

LOSSNAY unit

LGH-RS2-E2

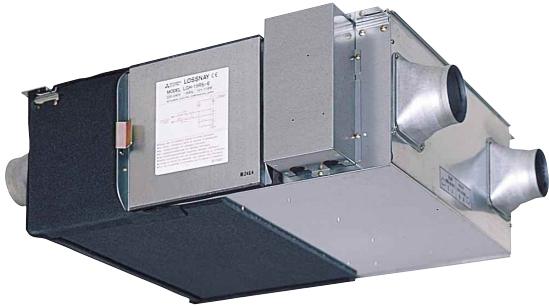
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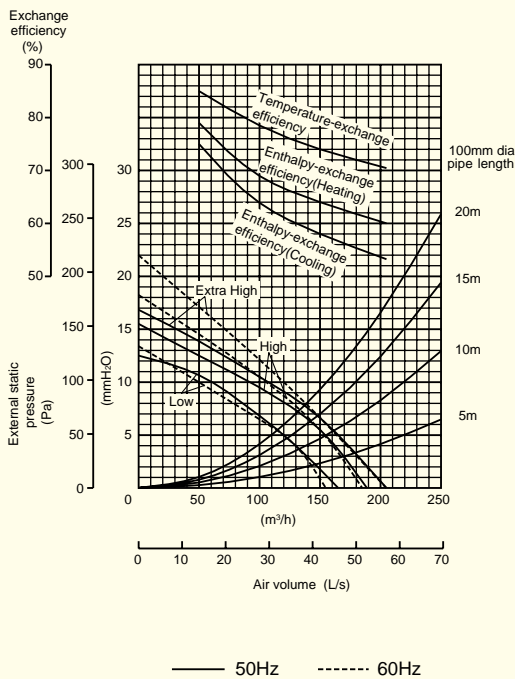
1. LGH-15RS2-E2

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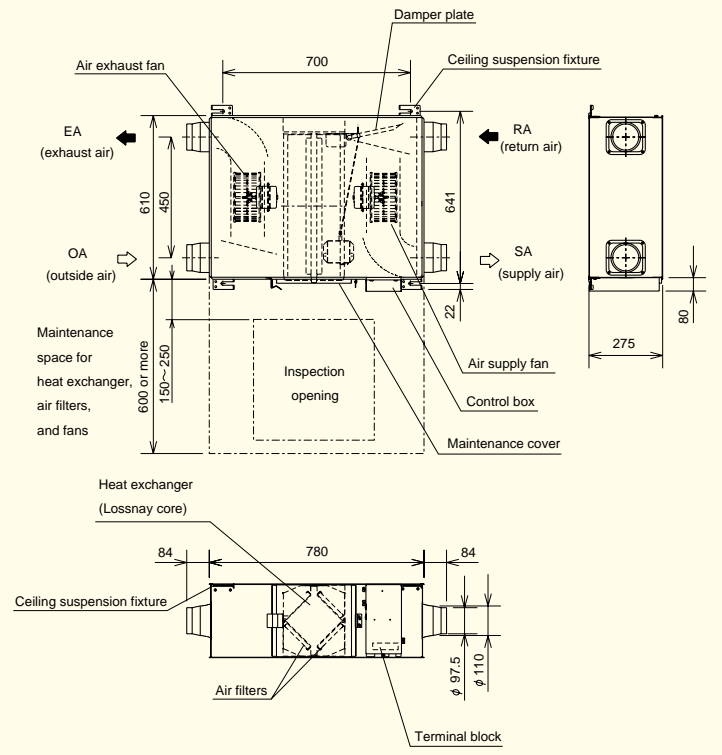


- Slim design
- Low noise design
- Straight-line air supply/exhaust system
- Extra-high notch (can be set for air supply or exhaust)
- Can be mounted upside down
- One inspection space

Characteristic Curve



External Dimensions

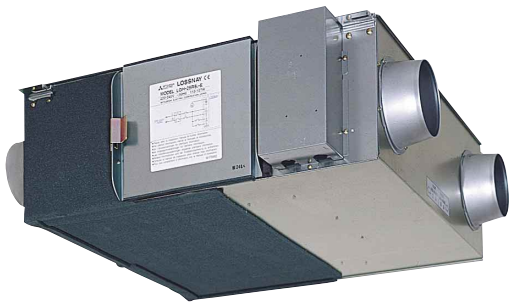


Unit:mm

Specifications

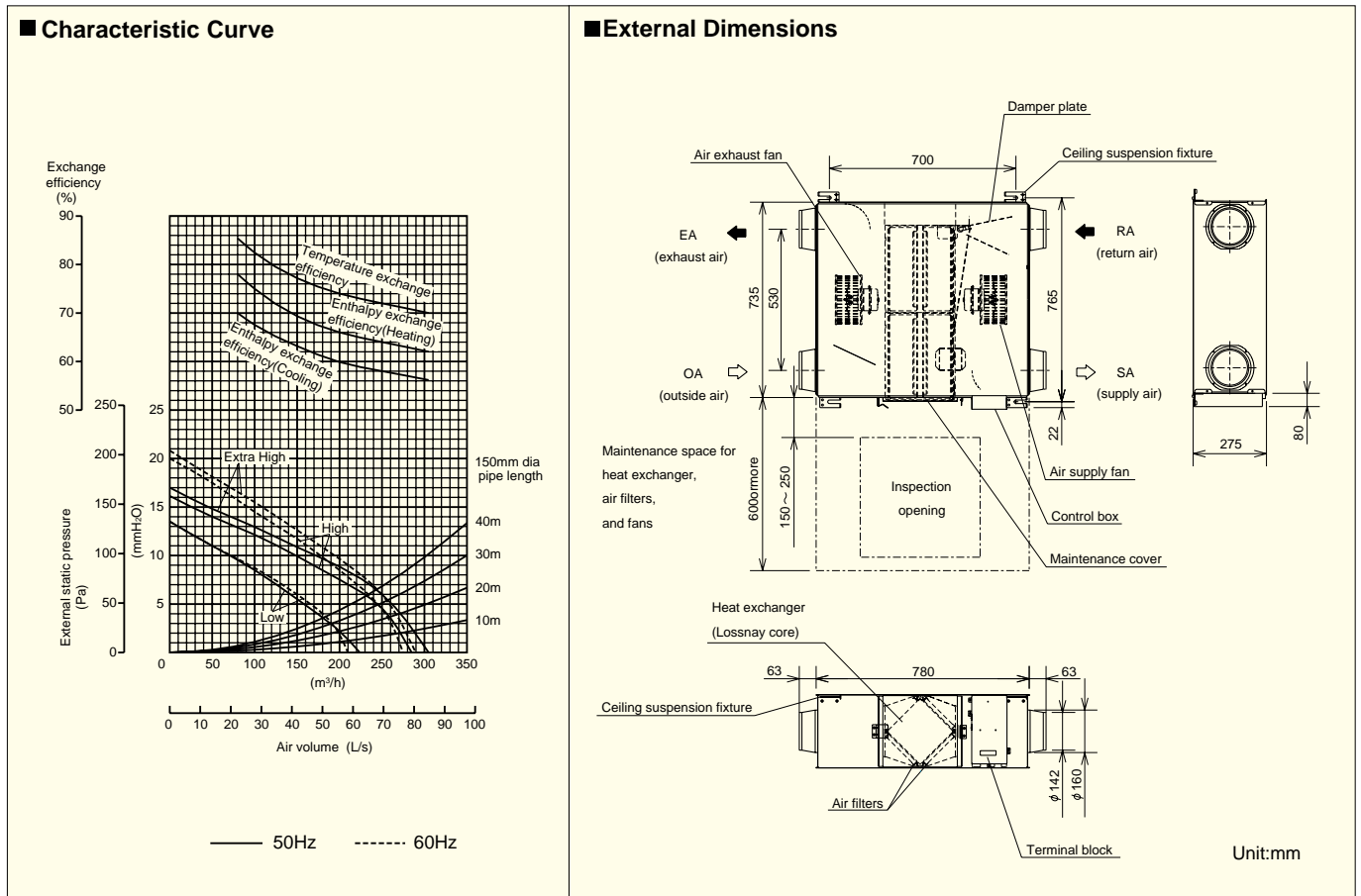
Model		LGH-15RS2-E2					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Notch		Extra high	High	Low	Extra high	High	Low
Current (A)		0.43-0.45/0.49	0.35-0.36/0.39	0.27-0.28/0.29	0.45-0.47/0.53	0.37-0.38/0.42	0.29-0.30/0.32
Input (W)		93-107/106	75-86/85	58-66/63	97-111/109	79-90/90	62-69/69
Air volume	(m³/h)	150/150	150/150	130/130	150/150	150/150	130/130
	(L/s)	42/42	42/42	36/36	42/42	42/42	36/36
External static pressure	(mmH ₂ O)	6.7/6.7	5.5/5.5	4.0/4.0	6.7/6.7	5.5/5.5	4.0/4.0
	(Pa)	65.7/65.7	53.9/53.9	39.2/39.2	65.7/65.7	53.9/53.9	39.2/39.2
Temperature exchange efficiency (%)		74/74	74/74	76/76	—	—	—
Enthalpy exchange efficiency (%)	Heating	64/64	64/64	65/65	—	—	—
	Cooling	58/58	58/58	60/60	—	—	—
Noise (dB) (measured at 1.5m under the center of Lossnay)		28.5-29.5/29	26.5-27.5/27	24.5-25.5/24	29-30/29.5	27-28/27.5	25-26/24.5
Weight (kg)		19kg					
Starting current	Under 0.7A	Insulation resistance	10MΩ or more (500V megger)	Withstand voltage	1500V AC, 1 minute		

