



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 : MC12Y3JM
MC18Y3JM

THE EXPERTS IN ROOM AIR CONDITIONING

960-920-05

1. Specification

Indoor unit type			Ceiling Cassette - 4way	
Model			MC12Y3JM	MC18Y3JM
Decoration Panel Name			DCG1218]	DCG1218
Power Supply		V, Ø, Hz	208/230, 1, 60	208/230, 1, 60
Capacity(*)		Btu/h class	12,000	18,000
Current	Running Current	A	0.25	0.25
Fan	Motor Type		BLDC	BLDC
	Fan Type		Turbo Fan	Turbo Fan
	Motor Output(W) x No. of Unit		43 x 1	43 x 1
	Air Flow Rate (H / M / L)	CMM	9.5 / 8.0 / 7.0	13.0 / 12.0 / 11.0
		CFM	335 / 283 / 247	459 / 424 / 388
	External Static Pressure	mmAq	-	-
	Capacitor	µF / Vac	-	-
Drive		Direct Drive	Direct Drive	
Coil	Row x Column x FPI		2R x 8C x 18	2R x 10C x 18
Dimensions (W x H x D)	Body	mm(inch)	570 x 214 x 570 (22-7/16 x 8-7/16 x 22-7/16)	570 x 256 x 570 (22-7/16 x 10-3/32 x 22-7/16)
	Decorative Panel	mm(inch)	700 x 22 x 700 (27-9/16 x 7/8 x 27-9/16)	700 x 22 x 700 (27-9/16 x 7/8 x 27-9/16)
Net Weight	Body	kg (lbs)	14.0 (30.9)	15.0 (33.1)
	Decorative Panel	kg (lbs)	3.0 (6.6)	3.0 (6.6)
Sound Level (H / M / L)		dB(A)+3	38/ 35/ 32	38/ 37/ 34
Piping	Liquid	mm (inch)	6.35 (1/4)	6.35 (1/4)
Connections	Gas	mm (inch)	9.52 (3/8)	12.7 (1/2)
	Drain(OD/ID)	mm(inch)	32.0(1-1/4) / 25.0(1)	32.0(1-1/4) / 25.0(1)
Safety Devices			Fuse, thermal protector for fan motor	Fuse, thermal protector for fan motor
Refrigerant			R410A	R410A
Refrigerant Control			EEV(in Outdoor unit)	EEV(in Outdoor unit)
Transmission Interunit Cable		No. x AWG	4C x 18	4C x 18

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

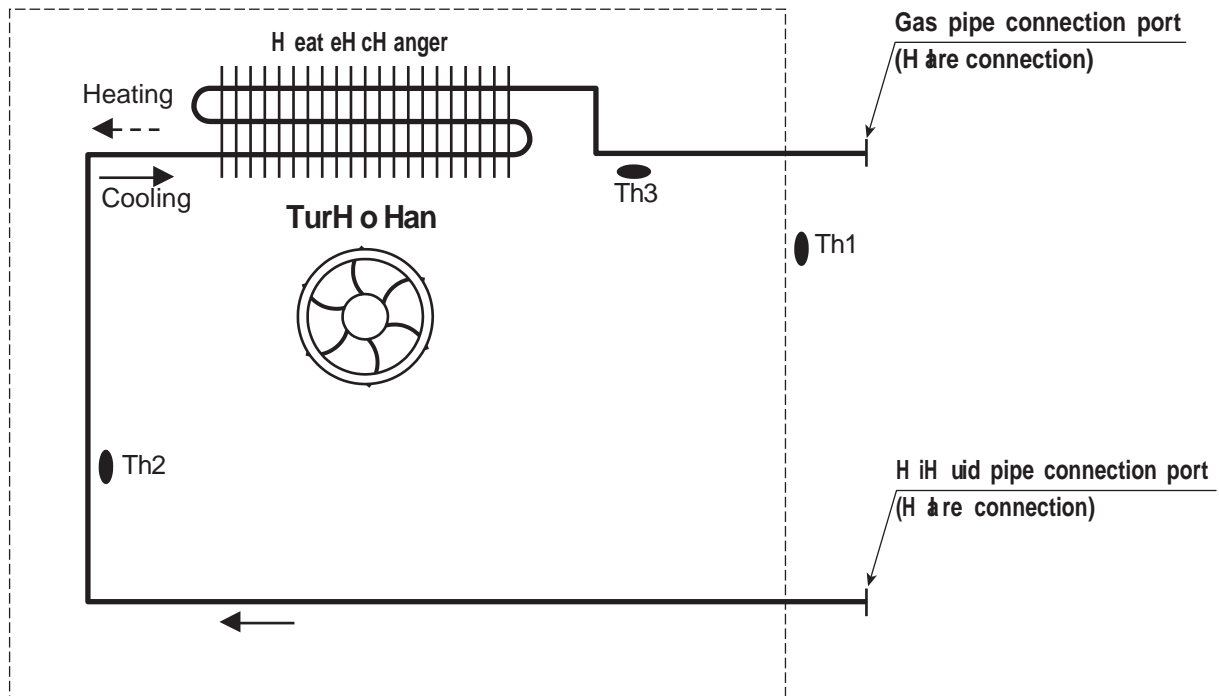
2. Wiring cable size must comply with the applicable local and national code.

