

CITY MULTI™

OA Processing unit

GUF-RD₃

GUF-RDH₃

GUF-RD(H)₃

V-B

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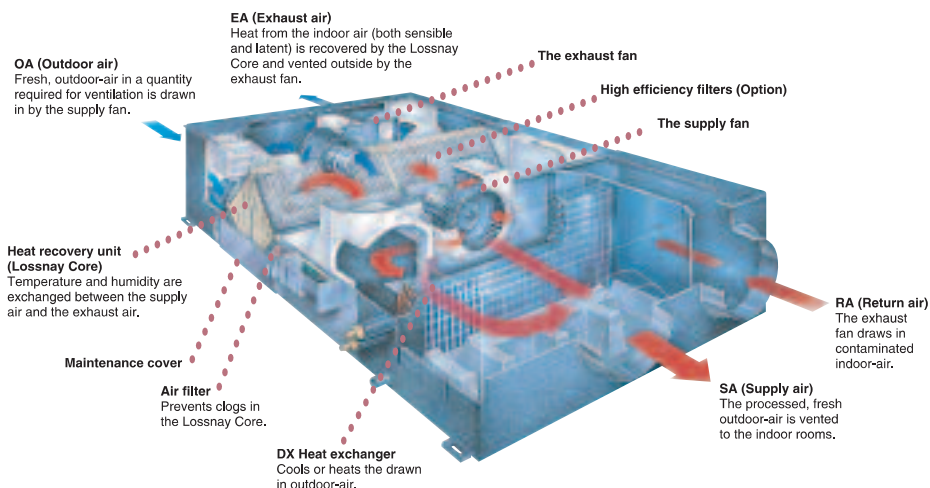
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OA Processing unit GUF-RD(H)₃ combines the characteristics of LOSSNAY and air conditioning function of indoor unit, offers perfect air conditioning in which fresh outdoor air, humidity, temperature adjustment are all considered. Moreover, GUF-RD(H)₃ realizes the air conditioning solution at the most energy saving method.

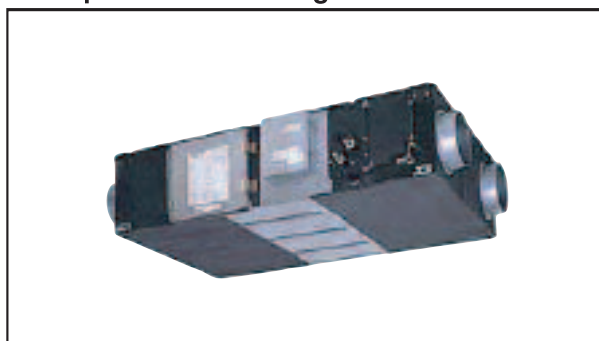
GUF Structure:



Permeable Film Humidifier (GUF-RDH Model)



Line up of OA Processing units



GUF-50RD ₃ -E	500m ³ /h	1-phase 220-240V 50Hz, 1-phase 220V 60Hz
GUF-100RD ₃ -E	1000m ³ /h	1-phase 220-240V 50Hz, 1-phase 220V 60Hz
GUF-50RDH ₃ -E	500m ³ /h	1-phase 220-240V 50Hz, 1-phase 220V 60Hz
GUF-100RDH ₃ -E	1000m ³ /h	1-phase 220-240V 50Hz, 1-phase 220V 60Hz

