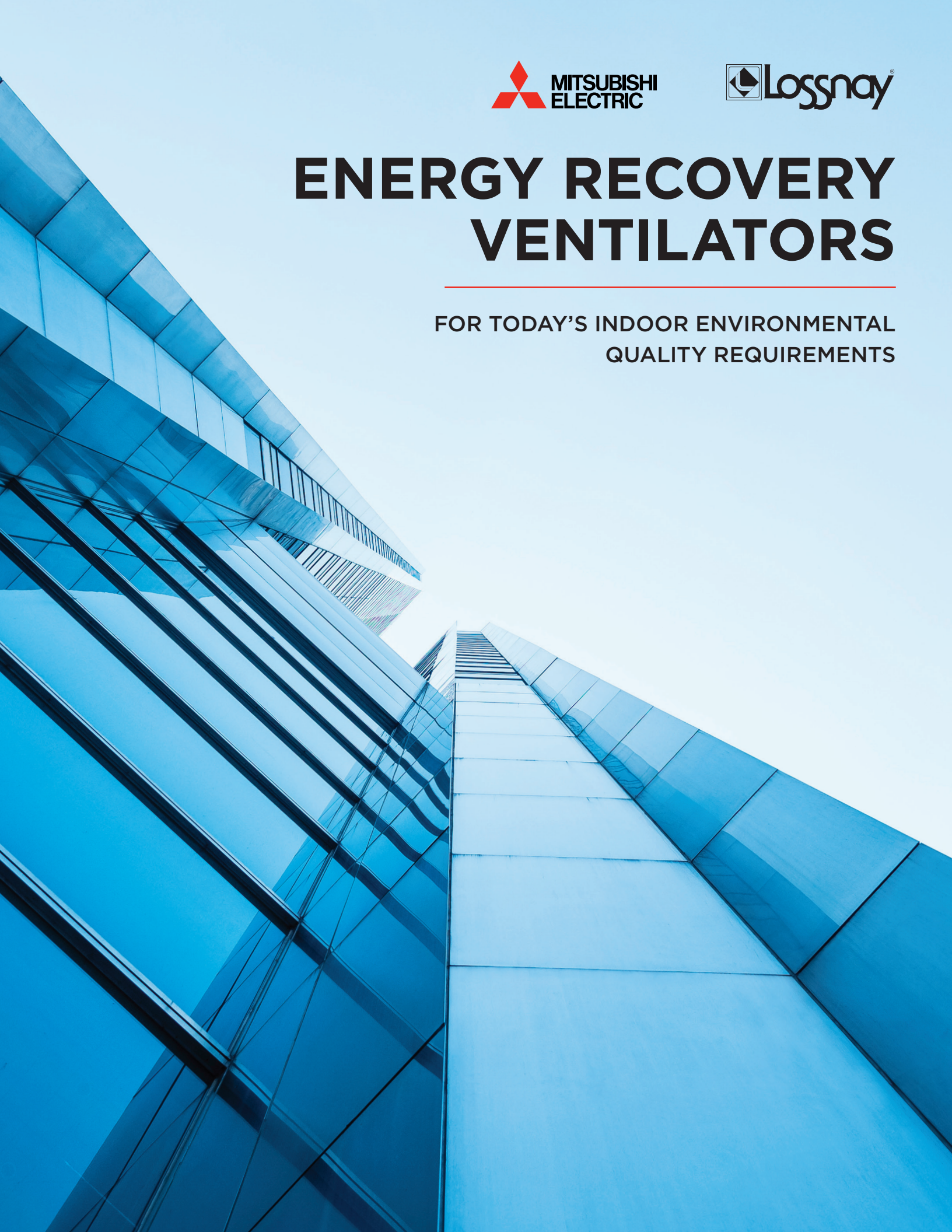


MITSUBISHI ELECTRIC

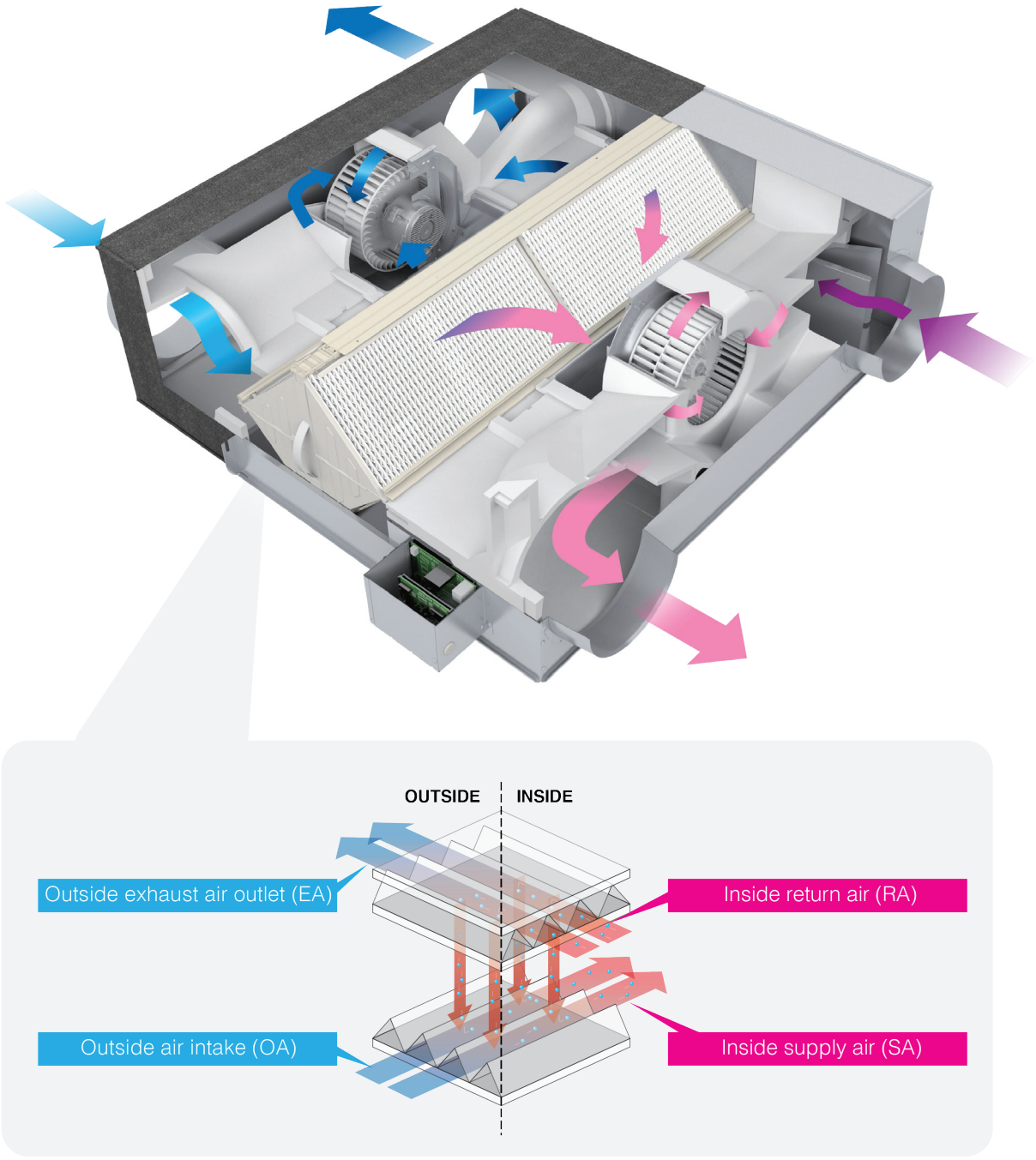
Lossnay

ENERGY RECOVERY VENTILATORS

FOR TODAY'S INDOOR ENVIRONMENTAL QUALITY REQUIREMENTS

OPTIMIZING AIR QUALITY INSIDE A BUILDING

Lossnay® is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.



