

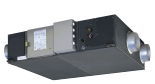






LROSSNAY SYSTEM



LOSSNAY LINE-UP

Application	Model	Air volume	50 CMH	100 CMH	150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
Commerical Use	LGH-RVX Series				●	●	●	●	●	●	●	●	●	
	LGH-RVXT Series											●	●	●
	GUF Series							●			●			
Optional Unit	Dx-Coil unit for Lossnay LGH-RVX/RVXT Series GUG Series							●	●	●	●	●	●	●
Residential Use	VL-220CZGV-E					●								
	VL-100(E)U ₅ -E			●										
	VL-50(E)S ₂ -E VL-50SR ₂ -E		●											

LGH-RVX Series

This commercially oriented system can be utilized virtually anywhere with high performance and functions.

LGH-RVXT Series

Thin large air volume models in LGH series with high performance and functions.

Dx-Coil Unit (GUG Series)

Temperature control equipment working with Lossnay unit and Mr. Slim outdoor unit.

GUF Series

Heat recovery with heating and cooling system using the heat resource of City Multi outdoor unit.

VL-220CZGV-E

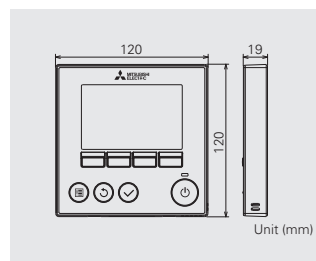
Centralized ventilation for residential use with sensible heat exchange.

VL-100(E)U₅-E, VL-50(E)S₂-E

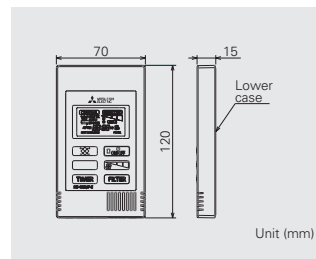
Wall mount models. Particularly suitable for houses and small offices.

REMOTE CONTROLLER

PZ-61DR-E



PZ-43SMF-E



Function (Communicating Mode)	PZ-61DR-E		PZ-43SMF-E	
	LGH-RVX/RVXT	VL-220CZGV-E	LGH-RVX/RVXT	VL-220CZGV-E
Fan speed selection	4 fan speeds	4 fan speeds	2 of 4 fan speeds	2 of 4 fan speeds
Ventilation mode selection	Energy recovery / Bypass / Auto	Heat recovery / Bypass / Auto (available with optional parts P-133DUE-E)	Energy recovery / Bypass / Auto	Heat recovery / Bypass / Auto (available with optional parts P-133DUE-E)
Night-purge (time)	Anytime schedule	No	No	No
Night-purge (fan speed)	Selectable from 4 fan speeds	No	No	No
Function setting from RC	Yes	Yes	No	No
Bypass temp. free setting	Yes	Yes (available with optional parts P-133DUE-E)	No	No
Heater-On temp. free setting	Yes	No	No	No
Fan power change after installation	Yes	Yes	No	No
On/Off timer	Yes	Yes	Yes	Yes
Auto-Off timer	Yes	Yes	No	No
Weekly timer	Yes	Yes	No	No
Operation restrictions (On/Off, ventilation mode, fan speed)	Yes	Yes (ventilation mode is available with optional parts P-133DUE-E)	No	No
Operation restrictions (fan speed skip setting)	Yes	Yes	No	No
Screen contrast adjustment	Yes	Yes	No	No
Language selection	Yes (8 languages)	Yes (8 languages)	No (English Only)	No (English Only)
Initializing remote controller	Yes	Yes	No	No
Filter cleaning sign	Yes	Yes	Yes	Yes
Lossnay core cleaning sign	Yes	No	No	No
Error indication	Yes	Yes	Yes	Yes
Error history	Yes	Yes	No	No

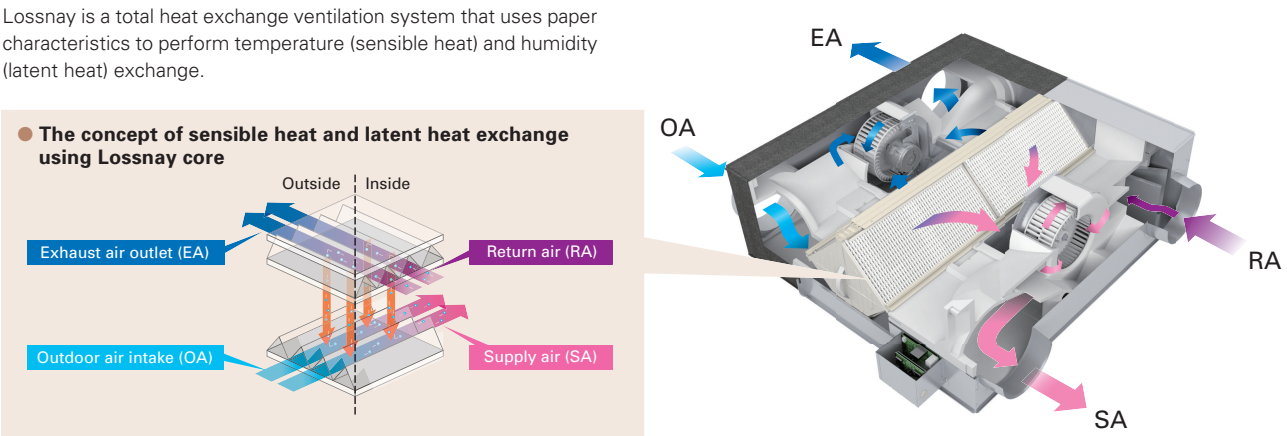
LOSSNAY SYSTEM

Lossnay ventilation systems are renowned industry-wide for their efficiency. They offer environment-friendly energy recovery and humidity control, and enable air conditioning systems to simultaneously provide optimum room comfort and energy savings.



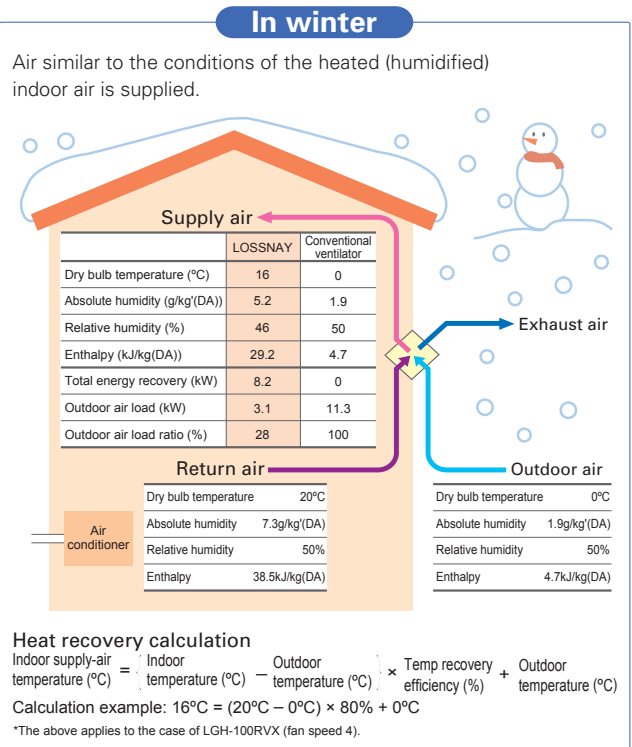
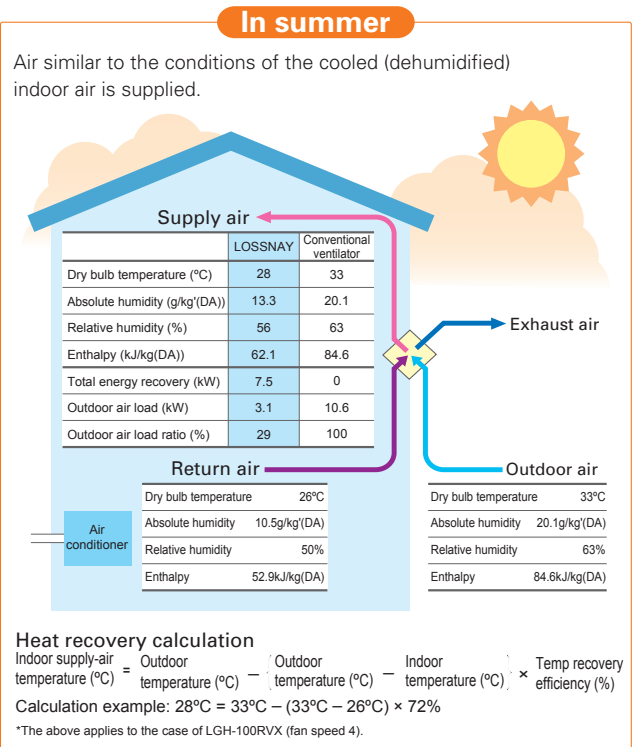
Indoor Air Quality Inside a Building is Optimised Through Temperature and Humidity Exchange by Lossnay

Lossnay is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.



What can be Improved by Introducing Lossnay?

