 42 (93)                               |
| Heat exchanger                                                     |                     | Cross fin (Aluminum fin and copper tube) |                                       |                                       |                                       |                                       |
| FAN                                                                | Type x Quantity     | Sirocco fan x 2                          | Sirocco fan x 2                       | Sirocco fan x 3                       | Sirocco fan x 3                       | Sirocco fan x 3                       |
| *4 External static press.                                          | Pa                  | 40 - <50> - <70> - <100> - <150>         | 40 - <50> - <70> - <100> - <150>      | 40 - <50> - <70> - <100> - <150>      | 40 - <50> - <70> - <100> - <150>      | 40 - <50> - <70> - <100> - <150>      |
|                                                                    | mmH <sub>2</sub> O  | 4.1 - <5.1> - <7.1> - <10.2> - <15.3>    | 4.1 - <5.1> - <7.1> - <10.2> - <15.3> | 4.1 - <5.1> - <7.1> - <10.2> - <15.3> | 4.1 - <5.1> - <7.1> - <10.2> - <15.3> | 4.1 - <5.1> - <7.1> - <10.2> - <15.3> |
|                                                                    | Motor Type          | DC motor                                 | DC motor                              | DC motor                              | DC motor                              | DC motor                              |
|                                                                    | Motor output kW     | 0.121                                    | 0.121                                 | 0.300                                 | 0.300                                 | 0.300                                 |
|                                                                    | Driving mechanism   | Direct-driven by motor                   | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                |
|                                                                    | Air flow rate       | (Low-Mid-High)                           |                                       |                                       |                                       |                                       |
|                                                                    | m <sup>3</sup> /min | 14.5 - 18.0 - 21.0                       | 14.5 - 18.0 - 21.0                    | 23.0 - 28.0 - 32.0                    | 28.0 - 34.0 - 37.0                    | 29.5 - 35.5 - 40.0                    |
|                                                                    | L/s                 | 242 - 300 - 350                          | 242 - 300 - 350                       | 383 - 467 - 533                       | 467 - 567 - 617                       | 492 - 592 - 667                       |
|                                                                    | cfm                 | 512 - 636 - 742                          | 512 - 636 - 742                       | 812 - 989 - 1,130                     | 989 - 1,201 - 1,306                   | 1,042 - 1,254 - 1,412                 |
| Sound pressure level (measured in *2 *5 *7 anechoic room) *2 *6 *7 | dB<A>               | 25.0-31.0-34.0                           | 25.0-31.0-34.0                        | 30.0-35.0-38.0                        | 34.0-38.0-40.0                        | 33.0-37.0-40.0                        |
|                                                                    |                     | 22.0-28.0-31.0                           | 22.0-28.0-31.0                        | 27.0-32.0-35.0                        | 31.0-35.0-37.0                        | 30.0-34.0-37.0                        |
| Air filter                                                         |                     | PP honeycomb fabric.                     | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  |
| Connectable outdoor unit                                           |                     | R32, R410A CITY MULTI                    | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 |
| Refrigerant                                                        | Liquid              | mm (in.)                                 | 9.52 (3/8) Braze                      | 9.52 (3/8) Braze                      | 9.52 (3/8) Braze                      | 9.52 (3/8) Braze                      |
| piping diameter                                                    | Gas                 | mm (in.)                                 | 15.88 (5/8) Braze                     | 15.88 (5/8) Braze                     | 15.88 (5/8) Braze                     | 15.88 (5/8) Braze                     |
| 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")                       | O.D.32 (1-1/4")                       |
| Optional parts                                                     | Filter box          | PAC-KE93TB-E                             | PAC-KE93TB-E                          | PAC-KE94TB-E                          | PAC-KE94TB-E                          | PAC-KE95TB-E                          |

### Notes:

- \*1 Nominal cooling conditions  
Indoor: 27°CDB/19°CWB (81°FDB/66°FWB), Outdoor: 35°CDB (95°FDB)  
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- \*2 The values are measured at the factory setting of external static pressure.
- \*3 Nominal heating conditions  
Indoor: 20°CDB (68°FDB), Outdoor: 7°CDB/6°CWB (45°FDB/43°FWB)  
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- \*4 The factory setting of airflow mode and external static pressure mode 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.
- \*5 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.
- \*6 Measured in anechoic room with a 2 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.