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

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

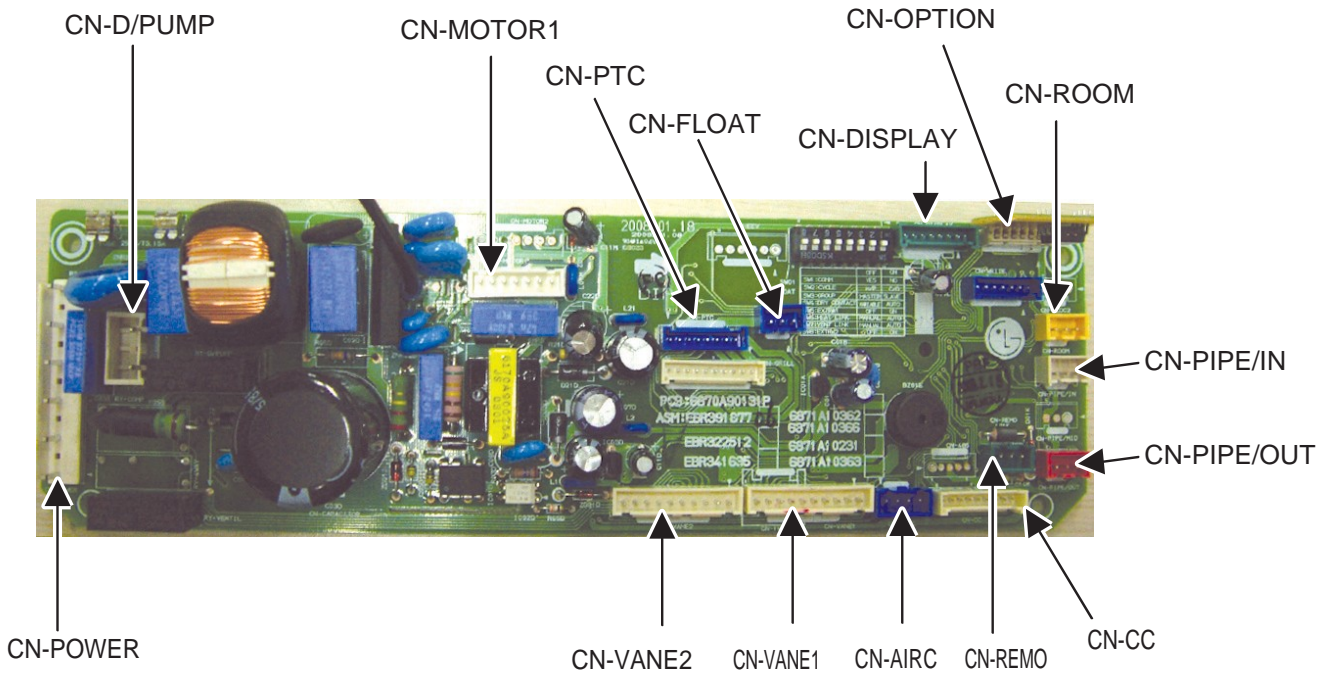
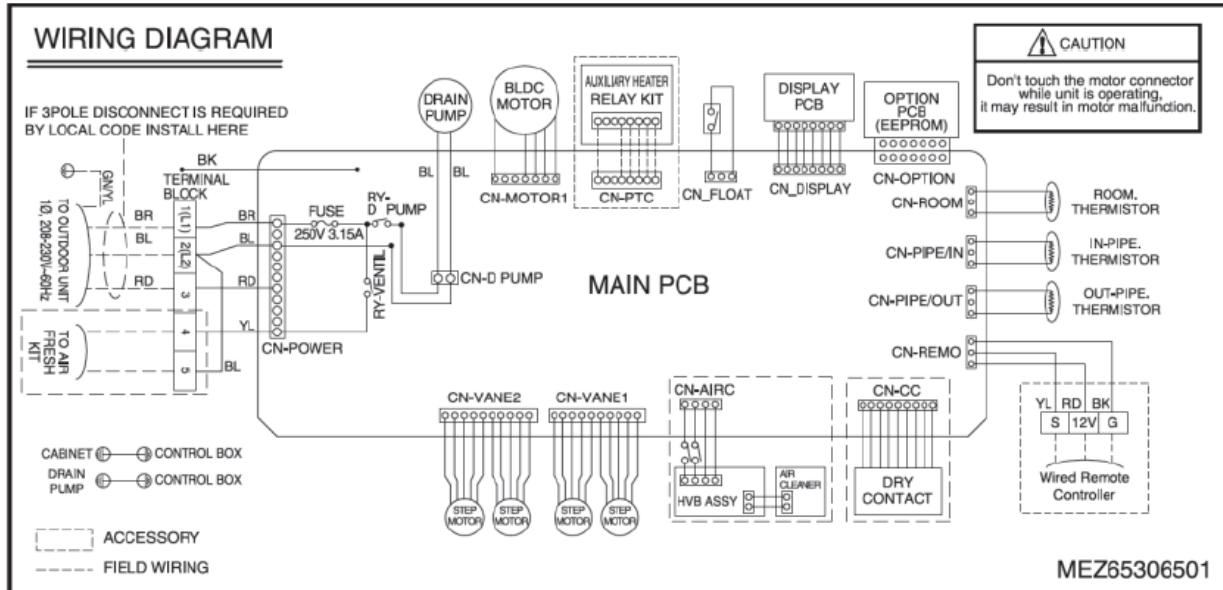
Conversion Formula
kW = Btu/h class X 0.0002931
cfm = CMM x 35.3

