

LROSSNAY SYSTEM



SELECTION

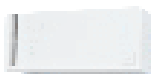
LOSSNAY Lineup consists of two types of ventilation: Energy Recovery Ventilation (ERV) and Heat Recovery Ventilation (HRV). Choose the model that best matches your building layout and indoor environment.

LOSSNAY LINEUP

Type	Core	Model	Airflow	150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	900 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
LOSSNAY	ERV	LGH-RVX3 Series	Single-decker	●	●	●	●	●	●	●			
			Double-decker								●	●	
	ERV	LGH-RVXT3 Series									●	●	●
	HRV	LGH-RVS Series					●		●	●			
LOSSNAY with Dx Coil Unit	ERV	GUF Series					●			●			

*ERV = Energy recovery ventilator *HRV = Heat recovery ventilator

PRODUCT LINEUP

Commercial		Residential	
Ceiling Cassette Type		Vertical Type	Wall mounted Type
LGH-RVX3 Series ▶▶ A commercially oriented system that can be used for a wide range of performance and functions virtually anywhere. 	LGH-RVXT3 Series ▶▶ This large airflow model of the LGH series that caters to high performance and functions. 	VL-CZPV-L Series ▶▶ Vertical type for residential use. Compact ventilation with sensible heat exchange. 	VL-B06LIS-L ▶▶ VL-B06SP-L Wall-mounted models for smaller air volumes. They may be located both horizontally and vertically. 
LGH-RVS Series ▶▶ Sensible heat models of the LGH series that can also be installed in January areas. 	GUF Series ▶▶ (LOSSNAY with Dx Coil Unit) Heat recovery units with a heating and cooling system that uses the CITY MULTI indoor unit as a heat source. 		

*ERV: Energy recovery ventilator *HRV: Heat recovery ventilator

Commercial Use LOSSNAY

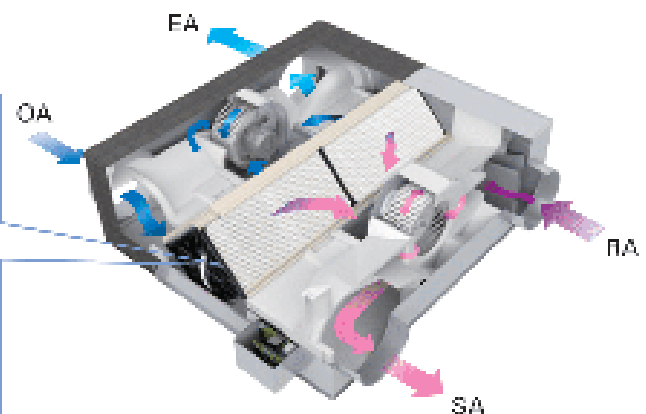
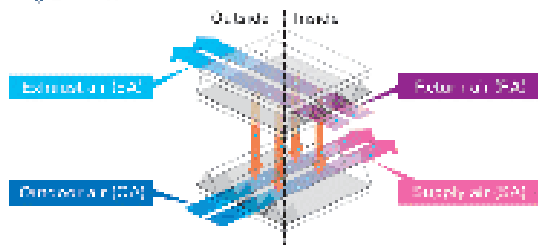
LGH SERIES



Optimized Indoor Air Quality through Temperature and Humidity Exchange by LOSSNAY

LOSSNAY is a total heat exchanger unit system that uses two types of characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.

- The concept of sensible heat and latent heat exchange using LOSSNAY core

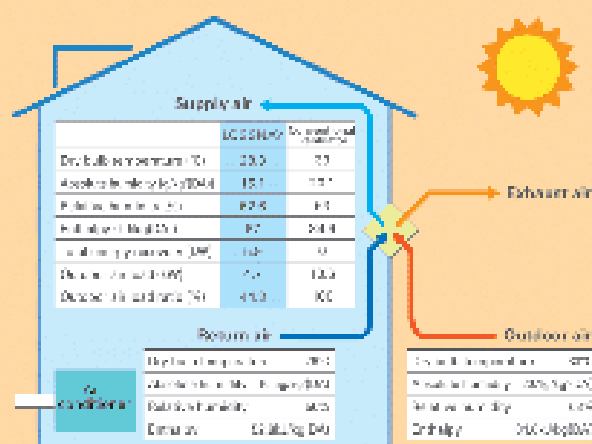


What is Improved by Introducing LOSSNAY?

- Ventilation with maximized comfort

In summer

Air that is similar to the conditions of cooled (dehumidified) indoor air is supplied.



Heat recovery calculation

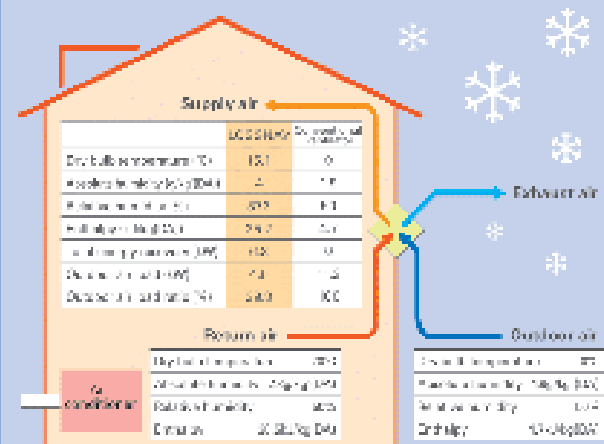
$$\text{Indoor dry-bulb temperature} = \left[\frac{\text{Outdoor dry-bulb temperature} \times \text{Capacity} + \text{Return air dry-bulb temperature} \times \text{Capacity}}{\text{Capacity} + \text{Capacity}} \right] \times \text{Temperature efficiency (\%)} + \text{Outdoor dry-bulb temperature}$$

Outdoor dry-bulb temperature: 33.0 (°C) / 91.4 (°F) / 303.15 (K)

Temperature efficiency: 88.1% (LOSSNAY) / 75.0% (FCU)

In winter

Air that is similar to the conditions of heated (humidified) indoor air is supplied.



Heat recovery calculation

$$\text{Indoor dry-bulb temperature} = \left[\frac{\text{Outdoor dry-bulb temperature} \times \text{Capacity} + \text{Return air dry-bulb temperature} \times \text{Capacity}}{\text{Capacity} + \text{Capacity}} \right] \times \text{Temperature efficiency (\%)} + \text{Outdoor dry-bulb temperature}$$

Outdoor dry-bulb temperature: 15.1 (°C) / 59.2 (°F) / 288.15 (K)

Temperature efficiency: 88.1% (LOSSNAY) / 75.0% (FCU)

Installation Image

Mitsubishi Electric offers Energy Recovery Ventilation and Heat Recovery Ventilation solutions for optimizing building air quality by using LOSSNAY.

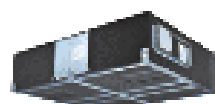
Energy Recovery Ventilation

A total heat exchange ventilation system that uses paper characteristics (LOSSNAY core) to perform temperature (sensible heat) and humidity (latent) heat exchange.

Environment friendly energy recovery and humidity control enables air conditioning systems to simultaneously provide optimum room comfort and energy savings.

- ✓ Total heat exchanger
- ✓ Eliminates excess humidity in the air
- ✓ Wide airflow line up

LGH RVXT8 Series



LGH RVX3 Series



Remote Controller



PV400JH-EA/EB

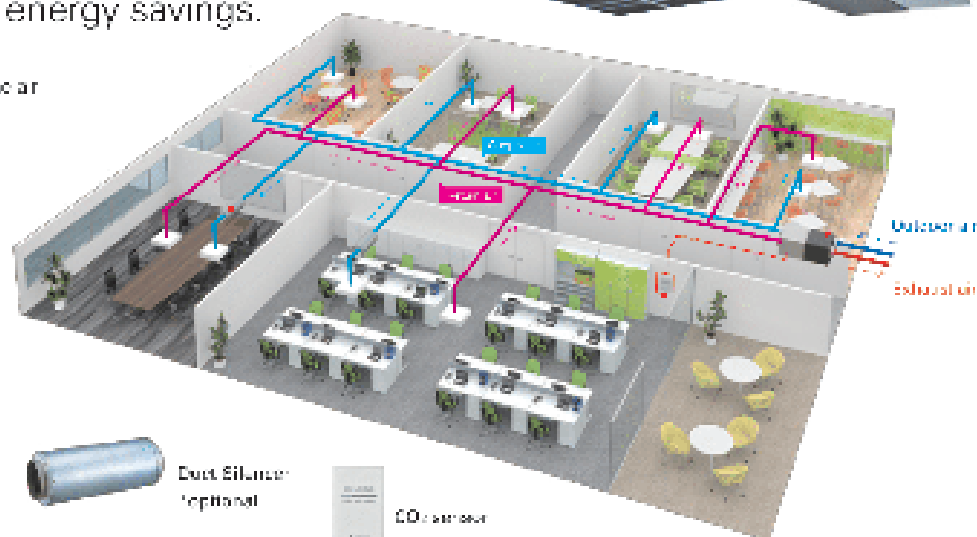
Optional



Duct Silencer
Optional



CO₂ sensor
Optional



Heat Recovery Ventilation

A heat exchange ventilation system that uses a heat exchanger (LOSSNAY core) to perform temperature (sensible heat) exchange.

Offering the best system solution for ventilation of all areas including the shower room and bathroom.

- ✓ Heat exchange
- ✓ Installation in sanitary areas
- ✓ CO₂ sensor control

LGH RV8 Series



Remote Controller



PZ 62DR EA/EB

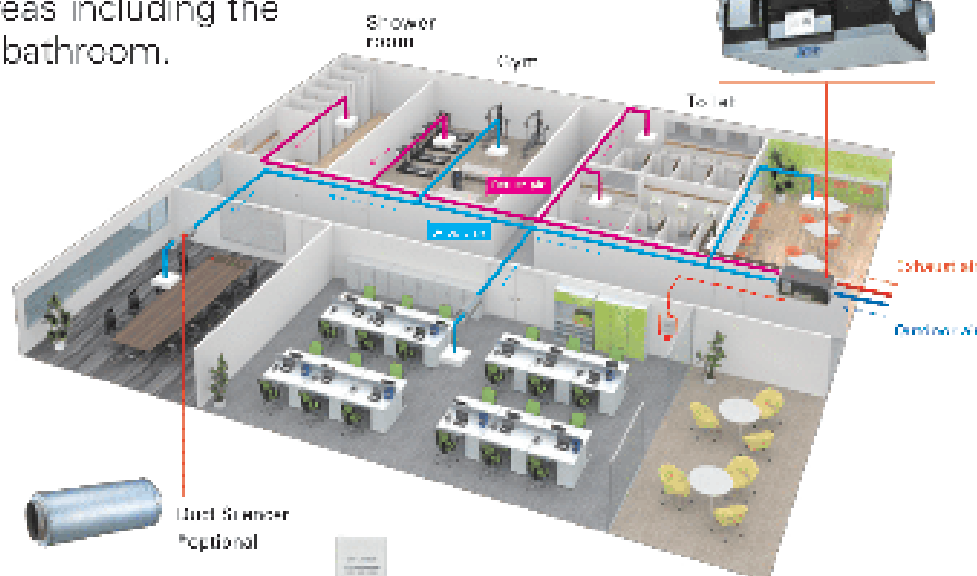
Optional



Duct Silencer
Optional



CO₂ sensor
Optional



Features of LGH Series

Controllability

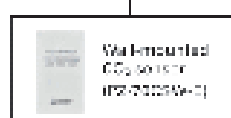
Flexible airflow setting

The default fan speed value is fan speed 1: 25%, fan speed 2: 50%, fan speed 3: 75%, and fan speed 4: 100% for both supply air and exhaust air can be adjusted flexibly. Within this range, between 25% and 100%, airflow can be adjusted by 5% increments to satisfactorily meet the designed airflow rate.



CO₂ sensor

A CO₂ sensor connected directly to a LOSSNAY ReX2 unit optimizes the fan speed according to the detected CO₂ level. It improves the heat-exchange efficiency and contributes to energy savings.



Two types of CO₂ sensors are available: wall-mounted and duct-mounted types. Power is supplied to the CO₂ sensor from the LOSSNAY board.



Fan speed automatically changes from 25% to 100% in 8 steps depending on the CO₂ concentration level.

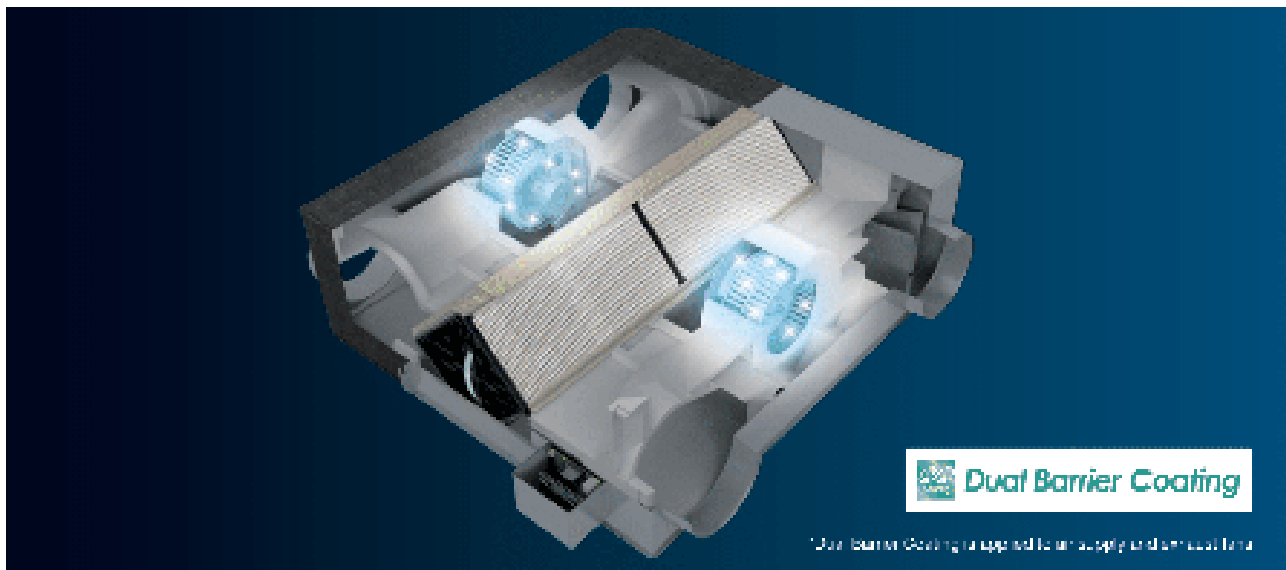


Automatic operation with CO₂ sensor

Fan speed automatically changes depending on CO₂ concentrations.

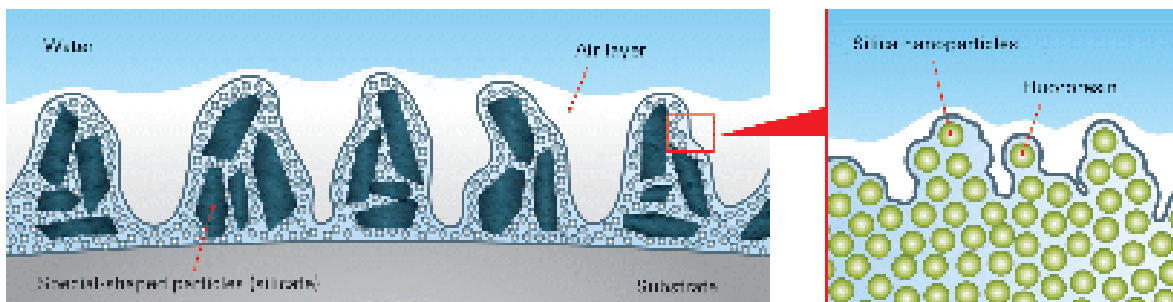


Dual Barrier Coating



A water-repellent effect is achieved by a coating film that has nano-sized concave-convex structures formed by silica nanoparticles (made of water-repellent fluororesin). In addition to micron-sized concave-convex structures formed by combining micron-sized special-shaped particles (oxide) with the silica nanoparticles. This even structure forms an air layer that suppresses the adhesion of dust and mold that contains a lot of humidity and reduces the amount of dirt that adheres to the substrate.