- \*7 The sound pressure level measured by the conventional method in JIS.
- \* R32 is flammable, and certain restrictions apply to the installation of units.  
For detail, refer to the section in the Databook on installation restrictions.
- \* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- \* Due to continuing improvement, above specifications may be subject to change without notice.
- \* When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

|                          | Outdoor unit             | (E)M200 | (E)M250 | (E)M300 |
|--------------------------|--------------------------|---------|---------|---------|
| Connectable indoor units | Not including M20 or M25 | 1-20    | 1-25    | 1-30    |
|                          | Including M20 or M25     | 1-8     | 1-10    | 1-12    |

# Ceiling concealed type **R32** **R410A**

## Medium static pressure type **PEFY-M VMAL-A** (Without drain pump)

|                                                                       |                           |                        | PEFY-M20VMAL-A                           | PEFY-M25VMAL-A                        | PEFY-M32VMAL-A                        | PEFY-M40VMAL-A                        | PEFY-M50VMAL-A                        | PEFY-M63VMAL-A                        |                |  |                |  |                |  |
|-----------------------------------------------------------------------|---------------------------|------------------------|------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------|--|----------------|--|----------------|--|
| Power source                                                          |                           |                        | 1-phase 220-230-240 V 50 Hz              | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           |                |  |                |  |                |  |
| Cooling capacity                                                      | *1                        | kW                     | 2.2                                      | 2.8                                   | 3.6                                   | 4.5                                   | 5.6                                   | 7.1                                   |                |  |                |  |                |  |
| (Nominal)                                                             | *1                        | BTU/h                  | 7,500                                    | 9,600                                 | 12,300                                | 15,400                                | 19,100                                | 24,200                                |                |  |                |  |                |  |
|                                                                       | *2                        | Power input            | kW                                       | 0.030                                 | 0.042                                 | 0.045                                 | 0.064                                 | 0.085                                 |                |  |                |  |                |  |
|                                                                       | *2                        | Current input          | A                                        | 0.26-0.25-0.24                        | 0.26-0.25-0.24                        | 0.36-0.34-0.33                        | 0.39-0.37-0.36                        | 0.53-0.51-0.49                        | 0.69-0.66-0.63 |  |                |  |                |  |
| Heating capacity                                                      | *3                        | kW                     | 2.5                                      | 3.2                                   | 4.0                                   | 5.0                                   | 6.3                                   | 8.0                                   |                |  |                |  |                |  |
| (Nominal)                                                             | *3                        | BTU/h                  | 8,500                                    | 10,900                                | 13,600                                | 17,100                                | 21,500                                | 27,300                                |                |  |                |  |                |  |
|                                                                       | *2                        | Power input            | kW                                       | 0.030                                 | 0.042                                 | 0.045                                 | 0.064                                 | 0.085                                 |                |  |                |  |                |  |
|                                                                       | *2                        | Current input          | A                                        | 0.26-0.25-0.24                        | 0.26-0.25-0.24                        | 0.36-0.34-0.33                        | 0.39-0.37-0.36                        | 0.53-0.51-0.49                        | 0.69-0.66-0.63 |  |                |  |                |  |
| External finish                                                       |                           |                        | Galvanized steel plate                   | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                |                |  |                |  |                |  |
| External dimension<br>H x W x D                                       |                           | mm                     | 250 x 700 x 732                          | 250 x 700 x 732                       | 250 x 700 x 732                       | 250 x 900 x 732                       | 250 x 900 x 732                       | 250 x 900 x 732                       |                |  |                |  |                |  |
|                                                                       |                           | in.                    | 9-7/8 x 27-9/16 x 28-7/8                 | 9-7/8 x 27-9/16 x 28-7/8              | 9-7/8 x 27-9/16 x 28-7/8              | 9-7/8 x 35-7/16 x 28-7/8              | 9-7/8 x 35-7/16 x 28-7/8              | 9-7/8 x 35-7/16 x 28-7/8              |                |  |                |  |                |  |
| Net weight                                                            |                           | kg (lbs)               | 20 (45)                                  | 20 (45)                               | 20 (45)                               | 24 (53)                               | 24 (53)                               | 26 (58)                               |                |  |                |  |                |  |
| Heat exchanger                                                        |                           |                        | Cross fin (Aluminum fin and copper tube) |                                       |                                       |                                       |                                       |                                       |                |  |                |  |                |  |