1. SPECIFICATIONS

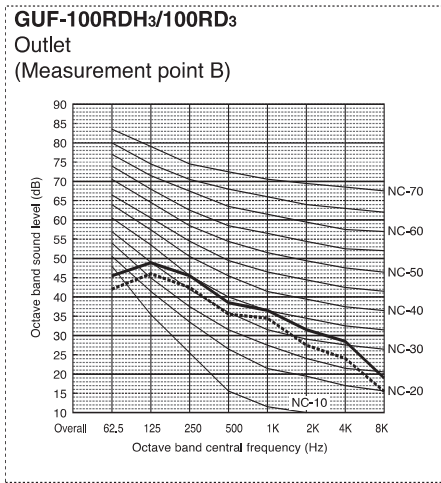
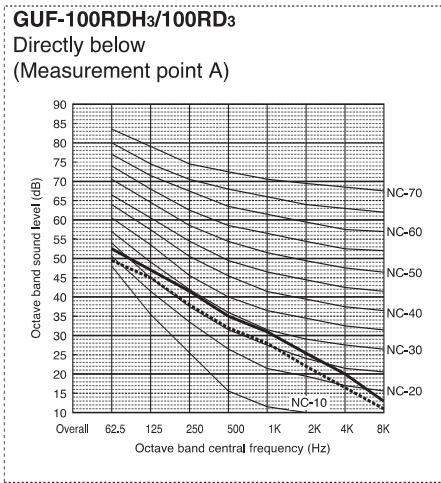
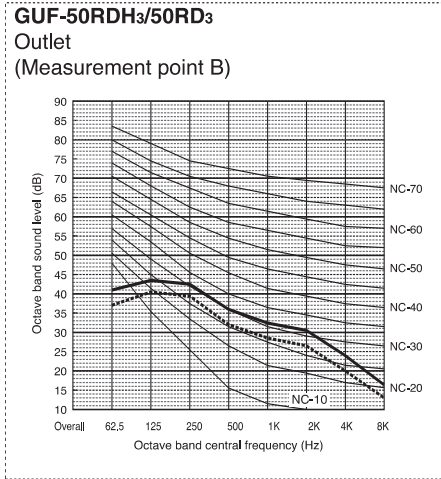
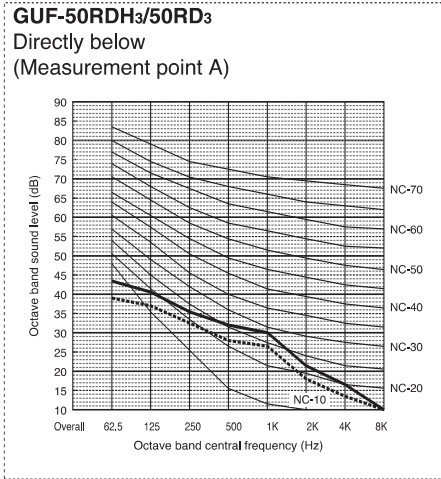
R410A Data G2

Model			GUF-50RDH ₃		GUF-100RDH ₃		GUF-50RD ₃		GUF-100RD ₃		
Power source			1-phase 220-240V 50Hz, 1-phase 220V 60Hz								
Cooling capacity Figure in < > is the recovery capacity by LOSSNAY core.	*1	kW	5.46	<1.83>	11.17	<3.85>	5.46	<1.83>	11.17	<3.85>	
	*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>	
	*2	kcal / h	4,500	<1,400>	9,300	<3,000>	4,500	<1,400>	9,300	<3,000>	
		Power input	kW	235-265		480-505		235-265		480-505	
		Current input	A		2.20		1.15		2.20		
Heating capacity Figure in < > is the recovery capacity by LOSSNAY core.	*3	kW	6.18	<2.01>	12.50	<4.20>	6.18	<2.01>	12.50	<4.20>	
	*3	kcal / h	5,300	<1,700>	10,800	<3,600>	5,300	<1,700>	10,800	<3,600>	
	*3	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		2.20		1.15		2.20	
Capacity equivalent to indoor unit			P32		P63		P32		P63		
Humidifying capacity			kg / h		5.4						
			lb / h		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 (lb)		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 x Quantity		SA: Centrifugal fan (Sirocco fan) x 1 EA: Centrifugal fan (Sirocco fan) x 1								
	External static press.	Pa	125		135		140		140		
		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 (High value)	m ³ / min		500		1,000		500		1,000		
	L / s		139		139		139		139		
	cfm		294		589		294		589		
Noise level (Low-High) (measured in anechoic room)			dB <A>		33.5-34.5		38-39		33.5-34.5		
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, R407C, R22 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		
Diameter of drain pipe			mm (in.) VP25								
Drawing	External		GUF-ext-rdH3				GUF-ext-rd3				
	Wiring		GUF-wir-rdH3				GUF-wir-rd3				
	Refrigerant cycle		-				-				
Standard attachment	Document		Installation Manual, Instruction Book								
	Accessory										
Remark	Optional parts		High efficiency filter: PZ-50RFM (for GUF-50RDH ₃ , GUF-50RD ₃)								
	Installation		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.								