■ Conceptual image of dual barrier coating



Installation Work

Short Commissioning Time with the New Remote Controller

New Remote Controller P2-62DF-EA/ER, Supply and Exhaust air volume from F51 to F54 directly on the screen. Commissioning will be operated while the fan motor is sensing the air volume.

By using P2-62DF-EA/ER, the commissioning time for LGH-RVX3 is reduced by 75%^{*1} compared to the previous RVX series.

Commissioning
time reduced by

75%^{*1}

Point 1
One screen for
airflow commissioning

Point 2
Direct input of
airflow value

Point 3
Can be returned even
when the fan motor is
sensing the airflow time

P2-62DF-EA/ER

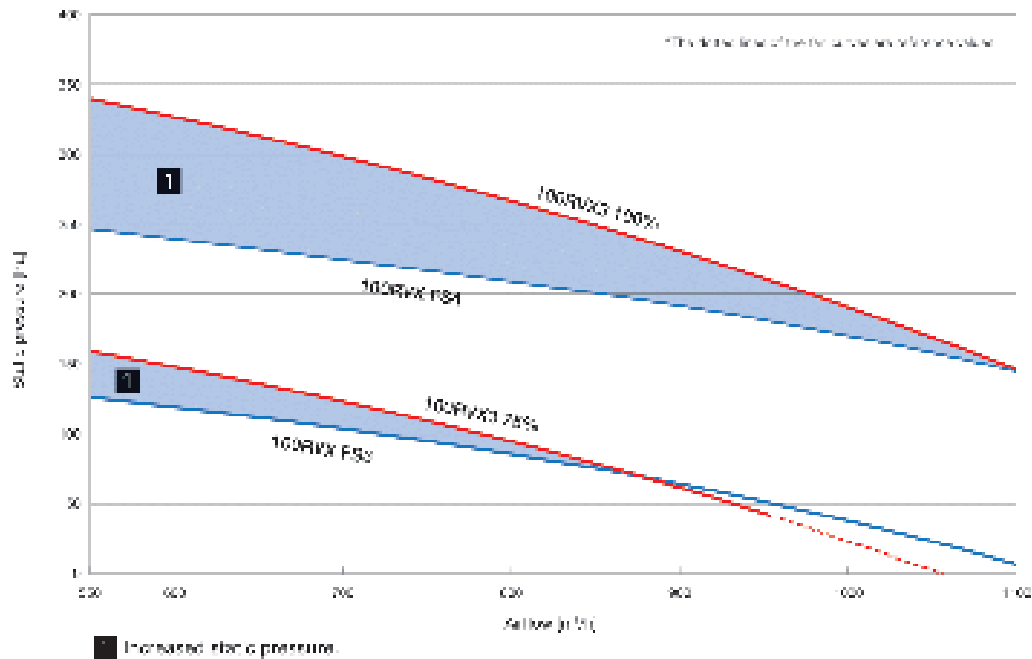
^{*1} The average commissioning time for installing LGH-RVX3 with P2-62DF-EA/ER and LGH-RVX3 with P2-62DF-EA/ER.

Setting work is not necessary for the supply fan or exhaust fan. This time does not include the time for setting the operation and work done time.

RVX3 SERIES

High Static Pressure

External static pressure has been improved compared to previous models. Accompanying this increase in external static pressure, the selection range of models and filters has also expanded. Furthermore, flexible customer work has become possible.



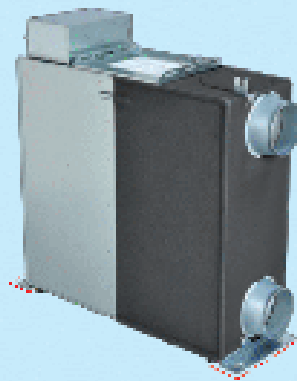
Flexible Vertical and Horizontal Installation

For RVX3 series, vertical installation has become possible for greater flexibility of installation locations. By using optional parts, the unit can be installed in places such as the machine room where only vertical installation is possible.

Vertical Installation Plates



Model name	LOSSNAY
PZ-1VS-E	LGH-15RVX3-E
	LGH-25RVX3-E
	LGH-35RVX3-E
	LGH-50RVX3-E
PZ-2VS-E	LGH-65RVX3-E
	LGH-80RVX3-E
	LGH-100RVX3-E



*Refer to the Lossnay LGH-100RVX3-E and LGH-100RVX3-F.

**Please follow the installation manual when installing RVX3 series as follows.

Horizontal installation



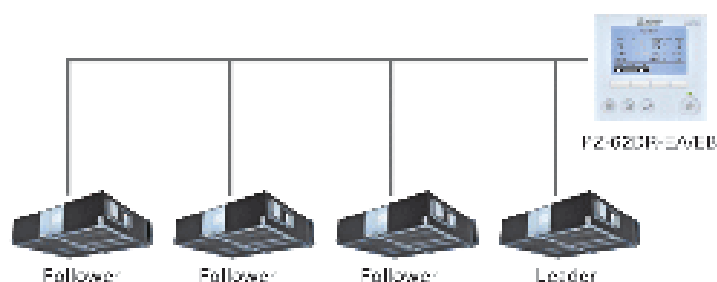
Vertical installation



RVXT3 SERIES

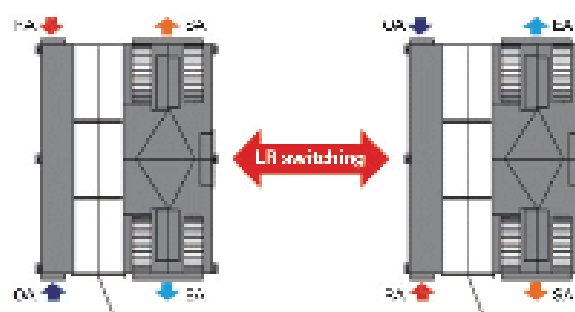
Large Airflow as One Unit: Leader-follower Function

- Multiple LGSSNVR units can be operated in synchronization as a single large airflow unit.
- A maximum of four units can be connected.
In the case of four LGH-250RVXT3-E units, total air volume is approx. 10,000m³/h.*
- *Actual airflow depends on system design and site condition.
- Only one mode can be in one group.
- P2-820R-EA/EB connection is required for this control.
- The maximum number of LGSSNVR units that can be connected in one group is four (one leader unit and three follower units).



Adaptable Installation: LR Switching

- Airflow direction can be changed using DIP switches.
- The intake (SA/RA) and exhaust (OA/EA) airflow can be switched depending on installation space.
- This facilitates ductwork and allows enough space for maintenance.
- *The unit cannot be flipped upside down.

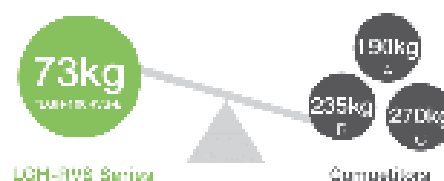


RVS SERIES

Easy Installation

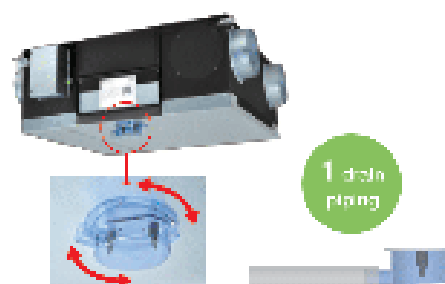
Light frame

Being frame is one of the most important factors for installation. The light frame of the LGH-RVS series provides an advantage in terms of installation cost and safety.



Easy drain piping

- Only one drain piping for both supply air and exhaust air.
- 360-degree drain pipe connection.
- Trap piping work is NOT required using a non-return backflow stopper.



LOSSNAY with Dx-Coil Unit

GUF SERIES



The GUF Series consists of a heat recovery unit (LOSSNAY core) and a DX coil. Along with LOSSNAY ventilation, it can be used as a main air conditioner when the load is light, and as a supplemental air conditioner in high load.

These units can be used with R410A.

Outdoor units are available for the GUF-RD series (for details, see Mitsubishi Electric's CITY MULTI catalog).

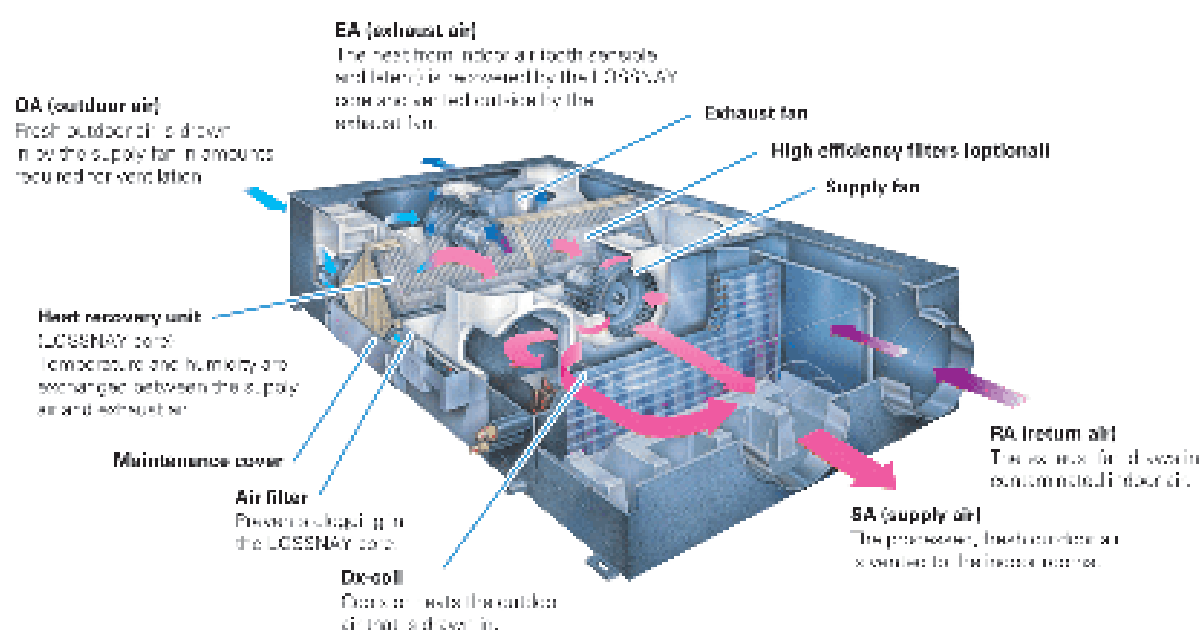
R410A Refrigerant Units

Model name		F112	F112S	F14C	F150	F150S	G90	F155	F160	F165	F190	F220	F250	F150	F160	F190	F220
F Series	FUHY-MYNA-A2				●	●	●	●	●	●	●	●	●	●	●	●	●
SD Series	REXPR-MYNA-A2				●	●	●	●	●	●	●	●	●	●			
MURY Series	FUMY-SP RMV-P	●	●	●	●												

LOSSNAY Ventilation and Air Conditioning

The OA (outdoor air) Processing Unit creates an optimum environment while providing substantial energy savings. It delivers forced circulation, heat recovery, heating and cooling, and air purification. This total conditioning system keeps indoor air fresh and comfortable all day long, and keeps it free of contaminants that could cause ailments such as sick building syndrome. Inside the OA Processing Unit is the LOSSNAY core, a heat exchange unit that transfers heat efficiently, and cuts ventilation load by as much as 70%. A remarkable product found nowhere else, this is a combination of functionality and performance combined within a single unit achieves warm, comfortable, good health, and energy savings.

GUF-RD type



Specifications

R VX3 SERIES

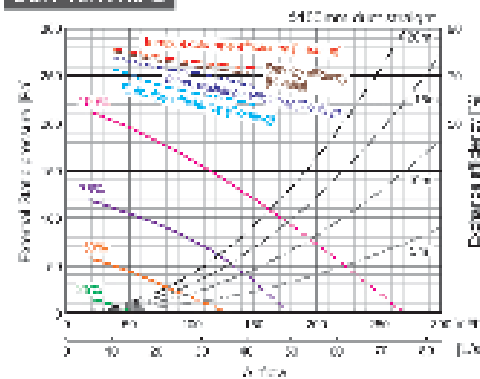
Model		LGH-15RVX3-E				LGH-25RVX3-E				LGH-35RVX3-E			
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50~60, 220V/60Hz				220-240V/50Hz, 220V/60~2			
Fan speed		1	3	2	1	4	3	2	1	4	3	2	1
Default Airflow setting		100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ¹⁾		55	30	15	10	75	42	21	11	120	61	29	15
Airflow ²⁾	(m³/h)	150	110	75	35	250	180	125	60	350	260	175	90
	(L/s)	42	31	21	10	68	52	35	17	87	73	49	24
Specific fan power (W/Ls) ³⁾		1.32	0.90	0.72	0.96	1.00	0.81	0.60	0.63	1.20	0.94	0.59	0.62
External static pressure (Pa) ¹⁾		120	60	30	5	120	60	30	0	160	80	40	10
Temperature exchange efficiency (%) ¹⁾	Heating	73.0	75.0	70.0	61.5	73.5	73.5	61.0	50.0	75.0	77.0	79.0	62.0
	Cooling	66.0	70.0	70.0	75.0	70.5	70.5	78.0	56.0	66.0	71.0	74.0	79.0
Enthalpy exchange efficiency (%) ¹⁾	Heating	70.0	73.0	76.0	60.6	69.0	72.0	70.5	54.0	72.0	74.0	77.6	60.0
	Cooling	50.0	62.0	66.0	75.0	59.0	63.5	58.0	76.0	60.0	64.0	69.6	74.6
Noise (dB) ¹⁾		27.0	22.0	19.0	17.0	30.5	23.0	19.5	17.0	30.0	24.0	19.0	17.0
Exhaust air transfer rate (%) ³⁾		0				5				0			
Weight (kg)		20				22				30			
Maximum input power (W)		74				119				155			

¹⁾ Input power, efficiency, and noise are based on rated air volume, 220V/50Hz and horizontal installation. ¹⁾ Measured according to ISO 16969-1:2012

²⁾ A-weighted sound pressure level measured at 1.5m under the center of the unit in an anechoic chamber. ¹⁾ Measured according to EN ISO 2022-1:2012

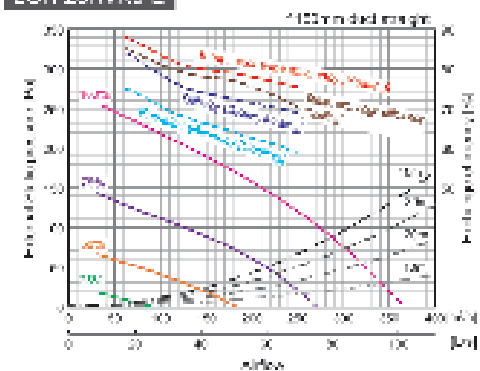
Characteristic curve

LGH-15RVX3-E



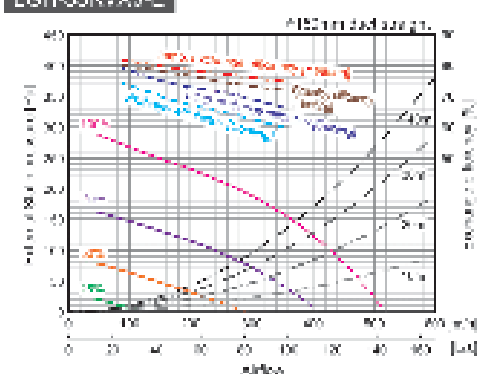
¹⁾ The coordinate of the line is set as the reference value.

