Lossnay LGH-RVX3-E

FRESH AIR ENERGY RECOVERY SYSTEM

The Lossnay LGH-RVX3-E Fresh Air Energy Recovery Ventilation range is designed to supply clean, fresh air into commercial and residential buildings, while simultaneously extracting stale air, ensuring good indoor air quality for occupant wellbeing. These units are also able to recover valuable heat and latent energy from outgoing stale air, maximising energy efficiency and reducing running costs.

LGH-15RVX3-E
10-42 L/s of air

LGH-25RVX3-E
17-69 L/s of air

LGH-35RVX3-E
24-97 L/s of air

LGH-50RVX3-E
35-139 L/s of air

LGH-65RVX3-E
45-181 L/s of air

LGH-80RVX3-E
56-222 L/s of air

LGH-100RVX3-E
69-278 L/s of air

LGH-160RVX3-E
111-444 L/s of air

LGH-200RVX3-E
139-556 L/s of air

Lossnay

ENERGY RECOVERY SYSTEM

Key Features

Maximise Heating and Cooling Efficiencies

Through its unique energy recovery core, the Lossnay LGH-RVX3-E range can recover up to 88%*1 of the thermal exchange efficiency from stale outgoing air, and transfer this to pre-warm (or pre-cool) incoming fresh, filtered air being supplied into both residential and commercial buildings. For example, in winter a building that has an inside temperature of 20°C and 4°C air outside, the incoming fresh air can be warmed to over 18°C by transferring through a Lossnay Ventilation System and benefiting from the efficient energy transfer process. The building's air conditioning systems no longer have to work as hard to maintain desired indoor air temperatures.

Optimise Indoor Air Quality

Each unit features a treated paper core that transfers both sensible and latent heat, managing humidity and CO_2 levels while maximising overall efficiency.

Improved Airflow Range

Featuring upgraded variable air control for more precise and efficient ventilation. Both supply and exhaust default fan speeds can be adjusted in 5% increments (from 25% to 100%) to accurately match the required airflow for each application.

Low Noise Design

Operating as quietly as 17dBA*2, the LGH-RVX3-E range meets stringent sound level requirements, ideal for offices, schools, and other occupied spaces where quietness matters most.

Improved External Static Pressure

External static pressure has been improved by up to 35Pa / 41%*3 compared to previous models, providing greater flexibility in ductwork design and installation options.

Vertical Installation

Using optional parts, the Lossnay RVX3 range can be installed vertically*4, expanding the number of installation possibilities.

Dual Barrier Coating

The patented and world's first Dual Barrier Coating from Mitsubishi Electric prevents dust and dirt from accumulating on the interior of the Lossnay unit, helping to keep it clean all year-round. Not only can dust and dirt build-up typically create unpleasant odours, but it also significantly impairs heat exchanger efficiency. Dual Barrier Coating ensures peace of mind and optimal performance.

Weekly Timer Enables Energy Saving Operation

Optimise airflow with the PZ-62DR-E*5 remote controller. The weekly timer lets you set up to eight ON/OFF patterns per day across seven days, with adjustable air volume for each. Offering finer control than previous models, the PZ-62DR-E controller enables precise, energy-efficient ventilation tailored to different times and days.

*1 LGH-25RVX3-E on lowest fan speed for winter conditions.
*2 LGH-15/25/35/50RVX3-E on lowest fan speed.
*3 LGH-25RVX3-E model on highest fan speed.
*4 LGH-160/200RVX3-E are unable to be installed vertically.
*5 PZ-62DR-E purchased separately.

Optimised Control with Optional CO_2 Sensor

Through the addition of optional Mitsubishi Electric CO_2 Sensors, CO_2 levels can be detected, and airflow intuitively adjusted to ensure optimum air quality, no matter how many people are within the space. The system will continuously adjust the volume of fresh air changes until optimum CO_2 levels are reached, with the system then reverting back to the original fan speed.

