SAMSUNG

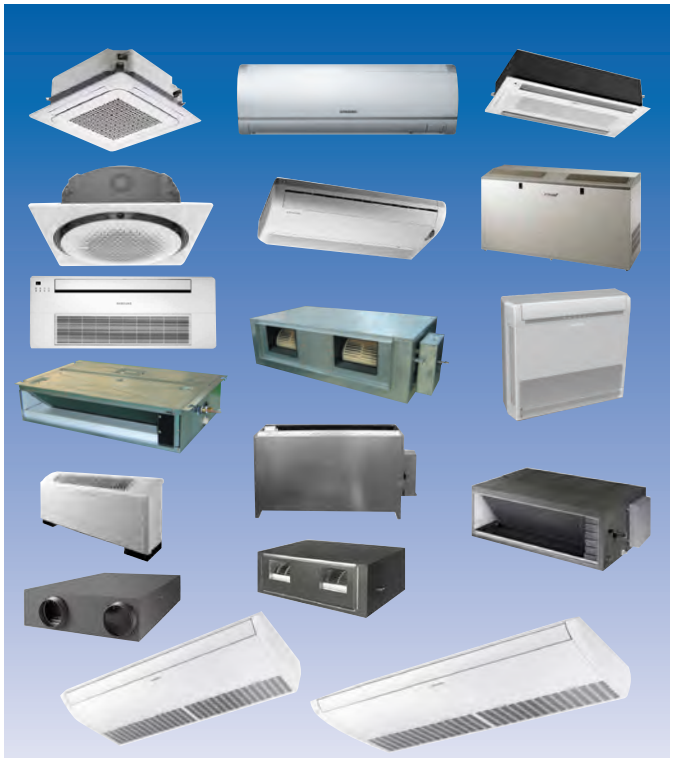
SYSTEM AIRCONDITIONER

INDOOR UNIT

AM007/009/012FN1DCH/AA
AM009/012/018/020FNNDCH/AA
AM009/012/018/024/030/036/048FN4DCH/AA
AM007/009/012FNLDCH/AA
AM018/024FNLDCH/AA
AM030/036/048FNLDCH/AA
AM018/024FNMDCH/AA
AM030/036FNMDCH/AA
AM048FNMDCH/AA
AM007/009/012/018/020/024FNTDCH/AA
AM007/009/012/018/020/024HNQDCH/AA
AM036/048FNHDCH/AA
AM076/096FNHDCH/AA
AM018/024FNCDCH/AA
AM048/096HNPDCH/AZ
AM007/009/012/015/018JNMDCH/AA
AM024/027/030/036/048JNHDCH/AA
AM036/048JNCDCH/AA
AM006/009/012/018/024JNFDCH/AA
AM006/009/012/018/024JNGDCH/AA
AM072/096JNESCH/AA
AM054KNMDCH/AZ
AM007/009/012/018/020/024KNQDCH/AZ
AM007/009/012/018/020/024KNTDCH/AZ
AM005/007/009/012/015/018/024/028MNVDCH/AA
AM007/009/012NN1DCH/AA
AM009/012/018/024/030/036/048KN4DCH/AA
AM005/007/009/012/015/018/024/028TNVDCH/AA
AM007MNMDCH/AA
AM009MNMDCH/AA
AM012MNMDCH/AA
AM015MNMDCH/AA
AM018MNMDCH/AA
AM024MNMDCH/AA
AM027MNMDCH/AA
AM030MNMDCH/AA
AM036MNMDCH/AA
AM048MNMDCH/AA
AM032MNQDCH/AA
AM007NN1DCH/AZ
AM009NN1DCH/AZ
AM012NN1DCH/AZ
AM018NN1DCH/AZ
AM024NN1DCH/AZ
AM006ANMDCH/AA
AM007ANMDCH/AA
AM009ANMDCH/AA
AM012ANMDCH/AA
AM015ANMDCH/AA
AM018ANMDCH/AA
AM024ANHDCH/AA
AM027ANHDCH/AA
AM030ANHDCH/AA
AM036ANHDCH/AA
AM048ANHDCH/AA

SERVICE Manual

SYSTEM AIRCONDITIONER



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1. Precautions

1-1 Precautions for the Service

- **Use the correct parts when changing the electric parts.**
  – Please check the labels and notices for the model name, proper voltage, and proper current for the electric parts.
- **Fully repair the connection for the types of harness when repairing the product after breakdown.**
  – A faulty connection can cause irregular noise and problems.
- **When disassembling or assembling, make sure that the product is laid down on a work cloth.**
  – Doing so will prevent scratching to the exterior of the rear side of the product.
- **Completely remove dust or foreign substances on the housing, connection, and inspection parts when performing repairs.**
  – This can prevent fire hazards for tracking, short, etc.
- **Please tighten the service valve of the outdoor unit and the valve cap of the charging valve as securely as possible by using a monkey spanner.**
- **Check whether the parts are properly and securely assembled after performing repairs.**
  – These parts should be in the same condition as before the repair.

1-2 Precautions for the Static Electricity and PL

- **Please carefully handle the PCB power terminal during repair and measurement when it is turned on since it is vulnerable to static electricity.**
  – Please wear insulation gloves before performing PCB repair and measurement.
- **Check if the place of installation is at least 2m away from electronic appliances such as TV, video players, and stereos.**
  – This can cause irregular noise or degrade the picture quality.
- **Please make sure the customer does not directly repair the product.**
  – Arbitrary dismantling may result in electric shock or fire.

1-3 Precautions for the Safety

- **Do not pull or touch the power plug or the subsidiary power switch with wet hands.**
  – This may result in electric shock or fire.
- **If the power line or the power plug is damaged, then it must be changed since this is a hazard.**
- **Do not bend the wire too much or position it so that it can be damaged by a heavy object on top.**
  – This may result in electric shock or fire.
- **The use of multiple electric outlets should be prohibited.**
  – This may result in electric shock or fire.
- **Ground the connection if it is necessary.**
  – The connection must be grounded if there is any risk of electrical short due to water or moisture.
- **Unplug the power or turn off the subsidiary power switch when changing or repairing electrical parts.**
  – Doing so will prevent electric shock.
- **Explain to workers that the battery for the remote control needs to be separated for storage purposes when the product will not be used for a long time.**
  – This can cause a problem for the remote control since battery fluid may trickle out.

1-4 Precautions for Handling Refrigerant for Air Conditioner

Environmental Cautions: Air pollution due to gas release

- **Safety Cautions**
  If liquid gas is released, then body parts that come into contact with it may experience frostbite/blister/numbness.
  If a large amount of gas is released, then suffocation may occur due to lack of oxygen. If the released gas is heated, then noxious gas may be produced by combustion.
- **Container Handling Cautions**
  Do not subject container to physical shock or overheating. (Flowage is possible while moving within the regulated pressure.)

1-5 Precautions for Welding the Air Conditioner Pipe

- **Dangerous or flammable objects around the pipe must be removed before the welding.**
- **If the refrigerant is kept inside the product or the pipe, then remove the refrigerant prior to welding.**
  If the welding is carried out while the refrigerant is kept inside, the welding cannot be properly performed. This will also produce noxious gas that is a health hazard. This leakage will also explode with the refrigerant and oil due to an increase in the refrigerant pressure, posing a danger to workers.
- **Please remove the oxide produced inside the pipe during the welding with nitrogen gas.**
  Using another gas may cause harm to the product or others.

1-6 Precautions for Additional Supplement of Air Conditioner Refrigerant

- **Precisely calculate the refrigerant by using a scale and S-net, and proceed with the test operation.**
  Excessive supplement can cause harm to the product since it can cause an inflow of the liquid refrigerant into the compressor.
- **Do not heat the refrigerant container for a forced injection.**
  This may cause harm to the product or others since the refrigerant container may burst.
- **Do not operate the product after removing the product safety pressure switch and sensor.**
  If the product is blocked inside, then this may cause harm to the product or others due to the excess pressure increase of the refrigerant gas.

1-7 Other Precautions

- **There should be no leakage of the pipes after installation. When withdrawing the refrigerant, the compressor should be stopped before removing the connecting pipe.**
  If the compressor is operating while the refrigerant pipe is not correctly connected and the service valve is opened, then air and other substances can enter the pipe. The interior of the refrigerant cycle may then build up excessive high pressure resulting in explosion and damage.

2. Product Specifications

2-1 Product Specifacations

2-1-1 Indoor Unit

■ Slim 1WAY cassette

Model				JSF-1		
				AM007FN1DCH/AA	AM009FN1DCH/AA	AM012FN1DCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	7,500	9,500	12,000
		Heating 2)	kW	-	-	-
			Btu/h	8,500	10,500	13,500
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	40	45	50
		Heating 2)	-	40	45	50
	Current Input (Nominal)	Cooling 1)	A	0.23	0.25	0.28
		Heating 2)	-	0.23	0.25	0.28
Fan	Type		-	Crossflow fan	Crossflow Fan	Crossflow Fan
	Motor	Model	-	Y4S476B041L	Y4S476B041L	Y4S476B041L
		Type	-	BLDC	BLDC	BLDC
		Output x n	W	20 x 1	20 x 1	20 x 1
	Air Flow Rate	H/M/L	CMM	7.00 / 6.00 / 5.00	7.00 / 6.00 / 5.00	8.00 / 7.00 / 6.00
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	29.0 / - / 27.0	30.0 / - / 27.0	35.0 / - / 30.0
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	6.35
			ø, inch	1/4	1/4	1/4
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7
			ø, inch	1/2	1/2	1/2
	Drain Pipe (Quick lock)		ø,mm	VP 20 (ODø26,IDø20)	VP20 (OD 26,ID 20)	VP20 (OD 26,ID 20)
Dimensions	Net Weight		kg	16	16	16
			lbs	35.3	35.3	35.3
	Shipping Weight		kg	18	18	18
			lbs	39.7	39.7	39.7
	Net Dimensions (W×H×D)		mm	970 x 135 x 410	970 x 135 x 410	970 x 135 x 410
			inch	38.2 x 5.3 x 16.1	38.2 x 5.3 x 16.1	38.2 x 5.3 x 16.1
	Shipping Dimensions (W×H×D)		mm	1,164 x 212 x 478	1,164 x 212 x 478	1,164 x 212 x 478
			inch	45.8 x 8.3 x 18.8	45.8 x 8.3 x 18.8	45.8 x 8.3 x 18.8
Panel Size	Panel model		-	PC1NUSMAN PC1NUPMAN	PC1NUSMAN PC1NUPMAN	PC1NUSMAN PC1NUPMAN
	Panel Net Weight		kg	3.1	3.1	3.1
			lbs	6.8	6.8	6.8
	Shipping Weight		kg	4.5	4.5	4.5
			lbs	9.9	9.9	9.9
	Net Dimensions (W×H×D)		mm	1,180 x 25 x 460	1,180 x 25 x 460	1,180 x 25 x 460
			inches	46.5 x 1 x 18.1	46.5 x 1 x 18.1	46.5 x 1 x 18.1
	Shipping Dimensions (W×H×D)		mm	1,259 x 144 x 539	1,259 x 144 x 539	1,259 x 144 x 539
			inch	49.6 x 5.7 x 21.2	49.6 x 5.7 x 21.2	49.6 x 5.7 x 21.2
Functions	Auto restart		-	O	O	O
	Auto swing		-	O	O	O
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	O	O	O
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	X	X	X
	Pattern sheet for installation		-	O	O	O
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	-/Model Name	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00	MR-DH00	MR-DH00
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-
		Receiver wire	-	-	-	-
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Mini 4WAY cassette

Model				Small			
				AM009FNNDCH/AA	AM012FNNDCH/AA	AM018FNNDCH/AA	AM020FNNDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-
			Btu/h	9,500	12,000	18,000	20,000
		Heating 2)	kW	-	-	-	-
			Btu/h	10,500	13,500	20,000	23,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	24	28	36	38
		Heating 2)	-	24	28	36	38
	Current Input (Nominal)	Cooling 1)	A	0.17	0.19	0.27	0.3
		Heating 2)	-	0.17	0.19	0.27	0.3
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor	Model	-	FMC6531SSJ	FMC6531SSJ	FMC6531SSJ	FMC6531SSJ
		Type	-	BLDC	BLDC	BLDC	BLDC
		Output x n	W	65 x 1	65 x 1	65 x 1	65 x 1
	Air Flow Rate	H/M/L	CMM	10.00 / 8.50 / 7.50	10.50 / 9.50 / 8.00	13.00 / 11.00 / 9.50	13.50 / 12.00 / 10.20
	External Pressure	Min / Std / Max	Pa	-	-	-	-
		-	WG	-	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	34.0 / 30.0 / 26.0	36.0 / 34.0 / 31.0	40.0 / 37.0 / 34.0	41.0 / 37.0 / 34.0
	Sound Power	High / Mid / Low	-	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	6.35	6.35
			ø, inch	1/4	1/4	1/4	1/4
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7	12.7
			ø, inch	1/2	1/2	1/2	1/2
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	12	12	12	12
			lbs	26.5	26.5	26.5	26.5
	Shipping Weight		kg	14	14	14	14
			lbs	30.9	30.9	30.9	30.9
	Net Dimensions (W×H×D)		mm	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575
			inch	22.6 x 9.8 x 22.6	22.6 x 9.8 x 22.6	22.6 x 9.8 x 22.6	22.6 x 9.8 x 22.6
	Shipping Dimensions (W×H×D)		mm	623 x 298 x 653	623 x 298 x 653	623 x 298 x 653	623 x 298 x 653
			inch	24.5 x 11.7 x 25.7	24.5 x 11.7 x 25.7	24.5 x 11.7 x 25.7	24.5 x 11.7 x 25.7
Panel Size	Panel model		-	PC4SUSMAN	PC4SUSMAN	PC4SUSMAN	PC4SUSMAN
	Panel Net Weight		kg	2.7	2.7	2.7	2.7
			lbs	6	6	6	6
	Shipping Weight		kg	4.2	4.2	4.2	4.2
			lbs	9.3	9.3	9.3	9.3
	Net Dimensions (W×H×D)		mm	670 x 45 x 670	670 x 45 x 670	670 x 45 x 670	670 x 45 x 670
			inches	26.4 x 1.8 x 26.4	26.4 x 1.8 x 26.4	26.4 x 1.8 x 26.4	26.4 x 1.8 x 26.4
	Shipping Dimensions (W×H×D)		mm	714 x 106 x 724	714 x 106 x 724	714 x 106 x 724	714 x 106 x 724
			inch	28.1 x 4.2 x 28.5	28.1 x 4.2 x 28.5	28.1 x 4.2 x 28.5	28.1 x 4.2 x 28.5
Functions	Auto restart		-	O	O	O	O
	Auto swing		-	O	O	O	O
	Group/individual control		-	O	O	O	O
	External contact control		-	O	O	O	O
	Trouble shooting by LED		-	O	O	O	O

Model				Small			
				AM009FNNDCH/AA	AM012FNNDCH/AA	AM018FNNDCH/AA	AM020FNNDCH/AA
Standard accessories	Installation manual		-	O	O	O	O
	Operation manual		-	X	X	X	X
	Pattern sheet for installation		-	O	O	O	O
	Flexible drain hose		-	O	O	O	O
	Flilter/Safety grille		-	Filter / Safety grille	Filter / Safety grille	Filter / Safety grille	Filter / Safety grille
	Drain pump	Drain pump	- / Model Name	-	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	AR-DH00	AR-DH00	AR-DH00	AR-DH00
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-	-
		Receiver wire	-	-	-	-	-
	EEV kits		-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ 4WAY casette (Small)

Model				4WAY casette - Small			
				AM009FN4DCH/AA	AM012FN4DCH/AA	AM018FN4DCH/AA	AM024FN4DCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-
			Btu/h	9,000	12,000	18,000	24,000
		Heating 2)	kW	-	-	-	-
			Btu/h	10,000	13,500	20,000	27,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	32	32	32	40
		Heating 2)	-	32	32	32	40
	Current Input (Nominal)	Cooling 1)	A	0.25	0.25	0.25	0.3
		Heating 2)	-	0.25	0.25	0.25	0.3
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor	Model	-	FMC6531SSH	FMC6531SSH	FMC6531SSH	FMC6531SSH
		Type	-	BLDC	BLDC	BLDC	BLDC
		Output x n	W	65 x 1	65 x 1	65 x 1	65 x 1
	Air Flow Rate	H/M/L	CMM	15.50 / 14.00 / 12.00	15.50 / 14.00 / 12.00	15.50 / 14.00 / 12.00	17.50 / 16.00 / 14.00
	External Pressure	Min / Std / Max	Pa	-	-	-	-
		-	WG	-	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	-	-	-	-
	Sound Power	High / Mid / Low		-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	6.35	9.52
			ø, inch	1/4	1/4	1/4	3/8
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7	15.88
			ø, inch	1/2	1/2	1/2	5/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD32,ID25)	VP25 (OD32,ID25)	VP25 (OD32,ID25)	VP25 (OD32,ID25)
Dimensions	Net Weight		kg	15.00	15.00	15.00	15.00
			lbs	33.07	33.07	33.07	33.07
	Shipping Weight		kg	18.50	18.50	18.50	18.50
			lbs	40.79	40.79	40.79	40.79
	Net Dimensions (W×H×D)		mm	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840
			inch	33.07 x 8.03 x 33.07	33.07 x 8.03 x 33.07	33.07 x 8.03 x 33.07	33.07 x 8.03 x 33.07
	Shipping Dimensions (W×H×D)		mm	898 x 275 x 898	898 x 275 x 898	898 x 275 x 898	898 x 275 x 898
			inch	35.35 x 10.83 x 35.35	35.35 x 10.83 x 35.35	35.35 x 10.83 x 35.35	35.35 x 10.83 x 35.35
Panel Size	Panel model		-	PC4NUSKFN	PC4NUSKFN	PC4NUSKFN	PC4NUSKFN
	Panel Net Weight		kg	5.80	5.80	5.80	5.80
			lbs	12.79	12.79	12.79	12.79
	Shipping Weight		kg	8.40	8.40	8.40	8.40
			lbs	18.52	18.52	18.52	18.52
	Net Dimensions (W×H×D)		mm	950 x 45 x 950	950 x 45 x 950	950 x 45 x 950	950 x 45 x 950
			inches	37.40 x 1.77 x 37.40	37.40 x 1.77 x 37.40	37.40 x 1.77 x 37.40	37.40 x 1.77 x 37.40
	Shipping Dimensions (W×H×D)		mm	1,005 x 100 x 1,005	1,005 x 100 x 1,005	1,005 x 100 x 1,005	1,005 x 100 x 1,005
			inch	39.57 x 3.94 x 39.57	39.57 x 3.94 x 39.57	39.57 x 3.94 x 39.57	39.57 x 3.94 x 39.57
Functions	Auto restart		-	O	O	O	O
	Auto swing		-	O	O	O	O
	Group/individual control		-	O	O	O	O
	External contact control		-	O	O	O	O
	Trouble shooting by LED		-	O	O	O	O
Standard accessories	Installation manual			O	O	O	O
	Operation manual			X	X	X	X
	Pattern sheet for installation			O	O	O	O
	Flexible drain hose			O	O	O	O
	Flilter/Safety grille			Filter / Safety grille	Filter / Safety grille	Filter / Safety grille	Filter / Safety grille
	Drain pump	Drain pump	- / Model Name	-	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-	-
		Receiver wire	-	-	-	-	-
	EEV kits		-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ 4WAY casette (Large)

Model				4WAY casette - Large		
				AM030FN4DCH/AA	AM036FN4DCH/AA	AM048FN4DCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	30,000	36,000	48,000
		Heating 2)	kW	-	-	-
			Btu/h	34,000	40,000	54,000
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	65	75	95
		Heating 2)	-	65	75	95
	Current Input (Nominal)	Cooling 1)	A	0.5	0.56	0.75
		Heating 2)	-	0.5	0.56	0.75
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan
	Motor	Model	-	FMC9731SSB	FMC9731SSB	FMC9731SSB
		Type	-	BLDC	BLDC	BLDC
		Output x n	W	65 x 1	65 x 1	65 x 1
	Air Flow Rate	H/M/L	CMM	22.00 / 19.50 / 17.00	24.00 / 22.00 / 20.00	29.00 / 27.00 / 24.00
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	-	-	-
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	9.52	9.52	9.52
			ø, inch	3/8	3/8	3/8
	Gas Pipe (Flare)		ø,mm	15.88	15.88	15.88
			ø, inch	5/8	5/8	5/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD32,ID25)	VP25 (OD32,ID25)	VP25 (OD32,ID25)
Dimensions	Net Weight		kg	18.50	18.50	18.50
			lbs	40.79	40.79	40.79
	Shipping Weight		kg	23.00	23.00	23.00
			lbs	50.71	50.71	50.71
	Net Dimensions (W×H×D)		mm	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
			inch	33.07 x 11.34 x 33.07	33.07 x 11.34 x 33.07	33.07 x 11.34 x 33.07
	Shipping Dimensions (W×H×D)		mm	898 x 357 x 898	898 x 357 x 898	898 x 357 x 898
			inch	35.35 x 14.06 x 35.35	35.35 x 14.06 x 35.35	35.35 x 14.06 x 35.35
Panel Size	Panel model		-	PC4NUSKFN	PC4NUSKFN	PC4NUSKFN
	Panel Net Weight		kg	5.80	5.80	5.80
			lbs	12.79	12.79	12.79
	Shipping Weight		kg	8.40	8.40	8.40
			lbs	18.52	18.52	18.52
	Net Dimensions (W×H×D)		mm	950 x 45 x 950	950 x 45 x 950	950 x 45 x 950
			inches	37.40 x 1.77 x 37.40	37.40 x 1.77 x 37.40	37.40 x 1.77 x 37.40
	Shipping Dimensions (W×H×D)		mm	1,005 x 100 x 1,005	1,005 x 100 x 1,005	1,005 x 100 x 1,005
			inch	39.57 x 3.94 x 39.57	39.57 x 3.94 x 39.57	39.57 x 3.94 x 39.57
Functions	Auto restart		-	O	O	O
	Auto swing		-	O	O	O
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	O	O	O
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	X	X	X
	Pattern sheet for installation		-	O	O	O
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter / Safety grille	Filter / Safety grille	Filter / Safety grille
	Drain pump	Drain pump	- / Model Name	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-
		Receiver wire	-	-	-	-
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ SLIM DUCT(Slim1)

Model				Slim1		
				AM007FNLDCH/AA	AM009FNLDCH/AA	AM012FNLDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	7,500	9,500	12,000
		Heating 2)	kW	-	-	-
			Btu/h	8,500	10,500	13,500
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	47	60	75
		Heating 2)	-	47	60	75
	Current Input (Nominal)	Cooling 1)	A	0.32	0.4	0.51
		Heating 2)	-	0.32	0.4	0.51
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Model	-	YSK110-25-6SN	YSK110-25-6SN	YSK110-25-6SN
		Type	-	SSR	SSR	SSR
		Output x n	W	40 x 1	50 x 1	60 x 1
	Air Flow Rate	H/M/L	CMM	8.00 / 7.00 / 6.00	9.00 / 8.00 / 7.00	10.00 / 8.50 / 7.00
	External Pressure	Min / Std / Max	mmAq	0.00 / 1.00 / 4.00	0.00 / 1.00 / 4.00	0.00 / 1.00 / 4.00
		-	Pa	0.00 / 9.8 / 39.23	0.00 / 9.8 / 39.23	0.00 / 9.8 / 39.23
Sound	Sound Pressure	High / Mid / Low	dBA	26.0 / 24.0 / 21.0	27.0 / 25.0 / 23.0	29.0 / 28.0 / 27.0
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	6.35
			ø, inch	1/4	1/4	1/4
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7
			ø, inch	1/2	1/2	1/2
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	24.50	24.50	24.50
			lbs	54.01	54.01	54.01
	Shipping Weight		kg	28.50	28.50	28.50
			lbs	62.83	62.83	62.83
	Net Dimensions (W×H×D)		mm	900 x 199 x 600	900 x 199 x 600	900 x 199 x 600
			inch	35.43 x 7.83 x 23.62	35.43 x 7.83 x 23.62	35.43 x 7.83 x 23.62
	Shipping Dimensions (W×H×D)		mm	1,150 x 280 x 710	1,150 x 280 x 710	1,150 x 280 x 710
			inch	45.28 x 11.02 x 27.95	45.28 x 11.02 x 27.95	45.28 x 11.02 x 27.95
Panel Size	Panel model		-	-	-	-
	Panel Net Weight		kg	-	-	-
			lbs	-	-	-
	Shipping Weight		kg	-	-	-
			lbs	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-
			inches	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-
			inch	-	-	-
Functions	Auto restart		-	O	O	O
	Auto swing		-	X	X	X
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	X	X	X

Model				Slim1		
				AM007FNLDCH/AA	AM009FNLDCH/AA	AM012FNLDCH/AA
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	O	O	O
	Pattern sheet for installation		-	X	X	X
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ SLIM DUCT(Slim2)

Model				Slim2	
				AM018FNLDCH/AA	AM024FNLDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-
			Btu/h	18,000	24,000
		Heating 2)	kW	-	-
			Btu/h	20,000	27,000
		Condensate (with high fan speed)	Liter/h	-	-
Power	Power Input (Nominal)	Cooling 1)	W	140	145
		Heating 2)	-	140	145
	Current Input (Nominal)	Cooling 1)	A	0.94	0.98
		Heating 2)	-	0.94	0.98
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Motor	Model	-	YSK140-60-4B1	YSK140-60-4B1
		Type	-	SSR	SSR
		Output x n	W	100 x 1	110 x 1
	Air Flow Rate	H/M/L	CMM	15.50 / 14.00 / 12.50	16.50 / 15.00 / 13.50
	External Pressure	Min / Std / Max	mmAq	0.00 / 1.00 / 4.00	0.00 / 1.00 / 4.00
		-	Pa	0.00 / 9.8 / 39.23	0.00 / 9.8 / 39.23
Sound	Sound Pressure	High / Mid / Low	dBA	36.0 / 34.0 / 31.0	38.0 / 36.0 / 33.0
	Sound Power	High / Mid / Low	-	-	-
Refrigerant	Type		-	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	9.52
			ø, inch	1/4	3/8
	Gas Pipe (Flare)		ø,mm	12.7	15.88
			ø, inch	1/2	5/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	30.00	30.00
			lbs	66.14	66.14
	Shipping Weight		kg	34.50	34.50
			lbs	76.06	76.06
	Net Dimensions (W×H×D)		mm	1,100 x 199 x 600	1,100 x 199 x 600
			inch	43.31 x 7.83 x 23.62	43.31 x 7.83 x 23.62
	Shipping Dimensions (W×H×D)		mm	1,350 x 280 x 710	1,350 x 280 x 710
			inch	53.15 x 11.02 x 27.95	53.15 x 11.02 x 27.95
Panel Size	Panel model		-	-	-
	Panel Net Weight		kg	-	-
			lbs	-	-
	Shipping Weight		kg	-	-
			lbs	-	-
	Net Dimensions (W×H×D)		mm	-	-
			inches	-	-
	Shipping Dimensions (W×H×D)		mm	-	-
			inch	-	-
Functions	Auto restart		-	O	O
	Auto swing		-	X	X
	Group/individual control		-	O	O
	External contact control		-	O	O
	Trouble shooting by LED		-	X	X

Model				Slim2	
				AM018FNLDCH/AA	AM024FNLDCH/AA
Standard accessories	Installation manual		-	O	O
	Operation manual		-	O	O
	Pattern sheet for installation		-	X	X
	Flexible drain hose		-	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	MDP-E075SEE3D	MDP-E075SEE3D
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N
	EEV kits		-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ SLIM DUCT(Slim3)

Model				Slim3		
				AM030FNLDCH/AA	AM036FNLDCH/AA	AM048FNLDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	30,000	36,000	48,000
		Heating 2)	kW	-	-	-
			Btu/h	34,000	40,000	54,000
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	95	120	180
		Heating 2)	-	95	120	180
	Current Input (Nominal)	Cooling 1)	A	0.8	1.05	1.4
		Heating 2)	-	0.8	1.05	1.4
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Model	-	DL-12840SSBC	DL-12840SSBC	DL-12840SSBC
		Type	-	BLDC	BLDC	BLDC
		Output x n	W	80 x 1	100 x 1	160 x 1
	Air Flow Rate	H/M/L	CMM	31.00/26.00/23.00	34.00/29.00/24.00	38.00/32.00/27.00
	External Pressure	Min / Std / Max	mmAq	0.00 / 1.00 / 6.00	0.00 / 3.00 / 6.00	0.00 / 3.00 / 6.00
		-	Pa	0.00 / 9.8 / 58.84	0.00 / 29.42 / 58.84	0.00 / 29.42 / 58.84
Sound	Sound Pressure	High / Mid / Low	dBA	37.0 / 36.0 / 34.0	37.0 / 36.0 / 34.0	39.0 / 38.0 / 36.0
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	9.52	9.52	9.52
			ø, inch	3/8	3/8	3/8
	Gas Pipe (Flare)		ø,mm	15.88	15.88	15.88
			ø, inch	5/8	5/8	5/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	40.00	40.00	41.50
			lbs	88.18	88.18	91.49
	Shipping Weight		kg	47.00	47.00	48.50
			lbs	103.62	103.62	106.92
	Net Dimensions (W×H×D)		mm	1,300 x 295 x 690	1,300 x 295 x 690	1,300 x 295 x 690
			inch	51.18 x 11.61 x 27.17	51.18 x 11.61 x 27.17	51.18 x 11.61 x 27.17
	Shipping Dimensions (W×H×D)		mm	1,575 x 370 x 835	1,575 x 370 x 835	1,575 x 370 x 835
			inch	62.01 x 14.57 x 32.87	62.01 x 14.57 x 32.87	62.01 x 14.57 x 32.87
Panel Size	Panel model		-	-	-	-
	Panel Net Weight		kg	-	-	-
			lbs	-	-	-
	Shipping Weight		kg	-	-	-
			lbs	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-
			inches	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-
			inch	-	-	-
Functions	Auto restart		-	O	O	O
	Auto swing		-	X	X	X
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	X	X	X
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	O	O	O
	Pattern sheet for installation		-	X	X	X
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ MSP DUCT(MSP-S)