2. LGH-25RS2-E2



- Slim design
- Low noise design
- Straight-line air supply/exhaust system
- Extra-high notch (can be set for air supply or exhaust)
- Can be mounted upside down
- One inspection space
- $\phi 100$ duct piping possible (When using optional duct piping attachment)

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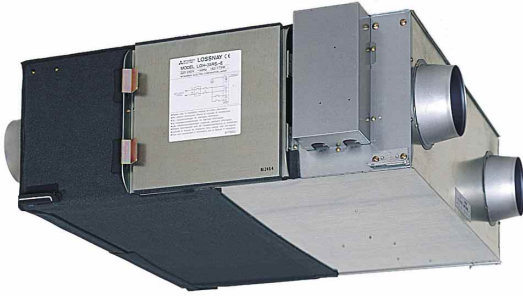


Specifications

Model		LGH-25RS2-E2					
Power source		Single phase 220-240V~50Hz/220V~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Notch		Extra high	High	Low	Extra high	High	Low
Current (A)		0.47-0.49/0.54	0.42-0.44/0.48	0.28-0.30/0.32	0.50-0.52/0.58	0.45-0.47/0.51	0.31-0.33/0.35
Input (W)		101-117/118	92-105/105	61-72/70	105-121/123	96-109/110	66-76/74
Air volume	(m ³ /h)	250/250	250/250	195/195	250/250	250/250	195/195
	(L/s)	69/69	69/69	54/54	69/69	69/69	54/54
External static pressure	(mmH ₂ O)	6.0/6.0	4.5/4.5	2.6/2.6	6.0/6.0	4.5/4.5	2.6/2.6
	(Pa)	58.8/58.8	44.1/44.1	25.5/25.5	58.8/58.8	44.1/44.1	25.5/25.5
Temperature exchange efficiency (%)		72/72	72/72	74/74	—	—	—
Enthalpy exchange efficiency (%)	Heating	64/64	64/64	66/66	—	—	—
	Cooling	58/58	58/58	60/60	—	—	—
Noise (dB) (measured at 1.5m under the center of Lossnay)		29-30/29.5	27-28/27.5	24.5-25.5/24.5	29.5-30.5/30	27.5-28.5/28	25-26/25
Weight (kg)		23kg					
Starting current	Under 0.8A	Insulation resistance	10M Ω or more (500V megger)	Withstand voltage	1500V AC, 1 minute		

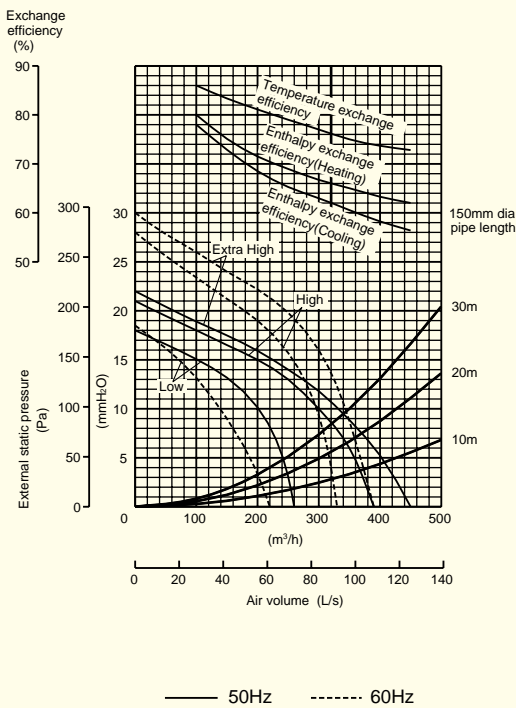
3. LGH-35RS2-E2

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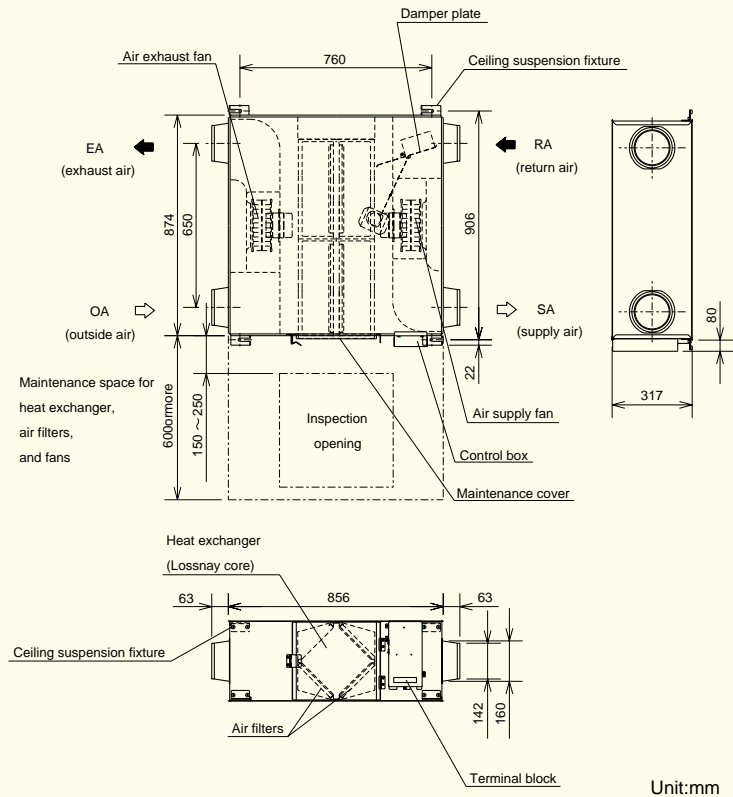