After launching its first generation in 1970, Lossnay has evolved by always looking ahead to the air conditioning needs of the future, which continue to evolve and diversify. The technology is used in a wide range of applications and units have been widely adopted in residences, office buildings, hospitals, schools, etc.

TEMPERATURE AND HUMIDITY EXCHANGE BY LOSSNAY®

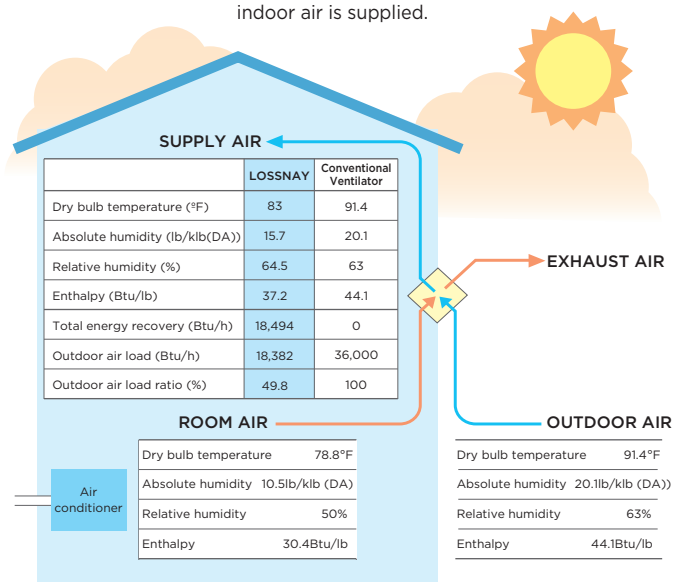
The Need For Fresh Air

Poor air quality can be attributed to many problems arising in the workplace and in the home. It is believed to contribute to a loss in productivity, low morale and possibly higher rates of illness. Providing good ventilation in residential and commercial buildings is critical to help ensure conditions under which people can live and work safely and comfortably.

Improved Ventilation With Maximized Comfort

IN SUMMER

Air similar to the conditions of the cooled (dehumidified) indoor air is supplied.



	LOSSNAY	Conventional Ventilator
Dry bulb temperature (ºF)	83	91.4
Absolute humidity (lb/klb(DA))	15.7	20.1
Relative humidity (%)	64.5	63
Enthalpy (Btu/lb)	37.2	44.1
Total energy recovery (Btu/h)	18,494	0
Outdoor air load (Btu/h)	18,382	36,000
Outdoor air load ratio (%)	49.8	100

ROOM AIR	
Dry bulb temperature	78.8°F
Absolute humidity	10.5lb/klb (DA)
Relative humidity	50%
Enthalpy	30.4Btu/lb

OUTDOOR AIR	
Dry bulb temperature	91.4°F
Absolute humidity	20.1lb/klb (DA))
Relative humidity	63%
Enthalpy	44.1Btu/lb

HEAT RECOVERY CALCULATION

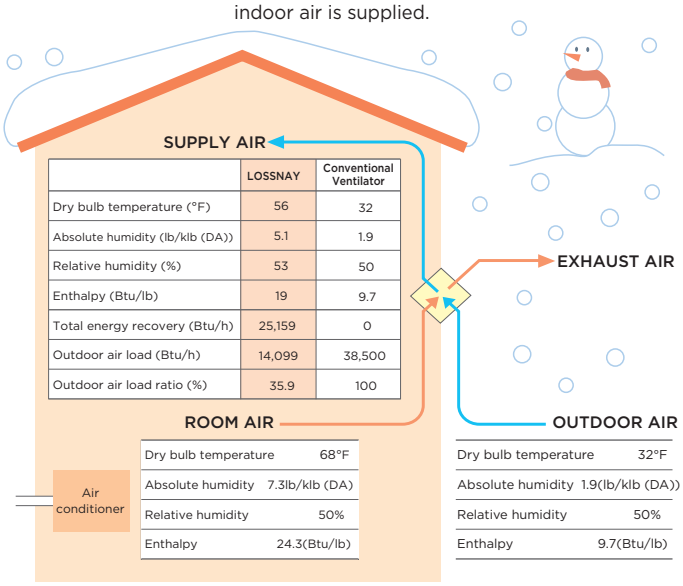
$$\text{Indoor Supply Air Temperature (°F)} = \text{Outdoor Temperature (°F)} - \{\text{Outdoor Temperature (°F)} - \text{Indoor Temperature (°F)}\} \times \text{Temp Recovery Efficiency (%)}$$

Calculation Example : 83°F=91.4°F - (91.4°F - 78.8°F) × 66.7%

**The above applies to the case of LGH-F600RVX (fan speed 4).*

IN WINTER

Air similar to the conditions of the heated (humidified) indoor air is supplied.



	LOSSNAY	Conventional Ventilator
Dry bulb temperature (°F)	56	32
Absolute humidity (lb/klb (DA))	5.1	1.9
Relative humidity (%)	53	50
Enthalpy (Btu/lb)	19	9.7
Total energy recovery (Btu/h)	25,159	0
Outdoor air load (Btu/h)	14,099	38,500
Outdoor air load ratio (%)	35.9	100

ROOM AIR	
Dry bulb temperature	68°F
Absolute humidity	7.3lb/klb (DA)
Relative humidity	50%
Enthalpy	24.3(Btu/lb)

OUTDOOR AIR	
Dry bulb temperature	32°F
Absolute humidity	1.9(lb/klb (DA))
Relative humidity	50%
Enthalpy	9.7(Btu/lb)

HEAT RECOVERY CALCULATION

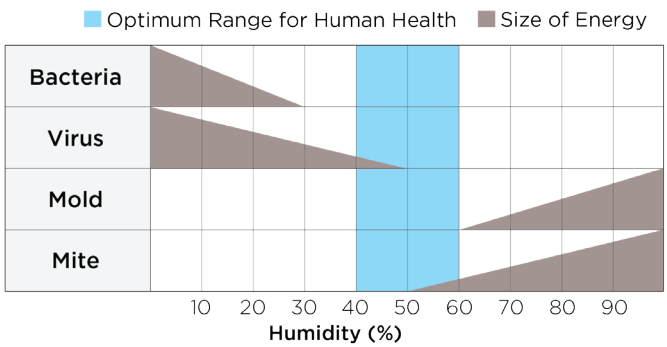
$$\text{Indoor Supply Air Temperature (°F)} = \{\text{Indoor Temperature (°F)} - \text{Outdoor Temperature (°F)}\} \times \text{Temp Recovery Efficiency (%)} + \text{Outdoor Temperature (°F)}$$

Calculation example : 56°F=(68°F - 32°F) × 66.7% + 32°F

The Need For Appropriate Humidity Management

The Lossnay Energy Recovery Ventilator exhausts stale indoor air and preconditions incoming outside air, all while decreasing the load on your HVAC system. In the winter, cool dry supply air from the outdoors is partially humidified by the moisture in the exhaust air. The exact opposite occurs in the summer.