Note :	*:1 Nominal cooling conditions	*:2 Nominal cooling conditions	*:3 Nominal heating conditions	Unit converter
	Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
	Outdoor : 35°CDB (95°FDB)	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)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
	Level difference : 0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
	* Sound level details refer to 2. SOUND LEVELS.			*Above specification data is subject to rounding variation.
	* Nominal conditions *:1, *:3 are subject to JIS B8615-1.			
	* Due to continuing improvement, above specification may be subject to change without notice.			

Ref.: Spec_PMFY-P20VBM-E

2-1. NC curves

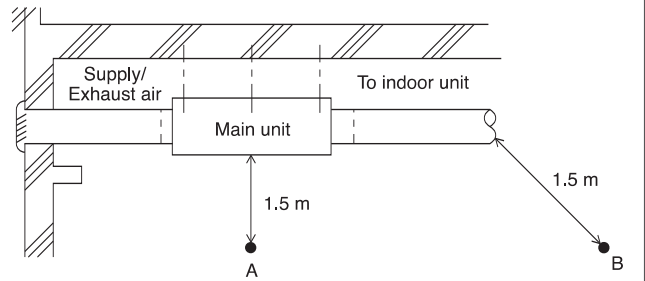


● Measurement Condition

Measurement site:

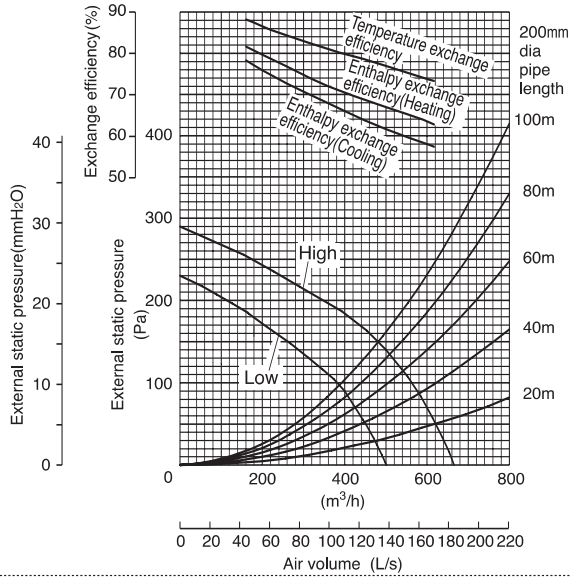
Mitsubishi Electric Co.,
 Nakatsugawa Works
 Anechoic chamber

