



FRIEDRICH

1 8 8 3

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: MD18Y3JM

THE EXPERTS IN ROOM AIR CONDITIONING

960-920-07

1. Specification

Indoor unit type		Ceiling Concealed Duct - Low Static		
Model		MD18Y3JM		
Power Supply	Ø / V / Hz	1/ 208~230/ 60		
Capacity(*)	Btu/h class	18,000		
Current	Running Current	A	0.25	
Fan	Motor Type	BLDC		
	Fan Type	Sirocco Fan		
	Motor Output(W) x No. of Unit	19 x 2		
	Air Flow Rate (H / M / L)	CMM	15/ 13.5/ 11.5	
		CFM	530/ 477/ 406	
	External Static Pressure	mmAq	4	
	Capacitor	µF / Vac	-	
Drive	Direct Drive			
Coil	Row x Column x FPI	2R x 11C x 21		
Dimensions (W x H x D)	Body	mm(inch)	1,100 x 190 x 575 (43 5/16 x 7 15/32 x 22 21/32)	
	Decorative Panel	mm(inch)	-	
Net Weight	Body	kg (lbs)	26.5 (58.4)	
	Decorative Panel	kg (lbs)	-	
Air Filter			Long life filter	
Sound Level (H / M / L)		dB(A)+3	34/ 31/ 29	
Piping Connections	Liquid	mm (inch)	6.35 (1/4)	
	Gas	mm (inch)	12.7 (1/2)	
	Drain(OD/ID)	mm(inch)	32 / 25(1.26/0.984)	
Dehumidification Rate		l/h	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	4X18(Including Earth)		

Note:

- 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

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

- Wiring cable size must comply with the applicable local and national code.
- The specification may be subject to change without prior notice for purpose of improvement.
- For more Capacity(*), refer to the combination table

2. Function Table

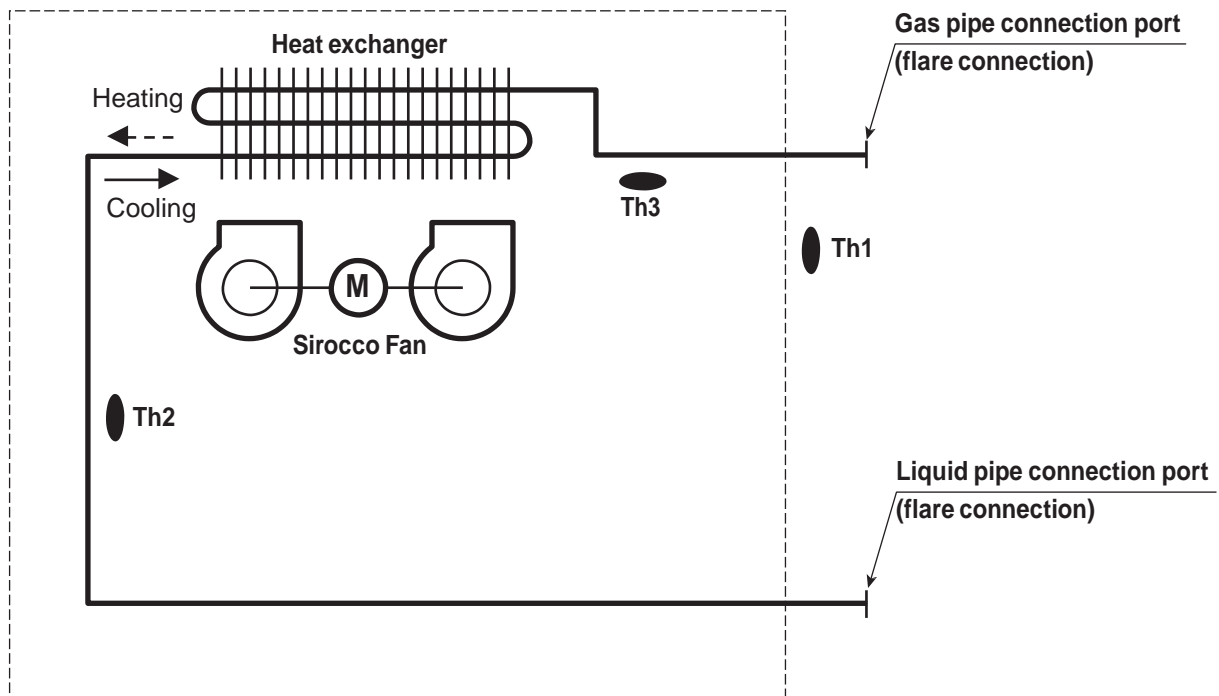
Category	Function	MD18Y3JM
Air flow	Air supply outlet	1
	Airflow direction control(left & right)	-
	Airflow direction control(up & down)	-
	Auto swing(left & right)	-
	Auto swing(up & down)	-
	Airflow steps(fan / cool / heat)	3 / 3 / 3
	Chaos swing	-
	Chaos wind(auto wind)	X
	Surge cool(Power wind)	X
	Swirl wind	X
Air purifying	Deodorizing filter	X
	Plasma air purifier	X
	Pre-filter(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
Two thermistor control	O	
Individual control	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
	Wireless LCD remote control(Ez)	X
CAC network function	General central controller (Non LGAP)	X
	Dry contact	X
	Central control(LGAP)	X
	PDI(power distribution indicator)	X
	PI 485	X
Special function kit	CTIE	X
	Zone control	X
Others	Thermistor	-

