

SERVICE MANUAL



Indoor unit		Outdoor unit
RDF12LALU	}	ROM-18LA2
RDF14LALU		
RDF12LALU	}	ROM-24LA2
RDF14LALU		
RDF18LALU		

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SPECIFICATIONS

INDOOR UNIT

ELECTRICAL DATA

TYPE	Cool and Heat		
MODEL NAME	RDF12LALU	RDF14LALU	RDF18LALU
POWER SOURCE	230 V		
FREQUENCY	50 Hz		
AIR CIRCULATION HIGH	630 m3/hr	820 m3/hr	850 m3/hr

FAN MOTOR

POWER SOURCE	230 V		
DISCRIMINATION	MFH-24RVL		
HIGH SPEED	790 r.p.m.	990 r.p.m.	1,040 r.p.m.
MIDDLE SPEED	720 r.p.m.	880 r.p.m.	950 r.p.m.
LOW SPEED	620 r.p.m.	770 r.p.m.	840 r.p.m.
QUIET	570 r.p.m.	620 r.p.m.	700 r.p.m.

NOISE LEVEL

HIGH SPEED	30dB	33dB	34dB
MIDDLE SPEED	29dB	30dB	32dB
LOW SPEED	26dB	27dB	30dB
QUIET	25dB	24dB	29dB

Note: Static pressure: 0pa, Duct length: Inlet 1m, Outlet 2m (indoor unit)

MEASUREMENT

DIMENSIONS	H x W x D	217 x 953 x 595 mm
WEIGHT	Gross / Net	27 kg / 23 kg

OUTDOOR UNIT

ELECTRICAL SPECIFICATIONS

TYPE		Cooling & heating multi	
MODEL NAME		ROM-18LA2	ROM-24LA2
COOLING CAPACITY		5.5 kW	5.8 kW
HEATING CAPACITY		6.3 kW	6.4 kW
POWER SUPPLY		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	7.3 A	7.6 A
	Heating	7.3 A	7.2 A
INPUT	Cooling	1.65 kW	1.73 kW
	Heating	1.65 kW	1.64 kW
EER	Cooling	3.33 kW/kW	3.35 kW/kW
	Heating	3.82 kW/kW	3.90 kW/kW
AIR CIRCULATION HIGH		2,800 m ³ /hr	2,800 m ³ /hr
MAX CURRENT		10.5 A	12.5 A

FAN MOTOR

DISCRIMINATION	MFB24JTAT
HIGH SPEED (COOL)	780 r.p.m.
HIGH SPEED (HEAT)	780 r.p.m.

NOISE LEVEL

COOL	49 dB(A)
HEAT	50 dB(A)

MEASUREMENT

DIMENSIONS	H x W x D	650 x 830 x 320 mm
WEIGHT	Net / Gross	56 kg / 62 kg

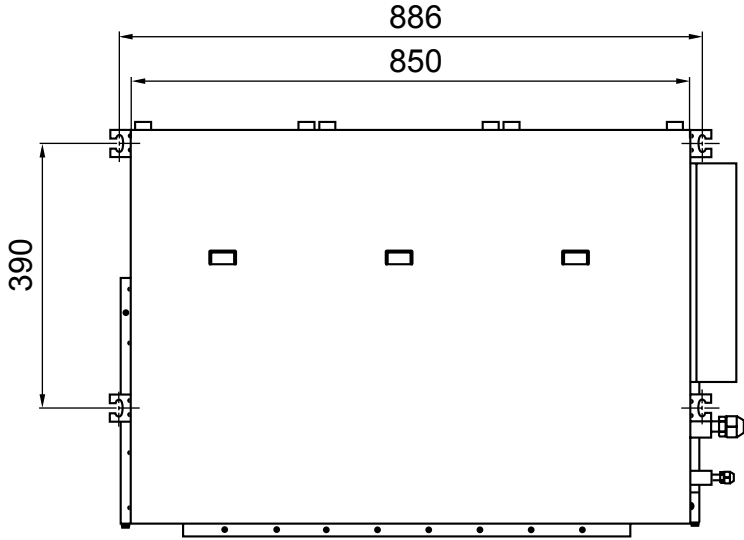
COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, Inverter, 4 poles, 3-phase, DC motor, Twin Rotary
DISCRIMINATION	TNB220FPCMT
WEIGHT (with oil)	14.1 kg
STANDARD REFRIGERANT	1,900 g
REFRIGERANT TYPE	R410A
ADDITIONAL CHARGE	Chargeless
MAX PIPE LENGTH (each unit)	20 m
MAX PIPE LENGTH (total)	30 m
MIN. PIPE LENGTH (each unit)	5 m
MIN. PIPE LENGTH (total)	10 m
MAX ELEVATION (between indoor units)	10 m
MAX ELEVATION (between indoor and outdoor)	10 m

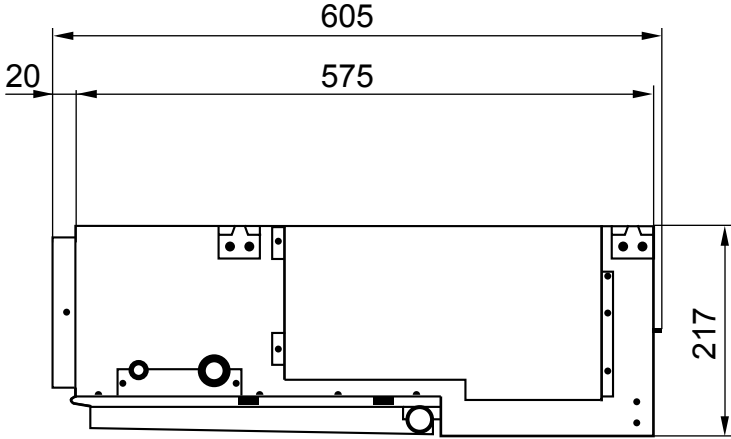
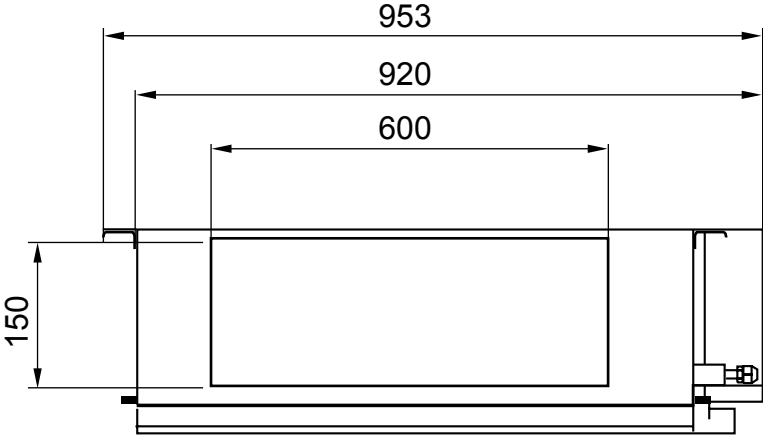
OUTLINE AND DIMENSIONS

