

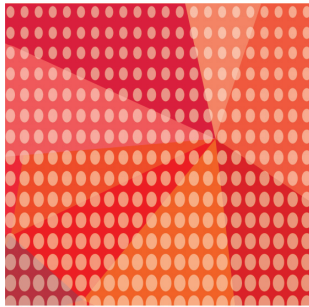
AIR CONDITIONING SYSTEMS



DATA BOOK

MODEL

LGH-F-RVX-E



LGH-F-RVX-E

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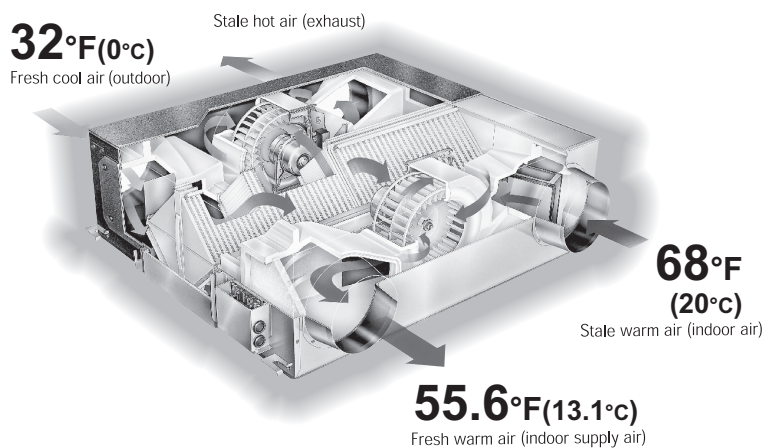
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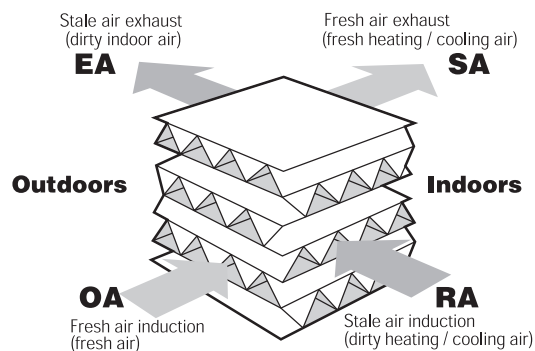
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Lossnay is a perfect combination of heat recovery and ventilation, which is a leading edge product in the ventilation and air-conditioning field.

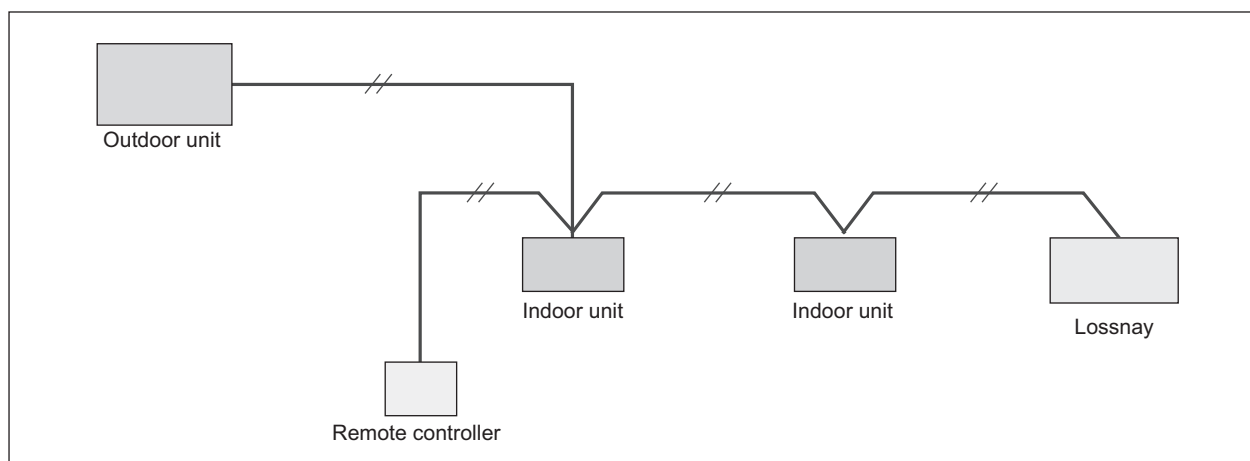
The Lossnay core is a special preserved paper made cross-flow and plate-fin structure, which is referable below.



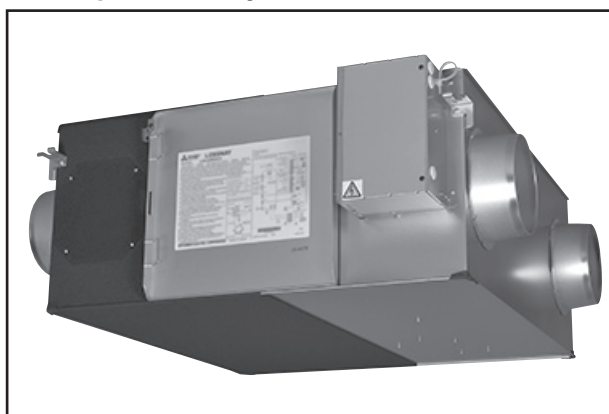
* LGH-F300RVX-E (Fan speed 4)



CITY MULTI can combine Lossnay into the air conditioning system, performing the best solution to ventilation and air-conditioning.