LGH-25RVX3-E



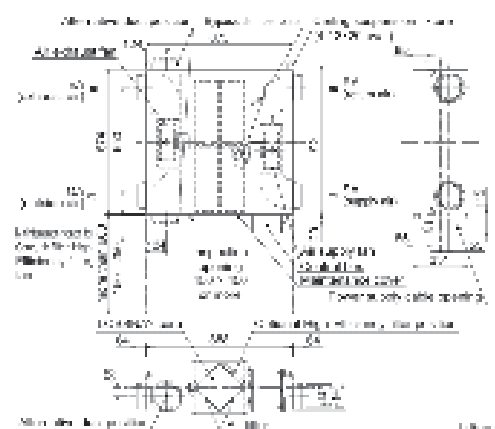
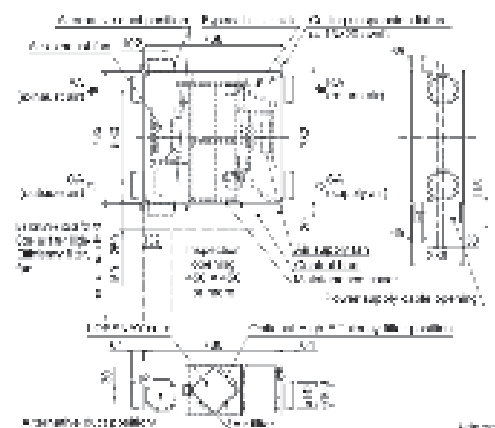
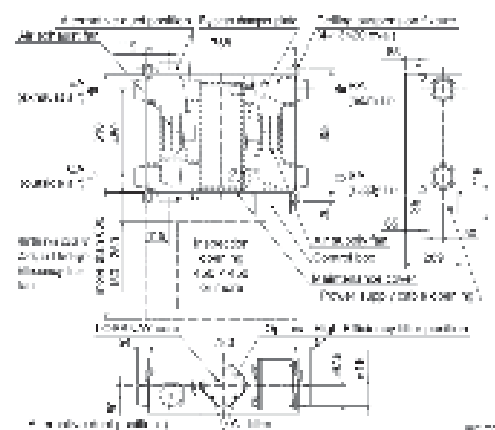
¹⁾ The coordinate of the line is set as the reference value.

LGH-35RVX3-E



¹⁾ The coordinate of the line is set as the reference value.

Cutline drawings



Mode	LGH-50RVX3-E				LGH-65RVX3-E				LGH-80RVX3-E			
Electrical power supply	220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Fan speed	4	3	2	1	4	3	2	1	4	3	2	1
Default Airflow setting	100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ¹	185	81	34	15	245	130	57	20	515	180	84	25
Airflow ² (m³/min) (L/s)	500	375	250	125	650	478	325	163	800	600	400	200
Specific fan power [W/(L/s)] ³	1.35	0.75	0.59	0.40	1.36	0.68	0.56	0.41	1.54	0.86	0.52	0.47
External static pressure (Pa) ⁴	150	85	35	10	150	85	30	10	170	88	43	11
Temperature exchange efficiency (%) ⁵	Heating 80.5	77.5	73.5	75.0	72.5	75.0	75.5	82.0	75.0	76.5	70.0	80.0
	Cooling 83.5	87.0	71.0	73.0	65.0	73.0	74.5	90.0	58.0	70.0	75.5	70.0
Enthalpy exchange efficiency (%) ⁶	Heating 90.5	88.5	72.0	73.0	69.5	72.0	75.5	90.0	82.0	86.0	70.0	73.5
	Cooling 93.5	90.0	63.0	69.0	65.5	69.0	85.5	74.0	54.5	60.5	65.0	70.5
Noise (dB) ⁷	35.0	27.0	21.0	17.0	37.5	31.5	24.0	17.5	38.0	33.5	25.0	19.0
Exhaust air transfer rate (%) ⁸	5				5				5			
Weight (kg)	32				41				47			
Maximum input power (W)	277				360				500			

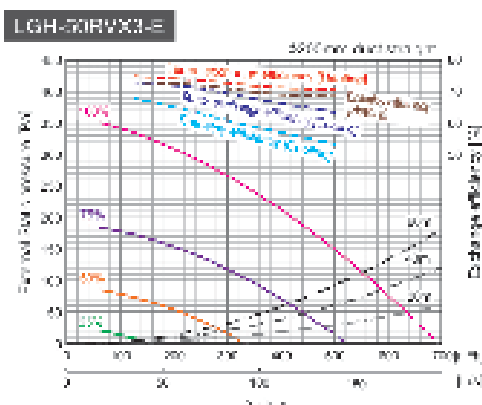
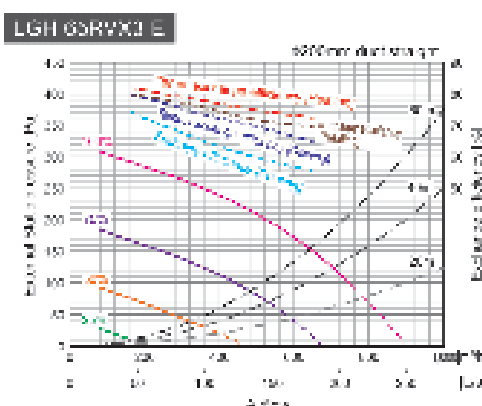
Total power efficiency are taken and based on relative volume, 25% and 50% and horizontal relative

[7] : <https://doi.org/10.1016/j.jmb.2019.04.004> | PMID: 31046411 | PMCID: PMC6550115

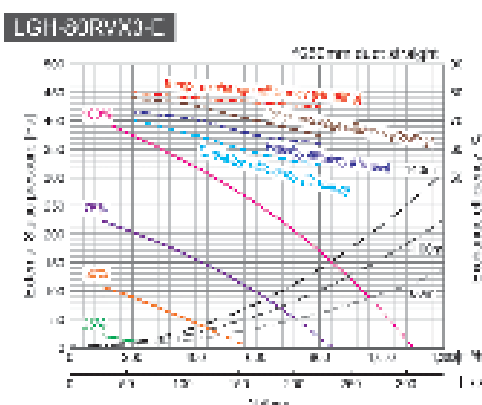
2. **Maruyama, Masahito** [日本・京都府京都市] 1944-11-28 1993-03-26 1948-1950 1950-1951 1951-1952

[†] *S. A. Gould and J. A. H. Stewart* were members of the research group for the period of the last two years of their careers. [‡] *Work performed according to NSF grant DMS-0001017.*

Characteristic curves

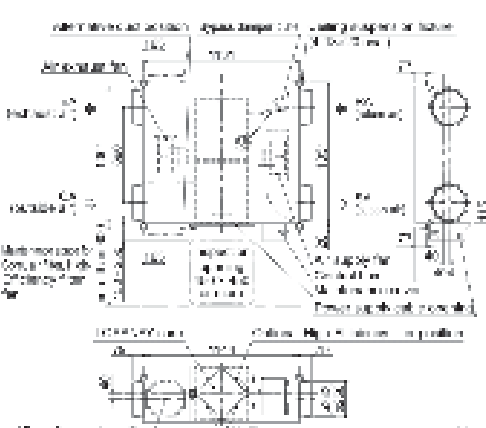
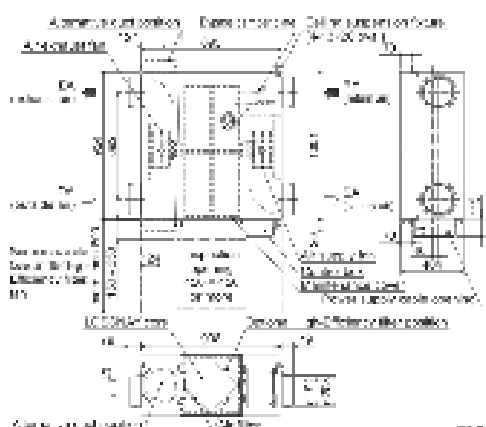
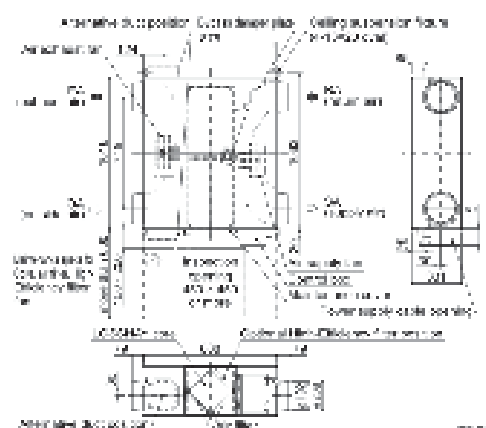
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* *Journal of Management Education*, 2000, 24(1), 10-12



* The cardinal line of the last 21 years are also shown online.

Outline drawings



¹² See also, e.g., *United States v. Smith*, 2005 WL 1000000 (S.D. Cal. Apr. 11, 2005).

Model	LGH-100RVX3-E				LGH-160RVX3-E				LGH-200RVX3-E			
Electrical power supply	220-240V/50Hz, 220V/60Hz				220-240V/50~60, 220V/60Hz				220-240V/50Hz, 220V/60~2			
Fan speed	4	3	2	1	4	3	2	1	4	3	2	1
Default Airflow setting	100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ¹⁾	435	210	85	22	857	324	128	45	855	415	180	52
Airflow ²⁾	(m ³ /h)	1000	750	500	250	1500	1000	500	400	400	1500	500
	(Lit/s)	275	205	135	69	415	275	137	111	111	415	137
Specific fan power [W/(Lit/s)] ³⁾		1.55	1.01	0.60	0.38	1.55	0.87	0.55	0.41	1.54	1.00	0.38
External static pressure (Pa) ⁴⁾		180	102	75	15	170	98	40	11	160	85	17
Temperature exchange efficiency (%) ⁵⁾	Heating	75.5	77.0	78.5	80.5	75.0	76.5	78.0	80.0	76.5	77.5	78.5
	Cooling	67.5	72.0	77.0	82.5	65.0	70.0	75.5	80.0	68.5	71.5	73.0
Full capacity exchange efficiency (%) ⁶⁾	Heating	60.5	63.0	66.5	73.5	62.0	65.0	70.5	73.5	64.0	67.5	73.0
	Cooling	35.5	61.0	66.0	73.5	51.5	53.5	58.0	70.5	57.0	60.0	71.0
Noise (dB) ⁷⁾		40.0	35.0	27.0	15.5	41.0	35.0	26.0	16.0	41.5	36.0	15.0
Exhaust air transfer rate (%) ⁸⁾	0				5				0			
Weight (kg)	33				95				100			
Maximum input power (W)	545				790				915			

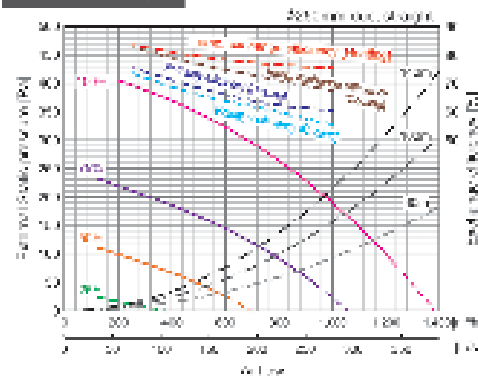
¹⁾ Input power, efficiency, and noise are based on rated air volume, 220V/50Hz and horizontal installation.

²⁾ Measured according to EN 1253:2019 ³⁾ Measured according to EN1253:2019

⁴⁾ As-specified static pressure is measured at 1.5m under the center of the unit in an anechoic chamber. ⁵⁾ Measured according to EN917:2013/1992

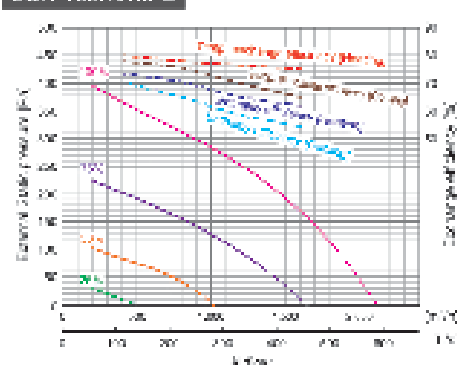
Characteristic curve

LGH-100RVX3-E



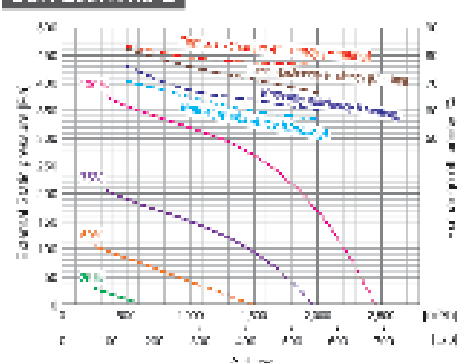
*The dotted line of the fan curve are reference values.

LGH-160RVX3-E



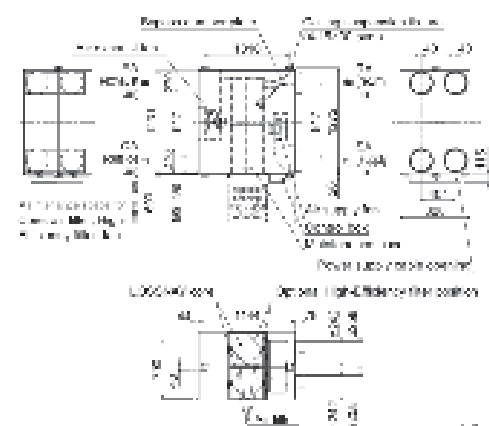
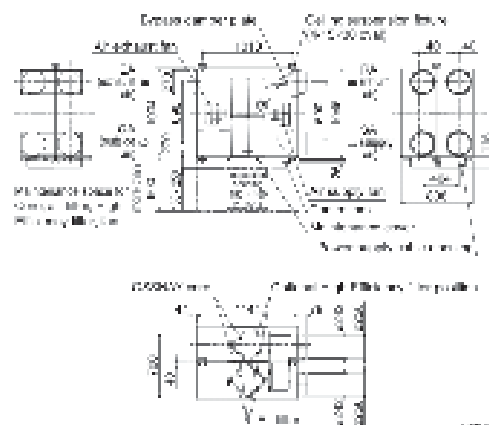
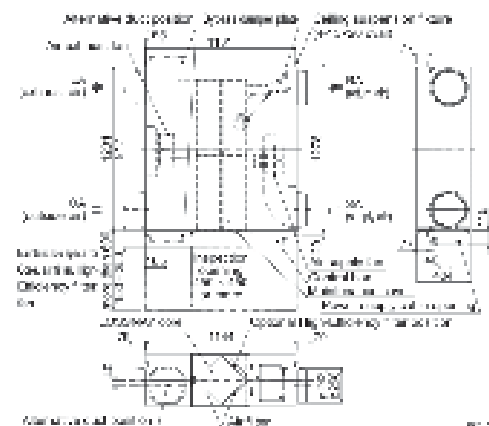
*The dotted line of the fan curve are reference values.

LGH-200RVX3-E



*The dotted line of the fan curve are reference values.

Outline drawings



*Lead times may be subject to change without notice.