INDOOR UNIT

Unit : mm

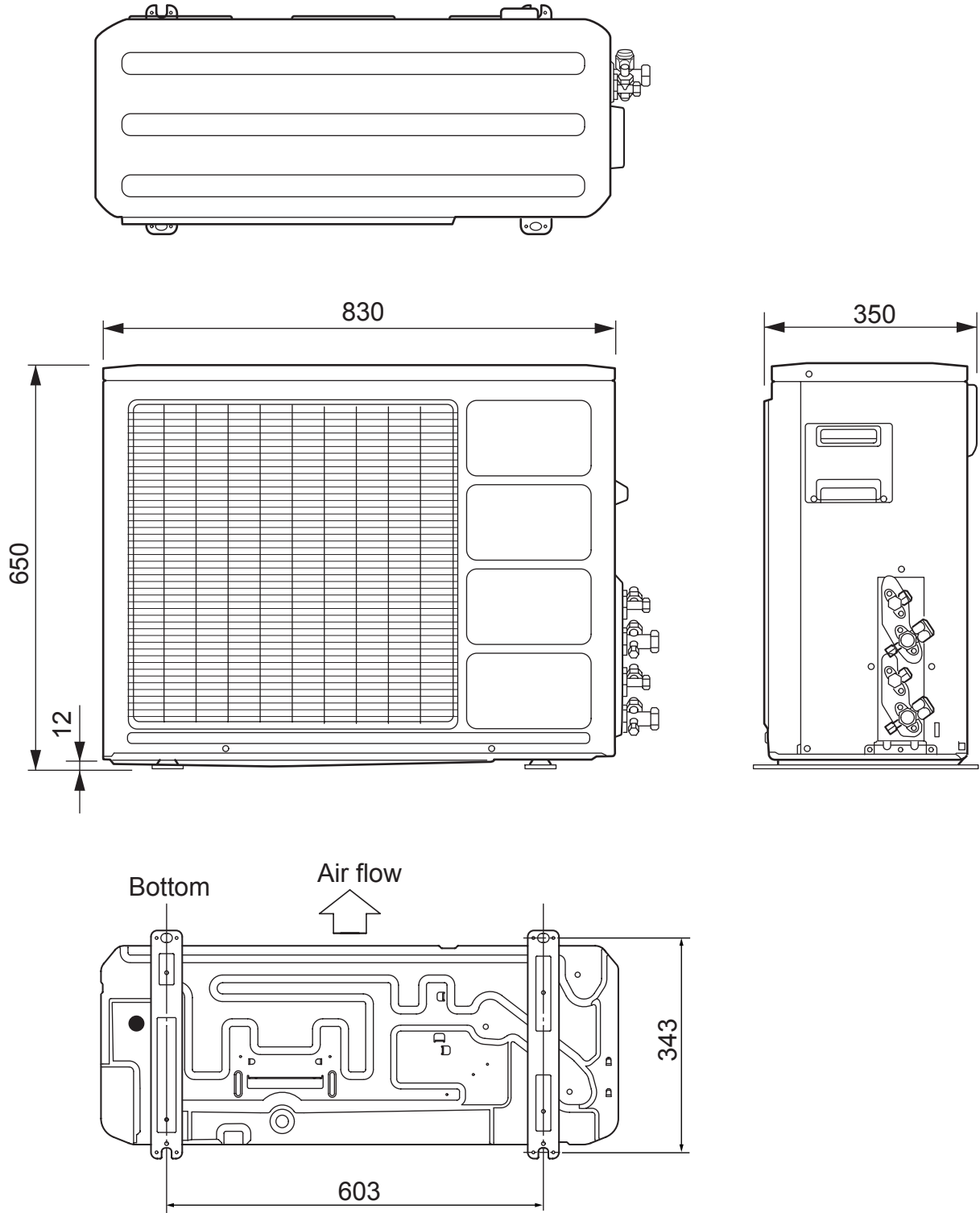


Drain pipe diameter
Inside : 21.5 mm
Outside : 26.0 mm

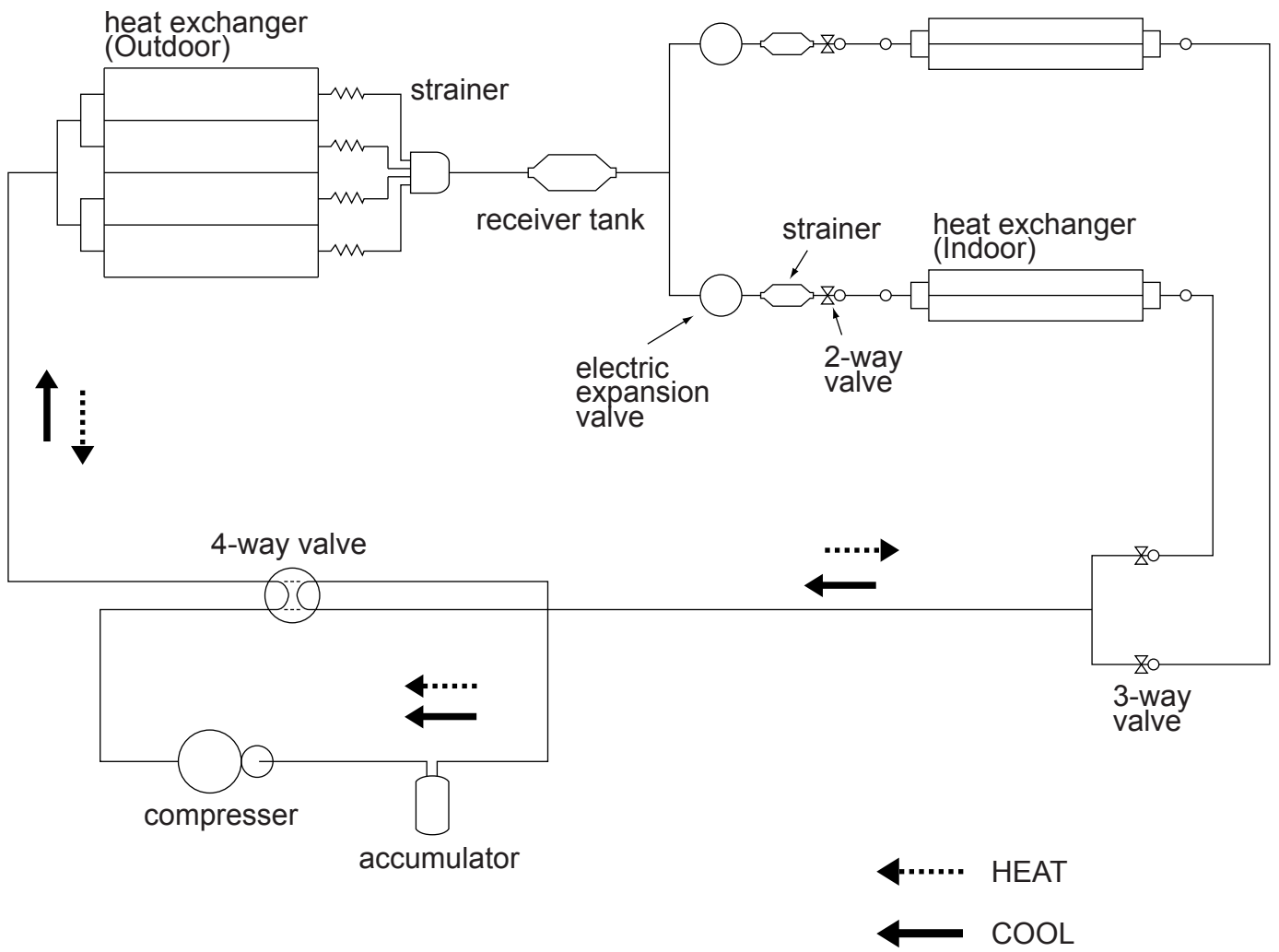


OUTDOOR UNIT

Unit : mm

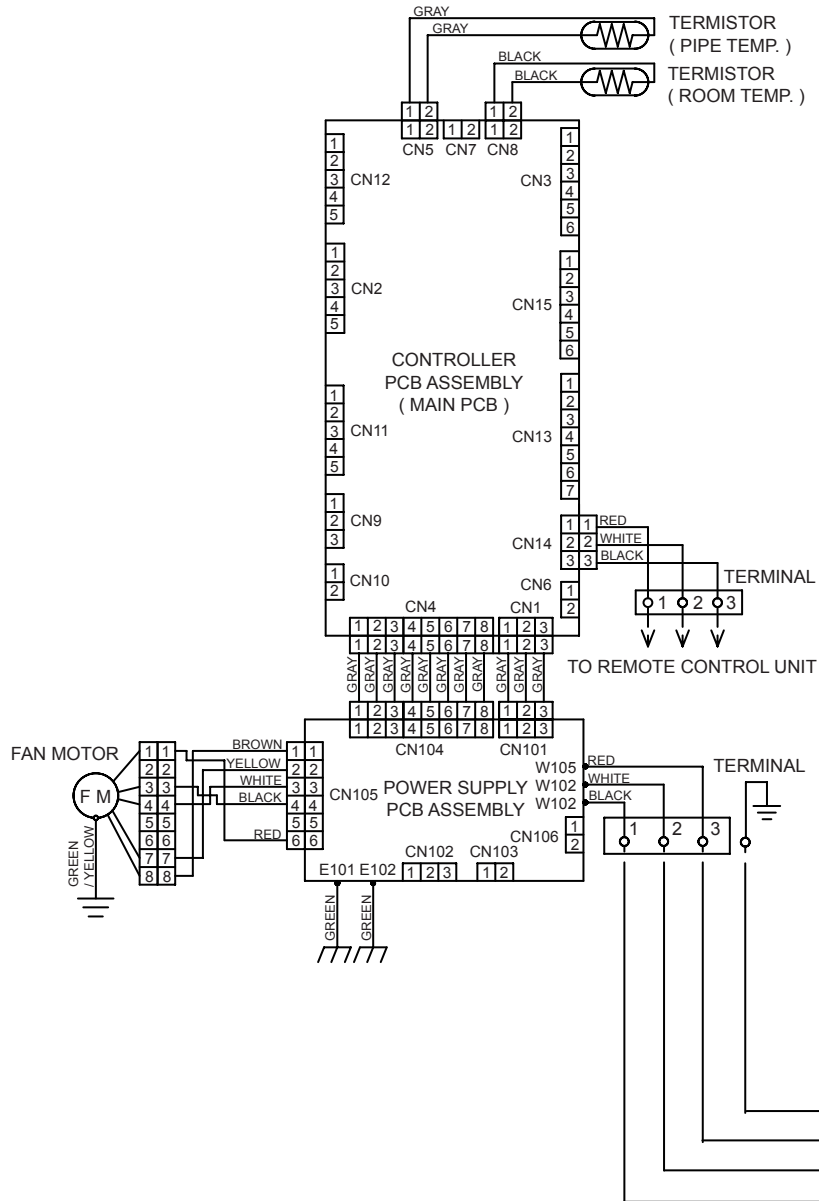


REFRIGERANT SYSTEM DIAGRAM

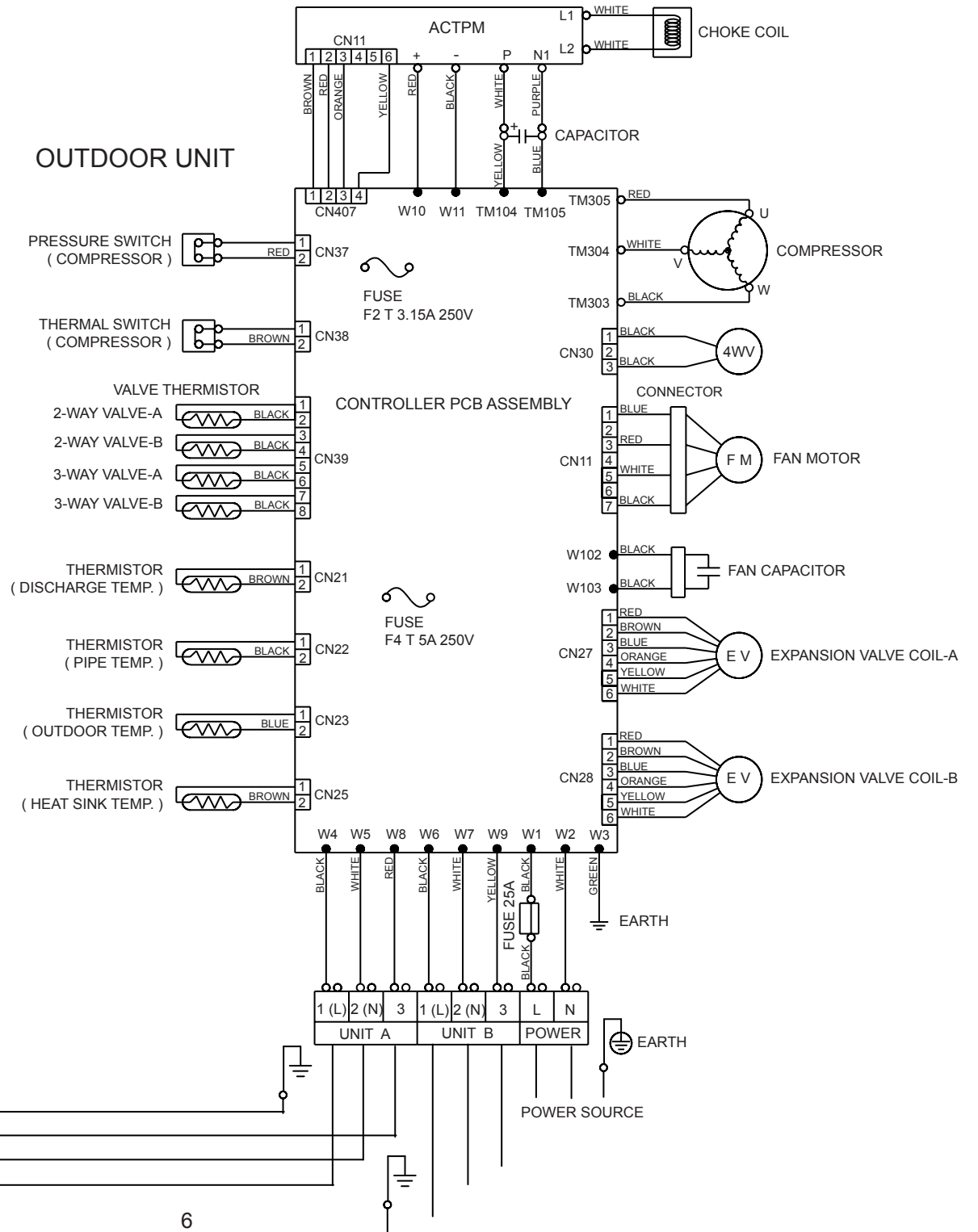


CIRCUIT DIAGRAM

INDOOR UNIT

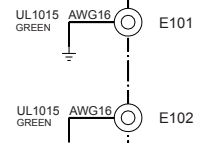