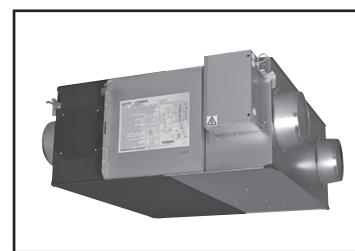
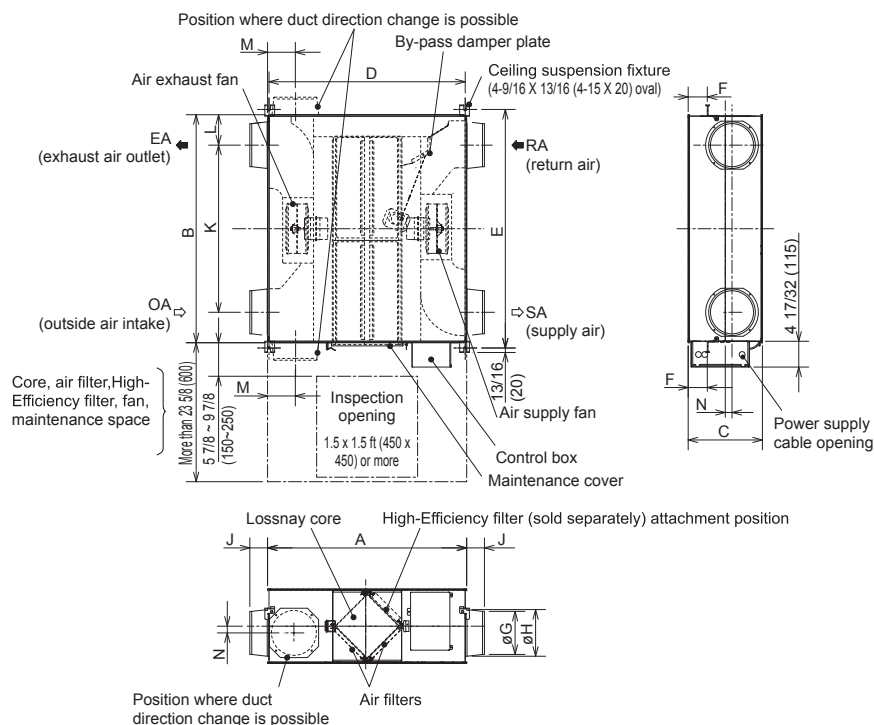


Line up of Lossnay units



LGH-F300RVX-E	300cfm	1-phase 208-230V, 60Hz
LGH-F470RVX-E	470cfm	1-phase 208-230V, 60Hz
LGH-F600RVX-E	600cfm	1-phase 208-230V, 60Hz
LGH-F1200RVX-E	1200cfm	1-phase 208-230V, 60Hz

LGH-F300 to F600RVX-E



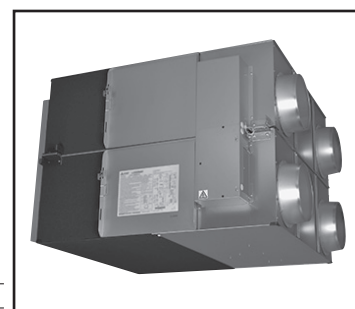
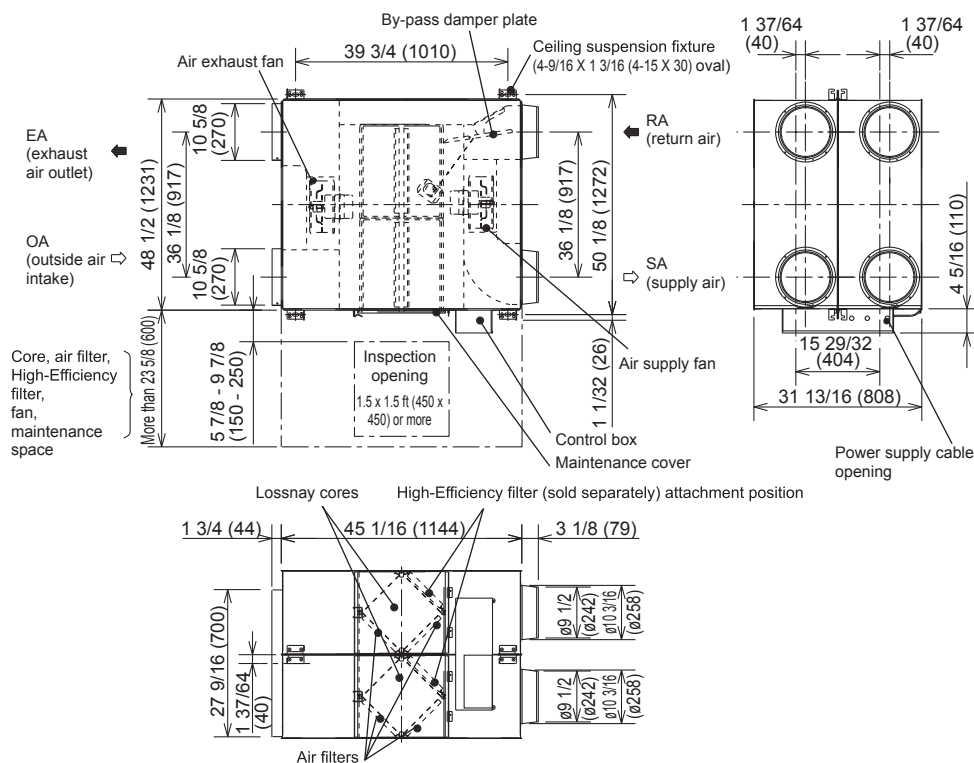
Accessory parts