Model				MSP DUCT - MSP-S	
				AM018FNMDCH/AA	AM024FNMDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-
			Btu/h	18,000	24,000
		Heating 2)	kW	-	-
			Btu/h	20,000	27,000
		Condensate (with high fan speed)	Liter/h	-	-
Power	Power Input (Nominal)	Cooling 1)	W	165	220
		Heating 2)	-	165	220
	Current Input (Nominal)	Cooling 1)	A	1.4	1.5
		Heating 2)	-	1.4	1.5
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Motor	Model	-	YSK140-200-4E1	YSK140-200-4E1
		Type	-	SSR	SSR
		Output x n	W	124 x 1	124 x 1
	Air Flow Rate	H/M/L	CMM	14.50 / 13.00 / 11.50	18.50 / 17.00 / 15.50
	External Pressure	Min / Std / Max	Pa	0.00 / 4.00 / 8.00	0.00 / 4.00 / 8.00
		-	WG	0.00 / 39.23 / 78.45	0.00 / 39.23 / 78.45
Sound	Sound Pressure	High / Mid / Low	dBA	35.0 / 33.0 / 31.0	39.0 / 35.0 / 31.0
	Sound Power	High / Mid / Low	-	-	-
Refrigerant	Type		-	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	9.52
			ø, inch	1/4	3/8
	Gas Pipe (Flare)		ø,mm	12.7	15.88
			ø, inch	1/2	5/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	29.00	29.00
			lbs	63.93	63.93
	Shipping Weight		kg	33.00	33.00
			lbs	72.75	72.75
	Net Dimensions (W×H×D)		mm	900 x 260 x 480	900 x 260 x 480
			inch	35.4 x 10.2 x 18.9	35.4 x 10.2 x 18.9
	Shipping Dimensions (W×H×D)		mm	1,170 x 340 x 595	1,170 x 340 x 595
			inch	46.1 x 13.4 x 23.4	46.1 x 13.4 x 23.4
Panel Size	Panel model		-	-	-
	Panel Net Weight		kg	-	-
			lbs	-	-
	Shipping Weight		kg	-	-
			lbs	-	-
	Net Dimensions (W×H×D)		mm	-	-
			inches	-	-
	Shipping Dimensions (W×H×D)		mm	-	-
			inch	-	-
Functions	Auto restart		-	O	O
	Auto swing		-	X	X
	Group/individual control		-	O	O
	External contact control		-	O	O
	Trouble shooting by LED		-	X	X
Standard accessories	Installation manual		-	O	O
	Operation manual		-	O	O
	Pattern sheet for installation		-	X	X
	Flexible drain hose		-	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	MDP-M075SGU3D	MDP-M075SGU3D
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N
	EEV kits		-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ MSP DUCT(MSP-1, MSP-2)

Model				MSP-1		MSP-2	
				AM030FNMDCH/AA	AM036FNMDCH/AA	AM048FNMDCH/AA	AM054KNMDCH/AZ
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-
			Btu/h	30,000	36,000	48,000	54,000
		Heating 2)	kW	-	-	-	-
			Btu/h	34,000	40,000	54,000	60,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	260	290	430	540
		Heating 2)	-	260	290	430	540
	Current Input (Nominal)	Cooling 1)	A	1.5	1.6	2.45	2.51
		Heating 2)	-	1.5	1.6	2.45	2.51
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Model	-	YSK140-200-4A	YSK140-200-4A	YDK-370S65023-01	YDK-370S65023-01
		Type	-	SSR	SSR	SSR	SSR
		Output x n	W	180 x 1	180 x 1	370 x 1	370 x 1
	Air Flow Rate	H/M/L	CMM	25.00 / 23.00 / 20.00	27.00 / 25.00 / 23.00	35.00 / 33.00 / 30.00	43.00/38.00/30.50
	External Pressure	Min / Std / Max	mmAq	6.00 / 8.00 / 10.00	6.00 / 8.00 / 10.00	6.00 / 8.00 / 10.00	4.00 / 8.00 / 14.00
		-	Pa	58.84 / 78.45 / 98.07	58.84 / 78.45 / 98.07	58.84 / 78.45 / 98.07	39.23 / 78.45 / 137.29
Sound	Sound Pressure	High / Mid / Low	dBA	40.0/37.0/34.0	41.0/40.0/38.0	42.0/39.0/36.0	43.0/40.0/36.0
	Sound Power	High / Mid / Low	-	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	9.52	9.52	9.52	9.52
			ø, inch	3/8	3/8	3/8	5/8
	Gas Pipe (Flare)		ø,mm	15.88	15.88	15.88	15.88
			ø, inch	5/8	5/8	5/8	5/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)
Dimensions	Net Weight		kg	36.50	36.50	48.50	50
			lbs	80.47	80.47	106.92	110.23
	Shipping Weight		kg	40.50	40.50	55.50	57
			lbs	89.29	89.29	122.36	125.66
	Net Dimensions (W×H×D)		mm	1,150 x 320 x 480	1,150 x 320 x 480	1,200 x 360 x 650	1200 x 360 x 650
			inch	45.28 x 12.60 x 18.90	45.28 x 12.60 x 18.90	47.24 x 14.17 x 25.59	47.24 x 14.17 x 25.59
	Shipping Dimensions (W×H×D)		mm	1,420 x 400 x 595	1,420 x 400 x 595	1480 x 420 x 790	1480 x 420 x 790
			inch	55.91 x 15.75 x 23.43	55.91 x 15.75 x 23.43	58.27 x 16.54 x 31.10	58.27 x 16.54 x 31.10
Panel Size	Panel model		-	-	-	-	-
	Panel Net Weight		kg	-	-	-	-
			lbs				
	Shipping Weight		kg	-	-	-	-
			lbs				
	Net Dimensions (W×H×D)		mm	-	-	-	-
			inches				
	Shipping Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
Functions	Auto restart		-	O	O	O	O
	Auto swing		-	X	X	X	X
	Group/individual control		-	O	O	O	O
	External contact control		-	O	O	O	O
	Trouble shooting by LED		-	X	X	X	X
Standard accessories	Installation manual		-	O	O	O	O
	Operation manual		-	O	O	O	O
	Pattern sheet for installation		-	X	X	X	X
	Flexible drain hose		-	O	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)	Filter (Washable)
	Drain pump	Drain pump	- / Model Name	MDP-M075SGU1D	MDP-M075SGU1D	MDP-M075SGU2D	MDP-M075SGU2D
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-	-

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ NEO FORTE(Small)

Model				NEO FORTE - Small		
				AM007FNTDCH/AA	AM009FNTDCH/AA	AM012FNTDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	7,500	9,500	12,000
		Heating 2)	kW	-	-	-
			Btu/h	8,500	10,500	13,500
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	37	37	45
		Heating 2)	-	37	37	45
	Current Input (Nominal)	Cooling 1)	A	0.25	0.25	0.3
		Heating 2)	-	0.25	0.25	0.3
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Model	-	RPG21Y	RPG21Y	RPG21Y
		Type	-	AC	AC	AC
		Output x n	W	23 x 1	23 x 1	23 x 1
	Air Flow Rate	H/M/L	CMM	7.80 / 6.80 / 5.80	7.80/6.80/5.80	9.30 / 8.30 / 7.30
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	30/28/26	30/28/26	36/32/28
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (FMR-DH00U)		ø,mm	6.35	6.35	6.35
			ø, inch	1/4	1/4	1/4
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7
			ø, inch	1/2	1/2	1/2
	Drain Pipe (Quick lock)		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg	8.50	8.50	8.50
			lbs	18.74	18.74	18.74
	Shipping Weight		kg	11.00	11.00	11.00
			lbs	24.25	24.25	24.25
	Net Dimensions (W×H×D)		mm	825 x 285x 189	825 x 285x 189	825 x 285x 189
			inch	32.48 x 11.22 x 7.44	32.48 x 11.22 x 7.44	32.48 x 11.22 x 7.44
	Shipping Dimensions (W×H×D)		mm	904 x 353 x 263	904 x 353 x 263	904 x 353 x 263
			inch	35.59 x 13.90 x 10.35	35.59 x 13.90 x 10.35	35.59 x 13.90 x 10.35
Panel Size	Panel model		-	-	-	-
	Panel Net Weight		kg	-	-	-
			lbs			
	Shipping Weight		kg	-	-	-
			lbs			
	Net Dimensions (W×H×D)		mm	-	-	-
			inches			
	Shipping Dimensions (W×H×D)		mm	-	-	-
			inch	-	-	-
Functions	Auto restart		-	O	O	O
	Auto swing		-	O	O	O
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	O	O	O
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	O	O	O
	Pattern sheet for installation		-	X	X	X
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-
		Receiver wire	-	-	-	-
	EEV kits		-	MXD, MEV series	MXD, MEV series	MXD, MEV series

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ NEO FORTE (Large)

Model				Large		
				AM018FNTDCH/AA	AM020FNTDCH/AA	AM024FNTDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	18,000	20,000	23,200
		Heating 2)	kW	-	-	-
			Btu/h	20,000	23,000	23,800
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	55	57	60
		Heating 2)	-	55	57	60
	Current Input (Nominal)	Cooling 1)	A	0.36	0.38	0.4
		Heating 2)	-	0.36	0.38	0.4
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Model	-	YDK-045S42213-02	YDK-045S42213-02	YDK-045S42213-02
		Type	-	AC	AC	AC
		Output x n	W	40 x 1	40 x 1	40 x 1
	Air Flow Rate	H/M/L	CMM	12.00/10.50/9.00	13.0/12.0/11.0	14.00/12.50/11.00
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	39/37/34	42/40/35	44/41/35
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	9.52
			ø, inch	1/4	1/4	3/8
	Gas Pipe (Flare)		ø,mm	12.7	12.7	15.88
			ø, inch	1/2	1/2	5/8
	Drain Pipe (Quick lock)		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg	12.50	12.50	12.50
			lbs	27.56	27.56	27.56
	Shipping Weight		kg	15.50	15.50	15.50
			lbs	34.17	34.17	34.17
	Net Dimensions (W×H×D)		mm	1,065 x 298 x 218	1,065 x 298 x 218	1,065 x 298 x 218
			inch	41.93 x 11.73 x 8.58	41.93 x 11.73 x 8.58	41.93 x 11.73 x 8.58
	Shipping Dimensions (W×H×D)		mm	1,138 x 378 x 301	1,138 x 378 x 301	1,138 x 378 x 301
			inch	44.80 x 14.88 x 11.85	44.80 x 14.88 x 11.85	44.80 x 14.88 x 11.85
Panel Size	Panel model		-	-	-	-
	Panel Net Weight		kg	-	-	-
			lbs			
	Shipping Weight		kg	-	-	-
			lbs			
	Net Dimensions (W×H×D)		mm	-	-	-
			inches			
	Shipping Dimensions (W×H×D)		mm	-	-	-
			inch	-	-	-
Functions	Auto restart		-	O	O	O
	Auto swing		-	O	O	O
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	O	O	O
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	O	O	O
	Pattern sheet for installation		-	X	X	X
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-
		Receiver wire	-	-	-	-
	EEV kits		-	MXD, MEV series	MXD, MEV series	MXD, MEV series

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ NEO FORTE (with EEV)(Small)

Model				NEO FORTE (with EEV)-Small		
				AM007HNQDCH/AA	AM009HNQDCH/AA	AM012HNQDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	7,500	9,500	12,000
		Heating 2)	kW	-	-	-
			Btu/h	8,500	10,500	13,500
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	37	37	45
		Heating 2)	-	37	37	45
	Current Input (Nominal)	Cooling 1)	A	0.25	0.25	0.3
		Heating 2)	-	0.25	0.25	0.3
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Model	-	RPG21Y	RPG21Y	RPG21Y
		Type	-	AC	AC	AC
		Output x n	W	23 x 1	23 x 1	23 x 1
	Air Flow Rate	H/M/L	CMM	7.80 / 6.80 / 5.80	7.80/6.80/5.80	9.30 / 8.30 / 7.30
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	31/29/26	31/29/26	37/33/29
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (FMR-DH00U)		ø,mm	6.35	6.35	6.35
			ø, inch	1/4	1/4	1/4
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7
			ø, inch	1/2	1/2	1/2
	Drain Pipe (Quick lock)		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg	8.80	8.80	8.80
			lbs	19.40	19.40	19.40
	Shipping Weight		kg	11.30	11.30	11.30
			lbs	24.91	24.91	24.91
	Net Dimensions (W×H×D)		mm	825 x 285x 189	825 x 285x 189	825 x 285x 189
			inch	32.48 x 11.22 x 7.44	32.48 x 11.22 x 7.44	32.48 x 11.22 x 7.44
	Shipping Dimensions (W×H×D)		mm	904 x 353 x 263	904 x 353 x 263	904 x 353 x 263
			inch	35.59 x 13.90 x 10.35	35.59 x 13.90 x 10.35	35.59 x 13.90 x 10.35
Panel Size	Panel model		-	-	-	-
	Panel Net Weight		kg	-	-	-
			lbs			
	Shipping Weight		kg	-	-	-
			lbs			
	Net Dimensions (W×H×D)		mm	-	-	-
			inches			
	Shipping Dimensions (W×H×D)		mm	-	-	-
			inch	-	-	-
Functions	Auto restart		-	O	O	O
	Auto swing		-	O	O	O
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	O	O	O
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	O	O	O
	Pattern sheet for installation		-	X	X	X
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-
		Receiver wire	-	-	-	-
	EEV kits		-	-	-	-

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ NEO FORTE (with EEV)(Large)

Model				Large		
				AM018HNQDCH/AA	AM020HNQDCH/AA	AM024HNQDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	18,000	20,000	23,200
		Heating 2)	kW	-	-	-
			Btu/h	20,000	23,000	23,800
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	55	57	60
		Heating 2)	-	55	57	60
	Current Input (Nominal)	Cooling 1)	A	0.36	0.38	0.4
		Heating 2)	-	0.36	0.38	0.4
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Model	-	YDK-045S42213-02	YDK-045S42213-02	YDK-045S42213-02
		Type	-	AC	AC	AC
		Output x n	W	40 x 1	40 x 1	40 x 1
	Air Flow Rate	H/M/L	CMM	12.00/10.50/9.00	13.0/12.0/11.0	14.0/12.5/11.0
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	39/37/34	42/39/35	45/40/35
	Sound Power	High / Mid / Low	-	-	-	-
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	9.52
			ø, inch	1/4	1/4	3/8
	Gas Pipe (Flare)		ø,mm	12.7	12.7	15.88
			ø, inch	1/2	1/2	5/8
	Drain Pipe (Quick lock)		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg	13.00	13.00	13.00
			lbs	28.66	28.66	28.66
	Shipping Weight		kg	16.00	16.00	16.00
			lbs	35.27	35.27	35.27
	Net Dimensions (W×H×D)		mm	1,065 x 298 x 218	1,065 x 298 x 218	1,065 x 298 x 218
			inch	41.93 x 11.73 x 8.58	41.93 x 11.73 x 8.58	41.93 x 11.73 x 8.58
	Shipping Dimensions (W×H×D)		mm	1,138 x 378 x 301	1,138 x 378 x 301	1,138 x 378 x 301
			inch	44.80 x 14.88 x 11.85	44.80 x 14.88 x 11.85	44.80 x 14.88 x 11.85
Panel Size	Panel model		-	-	-	-
	Panel Net Weight		kg	-	-	-
			lbs			
	Shipping Weight		kg	-	-	-
			lbs			
	Net Dimensions (W×H×D)		mm	-	-	-
			inches			
	Shipping Dimensions (W×H×D)		mm	-	-	-
			inch	-	-	-
Functions	Auto restart		-	O	O	O
	Auto swing		-	O	O	O
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	O	O	O
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	O	O	O
	Pattern sheet for installation		-	X	X	X
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	-	-	-
		Max. lifting Height /isplacement	mm / liter/h	-	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-
		Receiver wire	-	-	-	-
	EEV kits		-	-	-	-

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Wall Mounted type (A3050)

Model				AM005MNVDCH/AA	AM007MNVDCH/AA	AM009MNVDCH/AA	AM012MNVDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-
			Btu/h	5,000	7,500	9,500	12,000
		Heating 2)	kW	-	-	-	-
			Btu/h	5,800	8,500	10,500	13,500
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	14	15	16	20
		Heating 2)	W	16	18	24	28
	Current Input (Nominal)	Cooling 1)	A	0.12	0.13	0.13	0.15
		Heating 2)	A	0.13	0.15	0.19	0.20
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Type	-	BLDC	BLDC	BLDC	BLDC
		Output x n	W	27	27	27	27
	Air Flow Rate	H/M/L	CMM	4.40/4.20/3.80	5.40/4.70/4.00	5.70/5.00/4.30	7.10/5.70/4.60
	External Pressure	Min / Std / Max	Pa	-	-	-	-
		-	WG	-	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	28.0/25.0/24.0	33.0/29.0/25.0	36.0/31.0/25.0	37.0/34.0/30.0
	Sound Power	-	dBA	44	50	53	54
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (FMR-DH00U)		ø,mm	6.35	6.35	6.35	6.35
			ø, inch	1/4	1/4	1/4	1/4
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7	12.7
			ø, inch	1/2	1/2	1/2	1/2
	Drain Pipe (Quick lock)		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg	8.1	8.1	8.2	9.8
			lbs	17.86	17.86	18.08	21.61
	Shipping Weight		kg	9.7	9.7	9.8	11.7
			lbs	21.38	21.38	21.61	25.79
	Net Dimensions (W×H×D)		mm	750 x 249 x 246	750 x 249 x 246	750 x 249 x 246	826 x 261 x 261
			inch	29.53 x 9.80 x 9.69	29.53 x 9.80 x 9.69	29.53 x 9.80 x 9.69	32.52 x 10.28 x 10.28
	Shipping Dimensions (W×H×D)		mm	800 x 298 x 302	800 x 298 x 302	800 x 298 x 302	886 x 317 x 335
			inch	31.50 x 11.73 x 11.89	31.50 x 11.73 x 11.89	31.50 x 11.73 x 11.89	34.88 x 12.48 x 13.19
Panel Size	Panel model		-	-	-	-	-
	Panel Net Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Shipping Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
Functions	Auto restart		-	O	O	O	O
	Auto swing		-	O	O	O	O
	Group/individual control		-	O	O	O	O
	External contact control		-	O	O	O	O
	Trouble shooting by LED		-	O	O	O	O
Standard accessories	Installation manual		-	O	O	O	O
	Operation manual		-	O	O	O	O
	Pattern sheet for installation		-	X	X	X	X
	Flexible drain hose		-	O	O	O	O
	Flilter/Safety grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Drain pump	Drain pump	- / Model Name	-	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-	-
		Receiver wire	-	-	-	-	-
	EEV kits		-	-	-	-	-

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Model				AM015MNVDCH/AA	AM018MNVDCH/AA	AM024MNVDCH/AA	AM028MNVDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-
			Btu/h	15,000	18,000	24,000	28,000
		Heating 2)	kW	-	-	-	-
			Btu/h	17,000	20,000	27,000	29,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	31	27	41	55
		Heating 2)	W	41	37	53	72
	Current Input (Nominal)	Cooling 1)	A	0.24	0.21	0.31	0.42
		Heating 2)	A	0.31	0.29	0.41	0.55
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Type	-	BLDC	BLDC	BLDC	BLDC
		Output x n	W	27	27	27	27
	Air Flow Rate	H/M/L	CMM	8.90/7.50/6.00	11.80/10.00/8.20	14.80/12.40/10.00	16.70/14.30/12.40
	External Pressure	Min / Std / Max	Pa	-	-	-	-
		-	WG	-	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	41.0/38.0/34.0	39.0/36.0/33.0	44.0/41.0/36.0	47.0/43.0/40.0
	Sound Power	-	dBA	57	57	61	65
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (FMR-DH00U)		ø,mm	6.35	6.35	9.52	9.52
			ø, inch	1/4	1/4	3/8	3/8
	Gas Pipe (Flare)		ø,mm	12.7	12.7	15.88	15.88
			ø, inch	1/2	1/2	5/8	5/8
	Drain Pipe (Quick lock)		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg	9.8	14.6	14.6	14.6
			lbs	21.61	32.19	32.19	32.19
	Shipping Weight		kg	11.7	17.0	17.0	17.0
			lbs	25.79	37.48	37.48	37.48
	Net Dimensions (W×H×D)		mm	826 x 261 x 261	1065 x 301 x 294	1065 x 301 x 294	1065 x 301 x 294
			inch	32.52 x 10.28 x 10.28	41.93 x 11.85 x 11.57	41.93 x 11.85 x 11.57	41.93 x 11.85 x 11.57
	Shipping Dimensions (W×H×D)		mm	886 x 317 x 335	1123 x 354 x 384	1123 x 354 x 384	1123 x 354 x 384
			inch	34.88 x 12.48 x 13.19	44.21 x 13.94 x 15.12	44.21 x 13.94 x 15.12	44.21 x 13.94 x 15.12
Panel Size	Panel model		-	-	-	-	-
	Panel Net Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Shipping Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
Functions	Auto restart		-	O	O	O	O
	Auto swing		-	O	O	O	O
	Group/individual control		-	O	O	O	O
	External contact control		-	O	O	O	O
	Trouble shooting by LED		-	O	O	O	O
Standard accessories	Installation manual		-	O	O	O	O
	Operation manual		-	O	O	O	O
	Pattern sheet for installation		-	X	X	X	X
	Flexible drain hose		-	O	O	O	O
	Flilter/Safety grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Drain pump	Drain pump	- / Model Name	-	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-	-
		Receiver wire	-	-	-	-	-
	EEV kits		-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Wall Mounted type (Boracay with EEV)

Model				AM007KNQDCH/AZ	AM009KNQDCH/AZ	AM012KNQDCH/AZ
Power Supply			ø, #, V, Hz	1,208~230,60	1,208~230,60	1,208~230,60
Mode			-	HP / HR	HP / HR	HP / HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	7,500	9,500	12,000
		Heating 2)	kW	-	-	-
			Btu/h	8,500	10,500	13,500
	Condensate (with high fan speed)		Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	30	39	42
		Heating 2)	-	36	40	42
	Current Input (Nominal)	Cooling 1)	A	0.18	0.21	0.22
		Heating 2)	-	0.20	0.21	0.22
Fan	Type		-	Crossflow Fan Φ94*L601	Crossflow Fan Φ94*L601	Crossflow Fan Φ94*L601
	Motor	Model	-	Y4S476B223L	Y4S476B223L	Y4S476B223L
		Type	-	SSR Feedback	SSR Feedback	SSR Feedback
		Output x n	W	-	-	-
	Air Flow Rate	H/M/L	CMM	6.60/5.70/5.10	7.00/6.20/5.50	8.50/7.50/6.60
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound Level	Sound Pressure		dBA	36	35	41
Refrigerant	Type		-	R410a	R410a	R410a
	Control Method		-	EDM EEV 1.3C	EDM EEV 1.3C	EDM EEV 1.3C
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse:1.6A	Fuse:1.6A	Fuse:1.6A
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	6.35
			ø, inch	1/4"	1/4"	1/4"
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7
			ø, inch	1/2"	1/2"	1/2"
	Drain Pipe (Quick lock)		ø,mm	ID 18 hose	ID 18 hose	ID 18 hose
Dimensions	Net Weight		kg	8.5	9.0	9.0
			lbs	18.7	19.8	19.8
	Shipping Weight		kg	9.8	10.3	10.3
			lbs	21.6	22.7	22.7
	Net Dimensions (W×H×D)		mm	820*285*227	820*285*227	820*285*227
			inch	32.3*11.2*8.9	32.3*11.2*8.9	32.3*11.2*8.9
	Shipping Dimensions (W×H×D)		mm	880*363*280	880*363*280	880*363*280
			inch	34.6*14.3*11.0	34.6*14.3*11.0	34.6*14.3*11.0
Functions	Auto Restart		-	O	O	O
	Auto Swing		-	O	O	O
	Group/Individual Control		-	O	O	O
	External Contact Control		-	O	O	O
	Trouble Shooting by LED		-	O	O	O
Standard Accessories	Installation Manual		-	O	O	O
	Operation Manual		-	O	O	O
	Pattern Sheet for Installation		-	X	X	X
	Flexible Drain Hose		-	O	O	O
	Filter / Safety Grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)
Optional Accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	Wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Model				AM018KNQDCH/AZ	AM020KNQDCH/AZ	AM024KNQDCH/AZ
Power Supply			ø, #, V, Hz	1,208~230,60	1,208~230,60	1,208~230,60
Mode			-	HP / HR	HP / HR	HP / HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	18,000	20,000	23,200
		Heating 2)	kW	-	-	-
			Btu/h	20,000	23,000	23,800
	Condensate (with high fan speed)		Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	57	57	60
		Heating 2)	-	57	57	62
	Current Input (Nominal)	Cooling 1)	A	0.32	0.32	0.32
		Heating 2)	-	0.32	0.32	0.32
Fan	Type		-	Crossflow Fan Φ94*L844.3	Crossflow Fan Φ94*L844.3	Crossflow Fan Φ94*L844.3
	Motor	Model	-	Y4S476B84	Y4S476B84	Y4S476B84
		Type	-	SSR Feedback	SSR Feedback	SSR Feedback
		Output x n	W	-	-	-
	Air Flow Rate	H/M/L	CMM	14.40/12.90/11.20	14.40/12.90/11.20	15.70/14.10/12.90
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound Level	Sound Pressure		dBA	44	44	45
Refrigerant	Type		-	R410a	R410a	R410a
	Control Method		-	EDM EEV 2.0C	EDM EEV 2.0C	EDM EEV 2.0C
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse:1.6A	Fuse:1.6A	Fuse:1.6A
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	9.52
			ø, inch	1/4"	1/4"	3/8"
	Gas Pipe (Flare)		ø,mm	12.7	12.7	15.88
			ø, inch	1/2"	1/2"	5/8"
	Drain Pipe (Quick lock)		ø,mm	ID 18 hose	ID 18 hose	ID 18 hose
Dimensions	Net Weight		kg	12.5	12.5	12.5
			lbs	27.6	27.6	27.6
	Shipping Weight		kg	14.2	14.2	14.2
			lbs	31.3	31.3	31.3
	Net Dimensions (W×H×D)		mm	1065*298*243	1065*298*243	1065*298*243
			inch	41.9*11.7*9.6	41.9*11.7*9.6	41.9*11.7*9.6
	Shipping Dimensions (W×H×D)		mm	1128*378*299	1128*378*299	1128*378*299
			inch	44.4*14.9*11.8	44.4*14.9*11.8	44.4*14.9*11.8
Functions	Auto Restart		-	O	O	O
	Auto Swing		-	O	O	O
	Group/Individual Control		-	O	O	O
	External Contact Control		-	O	O	O
	Trouble Shooting by LED		-	O	O	O
Standard Accessories	Installation Manual		-	O	O	O
	Operation Manual		-	O	O	O
	Pattern Sheet for Installation		-	X	X	X
	Flexible Drain Hose		-	O	O	O
	Filter / Safety Grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)
Optional Accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	Wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Wall Mounted type (Boracay without EEV)

Model				AM007KNTDCH/AZ	AM009KNTDCH/AZ	AM012KNTDCH/AZ
Power Supply			ø, #, V, Hz	1,208~230,60	1,208~230,60	1,208~230,60
Mode			-	HP / HR	HP / HR	HP / HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	7,500	9,500	12,000
		Heating 2)	kW	-	-	-
			Btu/h	8,500	10,500	13,500
	Condensate (with high fan speed)		Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	30	39	42
		Heating 2)	-	36	40	42
	Current Input (Nominal)	Cooling 1)	A	0.18	0.21	0.22
		Heating 2)	-	0.20	0.21	0.22
Fan	Type		-	Crossflow Fan Φ94*L601	Crossflow Fan Φ94*L601	Crossflow Fan Φ94*L601
	Motor	Model	-	Y4S476B223L	Y4S476B223L	Y4S476B223L
		Type	-	SSR Feedback	SSR Feedback	SSR Feedback
		Output x n	W	-	-	-
	Air Flow Rate	H/M/L	CMM	6.60/5.70/5.10	7.00/6.20/5.50	8.50/7.50/6.60
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound Level	Sound Pressure		dBA	36	35	41
Refrigerant	Type		-	R410a	R410a	R410a
	Control Method		-	-	-	-
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse:1.6A	Fuse:1.6A	Fuse:1.6A
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	6.35
			ø, inch	1/4"	1/4"	1/4"
	Gas Pipe (Flare)		ø,mm	12.7	12.7	12.7
			ø, inch	1/2"	1/2"	1/2"
	Drain Pipe (Quick lock)		ø,mm	ID 18 hose	ID 18 hose	ID 18 hose
Dimensions	Net Weight		kg	8.0	8.5	8.5
			lbs	17.6	18.7	18.7
	Shipping Weight		kg	9.3	9.8	9.8
			lbs	20.5	21.6	21.6
	Net Dimensions (W×H×D)		mm	820*285*227	820*285*227	820*285*227
			inch	32.3*11.2*8.9	32.3*11.2*8.9	32.3*11.2*8.9
	Shipping Dimensions (W×H×D)		mm	880*363*280	880*363*280	880*363*280
			inch	34.6*14.3*11.0	34.6*14.3*11.0	34.6*14.3*11.0
Functions	Auto Restart		-	O	O	O
	Auto Swing		-	O	O	O
	Group/Individual Control		-	O	O	O
	External Contact Control		-	O	O	O
	Trouble Shooting by LED		-	O	O	O
Standard Accessories	Installation Manual		-	O	O	O
	Operation Manual		-	O	O	O
	Pattern Sheet for Installation		-	X	X	X
	Flexible Drain Hose		-	O	O	O
	Filter / Safety Grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)
Optional Accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	Wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Model				AM018KNTDCH/AZ	AM020KNTDCH/AZ	AM024KNTDCH/AZ
Power Supply			ø, #, V, Hz	1,208~230,60	1,208~230,60	1,208~230,60
Mode			-	HP / HR	HP / HR	HP / HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	18,000	20,000	23,200
		Heating 2)	kW	-	-	-
			Btu/h	20,000	23,000	23,800
	Condensate (with high fan speed)		Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	57	57	60
		Heating 2)	-	57	57	62
	Current Input (Nominal)	Cooling 1)	A	0.32	0.32	0.32
		Heating 2)	-	0.32	0.32	0.32
Fan	Type		-	Crossflow Fan Φ94*L844.3	Crossflow Fan Φ94*L844.3	Crossflow Fan Φ94*L844.3
	Motor	Model	-	Y4S476B84	Y4S476B84	Y4S476B84
		Type	-	SSR Feedback	SSR Feedback	SSR Feedback
		Output x n	W	0	-	-
	Air Flow Rate	H/M/L	CMM	14.40/12.90/11.20	14.40/12.90/11.20	15.70/14.10/12.90
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound Level	Sound Pressure		dBA	44	44	45
Refrigerant	Type		-	R410a	R410a	R410a
	Control Method		-	-	-	-
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse:1.6A	Fuse:1.6A	Fuse:1.6A
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	9.52
			ø, inch	1/4"	1/4"	3/8"
	Gas Pipe (Flare)		ø,mm	12.7	12.7	15.88
			ø, inch	1/2"	1/2"	5/8"
	Drain Pipe (Quick lock)		ø,mm	ID 18 hose	ID 18 hose	ID 18 hose
Dimensions	Net Weight		kg	12.0	12.0	12.0
			lbs	26.5	26.5	26.5
	Shipping Weight		kg	13.7	13.7	13.7
			lbs	30.2	30.2	30.2
	Net Dimensions (W×H×D)		mm	1065*298*243	1065*298*243	1065*298*243
			inch	41.9*11.7*9.6	41.9*11.7*9.6	41.9*11.7*9.6
	Shipping Dimensions (W×H×D)		mm	1128*378*299	1128*378*299	1128*378*299
			inch	44.4*14.9*11.8	44.4*14.9*11.8	44.4*14.9*11.8
Functions	Auto Restart		-	O	O	O
	Auto Swing		-	O	O	O
	Group/Individual Control		-	O	O	O
	External Contact Control		-	O	O	O
	Trouble Shooting by LED		-	O	O	O
Standard Accessories	Installation Manual		-	O	O	O
	Operation Manual		-	O	O	O
	Pattern Sheet for Installation		-	X	X	X
	Flexible Drain Hose		-	O	O	O
	Filter / Safety Grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)
Optional Accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	Wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ HSP DUCT (Small)