O : Applied X : Not applied - : No relation

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

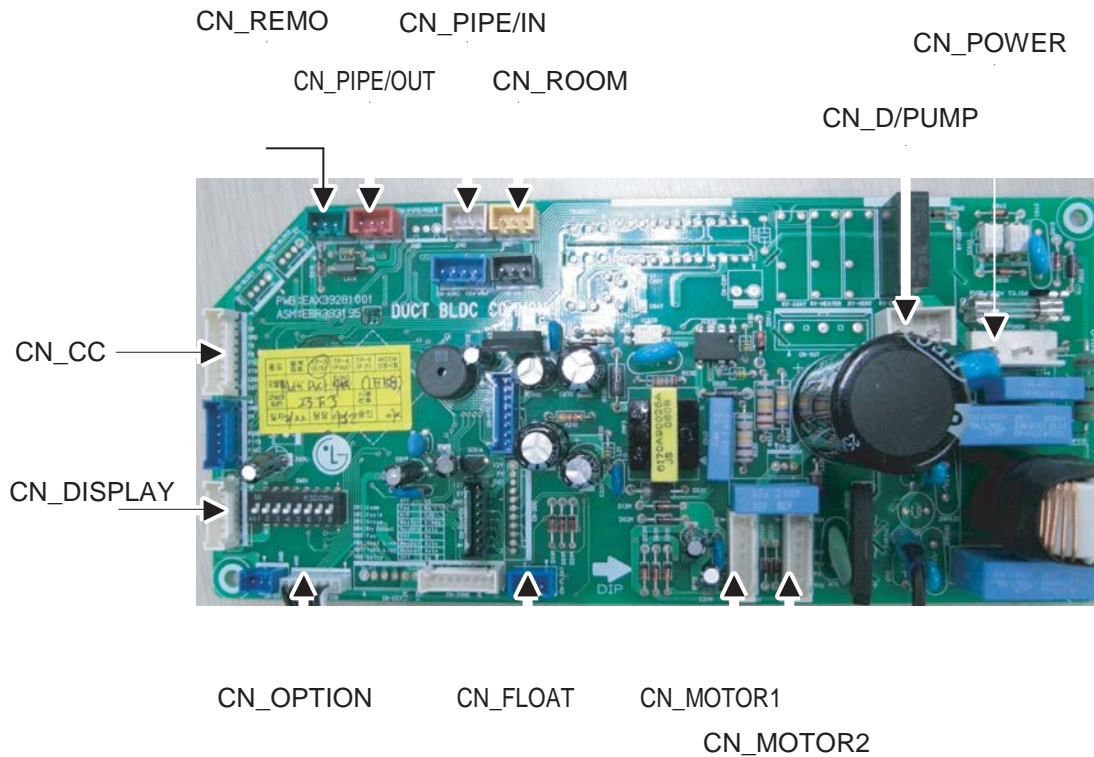
