

VENTILATION SOLUTIONS



Necessity of ERV



High Efficiency Heat Exchanger

Efficiency and comfort is ensured through the high-efficiency energy recovery central core. This recovers energy from outgoing indoor air and transfers it to the fresh incoming air without mixing the air stream.



Cross Flow System

The exhaust system uses a high static sirocco fan to remove stale indoor air. Supply and exhaust air flows are completely separated in the heat exchanger, allowing the LG ERV to filter out particles before supplying outdoor air to ensure indoor air is fresh and healthy.



Night Time Free Cooling

During summer nights, indoor heat can be discharged outdoors and cool outdoor air can be brought indoors for energy savings.



** This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTI V only) ** Energy saving ratio can be differed by weather condition. ** Test Condition

Office (49,000ft²) / Occupancy : 30 / Area : London, UK
 ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination
 Other conditions are subject to BREEAM.

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CO₂ Auto Operation

- - Fine CO₂ level LG ERV reduces energy loss with auto fan speed control High Occupancy Low Occupancy following CO₂ level. (high CO₂ level) (low CO2 level) ----- Fan speed Reduce power consumptior Reduce cooling, heating energy loss by ventilation Low 4% Energy Saving (Annually) * This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTI V only) Extra Energy saving ratio can be differed by weather condition.
 Test Condition - Office (49,000ft²) / Occupancy : 30 / Area : London, UK HighO O O O 0 0 ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination
 Other conditions are subject to BREEAM

Seasonal Auto Operation

LG ERV senses outdoor temperature and operates automatically following weather conditions.



Delay Operation

When the air conditioner and ERV are switched on simultaneously, delayed operation can reduce unnecessary heating and cooling energy loss by slowing down automatic ERV operation.

 % This function is operated with 'Night Time Free Cooling' on remote controller.(with MULTI V only)
 % Energy saving ratio can be differed by weather condition.
 % Test Condition - Office (49,000ft2) / Occupancy : 30 / Area : London, UK - ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination - Other conditions are subject to BREEAM



CO₂ Level Monitoring

CO₂ sensor senses CO₂ level in the room. Users can monitor CO₂ level on new wired remote controller, and ERV controls the fan speed automatically following the level.

CO₂ Level Visualization

High

CO2 sensor senses indoor CO2 level and displays it on a new wired remote controller.



CO₂ Concentration Control

Using CO₂ sensor, LG ERV controls exhaust air flow automatically to keep indoor air fresh under settled CO₂ concentration.



High Durability

There is no moving part within the heat exchanger and therefore it has higher durability and reliability. The heat exchanger is made of special thin paper membranes which are bacteria-resistant to prevent harmful bacteria growth, and flame-retardant treated for fire safety.

Inside ERV

Heat Exchanger and Filter



Main Display

If the CO₂ level is above 900ppm in the room, the red mark appears.



change. * Applicable to only Standard III, Premium remote controlle

Further Information

CO₂ level and room condition are displayed continuously.



VENTILATION SOLUTIONS

ERV

/ RESIDENTIAL

ERV

Standard III Controller	
Windows Closed	Windows Open
	Time (min)

CONVENIENCE

Easy Control

The wired remote controller is easy to use.



Easy • Navigation buttons, easy to use. Simple installation setting

Group Control

1 wired remote controller can work with up to 16 ERVs, including air conditioners. It is convenient for large common spaces such as lobbies.

Combine Several Units 16 units group control is available with 1 remote controller.



Air Casity Level

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Indoor Terrap



Convenient

- Dual display with air conditioner - Zoom selected directory to increase legibility



Fast Ventilation Mode

Fast ventilation mode prevents the spread of contaminants under negative indoor pressure, and makes indoor air fresh and comfortable quickly.

Only Exhausting



External Static Pressure Control

The high static pressure fan can control the air volume depending on the length of the duct. It is also easy to control the pressure level by using the remote controller for a more flexible duct installation and easier testing.

Easy Cleaning and Filter Change

Filter can be conveniently changed and cleaned.