- Mounting small screws for duct flangesx16
- Mounting large screws for ceiling suspension fixture.....x4
- Duct connecting flangesx4
- Screw capx6
- Slim-Lossnay connection cable (gray: two wires)x1

Unit: Inch (mm)

Model	Dimensions			Ceiling suspension fixture pitch			Nominal diameter	Duct connecting flange			Duct pitch				Weight lbs (kg)
	A	B	C	D	E	F		G	H	J	K	L	M	N	
LGH-F300RVX-E	34 15/16 (888)	40 (1016)	13 1/32 (331)	34 1/2 (875)	41 7/8 (1063)	3 11/32 (85)	7 7/8 (200)	7 9/16 (192)	8 3/16 (208)	3 1/8 (79)	29 3/8 (745)	5 5/16 (135.5)	4 7/8 (124)	1 3/16 (30)	75 (34)
LGH-F470RVX-E	45 1/16 (1144)	39 1/2 (1004)	15 29/32 (404)	44 17/32 (1131)	41 3/8 (1051)	3 1/32 (77)	9 7/8 (250)	9 1/2 (242)	10 3/16 (258)	3 1/8 (79)	27 3/16 (690)	6 3/16 (157)	6 1/2 (165)	1 37/64 (40)	110 (50)
LGH-F600RVX-E	45 1/16 (1144)	48 1/2 (1231)	15 29/32 (404)	44 17/32 (1131)	50 5/16 (1278)	3 1/32 (77)	9 7/8 (250)	9 1/2 (242)	10 3/16 (258)	3 1/8 (79)	36 1/8 (917)	6 3/16 (157)	6 1/2 (165)	1 37/64 (40)	123 (56)

LGH- F1200RVX-E

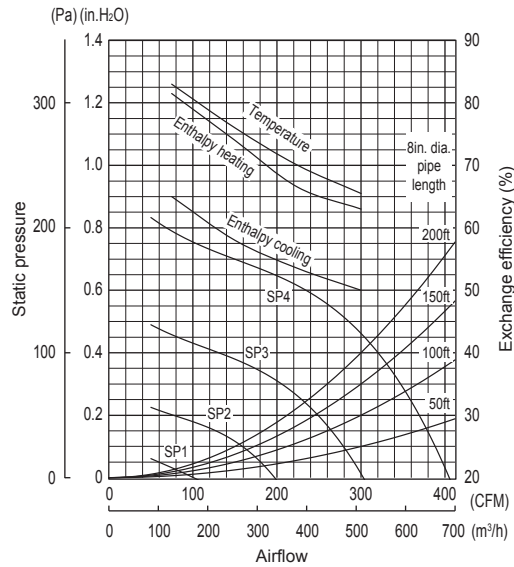


Accessory parts

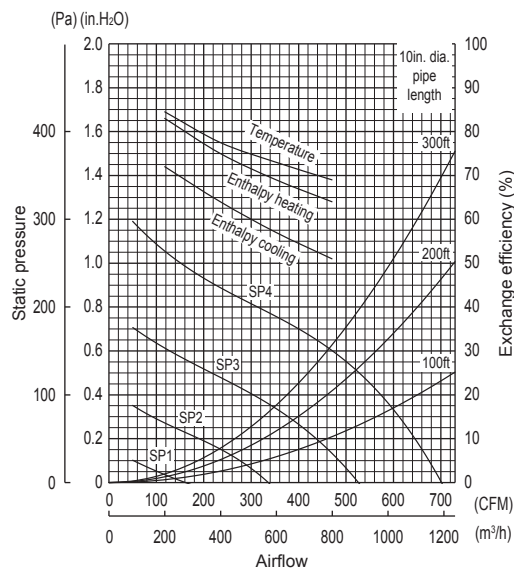
- Mounting small screws for duct flangesx16
- Duct connecting flangesx4
- Screw capx6
- Slim-Lossnay connection cable (gray: two wires)x1

Weight lbs (kg): 251 (114)
Unit: Inch (mm)