Activity Range Of Microorganisms By Humidity Range

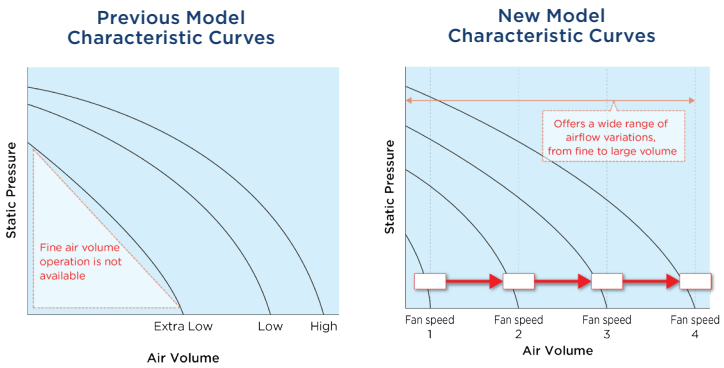


Source: ASHRAE Trans. 91 - 1B (1985)

PRODUCT FEATURES

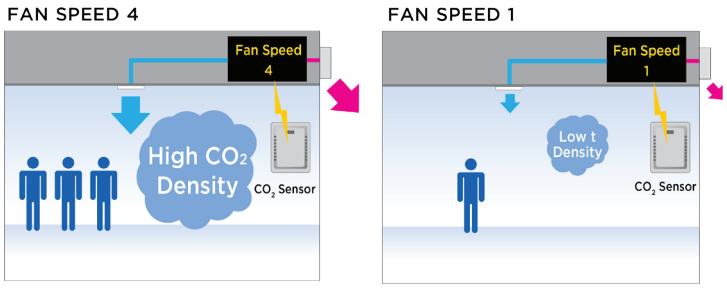
Wide Range Air Volume

Unlike the air volume produced by previous models, in which there are the three settings of “High,” “Low,” and “Extra low,” the new model is equipped with four fan speeds. In addition, each speed has a range setting of 25%, 50%, 75% and 100%, allowing much finer air volume control. When used in combination with the CO2 sensor or timer function, the air volume can be controlled according to conditions that realize better performance and reduce power consumption.



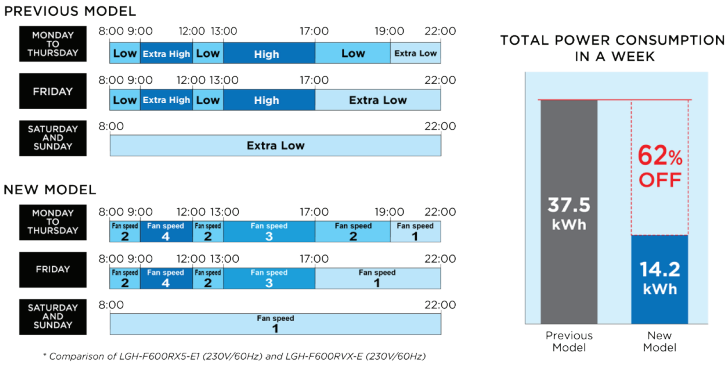
Air Volume Control By CO2 Sensor

An external CO2 sensor can be connected directly to the Lossnay® RVX units allowing the fan speed to vary according to the CO2 levels detected. When the CO2 concentration is low, the unit can operate at a lower air volume compared to previous models. This improves total heat exchange efficiency and contributes to energy savings.



Weekly Timer

The operation pattern for each day of the week, ON / OFF and air volume can be set using the weekly timer function (up to eight zones per day). Compared to previous models, much finer operation control contributes to enhanced energy savings operation. With a wider range of air volumes the Lossnay RVX units enable optimized ventilation at different times of the day and for different days of the week, enabling further energy savings.



* Comparison of LGH-F600RX5-E1 (230V/60Hz) and LGH-F600RVX-E (230V/60Hz)

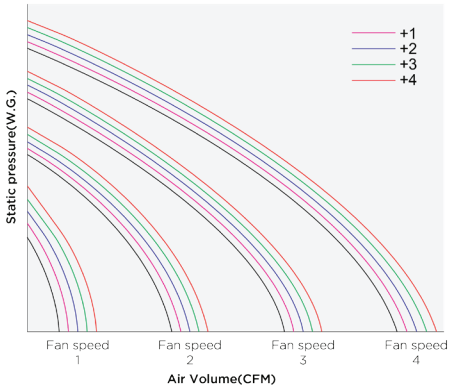
Fan Speed Adjustment Function

The default fan speed value can be adjusted slightly.
Use the PZ-61DR-E remote controller to reset the speed.

1) Considering the total hours of Lossnay® operation (filter clogging), the fan power can be adjusted automatically after a period of time.

2) After the unit is installed, when if the air volume is slightly lower than the desired airflow, it is possible to make fine adjustments.

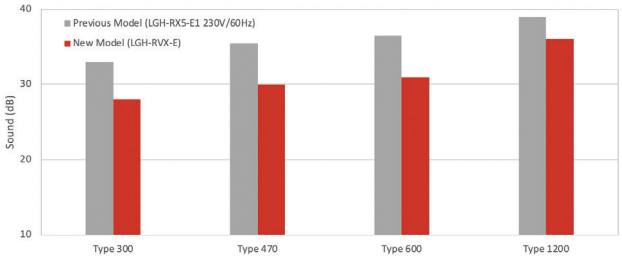
P-Q Curve Image



Low Noise Design

Providing a range of air volume for each fan speed, sound levels can be reduced to achieve less noise.

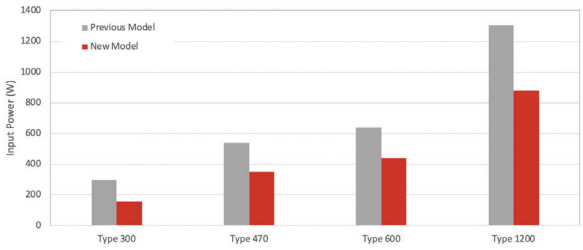
Noise Comparison Between New And Previous Models (New Model: Fan Speed 3, Previous Model: High)



Power Consumption Reduced Further With Introduction Of DC Motor

A high efficiency DC motor has been adopted. Compared to models with an AC motor, power consumption is reduced.

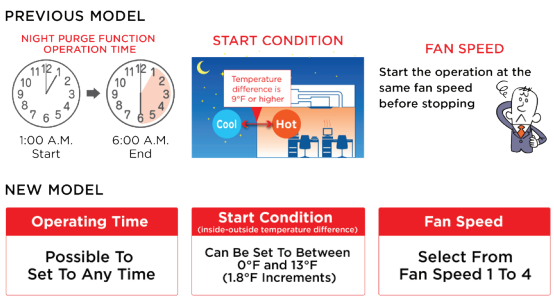
Comparison Between New And Previous Power Consumption (New Model: Fan Speed 4, Previous Model: Extra-High)



Flexibility In Setting Night Purge And Auto Ventilation Mode Has Improved

NIGHT PURGE

During the summer season, the night purge mode draws cooler outside air into the room at night. This energy conservation mode reduces the load when the air conditioning starts up the next morning. With previous models, the unit operated with only one condition that is set initially. With new models, it was possible to set* the night purge operation for the start conditions, air volume, and operation time and easily respond to the operating environment requests that vary with each customer.

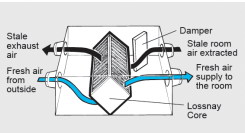


* Settings can only be made using the PZ-61DR-E

Flexibility In Setting Night Purge And Auto Ventilation Mode Has Improved

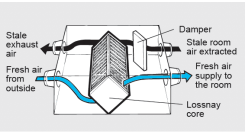
VENTILATION MODE SWITCHING

When using the PZ-61DR-E, it is possible to select manual switching or automatic switching between "Lossnay® ventilation (with heat exchange)" and "Bypass ventilation (without heat exchange)".



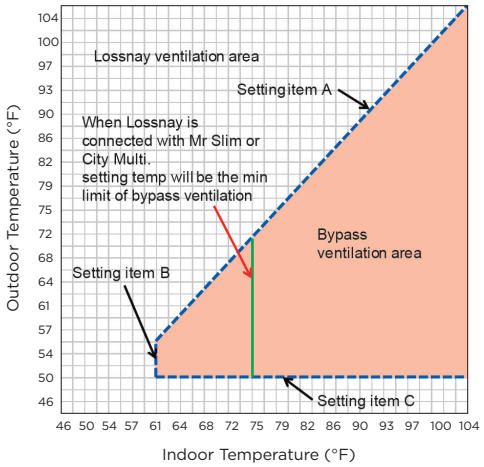
What is Lossnay ventilation?

Room air is discharged outside via Lossnay core. Heat exchanged outside air is supplied to the room. In summer and winter, air conditioning energy can be recovered by the Lossnay unit.



What is bypass ventilation?

Stale room air is discharged to the outside without passing through the Lossnay core. In spring and fall when air conditioning is not necessary, the unit operates in bypass ventilation mode.