PZ-70CSD-E2
Duct-in Type

CO2 levels are indicated by LED lights

PZ-70CSW-E2
Wall Mounted Type

Optional High-Efficiency Filters Available*6

For spaces where clean air matters most like hospitals, schools and offices, optional high-efficiency filters provide added protection. By capturing fine airborne particles, they enhance indoor air quality, creating a healthier and more comfortable space for everyone.

Make Heat Recovery Ventilation Visible – with Optional Lossnay Wi-Fi Control

OPTIONAL Wi-Fi CONTROL

Elevating air quality and maximising energy efficiencies has never been easier, because now the power is in your hands.

See by how many degrees Lossnay is pre-warming or pre-cooling the incoming fresh air to the building in real time, helping save on operating costs because less additional heating is required to get a room up to temperature.

And in summer, monitor by how many degrees Lossnay reduces the average temperature using Automatic Free Cooling*7 Mode.

In addition, the App will also proactively remind you when it is time to clean filters to maximise both cost efficient operation and health benefits.

Lossnay Wi-Fi Control truly is the smart evolution in fresh air ventilation.

With the option of an additional CO_2 sensor, when connected with the optional Wi-Fi Control Interface, CO_2 levels can be viewed in real-time making it ideal for schools, medical facilities and offices.

*6 Please refer to our "Lossnay Filter Range" brochure for more details.
*7 In comparison to using a dedicated cooling device. The unit will continue to use a small amount of power to bring colder fresh air from outside.

