



FRIEDRICH

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Multi Zone Air Conditioner SVC MANUAL (Exploded View)

DUCTLESS SPLIT SYSTEMS

CAUTION

Before Servicing the unit, read the safety precautions in General SVC manual.
Only for authorized service personnel.

MODEL: MD12Y3JM

THE EXPERTS IN ROOM AIR CONDITIONING

960-920-06

1. Specification

Indoor unit type			Ceiling Concealed Duct - Low Static
Model			MD12Y3JM
Power Supply		Ø / V / Hz	1/ 208~230/ 60
Capacity(*)		Btu/h class	12,000
Current	Running Current	A	0.25
Fan	Motor Type		BLDC
	Fan Type		Sirocco Fan
	Motor Output(W) x No. of Unit		5 x 1, 19 x 1
	Air Flow Rate (H / M / L)	CMM	9.5 / 8.5 / 7.5
		CFM	335 / 300 / 265
	External Static Pressure	mmAq	4
	Capacitor	µF / Vac	-
Drive		Direct Drive	
Coil	Row x Column x FPI		2R x 12C x 21
Dimensions (W x H x D)	Body	mm(inch)	820 x 190 x 575(32 9/32x7 1/2x 22 21/32)
	Decorative Panel	mm(inch)	-
Net Weight	Body	kg (lbs)	20.5(45.2)
	Decorative Panel	kg (lbs)	-
Air Filter			Long life filter
Sound Level (H / M / L)		dB(A)+3	33/ 31/26
Piping Connections	Liquid	mm (inch)	6.35 (1/4)
	Gas	mm (inch)	9.52 (3/8)
	Drain(OD/ID)	mm(inch)	32/25(1.26/0.984)
Dehumidification Rate		l/h	1.2
Safety Devices			Fuse, thermal protector for fan motor
Temperature Sensor			Thermistor
Refrigerant			R410A
Refrigerant Control			EEV(in Outdoor unit)
Transmission Interunit Cable		No. x AWG	4 x 18 (Including Earth)

Note:

1. Capacities are based on the following conditions:

- Cooling: - Indoor Temperature 26.7°C(80°F) DB/19.4°C(67°F)
- Outdoor Temperature 35°C(95°F) DB/23.9°C(75°F)
- Heating: - Indoor Temperature 21.1°C(70°F) DB/15.6°C(60°F) WB
- Outdoor Temperature 8.3°C(47°F) DB/6.1°C(43°F) WB
- Piping Length - Interconnecting Piping Length 7.5m(24.6 ft.)
- Level Difference of Zero

2. Wiring cable size must comply with the applicable local and national code.

3. The specification may be subject to change without prior notice for purpose of improvement.

4. For more Capacity(*), refer to the combination table

Conversion	Formula
kW	= Btu/h class X 0.0002931
cfm	= CMM x 35.3

2. Function Table

Category	Function	MD12Y3JM
Air flow	Air supply outlet	1
	Airflow direction control(left & right)	-
	Airflow direction control(up & down)	-
	Auto swing(left & right)	-
	Auto swing(up & down)	-
	Airflow steps(fan / cool / heat)	03.3.3
	Chaos swing	-
	Chaos wind(auto wind)	X
	Jet cool(Power wind)	X
	Swirl wind	X
Air purifying	Deodorizing filter	X
	Plasma air purifier	X
	Prefilter(washable / anti-fungus)	O
Installation	Drain pump	O
	E.S.P. control	O
	Electric heater(operation)	X
	High ceiling operation	-
Reliability	Hot start	O
	Self-diagnosis	O
	Soft dry operation	O
Convenience	Auto changeover	X
	Auto cleaning	X
	Auto operation(artificial intelligence)	O
	Auto restart operation	O
	Child lock	O
	Energy-Saving Cooling Mode	X
	Forced operation	X
	Group control	O
	Sleep mode	X
	Timer(on/off)	X
Timer(weekly)	X	
Individual control	Two thermistor control	O
	Wide wired remote controller	DWC1
	Deluxe wired remote controller	-
	Simple wired remote controller	O
	Simple wired remote controller(for hotel use)	X
	Wireless remote controller(simple)	X
	Wireless LCD remote control	X
CAC network function	Wireless LCD remote control(Ez)	X
	General central controller (Non LGAP)	X
	Dry contact	X
	Central control(LGAP)	X
	PDI(power distribution indicator)	X
Special function kit	PI 485	X
	CTIE	X
Others	Zone control	X
	Thermistor	-