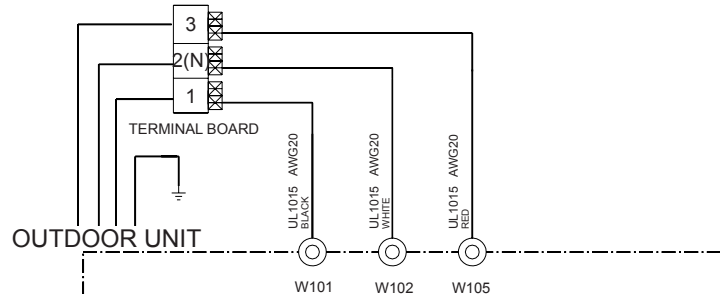


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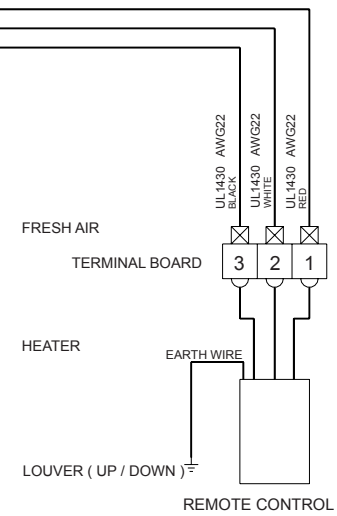
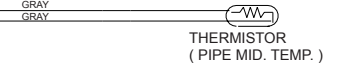
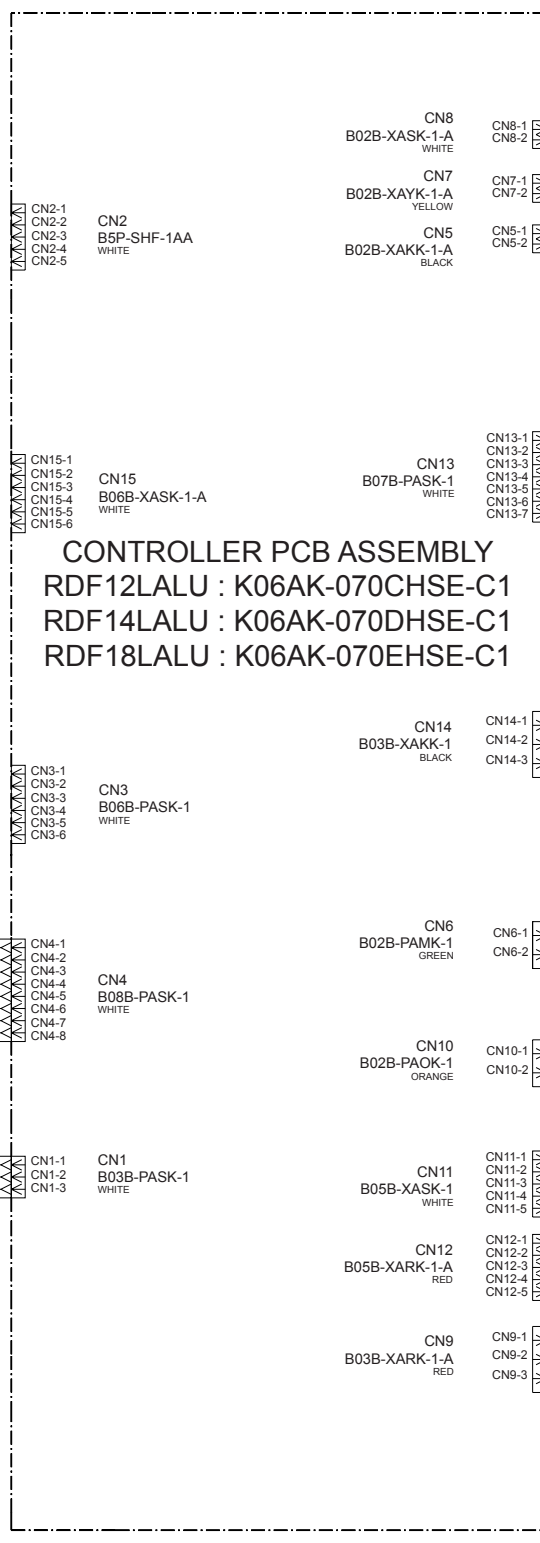
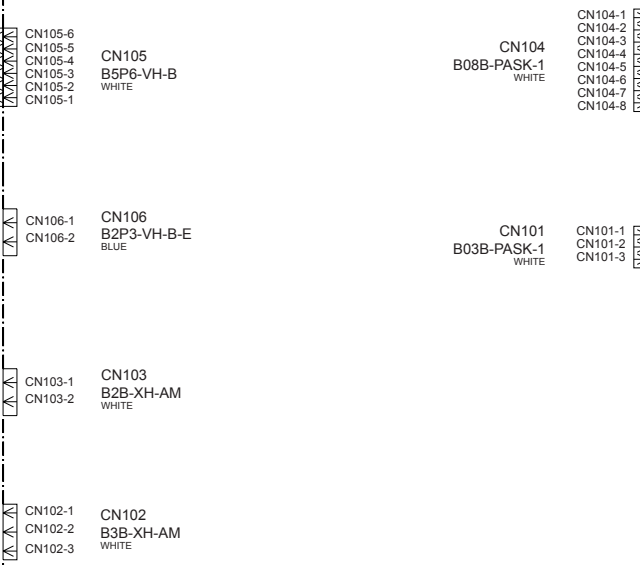
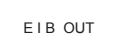
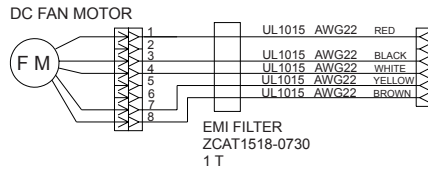