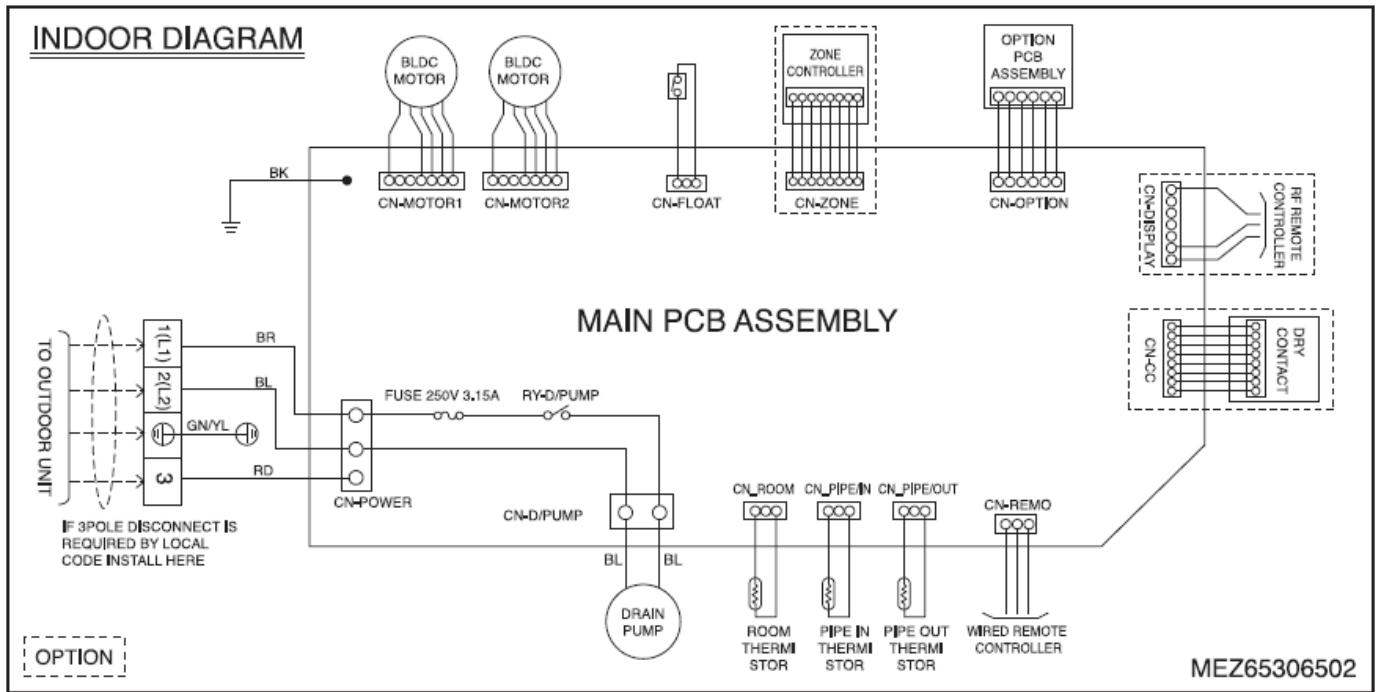
Accessory : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