Model				Large	
				AM036FNHDCH/AA	AM048FNHDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-
			Btu/h	36,000	48,000
		Heating 2)	kW	-	-
			Btu/h	40,000	54,000
		Condensate (with high fan speed)	Liter/h	-	-
Power	Power Input (Nominal)	Cooling 1)	W	210	330
		Heating 2)	-	210	330
	Current Input (Nominal)	Cooling 1)	A	1.47	2.38
		Heating 2)	-	1.47	2.38
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Motor	Model	-	ZWD-183-BA01 ZWD-183-BA02	ZWD-183-BA01 ZWD-183-BA02
		Type	-	BLDC	BLDC
		Output x n	W	183 x 2	183 x2
	Air Flow Rate	H/M/L	CMM	28 / - / -	39 / - / -
	External Pressure	Min / Std / Max	Pa	49.03 / 98.06 / 196.13	49.03 / 98.06 / 196.13
		-	WG	5.00 / 10.00 / 20.00	5.00 / 10.00 / 20.00
Sound	Sound Pressure	High / Mid / Low	dBA	40.0 / - / 37.0	44.0 / - / 40.0
	Sound Power	High / Mid / Low		-	-
Refrigerant	Type		-	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	9.52	9.52
			ø, inch	3/8	3/8
	Gas Pipe (Flare)		ø,mm	15.88	15.88
			ø, inch	5/8	5/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	56	56
			lbs	123.5	123.5
	Shipping Weight		kg	63	63
			lbs	138.9	138.9
	Net Dimensions (W×H×D)		mm	1,200 x 360 x 650	1,200 x 360 x 650
			inch	47.2 x 14.2 x 25.6	47.2 x 14.2 x 25.6
	Shipping Dimensions (W×H×D)		mm	1,456 x 432 x 784	1,456 x 432 x 784
			inch	57.3 x 17.0 x 30.9	57.3 x 17.0 x 30.9
Panel Size	Panel model		-	-	-
	Panel Net Weight		kg	-	-
			lbs	-	-
	Shipping Weight		kg	-	-
			lbs	-	-
	Net Dimensions (W×H×D)		mm	-	-
			inches	-	-
	Shipping Dimensions (W×H×D)		mm	-	-
			inch	-	-
Functions	Auto restart		-	O	O
	Auto swing		-	X	X
	Group/individual control		-	O	O
	External contact control		-	O	O
	Trouble shooting by LED		-	X	X
Standard accessories	Installation manual		-	O	O
	Operation manual		-	O	O
	Pattern sheet for installation		-	X	X
	Flexible drain hose		-	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	MDP-M075SGU2D	MDP-M075SGU2D
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N
	EEV kits		-	-	/ M

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ HSP DUCT(BIG DUCT)

Model				BIG DUCT	
				AM076FNHDCH/AA	AM096FNHDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-
			Btu/h	76,800	96,000
		Heating 2)	kW	-	-
			Btu/h	85,200	108,000
		Condensate (with high fan speed)	Liter/h	-	-
Power	Power Input (Nominal)	Cooling 1)	W	530	790
		Heating 2)		530	790
	Current Input (Nominal)	Cooling 1)	A	3.8	5.9
		Heating 2)	-	3.8	5.9
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Motor	Model	-	DL-13875SSOB	DL-13875SSOB
		Type	-	BLDC	BLDC
		Output x n	W	400 x 1	400 x 1
	Air Flow Rate	H/M/L	CMM	58.00 / 52.00 / 47.00	72.00 / 65.00 / 58.00
	External Pressure	Min / Std / Max	Pa	5.00 / 15.00 / 25.00	5.00 / 15.00 / 28.00
			WG	49.03 / 147.10 / 245.17	49.03 / 147.10 / 274.59
Sound	Sound Pressure	High / Mid / Low	dBA	45.0/43.0/41.0	48.0/46.0/43.0
	Sound Power	High / Mid / Low	-	-	-
Refrigerant	Type		-	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	9.52	9.52
			ø, inch	3/8	3/8
	Gas Pipe (Flare)		ø,mm	19.05	22.22
			ø, inch	3/4	7/8
	Drain Pipe (Quick lock)		ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	89	89
			lbs	196.2	196.2
	Shipping Weight		kg	99	99
			lbs	218.3	218.3
	Net Dimensions (W×H×D)		mm	1,240 x 470 x 1,040	1,240 x 470 x 1,040
			inch	48.8 x 18.5 x 40.9	48.8 x 18.5 x 40.9
	Shipping Dimensions (W×H×D)		mm	1,507 x 558 x 1,155	1,507 x 558 x 1,155
			inch	59.3 x 22 x 45.5	59.3 x 22 x 45.5
Panel Size	Panel model		-	-	-
	Panel Net Weight		kg	-	-
			lbs	-	-
	Shipping Weight		kg	-	-
			lbs	-	-
	Net Dimensions (W×H×D)		mm	-	-
			inches	-	-
	Shipping Dimensions (W×H×D)		mm	-	-
			inch	-	-
Functions	Auto restart		-	O	O
	Auto swing		-	X	X
	Group/individual control		-	O	O
	External contact control		-	O	O
	Trouble shooting by LED		-	X	X
Standard accessories	Installation manual		-	O	O
	Operation manual		-	O	O
	Pattern sheet for installation		-	O	O
	Flexible drain hose		-	O	O
	Flilter/Safety grille		-	X	X
	Drain pump	Drain pump	- / Model Name	MDP-N047SNC1D	MDP-N047SNC1D
		Max. lifting Height / Displacement	mm / liter/h	470 / 24	470 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N
	EEV kits		-		

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ CEILING

Model				CEILING	
				AM018FNCDCH/AA	AM024FNCDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-
			Btu/h	18,000	24,000
		Heating 2)	kW	-	-
			Btu/h	20,000	27,000
		Condensate (with high fan speed)	Liter/h	-	-
Power	Power Input (Nominal)	Cooling 1)	W	72	80
		Heating 2)		72	80
	Current Input (Nominal)	Cooling 1)	A	0.42	0.48
		Heating 2)	-	0.42	0.48
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Motor	Model	-	Y5S613A86	Y5S413B216
		Type	-	AC	AC
		Output x n	W	25 x 1	35 x 1
	Air Flow Rate	H/M/L	CMM	14.00 / 13.00 / 12.00	18.00 / 16.50 / 15.00
	External Pressure	Min / Std / Max	Pa	-	-
			WG	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	40.0/37.0/34.0	44.0/42.0/40.0
	Sound Power	High / Mid / Low		-	-
Refrigerant	Type		-	R-410A	R-410A
	Control Method		-	EEV NOT INCLUDED	EEV NOT INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	9.52
			ø, inch	1/4	3/8
	Gas Pipe (Flare)		ø,mm	12.7	15.88
			ø, inch	1/2	5/8
	Drain Pipe (Quick lock)		ø,mm	VP18 (OD 19,ID 16)	VP18 (OD 19,ID 16)
Dimensions	Net Weight		kg	21.00	21.00
			lbs	46.30	46.30
	Shipping Weight		kg	25.50	25.50
			lbs	56.22	56.22
	Net Dimensions (W×H×D)		mm	1,000 x 650 x 200	1,000 x 650 x 200
			inch	39.97 x 25.59 x 7.87	39.97 x 25.59 x 7.87
	Shipping Dimensions (W×H×D)		mm	1,080 x 730 x 300	1,080 x 730 x 300
			inch	42.52 x 28.74 x 11.81	42.52 x 28.74 x 11.81
Panel Size	Panel model		-	-	-
	Panel Net Weight		kg	-	-
			lbs	-	-
	Shipping Weight		kg	-	-
			lbs	-	-
	Net Dimensions (W×H×D)		mm	-	-
			inches	-	-
	Shipping Dimensions (W×H×D)		mm	-	-
			inch	-	-
Functions	Auto restart		-	O	O
	Auto swing		-	X	X
	Group/individual control		-	O	O
	External contact control		-	O	O
	Trouble shooting by LED		-	X	X
Standard accessories	Installation manual		-	O	O
	Operation manual		-	O	O
	Pattern sheet for installation		-	X	X
	Flexible drain hose		-	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-
		Receiver wire	-	-	-
	EEV kits		-	MXD, MEV series	MXD, MEV series

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Big Ceiling

Model				AM036JNCDCH/AA	AM048JNCDCH/AA
Power Supply			φ,V,Hz	1,208~230,60	1,208~230,60
Mode 1)			-	HP / HR	HP / HR
Performance	Capacity	Cooling 2)	Btu/h	36,000	48,000
		Heating 3)	Btu/h	40,000	54,000
Power	Input Consumption (Cooling/Heating)		W	92/80	160/160
	Running Current (Cooling/Heating)		A	0.94/0.83	1.45/1.45
Indoorunit refrigerant adding amount			Kg/EA	0.56	0.95
Noise Level	Actual Noise Pressure (High)		dB(A) ↓	49	52
Fan	Type		-	Sirocco, Φ168*3EA	Sirocco, Φ168*4EA
	Motor	Model	-	SIC-70CW-F1153-6, DL-12830SSBF (DB31-00660A)	SIC-80CW-F1244-2, DL-12830SSBK (DB31-00661A)
		Type	-	BLDC Feedback	BLDC Feedback
		Output	W	153W	244W
Airflow Rate	Fan(H/M/L)		㎥/min	29.3/23.9/18.5	36.4/30.8/26.0
Refrigerant	Type		-	R410a	R410a
	Control Method		-	EDM EEV 4.0C	EDM EEV 4.0C
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	250V/5A	250V/5A
Piping Connections	Liquid (Flare)		Φ,mm	9.52	9.52
			Φinch	3/8"	3/8"
	Gas (Flare)		Φ,mm	15.88	15.88
			Φinch	5/8"	5/8"
	Drain		Φ,mm	VP25 (OD25,ID 20)	VP25 (OD25,ID 20)
			Φinch	-	-
Weight	Net Weight		kg	33.5	42.5
	Shipping Weight		kg	39.5	48.5
Dimensions	Net Dimensions (W×H×D)		mm	1350*235*675	1650*235*675
			inch	-	-
	Shipping Dimensions (W×H×D)		mm	1439*758*321	1739*758*321
			inch	-	-
Functions	Auto Restart		-	O	O
	Auto Swing		-	O	O
	Group/Individual Control		-	O	O
	External Contact Control		-	O	O
	Trouble Shooting by LED		-	O	O
Standard Accessories	Installation Manual		-	O	O
	Operation Manual		-	O	O
	Pattern Sheet for Installation		-	O	O
	Flexible Drain Hose		-	O	O
	Filter / Safety Grille		-	Filter (Washable)	Filter (Washable)
Optional Accessories	Wireless Remote Controller		-	AR-DH00	AR-DH00
	Wired Remote Controller	Simplified	-	MWR-WE10N	MWR-WE10N
	External Contact Interface Module		-	MIM-B14	MIM-B14

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Norminal cooling capacities are based on;
- Indoor temperature : 27℃ DB, 19℃ WB - Outdoor temperature : 35℃ DB, 24℃ WB

*3) Norminal heating capacities are based on;
- Indoor temperature : 20℃ DB, 15℃ WB - Outdoor temperature : 7℃ DB, 6℃ WB

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ PAC

Model				PAC	
				AM048HNPDCH/AZ	AM096HNPDCH/AZ
Power Supply			Φ, #, V, Hz	1, ,208-230,60	1, ,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling	kW		
			Btu/hr	48 000	96 000
		Heating	kW		
			Btu/hr	54 000	108 000
Power	Power Input (Nominal)	Cooling	W	550	950
		Heating		550	950
	Current Input (Nominal)	Cooling	A	2.6	4.5
		Heating		2.6	4.5
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan
		Output x n	W	100 × 1	700 × 1
	Air Flow Rate	H/M/L (UL)	CMM	33/30/27	70/60/50
			l/s	-	-
	External Pressure	Min / Std / Max	mmAq	-	-
			Pa	-	-
Piping Connections	Liquid Pipe		Φ,mm	9.52	9.52
			Φ, inch	3/8	3/8
	Gas Pipe		Φ,mm	15.88	22.22
			Φ, inch	5/8	7/8
	Drain Pipe		Φ,mm	ID 18 HOSE	VP25 (OD 32, ID 25)
Field Wiring	Power Source Wire		mm2	2.5	2.5
	Transmission Cable		mm2	0.75 ~ 1.50	0.75 ~ 1.50
Sound	Sound Pressure	High	dB(A)	58	63
	Sound Power	Cooling		-	-
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Dimensions	Net Weight		kg	61.0	115.0
	Shipping Weight		kg	66.0	130.0
	Net Dimensions (W×H×D)		mm	650 x 1850 x 395	1100 x 1800 x 485
	Shipping Dimensions (W×H×D)		mm	753 x 1949 x 503	1177 x 1950 x 563
Panel Size	Panel model		-	-	-
	Panel Net Weight		kg	-	-
	Shipping Weight		kg	-	-
	Net Dimensions (W×H×D)		mm	-	-
	Shipping Dimensions (W×H×D)		mm	-	-
Functions	Auto restart		-	O	O
	Auto swing		-	O	O
	Group/individual control		-	O	O
	External contact control		-	O	O
	Trouble shooting by LED		-	O	O
Standard accessories	Installation manual		-	O	O
	Operation manual		-	O	O
	Pattern sheet for installation		-	X	X
	Flexible drain hose		-	O	O
	Flilter/Safety grille		-	Filter (washable)	Filter (washable)
	Drain pump	Drain pump	- / Model Name	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-
		Receiver wire	-	-	-
	EEV kits		-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ MA-1 (Drain Pump Built-in)

Model				MSP DUCT				
				AM007JNMDCH/AA	AM009JNMDCH/AA	AM012JNMDCH/AA	AM015JNMDCH/AA	AM018JNMDCH/AA
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-	-
			Btu/h	7,500	9,500	12,000	15,000	18,000
		Heating 2)	kW	-	-	-	-	-
			Btu/h	8,500	10,500	13,500	17,000	20,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	30.0	30.0	32.0	44.0	52.0
		Heating 2)		30.0	30.0	32.0	44.0	52.0
	Current Input (Nominal)	Cooling 1)	A	0.24	0.24	0.26	0.32	0.40
		Heating 2)		0.24	0.24	0.26	0.32	0.40
Fan	Type			Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Model	-	DL-12840SSBH	DL-12840SSBH	DL-12840SSBH	DL-12840SSBH	DL-12840SSBH
		Type	-	BLDC	BLDC	BLDC	BLDC	BLDC
		Output x n	W	183 x 1	183 x 1	183 x 1	183 x 1	183 x 1
	Air Flow Rate	H/M/L	CMM	7.5/6.7/6.0	9.0/8.0/7.0	10.0/8.5/7.0	12.0/10.5/9.0	14.5/13.0/11.5
	External Pressure	Min / Std / Max	mmAq	1.0 (15 - 0)	1.0 (15 - 0)	1.0 (15 - 0)	1.0 (15 - 0)	1.0 (15 - 0)
			Pa	-	-	-	-	-
Sound	Sound Pressure	High / Mid / Low	dB(A)	36/30/26	38/32/26	39/34/30	41/36/32	42/38/35
	Sound Power	Cooling		55	56	60	63	66
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control				Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices				Fuse	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		Φ,mm	6.35	6.35	6.35	6.35	6.35
			Φ, inch	1/4"	1/4"	1/4"	1/4"	1/4"
	Gas Pipe (Flare)		Φ,mm	12.7	12.7	12.7	12.7	12.7
			Φ, inch	1/2"	1/2"	1/2"	1/2"	1/2"
	Drain Pipe (Quick lock)		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	35.0	35.0	35.0	35.0	36.5
	Shipping Weight		kg	39.0	39.0	39.0	39.0	40.5
	Net Dimensions (W×H×D)		mm	1150 × 320 × 480	1150 × 320 × 480	1150 × 320 × 480	1150 × 320 × 480	1150 × 320 × 480
	Shipping Dimensions (W×H×D)		mm	1419 x 400 x 594	1447 x 425 x 769	1447 x 425 x 769	1447 x 425 x 769	1447 x 425 x 769
Panel Size	Panel model		-	-	-	-	-	-
	Panel Net Weight		kg	-	-	-	-	-
	Shipping Weight		kg	-	-	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-	-	-
Funtion	Auto restsrt		-	o	o	o	o	o
	Auto swing		-	x	x	x	x	x
	Group/Individual control		-	o	o	o	o	o
	Exteral contact control		-	o	o	o	o	o
	Trouble shooting by LED		-	x	x	x	x	x
Standard accessories	Installation manual		-	o	o	o	o	o
	Operation manual		-	o	o	o	o	o
	Pattern sheet for installation		-	x	x	x	x	x
	Flexible drain hose		-	o	o	o	o	o
	Flilter/Safety grille		-	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter
	Drain pump	Drain pump	-	Built-In	Built-In	Built-In	Built-In	Built-In
		Max. lifting Height / Displacement	mm / liter/ h	750 / 24	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ MA-2 (Drain Pump Built-in)

Model				MSP DUCT				
				AM024JNHDCH/AA	AM027JNHDCH/AA	AM030JNHDCH/AA	AM036JNHDCH/AA	AM048JNHDCH/AA
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-	-
			Btu/h	24,000	27,000	30,000	36,000	48,000
		Heating 2)	kW	-	-	-	-	-
			Btu/h	27,000	30,000	34,000	40,000	54,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	82.0	91.0	108.0	140.0	200.0
		Heating 2)		82.0	91.0	108.0	140.0	200.0
	Current Input (Nominal)	Cooling 1)	A	0.93	0.95	1.11	1.29	1.76
		Heating 2)		0.93	0.95	1.11	1.29	1.76
Fan	Type			Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Model	-	DL-12840SSBF	DL-12840SSBF	DL-12840SSBF	DL-12840SSBF	DL-12840SSBF
		Type	-	BLDC	BLDC	BLDC	BLDC	BLDC
		Output x n	W	183 x 2	183 x 2	183 x 2	183 x 2	183 x 2
	Air Flow Rate	H/M/L	CMM	18.5/17.0/15.5	21.0/19.5/18.0	25.0/22.5/20.0	27.0/25.0/23.0	35.0/32.5/30.0
	External Pressure	Min / Std / Max	mmAq	5.2 (3 - 20)	5.2 (3 - 20)	5.2 (3 - 20)	5.2 (3 - 20)	5.2 (3 - 20)
			Pa	-	-	-	-	-
Sound	Sound Pressure	High / Mid / Low	dB(A)	36/34/30	38/34/30	39/34/31	41/38/35	42/39/36
	Sound Power	Cooling		71	71	72	72	73
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control				Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices				Fuse	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		Φ,mm	9.52	9.52	9.52	9.52	9.52
			Φ, inch	3/8"	3/8"	3/8"	3/8"	3/8"
	Gas Pipe (Flare)		Φ,mm	15.88	15.88	15.88	15.88	15.88
			Φ, inch	5/8"	5/8"	5/8"	5/8"	5/8"
	Drain Pipe (Quick lock)		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	54.0	54.0	54.0	56.0	56.0
	Shipping Weight		kg	68.0	68.0	68.0	70.0	70.0
	Net Dimensions (W×H×D)		mm	1200 × 360 × 650	1200 × 360 × 650	1200 × 360 × 650	1200 × 360 × 650	1200 × 360 × 650
	Shipping Dimensions (W×H×D)		mm	1460 x 455 x 780	1460 x 455 x 780	1460 x 455 x 780	1460 x 455 x 780	1460 x 455 x 780
Panel Size	Panel model		-	-	-	-	-	-
	Panel Net Weight		kg	-	-	-	-	-
	Shipping Weight		kg	-	-	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-	-	-
Funtion	Auto restsrt		-	o	o	o	o	o
	Auto swing		-	x	x	x	x	x
	Group/Individual control		-	o	o	o	o	o
	Exteral contact control		-	o	o	o	o	o
	Trouble shooting by LED		-	x	x	x	x	x
Standard accessories	Installation manual		-	o	o	o	o	o
	Operation manual		-	o	o	o	o	o
	Pattern sheet for installation		-	x	x	x	x	x
	Flexible drain hose		-	o	o	o	o	o
	Flilter/Safety grille		-	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter
	Drain pump	Drain pump	-	Built-In	Built-In	Built-In	Built-In	Built-In
		Max. lifting Height / Displacement	mm / liter/ h	750 / 24	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Floor Standing Type (CONCEALED)

Model					Small			Large	
					AM006JNFDCH/AA	AM009JNFDCH/AA	AM012JNFDCH/AA	AM018JNFDCH/AA	AM024JNFDCH/AA
Power Supply				Ø,V,Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz
Mode					HP / HR	HP / HR	HP / HR	HP / HR	HP / HR
Performance	Capacity	Cooling		kW	-	-	-	-	-
				Btu/h	6,000	9,500	12,000	18,000	24,000
		Heating		kW	-	-	-	-	-
				Btu/h	6,700	10,500	13,500	20,000	27,000
Power	Running Current		Cooling	A	0.2	0.22	0.24	0.53	0.53
			Heating	A	0.2	0.22	0.24	0.53	0.53
	Input		Cooling	W	35.0	40.0	50.0	110.0	110.0
			Heating	W	35.0	40.0	50.0	110.0	110.0
Sound	Sound Pressure	High / Mid / Low		dB(A)	34/29/24	37/32/27	37/32/27	40/36/32	40/36/32
FAN	Type			-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor		Model	-					
Airflow Rate	H/M/L			CFM	175/140/105	250/195/160	350/300/210	550/495/390	550/495/390
Refrigerant	Type			-	R-410A	R-410A	R-410A	R-410A	R-410A
	Control Method			-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control				-	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors
Safety Devices				-	Fuse	Fuse	Fuse	Fuse	Fuse
Piping connections	Liquid(Flare)			Ø,mm	6.35	6.35	6.35	6.35	9.52
				Ø, inch	1/4	1/4	1/4	1/4	3/8
	Gas(Flare)			Ø,mm	12.7	12.7	12.7	12.7	15.88
				Ø, inch	1/2	1/2	1/2	1/2	5/8
	Drain			Ø,mm	ID18 HOSE	ID18 HOSE	ID18 HOSE	ID18 HOSE	ID18 HOSE
Weight	Net Weight			kg	23	23	23	28.5	28.5
				lbs	50.7	50.7	50.7	62.8	62.8
	Shipping Weight			kg	27	27	27	33.5	33.5
				lbs	59.5	59.5	59.5	73.8	73.8
Dimensions	Net Dimensions			mm	945x600x220	945x600x220	945x600x220	1225x600x220	1225x600x220
				lbs	37.2×23.62×8.66	37.2×23.62×8.66	37.2×23.62×8.66	48.23 × 23.62 × 8.66	48.23 × 23.62 × 8.66
	Shipping Dimensions			mm	1035x690x310	1035x690x310	1035x690x310	1335x690x310	1335x690x310
				lbs	40.75x27.17x12.2	40.75x27.17x12.2	40.75x27.17x12.2	52.56 x 27.17 x 12.2	52.56 x 27.17 x 12.2
Functions	Auto Restart			-	O	O	O	O	O
	Auto Swing			-	X	X	X	X	X
	Group/Individual Control			-	O	O	O	O	O
	External Contact Control			-	O	O	O	O	O
	Trouble Shooting by LED			-	O	O	O	O	O
Standard Accessories	Installation Manual			-	O	O	O	O	O
	Operation Manual			-	X	X	X	X	X
	Pattern Sheet for Installation			-	X	X	X	X	X
	Flexible Drain Hose			-	O	O	O	O	O
	Filter / Safety Grille			-	O	O	O	O	O
	Drain Pump (Pumping, Speeed, Lift)			ℓ/h,mm	X	X	X	X	X
Optional Accessories	Simple Wired Remote Controller			-	MWR-SH00N(Option)	MWR-SH00N(Option)	MWR-SH00N(Option)	MWR-SH00N(Option)	MWR-SH00N(Option)
	Wired Remote Controller			-	MWR-WE10N(Option)	MWR-WE10N(Option)	MWR-WE10N(Option)	MWR-WE10N(Option)	MWR-WE10N(Option)
	Air Filter			-	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Floor Standing Type (EXPOSED)

Model					Small			Large	
					AM006JNGDCH/AA	AM009JNGDCH/AA	AM012JNGDCH/AA	AM018JNGDCH/AA	AM024JNGDCH/AA
Power Supply				Ø,V,Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz	208 - 230 V~ 60Hz
Mode					HP / HR	HP / HR	HP / HR	HP / HR	HP / HR
Performance	Capacity	Cooling		kW	-	-	-	-	-
				Btu/h	6,000	9,500	12,000	18,000	24,000
		Heating		kW	-	-	-	-	-
				Btu/h	6,700	10,500	13,500	20,000	27,000
Power	Running Current		Cooling	A	0.2	0.22	0.24	0.53	0.53
			Heating	A	0.2	0.22	0.24	0.53	0.53
	Input		Cooling	W	35.0	40.0	50.0	110.0	110.0
			Heating	W	35.0	40.0	50.0	110.0	110.0
Sound	Sound Pressure	High / Mid / Low		dB(A)	34/29/24	37/32/27	37/32/27	40/36/32	40/36/32
FAN	Type			-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor		Model	-					
Airflow Rate	H/M/L			CFM	175/140/105	250/195/160	350/300/210	550/495/390	550/495/390
Refrigerant	Type			-	R-410A	R-410A	R-410A	R-410A	R-410A
	Control Method			-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control				-	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors
Safety Devices				-	Fuse	Fuse	Fuse	Fuse	Fuse
Piping connections	Liquid(Flare)			Ø,mm	6.35	6.35	6.35	6.35	9.52
				Ø, inch	1/4	1/4	1/4	1/4	3/8
	Gas(Flare)			Ø,mm	12.7	12.7	12.7	12.7	15.88
				Ø, inch	1/2	1/2	1/2	1/2	5/8
	Drain			Ø,mm	ID18 HOSE	ID18 HOSE	ID18 HOSE	ID18 HOSE	ID18 HOSE
Weight	Net Weight			kg	26	26	26	31.5	31.5
				lbs	57.3	57.3	57.3	69.4	69.4
	Shipping Weight			kg	29.5	29.5	29.5	36.5	36.5
				lbs	65.0	65.0	65.0	80.5	80.5
Dimensions	Net Dimensions			mm	945x600x220	945x600x220	945x600x220	1225x600x220	1225x600x220
				lbs	37.2×23.62×8.66	37.2×23.62×8.66	37.2×23.62×8.66	48.23 × 23.62 × 8.66	48.23 × 23.62 × 8.66
	Shipping Dimensions			mm	1035x690x310	1035x690x310	1035x690x310	1335x690x310	1335x690x310
				lbs	40.75x27.17x12.2	40.75x27.17x12.2	40.75x27.17x12.2	52.56 x 27.17 x 12.2	52.56 x 27.17 x 12.2
Functions	Auto Restart			-	O	O	O	O	O
	Auto Swing			-	X	X	X	X	X
	Group/Individual Control			-	O	O	O	O	O
	External Contact Control			-	O	O	O	O	O
	Trouble Shooting by LED			-	O	O	O	O	O
Standard Accessories	Installation Manual			-	O	O	O	O	O
	Operation Manual			-	X	X	X	X	X
	Pattern Sheet for Installation			-	X	X	X	X	X
	Flexible Drain Hose			-	O	O	O	O	O
	Filter / Safety Grille			-	O	O	O	O	O
	Drain Pump (Pumping, Speeed, Lift)			ℓ/h,mm	X	X	X	X	X
Optional Accessories	Simple Wired Remote Controller			-	MWR-SH00N(Option)	MWR-SH00N(Option)	MWR-SH00N(Option)	MWR-SH00N(Option)	MWR-SH00N(Option)
	Wired Remote Controller			-	MWR-WE10N(Option)	MWR-WE10N(Option)	MWR-WE10N(Option)	MWR-WE10N(Option)	MWR-WE10N(Option)
	Air Filter			-	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ OAP Duct

Model				OAP Duct	
				AM072JNESCH/AA	AM096JNESCH/AA
Power Supply			φ,V,Hz	1,208~230,60	1,208~230,60
Mode 1)			-	HP	HP
Performance	Capacity	Cooling 2)	Btu/hr 92% ↑	72,000	96,000
		Heating 3)	Btu/hr 92% ↑	47,000	59,000
Power	Input Consumption (Cooling/Heating)		W 105% ↓	360/360	450/450
	Running Current (Cooling/Heating)		A 105% ↓	2.60/2.60	3.10/3.10
Indoorunit refrigerant adding amount			Kg/EA	1.18	1.18
Noise Level	Actual Noise Pressure (High)		dB(A) ↓	47	47
Fan	Type		-	Sirocco, Φ270*2EA	Sirocco, Φ270*2EA
	Motor	Model	-	DL-17860SSBA (DB31-00659A)	DL-17860SSBA (DB31-00659A)
		Type	-	BLDC Feedback	BLDC Feedback
		Output	W	-	-
Fan Speed	Fan(H/M/L)	0 mmAq	rpm±20	875/-/-	890/-/-
	Fan(H/M/L)	Standard		1050/-/-	1080/-/-
	Cooling (H/M/L)	Standard		-	-
	Heating (H/M/L)	Standard		-	-
Airflow Rate	Fan(H/M/L)		㎥/min	28.00/-/-	35.00/-/-
	Cooling (High)			-	-
	Heating (High)			-	-
Refrigerant	Type		-	R410a	R410a
	Control Method		-	EDM EEV 6.4C	EDM EEV 6.4C
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse
External Static Pressure	Standard (Min.~Max)		mmH2O	25(5~30)	25(5~30)
Piping Connections	Liquid (Flare)		Φ,mm	9.52	9.52
			Φinch	3/8"	3/8"
	Gas (Flare)		Φ,mm	19.05	22.23
			Φinch	3/4"	7/8"
	Drain		Φ,mm	VP25 (OD 32,ID 25) mm	VP25 (OD 32,ID 25) mm
			Φinch	-	-
Weight	Net Weight		kg	90	90
	Shipping Weight		kg	100	100
Dimensions	Net Dimensions (W×H×D)		mm	1465x460x910	1465x460x910
			inch	-	-
	Shipping Dimensions (W×H×D)		mm	1612 x 519 x 984	1612 x 519 x 984
			inch	-	-
Bypass Tube	SOLENOID VALVE		-	Assy,FDF6A48	Assy,FDF6A48
	Check VALVE		-	ID9.6-ID12.9	ID9.6-ID12.9
Panel Size	Model		-	-	-
	Net Weight		kg	-	-
	Shipping Weight		kg	-	-
	Net Dimensions (W×H×D)		mm	-	-
	Shipping Dimensions (W×H×D)		mm	-	-
Functions	Auto restart		-	O	O
	Auto swing		-	X	X
	Group/Individual control		-	O(OAP group only)	O(OAP group only)
	External contact control		-	O	O
	Trouble shooting by LED		-	X	X
Standard accessories	Installation manual		-	O	O
	Operation manual		-	O	O
	Pattern sheet for installation		-	O	O
	Flexible drain hose		-	O	O
	Filter/Safety grille		-	X	X
	Drain pump	Drain pump	- / Model Name	Optional / MDP-G075SQ	Optional / MDP-G075SQ
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24
Optional Accessories	Wireless remote controller		-	MR-EH00U	MR-EH00U
	Wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N
	EEV kits		-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Norminal cooling capacities are based on;
- Indoor temperature : 35℃ DB, 28℃ WB - Outdoor temperature : 35℃ DB, 28℃ WB