ERV Unit

Remove Side Panel







Remove Heat Exchanger

Change Filter



	MODEL		UNIT	LZ-H025GBA4	LZ-H035GBA5
Dimensions (W x H x D)	Body		mm		988 x 273 x 1,014
Weight	Body		kg		44
Power Supply			V / Ø / Hz		220-240 / 1 / 50
Normal Air flow			m³/h	250	350
	Operating Step		-		Super-high / High / Low
	Current	SH / H / L	A	0.70 / 0.60 / 0.42	1.05 / 0.90 / 0.50
	Power Input	SH / H / L	W	97 / 78 / 52	150 / 125 / 60
	Air Flow	SH / H / L	m³/h	250 / 250 / 150	350 / 350 / 210
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50	150 / 100 / 50
ERV Mode	Temperature Exchange Efficiency	SH / H / L	%	80 / 80 / 83	79 / 79 / 82
	Enthalpy Exchange	Heating (SH / H / L)	%	70 / 70 / 72	75 / 75 / 80
	Efficiency	Cooling (SH / H / L)	%	66 / 66 / 68	71 / 71 / 75
	Energy Label	A+ to G Scale	-	A	В
	Sound Pressure Level	SH / H / L	dB(A)	29 / 28/ 24	35 / 32 / 26
	Sound Power Level	SH / H / L	dB(A)	50	53 / 50 / 42
	Operating Step		-		Super-high / High / Low
	Current	SH / H / L	A	0.70 / 0.60 / 0.42	1.05 / 0.90 / 0.50
Bypass Mode	Power Input	SH / H / L	W	97 / 78 / 52	150 / 125 / 60
- Jpass mode	Air Flow	SH / H / L	m³/h	250 / 250 / 150	350 / 350 / 210
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50	150 / 100 / 50
	Sound Pressure Level	SH / H / L	dB(A)	29 / 29/ 25	35 / 33 / 26
Duct Work		Qty	EA		4
Duct Work		Size (Ø)	mm		Ø200
Supply Air Fan		Qty	EA		1
Supply All Tall		Туре	-		Direct-Drive Sirocco
Fxhaust Air Fan		Qty	EA		1
		Туре	-		Direct-Drive Sirocco
		Qty	EA		2
Filters		Туре	-		Cleanable Fibrous Fleeces
		Size (W x H x D)	mm	855 x 10 x 160	855 x 10 x 166

Note : 1. ERV mode : Total Heat Recovery Ventilation mode 2. Refer to dimensional drawings. 3. Noise level : - The operating conditions are assumed to be standard - Sound neasured at 1.5m below the center the body. - Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed. - The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound. - The metrature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 75% RH 5. Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH 6. Temperature Exchange efficiency is tested at heating condition.

Accessories

CHASSI	S LZ-H025GBA4 LZ-H035GBA5
Drain Pump	-
Cassette Cover	-
Refrigerant Leak Detector	-
EEV Kit	-
Multi-tenant Power Module	-
Robot Cleaner	-
Pre Filter (Washable)	-
Ion Generator	-
CO ₂ Sensor	 (embedded)
Ventilation Kit	-
IR Receiver	-
Zone Controller	-
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)
External Input (1 point)	-
Wi-Fi	-

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LZ-H080GBA5/LZ-H100GBA5 LZ-H150GBA5 / LZ-H200GBA5



