

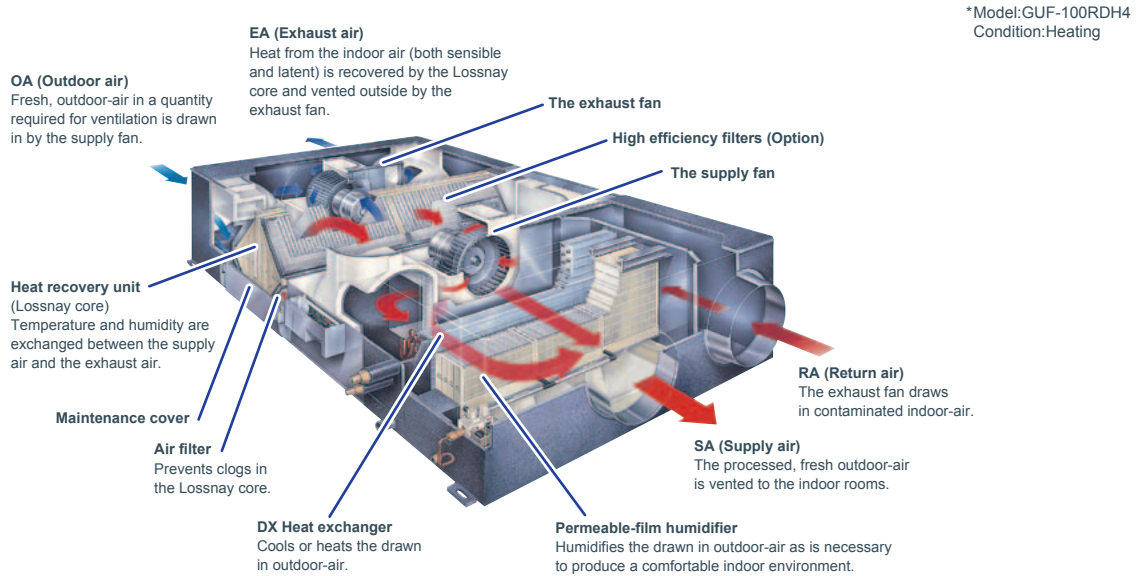
OA Processing Units

GUF-RDH4-Series



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.



Permeable Film Humidifier (RDH4 model)

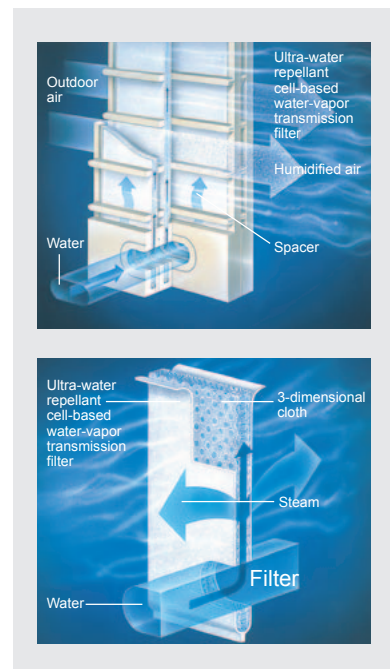
Comfortable Level of Humidity for Exceptionable Air Quality

The OA Processing Unit is equipped with a permeable film humidifier developed by Mitsubishi Electric. Steam transmission efficiency has been improved remarkably by lowering the resistance of the material. By providing an optimum level of humidity, the OA Processing Unit creates a comfortable interior environment preventing irritations such as dried out eyes or a parched throat that can be caused by insufficiently low levels of humidity in the air.

Highly Efficient Humidification

Improvements in the system of airflow patterns and water injection techniques have resulted in a substantial increase in humidifying volume. The system also controls the humidity level of the air that is exhausted, ensuring an efficient, environmentally friendly manner of operation.

Note: In the case in which the level of residual impurities exceeds 100mg/l please use a water purifier

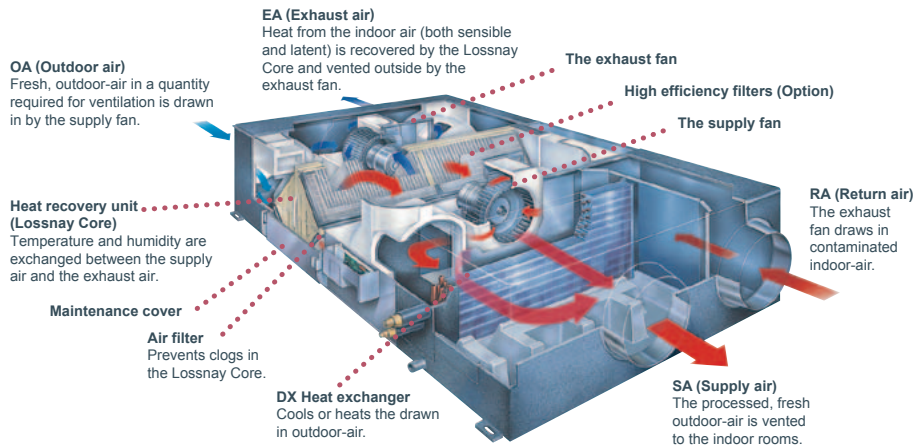


GUF-RD4-Series

A Total Air Conditioning Package Manifesting Remarkable Power

Lossnay Ventilation and Air Conditioning

The OA (outdoor-air) Processing Unit creates an optimum environment while providing substantial energy savings. The OA Processing Unit comprises forced air ventilation, heat recovery, heating and cooling, and air purification. This total air conditioning system keeps indoor air fresh and comfortable all year round, and keeps it free of contaminants preventing ailments such as sick building syndrome. Inside the OA Processing Unit is the Lossnay Core, a heat-exchange unit that transfers heat efficiently, cutting ventilation load by as much as 70%. This special combination of functionality and performance contained within a single unit ensures users ample comfort, good health, and energy savings.



