

**GUF-RD4, GUF-RDH4**

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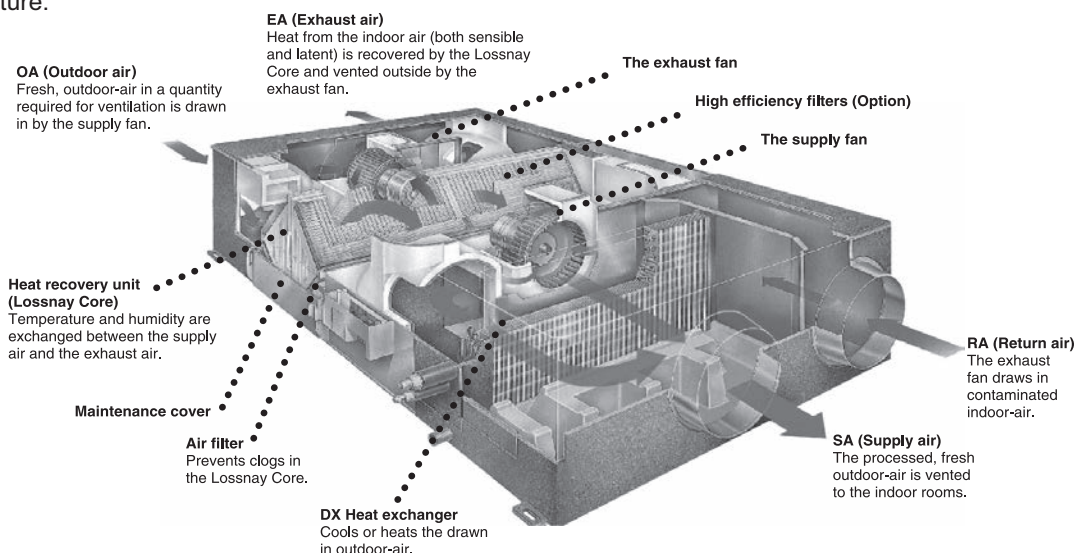
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# OA Processing unit

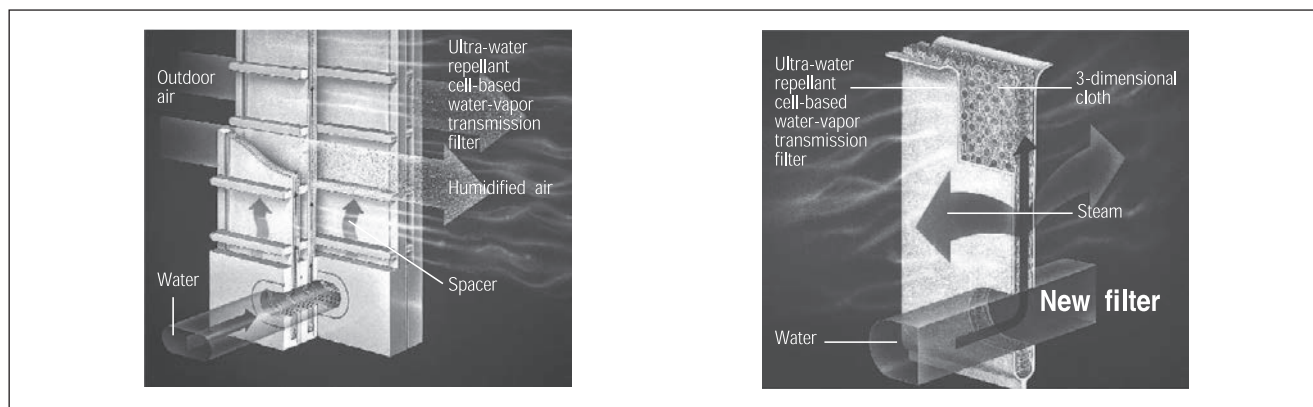
OA Processing unit GUF-RD(H)<sub>4</sub> combines the characteristics of LOSSNAY and air conditioning function of indoor unit, offers perfect air conditioning in which fresh outdoor air, humidity, temperature adjustment are all considered.

Moreover, GUF-RD(H)<sub>4</sub> realizes the air conditioning solution at the most energy saving method.