	MODEL		UNIT	LZ-H080GBA5	LZ-H100GBA5	LZ-H150GBA5	LZ-H200GBA5
Dimensions (W x H x D)	Body		mm	1,101 x 405 x 1,230		1,353 x 8	315 x 1,230
Weight	Body		kg		63	:	130
Power Supply			V / Ø / Hz	220-24	0 / 1 / 50	220-24	0 / 1 / 50
Normal Air flow			m³/h	800	1,000	1,500	2,000
	Operating Step		-	Super-high	/ High / Low	Super-high	/ High / Low
	Current	SH / H / L	А	2.13 / 1.75 / 1.00	2.92 / 2.38 / 1.40	4.26 / 3.50 / 2.00	5.92 / 4.76 / 2.80
	Power Input	SH / H / L	W	328 / 266 / 144	463 / 370 / 208	660 / 530 / 290	926 / 740 / 420
	Air Flow	SH / H / L	m³/h	800 / 800/ 660	1,000 / 1,000 / 800	1,500 / 1,500 / 1,200	2,000 / 2,000 / 1,600
	External Static Pressure	SH / H / L	Ра	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50
ERV Mode	Temperature Exchange Efficiency	SH / H / L	%	81 / 81 / 83	79 / 79 / 80.9	81 / 81 / 83	79 / 79 / 80.9
	Enthalpy Exchange	Heating (SH / H / L)	%	73 / 73 / 76	71 / 71/ 73	73 / 73 / 76	71 / 71/ 73
	Efficiency		%	66 / 66 / 70	64 / 64 / 67	66 / 66 / 70	64 / 64 / 67
	Sound Pressure Level	SH / H / L	dB(A)	40 / 36 / 32	40 / 37 / 33	43 / 39 / 35	43 / 40 / 36
	Sound Power Level	SH / H / L	dB(A)	56 / 53 / 47	59 / 56 / 52	59 / 56 / 50	62 / 59 / 55
	Operating Step	a	-	Super-hiah /		Super-hiah /	
	Current	SH / H / L	A	2.13 / 1.75 / 1.00	2.92 / 2.38 / 1.40	4.26 / 3.50 / 2.00	5.92 / 4.76 / 2.80
Bypass Mode	Power Input	SH / H / L	W	328 / 266 / 144	463 / 370 / 208	660 / 530 / 290	926 / 740 / 420
	Air Flow	SH / H / L	m³/h			1,500 / 1,500 / 1,200	
	External Static Pressure	SH / H / L	Pa	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50
	Sound Pressure Level	SH / H / L	dB(A)	41 / 37 / 33	41 / 38 / 34	44 / 40 / 36	44/ 41 / 37
Duct Work		Qty	EA		4	4	+ 2
		Size (Ø)	mm	Ø	250	Ø250	+ Ø350
Supply Air Fan		Qty	EA		1		2
		Туре	-	Direct-Di	rive Sirocco	Direct-D	rive Sirocco
Exhaust Air Fan		Qty	EA		1		2
		Туре	-	Direct-Di	rive Sirocco	Direct-D	rive Sirocco
		Qty	EA		2		4
Filters		Туре	-	Cleanable F	ibrous Fleeces	Cleanable F	ibrous Fleeces
		Size (W x H x D)	mm	1,148	x 6 x 245	1,148	x 6 x 245

Note :

1. ERV mode : Total Heat Recovery Ventilation mode
 2. Refer to dimensional drawings.
 3. Noise level :

Noise level :

 The operating conditions are assumed to be standard
 Sound measured at 1.5m below the center the body.
 Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
 The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.

 Temperature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 65% RH
 Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH
 Temperature Exchange efficiency is tested at heating condition.

Accessories

CHASSIS	LZ-H08
Drain Pump	
Cassette Cover	
Refrigerant Leak Detector	
EEV Kit	
Multi-tenant Power Module	
Robot Cleaner	
Pre Filter (Washable)	
Ion Generator	
CO ₂ Sensor	
Ventilation Kit	
IR Receiver	
Zone Controller	
Dry Contact (with additional accessory)	
External Input (1 point)	
Wi-Fi	

∗ ∘ : Applied, - : Not applied Option : Refer to model name in table



ZE050GUCCA0 / ZE080GUCDA0 7F100GUCDA0

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※2Q Launching

• Ventilation with sensible and latent heat recovery

- \bullet Air flow coverage from 500 to 1,000 m³/h
- Compact size from 273 mm height
- Various filters can be used to improve indoor air quality (IAQ)
- Filters grades : ePM10 50% (M5), ePM1 70% (F7), ePM1 80% (F9)
- A second filter can be installed on the supply air side
- Built-in CO₂ concentration sensor
- CO₂ Auto Operation based on CO₂ level
- Wi-Fi connection (optional)
- Hygienic material with Safe plus insulation