3. Piping Diagrams

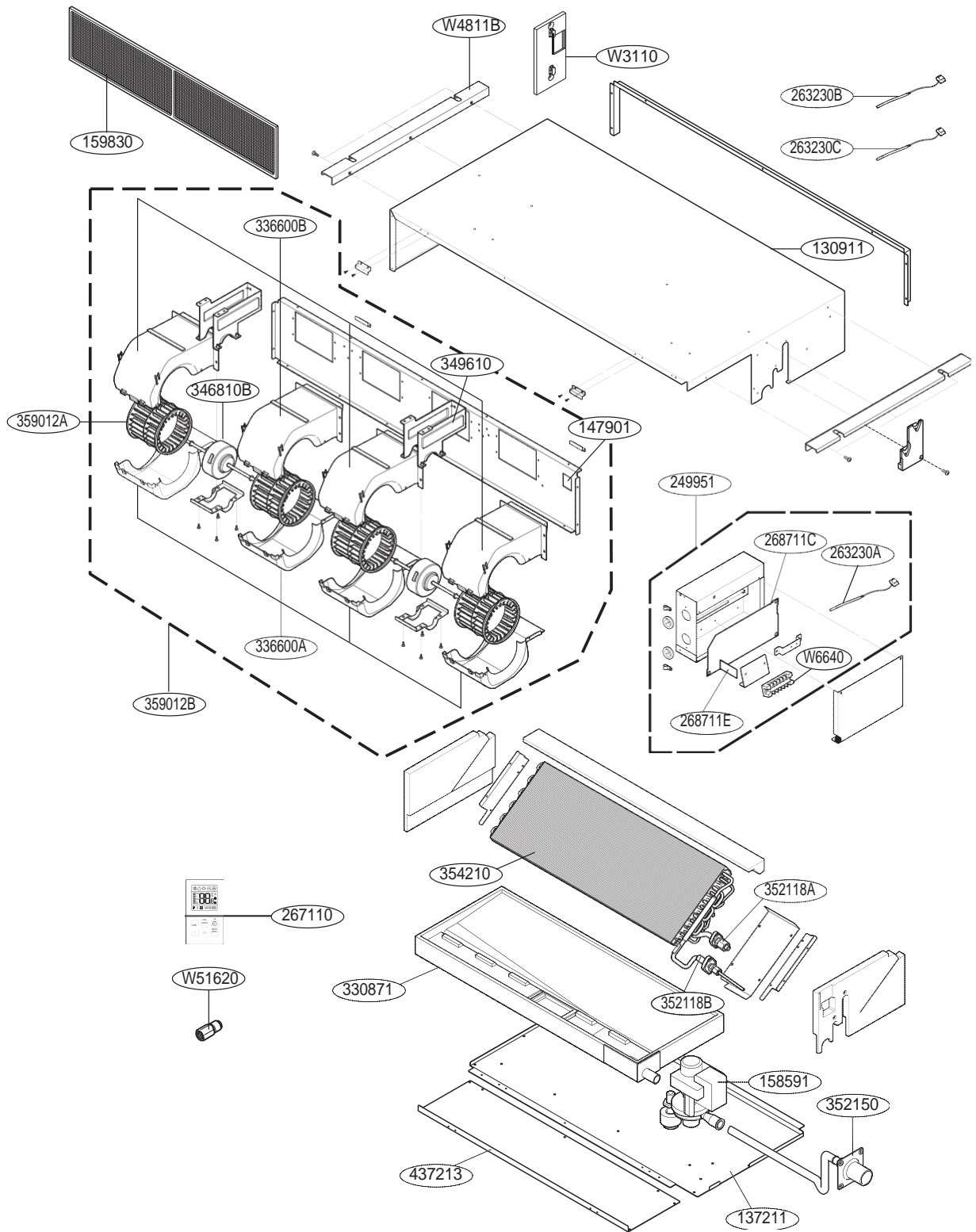


LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN_ROOM
Th2	Thermistor for evaporator inlet temperature	CN_PIPE/IN
Th3	Thermistor for evaporator outlet temperature	CN_PIPE/OUT

4. Wiring Diagrams



5. Exploded View



Model: MD18Y3JM

Loc No.	Description	Friedrich Part #
147901	Barrier,Indoor	67600403
W4811B	Bracket Assembly	67600703
349610	Bracket Assembly,Motor(Indoor)	67600708
130911	Cabinet Assembly,Indoor	67600809
W3110	Case	67600925
249951	Case Assembly,Control(Indoor)	67600904
W6640	Connector,Terminal Block	67601407
354210	Evaporator Assembly,First	67602010
359012A	Fan Assembly,Blower	67602103
359012B	Fan Assembly,Blower	67602105
159830	Filter Assembly,Air Cleaner	67602201
352150	Hose Assembly,Drain	67602801
336600A	Housing,Wrapper	67602903
336600B	Housing,Wrapper	67602904
346810B	Motor Assembly,DC,Indoor	67603310
346810B	Motor,DC	67603331
330871	Pan Assembly,Drain	67603703
137211	Panel Assembly,Front(Indoor)	67603801
437213	Panel Assembly,Rear(Indoor)	67603816
268711C	PCB Assembly,Main	67603908
268711E	PCB Assembly,Option	67603918
158591	Pump Assembly,Water	67604100
267110	Remote Controller Assembly	67604300
W51620	Socket,Flare	67604401
263230C	Thermistor Assembly,NTC	67604805
263230A	Thermistor Assembly,NTC	67604809
263230B	Thermistor Assembly,NTC	67604822
263230A	Thermistor,NTC	67604825
263230C	Thermistor,NTC	67604827
352118A	Tube Assembly,Manifold(Indoor)	67606002
352118B	Tube Assembly,Manifold(Indoor)	67606006



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