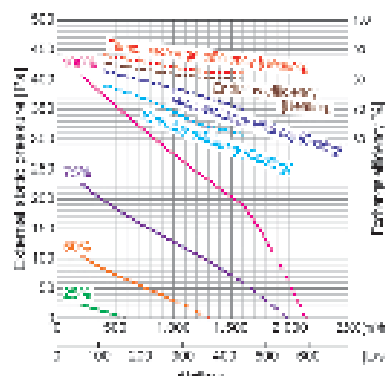
RVXT3 SERIES

Model		LGH-160RVXT3-E				LGH-200RVXT3-E				LGH-250RVXT3-E			
Electrical power supply		350-410V/3N-50Hz, 380V/3N-60Hz				380-410V/3N-60Hz, 350V/3N-50Hz				350-410V/3N-50Hz, 380V/3N-60Hz			
Fan speed		4	3	2	1	4	3	2	1	4	3	2	1
Default airflow setting		100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ¹⁾	L1-N	0	0	0	0	0	0	0	0	0	0	0	0
	L2-N	364	184	72	23	522	248	96	28	724	345	142	43
	L3-N	364	184	72	23	522	248	96	28	724	345	142	43
	Total	708	368	144	46	1044	496	192	56	1448	690	284	86
Airflow ²⁾	m ³ /h	1600	1200	800	400	2000	1500	1000	500	2500	1875	1250	625
	(L/s)	444	333	222	111	556	417	278	139	694	521	347	174
Specific fan power (W/Ls) ³⁾		1.54	1.10	0.88	0.41	1.48	1.30	0.88	0.40	2.04	1.34	0.80	0.40
External static pressure (Pa) ⁴⁾		190	107	48	12	190	107	48	12	190	107	48	12
Temperature exchange efficiency (%) ⁵⁾	Heating	82.0	83.0	85.5	88.0	83.0	81.0	83.0	86.0	77.0	78.0	80.0	84.0
	Cooling	70.0	75.0	79.0	83.0	67.5	73.0	76.0	80.0	66.0	70.5	75.5	81.0
Enthalpy exchange efficiency (%) ⁶⁾	Heating	90.0	87.0	89.0	95.5	75.5	79.5	81.5	94.5	75.0	76.0	79.0	91.5
	Cooling	91.5	88.5	79.0	79.0	85.5	81.0	87.5	75.0	94.0	88.0	68.0	79.0
Noise (dB) ⁷⁾		38.0	38.0	26.0	19.0	40.0	35.0	25.0	21.0	44.0	38.0	31.5	23.0
Exhaust air transfer rate (%) ⁸⁾		5.0				5.0				5.0			
Weight (kg)		172				172				172			
Maximum output (W) 200V/3N/50Hz/50°C		2400-2700W				1000-1040W/850				1400-1400W/850			

¹⁾ All power is based on system configuration with a unit size of 400W/400V. ²⁾ The pressure is based on static pressure. ³⁾ The unit is based on the default airflow setting. ⁴⁾ The unit is based on the default airflow setting. ⁵⁾ The unit is based on the default airflow setting. ⁶⁾ The unit is based on the default airflow setting. ⁷⁾ The unit is based on the default airflow setting. ⁸⁾ The unit is based on the default airflow setting.

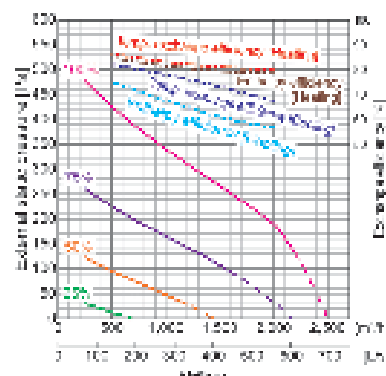
Characteristic curve

LGH-160RVXT3-E



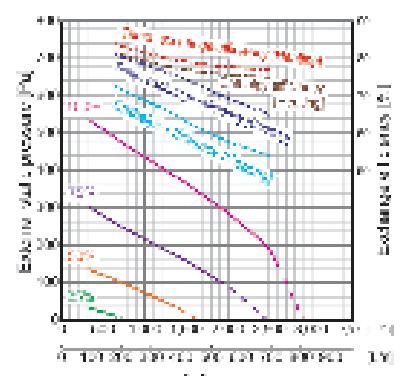
*The condition of the fan curve is reference value.

LGH-200RVXT3-E



*The condition of the fan curve is reference value.
*The condition of the fan curve is reference value.
*The condition of the fan curve is reference value.

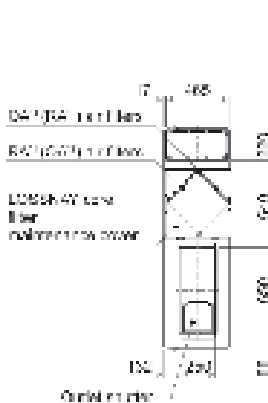
LGH-250RVXT3-E



*The condition of the fan curve is reference value.
*The condition of the fan curve is reference value.
*The condition of the fan curve is reference value.

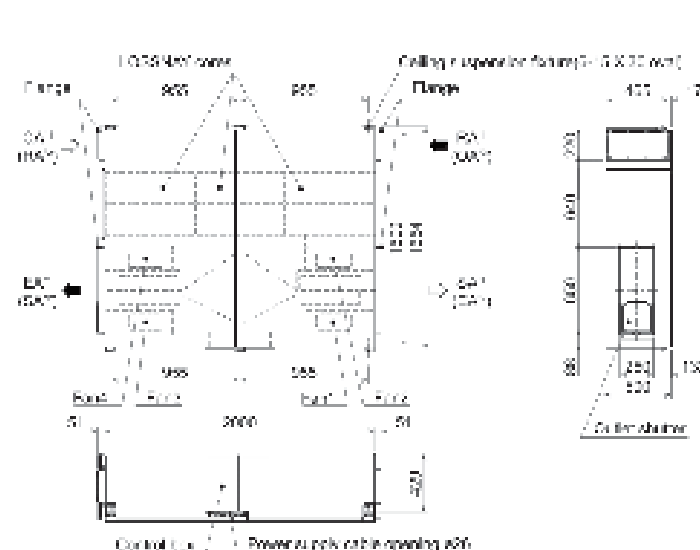
Outline drawings

LGH-160RVXT3-E



LGH-200RVXT3-E

LGH-250RVXT3-E



Unit (mm)

① Supply air
② Exhaust air
③ Filter
④ Control panel
⑤ Exhaust air
⑥ Exhaust air
⑦ Exhaust air
⑧ Exhaust air
⑨ Exhaust air
⑩ Exhaust air
⑪ Exhaust air
⑫ Exhaust air
⑬ Exhaust air
⑭ Exhaust air
⑮ Exhaust air
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㊿ Exhaust air

Specification may be subject to change without notice.

100%

[illegible]

Outline drawings



* 2006年12月31日 7月31日 34日 2006年12月31日 2006年12月31日

GUF SERIES

Model		GUF-50RD4				GUF-100RD4			
Electrical power supply		220-240V/50Hz				220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low	High	Low	High	Low
Running current (A)		1.15	0.70	1.15	0.70	2.20	1.23	2.25	1.27
Input power (W)		205-265	150-165	235-255	150-165	490-535	370-385	480-515	305-410
Airflow	(m³/h)	500	400	500	400	1000	800	1000	800
	(L/s)	138	111	139	111	270	222	270	222
External static pressure (Pa)		140	80	140	80	140	80	140	80
Temperature exchange efficiency (%)		77.5	90	—	—	78.5	91.5	—	—
Enthalpy exchange efficiency (%)	Heating	65	74			71	74		
	Cooling	60	67			68	71		
Cooling capacity (kW)		6.37 (1.84)				11.44 (3.12)			
Heating capacity (kW)		6.21 (2.04)				12.50 (3.69)			
Capacity equivalent to the indoor unit		P32				P53			
Humidifier		Humidifying				—			
Humidifier (humidifying capacity (l/h))		—				—			
Water supply pressure		—				—			
Noise (dB) (Measured at fan under the standard condition)		33.5-34.5	29.6-30.5	35-36	29.6-30.6	36-39	34-35	35-39	35-36
Weight (kg)		45				50			

*Cooling/ heating capacity indicates the maximum value in operation under the following condition.

Cooling condition: 27°C DB/19°C WB, indoor air: 25°C DB/50% RH, outdoor air: 35°C DB/50% RH

Heating condition: 7°C DB/6°C WB, indoor air: 20°C DB/50% RH, outdoor air: 5°C DB/50% RH

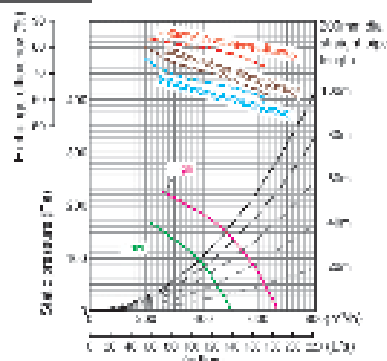
The figure in () indicates the cooling/heating capacity of full exchange mode.

Temperature of water in the water supply pipe is 10°C and the water supply pressure is 0.1 MPa (1 bar) in the humidifier.

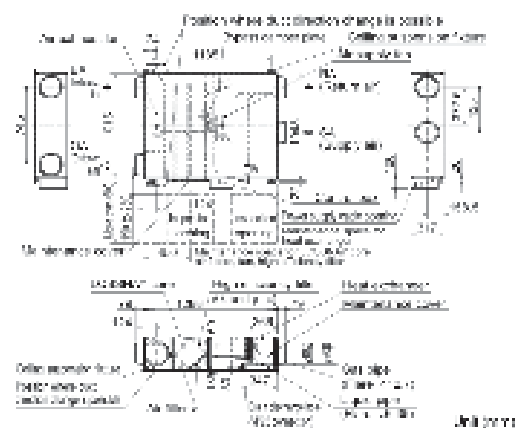
When the total capacity of indoor unit connected to outdoor unit (GU-F or GU-FH) exceeds the capacity of the outdoor unit, the total capacity of GUF needs to be 30% and less of the connected outdoor unit capacity.

Characteristic curve

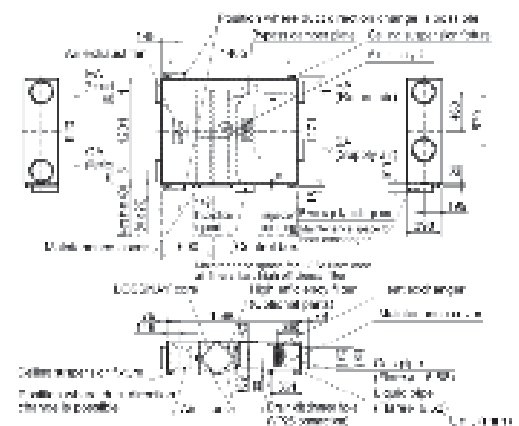
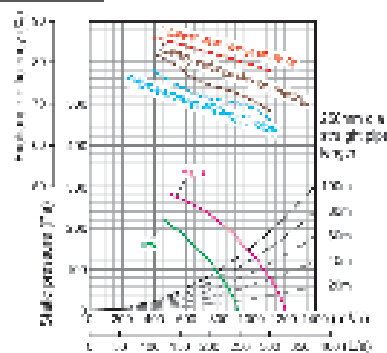
GUF-50RD4



Outline drawings



GUF-100RD4



*Standard dimensions are shown in the drawing as a reference only.

Mitsubishi Electric Ventilator Selection Tool

Mitsubishi Electric Ventilator Selection Tool is software for selecting optimal ventilation fans. In addition to supporting the selection of a sufficient model, it also provides necessary technical documents.

1. Model selection

3. Technical document archive

2. Summary sheet

1. Model selection

An appropriate model can be selected simply by inputting the necessary air volume and static pressure. The model pairs that go with the selected model will also be listed.

2. Summary sheet

Data of the selected model can be downloaded by PDF file, SFP, static pressure information, and energy saving calculation can be also downloaded (varies by model).

3. Technical document archive

Other technical data needed for ventilation system design are also available.



Summary sheet



2D CAD



3D CAD

...and more!

* This image is for illustrative purposes and actual data may vary.

* The fan and other features may change due to product improvements and/or locations.

LOSSNAY YouTube Channel

LOSSNAY's Tube channel provides you videos on LOSSNAY features, structures, and model. Please check the 2D code below for more details.

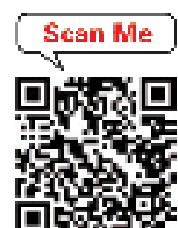
■RVX3 Series features



■LOSSNAY structure

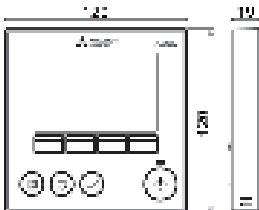
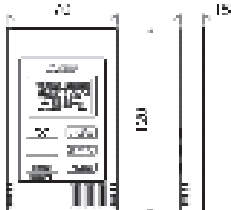


■How to select a model



CONTROL TECHNOLOGIES

Compatibility Table

Model	PZ-62DR-EA/EB	PZ-43SMF-E
Image		
Dimension	 Unit (mm)	 Unit (mm)
Remote Controller Compatibility Table		
Model name	PZ-62DR-EA/EB	PZ-43SMF-E
Compatible series	LGH-RVX3/RVXT3/RVS	LGH-RVX3/RVXT3/RVS
Fan speed selection	4 fan speeds and Auto (Auto is available when using a CO ₂ sensor)	2 of 4 fan speeds
Control with a CO ₂ sensor (Mitsubishi Electric and field supply)	Yes (Fan speed automatically changes from 25% to 100%, depending on the CO ₂ concentration*)	No
Ventilation mode selection	Energy recovery/Bypass/Auto	Energy recovery/Bypass/Auto
Night purge	Yes	No
Function setting with remote controller	Yes	No
Bypass temp. free setting	Yes	No
Flexible airflow setting	Yes (Both supply and exhaust fan speeds can be set separately from 25% to 100% in 5% pitches)	No
ON/OFF timer	Yes	Yes
Auto-off timer	Yes	No
Weekly timer	Yes	No
Fan speed timer	Yes	No
Operation restrictions (ON/OFF, ventilation mode, fan speed)	Yes	No
Operation restrictions (fan speed skip setting)	Yes	No
Screen contrast adjustment	Yes	No
Language selection	Yes (17 languages)	No (English only)
CO ₂ concentration indication (Mitsubishi Electric and field supply)	Yes	No
Filter cleaning sign	Yes (Maintenance interval can be changed)	Yes
LOSSNAY core cleaning sign	Yes/No (RVS Series)	No
Error indication	Yes (Displays model name, serial number, contact information)	Yes
Error history	Yes	No
DA/RA/SA temp. display	Yes	No

*When using a CO₂ sensor, Upper and lower limits may differ.

Remote Control Language Table

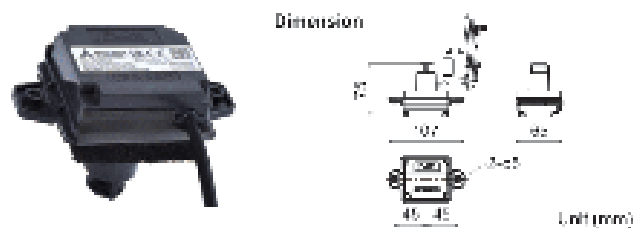
Language	English	German	Spanish	French	Italian	Russian	Arabic	Swedish	Dutch	Turkish	Polish	Greek	Czech	Hungarian	Slovakian	Bulgarian	Danish
-EA	●	●	●	●		●			●	●	●		●	●			●
-EB	●	●	●	●	●		●	●				●				●	●

CO₂ Sensors

Connecting a CO₂ sensor directly to the LOSSNAY unit will optimize fan speed according to the level of CO₂ detected.

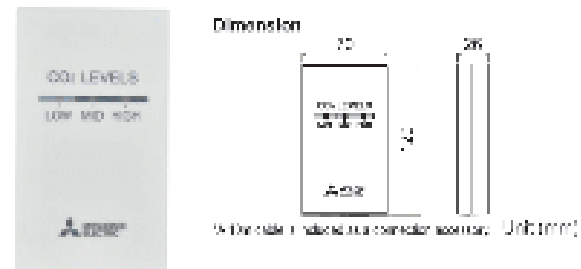
PZ-70CSD-E (Duct mounted type)

Mounted in the duct with all the wiring hidden in the ceiling.