*3) Norminal heating capacities are based on;
- Indoor temperature : 0℃ DB, -3℃ WB - Outdoor temperature : 0℃ DB, -3℃ WB

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Global Duct 1

Model				Global Duct 1				
				AM007MNMDCH/AA	AM009MNMDCH/AA	AM012MNMDCH/AA	AM015MNMDCH/AA	AM018MNMDCH/AA
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-	-
			Btu/h	7,500	9,500	12,000	15,000	18,000
		Heating 2)	kW	-	-	-	-	-
			Btu/h	8,500	10,500	13,500	17,000	20,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	27	27	31	38	80
		Heating 2)	W	27	27	31	38	80
	Current Input (Nominal)	Cooling 1)	A	0.25	0.25	0.26	0.30	0.65
		Heating 2)	A	0.25	0.25	0.26	0.30	0.65
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Model	-					
		Type	-	BLDC	BLDC	BLDC	BLDC	BLDC
		Output x n	W	153 x 1	153 x 1	153 x 1	153 x 1	153 x 1
	Air Flow Rate	H/M/L	CMM	9	9	10	11	17
	External Pressure	Min / Std / Max	mmAq	0.0 / 1.0 / 15.0	0.0 / 1.0 / 15.0	0.0 / 1.0 / 15.0	0.0 / 1.0 / 15.0	0.0 / 1.0 / 15.0
			Pa	0.0 / 9.8 / 147.1	0.0 / 9.8 / 147.1	0.0 / 9.8 / 147.1	0.0 / 9.8 / 147.1	0.0 / 9.8 / 147.1
Sound	Sound Pressure	High / Mid / Low	dB(A)	26 / 24 / 22	26 / 24 / 22	27 / 25 / 23	28 / 26 / 24	29 / 27 / 25
	Sound Power	Cooling	dB(A)	-	-	-	-	-
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		Φ,mm	6.35	6.35	6.35	6.35	6.35
			Φ, inch	1/4"	1/4"	1/4"	1/4"	1/4"
	Gas Pipe (Flare)		Φ,mm	12.7	12.7	12.7	12.7	12.7
			Φ, inch	1/2"	1/2"	1/2"	1/2"	1/2"
	Drain Pipe (Quick lock)		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	31.2	31.2	31.2	31.2	31.2
	Shipping Weight		kg	35.0	35.0	35.0	35.0	35.0
	Net Dimensions (W×H×D)		mm	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700
	Shipping Dimensions (W×H×D)		mm	1,064 x 320 x 784	1,064 x 320 x 784	1,064 x 320 x 784	1,064 x 320 x 784	1,064 x 320 x 784
Funtion	Auto restart		-	o	o	o	o	o
	Auto swing		-	x	x	x	x	x
	Group/Individual control		-	o	o	o	o	o
	Exteral contact control		-	o	o	o	o	o
	Trouble shooting by LED		-	x	x	x	x	x
Standard accessories	Installation manual		-	o	o	o	o	o
	Operation manual		-	o	o	o	o	o
	Pattern sheet for installation		-	x	x	x	x	x
	Flexible drain hose		-	o	o	o	o	o
	Flilter/Safety grille		-	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter
	Drain pump	Drain pump	-	Built-In	Built-In	Built-In	Built-In	Built-In
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Global Duct 2

Model				Global Duct 2		
				AM024MNMDCH/AA	AM027MNMDCH/AA	AM030MNMDCH/AA
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	24,000	27,000	30,000
		Heating 2)	kW	-	-	-
			Btu/h	27,000	30,000	34,000
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	114	125	132
		Heating 2)	W	114	125	132
	Current Input (Nominal)	Cooling 1)	A	0.81	0.87	0.92
		Heating 2)	A	0.81	0.87	0.92
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Model	-			
		Type	-	BLDC	BLDC	BLDC
		Output x n	W	153 x 1	153 x 1	153 x 1
	Air Flow Rate	H/M/L	CMM	22	23	24
	External Pressure	Min / Std / Max	mmAq	3.0 / 5.2 / 20.0	3.0 / 5.2 / 20.0	3.0 / 5.2 / 20.0
			Pa	29.4 / 51.0 / 196.1	29.4 / 51.0 / 196.1	29.4 / 51.0 / 196.1
Sound	Sound Pressure	High / Mid / Low	dB(A)	39 / 36 / 30	40 / 37 / 34	40 / 38 / 35
	Sound Power	Cooling	dB(A)	-	-	-
Refrigerant	Type		-	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		Φ,mm	9.52	9.52	9.52
			Φ, inch	3/8"	3/8"	3/8"
	Gas Pipe (Flare)		Φ,mm	15.88	15.88	15.88
			Φ, inch	5/8"	5/8"	5/8"
	Drain Pipe (Quick lock)		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	45.2	45.2	45.2
	Shipping Weight		kg	50.0	50.0	50.0
	Net Dimensions (W×H×D)		mm	1,200 x 250 x 700	1,200 x 250 x 700	1,200 x 250 x 700
	Shipping Dimensions (W×H×D)		mm	1,429 x 320 x 779	1,429 x 320 x 779	1,429 x 320 x 779
Funtion	Auto restart		-	o	o	o
	Auto swing		-	x	x	x
	Group/Individual control		-	o	o	o
	Exteral contact control		-	o	o	o
	Trouble shooting by LED		-	x	x	x
Standard accessories	Installation manual		-	o	o	o
	Operation manual		-	o	o	o
	Pattern sheet for installation		-	x	x	x
	Flexible drain hose		-	o	o	o
	Flilter/Safety grille		-	Long life filter	Long life filter	Long life filter
	Drain pump	Drain pump	-	Built-In	Built-In	Built-In
		Max. lifting Height / Displacement	mm/liter/h	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Global Duct 3

Model				Global Duct 3	
				AM024MNMDCH/AA	AM027MNMDCH/AA
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-
			Btu/h	36,000	48,000
		Heating 2)	kW	-	-
			Btu/h	40,000	54,000
		Condensate (with high fan speed)	Liter/h	-	-
Power	Power Input (Nominal)	Cooling 1)	W	165	272
		Heating 2)	W	165	272
	Current Input (Nominal)	Cooling 1)	A	1.11	1.84
		Heating 2)	A	1.11	1.84
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Motor	Model	-		
		Type	-	BLDC	BLDC
		Output x n	W	153 x 1	153 x 1
	Air Flow Rate	H/M/L	CMM	29	33
	External Pressure	Min / Std / Max	mmAq	3.0 / 5.2 / 20.0	3.0 / 5.2 / 20.0
			Pa	29.4 / 51.0 / 196.1	29.4 / 51.0 / 196.1
Sound	Sound Pressure	High / Mid / Low	dB(A)	38 / 35 / 32	41 / 38 / 35
	Sound Power	Cooling	dB(A)	-	-
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		Φ,mm	9.52	9.52
			Φ, inch		
	Gas Pipe (Flare)		Φ,mm	15.88	15.88
			Φ, inch		
	Drain Pipe (Quick lock)		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	45.2	45.2
	Shipping Weight		kg	50.0	50.0
	Net Dimensions (W×H×D)		mm	850 x 250 x 700	850 x 250 x 700
	Shipping Dimensions (W×H×D)		mm	1,064 x 320 x 784	1,064 x 320 x 784
Funtion	Auto restart		-	o	o
	Auto swing		-	x	x
	Group/Individual control		-	o	o
	Exteral contact control		-	o	o
	Trouble shooting by LED		-	x	x
Standard accessories	Installation manual		-	o	o
	Operation manual		-	o	o
	Pattern sheet for installation		-	x	x
	Flexible drain hose		-	o	o
	Flilter/Safety grille		-	Long life filter	Long life filter
	Drain pump	Drain pump	-	Built-In	Built-In
		Max. lifting Height / Displacement	mm/liter/h	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N
	EEV kits		-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Wind-free 1way cassette type

Model				JSF-1		
				AM007NN1DCH*	AM009NN1DCH*	AM012NN1DCH*
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-
			Btu/h	7,500	9,500	12,000
		Heating 2)	kW	-	-	-
			Btu/h	8,500	10,500	13,500
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	40.0	45.0	50.0
		Heating 2)		40.0	45.0	50.0
	Current Input (Nominal)	Cooling 1)	A	0.23	0.25	0.28
		Heating 2)		0.23	0.25	0.28
Fan	Type		-	Crossflow fan	Crossflow fan	Crossflow fan
	Motor	Model	-	YKFG-18-4-91L	YKFG-18-4-91L	YKFG-18-4-91L
		Type	-	AC MOTOR	AC MOTOR	AC MOTOR
		Output x n	W	20 x 1	20 x 1	20 x 1
	Air Flow Rate	H/M/L	CMM	6.00/5.00/4.00	7.00/6.00/5.00	8.00/7.00/6.00
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure	High / Mid / Low	dBA	29 / 26 / 24	32 / 28 / 24	37 / 33 / 30
	Sound Power	High / Mid / Low	dBA	47	50	55
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid Pipe (Flare)		ø,mm	6.35	6.35	6.35
			ø, inch	1/4"	1/4"	1/4"
	Gas Pipe (Flare)		ø,mm	12.70	12.70	12.70
			ø, inch	1/2"	1/2"	1/2"
	Drain Pipe (Quick lock)		ø,mm	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)
Dimensions	Net Weight		kg	10.00	10.00	10.00
			lbs	22.05	22.05	22.05
	Shipping Weight		kg	12.80	12.80	12.80
			lbs	28.22	28.22	28.22
	Net Dimensions (W×H×D)		mm	970 x 135 x 410	970 x 135 x 410	970 x 135 x 410
			inch	38.19 x 5.31 x 16.14	38.19 x 5.31 x 16.14	38.19 x 5.31 x 16.14
	Shipping Dimensions (W×H×D)		mm	1,173 x 231 x 478	1,173 x 231 x 478	1,173 x 231 x 478
			inch	46.18 x 9.09 x 18.82	46.18 x 9.09 x 18.82	46.18 x 9.09 x 18.82
Panel Size	Panel model		-	PC1NWFMAN	PC1NWFMAN	PC1NWFMAN
	Panel Net Weight		kg	4.30	4.30	4.30
			lbs	9.48	9.48	9.48
	Shipping Weight		kg	6.30	6.30	6.30
			lbs	13.89	13.89	13.89
	Net Dimensions (W×H×D)		mm	1198 x 35 x 500	1198 x 35 x 500	1198 x 35 x 500
			inch	47.17 x 1.38 x 19.69	47.17 x 1.38 x 19.69	47.17 x 1.38 x 19.69
	Shipping Dimensions (W×H×D)		mm	1262 x 124 x 568	1262 x 124 x 568	1262 x 124 x 568
			inch	49.69 x 4.88 x 22.36	49.69 x 4.88 x 22.36	49.69 x 4.88 x 22.36
Functions	Auto restart		-	O	O	O
	Auto swing		-	O	O	O
	Group/individual control		-	O	O	O
	External contact control		-	O	O	O
	Trouble shooting by LED		-	O	O	O
Standard accessories	Installation manual		-	O	O	O
	Operation manual		-	X	X	X
	Pattern sheet for installation		-	O	O	O
	Flexible drain hose		-	O	O	O
	Flilter/Safety grille		-	O	O	O
	Drain pump	Drain pump	-/Model Name	INCLUDED	INCLUDED	INCLUDED
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00	MR-DH00	MR-DH00
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-
		Receiver wire	-	-	-	-
	EEV kits		-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Wind-free 1way cassette type

Model				JSF-2	
				AM018NN1DCH/AZ	AM024NN1DCH/AZ
Power Supply			Φ, #, V, Hz	1,208-230,60	1,208-230,60
Mode			-	HP/HR	HP/HR
Performance	Capacity	Cooling	kW	-	-
			Btu/h	19,100	24,200
		Heating	kW	-	-
			Btu/h	21,500	27,300
Power	Power Input	Cooling	W	55.0	80.0
		Heating		55.0	80.0
	Current Input	Cooling	A	0.28	0.40
		Heating		0.28	0.40
Fan	Type		-	Crossflow Fan	Crossflow Fan
	Motor	Model	-	SIC-55CVL-F158-3	SIC-55CVL-F158-3
		Type	-	BLDC Motor	BLDC Motor
		Output x n	W	54 x 1	54 x 1
	Air Flow Rate	H/M/L	CMM	15.00/13.00/11.00	16.50/14.50/12.00
	External Pressure	Min / Std / Max	Pa	-	-
		-	WG	-	-
Sound	Sound Pressure	High / Mid / Low	dB(A)	41 / 38 / 35	42 / 39 / 36
	Sound Power	Cooling		59	60
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	
Safety devices			-	Fuse	
Piping Connections	Liquid Pipe (Flare)		Φ, mm	6.35	9.52
			Φ, inch	1/4"	3/8"
	Gas Pipe (Flare)		Φ, mm	12.7	15.88
			Φ, inch	1/2"	5/8"
	Drain Pipe(Quick lock)		Φ, mm	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)
Dimension	Net Weight		kg	13.5	13.5
			lbs	29.76	29.76
	Shipping Weight		kg	17.3	17.3
			lbs	38.14	38.14
	Net Dimensions (WxHxD)		mm	1200 x 138 x 450	1200 x 138 x 450
			inch	47.24 x 5.43 x 17.72	47.24 x 5.43 x 17.72
	Shipping Dimensions (WxHxD)		mm	1435 x 224 x 525	1435 x 224 x 525
			inch	56.50 x 8.82 x 20.67	56.50 x 8.82 x 20.67
Panel	Model Name		-	PC1BWFMAN	PC1BWFMAN
	Panel Net Weight		kg	5.0	5.0
			lbs	11.02	11.02
	Shipping Weight		kg	7.0	7.0
			lbs	15.43	15.43
	Net Dimensions (W×H×D)		mm	1410 x 35 x 500	1410 x 35 x 500
			inch	55.51 x 1.38 x 19.69	55.51 x 1.38 x 19.69
	Shipping Dimensions (W×H×D)		mm	1473 x 124 x 568	1473 x 124 x 568
			inch	57.99 x 4.88 x 22.36	57.99 x 4.88 x 22.36
Functions	Auto restart		-	O	O
	Auto swing		-	O	O
	Group/individual control		-	O	O
	External contact control		-	O	O
	Trouble shooting by LED		-	O	O
Standard accessories	Installation manual		-	O	O
	Operation manual		-	X	X
	Pattern sheet for installation		-	O	O
	Flexible drain hose		-	O	O
	Flilter/Safety grille		-	O	O
	Drain pump	Drain pump	-/Model Name	INCLUDED	INCLUDED
		Max. lifting Height / Displacement	mm / liter/h	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00	MR-DH00
	wired remote controller		-	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-
		Receiver wire	-	-	-
	EEV kits		-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Norminal cooling capacities are based on;
- Indoor temperature : 35℃ DB, 28℃ WB - Outdoor temperature : 35℃ DB, 28℃ WB

*3) Norminal heating capacities are based on;
- Indoor temperature : 0℃ DB, -3℃ WB - Outdoor temperature : 0℃ DB, -3℃ WB

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Wall Mounted type (MAX With EEV)

Model				AM032MNQDCH/AA
Power Supply			Φ,#,V,Hz	1,2,208-230,60
Mode *1)			-	HP / HR
Performance	Capacity	Cooling*2)	kW	
			Btu/h	31,700
		Heating*3)	kW	
			Btu/h	33,400
Power	Power Input	Cooling	W	66
		Heating	W	76
	Current Input	Cooling	A	0.47
		Heating	A	0.54
Fan	Type		-	Crossflow Fan Φ107*L485, 2EA
	Motor	Type	-	BLDC
		Output	W	58
		Number of unit	-	1
	Airflow Rate	Cooling(High)	㎥/mim	22.5
		Heating(High)	㎥/mim	25.0
Piping Connections	Liquid Pipe		Φ,㎜	9.52
			Φ,inch	3/8″
	Gas Pipe		Φ,㎜	15.88
			Φ,inch	5/8″
	Drain Pipe		Φ,㎜	ID 18 HOSE
Field Wiring	Power Source Wire	Below 20m/over 20m	mm^2	1.5 ~ 2.5
	Transmission Cable		mm^2	0.75 ~ 1.50
Refrigerant	Type		-	R410A
	Control Method		-	EEV INCLUDED
Sound	Sound Pressure*4)	Cooling/Heating	dBA	55/56
Dimensions	Net Weight		㎏	19
	Shipping Weight		㎏	22
	Net Dimensions (W x Hx D)		㎜	1279*345*229
	Shipping Dimensions (W x Hx D)		㎜	1352*420*326
Functions	Auto Restart		-	O
	Auto Swing		-	O
	Group/Individual Control		-	O
	External Contact Control		-	O
	Trouble Shooting by LED		-	O
Standard Accessories	Installation Manual		-	O
	Operation Manual		-	O
	Pattern Sheet for Installation		-	X
	Flexible Drain Hose		-	O
	Filter / Safety Grille		-	Filter (Washable)
	Wireless Remote Controller		-	MR-EH00
Optional Accessories	Wireless Remote Controller		-	-
	Wired Remote Controller	Simplified	-	MWR-WE10N
	External Contact Interface Module		-	MIM-B14

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ 360 Cassette Type

Model				AM009KN4DCH/AA	AM012KN4DCH/AA	AM018KN4DCH/AA	AM024KN4DCH/AA
Power Supply			φ,V,Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode 1)			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity	Cooling 2)	kW	-	-	-	-
			Btu/h	9,000	12,000	18,000	24,000
		Heating 3)	kW	-	-	-	-
			Btu/h	10,000	13,500	20,000	27,000
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 2)	W	26.0	26.0	26.0	38.0
		Heating 3)		26.0	26.0	26.0	38.0
	Current Input (Nominal)	Cooling 2)	A	0.18	0.18	0.18	0.28
		Heating 3)		0.18	0.18	0.18	0.28
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor	Model	-	FMC6531SSL	FMC6531SSL	FMC6531SSL	FMC6531SSL
		Type	-	BLDC	BLDC	BLDC	BLDC
		Output	W	65 *5)	65 *5)	65 *5)	65 *5)
	External Pressure	Min / Std / Max	Pa	-	-	-	-
		-	WG	-	-	-	-
Sound	Sound Pressure *4)		dBA	44	44	44	47
	Sound Power			-	-	-	-
Refrigerant	Type		-	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse
Piping Connections	Liquid (Flare)		Φ,mm	6.35	6.35	6.35	9.52
			Φ,inch	1/4	1/4	1/4	3/8
	Gas (Flare)		Φ,mm	12.7	12.7	12.7	15.88
			Φ,inch	1/2	1/2	1/2	5/8
	Drain		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	21.0	21.0	21.0	21.0
			lbs	46.3	46.3	46.3	46.3
	Shipping Weight		kg	25.9	25.9	25.9	25.9
			lbs	55.1	55.1	55.1	55.1
	Net Dimensions (W×H×D)		mm	947 x 281 x 947	947 x 281 x 947	947 x 281 x 947	947 x 281 x 947
			inch	37.28 x 11.06 x 37.28	37.28 x 11.06 x 37.28	37.28 x 11.06 x 37.28	37.28 x 11.06 x 37.28
	Shipping Dimensions (W×H×D)		mm	990 x 330 x 990	990 x 330 x 990	990 x 330 x 990	990 x 330 x 990
			inch	38.98 x 12.99 x 38.98	38.98 x 12.99 x 38.98	38.98 x 12.99 x 38.98	38.98 x 12.99 x 38.98
Panel Size	Model		-	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN
	Net Weight		kg	3.6	3.6	3.6	3.6
			lbs	7.94	7.94	7.94	7.94
	Shipping Weight		kg	6.0	6.0	6.0	6.0
			lbs	13.23	13.23	13.23	13.23
	Net Dimensions (W×H×D)		mm	1000 x 66 x 1000	1000 x 66 x 1000	1000 x 66 x 1000	1000 x 66 x 1000
			inch	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37
	Shipping Dimensions (W×H×D)		mm	1093 x 85 x 1083	1093 x 85 x 1083	1093 x 85 x 1083	1093 x 85 x 1083
			inch	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64
Functions	Auto Restart		-	O	O	O	O
	Auto Swing		-	O	O	O	O
	Group/Individual Control		-	O	O	O	O
	External Contact Control		-	O	O	O	O
	Trouble Shooting by LED		-	O	O	O	O
Standard Accessories	Installation Manual		-	O	O	O	O
	Operation Manual		-	O	O	O	O
	Pattern Sheet for Installation		-	O	O	O	O
	Flexible Drain Hose		-	O	O	O	O
	Filter / Safety Grille		-	Filter / Safety Grille	Filter / Safety Grille	Filter / Safety Grille	Filter / Safety Grille
	Drain Pump (Pumping speed, lift)		ℓ/h,mm	24, 750	24, 750	24, 750	24, 750
Optional Accessories	Wireless Remote Controller		-	AR-KH00E	AR-KH00E	AR-KH00E	AR-KH00E
	Wired Remote Controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
			-	MWR-WS00	MWR-WS00	MWR-WS00	MWR-WS00
	External Contact Interface Module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Model				AM030KN4DCH/AA	AM036KN4DCH/AA	AM048KN4DCH/AA
Power Supply			φ,V,Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode 1)			-	HP/HR	HP/HR	HP/HR
Performance	Capacity	Cooling 2)	kW	-	-	-
			Btu/h	30,000	36,000	48,000
		Heating 3)	kW	-	-	-
			Btu/h	34,000	40,000	54,000
		Condensate (with high fan speed)	Liter/h	-	-	-
Power	Power Input (Nominal)	Cooling 2)	W	54.0	71.0	91.0
		Heating 3)		54.0	71.0	91.0
	Current Input (Nominal)	Cooling 2)	A	0.42	0.57	0.75
		Heating 3)		0.42	0.57	0.75
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan
	Motor	Model	-	FMC9731SSE	FMC9731SSE	FMC9731SSE
		Type	-	BLDC	BLDC	BLDC
		Output	W	97 *5)	97 *5)	97 *5)
	External Pressure	Min / Std / Max	Pa	-	-	-
		-	WG	-	-	-
Sound	Sound Pressure *4)		dBA	49	50	53
	Sound Power			-	-	-
Refrigerant	Type		-	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom & Thermistors	Micom & Thermistors	Micom & Thermistors
Safety Devices			-	Fuse	Fuse	Fuse
Piping Connections	Liquid (Flare)		Φ,mm	9.52	9.52	9.52
			Φ,inch	3/8	3/8	3/8
	Gas (Flare)		Φ,mm	15.88	15.88	15.88
			Φ,inch	5/8	5/8	5/8
	Drain		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Dimensions	Net Weight		kg	24.0	24.0	24.0
			lbs	52.9	52.9	52.9
	Shipping Weight		kg	29.4	29.4	29.4
			lbs	63.9	63.9	63.9
	Net Dimensions (W×H×D)		mm	947 x 365 x 947	947 x 365 x 947	947 x 365 x 947
			inch	37.28 x 14.37 x 37.28	37.28 x 14.37 x 37.28	37.28 x 14.37 x 37.28
	Shipping Dimensions (W×H×D)		mm	990 x 414 x 990	990 x 414 x 990	990 x 414 x 990
			inch	38.98 x 16.30 x 38.98	38.98 x 16.30 x 38.98	38.98 x 16.30 x 38.98
Panel Size	Model		-	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN
	Net Weight		kg	3.6	3.6	3.6
			lbs	7.94	7.94	7.94
	Shipping Weight		kg	6.0	6.0	6.0
			lbs	13.23	13.23	13.23
	Net Dimensions (W×H×D)		mm	1000 x 66 x 1000	1000 x 66 x 1000	1000 x 66 x 1000
			inch	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37
	Shipping Dimensions (W×H×D)		mm	1093 x 85 x 1083	1093 x 85 x 1083	1093 x 85 x 1083
			inch	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64
Functions	Auto Restart		-	O	O	O
	Auto Swing		-	O	O	O
	Group/Individual Control		-	O	O	O
	External Contact Control		-	O	O	O
	Trouble Shooting by LED		-	O	O	O
Standard Accessories	Installation Manual		-	O	O	O
	Operation Manual		-	O	O	O
	Pattern Sheet for Installation		-	O	O	O
	Flexible Drain Hose		-	O	O	O
	Filter / Safety Grille		-	Filter / Safety Grille	Filter / Safety Grille	Filter / Safety Grille
	Drain Pump (Pumping speed, lift)		ℓ/h,mm	24, 750	24, 750	24, 750
Optional Accessories	Wireless Remote Controller		-	AR-KH00E	AR-KH00E	AR-KH00E
	Wired Remote Controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N
			-	MWR-WS00	MWR-WS00	MWR-WS00
	External Contact Interface Module		-	MIM-B14	MIM-B14	MIM-B14

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Premium Plus Windfree Type

Model				AM005TNVDCH/AA	AM007TNVDCH/AA	AM009TNVDCH/AA	AM012TNVDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-
			Btu/h	5000	7500	9500	12000
		Heating 2)	kW	-	-	-	-
			Btu/h	5800	8500	10500	13500
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	20	24	30	37
		Heating 2)	W	20	24	30	37
	Current Input (Nominal)	Cooling 1)	A	0.13	0.16	0.2	0.25
		Heating 2)	A	0.13	0.16	0.2	0.25
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Type	-	BLDC	BLDC	BLDC	BLDC
		Output x n	W	27 x 1	27 x 1	27 x 1	27 x 1
	Air Flow Rate	H/M/L	CMM	4.9/4.5/4.1	5.7/5.0/4.5	8.5/7.7/6.9	10.3/9.1/8.3
			CFM	173.0/158.9/144.8	201.3/176.6/158.9	300.2/271.9/243.7	363.8/321.4/293.1
	External Pressure	Min/Std /Max	Pa	-	-	-	-
		-	WG	-	-	-	-
Sound	Sound Pressure	High/Mid/Low/Windfree	dBA	31/30/27/26	34/32/30/27	34/33/32/26	40/36/34/26
	Sound Power	Cooling	dBA	50	51	52	56
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg (lbs)	9.0(19.8)	9.0(19.8)	9.5(20.9)	9.5(20.9)
	Shipping Weight		kg (lbs)	10.5(23.1)	10.5(23.1)	11.0(24.3)	11.0(24.3)
	Net Dimensions (W×H×D)		mm	820 x 299 x 215	820 x 299 x 215	820 x 299 x 215	820 x 299 x 215
			inch	32 5/16 x 11 3/4 x 8 7/16	32 5/16 x 11 3/4 x 8 7/16	32 5/16 x 11 3/4 x 8 7/16	32 5/16 x 11 3/4 x 8 7/16
	Shipping Dimensions (W×H×D)		mm	880 x 290 x 375	880 x 290 x 375	880 x 290 x 375	880 x 290 x 375
			inch	34 5/8 x 11 7/16 x 14 3/4	34 5/8 x 11 7/16 x 14 3/4	34 5/8 x 11 7/16 x 14 3/4	34 5/8 x 11 7/16 x 14 3/4
Panel Size	Panel model		-	-	-	-	-
	Panel Net Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Shipping Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
Functions	Auto restart		-	O	O	O	O
	Auto swing		-	O	O	O	O
	Group/individual control		-	O	O	O	O
	External contact control		-	O	O	O	O
	Trouble shooting by 88SEG LED		-	O	O	O	O
Standard accessories	Installation manual		-	O	O	O	O
	Operation manual		-	O	O	O	O
	Pattern sheet for installation		-	X	X	X	X
	Flexible drain hose		-	O	O	O	O
	Flilter/Safety grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Drain pump	Drain pump	- / Model Name	-	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-	-	-
Optional accessories	Wireless remote controller		-	AR-EH03U	AR-EH03U	AR-EH03U	AR-EH03U
	wired remote controller		-	MWR-WE13U	MWR-WE13U	MWR-WE13U	MWR-WE13U
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-	-
		Receiver wire	-	-	-	-	-
	EEV kits		-	-	-	-	-

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Model				AM015TNVDCH/AA	AM018TNVDCH/AA	AM024TNVDCH/AA	AM028TNVDCH/AA
Power Supply			ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR	HP/HR	HP/HR
Performance	Capacity (Nominal)	Cooling 2)	kW	-	-	-	-
			Btu/h	15000	18000	23200	28000
		Heating 2)	kW	-	-	-	-
			Btu/h	17000	20000	23800	29000
		Condensate (with high fan speed)	Liter/h	-	-	-	-
Power	Power Input (Nominal)	Cooling 1)	W	40	52	60	65
		Heating 2)	W	40	52	60	65
	Current Input (Nominal)	Cooling 1)	A	0.27	0.35	0.4	0.43
		Heating 2)	A	0.27	0.35	0.4	0.43
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Motor	Type	-	BLDC	BLDC	BLDC	BLDC
		Output x n	W	27 x 1	27 x 1	27 x 1	27 x 1
	Air Flow Rate	H/M/L	CMM	12.5/11.4/10.5	15.7/13.8/12.0	16.8/15.0/13.2	17.5/15.6/13.8
			CFM	441.5/402.6/370.8	554.5/487.4/423.8	593.3/529.7/466.2	618.0/550.9/487.4
	External Pressure	Min/Std /Max	Pa	-	-	-	-
		-	WG	-	-	-	-
Sound	Sound Pressure	High/Mid/Low/Windfree	dBA	37/34/33/29	40/37/34/29	43/40/37/29	46/45/43/30
	Sound Power	Cooling	dBA	55	58	62	64
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Temperature Control			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	6.35 (1/4)	6.35 (1/4)	9.52 (3/8)	9.52 (3/8)
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	12.7 (1/2)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)
	Drain Pipe		ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Dimensions	Net Weight		kg (lbs)	12.0(26.5)	12.0(26.5)	12.0(26.5)	13.0(28.7)
	Shipping Weight		kg (lbs)	14.0(30.9)	14.0(30.9)	14.0(30.9)	15.0(33.1)
	Net Dimensions (W×H×D)		mm	1,055 x 299 x 215	1,055 x 299 x 215	1,055 x 299 x 215	1,055 x 299 x 215
			inch	41 9/16 x 11 3/4 x 8 7/16	41 9/16 x 11 3/4 x 8 7/16	41 9/16 x 11 3/4 x 8 7/16	41 9/16 x 11 3/4 x 8 7/16
	Shipping Dimensions (W×H×D)		mm	1,115 x 290 x 375	1,115 x 290 x 375	1,115 x 290 x 375	1,115 x 290 x 375
			inch	43 7/8 x 11 7/16 x 14 3/4	43 7/8 x 11 7/16 x 14 3/4	43 7/8 x 11 7/16 x 14 3/4	43 7/8 x 11 7/16 x 14 3/4
Panel Size	Panel model		-	-	-	-	-
	Panel Net Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Shipping Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Net Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
	Shipping Dimensions (W×H×D)		mm	-	-	-	-
			inch	-	-	-	-
Functions	Auto restart		-	O	O	O	O
	Auto swing		-	O	O	O	O
	Group/individual control		-	O	O	O	O
	External contact control		-	O	O	O	O
	Trouble shooting by 88SEG LED		-	O	O	O	O
Standard accessories	Installation manual		-	O	O	O	O
	Operation manual		-	O	O	O	O
	Pattern sheet for installation		-	X	X	X	X
	Flexible drain hose		-	O	O	O	O
	Flilter/Safety grille		-	Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Drain pump	Drain pump	- / Model Name	-	-	-	-
		Max. lifting Height / Displacement	mm / liter/h	-	-	-	-
Optional accessories	Wireless remote controller		-	AR-EH03U	AR-EH03U	AR-EH03U	AR-EH03U
	wired remote controller		-	MWR-WE13U	MWR-WE13U	MWR-WE13U	MWR-WE13U
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits	Receiver	-	-	-	-	-
		Receiver wire	-	-	-	-	-
	EEV kits		-	-	-	-	-

*1) Mode - HP : Heat Pump, HR : Heat Recovery
*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
*5) Specifications may be subject to change without prior notice for product improvement.

