

Submittal Data: LGH-F1200RVXT2-E

Energy Recovery Ventilator

Job Name:	Location:
Schedule Reference:	Submitted By:
Submitted To:	Reference: Approval: Construction:
Engineer:	Date: Application:



Images provided for reference purposes only

- Lossnay® cross-flow energy recovery core
- Operation Mode available are Heat Recovery, Bypass or Auto
- Minimal cross contamination (<1% overall) between entering and leaving air streams
- Stand alone or interlocks with all Mitsubishi product
- External input bypass damper control
- Mult-ventilation modes
- M-Net or Stand-alone control

Specifications:

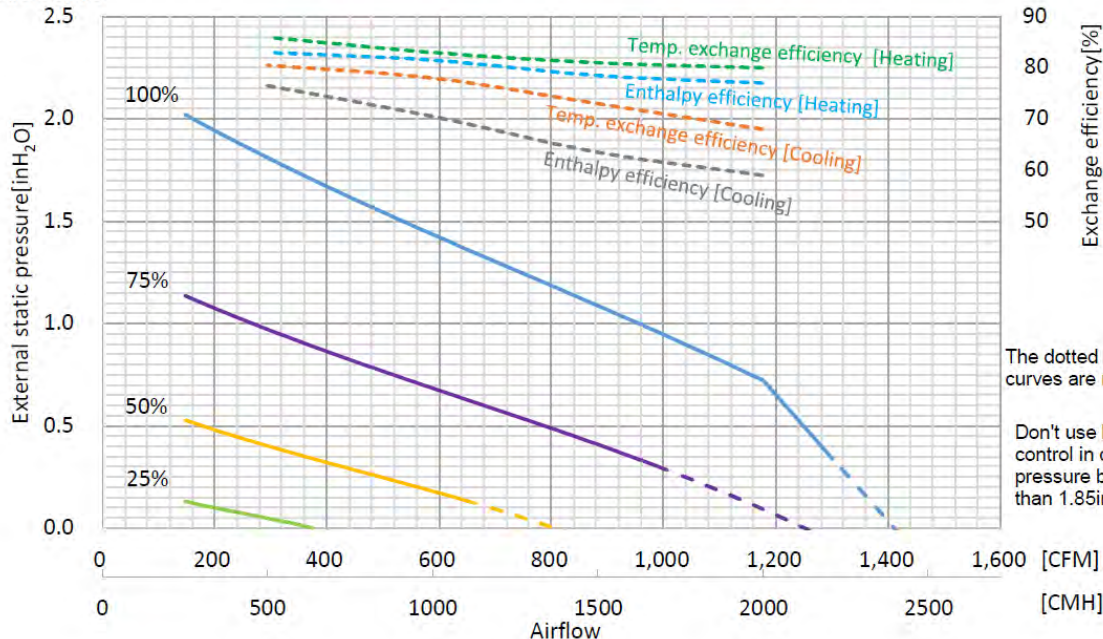
Capacity	CFM (m ³ /hr)	1177 (2000)
Power Source		208-240 V Three-phase 60 Hz
Maximum Power Consumption	kW	1.01 - 1.00
Power Consumption	kW	0.055 - 0.19 - 0.491 - 1.012
Current (208-240V) (L1) (L2) (L3)	A	(3.4-3.0) (3.4-3.0) (4.8-4.2)
Minimum Circuit Ampacity (MCA) ¹	A	6.0
Maximum Overcurrent Protection (MOCP)	A	15
Air Volume	CFM	294 - 589 - 883 - 1177
Temperature Recovery Efficiency (Heating)	%	86.0 - 83.0 - 81.0 - 80.0
Temperature Recovery Efficiency (Cooling)	%	80.5 - 78.0 - 73.0 - 68.0
Enthalpy Recovery Efficiency (Heating)	%	83.0 - 81.5 - 78.5 - 77.0
Enthalpy Recovery Efficiency (Cooling)	%	76.5 - 70.5 - 63.5 - 59.0
Noise Level	dB(A)	20.5 - 28.0 - 35.0 - 40.5
External static pressure	In. W.G	0.05 - 0.18 - 0.41 - 0.72
External Finish		Galvanized steel sheet
Unit Dimensions	W: In. (mm)	78 47/64 (2000)
	D: In. (mm)	65 1/8 (1654)
	H: In. (mm)	16 57/64 (429)
Net Weight	Lbs. (kg)	393 / 178
Energy Transfer (Lossnay® core)	Special treated paper plate heat exchanger	
Heat Exchange System	Air-to-air total heat exchange (sensible heat + latent heat)	
Heat Exchange Material	Partition, spacing plate-cellulose fiber membrane	
Blower	9 5/8 in. (245 mm) dia. centrifugal fan	
Motor	EC motor	
Filter	Non-woven fabrics filter (MERV 7, ISO Coarse 65% (ISO 16890:2016))	
Entering Air Temperature Operation Range	14° F to 104° F (-10° C to 40° C), RH 80% or less	
Model No.	Description: (Optional Accessories)	
PZ-250TRFA-E	MERV 7 Filter	
PZ-250TPF-E	MERV 16 Filter	
PZ-62DR-EA	Remote Controller	
PZ-70CSW-E	CO2 Sensor, Wall-mounted	
PZ-70CSD-E	CO2 Sensor, Duct-mounted	
PZ-4GS-E	Signal Output	