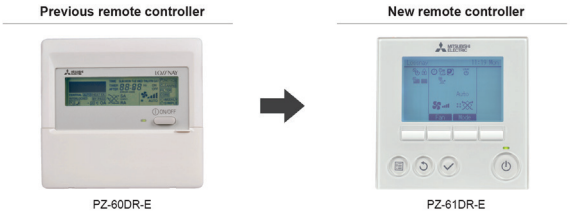
Bypass / Lossnay Ventilation Map In Automatic Ventilation Mode

With the previous model, the auto ventilation mode is based on the initial setting condition; however, with the new model it becomes possible to set three set points, as shown in the table on the right.

* Settings can only be made using the PZ-61DR-E

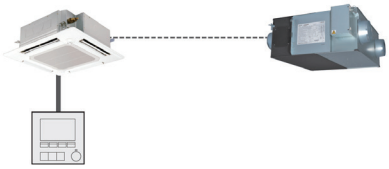
New Remote Control Design

The new remote controller features an enhanced new design. Full-dot backlit LCD makes it easy to see and control the unit.



Improved Air Volume Setting Flexibility When Simultaneously Operating With Air Conditioner

For the specified high and low air volume of the air conditioner, two types of air volumes can be selected, respectively, providing more flexible setting options.



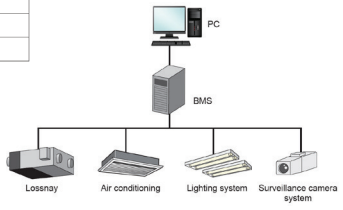
		Previous model	New model
Mr.Slim City Multi	Low	Low	Fan speed 1 or 2*
	High	High or Extra-High	Fan speed 3 or 4*

*factory setting

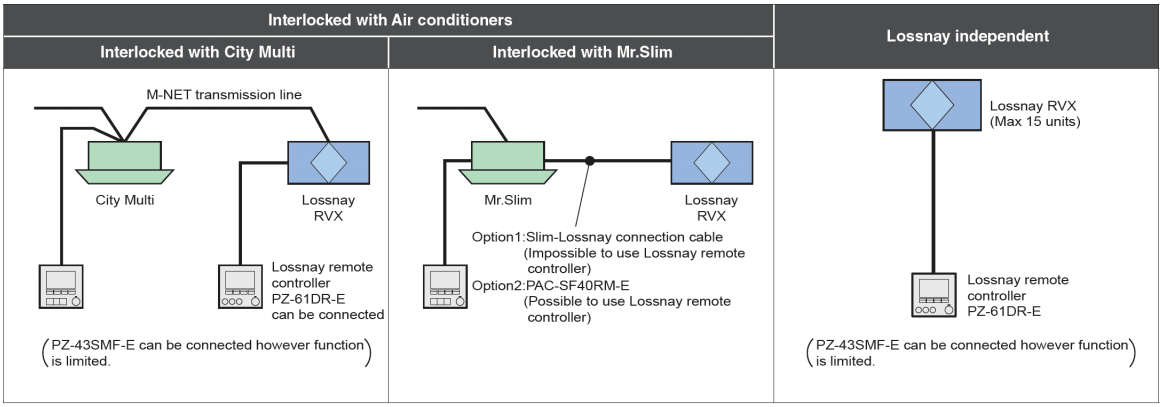
Improved Control With A BMS System

Using a 0-10V signal from the building management system, the air volume of the Lossnay unit can be changed.

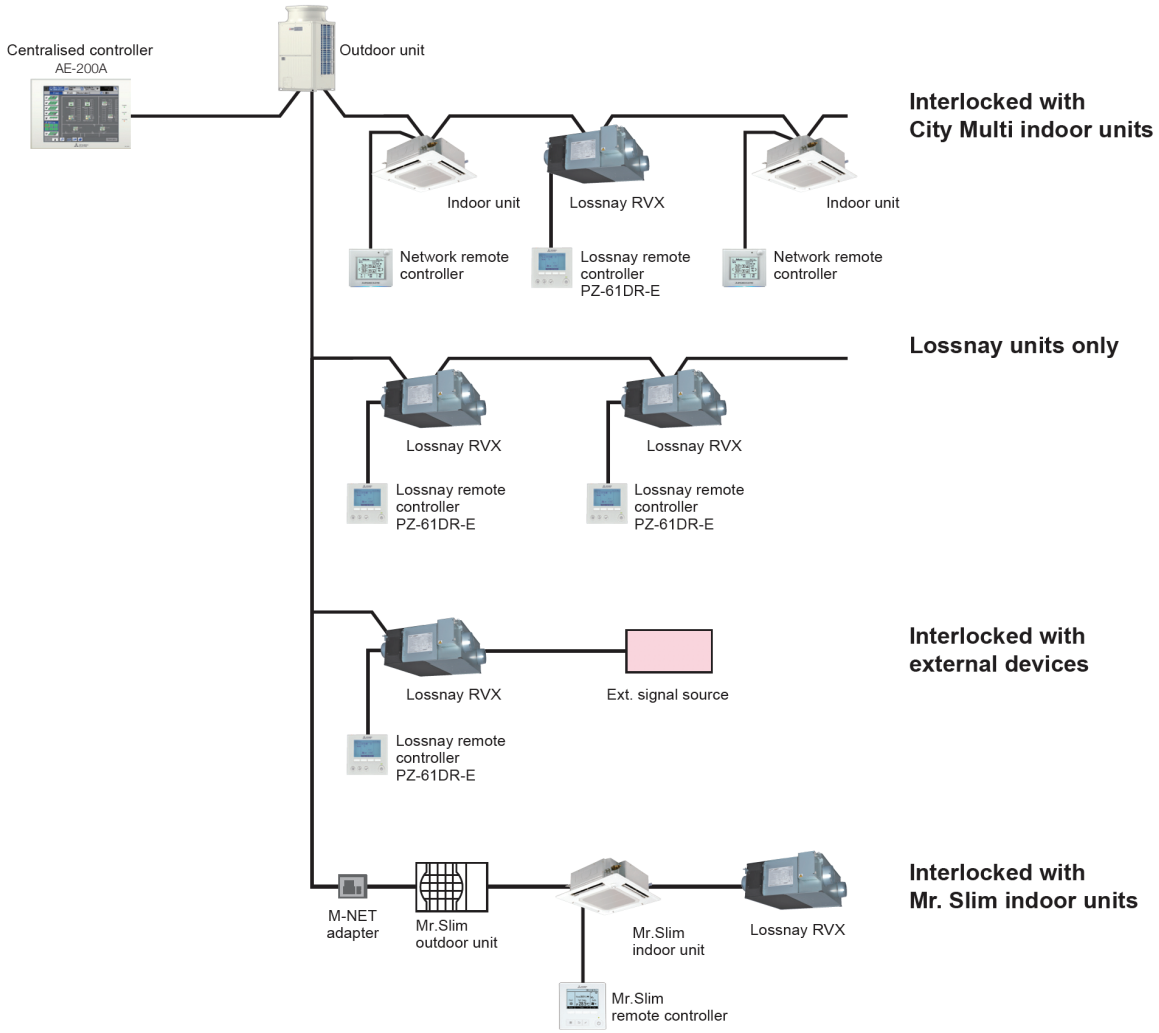
Input voltage [VDC]	Fan speed	Fan speed changing from remote controller
0 -1.0	–	Available
1.5 - 2.5	1	Not available
3.5 - 4.5	2	Not available
5.5 - 7.0	3	Not available
8.5 - 10.0	4	Not available