| FAN                                                                   | Type x Quantity           |                        | Sirocco fan x 1                          | Sirocco fan x 1                       | Sirocco fan x 1                       | Sirocco fan x 2                       | Sirocco fan x 2                       | Sirocco fan x 2                       |                |  |                |  |                |  |
|                                                                       | *4 External static press. | Pa                     | 35 - <50> - <70> - <100> - <150>         | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      | 35 - <50> - <70> - <100> - <150>      |                |  |                |  |                |  |
|                                                                       |                           | mmH <sub>2</sub> O     | 3.6 - <5.1> - <7.1> - <10.2> - <15.3>    | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> | 3.6 - <5.1> - <7.1> - <10.2> - <15.3> |                |  |                |  |                |  |
|                                                                       | Motor Type                | DC motor               | DC motor                                 | DC motor                              | DC motor                              | DC motor                              | DC motor                              |                                       |                |  |                |  |                |  |
|                                                                       | Motor output              | kW                     | 0.085                                    | 0.085                                 | 0.085                                 | 0.121                                 | 0.121                                 | 0.121                                 |                |  |                |  |                |  |
|                                                                       | Driving mechanism         | Direct-driven by motor | Direct-driven by motor                   | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                |                                       |                |  |                |  |                |  |
|                                                                       | Air flow rate             | (Low-Mid-High)         |                                          |                                       |                                       |                                       |                                       |                                       |                |  |                |  |                |  |
|                                                                       |                           | m <sup>3</sup> /min    | 6.0 - 7.5 - 8.5                          | 6.0 - 7.5 - 8.5                       | 7.5 - 9.0 - 10.5                      | 10.0 - 12.0 - 14.0                    | 12.0 - 14.5 - 17.0                    | 13.5 - 16.0 - 19.0                    |                |  |                |  |                |  |
|                                                                       | L/s                       | 100 - 125 - 142        | 100 - 125 - 142                          | 125 - 150 - 175                       | 167 - 200 - 233                       | 200 - 242 - 283                       | 225 - 267 - 317                       |                                       |                |  |                |  |                |  |
|                                                                       | cfm                       | 212 - 265 - 300        | 212 - 265 - 300                          | 265 - 318 - 371                       | 353 - 424 - 494                       | 424 - 512 - 600                       | 477 - 565 - 671                       |                                       |                |  |                |  |                |  |
| Sound pressure level<br>(measured in *2 *5 *7 anechoic room) *2 *6 *7 |                           |                        | (Low-Mid-High)                           |                                       |                                       |                                       |                                       |                                       |                |  |                |  |                |  |
|                                                                       |                           |                        | 21.0-25.0-27.0                           |                                       | 21.0-25.0-27.0                        |                                       | 23.0-27.0-30.0                        |                                       | 23.0-28.0-31.0 |  | 24.0-31.0-34.0 |  | 27.0-31.0-35.0 |  |
|                                                                       |                           |                        | 18.0-22.0-24.0                           |                                       | 18.0-22.0-24.0                        |                                       | 20.0-24.0-27.0                        |                                       | 20.0-25.0-28.0 |  | 21.0-28.0-31.0 |  | 24.0-28.0-32.0 |  |
| Air filter                                                            |                           |                        | PP honeycomb fabric.                     | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  |                |  |                |  |                |  |
| Connectable outdoor unit                                              |                           |                        | R32, R410A CITY MULTI                    | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 |                |  |                |  |                |  |
| Refrigerant                                                           | Liquid                    | mm (in.)               | 6.35 (1/4) Brazed                        | 6.35 (1/4) Brazed                     | 6.35 (1/4) Brazed                     | 6.35 (1/4) Brazed                     | 6.35 (1/4) Brazed                     | 9.52 (3/8) Brazed                     |                |  |                |  |                |  |
| piping diameter                                                       | Gas                       | mm (in.)               | 12.7 (1/2) Brazed                        | 12.7 (1/2) Brazed                     | 12.7 (1/2) Brazed                     | 12.7 (1/2) Brazed                     | 12.7 (1/2) Brazed                     | 15.88 (5/8) Brazed                    |                |  |                |  |                |  |
| 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")                       | O.D.32 (1-1/4")                       | O.D.32 (1-1/4")                       |                |  |                |  |                |  |
| Optional parts                                                        | Filter box                |                        | PAC-KE91TB-E                             | PAC-KE91TB-E                          | PAC-KE91TB-E                          | PAC-KE92TB-E                          | PAC-KE92TB-E                          | PAC-KE92TB-E                          |                |  |                |  |                |  |