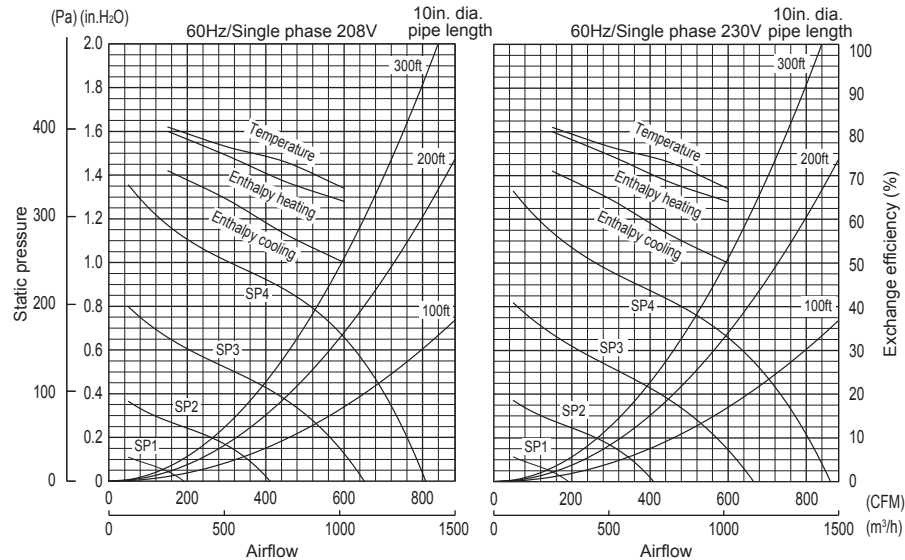
LGH-F300RVX-E



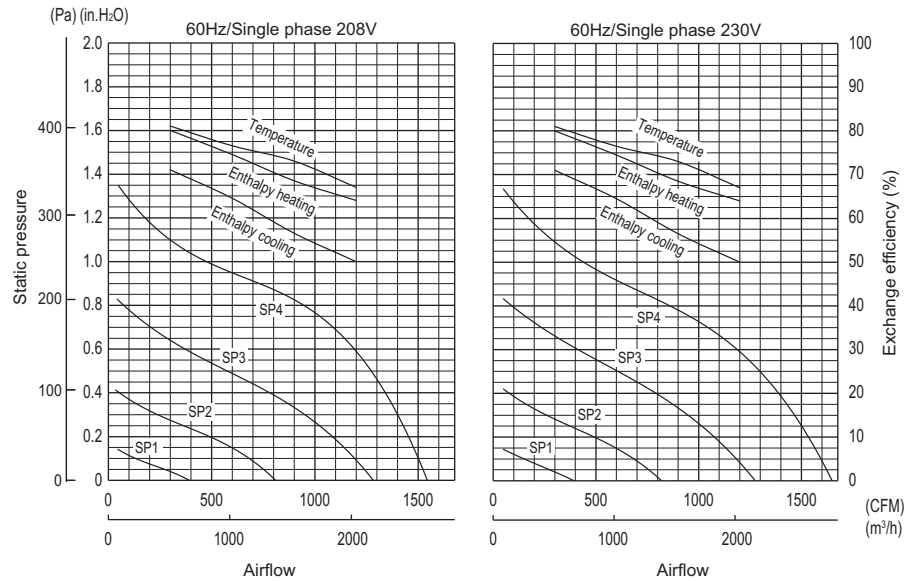
LGH-F470RVX-E



LGH-F600RVX-E



LGH-F1200RVX-E



LGH-F300RVX-E

Model			LGH-F300RVX-E								
Electrical power supply			Single phase 208-230V/60Hz								
Ventilation mode			Heat recovery mode				Bypass mode				
Fan speed			SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	
Running current (A)			1.17-1.06	0.64-0.55	0.33	0.22	1.17-1.10	0.64-0.59	0.33	0.22	
Input power (W)			155	78	32	12	155	81	35	14	
Airflow		(CFM)	300	225	150	75	300	225	150	75	
		(m³/h)	510	382	255	127	510	382	255	127	
		(W/CFM)	0.52	0.35	0.21	0.16	0.52	0.36	0.23	0.19	
		(in.H₂O)	0.46	0.26	0.12	0.03	0.46	0.26	0.12	0.03	
External static pressure			(Pa)	115	65	29	8	115	65	29	8
Exchange efficiency (%)	Temperature		65.5	70.0	76.0	83.0	—	—	—	—	
	Enthalpy	Heating	63.0	66.5	74.0	81.5	—	—	—	—	
		Cooling	50.0	53.5	58.0	65.0	—	—	—	—	
Noise (dB) (Measured at 59in. (1.5m) under the center of the unit in an anechoic chamber.)			34.0	28.0	22.0	18.0	35.0	29.0	22.0	18.0	
Insulation resistance			10MΩ or more								
Dielectric strength			AC 1000V 1 minute								
Maximum current (A)			2.05								

*The noise level at 59in. (1.5m) away from outlets in the 45° direction is about 18dB greater than the indicated value at fan speed 4.

*The running current, the input power, the efficiency and the noise are based on the rating airflow and 208-230V/60Hz.