- Slim design
- Low noise design
- Straight-line air supply/exhaust system
- Extra-high notch (can be set for air supply or exhaust)
- Can be mounted upside down
- One inspection space
- $\phi 100$ duct piping possible (When using optional duct piping attachment)

■ Characteristic Curve



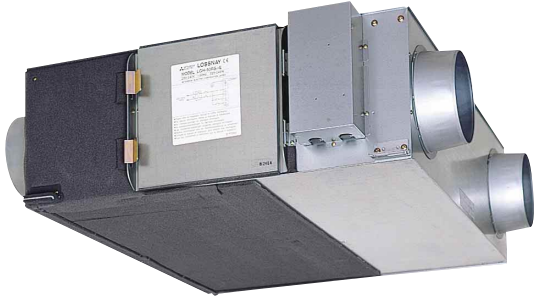
■ External Dimensions



■ Specifications

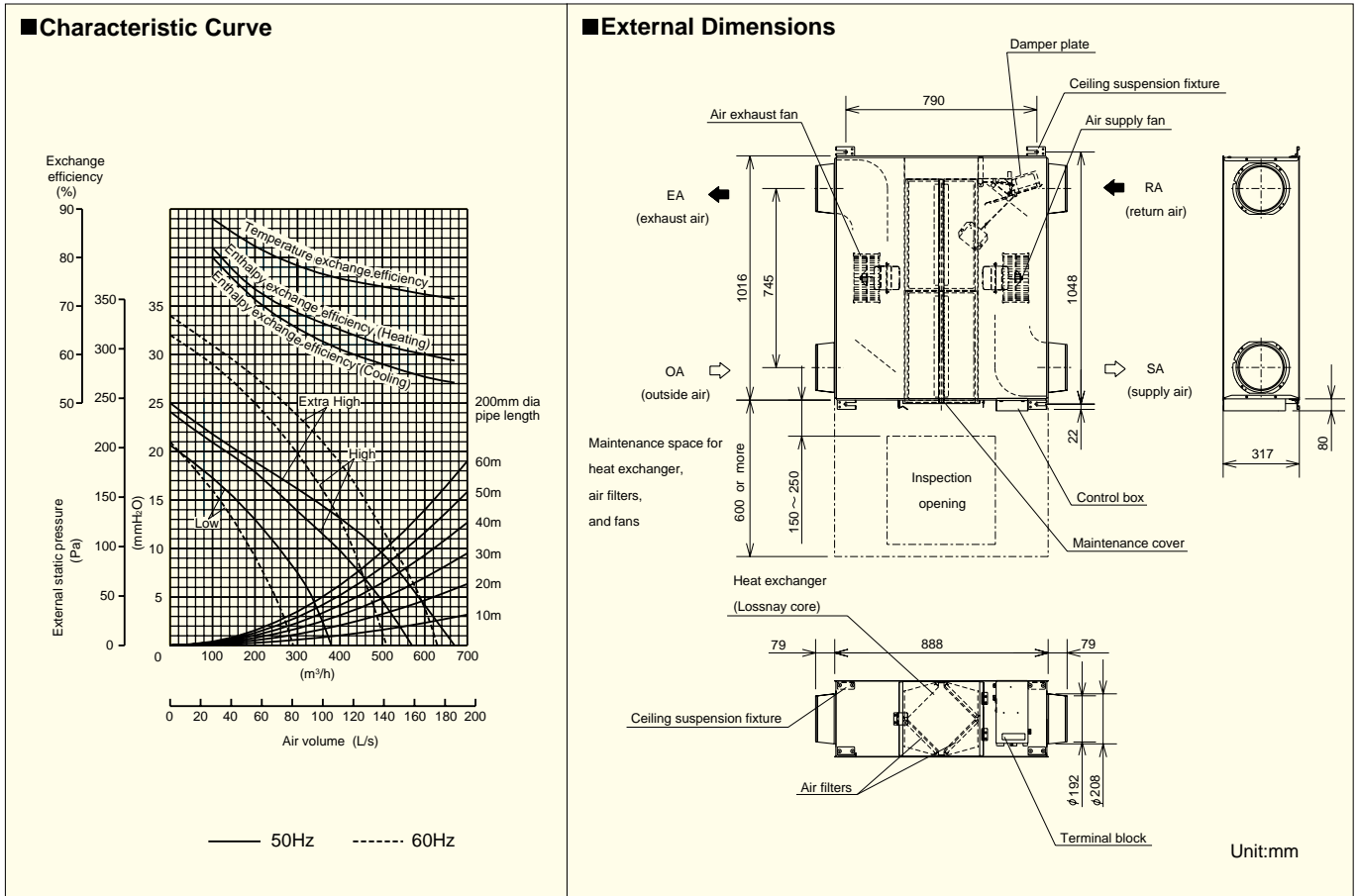
Model		LGH-35RS2-E2					
Power source		Single phase 220-240V ~ 50Hz/220V ~ 60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Notch		Extra high	High	Low	Extra high	High	Low
Current (A)		0.60-0.60/0.77	0.57-0.57/0.68	0.40-0.42/0.42	0.63-0.63/0.80	0.60-0.60/0.70	0.43-0.45/0.44
Input (W)		132-142/168	125-134/148	87-99/90	137-147/173	130-139/153	92-104/93
Air volume	(m³/h)	350/350	350/320	250/210	350/350	350/320	250/210
	(L/s)	97/97	97/89	69/58	97/97	97/89	69/58
External static pressure	(mmH₂O)	8.9/8.9	6.0/4.5	3.1/1.9	8.9/8.9	6.0/4.5	3.1/1.9
	(Pa)	87.2/87.2	58.8/44.1	30.4/18.6	87.2/87.2	58.8/44.1	30.4/18.6
Temperature exchange efficiency (%)		75/75	75/76	79/81	—	—	—
Enthalpy exchange efficiency (%)	Heating	65/65	65/66	69/71	—	—	—
	Cooling	61/61	61/62	65/68	—	—	—
Noise (dB) (measured at 1.5m under the center of Lossnay)		31-33/30	29-31/27	24-26/22	32-34/30.5	30-32/27.5	24-26/22.5
Weight (kg)		33kg					
Starting current	Under 1.6A	Insulation resistance	10MΩ or more (500V megger)		Withstand voltage	1500V AC, 1 minute	

4. LGH-50RS2-E2



- Slim design
- Low noise design
- Straight-line air supply/exhaust system
- Extra-high notch (can be set for air supply or exhaust)
- Can be mounted upside down
- One inspection space
- $\phi 150$ duct piping possible (When using optional duct piping attachment)