Specifications

Lossnay LGH-RVX3-E

MODEL			LGH-15 RVX3-E	LGH-25 RVX3-E	LGH-35 RVX3-E	LGH-50 RVX3-E	LGH-65 RVX3-E	LGH-80 RVX3-E	LGH-100 RVX3-E	LGH-160 RVX3-E	LGH-200 RVX3-E
25% (Default Speed 1)	Air Volume	m^3/h	38	63	88	125	163	200	250	400	500
		L/s	10	17	24	35	45	56	69	111	139
	External Static Pressure	Pa	8	8	10	10	10	11	12	11	11
	Temperature Exchange Efficiency	Heating %	81.5	88.0	82.0	75.0	82.0	80.0	83.5	80.0	83.5
		Cooling %	78.0	85.0	79.0	73.0	80.0	78.0	82.5	78.0	82.5
	Enthalpy Exchange Efficiency	Heating %	80.5	84.0	80.0	73.0	80.0	73.5	75.5	73.5	76.0
		Cooling %	68.0	73.0	69.5	65.0	69.0	68.0	71.5	68.0	70.0
	Specific Fan Power	W/(L/s)	0.96	0.63	0.62	0.43	0.44	0.41	0.39	0.41	0.41
	Input Power	W	10	11	15	15	20	23	27	45	57
	Sound Pressure Level	dB(A)	17.0	17.0	17.0	17.0	17.5	18.0	18.5	18.0	18.0
50% (Default Speed 2)	Air Volume	m^3/h	75	125	175	250	325	400	500	800	1000
		L/s	21	35	49	69	90	111	139	222	278
	External Static Pressure	Pa	30	30	40	38	38	43	48	43	43
	Temperature Exchange Efficiency	Heating %	78.0	81.0	79.0	73.5	78.5	78.0	79.5	78.0	79.5
		Cooling %	73.5	79.0	74.0	71.0	74.5	75.5	77.0	75.5	76.0
	Enthalpy Exchange Efficiency	Heating %	76.5	75.5	77.5	72.0	76.5	70.5	68.5	70.5	67.5
		Cooling %	61.0	65.0	63.5	60.0	61.5	62.5	64.0	62.5	64.5
	Specific Fan Power	W/(L/s)	0.72	0.60	0.60	0.49	0.56	0.58	0.60	0.58	0.59
	Input Power	W	15	21	29	34	51	64	83	128	163
	Sound Pressure Level	dB(A)	18.0	19.5	19.0	21.0	24.0	25.0	27.0	26.0	27.5
75% (Default Speed 3)	Air Volume	m^3/h	113	188	263	375	488	600	750	1200	1500
		L/s	31	52	73	104	135	167	208	333	417
	External Static Pressure	Pa	68	68	90	85	85	96	107	96	96
	Temperature Exchange Efficiency	Heating %	75.5	78.5	77.0	71.5	75.0	76.5	77.0	76.5	77.5
		Cooling %	70.5	76.5	71.0	67.0	70.0	70.0	72.0	70.0	71.5
	Enthalpy Exchange Efficiency	Heating %	73.5	72.0	74.5	69.5	72.0	65.0	63.0	65.0	64.0
		Cooling %	57.0	60.5	59.5	55.0	55.0	56.0	59.0	56.0	59.5
	Specific Fan Power	W/(L/s)	0.96	0.81	0.84	0.78	0.89	0.96	1.01	0.97	1.00
	Input Power	W	30	42	61	81	120	160	210	324	416
	Sound Pressure Level	dB(A)	22.0	25.0	24.5	27.0	31.5	33.5	35.0	35.0	36.0
100% (Default Speed 4)	Air Volume	m^3/h	150	250	350	500	650	800	1000	1600	2000
		L/s	42	69	97	139	181	222	278	444	556
	External Static Pressure	Pa	120	120	160	150	150	170	190	170	170
	Temperature Exchange Efficiency	Heating %	73.5	75.5	75.0	70.5	72.5	75.0	75.5	75.0	76.5
		Cooling %	65.5	70.5	66.5	63.5	65.0	65.0	67.5	65.0	66.5
	Enthalpy Exchange Efficiency	Heating %	70.5	69.0	72.0	68.5	69.5	62.0	60.5	62.0	60.5
		Cooling %	52.5	56.0	55.0	51.5	50.5	52.0	53.5	52.0	57.0
	Specific Fan Power	W/(L/s)	1.32	1.08	1.23	1.33	1.36	1.54	1.58	1.55	1.54
	Input Power	W	55	75	120	185	245	343	438	687	855
	Sound Pressure Level	dB(A)	27.0	30.5	30.5	35.0	37.5	39.0	40.0	41.0	41.5
Duct Size		mm	100	150	150	200	200	250	250		
Weight		kg	20	22	30	33	41	47	53	96	108
Dimensions	Width x Depth x Height	mm	780 x 610 x 289	780 x 735 x 289	888 x 874 x 331	888 x 1016 x 331	908 x 954 x 404	1144 x 1004 x 404	1144 x 1231 x 404	1144 x 1004 x 808	1144 x 1231 x 808
Electrical Power Supply			220-240V, 50Hz								
Maximum Current		A	0.57	0.88	1.37	1.86	2.37	3.23	3.77	4.74	5.40
Fuse Rating	(BS88) - HRC (A)	A	6	6	6	6	6	6	6	10	10
Heat Exchanger			Paper with specially treated Cellulose MembraneMembrane								
Standard Filter			ISO 16890 Coarse 60%*1								

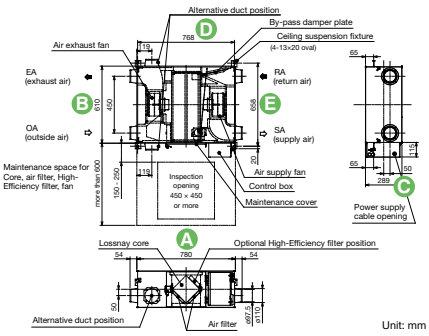
Note: Running current, power consumption, recovery efficiency, and sound levels are based on the above default airflow rates at 25%, 50%, 75%, and 100%. Specific duty point data is available upon request. Supply and exhaust fan speeds can be individually commissioned between 25% and 100% in 5% increments. Sound pressure level measured at 1.5m under the centre of the bottom panel. Air flow rates, external static pressure and specific fan powers tested to BS EN13053:2019. Energy recovery efficiencies tested to BS EN308:2022.
*1 EN 779 G4 equivalent according to 'REHVA Filter Class Conversion between EN 779 and EN ISO 16890-1'.