● Ventilation with maximised comfort



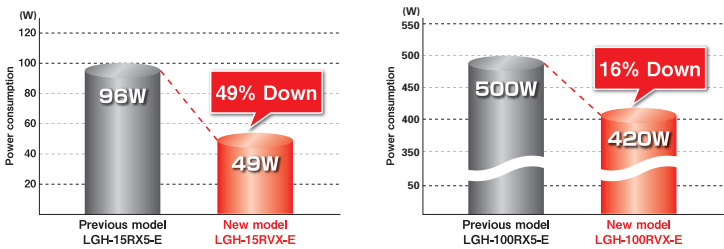
Commercial Use Lossnay

LGH-RVX (Standard model)

Power consumption reduced further with introduction of a DC motor

Realized low power consumption with introduction of a high efficiency brushless DC motor. Compared to models with an AC motor, power consumption is reduced.

Comparison between new and previous power consumption
(New model: Fan speed 4 at 230V 50Hz, Previous model: Extra-High at 220V 50Hz)



Improved Air Volume Range

Wide range air volume

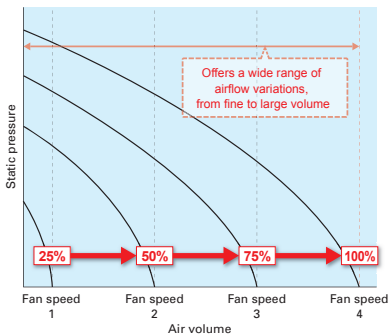
Each fan speed has a range setting of 25, 50, 75 and 100%, allowing much finer air volume control. When used in combination with the CO₂ sensor or timer function, the air volume can be controlled according to conditions that realize better performance and reduce power consumption.

Fan speed adjustment function

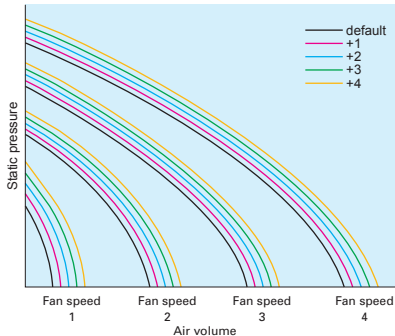
The default fan speed value can be adjusted slightly. Use the PZ-61DR-E remote controller to reset the speed.

- 1) Considering the total hours of Lossnay operation (filter clogging), the fan power can be adjusted automatically after a given period of time.
- 2) After the unit is installed, when if the air volume is slightly lower than the desired airflow, it is possible to make fine adjustments.

■ LGH-RVX/RVXT series model characteristic curves



■ P-Q curve image



LGH-RVXT (Thinner body type)

The LGH-RVXT series have a large air volume of 1500 - 2500 CMH, but has a thin body @500mm. Installing the unit behind the ceiling is easy.

■ LGH-150/200RVX-E



Height: 808mm

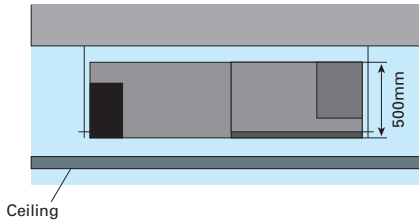
■ LGH-150/200/250RVXT-E



Height: 500mm

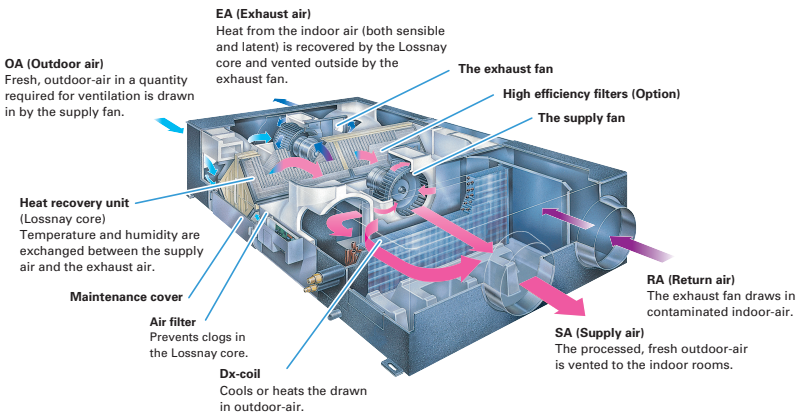
38%
Thinner
body

■ LGH-RVXT Installation image



GUF Series (Lossnay with Dx-coil unit)

Along with Lossnay ventilation, the OA Processing Unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy.



LGH-RVX Series

Model		LGH-50RVX-E								LGH-65RVX-E								LGH-80RVX-E							
Electrical power supply		220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		1.15	0.59	0.26	0.13	1.15	0.59	0.27	0.13	1.65	0.90	0.39	0.15	1.72	0.86	0.38	0.16	1.82	0.83	0.36	0.15	1.97	0.86	0.40	0.15
Input power (W)		165	78	32	12	173	81	35	14	252	131	49	15	262	131	47	17	335	151	60	18	340	151	64	20
Air volume	(m³/h)	500	375	250	125	500	375	250	125	650	488	325	163	650	488	325	163	800	600	400	200	800	600	400	200
	(L/s)	139	104	69	35	139	104	69	35	181	135	90	45	181	135	90	45	222	167	111	56	222	167	111	56
External static pressure (Pa)		120	68	30	8	120	68	30	8	120	68	30	8	120	68	30	8	150	85	38	10	150	85	38	10
Temperature exchange efficiency (%)		78	81	83.5	87	—	—	—	—	77	81	84	86	—	—	—	—	79	82.5	84	85	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69	71	75	82.5	—	—	—	—	68.5	71	76	82	—	—	—	—	71	73.5	78	81	—	—	—	—
	Cooling	66.5	68	72.5	82	—	—	—	—	66	69.5	74	81	—	—	—	—	70	72.5	78	81	—	—	—	—
Noise (dB) <small>(Measured at 1.5m under the center of unit in an anechoic chamber)</small>		34	28	19	18	35	29	20	18	34.5	29	22	18	35.5	29	22	18	34.5	30	23	18	36	30	23	18
Weight (kg)		33								38								48							

LGH-RVXT Series

GU Series

■ For LGH-RVX and LGH-RVXT series

*The running current, the input power, the efficiency and the noise are based on the rating air volume, and 230V/50Hz.

*For the specification at the other frequency contact your dealer.

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

■ For GUF series

*Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling: Indoor: 27°C DB/19°C WB Outdoor: 35°C DB/24°C WB

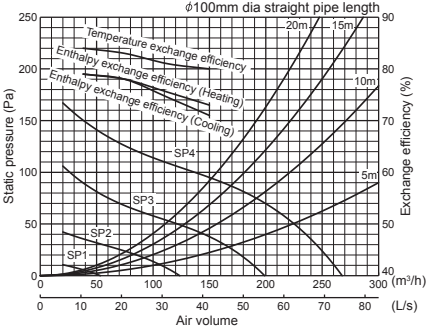
Heating: Indoor: 20°C DB/13.8°C WB Outdoor: 7°C DB/6°C WB

*The figures in () indicates heat recovering capacity of heat exchange core.

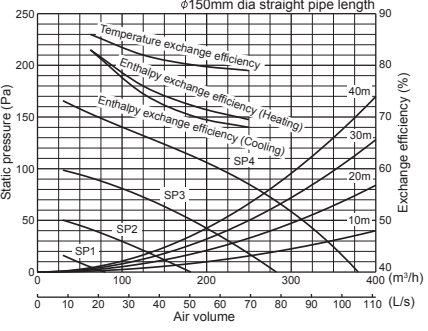
*Figures in the chart are measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

