LOSSNAY 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.

PRODUCT LINEUP

Lossnay			
Energy Recovery Ventilation	Heat Recovery Ventilation		Energy Recovery Ventilation
Centralized Ventilation			Decentralized Ventilation
Ceiling Concealed		Vertical Type	Wall mounted Type
LGH-RVX Series A commercially oriented system that can be used to deliver high performance and functions virtually anywhere. 	**LGH-RVS Series** Sensible heat models of the LGH series that can also be installed in sanitary areas. 	**VL-CZPVU Series** Vertical type for residential use. Centralized ventilation with sensible heat exchange. 	**VL-100(E)U5-E** Wall mounted models. Particularly suitable for houses and small offices. **VL-50(E)S2-E** **VL-50SR2-E** 
LGH-RVXT Series Thin, large airflow models of the LGH series that deliver high performance and functions. 			
GUF Series **(Lossnay with Dx-Coil Unit)** Heat recovery units with a heating and cooling system that uses the City Multi outdoor units as a heat source. 			

Dx-coil unit	Remote controller	
For Lossnay LGH-RVX/RVXT Series	For LGH-RVX/RVXT/RVS Series	
GUG Series Temperature control equipment that works with Lossnay units and Mr.Slim outdoor units. 	PZ-62DR-EA/EB 	PZ-43SMF-E 

LOSSNAY LINEUP

Application		Model \ Airflow	50 CMH	100 CMH	150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
Centralized Ventilation	Ceiling Concealed	LGH-RVX Series 			●	●	●	●	●	●	●	●		
		LGH-RVXT Series 										●	●	●
		LGH-RVS Series 						●		●	●			
		GUF Series 						●			●			
		GUG Series (Dx-coil unit for Lossnay LGH-RVX/RVXT Series) 						●	●	●	●	●	●	●
	Vertical Type	VL-CZPVU Series 				●	●	●						
Decentralized Ventilation	Wall mounted Type	VL-100(E)U5-E		●										
		VL-50(E)S2-E VL-50SR2-E 	●											

Commercial Use Lossnay

Mitsubishi Electric offers Energy Recovery Ventilation and Heat Recovery Ventilation solutions for optimizing building air quality by Lossnay

Energy Recovery Ventilation

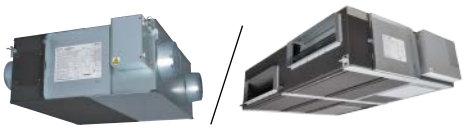
A total heat exchange ventilation system that uses paper characteristics (Lossnay core) to perform temperature (sensible heat) and humidity (latent heat) exchange.

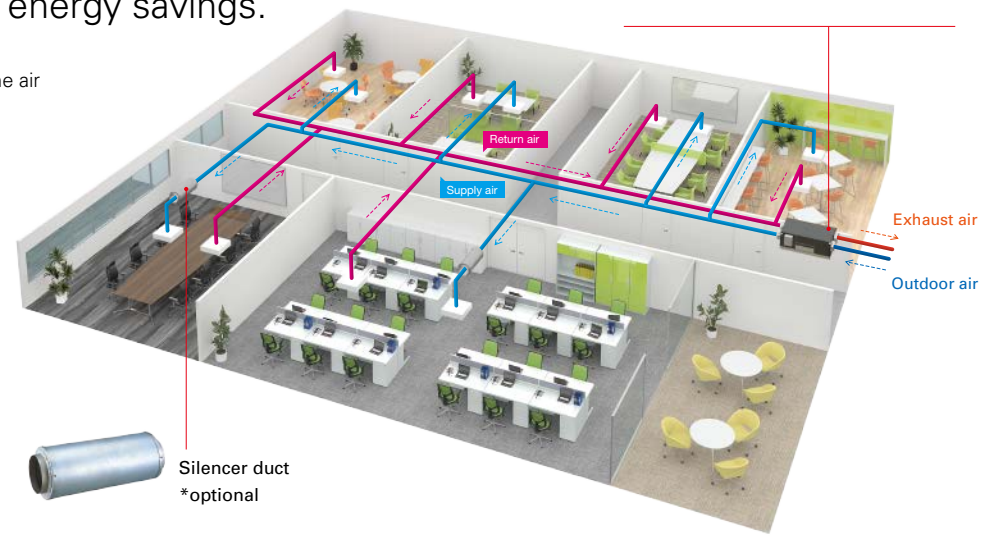
ERV Solution

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 range of airflow lineup

LGH-RVX/RVXT Series





Remote Controller



*optional

Silencer duct
*optional

Heat Recovery Ventilation

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

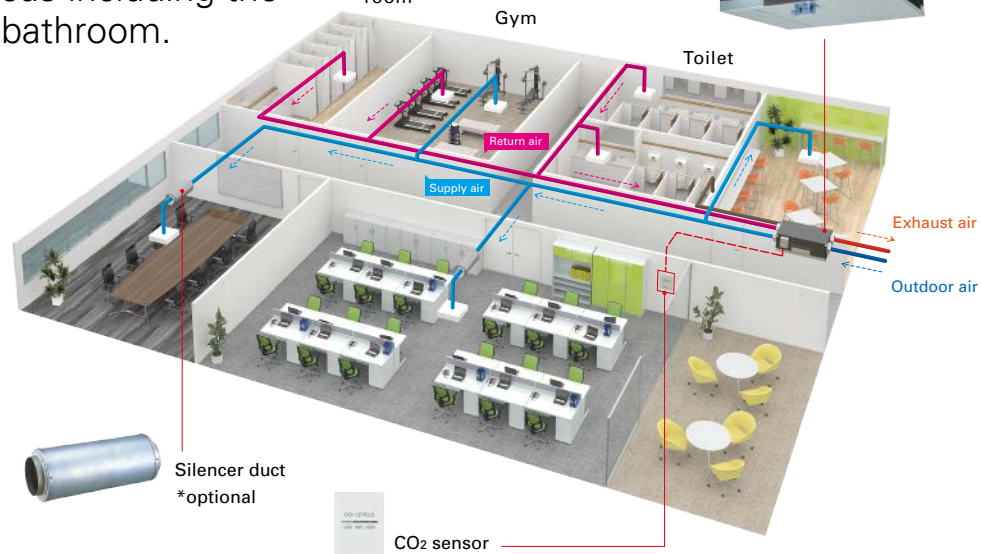
HRV Solution

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

- ✓ Heat Exchanger
- ✓ Installation in sanitary areas
- ✓ Control with CO_2 sensor

LGH-RVS Series





Remote Controller



*optional

Silencer duct
*optional

CO_2 sensor
*optional

Residential Use Lossnay

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

Heat Recovery Ventilation

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

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. A sensible heat exchanger effectively reduces excess humidity in the winter.

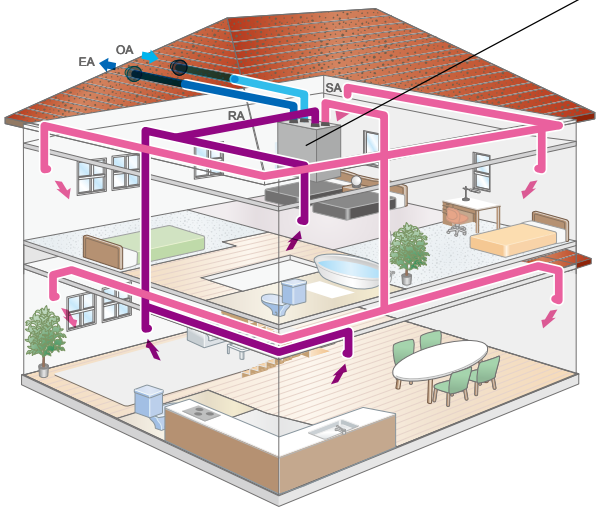


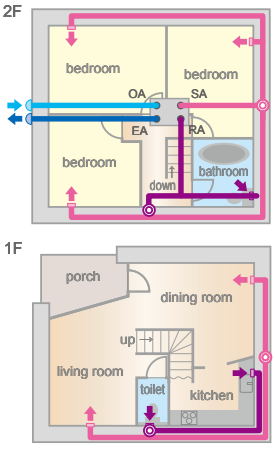
VL-250/350/500CZPVU-R-E
VL-250/350/500CZPVU-L-E

- ✓ Heat Exchanger
- ✓ Whole-house Solution
- ✓ Air Purification
- ✓ Quiet Operation
- ✓ MELCloud Control



* MELCloud uses the MAC-567IF-E interface



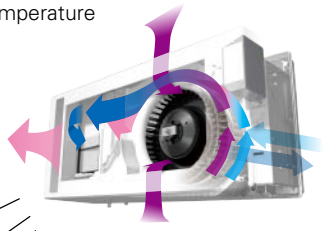


Energy Recovery Ventilation

A total heat exchange ventilation system that uses paper characteristics (Lossnay Core) to perform temperature (Sensible heat) and humidity (latent heat) exchange.

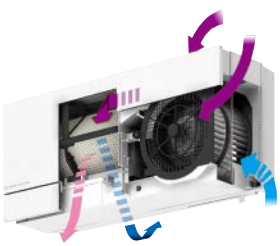
Decentralized Ventilation Solution

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.

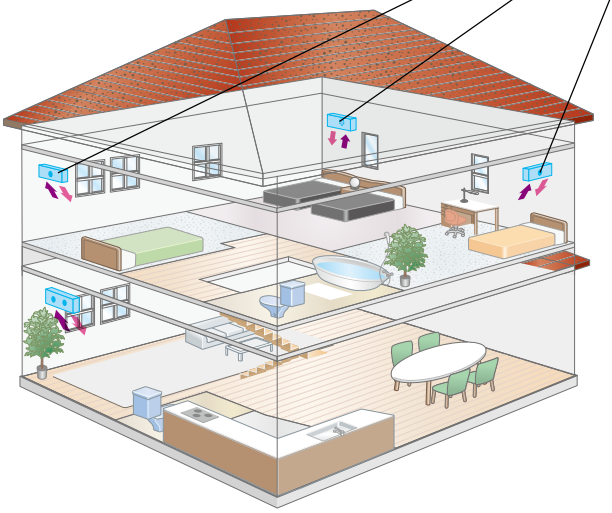


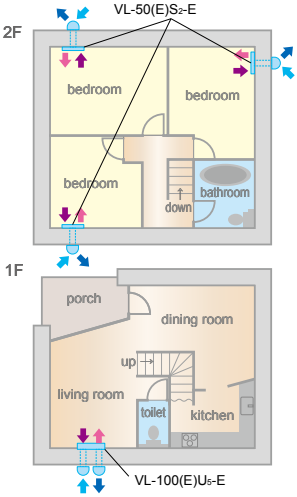
VL-50S$_2$-E (Pull-Switch Model)
VL-50ES$_2$-E (Wall-Switch Model)
VL-50SR$_2$-E (Remote Controller Model)

- ✓ Total Heat Exchanger
- ✓ Individual Ventilation
- ✓ Flexible Installation
- ✓ Easy Maintenance
- ✓ Stylish Design



VL-100U$_5$-E (Pull-Switch Model)
VL-100EU$_5$-E (Wall-Switch Model)





LOSSNAY

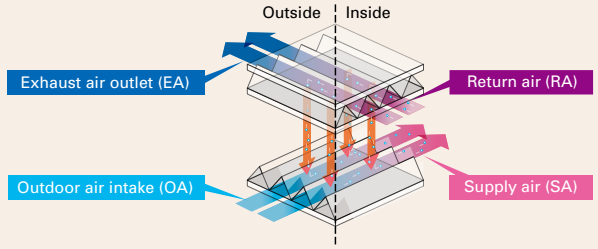
Lossnay ventilation systems are renowned industry-wide for their efficiency. They offer environment-friendly energy recovery and humidity control, and enable air conditioning systems to simultaneously provide optimum room comfort and energy savings.

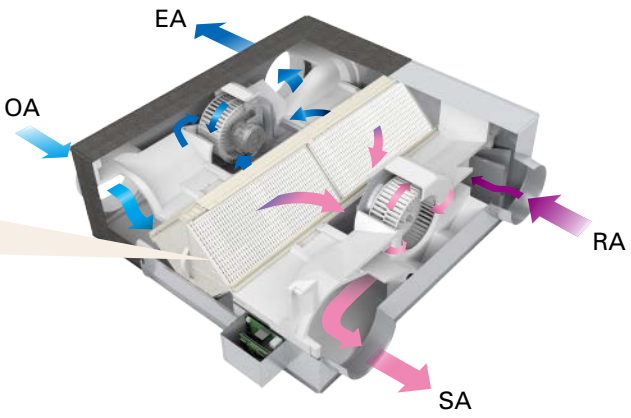


Indoor air quality inside a building is optimized through temperature and humidity exchange by Lossnay

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

The concept of sensible heat and latent heat exchange using Lossnay core



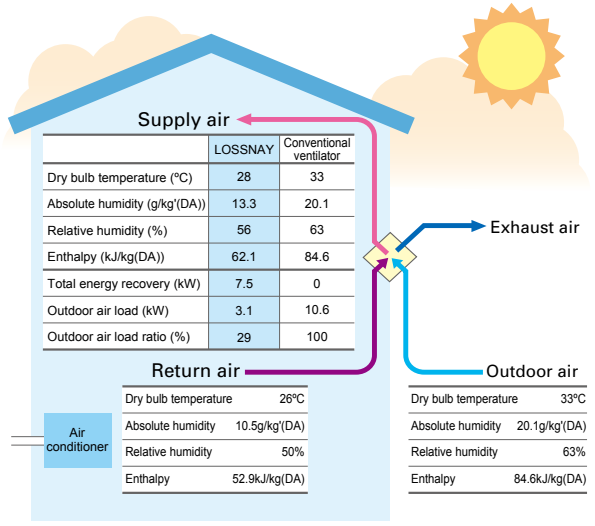


What can be improved by introducing Lossnay?

Ventilation with maximized comfort

In summer

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



	LOSSNAY	Conventional ventilator
Dry bulb temperature (°C)	28	33
Absolute humidity (g/kg'(DA))	13.3	20.1
Relative humidity (%)	56	63
Enthalpy (kJ/kg(DA))	62.1	84.6
Total energy recovery (kW)	7.5	0
Outdoor air load (kW)	3.1	10.6
Outdoor air load ratio (%)	29	100

Return air	
Dry bulb temperature	26°C
Absolute humidity	10.5g/kg'(DA)
Relative humidity	50%
Enthalpy	52.9kJ/kg(DA)

Outdoor air	
Dry bulb temperature	33°C
Absolute humidity	20.1g/kg'(DA)
Relative humidity	63%
Enthalpy	84.6kJ/kg(DA)

Heat recovery calculation

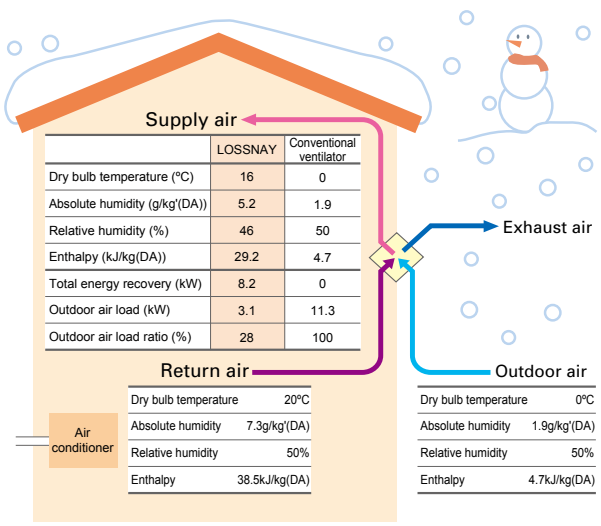
Indoor supply-air temperature (°C) = { Outdoor temperature (°C) − (Outdoor temperature (°C) − Indoor temperature (°C)) × Temp recovery efficiency (%) }

Calculation example: 28°C = 33°C − (33°C − 26°C) × 71.5%

*The above applies to the case of LGH-100RVX (fan speed 4).

In winter

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



	LOSSNAY	Conventional ventilator
Dry bulb temperature (°C)	16	0
Absolute humidity (g/kg'(DA))	5.2	1.9
Relative humidity (%)	46	50
Enthalpy (kJ/kg(DA))	29.2	4.7
Total energy recovery (kW)	8.2	0
Outdoor air load (kW)	3.1	11.3
Outdoor air load ratio (%)	28	100

Return air	
Dry bulb temperature	20°C
Absolute humidity	7.3g/kg'(DA)
Relative humidity	50%
Enthalpy	38.5kJ/kg(DA)

Outdoor air	
Dry bulb temperature	0°C
Absolute humidity	1.9g/kg'(DA)
Relative humidity	50%
Enthalpy	4.7kJ/kg(DA)

Heat recovery calculation

Indoor supply-air temperature (°C) = { Indoor temperature (°C) − (Outdoor temperature (°C)) × Temp recovery efficiency (%) } + Outdoor temperature (°C)

Calculation example: 16°C = (20°C − 0°C) × 80% + 0°C

*The above applies to the case of LGH-100RVX (fan speed 4).

LGH-RVX SERIES



A commercially oriented system that can be used to deliver high performance and functions virtually anywhere.

LGH-15/25/35/50/65/80/100/150RVX-E

Improved airflow range

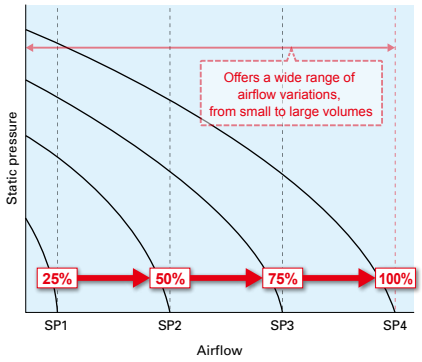
Wide airflow range

Each fan speed has a range setting of 25, 50, 75 and 100%, allowing much finer airflow control. When used in combination with the CO_2 sensor or timer function, airflow can be controlled according to conditions that realize better performance and reduce power consumption.

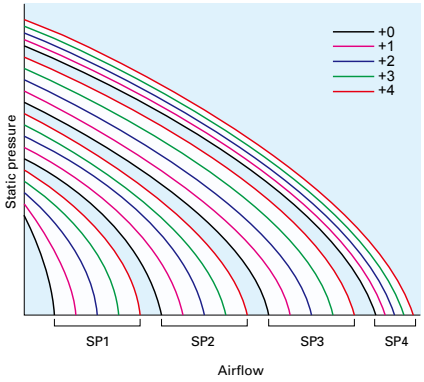
Fan speed adjustment function

The default fan speed value can be adjusted in slight increments. Use the PZ-62DR-EA/EB remote controller to reset the speed.
1) Considering the total hours of Lossnay operation (filter clogging), fan power can be adjusted automatically after a given period of time.
2) After the unit is installed, fine adjustments can be made if the airflow is slightly lower than the desired airflow.

■ **Characteristic curves of the LGH-RVX/RVXT Series**



■ **P-Q curve image**



LGH-RVXT SERIES



The LGH-RVXT Series has a large airflow of 1500-2500 CMH but a thin body of approximately 500mm. Therefore, the unit can be easily installed in the ceiling.