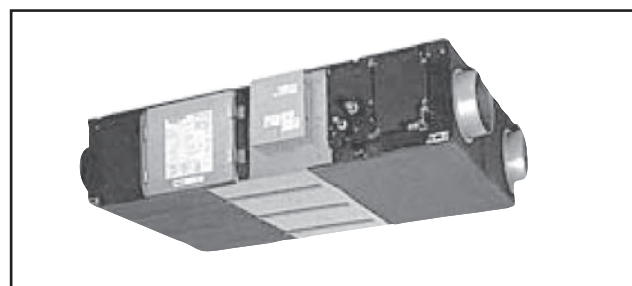
## GUF Structure:



## Permeable Film Humidifier (GUF-RDH Model)



## Line up of OA Processing units



GUF-50RD <sub>4</sub>	500m <sup>3</sup> /h	1-phase 220-240V 50Hz
GUF-100RD <sub>4</sub>	1000m <sup>3</sup> /h	1-phase 220-240V 50Hz
GUF-50RDH <sub>4</sub>	500m <sup>3</sup> /h	1-phase 220-240V 50Hz
GUF-100RDH <sub>4</sub>	1000m <sup>3</sup> /h	1-phase 220-240V 50Hz

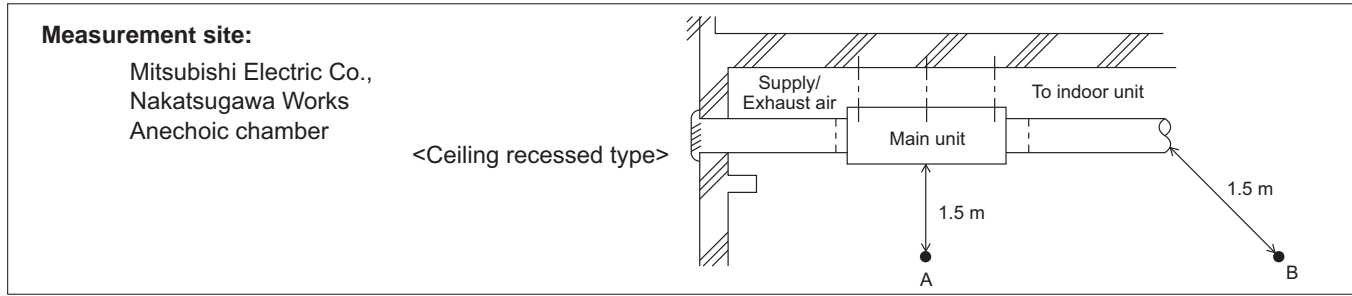
# 1. SPECIFICATIONS

DATA G11

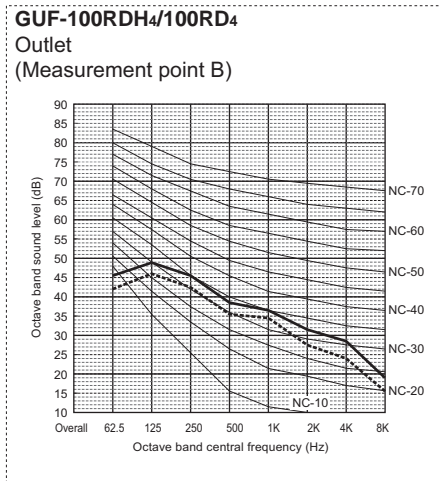
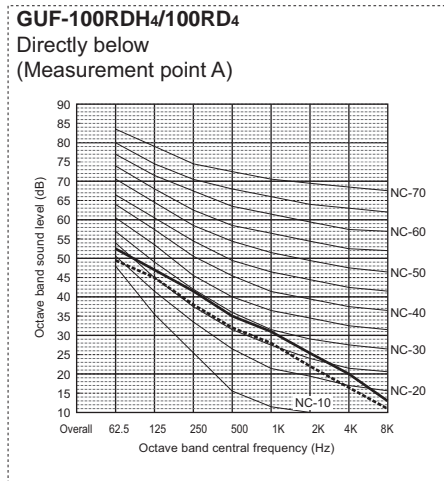
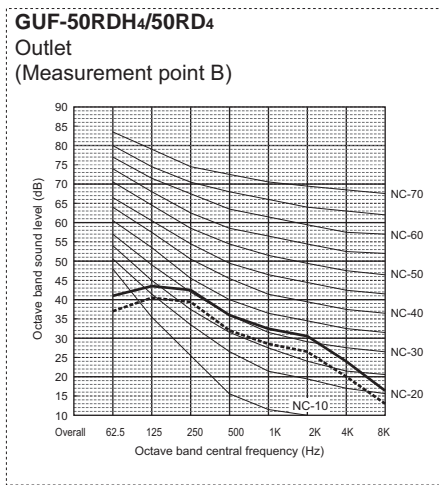
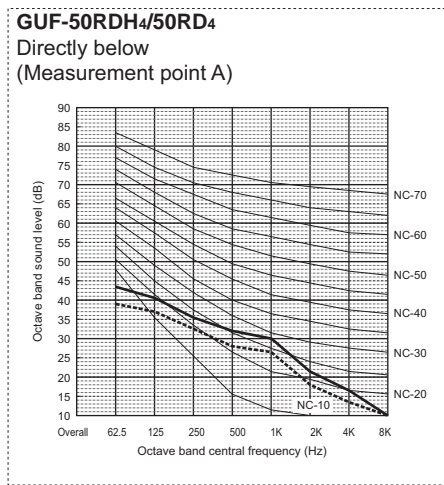
Model			GUF-50RDH <sub>4</sub>	GUF-100RDH <sub>4</sub>	GUF-50RD <sub>4</sub>	GUF-100RD <sub>4</sub>					
Power source			1-phase 220-240V 50Hz								
Cooling capacity	*1	kW	5.57	<1.94>	11.44	<4.12>	5.57	<1.94>	11.44	<4.12>	
	Figure in < > is the recovery capacity by LOSSNAY core.	*1	kcal / h	4,800	<1,650>	9,800	<3,500>	4,800	<1,650>	9,800	<3,500>
		*1	BTU / h	19,000	<6,600>	39,000	<14,000>	19,000	<6,600>	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>	
	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>
		*2	BTU / h	21,200	<7,000>	42,850	<14,450>	21,200	<7,000>	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					
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		Partition, Cross-flow structure, Special preserved paper-plate.								
	Refrigerant coil		Cross fin (Aluminium fin and copper tube)								
FAN	Type x Quantity		SA: Centrifugal fan (Sirocco fan) x 1 EA: Centrifugal fan (Sirocco fan) x 1								