Characteristic Curves

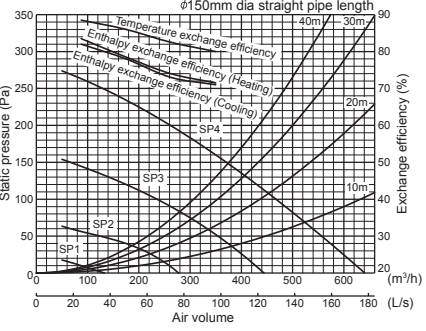
LGH-15RVX-E



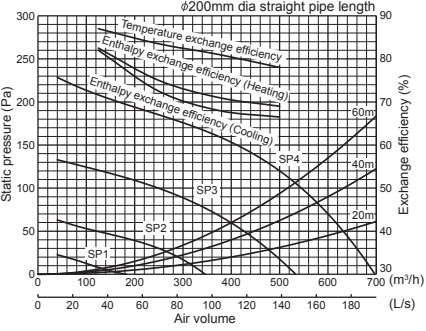
LGH-25RVX-E



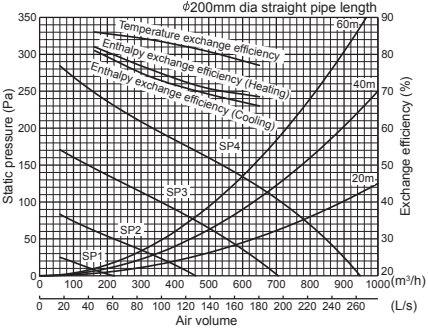
LGH-35RVX-E



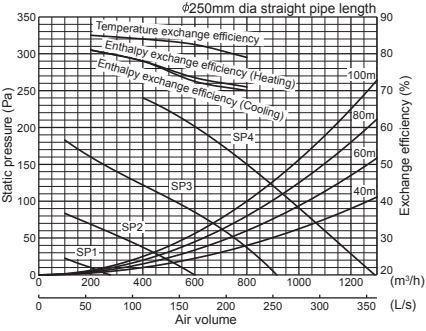
LGH-50RVX-E



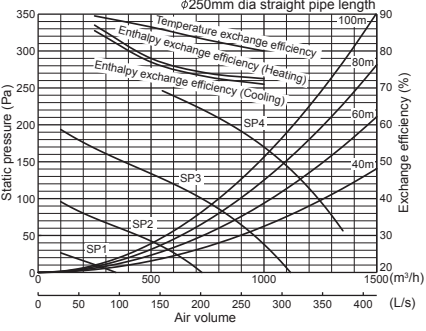
LGH-65RVX-E



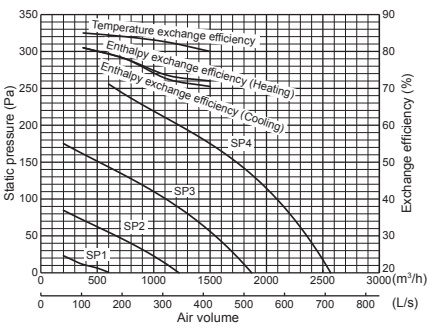
LGH-80RVX-E



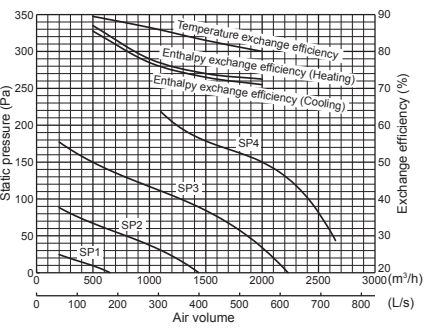
LGH-100RVX-E



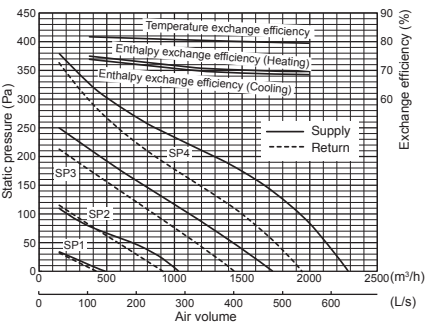
LGH-150RVX-E



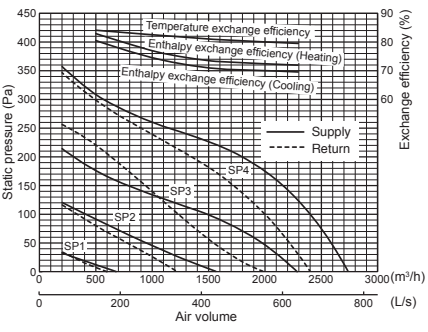
LGH-200RVX-E



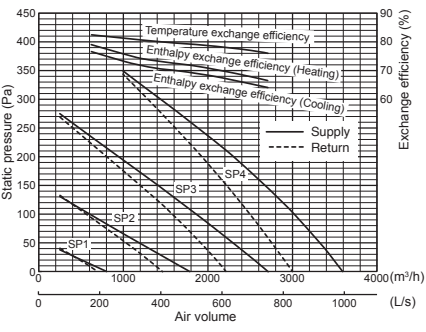
LGH-150RVXT-E



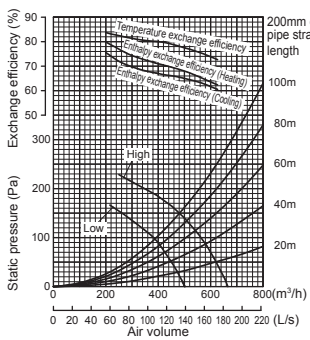
LGH-200RVXT-E



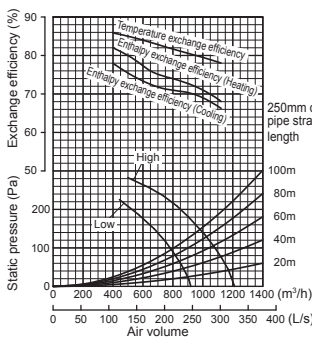
LGH-250RVXT-E



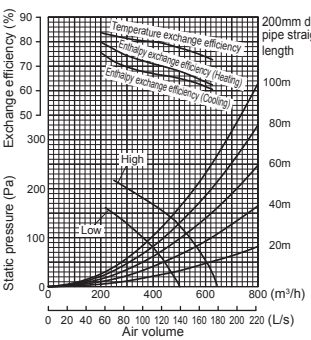
GUF-50RD4



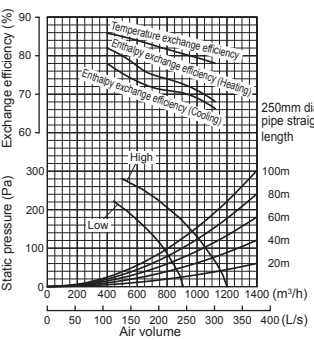
GUF-100RD4



GUF-50RDH4



GUF-100RDH4

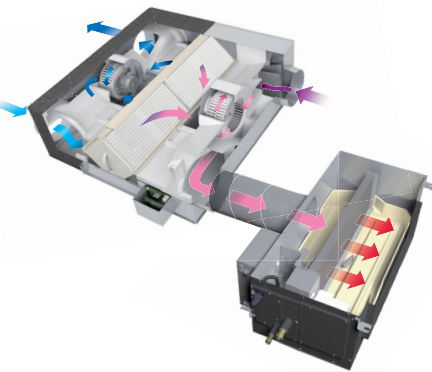


Optional Dx-coil Unit for Lossnay

Supply Comfortable Control

Product Features

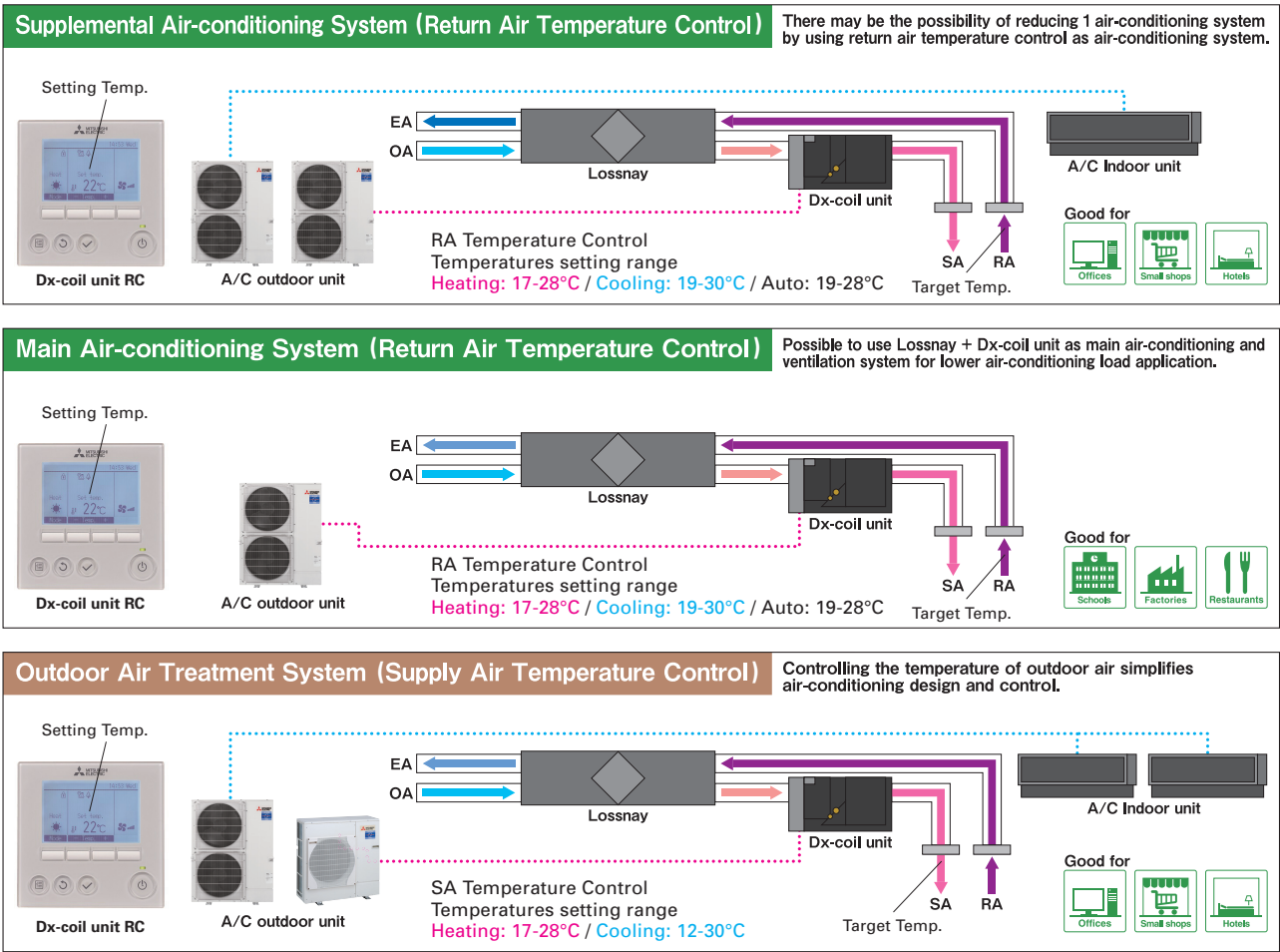
- Lossnay return air and supply air temperature control are possible with Dx-coil unit which is connectable with Mr. Slim (Power inveter series)
 - Expand the product line-up of Lossnay with temperature control (500-2,500CMH) by the connection of Dx-coil unit.
- Suitable for various applications such as offices, shops and schools etc.