LGH-150/200/250RVXT-E

Thin body type

■ **LGH-150RVX-E**



Height: 808mm

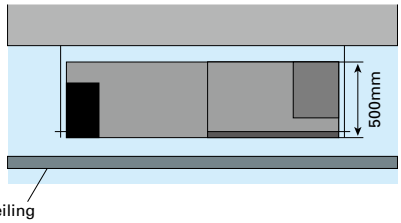
■ **LGH-150/200/250RVXT-E**



Height: 500mm

38% Thinner body

■ **LGH-RVXT installation image**



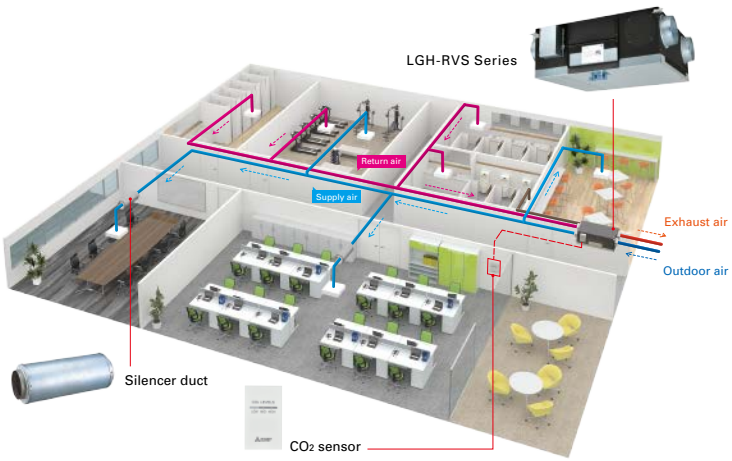
LGH-RVS SERIES

The LGH-RVS Series of sensible heat Lossnay models allows diverse solutions and options in response to customer needs.

LGH-50/80/100RVS-E



A system solution for all-area ventilation



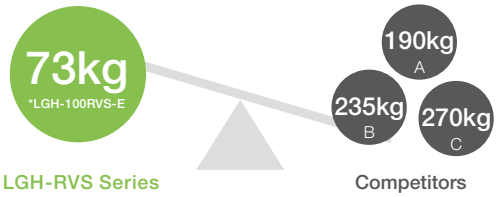
A sensible heat exchanger allows ventilation of all areas including sanitary area.

- Plug and play CO_2 sensor control including power
- Digital commissioning of fan speed increments
- Built-in condensate drainage traps

Easy installation

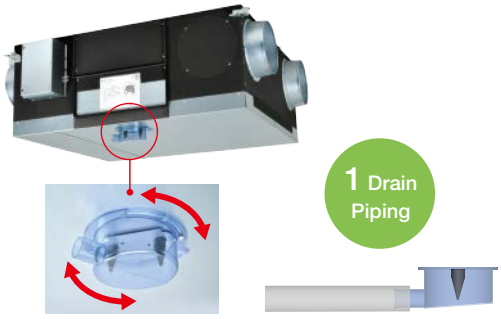
Light Chassis

Being light in weight is one of the most important factors for installation. The light chassis of the LGH-RVS series can provide a huge advantage in terms of installation coat and safety.



Easy Drain Piping

- Only one drain piping for both SA and EA.
- 360-degree drain pipe connection.
- Trap piping work is NOT required owing to an internal backflow stopper.



Various optional parts

The LGH-RVS series can connect with various optional parts. A CO_2 sensor is one of the best solutions for optimized airflow control. The unit operates while optimizing airflow in accordance with the level of CO_2 condensation in the room. Optimized ventilation can reduce the energy consumption of the air conditioner. A high-efficiency filter can be optionally installed in the unit as an easy solution for even better indoor air quality.

- CO_2 sensor



- Filter



- Silencer duct



GUF SERIES



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.

GUF-50/100RD4, GUF-50/100RDH4

These units can be used with R410A.
Outdoor units available in the GUF-RD/RDH series (For details see Mitsubishi Electric's CITY MULTI catalog).

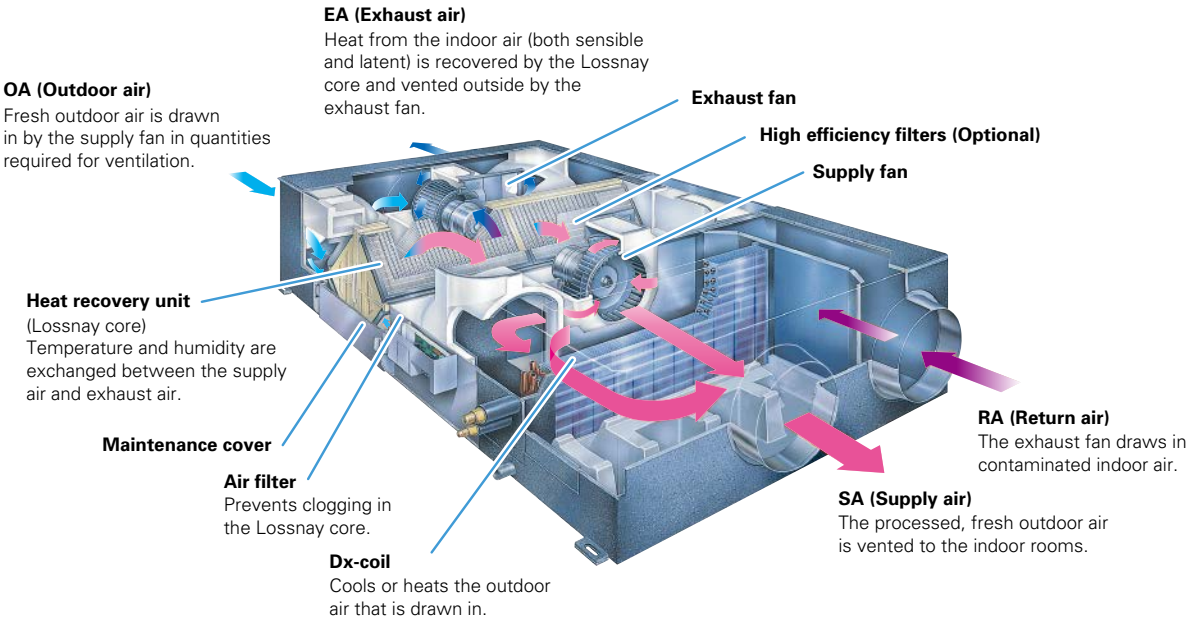
R410A refrigerant units

Model Size		P112	P125	P140	P200	P250	P300	P350	P400	P450	P500	P550	P600	P650	P700	P750	P800
Y Series	PUHY-YGM-A				●	●	●	●	●	●	●	●	●	●	●	●	●
R2 Series	PURY-YGM-A				●	●	●	●	●	●	●	●	●	●			
PUMY Series	PUMY-SP	●	●	●													
	PUMY-P	●	●	●	●												

Lossnay ventilation and Air conditioning

The OA (outdoor-air) Processing Unit creates an optimum environment while providing substantial energy savings. The OA Processing Unit comprises forced air ventilation, heat recovery, heating and cooling, and air purification. This total air conditioning system keeps indoor air fresh and comfortable all year round, and keeps it free of contaminants preventing ailments such as sick building syndrome. Inside the OA Processing Unit is the Lossnay Core, a heat-exchange unit that transfers heat efficiently, cutting ventilation load by as much as 70%. A remarkable product found nowhere else, this special combination of functionality and performance contained within a single unit ensures users ample comfort, good health, and energy savings.

GUF-RD type



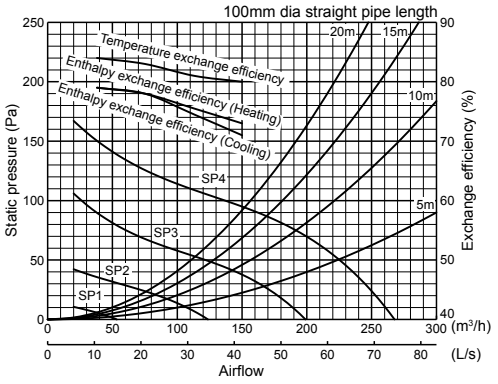
LGH–RVX SERIES

Specifications

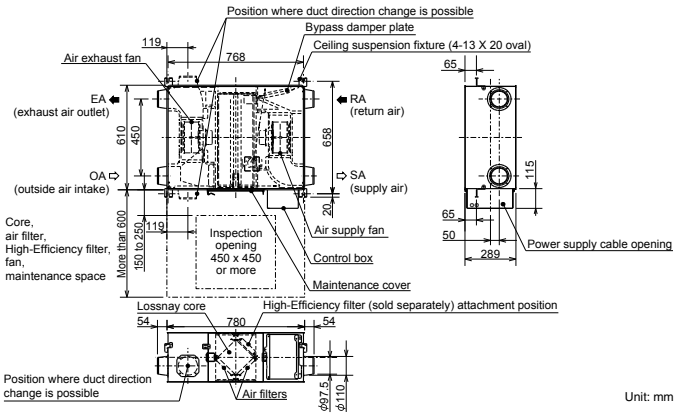
LGH-15RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		0.40	0.24	0.15	0.10	0.41	0.25	0.15	0.10
Input power (W)		49	28	14	7	52	28	14	8
Airflow	(m^3/h)	150	113	75	38	150	113	75	38
	(L/s)	42	31	21	10	42	31	21	10
External static pressure (Pa)		95	54	24	6	95	54	24	6
Temperature exchange efficiency (%)		80	81	83	84	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	73	75.5	78	79	–	–	–	–
	Cooling	71	74.5	78	79	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		28	24	19	17	29	24	19	18
Weight (kg)		20							
Specific energy consumption class		A							

Characteristic Curves



Dimensions

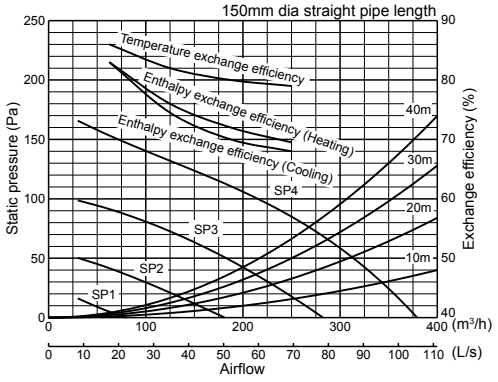


Unit: mm

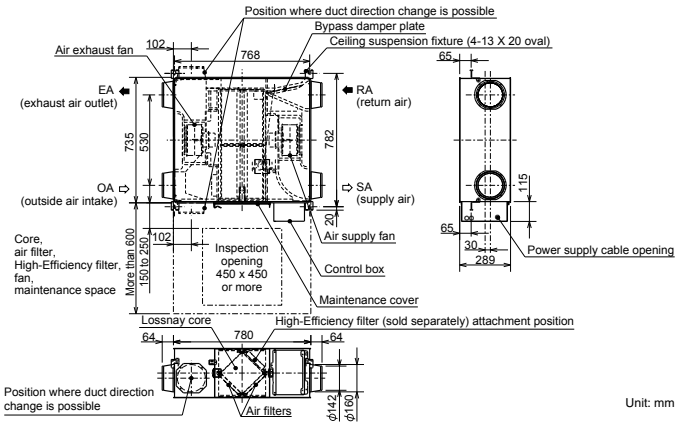
LGH-25RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		0.48	0.28	0.16	0.10	0.48	0.29	0.16	0.11
Input power (W)		62	33	16	7.5	63	35	17	9
Airflow	(m^3/h)	250	188	125	63	250	188	125	63
	(L/s)	69	52	35	17	69	52	35	17
External static pressure (Pa)		85	48	21	5	85	48	21	5
Temperature exchange efficiency (%)		79	80	82	86	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	69.5	72	76	83	–	–	–	–
	Cooling	68	70	74.5	83	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		27	22	20	17	27.5	23	20	17
Weight (kg)		23							
Specific energy consumption class		A							

Characteristic Curves



Dimensions



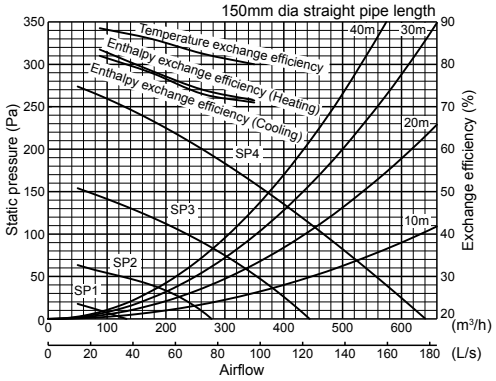
Unit: mm

■For LGH-RVX and LGH-RVXT series
*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.
*For specifications at other frequencies, contact your dealer.

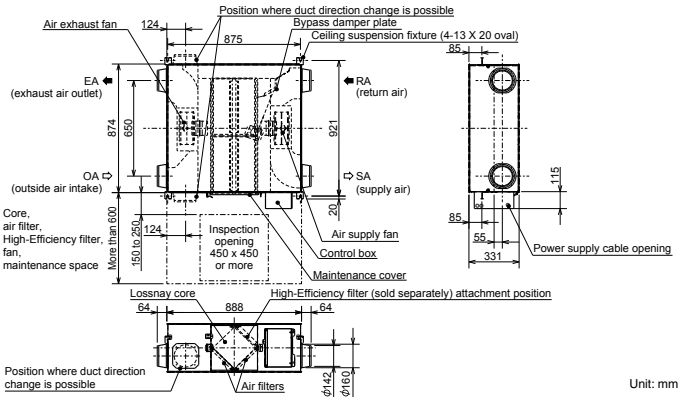
LGH-35RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		0.98	0.54	0.26	0.12	0.98	0.56	0.28	0.13
Input power (W)		140	70	31	11	145	72	35	13
Airflow	(m^3/h)	350	263	175	88	350	263	175	88
	(L/s)	97	73	49	24	97	73	49	24
External static pressure (Pa)		160	90	40	10	160	90	40	10
Temperature exchange efficiency (%)		80	82.5	86	88.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	71.5	74	78.5	83.5	–	–	–	–
	Cooling	71	73	78	82	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		32	28	20	17	32.5	28	20	18
Weight (kg)		30							

Characteristic Curves



Dimensions

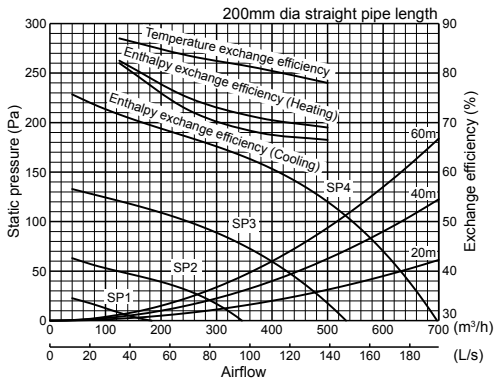


Unit: mm

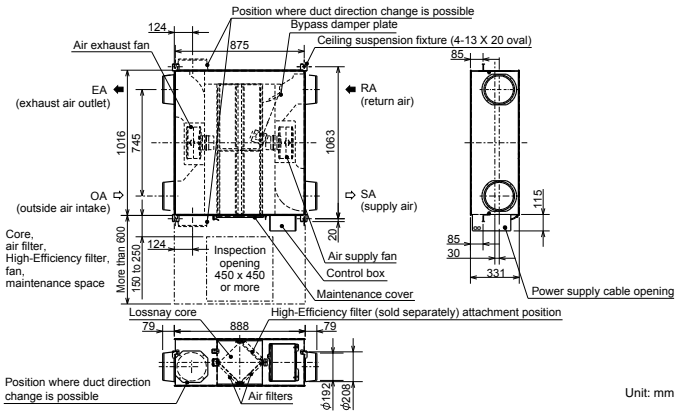
LGH-50RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		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
Input power (W)		165	78	32	12	173	81	35	14
Airflow	(m^3/h)	500	375	250	125	500	375	250	125
	(L/s)	139	104	69	35	139	104	69	35
External static pressure (Pa)		120	68	30	8	120	68	30	8
Temperature exchange efficiency (%)		78	81	83.5	87	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	69	71	75	82.5	–	–	–	–
	Cooling	66.5	68	72.5	82	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		34	28	19	18	35	29	20	18
Weight (kg)		33							

Characteristic Curves



Dimensions



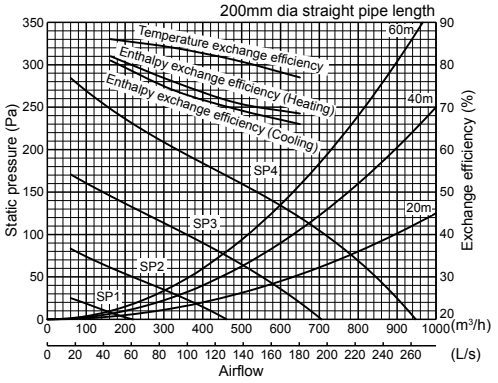
Unit: mm

■For LGH-RVX and LGH-RVXT series
*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.
*For specifications at other frequencies, contact your dealer.

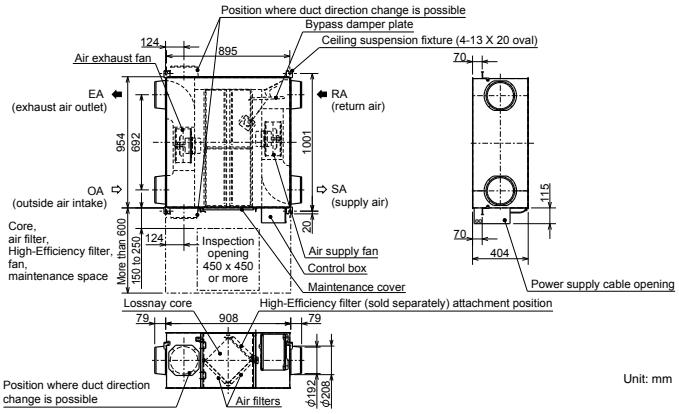
LGH-65RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		1.65	0.90	0.39	0.15	1.72	0.86	0.38	0.16
Input power (W)		252	131	49	15	262	131	47	17
Airflow	(m^3/h)	650	488	325	163	650	488	325	163
	(L/s)	181	135	90	45	181	135	90	45
External static pressure (Pa)		120	68	30	8	120	68	30	8
Temperature exchange efficiency (%)		77	81	84	86	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	68.5	71	76	82	–	–	–	–
	Cooling	66	69.5	74	81	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		34.5	29	22	18	35.5	29	22	18
Weight (kg)		38							

Characteristic Curves



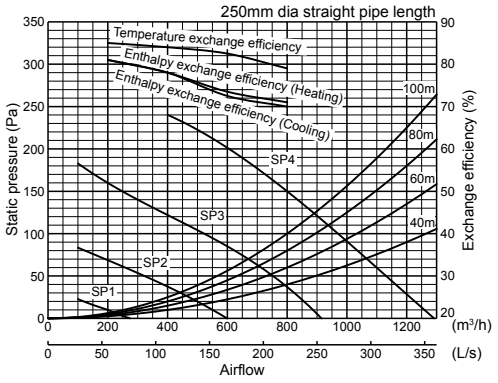
Dimensions



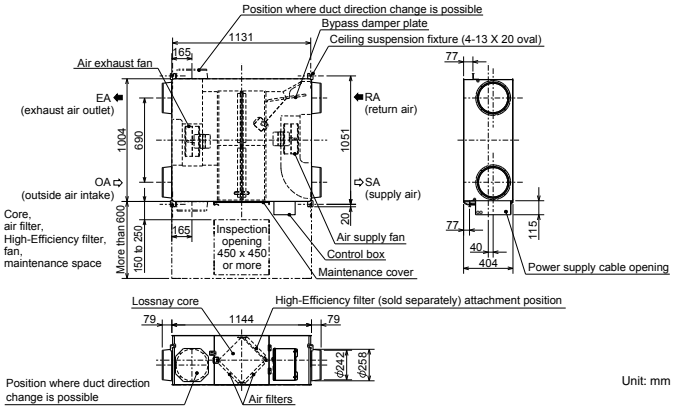
LGH-80RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		1.82	0.83	0.36	0.15	1.97	0.86	0.40	0.15
Input power (W)		335	151	60	18	340	151	64	20
Airflow	(m^3/h)	800	600	400	200	800	600	400	200
	(L/s)	222	167	111	56	222	167	111	56
External static pressure (Pa)		150	85	38	10	150	85	38	10
Temperature exchange efficiency (%)		79	82.5	84	85	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	71	73.5	78	81	–	–	–	–
	Cooling	70	72.5	78	81	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		34.5	30	23	18	36	30	23	18
Weight (kg)		48							

Characteristic Curves



Dimensions

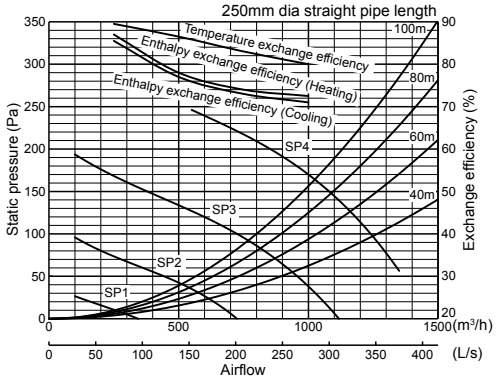


■For LGH-RVX and LGH-RVXT series
*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.
*For specifications at other frequencies, contact your dealer.