PZ-70CSW-E (Wall mounted type)

Mounted on the wall, CO₂ is monitored in 3 levels.



Vertical Installation Plates

PZ-1VS-E, PZ-2VS-E



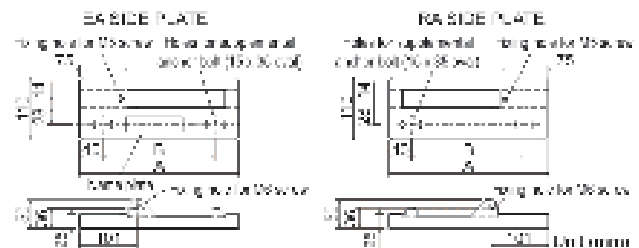
EA side plate RA side plate

Change dimension table (Unit: mm)

Model	A	B	Weight (kg)	Applicable model
PZ-1VS-E	200	200	1.2	LG-115 to GPRVX3-E
PZ-2VS-E	300	300	1.6	LG145 to LG15VX3-E

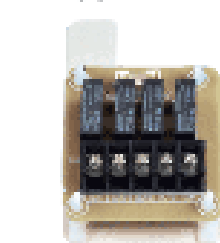
Note: Applicable for LG15VX3-E

Dimension



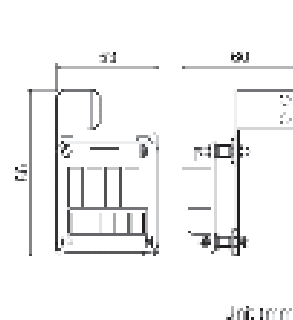
Signal Output Terminal

PZ-4GS-E



The PCBs of RVX3, RVX3T3, RVX3 have only one output terminal. By using PZ-4GS-E, four more output terminals can be added to the units.

Dimension



Wiring diagram



Duct Silencer



The duct silencer connects to the LOSSNAY unit to reduce airflow noise.

Specifications

Model	Airflow (m³/h)	Airflow at static pressure (Pa) or pressure range (kPa)							
		625 Pa	125 Pa	300 Pa	600 Pa	1000 Pa	2000 Pa	4000 Pa	6000 Pa
PZ-100SS-E	50	0	3	6	7	6	6	6	8
	150	0	3	6	7	7	7	7	9
PZ-150SS-E	250	0	1	5	8	15	21	20	17
	300	0	1	4	8	14	21	21	16
	500	0	1	4	7	13	18	18	9
PZ-200SS-E	800	0	1	3	8	12	17	17	6
	1000	0	2	4	12	22	21	14	13
PZ-250SS-E	1000	0	-	4	12	22	20	14	13

1. Figures in the chart above are based on a comparison with a general size duct of the same length.

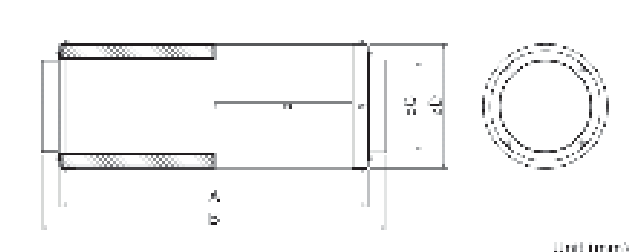
2. The air flow rate A and B are based on the chart above.

3. When the airflow rate differs, the noise will also differ from the chart above.

4. Figures in the chart above are subject to change without notice.

5. Some ratings and specifications may change due to product improvements or modifications.

Dimension

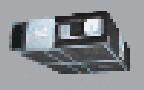


Change dimension table (Unit: mm)

Model	A	B	C	D	Connection port	Weight (kg)
PZ-100SS-E	400	400	96	132	ø100	1.9
PZ-150SS-E	500	500	148	202	ø100	3.5
PZ-200SS-E	600	600	198	252	ø200	5.5
PZ-250SS-E	600	650	246	332	ø250	8.0

Filters

Lineup and Classification

LOSSNAY			Filter				
Model	Fiber		Name	Model	Material	Classification	
	Standard Setting	Optional Setting				ISO 16890: 2010	EN779: 2012
 LGH-RVX3 Series	●		Replacement filter (Coarse 60% filter)	PZ-TRF3-E	Non-woven fabric	Coarse 60%	
		●	Advanced high-efficiency filter (ePM1 70.4 filter)	PZ-THRF3-E	Synthetic fiber	ePM1 70%, ePM2 1.00%, ePM10 93.4	—
		●	High-efficiency filter (H10 filter)	PZ-TH-M3-L	Synthetic fiber	—	M6
		●	Advanced high-efficiency filter (F1 filter)	PZ-THF3-E	Synthetic fiber	—	F8
 LGH-RVX3 Series	●		Replacement filter (Coarse 60% filter)	PZ-STRF3-E	Non-woven fabric	Coarse 60%	—
		●	Advanced high-efficiency filter (ePM1 70.4 filter)	PZ-STTRF3-E	Synthetic fiber	ePM1 70%, ePM2 0.80%, ePM10 93.4	—
		●	High-efficiency filter (H10 filter)	PZ-STTHF3-E	Synthetic fiber	—	M6
		●	Advanced high-efficiency filter (F8 filter)	PZ-STTHF3-E	Synthetic fiber	—	F8
 GLT Series	●		Replacement filter (Coarse 60% filter)	PZ-STRF3-E	Non-woven fabric	Coarse 60%	G3
		●	High-efficiency filter (ePM1 10.0 filter)	PZ-STRFM3-E	Synthetic fiber	ePM10 93%	M6
		●	Advanced high-efficiency filter (ePM1 10.4 filter)	PZ-STTHF3-E	Synthetic fiber	ePM1 55%, ePM2 1.70%, ePM10 93.4	FU
		●	Replacement filter (Coarse 60% filter)	PZ-TH3-LH	Non-woven fabric	Coarse 60%	G3
 GLT Series	●		High-efficiency filter (ePM1 10.0 filter)	PZ-TH3-M-L	Non-combustible fiber	ePM10 93%	—
		●	Advanced high-efficiency filter (ePM1 10.5 filter)	PZ-TH3-F3-L	Synthetic fiber	ePM1 55%, ePM2 1.00%, ePM10 93.4	—

*1: Designed for the Spanish market to comply with RITE (Regulation of Thermal Installation of Buildings)

For LGH-RVX3 SERIES

Filter								Package number for replacement	Installation location			
Image	Model	Applicable model	Dimension (mm)			Pieces per package	Numbers of filters					
			L	W	H		OA		RA	SA		
	Replacement filter (Coarse 60% filter)	PZ-15-TRF3-E	LGH-15RVX3-F	565	125	20	2	1	2	1	1	—
		PZ-25RF3-E	LGH-25RVX3-E	654	151	13	2	1	2	1	1	—
		PZ-35-TRF3-E	LGH-35RVX3-F	794	159	15	2	1	2	1	1	—
		PZ-65RF3-E	LGH-65RVX3-E	626	178	13	2	1	2	1	1	—
		PZ-85-TRF3-E	LGH-85RVX3-F	857	210	15	2	1	2	1	1	—
		PZ-85RF3-E	LGH-85RVX3-E	800	238	15	2	1	2	1	1	—
		LGH-180RVX3-F	4					2	2	—		
		PZ-100RF3-E	LGH-100RVX3-E	1117	238	15	2	1	2	1	1	—
			LGH-200RVX3-F					2	4	2	2	—
		Advanced high-efficiency filter (ePM1 70.4 filter)	PZ-155RF3-E	LGH-15RVX3-E	642	184.6	23	1	1	1	—	1
PZ-25-TRF3-E			LGH-25RVX3-F	322	125.5	25	2	1	2	—	—	2
		PZ-355RF3-E	LGH-35RVX3-E	390	169.6	23	2	1	2	—	—	2
		PZ-65-TRF3-E	LGH-65RVX3-F	481	155.5	25	2	1	2	—	—	2
		PZ-655RF3-E	LGH-65RVX3-E	423	197.6	23	2	1	2	—	—	2
		PZ-80-3RF3-E	LGH-80RVX3-F	442	238	23	2	1	2	—	—	2
LGH-100RVX3-E			2					4	—	—	4	
		PZ-100RFP3-E	LGH-100RVX3-F	654	238	23	2	1	2	—	—	2
			LGH-200RVX3-E					2	4	—	—	4
		High-efficiency filter (H10 filter)	PZ-15-TRF3-F	LGH-15RVX3-F	565	125	15	1	1	1	1	—
	PZ-25RFM3-E		LGH-25RVX3-E	322	151	13	2	1	2	2	—	—
		PZ-35-TRF3-F	LGH-35RVX3-F	390	159	15	2	1	2	2	—	—
		PZ-65RFM3-E	LGH-65RVX3-E	451	178	13	2	1	2	2	—	—
		PZ-85-TRF3-F	LGH-85RVX3-F	420	210	15	2	1	2	2	—	—
		PZ-85RFM3-E	LGH-85RVX3-E	442	238	13	2	1	2	2	—	—
		LGH-180RVX3-F	2					4	4	—	—	
		PZ-100RFM3-E	LGH-100RVX3-E	654	238	13	2	1	2	2	—	—
			LGH-200RVX3-F					2	4	4	—	—
		Advanced high-efficiency filter (F8 filter)	PZ-155RF3-E	LGH-15RVX3-E	642	184.6	23	1	1	1	—	1
PZ-25-TRF3-F			LGH-25RVX3-F	322	125.5	25	2	1	2	—	—	2
		PZ-355RF3-E	LGH-35RVX3-E	390	169.6	23	2	1	2	—	—	2
		PZ-65-TRF3-F	LGH-65RVX3-F	481	155.5	25	2	1	2	—	—	2
		PZ-655RF3-E	LGH-65RVX3-E	423	197.6	23	2	1	2	—	—	2
		PZ-80-3RF3-E	LGH-80RVX3-F	442	238	23	2	1	2	—	—	2
LGH-100RVX3-E			2					4	—	—	4	
		PZ-100RFP3-E	LGH-100RVX3-F	654	238	23	2	1	2	—	—	2
			LGH-200RVX3-E					2	4	—	—	4

*2: Designed for the Spanish market to comply with RITE (Regulation of Thermal Installation of Buildings)

For LGH-RVXT3 SERIES

Image	Model	Filter							Pieces per package	Package number for replacement	Installation location				
		Applicable model	Dimension (mm)								Numbers of filters				
			Short			Long					QA	RA	SA		
			L	W	H	L	W	H			Long	Long	Short	Long	
Replacement filter (Coarse 80% filter) 	PZ-250TRF-E	LGH-160RVXT3-E LGH-200RVXT3-E LGH-250RVXT3-E	-	-	-	895	285	15	Long : 4	-	4	2	2	-	-
Advanced high-efficiency filter (dPM1 95% filter) 	PZ-250TRF-E		668	285	25	1327	286	25	Short : 1 Long : 1	-	2	-	-	1	1
High-flow top filter (M5 filter) 	PZ-250TMR-E		-	-	-	1000	283	10	Long : 2	-	2	2	-	-	-
Advanced high-efficiency filter (F0 filter) 	PZ-250THR-E		668	288	25	1327	288	25	Short : 1 Long : 1	-	2	-	-	1	1

* Designed for the specified models to comply with HITE (regulation) thermal insulation of building.

For LGH-RVS SERIES

Image	Model	Filter				Pieces per package	Package number for replacement	Installation location			
		Applicable model	Dimension (mm)					Numbers of filters			
			L	W	H			QA	RA	SA	
Replacement filter (Coarse 50% filter) 	PZ-800RF-E	LGH-800RVS-E	845	195	15	2	1	2	1	1	—
	PZ-880RF-E	LGH-800RVS-E	885	195	15	2	1	2	1	1	—
	PZ-8100RF-E	LGH-100RVS-E	1112	193	15	2	1	2	1	1	—
High efficiency filter (dPM10 90% filter) 	PZ-600RFM-E	LGH-600RVS-E	422	190	10	2	1	2	2	—	—
	PZ-600R-1M4	LGH-600RVS-1M4	412	195	15	2	1	2	2	—	—
	PZ-8100RFM-E	LGH-100RVS-E	656	195	15	2	1	2	2	—	—
Advanced high-efficiency filter (dPM1 95% filter) 	PZ-800RF-E	LGH-600RVS-E	412	203	25	2	1	2	2	—	—
	PZ-600RF-E	LGH-600RVS-E	402	203	25	2	1	2	2	—	—
	PZ-8100R-1M4	LGH-100RVS-1M4	656	203	25	2	1	2	2	—	—

For GUF SERIES

Image	Model	Filter				Pieces per package	Package number for replacement	Installation location			
		Applicable model	Dimension (mm)					Numbers of filters			
			L	W	H			QA	RA	SA	
	PZ-600RF-E	GUF-600RD4	490	163	15	4	1	4	2	2	-
	PZ-100RFS-E	GUF-100RD4	593	243	15	4	1	4	2	2	-
	PZ-600RFM-E	GUF-600RD4	464	170	25	2	1	2	-	-	2
	PZ-100RPM-E	GUF-100RD4	550	236	25	2	1	2	-	-	2
	PZ-600RFP2-E	GUF-600RD4	464	170	25	2	1	2	-	-	2
	PZ-100R-1P2-L	GUF-100RD4	550	236	25	2	1	2	-	-	2

Residential Use LOSSNAY

VL-CZPVU SERIES



Vertical type centralized ventilation with sensible heat exchange for residential use.

Key Features



Quiet Operation

Noise is one of the most common concerns for residential ventilation. Unit's quiet operation is achieved with the special fan designed by Mitsubishi Electric. The balance between airflow and static pressure is optimized and the fan rotation is minimized, leading to sensitive lows.

Air Purification

An optional filter removes NOx and PM2.5 and improves indoor air quality. They can be incorporated inside the unit without any filter box, which saves space.

*Flue Gas Analyzer to display flue gas analysis data (CO, NOx) and nitrogen dioxide (NO₂).

*PM2.5 G-Alpha sensor measures the mass of fine particles per unit volume.

Wi-Fi Control

MELCloud is a Cloud-based solution for controlling LOSSNAY units either locally or remotely by computer, tablet or smartphone via the Internet. In a basic LOSSNAY operation, it can be checked and controlled via MELCloud from virtually anywhere and Internet connection is available. With MELCloud, the LOSSNAY system can be used much more easily and conveniently.

Energy Saving

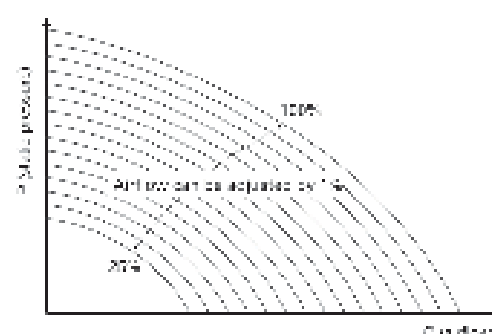
Under regulation (EU No. 1254/2014), the VL-CZPVU series has the highest energy-saving performance in its class (ErP A+). It saves heating and cooling costs by minimizing the energy loss that occurs during ventilation.

ErP A+

A+

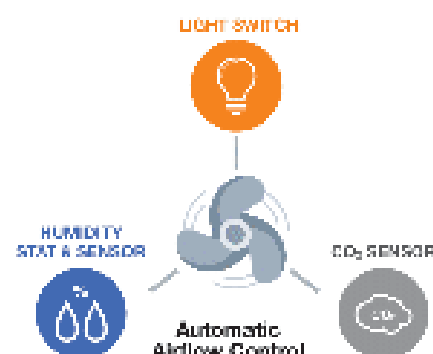
Variable Airflow Control

The default fan speed value (fan speed 1: 30%, fan speed 2: 40%, fan speed 3: 70%, and fan speed 4: 100%) of both supply air and exhaust air can be adjusted flexibly. Within the range between 25% and 100%, airflow can be adjusted by 1% increments to satisfactorily meet the designed airflow rate.