Indoor Unit(cont.)

■ Duct S

Model				Duct S				
				AM006ANMDCH/AA	AM007ANMDCH/AA	AM009ANMDCH/AA	AM012ANMDCH/AA	AM015ANMDCH/AA
Power Supply			Φ, #, V, Hz	1,2,208~230V,60	1,2,208~230V,60	1,2,208~230V,60	1,2,208~230V,60	1,2,208~230V,60
Mode			-	HP / HR	HP / HR	HP / HR	HP / HR	HP / HR
Performance	Capacity (Nominal)	Cooling (ISO/SASO)	kW	1.9	2.20	2.78	3.52	4.40
			Btu/h	6,300	7,500	9,500	12,000	15,000
		Heating	kW	2.1	2.49	3.08	3.96	4.98
			Btu/h	7,100	8,500	10,500	13,500	17,000
Power	Power Input (Nominal)	Cooling	W	38.0	38.0	39.0	39.0	43.0
		Heating		38.0	38.0	39.0	39.0	43.0
	Current Input (Nominal)	Cooling	A	0.3	0.3	0.3	0.3	0.4
		Heating		0.3	0.3	0.3	0.3	0.4
		MCA		0.91	0.91	0.91	0.91	1.29
		MOP		15.0	15.0	15.0	15.0	15.0
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
		Output x n	W	153 x 1	153 x 1	153 x 1	153 x 1	153 x 1
	Air Flow Rate	H/M/L (UL)	CMM	9/8/7	9/8/7	10/9/8	12/10/8.5	14/11/10
			l/s	-	-	-	-	-
	External Pressure	Min / Std / Max	mmAq	0/1/15	0/1/15	0/1/15	0/1/15	0/1/15
			Pa	0.00/9.81/147.10	0.00/9.81/147.10	0.00/9.81/147.10	0.00/9.81/147.10	0.00/9.81/147.10
		FLA	A	0.73	0.73	0.73	0.73	1.03
			HP	1/8	1/8	1/8	1/8	1/5
Piping Connections	Liquid Pipe		Φ,mm	6.35	6.35	6.35	6.35	6.35
			Φ, inch	1/4"	1/4"	1/4"	1/4"	1/4"
	Gas Pipe		Φ,mm	12.70	12.70	12.70	12.70	12.70
			Φ, inch	1/2"	1/2"	1/2"	1/2"	1/2"
	Drain Pipe		Φ,mm	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")
Field Wiring	Power Source Wire		mm2	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission Cable		mm2	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	High / Mid / Low	dB(A)	27/25/23	27/25/23	28/26/24	29/27/25	31/28/25
	Sound Power	Cooling		50	50	51	51	53
Dimensions	Net Weight		kg	27.5	27.5	27.5	27.5	27.5
	Shipping Weight		kg	31.0	31.0	31.0	31.0	31.0
	Net Dimensions (W×H×D)		mm	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700
	Shipping Dimensions (W×H×D)		mm	1064 x 320 x 784	1064 x 320 x 784	1064 x 320 x 784	1064 x 320 x 784	1064 x 320 x 784
Funtion	Auto restart		-	o	o	o	o	o
	Auto swing		-	x	x	x	x	x
	Group/Individual control		-	o	o	o	o	o
	Exteral contact control		-	o	o	o	o	o
	Trouble shooting by LED		-	x	x	x	x	x
Standard accessories	Installation manual		-	o	o	o	o	o
	Operation manual		-	o	o	o	o	o
	Pattern sheet for installation		-	x	x	x	x	x
	Flexible drain hose		-	o	o	o	o	o
	Flilter/Safety grille		-	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter
	Drain pump	Drain pump	-	Built-In	Built-In	Built-In	Built-In	Built-In
		Max. lifting Height / Displacement	mm / liter/ h	750 / 24	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

Model				Duct S					
				AM018ANMDCH/AA	AM024ANHDCH/AA	AM027ANHDCH/AA	AM030ANHDCH/AA	AM036ANHDCH/AA	AM048ANHDCH/AA
Power Supply			Φ,#,V,Hz	1,2,208~230V,60	1,2,208~230V,60	1,2,208~230V,60	1,2,208~230V,60	1,2,208~230V,60	1,2,208~230V,60
Mode			-	HP / HR	HP / HR	HP / HR	HP / HR	HP / HR	HP / HR
Performance	Capacity (Nominal)	Cooling (ISO/ SASO)	kW	5.28	7.03	7.91	8.79	10.55	14.07
			Btu/h	18,000	24,000	27,000	30,000	36,000	48,000
		Heating	kW	5.86	7.91	8.79	9.96	11.72	15.83
			Btu/h	20,000	27,000	30,000	34,000	40,000	54,000
Power	Power Input (Nominal)	Cooling	W	50.0	90.0	110.0	140.0	130.0	220.0
		Heating		50.0	90.0	110.0	140.0	130.0	220.0
	Current Input (Nominal)	Cooling	A	0.5	0.7	0.8	1.2	1.2	1.5
		Heating		0.5	0.7	0.8	1.2	1.2	1.5
		MCA		2.14	2.41	2.69	2.95	3.11	3.40
		MOP		15.0	15.0	15.0	15.0	15.0	15.0
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
		Output x n	W	153 x 1	153 x 1	153 x 1	153 x 1	350 x 1	350 x 1
	Air Flow Rate	H/M/L (UL)	CMM	19/16/13	23/19/14	26/21/15	28/23/16.5	31/26/20	43/36/25
			l/s	-	-	-	-	-	-
	External Pressure	Min / Std / Max	mmAq Pa	0/1/20	3/5.2/20.	3/5.2/20	3/5.2/20.	3/5.2/20.	3/5.2/20.
				0.00/9.81/196.13	29.42/50.99/196.13	29.42/50.99/196.13	29.42/50.99/196.13	29.42/50.99/196.13	29.42/50.99/196.13
		FLA	A	1.71	1.93	2.15	2.36	2.49	2.72
			HP	1/4	2/7	1/3	1/3	2/5	5/9
Piping Connections	Liquid Pipe		Φ,mm	6.35	9.52	9.52	9.52	9.52	9.52
			Φ, inch	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"
	Gas Pipe		Φ,mm	12.70	15.88	15.88	15.88	15.88	15.88
			Φ, inch	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"
	Drain Pipe		Φ,mm	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")	Nominal 3/4" (OD 1.05")
Field Wiring	Power Source Wire		mm2	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission Cable		mm2	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	High / Mid / Low	dB(A)	33/29/26	36/32/28	37/33/29	38/34/30	37/34/30	42/38/34
	Sound Power	Cooling		59	62	63	64	62	66
Dimensions	Net Weight		kg	35.0	35.0	35.0	35.0	44.5	44.5
	Shipping Weight		kg	39.5	39.5	39.5	39.5	50.5	50.5
	Net Dimensions (W×H×D)		mm	1200 x 250 x 700	1200 x 250 x 700	1200 x 250 x 700	1200 x 250 x 700	1300 x 300 x 700	1300 x 300 x 700
	Shipping Dimensions (W×H×D)		mm	1429 x 320 x 779	1429 x 320 x 779	1429 x 320 x 779	1429 x 320 x 779	1529 x 370 x 779	1529 x 370 x 779
Funtion	Auto restart		-	o	o	o	o	o	o
	Auto swing		-	x	x	x	x	x	x
	Group/Individual control		-	o	o	o	o	o	o
	Exteral contact control		-	o	o	o	o	o	o
	Trouble shooting by LED		-	x	x	x	x	x	x
Standard accessories	Installation manual		-	o	o	o	o	o	o
	Operation manual		-	o	o	o	o	o	o
	Pattern sheet for installation		-	x	x	x	x	x	x
	Flexible drain hose		-	o	o	o	o	o	o
	Flilter/Safety grille		-	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter	Long life filter
	Drain pump	Drain pump	-	Built-In	Built-In	Built-In	Built-In	Built-In	Built-In
		Max. lifting Height / Displacement	mm/ liter/h	750 / 24	750 / 24	750 / 24	750 / 24	750 / 24	750 / 24
Optional accessories	Wireless remote controller		-	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U	MR-DH00U
	wired remote controller		-	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N	MWR-WE10N
	External contact interface module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14
	Duct Receiver kits		-	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N	MRK-A10N
	EEV kits		-	-	-	-	-	-	-

*1) Mode
- HP : Heat Pump, HR : Heat Recovery

*2) Nominal cooling capacities are based on;
- Indoor temperature : 27˚C DB, 19˚C WB
- Outdoor temperature : 35˚C DB, 24˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*3) Nominal heating capacities are based on;
- Indoor temperature : 20˚C DB, 15˚C WB
- Outdoor temperature : 7˚C DB, 6˚C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

*5) Specifications may be subject to change without prior notice for product improvement.

2-2 Accessory and Option Specifications

2-2-1 Accessories

Classification		Product	Model	Image	Application model
Intergrated management system	Controller	DMS 2	MIM-B14		DVM S
		S-NET 3	MST-P3P		DVM S
	Interface module	PIM	MIM-B16N		DVM S ('13.07~)
Centralized control system	Controller	Centralized controller	MCM-A202DN		DVM S
		Operation mode selection switch	MCM-C200		DVM S
		Touch screen controller	MCM-A300N		DVM S
Individual control system Controller	Controller	Wireless remote controller	MR-DH00U		Cassette, Duct (Receiver needed) Wall-mounted, Ceiling (No receiver needed)
			MR-DH00		Cassette, Duct (Receiver needed)
			MR-EH00		Cassette, Duct (Receiver needed)
			MR-KH00		360 cassette
			AR-EH03U		All model
		Wired remote controller (Multi function)	MWR-WE10N		Cassette, Wall-mounted, Ceiling, Duct
			MWR-WE13U		All model
		Wireless signal receiver	MRK-A10N		Duct (for wireless remote controller)
		Remote sensor	MRW-TA		Cassette, Wall-mounted, Ceiling, Duct
Building management system		Lonworks interface module	MIM-B18N		DVM S
		DMS-Bnet (BACnet)	MIM-B17N		DVM S
Guest room management system		External contact interface module	MIM-B14		DVM S
Converter		S-NET Pro	MIM-C02N		DVM S
S-checker			MIM-C10		DVM S
Motion detector sensor			MCR-SMA		Only Mini 4Way

※ DVM Series : DVM mini, DVM PLUS III, DVM PLUS III HR, DVM PLUS IV, DVM PLUS IV HR

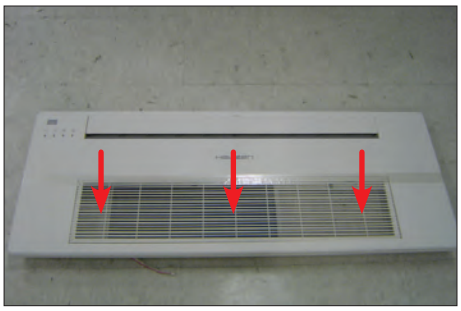
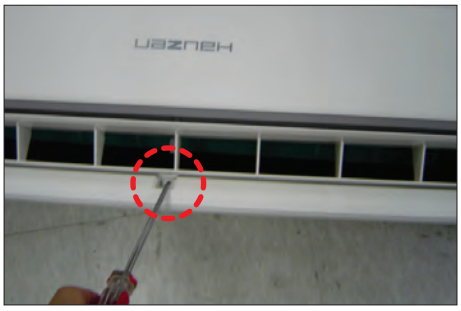
Classification	Feature	Model	Description	Relevant unit	Remark
Y-joint		MXJ-YA4422M	over 135.2kW(461 MBH)	HP/HR	Requisite
		MXJ-YA4119M	98.4kW~135.2kW(336~461 MBH)		
		MXJ-YA3419M	70.3kW~98.4kW(240~336 MBH)		
		MXJ-YA2815M	45.0kW~70.3kW(154~240 MBH)		
		MXJ-YA2812M	40.0kW~45.0kW(136~154 MBH)		
		MXJ-YA2512M	15.0kW~40.0kW(51~136 MBH)		
		MXJ-YA1509M	below 15.0kW(51 MBH)		
Y-joint (High pressure gas for HR)		MXJ-YA1500M	22.4kW (76 MBH) and below	HR	Requisite
		MXJ-YA2500M	22.4kW ~ 70.3 kW(76~240 MBH)		
		MXJ-YA3100M	70.3kW ~ 135.2 kW(240~461 MBH)		
		MXJ-YA3800M	More than 135.2 kW(461 MBH)		
Outdoor T Joint (Outdoor Connection)		MXJ-TA3819M	456MBH and below	HP/HR	Requisite
		MXJ-TA3100M	456MBH and below(High Pressure Gas for HR)	HR	Requisite
Header Joint		MXJ-HA3819M	8 indoor units - More than 70.3kW(240 MBH)	HP/HR	Requisite
		MXJ-HA3115M	8 indoor units - 70.3kW(240 MBH) and below		
		MXJ-HA2512M	4 indoor units - Less than 45.0kW(154 MBH)		
EEV kit		MXD-E24K132A	2 indoor units (7-15.5, 17-31K)	HP Wall-mounted Ceiling	Option
		MXD-E24K200A	2 indoor units (7-15.5K)		
		MXD-E32K200A	2 indoor units (7-31K)		
		MXD-E24K232A	3 indoor units (7-15.5, 17-31K)	HP Wall-mounted Ceiling	Option
		MXD-E24K300A	3 indoor units (7-15.5K)		
		MXD-E32K224A	3 indoor units (7-15.5, 17-31K)		
		MXD-E32K300A	3 indoor units (17-31K)		
		MEV-E24SA	1 indoor unit (Below 12K)	Wall-mounted Ceiling	Option
		MEV-E32SA	1 indoor unit (18K Over)		
Drain Pump		MDP-E075SEE3D	SLIM DUCT	Slim Duct	Option
		MDP-M075SGU3D	MSP DUCT(18/24MBH)	MSP Duct	
		MDP-M075SGU1D	MSP DUCT(30/36MBH)		
		MDP-M075SGU2D	MSP DUCT(48MBH)/HSP(36/48MHB)		
		MDP-N047SNC1D	HSP DUCT(76.8/96MBH)	HSP Duct	
MCU		MCU-S6NEE1N	Below 6 indoor units	HR	Requisite
		MCU-S4NEE1N	Below 4 indoor units		
		MCU-S4NEE2N	Below 4 indoor units - HSP DUCT(more than 76,800Btu/h)		
AHU kit		MXD-K025AN	24~30MBH(7kW~8.75kW)	-	Option
		MXD-K050AN	48~60MBH(14kW~17.5kW)		
		MXD-K075AN	72~90MBH(21kW~26.25kW)		
		MXD-K100AN	96~112MBH(28kW~35kW)		
Front panel		PC1NUSMAN	SLIM 1-WAY(Classic)	SLIM 1WAY	Requisite
		PC1NUPMAN	SLIM 1-WAY(Zet sliding)	SLIM 1WAY	
		PC4SUSMAN	MINI 4-WAY(Classic)	MINI 4WAY	
		PC4NUSKAN	G 4-WAY(Classic)	G 4WAY	

3. Disassembly and Reassembly

■ Necessary Tools

Item	Remark
+Screw Driver	
Monkey Spanner	
–Screw Driver	
Nipper	
Electric Motion Driver	
L-Wrench	

■ Slim 1 way cassette type

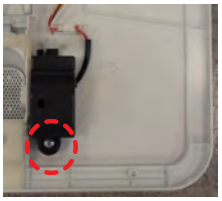
No	Parts	Procedure	Remark
1	Panel & Filter (A type)	1) Press the Push Button on the Grill and open it	
		2) Separate 1 clip from the Panel and tilt the Grill to 45° and separate the Grille from the Panel.	
		3) Separate the Filter from the Panel.	
		4) Separate 3 cover screws from it.	
		5) Unscrew 6 fixed screws and separate them from the Indoor Unit. (Use +Screw Driver)	

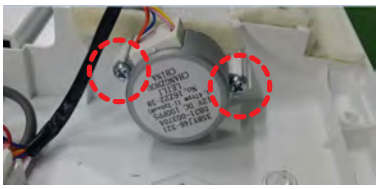
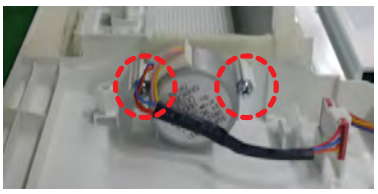
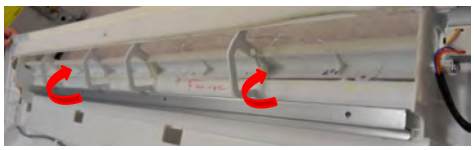
No	Parts	Procedure	Remark
		6) Press the left and right Hooks to separate the Panel from the Indoor Unit.	

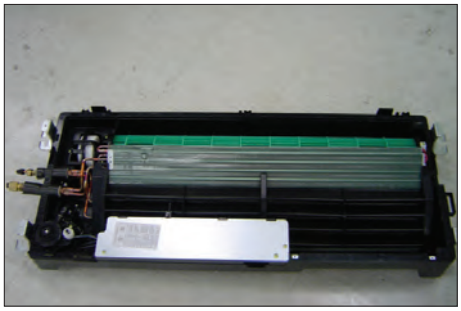
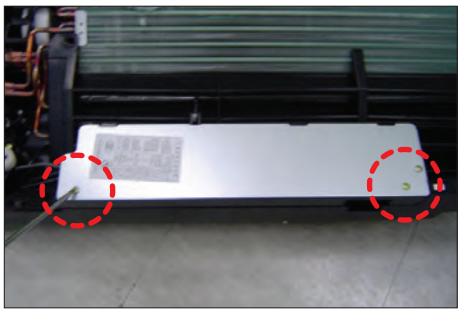
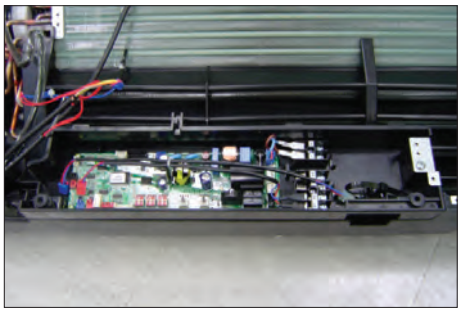
■ Wind-free 1way cassette type

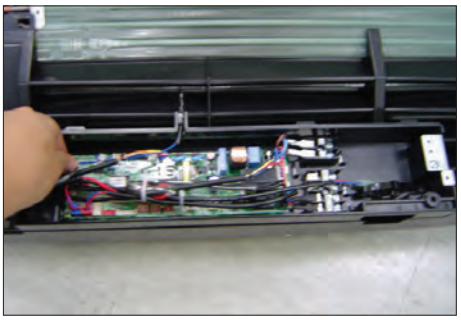
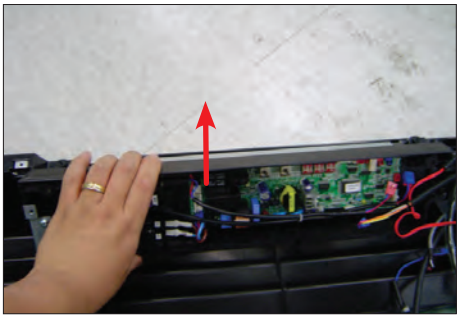
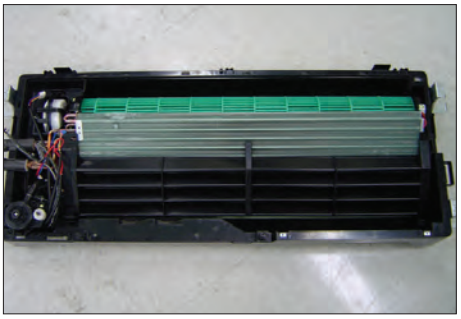
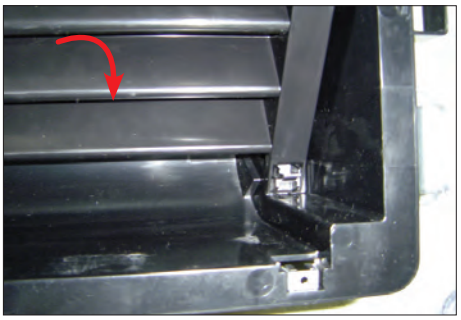
Wind-free PANEL

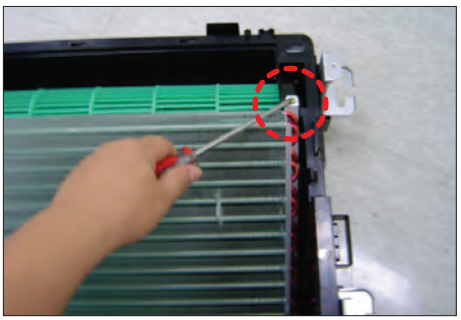
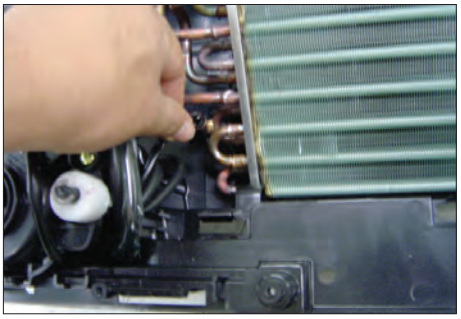
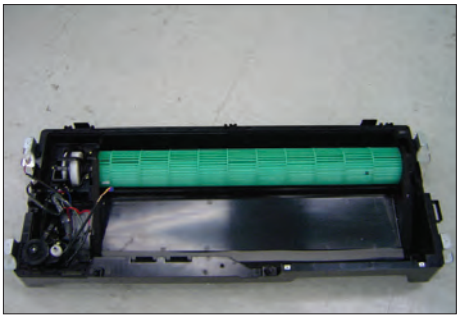
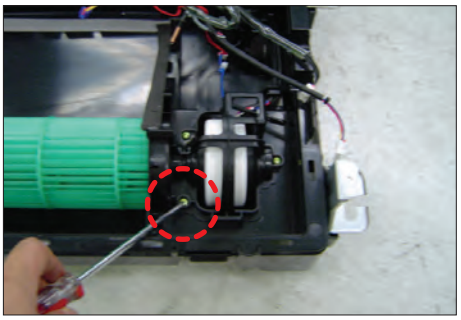
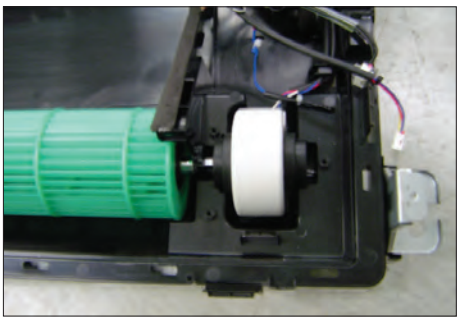
No	Parts	Procedure	Remark
1	PANEL And FILTER WIND FREE TYPE (PC1BWFMAN)	1) Open the GRILLE as shown in the figure. - 4point	 
		2) Remove the FILTER from the PANEL.	
		3) Remove the 3 COVER SCREW as shown in the figure.	
		4) Remove the 7 screws fixed in PANEL and then remove the PANEL. (Use +Screw Driver)	
		5) Press the left and right PANEL HOOK and then separate the PANEL from the indoor unit.	 

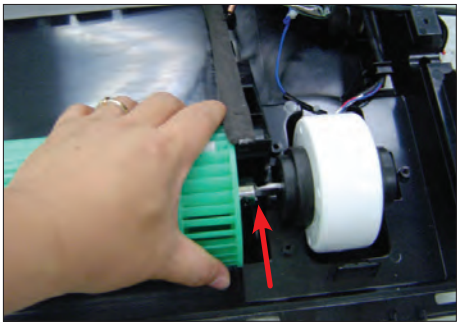
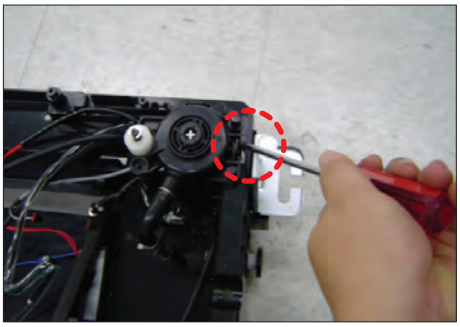
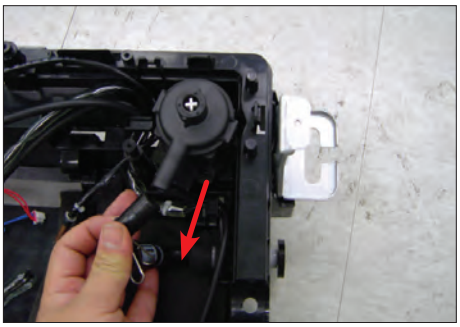
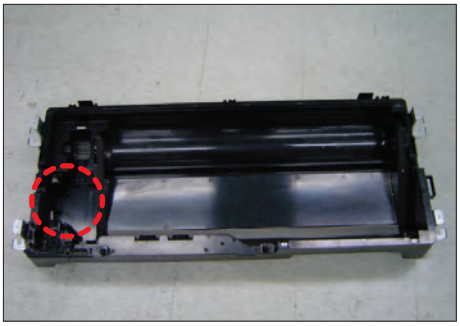
No	Parts	Procedure	Remark
	PANEL And FILTER (Continues)	6) Open the GRILLE and then separate the CLIP WIRE.	
		7) Remove the screws fixed in COVER DISPLAY, COVER MOTOR RIGHT and then remove the COVER DISPLAY, COVER MOTOR RIGHT . (Use +Screw Driver)	  
		8) Disconnect the connector. (Remote control receiver PBA and Display PBA)	

No	Parts	Procedure	Remark
	PANEL And FILTER (Continues)	9) Remove the 4 screws fixed in STEP MOTOR and then remove the MOTOR. (Use +Screw Driver)	 
		10) Remove the 4 HINGE and then separate the BLADE H.	
		11) Separate the SENSOR HUMIDITY.	
		12) Remove the 5 screws fixed in GUIDE AIR and then remove the GUIDE AIR. (Use +Screw Driver)	 
		13) Separate the PLATE.	

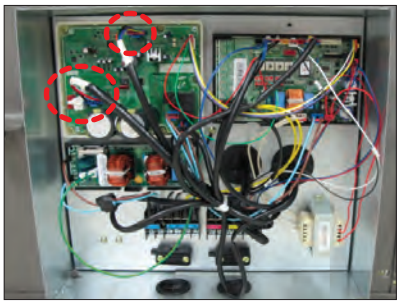
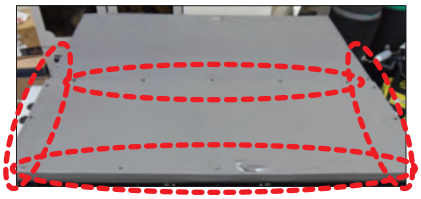
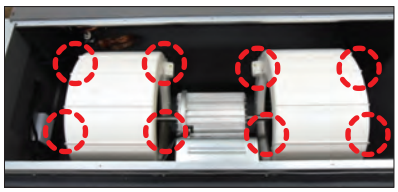
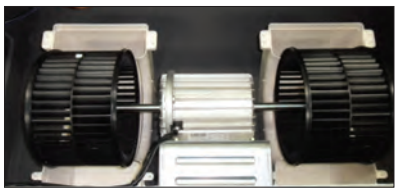
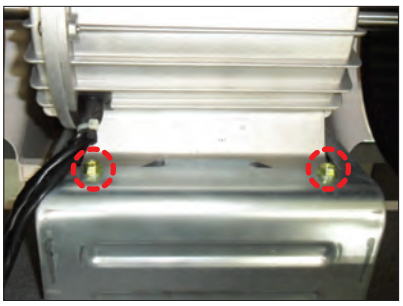
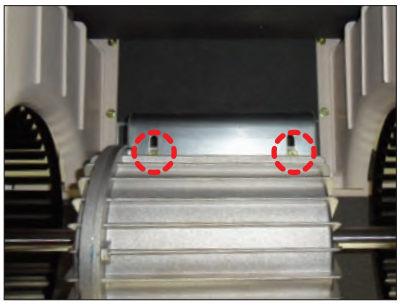
No	Parts	Procedure	Remark
2	Drain Pan	1) Separate 5 fixing screws from the Drain Pan. (Use +Screw Driver) 2) Pull the Drain Pan to separate them from the Indoor Unit. ⚠ **When disassembling the Pan, be careful not to touch the heat exchanger board with a bare hand.**	 
3	Control In	1) Undo 3 fixing screws in the Control In appliance part to separate the Cover. (Use +Screw Driver)	 

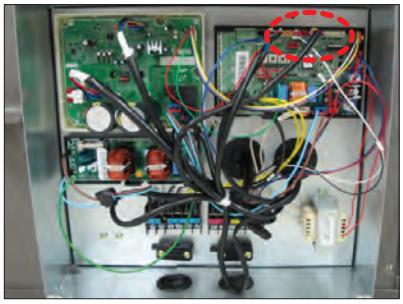
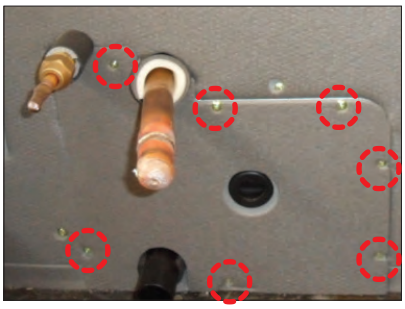
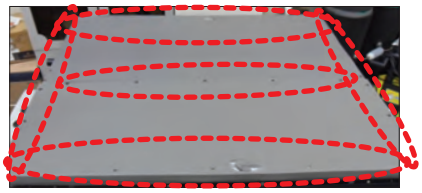
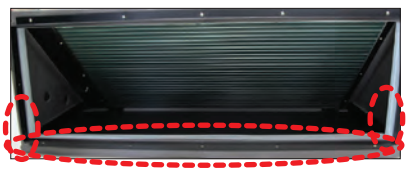
No	Parts	Procedure	Remark
		2) Separate 8 connecters on the PCB of the Indoor Unit.	
		3) Separate the Control In from the Indoor Unit.	 
4	Drain Sub	1) Push the hook on the Drain Sub to separate it.	 