• Group control available up to 16 units with one wired controller

	MODEL		UNIT	ZE050GUCCA0	ZE080GUCDA0	ZE100GUCDA0
Dimensions (W x H x D)	Body		mm	1,014 × 273 × 988 1,062 x 36 5 x 1,240		5 x 1,240
Weight	Body		kg	41.7	54.4	54.4
Power Supply			V / Ø / Hz		220-240 / 1 / 50-60	
Normal Airflow R	ate		m³/h	500	800	1,000
	Operating Step		-		High / Mid / Low	
	Current	SH / H / L	A	1.7 / 1.2 / 0.8	2.2 / 1.4 / 0.8	3.0 / 1.9 / 1.0
	Power Input	SH / H / L	W	250 / 160 / 105	330 / 200 / 100	475 / 280 / 140
	Airflow Rate	SH / H / L	m³/h	500 / 400 / 300	800 / 640 / 480	1,000 / 800 / 600
	External Static Pressure	SH / H / L	Ра	150 / 96 / 54	160 / 102 / 57	160 / 102 / 57
ERV Mode	Temperature Exchange Efficiency	SH / H / L	%	78	75	73
	Enthalpy Exchange	Heating (SH / H / L)	%	75 / 75 / 78	73 / 76 / 79	72 / 73 / 74
	Efficiency	Cooling (SH / H / L)	%	68 / 68 / 75	68 / 70 / 73	63 / 67 / 71
	Sound Pressure Level	SH / H / L	dB(A)	39 / 34 / 29	39 / 34 / 28	40 / 36 / 29
	Sound Power Level	SH / H / L	dB(A)	TBD	TBD	TBD
Bypass Mode			-		0	
Duct Work		Qty	EA		4	
		Size (Ø)	mm	200	250	250
Supply Air Fan		Qty	EA		1	
Supply All Fall		Туре	-		Direct-Drive Sirocco	
Exhaust Air Fan		Qty	EA		1	
Exhaust Air Fan		Туре	-		Direct-Drive Sirocco	
Filters		Default	Grade (Qty)		OA: F7 RA: M5	
T IILETS		Option	Grade		OA: M5, F7, F9 SA: M5, F7, F9	

Note : 1. ERV mode : Total Heat Recovery Ventilation mode 2. Refer to dimensional drawings. 3. Noise level :

Noise level :

 The operating conditions are assumed to be standard
 Sound measured at 1.5m below the center the body.
 Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
 The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.

 Temperature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 75% RH
 Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH
 Temperature Efficiency is tested at heating condition.

Accessories

Air

Interlocking with MULTI V

CHASSIS	ZE050GUCCA0	ZE080GUCDA0	ZE100GUCDA0	
Filter	M5, F7, F9			
CO ₂ Sensor	Embedded			
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)			
Wi-Fi	PWFMDD200			

 $* \circ$: Applied, - : Not applied Option : Refer to model name in table

LG Filters

MODEL (CMH)	500	800. 1.000
M5	AFT050AEM50	AFT100AEM50
F7	AFT050AEF70	AFT100AEF70
F9 (Lanching date will be updated)	AFT050AEF90	AFT100AEF90



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ERV



Clean Air Supply

Remove Up to 99.99% of Harmful Particles on Pre-Filter with UVnano



UVnano Technology Applied

Easy Filter Maintenance

Via the one-touch button, the user can open the access door at the bottom of the unit, pull down the heat exchanger to change the filters. It is easy and simple without the need for any additional tools.



After pressing the one-touch button, unhook the safety hooks that holds door from failing to fully open the door.

It Prevents 99.99 % of Bacteria and Viruses from Growing





Hold the filter handle and pull it out down.

Smart Control

(1) Dual Laser Fine Dust Sensor

Two fine dust sensors monitor the incoming air and the supplied air to the room in real time to ensure that clean air is always supplied.



(2) CO₂ Monitoring

The embedded CO₂ sensor monitors the carbon dioxide concentration in the room in real time and automatically controls the ventilation rate.



is high, it increases the ventilation rate, and automatically reduces it when the concentration is low.



* CO₂ Sensor is Embedded.

(3) Control ERV Anytime, Anywhere



④ Filter Maintenance Alarm

The filter replacement notification and text message are sent when the fine dust concentration is higher than the pre-set point.