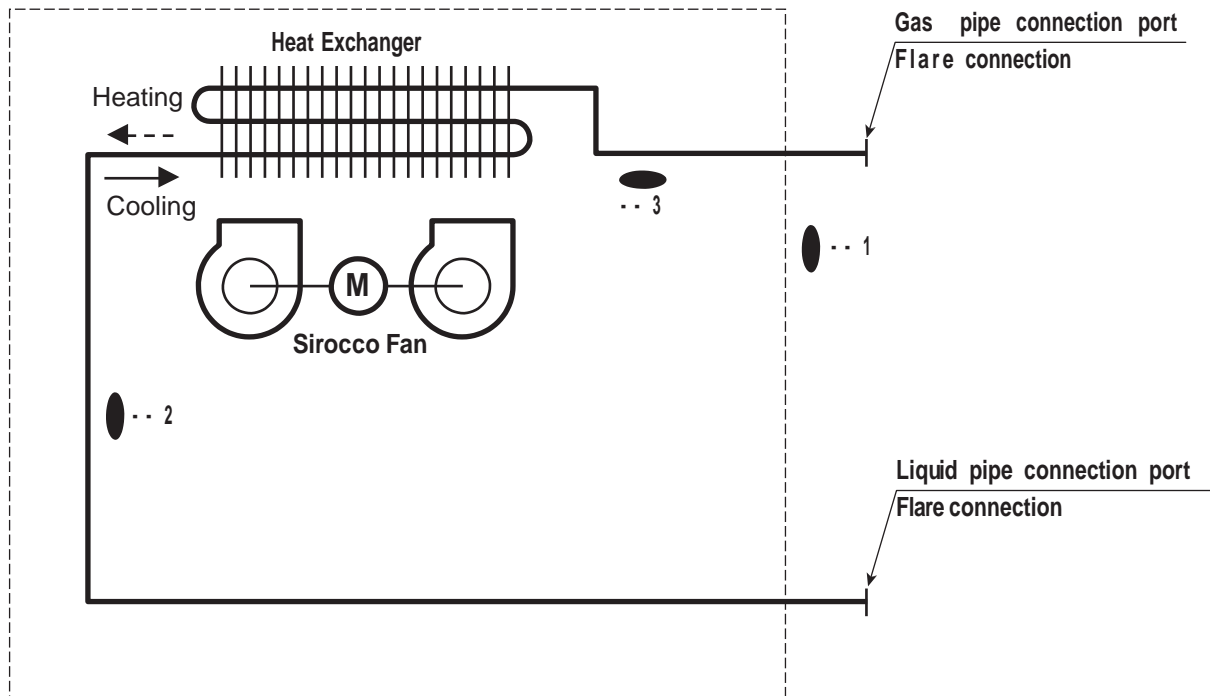
Note :

O : Applied, X : Not applied, - : No relation

* Option : Model name & price are different according to options, and assembled in factory with main unit.