<Ceiling recessed type>

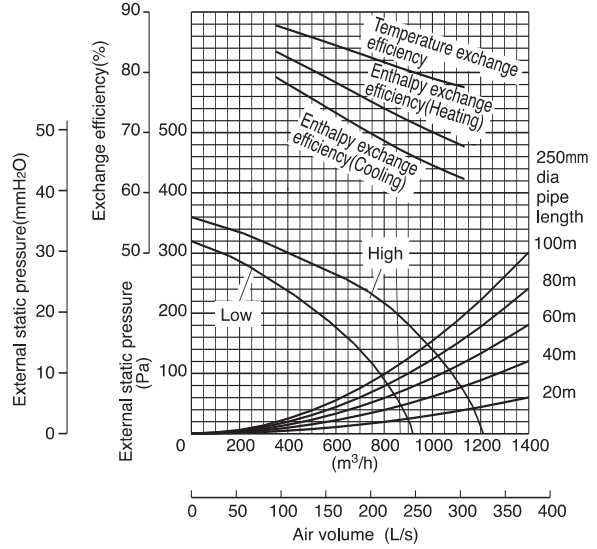


2-2. Fan characteristics curves

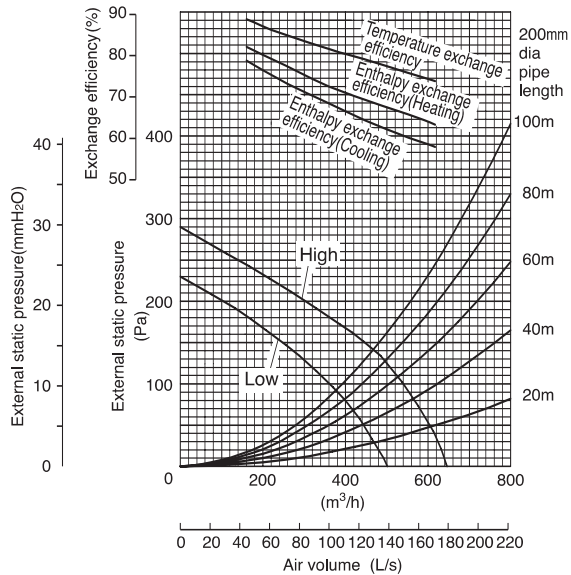
GU-F-50RDH₃
Humidifying Type



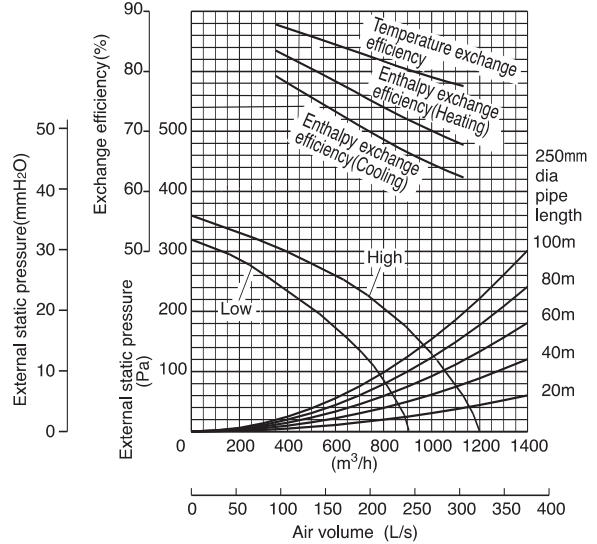
GU-F-100RDH₃
Humidifying Type



GU-F-50RD₃
Non-Humidifying Type



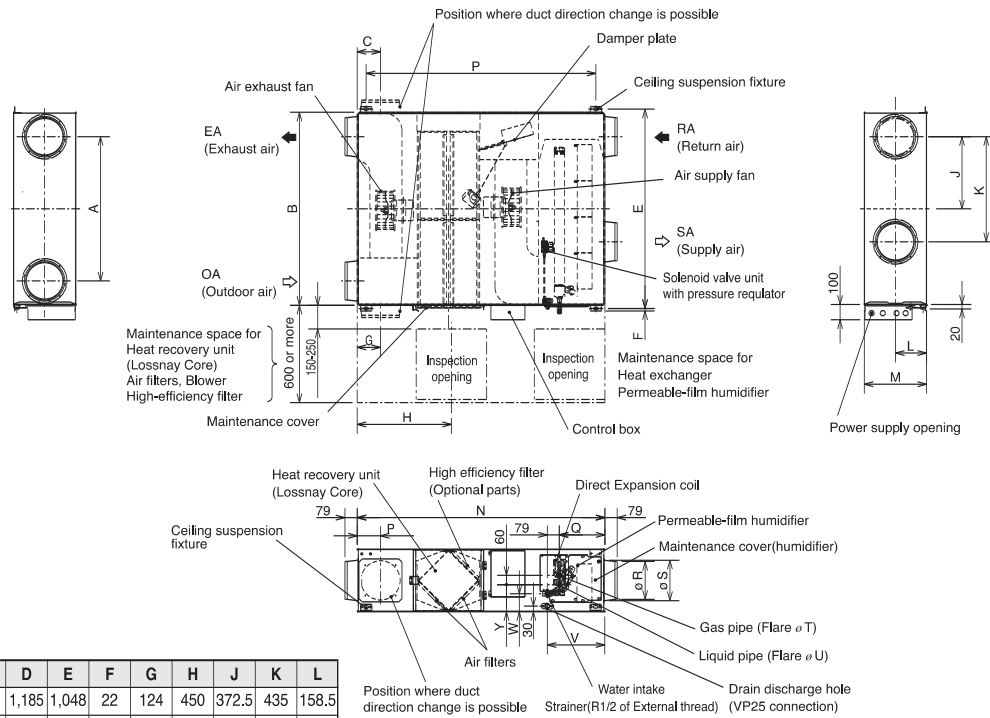
GU-F-100RD₃
Non-Humidifying Type



GUF-50,100RD(H)₃