Target Application

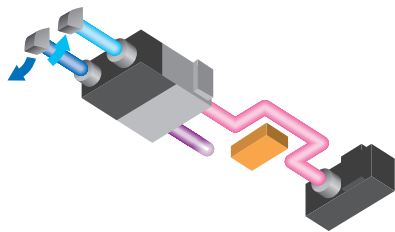


Application Examples



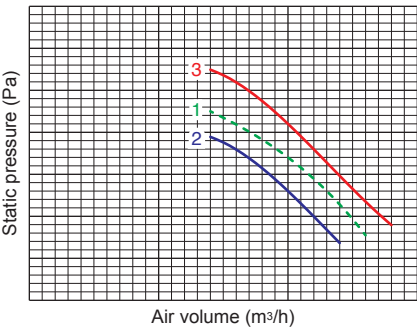
*Example images of using LGH-RVXT series for reference only.

Flexible Installation



Flexible Connection to Lossnay
The length of the connection cable (accessory) between the Lossnay and Dx-coil unit is about 6m, so flexible installation is possible (two units can be installed close together or far apart with straight or bent ducting).

To Keep High Static Pressure

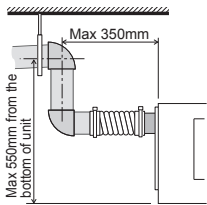


P-Q curve image
1. Lossnay unit
2. Lossnay unit + Dx-coil unit
3. Lossnay unit (fan power up +4) + Dx-coil unit

Dx-coil unit static pressure loss is kept to minimum, making it possible to maintain high static pressure using the fan power up function of the Lossnay. The fan power up function is only available when used with the PZ-61DR-E Lossnay remote controller.

Drain Pump Equipment

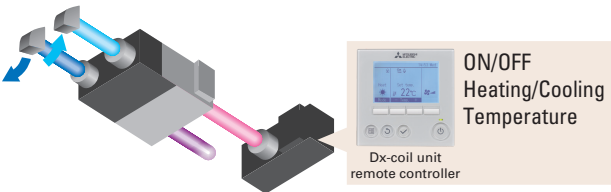
A built-in drain pump makes, attaching the drain hose in the ceiling cavity easy, resulting in simple and fast installation.



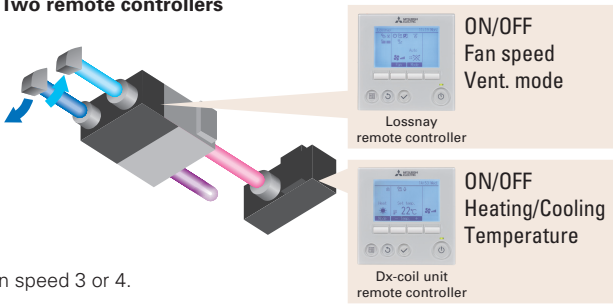
User-friendly System Control

Flexible Remote Controller Selection

(A) One remote controller



(B) Two remote controllers



When using only one remote controller, the Lossnay fan speed is fixed at fan speed 3 or 4.
When using two remote controllers, all of Lossnay function is available.
*1: Both of Lossnay unit and Dx-coil unit will synchronously switch to ON and OFF.
*2: When one of the two remote controllers is turned ON, the other remote controller turns ON synchronously.

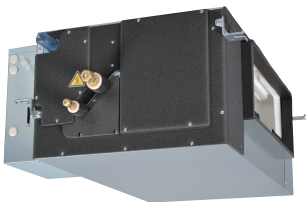
Priority Mode Selection

Temperature priority mode (factory setting) or Fan speed priority mode are selectable when Lossnay unit fan speed is controlled by a CO₂-sensor or a BMS (analogue input (0-10VDC) or a volt-free input).
*During fan speed 1 or 2, the Dx-coil unit is always thermo-OFF

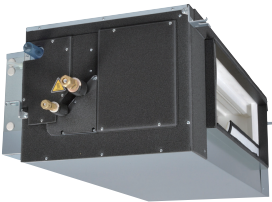
Operation mode	Fan speed order from external input	Actual fan speed	
		Temp. priority	Fan speed priority
Heating or Cooling	FS4	FS4	FS4
	FS3	FS3	FS3
	FS2	FS3	FS2
	FS1	FS3	FS1
Fan	FS4	FS4	FS4
	FS3	FS3	FS3
	FS2	FS2	FS2
	FS1	FS1	FS1

Specifications

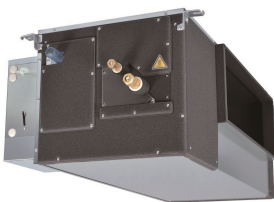
GUG Series



GUG-01SL-E



GUG-02SL-E

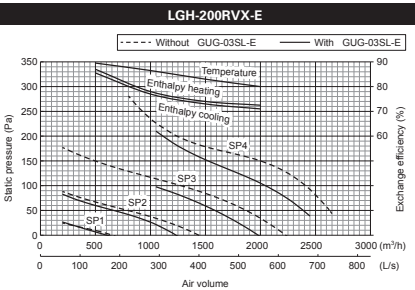
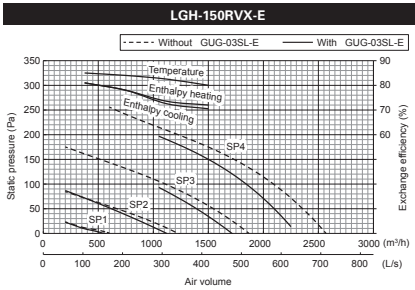
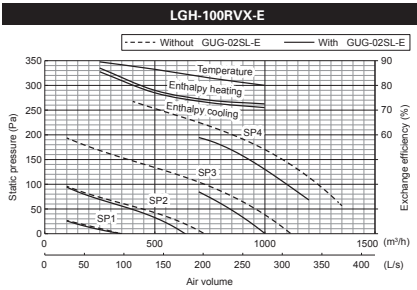
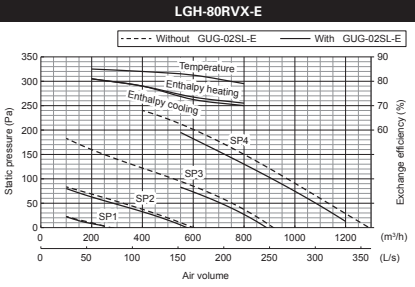
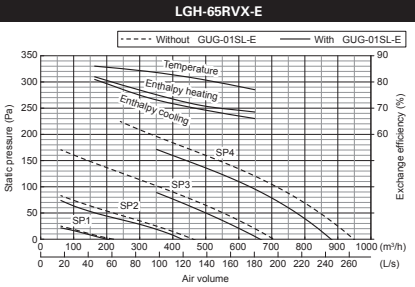
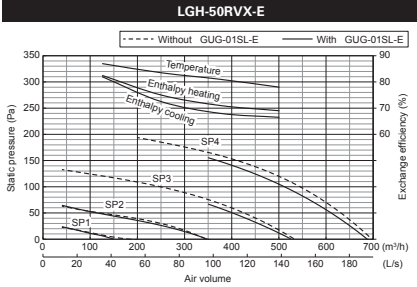