LGH-F470RVX-E

Model		LGH-F470RVX-E								
Electrical power supply		Single phase 208-230V/60Hz								
Ventilation mode		Heat recovery mode				Bypass mode				
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	
Running current (A)		2.15	1.20	0.64	0.39	2.28	1.23	0.66	0.39	
Input power (W)		348	176	89	31	365	184	94	34	
Airflow	(CFM)	470	353	235	118	470	353	235	118	
	(m³/h)	799	599	399	200	799	599	399	200	
	(W/CFM)	0.74	0.50	0.38	0.26	0.78	0.52	0.40	0.29	
	(in.H₂O)	0.60	0.34	0.15	0.04	0.60	0.34	0.15	0.04	
External static pressure		(Pa)	150	84	38	9	150	84	38	9
Exchange efficiency (%)	Temperature	69.0	73.0	77.5	84.5	—	—	—	—	
	Enthalpy	Heating	64.0	69.0	75.0	83.0	—	—	—	—
		Cooling	51.0	57.0	64.0	72.0	—	—	—	—
Noise (dB) (Measured at 59in. (1.5m) under the center of the unit in an anechoic chamber.)		34.5	30.0	23.0	18.0	36.0	30.0	23.0	18.0	
Insulation resistance		10MΩ or more								
Dielectric strength		AC 1000V 1 minute								
Maximum current (A)		3.10								

*The noise level at 59in. (1.5m) away from outlets in the 45° direction is about 24dB greater than the indicated value at fan speed 4.

*The running current, the input power, the efficiency and the noise are based on the rating airflow and 208-230V/60Hz.

LGH-F600RVX-E

Model			LGH-F600RVX-E								
Electrical power supply			Single phase 208-230V/60Hz								
Ventilation mode			Heat recovery mode				Bypass mode				
Fan speed			SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	
Running current (A)			2.70	1.40	0.68	0.28	2.85	1.45	0.72	0.30	
Input power (W)			438	210	95	34	455	225	103	37	
Airflow		(CFM)	600	450	300	150	600	450	300	150	
		(m³/h)	1019	765	510	255	1019	765	510	255	
		(W/CFM)	0.73	0.47	0.32	0.23	0.76	0.50	0.34	0.25	
		(in.H₂O)	0.66	0.37	0.16	0.04	0.66	0.37	0.16	0.04	
External static pressure			(Pa)	164	93	41	11	164	93	41	11
Exchange efficiency (%)	Temperature		67.0	73.0	76.5	81.0	—	—	—	—	
	Enthalpy	Heating	64.0	68.5	74.5	80.0	—	—	—	—	
		Cooling	50.0	56.5	64.5	71.0	—	—	—	—	
Noise (dB) (Measured at 59in. (1.5m) under the center of the unit in an anechoic chamber.)			37.0	31.0	23.0	18.0	38.0	32.0	24.0	18.0	
Insulation resistance			10MΩ or more								
Dielectric strength			AC 1000V 1 minute								
Maximum current (A)			3.45								

*The noise level at 59in. (1.5m) away from outlets in the 45° direction is about 21dB greater than the indicated value at fan speed 4.

*The running current, the input power, the efficiency and the noise are based on the rating airflow and 208-230V/60Hz.

LGH-F1200RVX-E

Model		LGH-F1200RVX-E								
Electrical power supply		Single phase 208-230V/60Hz								
Ventilation mode		Heat recovery mode				Bypass mode				
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	
Running current (A)		5.40	2.80-2.45	1.35-1.16	0.60	5.40	2.55	1.26	0.65	
Input power (W)		880	440	200	80	880	440	210	85	
Airflow	(CFM)	1200	900	600	300	1200	900	600	300	
	(m³/h)	2039	1529	1019	510	2039	1529	1019	510	
	(W/CFM)	0.73	0.49	0.33	0.27	0.73	0.49	0.35	0.28	
External static pressure	(in.H ₂ O)	0.59	0.33	0.15	0.04	0.59	0.33	0.15	0.04	
	(Pa)	147	83	37	10	147	83	37	10	
	Exchange efficiency (%)	Temperature	67.0	73.0	76.5	81.0	—	—	—	—
Enthalpy		Heating	64.0	68.5	74.5	80.0	—	—	—	—
		Cooling	50.0	56.5	64.5	71.0	—	—	—	—
Noise (dB) (Measured at 59in. (1.5m) under the center of the unit in an anechoic chamber.)		41.0	36.0	28.0	19.5	42.0	36.0	28.0	19.5	
Insulation resistance		10MΩ or more								
Dielectric strength		AC 1000V 1 minute								
Maximum current (A)		6.40								

*The noise level at 59in. (1.5m) away from outlets in the 45° direction is about 20dB greater than the indicated value at fan speed 4.

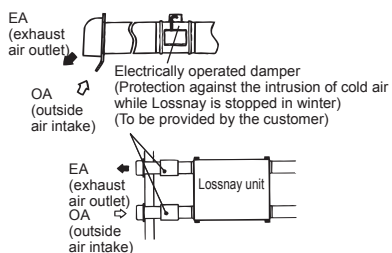
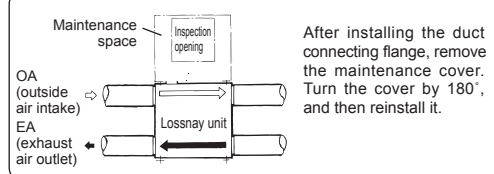
*The running current, the input power, the efficiency and the noise are based on the rating airflow and 208-230V/60Hz.