Drw. : GUF-ext-rdH3
Unit : mm

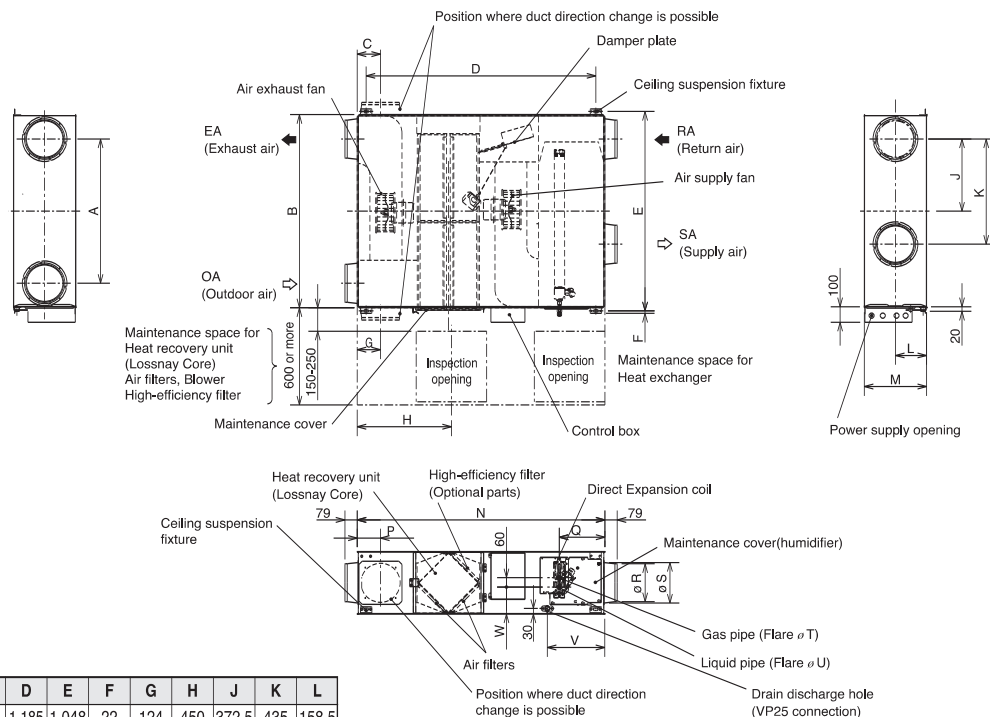
Humidifying Type GUF-50/100RDH₃



Model	A	B	C	D	E	F	G	H	J	K	L
GUF-50RDH ₃	745	1,016	124	1,185	1,048	22	124	450	372.5	435	158.5
GUF-100RDH ₃	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 ₃	317	1,288	124	266	192	208	12.7	6.35	347	99	135
GUF-100RDH ₃	398	1,580	149	280	242	258	15.88	9.52	361	110	169