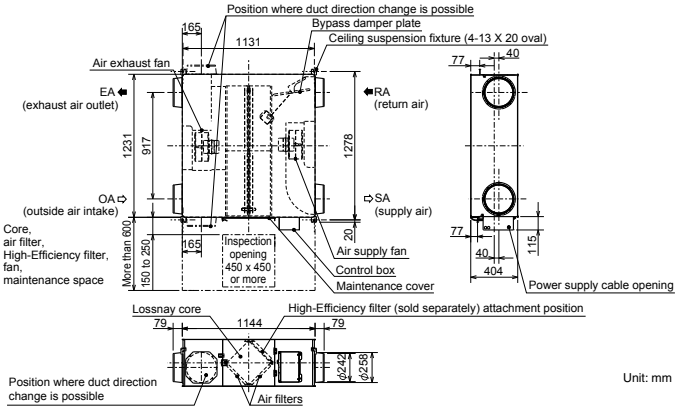
LGH-100RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		2.50	1.20	0.50	0.17	2.50	1.20	0.51	0.19
Input power (W)		420	200	75	21	420	200	75	23
Airflow	(m^3/h)	1000	750	500	250	1000	750	500	250
	(L/s)	278	208	139	69	278	208	139	69
External static pressure (Pa)		170	96	43	11	170	96	43	11
Temperature exchange efficiency (%)		80	83	86.5	89.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	72.5	74	78	87	–	–	–	–
	Cooling	71	73	77	85.5	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		37	31	23	18	38	32	24	18
Weight (kg)		54							

Characteristic Curves



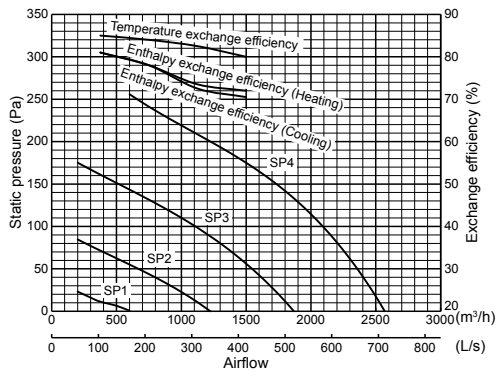
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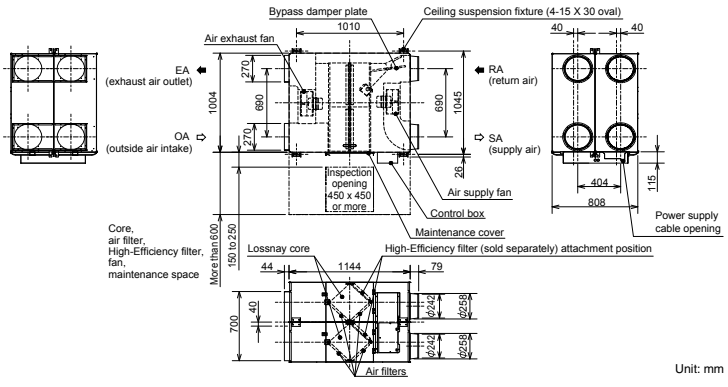
LGH-150RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		3.71	1.75	0.70	0.29	3.85	1.78	0.78	0.30
Input power (W)		670	311	123	38	698	311	124	44
Airflow	(m^3/h)	1500	1125	750	375	1500	1125	750	375
	(L/s)	417	313	208	104	417	313	208	104
External static pressure (Pa)		175	98	44	11	175	98	44	11
Temperature exchange efficiency (%)		80	82.5	84	85	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	72	73.5	78	81	–	–	–	–
	Cooling	70.5	72.5	78	81	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		39	32	24	18	40.5	33	26	18
Weight (kg)		98							

Characteristic Curves



Dimensions



■For LGH-RVX and LGH-RVXT series
*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.
*For specifications at other frequencies, contact your dealer.

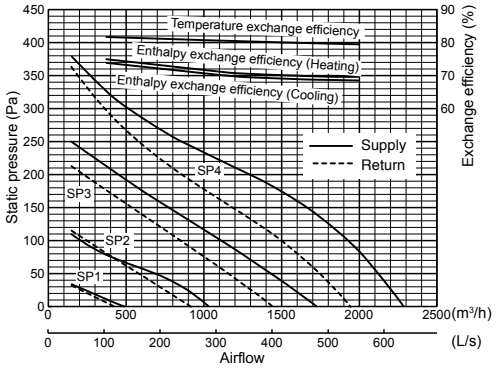
LGH–RVXT SERIES

Specifications

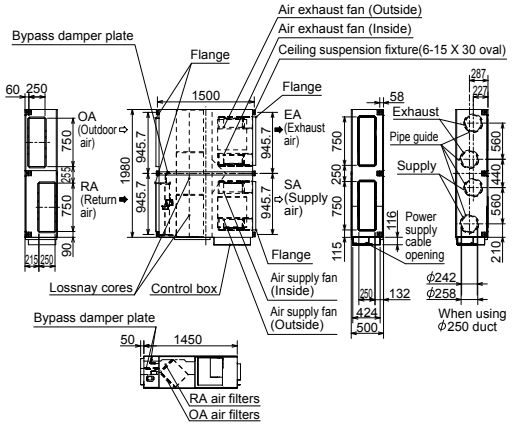
LGH-150RVXT-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		4.30	2.40	1.10	0.36	3.40	1.80	0.77	0.31
Input power (W)		792	421	176	48	625	334	134	37
Airflow	(m^3/h)	1500	1125	750	375	1500	1125	750	375
	(L/s)	417	313	208	104	417	313	208	104
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11
	Return	100	56	25	6	100	56	25	6
Temperature exchange efficiency (%)		80	80.5	81	81.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	70	71	73	75	–	–	–	–
	Cooling	69	70	72	74	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		39.5	35.5	29.5	22	39	33	26.5	20.5
Weight (kg)		156							

Characteristic Curves



Dimensions

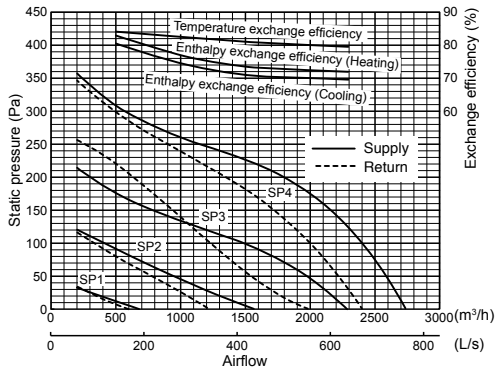


Unit: mm

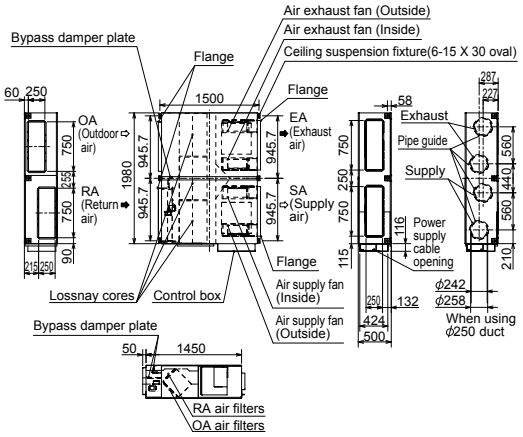
LGH-200RVXT-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		5.40	2.70	1.10	0.39	5.00	2.20	0.85	0.34
Input power (W)		1000	494	197	56	916	407	150	45
Airflow	(m^3/h)	2000	1500	1000	500	2000	1500	1000	500
	(L/s)	556	417	278	139	556	417	278	139
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11
	Return	100	56	25	6	100	56	25	6
Temperature exchange efficiency (%)		80	81	82.5	84	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	72.5	73.5	77	83	–	–	–	–
	Cooling	70	71	74.5	80.5	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		39.5	35.5	28	22	40.5	34.5	27	20.5
Weight (kg)		159							

Characteristic Curves



Dimensions



Unit: mm

■For LGH-RVX and LGH-RVXT series

*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

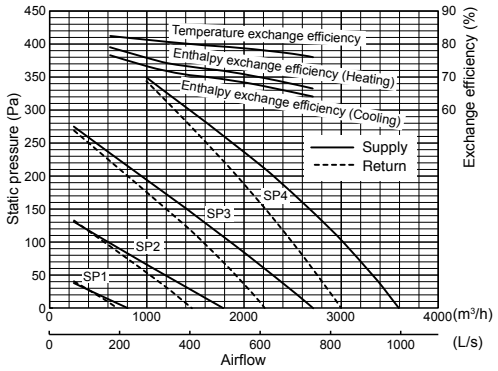
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

*For specifications at other frequencies, contact your dealer.

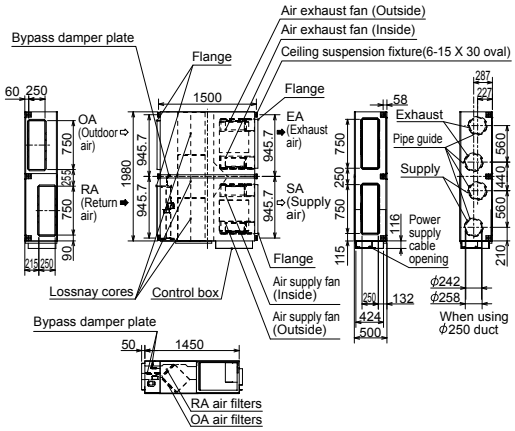
LGH-250RVXT-E

Electrical power supply		220-240V/50Hz, 220V/60Hz						
Ventilation mode		Heat recovery mode				Bypass mode		
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		7.60	3.60	1.40	0.57	6.90	3.10	1.30	0.49
Input power (W)		1446	687	244	82	1298	587	212	69
Airflow	(m^3/h)	2500	1875	1250	625	2500	1875	1250	625
	(L/s)	694	521	347	174	694	521	347	174
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11
	Return	100	56	25	6	100	56	25	6
Temperature exchange efficiency (%)		77	79	80.5	82.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	68	71.5	74	79	–	–	–	–
	Cooling	65.5	69	71.5	76.5	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		43	39	32	24	44	38.5	31	22.5
Weight (kg)		198							

Characteristic Curves



Dimensions



Unit: mm

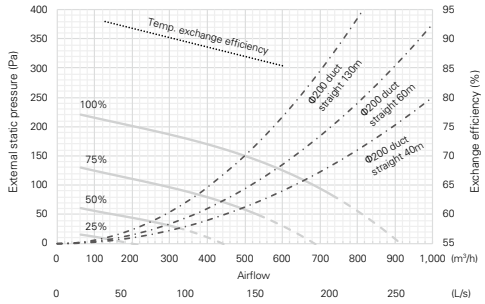
■For LGH-RVX and LGH-RVXT series
*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.
*For specifications at other frequencies, contact your dealer.

LGH–RVS SERIES
Specifications

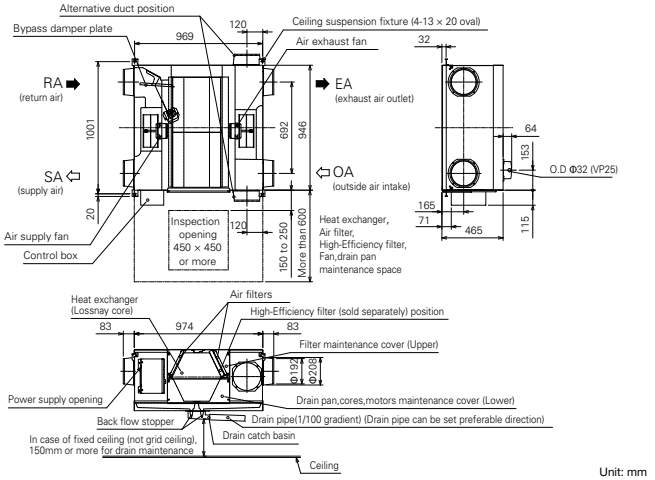
LGH-50RVS-E

Weight		55kg (67kg with maximum drain water)				
Electrical power supply		220-240V/50Hz, 220V/60Hz				
Fan speed		100%	75%	50%	25%	Test condition
Input power (W)		190	110	60	25	ISO 16494 Temp. exchange efficiency is winter condition
Airflow	(m^3/h)	500	375	250	125	
	(L/s)	139	104	69	35	
Specific fan power [W/(L/s)]		1.37	1.06	0.86	0.72	
External static pressure (Pa)		150	84	38	9	
Temperature exchange efficiency (%)		87.0	89.0	91.0	93.0	
Noise (dB)		33.0	27.0	22.0	18.0	A-weighted sound pressure level @1.5m off from the center of the unit in an anechoic chamber
Exhaust air transfer ratio (%)		5				Tracer gas method @100% airflow (prEN308)

Characteristic Curves



Dimensions

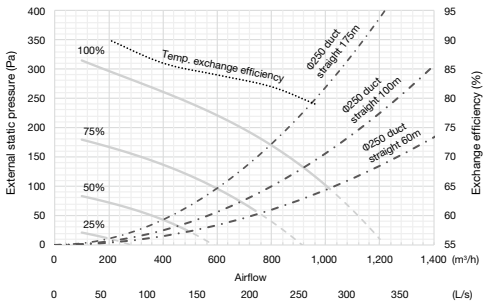


Unit: mm

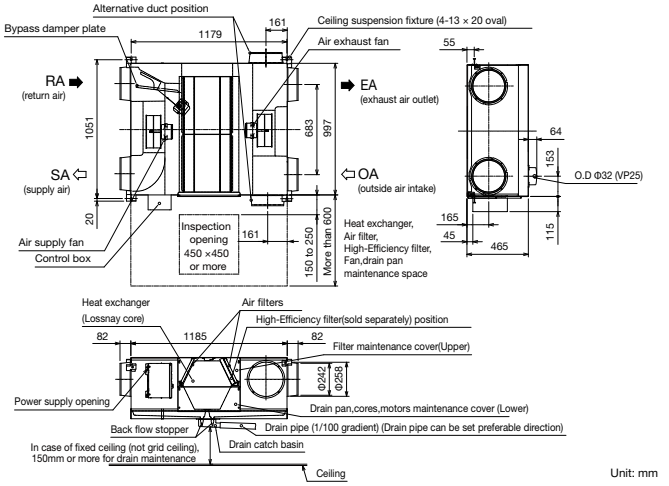
LGH-80RVS-E

Weight		63kg (77kg with maximum drain water)				
Electrical power supply		220-240V/50Hz, 220V/60Hz				
Fan speed		100%	75%	50%	25%	Test condition
Input power (W)		325	175	85	32	ISO 16494 Temp. exchange efficiency is winter condition
Airflow	(m^3/h)	800	600	400	200	
	(L/s)	222	167	111	56	
Specific fan power [W/(L/s)]		1.46	1.05	0.77	0.58	
External static pressure (Pa)		170	96	43	11	
Temperature exchange efficiency (%)		82.0	84.0	86.0	90.0	
Noise (dB)		36.0	30.0	25.0	18.0	A-weighted sound pressure level @1.5m off from the center of the unit in an anechoic chamber
Exhaust air transfer ratio (%)		5				Tracer gas method @100% airflow (prEN308)

Characteristic Curves



Dimensions



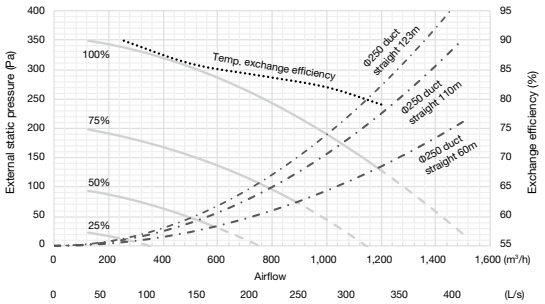
Unit: mm

■The input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz. Temperature exchange efficiency (%) is measured at indoor DB 20°C/WB15°C and outdoor DB 5°C/WB3°C. It is measured according to ISO16494.
When the indoor humidity is low and condensation in the heat exchanger does not occur, the exchange efficiency may be decreased in winter.
■The absolute humidity of RA shall be lower than 0.0139kg/kg (DA) in winter and relative humidity of RA shall be lower than 90%RH through the year.
Example of the absolute humidity 0.0139kg/kg (DA) are 20.7°C 90%RH, 25°C 70%, 30°C 50% etc.