• Duct length

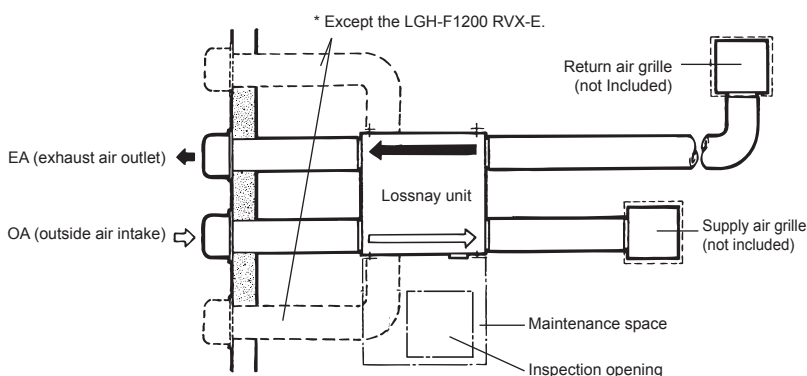
Model	Distance
LGH-F300RVX-E	3.3 ft (1 m) or more
LGH-F470 and F600RVX-E	8.2 ft (2.5 m) or more
LGH-F1200RVX-E	9.8 ft (3 m) or more

- The parts can also be installed upside down. Remove the maintenance cover, rotate the parts by 180°, and re-install.

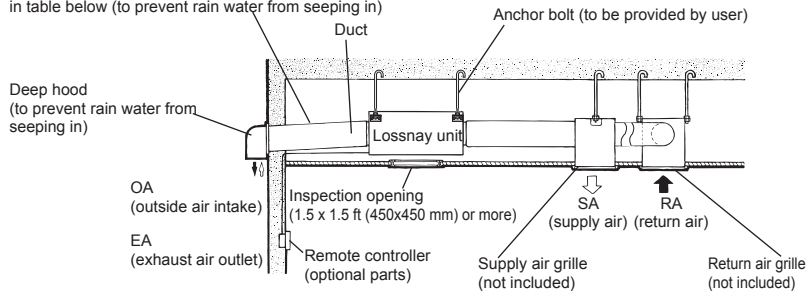
* It can be installed by inverting the top and the bottom.



- In a region where there is risk of freezing in winter, it is recommended to install an Electrically operated damper, or the like, in order to prevent the intrusion of (cold) outdoor air while Lossnay is stopped.

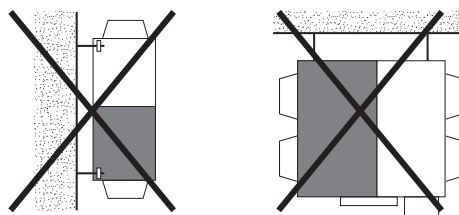


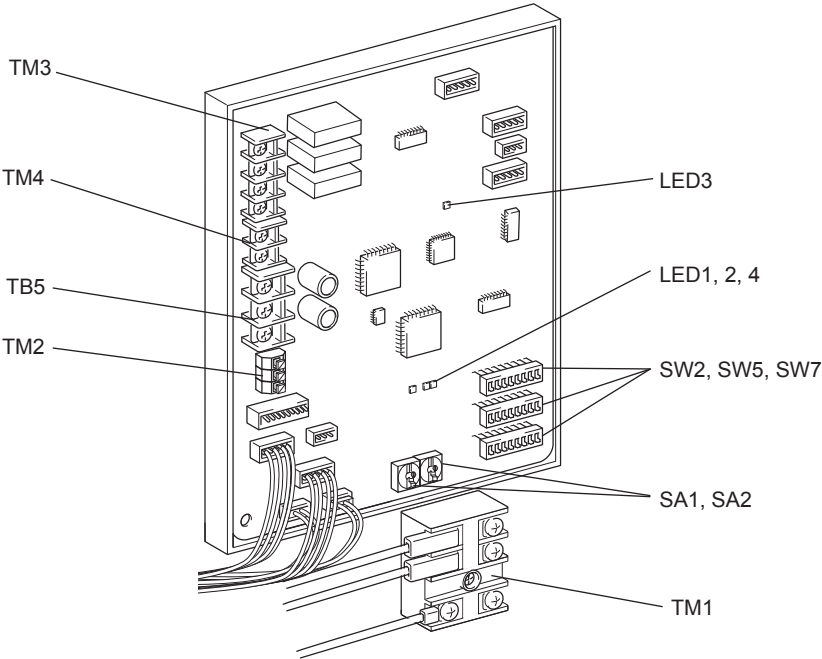
Downward gradient of duct:
1/30 or more (toward wall side) and provision of distance
in table below (to prevent rain water from seeping in)



