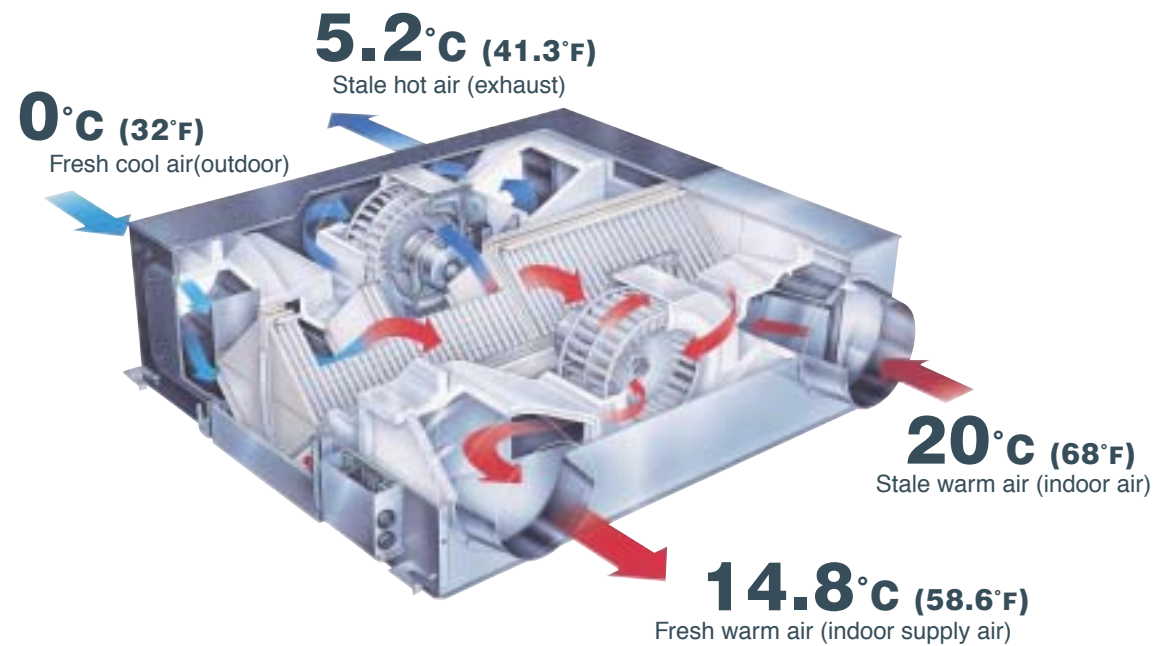




The Ventilation System for Enhanced Air Quality - Lossnay

Combine with Lossnay Ventilation System Enhanced Air Quality.
Unified Control System Allows Greater Design Freedom.



- LGH-15RX4 [150m³/h Single phase 220-240V 50Hz/60Hz]
- LGH-25RX4 [250m³/h Single phase 220-240V 50Hz/60Hz]
- LGH-35RX4 [350m³/h Single phase 220-240V 50Hz/60Hz]
- LGH-50RX4 [500m³/h Single phase 220-240V 50Hz/60Hz]
- LGH-65RX4 [650m³/h Single phase 220-240V 50Hz/60Hz]

- LGH-80RX4 [800m³/h Single phase 220-240V 50Hz/60Hz]
- LGH-100RX4 [1000m³/h Single phase 220-240V 50Hz/60Hz]
- LGH-150RX4 [1500m³/h Single phase 220-240V 50Hz/60Hz]
- LGH-200RX4 [2000m³/h Single phase 220-240V 50Hz/60Hz]

Heat-Exchange Efficiency Obtainable Only with Lossnay.

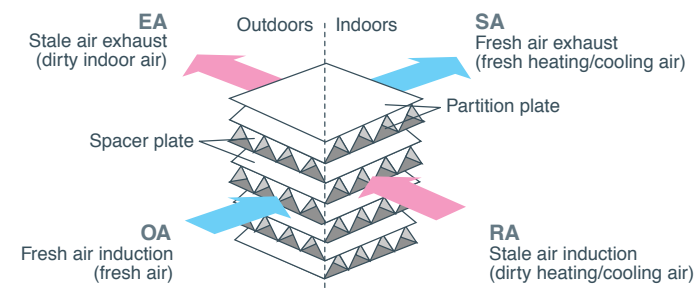
The secret to the unmatched comfort provided by Lossnay core is the cross-flow, plate-fin structure off the heat-exchange unit. A diaphragm made of a specially processed paper fully separates inducted and exhausted air supplies, ensuring that only fresh air is introduced to the indoor environment.