	External static press. *4	Pa	125	135	140	140					
		mmH <sub>2</sub> 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 (High value)	m <sup>3</sup> / h		500	1,000	500	1,000					
	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					
Field drain pipe size		mm (in.)	Socket(L.D. 32mm (1-1/4))+O.D. 32mm (1-1/4)								
Drawing	External		-								
	Wiring		-								
	Refrigerant cycle		-								
Standard attachment	Document		Installation Manual, Instruction Book								
	Accessory										
Remark	Optional parts		High efficiency filter: PZ-50RFM-E (for GUF-50RDH <sub>4</sub> , GUF-50RD <sub>4</sub> ) PZ-100RFM-E (for GUF-100RDH <sub>4</sub> , GUF-100RD <sub>4</sub> )								
	Installation		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.								
<b>Note :</b>			*1 Nominal cooling conditions			*2 Nominal heating conditions			Unit converter		
Indoor :			27°CDB/19°CWB (81°FDB/66°FWB)			20°CDB (68°FDB)			kcal/h = kW x 860		
Outdoor :			35°CDB (95°FDB)			7°CDB/6°CWB (45°FDB/43°FWB)			BTU/h = kW x 3,412		
Pipe length :			7.5 m (24-9/16 ft)			7.5 m (24-9/16 ft)			cfm = m <sup>3</sup> /min x 35.31		
Level difference :			0 m (0 ft)			0 m (0 ft)			lbs = kg / 0.4536		
* Nominal conditions *1, *2 are subject to JIS B8615-1.									*Above specification data is subject to rounding variation.		
* Due to continuing improvement, above specification may be subject to change without notice.											
*3 The values are measured at the rated external static pressure.											
*4 The figure in < > indicates the value when external static pressure is changed.											