⚠ CAUTION

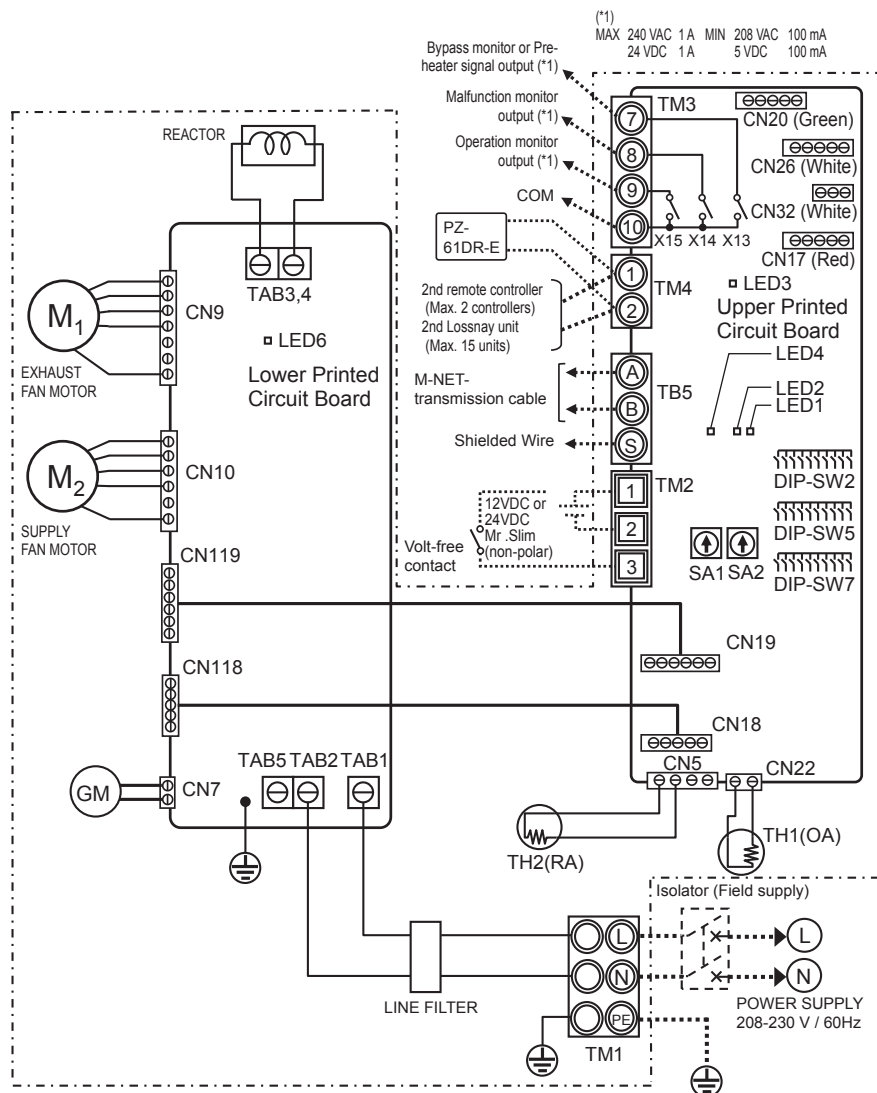
- Do not install Lossnay unit vertically or on an incline.





- * TM1, TM2, TM3, TM4, TB5 shown in dotted lines are field work.
- * Be sure to connect the ground wire.
- * A power supply isolator must be installed.
- * Always use an isolator for the main switch power connection.
- * Select proper circuit breaker according to the electrical current information in the chart below.

Model		LGH-F300RVX-E	LGH-F470RVX-E	LGH-F600RVX-E
Maximum current when operating [A]		2.05	3.10	3.45
Inrush current after power supply ON [A]	10 ms	6.1		
	100 ms	3.6		