2. Piping Diagrams



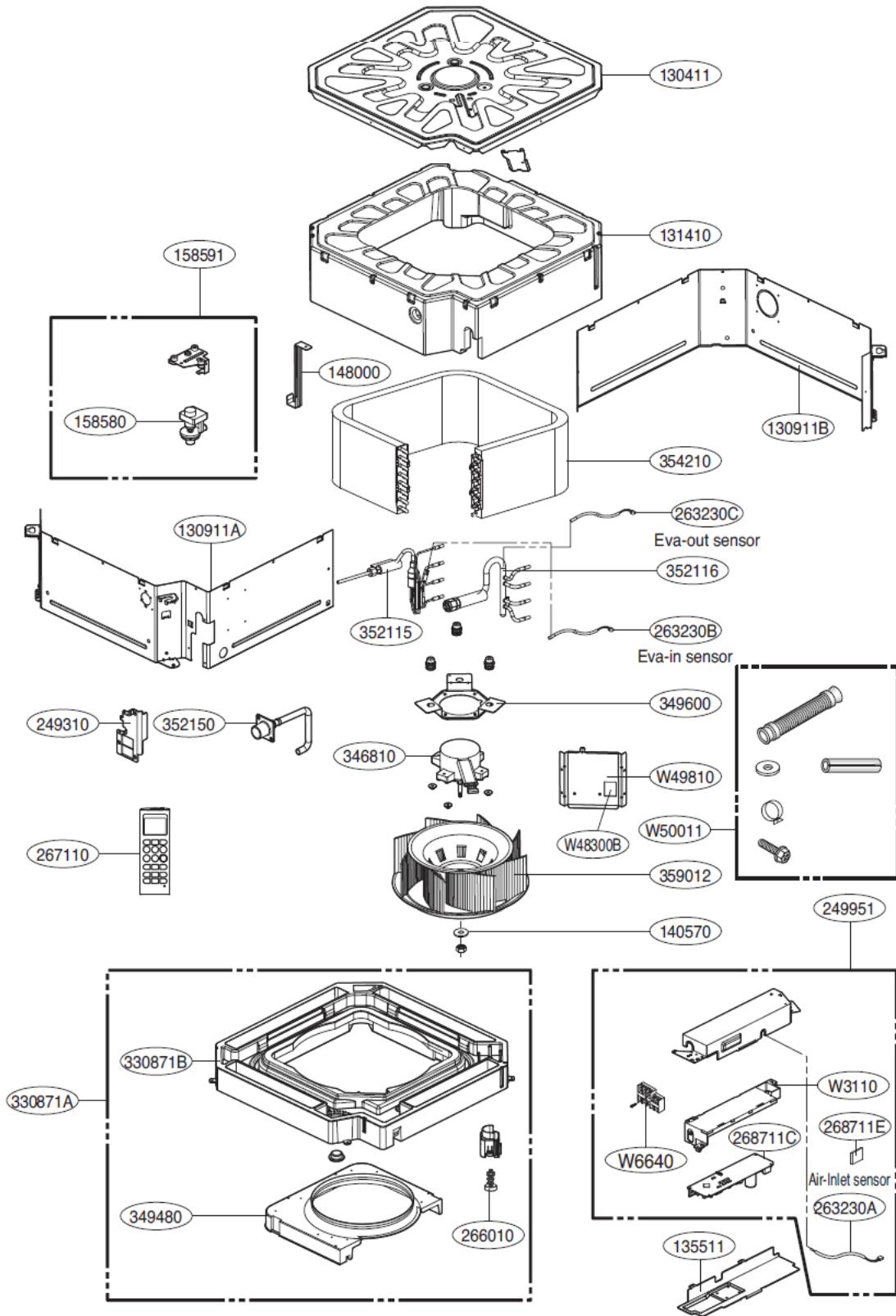
LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN_ROOM
Th2	Thermistor for evaporator inlet temperature	CN_PIPE/IN
Th3	Thermistor for evaporator outlet temperature	CN_PIPE/OUT