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Specifications

Model		LGH-50RS2-E2					
Power source		Single phase 220-240V ~ 50Hz/220V ~ 60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Notch		Extra high	High	Low	Extra high	High	Low
Current (A)		0.84-0.84/1.10	0.78-0.78/0.96	0.51-0.53/0.50	0.87-0.87/1.12	0.81-0.81/0.97	0.54-0.56/0.54
Input (W)		184-201/250	170-183/209	107-123/109	190-207/253	175-188/211	112-128/113
Air volume	(m^3/h)	500/500	500/480	360/280	500/500	500/480	360/280
	(L/s)	139/139	139/133	100/78	139/139	139/133	100/78
External static pressure	(mmHzO)	9.5/12.0	4.7/4.0	2.4/1.4	9.5/12.0	4.7/4.0	2.4/1.4
	(Pa)	93.1/117.6	46.1/39.2	23.5/13.7	93.1/117.6	46.1/39.2	23.5/13.7
Temperature exchange efficiency (%)		74/74	74/74	76/79	—	—	—
Enthalpy exchange efficiency (%)	Heating	62/62	62/62	66/69	—	—	—
	Cooling	58/58	58/58	62/66	—	—	—
Noise (dB) (measured at 1.5m under the center of Lossnay)		34-35/36	32-33/32	25.5-26.5/24	35-36/37	33-34/33	26.5-27.5/25
Weight (kg)		38kg					
Starting current	Under 2.2A/1.9A	Insulation resistance	10M Ω or more (500V megger)	Withstand voltage	1500V AC, 1 minute		

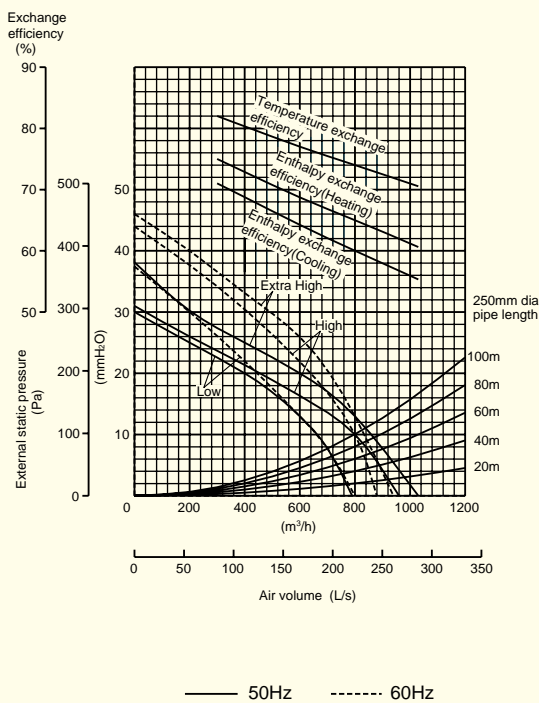
5. LGH-80RS2-E2

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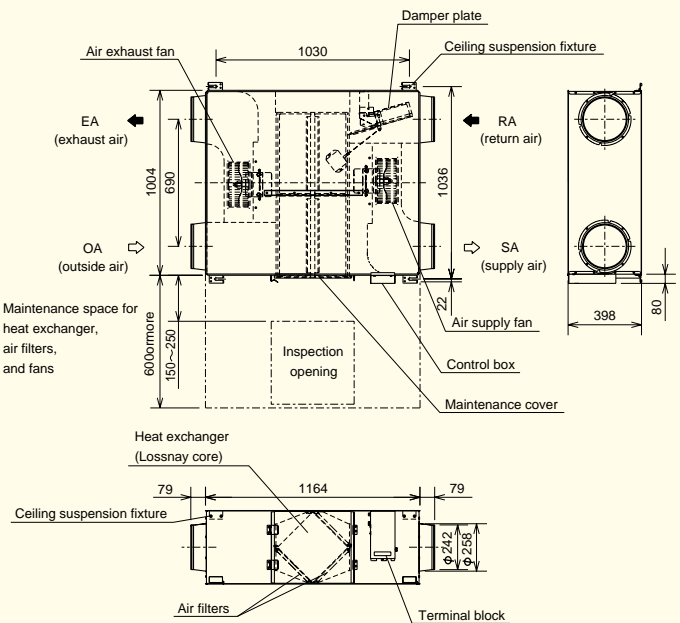


- Slim design
- Low noise design
- Straight-line air supply/exhaust system
- Extra-high notch (can be set for air supply or exhaust)
- Can be mounted upside down
- One inspection space
- $\phi 200$ duct piping possible (When using optional duct piping attachment)

Characteristic Curve



External Dimensions



Unit:mm

Specifications

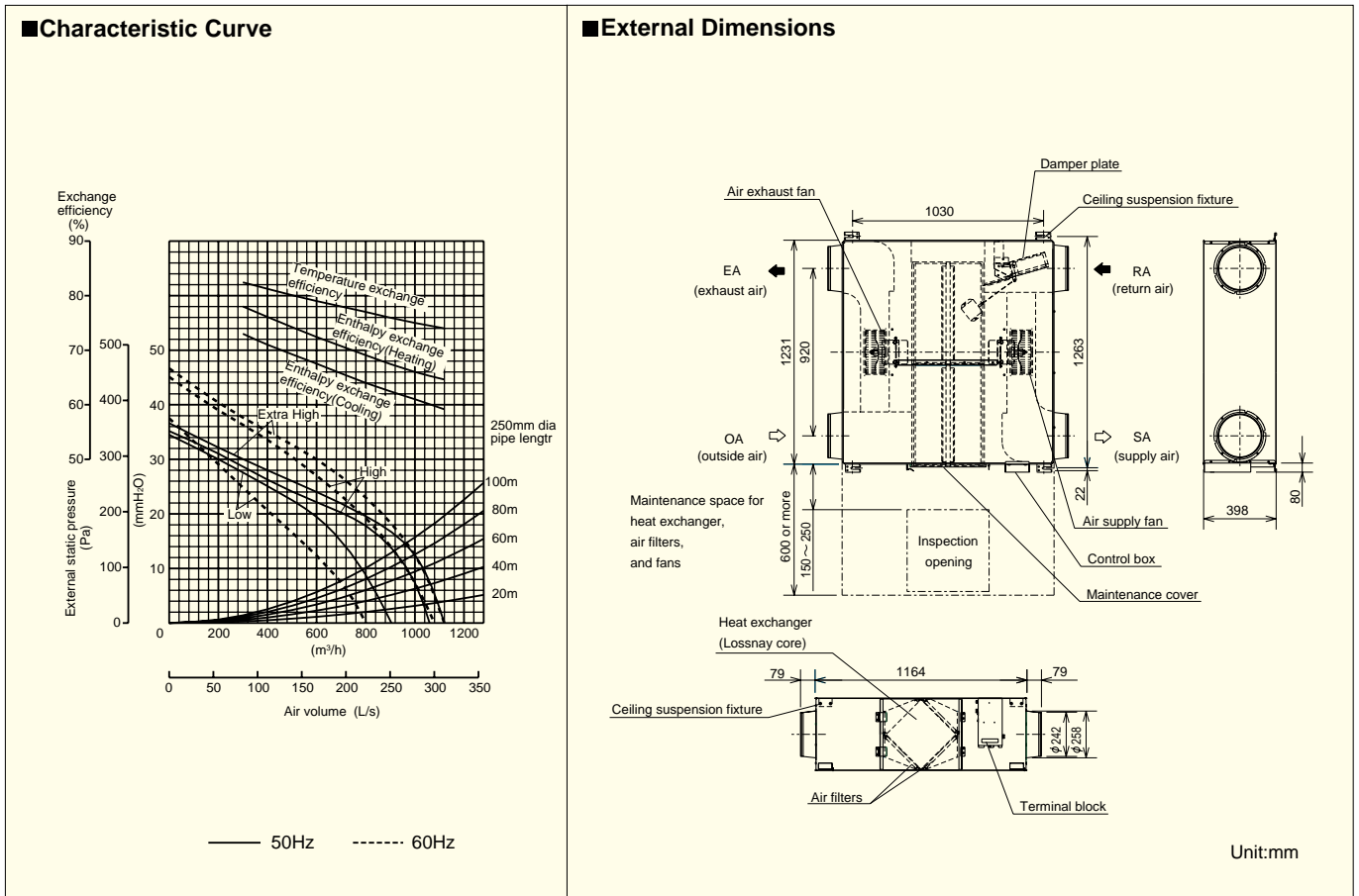
Model	LGH-80RS2-E2					
Power source	Single phase 220-240V ~ 50Hz/220V ~ 60Hz					
Ventilation mode	Lossnay ventilation			Bypass ventilation		
Notch	Extra high	High	Low	Extra high	High	Low
Current (A)	2.0-2.0/2.5	1.9-1.9/2.3	1.6-1.6/1.8	2.1-2.1/2.6	2.0-2.0/2.4	1.7-1.7/1.8
Input (W)	440-460/550	415-445/505	345-375/385	453-473/560	438-458/510	358-388/390
Air volume	(m ³ /h)	800/800	800/800	700/700	800/800	700/700
	(L/s)	222/222	222/222	194/194	222/222	194/194
External static pressure	(mmH ₂ O)	13.2/13.2	10/10	7.7/7.7	13.2/13.2	7.7/7.7
	(Pa)	129.4/129.4	98/98	75.5/75.5	129.4/129.4	75.5/75.5
Temperature exchange efficiency (%)	74/74	74/74	75/75	—	—	—
Enthalpy exchange efficiency (%)	Heating	65/65	65/65	67/67	—	—
	Cooling	60/60	60/60	62/62	—	—
Noise (dB) (measured at 1.5m under the center of Lossnay)	36.5-37.5/37	35-36/35.5	32.5-33.5/31	37-38/37.5	35.5-36.5/36	33-34/31.5
Weight (kg)	73kg					
Starting current	Under 4.8A/4.1A	Insulation resistance	10M Ω or more (500V megger)	Withstand voltage	1500V AC, 1 minute	