GUG-03SL-E

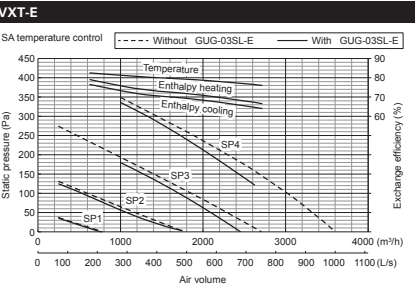
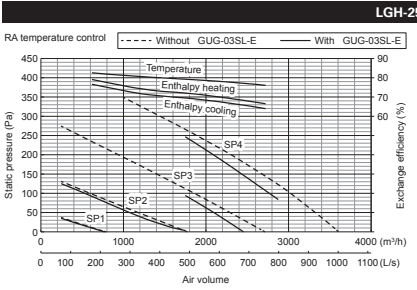
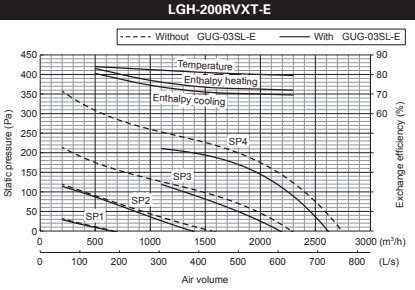
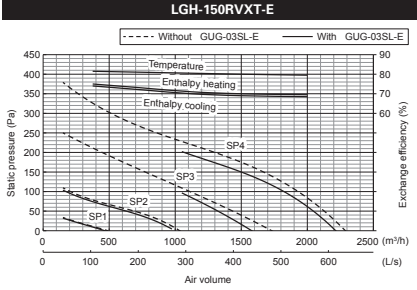
Model		GUG-01SL-E (Connection to LGH-50RVX-E or LGH-65RVX-E)				GUG-02SL-E (Connection to LGH-80RVX-E or LGH-100RVX-E)											
Refrigerant		R410A				R410A											
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)				220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)											
Input power		Heating / Fan: 2.5W, Cooling: 12.4W				Heating / Fan: 2.5W, Cooling: 12.4W											
Running current		Less than 0.1A				Less than 0.1A											
Weight		21kg *Accessories: Approx. 1kg				26kg *Accessories: Approx. 1kg											
Function		Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control				Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control											
		RA (Return Air) temperature control				RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]											
RA (Return Air) temperature control																	
Connectable Lossnay unit		LGH-50RVX-E		LGH-65RVX-E		LGH-80RVX-E		LGH-100RVX-E									
Capacity [kW]	Heating	6.5 (2.4 + 4.1)		7.7 (3.2 + 4.5)		10.0 (4.0 + 6.0)		13.2 (5.1 + 8.1)									
	Cooling	5.6 (2.0 + 3.6)		6.6 (2.6 + 4.0)		8.3 (3.3 + 5.0)		11.3 (4.2 + 7.1)									
SHF		0.66		0.69		0.69		0.66									
Performance index	Heating	4.09		4.72		4.62		4.42									
	Cooling	4.69		5.03		4.76		4.98									
Air flow range at SP3 and SP4		350 - 695 m³/h		350 - 900 m³/h		560 - 1200 m³/h		700 - 1200 m³/h									
Connectable outdoor unit		PUHZ-ZRP35		PUHZ-ZRP35		PUHZ-ZRP50		PUHZ-ZRP71									
Ext. piping		Diameter Liquid / Gas: 6.35 / 12.7 Maximum length: 50m, Maximum height: 30m		Diameter Liquid / Gas: 6.35 / 12.7 Maximum length: 50m, Maximum height: 30m		Diameter Liquid / Gas: 6.35 / 12.7 Maximum length: 50m, Maximum height: 30m		Diameter Liquid / Gas: 9.52 / 15.88 Maximum length: 50m, Maximum height: 30m									
Required optional parts		-		-		PAC-SH30RJ-E and PAC-SH50RJ-E		-									
SA (Supply Air) temperature control																	
Connectable Lossnay unit		-		-		LGH-80RVX-E		LGH-100RVX-E									
Capacity [kW]	Heating	-		-		10.0 (4.0 + 6.0)		11.4 (5.1 + 6.3)									
	Cooling	-		-		8.3 (3.3 + 5.0)		9.5 (4.2 + 5.3)									
SHF		-		-		0.69		0.73									
Performance index	Heating	-		-		4.62		5.09									
	Cooling	-		-		4.76		5.43									
Air flow range at SP3 and SP4		-		-		560 - 1200 m³/h		700 - 1200 m³/h									
Connectable outdoor unit		-		-		PUHZ-ZRP50		PUHZ-ZRP50									
Ext. piping		-		-		Diameter Liquid / Gas: 6.35 / 12.7 Maximum length: 50m, Maximum height: 30m		Diameter Liquid / Gas: 6.35 / 12.7 Maximum length: 50m, Maximum height: 30m									
Required optional parts		-		-		PAC-SH30RJ-E and PAC-SH50RJ-E		PAC-SH30RJ-E and PAC-SH50RJ-E									
Ventilation specifications																	
Connectable Lossnay unit		LGH-50RVX-E				LGH-65RVX-E				LGH-80RVX-E				LGH-100RVX-E			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Air Volume	[m³/h]	500	375	250	125	650	488	325	163	800	600	400	200	1,000	750	500	250
	[L/s]	139	104	69	35	181	135	90	45	222	167	111	56	278	208	139	69
External static pressure [Pa]		105	59	26	7	95	53	24	6	130	73	33	8	130	73	33	8

Model		GUG-03SL-E (Connection to LGH-150RVX-E or LGH-200RVX-E)				GUG-03SL-E (Connection to LGH-150RVXT-E, LGH-200RVXT-E or LGH-250RVXT-E)															
Refrigerant		R410A																			
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)																			
Input power		Heating / Fan: 2.5W, Cooling: 12.4W																			
Running current		Less than 0.1A																			
Weight		28kg *Accessories: Approx. 1kg																			
Function		Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control																			
		RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]																			
RA (Return Air) temperature control																					
Connectable Lossnay unit		LGH-150RVX-E		LGH-200RVX-E		LGH-150RVXT-E		LGH-200RVXT-E		LGH-250RVXT-E											
Capacity [kW]	Heating	20.7 (7.7 + 13.0)		23.8 (10.3 + 13.5)		20.4 (7.4 + 13.0)		23.8 (10.3 + 13.5)		26.1 (12.1 + 14.0)											
	Cooling	15.8 (6.3 + 9.5)		18.4 (8.4 + 10.0)		15.7 (6.2 + 9.5)		18.4 (8.4 + 10.0)		22.3 (9.8 + 12.5)											
SHF		0.68		0.76		0.68		0.76		0.87											
Performance index	Heating	4.24		5.02		4.07		4.86		4.75											
	Cooling	5.27		5.86		5.03		5.59		4.59											
Air flow range at SP3 and SP4		1050 - 2250 m³/h		1050 - 2600 m³/h		1050 - 2250 m³/h		1050 - 2600 m³/h		1750 - 2880 m³/h											
Connectable outdoor unit		PUHZ-ZRP100		PUHZ-ZRP100		PUHZ-ZRP100		PUHZ-ZRP100		PUHZ-ZRP125											
Ext. piping	Diameter	Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88											
	Maximum length: 75m, Maximum height: 30m	Maximum length: 75m, Maximum height: 30m		Maximum length: 75m, Maximum height: 30m		Maximum length: 75m, Maximum height: 30m		Maximum length: 75m, Maximum height: 30m		Maximum length: 75m, Maximum height: 30m											
SA (Supply Air) temperature control																					
Connectable Lossnay unit		LGH-150RVX-E		LGH-200RVX-E		LGH-150RVXT-E		LGH-200RVXT-E		LGH-250RVXT-E											
Capacity [kW]	Heating	16.6 (7.7 + 8.9)		19.5 (10.3 + 9.2)		16.3 (7.4 + 8.9)		19.5 (10.3 + 9.2)		21.6 (12.1 + 9.5)											
	Cooling	13.4 (6.3 + 7.1)		15.9 (8.5 + 7.4)		13.3 (6.2 + 7.1)		15.9 (8.5 + 7.4)		17.6 (9.8 + 7.8)											
SHF		0.85		0.90		0.86		0.90		0.95											
Performance index	Heating	5.46		6.30		5.16		6.01		5.97											
	Cooling	5.32		5.85		5.03		5.54		5.31											
Air flow range at SP3 and SP4		1050 - 2250 m³/h		1050 - 2600 m³/h		1050 - 2250 m³/h		1050 - 2600 m³/h		1000 - 2600 m³/h											
Connectable outdoor unit		PUHZ-ZRP71		PUHZ-ZRP71		PUHZ-ZRP71		PUHZ-ZRP71		PUHZ-ZRP71											
Ext. piping	Diameter	Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88		Liquid / Gas: 9.52 / 15.88											
	Maximum length: 50m, Maximum height: 30m	Maximum length: 50m, Maximum height: 30m		Maximum length: 50m, Maximum height: 30m		Maximum length: 50m, Maximum height: 30m		Maximum length: 50m, Maximum height: 30m		Maximum length: 50m, Maximum height: 30m											
Ventilation specifications																					
Connectable Lossnay unit		LGH-150RVX-E				LGH-200RVX-E				LGH-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Air Volume	[m³/h]	1,500	1,125	750	375	2,000	1,500	1,000	500	1,500	1,125	750	375	2,000	1,500	1,000	500	2,500	1,875	1,250	625
	[L/s]	417	313	208	104	556	417	278	139	417	313	208	104	556	417	278	139	694	521	347	174
External static pressure [Pa]		150	84	38	9	105	59	26	7	150	84	38	9	145	82	36	9	140	79	35	9

Characteristic Curves



*Note The graphs below show the supply air only.