The New Remote Controller PZ-61DR-E Enables Simple Control Setting



Centralized Controller System



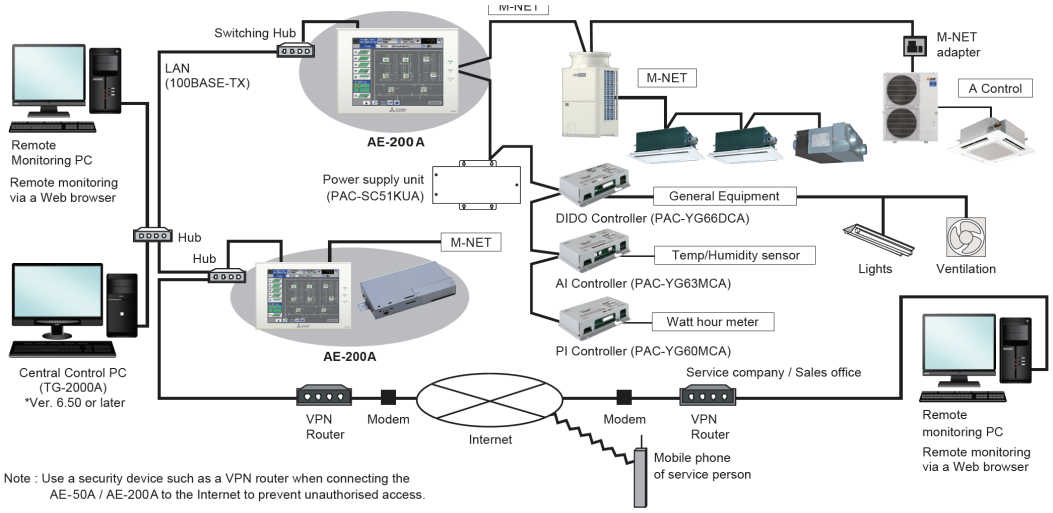
FEATURES OF THE AE-200 CENTRALIZED CONTROLLER

An easy and flexible system can be implemented according to the needs of the facilities

- Provides control on up to 50 indoor units of air conditioning equipment.
- Up to three AE-50A expansion controllers can be added to a single AE-200A. This allows the AE-200A to control and monitor up to 200 indoor units from one touch screen.

*1. Please contact your local distributor to find out when the feature is supported.

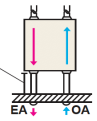
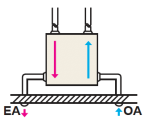
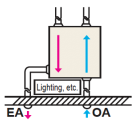
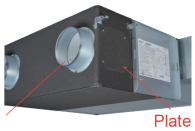
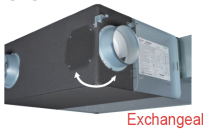
System Structure



Note : Use a security device such as a VPN router when connecting the AE-50A / AE-200A to the Internet to prevent unauthorised access.

Connect Ducts In Two Different Directions (OA, EA Side)

Ducts can be connected in two different directions to the outdoor vents thanks to collars and aperture plates that can be interchangeably placed in two different positions. This flexibility allows for installations close to the surface of a wall and helps avoid cases where the stale air exhaust vent would be blocked by some type of obstruction. As a result, both planning and installation is simplified.

Standard installation	Installation with duct direction changed
A space is necessary to prevent the influx of rainwater. 	Can be installed close to the surface of the wall.  Avoid installations where the stale air exhaust aperture would be blocked by lighting or air conditioning units. 
	Changing the duct direction  Remove the flange (factory-standard direction) and the side panel plate and switch their placements. They are both equipped with screw stoppers making the switch extremely simple. The direction of the ducts can only be changed on the outside (OA and EA). The inside cannot be changed (SA and RA).

OA/EA square duct (LGH-F1200)

OA/EA is square duct. This simplifies installation and reduces total installation time.

FUNCTIONS

□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable number of unit	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	○◎△●	○◎
Operation mode	Switches between several operation modes depending on the air conditioning unit. Air conditioning unit : Cool/Dry/Auto(*)/Fan/Heat LOSSNAY unit : Heat Recovery/Bypass/Auto CAHV, CRHV, Air To Water (PWFY) units : Heating, Heating ECO, Hot Water, Anti-freeze, Cooling(**) * Auto mode is for CITY MULTI R2 and WR2 series only. ** Only PWFY	○◎△●	○
Temperature setting	Cool/Dry : 19°C (67°F) -35°C (95°F) [14°C (57°F) -30°C (87°F)] Heat : 4.5°C (40°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] Auto : 19°C (67°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] The range of temperature depends on the air conditioning unit. [ ] in case of using middle-temperature on PDFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded.	○◎△●	○
Fan speed setting	Models with 4 air flow speed settings : Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings : Hi/Mid/Low Models with 2 air flow speed settings : Hi/Low Fan speed setting (including Auto) varies depending on the model.	○◎△●	○
Air fl ow direction setting	Air flow direction angles, 4-angles or 5-angles Swing, Auto (Louver cannot be set)	○◎△●	○
Schedule operation	Weekly schedule can be set by groups based on daily operation pattern.	○◎△●	○
Permit/prohibit local operation	Individually prohibits operation of each local remote controller function. (ON/OFF, Operation mode, Set temperature, Filter sign reset, Air Direction*, Fan Speed*, Timer*) * This function depends on the model.	○◎△●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occuring on an air conditioning unit, the afflicated unit and the error code are displayed.	×	□◎
Test run	This operates air conditioning units in test run mode.	○◎△●	○
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○◎△●	○
External input/output	By using optional external input/output adapter (PAC-YG10HA-E) you can set and monitor the following. Input : By level signal : "Batch ON/OFF", "Batch emergency stop" By pulse signal : "Batch ON/OFF", "Enable/disable local remote controller" Output : "ON/OFF", "Error/Normal"	◎	◎
Energy Management	Bar Graph : Indoor unit Electric Energy, FAN operation time, Thermo-ON time (TOTAL, Cooling, Heating) can be displayed hourly, daily and monthly. Line Graph : Outdoor temp., Room temp., Set temp. (Heating, Cooling) input from PAC-YG63MCA and temp. from AHC.	×	□○●
Advanced HVAC Controller (AHC)	The status of AHC can only be monitored.	×	○
New Smart ME contoroller	The status of sensor on this controller can be monitored.	×	○
Smartphone/Tablet	The specified Web browser on iOS and Android OS can monitor and operate AE-200E. *2	○	○
New Web design	The web screen design is renewed for user friendly interface. *2	○◎△●	○
Initial setting software	The initial setting can be configured without the connection of AE-200E. *2	×	×
Apportionment of power consumption	Apportionment of power consumption can be calculated on AE-200 without TG-2000A. *2	●	□●
BACnet® communication	ANSI/ASHRAE 135-2010 (ISO16484-5) is supported and approved by the BTL. *2	○	×

*2 Please contact your local distributor for when the feature is supported.

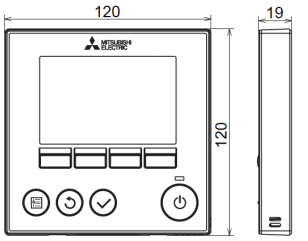
List of Remote Controller Settings and Functions

The remote controller provides a wide range of functions and features in addition to the main functions described below, such as sophisticated energy savings control and an interface that is easy to use.