ACCESSORIES		LGH-15 RVX3-E	LGH-25 RVX3-E	LGH-35 RVX3-E	LGH-50 RVX3-E	LGH-65 RVX3-E	LGH-80 RVX3-E	LGH-100 RVX3-E	LGH-160 RVX3-E	LGH-200 RVX3-E
Remote Controller		PZ-62DR-EB								
Filters	Standard Replacement Filter (Coarse 60%)	PZ-15RF3-E	PZ-25RF3-E	PZ-35RF3-E	PZ-50RF3-E	PZ-65RF3-E	PZ-80RF3-E	PZ-100RF3-E	PZ-80RF3-E (2 sets)	PZ-100RF3-E (2 sets)
	ePM1 75%	PZ-15RFP3-E	PZ-25RFP3-E	PZ-35RFP3-E	PZ-50RFP3-E	PZ-65RFP3-E	PZ-80RFP3-E	PZ-100RFP3-E	PZ-80RFP3-E (2 sets)	PZ-100RFP3-E (2 sets)
CO_2 Sensors		PZ-70CSW-E2 (Wall mounted) / PZ-70CSD-E2 (Duct mounted)								
Vertical Mounting Brackets		PZ-1VS-E	PZ-1VS-E	PZ-1VS-E	PZ-1VS-E	PZ-2VS-E	PZ-2VS-E	PZ-2VS-E	–	–

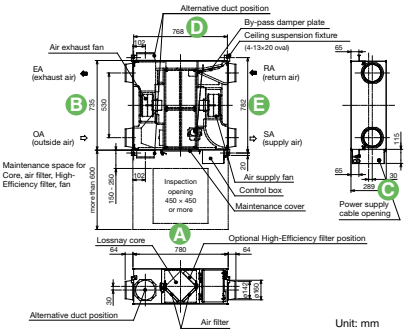
Dimensions

Please refer to the dimensions in the tables for the relevant Lossnay model.

LGH-15RVX3-E

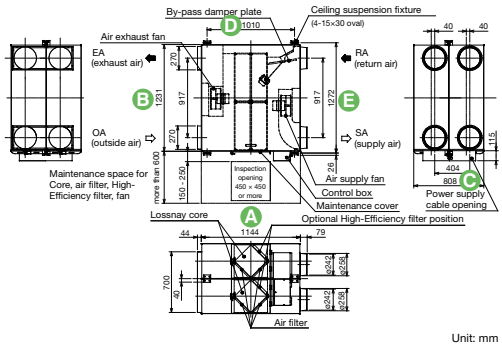


LGH-25RVX3-E



MODEL	Dimensions			Ceiling Suspension Fixture Pitch		Nominal Duct Diameter
	A	B	C	D	E	
LGH-15RVX3-E	780	610	289	768	658	150
LGH-25RVX3-E	780	735	289	768	782	150
LGH-35RVX3-E	888	874	331	875	921	150
LGH-50RVX3-E	888	1016	331	875	1063	200
LGH-65RVX3-E	908	954	404	895	1001	200
LGH-80RVX3-E	1144	1004	404	1131	1051	250
LGH-100RVX3-E	1144	1231	404	1131	1278	250

LGH-160RVX3-E – LGH-200RVX3-E



MODEL	Dimensions			Ceiling Suspension Fixture Pitch		Nominal Duct Diameter
	A	B	C	D	E	
LGH-160RVX3-E	1144	1004	808	1010	1045	250 (SA, RA) 270x700 (OA, EA)
LGH-200RVX3-E	1144	1231	808	1010	1272	250 (SA, RA) 270x700 (OA, EA)

Learn More About Lossnay Fresh Air Heat Recovery Ventilation

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