Attention

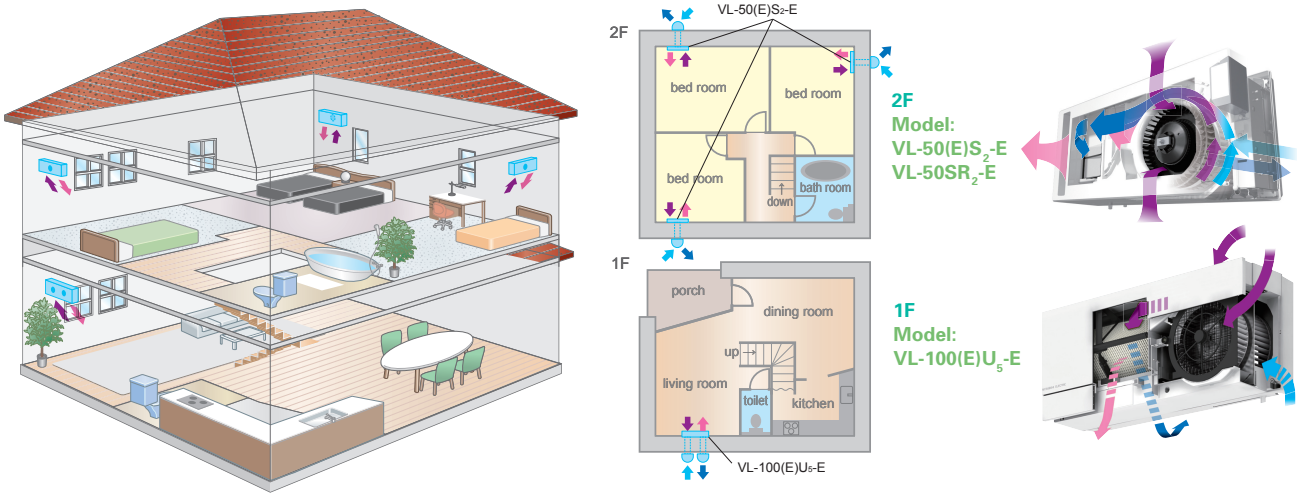
1. The running current and input power are based on 230V/50Hz.
2. The cooling and heating capacities are based on the air conditions listed below and the rated airflow of fan speed 4.
Cooling Indoor: 27°CDB/19°CWB Outdoor: 35°CDB/24°CWB
Heating Indoor: 20°CDB/15°CWB Outdoor: 7°CDB/6°CWB
3. The first figure in () of the capacity specification is the heat recovery energy of the Lossnay unit. The second figure is the capacity specification for the Dx-coil connected to the outdoor unit.
4. "Performance index" is the calculated value at the temperature conditions above and is reference purpose only.
Performance index = Total capacity ÷ total power consumption of outdoor unit and Lossnay unit
5. The external static pressure listed in the tables includes the static pressure loss of the Dx-coil unit when using a 50cm straight duct between the Lossnay and Dx-coil units. When the duct work between the Lossnay and Dx-coil units is longer and/or bent, the pressure loss of the duct work should be included in the pressure loss calculation.
6. The designed airflow of the system (Lossnay, Dx-coil and duct work) at fan speed 3 and 4 should be kept within "Airflow range at SP3 and SP4" listed in the tables. This range is shown as a solid line in graphs of the characteristics curve. If the Lossnay airflow is out of this range, the compressor of the outdoor unit may stop for self-protection purposes.
7. By installing the Dx-coil unit with a Lossnay unit, the air blow noise level is quieter at fan speed 4.
Please refer to the "Direct Expansion coil unit for Lossnay" catalogue.
8. Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere.
This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO₂, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

Residential Use Lossnay

Mitsubishi Electric offers you decentralized ventilation and centralized ventilation solutions for optimising your indoor air quality by Lossnay.

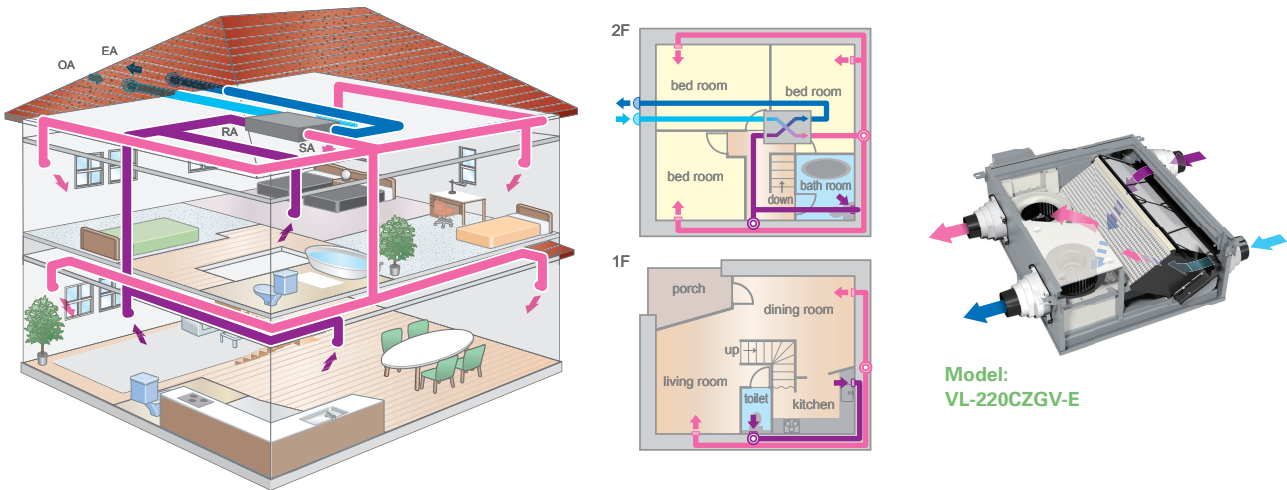
Decentralized Ventilation Solution

Install the wall mounted Lossnay in each room.
The heat recovery system provides fresh air at a comfortable air temperature.
Total heat exchangers effectively reduce heat loss.



Centralized Ventilation Solution

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. Sensible heat exchanger effectively reduces excess humidity in the winter.

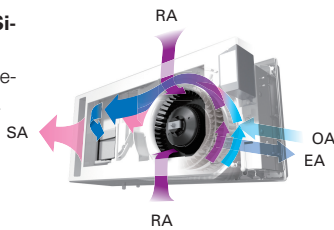


Decentralized ventilation: VL-50(E)S2-E, VL-50SR2-E and VL-100(E)U5-E

Product Merit

Air supplied and Exhausted Simultaneously

Supply and exhaust air simultaneously while transferring the heat.

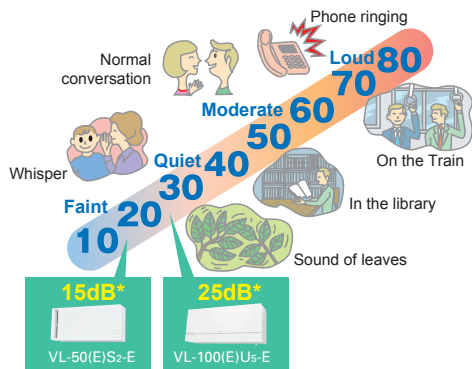


Energy Efficient

- Total heat exchanger minimizes heat loss.
- Achieve over 80% * temperature efficiency.

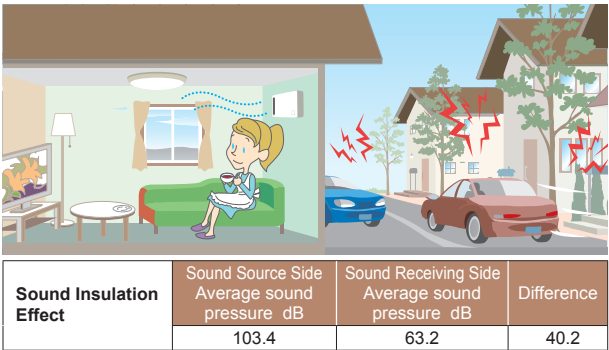
*VL-10D(E)U5-E at low fan speed in 230V 50Hz
*VL-50(E)S2-E at low fan speed in 230V 50Hz

The low noise level is good for bedrooms and children's rooms.



Sound Insulation

A sound insulation effect reduces noise generated outside.



*Tested based on VL-08S2-AE
*Measured by average sound pressure level of more than 30dB in 500Hz according to JIS A1416.
VL-08S2-AE is Japanese dedicated model with equivalent of VL-50(E)S2-E

Product Features

Stylish Design

Match any interior décor to create a comfortable room.



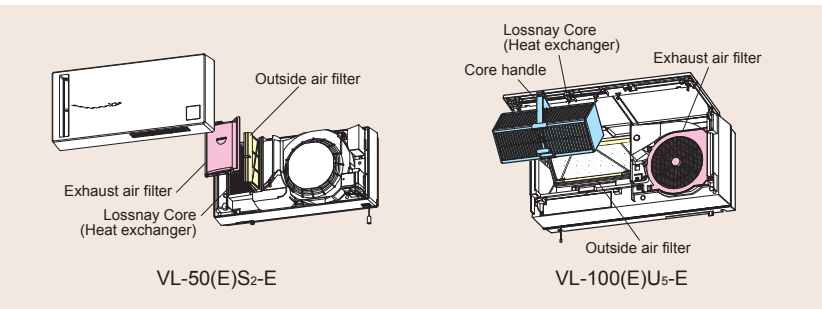
VL-50(E)S2-E
VL-50SR2-E



VL-100(E)U5-E

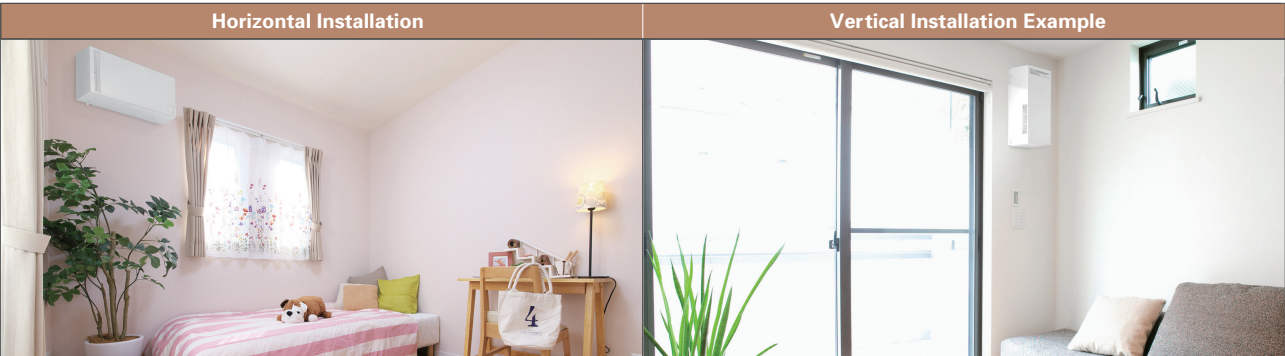
Easy Maintenance

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

Not only horizontal installation but also vertical installation are available. It can fit various types of rooms with flexible installation.