The superior heat-transfer and moisture permeability of the special paper assure highly effective total heat exchange (temperature and humidity) when inducted and exhausted air supplies cross in the Lossnay core.

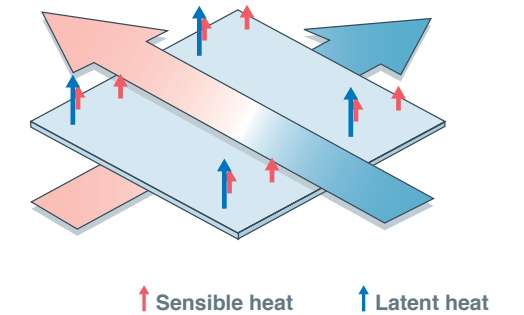
LOSSNAY Technology

- **Two paths ventilation**
LOSSNAY simultaneously intakes Fresh Air and exhausts Dirty Air.
- **Total energy recover**
LOSSNAY returns BOTH sensible heat and latent heat.

A. Two paths ventilation



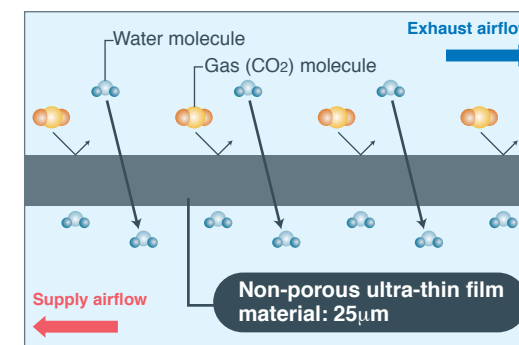
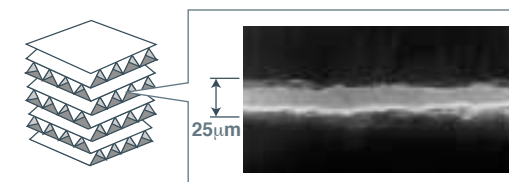
B. Total Energy transfer



- **Hyper Performance [HYPER CORE]**
Mitsubishi developed "HYPER CORE" of World No.1

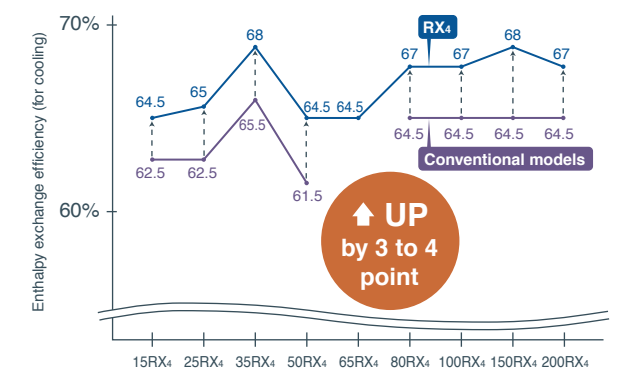
No dirty air return

LOSSNAY recovers energy but does NOT return dirty air to indoor by Non porous paper.



High Performance

Mitsubishi has World No.1 Energy exchange efficiency.



Why LOSSNAY is necessary.

• Without ventilation...

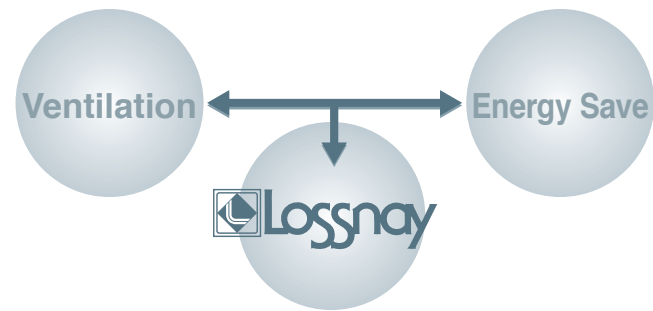
Lack of Ventilation makes people sick by dirty indoor air including CO2, Dust, Bacteria.

• If just opening windows...

Opening windows eliminates dirty air BUT wastes much air-con energy.

• So we recommend LOSSNAY

LOSSNAY is simultaneous pursuit of Ventilation and Energy Saving.



• This is LOSSNAY !