3. Wiring Diagrams



4. Exploded View

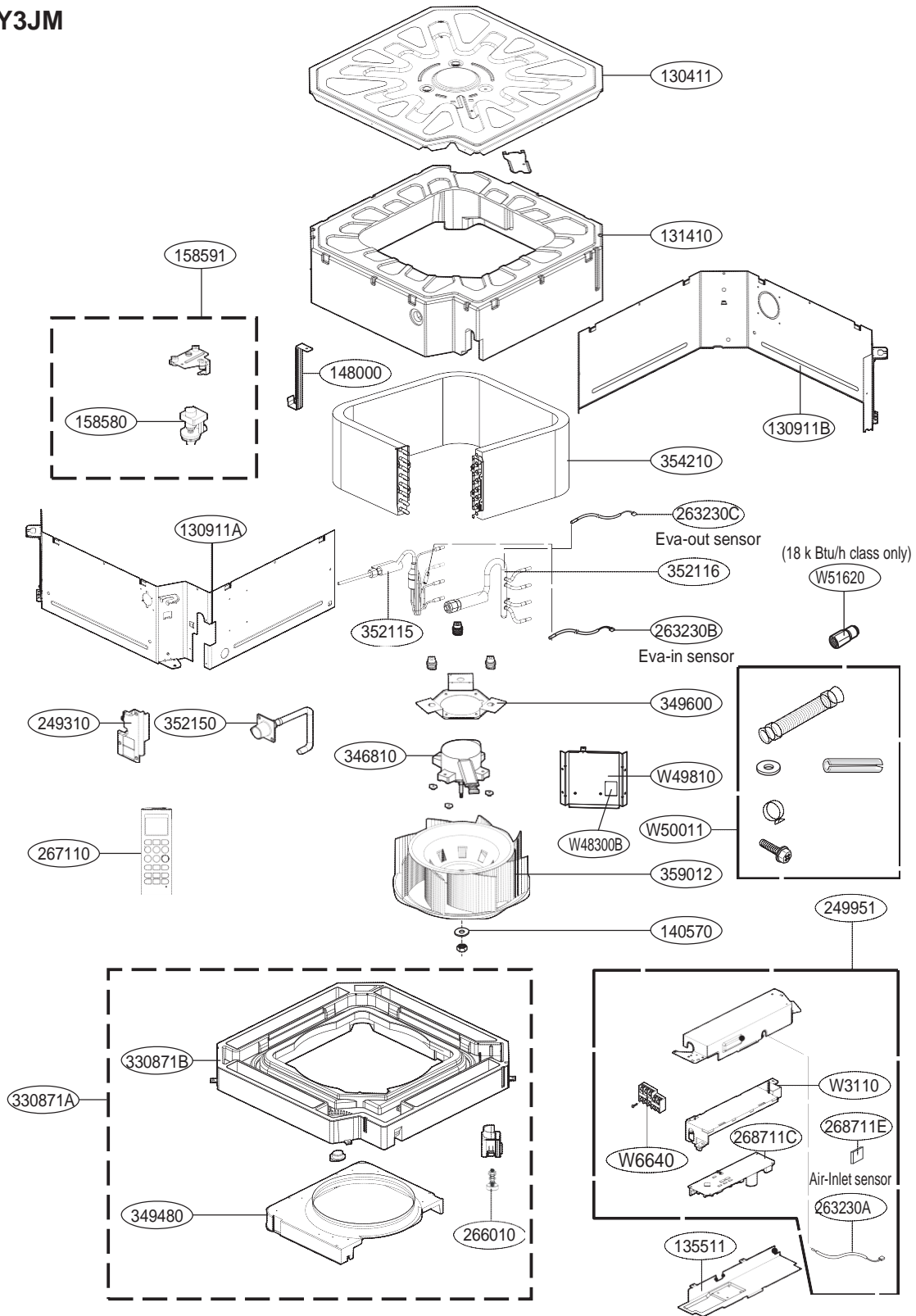
• MC12Y3JM



- MC12Y3JM

Loc No.	Description	Friedrich Part #
W50011	Accessory Assembly,Final(Indoor)	67600000
130411	Base Assembly,Indoor	67600502
349600	Bracket,Motor	67600713
W48300B	Bush	67606800
131410	Cabinet Assembly	67600807
130911A	Cabinet Assembly,Indoor	67600815
130911B	Cabinet Assembly,Indoor	67600817
W3110	Case	67600902
249951	Case Assembly,Control(Indoor)	67600905
W6640	Connector,Terminal Block	67601410
135511	Cover Assembly,Control(Indoor)	67601600
354210	Evaporator Assembly,First	67602003
359012	Fan,Turbo	67602119
249310	Holder Assembly	67602701
352150	Hose Assembly,Drain	67602805
140570	Locker Assembly	67603100
346810	Motor,DC	67603333
349480	Orifice	67603606
330871A	Pan Assembly,Drain	67603707
330871B	Pan Assembly,Drain	67603708
268711C	PCB Assembly,Main	67603907
268711E	PCB Assembly,Sub	67603926
158591	Pump Assembly,Water	67604102
158580	Pump,Water	67604103
267110	Remote Controller Assembly	67604301
148000	Supporter	67604605
W49810	Supporter Assembly	67604610
266010	Switch Assembly	67604700
263230C	Thermistor Assembly,NTC	67604802
263230C	Thermistor Assembly,NTC	67604806
263230B	Thermistor Assembly,NTC	67604807
263230A	Thermistor Assembly,NTC	67604809
263230A	Thermistor,NTC	67604824
263230B	Thermistor,NTC	67604826
352115	Tube Assembly,Evaporator(In)	67605802
352116	Tube Assembly,Evaporator(Out)	67605804