Non-Humidifying Type GUF-50/100RD₃

Drw. : GUF-ext-rd3
Unit : mm

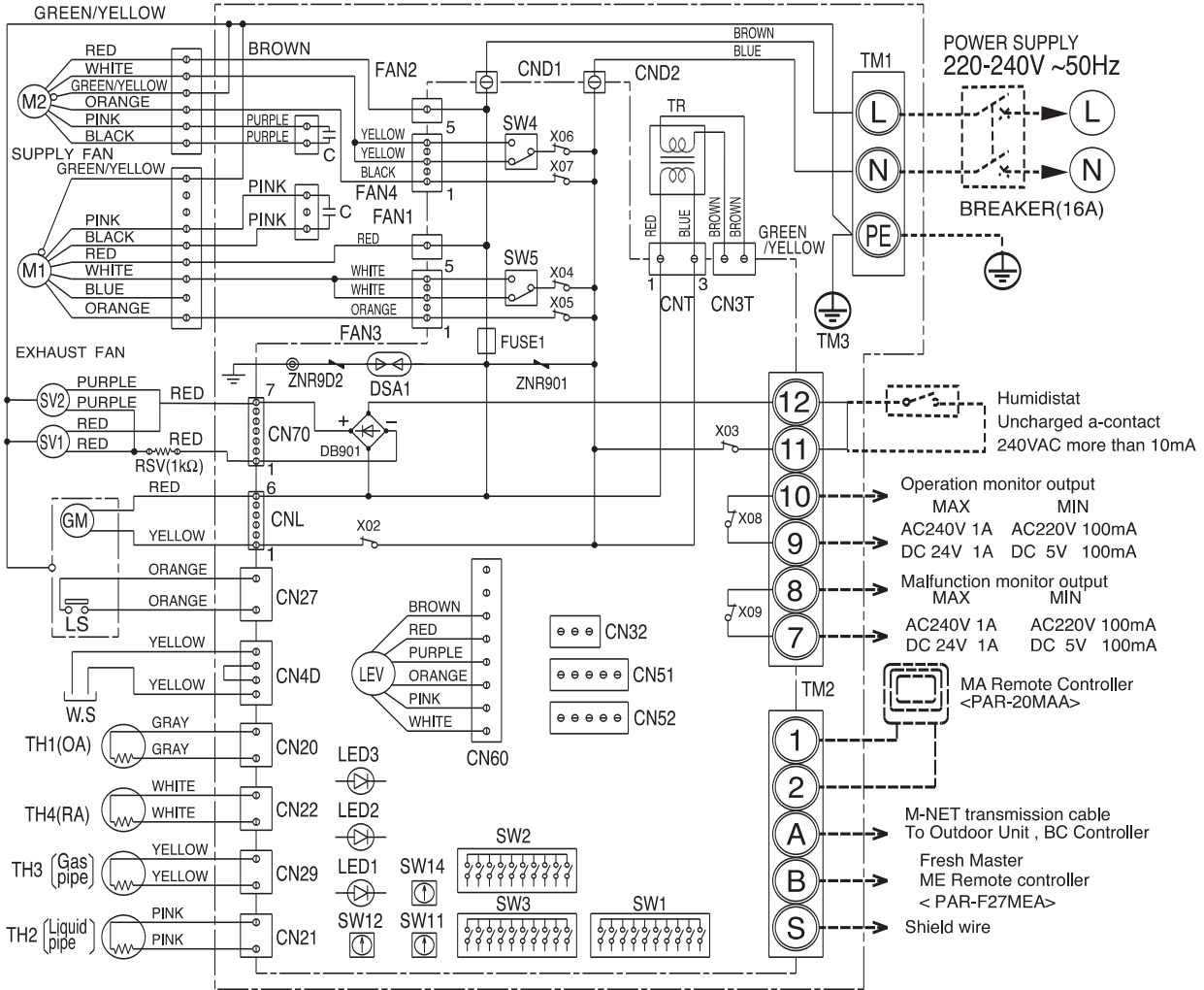


Model	A	B	C	D	E	F	G	H	J	K	L
GUF-50RD ₃	745	1,016	124	1,185	1,048	22	124	450	372.5	435	158.5
GUF-100RD ₃	920	1,231	149	1,465	1,271	16	149	600	460	670	199
Model	M	N	P	Q	R	S	T	U	V	W	
GUF-50RD ₃	317	1,288	124	266	192	208	12.7	6.35	347	135	
GUF-100RD ₃	398	1,580	149	280	242	258	15.88	9.52	361	169	

Humidifying Type GUF-50/100RDH3

Drv. :GUF-wir-rdH3

- TM1, TM2 shown in dotted lines are field work.
- Be sure to connect the grounding wire.
- Breakers and controller switches should be provided by the customer.