ADVANTAGES

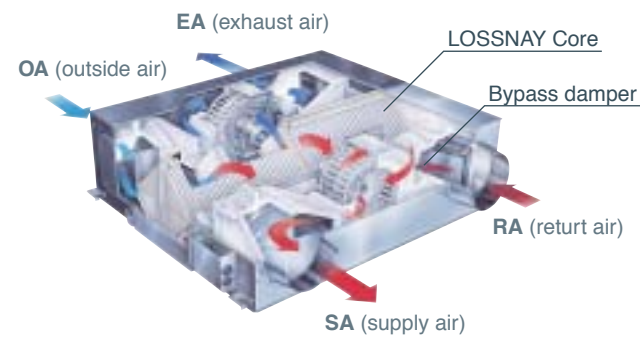
Clean air supply, dirty air exhaust by Two air paths (OA → SA and RA → EA)

Energy recovery by LOSSNAY Core

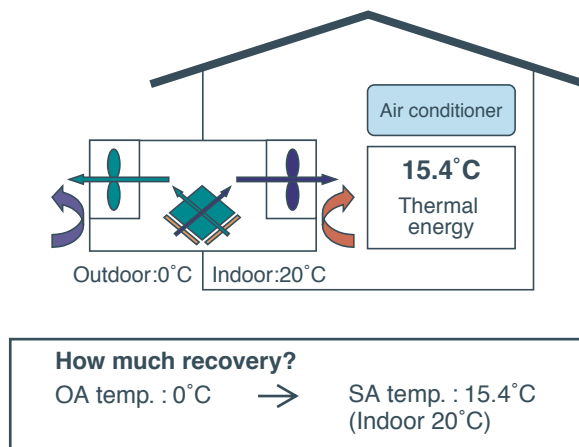
Free cooling by bypass damper

MULTI VENTILATION MODE for multi ventilation request (Power supply, Power supply/exhaust, Power exhaust)

UNIT STRUCTURE



Energy Recovery Image



LOSSNAY features

■ Multi Ventilation Mode to control air volume balance

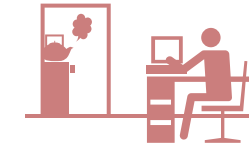
Normal office, etc.



Many people in an office

Power air supply/exhaust

Smaller offices or tenant buildings, etc.



Extractor fan working place

Power air supply

Smoking areas, etc.



Priority air exhaust

Power air exhaust

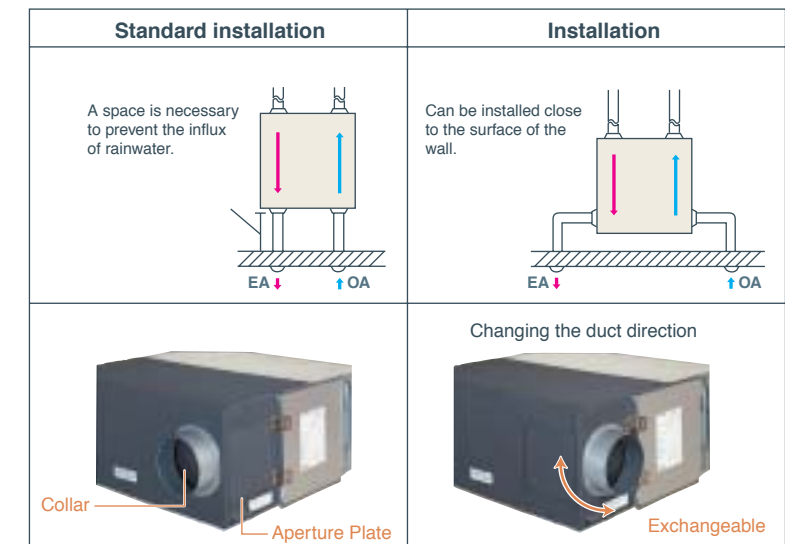
All LGH models feature the "Multi-ventilation Mode," which allows the air supply/exhaust balance to be varied dynamically to suit the usage environment and location. Modes can be selected easily by setting the connectors on the circuit board.

Ventilation Mode	Supply Airflow	Exhaust Airflow
Power air supply/exhaust mode	High	High
Power air supply mode	High	Low
Power air exhaust mode	Low	High
Energy-saving ventilation mode	Low	Low

* "High" can be further set to "Extra high" using the dip switch.

■ Easy Installation

Flexible duct work is available.