Note:

1. All electrical work shall comply with National (CEC) and local codes and regulations.
 2. Fan Speed: extra low - low - high - extra high @ 208V - 230V.
 3. Low temperature operation with field installed insulated duct, see local sales rep for details.
 4. Ventilation air to be introduced independent of or in series with VRF indoor units. Please refer to local codes for the required ventilation rates specific to the application.
 5. Mitsubishi Electric Sales Canada Inc. (MESCA) supports the use of only MESCA supplied and approved components and accessories for proper functioning of the unit(s). Use of non - MESCA supported components and accessories will affect warranty coverage.
- MESCA recommends
- (A) consideration of all applicable design and application parameters and requirements specific to any project; and
- (B) implementation of any countermeasures needed to address those parameters and requirements, wherever applicable.
6. All components of the system must be compatible. For more details on system control compatibility, please refer to Technical Bulletin 100-151 available on our website.
- NOTE: Items denoted in this submittal by an asterisk (*) are provided as specific instances or examples of system compatibility, and are not intended to represent a complete or exhaustive list of compatibility requirements.
7. Should any person change this document in any manner whatsoever without MESCA's written permission, the document shall be of no force and effect and any change shall be deemed to be a representation and warranty made by that person and not MESCA. That person, and not MESCA, shall assume full responsibility for the consequences of such changes. MESCA assumes no responsibility for any consequences in such cases.

Fan Characteristics Curves:

■ Characteristic curve



The dotted lines of fan curves are reference values.

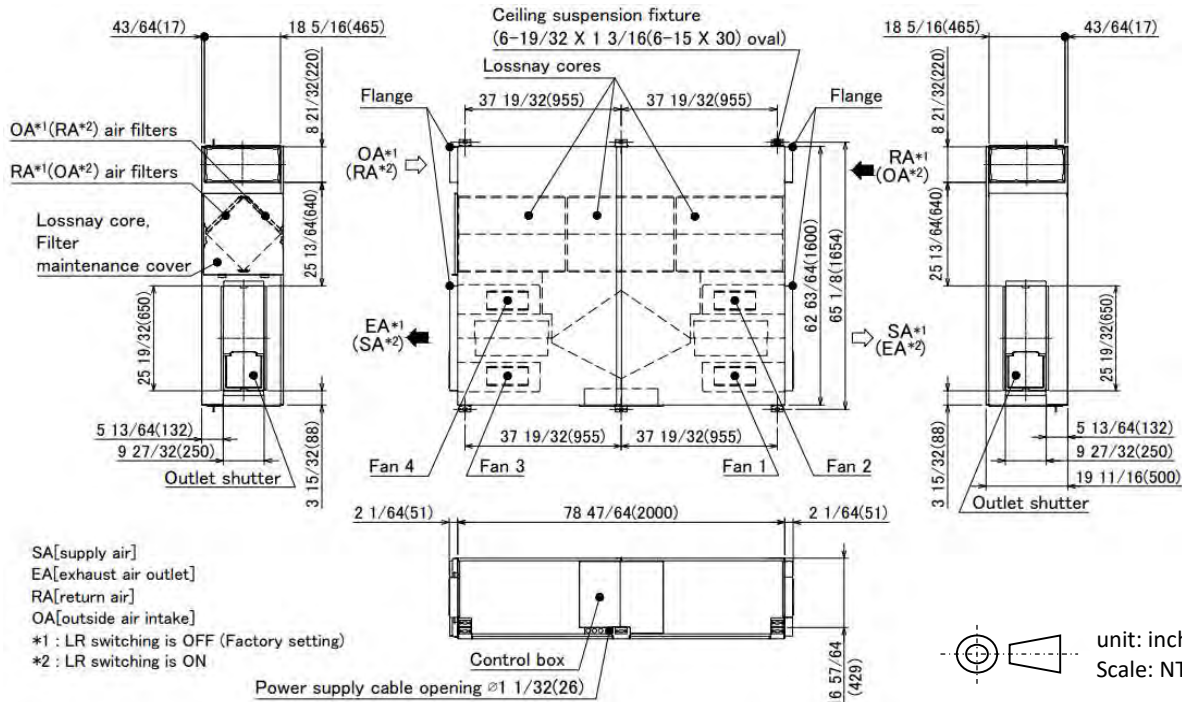
Don't use leader-follower control in case static pressure become more than 1.85inH₂O (460Pa).