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

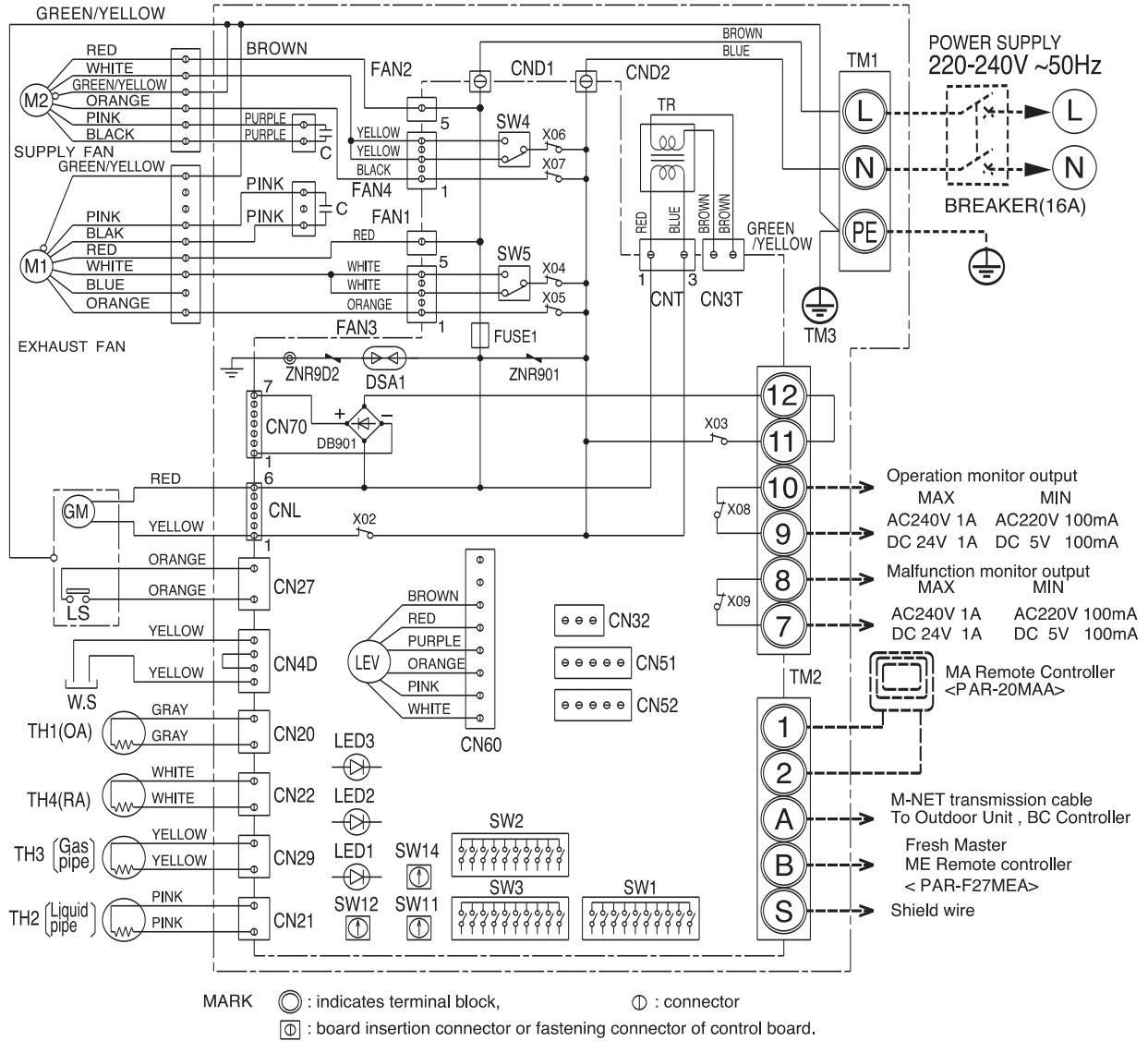
Symbol Explanation

Symbol	Name	Symbol	Name	Symbol	Name
M1	Fan motor (exhaust)	TM1	Terminal block (power supply)	1, 2	Remote control terminal
M2	Fan motor (supply)	TM2	Terminal block (transmission)	A, B	M-NET transmission terminal
C	Capacitor	TM3	Terminal block (humidistat, monitor)	s	Shield
W.S	Water sensor	SW1	Switch (function selection)	CND1, CND2	Connector (power supply)
SV1	Solenoid valve (pressure regulator)	SW2	Switch (capacity code setting)	X02-X09	Relay
SV2	Solenoid valve (exhaust)	SW3	Switch (function selection)	TR	Transformer
TH1	Thermistor (outdoor air temp. detection)	SW4, SW5	Switch	GM	Damper motor
TH2	Thermistor (pipe temp. detection/liquid)	SW11	Switch (1st digit address set)	LS	Limit switch
TH3	Thermistor (pipe temp. detection/gas)	SW12	Switch (2nd digit address set)	LED1	Power supply monitor
TH4	Thermistor (room air temp. detection)	SW14	Switch (branch NO. set)	LED2	MA Remote controller
LEV	Electronic linear expansion valve	CN32	Connector (Remote input)		Power supply monitor
RSV	Resistance (solenoid valve)	CN51, CN52	Connector (Remote input/output)	LED3	M-NET Power supply monitor

Non-Humidifying Type GUF-50/100RD3