	MODEL		UNIT	
Dimensions (W x H x D)	Body		mm	
Weight	Body		kg	
Power Supply			V / Ø / Hz	
	Operating Step		-	
	Current	SH / H / L	А	
	Power Input	SH / H / L	W	
	Air Flow	SH / H / L	CMH	
	External Static Pressure	SH / H / L	Ра	
		Heating (SH / H / L) (ErP)	%	
ERV Mode	Temperature Exchange Efficiency	Heating (SH / H / L) (JIS)	%	
	Efficiency	Cooling (SH / H / L) (JIS)	%	
	Enthalpy Exchange Efficiency	Heating (SH / H / L) (JIS)	%	
		Cooling (SH / H / L) (JIS)	%	
	Energy Label	A+ to G Scale	-	
	Sound Power Level	SH / H / L	dB(A)	
	Sound Pressure Level	SH / H / L	dB(A)	
	Current	SH / H / L	А	
Dumana Mada	Power Input	SH / H / L	W	
Bypass Mode	Air Flow	SH / H / L	CMH	
	External Static Pressure	SH / H / L	Pa	
Operation Range	Outdoor Air Temperature	/ Relative Humidity	°C / %	
Duct Work	Qty		EA	
DUCT WORK	Size (Ø)	mm		
	Supply Air Fan		RPM	
Fan Motor	Exhaust Air Fan		RPM	
	Max.		RPM	
	Min.		RPM	
Filters	Grade ¹⁾		-	
Filters	Size (W x H x D)		mm	

Note:
 1. Temperature and Enthalpy Exchange Efficiency are based on the following conditions. Temperature Exchange Efficiency is tested at heating conditions.
 Cooling : Indoor Ambient Temp. 26.5°CDB / 64.5%RH, Outdoor Ambient Temp. 34.5°CDB / 75%RH
 Heating : Indoor Ambient Temp. 20.5°CDB / 59.5%RH, Outdoor Ambient Temp. 5°CDB / 65%RH
 The operating sound measured at the point 1.5 m below the center of the unit is converted to that measured at an anechoic chamber.
 The specifications, designs and information here are subject to change without notice.

LZ-H015GBA6	LZ-H020GBA6
640 x 320 x 640	640 x 320 x 640
23	23
220 - 240 / 1 / 50	220 - 240 / 1 / 50
SH / H / L	SH / H / L
0.43 / 0.38 / 0.23	0.59 / 0.51 / 0.26
56 / 49 / 26	79 / 71 / 30
150 / 150 / 80	200 / 200 / 100
100 / 70 / 50	100 / 70 / 50
85	82
80 / 80 / 84	78 / 78 / 82
74 / 74 / 83	70 / 70/ 81
79 / 79 / 83	75 / 75 / 81
74 / 74 / 80	68 / 68 / 76
А	A
53 / 51 / 45	55 / 53 / 46
28 / 26 / 21	30 / 28 / 22
0.45 / 0.40 / 0.26	0.60 / 0.52 / 0.29
63 / 53 / 31	84 / 73 / 35
150 / 150 / 80	200 / 200 / 100
100 / 70 / 50	100 / 70 / 50
-10 ~ 40 / 20 ~ 80	-10 ~ 40 / 20 ~ 80
4	4
125	125
1,850 / 1,710 / 1,300	2,050 / 1,910 / 1,400
1,750 / 1,600 / 1,250	1,910 / 1,770 / 1,320
2,100	2,100
1,000	1,000
F8	F8
278 x 276 x 50	278 x 276 x 50

LZ-H015GBA6 / LZ-H020GBA6



Accessories

LZ-H015GBA6	LZ-H020GBA6
Embedded	
Embedded	
Embedded	
Embedded	
0	
0	
	Embedded Embedded Embedded Embedded

※ ○ : Applied, - : Not applied Option : Refer to model name in table

Functions

	MODEL	LZ-H015GBA6	LZ-H020GBA6
Air Purification	UVnano	0	0
	Pre-Filter	0	0
	Fine Filter (ePM1 95%)	0	0
Reliability	Self Diagnosis	0	0
Convenience	Auto Restart	0	0
	Child Lock	0	0
	Forced Operation	0	0
	Group Control	0	0
	Turn On / Off Reservation	0	0
	Schedule	0	0
	Night Time Free Cooling	0	0
	Delayed Operation	0	0
	Airflow Amount Customized Operation	0	0
	Seasonal Customized Operation	0	0
	Seasonal Auto Operation	0	0
Installation	E.S.P. Control	0	0
ETC	Central Control (LGAP)	0	0
	Filter Alarm	0	0
	CO ₂ Sensor	0	0
	Wi-Fi	Accessory	Accessory

Note 1. 0 : Applied, X : Not applied Accessory : Ordered and purchased separately the accessory package referring to the model name provided and install at field. Accessory line-ups varies by region, so check your local catalogue or local sales material. 2. Some functions can be limited by remote controller.

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