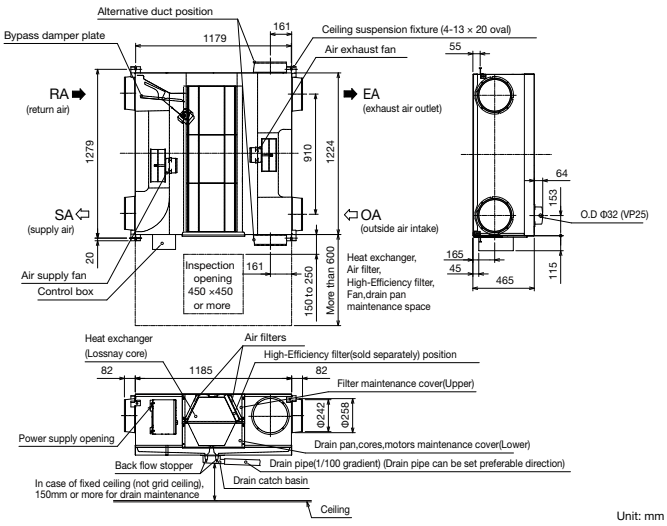
LGH-100RVS-E

Weight		73kg (89kg with maximum drain water)				
Electrical power supply		220-240V/50Hz, 220V/60Hz				
Fan speed		100%	75%	50%	25%	Test condition
Input power (W)		445	225	100	35	ISO 16494 Temp. exchange efficiency is winter condition
Airflow	(m^3/h)	1000	750	500	250	
	(L/s)	278	208	139	69	
Specific fan power [W/(L/s)]		1.60	1.08	0.72	0.50	
External static pressure (Pa)		190	107	48	12	
Temperature exchange efficiency (%)		82.0	84.0	86.0	90.0	
Noise (dB)		37.0	32.0	24.0	18.0	A-weighted sound pressure level @1.5m off from the center of the unit in an anechoic chamber
Exhaust air transfer ratio (%)		5				Tracer gas method @100% airflow (prEN308)

Characteristic Curves



Dimensions



Unit: mm

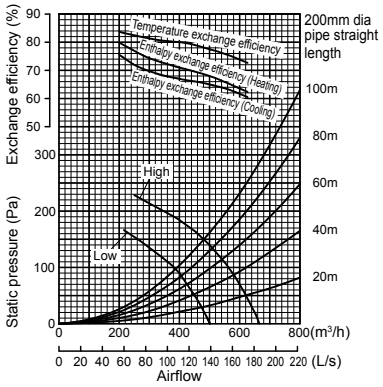
■The input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz. Temperature exchange efficiency (%) is measured at indoor DB 20°C/WB15°C and outdoor DB 5°C/WB3°C. It is measured according to ISO16494.
When the indoor humidity is low and condensation in the heat exchanger does not occur, the exchange efficiency may be decreased in winter.
■The absolute humidity of RA shall be lower than 0.0139kg/kg (DA) in winter and relative humidity of RA shall be lower than 90%RH through the year.
Example of the absolute humidity 0.0139kg/kg (DA) are 20.7°C 90%RH, 25°C 70%, 30°C 50% etc.

GUF SERIES
Specifications

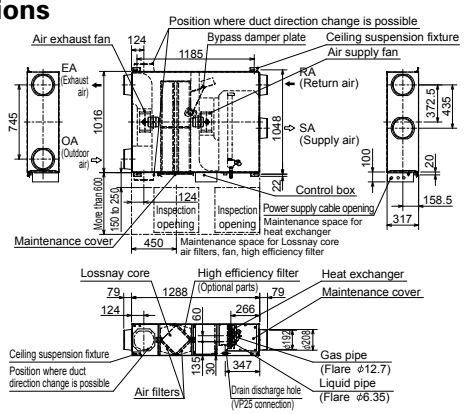
GUF-50RD4

Electrical power supply		220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low
Running current (A)		1.15	0.70	1.15	0.70
Input power (W)		235-265	150-165	235-265	150-165
Airflow	(m^3/h)	500	400	500	400
	(L/s)	139	111	139	111
External static pressure (Pa)		140	90	140	90
Temperature exchange efficiency (%)		77.5	80	–	–
Enthalpy exchange efficiency (%)	Heating	68	71	–	–
	Cooling	65	67	–	–
Cooling capacity (kW)		5.57 (1.94)			
Heating capacity (kW)		6.21 (2.04)			
Capacity equivalent to the indoor unit		P32			
Humidifier	Humidifying	–			
	Humidifying capacity (kg/h)	–			
	Water supply pressure	–			
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		33.5-34.5	29.5-30.5	35-36	29.5-30.5
Weight (kg)		48			

Characteristic Curves



Dimensions

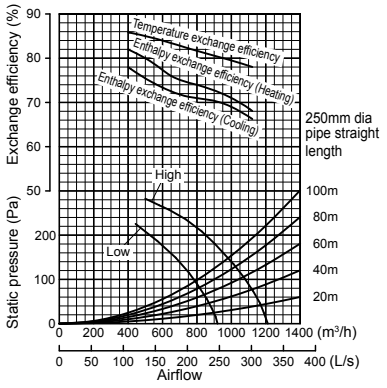


Unit: mm

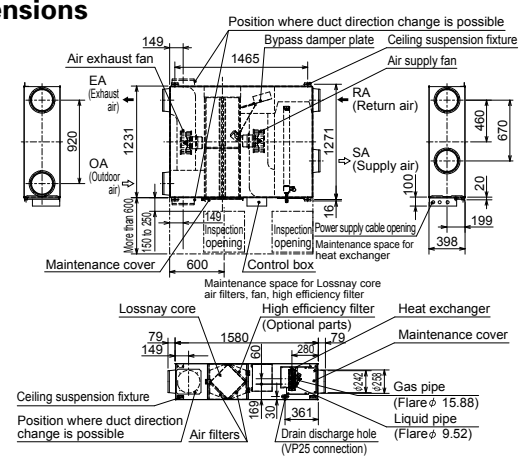
GUF-100RD4

Electrical power supply		220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low
Running current (A)		2.20	1.73	2.25	1.77
Input power (W)		480-505	370-395	490-515	385-410
Airflow	(m^3/h)	1000	800	1000	800
	(L/s)	278	222	278	222
External static pressure (Pa)		140	90	140	90
Temperature exchange efficiency (%)		79.5	81.5	–	–
Enthalpy exchange efficiency (%)	Heating	71	74	–	–
	Cooling	69	71	–	–
Cooling capacity (kW)		11.44 (4.12)			
Heating capacity (kW)		12.56 (4.26)			
Capacity equivalent to the indoor unit		P63			
Humidifier	Humidifying	–			
	Humidifying capacity (kg/h)	–			
	Water supply pressure	–			
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		38-39	34-35	38-39	35-36
Weight (kg)		82			

Characteristic Curves



Dimensions



Unit: mm

■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 recoverying capacity of heat exchange core.

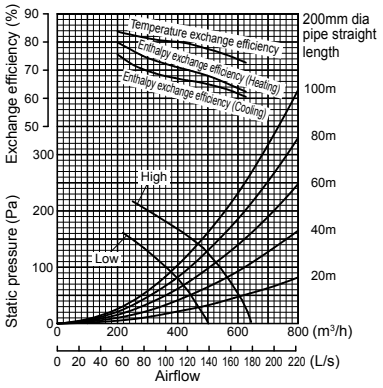
*Figures in the chart are measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

*When the total capacity of indoor units connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor until capacity.

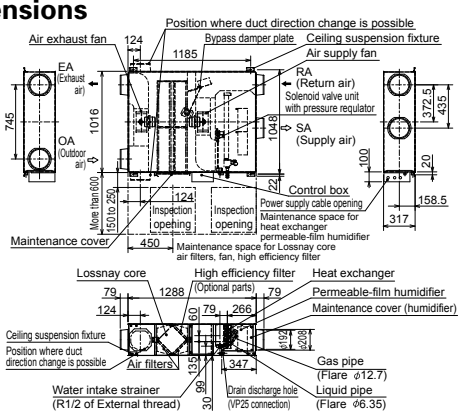
GUF-50RDH4

Electrical power supply		220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low
Running current (A)		1.15	0.70	1.15	0.70
Input power (W)		235-265	150-165	235-265	150-165
Airflow	(m^3/h)	500	400	500	400
	(L/s)	139	111	139	111
External static pressure (Pa)		125	80	125	80
Temperature exchange efficiency (%)		77.5	80	–	–
Enthalpy exchange efficiency (%)	Heating	68	71	–	–
	Cooling	65	67	–	–
Cooling capacity (kW)		5.57 (1.94)			
Heating capacity (kW)		6.21 (2.04)			
Capacity equivalent to the indoor unit		P32			
Humidifier	Humidifying	Permeable film humidifier			
	Humidifying capacity (kg/h)	2.7 (heating)			
	Water supply pressure	Minimum pressure : 2.0 × 10^4Pa Maximum pressure : 49.0 × 10^4Pa			
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		33.5-34.5	29.5-30.5	35-36	29.5-30.5
Weight (kg)		51 (filled with water 55)			

Characteristic Curves



Dimensions

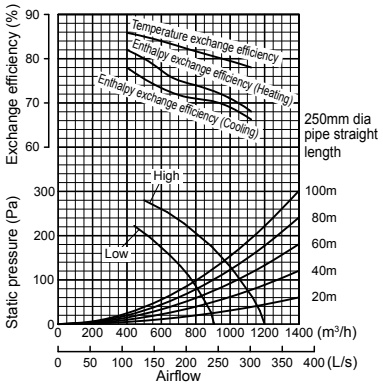


Unit: mm

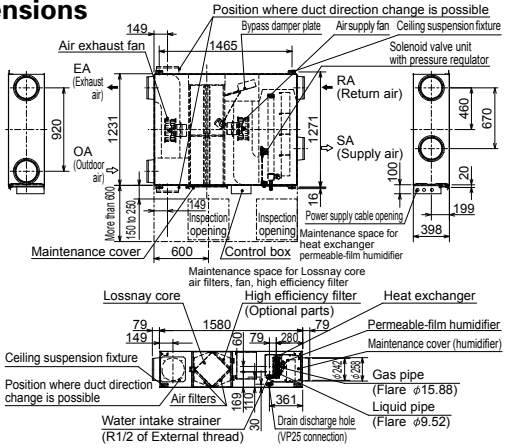
GUF-100RDH4

Electrical power supply		220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low
Running current (A)		2.20	1.76	2.25	1.77
Input power (W)		480-505	385-400	490-515	385-410
Airflow	(m^3/h)	1000	800	1000	800
	(L/s)	278	222	278	222
External static pressure (Pa)		135	86	135	86
Temperature exchange efficiency (%)		79.5	81.5	–	–
Enthalpy exchange efficiency (%)	Heating	71	74	–	–
	Cooling	69	71	–	–
Cooling capacity (kW)		11.44 (4.12)			
Heating capacity (kW)		12.56 (4.26)			
Capacity equivalent to the indoor unit		P63			
Humidifier	Humidifying	Permeable film humidifier			
	Humidifying capacity (kg/h)	5.4 (heating)			
	Water supply pressure	Minimum pressure : 2.0 × 10^4Pa Maximum pressure : 49.0 × 10^4Pa			
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		38-39	34-35	38-39	35-36
Weight (kg)		88 (filled with water 96)			

Characteristic Curves



Dimensions



Unit: mm

■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.

*When the total capacity of indoor units connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor until capacity.

GUG SERIES



GUG-03SL-E

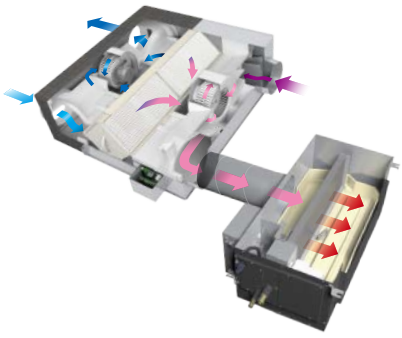
(Optional Dx-coil Unit for Lossnay)
Temperature control equipment that works with Lossnay units and Mr.Slim outdoor units.

GUG-01SL-E (Connection to LGH-50RVX-E or 65RVX-E)
GUG-02SL-E (Connection to LGH-80RVX-E or 100RVX-E)
GUG-03SL-E (Connection to LGH-150RVX-E, LGH-150/200/250RVXT-E)

Supply comfortable control

Product Features

- Lossnay return air and supply air temperature control are possible by connecting the Dx-coil unit to Mr.Slim (power inverter series).
- Connecting the Dx-coil unit will expand Lossnay's temperature control range (500-2,500 CMH). Suitable for various applications such as offices, shops and schools etc.



■ Target Applications



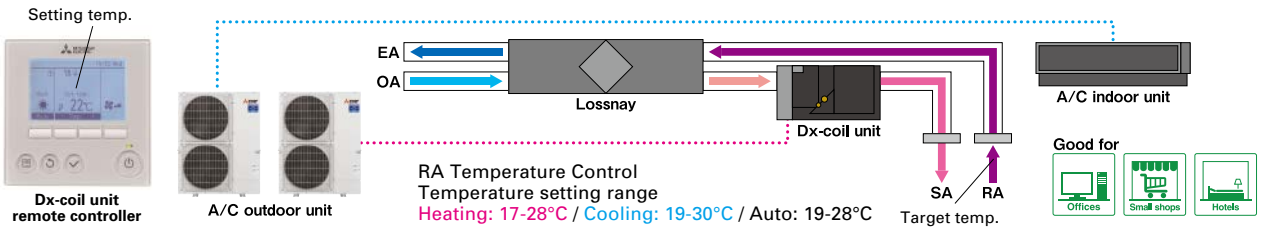




Application Examples

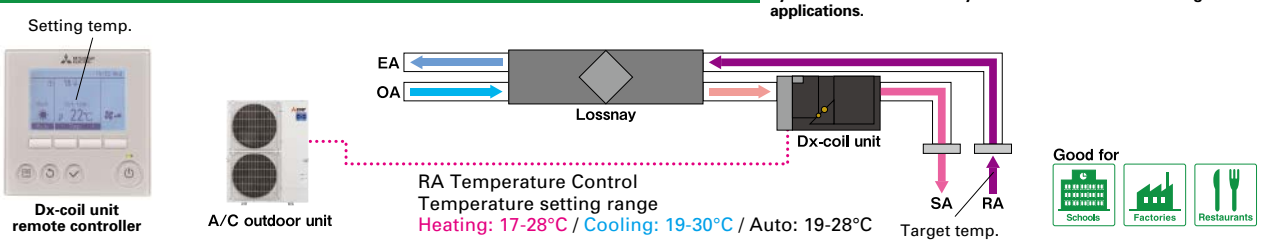
Supplemental Air-conditioning System (Return Air Temperature Control)

It may be possible to reduce one air-conditioning unit by adopting return air temperature control.



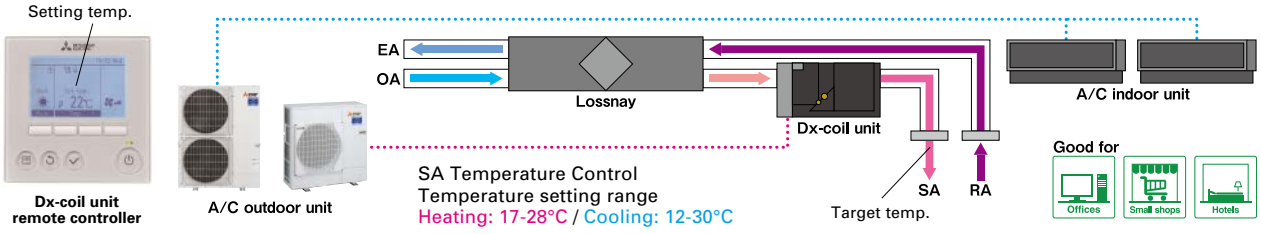
Main Air-conditioning System (Return Air Temperature Control)

Lossnay + Dx-coil unit may be used as the main air-conditioning system and a ventilation system for lower air-conditioning load applications.



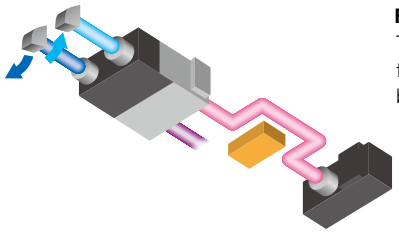
Outdoor Air Treatment System (Supply Air Temperature Control)

Controlling the temperature of outdoor air simplifies air-conditioning design and control.



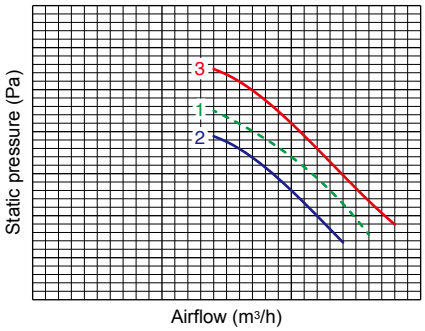
*The above images of using the LGH-RVXT Series are simply examples for reference.

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).



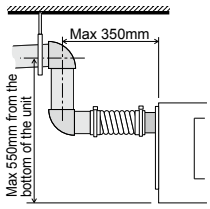
To Keep High Static Pressure

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 a 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-62DR-EA/EB Lossnay remote controller.

Drain Pump Equipment

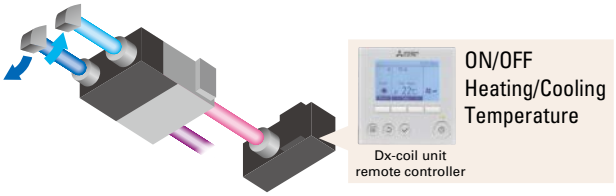
A built-in drain pump makes attaching the drain hose in the ceiling cavity easy, resulting in simple and fast installation.



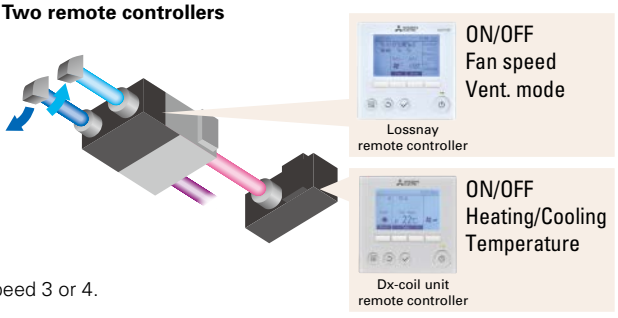
User-friendly system control

Flexible Remote Controller Selection

(A) One remote controller



(B) Two remote controllers



When using only one remote controller, Lossnay fan speed is fixed at fan speed 3 or 4.
When using two remote controllers, all Lossnay functions are available.
*1: Lossnay unit and Dx-coil unit both will synchronously switch 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 CO_2-sensor or a BMS (analog input (0 - 10 VDC) or a volt-free input).