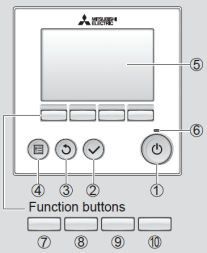
Function (Communicating mode)	PZ-61DR-E	PZ-43SMF-E
Fan speed selection	4 fan speeds	2 of 4 fan speeds
Ventilation mode selection	Energy recovery / Bypass / Auto	Energy recovery / Bypass / Auto
Night-purge (time)	Any time selectable	No
Night-purge (fan speed)	Selectable from 4 fan speeds	No
Dip-switch setting and function setting from RC	Yes	No
Bypass temp. free setting	Yes	No
Heater-On temp. free setting	Yes	No
Fan power up after installation	Yes	No
0 - 10VDC external input	Yes	Yes
ON/OFF timer	Yes	Yes
Auto-Off timer	Yes	No
Weekly timer	Yes	No
Operation restrictions (ON/OFF, Ventilation mode, fan speed)	Yes	No
Operation restrictions (Fan speed skip setting)	Yes	No
Screen contrast adjustment	Yes	No
Language selection	Yes (8 languages)	No (English only)
Initializing remote controller	Yes	No
Filter cleaning sign	Yes	Yes
Lossnay core cleaning sign	Yes	No
Error indication	Yes	Yes
Error history	Yes	No
OA/RA/SA temp. display	Yes	No

CONTROLLERS

Lossnay® Remote Controller (PZ-61DR-E)

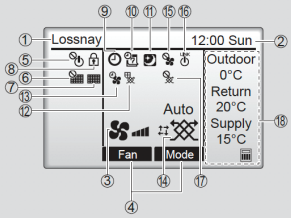


Operation section



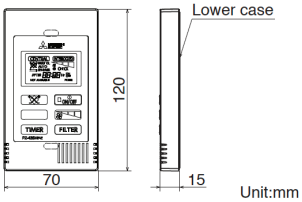
① Press to turn ON/OFF the Lossnay unit.
② Press to save the setting.
③ Press to return to the previous screen.
④ Press to bring up the Main menu.
⑤ Operation settings will appear.
When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.
⑥ This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.
⑦ Main menu : Press to move the cursor down.
⑧ Main display : Press to change the fan speed. Main menu : Press to move the cursor up.
⑨ Main display : Press to change the ventilation mode. Main menu : Press to go to the previous page.
⑩ Main menu : Press to go to the next page.

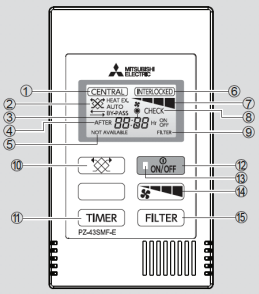
Display section



① Lossnay is always displayed.
② Current time appears here
③ Fan speed setting appears here.
④ Functions of the corresponding buttons appear here.
⑤ Appears when the ON/OFF operation is centrally controlled.
⑥ Appears when the filter reset function is centrally controlled.
⑦ Indicates when filter and/or Lossnay core needs maintenance.
⑧ Appears when the buttons are locked and/or a fan speed is skipped.
⑨ Appears when the On/Off timer, or Auto-off timer function is enabled.
⑩ Appears when the Weekly timer is enabled.
⑪ Appears when the night-purge function is available.
⑫ Appears when performing operation to protect the equipment.
⑬ Appears when performing the power supply/exhaust function or the delay operation at the start of operation.
⑭ Indicates the ventilation mode setting.
⑮ Appears when external fan speed operation.
⑯ Appears when operation interlocked with external unit.
⑰ Appears when external ventilation mode operation.
⑱ Displays the outdoor temperature, return temperature, and supply temperature (calculated value).

Lossnay Remote Controller (PZ-43SMF-E)



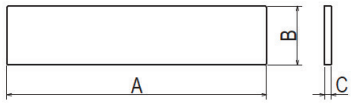


① Displayed during remote operation prohibited by centralsed control unit, etc.
② Displays the ventilation mode status.
Heat exchange HEAT EX.
By-pass BY-PASS
Automatic (HEAT EX./BY-PASS) HEAT EX. AUTO or AUTO BY-PASS
③ Displayed while the Lossnay remote controller is powered on.
④ Displays on-timer or off-timer duration.
⑤ When a button is pressed for a function which the Lossnay unit cannot perform, this display flashes concurrently with the display of the function.
⑥ Displayed when the Lossnay starts off by interlocked indoor unit or external signal.
⑦ Displays the selected fan speed.
⑧ Displayed together with the malfunctioning unit (3 digits) and an error code (4 digits).
⑨ Displayed when the accumulated operating time reaches the time set for filter maintenance.
⑩ Used to select the ventilation mode among heat exchange, by-pass or automatic.
⑪ Increasing 0:30 by pressing it once. Keep pressing the button for fast-forwarding.
⑫ Switch for start and stop.
⑬ On during operation. Flashes when a malfunction occurs.
⑭ Used to select the fan speed either "Low" or "High".
Low → High
⑮ Press twice to reset the filter sign display.

FILTERS

Standard Filter

Replacement components for the standard air filter supplied with the Lossnay® LGH main unit.

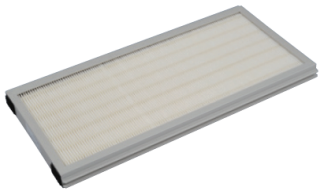


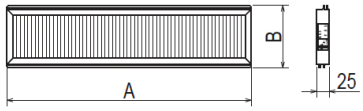
Unit:mm

Model	Dimension (in.)			Number of Filters Per Set		Applicable Model	Filter Sets Required
	A	B	C	Supply	Exhaust		
PZ-50RF8-E	18-1/2	7-13/64	19/32	2	2	LGH-F300RVX	1
PZ-80RF8-E	17-3/4	9-9/16	19/32	2	2	LGH-F470RVX	1
PZ-100RF8-E	22-1/4	9-9/16	19/32	2	2	LGH-F600RVX	1
PZ-100RF8-E	22-1/4	9-9/16	19/32	2	2	LGH-F1200RVX	2

High-Efficiency MERV 16 Filter

This high-efficiency filter can be incorporated inside the Lossnay unit without the need to attach parts from other systems. The main unit external dimensions are unchanged.





Unit:mm

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

Model	Dimension (in.)			Number of Filters Per Set		Applicable Model	Filter Sets Required
	A	B	C	Supply	Exhaust		
PZ-50RFP2-E	18-1/4	6-7/8	1	2	2	LGH-F300RVX	1
PZ-80RFP2-E	17-9/16	9-5/16	1	2	2	LGH-F470RVX	1
PZ-100RFP2-E	22	9-5/16	1	2	2	LGH-F600RVX	1
PZ-100RFP2-E	22	9-5/16	1	2	2	LGH-F1200RVX	2

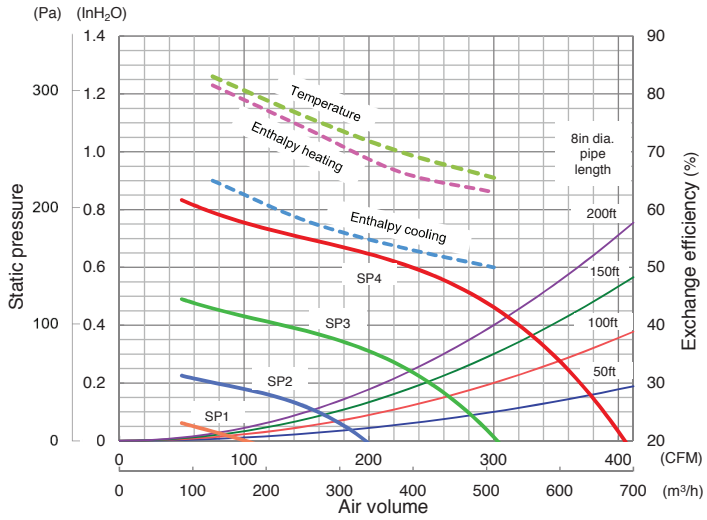
LGH-F300RVX-E

MODEL	LGH-F300RVX-E	SIGN	

Heat exchange system		Heat recovery ventilating system							
Heat exchanger material		Special treated paper plate heat exchanger							
Cladding		Galvanized steel sheet							
Heat insulation material		Self-extinguishing urethane foam							
Motor		EC motor							
Blower		8 3/4 in. (220mm) diameter centrifugal fan							
Filter		Non-woven fabrics filter (EU-G3)							
Surrounding air condition		Shall be between 14°F(-10℃)and 104°F(+40℃), 80%RH or less							
Suction air condition		Shall be lower than 104°F(+40℃), 80%RH							
Supply fan operation under low outdoor temperature		14°F (-10℃) to 5°F (-15℃) : Intermittent operation 60 min ON, 10 min OFF. 5°F (-15℃) or less : Intermittent operation 55 min OFF, 5 min ON.							
Function		Heat recovery ventilation/ Bypass ventilation, Fan speed 1,2,3,4							
Weight		75lbs (34kg)							
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
Air volume	[CFM]	300	225	150	75	300	225	150	75
	[m^3/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
External static pressure	[InH_2O]	0.46	0.26	0.12	0.03	0.46	0.26	0.12	0.03
	[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	-	-	-	-
	Enthalpy Cooling	50.0	53.5	58.0	65.0	-	-	-	-
Noise ※1	[dB]	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							

■Characteristic curve

※1. Measured at 59in(1.5m) under the center of the unit in an anechoic chamber.