6. LGH-100RS2-E2



- Slim design
- Low noise design
- Straight-line air supply/exhaust system
- Extra-high notch (can be set for air supply or exhaust)
- Can be mounted upside down
- One inspection space
- $\phi 200$ duct piping possible (When using optional duct piping attachment)

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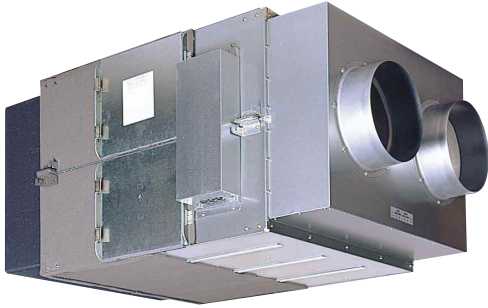


■ Specifications

Model		LGH-100RS2-E2					
Power source		Single phase 220-240V ~ 50Hz/220V ~ 60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Notch		Extra high	High	Low	Extra high	High	Low
Current (A)		2.3-2.3/2.8	2.2-2.2/2.6	1.9-1.9/1.7	2.2-2.2/2.8	2.1-2.1/2.6	1.8-1.8/1.7
Input (W)		500-535/605	475-525/555	405-445/355	498-508/600	463-503/560	398-448/360
Air volume	(m ³ /h)	1,000/1,000	1,000/1,000	845/750	1,000/1,000	1,000/1,000	845/750
	(L/s)	278/278	278/278	235/208	278/278	278/278	235/208
External static pressure	(mmH ₂ O)	12.5/12.5	7.4/7.4	5.3/4.2	12.5/12.5	7.4/7.4	5.3/4.2
	(Pa)	122.5/122.5	72.5/72.5	51.9/41.2	122.5/122.5	72.5/72.5	51.9/41.2
Temperature exchange efficiency (%)		75/75	75/75	76.5/78	—	—	—
Enthalpy exchange efficiency (%)	Heating	66/66	66/66	68/70	—	—	—
	Cooling	61/61	61/61	63/65	—	—	—
Noise (dB) (measured at 1.5m under the center of Lossnay)		37-38/38	35.5-36.5/37	33-34/31	37.5-38.5/39	36-37/38	33.5-34.5/32
Weight (kg)		83kg					
Starting current	Under 4.5A/4.7A	Insulation resistance	10M Ω or more (500V megger)	Withstand voltage	1500V AC, 1 minute		

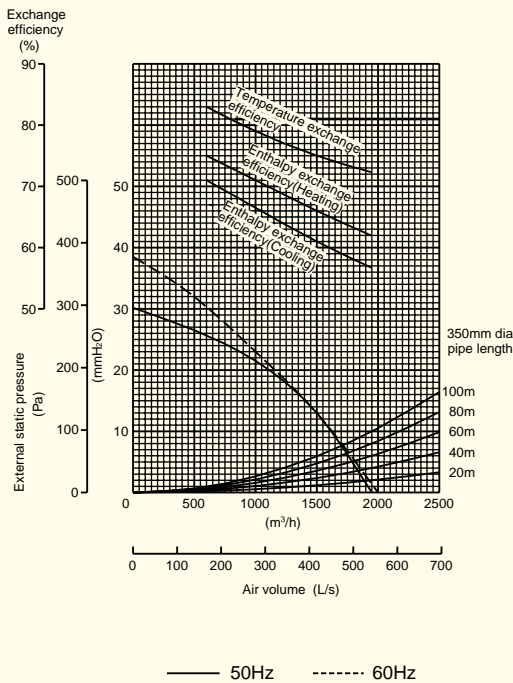
7. LGH-150RS2-E2

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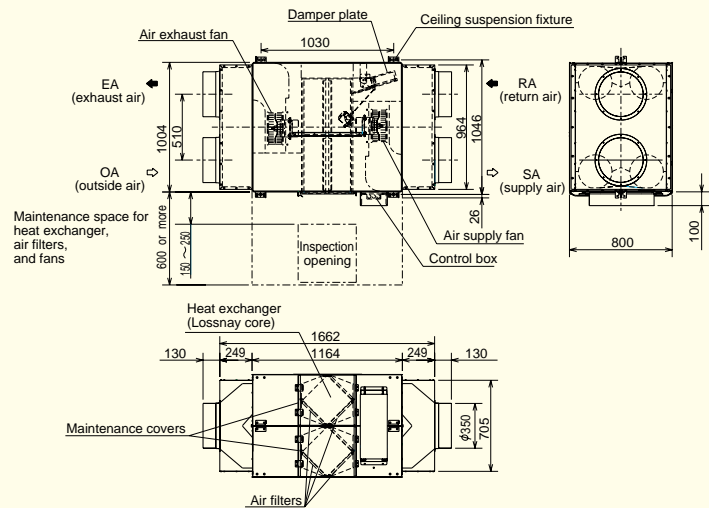


- Slim design ● Low noise design
- Straight-line air supply/exhaust system
- Can be mounted upside down
- One inspection space ● Bypass operation included
- Switch possible between two $\phi 250$ ducts for indoor air supply and exhaust (total of 4 ducts). This is when using two optional flange sets PZ-25FR.