Model line up

■ Appearance



LGH-50RX4-E



LGH-200RX4-E

■ Specification

			Model: LGH-RX4 series								
Model			15R	25R	35R	50R	65R	80R	100R	150R	200R
Power source			200/240V 1Ph 50/60Hz								
Size	L mm		780	780	888	1016	954	1164	1263	1413	1413
	W mm		610	735	874	888	908	1004	1164	1004	1231
	H mm		275	275	317	317	388	398	398	800	800
Volume	m ³		0.13	0.16	0.25	0.29	0.34	0.47	0.59	1.13	1.39
Weight	kg		17	21	30	33	46	61	69	138	161
Duct diameter [mm]			100	150	150	200	250	250	250	350	350
Air Volume	Shi	CMH	150	250	350	500	650	800	1000	1500	2000
	Shi	Pa	95	80	150	150	110	140	160	140	150
Static Pressure	Shi	Pa	95	80	150	150	110	140	160	140	150
Sound level A	Shi	dB	26	26.5	31	33	34.5	33.5	36	36.5	39
Sound level B	Shi	dB	33	34.5	39	41	42.5	44.5	47	49	51.5
Ex. Efficiency	Temp.	%	77	78	79	77	77	78	79	79	79
	Heatin	%	70	70	70	67.5	67.5	71	71	72	71
	Cooling	%	65.5	65	68	64.5	64.5	67	67	68	67

■ M-NET system with City Multi Flexible system, for your multi demand



Installation

LOSSNAY ventilation combined with Air-con

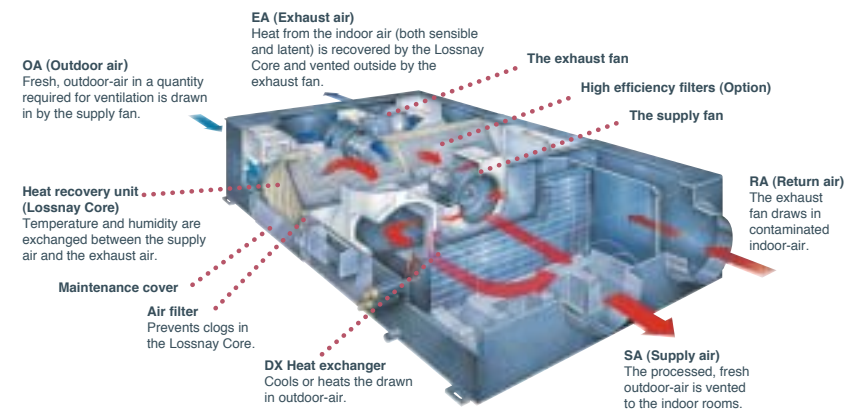


OA Processing Units



Ideal Indoor-Air Quality — For Your Comfort and Health

The OA (outdoor-air) Processing Unit creates an optimum indoor-air environment at an unparalleled rate of cost efficiency providing substantial energy savings. Forced air ventilating and humidifying functions unique to this system keep indoor-air fresh and free of contaminants preventing “sick building syndrome” and the spread of airborne viruses such as the flu. Another novel feature of the OA Processing Unit is the “Lossnay core,” a heat-exchange unit that functions to transfer heat efficiently, cutting ventilation load by as much as 70%. This special combination of functionality and performance designed to ensure users ample comfort and year-round health which cannot be found anywhere else on the market.



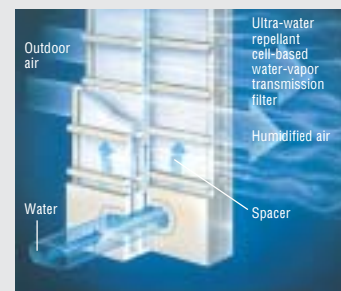
GUF-50RD(H)₃ *1
 Cooling Capacity
 5.46 (DX coil:3.63, Lossnay:1.83)KW
 Heating capacity
 6.18 (DX coil:4.17, Lossnay:2.01)KW
 500m³/h Single phase 220-240V 50Hz

GUF-100RD(H)₃ *1
 Cooling Capacity
 11.17 (DX coil:7.32, Lossnay3.85)KW
 Heating capacity
 12.50 (DX coil:8.30, Lossnay:4.20)KW
 1000m³/h Single phase 220-240V 50Hz
 *1 H : Humidifying Type

New Permeable Film Humidifier (RDH₃ model)

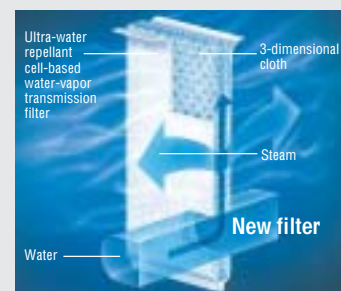
Comfortable Level of Humidity for Exceptionable Air Quality

The OA Processing Unit is equipped with a new permeable film humidifier developed and patented by Mitsubishi Electric. Steam transmission efficiency has been improved remarkably by lowering the resistance of the material. The use of a 3-layer film that allows only the transfer of steam prevents the production of white powder, so there is no need for the use of a water purifier.