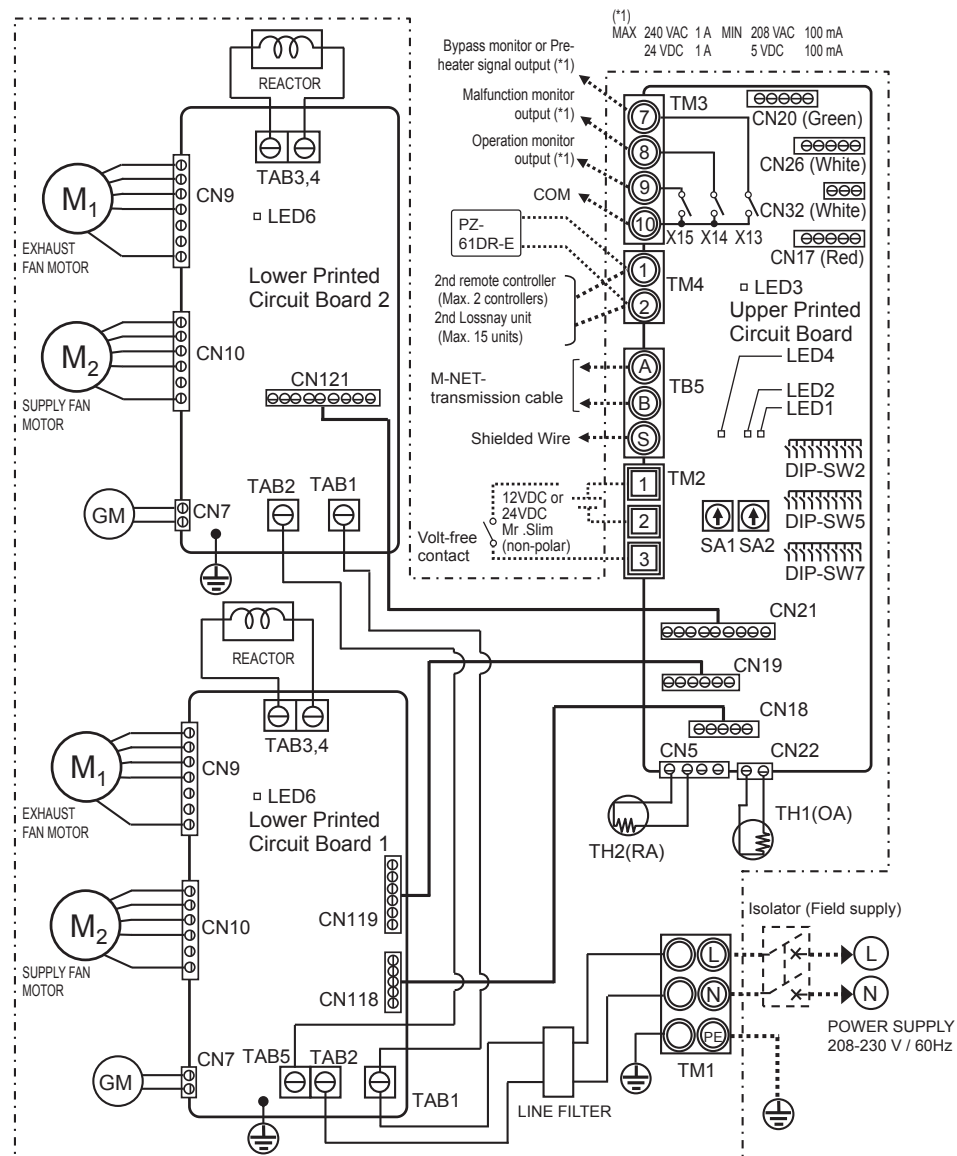


M1: Motor for exhaust fan	X13: Relay contact	CN22: Connector (Thermistor OA)
M2: Motor for supply fan	X14: Relay contact	CN26: Connector (By-pass, 0 - 10 VDC Fan speed control)
GM: Motor for By-pass damper	X15: Relay contact	CN32: Connector (Remote control selection)
TH1: Thermistor for outside air	CN5: Connector (Thermistor RA)	SA1: Address setting rotary switch (10 digit)
TH2: Thermistor for return air	CN7: Connector (Motor for By-pass damper)	SA2: Address setting rotary switch (1 digit)
SW2, 5, 7: Switch (Function selection)	CN9: Connector (Fan motor)	LED1 to LED3: Inspection indicator lamp
TM1: Terminal block (Power supply)	CN10: Connector (Fan motor)	LED4, LED6: Power supply indicator lamp
TM2: Terminal block (External control input)	CN17: Connector (Fan speed 1/2/3/4)	SYMBOL  : Terminal block
TM3: Terminal block (Monitor output)	CN18: Connector	 : Connector on PCB
TM4: Terminal block (Transmission cable)	CN118: Connector	
TB5: Terminal block (M-NET Transmission cable)	CN19: Connector	
TAB1, TAB2, (TAB5): Connector (Power supply)	CN119: Connector	
TAB3, TAB4: Connector (Reactor)	CN20: Unused	

Wire connection diagram ----- Model LGH-F1200RVX-E

- * TM1, TM2, TM3, TM4, TB5 shown in dotted lines are field work.
- * Be sure to connect the ground wire.
- * A power supply isolator must be installed.
- * Always use an isolator for the main switch power connection.
- * Select proper circuit breaker according to the electrical current information in the chart below.

Model	LGH-F1200RVX-E	
Maximum current when operating [A]	6.40	
Inrush current after power supply ON [A]	10 ms	12.2
	100 ms	7.2

**Definition of symbols**

M1: Motor for exhaust fan	X13: Relay contact	CN21: Connector
M2: Motor for supply fan	X14: Relay contact	CN121: Connector
GM: Motor for By-pass damper	X15: Relay contact	CN22: Connector (Thermistor OA)
TH1: Thermistor for outside air	CN5: Connector (Thermistor RA)	CN26: Connector (By-pass, 0 - 10 VDC Fan speed control)
TH2: Thermistor for return air	CN7: Connector (Motor for By-pass damper)	CN32: Connector (Remote control selection)
SW2, 5, 7: Switch (Function selection)	CN9: Connector (Fan motor)	SA1: Address setting rotary switch (10 digit)
TM1: Terminal block (Power supply)	CN10: Connector (Fan motor)	SA2: Address setting rotary switch (1 digit)
TM2: Terminal block (External control input)	CN17: Connector (Fan speed 1/2/3/4)	LED1 to LED3: Inspection indicator lamp
TM3: Terminal block (Monitor output)	CN18: Connector	LED4, LED6: Power supply indicator lamp
TM4: Terminal block (Transmission cable)	CN118: Connector	SYMBOL ○ □ : Terminal block
TB5: Terminal block (M-NET Transmission cable)	CN19: Connector	Ⓢ : Connector on PCB
TAB1, TAB2, TAB5: Connector (Power supply)	CN119: Connector	
TAB3, TAB4: Connector (Reactor)	CN20: Unused	



for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

⚠ Warning

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
 - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, repair, or at the time of disposal of the unit.
 - It may also be in violation of applicable laws.
 - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R410A.

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