■ Characteristic Curve



■ External Dimensions

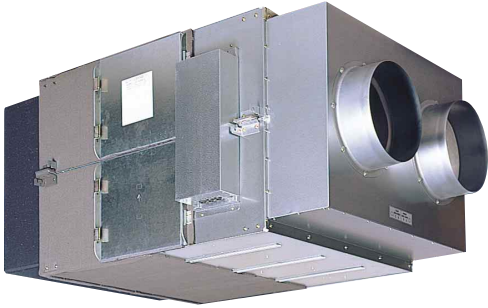


Unit:mm

■ Specifications

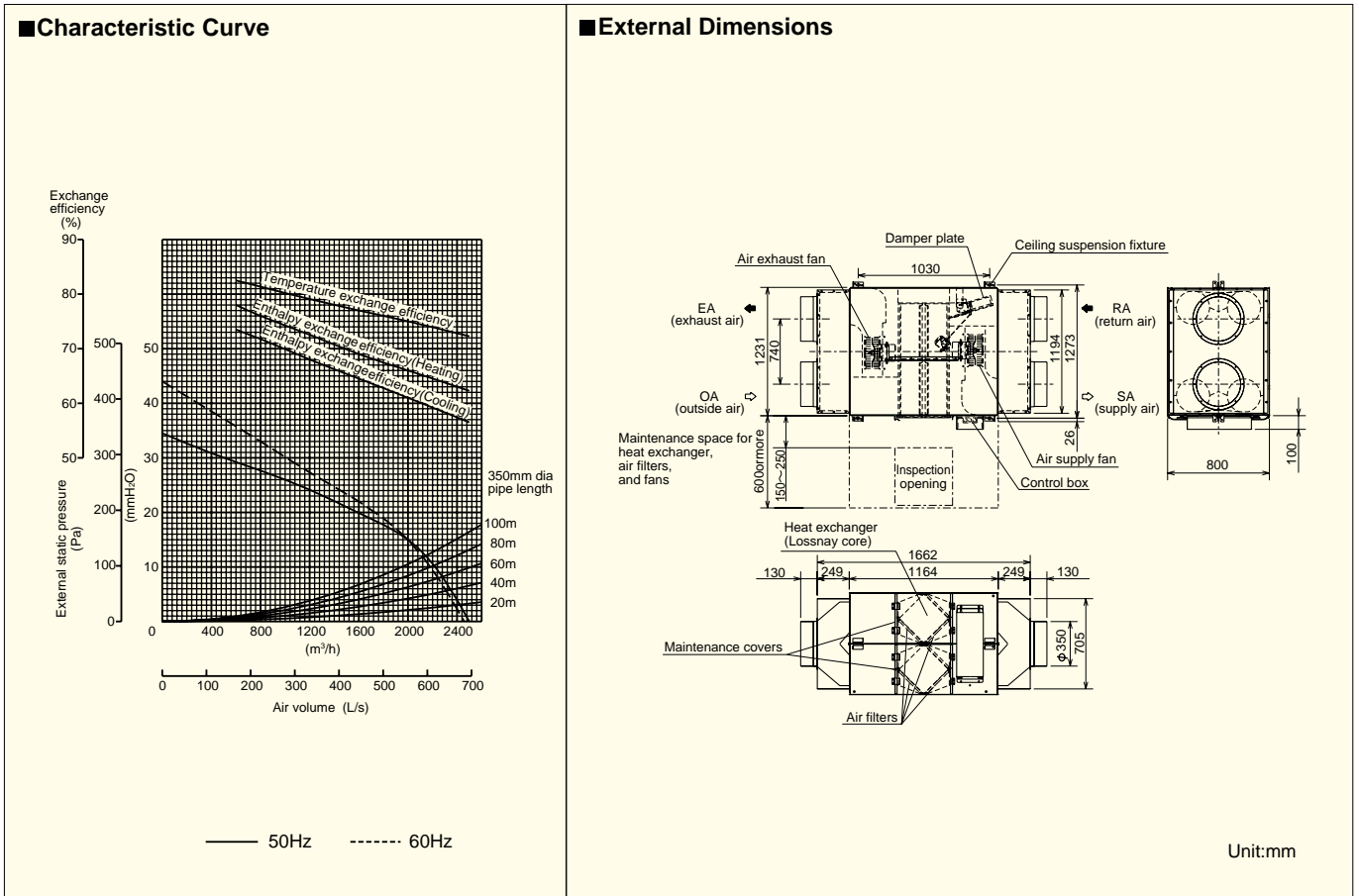
Model		LGH-150RS2-E2			
Power source		Three phase 380-415V~50Hz/380V~60Hz			
Ventilation mode		Lossnay ventilation		Bypass ventilation	
Current (A)		1.6-1.6/1.9		1.65-1.65/1.9	
Input (W)		840-885/1,120		870-925/1,126	
Air volume	(m ³ /h)	1,500/1,500		1,500/1,500	
	(L/s)	417/417		417/417	
External static pressure	(mmH ₂ O)	13/13		13/13	
	(Pa)	127.4/127.4		127.4/127.4	
Temperature exchange efficiency (%)		75/75		—	
Enthalpy exchange efficiency (%)	Heating	66/66		—	
	Cooling	61/61		—	
Noise (dB) (measured at 1.5m under the center of Lossnay)		38-39/40		39.5-40.5/41.5	
Weight (kg)		175kg			
Starting current	Under 7.1A/6.7A	Insulation resistance	10M Ω or more (500V megger)	Withstand voltage	1500V AC, 1 minute

8. LGH-200RS2-E2



- Slim design ● Low noise design
- Straight-line air supply/exhaust system
- Can be mounted upside down ● One inspection space
- Bypass operation included
- Switch possible between two $\phi 250$ ducts for indoor air supply and exhaust (total of 4 ducts). This is when using two optional flange sets PZ-25FR.