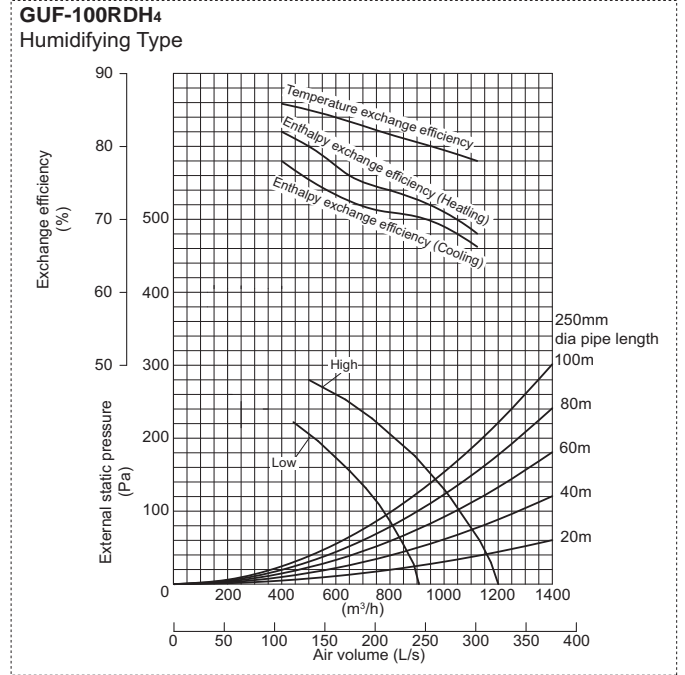
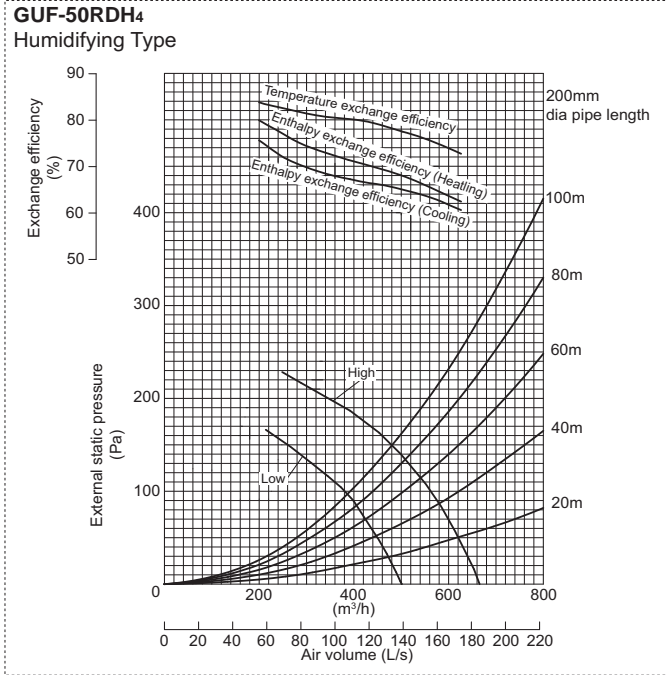
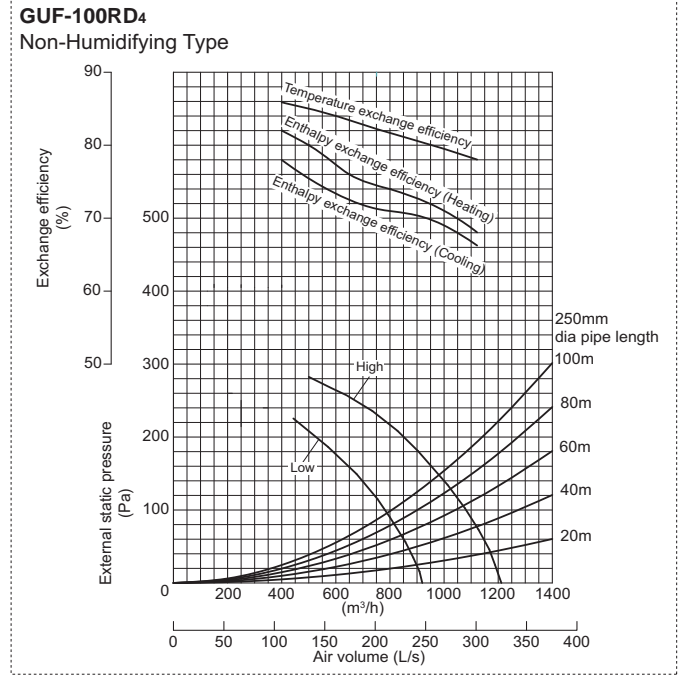
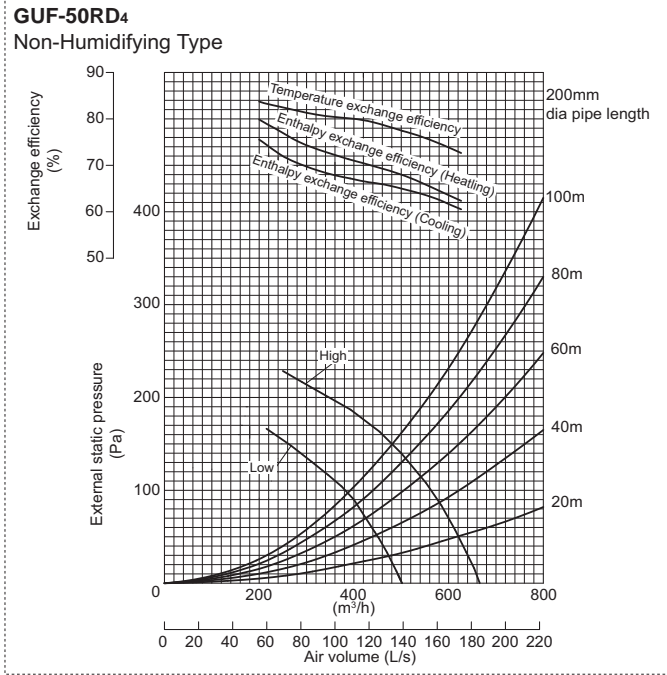
OA