Centralised ventilation: VL-220CZGV-E

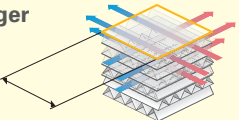
Product Merit

Newly Developed Heat Exchanger

- During ventilation, Lossnay recovers warmth in the winter and keeps air cool in the summer.
- Reducing heating and cooling loads with a maximum exchange efficiency of 86%*.

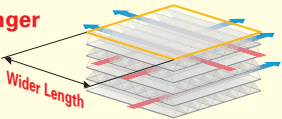
Normal Square Heat Exchanger

Simple structure contributes to minimize pressure loss and reduce power consumption.



New Diamond Heat Exchanger

Due to the diamond design, air passages are longer and help realize higher exchange efficiency.



Energy Efficient

- The highest energy-saving performance in its class. (8.5W* minimum input power)
- Saves heating and cooling costs by minimizing energy loss that occurs during ventilation.



Quiet

- At an ultra quiet 14dB*, it is the quietest product in its class.
- Blocks outside noise for a more comfortable environment.



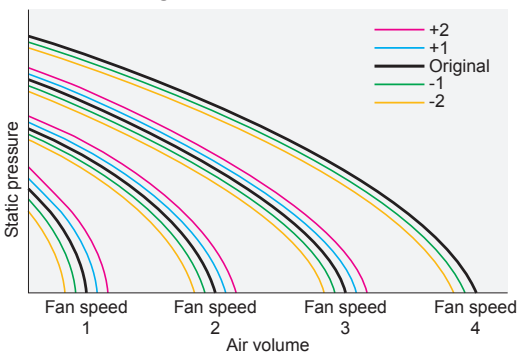
*Fan speed 1

Product Features

Fan Speed Precise Adjustment Function

- Each main fan speed value can be further adjusted slightly. Use the PZ-61DR-E remote controller to adjust the speed.
- 1) Considering the total hours of Lossnay operation (filter clogging), the fan power can be adjusted automatically after a given period of time.
 - 2) After the unit is installed, when if the air volume is slightly lower or higher than the desired air flow, it is possible to make a fine adjustments. (Fan speed 4 is available only 1 down and 2 down)

P-Q curve image



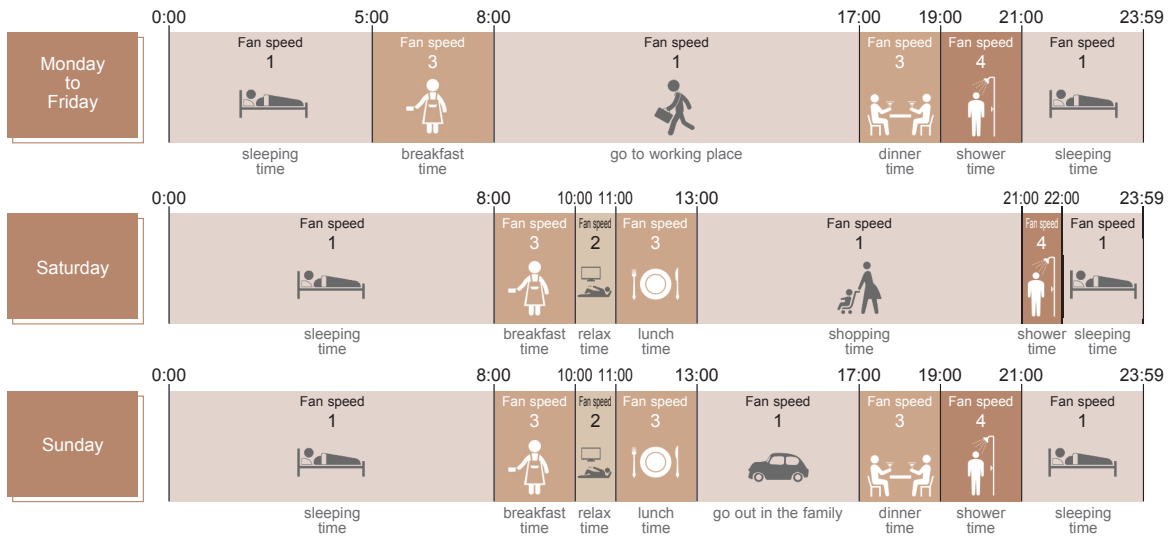
Multi Ventilation (Power Supply and Exhausted) Mode

This mode allows the air supply/ exhaust balance to be varied dynamically. The supply/ exhaust balance can be selected to suit the usage environment.

Normal Mode	Power Supply Mode		Power Exhaust Mode	
Relax time 	Adjust the indoor pressure balance in case a separate exhaust is installed 	Increase indoor pressure to prevent unfiltered drafts from coming in 	Keep steam inside of the shower room 	Prevent odors from spreading

Weekly Timer

Operation patterns for each day of the week. ON/OFF and airflow can be set using the weekly timer function (up to eight zones per day). This function contributes to enhanced energy-saving operation.



*Example for reference only.

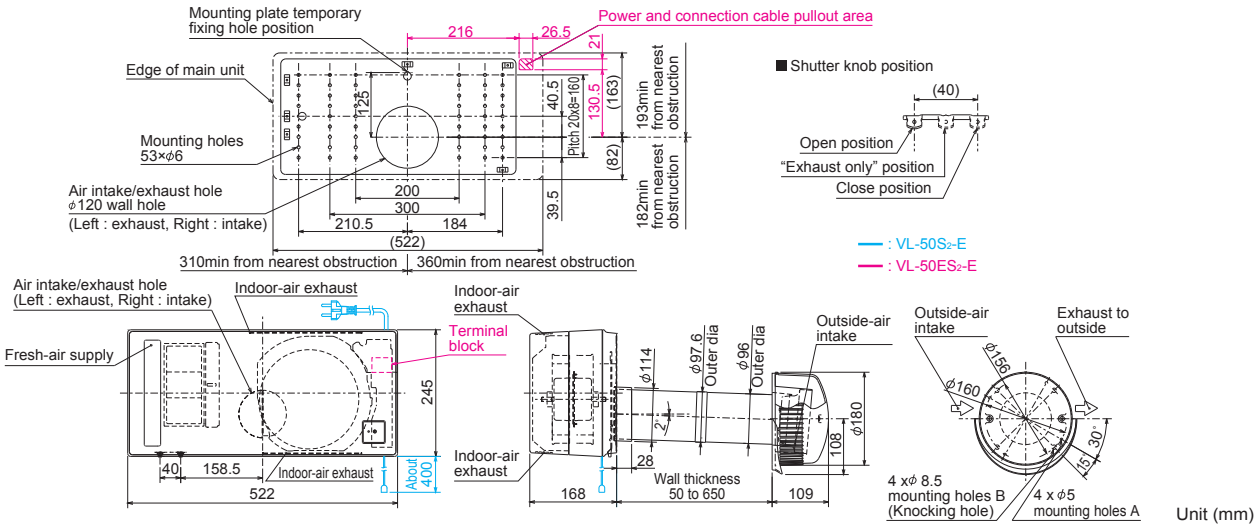
Residential Lossnay Specifications

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

Model	VL-50(E)S2-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Air volume (m³/h)	51	15	52.5	16	54	17	54	17
Power consumption (W)	19	4	20	4.5	21	5	21	5.5
Temperature exchange efficiency (%)	70	86	69	85	68	84	68	84
Noise level (dB)	36.5	14	37	15	37.5	15.5	37.5	15.5
Weight (kg)	6.2							
Specific energy consumption class	C							

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628) on shutter knob open position.