Highly Efficient Humidification

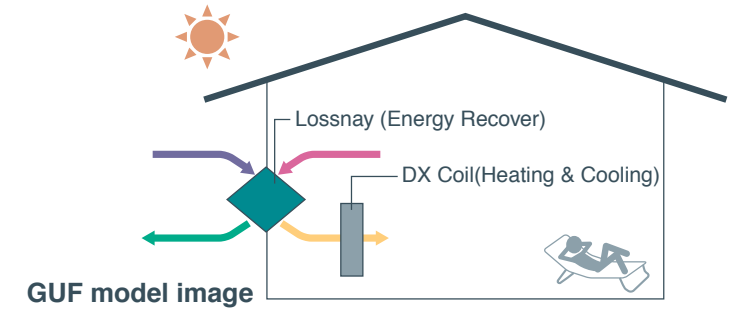
Improvements in the system of airflow patterns and water injection techniques have resulted in a substantial increase in humidifying volume.



RDH₃ SERIES OUTDOOR AIR PROCESSING UNIT GUF type

General

GUF - For the finest indoor quality
 GUF = [LOSSNAY] + [HEATING & COOLING]



Specification

Model		GUF-50RDH3	GUF-100RDH3	GUF-50RD3	GUF-100RD3
Power source		1-phase 220-240V 50Hz, 1-phase 220V 60Hz			
Cooling capacity	*1 kW	5.46 <1.83>	11.17 <3.85>	5.46 <1.83>	11.17 <3.85>
Figure in < > is the recovery capacity by LOSSNAY core.	*1 kcal / h	4,700 <1,600>	9,600 <3,300>	4,700 <1,600>	9,600 <3,300>
	*1 BTU / h	18,600 <6,200>	38,100 <13,100>	18,600 <6,200>	38,100 <13,100>
	Power input kW	235-265	480-505	235-265	480-505
	Current input A	1.15	2.20	1.15	2.20
Heating capacity	*2 kW	6.18 <2.01>	12.50 <4.20>	6.18 <2.01>	12.50 <4.20>
Figure in < > is the recovery capacity by LOSSNAY core.	*2 kcal / h	5,300 <1,700>	10,800 <3,600>	5,300 <1,700>	10,800 <3,600>
	*2 BTU / h	21,100 <6,900>	42,700 <14,300>	21,100 <6,900>	42,700 <14,300>
	Power input kW	235-265	480-505	235-265	480-505
	Current input A	1.15	2.20	1.15	2.20
Capacity equivalent to indoor unit		P32	P63	P32	P63
Humidifying capacity	kg / h	2.7	5.4	-	-
	lb / h	6.0	12.0	-	-
	Humidifier	Permeable film humidifier			
External finish		Galvanized, with grey insulation sheet			
External dimension H × W × D	mm	317 × 1,016 × 1,288	398 × 1,231 × 1,580	317 × 1,016 × 1,288	398 × 1,231 × 1,580
	in.	12-1/2 × 40 × 50-3/4	15-11/16 × 48-1/2 × 62-1/4	12-1/2 × 40 × 50-3/4	15-11/16 × 48-1/2 × 62-1/4
Net weight	kg (lb)	57 (126)	98 (217)	54 (120)	92 (203)
Heat exchanger	LOSSNAY core	Partition, Cross-flow structure, Special preserved paper-plate.			
	Refrigerant coil	Cross fin (Aluminum fin and copper tube)			
FAN	Type × Quantity	SA: Centrifugal fan (Sirocco fan) × 1 EA: Centrifugal fan (Sirocco fan) × 1			
	External static press.	Pa	125	135	140
		mmH ₂ O	12.7	13.8	14.3
	Motor type	Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2units			
	Motor output	kW	-	-	-
	Driving mechanism	Direct-driven by motor			
	Airflow rate (High value)	m ³ / h	500	1,000	500
		L / s	139	139	139
		cfm	294	589	294
Noise level (Low-High) (measured in anechoic room)	dB <A>	33.5-34.5	38-39	33.5-34.5	38-39
Insulation material		Polyester sheet			
Air filter	Supplying air	Non-woven fabrics filter (Gravitational method 82%) & Optional part: High efficiency filter (Colorimetric method 65%)			
	Exhausting air	Non-woven fabrics filter (Gravitational method 82%)			
Protection device		Fuse			
Refrigerant control device		LEV			
Diameter of liquid refrigerant pipe	mm (in.)	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare
Diameter of gas refrigerant pipe	mm (in.)	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare
Diameter of drain pipe	mm (in.)	VP25			

Note:

- *1 Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB/24°CWB
- *2 Heating : Indoor 20°CDB/13.8°CWB, Outdoor 7°CDB/16°CWB