INDOOR PCB CIRCUIT DIAGRAM

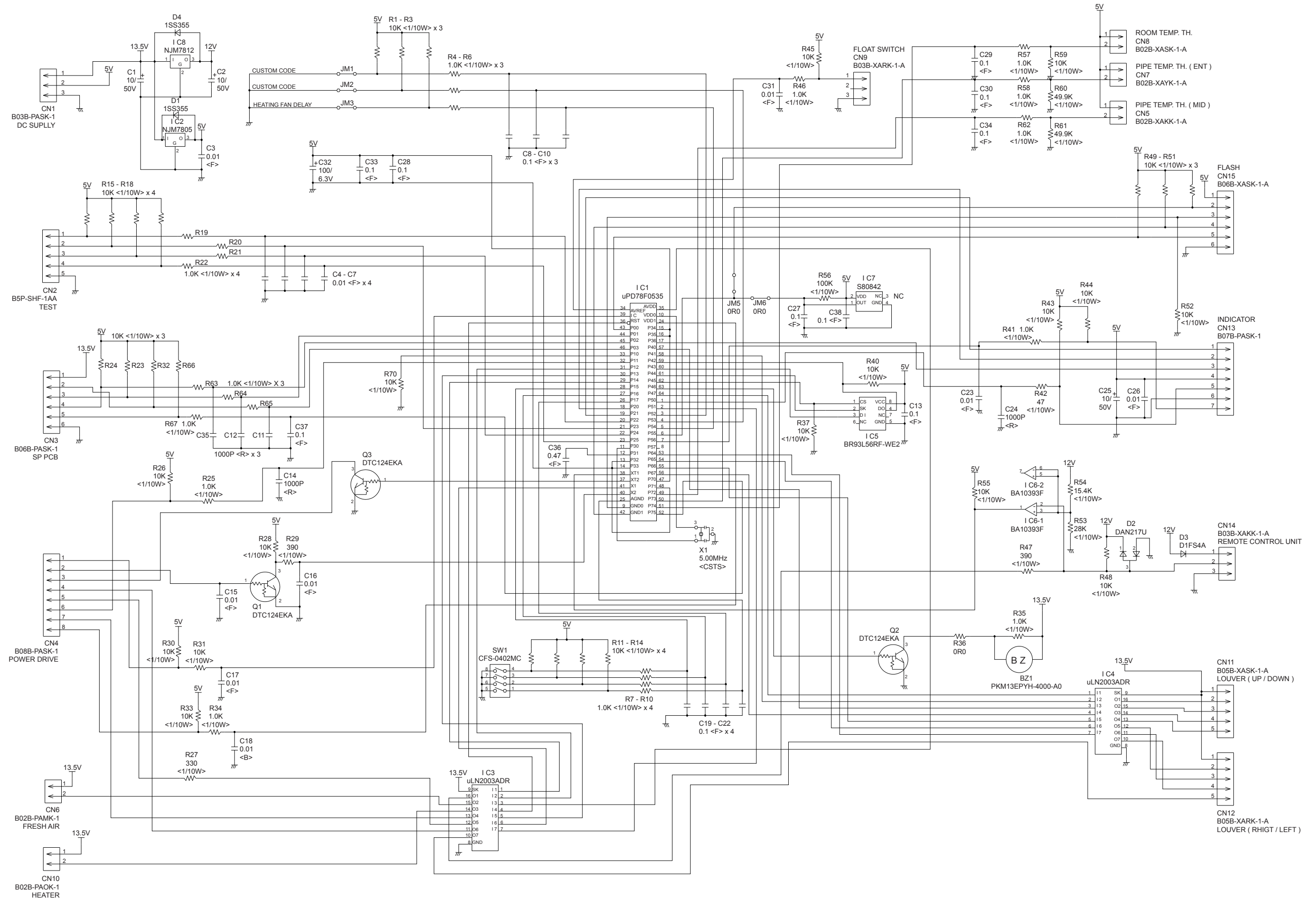
CONTROL UNIT
 RDF12LALU : EZ-0070SHSE
 RDF14LALU : EZ-0070THSE
 RDF18LALU : EZ-0070WHSE



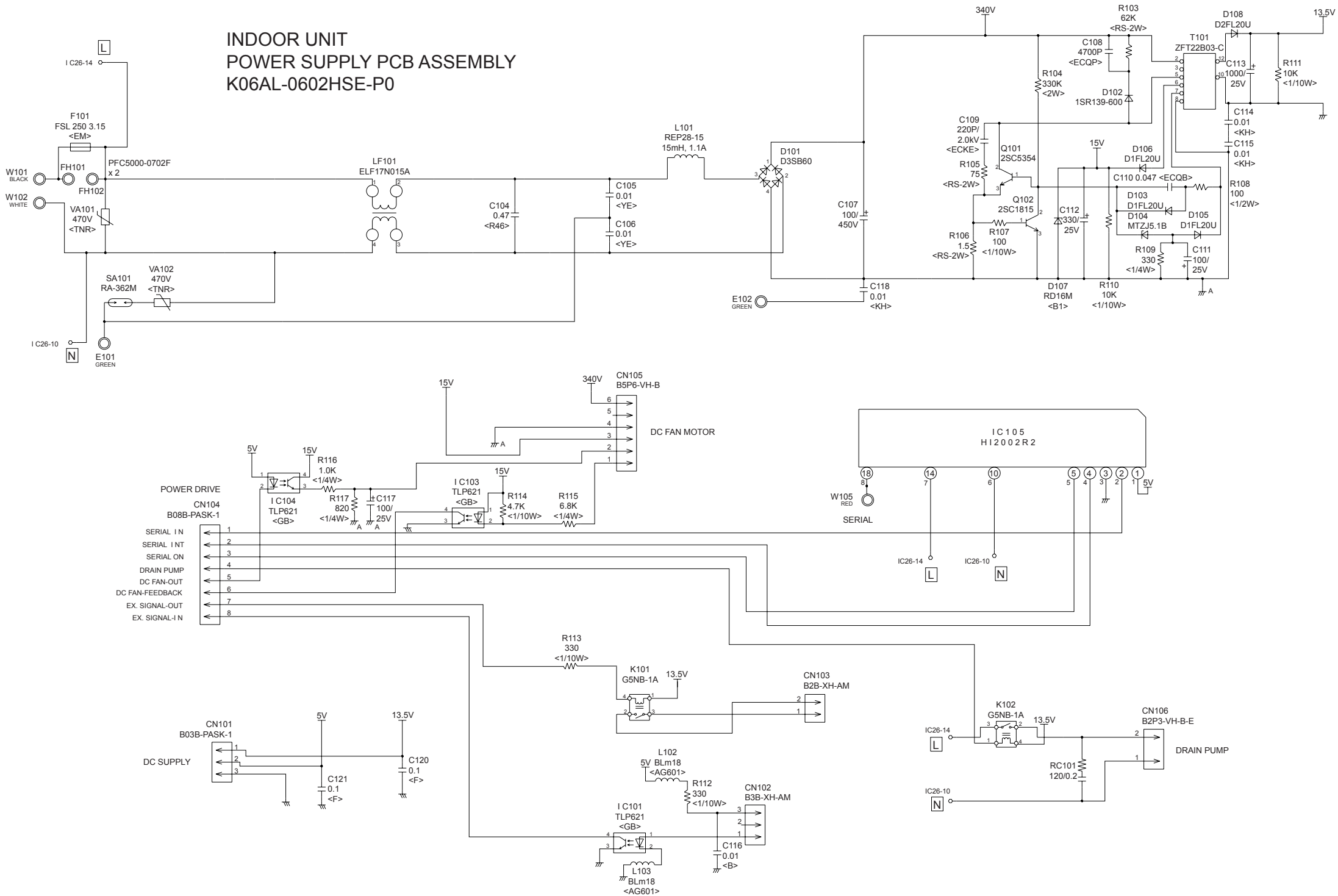
POWER SUPPLY PCB ASSEMBLY
 K06AL-0602HSE-P0



INDOOR UNIT
 CONTROLLER PCB ASSEMBLY
 RDF12LALU : K06AK-070CHSE-C1
 RDF14LALU : K06AK-070DHSE-C1
 RDF18LALU : K06AK-070EHSE-C1