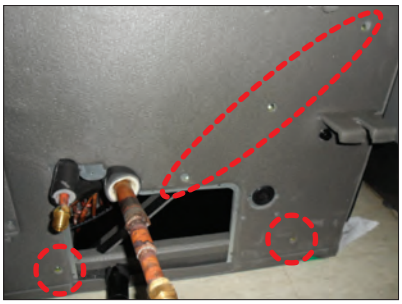
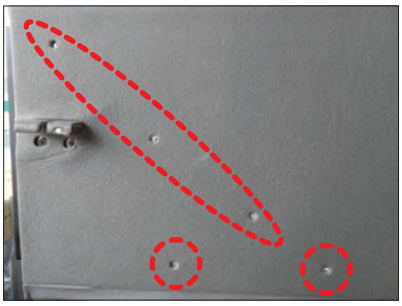
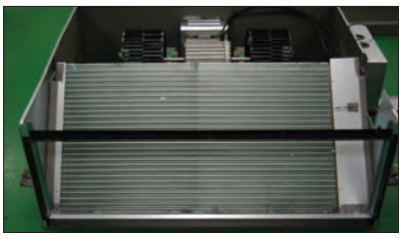
No	Parts	Procedure	Remark
5	Heat Exchanger	1) Undo fixing screw in the Heat Exchanger. (Use +Screw Driver)	
		2) Separate an Indoor Sensor from the Heat Exchanger.	
		3) Separate the Heat Exchanger from the Indoor Unit.	
6	Cross Fan	1) Undo 3 fixing screws on the Cover Fan Motor. (Use +Screw Driver)	
		2) Separate the Cover Fan Motor from the Indoor Unit.	

No	Parts	Procedure	Remark
		3) Separate the Cross Fan from the Indoor Unit.	
7	Drain Pump	1) Separate fixing screw in the Cover Drain Pump. (Use +Screw Driver)	
		2) Separate the Drain Hose from the Drain Pump.	
		3) Separate the Drain Pump from the Indoor Unit.	

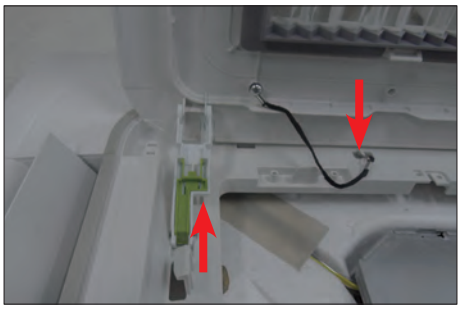
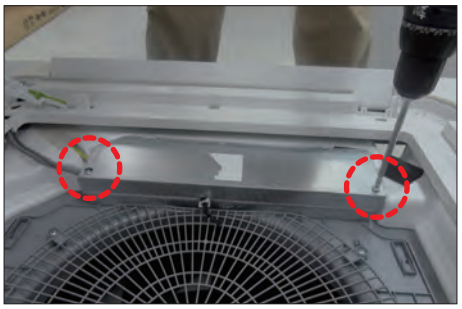
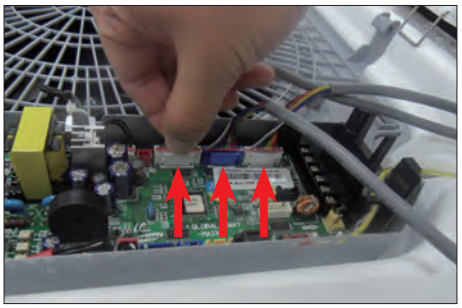
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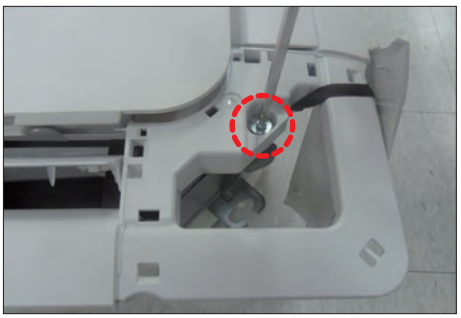
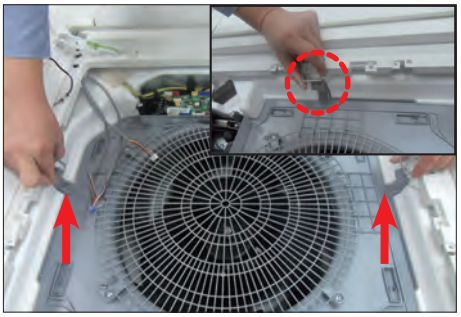
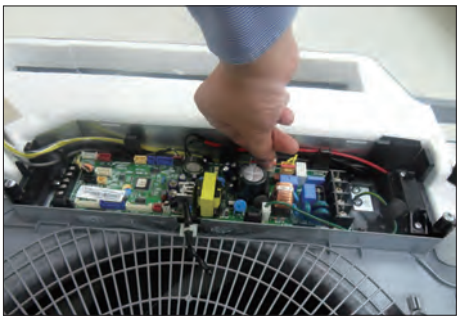
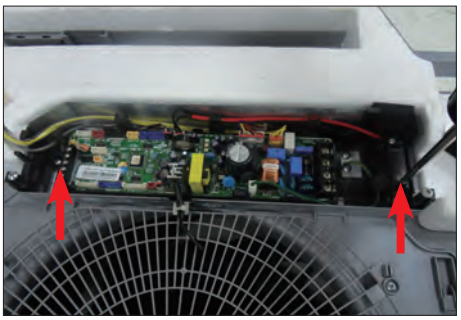
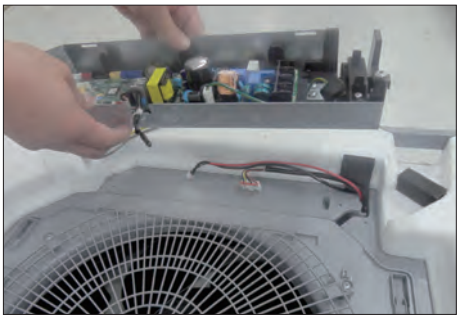
No	Parts	Procedure	Remark
1	MOTOR & BLOWER	1) Detach the motor connectors from the PCB.	
		2) Unscew 16 screws and detach Cabinet-Base Blower. (Use+Screw Driver)	
		3) Unscrew 8 screws and detach Case-Blower. (Use +Screw Driver)	 
		4) Unscrew 4 bolts and separate Motor & blower from Bracket-Motor. (Use +Screw Driver)	 

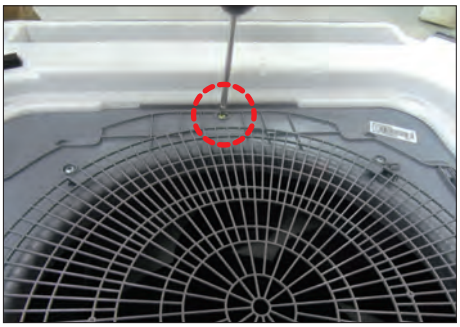
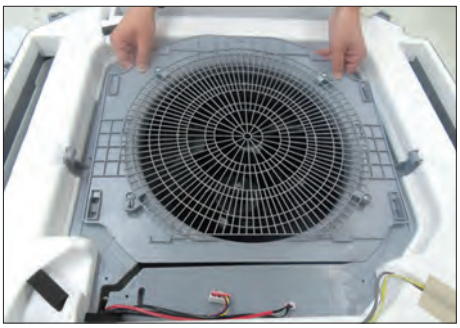
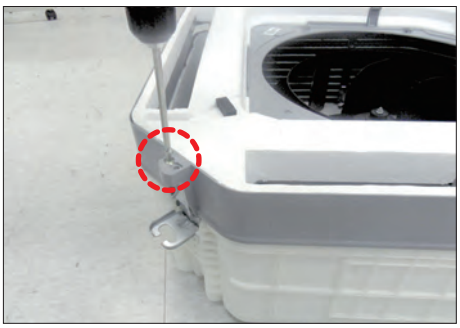
No	Parts	Procedure	Remark
		5) Unscrew bolt and Separate Blower from the motor. (Use +Screw Driver)	
2	EVAPORATOR & DRAIN-PAN	1) Detach EEV and Sensor connectors from the PCB. (Use +Screw Driver)	
		2) Unscrew 8 screws and Detach Cover-Pipe. (Use +Screw Driver)	
		3) Unscrew 31 screws and detach Cabinet-Base Blower andCabinet-Base Drain. (Use +Screw Driver)	 

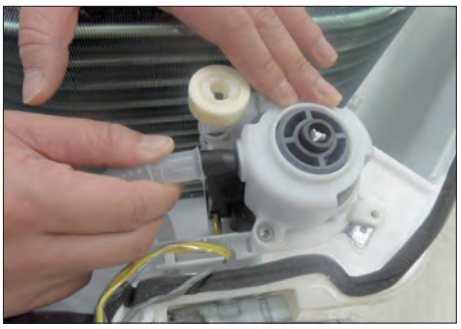
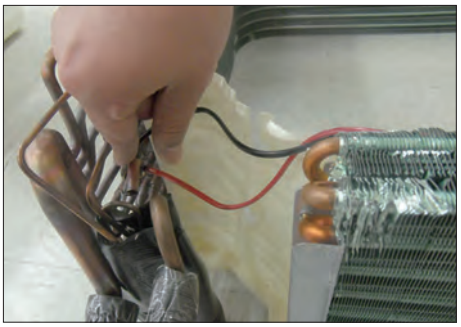
No	Parts	Procedure	Remark
		4) Unscrew 10 screws and detach Drain-Pan from the indoor unit. (Use +Screw Driver)	 
		5) Separate Evaporator from the indoor unit.	

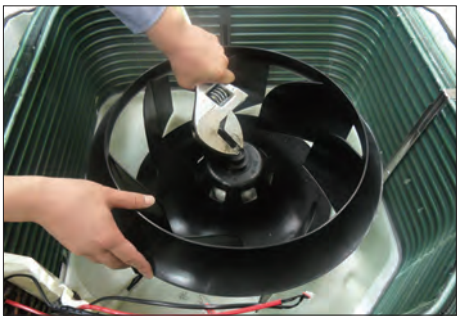
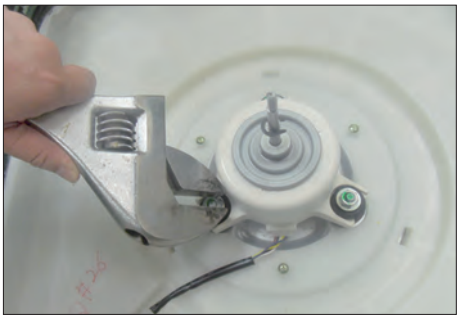
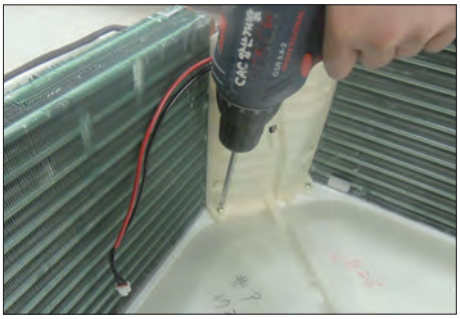
■ Global 4way Cassette type

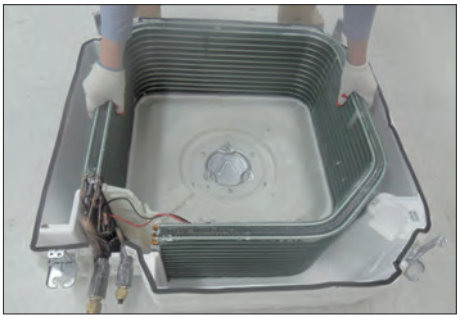
No	Parts	Procedure	Remark
1	Panel	1) Push the handles on both sides of the Samsung logo towards the product's interior to open the Grille.	
		2) Push up the green knob in the Open direction, and detach the white link from the panel. Detach the safety clip.	
		3) Remove the 2 fixed screws to remove the Control-Box Cover. (Use +Screw Driver)	
		4) Remove the Remocon-Receiver and Blade Connector Wire from the PBA. (3EA)	
		5) Push the 4 panel corners and cover downwards to remove it.	

No	Parts	Procedure	Remark
		6) Disassemble the bolts that are assembled with the indoor unit at the 4 panel corners.	
		7) Press the Steel Hangers at both sides of the panel inwards, and rotate them 90 degrees to remove it from the indoor unit's Hock. Remove the panel from the indoor unit.	
2	Control-Box	1) Disconnect the Connector Wire that is connected to the indoor unit's PBA from the PBA.	
		2) Unscrew the 2 fixed screws on both sides of the Control Box, and disassemble the Control Box from the indoor unit. (Use +Screw Driver)	 

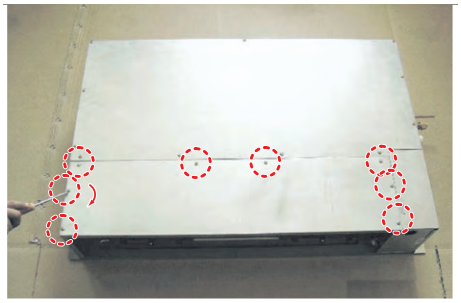
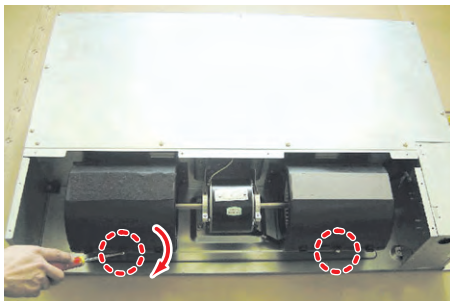
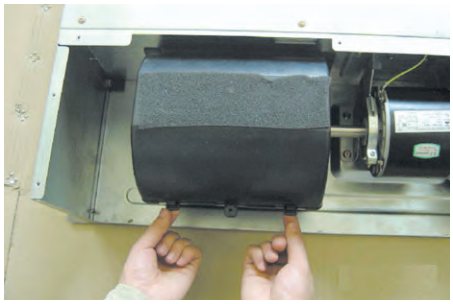
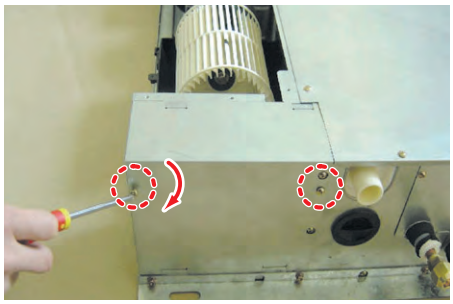
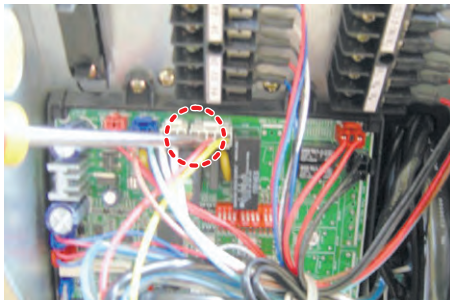
No	Parts	Procedure	Remark
3	Bell-Mouth	1) Unscrew the screw fixed on the Bell-Mouth. (Use +Screw Driver)	
		2) Push the Bell-Mouth in the direction opposite to where it's installed on the Control-Box to remove it.	
4	Drain Pan	1) Unscrew the screws on the 4 corners of the indoor unit. (Use +Screw Driver)	
		2) Remove the Drain Pan from the indoor unit.	

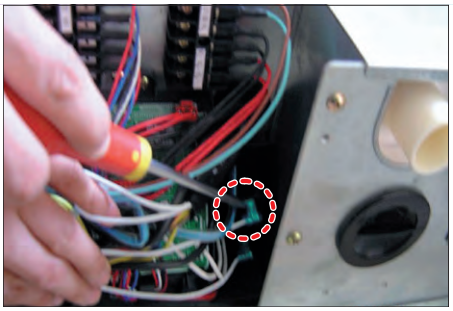
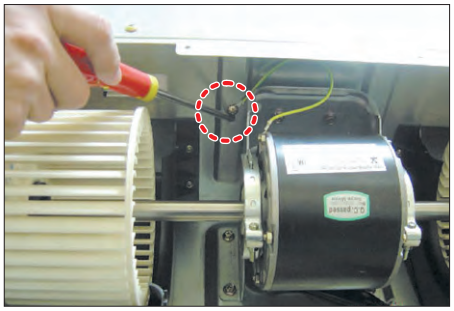
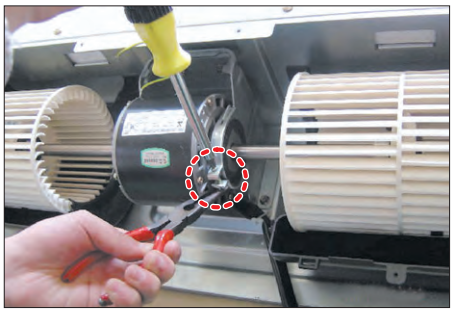
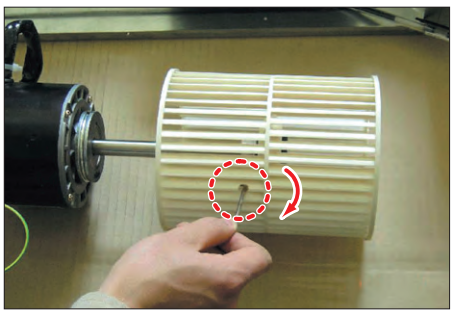
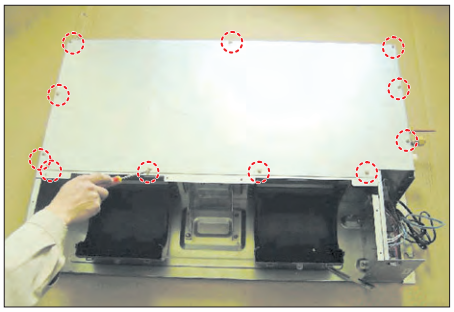
No	Parts	Procedure	Remark
5	Drain Pump & Hose	1) Remove the 2 fixed screws and disconnect the white drainage hose from the Drain Pump. (Use +Screw Driver)	 
		2) Remove the 2 screws and take the Drain-Hose out from the indoor unit to disassemble the transparent Drain-Hose fixed on the side of the indoor unit. (Use +Screw Driver)	
6	Evap. Temperature Sensor	1) Use your hand to remove the temperature sensor attached to the Evap Pipe along with the fixing clip.	

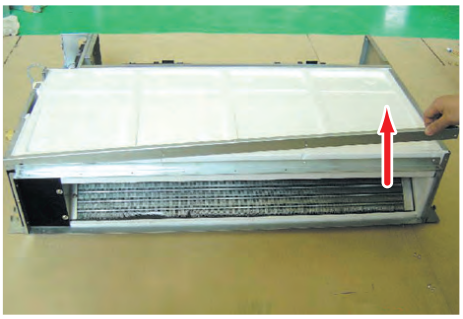
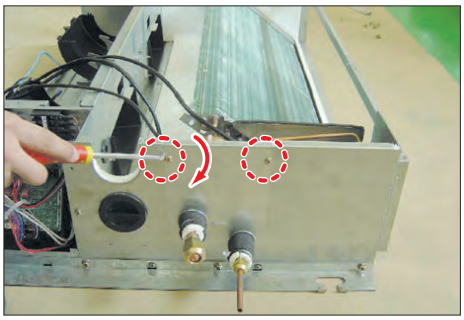
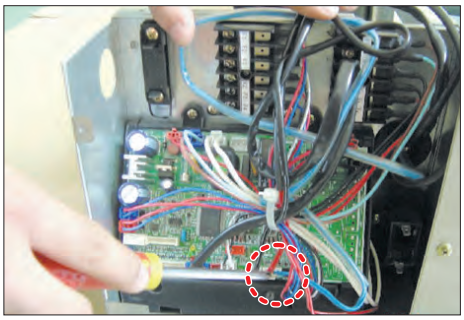
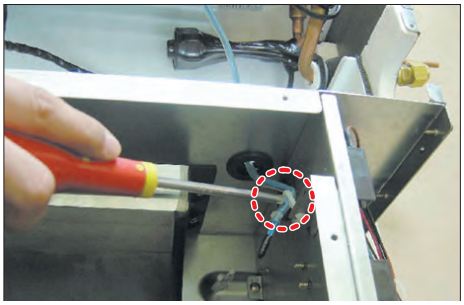
No	Parts	Procedure	Remark
7	Fan & Motor	1) Turn the hexangular nut attached to the top of the Fan counterclockwise to remove it. Take the Fan out of the Motor.	
		2) Turn the three hexangular nuts on the Motor counterclockwise to remove the nuts. Take the Motor Wires attached to these three locations out with your hands prior to removing the Motor.	 
8	Evaporator	1) Remove the screws of the 2 Steel Holder Evaps that are used to fix the Heat Exchanger, and then remove it. (Use +Screw Driver)	
		2) Remove the 2 fixing screws of the Partition Evap at the Heat Exchanger's In/Out Pipe. (Use +Screw Driver)	

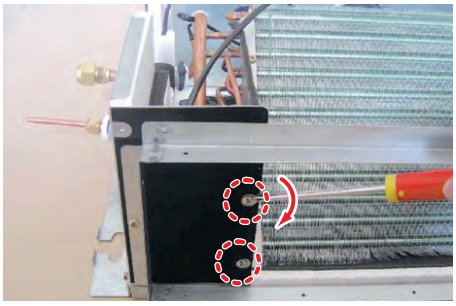
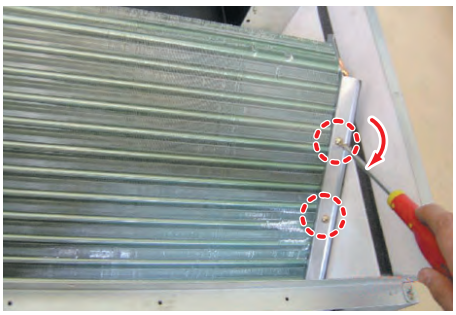
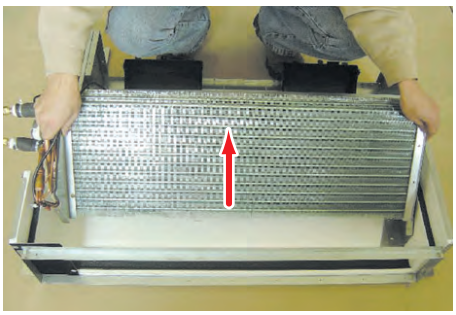
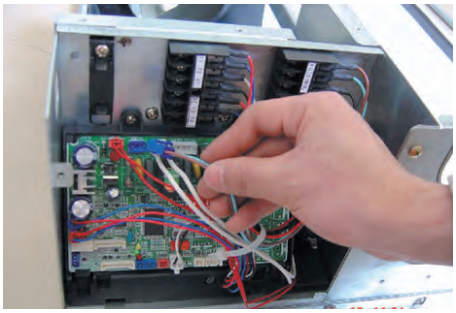
No	Parts	Procedure	Remark
		3) Remove the screw of the Cover Pipe that is used to fix the In/Out Pipe. Remove the In/Out Pipe. (Use +Screw Driver)	
		4) Remove the Heat Exchanger from the indoor unit's cabinet.	
			

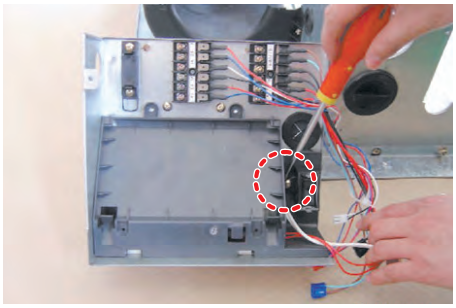
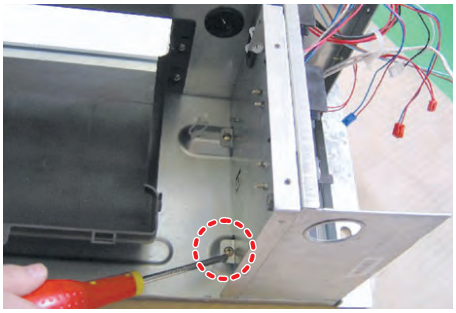
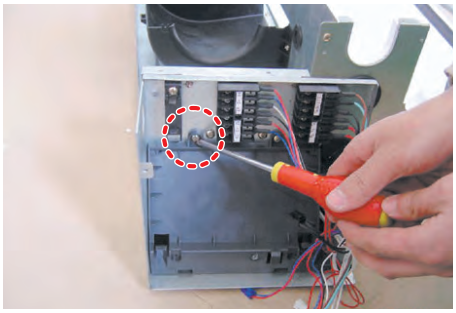
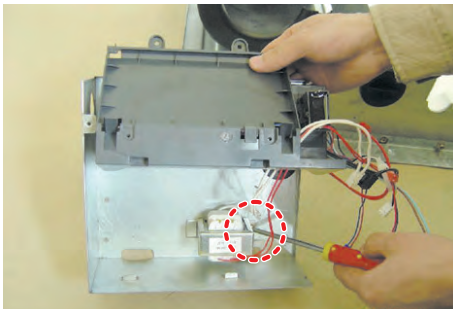
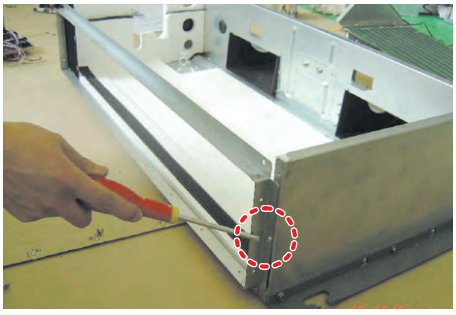
■ Duct type(Slim1,2)

No	Parts	Procedure	Remark
1	Motor & Blower	1) Disassemble the Cabinet-Top Motor. – Unscrew 8 screws	
		2) Disassemble 2 Cover Blower Uppers. – After unscrewing 2 screws	
		– Disassemble the Cover Blower Upper with pushing its hook.	
		3) Disassemble the Cover Control. – Unscrew 2 screws	
		4) Disassemble Motor Wires connected to the inside of PCB and connected to the Capacitor.	

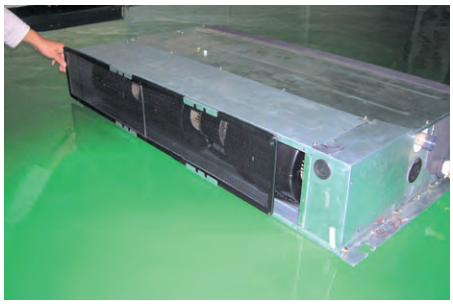
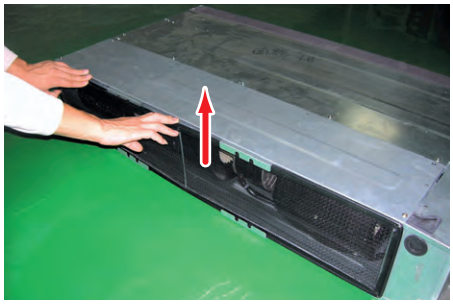
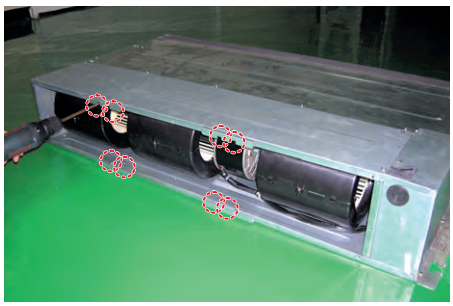
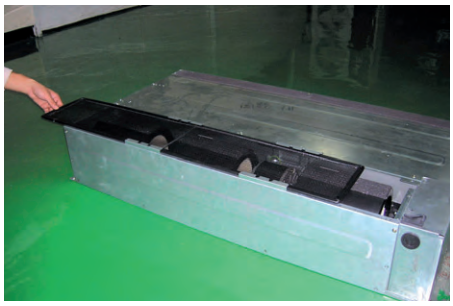
No	Parts	Procedure	Remark
			
		5) Disassemble the Motor earth wire connected to the Partition. – Unscrew a screw	
		6) Disassemble the band Motor for fixing the Motor. – Unscrew 2 screws	
		7) After disassembling the Motor and Blower for the set, disassemble the Blower by use of 3mm wrench.	
2	Ass'y Drain Pan	1) Disassemble the Cabinet-Top Evap. – Unscrew 11 screws	

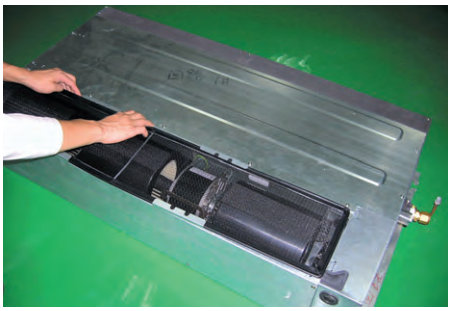
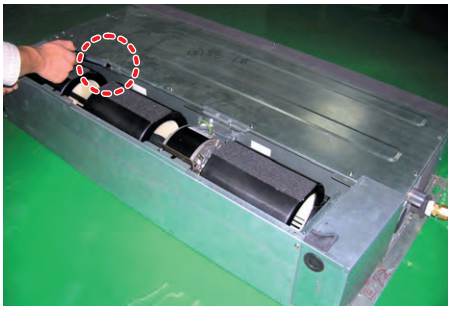
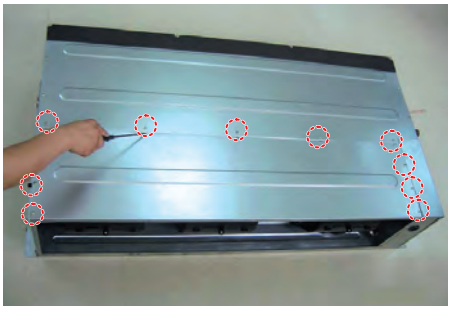
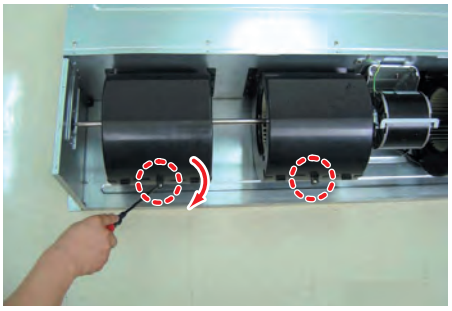
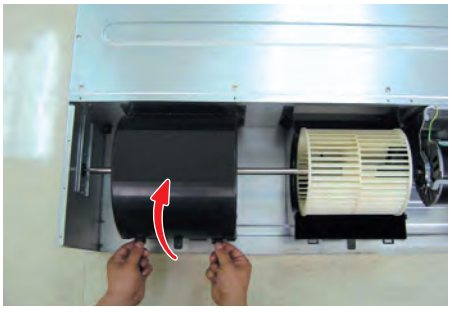
No	Parts	Procedure	Remark
		2) Disassemble the Bracket Outlet Sub that fixes the Drain Pan equipped on the front of the set. – Unscrew 6 screws	
		3) Disassemble the Drain Cushion from the set.	
3	Ass'y Evap	⚠ **The Evaporator should be disassembled after disassembling the Cover Control 1-3) and the Drain Pan 2-1), 2-2), 2-3).** 1) Disassemble the Cover Pipe that fixes the high/low pressure Pipe. – Unscrew 2 screws	
		2) Disassemble the refrigerant temperature sensor, Inlet air temperature sensor, and EEV wire that connected to the inside of PCB.	 