|                                                                    |                        |                    | PEFY-M71VMAL-A                           | PEFY-M80VMAL-A                        | PEFY-M100VMAL-A                       | PEFY-M125VMAL-A                       | PEFY-M140VMAL-A                       |
|--------------------------------------------------------------------|------------------------|--------------------|------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Power source                                                       |                        |                    | 1-phase 220-230-240 V 50 Hz              | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           | 1-phase 220-230-240 V 50 Hz           |
| Cooling capacity                                                   |                        | *1 kW              | 8.0                                      | 9.0                                   | 11.2                                  | 14.0                                  | 16.0                                  |
| (Nominal)                                                          |                        | *1 BTU/h           | 27,300                                   | 30,700                                | 38,200                                | 47,800                                | 54,600                                |
| *2 Power input                                                     |                        | kW                 | 0.078                                    | 0.078                                 | 0.140                                 | 0.197                                 | 0.206                                 |
| *2 Current input                                                   |                        | A                  | 0.60-0.57-0.55                           | 0.60-0.57-0.55                        | 1.01-0.97-0.93                        | 1.29-1.23-1.18                        | 1.40-1.34-1.28                        |
| Heating capacity                                                   |                        | *3 kW              | 9.0                                      | 10.0                                  | 12.5                                  | 16.0                                  | 18.0                                  |
| (Nominal)                                                          |                        | *3 BTU/h           | 30,700                                   | 34,100                                | 42,700                                | 54,600                                | 61,400                                |
| *2 Power input                                                     |                        | kW                 | 0.078                                    | 0.078                                 | 0.140                                 | 0.197                                 | 0.206                                 |
| *2 Current input                                                   |                        | A                  | 0.60-0.57-0.55                           | 0.60-0.57-0.55                        | 1.01-0.97-0.93                        | 1.29-1.23-1.18                        | 1.40-1.34-1.28                        |
| External finish                                                    |                        |                    | Galvanized steel plate                   | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                | Galvanized steel plate                |
| External dimension                                                 |                        | mm                 | 250 x 1,100 x 732                        | 250 x 1,100 x 732                     | 250 x 1,400 x 732                     | 250 x 1,400 x 732                     | 250 x 1,600 x 732                     |
| H x W x D                                                          |                        | in.                | 9-7/8 x 43-5/16 x 28-7/8                 | 9-7/8 x 43-5/16 x 28-7/8              | 9-7/8 x 55-1/8 x 28-7/8               | 9-7/8 x 55-1/8 x 28-7/8               | 9-7/8 x 63 x 28-7/8                   |
| Net weight                                                         |                        | kg (lbs)           | 29 (64)                                  | 29 (64)                               | 36 (80)                               | 37 (82)                               | 41 (91)                               |
| Heat exchanger                                                     |                        |                    | Cross fin (Aluminum fin and copper tube) |                                       |                                       |                                       |                                       |
| FAN                                                                |                        | Type x Quantity    | Sirocco fan x 2                          | Sirocco fan x 2                       | Sirocco fan x 3                       | Sirocco fan x 3                       | Sirocco fan x 3                       |
| *4                                                                 | External static press. | Pa                 | 40 - <50> - <70> - <100> - <150>         | 40 - <50> - <70> - <100> - <150>      | 40 - <50> - <70> - <100> - <150>      | <40> - 50 - <70> - <100> - <150>      | <40> - 50 - <70> - <100> - <150>      |
|                                                                    |                        | mmH <sub>2</sub> O | 4.1 - <5.1> - <7.1> - <10.2> - <15.3>    | 4.1 - <5.1> - <7.1> - <10.2> - <15.3> | 4.1 - <5.1> - <7.1> - <10.2> - <15.3> | <4.1> - 5.1 - <7.1> - <10.2> - <15.3> | <4.1> - 5.1 - <7.1> - <10.2> - <15.3> |
|                                                                    | Motor Type             | DC motor           | DC motor                                 | DC motor                              | DC motor                              | DC motor                              |                                       |
|                                                                    | Motor output           | kW                 | 0.121                                    | 0.121                                 | 0.300                                 | 0.300                                 | 0.300                                 |
|                                                                    | Driving mechanism      |                    | Direct-driven by motor                   | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                | Direct-driven by motor                |
|                                                                    | Air flow rate          |                    | (Low-Mid-High)                           |                                       |                                       |                                       |                                       |
|                                                                    | m <sup>3</sup> /min    | 14.5 - 18.0 - 21.0 | 14.5 - 18.0 - 21.0                       | 23.0 - 28.0 - 32.0                    | 28.0 - 34.0 - 37.0                    | 29.5 - 35.5 - 40.0                    |                                       |
|                                                                    | L/s                    | 242 - 300 - 350    | 242 - 300 - 350                          | 383 - 467 - 533                       | 467 - 567 - 617                       | 492 - 592 - 667                       |                                       |
|                                                                    | cfm                    | 512 - 636 - 742    | 512 - 636 - 742                          | 812 - 989 - 1,130                     | 989 - 1,201 - 1,306                   | 1,042 - 1,254 - 1,412                 |                                       |
| Sound pressure level (measured in *2 *5 *7 anechoic room) *2 *6 *7 |                        |                    | (Low-Mid-High)                           |                                       |                                       |                                       |                                       |
|                                                                    |                        | dB<A>              | 25.0-31.0-34.0                           | 25.0-31.0-34.0                        | 30.0-35.0-38.0                        | 34.0-38.0-40.0                        | 33.0-37.0-40.0                        |
|                                                                    |                        |                    | 22.0-28.0-31.0                           | 22.0-28.0-31.0                        | 27.0-32.0-35.0                        | 31.0-35.0-37.0                        | 30.0-34.0-37.0                        |
| Air filter                                                         |                        |                    | PP honeycomb fabric.                     | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  | PP honeycomb fabric.                  |
| Connectable outdoor unit                                           |                        |                    | R32, R410A CITY MULTI                    | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 | R32, R410A CITY MULTI                 |
| Refrigerant                                                        | Liquid                 | mm (in.)           | 9.52 (3/8) Braze                         | 9.52 (3/8) Braze                      | 9.52 (3/8) Braze                      | 9.52 (3/8) Braze                      | 9.52 (3/8) Braze                      |
| piping diameter                                                    | Gas                    | mm (in.)           | 15.88 (5/8) Braze                        | 15.88 (5/8) Braze                     | 15.88 (5/8) Braze                     | 15.88 (5/8) Braze                     | 15.88 (5/8) Braze                     |
| 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")                       | O.D.32 (1-1/4")                       |
| Optional parts                                                     | Filter box             |                    | PAC-KE93TB-E                             | PAC-KE93TB-E                          | PAC-KE94TB-E                          | PAC-KE94TB-E                          | PAC-KE95TB-E                          |