LOSSNAY

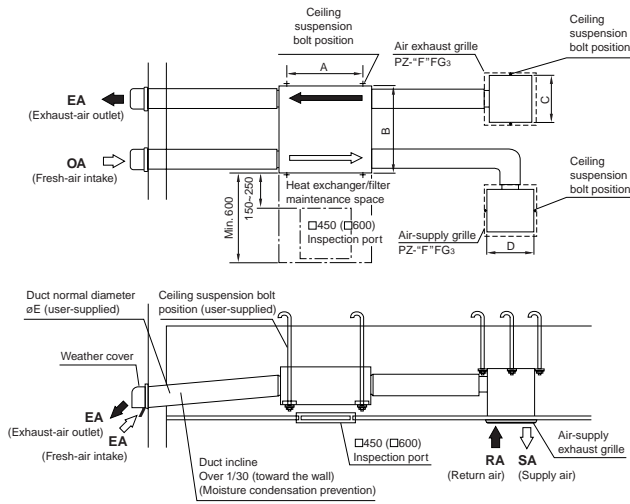


■ Specifications

Model		LGH-200RS2-E2			
Power source		Three phase 380-415V~50Hz/380V~60Hz			
Ventilation mode		Lossnay ventilation		Bypass ventilation	
Current (A)		1.9-1.9/2.7		1.8-1.8/2.9	
Input (W)		1,020-1,050/1,640		960-990/1,515	
Air volume	(m³/h)	2,000/2,000		2,000/2,000	
	(L/s)	556/556		556/556	
External static pressure	(mmH ₂ O)	15/15		15/15	
	(Pa)	147/147		147/147	
Temperature exchange efficiency (%)		75/75		—	
Enthalpy exchange efficiency (%)	Heating	66/66		—	
	Cooling	61/61		—	
Noise (dB) (measured at 1.5m under the center of Lossnay)		39.5-40.5/42		40.5-41.5/43	
Weight (kg)		194kg			
Starting current	Under 10A/8.9A	Insulation resistance	10MΩ or more (500V megger)	Withstand voltage	1500V AC, 1 minute

9. Installation Diagram

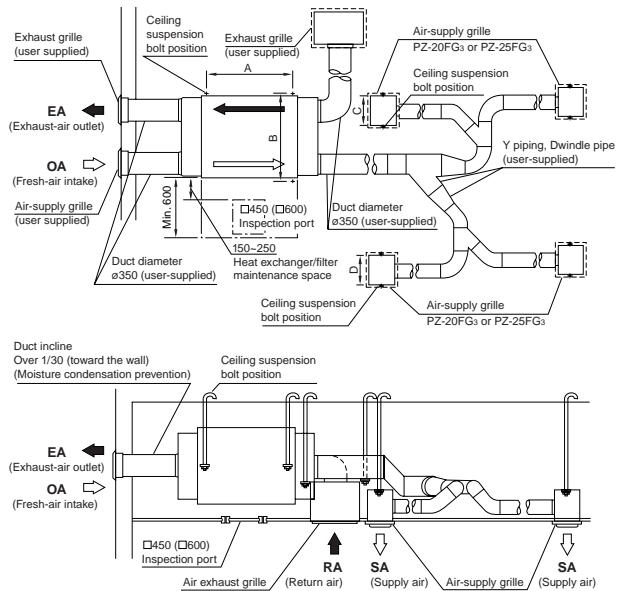
LGH-15RS2-E2~100RS2-E2



- An inspection port (□450 or □600) must be installed on the filter and Lossnay core removing side.
- Provide heat insulation to prevent moisture condensation along the two outside ducts (fresh-air intake and exhaust-air outlet).
- Ceiling installation hardware can be attached to the top of the unit.
- Do not use vent caps or round hoods in places directly exposed to rain.
- Humidifier and high-performance filter units can be installed in the middle of the air-supply duct.

	A	B	C	D	E	F
LGH-15RS2-E2	700	641	334	334	100	10
LGH-25RS2-E2	700	765	334	334	150	15
LGH-35RS2-E2	760	906	334	334	150	15
LGH-50RS2-E2	790	1,048	414	414	200	20
LGH-80RS2-E2	1,030	1,036	414	414	250	25
LGH-100RS2-E2	1,030	1,263	414	414	250	25

LGH-150RS2-E2, 200RS2-E2



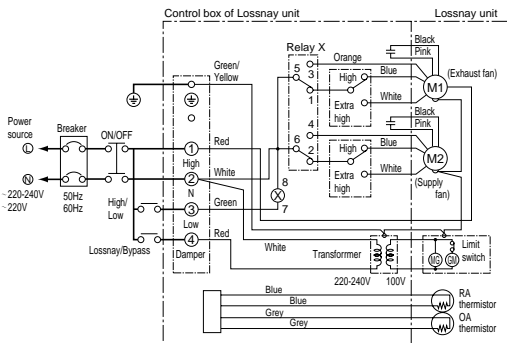
- An inspection port (□450 or □600) must be installed on the filter and Lossnay core removing side.
- Provide heat insulation to prevent moisture condensation along the two outside ducts (fresh-air intake and exhaust-air outlet).
- Where rain falls directly on the machinery, use the weather cover to prevent entry of rainwater.

	A	B	C	D
LGH-150RS2-E2	1,030	1,046	414	414
LGH-200RS2-E2	1,030	1,273	414	414

10. Wiring Diagram

LGH-15RS2-E2 ~ 100RS2-E2

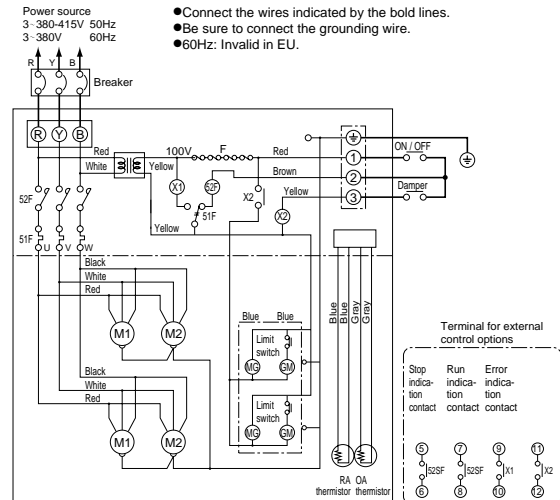
- Connect the wires indicated by the bold lines.
- Be sure to connect the grounding wire.
- 60Hz: Invalid in EU.



Breakers and control switches should be provided by the customer.
 ● Connect the thermistor when a Lossnay adaptor is used. For details, please refer to the installation instruction manual of the Lossnay adaptor.

LGH-150RS2-E2, 200RS2-E2

- Connect the wires indicated by the bold lines.
- Be sure to connect the grounding wire.
- 60Hz: Invalid in EU.



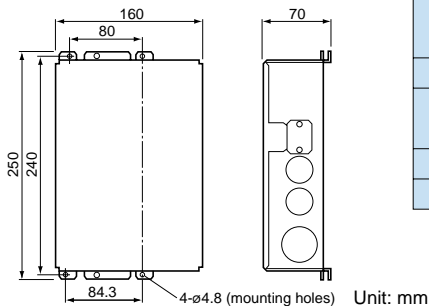
52F: Contactor 51F: Overcurrent relay M1, M2: Fan motor MG: Magnet GM: Damper motor
 X: Auxiliary relay Y: Transformer F: Thermal fuse for fan

11. Optional Parts

Lossnay Adaptor (PZ-53ADF-E)



External Dimensional Diagrams



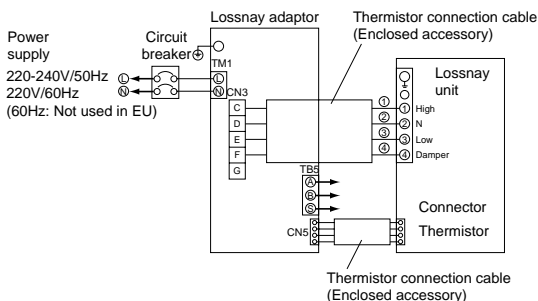
Specifications

Power supply	Single phase 220V-240V / 50Hz 220V / 60Hz (Not used in EU)
Electricity consumption	3 W
Operating conditions	Temperature: 0 - 40°C / Humidity: 80%RH or less (no condensation)
Weight	1.1 kg
Fan control capacity	5 A or less