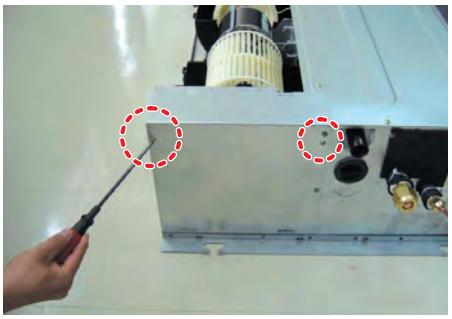
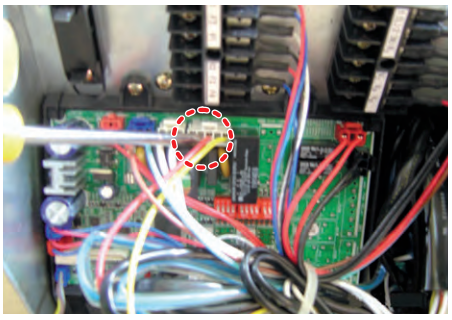
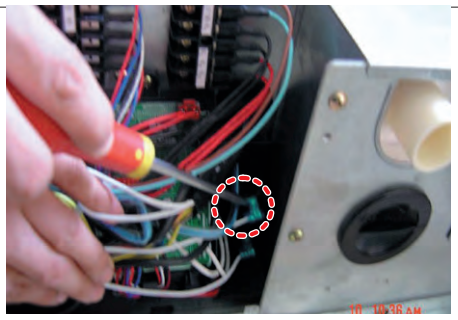
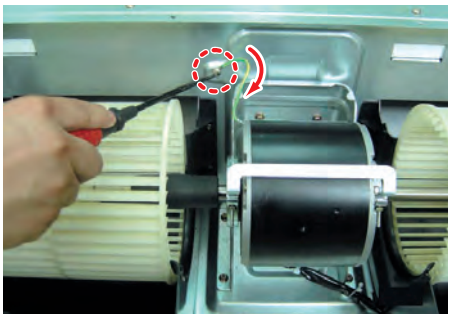
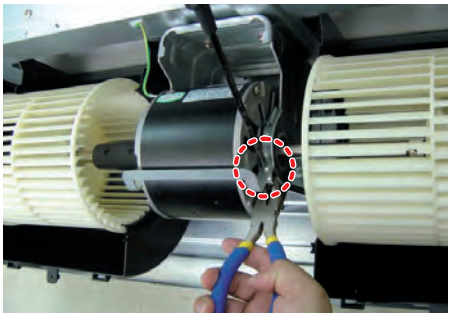
No	Parts	Procedure	Remark
		3) Disassemble the Support Evap. LF that fixes the Evaporator. – Unscrew 2 screws	
		4) Disassemble the Support Evap RH. – Unscrew 2 screws	
		5) Disassemble the Evaporator form the set.	
4	Ass'y Control In	⚠ **The Control In should be disassembled after disassembling the Cover Control 1-3).** 1) Disassemble all Control Wires connected to the inside of PCB. 2) In case of disassembling the PCB separately, disassemble the PCB from the case with pushing the hook after unscrewing the screw. – Unscrew 1 screw	 

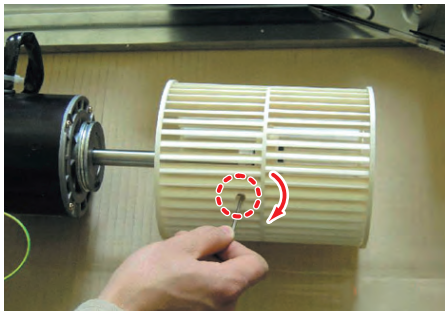
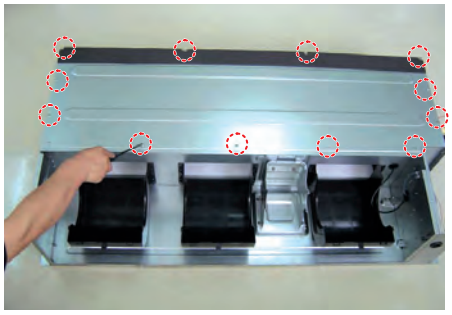
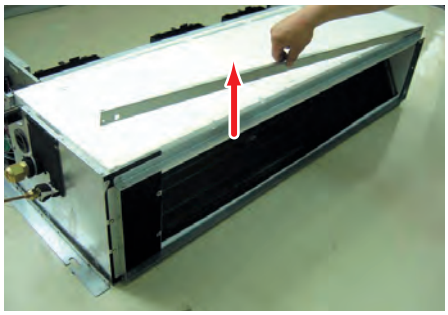
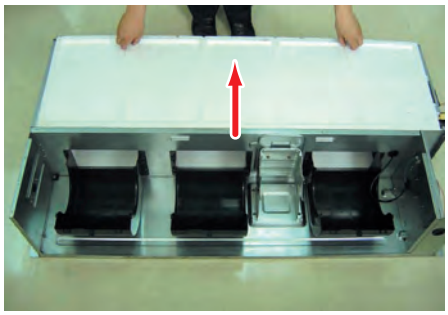
No	Parts	Procedure	Remark
		3) In case of disassembling the Capacitor separately, disassemble the Capacitor from the Case.	
		4) In case of disassembling the Case Control, disassemble the Case Control from the set after unscrewing the screw connected to the direction of Blower. ⚠ **Disassemble if after disassembling the Cabinet Top Motor 1-1).**	
		5) In case of disassembling the Trans Power, unscrew the screw fixing on the Case. ⚠ **Disassemble if after disassembling the case PCB 4-4).**	
5	Bracket Outlet	1) Disassemble the Bracket Outlet assembled on the Cabinet. – Unscrew 10 screws	 

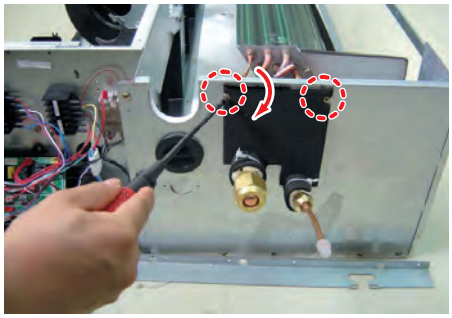
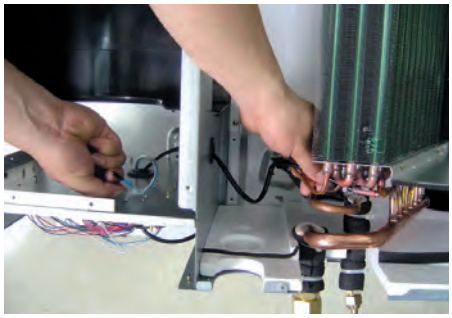
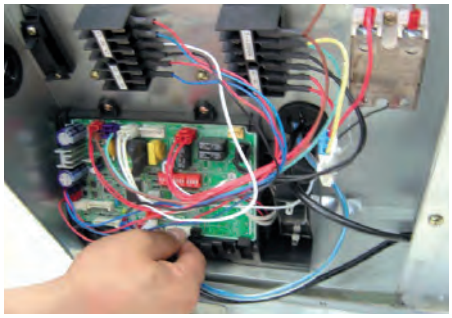
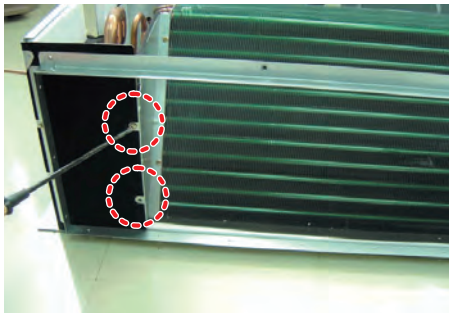
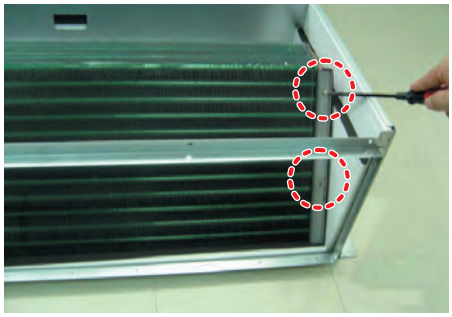
■ Duct type(Slim3)

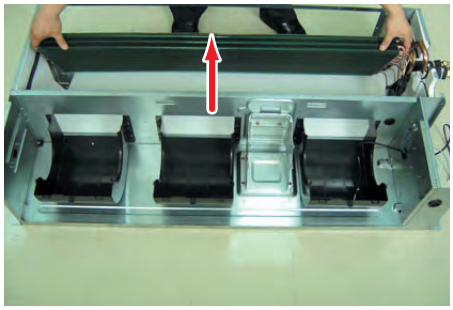
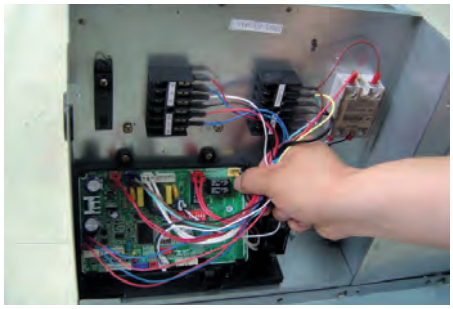
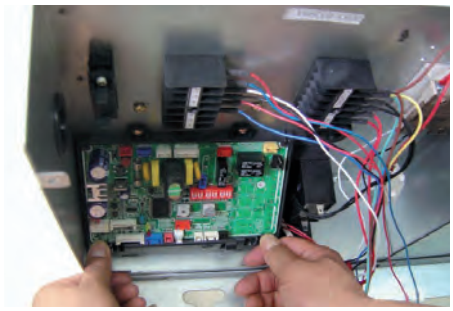
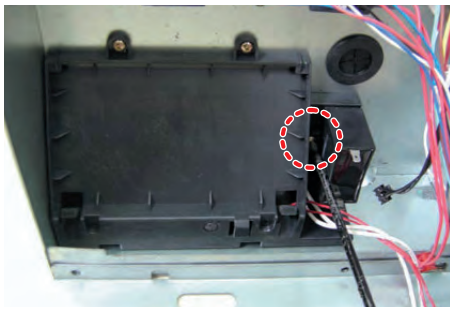
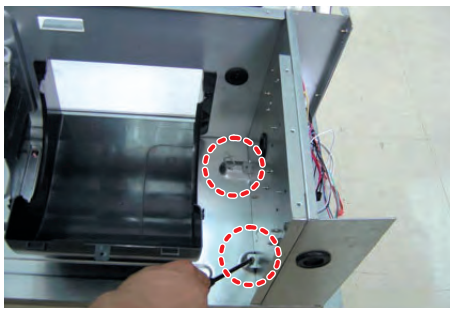
No	Parts	Procedure	Remark
1	Filter	1) DPull out the Filter as picture 1 or picture 2.	 
		2) DIf it is necessary, after disassembling 8 indicating screws, detach the Bracket Filter.	 

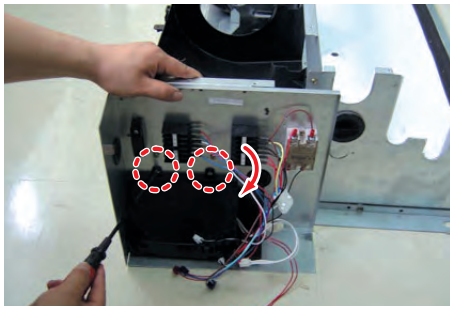
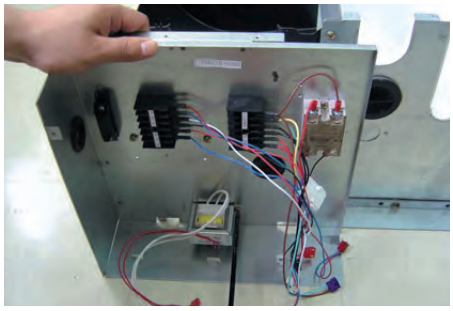
No	Parts	Procedure	Remark
		3) If the Cabinet-Top Motor is assembled on the side of the set,the procedure of disassembling the Filter is just as the above.	 
5	Bracket Outlet	1) After disassembling 13 indicating screws, detach Ass'y Cabinet-Top Motor.	
		2) After disassembling 3 indicating screws, detach Ass'y Case Blower Upper.	
		– Press the pothook of the Case Blower and detach Ass'y Case Blower Upper.	

No	Parts	Procedure	Remark
		3) After disassembling 2 indicating screws, detach the Cover Control.	
		4) Detach the Motor Wire Connected to PCB and Capacitor.	
			
		5) After disassembling the indicating screws, detach the wire connected to the Partition.	
		6) After disassembling 2 indicating screws, detach the Ass 'y Band Motor.	

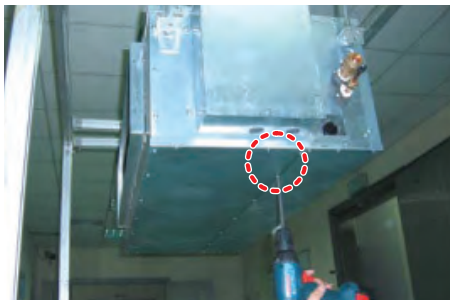
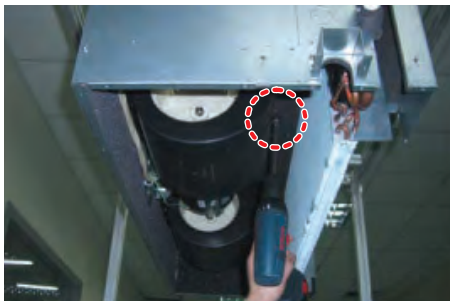
No	Parts	Procedure	Remark
		7) After disassembling the Motor and Blowers, detach the Blowers from the axis of the Motor by 3mm inner hexagon spanner.	
3	Drain Pan	1) After disassembling 15 indicating screws, detach Ass'y Cabinet-Top Evap.	
		2) After disassembling 6 indicating screws, detach the Bracket Outlet.	
		3) Detach the Drain Pan.	

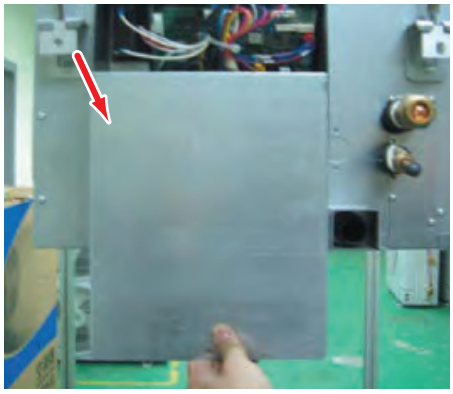
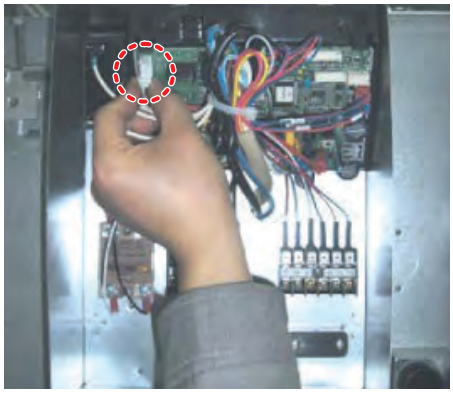
No	Parts	Procedure	Remark
4	Evaporator	⚠ **After finished the procedures above, detach the Evaporator.** 1) After disassembling 2 indicating screws, detach Ass'y Cover Pipe.	
		2) Detach the Sensor from the Control Box. (including 2 Sensors)	 
		3) After disassembling 2 indicating screws, detach Ass'y Support Evap LF.	
		4) After disassembling 2 indicating screws, detach Ass'y Support Evap RH.	

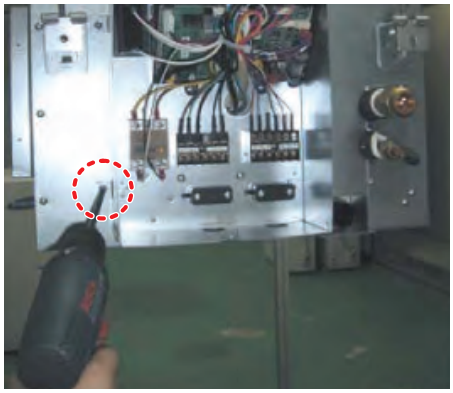
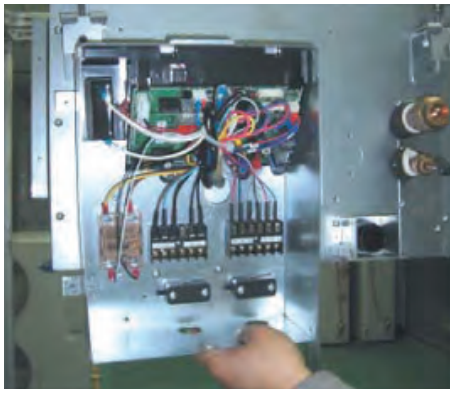
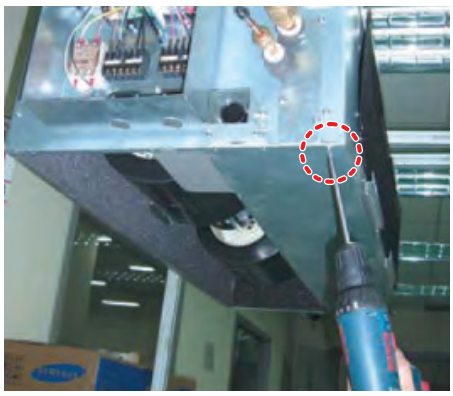
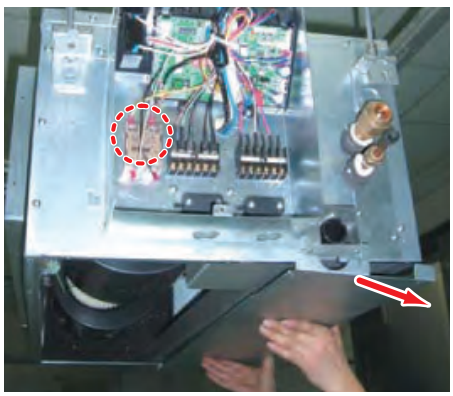
No	Parts	Procedure	Remark
		5) Detach the Evaporator from the set.	
5	Control In	⚠ **Detach the parts of Control In after disassembling the Cover Control.** 1) Detach all the wires connected to the PCB.	
		2) If only the disassembly of PCB required, press the Pothook and detach the PCB from the set.	
		3) If only the disassembly of Capacitor is required,detach it from the set.	
		4) If only the disassembly of Case Control is required,detach it from the set after disassembling 2 indicating screws.	

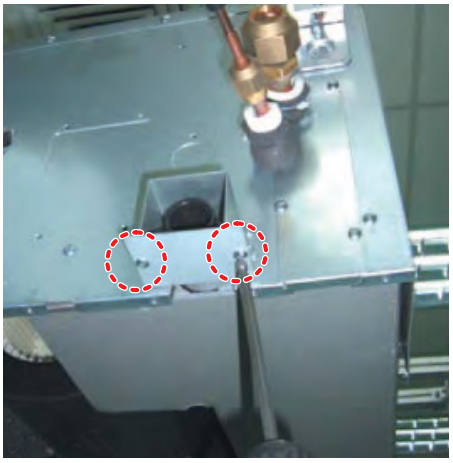
No	Parts	Procedure	Remark
7	Ass'y Cross Fan	5) Detach the Transformer after disassembling 2 indicating screws. ⚠ **Work is possible after disassembling the Case PCB.**	 
6	Ass'y Bracket Outlet	2) After disassembling 16 indicating screws, detach Ass'y Bracket Outlet.	

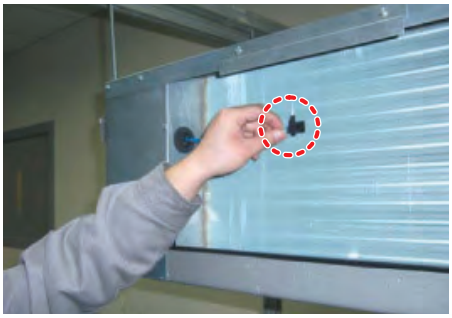
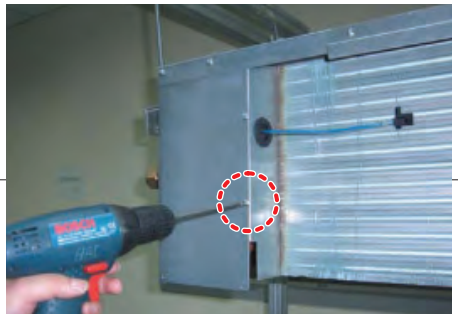
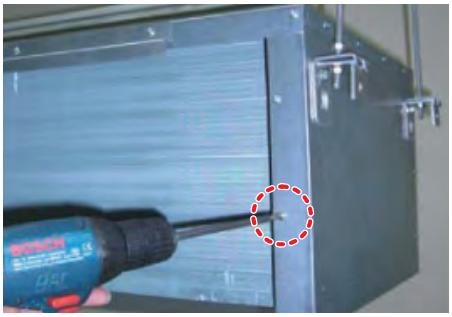
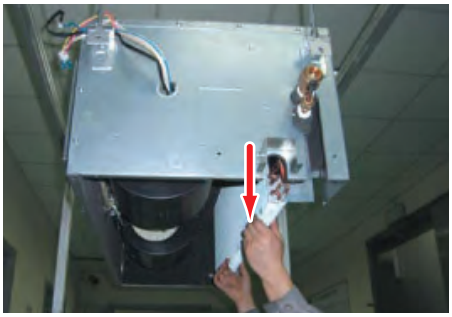
■ Duct type (MSP1)

No	Parts	Procedure	Remark
1	Filter	1) After disassembling 16 places indicating screws,detach Ass'y Cabi Bottom Blower. (Use +Screw Driver.)	
			
		2) Detach from Ass'y Control In the capacitor connection wire between the Motor Fan and housing connector.	
		3) After disassembling 2 places indicating screws,detach the 2 Fan Case. (Use +Screw Driver.)	

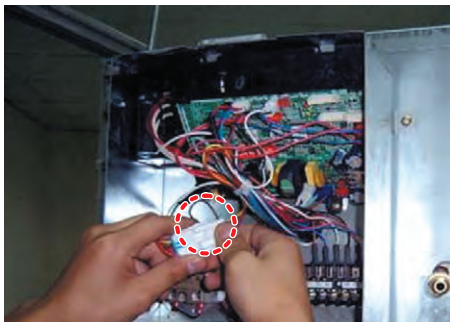
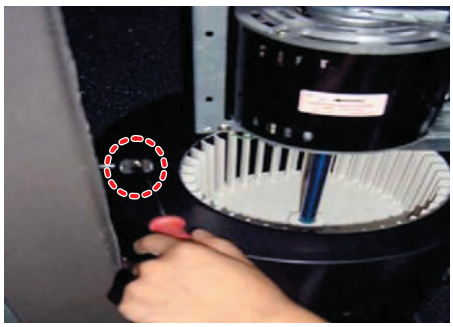
No	Parts	Procedure	Remark
		4) After disassembling 2 places indicating screws,detach Fan Motor and Blower from the set.	
2	Control In	1) After disassembling 1 Indicating screw, detach the Cover control. (Use +Screw Driver.)	 
		2) Detach the Motor-Fan and Sensor Connector from the PCB.	

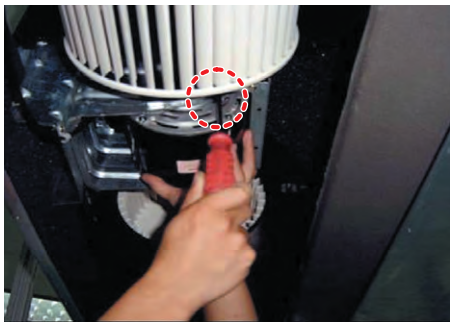
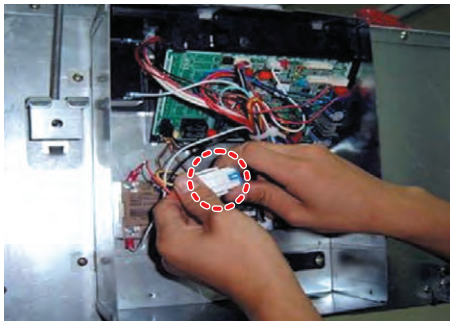
No	Parts	Procedure	Remark
		3) Disassemble 4 indicating screws and detach Control In from the set. (Use +Screw Driver.)	 
3	Drain Pan	※ Work is possible when Disassembling the Ass'y Cabi Bottom Blower. 1) Disassemble 7 indicating screws and detach Ass'y Cabi Bottom Drain. (Use +Screw Driver.)	 

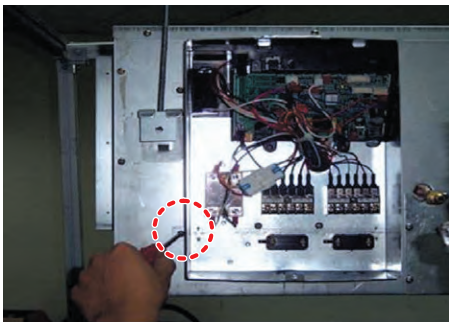
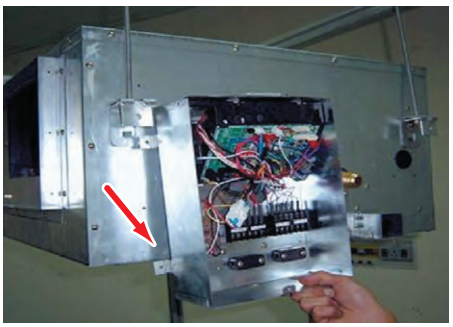
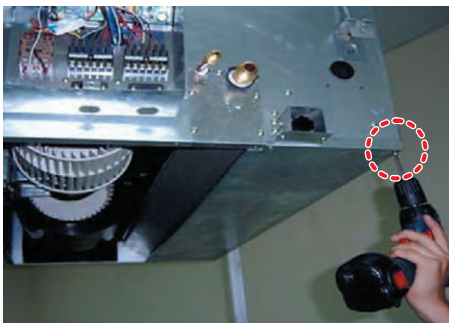
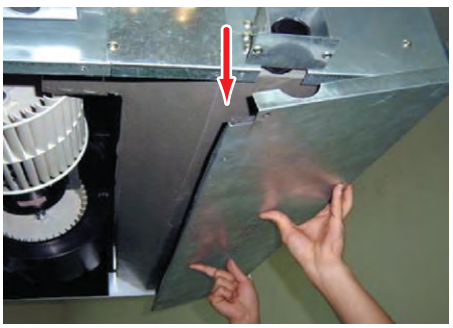
No	Parts	Procedure	Remark
		2) Disassemble 2 indicating screws and detach Holder Pipe. (Use +Screw Driver.)	
		3) Disassemble 4 indicating screws and detach the Drain Pan. (2 screws each at left and right side) (Use +Screw Driver.)	
			
			

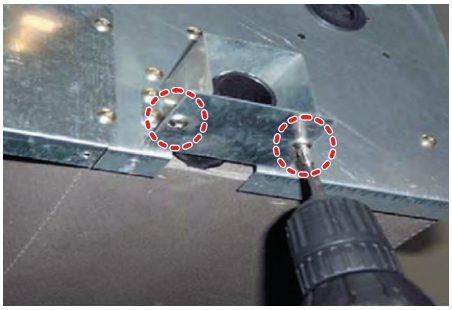
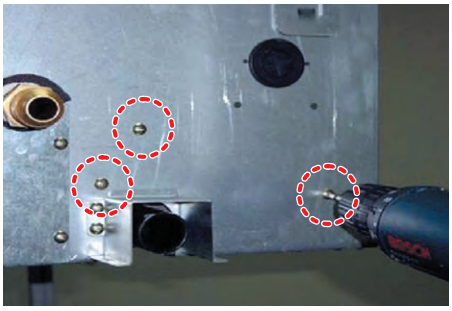
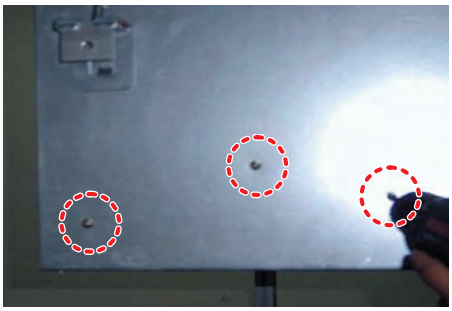
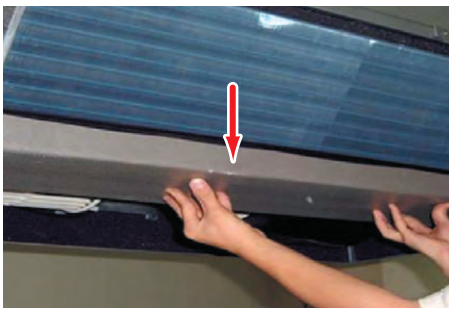
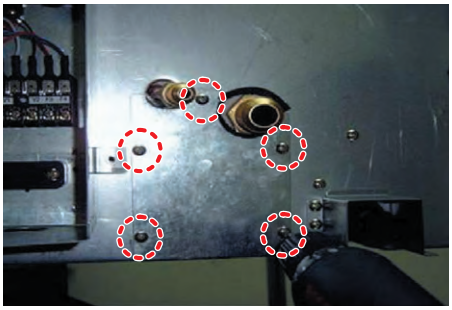
No	Parts	Procedure	Remark
4	Evap	Work is possible when Disassembling the Ass'y Drain Pan. 1) Disassemble 5 indicating screws to detach Cover Pipe.(Use +Screw Driver.)	
		2) Disassemble Sensor on the Evap.	
		3) Disassemble 4 indicating screws which are in the near of Hanger Plate to detach the Evap. (2 screws each at left and right side) (Use +Screw Driver.) ⚠ **It needs 2 peoples.**	
			
			

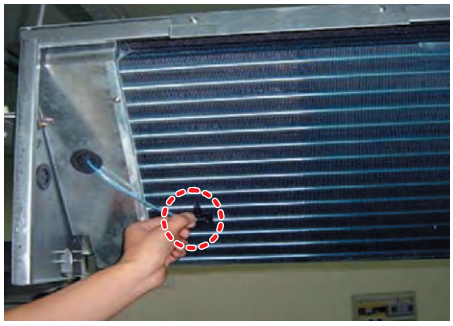
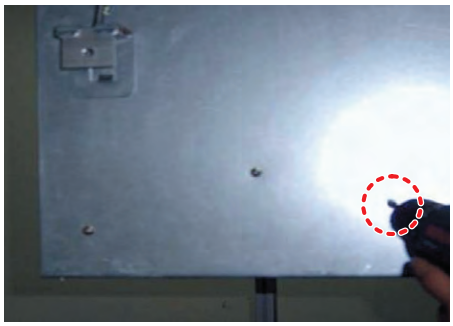
■ Duct type (MSP2, HSP SMALL)

No	Parts	Procedure	Remark
1	Blower & Motor	1) After disassembling 15 places indicating screws, detach Ass'y Cabi Bottom Blower. (Use +Screw Driver.)	
			