### Notes:

- \*1 Nominal cooling conditions  
Indoor: 27°CDB/19°CWB (81°FDB/66°FWB), Outdoor: 35°CDB (95°FDB)  
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- \*2 The values are measured at the factory setting of external static pressure.
- \*3 Nominal heating conditions  
Indoor: 20°CDB (68°FDB), Outdoor: 7°CDB/6°CWB (45°FDB/43°FWB)  
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- \*4 The factory setting of airflow mode and external static pressure mode 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.
- \*5 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.

- \*6 Measured in anechoic room with a 2 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.
- \*7 The sound pressure level measured by the conventional method in JIS.
- \* R32 is flammable, and certain restrictions apply to the installation of units.  
For detail, refer to the section in the Databook on installation restrictions.
- \* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- \* Due to continuing improvement, above specifications may be subject to change without notice.
- \* When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

|                          | Outdoor unit             | (E)M200 | (E)M250 | (E)M300 |
|--------------------------|--------------------------|---------|---------|---------|
| Connectable indoor units | Not including M20 or M25 | 1-20    | 1-25    | 1-30    |
|                          | Including M20 or M25     | 1-8     | 1-10    | 1-12    |

# Ceiling concealed type

## High static pressure type

PEFY-P VMHS-E **R410A**

• Technologies and functions ..... P.160



PEFY-P VMHS-E  
(P40-P140)



PEFY-P VMHS-E (P200/P250)

A wide range of external static pressure allows authentic duct air-conditioning with an elegant interior layout.

Maximum 250 Pa of external static pressure allows easy duct design

High external static pressure enables long duct and more freedom in design. It allows high interior oriented ducted air conditioning.

| PEFY-P VMHS-E                 | P40                        | P50 | P63 | P71 | P80 | P100 | P125 | P140 |
|-------------------------------|----------------------------|-----|-----|-----|-----|------|------|------|
| External static pressure (Pa) | 50 – <100> – <150> – <200> |     |     |     |     |      |      |      |

| PEFY-P VMHS-E                 | P200                               | P250 |
|-------------------------------|------------------------------------|------|
| External static pressure (Pa) | <50> – <100> – 150 – <200> – <250> |      |

The factory setting of external static pressure is shown without chevrons "<" ">".

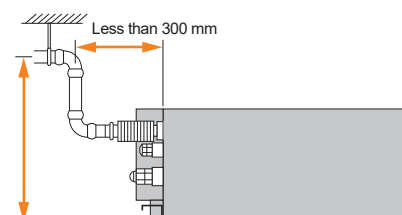
Refer to "Fan characteristics curves", according to the external static pressure, in the DATA BOOK for the usable range of the air flow rate.



Drain pump (option) ensures up to 550 mm (21-11/16 in.) of lift for P40-P140 VMHS models / 700 mm (27-9/16 in.) for P200/P250VMHS models

The introduction of an upper drain pump allows the drain connection to be raised as high as 550 mm (21-11/16 in.) for P40-P140VMHS models/700 mm (27-9/16 in.) for P200/P250VMHS models, allowing more freedom in piping layout design and reducing horizontal piping requirements.

Drain pump ensures up to 550 mm of lift (P40-P140VMHS models), 700 mm of lift (P200/P250 VMHS models)



## IT terminal

IT terminal is available. For details, contact your local distributor.

Lineup &  
Functions

Y-Series

R2-Series

ZUBADAN  
-Series

S-Series

BC Controllers

Ceiling  
cassette type

Ceiling  
concealed type

Ceiling  
suspended type

Wall-mounted  
type

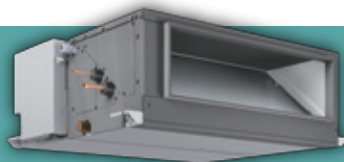
Floor standing  
type

Functions

LOSSNAY  
System

Remote  
Controller

Hot Water  
Solution



## P140 (6 HP) and smaller models with a DC motor

### The use of a DC motor

In the past, the only models featuring a DC motor were the P200 (8 HP) and P250 (10 HP). Now, the P140 (6 HP) and smaller models feature a DC motor that consumes less power compared to AC motors. In the P80 models, power consumption is reduced by 59%\*.