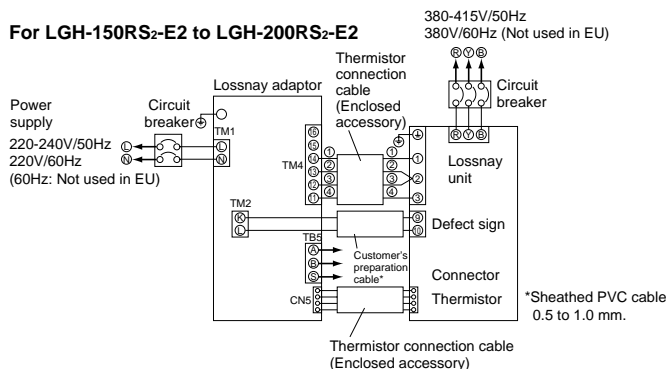


Connection Diagrams

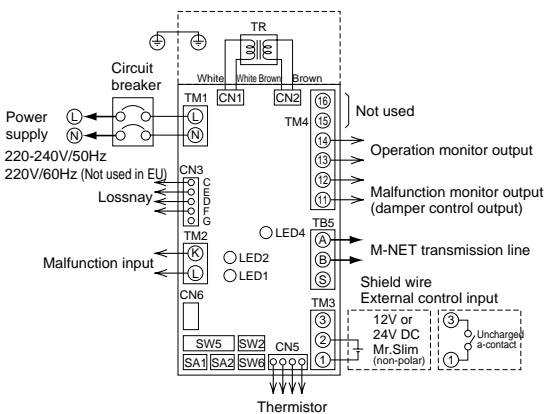
For LGH-15RS₂-E2 to LGH-100RS₂-E2



For LGH-150RS₂-E2 to LGH-200RS₂-E2



Wiring Diagrams



Meaning of symbols

Symbol	Name
SW2	Function selector dip switch
SW5	Function selector dip switch
SW6	Function selector dip switch
SA1	Address setting rotary switch (10 digit)
SA2	Address setting rotary switch (1 digit)
CN1	Connector (transformer, primary side)
CN2	Connector (transformer, secondary side)
CN3	Connector (for connection with Lossnay)
CN5	Connector (for connection with thermistor)
TR	Control circuit transformer
TM1	Terminal block (power supply input)
TM2	Terminal block (malfunction input)
TM3	Terminal block (external control input)
TM4	Terminal block (monitor output, malfunction monitor output, damper control output)
TB5	Terminal block (transmission line connection: 2 non-polar lines)
LED1	Inspection display lamp (green)
LED2	Inspection display lamp (red)
LED4	Inspection display lamp (red)

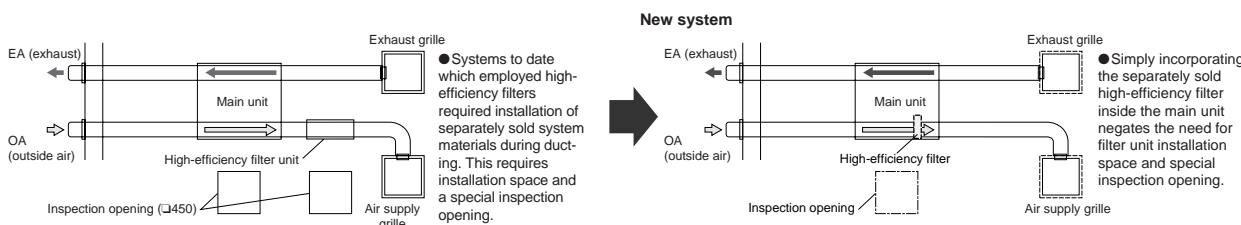
High-efficiency Filter

This high-efficiency filter (with 65% colorimetricity) can be incorporated inside the Lossnay unit without the need to attach parts from other systems, as done to date. The main unit external dimensions are unchanged, and processing capacity ranges between 150m³/h and 2,000m³/h.

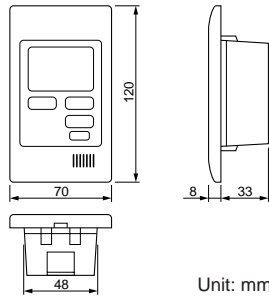


Incorporation into the main unit is simple, and filter changes can be performed via the main unit inspection opening.

System design and operation incorporating the high-efficiency filter is simple



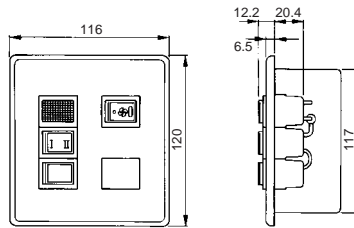
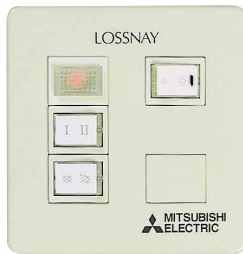
Control Switch (PZ-52SF-E)



Unit: mm

Source power requirement	Input voltage 17VDC - 30VDC, 0.02A Power received from an outdoor unit or a power supply unit via M-NET transmission line.	
Interface condition for transmission line	M-NET transmission line: 30VDC+AMI signal (±5VDC)	
Number of M-NET controlled Lossnay unit controlled by PZ-52SF-E	1 - 16	
Environmental condition	Temperature	Operating 0 - 40°C Non operating 0 - 70°C
	Humidity	30 - 90%RH (No condensation)
Dimensions	120 (High) × 70 (Width) × 8 (Depth) mm	
Weight	0.12 kg	

Control Switch (PZ-05SLB₂-CE)



Unit: mm

Optional Parts List

Parts Model	Switch	Interlocking system		Air supply exhaust grille (sound muffler type)	Sound muffler box	Branching duct	Duct conversion attachment	Vent cap	Weather cover	Round hood	Flange set (duct connection for ø250)	Spare filter	High efficiency filter			
		Adaptor	Switch													
LGH-15RS2-E2	PZ-05SLB ₂ -CE	PZ-53ADF-E	PZ-52SF-E	PZ-10FG ₃	—	—	—	PZ-10BCA ₄	PZ-10CV	PZ-10FA ₃	—	PZ-15RF ₅	PZ-15RFM			
LGH-25RS2-E2				PZ-15FG ₃	—	PZ-15Y	PZ-15A	PZ-15BCA ₄	PZ-15CV	PZ-15FA ₃		PZ-25RF ₅	PZ-25RFM			
LGH-35RS2-E2				PZ-20FG ₃	PZ-20SB ₂	PZ-20Y	PZ-20A ₂	PZ-20BCA ₄	PZ-20CV	PZ-20FA ₃		PZ-35RF ₅	PZ-35RFM			
LGH-50RS2-E2				PZ-25FG ₃	PZ-25SB ₂	PZ-25Y	PZ-25A	PZ-25BCD	PZ-25VS	PZ-25FS ₄		PZ-50RF ₅	PZ-50RFM			
LGH-80RS2-E2				Custom preparation	—	—	—	—	—	—		—	—	PZ-25FR	PZ-80RF ₅	PZ-80RFM*
LGH-100RS2-E2															PZ-100RF ₅	PZ-100RFM
LGH-150RS2-E2	PZ-150RF ₅ *	PZ-150RFM*														
LGH-200RS2-E2											PZ-200RF ₅ *	PZ-200RFM*				

*2 sets are necessary.