*During fan speed 1 or 2, the Dx-coil unit is always set to 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

GUG SERIES
Specifications



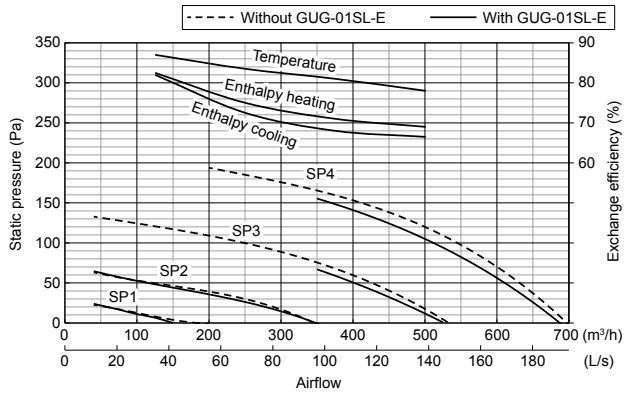
GUG-01SL-E

GUG-01SL-E (Connection to LGH-50RVX-E or LGH-65RVX-E)

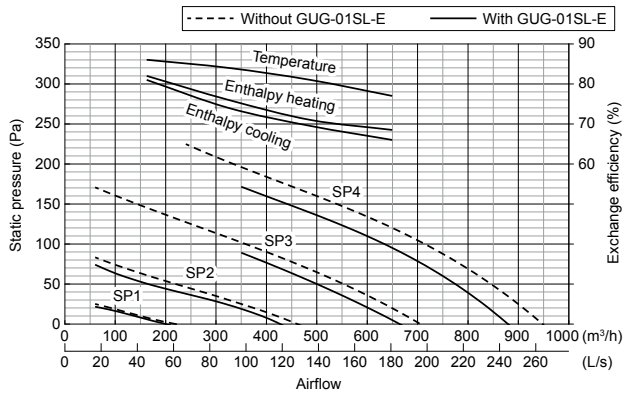
Refrigerant		R410A						
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)						
Input power		Heating / Fan: 2.5W, Cooling: 12.4W						
Running current		Less than 0.1A						
Weight		21kg *Accessories: Approx. 1kg						
Function		Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control						
		RA (Return Air) temperature control						
RA (Return Air) temperature control								
Connectable Lossnay unit		LGH-50RVX-E				LGH-65RVX-E		
Capacity [kW]	Heating	6.5 (2.4 + 4.1)				7.7 (3.2 + 4.5)		
	Cooling	5.6 (2.0 + 3.6)				6.6 (2.6 + 4.0)		
SHF		0.66				0.69		
Performance index	Heating	4.09				4.72		
	Cooling	4.69				5.03		
Airflow range at SP3 and SP4		350 - 695 m^3/h				350 - 900 m^3/h		
Connectable outdoor unit		PUHZ-ZRP35				PUHZ-ZRP35		
Ext. piping		Diameter Liquid / Gas: 6.35 / 12.7				Diameter Liquid / Gas: 6.35 / 12.7		
		Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m		
Ventilation specifications								
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Airflow	[m^3/h]	500	375	250	125	650	488	325	163
	[L/s]	139	104	69	35	181	135	90	45
External static pressure [Pa]		105	59	26	7	95	53	24	6

Characteristic Curves

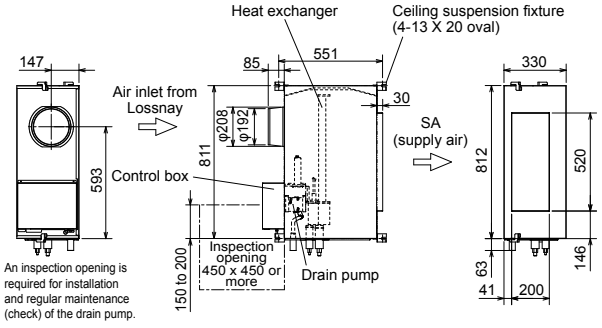
LGH-50RVX-E

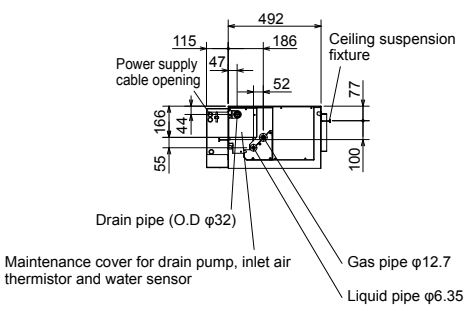


LGH-65RVX-E



Dimensions





Unit (mm)



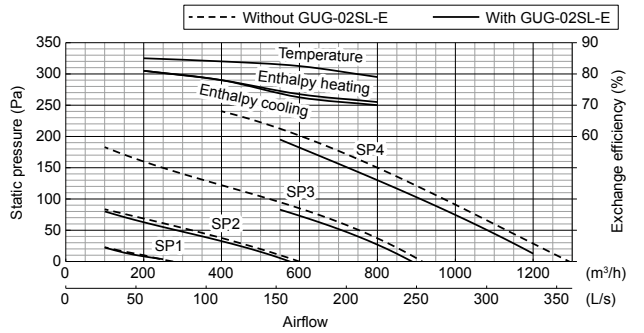
GUG-02SL-E

GUG-02SL-E (Connection to LGH-80RVX-E or LGH-100RVX-E)

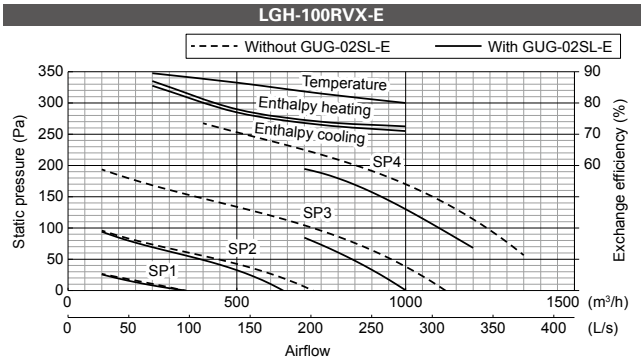
Refrigerant		R410A						
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)						
Input power		Heating / Fan: 2.5W, Cooling: 12.4W						
Running current		Less than 0.1A						
Weight		26kg *Accessories: Approx. 1kg						
Function		Heating / Cooling / Auto / Fan *Auto is 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-80RVX-E				LGH-100RVX-E		
Capacity [kW]	Heating	10.0 (4.0 + 6.0)				13.2 (5.1 + 8.1)		
	Cooling	8.3 (3.3 + 5.0)				11.3 (4.2 + 7.1)		
SHF		0.69				0.66		
Performance index	Heating	4.62				4.42		
	Cooling	4.76				4.98		
Airflow range at SP3 and SP4		560 - 1200 m^3/h				700 - 1200 m^3/h		
Connectable outdoor unit		PUHZ-ZRP50				PUHZ-ZRP71		
Ext. piping		Diameter Liquid / Gas: 6.35 / 12.7				Diameter Liquid / Gas: 9.52 / 15.88		
		Maximum length: 50m, Maximum height: 30m				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		
Airflow range at SP3 and SP4		560 - 1200 m^3/h				700 - 1200 m^3/h		
Connectable outdoor unit		PUHZ-ZRP50				PUHZ-ZRP50		
Ext. piping		Diameter Liquid / Gas: 6.35 / 12.7				Diameter Liquid / Gas: 6.35 / 12.7		
		Maximum length: 50m, Maximum height: 30m				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-80RVX-E				LGH-100RVX-E		
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Airflow	[m^3/h]	800	600	400	200	1,000	750	500	250
	[L/s]	222	167	111	56	278	208	139	69
External static pressure [Pa]		130	73	33	8	130	73	33	8

Characteristic Curves

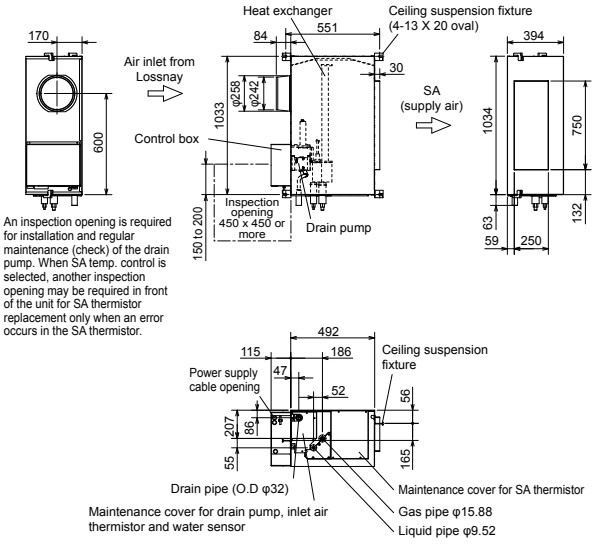
LGH-80RVX-E



LGH-100RVX-E



Dimensions



Unit (mm)



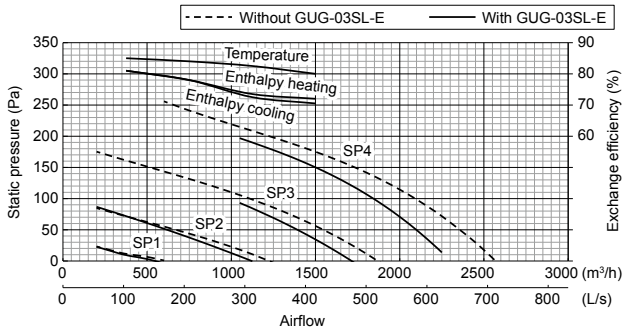
GUG-03SL-E

GUG-03SL-E (Connection to LGH-150RVX-E)

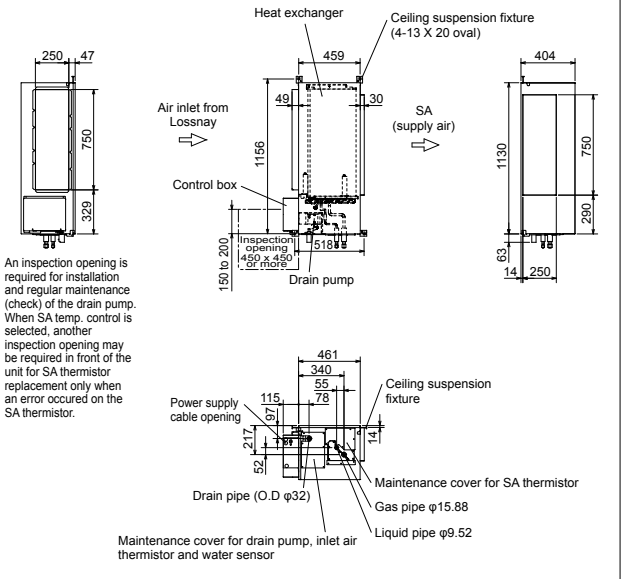
Refrigerant		R410A			
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)			
Input power		Heating / Fan: 2.5W, Cooling: 12.4W			
Running current		Less than 0.1A			
Weight		28kg *Accessories: Approx. 1kg			
Function		Heating / Cooling / Auto / Fan *Auto is only available 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			
Capacity [kW]	Heating	20.7 (7.7 + 13.0)			
	Cooling	15.8 (6.3 + 9.5)			
SHF		0.68			
Performance index	Heating	4.24			
	Cooling	5.27			
Airflow range at SP3 and SP4		1050 - 2250 m^3/h			
Connectable outdoor unit		PUHZ-ZRP100			
Ext. piping		Diameter Liquid / Gas: 9.52 / 15.88			
		Maximum length: 75m, Maximum height: 30m			
SA (Supply Air) temperature control					
Connectable Lossnay unit		LGH-150RVX-E			
Capacity [kW]	Heating	16.6 (7.7 + 8.9)			
	Cooling	13.4 (6.3 + 7.1)			
SHF		0.85			
Performance index	Heating	5.46			
	Cooling	5.32			
Airflow range at SP3 and SP4		1050 - 2250 m^3/h			
Connectable outdoor unit		PUHZ-ZRP71			
Ext. piping		Diameter Liquid / Gas: 9.52 / 15.88			
		Maximum length: 50m, Maximum height: 30m			
Ventilation specifications					
Connectable Lossnay unit		LGH-150RVX-E			
Fan speed		SP4	SP3	SP2	SP1
Airflow	[m^3/h]	1,500	1,125	750	375
	[L/s]	417	313	208	104
External static pressure [Pa]		150	84	38	9

Characteristic Curves

LGH-150RVX-E



Dimensions

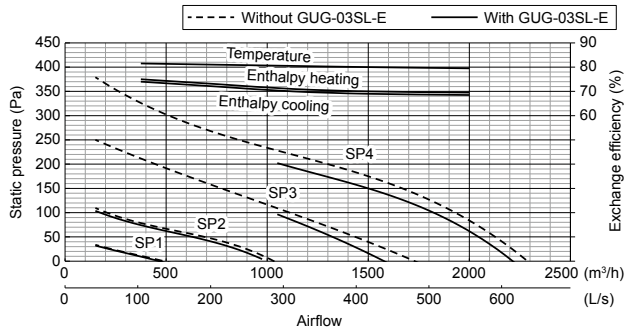


GUG-03SL-E (Connection to LGH-150RVXT-E, LGH-200RVXT-E or LGH-250RVXT-E)

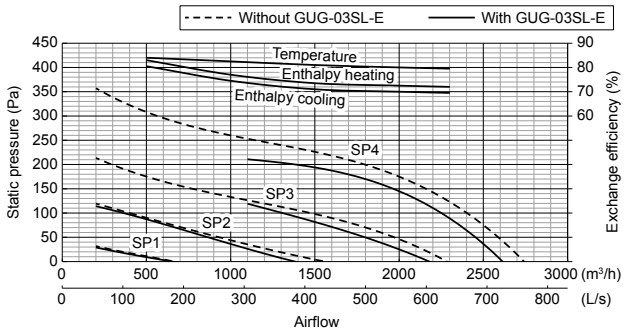
Refrigerant		R410A										
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)										
Input power		Heating / Fan: 2.5W, Cooling: 12.4W										
Running current		Less than 0.1A										
Weight		28kg *Accessories: Approx. 1kg										
Function		Heating / Cooling / 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-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E		
Capacity [kW]	Heating	20.4 (7.4 + 13.0)				23.8 (10.3 + 13.5)				26.1 (12.1 + 14.0)		
	Cooling	15.7 (6.2 + 9.5)				18.4 (8.4 + 10.0)				22.3 (9.8 + 12.5)		
SHF		0.68				0.76				0.87		
Performance index	Heating	4.07				4.86				4.75		
	Cooling	5.03				5.59				4.59		
Airflow range at SP3 and SP4		1050 - 2250 m^3/h				1050 - 2600 m^3/h				1750 - 2880 m^3/h		
Connectable outdoor unit		PUHZ-ZRP100				PUHZ-ZRP100				PUHZ-ZRP125		
Ext. piping		Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88		
		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-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E		
Capacity [kW]	Heating	16.3 (7.4 + 8.9)				19.5 (10.3 + 9.2)				21.6 (12.1 + 9.5)		
	Cooling	13.3 (6.2 + 7.1)				15.9 (8.5 + 7.4)				17.6 (9.8 + 7.8)		
SHF		0.86				0.90				0.95		
Performance index	Heating	5.16				6.01				5.97		
	Cooling	5.03				5.54				5.31		
Airflow range at SP3 and SP4		1050 - 2250 m^3/h				1050 - 2600 m^3/h				1000 - 2600 m^3/h		
Connectable outdoor unit		PUHZ-ZRP71				PUHZ-ZRP71				PUHZ-ZRP71		
Ext. piping		Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88		
		Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m		
Ventilation specifications												
Connectable Lossnay unit		LGH-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E		
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Airflow	[m^3/h]	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	694	521	347	174
External static pressure [Pa]		150	84	38	9	145	82	36	9	140	79	35	9

Characteristic Curves **Note** The graphs below show the supply air only.

LGH-150RVXT-E

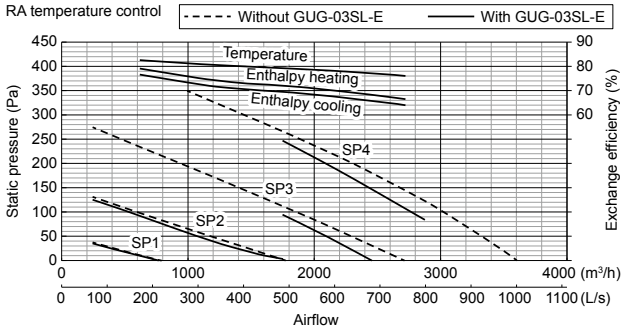


LGH-200RVXT-E

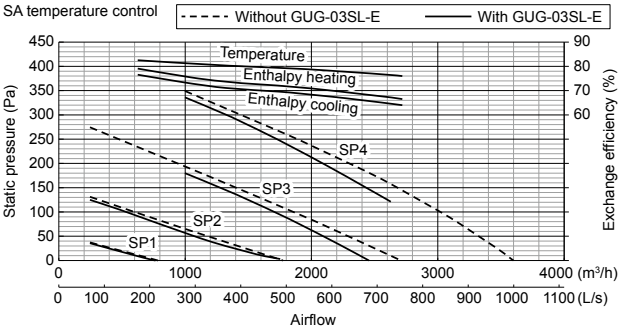


LGH-250RVXT-E

RA temperature control



SA temperature control



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 for 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 the solid line in graphs of the characteristic curves. 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" catalog.
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 CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit or disassemble the product yourself and always ask a professional.

CONTROL TECHNOLOGIES

New model



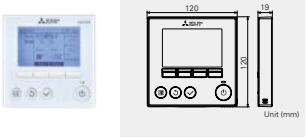
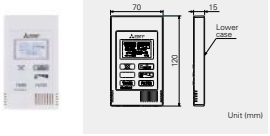
PZ-62DR-EA/EB

Multi-language Display

Control panel operation in 17 different languages. Choose a desired language, among the following languages.

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

Compatibility Table

Function	PZ-62DR-EA/EB		PZ-43SMF-E
			
	LGH-RVX / RVXT	LGH-RVS	LGH-RVX / RVXT / RVS
Fan speed selection	4 fan speeds	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)	No	Yes (Fan speed automatically changes from 25% to 100% depending on the CO_2 concentration*)	No
Control with a CO_2 sensor (Field supply)	Yes (Fan speed automatically changes between 4 levels depending on the CO_2 concentration)	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	Energy recovery / Bypass / Auto
Night-purge	Yes	Yes	No
Function setting from remote controller	Yes	Yes	No
Bypass temp. free setting	Yes (Set in Function setting menu)	Yes	No
Multi-stage airflow control	No	Yes (Both supply and exhaust fan speeds can be set separately from 25% to 100% in 5% pitches)	No
ON/OFF timer	Yes	Yes	Yes
Auto-off timer	Yes	Yes	No
Weekly timer	Yes	Yes	No
Fan speed timer	Yes	Yes	No
Operation restrictions (ON/OFF, ventilation mode, fan speed)	Yes	Yes	No
Operation restrictions (fan speed skip setting)	Yes	Yes	No
Screen contrast adjustment	Yes	Yes	No
Language selection	Yes	Yes	No (English only)
CO_2 concentration indication	No	Yes (available when using our manufactured CO_2 sensor)	No
Filter cleaning sign	Yes	Yes (maintenance interval can be changed)	Yes
Lossnay core cleaning sign	Yes	No	No
Error indication	Yes (displays model name, serial number, contact information)	Yes (displays model name, serial number, contact information)	Yes
Error history	Yes	Yes	No
OA / RA / SA temp. display	Yes	Yes	No

*Upper and lower limits may differ when using a CO_2 sensor.

Filters & Accessories

Filters For LGH-RVX Series & LGH-RVXT Series & GUF Series

Standard Filters

Replacements for the standard filter supplied with the Lossnay main unit.



Filter					Lossnay	
Filter Material	Classification		Model Name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Non-woven Fabrics	Coarse 35%	G3*	PZ-15RF8-E	2	LGH-15RVX-E	2
			PZ-25RF8-E	4	LGH-25RVX-E	4
			PZ-35RF8-E	4	LGH-35RVX-E	4
			PZ-50RF8-E	4	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	4
			PZ-65RF8-E	4	LGH-65RVX-E	4
			PZ-80RF8-E	4	LGH-80RVX-E	4
					LGH-150RVX-E	8
			PZ-100RF8-E	4	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	4
	Coarse 50%	G3	PZ-150RTF-E	4	LGH-150RVXT-E	4
			PZ-250RTF-E	4	LGH-200RVXT-E, LGH-250RVXT-E	4

*The classification in EN779 (2002) is G3.

High-efficiency Filters Optional

These high-efficiency filters can be easily inserted in the Lossnay unit without the need to attach external parts.