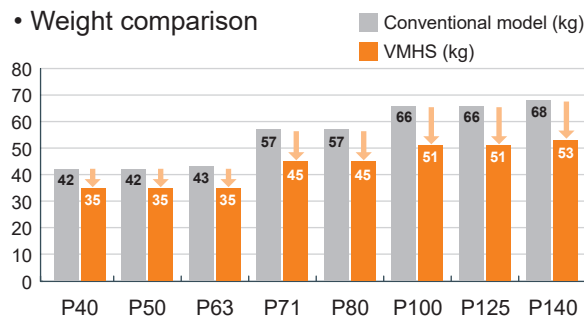
\*Comparison made at 50 Hz, 220 V, 100 Pa low fan speed

|               |          |     |     |     |     |      |      |      |          |      |
|---------------|----------|-----|-----|-----|-----|------|------|------|----------|------|
|               | P40      | P50 | P63 | P71 | P80 | P100 | P125 | P140 | P200     | P250 |
| PEFY-P VMH(S) | AC motor |     |     |     |     |      |      |      | DC motor |      |
| PEFY-P VMHS   | DC motor |     |     |     |     |      |      |      |          |      |

### Reduced weight

By downsizing the motor, the unit weight has been reduced, offering easier installation.

#### • Weight comparison



### Drain pumps (sold separately) with a DC motor are now also available.

The use of a high-efficiency DC motor for the drain pump motor in the latest models reduces power consumption by 90%, in comparison to conventional models. The pump head height of 550 mm provides for greater piping design flexibility.

### Four levels of external static pressure settings

While the conventional models only had three levels of external static pressure, the latest models offer four levels of external static pressure. The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

|             |            | P40                  | P50 | P63 | P71 | P80 | P100 | P125 | P140 |
|-------------|------------|----------------------|-----|-----|-----|-----|------|------|------|
| PEFY-P VMH  | 220 V      | <50>-100-<200>       |     |     |     |     |      |      |      |
|             | 230, 240 V | <100>-150-<200>      |     |     |     |     |      |      |      |
| PEFY-P VMHS | 220-240 V  | 50-<100>-<150>-<200> |     |     |     |     |      |      |      |

Four levels of external pressure settings

The factory setting of external static pressure is shown without brackets (< >).

Refer to "Fan characteristics curves" according to the external static pressure, in the DATA BOOK for the usable range of airflow rate.

### Three fan speeds (Low/Mid/High) to choose from

The conventional models had two levels of fan speed, but the latest models offer three levels (Low/Mid/High). Combined with a wider selection of external static pressure levels, the latest models offer optimal operation settings to suit the air-conditioning load of the installation space.