■ Attention

1. The input power, the efficiency and the noise are based on the rating air volume, 208V/60Hz.
Noise (A-weighted sound pressure level) is measured 1.6yd (1.5m) off from the center of the unit in an anechoic chamber.
2. Heat recovery ventilation mode starts automatically while detecting OA temperature lower than 47°F(8°C), even Bypass mode is selected. Remote controller continues to display "Bypass ventilation" in this case.
3. Do not use the booster fan to exceed airflow rate/pressure shown in Q-H diagram of the unit.
4. In bypass mode, the maximum air flow is 70% of heat recovery mode. See "Bypass operation" section for more detail.
5. Power supply must be connected to 3 phase power line but the unit uses it as 2 lines of single phase power. See "Wiring diagram" section for more detail.
6. It is prohibited to use the unit where salt, sulphur or hot spring steam damage is expected.
7. Do not use with acid, alkalis, organic solvent, oil mist, paint, or harmful gas as pesticide, corrosive gas, etc.
8. In cold area or strong wind area, outdoor air may enter the unit because of the pressure difference or external wind even when the unit stops. It is recommended to install an electrically damper to block outdoor air in such cases.
9. Avoid to install air inlets and outlets where insects are likely to gather like a place near interior or exterior lights. In that case, select hoods or louvers which have repellent net.

※Specifications may be subject to change without notice.

Unit Outline and Dimensions:

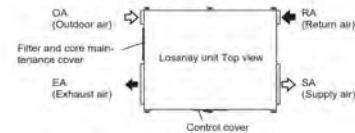


■ LR switching

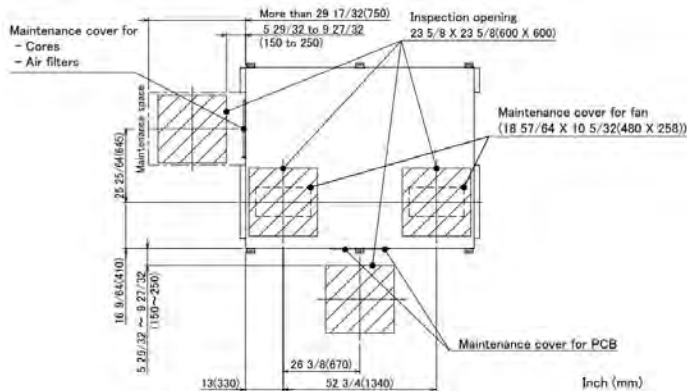
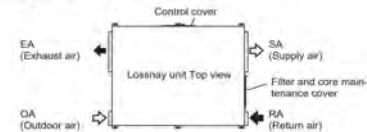
FRVXT2 can not be installed up-side-down.

Instead, it has the function to be able to change air path for supply side and exhaust side to be opposite.

LR switching is OFF (Factory setting)



LR switching is ON



■ Caution for installation

- Do not modify the unit as it may cause malfunction.
- Install the anchor bolts to ensure the product's weight or earthquake load. Correctly rated wire/chain may also be used.
- Leave sufficient space and make inspection opening for the filter and Lossnay core removal side for maintenance purpose.
- The unit shall be installed horizontally. In each case, the tolerance is $\pm 0.5"$.
- Take care in locating air inlet to prevent intake of dirty air or disgusting smell from exhaust gas of factory, air from rubbish disposal, etc.
- Take care as below to prevent from condensation.
 - The outdoor side (OA, EA) and SA ducts must be heat-insulated in order to prevent from condensation.
 - If the ambient temperature around the Lossnay unit is close to outdoor condition, it is recommended to insulate RA and SA ducts and additional insulation foam on the unit surface.
 - Condensation and freezing may occur on the Lossnay unit surface, because of the outdoor air condition or humidity condition above the ceiling. A supplemental insulation foam for the unit surface is necessary in that case.
 - When the supply air is set twice as much as the exhaust air or more by airflow function, the Lossnay body indoor side and SA duct must be put additional insulation. Without additional insulation, it could cause condensation and water drop from the unit.
- Do not install this product in a place where it is exposed to ultraviolet light. UV may damage covering insulation.
- Outdoor air may enter the Lossnay owing to the pressure difference between indoor and outdoor or external winds even when the product is not operated. It is recommended to install an electrically operated damper to block the outdoor air.
- Install louvers or covers for OA inlet & EA outlet to prevent rainwater from entering the Lossnay unit. The outdoor side duct (OA and EA) shall decline by 1/30 or more downward to outdoor.
- When RA duct is not installed and RA is suctioned directly from the unit surrounding space, a repellent net is necessary for the RA inlet to prevent large size dust or something from intruding into the unit.
- Take precautions when using the product in a quiet location.
- Do not use under high temperature and humidity condition. Condensation will occur and water will gather inside the Lossnay cores under high temperature and humidity condition, such as warm swimming pool, bathroom, greenhouse or foggy place.

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