

HEAT RECOVERY VENTILATORS  
FOR RESIDENTIAL USE



MODEL

# VL-100EU5-E

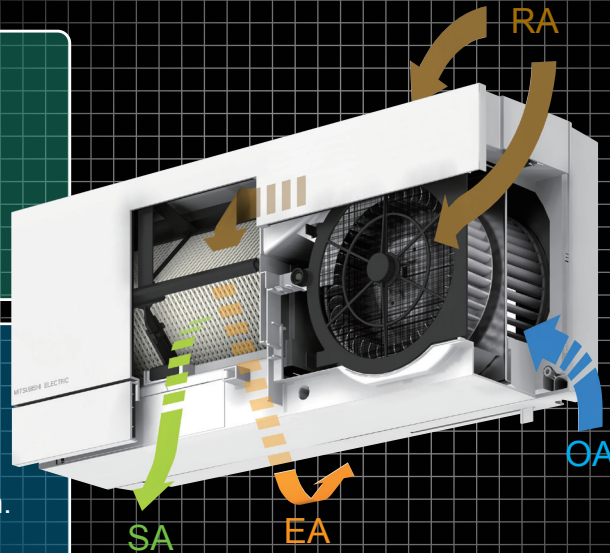
Wall switch type

## Energy Saving

Reduced heat loss contributes to lower air conditioning costs.

## Fresh Air

Simultaneous air supply/exhaust function ensures efficient ventilation.



## Quiet Operation

Equipped with sound insulation for even quieter operation.

## Simple Installation

Easy installation through boring of 2 installation holes.

## Stylish Design

Designed to match any interior decor.

## Total-Heat-Exchange Concept

### Operation in Winter

**16°C**  
Fresh warm air  
(indoor supply air)

**4°C**  
Stale cold air  
(exhaust)

**20°C**  
Stale warm air  
(indoor return air)

**0°C**  
Fresh cold air  
(outdoor air)

### Operation in Summer

**23.8°C**  
Fresh cool air  
(indoor supply air)

**32.2°C**  
Stale hot air  
(exhaust)

**21°C**  
Stale cool air  
(indoor return air)

**35°C**  
Fresh hot air  
(outdoor air)

#### •Heat-exchange Temp. equation

$$\text{Indoor supply-air temperature(°C)} = \left\{ \begin{array}{l} \text{Indoor} \\ \text{temperature(°C)} \end{array} - \left\{ \begin{array}{l} \text{Outdoor} \\ \text{temperature(°C)} \end{array} \right\} \times \text{Temp exchange} \right. + \left. \begin{array}{l} \text{Outdoor} \\ \text{temperature(°C)} \end{array} \right\} \times \text{efficiency(\%)}$$

Calculation example : 16°C = (20°C - 0°C) x 80% + 0°C (Low fan speed)

#### •Heat-exchange Temp. equation

$$\text{Indoor supply-air temperature(°C)} = \left\{ \begin{array}{l} \text{Outdoor} \\ \text{temperature(°C)} \end{array} - \left\{ \begin{array}{l} \text{Outdoor} \\ \text{temperature(°C)} \end{array} \right\} - \left\{ \begin{array}{l} \text{Indoor} \\ \text{temperature(°C)} \end{array} \right\} \right\} \times \text{Temp exchange} + \left\{ \begin{array}{l} \text{Indoor} \\ \text{temperature(°C)} \end{array} \right\} \times \text{efficiency(\%)}$$

Calculation example : 23.8°C = 35°C - (35°C - 21°C) x 80% (Low fan speed)

## Specifications

**VL-100EU<sub>5</sub>-E**  
(White)

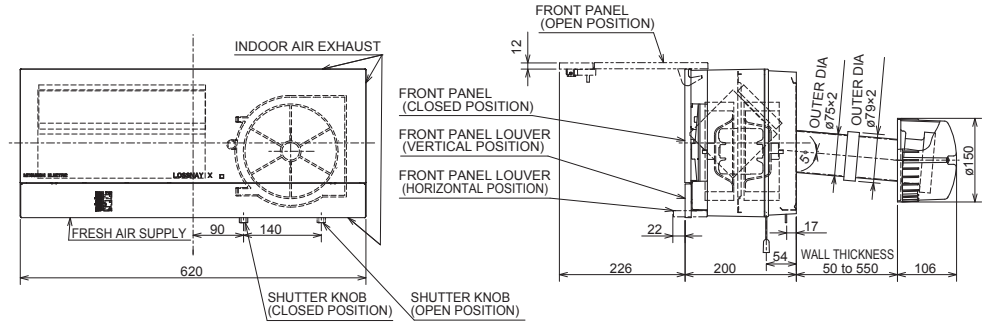
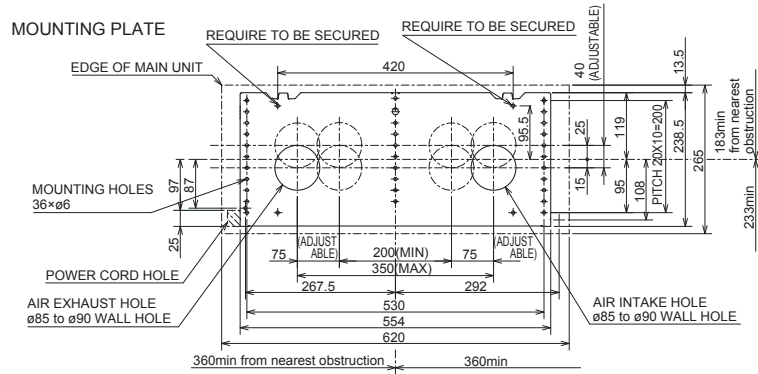