2-1. Measurement Condition



2-2. NC curves

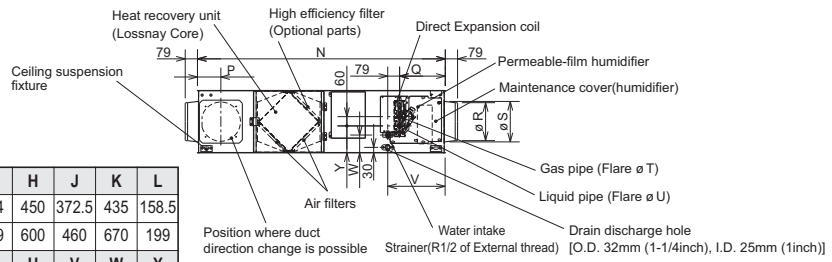
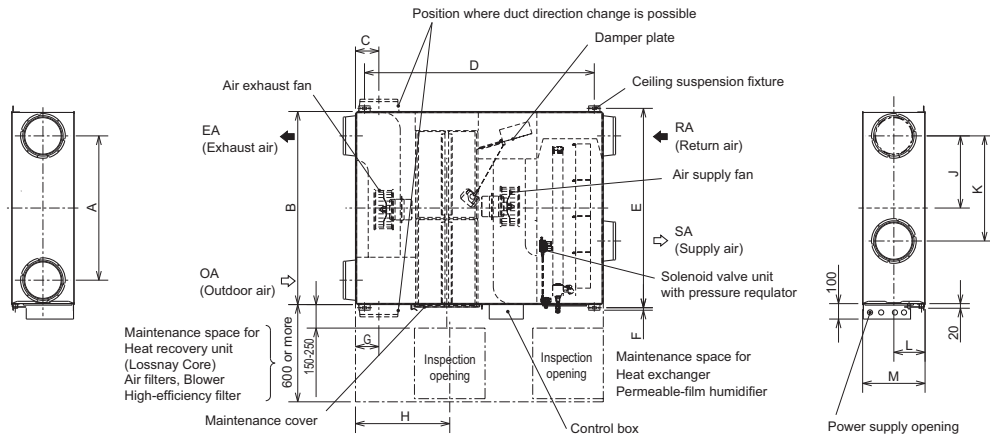




GUF-50,100RD(H)<sub>4</sub>

Humidifying Type GUF-50/100RDH<sub>4</sub>

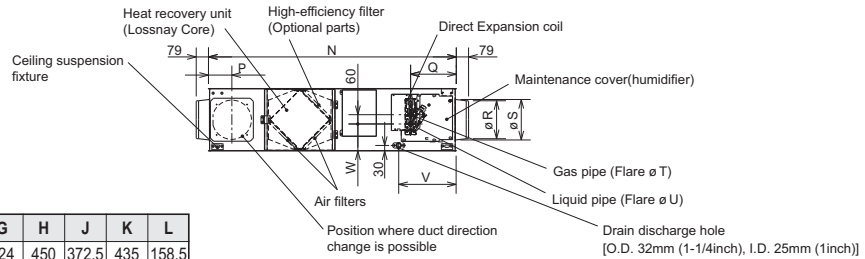
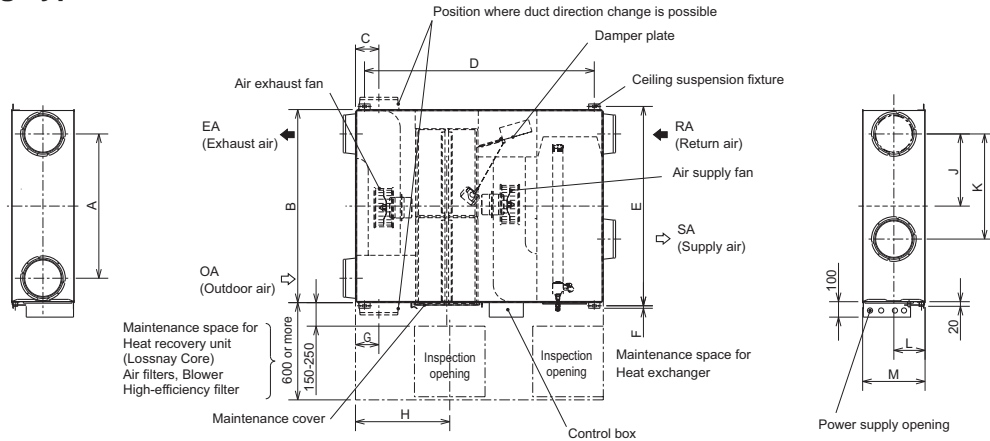
Unit : mm