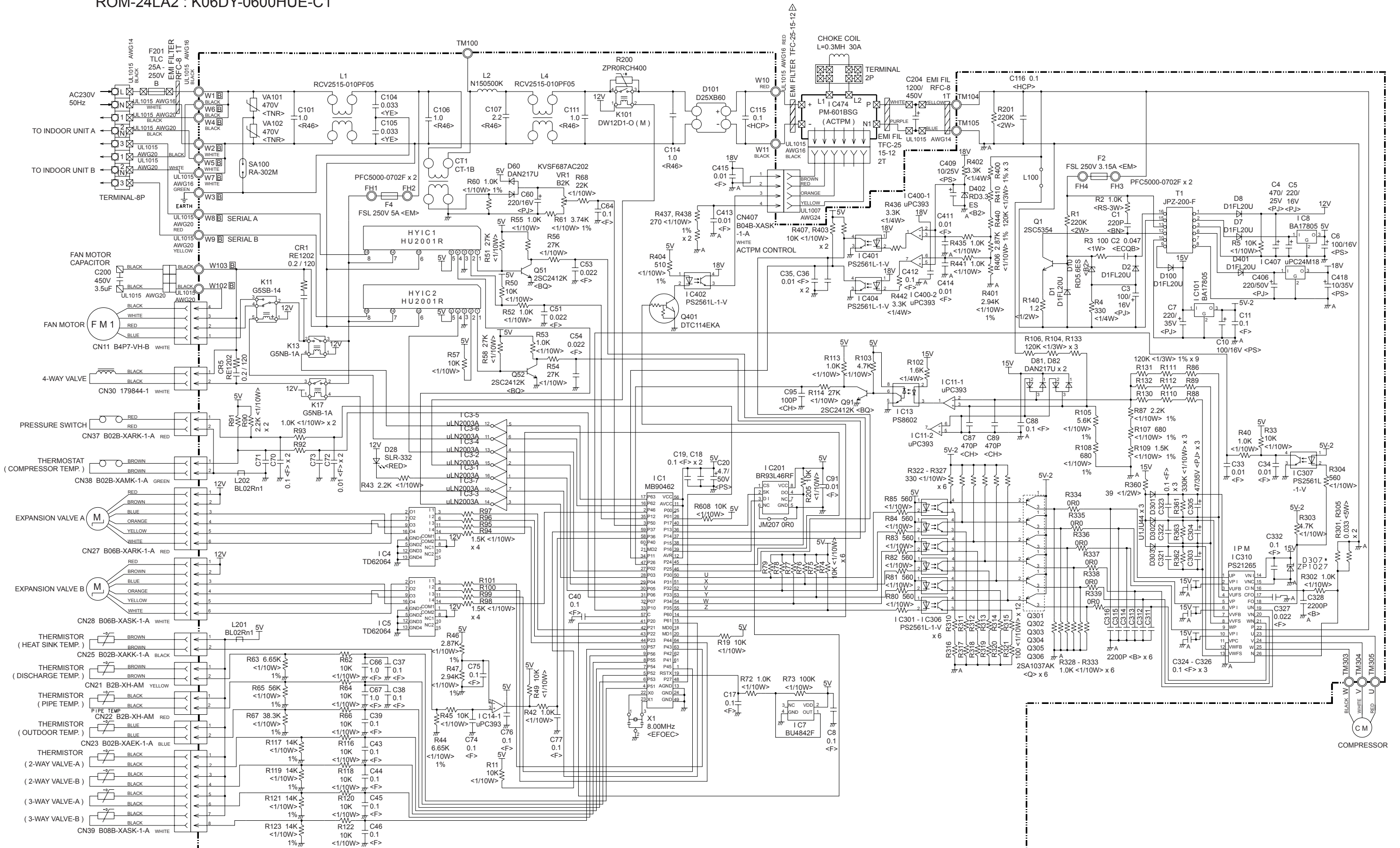


INDOOR UNIT POWER SUPPLY PCB ASSEMBLY K06AL-0602HSE-P0



OUTDOOR PCB CIRCUIT DIAGRAM

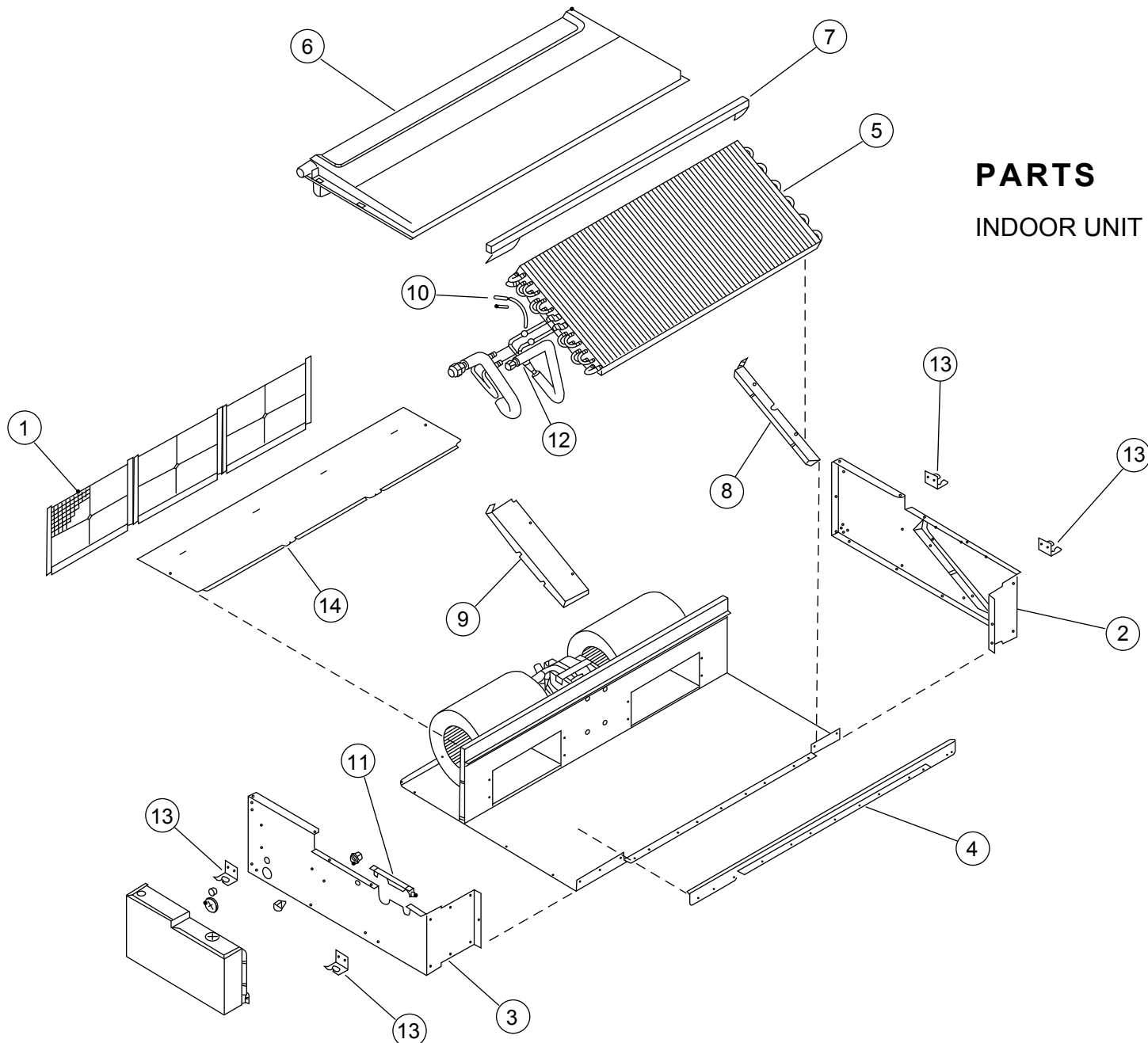
CONTROLLER PCB ASSEMBLY
ROM-18LA2 : K06DY-0602HUE-C1
ROM-24LA2 : K06DY-0600HUE-C1



