MITSUBISHI ELECTRIC
HVAC Advanced Products Division

Lossnay® MITSUBISHI ELECTRIC

SUBMITTAL DATA: LGH-F470RX3-E

Job Name: Date:

Drawing Reference: Schedule No.:



GENERAL FEATURES

- Supplies ventilation air while reducing energy consumption
- Pre-conditions outside supply air with both sensible and latent energy from exhaust air
- Minimal cross contamination (<1% overall) between entering and leaving air streams – effectively removes unwanted airborne material from the structure
- No moving parts to fail in the transfer component – very high reliability
- Stand alone control or interlock with Mitsubishi Electric air conditioning units – M-NET compatible
- Temperature actuated by-pass damper

SPECIFICATIONS

Capacity . . . . . 470 ft³/min / 13.3 m³/min

Power

Power Source . . . . . 208-230V, 1 Phase, 60Hz
Power Consumption . . . . . 0.375-0.560 kW
Current . . . . . 1.6-2.5 A
Starting Current . . . . . Under 5.0 A
Min. Circuit Capacity (MCC) . . . . . 3.7 A
Maximum Overcurrent Protection (MOCP) . . . . . 15 A

Controllers

PZ-41SLB-E Lossnay® Controller: Controls 1-15 Lossnay units, On-Off, Fan Speed, and Vent Mode

PZ-52SF-E M-NET Lossnay® Controller: Provides On-Off, Fan Speed, and Vent Mode and allows full access control by Mitsubishi Electric CITY-MULTI Controls Network and system controllers.

Control Modes

Interlocked Mode: Operates with CITY MULTI or Mr. Slim HVAC unit

Non-interlocked Mode: Operates independently

Ventilation Mode: Controls By-pass Damper/Heat-Cool, By-pass, Auto

Delayed Operating Mode: Time setting from HVAC controller for delayed on or off operation

External Control Input Mode: Accepts input signals from optional control devices or systems to activate Lossnay® unit

Temperature recovery efficiency
(fan speed low-high-extra high) 75-72-72%

Enthalpy recovery efficiency
Heating (fan speed low-high-extra high) 65-62-62%
Cooling (fan speed low-high-extra high) 48-44-44%

External static pressure (in. H_2O)
(fan speed low-high-extra high) . . . . . 0.29 - 0.58 - 0.80

External Finish . . . . . Galvanized steel sheet

Dimensions
inches . . . . . 15-11/16 H x 39-1/2 W x 45-13/16 D
mm . . . . . 398 H x 1003 W x 1164 D

Net Weight . . . . . 143 lb / 65 kg

Energy Transfer . . . . . Lossnay® core

Heat Exchange System . . . . . Air-to-air total heat (sensible heat + latent heat) exchange, no moving parts

Heat Exchange Material . . . . . Partition, spacing plate-cellulose fiber membrane

Blower . . . . . 9.625 in. dia. centrigugal fan

Motor . . Totally enclosed capacitor permanent split-phase 0.52 HP induction motor, 4 poles, 2 units

Filter . . . . . Washable fiber (2)

Operating Environment
14°F-104°F (-10°C-50°C), RH 80% or less

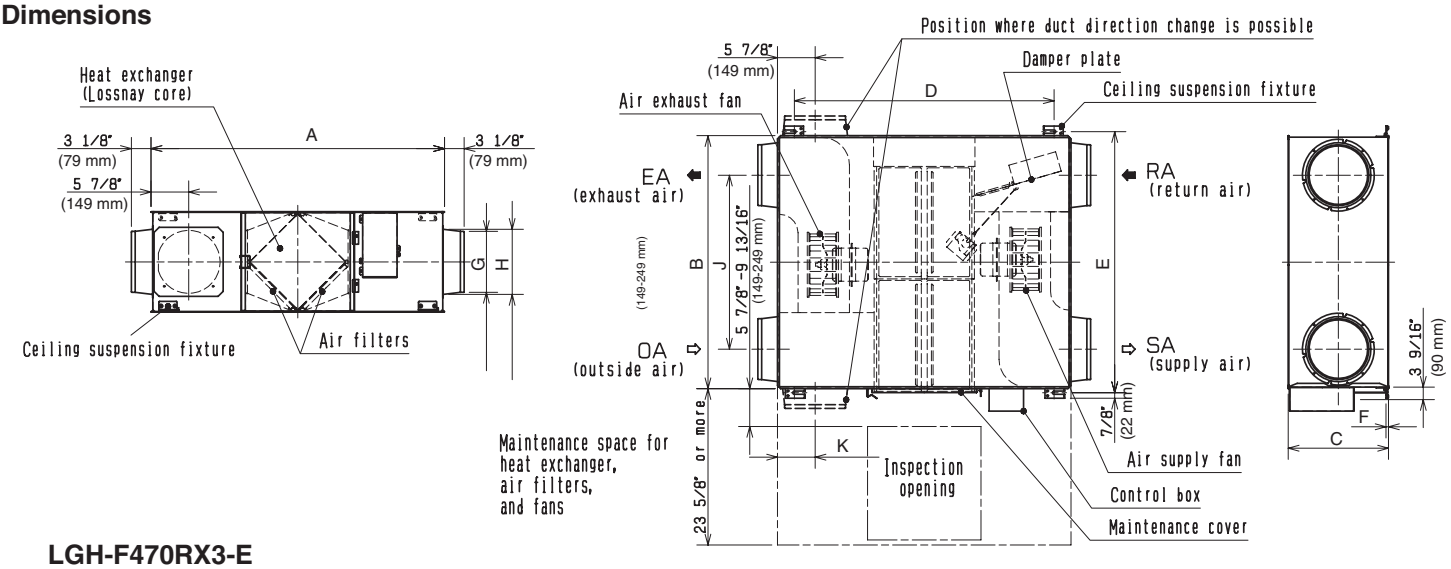
Sound Level
(fan speed low-high-extra high) (230V) . . . 31.5-37-39 dB (A)

Ventilation air: Providing sufficient ventilation air is an important part of every building design. ASHRAE Standard 62 provides the minimum ventilation air requirements. Also, check local codes.