Dimensions

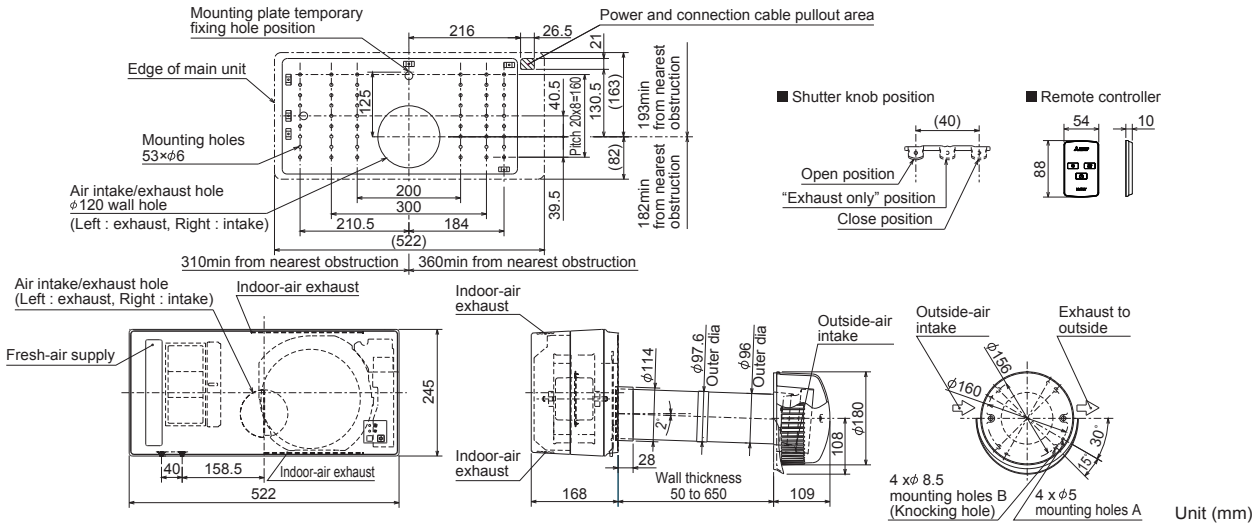


Model: VL-50SR2-E (Remote Controller Model)

Model	VL-50SR2-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Air volume (m³/h)	51	15	52.5	16	54	17	54	17
Power consumption (W)	19	4.5	20	5	21	5.5	21	6
Temperature exchange efficiency (%)	70	86	69	85	68	84	68	84
Noise level (dB)	36.5	14	37	15	37.5	15.5	37.5	15.5
Weight (kg)	6.2							
Specific energy consumption class	C							

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628) on shutter knob open position.

Dimensions

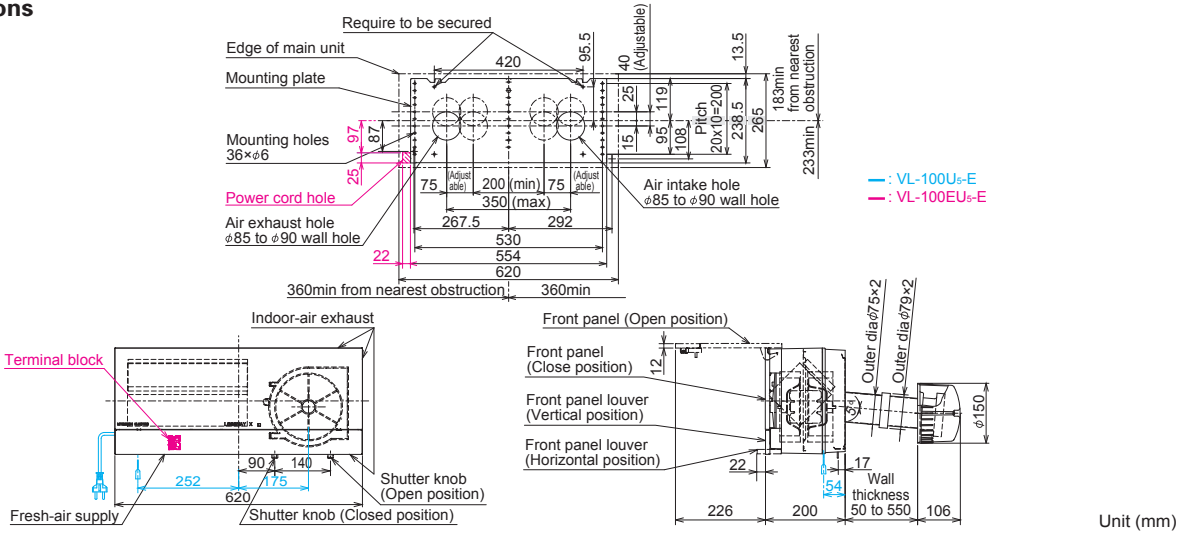


Model: VL-100U₅-E (Pull-Switch Model), VL-100EU₅-E (Wall-Switch Model)

Model	VL-100(E)U ₅ -E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Air volume (m³/h)	100	55	105	60	106	61	103	57
Power consumption (W)	30	13	31	15	34	17	34	17
Temperature exchange efficiency (%)	73	80	73	80	72	79	73	80
Noise level (dB)	36.5	24	37	25	38	27	38	25
Weight (kg)	7.5							
Specific energy consumption class	B							

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628) on shutter knob open position.

Dimensions

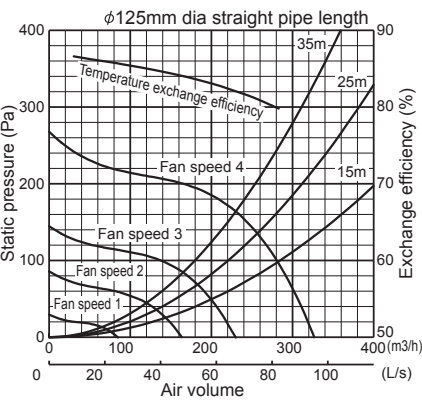


Model: VL-220CZGV-E

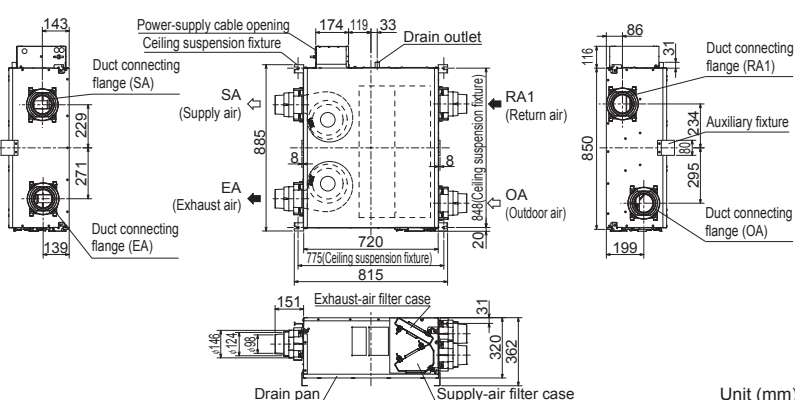
Model	VL-220CZGV-E			
Electrical power supply	220-240V/50Hz 220V/60Hz			
Ventilation mode	Heat recovery mode			
Fan speed	Fan speed 4	Fan speed 3	Fan speed 2	Fan speed 1
Running current	0.60	0.29	0.18	0.11
Input power (W)	80	35	18.5	8.5
Air volume	(m³/h)	230	165	120
	(L/s)	64	46	33
External static pressure (Pa)	164	84	44	13
Temperature exchange efficiency (%)	82	84	85	86
Noise level (dB)	31	25	19	14
Weight (kg)	31			
Specific energy consumption class	A			

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

Characteristic Curve



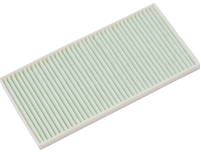




Dimensions



Accessories





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

Filter, Extension Pipe and Stainless Hood

Type	High Efficiency Filter	Replacement Filter	Extension Pipe	Joint	Stainless Hood
Design					
Model	P-50HF2-E	P-50F2-E	P-50P-E	P-50PJ-E	P-50VSQ5-E
Feature	Upgraded high-performance filter.	Standard grade replacement filter.	Total length when connected to the joint is 350mm.	Joint for extension pipe	Stylish stainless hood

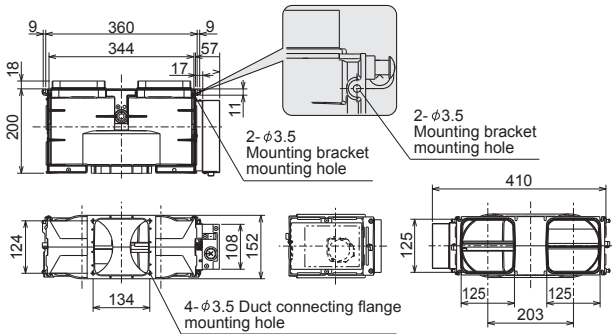
Optional Parts for VL-100(E)U5-E

Filter and Extension Pipe

Type	High Efficiency Filter	Replacement Filter	Extension Pipe	Joint
Design				
Model	P-100HF5-E	P-100F5-E	P-100P-E	P-100PJ-E
Feature	Upgraded high-performance filter.	Standard grade replacement filter.	Total length when connected to the joint is 300mm.	<ul style="list-style-type: none">Joint for extension pipeScrew-in method




Optional Parts for VL-220CZGV-E

Bypass damper
Model: P-133DUE-E



Unit (mm)

Filter

Type	High Efficiency Supply Air Filter	Medium Efficiency Exhaust Air Filter	Standard Replacement Filter
Design			
Model	P-220SHF-E	P-220EMF-E	P-220F-E
Classification (EN779:2012)	M6	G4	G3