Drw. :GUF-wir-rd3

- TM1, TM2 shown in dotted lines are field work.
- Be sure to connect the grounding wire.
- Breakers and controller switches should be provided by the customer.



Symbol Explanation

Symbol	Name	Symbol	Name	Symbol	Name
M1	Fan motor (exhaust)	TM1	Terminal block (power supply)	1, 2	Remote control terminal
M2	Fan motor (supply)	TM2	Terminal block (transmission)	A, B	M-NET transmission terminal
C	Capacitor	TM3	Terminal block (humidistat, monitor)	S	Shield
W.S	Water sensor	SW1	Switch (function selection)	CND1, CND2	Connector (power supply)
TH1	Thermistor (outdoor air temp. detection)	SW2	Switch (capacity code setting)	X02-X09	Relay
TH2	Thermistor (pipe temp. detection/liquid)	SW3	Switch (function selection)	TR	Transformer
TH3	Thermistor (pipe temp. detection/gas)	SW4, SW5	Switch	GM	Damper motor
TH4	Thermistor (room air temp. detection)	SW11	Switch (1st digit address set)	LS	Limit switch
LEV	Electronic linear expansion valve	SW12	Switch (2nd digit address set)	LED1	Power supply monitor
		SW14	Switch (branch NO. set)	LED2	MA Remote controller
		CN32	Connector (Remote input)	LED3	M-NET Power supply monitor
		CN51, CN52	Connector (Remote input/output)		

- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- V_a
- V_b**
- BC