Model	A	B	C	D	E	F	G	H	J	K	L
GUF-50RDH <sub>4</sub>	745	1,016	124	1,185	1,048	22	124	450	372.5	435	158.5
GUF-100RDH <sub>4</sub>	920	1,231	149	1,465	1,271	16	149	600	460	670	199
Model	M	N	P	Q	R	S	T	U	V	W	Y
GUF-50RDH <sub>4</sub>	317	1,288	124	266	192	208	12.7	6.35	347	99	135
GUF-100RDH <sub>4</sub>	398	1,580	149	280	242	258	15.88	9.52	361	110	169

Non-Humidifying Type GUF-50/100RD<sub>4</sub>

Unit : mm



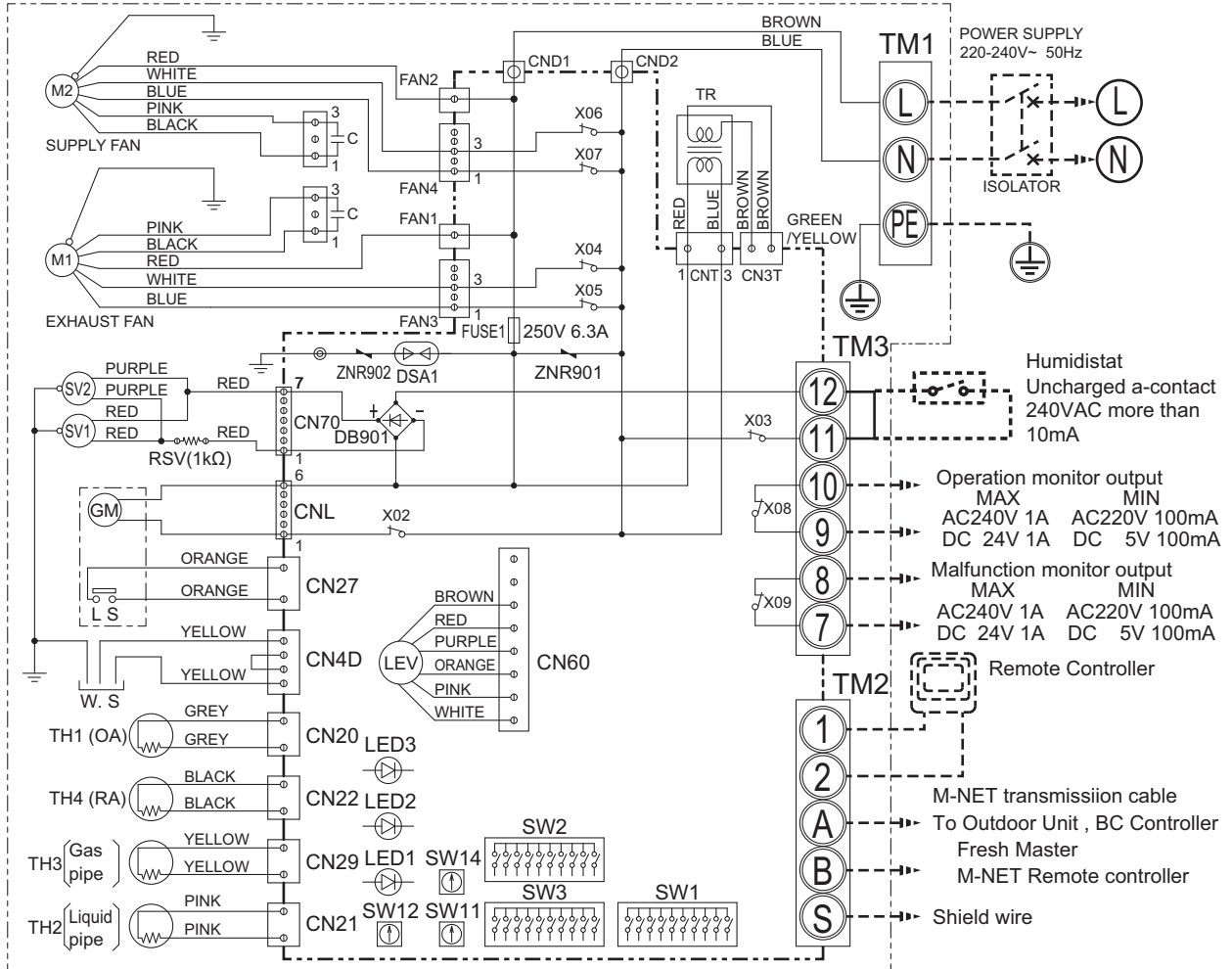
Model	A	B	C	D	E	F	G	H	J	K	L
GUF-50RD <sub>4</sub>	745	1,016	124	1,185	1,048	22	124	450	372.5	435	158.5
GUF-100RD <sub>4</sub>	920	1,231	149	1,465	1,271	16	149	600	460	670	199
Model	M	N	P	Q	R	S	T	U	V	W	
GUF-50RD <sub>4</sub>	317	1,288	124	266	192	208	12.7	6.35	347	135	
GUF-100RD <sub>4</sub>	398	1,580	149	280	242	258	15.88	9.52	361	169	