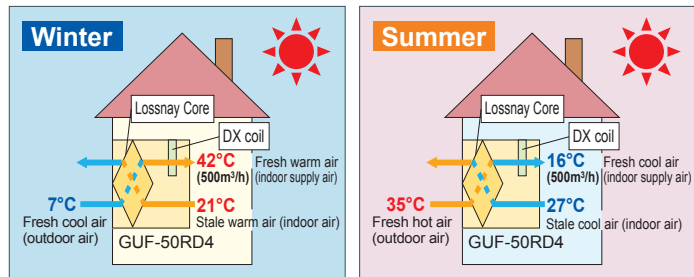
The Air Conditioning Function

Two Units in One

Along with Lossnay ventilation, the OA Processing Unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy. Also, with ventilation and air conditioning integrated, space is saved and installation expense kept to a minimum. What's more, the air temperature in any room can be perfectly adjusted to the desired

temperature of the occupants via the OA Processing Unit, which can be used as the indoor unit of the CITY MULTI air conditioning system. The heat recovery function maximizes efficiency and saves energy, benefiting the environment and helping companies cut costs. It also reduces the refrigerant load and lowers the amount of horsepower required by the outdoor unit.

Temperature simulation (Example : GUF-50RD4)



Specification

Model			GUF-50RDH4	GUF-100RDH4	GUF-50RD4	GUF-100RD4	GUF-100RDH4-60	
Power source			1-phase 220-240V 50Hz				1-phase 220V 60Hz	
Cooling capacity	*1	kW	5.57 <1.94>	11.44 <4.12>	5.57 <1.94>	11.44 <4.12>	11.44 <4.12>	
Figure in < > is the recovery capacity by LOSSNAY core.	*1	kcal / h	4,800 <1,650>	9,800 <3,500>	4,800 <1,650>	9,800 <3,500>	9,800 <3,500>	
	*1	BTU / h	19,000 <6,600>	39,000 <14,000>	19,000 <6,600>	39,000 <14,000>	39,000 <14,000>	
	*3	Power input	W	235-265	480-505	235-265	480-505	
	*3	Current input	A	1.15	2.20	1.15	2.20	
Heating capacity	*2	kW	6.21 <2.04>	12.56 <4.26>	6.21 <2.04>	12.56 <4.26>	12.56 <4.26>	
Figure in < > is the recovery capacity by LOSSNAY core.	*2	kcal / h	5,340 <1,750>	10,800 <3,650>	5,340 <1,750>	10,800 <3,650>	10,800 <3,650>	
	*2	BTU / h	21,200 <7,000>	42,850 <14,450>	21,200 <7,000>	42,850 <14,450>	42,850 <14,450>	
	*3	Power input	W	235-265	480-505	235-265	480-505	
	*3	Current input	A	1.15	2.20	1.15	2.20	
Capacity equivalent to indoor unit			P32	P63	P32	P63	P63	
Humidifying capacity			kg / h	2.7	5.4	—	—	
			lbs / h	6.0	12.0	—	—	
Humidifier			Permeable film humidifier				—	
External finish			Galvanized, with grey insulation sheet					
External dimension H x W x D			mm	317 x 1,016 x 1,288	398 x 1,231 x 1,580	317 x 1,016 x 1,288	398 x 1,231 x 1,580	
			in.	12-1/2 x 40 x 50-3/4	15-11/16 x 48-1/2 x 62-1/4	12-1/2 x 40 x 50-3/4	15-11/16 x 48-1/2 x 62-1/4	
Net weight			kg (lbs)	51 (112)	88 (194)	48 (106)	82 (181)	
Heat exchanger			LOSSNAY core					
			Refrigerant coil					
FAN			Type x Quantity					
			Partition, Cross-flow structure, Special preserved paper-plate.					
			Cross fin (Aluminum fin and copper tube)					
			SA: Centrifugal fan (Sirocco fan) x 1					
			EA: Centrifugal fan (Sirocco fan) x 1					
			External static press.	Pa	125	135	140	140
			*4	mmH ₂ O	12.7	13.8	14.3	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	m ³ / h	500	1,000	500	1,000
			(High value)	L / s	139	278	139	278
				cfm	294	589	294	589
Sound pressure level (Low-High) (measured in anechoic room)			*3	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					
Connectable outdoor unit			R410A CITY MULTI					
Diameter of refrigerant pipe			Liquid	mm (in.)	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare
			Gas	mm (in.)	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare

Notes:

- *1 Nominal cooling conditions
Indoor : 27°CDB (81°FDB)/19°CWB (66°FWB)
Outdoor : 35°CDB (95°FDB)/24°CWB (75°FWB)
- *2 Nominal heating conditions
Indoor : 20°CDB (68°FDB)/13.8°CWB (57°FWB)
Outdoor : 7°CDB (45°FDB)/6°CWB (43°FWB)
- *3 The values are measured at the rated external static pressure.
- *4 The figure in < > indicates the value when external static pressure is changed.