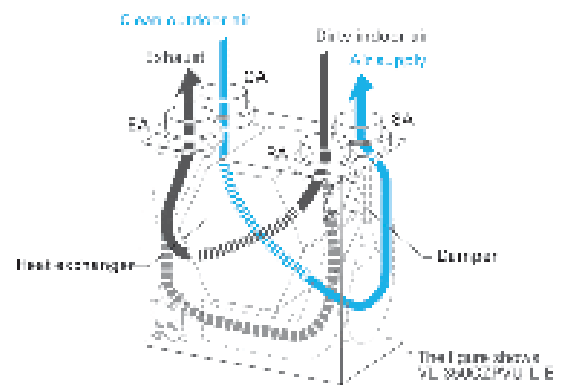
External Airflow Control

The airflow from the LOSSNAY unit can be changed using 0-10V signals from the controllers, such as the humidity stat and CO₂ sensor (flue supply). The LOSSNAY unit is also connected to the light switch which can boost operation mode (input 220-240V). These devices are connected directly to the LOSSNAY unit, allowing automatic fan speed selection according to bathroom occupancy, CO₂ level, and humidity level.



Automatic Bypass Mode

It is possible to switch between "100%RA" ventilation (with heat exchange) and "bypass ventilation (without heat exchange)" either manually or automatically. When outside air is cooler than indoor air in summer, the unit will choose outside air bypassing heat exchanger.



Wide Operating Temperature

The V-122EU series can operate at temperatures down to -15°C . With a pre-heater, it can operate at temperatures down to -25°C .

* In 1990, when sampling was done at -55°C , an additional 1000 samples were collected. A requirement in the 1990 act in addition to the previous one was that the samples had to be collected at -55°C or lower.

*The G4 temperature must be higher than 15°C when the pre-heating

MELCloud for LOSSNAY

MLC4 can enable fast, easy remote control and monitoring of OESK49 units. Wireless remote connectivity and an internet connection to the internet terminal are all that are needed. MLC4 can also be used to control room air conditions and appear heat pumps simultaneously.

Key control and monitoring features

1. Turn system on/off
2. Switching air on & operating mode (Heat recovery / Bypass)
3. Controlling the speed of the fans (are off/on a while until a set

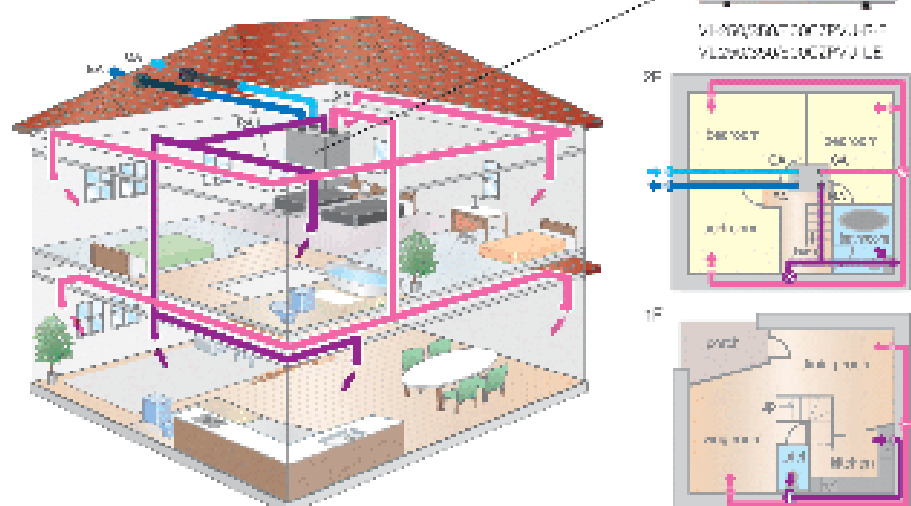


Isntallation Image

Centralized Ventilation

One LOSSNAY unit provides 24-hour ventilation for the entire house, from living room and bedrooms to the bathroom. The heat recovery system provides fresh air at a comfortable air temperature. A sensible heat exchanger effectively reduces excess humidity in the winter.

- ✓ Heat Exchangers
- ✓ Whole-house Solutions
- ✓ Air Purification
- ✓ Boiler Operation
- ✓ ME Check Panel



Specifications

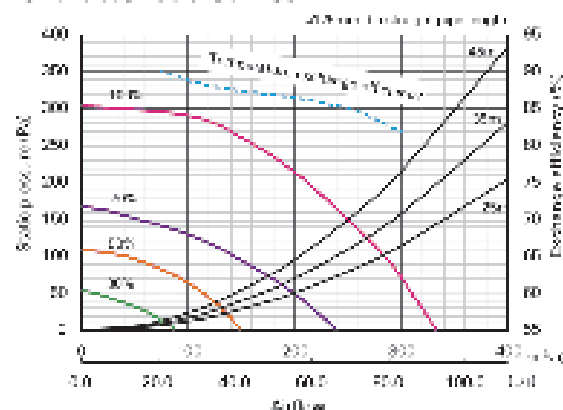
VL-CZPVU SERIES

Model	VL-250CZPVU-R/L-E			
Electrical power supply	220-240V/50Hz, 220V/60Hz			
Ventilation mode	Heat recovery mode			
Fan speed	1501 (100%)	1151 (75%)	927 (60%)	811 (50%)
Running current (A)	0.76	0.56	0.29	0.12
Input power (W)	106	44	23	11
Airflow	(m ³ /h)	250	175	125
	(L/s)	69	49	35
External static pressure (Pa)	150	74	39	14
Temperature exchange efficiency (%)	93	87	89	80
Noise level (dB)	31	22	19	15+
Energy efficiency class	A+			
Weight (kg)	25			
Dimensions (mm)	(H) 365 x (W) 365 x (D) 306			

■Notes

1. Actual values are all factory default.
2. All values are given for standard conditions. The efficiency and pressure are standard for the rating airflow. The pressure is standard for the rating airflow.
3. Sound pressure level is 1m distance.
4. The noise level is measured in a quiet room with no other noise.
5. The noise level is measured in a quiet room with no other noise.
6. The noise level is measured in a quiet room with no other noise.
7. The noise level is measured in a quiet room with no other noise.
8. The noise level is measured in a quiet room with no other noise.
9. The noise level is measured in a quiet room with no other noise.
10. The noise level is measured in a quiet room with no other noise.

Characteristic Curves

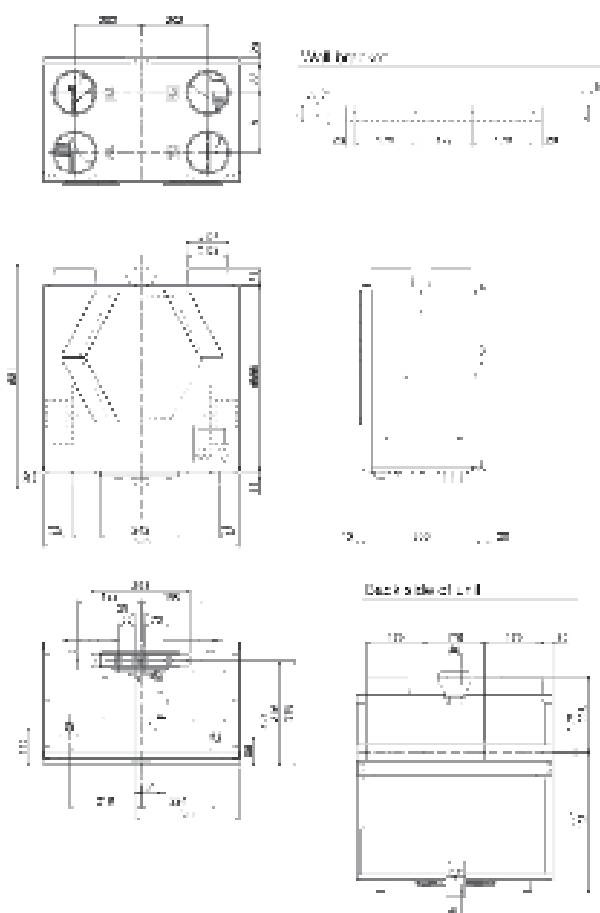


■Notes

1. The static pressure is measured in a quiet room with no other noise.
2. The static pressure is measured in a quiet room with no other noise.
3. The static pressure is measured in a quiet room with no other noise.
4. The static pressure is measured in a quiet room with no other noise.
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9. The static pressure is measured in a quiet room with no other noise.
10. The static pressure is measured in a quiet room with no other noise.

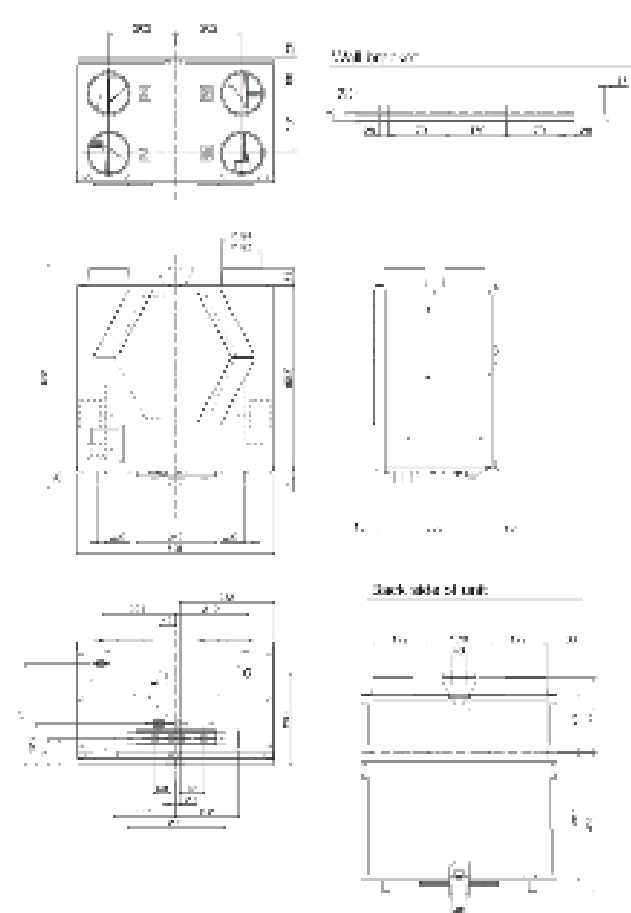
Dimensions

VL-250CZPVU-R-E



Unit: mm

VL-250CZPVU-L-E



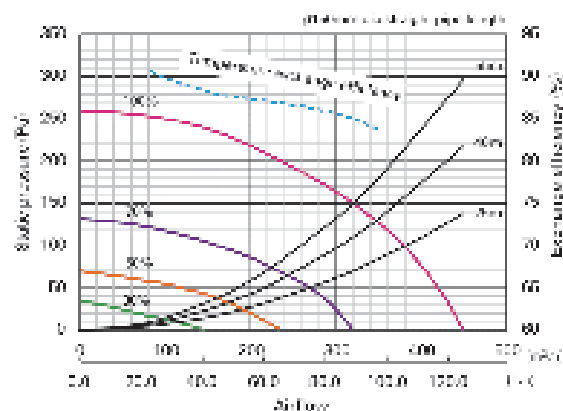
Unit: mm

Model	VL-350CZPVU-R/L-E			
Electrical power supply	220-240V/50Hz, 220V/60Hz			
Ventilation mode	Heat recovery mode			
Fan speed	150 (100%)	133 (100%)	122 (100%)	111 (100%)
Running current (A)	1.08	0.93	0.83	0.75
Input power (W)	150	71	37	18
Airflow	(m³/h)	320	324	180
	(L/s)	89	90	50
External static pressure (Pa)	150	74	39	14
Temperature exchange efficiency (%)	93	87	89	80
Noise level (dB)	33	25	19	15+
Energy efficiency class	A+			
Weight (kg)	32			
Dimensions (mm)	(H) 623 x (W) 669 x (D) 432			

■ Notes

1. Actual values are all factory default.
2. All values are measured at 25°C. The efficiency and noise are measured at the rating voltage and standard air.
3. Sound pressure level at 0.1m distance.
4. The noise level is not applicable when the unit is used in the ceiling.
5. The actual static pressure and airflow in the duct according to EN12530-1 and the actual static pressure are measured by chamber method.
6. Typical values are shown in the graph as reference values.

Characteristic Curves

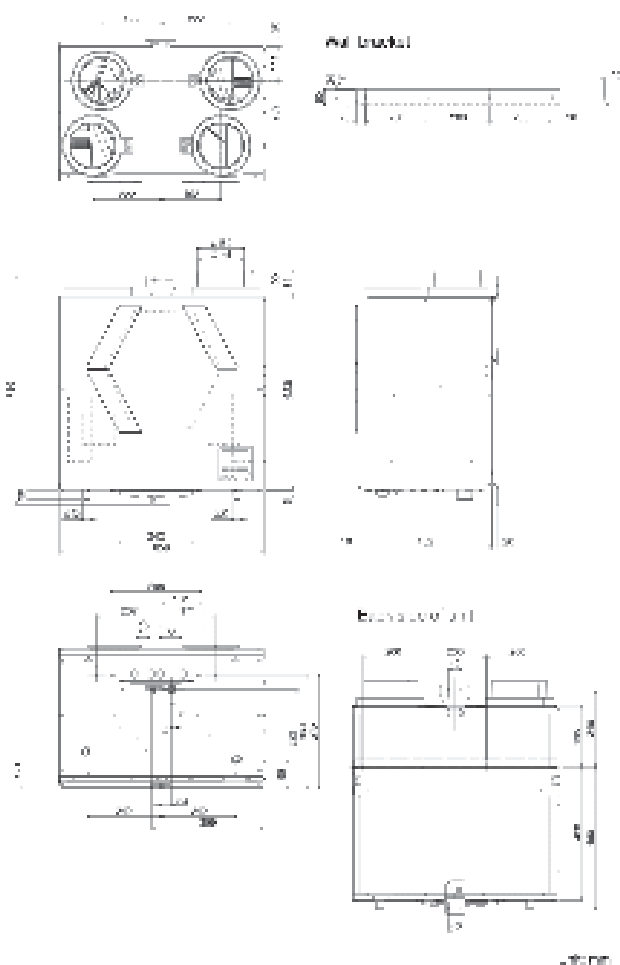


■ Notes

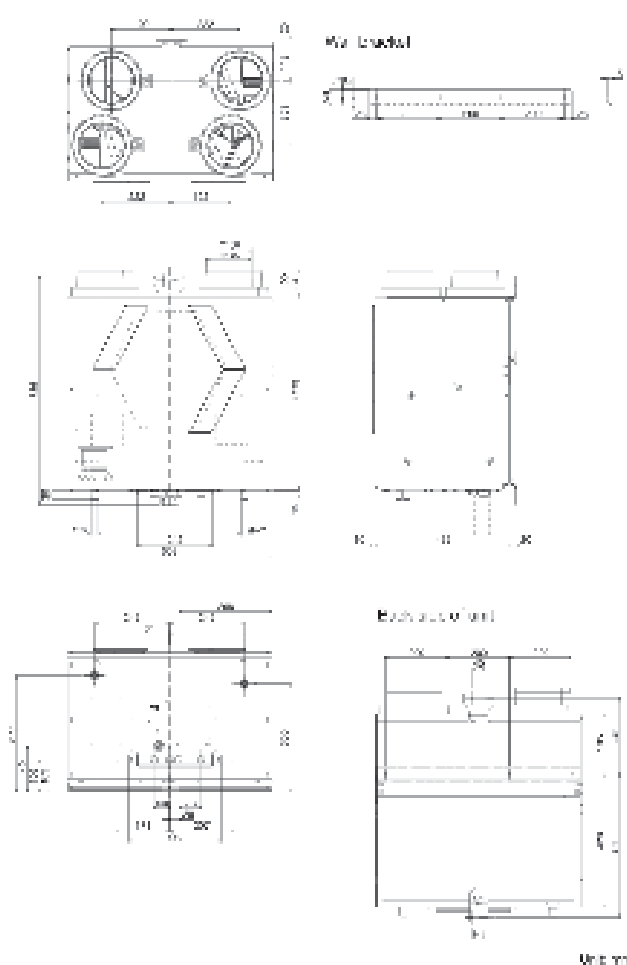
1. The static pressure is measured by the static pressure gauge (P-10001) at 0.1m distance. The characteristic curves are measured by chamber method.