OA

Humidifying Type GUF-50/100RDH4

- TM1, TM2, TM3 shown in dotted lines are field work.
- Be sure to connect the grounding wire.
- Isolators should be supplied by the field.

**Warning**  
Before obtaining access to terminals, all supply circuits must be disconnected.



MARK ○ indicates terminal block, ⊙ :connector  
Ⓜ :board insertion connector or fastening connector of control board.

Symbol Explanation

Symbol	Name	Symbol	Name	Symbol	Name
M1	Fan motor (exhaust)	RSV	Resistance (solenoid valve)	A, B	M-NET transmission terminal
M2	Fan motor (supply)	TM1	Terminal block (power supply)	S	Shield
C	Capacitor	TM2	Terminal block (transmission)	CND1, CND2	Connector (power supply)
W. S	Water sensor	TM3	Terminal block (humidistat, monitor)	X02-X09	Relay
SV1	Solenoid valve (pressure regulator)	SW1	Switch (function selection)	TR	Transformer
SV2	Solenoid valve (exhaust)	SW2	Switch (capacity code setting)	GM	Damper motor
TH1	Thermistor (outdoor air temp. detection)	SW3	Switch (function selection)	LS	Limit switch
TH2	Thermistor (pipe temp. detection/liquid)	SW11	Switch (ones digit address set)	LED1	Power supply monitor
TH3	Thermistor (pipe temp. detection/gas)	SW12	Switch (tens digit address set)	LED2	MA remote controller
TH4	Thermistor (room air temp. detection)	SW14	Switch (branch NO. set)	LED3	Power supply monitor
LEV	Electronic linear expansion valve	1, 2	Remote controller terminal		M-NET Power supply monitor

\*Specifications may be subject to change without notice.