COMPRESSOR

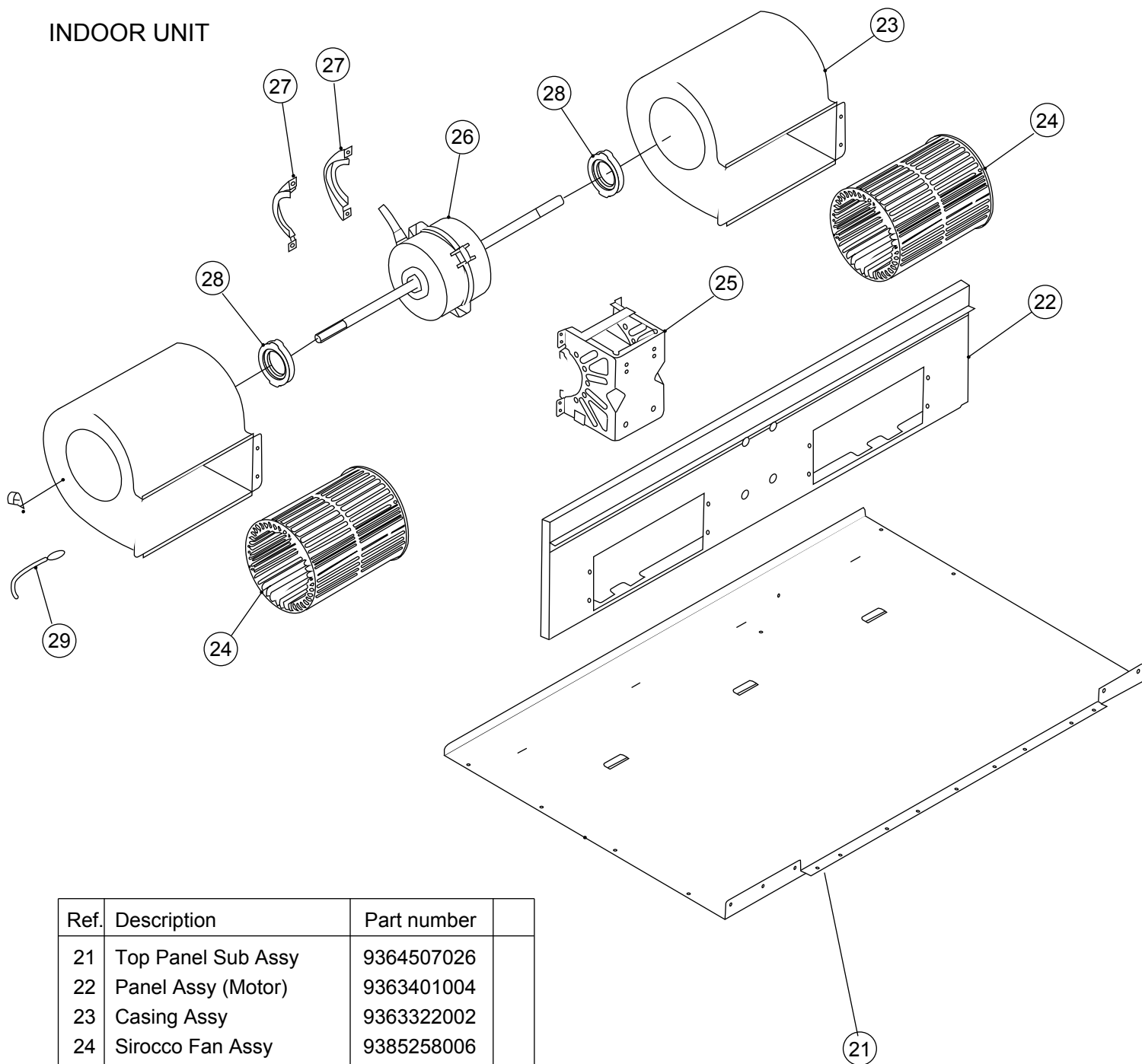
PARTS

INDOOR UNIT



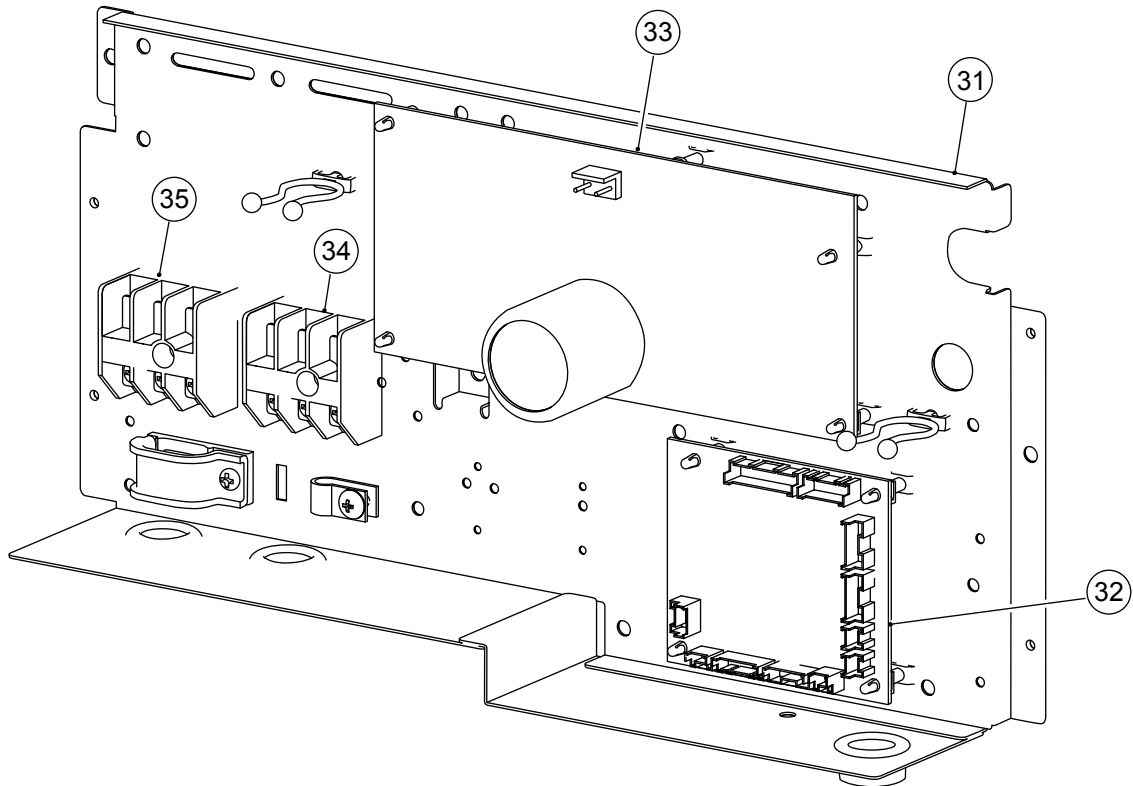
Ref.	Description	Part number		
		RDF12LALU	RDF14LALU	RDF18LALU
1	Air Filter	9366833017	9366833017	9366833017
2	Side Panel R Sub Assy	9364505022	9364505022	9364505022
3	Side Panel L Sub Assy	9364506029	9364506029	9364506029
4	Front Panel Sub Assy	9364508023	9364508023	9364508023
5	Evaporator Assy	9373255024	9373255017	9372972014
6	Drain Pan Sub Assy	9364502069	9364502069	9364502069
7	Evaporator Support Plate	9363404005	9363404005	9363404005
8	Bracket Evaporator R	9363199000	9363199000	9363199000
9	Bracket Evaporator L	9363198003	9363198003	9363198003
10	Pipe Thermistor	9703297090	9703297069	9703297090
11	Pipe Cover	9363327007	9363327007	9363327007
12	Distributor Assy	9373034254	9373034209	9373034216
13	Hook	9363195002	9363195002	9363195002
14	Cabinet Cover Sub Assy	9364503028	9364503028	9364503028
--	Drain Cap Assy	9377878014	9377878014	9377878014
--	Coupling Pipe Assy	9373038467	9373038085	---
--	Outlet (Eva) Assy	---	---	9372978047

INDOOR UNIT



Ref.	Description	Part number
21	Top Panel Sub Assy	9364507026
22	Panel Assy (Motor)	9363401004
23	Casing Assy	9363322002
24	Sirocco Fan Assy	9385258006
25	Motor Fixing Table Assy	9358591000
26	Fan Motor Assy	9602401017
27	Motor Fixture	9358594001
28	Rubber (Vibration-proof)	9385102002
29	Room Thermistor	9703299018