■Attention

1. The running current, the input power, the efficiency and the noise are based on the rating air volume. The noise is measured at 59in. under the center of the unit in an anechoic chamber.
2. Temperature exchange efficiency (%) is an average of heating and cooling.
3. Heat recovery ventilation mode starts automatically while detecting OA temperature lower than 8℃, even Bypass mode is selected. Remote controller continues to display "Bypass ventilation" in this case.
4. Mitsubishi Electric measures figures in the chart according to Japan Industrial Standard (JIS B 8628-2003). The characteristic curves are measured by chamber method. Only the temperature condition of the efficiency measuring is based on AHRI 1060-2014.
5. The noise level at 59in. away from outlets in the 45° direction is about 18dB greater than the indicated value at fan speed4.
6. On-site measurements by pitot tube method could be as much 20% difference from JIS test room conditions. If the measuring point is close to sources of turbulence like bends, contractions and dampers etc., it is difficult to measure air volume correctly. A straight duct length more than 10D (D=duct diameter) from the source of turbulence is recommended for correct measurement. On-site measurement should therefore be measured in accordance with BSRIA guideline (Commissioning Air Systems. Application procedures for buildings AG3/89.3(2001)).

※Specification may be subject to change without notice.

SPECIFICATIONS	DATE	TYPE	CEILING RECESSED LOSSNAY	
	06-Nov-19	MODEL	LGH-F300RVX-E	
MITSUBISHI ELECTRIC CORPORATION		NUMBER	N19HHGU0051	1/5

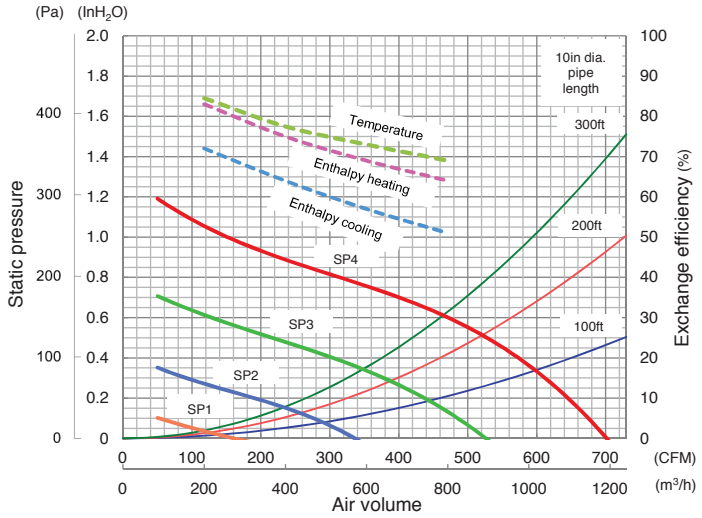
LGH-F470RVX-E

MODEL	LGH-F470RVX-E	SIGN	

Heat exchange system		Heat recovery ventilating system							
Heat exchanger material		Special treated paper plate heat exchanger							
Cladding		Galvanized steel sheet							
Heat insulation material		Self-extinguishing urethane foam							
Motor		EC motor							
Blower		9 5/8 in. (245mm) diameter centrifugal fan							
Filter		Non-woven fabrics filter (EU-G3)							
Surrounding air condition		Shall be between 14°F(-10℃)and 104°F(+40℃), 80%RH or less							
Applicable air condition range of outdoor and indoor Suction air condition		14°F (-10℃) to 5°F (-15℃) : Intermittent operation 60 min ON, 10 min OFF. 5°F (-15℃) or less : Intermittent operation 55 min OFF, 5 min ON.							
Functions		Heat recovery ventilation/ Bypass ventilation, Fan speed 1,2,3,4							
Weight		110lbs (50kg)							
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
Air volume	[CFM]	470	353	235	118	470	353	235	118
	[m^3/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
External static pressure	[In.H_2O]	0.60	0.34	0.15	0.04	0.60	0.34	0.15	0.04
	[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	-	-	-	-
	Enthalpy Cooling	51.0	57.0	64.0	72.0	-	-	-	-
Noise ※1	[dB]	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							

■Characteristic curve

※1. Measured at 59in(1.5m) under the center of the unit in an anechoic chamber.



■Attention

1. The running current, the input power, the efficiency and the noise are based on the rating air volume. The noise is measured at 59in. under the center of the unit in an anechoic chamber.
2. Temperature exchange efficiency (%) is an average of heating and cooling.
3. Heat recovery ventilation mode starts automatically while detecting OA temperature lower than 8℃, even Bypass mode is selected. Remote controller continues to display "Bypass ventilation" in this case.
4. Mitsubishi Electric measures figures in the chart according to Japan Industrial Standard (JIS B 8628-2003). The characteristic curves are measured by chamber method. Only the temperature condition of the efficiency measuring is based on AHRI 1060-2014.
5. The noise level at 59in. away from outlets in the 45° direction is about 24dB greater than the indicated value at fan speed4.
6. On-site measurements by pitot tube method could be as much 20% difference from JIS test room conditions. If the measuring point is close to sources of turbulence like bends, contractions and dampers etc., it is difficult to measure air volume correctly. A straight duct length more than 10D (D=duct diameter) from the source of turbulence is recommended for correct measurement. On-site measurement should therefore be measured in accordance with BSRIA guideline (Commissioning Air Systems. Application procedures for buildings AG3/89.3(2001)).

※Specification may be subject to change without notice.

SPECIFICATIONS	DATE	TYPE	CEILING RECESSED LOSSNAY	
	06-Nov-19	MODEL	LGH-F470RVX-E	
MITSUBISHI ELECTRIC CORPORATION		NUMBER	N19HHGU0052	1/5