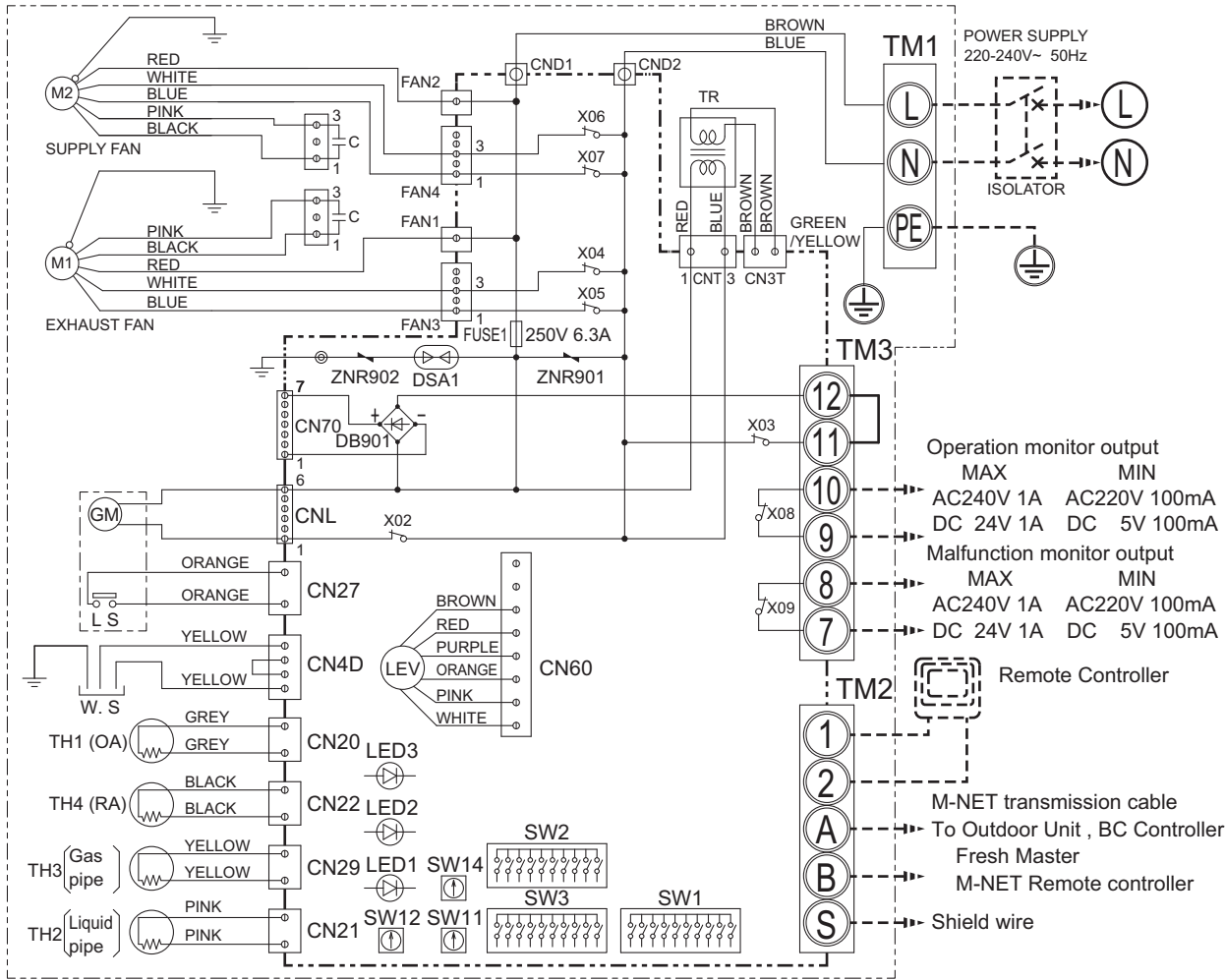


Non-Humidifying Type GUF-50/100RD4

- TM1, TM2, TM3 shown in dotted lines are field work.
- Be sure to connect the grounding wire.
- Isolators should be supplied by the field.

**Warning**

Before obtaining access to terminals, all supply circuits must be disconnected.



MARK ○ indicates terminal block, ⊕ connector  
 ⊕ board insertion connector or fastening connector of control board.

Symbol explanation

Symbol	Name	Symbol	Name	Symbol	Name
M1	Fan motor (exhaust)	TM1	Terminal block (power supply)	S	Shield
M2	Fan motor (supply)	TM2	Terminal block (transmission)	CND1, CND2	Connector (power supply)
C	Capacitor	TM3	Terminal block (humidistat, monitor)	X02-X09	Relay
W.S	Water sensor	SW1	Switch (function selection)	TR	Transformer
TH1	Thermistor (outdoor air temp. detection)	SW2	Switch (capacity code setting)	GM	Damper motor
TH2	Thermistor (pipe temp. detection/liquid)	SW3	Switch (function selection)	LS	Limit switch
TH3	Thermistor (pipe temp. detection/gas)	SW11	Switch (ones digit address set)	LED1	Power supply monitor
TH4	Thermistor (room air temp. detection)	SW12	Switch (tens digit address set)	LED2	MA remote controller
LEV	Electronic linear expansion valve	SW14	Switch (branch NO. set)	LED3	Power supply monitor
		1, 2	Remote controller terminal		M-NET Power supply monitor
		A, B	M-NET transmission terminal		

\*Specifications may be subject to change without notice.