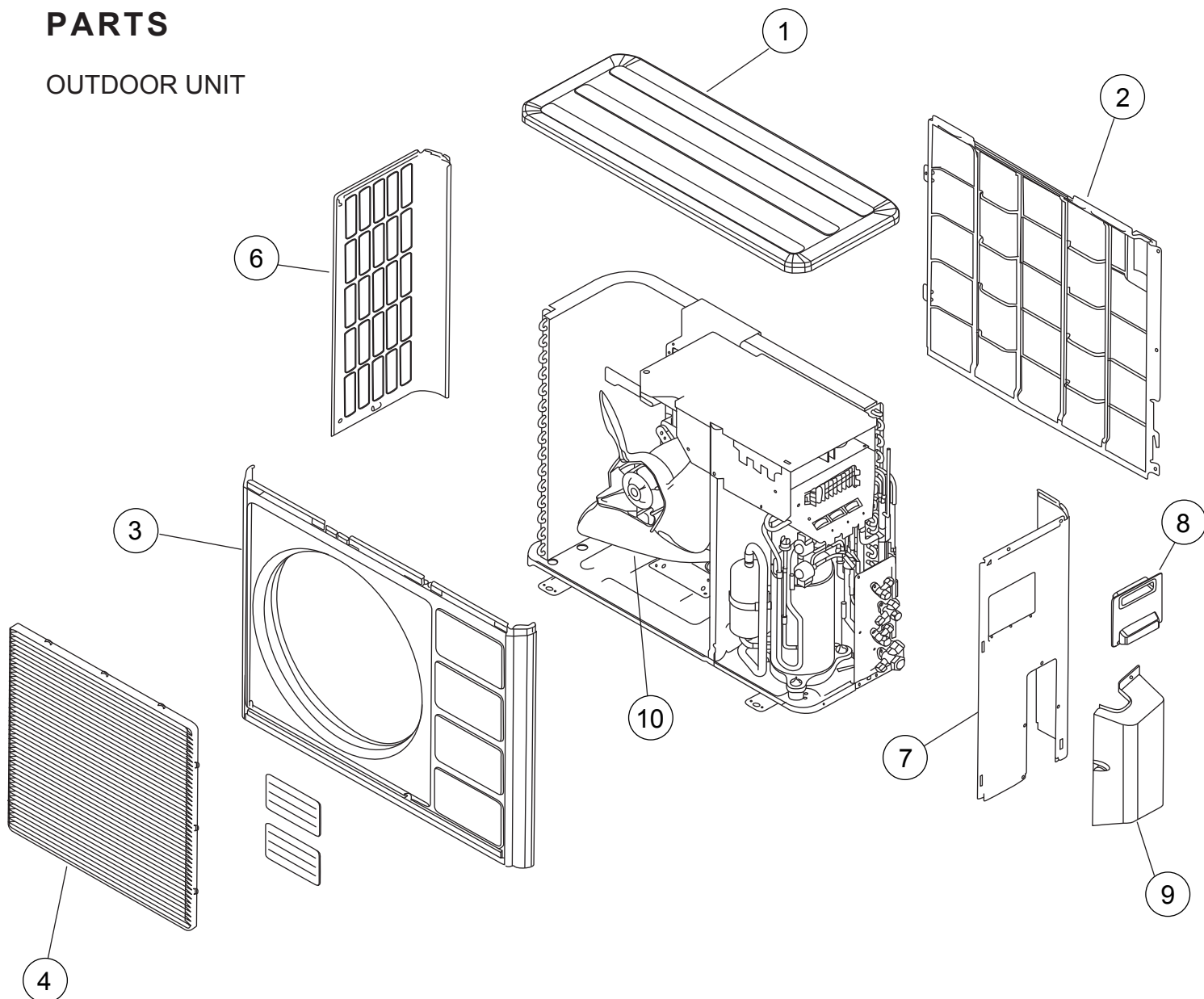
INDOOR UNIT



Ref.	Description	Part number
31	Control Box	9375240035
32	Controller PCB Assy (12)	9707393378
32	Controller PCB Assy (14)	9707393385
32	Controller PCB Assy (18)	9707393392
33	Power Supply PCB Assy	9707398038
34	Terminal	9703345012
35	Terminal	9306489045
--	Control Box Cover	9363201000
--	Remote Control	9372266199
--	Wire	9372714010
--	Hole Cover	9378176010
--	Cap (Power)	9352173011

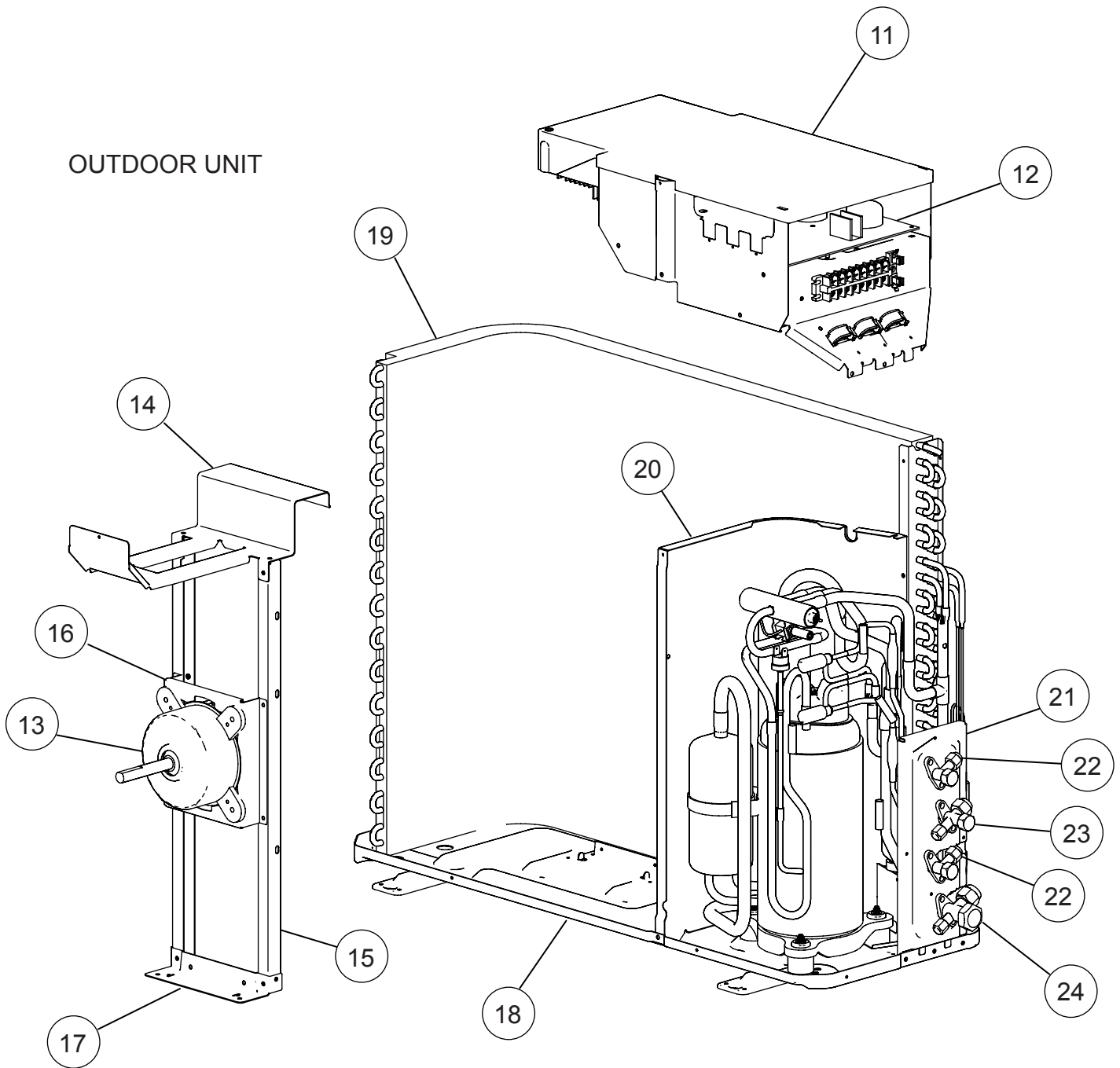
PARTS

OUTDOOR UNIT



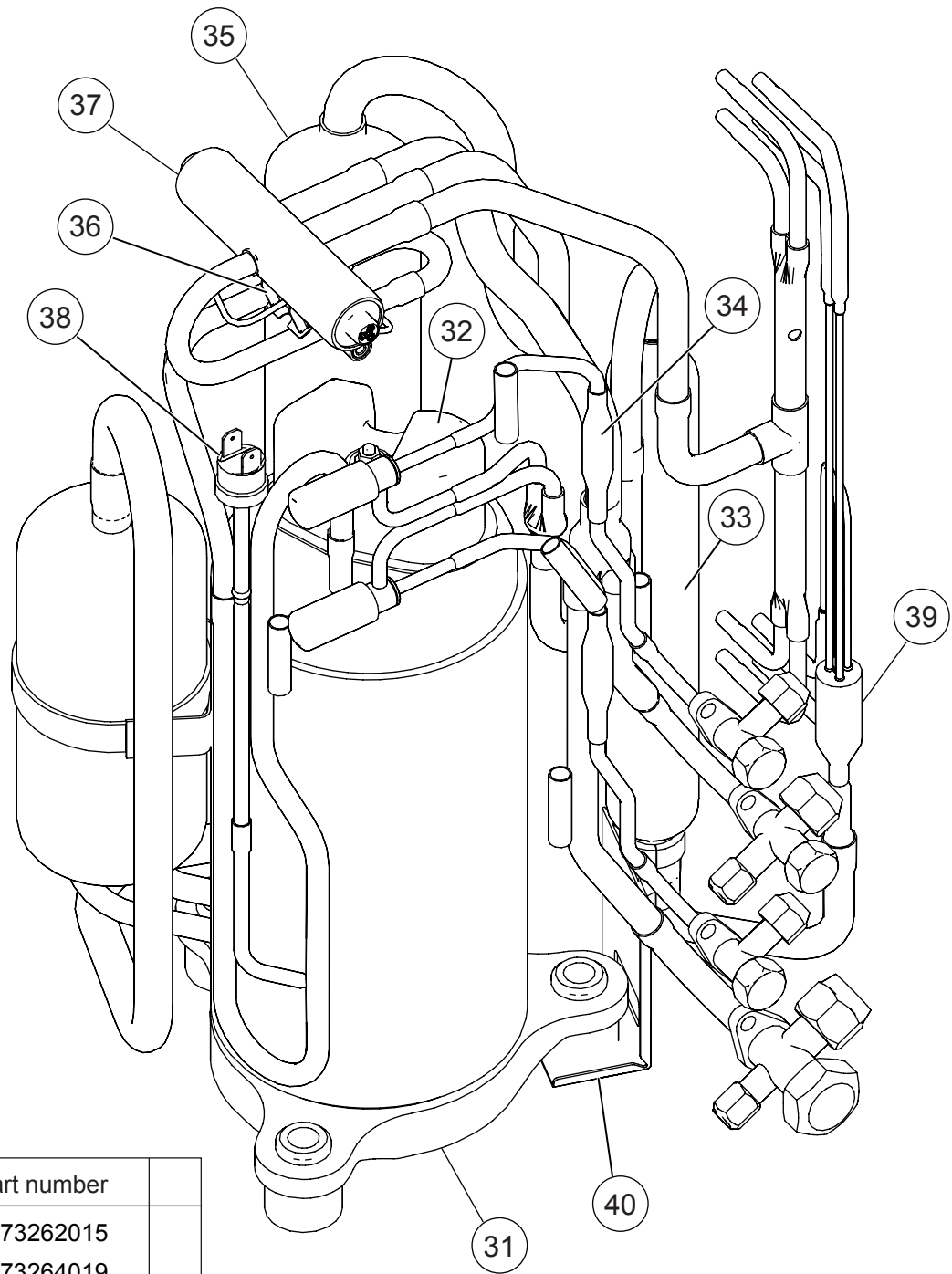
Ref.	Description	Part number	
1	Top Panel	9371925011	
2	Protective Net	9371934013	
3	Front Panel	9371924014	
4	Fan Guard	9371187013	
6	Side Panel L	9371926018	
7	Side Panel R Sub Assy	9372306048	
8	Connecteur Cover	9366398004	
9	Valve Cover	9372796016	
10	Propeller Fan Assy	9366378013	