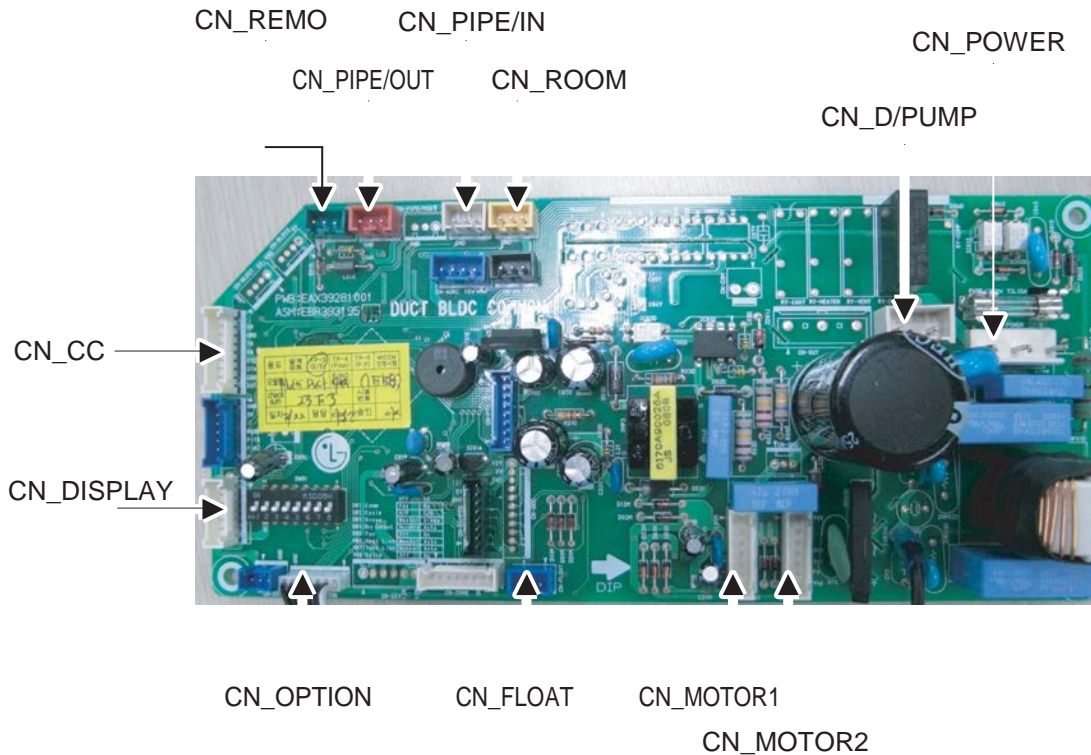
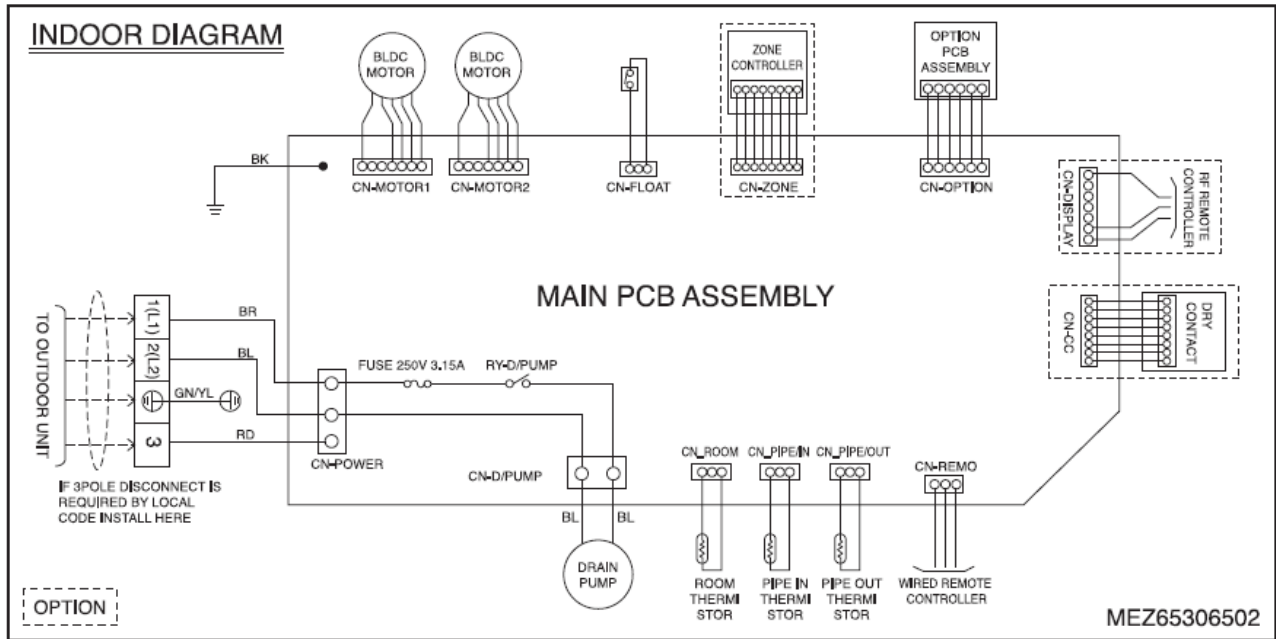
* Accessory : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