Dimensions

VL-350CZPVU-R-E



VL-350CZPVU-L-E

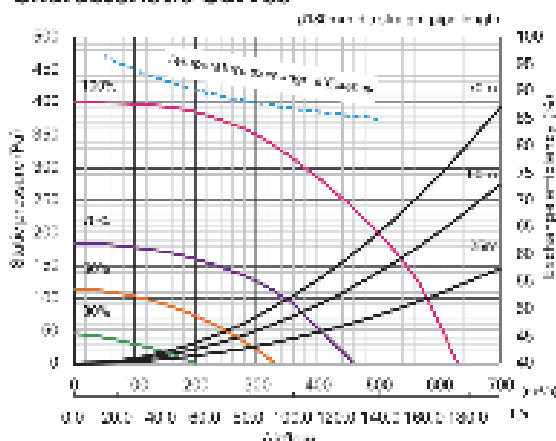


Model	VL-500CZPVU-R-L-E			
Electrical power supply	220-240V/50Hz, 220V/60Hz			
Ventilation mode	Heat recovery mode			
Fan speed	150 (100%)	133 (100%)	122 (100%)	111 (100%)
Running current (A)	1.73	1.57	1.40	1.19
Input power (W)	275	104	49	21
Airflow	(m ³ /h)	650	350	250
	(L/s)	108	57	42
External static pressure (Pa)	250	85	50	10
Temperature exchange efficiency (%)	93	87	89	82
Noise level (dB)	37	29	22	15+
Energy efficiency class	A+			
Weight (kg)	39			
Dimensions (mm)	(H) 632 x (W) 725 x (D) 606			

■Notes

1. Actual values are all factory default.
2. All values are measured at 25°C. The efficiency and pressure are standard the rating values at standard air.
3. Sound pressure level at 0.1m is shown.
4. The noise level is not applicable when the unit is used in the ceiling.
5. The actual static pressure and airflow in the duct according to EN1819-1-1-10 and the actual static pressure and airflow are not shown in the table.
6. The actual static pressure and airflow are not shown in the table.

Characteristic Curves

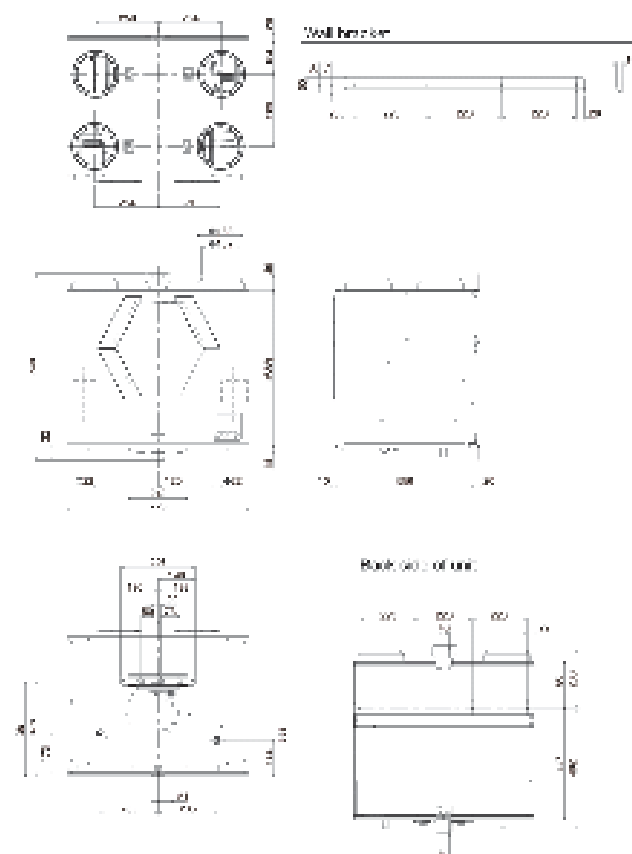


■Notes

1. The actual static pressure and airflow in the duct according to EN1819-1-1-10 and the actual static pressure and airflow are not shown in the table.

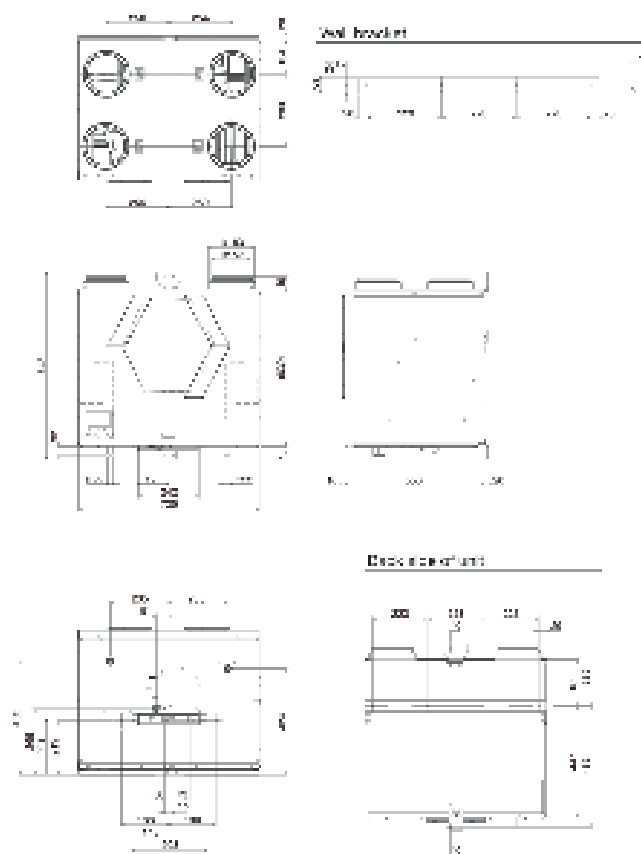
Dimensions

VL-500CZPVU-R-E



Unit:mm

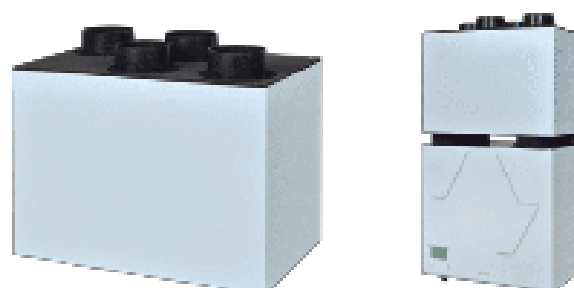
VL-500CZPVU-L-E



Unit:mm

Silencer Box

Noise level can be further decreased by using a silencer box.



Installation Image

P-250SB-E

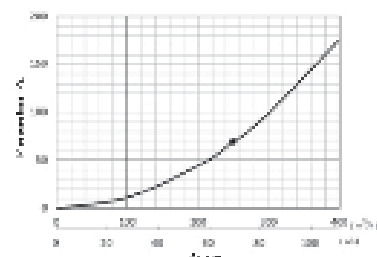
■ Attenuation of sound power level for center frequency

Air flow (m³/min)	Static pressure (Pa)	Point	Attenuation of sound power level for center frequency (dB (dBS))							
			55	125	250	500	1000	2000	4000	8000
125	25	Center (250Hz)	0	7	11	17	25	35	41	45

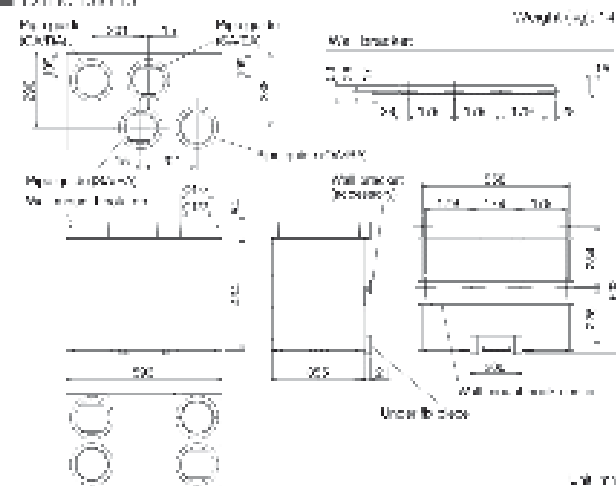
- Figures in the chart above are measured by Mitsubishi Electric.
- The silencer box is placed just after the outlet of the L250W4W unit as specified in the Installation Manual.
- When air flow differs, attenuation may also differ from the chart above.

■ Pressure loss curve

The curve on the right shows the total pressure drop of the CA and SA or BA and SA ducts in the silencer box.



■ Dimensions



P-350SB-E

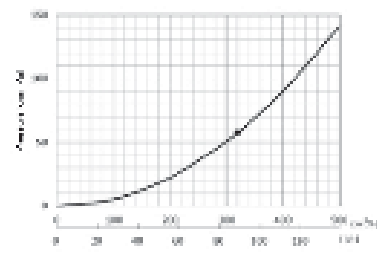
■ Attenuation of sound power level for center frequency

Air flow (m³/min)	Static pressure (Pa)	Point	Attenuation of sound power level for center frequency (dB (dBS))							
			55	125	250	500	1000	2000	4000	8000
225	25	Center (250Hz)	2	0	11	21	32	39	9	12

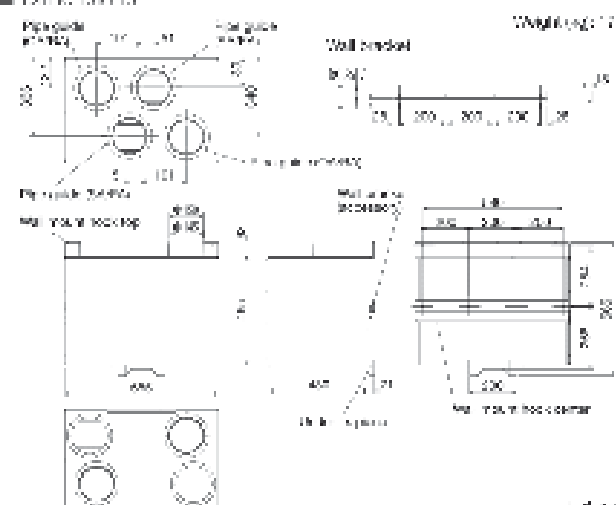
- Figures in the chart above are measured by Mitsubishi Electric.
- The silencer box is placed just after the outlet of the L350W4W unit as specified in the Installation Manual.
- When air flow differs, attenuation may also differ from the chart above.

■ Pressure loss curve

The curve on the right shows the total pressure drop of the CA and SA or BA and CA ducts in the silencer box.



■ Dimensions



P-500SB-E

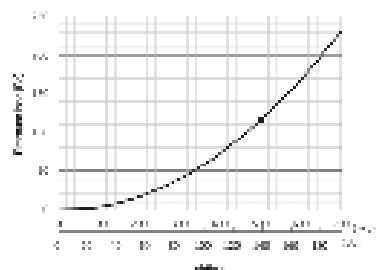
■ Attenuation of sound power level for center frequency

Air flow (m³/min)	Static pressure (Pa)	Point	Attenuation of sound power level for center frequency (dB (dBS))							
			55	125	250	500	1000	2000	4000	8000
330	30	Center (250Hz)	10.5	9.5	10.0	21.0	27.0	29.0	26.0	14.0

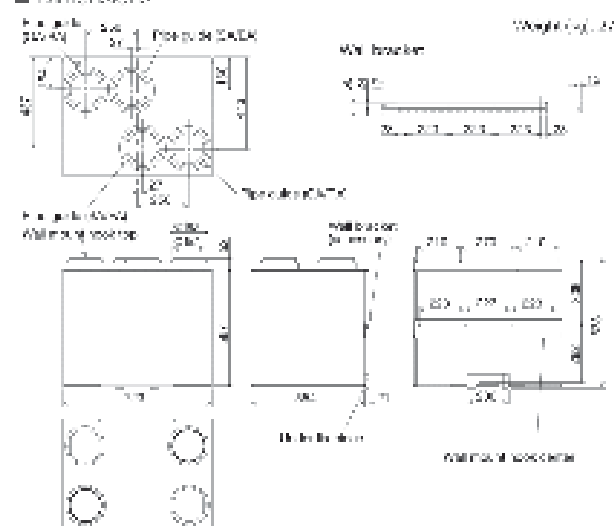
- Figures in the chart above are measured by Mitsubishi Electric.
- The silencer box is placed just after the outlet of the L500W4W unit as specified in the Installation Manual.
- When the installation differs, attenuation may be also differ from the chart above.

■ Pressure loss curve

The curve on the right shows the total pressure drop of the CA and SA or BA and CA ducts in the silencer box.



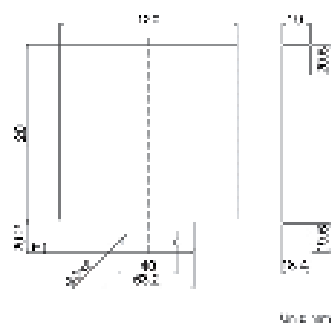
■ Dimensions



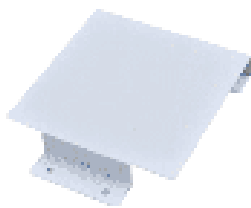
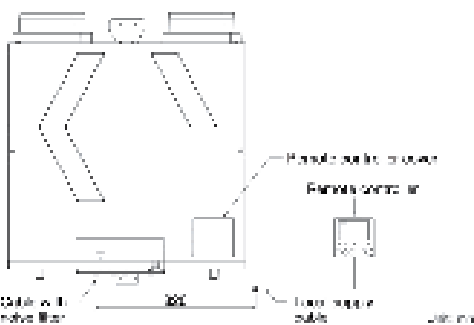
Remote Controller Cover

By attaching a Remote Controller Cover, the remote controller can be installed at a distance from the unit.

■ Dimensions



■ Configuration



Remote controller cover



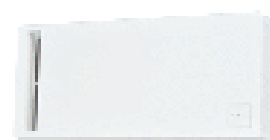
Cable with noise filter
(5A 2-core shielded cable, 10m length)
Agreement only, 500V class

Filters

Type	Replacement filter	Standard filter	Medium efficiency filter	Advanced efficiency filter	Advanced high efficiency filter	NOx Filter
Model	P-2501F-E P-8501F-E P-6501F-F	P-2502F-E P-8502F-E P-6502F-F	P-2503F-E P-8503F-E P-6503F-F	P-2504F-E P-8504F-E P-6504F-F	P-2505F-E P-8505F-E P-6505F-F	P-2506F-E P-8506F-E P-6506F-F
Capacity	PM2.5 2710x	PM2.5 2710x	PM2.5 2710x	PM2.5 2710x	PM2.5 2710x	PM2.5 2710x
ISO 16890 (PM2.5)	Class 15.4	Class 15.4	Class 15.4	Class 15.4	Class 15.4	Class 15.4

VL-50

Wall-mounted models particularly suited for houses and small offices.