OUTDOOR UNIT



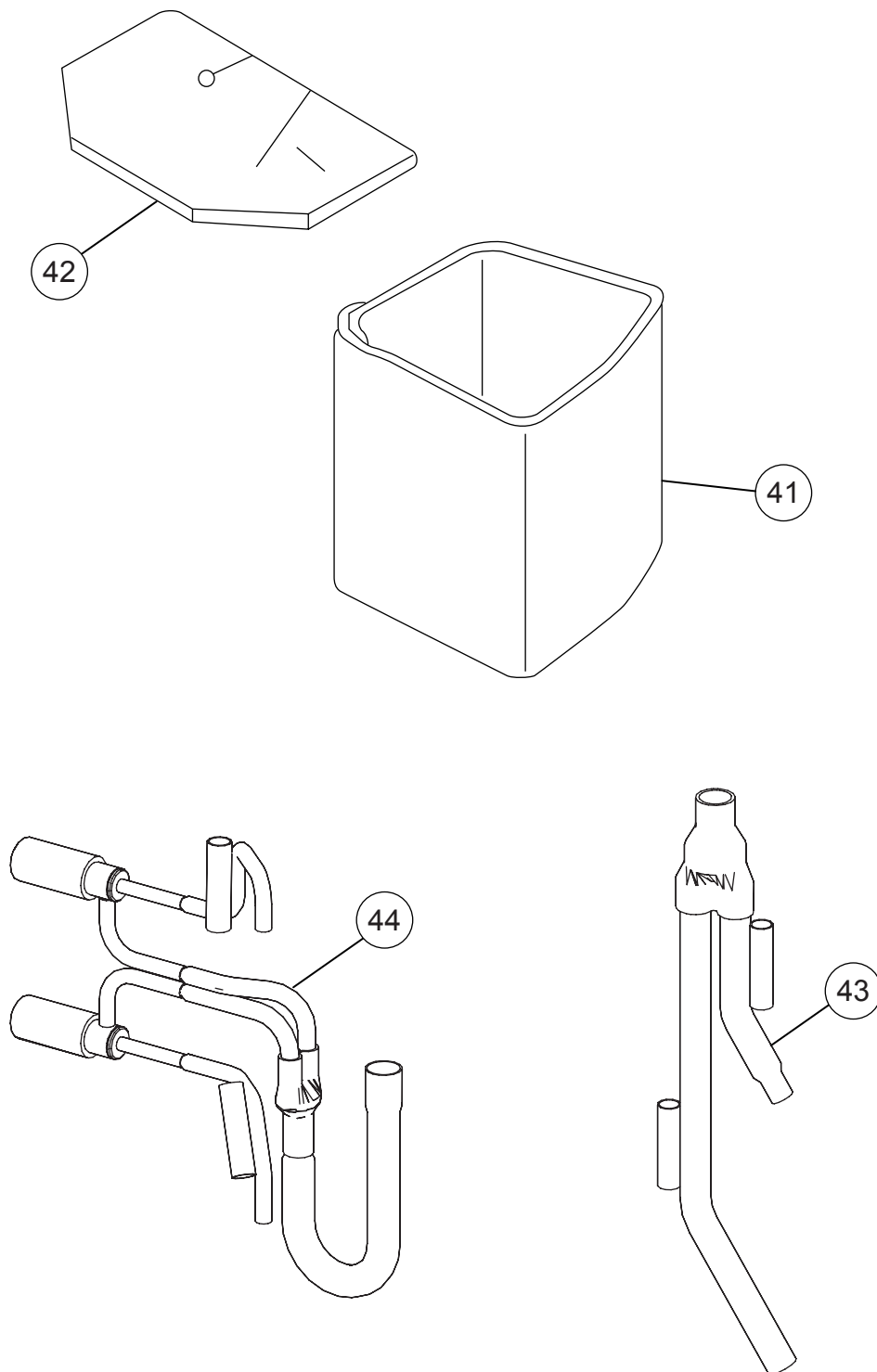
Ref.	Description	Part number	Ref.	Description	Part number
11	Control Cover	9372792018	--	Heat Exchanger Thermistor	9704220059
12	Controller PCB Assy (18LMAK2)	9707560039	--	Thermistor Outdoor	9703516047
12	Controller PCB Assy (24LMAM2)	9707560015	--	Thermistor Heat Sink	9900195014
13	Motor Induct	9601671046	--	Relay	9900117016
14	Motor Bracket Top	9371931012	--	ACTPM	9703457012
15	Motor Bracket	9371929019	--	Capacitor for PCB	9705387010
16	Motor Bracket Center	9371930015	--	Fan Capacitor	9900270049
17	Motor Bracket Bottom	9371932019	--	Fuse	0600086039
18	Base Assy	9371920078	--	Terminal 8P	9900203047
19	Condenser Assy	9372181096	--	Fuse Holder	0501454012
20	Separate Wall	9372795019	--	Terminal 2P	9701971015
21	Valve Plate	9371928036			
22	2-Way Valve	9372204054			
23	3-Way Valve	9372205044			
24	3-Way Valve	9372205051			

OUTDOOR UNIT



Ref.	Description	Part number
31	Compressor Assy	9373262015
32	Terminal Cover (Comp)	9373264019
33	Receiver Tank Assy	9373426011
34	Strainer Assy	9366602019
35	Accumulator	9368391003
36	Solenoid	9900165079
37	4-Way Valve	9900163013
38	Pressure Switch Assy	9373729044
39	Capillary Assy	9373729211
40	Accum Support Assy	9372252017
--	Thermal Switch	9377956019
--	Gasket (Comp)	9373266013
--	Compressor Pressure Switch	9900186012
--	Compressor Thermal Switch	9373263012
--	Thermistor Valve	9900194017
--	Thermistor Discharge	9704219039
--	Special Nut M8 (Comp)	9355091008
--	Thermister Holder Pipe	313714262805

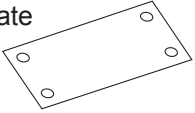
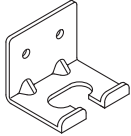
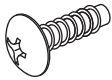



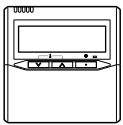
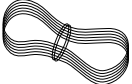

OUTDOOR UNIT



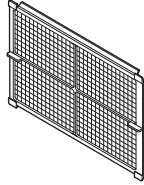




Ref.	Description	Part number	
41	Compressor Cover A	9373730019	
42	Compressor Cover B	9373730026	
43	Joint Pipe (3Way) Assy	9373729129	
44	Expansion Valve Assy	9373729068	

ACCESSORIES

INDOOR UNIT

Name and Shape	Q'ty	Application
Installation template 	1	For positioning the indoor unit (P/N 9364225005)
Hanger 	4	For suspending the indoor unit from ceiling (P/N 9363195002)
Tapping screw (ø4 x 10) 	8	For installing the hanger (P/N 301171164104)
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling (P/N 313005446653)
Special nut B (small flange) 	4	(P/N 313005446759)
Binder 	(Small) 1	For remote control and cord binding (P/N 313361275805)
	(Large) 4	For fixing the coupler heat insulation (P/N 312300787605)
Remote control 	1	For air conditioner operation (P/N 9372266199)
Remote control cord 	1	For connecting the remote control (P/N 9372714010)
Tapping screw (ø4 x 16) 	2	For installing remote control (P/N 0700181108)

Name and Shape	Q'ty	Application
Coupler heat insulation (large) 	1	For indoor side pipe joint (gas pipe) (P/N 9350716029)
Coupler heat insulation (small) 	1	For indoor side pipe joint (liquid pipe) (P/N 9352766015)
Filter 	3	For protecting air conditioner against dust (P/N 9366833017)
Drain hose insulation 	1	Insulates the drain hose and vinyl hose connection (P/N 313806217708)
Edge cover 	1	For making a wiring hole for connecting optional units (P/N 9378176010)

OPTIONAL PARTS

The following options are available.

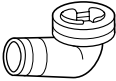


Remote sensor : UTD-RS100 (P/N 9072619004)

External control set : UTD-ECS5A (P/N 9077359004)

IR receiver unit : UTY-LRHY1 (P/N 9048098000)

Drain pump unit : UTZ-PX1BBA (P/N 9052976004)

OUTDOOR UNIT

Name and Shape	Part number
Drain pipe 	9303029015
Drain cap 	313166024302
Adapter D (1/2" → 3/8") 12.7mm → 9.52mm 	9370244007

0804G3438