• MC18Y3JM

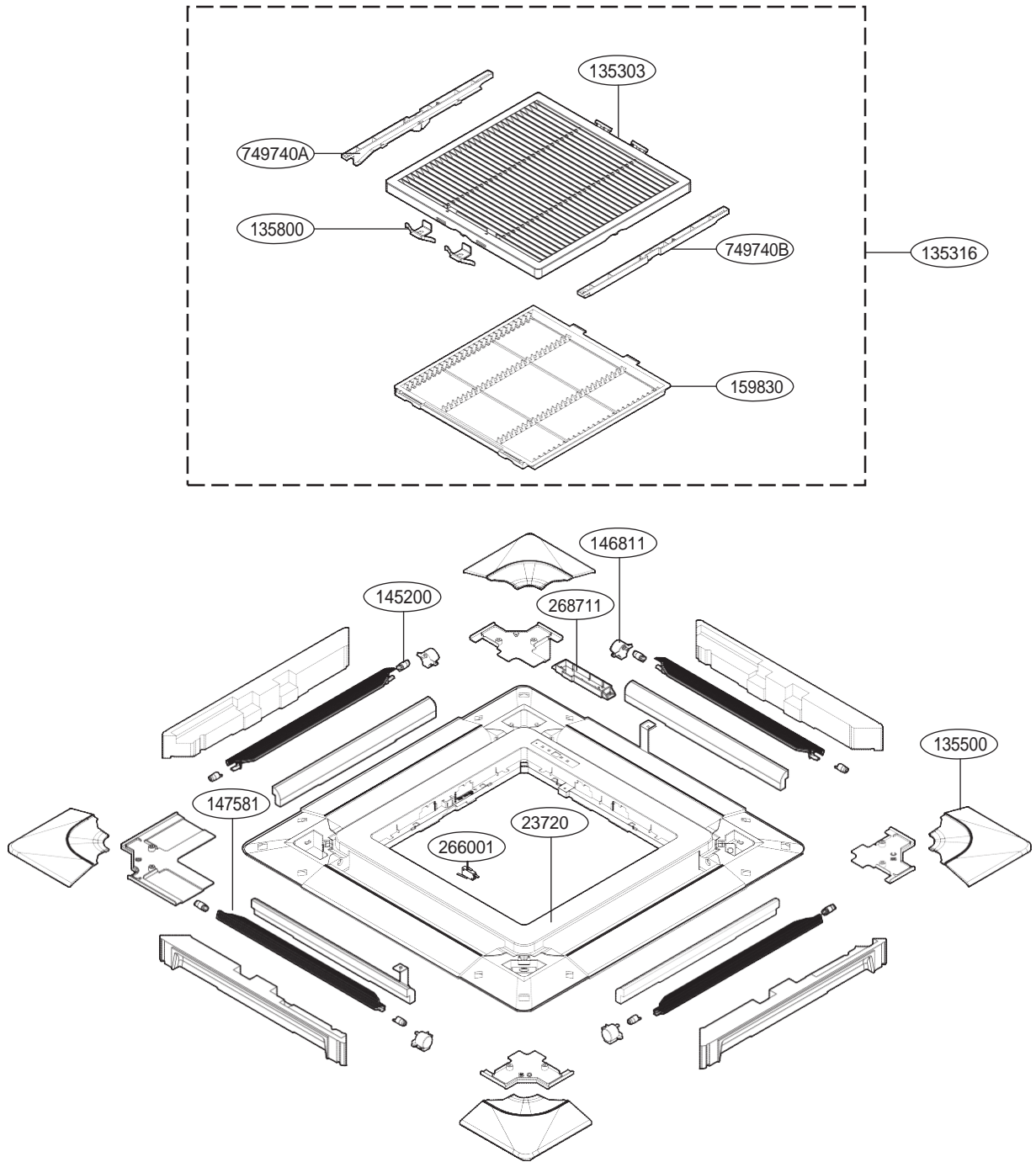


• MC18Y3JM

Loc No.	Description	Friedrich Part #
W50011	Accessory Assembly,Final(Indoor)	67600000
130411	Base Assembly,Indoor	67600502
349600	Bracket,Motor	67600713
W48300B	Bush	67606800
131410	Cabinet Assembly	67600806
130911A	Cabinet Assembly,Indoor	67600814
130911B	Cabinet Assembly,Indoor	67600816
W3110	Case	67600902
249951	Case Assembly,Control(Indoor)	67600906
W6640	Connector,Terminal Block	67601410
135511	Cover Assembly,Control(Indoor)	67601600
354210	Evaporator Assembly,First	67602002
359012	Fan,Turbo	67602118
249310	Holder Assembly	67602701
352150	Hose Assembly,Drain	67602805
140570	Locker Assembly	67603101
346810	Motor Assembly,DC,Indoor	67603307
349480	Orifice	67603605
330871A	Pan Assembly,Drain	67603706
330871B	Pan Assembly,Drain	67603708
268711C	PCB Assembly,Main	67603907
268711E	PCB Assembly,Sub	67603925
158591	Pump Assembly,Water	67604102
158580	Pump,Water	67604103
267110	Remote Controller Assembly	67604301
W51620	Socket,Flare	67604400
148000	Supporter	67604600
W49810	Supporter Assembly	67604609
266010	Switch Assembly	67604700
263230C	Thermistor Assembly,NTC	67604802
263230C	Thermistor Assembly,NTC	67604806
263230B	Thermistor Assembly,NTC	67604807
263230A	Thermistor Assembly,NTC	67604809
263230A	Thermistor,NTC	67604824
263230B	Thermistor,NTC	67604826
352115	Tube Assembly,Evaporator(In)	67605801
352116	Tube Assembly,Evaporator(Out)	67605803

Front Panel (Accessory)

• DCG1218





Friedrich Air Conditioning Co. | 10001 Reunion Place, Suite 500 | San Antonio, TX 78216 | 877.599.5665
www.friedrich.com