Filter					Lossnay	
Filter Material	Classification		Model Name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Synthetic fiber	ePM10 75%	M6*	PZ-15RFM-E	1	LGH-15RVX-E	1
			PZ-25RFM-E	2	LGH-25RVX-E	2
			PZ-35RFM-E	2	LGH-35RVX-E	2
			PZ-50RFM-E	2	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	2
			PZ-65RFM-E	2	LGH-65RVX-E	2
			PZ-80RFM-E	2	LGH-80RVX-E	2
					LGH-150RVX-E	4
			PZ-100RFM-E	2	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	2

*The classification in EN779 (2002) is F7.

Advanced High-efficiency Filters (For LGH-RVX and GUF Series) Optional

These advanced high-efficiency filters are designed to remove approx. 99.7% of airborne particulates that are 0.5μm or larger.
*GB/T14295-2008 : YG class, 99.7% (Collecting efficiency for particles that are 0.5μm or larger)



Filter					Lossnay	
Filter Material	Classification		Model Name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	ASHRAE 52.2 (2017)				
Synthetic fiber	ePM1 75% ePM2.5 80% ePM10 95%	MERV16	PZ-15RFP2-E	1	LGH-15RVX-E	1
			PZ-25RFP2-E	2	LGH-25RVX-E	2
			PZ-35RFP2-E	2	LGH-35RVX-E	2
			PZ-50RFP2-E	2	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	2
			PZ-65RFP2-E	2	LGH-65RVX-E	2
			PZ-80RFP2-E	2	LGH-80RVX-E	2
					LGH-150RVX-E	4
			PZ-100RFP2-E	2	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	2

Advanced High-efficiency Filters (For LGH-RVXT Series) Optional

These advanced high-efficiency filters can be easily inserted in the Lossnay unit without the need to attach external parts.



Filter					Lossnay	
Filter Material	Classification		Model Name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Non-woven Fabrics	ePM10 75%	M6*	PZ-M6RTFM-E	3	LGH-150RVXT-E, LGH-200RVXT-E, LGH-250RVXT-E	3
	ePM1 65% ePM2.5 75% ePM10 90%	F8*	PZ-F8RTFM-E	3		
		M6*	PZ-M6TDF-E	3		
		F8*	PZ-F8TDF-E	3		

*There is no data for the classification in EN779 (2002).

Filters For LGH-RVS Series

Filters

A lineup of three types of filters offers optimum indoor air quality solutions!
All filters are ISO and EN779:2012 certified, and can be easily installed in the units.
Maintenance and exchanges can also be performed easily, simply by opening the maintenance panel.



Standard Filter



Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required set/unit
	ISO 16890 (2016)	EN779 (2012)				
Non-woven fabrics	Coarse 50%	G3	PZ-S50RF-E	2	LGH-50RVS-E	1
			PZ-S80RF-E	2	LGH-80RVS-E	1
			PZ-S100RF-E	2	LGH-100RVS-E	1

High-efficiency Filter



Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required set/unit
	ISO 16890 (2016)	EN779 (2012)				
Pleated filter	ePM_{10} 80%	M6	PZ-S50RFM-E	2	LGH-50RVS-E	1
			PZ-S80RFM-E	2	LGH-80RVS-E	1
			PZ-S100RFM-E	2	LGH-100RVS-E	1

Advanced High-efficiency Filter



Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required set/unit
	ISO 16890 (2016)	EN779 (2012)				
Pleated filter	ePM_{10} 90% $ePM_{2.5}$ 75% ePM_{1} 65%	F8	PZ-S50RFH-E	2	LGH-50RVS-E	1
			PZ-S80RFH-E	2	LGH-80RVS-E	1
			PZ-S100RFH-E	2	LGH-100RVS-E	1

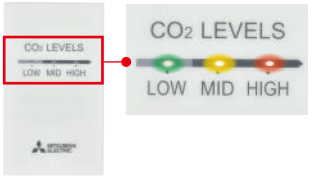
Accessories For LGH-RVS Series

CO_2 Sensor

A CO_2 sensor connected directly to a Lossnay RVS unit optimizes the fan speed according to the level of CO_2 detected. It improves total heat exchange efficiency and contributes to energy saving.

PZ-70CSW-E
(Wall mounted type)

CO_2 levels are indicated by LED lights.



PZ-70CSB-E
(Built-in type)







■ **Automatic operation with CO_2 sensor and PZ-62DR-E**

Fan speed automatically changes depending on CO_2 concentration.

Accessories For LGH-RVX/RVS Series & GUF Series



Duct Silencer

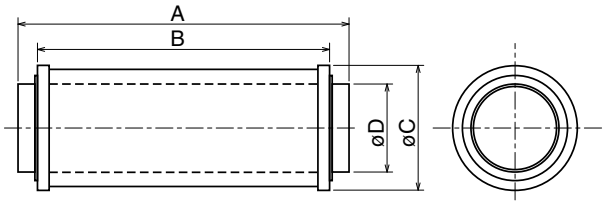
In facilities and applications requiring quiet operations, the silencer duct that reduces noise levels is the ideal solution. It contains glass wool and attenuates sound power by absorbing the noise from the airflow or operation of the unit.

Specifications

Model	Airflow [m³/h]	Attenuation of sound power level [dB] for center frequency (Discharge)							
		62.5Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
PZ-100SS-E	50	0	3	5	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	14
	350	0	1	4	8	14	21	21	16
PZ-200SS-E	500	0	1	4	7	13	18	16	9
	650	0	1	3	8	12	17	14	6
PZ-250SS-E	800	0	2	4	12	22	21	14	13
	1000	0	1	4	12	22	20	14	13

1. Figures on the chart above are based on the comparison with a general steel duct of the same length.
2. The silencer is placed on just before the outlet during the measurement.
3. When the airflow rate differs, the insertion loss is also different from the chart above.
4. Figures on the chart above are flat (No-weighted) values.

Dimensions

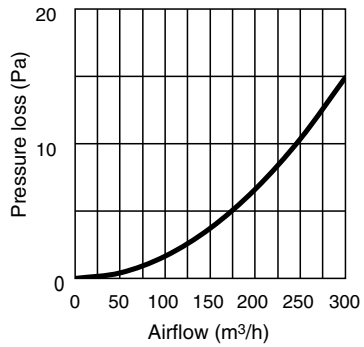


Unit: mm

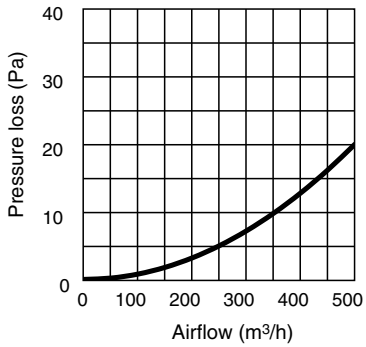
Model	A	B	C	D	Connecting duct	Weight (kg)
PZ-100SS-E	450	400	152	99	ø100	1.9
PZ-150SS-E	560	500	202	149	ø150	3.5
PZ-200SS-E	660	600	252	199	ø200	5.3
PZ-250SS-E	660	600	332	249	ø250	8.9

Pressure loss curve

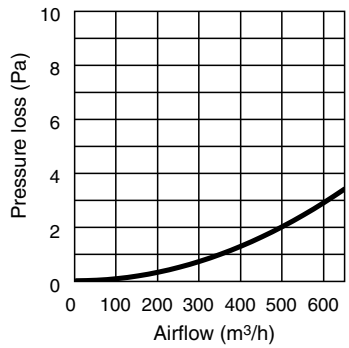
PZ-100SS-E



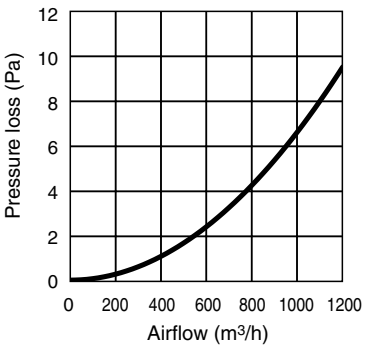
PZ-150SS-E



PZ-200SS-E



PZ-250SS-E





VL-CZPVU SERIES

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

VL-250CZPVU-R/L-E
VL-350CZPVU-R/L-E
VL-500CZPVU-R/L-E

Key features



Quiet Operation

Noise is one of the most common concerns for residential ventilation. Ultra quiet operation is achieved with the sirocco fan designed by Mitsubishi Electric. The balance between airflow and static pressure is optimized and the fan rotation is minimized, leading to low noise levels.

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.

*NOx: Nitrogen oxide, which includes nitric oxide (NO) and nitrogen dioxide (NO_2).
*PM2.5: Airborne particulates that are 2.5μm or smaller in size.

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. It allows Lossnay operations to 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.

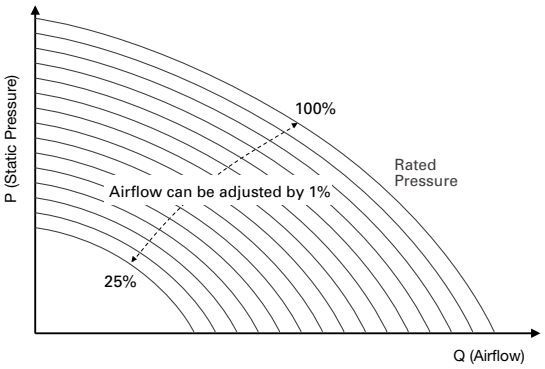
Energy efficiency

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+

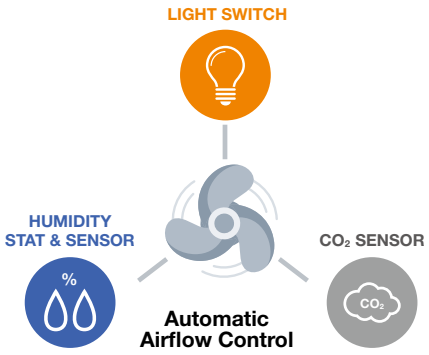
Variable airflow control

The default fan speed value (Fan speed 1: 30%, Fan speed 2: 50%, 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.



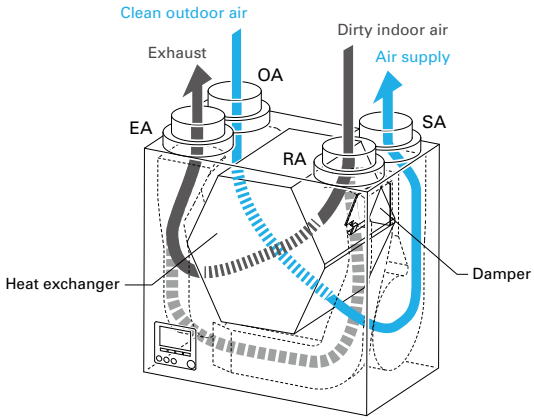
External airflow control

The airflow from the Lossnay unit can be altered using 0-10V signals from the controllers, such as the humidity stat and CO_2 sensor (field supply). The Lossnay unit is also connected to the light switch and can change to boost operation mode (input 220-240V). These devices are connected directly to the Lossnay unit, allowing automatic fan speed control according to bathroom occupation, CO_2 level, and humidity level.



Automatic bypass mode

It is possible to switch between "Lossnay 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 directly draws in outside air, bypassing the heat exchanger.



* The figure shows VL-350CZPVU-L-E

Wide operating temperature range

The VL-CZPVU series can operate at temperatures down to –15°C. With a pre-heater, it can operate at temperatures down to –25°C.

* In areas where outdoor air falls below –20°C, an electric shutter (locally supplied) is required in the OA duct in addition to the pre-heater.
* The OA temperature must be higher than –15°C to use the pre-heater.

MELCloud for Lossnay

MELCloud enables fast, easy remote control and monitoring of Lossnay units. Wireless computer connectivity and an Internet-connected mobile or fixed terminal are all that are needed. MELCloud can also be used to control room air conditioners and Ecodan heat pumps simultaneously.

Key Control and Monitoring Features

1. Turn system on/off
2. Switching airflow & operating mode (Heat recovery / Bypass)
3. Confirming the status of the filter/core (Maintenance notification)



* MELCloud uses the MAC-567IF-E interface

VL-CZPVU SERIES

Specifications

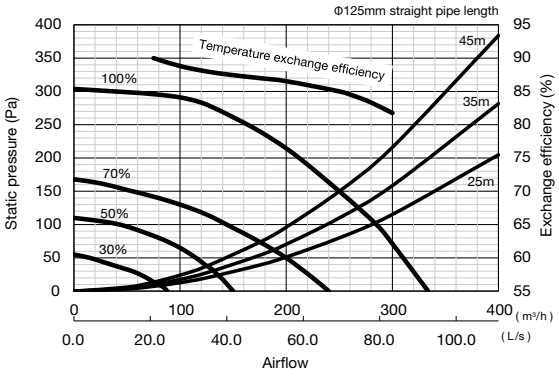
VL-250CZPVU-R/L-E

Electrical Power Supply		220-240V/50Hz, 220V-/60Hz			
Ventilation Mode		Heat recovery mode			
Fan Speed		FS4 (100%)	FS3 (70%)	FS2 (50%)	FS1 (30%)
Running Current (A)		0.76	0.35	0.20	0.12
Input Power (W)		106	44	23	11
Airflow	(m^3/h)	250	175	125	75
	(L/s)	69	49	35	21
External Static Pressure (Pa)		150	74	38	14
Temperature Exchange Efficiency (%)		85	87	88	90
Noise Level (dB)		31	22	16	15 >
Energy Efficiency Class		A+			
Weight (kg)		26			
Dimensions (mm)		(H) 565 x (W) 595 x (D) 356			

■ Attention

1. The above values are at factory default.
2. The running current, the input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz.
3. The sound pressure level at 3m is spherical.
4. Temperature exchange efficiency (%) is based on winter condition.
5. Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

Characteristic Curves

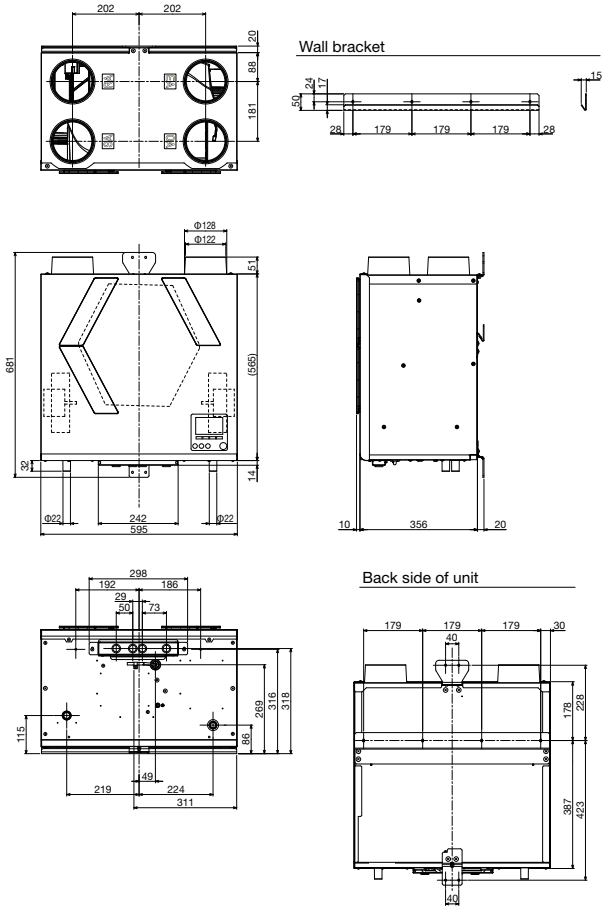


■ Attention

Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

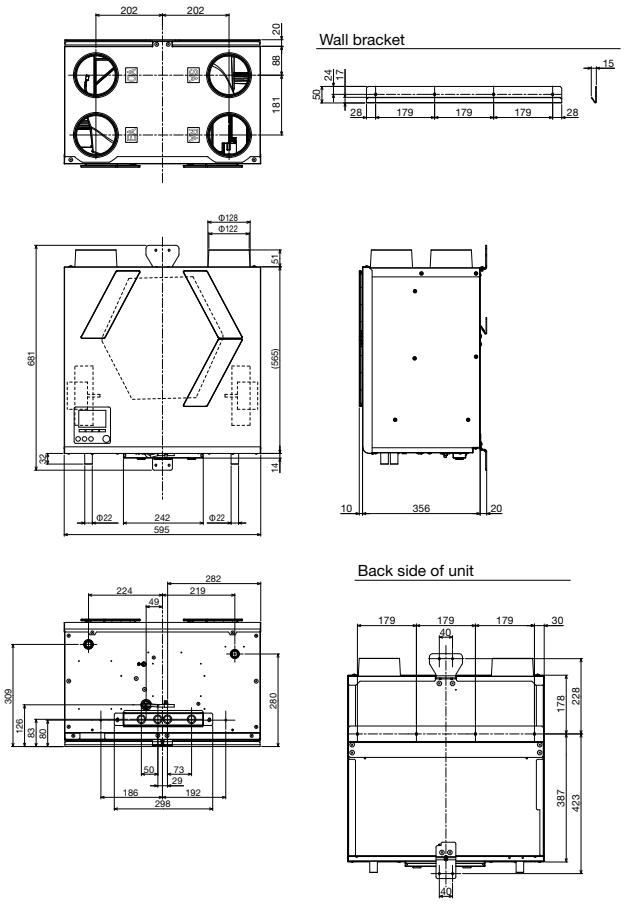
Dimensions

VL-250CZPVU-R-E



Unit: mm

VL-250CZPVU-L-E



Unit: mm

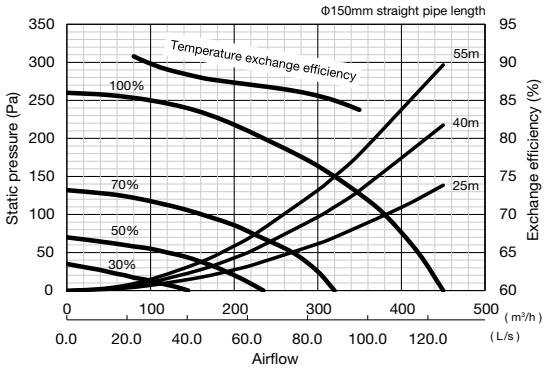
VL-350CZPVU-R/L-E

Electrical Power Supply		220-240V/50Hz, 220V-/60Hz			
Ventilation Mode		Heat recovery mode			
Fan Speed		FS4 (100%)	FS3 (70%)	FS2 (50%)	FS1 (30%)
Running Current (A)		1.08	0.52	0.31	0.18
Input Power (W)		155	71	37	19
Airflow	(m^3/h)	320	224	160	96
	(L/s)	89	62	44	27
External Static Pressure (Pa)		150	74	38	14
Temperature Exchange Efficiency (%)		85	87	88	90
Noise Level (dB)		35	26	19	15>
Energy Efficiency Class		A+			
Weight (kg)		32			
Dimensions (mm)		(H) 623 x (W) 658 x (D) 432			

■ Attention

1. The above values are at factory default.
2. The running current, the input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz.
3. The sound pressure level at 3m is spherical.
4. Temperature exchange efficiency (%) is based on winter condition.
5. Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