3. Piping Diagrams

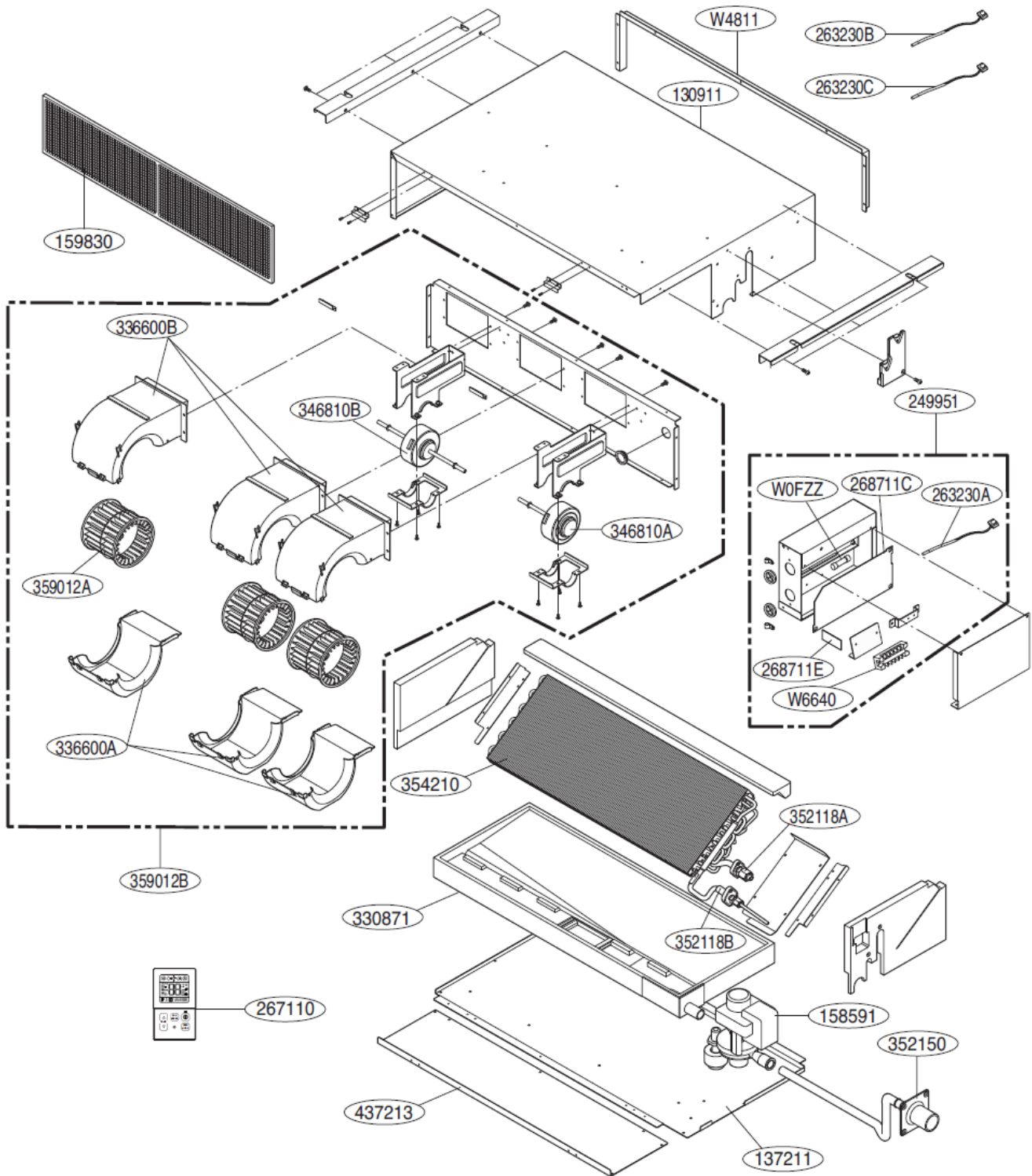


LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN_ROOM
Th2	Thermistor for evaporator inlet temperature	CN_PIPE
Th3	Thermistor for evaporator outlet temperature	CN_PIPEOUT

4. Wiring Diagrams



5. Exploded View



Model: MD12Y3JM

Loc No.	Description	Friedrich Part #
W4811	Bracket Assembly	67600702
130911	Cabinet Assembly,Indoor	67600808
249951	Case Assembly,Control(Indoor)	67600903
W6640	Connector,Terminal Block	67601407
354210	Evaporator Assembly,First	67602009
359012A	Fan Assembly,Blower	67602103
359012B	Fan Assembly,Blower	67602104
159830	Filter Assembly,Air Cleaner	67602200
W0FZZ	Fuse Assembly	67602302
352150	Hose Assembly,Drain	67602801
336600B	Housing,Wrapper	67602903
336600A	Housing,Wrapper	67602904
346810A	Motor Assembly,DC,Indoor	67603305
346810B	Motor Assembly,DC,Indoor	67603310
346810B	Motor,DC	67603331
346810A	Motor,DC	67603332
330871	Pan Assembly,Drain	67603702
137211	Panel Assembly,Front(Indoor)	67603800
437213	Panel Assembly,Rear(Indoor)	67603815
268711C	PCB Assembly,Main	67603908
268711E	PCB Assembly,Option	67603917
158591	Pump Assembly,Water	67604100
267110	Remote Controller Assembly	67604300
263230C	Thermistor Assembly,NTC	67604822
263230B	Thermistor Assembly,NTC	67604805
263230A	Thermistor Assembly,NTC	67604809
263230A	Thermistor,NTC	67604825
263230B	Thermistor,NTC	67604827
352118B	Tube Assembly,Manifold(Indoor)	67606004
352118A	Tube Assembly,Manifold(Indoor)	67606005



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