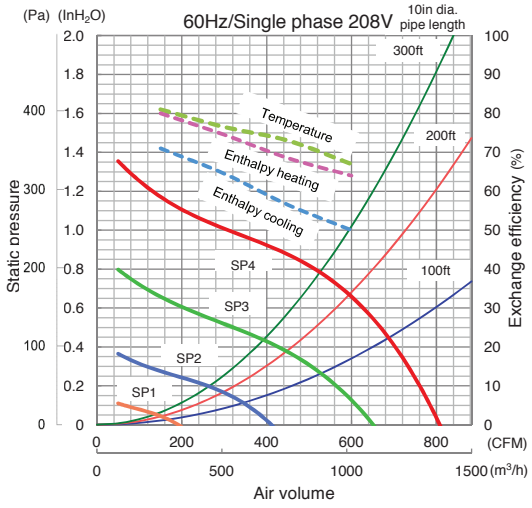
LGH-F600RVX-E

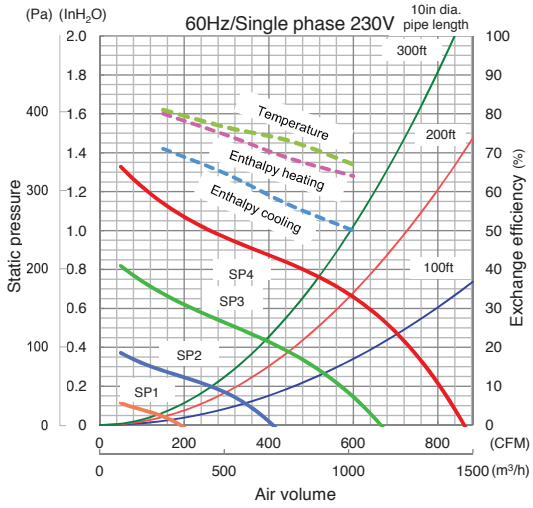
MODEL	LGH-F600RVX-E	SIGN	

Heat exchange system		Heat recovery ventilating system							
Heat exchanger material		Special treated paper plate heat exchanger							
Cladding		Galvanized steel sheet							
Heat insulation material		Self-extinguishing urethane foam							
Motor		EC motor							
Blower		9 5/8 in. (245mm) diameter centrifugal fan							
Filter		Non-woven fabrics filter (EU-G3)							
Surrounding air condition		Shall be between 14°F(-10℃)and 104°F(+40℃), 80%RH or less							
Suction air condition		Shall be lower than 104°F(+40℃), 80%RH							
Supply fan operation under low outdoor temperature		14°F (-10℃) to 5°F (-15℃) : Intermittent operation 60 min ON, 10 min OFF. 5°F (-15℃) or less : Intermittent operation 55 min OFF, 5 min ON.							
Function		Heat recovery ventilation/ Bypass ventilation, Fan speed 1,2,3,4							
Weight		123lbs (56kg)							
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
Air volume	[CFM]	600	450	300	150	600	450	300	150
	[m^3/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
External static pressure	[InH_2O]	0.66	0.37	0.16	0.04	0.66	0.37	0.16	0.04
	[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	-	-	-	-
	Enthalpy Cooling	50.0	56.5	64.5	71.0	-	-	-	-
Noise ※1	[dB]	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							

※1. Measured at 59in(1.5m) under the center of the unit in an anechoic chamber.

■Characteristic curve





■Attention

1. The running current, the input power, the efficiency and the noise are based on the rating air volume. The noise is measured at 59in. under the center of the unit in an anechoic chamber.
2. Temperature exchange efficiency (%) is an average of heating and cooling.
3. Heat recovery ventilation mode starts automatically while detecting OA temperature lower than 8℃, even Bypass mode is selected. Remote controller continues to display "Bypass ventilation" in this case.
4. Mitsubishi Electric measures figures in the chart according to Japan Industrial Standard (JIS B 8628-2003). The characteristic curves are measured by chamber method. Only the temperature condition of the efficiency measuring is based on AHRI 1060-2014.
5. The noise level at 59in. away from outlets in the 45° direction is about 21dB greater than the indicated value at fan speed4.
6. On-site measurements by pitot tube method could be as much 20% difference from JIS test room conditions. If the measuring point is close to sources of turbulence like bends, contractions and dampers etc., it is difficult to measure air volume correctly. A straight duct length more than 10D (D=duct diameter) from the source of turbulence is recommended for correct measurement. On-site measurement should therefore be measured in accordance with BSRIA guideline (Commissioning Air Systems. Application procedures for buildings AG3/89.3(2001)).

※Specification may be subject to change without notice.

SPECIFICATIONS	DATE	TYPE	CEILING RECESSED LOSSNAY	
	06-Nov-19	MODEL	LGH-F600RVX-E	
MITSUBISHI ELECTRIC CORPORATION		NUMBER	N19HHGU0053	1/5

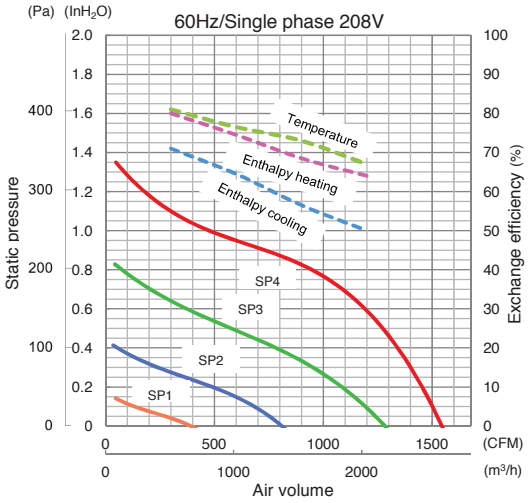
LGH-F1200RVX-E

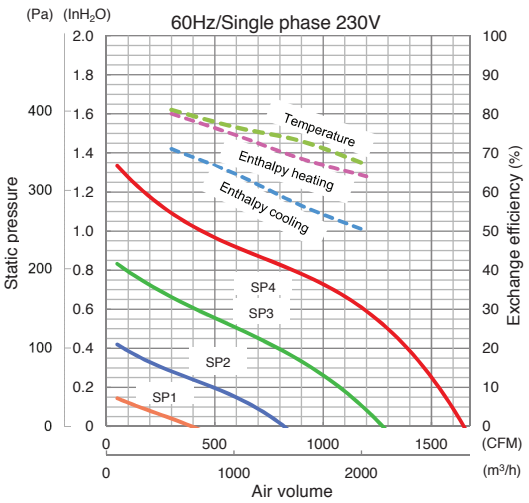
MODEL	LGH-F1200RVX-E	SIGN	

Heat exchange system		Heat recovery ventilating system							
Heat exchanger material		Special treated paper plate heat exchanger							
Cladding		Galvanized steel sheet							
Heat insulation material		Self-extinguishing urethane foam							
Motor		EC motor							
Blower		9 5/8 in. (245mm) diameter centrifugal fan							
Filter		Non-woven fabrics filter (EU-G3)							
Surrounding air condition		Shall be between 14°F(-10℃)and 104°F(+40℃), 80%RH or less							
Suction air condition		Shall be lower than 104°F(+40℃), 80%RH							
Supply fan operation under low outdoor temperature		14°F (-10℃) to 5°F (-15℃) : Intermittent operation 60 min ON, 10 min OFF. 5°F (-15℃) or less : Intermittent operation 55 min OFF, 5 min ON.							
Function		Heat recovery ventilation/ Bypass ventilation, Fan speed 1,2,3,4							
Weight		251lbs (114kg)							
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
Air volume	[CFM]	1200	900	600	300	1200	900	600	300
	[m^3/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	[InH_2O]	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	-	-	-	-
	Enthalpy Cooling	50.0	56.5	64.5	71.0	-	-	-	-
Noise ※1	[dB]	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							

■Characteristic curve

※1. Measured at 59in(1.5m) under the center of the unit in an anechoic chamber.





■Attention

1. The running current, the input power, the efficiency and the noise are based on the rating air volume. The noise is measured at 59in. under the center of the unit in an anechoic chamber.
2. Temperature exchange efficiency (%) is an average of heating and cooling.
3. Heat recovery ventilation mode starts automatically while detecting OA temperature lower than 8℃, even Bypass mode is selected. Remote controller continues to display "Bypass ventilation" in this case.
4. Mitsubishi Electric measures figures in the chart according to Japan Industrial Standard (JIS B 8628-2003). The characteristic curves are measured by chamber method. Only the temperature condition of the efficiency measuring is based on AHRI 1060-2014.
5. The noise level at 59in. away from outlets in the 45° direction is about 20dB greater than the indicated value at fan speed4.
6. On-site measurements by pitot tube method could be as much 20% difference from JIS test room conditions. If the measuring point is close to sources of turbulence like bends, contractions and dampers etc., it is difficult to measure air volume correctly. A straight duct length more than 10D (D=duct diameter) from the source of turbulence is recommended for correct measurement. On-site measurement should therefore be measured in accordance with BSRIA guideline (Commissioning Air Systems. Application procedures for buildings AG3/89.3(2001)).

※Specification may be subject to change without notice.

SPECIFICATIONS	DATE	TYPE	CEILING RECESSED LOSSNAY	
	06-Nov-19	MODEL	LGH-F1200RVX-E	
MITSUBISHI ELECTRIC CORPORATION		NUMBER	N19HHGU0054	1/5

1340 Satellite Blvd. Suwanee, GA 30024

WWW.MITSUBISHIPRO.COM

ME_CM_1364 | 09.2020 | Printed in the USA