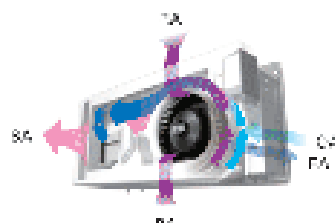
VL-50(E)S2-E
VL-50SR2-E

Decentralized Ventilation: VL-50(E)S2-E and VL-50SR2-E

Product advantages

Air is supplied and exhausted simultaneously

Air is supplied and exhausted simultaneously while transferring the heat.



Energy efficient

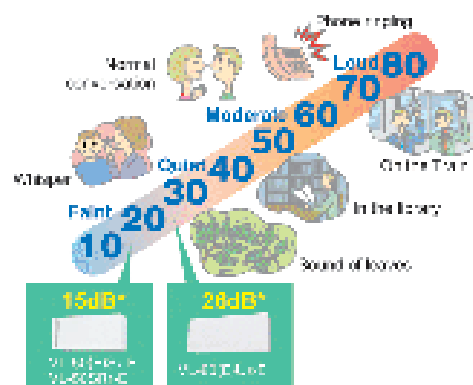
- Total heat exchange minimizes heat loss.
- Air leak cover: 90%* → minimizes air leakage.

*Based on ISO-4545 test method at 330V/50Hz

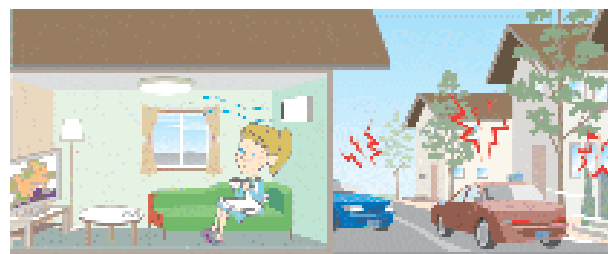
Sound insulation

A sound insulation effect reduces the level of noise generated outside.

Low noise levels are ideal for bedrooms and children's rooms.



*Based on ISO-4545 test method



Sound insulation effect	Sound Source Side Average sound pressure (dB)	Sound Receiving Side Average sound pressure (dB)	Difference
	109.4	69.2	40.2

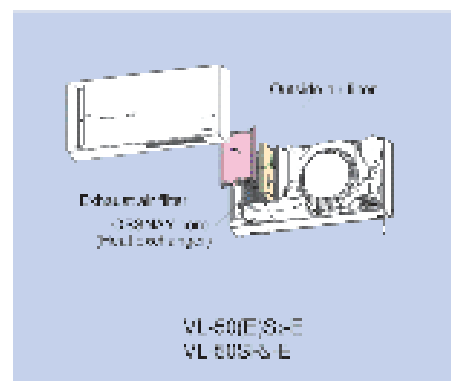
*Based on ISO-4545

*Based on test results with pressure level of more than 20dB in 500Hz according to JIS S-417

VL-50SR2-E is a Japanese standard model equivalent to VL-50(E)S2-E

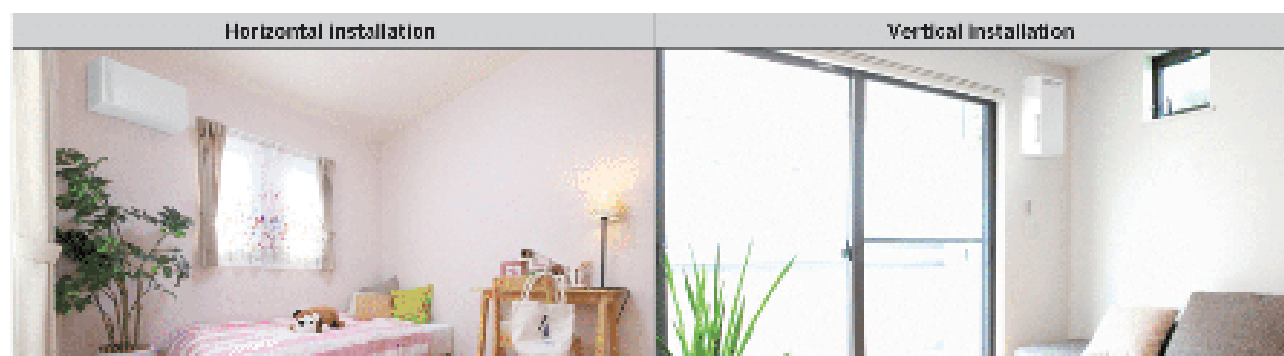
Easy maintenance

The only maintenance required is cleaning the outside air filter and exhaust air filter. Filters are easily accessible, making quick and thorough cleaning possible.



Flexible Installation for Only VL-50(E)S2-E and VL-50SR2-E

VL-50(E)S2-E and VL-50SR2-E may be installed either horizontally or vertically in various types of rooms.



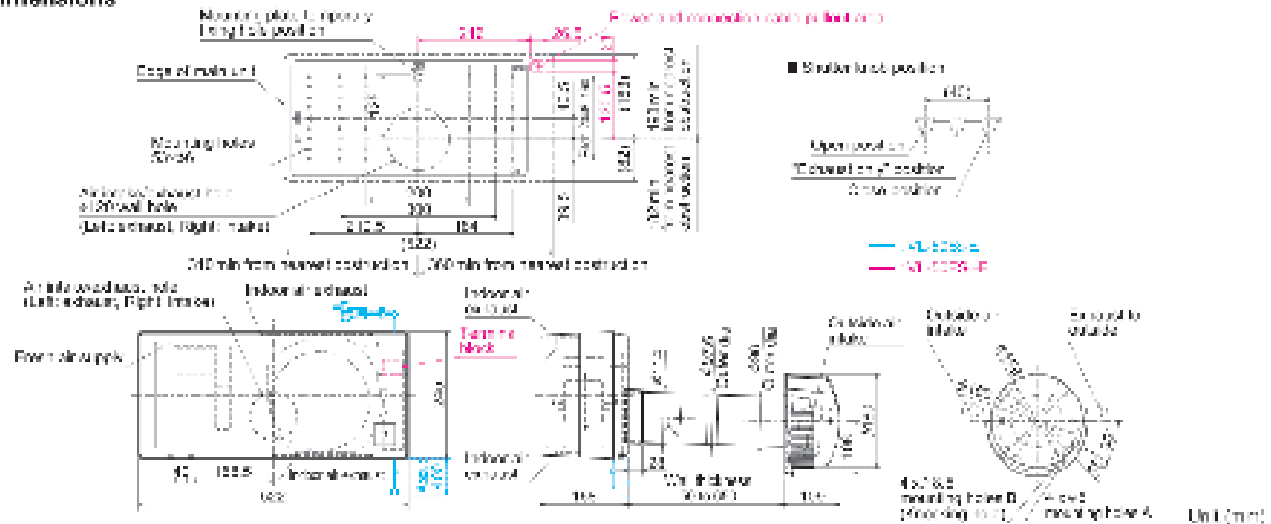
Specifications

VL-50(E)S₂-E (VL-50S₂-E/Pull-Switch Model, VL-50ES₂-E/Wall-Switch Model)

Model	VL-50(E)S ₂ -E							
Electrical power supply	220V/50Hz		230V/50~60		240V/50Hz		230V/60~62	
Fan speed	High	Low	High	Low	High	Low	High	Low
Airflow (m ³ /h)	51	15	52.5	15	54	17	57	17
Power consumption (W)	18	4	20	4.5	21	5	21	5.5
Temperature exchange efficiency (%)	70	86	69	85	68	84	69	84
Noise level (dB)	35.5	14	37	15	37.5	15.5	37.5	15.5
Weight (kg)	0.2							
Specific energy consumption class	C							

*The value for efficiency and noise level according to Japan's standard. Marked with * indicates the value is for reference only.
 (Specifications may be subject to changes without notice.)

Dimensions

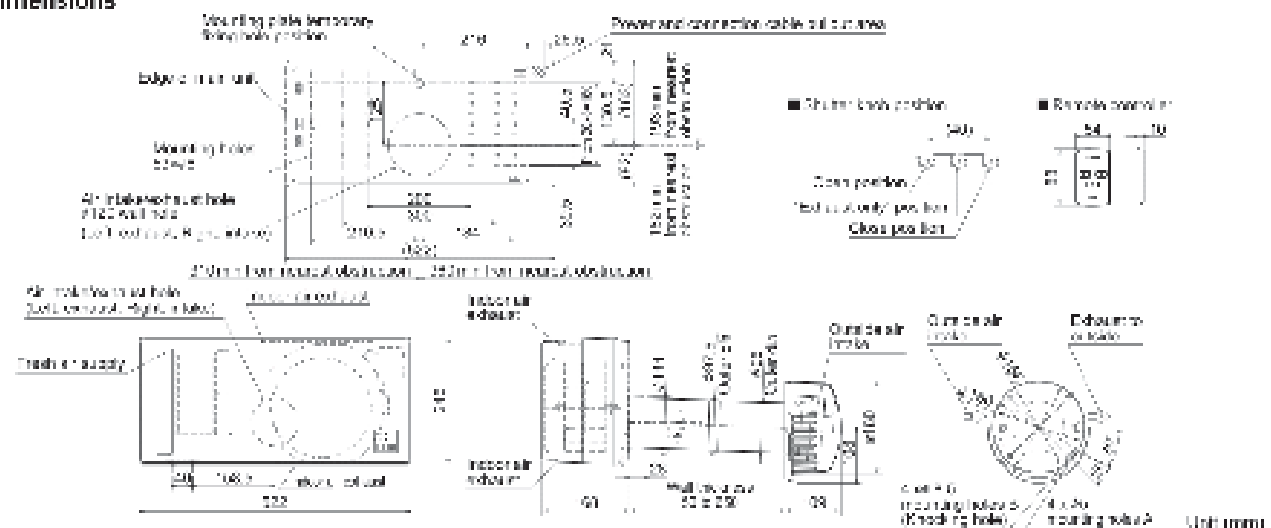


VL-50SR₂-E (Remote Controller Model)

Model	VL-50SR ₂ -E							
Electrical power supply	220V/50Hz		230V/50~60		240V/50Hz		230V/60~62	
Fan speed	High	Low	High	Low	High	Low	High	Low
Airflow (m ³ /h)	51	15	52.5	15	54	17	57	17
Power consumption (W)	18	4.6	20	5	21	5.6	21	5
Temperature exchange efficiency (%)	70	86	69	85	68	84	69	84
Noise level (dB)	35.5	14	37	15	37.5	15.5	37.5	15.5
Weight (kg)	0.2							
Specific energy consumption class	C							

*The value for efficiency and noise level according to Japan's standard. Marked with * indicates the value is for reference only.
 (The value may be subject to changes without notice.)

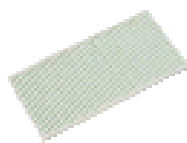
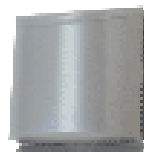
Dimensions



Optional Parts

Optional Parts for VL-50(E)S2-E and VL-50SR2-E

Filter, Extension Pipe and Stainless Hood

Type	Replacement Filter	High Efficiency Filter	Extension Pipe	Joint	Stainless Hood
Design					
Model	P-50H2-E	P-50HFX-E	P-50PE	P-50PJ-E	P-50VSD2-E
Feature	—	—	Available when connected with joint is 900 mm	Joint for extension pipe	Stylish stainless hood
Classification (UL779/ISO12)	G3	—	—	—	—
Classification (ISO16813)	Coarse 30%	99M10 99%	—	—	—

Compatible table

Commercial

Optional Parts List

Optional parts			Model																	
LOSSNAY remote controller			PZ-8010-FA4PR	PZ-435WE-E	PZ-15RF3-E	PZ-25RF3-E	PZ-35RF3-E	PZ-45RF3-E	PZ-55RF3-E	PZ-65RF3-E	PZ-75RF3-E	PZ-85RF3-E	PZ-95RF3-E	PZ-105RF3-E	PZ-115RF3-E	PZ-125RF3-E	PZ-135RF3-E	PZ-145RF3-E	PZ-155RF3-E	PZ-165RF3-E
Filter	Replacement filter	PZ-15RF3-E																		
		PZ-25RF3-E																		
		PZ-35RF3-E																		
		PZ-45RF3-E																		
		PZ-55RF3-E																		
		PZ-65RF3-E																		
		PZ-75RF3-E																		
		PZ-85RF3-E																		
		PZ-95RF3-E																		
		PZ-105RF3-E																		
		PZ-115RF3-E																		
	High-efficiency filter	PZ-125RF3-E																		
		PZ-135RF3-E																		
		PZ-145RF3-E																		
		PZ-155RF3-E																		
		PZ-165RF3-E																		
		PZ-175RF3-E																		
		PZ-185RF3-E																		
		PZ-195RF3-E																		
		PZ-205RF3-E																		
		PZ-215RF3-E																		
		PZ-225RF3-E																		
	Advanced high-efficiency filter	PZ-235RF3-E																		
		PZ-245RF3-E																		
		PZ-255RF3-E																		
		PZ-265RF3-E																		
		PZ-275RF3-E																		
		PZ-285RF3-E																		
		PZ-295RF3-E																		
		PZ-305RF3-E																		
		PZ-315RF3-E																		
		PZ-325RF3-E																		
		PZ-335RF3-E																		
		PZ-345RF3-E																		
CO ₂ sensor	PZ-700SD-E																			
	PZ-700SM-E																			
	PZ-700SE-E																			
	PZ-700SF-E																			
Vertical installation plates	PZ-700V-E																			
	PZ-700H-E																			
	PZ-700L-E																			
	PZ-700R-E																			
Signal output terminal	PZ-700S-E																			
	PZ-700M-E																			
	PZ-700SE-E																			
	PZ-700SF-E																			
Duct silencer	PZ-700SD-E																			
	PZ-700SM-E																			
	PZ-700SE-E																			
	PZ-700SF-E																			

*1. Designed for the European market, comply with RITE (Regulation of Thermal Installations of Buildings). *2. All the products are available in a separate page for each model of product.

Residential

Optional Parts for VL-CZPVU Series

Optional parts				VL-5002P-VL140-E	VL-5002P-VL140-E	VL-5002P-VL140-E
Model						
Filter	Replacement filter (Coarse 90% filter)	P-150-E	P-150-E	●		
			P-300P-E		●	
			P-300P-E			●
	Standard filter (Coarse 90% filter)	P-150P-E	P-250P-E	●		
			P-300P-E		●	
			P-300P-E			●
	Medium-efficiency filter (ePM10 90% filter)	P-150MF-E	P-250MF-E	●		
			P-300MF-E		●	
			P-300MF-E			●
	PM2.5 filter (ePM2.5 90% filter)	P-150PF-E	P-250PF-E	●		
			P-300PF-E		●	
			P-300PF-E			●
	PM1 filter (ePM1 95% filter)	P-150PFH-E	P-250PFH-E	●		
			P-300PFH-E		●	
			P-300PFH-E			●
	NOx filter	P-150NF-E	P-250NF-E	●		
			P-300NF-E		●	
			P-300NF-E			●
Silencer box		P-150S-E	P-250S-E	●		
			P-300S-E		●	
			P-300S-E			●
RC cover (remote controller cover)		P-RC0-E	●	●	●	

*These optional parts are only compatible with models that have a serial number of 255/0001 or later.

Optional Parts for VL-50

Optional parts			Model	VL-500-E	VL-500S-E	VL-500S-E
Filter	Replacement filter	F-50F2-E (G3 Filter)		●	●	●
	High efficiency filter	F-50HF2-E (ePM10 75% Filter)		●	●	●
Extension pipe			P-500P-E	●	●	●
Pipe extension joint			P-500P-J	●	●	●
Stainless hood			P-50V505-E	●	●	●