Notes:

Model: LGH-F470RX3-E

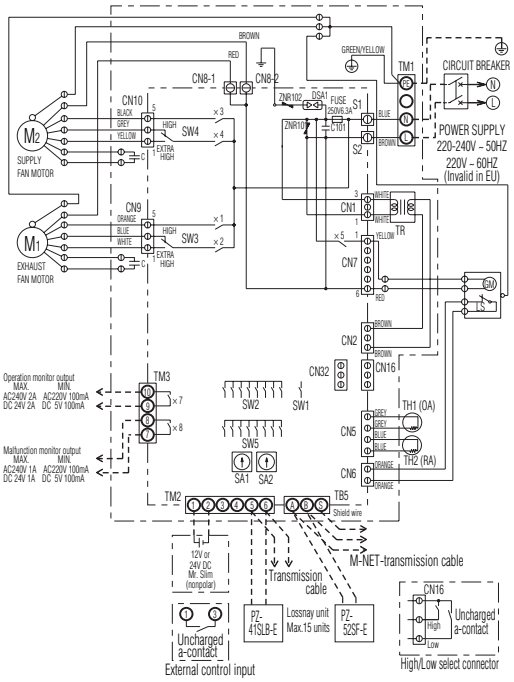
Dimensions



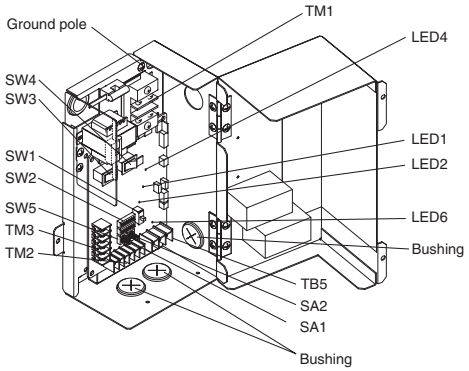
LGH-F470RX3-E

	Dimensions			Ceiling suspension fixture pitch			Nominal diameter	Duct connecting flange		Duct pitch		Weight
	A	B	C	D	E	F		G	H	J	K	
inches	45 13/16	39 1/2	15 11/16	40 9/16	40 13/16	3/8	10	ø9 1/2	ø10 3/16	27 3/16	5 7/8	143 lb
mm	1164	1003	398	1030	1037	9.5	254	241	259	691	149	65 kg

Wiring Diagram



M1	Motor for exhaust fan
M2	Motor for supply fan
C	Capacitor
GM	Motor for bypass movement
LS	Microswitch
TH1	Thermistor for outside air
TH2	Thermistor for return air
SW1	Switch (Main/Sub change)
SW2, 5	Switch (Function selection)
SW3	High/E. High select switch (Exhaust fan)
SW4	High/E. High select switch (Supply fan)
TM1	Terminal block (Power supply)
TM2	Terminal block (Transmission cable and external control input)
TM3	Terminal block (Monitor output)
TB5	Terminal block (M-NET Transmission cable)
S1, S2	Connector (Power supply)
TR	Control circuit transformer
X7	Relay contact (for operation monitor output)
X8	Relay contact (for malfunction monitor output)
CN1	Connector (Transformer primary)
CN2	Connector (Transformer secondary)
CN5	Connector (Thermistor)
CN6	Connector (Microswitch)
CN7	Connector (Motor for bypass operation)
CN8-1	Tab connector (Fan motor)
CN8-2	Tab connector (Fan motor)
CN9	Connector (Fan motor)
CN10	Connector (Fan motor)
CN16	Connector (High/Low switch)
CN32	Connector (Remote control selection)
SA1	Address setting rotary switch (10 digit)
SA2	Address setting rotary switch (1 digit)
LED1	Inspection indicator lamp
LED2	Inspection indicator lamp
LED4	Power supply indicator lamp
LED6	M-NET indicator lamp
MARK:	Indicates Terminal block Connector Board insertion connector or fastening connector of control board



Listed Energy Recovery Ventilator

Performance certified to ARI 1060 Standard

Certificate Number FM33568

Mitsubishi Electric Air Conditioning & Refrigeration Systems Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO), based on a review of quality warranties for the production of refrigeration and air conditioning equipment.

ISO Authorization System
The ISO 9000 series is a plant authorization system relating to quality warranties as stipulated by the ISO. ISO 9001 certifies quality warranties warranties based on the "design, development, production, installation, and auxiliary services" for products built at an authorized plant.

Mitsubishi Electric Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

The ISO 14000 series is a set of standards applying to environmental protection set by the International Standard Organization (ISO).

Certificate Number EC97J1227

MITSUBISHI ELECTRIC
HVAC Advanced Products Division
Mitsubishi Electric & Electronics USA, Inc.

3400 Lawrenceville Suwanee Rd
Suwanee, GA 30024
Tele: 678-376-2900 • Fax: 800-889-9904
Toll Free: 800-433-4822 (#4)
www.mehvac.com

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