# Ceiling concealed type **R410A**

## High static pressure **PEFY-P VMHS-E**

|                                                  |                              |                                  | PEFY-<br>P40VMHS-E                                                                             | PEFY-<br>P50VMHS-E    | PEFY-<br>P63VMHS-E             | PEFY-<br>P71VMHS-E     | PEFY-<br>P80VMHS-E             | PEFY-<br>P100VMHS-E    | PEFY-<br>P125VMHS-E            | PEFY-<br>P140VMHS-E    |                    |
|--------------------------------------------------|------------------------------|----------------------------------|------------------------------------------------------------------------------------------------|-----------------------|--------------------------------|------------------------|--------------------------------|------------------------|--------------------------------|------------------------|--------------------|
| Power source                                     |                              |                                  | 1-phase 220-230-240 V 50/60 Hz                                                                 |                       |                                |                        |                                |                        |                                |                        |                    |
| Cooling capacity<br>(Nominal)                    | *1                           | kW                               | 4.5                                                                                            | 5.6                   | 7.1                            | 8.0                    | 9.0                            | 11.2                   | 14.0                           | 16.0                   |                    |
|                                                  | *1                           | BTU/h                            | 15,400                                                                                         | 19,100                | 24,200                         | 27,300                 | 30,700                         | 38,200                 | 47,800                         | 54,600                 |                    |
|                                                  | *2                           | Power input                      | kW                                                                                             | 0.055                 | 0.055                          | 0.090                  | 0.075                          | 0.090                  | 0.160                          | 0.160                  | 0.190              |
| Heating capacity<br>(Nominal)                    | *2                           | Current input<br>(220-230-240 V) | A                                                                                              | 0.41 - 0.39 - 0.38    | 0.41 - 0.39 - 0.38             | 0.64 - 0.62 - 0.59     | 0.54 - 0.52 - 0.50             | 0.63 - 0.61 - 0.58     | 1.05 - 1.01 - 0.96             | 1.05 - 1.01 - 0.96     | 1.24 - 1.19 - 1.14 |
|                                                  | *3                           | kW                               | 5.0                                                                                            | 6.3                   | 8.0                            | 9.0                    | 10.0                           | 12.5                   | 16.0                           | 18.0                   |                    |
|                                                  | *3                           | BTU/h                            | 17,100                                                                                         | 21,500                | 27,300                         | 30,700                 | 34,100                         | 42,700                 | 54,600                         | 61,400                 |                    |
| External finish                                  | *2                           | Power input                      | kW                                                                                             | 0.055                 | 0.055                          | 0.090                  | 0.075                          | 0.090                  | 0.160                          | 0.160                  | 0.190              |
|                                                  | *2                           | Current input<br>(220-230-240 V) | A                                                                                              | 0.41 - 0.39 - 0.38    | 0.41 - 0.39 - 0.38             | 0.64 - 0.62 - 0.59     | 0.54 - 0.52 - 0.50             | 0.63 - 0.61 - 0.58     | 1.05 - 1.01 - 0.96             | 1.05 - 1.01 - 0.96     | 1.24 - 1.19 - 1.14 |
|                                                  | Galvanized steel plate       |                                  |                                                                                                |                       |                                |                        |                                |                        |                                |                        |                    |
| External dimension<br>H x W x D                  |                              | mm                               | 380 x 745 x 900                                                                                | 380 x 745 x 900       | 380 x 745 x 900                | 380 x 1,030 x 900      | 380 x 1,030 x 900              | 380 x 1,195 x 900      | 380 x 1,195 x 900              | 380 x 1,195 x 900      |                    |
|                                                  |                              | in.                              | 15 x 29-3/8 x 35-7/16                                                                          | 15 x 29-3/8 x 35-7/16 | 15 x 29-3/8 x 35-7/16          | 15 x 40-9/16 x 35-7/16 | 15 x 40-9/16 x 35-7/16         | 15 x 47-1/16 x 35-7/16 | 15 x 47-1/16 x 35-7/16         | 15 x 47-1/16 x 35-7/16 |                    |
| Net weight                                       |                              | kg (lbs)                         | 35 (78)                                                                                        | 35 (78)               | 35 (78)                        | 45 (100)               | 45 (100)                       | 51 (113)               | 51 (113)                       | 53 (117)               |                    |
| Heat exchanger                                   |                              |                                  | Cross fin (Aluminum fin and copper tube)                                                       |                       |                                |                        |                                |                        |                                |                        |                    |
| FAN                                              | Type x Quantity              |                                  | Sirocco fan x 1                                                                                |                       |                                |                        |                                |                        |                                |                        |                    |
|                                                  | *4<br>External static press. | Pa                               | 50 - <100> - <150> - <200>                                                                     |                       | 50 - <100> - <150> - <200>     |                        | 50 - <100> - <150> - <200>     |                        | 50 - <100> - <150> - <200>     |                        |                    |
|                                                  |                              | mmH <sub>2</sub> O               | 5.1 - <10.2> - <15.3> - <20.4>                                                                 |                       | 5.1 - <10.2> - <15.3> - <20.4> |                        | 5.1 - <10.2> - <15.3> - <20.4> |                        | 5.1 - <10.2> - <15.3> - <20.4> |                        |                    |
|                                                  | Motor Type                   |                                  | DC motor                                                                                       |                       |                                |                        |                                |                        |                                |                        |                    |
|                                                  | Motor output                 | kW                               | 0.121                                                                                          | 0.121                 | 0.121                          | 0.244                  | 0.244                          | 0.375                  | 0.375                          | 0.375                  |                    |
|                                                  | Driving mechanism            |                                  | Direct-driven by motor                                                                         |                       |                                |                        |                                |                        |                                |                        |                    |
|                                                  | Airflow rate (Lo-Mid-Hi)     | m <sup>3</sup> /min              | 10.0 - 12.0 - 14.0                                                                             | 10.0 - 12.0 - 14.0    | 13.5 - 16.0 - 19.0             | 15.5 - 18.0 - 22.0     | 18.0 - 21.5 - 25.0             | 26.5 - 32.0 - 38.0     | 26.5 - 32.0 - 38.0             | 28.0 - 34.0 - 40.0     |                    |
|                                                  |                              | L/s                              | 167 - 200 - 233                                                                                | 167 - 200 - 233       | 225 - 267 - 317                | 258 - 300 - 367        | 300 - 358 - 417                | 442 - 533 - 633        | 442 - 533 - 633                | 467 - 567 - 667        |                    |
|                                                  |                              | cfm                              | 353 - 424 - 494                                                                                | 353 - 424 - 494       | 477 - 565 - 671                | 547 - 636 - 777        | 636 - 759 - 883                | 936 - 1,130 - 1,342    | 936 - 1,130 - 1,342            | 989 - 1,201 - 1,412    |                    |
| Sound pressure level (measured in anechoic room) |                              |                                  | (Low-Mid-High)                                                                                 |                       |                                |                        |                                |                        |                                |                        |                    |
| *2 dB <A>                                        |                              |                                  | 20-23-27                                                                                       | 20-23-27              | 24-27-32                       | 24-26-30               | 25-27-30                       | 27-31-34               | 27-31-34                       | 27-32-36               |                    |
| Air filter                                       |                              |                                  | Option:Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended. |                       |                                |                        |                                |                        |                                |                        |                    |
| Refrigerant piping diameter                      | Liquid                       | mm (in.)                         | 6.35 (1/4) Brazed                                                                              | 6.35 (1/4) Brazed     | 9.52 (3/8) Brazed              | 9.52 (3/8) Brazed      | 9.52 (3/8) Brazed              | 9.52 (3/8) Brazed      | 9.52 (3/8) Brazed              | 9.52 (3/8) Brazed      |                    |
|                                                  | Gas                          | mm (in.)                         | 12.7 (1/2) Brazed                                                                              | 12.7 (1/2) Brazed     | 15.88 (5/8) Brazed             | 15.88 (5/8) Brazed     | 15.88 (5/8) Brazed             | 15.88 (5/8) Brazed     | 15.88 (5/8) Brazed             | 15.88 (5/8) Brazed     |                    |
| 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)         | O.D.32 (1-1/4)                 | O.D.32 (1-1/4)         | O.D.32 (1-1/4)                 | O.D.32 (1-1/4)         |                    |