| Supply voltage (V) | Power line frequency (Hz) | Fan speed | Air volume (m <sup>3</sup> /h) | Power consumption (W) | Temp.exchange efficiency (%) | Noise (dB) | Weight (kg) |
|--------------------|---------------------------|-----------|--------------------------------|-----------------------|------------------------------|------------|-------------|
| 220                | 50                        | HI        | 100                            | 30                    | 73                           | 36.5       | 7.5         |
|                    |                           | LO        | 55                             | 13                    | 80                           | 24         |             |
| 230                | 50                        | HI        | 105                            | 31                    | 73                           | 37         |             |
|                    |                           | LO        | 60                             | 15                    | 80                           | 25         |             |
| 240                | 50                        | HI        | 106                            | 34                    | 72                           | 38         |             |
|                    |                           | LO        | 61                             | 17                    | 79                           | 27         |             |
| 220                | 60                        | HI        | 103                            | 34                    | 73                           | 38         |             |
|                    |                           | LO        | 57                             | 17                    | 80                           | 25         |             |

- Simple installation through boring of 2 installation holes.
- Low-noise(Less than 30dB at low fan speed).
- 1-motor 2-fan system.
- Air-volume:low/high fan speeds.
- Air-supply/exhaust pipes and a plastic weather cover are included.
- Equipped with an outdoor-air shutter.
- Wall switch

## Dimensions

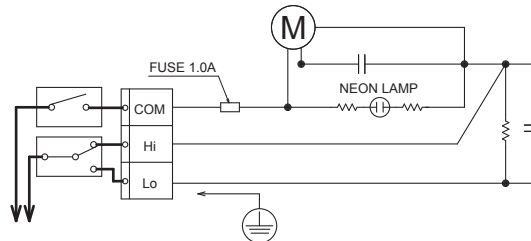
**VL-100EU<sub>5</sub>-E**



(unit: mm)

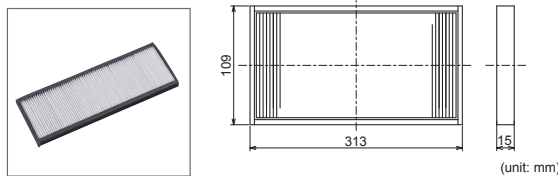
## Wiring Diagram

**VL-100EU<sub>5</sub>-E**



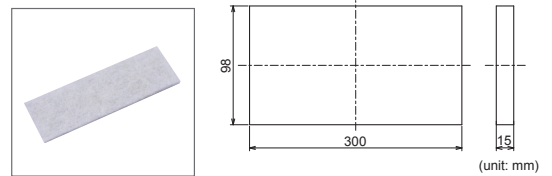
## Optional parts

**High performance filter**  
**P-100HF<sub>5</sub>-E**



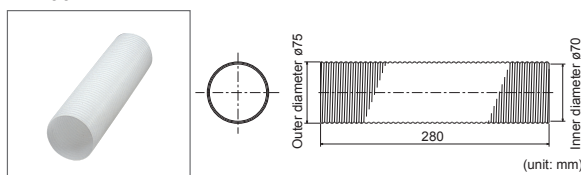
- Upgraded high-performance filter.

**Replacement filter**  
**P-100F<sub>5</sub>-E**



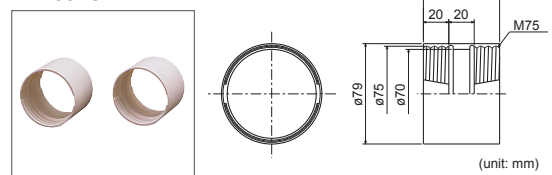
- Standard grade replacement filter.

**Extension Pipe**  
**P-100P-E**



- Total length when connected to the pipe extension coupling is 300mm.

**Extension Pipe Coupling**  
**P-100PJ-E**



- Screw-in method