Characteristic Curves

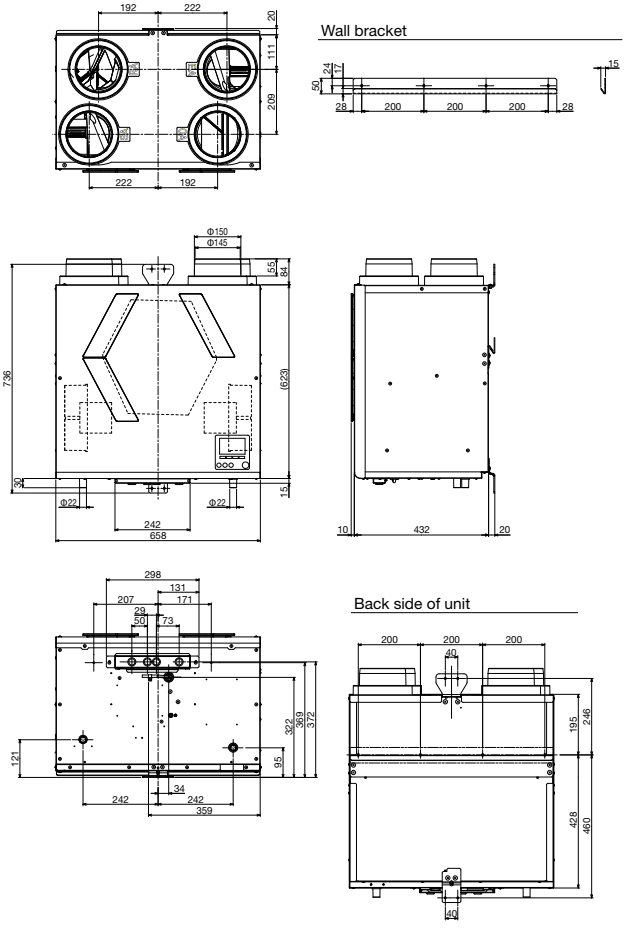


■ Attention

Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

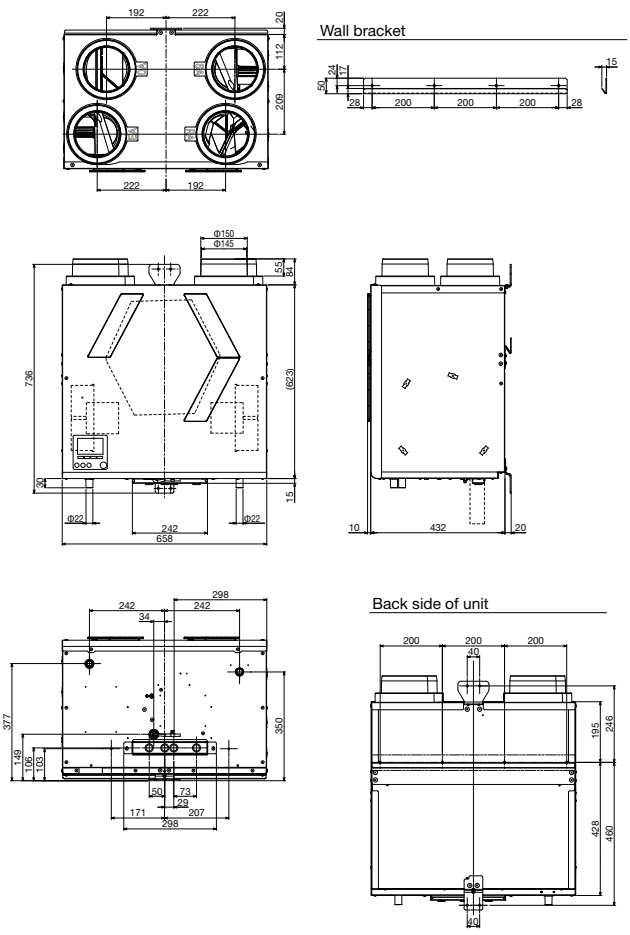
Dimensions

VL-350CZPVU-R-E



Unit: mm

VL-350CZPVU-L-E



Unit: mm

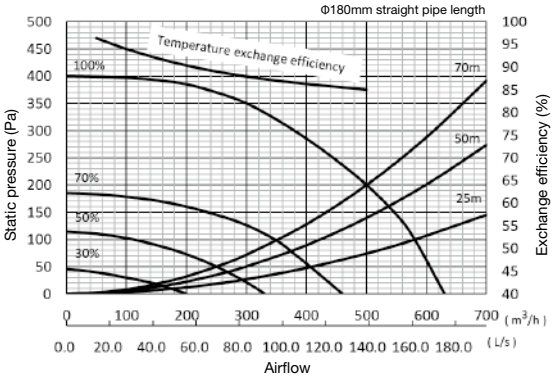
VL-500CZPVU-R/L-E

Electrical Power Supply		220-240V/50Hz, 220V-/60Hz			
Ventilation Mode		Heat recovery mode			
Fan Speed		FS4 (100%)	FS3 (70%)	FS2 (50%)	FS1 (30%)
Running Current (A)		1.73	0.77	0.40	0.19
Input Power (W)		275	104	49	21
Airflow	(m^3/h)	500	350	250	150
	(L/s)	139	97	69	42
External Static Pressure (Pa)		200	98	50	18
Temperature Exchange Efficiency (%)		85	87	89	92
Noise Level (dB)		37	29	22	15>
Energy Efficiency Class		A+			
Weight (kg)		39			
Dimensions (mm)		(H) 632 x (W) 725 x (D) 556			

■ Attention

1. The above values are at factory default.
2. The running current, the input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz.
3. The sound pressure level at 3m is spherical.
4. Temperature exchange efficiency (%) is based on winter condition.
5. Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

Characteristic Curves

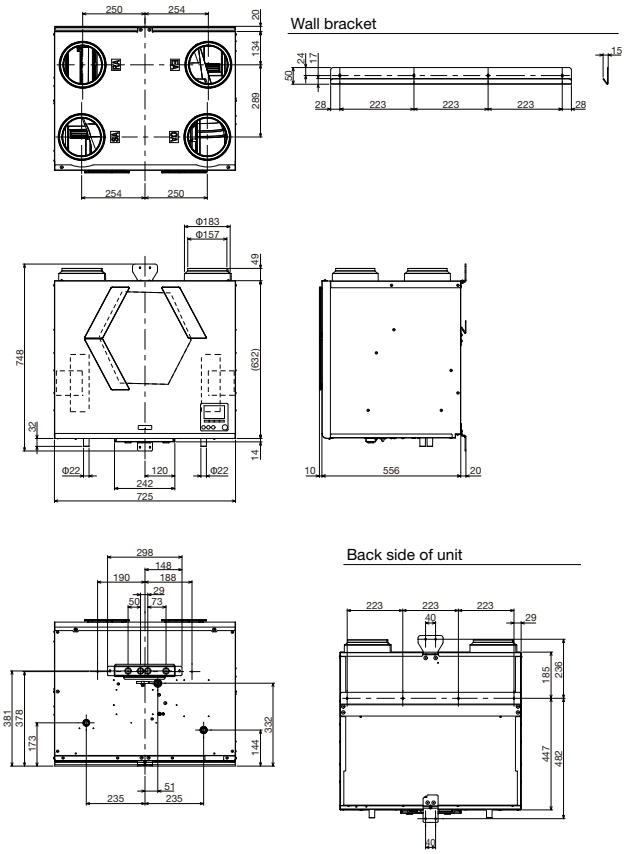


■ Attention

Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

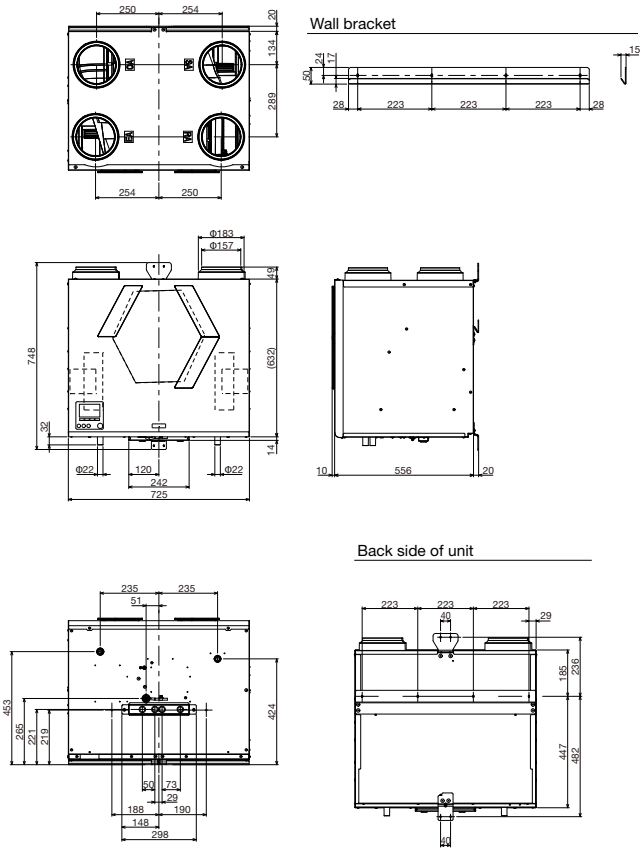
Dimensions

VL-500CZPVU-R-E



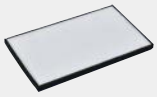
Unit: mm

VL-500CZPVU-L-E

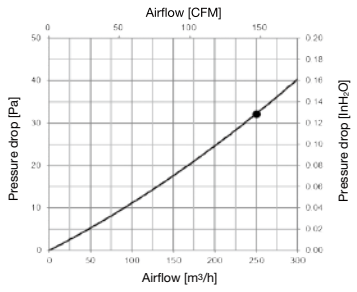
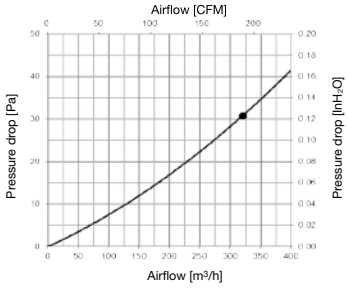
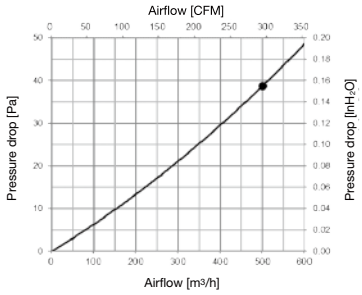


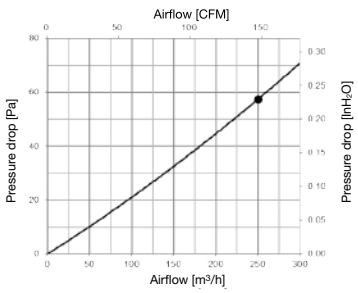
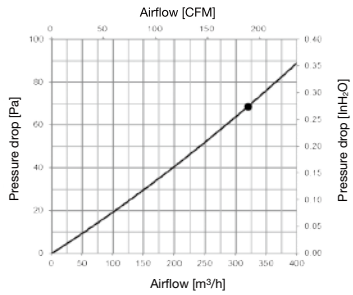
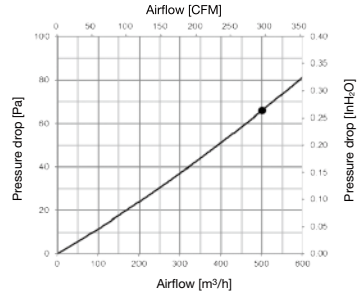
Unit: mm

Filters

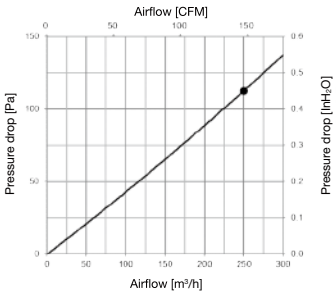
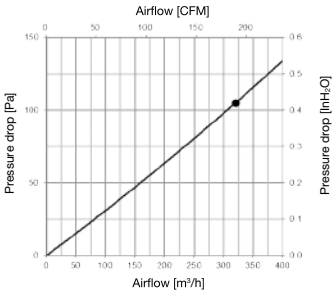
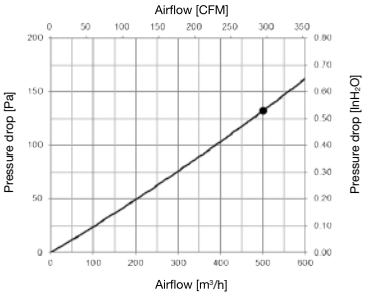
Type		Replacement Filter	Standard Filter	Medium Efficiency Filter	Advanced Efficiency Filter	Advanced High Efficiency Filter	NOx Filter
							
Model		P-250F-E P-350F-E P-500F-E	P-250SF-E P-350SF-E P-500SF-E	P-250MF-E P-350MF-E P-500MF-E	P-250PF-E P-350PF-E P-500PF-E	P-250PFH-E P-350PFH-E P-500PFH-E	P-250NF-E P-350NF-E P-500NF-E
Classification	EN779 (2012)	G3	G4	M6	M6	ePM1 55%	NO_2 90%
	ISO 16890 (2016)	Coarse 55%	Coarse 90%	ePM10 80%	ePM2.5 50%		

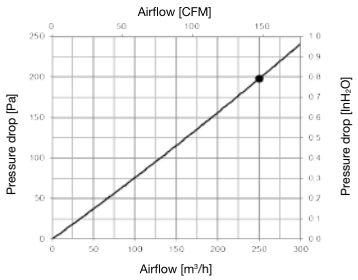
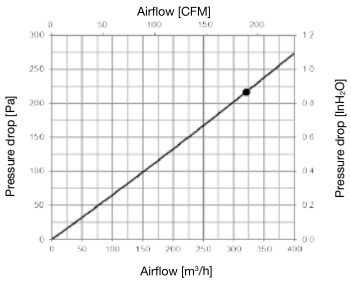
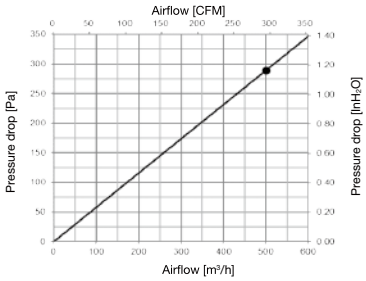
Pressure loss characteristics

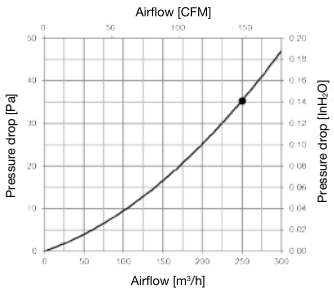
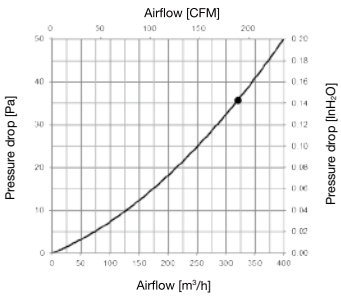
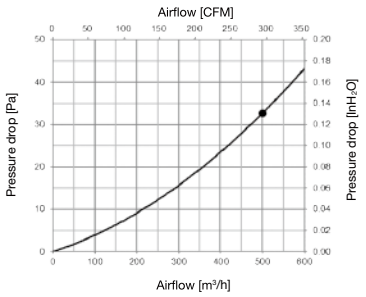
Model	P-250SF-E	P-350SF-E	P-500SF-E
Standard Filter			

Model	P-250MF-E	P-350MF-E	P-500MF-E
Medium Efficiency Filter			

Pressure loss characteristics

Model	P-250PF-E	P-350PF-E	P-500PF-E
Advanced Efficiency Filter			

Model	P-250PFH-E	P-350PFH-E	P-500PFH-E
Advanced High Efficiency Filter			

Model	P-250NF-E	P-350NF-E	P-500NF-E
NOx Filter			

Silencer Box

P-250/350/500SB-E

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





Installation Image

Model P-250SB-E

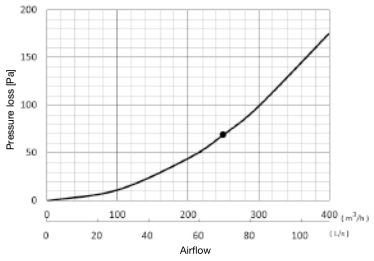
■ Attenuation of sound power level for center frequency

Airflow (m³/h)	Static pressure (Pa)	Point	Attenuation of sound power level for center frequency Hz (dB)							
			63	125	250	500	1000	2000	4000	8000
175	74	Outlet (SA/EA)	9	7	11	19	29	28	21	13

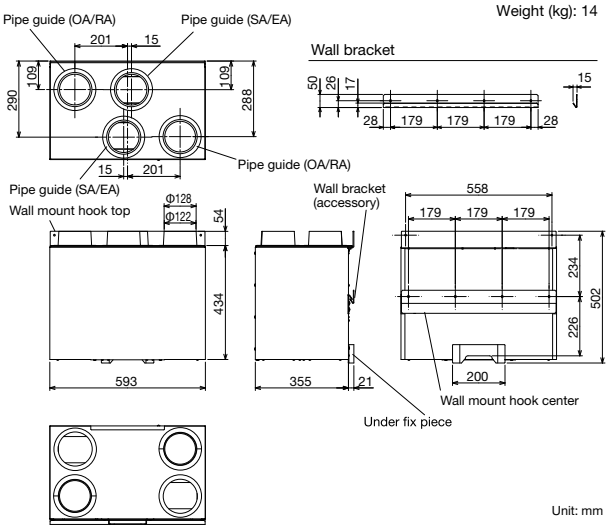
1. Figures in the chart above are measured by Mitsubishi Electric.
2. The silencer box is placed just after the outlet of the Lossnay unit as specified in the Installation Manual.
3. When airflow differs, attenuation may also differ from the chart above.

■ Pressure loss curve

The curve on the right shows the total pressure drop of the OA and SA or RA and EA ducts in the silencer box.



■ Dimensions



Unit: mm

Model P-350SB-E

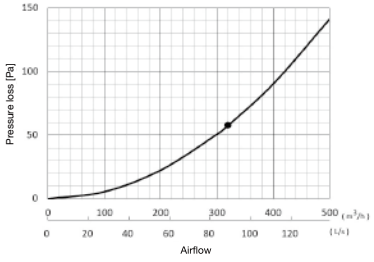
■ Attenuation of sound power level for center frequency

Airflow (m³/h)	Static pressure (Pa)	Point	Attenuation of sound power level for center frequency Hz (dB)							
			63	125	250	500	1000	2000	4000	8000
224	74	Outlet (SA/EA)	12	8	11	21	32	29	19	12

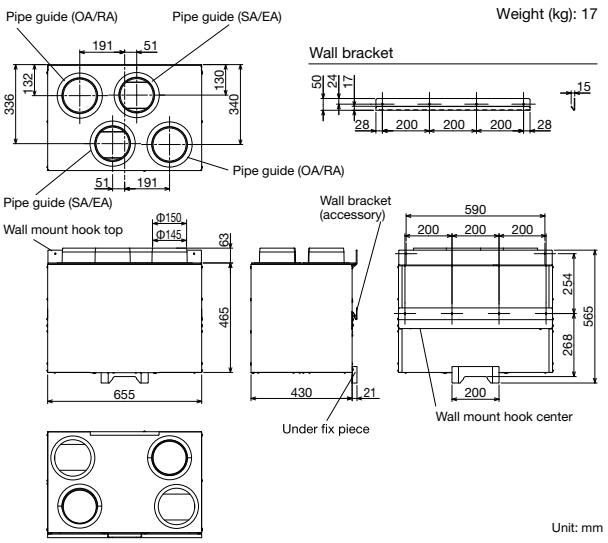
1. Figures in the chart above are measured by Mitsubishi Electric.
2. The silencer box is placed just after the outlet of the Lossnay unit as specified in the Installation Manual.
3. When airflow differs, attenuation may also differ from the chart above.