|                                    |                                |                                 | PEFY-P200VMHS-E                                                                         | PEFY-P250VMHS-E |
|------------------------------------|--------------------------------|---------------------------------|-----------------------------------------------------------------------------------------|-----------------|
| Power source                       |                                |                                 | 1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz                                           |                 |
| Cooling capacity                   | *1                             | kW                              | 22.4                                                                                    | 28.0            |
|                                    | *1                             | BTU/h                           | 76,400                                                                                  | 95,500          |
| Heating capacity                   | *3                             | kW                              | 25.0                                                                                    | 31.5            |
|                                    | *3                             | BTU/h                           | 85,300                                                                                  | 107,500         |
| Power consumption                  | *2 Cooling                     | kW                              | 0.63                                                                                    | 0.82            |
|                                    | Heating                        | kW                              | 0.63                                                                                    | 0.82            |
| Current                            | Cooling 220-230-240V           | A                               | 3.47-3.32-3.18                                                                          | 4.72-4.43-4.14  |
|                                    | Heating 220-230-240V           | A                               | 3.47-3.32-3.18                                                                          | 4.72-4.43-4.14  |
| External finish                    |                                |                                 | Galvanized steel plate                                                                  |                 |
| Dimension H x W x D                | mm                             |                                 | 470 x 1,250 x 1,120                                                                     |                 |
|                                    | in.                            |                                 | 18-9/16 x 49-1/4 x 44-1/8                                                               |                 |
| Net weight                         | kg (lbs)                       |                                 | 97 (214)                                                                                | 100 (221)       |
| Heat exchanger                     |                                |                                 | Cross fin (Aluminum plate fin and copper tube)                                          |                 |
| FAN                                | Type x Quantity                |                                 | Sirocco fan x 2                                                                         |                 |
|                                    | *4<br>Airflow rate (Lo-Mid-Hi) | m <sup>3</sup> /min             | 50.0-61.0-72.0                                                                          | 58.0-71.0-84.0  |
|                                    |                                | L/s                             | 833-1017-1200                                                                           | 967-1183-1400   |
|                                    |                                | cfm                             | 1766-2154-2542                                                                          | 2048-2507-2966  |
|                                    | External static press.         | Pa                              | <50>-<100>-150-<200>-<250>                                                              |                 |
| mmH <sub>2</sub> O                 |                                | <5.1>-<10.2>-15.3-<20.4>-<25.5> |                                                                                         |                 |
| Motor                              | Type                           |                                 | DC motor                                                                                |                 |
|                                    | Output                         | kW                              | 0.87                                                                                    | 0.87            |
| Air filter(option)                 |                                |                                 | Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended. |                 |
| Refrigerant pipe diameter          | Gas (Braze)                    | mm (in.)                        | ø19.05 (ø3/4)                                                                           | ø22.2 (ø7/8)    |
|                                    | Liquid (Braze)                 | mm (in.)                        | ø9.52 (ø3/8)                                                                            |                 |
| Field drain pipe diameter          | mm (in.)                       |                                 | O.D. 32 (1-1/4)                                                                         |                 |
| Sound pressure level (Lo-Mid-Hi)*2 |                                | dB<A>                           | 36-39-43                                                                                | 39-42-46        |

Ceiling concealed type

R410A

High static pressure type

Optional parts

| Description      | Model          | Applicable capacity | Remarks                                   |
|------------------|----------------|---------------------|-------------------------------------------|
| Drain pump       | PAC-KE05DM-F   | P200, P250          |                                           |
|                  | PAC-DRP10DP-E2 | P40-P140            |                                           |
| Long life filter | PAC-KE86LAF    | P40, P50, P63       |                                           |
|                  | PAC-KE88LAF    | P71, P80            |                                           |
|                  | PAC-KE89LAF    | P100, P125, P140    |                                           |
|                  | PAC-KE85LAF    | P200, P250          |                                           |
| Filter box       | PAC-KE63TB-F   | P40, P50, P63       |                                           |
|                  | PAC-KE99TB-F   | P71, P80            | Required when long<br>life filter is used |
|                  | PAC-KE140TB-F  | P100, P125, P140    |                                           |
|                  | PAC-KE250TB-F  | P200, P250          |                                           |