■ Pressure loss curve

The curve on the right shows the total pressure drop of the OA and SA or RA and EA ducts in the silencer box.



■ Dimensions



Unit: mm

Model	P-500SB-E

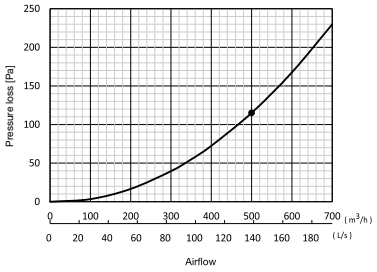
■ Attenuation of sound power level for center frequency

Airflow (m^3/h)	Static pressure (Pa)	Point	Attenuation of sound power level for center frequency Hz (dB)							
			63	125	250	500	1000	2000	4000	8000
350	98	Outlet (SA/EA)	10.5	9.5	13.0	21.0	27.0	29.0	26.0	14.0

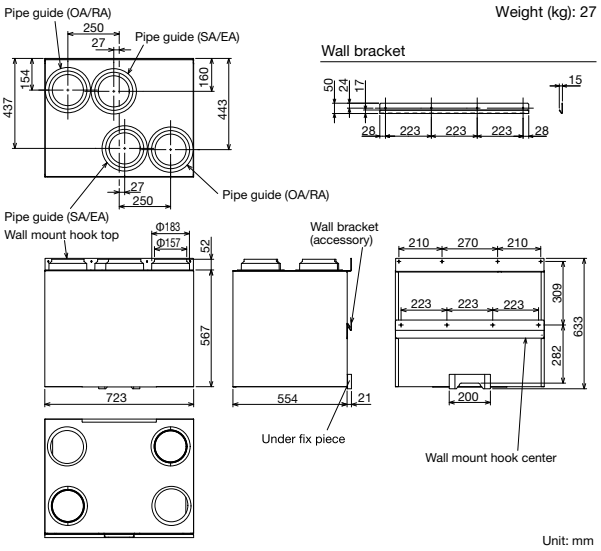
1. Figures on the chart above are measured by Mitsubishi Electric.
2. The silencer box is placed on the just after the outlet of the Lossnay unit as specified in the Installation Manual.
3. When the airflow differs, the attenuation may be also different from the chart above.

■ Pressure loss curve

The curve on the right shows the total pressure drop of the OA and SA or RA and EA ducts in the silencer box.



■ Dimensions

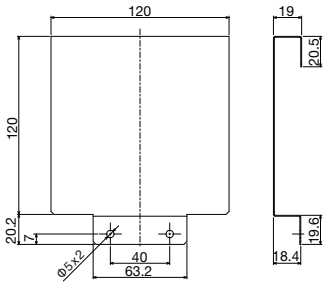


Remote Controller Cover

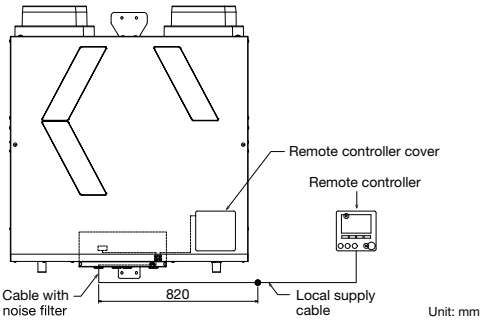
P-RCC-E

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

(Cable length outside the product: Approximately 820 mm)

VL-50(E)S2-E, VL-50SR2-E
VL-100(E)U5-E

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



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



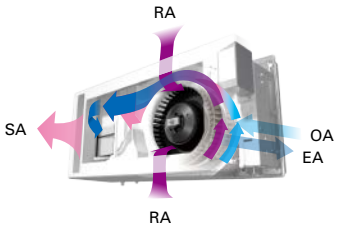
VL-100(E)U5-E

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

Product advantages

Air supplied and Exhausted Simultaneously

Air is supplied and exhausted simultaneously while transferring the heat.

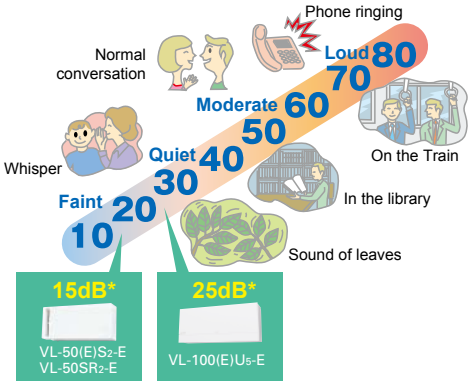


Energy Efficient

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

*VL-100(E)U5-E at low fan speed in 230V 50Hz
*VL-50(E)S2-E at low fan speed in 230V 50Hz

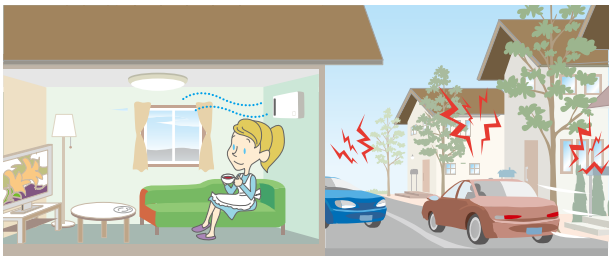
Low noise levels are ideal for bedrooms and children's rooms.



*Condition: 50Hz, 230V, low fan speed

Sound Insulation

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

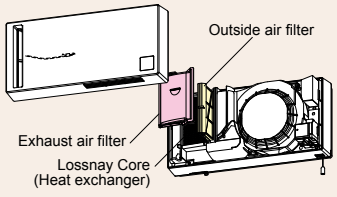


Sound Insulation Effect	Sound Source Side Average sound pressure dB	Sound Receiving Side Average sound pressure dB	Difference
	103.4	63.2	40.2

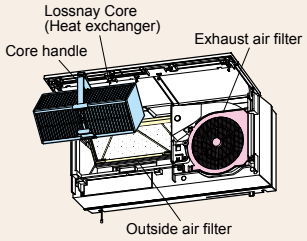
*Tested based on VL-08S2-AE
*Measured by average sound pressure level of more than 30dB in 500Hz according to JIS A1416.
VL-08S2-AE is a Japanese dedicated model equivalent to VL-50(E)S2-E

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.



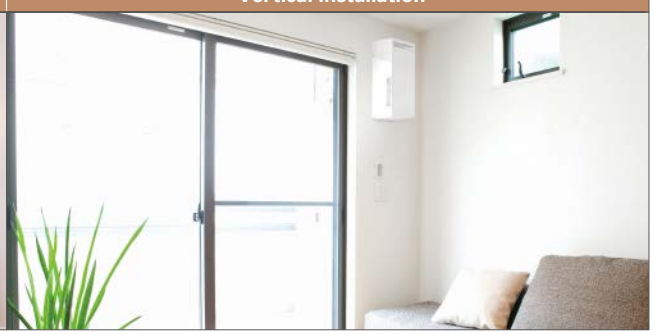
VL-50(E)S2-E
VL-50SR2-E



VL-100(E)U5-E

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

Both horizontal and vertical installations are possible to fit various types of rooms.

Horizontal Installation	Vertical Installation
	

VL-50(E)S$_2$-E, VL-50SR$_2$-E, VL-100(E)U$_5$-E

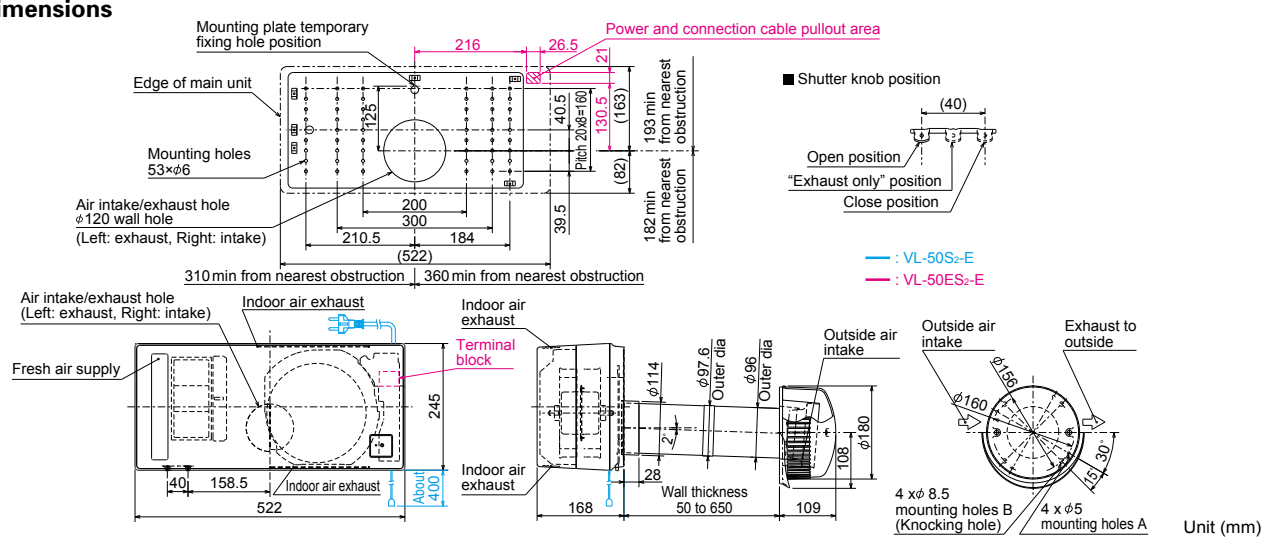
Specifications

Model: VL-50S$_2$-E (Pull-Switch Model) and VL-50ES$_2$-E (Wall-Switch Model)

Model	VL-50(E)S$_2$-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Airflow (m^3/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 were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.

Dimensions



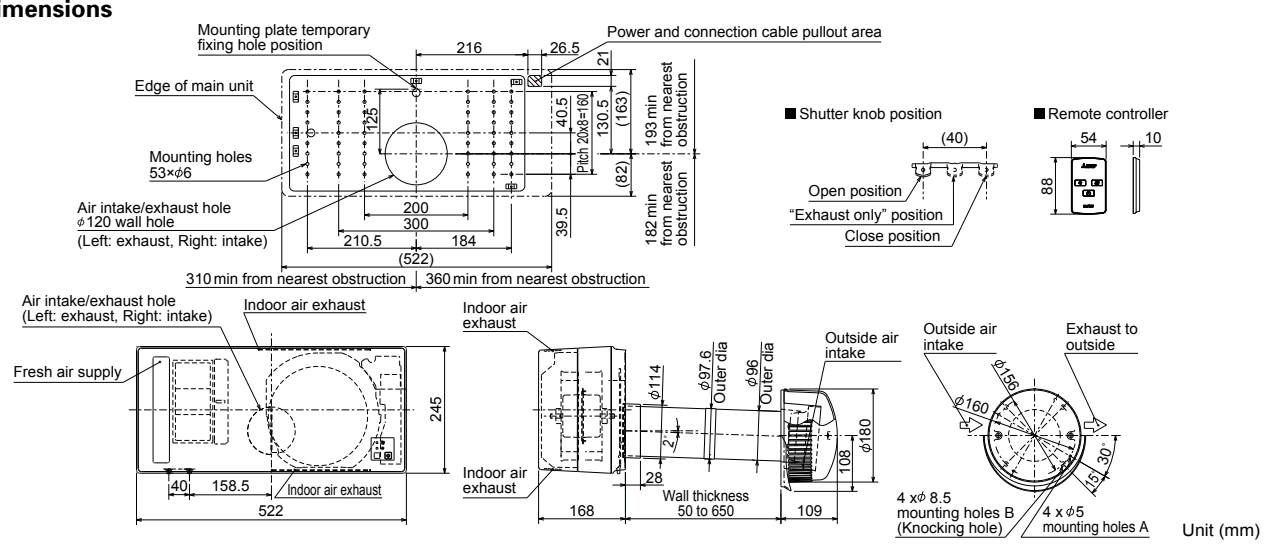
Unit (mm)

Model: VL-50SR$_2$-E (Remote Controller Model)

Model	VL-50SR$_2$-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Airflow (m^3/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 were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.

Dimensions



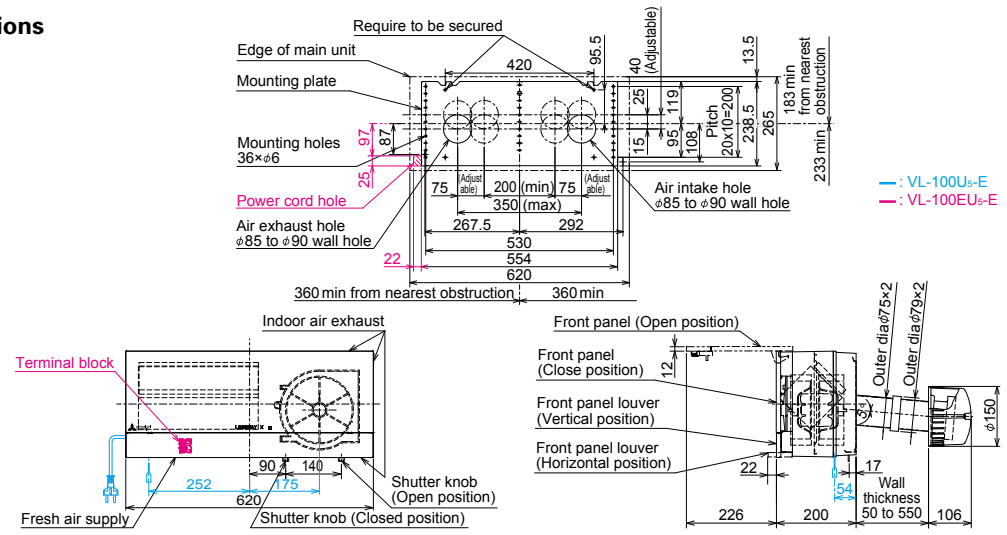
Unit (mm)

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

Model	VL-100(E)U5-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Airflow (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 were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.

Dimensions



Unit (mm)

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-50F2-E	P-50HF2-E	P-50P-E	P-50PJ-E	P-50VSQ5-E
Feature	–	–	Total length when connected to the joint is 350mm.	Joint for extension pipe	Stylish stainless hood
Classification (EN779:2012)	G3	–	–	–	–
Classification (ISO16890)	Coarse 35%	ePM10 75%	–	–	–

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

Filter and Extension Pipe

Type	Replacement Filter	High Efficiency Filter	Extension Pipe	Joint
Design				
Model	P-100F5-E	P-100HF5-E	P-100P-E	P-100PJ-E
Feature	–	–	Total length when connected to the joint is 300mm.	• Joint for extension pipe • Screw-in method
Classification (EN779:2012)	G3	M6	–	–
Classification (ISO16890)	Coarse 35%	ePM10 70%	–	–

List of optional parts

Optional Parts \ Lossnay		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-150RVXT-E	LGH-200RVXT-E	LGH-250RVXT-E	GUF-50RD4	GUF-50RDH4	GUF-100RD4	GUF-100RDH4	LGH-50RVS-E	LGH-80RVS-E	LGH-100RVS-E
Lossnay Remote Controller	PZ-62DR-EA/EB	●	●	●	●	●	●	●	●	●	●	●					●	●	●
	PZ-43SMF-E	●	●	●	●	●	●	●	●	●	●	●					●	●	●
Standard Filter	PZ-15RF8-E	●																	
	PZ-25RF8-E		●																
	PZ-35RF8-E			●															
	PZ-50RF8-E				●								●	●					
	PZ-65RF8-E					●													
	PZ-80RF8-E						●		●										
	PZ-100RF8-E							●							●	●			
	PZ-150RTF-E									●									
	PZ-250RTF-E										●	●							
	PZ-S50RF-E																●		
	PZ-S80RF-E																	●	
	PZ-S100RF-E																		●
High-efficiency Filters	PZ-15RFM-E	●																	
	PZ-25RFM-E		●																
	PZ-35RFM-E			●															
	PZ-50RFM-E				●								●	●					
	PZ-65RFM-E					●													
	PZ-80RFM-E						●		●										
	PZ-100RFM-E							●							●	●			
	PZ-S50RFM-E																●		
	PZ-S80RFM-E																	●	
	PZ-S100RFM-E																		●
Advanced High-efficiency Filters	PZ-15RFP2-E	●																	
	PZ-25RFP2-E		●																
	PZ-35RFP2-E			●															
	PZ-50RFP2-E				●								●	●					
	PZ-65RFP2-E					●													
	PZ-80RFP2-E						●		●										
	PZ-100RFP2-E							●			●				●	●			
	PZ-M6RTFM-E									●	●	●							
	PZ-F8RTFM-E									●	●	●							
	PZ-S50RFH-E																●		
	PZ-S80RFH-E																	●	
	PZ-S100RFH-E																		●
Duct Silencer	PZ-100SS-E	●																	
	PZ-150SS-E		●	●															
	PZ-200SS-E				●	●							●	●			●		
	PZ-250SS-E						●	●	●						●	●		●	●
CO_2 Sensor	PZ-70CSW-E																●	●	●
	PZ-70CSB-E																●	●	●

Note: Please refer to each product page for required number of pieces/sets.

List of optional parts for the VL-CZPVU Series

Optional Parts \ Lossnay					VL-250CZPVU-R/L-E	VL-350CZPVU-R/L-E	VL-500CZPVU-R/L-E
	Type	Classification (EN779:2012)	Classification (ISO16890)	Model			
Filter	Replacement Filter	G3	Coarse 55%	P-250F-E	●		
				P-350F-E		●	
				P-500F-E			●
	Standard Filter	G4	Coarse 90%	P-250SF-E	●		
				P-350SF-E		●	
				P-500SF-E			●
	Medium Efficiency Filter	M6	ePM10 80%	P-250MF-E	●		
				P-350MF-E		●	
				P-500MF-E			●
	Advanced Efficiency Filter	M6	ePM2.5 50%	P-250PF-E	●		
				P-350PF-E		●	
				P-500PF-E			●
	Advanced High Efficiency Filter		ePM1 55%	P-250PFH-E	●		
				P-350PFH-E		●	
				P-500PFH-E			●
	NoxFilter		NO2 90%	P-250NF-E	●		
				P-350NF-E		●	
				P-500NF-E			●
Silencer Box				P-250SB-E	●		
				P-350SB-E		●	
				P-500SB-E			●
Remote Controller Cover				P-RCC-E	●	●	●

List of optional parts for the VL-50/100 Series

Optional Parts \ Lossnay					VL-50S2-E	VL-50ES2-E	VL-50SR2-E	VL-100U5-E	VL-100EU5-E
	Type	Classification (EN779:2012)	Classification (ISO16890)	Model					
Filter	Replacement Filter	G3	Coarse 35%	P-50F2-E	●	●	●		
				P-100F5-E				●	●
	High Efficiency Filter		ePM10 75%	P-50HF2-E	●	●	●		
		M6	ePM10 70%	P-100HF5-E				●	●
Extension Pipe				P-50P-E	●	●	●		
				P-100P-E				●	●
Joint				P-50PJ-E	●	●	●		
				P-100PJ-E				●	●
Stainless Hood				P-50VSQ5-E	●	●	●		