		2) Detach from Ass'y Control In the capacitor connection wire between the Motor Fan and housing connector.	
		3) After disassembling 4 places indicating screws, detach the 2 Fan Case. (Use +Screw Driver.)	

No	Parts	Procedure	Remark
		4) After disassembling 2 places indicating screws, detach Fan Motor and Blower from the set. (Use +Screw Driver.)	
3	Drain Pan	1) After disassembling 1 Indicating screw, detach the Cover control.(Use +Screw Driver.)	 
		2) Detach the Motor-Fan and Sensor Connector from the PCB.	

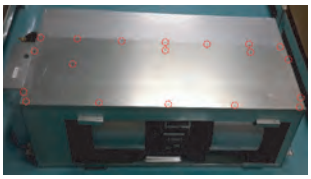
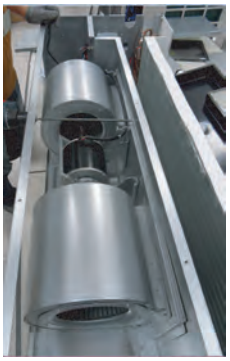
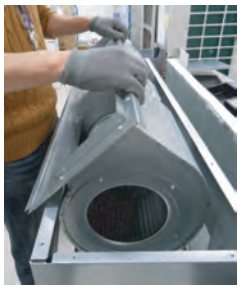
No	Parts	Procedure	Remark
		3) Disassemble 4 indicating screws and detach Control In from the set. (Use +Screw Driver.)	 
3	Drain Pan	※ Work is possible when Disassembling the Ass'y Cabi Bottom Blower. 1) Disassemble 6 indicating screws and detach Ass'y Cabi Bottom Drain. (Use +Screw Driver.)	 

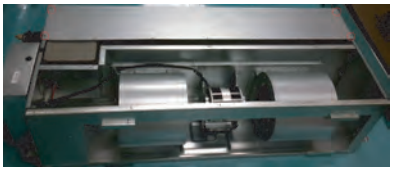
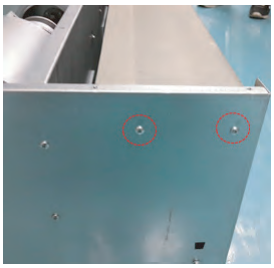
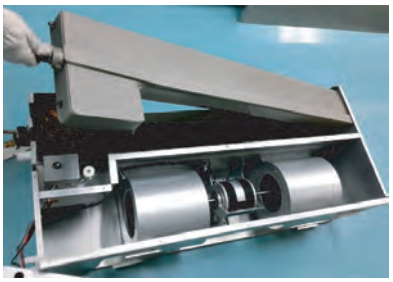
No	Parts	Procedure	Remark
		2) Disassemble 2 indicating screws and detach Holder Pipe. (Use +Screw Driver.)	
		3) Disassemble 6 indicating screws and detach the Drain Pan. (Use +Screw Driver.) (3 screws each at left and right side)	
			
			
4	Evap	※ Work is possible when Disassembling the Ass'y Cabi Bottom Blower.	
		1) Disassemble 6 indicating screws and detach Ass'y Cabi Bottom Drain. (Use +Screw Driver.)	

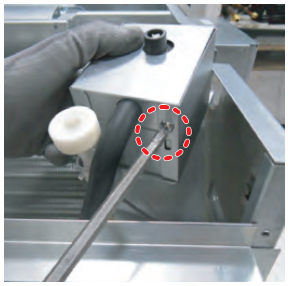
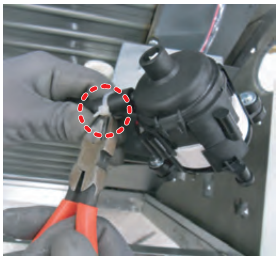
No	Parts	Procedure	Remark
		2) Disassemble Sensor on the Evap.	
		3) Disassemble 2 indicating screws which are in the near of Hanger Plate to detach the Evap. (1 screw each at left and right side) ⚠ **It needs 2 peoples.**	 

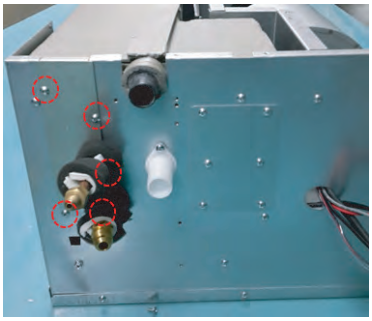
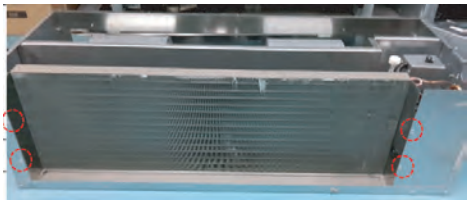
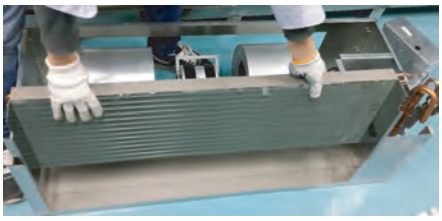
■ Duct type (MA1-Drain Pump Built-in)

- AM007/009/012/015/018JNMDCH/AA

No	Parts	Procedure	Remark
1	Assy fan parts	1) Disassemble the Cabinet-blower. (Unscrew 19 screws)	
		2) Disassemble the Partition-front from Partition. (Unscrew 8 screws)	 
		3) Rotate the assy fan parts in CCW direction.	
		4) Pull out the assy fan parts after hang at the edge of cabinet.	 

No	Parts	Procedure	Remark
2	Drain Pan	1) Disassemble the cabinet-drain. - Unscrew 7 screws.	
		2) Disassemble the Drain pan. - Unscrew 4 screws.	
			

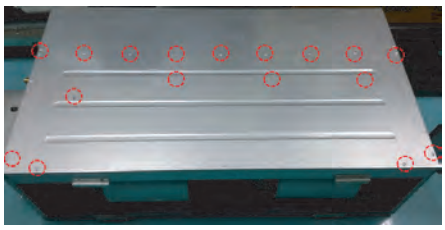
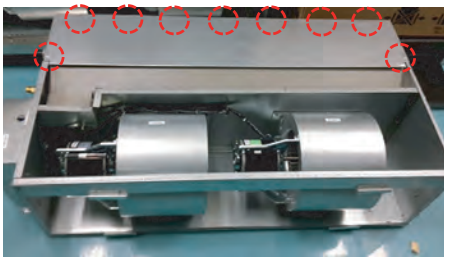
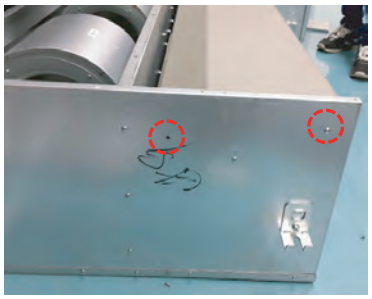
No	Parts	Procedure	Remark
3	Drain pump	1) Disassemble the drain pump kit from the set. - Unscrew 2 screws.	
		2) Disassemble the drian pump case. - Unscrew 4 screws.	
			
		3) Disassemble the drian pump. - Unscrew 2 screws and cabel tie.	
			

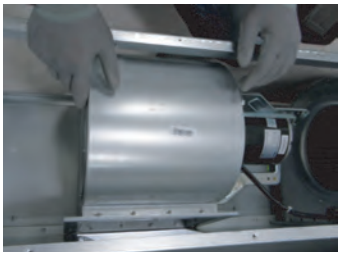
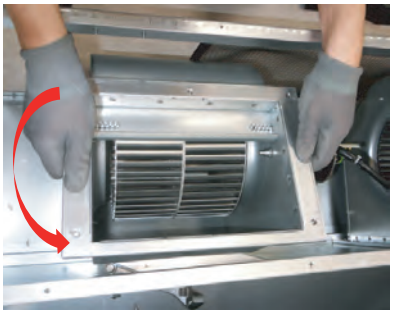
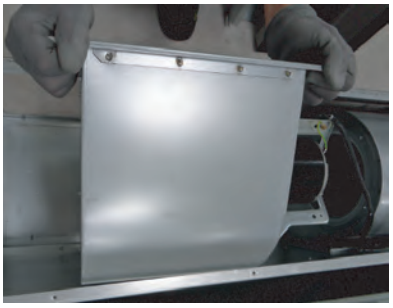
No	Parts	Procedure	Remark
4	Evaporator	1) Disassemble the Cover-pipe. - Unscrew 5 screws.	
		2) Disassemble the Evaporator. - Unscrew 4 screws.	 

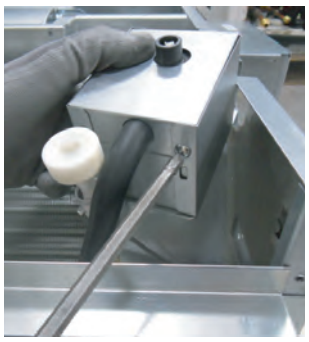
No	Parts	Procedure	Remark
5	Main PBA	1) Disassemble the Case Control. - Unscrew 3 screws.	
		2) Disassemble the Evaporator. - Unscrew 4 screws.	 

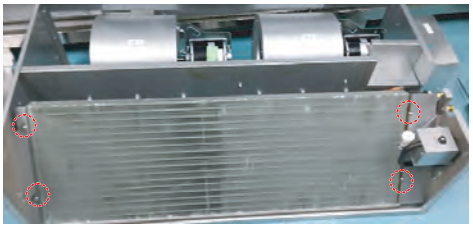
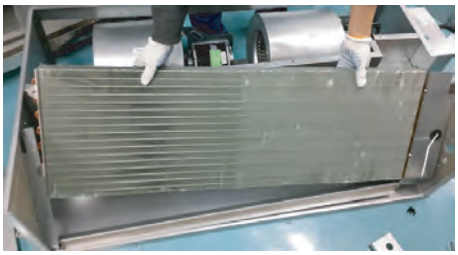
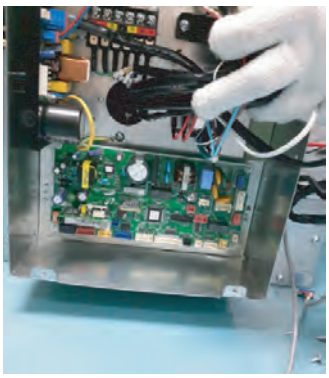
■ Duct type (MA2)

- AM024/027/030/036/048JNHDCH/AA (Drain Pump Built-in)
- AM054KNMDCH/AZ (Drain Pump Option)

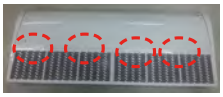
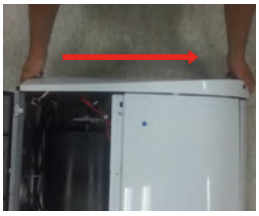
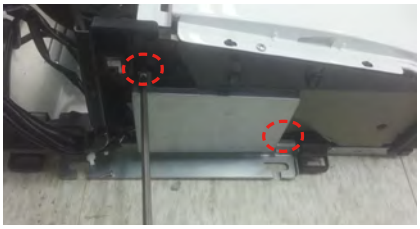
No	Parts	Procedure	Remark
1	Drain Pan	1) Disassemble the cabinet-blower. - Unscrew 17 screws.	
		2) Disassemble the cabinet-drain. - Unscrew 9 screws.	
		3) Disassemble the drain pan. - Unscrew 4 screws.	
			

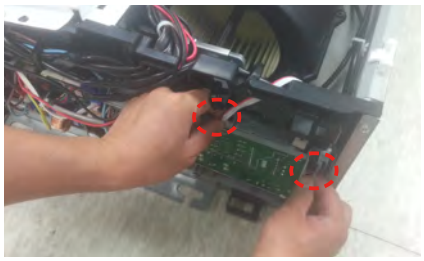
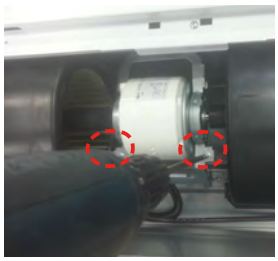
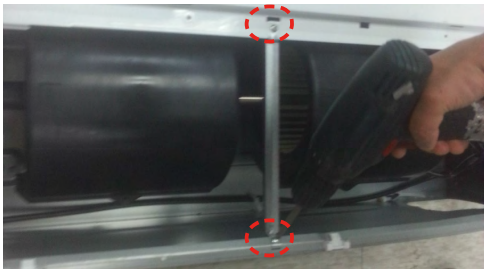
No	Parts	Procedure	Remark
2	Assy fan parts	1) Disassemle the case blower from partition. - Unscrew 10 bolts by using wrench and driver.	
			
			
		2) Ratate the Assy fan parts in CCW direction.	
		3) Pull out the Assy fan parts after hang at the edge of cabinet.	
			

No	Parts	Procedure	Remark
3	Drain pump	1) Disassemble the drain pump kit from the set. - Unscrew 2 screws.	
		2) Disassemble the drian pump case. - Unscrew 4 screws.	
			
		3) Disassemble the drian pump. - Unscrew 2 screws and cabel tie.	
			

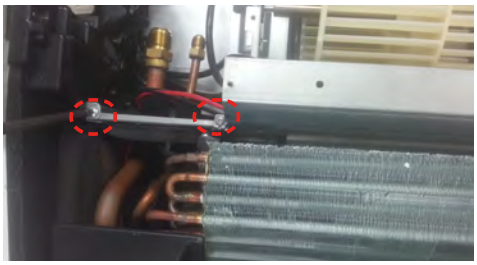
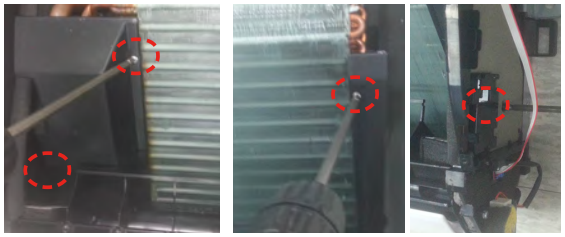
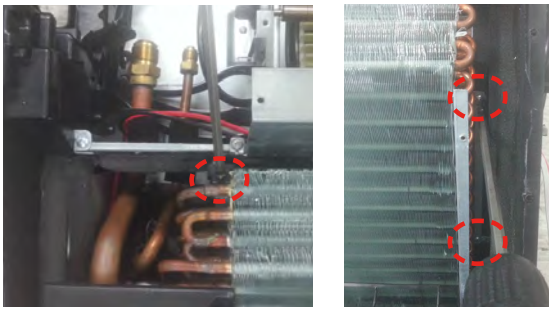
No	Parts	Procedure	Remark
4	Evaporator	1) Disassemble the Evaporator. - Unscrew 4 screws.	 
5	Main PBA	1) Disassemble the Case Control. - Unscrew 3 screws.	
		2) Detach all connect cable.	
		3) Disassemble the PBA. - Unscrew 1 screw.	

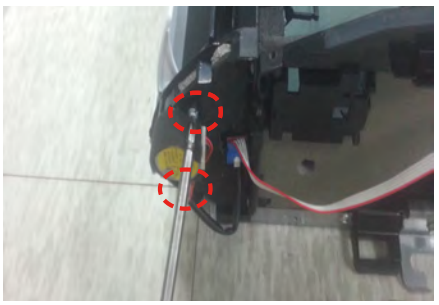
AM036/048JNCDCH/AA

No	Parts	Procedure	Remark
1	Electrial Part	1) Open the Grille by sliding 4 position and removing 4 screws.	  
		2) Detach the Air Inlet Grille.	
		3) Detach the Cover side by removing 1 screw and sliding Cover.	 
		4) Open the cover of Component Electrical Box by removing 2 screws.	
		5) Open the cover of Terminal block Box by removing 2 screws	

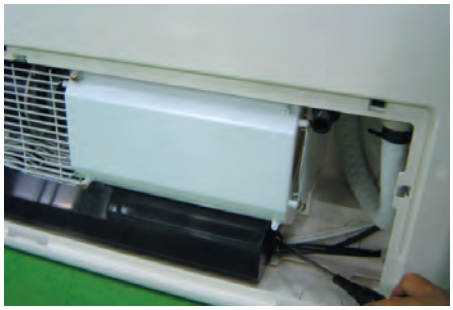
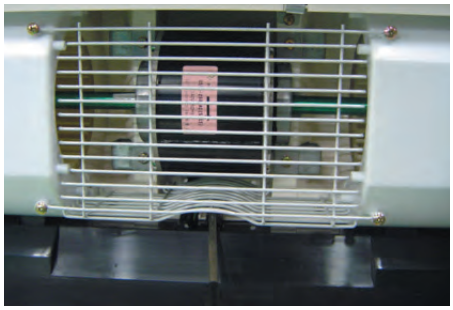
No	Parts	Procedure	Remark
2	Fan & Motor	1) Disconnect 2 wires of Motor.	
		2) Detach Holder Motor by removing 2 screws.	 
		3) Detach the Upper case of Fan. (AM112JNCDKH : 3EA, AM140JNCDKH : 4EA)	
		4) Detach Bracket Grille by removing 2 Screws. (AM112JNCDKH : 1EA, AM140JNCDKH : 2EA)	 

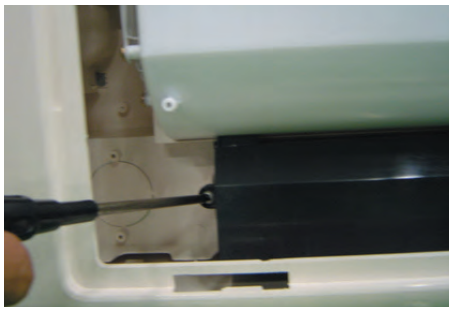
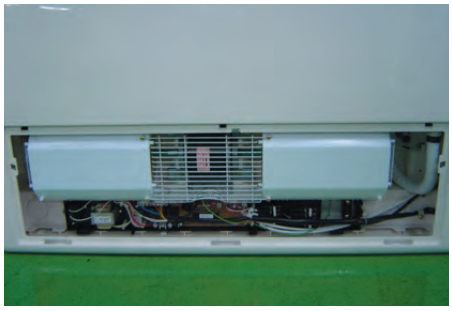
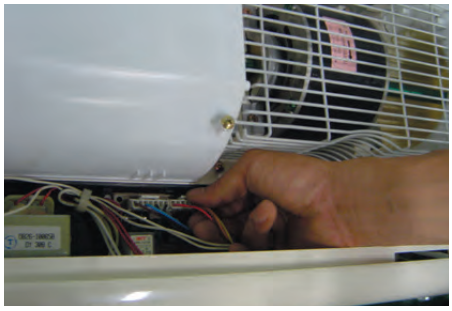
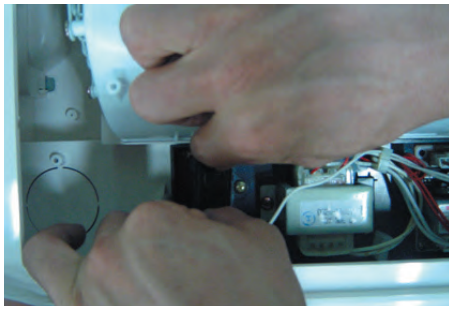
No	Parts	Procedure	Remark
3	Drain Pan	1) Detach the Cabinet Front by removing 7 screws.	 
		2) Remove 1 screw in the middle of drain pan.	
		3) Detach the Drian pan. Be careful that there might be some water left in the drain pan when you remove the drain pan.	

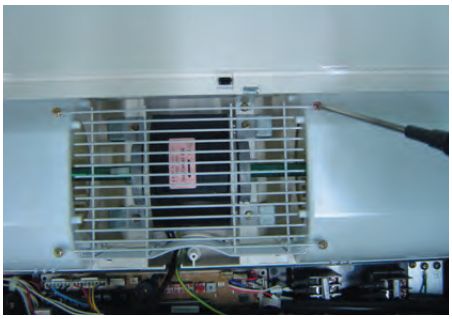
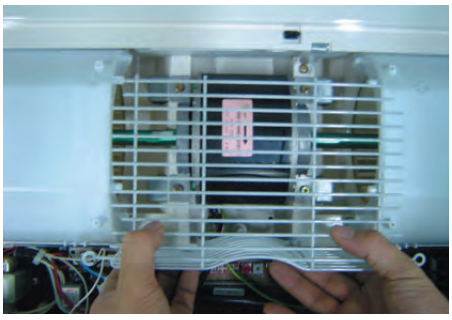
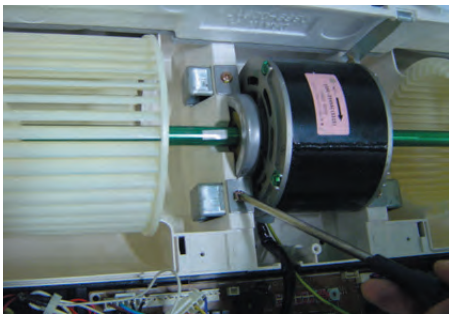
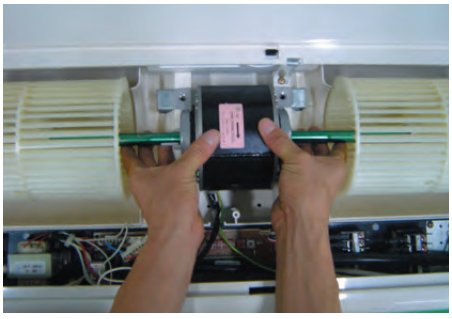
No	Parts	Procedure	Remark
4	Evaporator	1) First, Separate the connector of the expansion valve.	
		2) Detache the Cover Pipe by removing 2 screws.	
		3) Detache the Cover Evap LF/RH by removing 4 screws.	
		4) Detach the Evaporator assembly by removing 3 screws.	

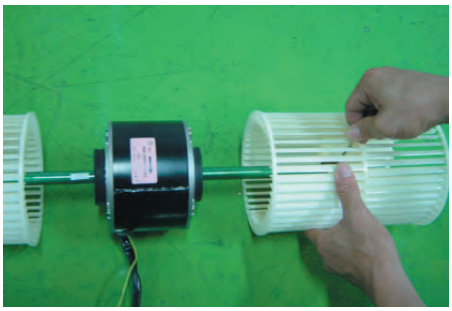
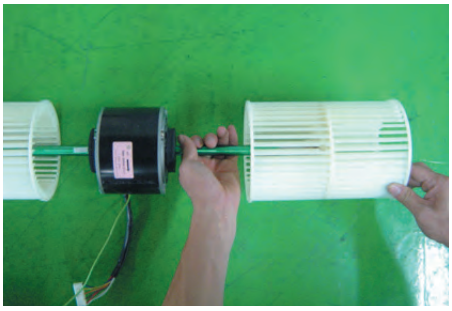
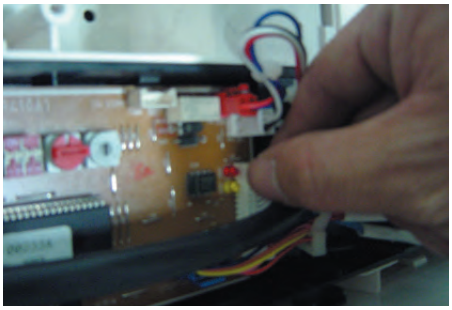
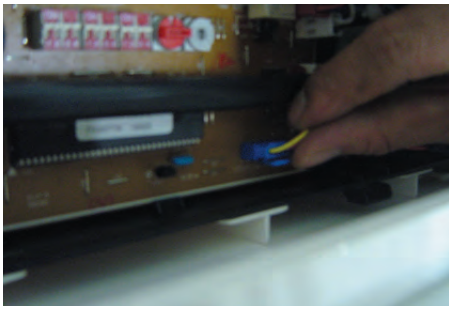
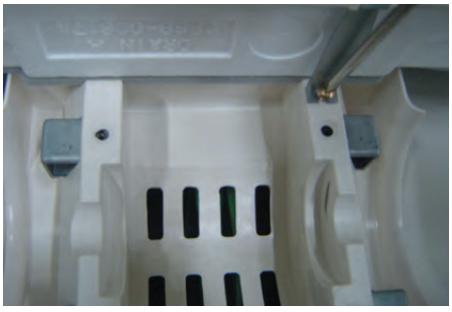
No	Parts	Procedure	Remark
5	Stepping Motor	1) Detach the Connector.	
		2) Detache the Stepping Motor by emoving 2 screws.	
6	Holder Blade	1) Remove 4 screws at both side of the Holder blade.	 

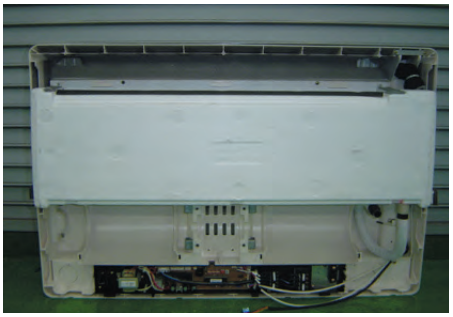
CEILING

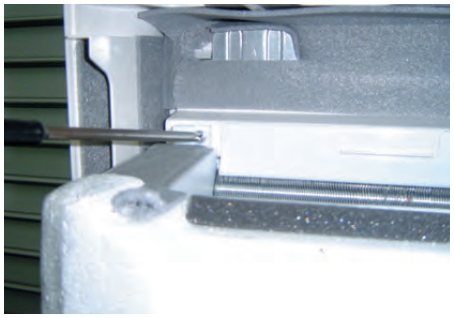
No	Parts	Procedure	Remark
1	Electrical Part	1) Open the Grille by pressing 3 position. (center and both side)	
		2) Detach the Air Inlet Grille.	
		3) Open the Cover of Component Electrical Box by removing 3 screws. (center and both side)	
			

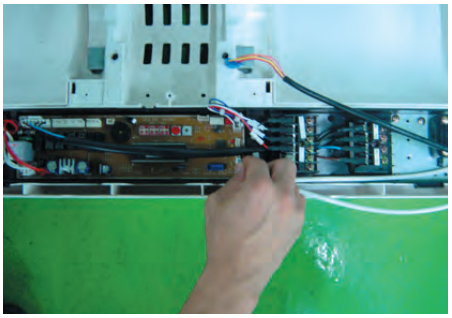
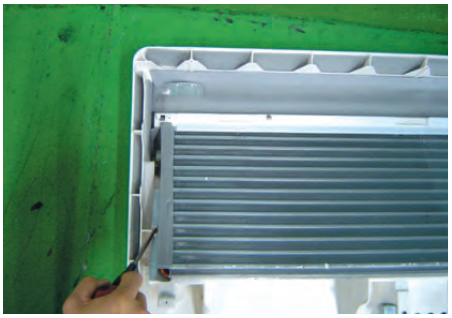
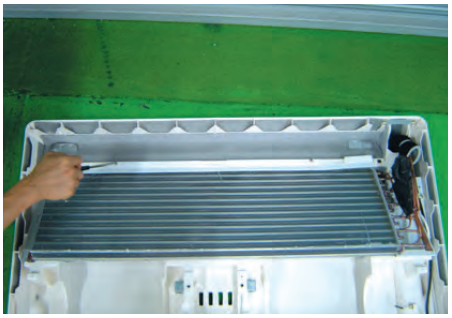
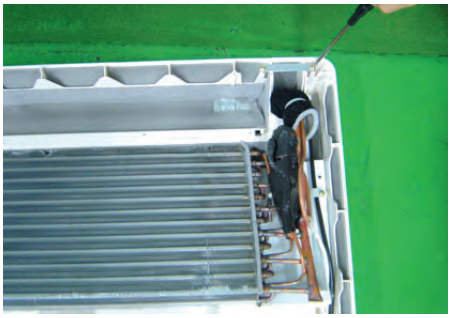
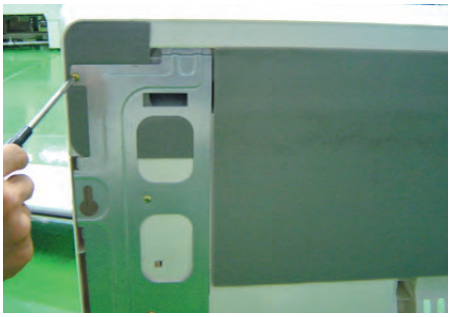
No	Parts	Procedure	Remark
			 
2	Fan & Motor	1) Detach the screw and untie earth wire of Motor.	
		2) Disconnect of housing of Motor Wire.	
		3) Disconnect the Capacitor Wire.	

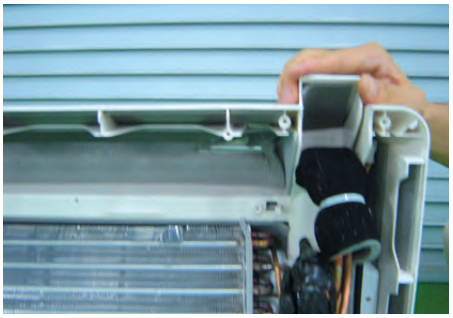
No	Parts	Procedure	Remark
		4) Loosen the Guard Safety by removing 6 screws.	
			
		5) Detach the Upper Case of Fan. (2EA)	
		6) Loosen the 4 screws what is fix the Motor.	
		7) Detach the Fan and Motor assembly.	

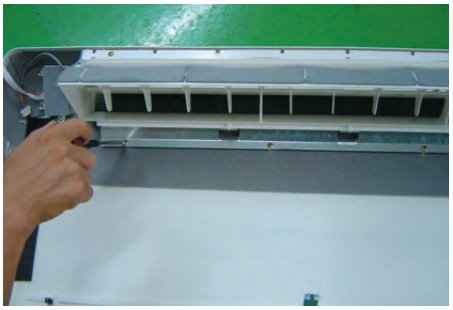
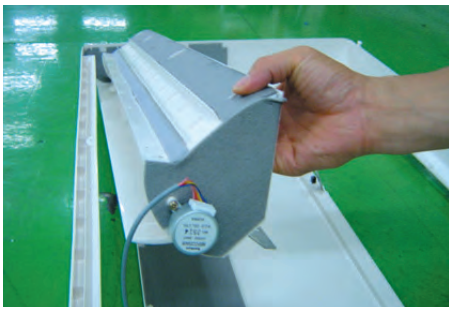
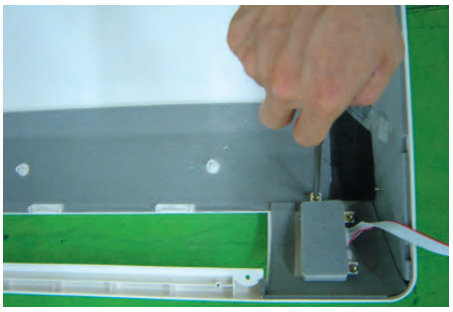
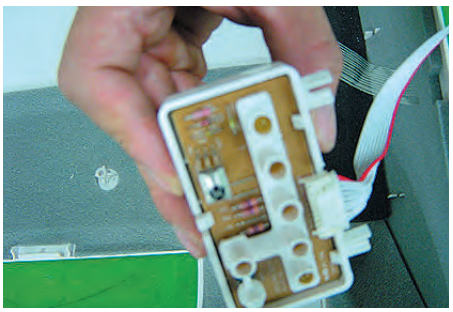
No	Parts	Procedure	Remark
		8) Loosen the set fixing bolts. (with a M3 wrench)	
		9) Detach the Fan.	
3	Drain Pan	1) Disconnect the Display PCB Wire as shown in picture. (white housing)	
		2) Disconnect the Step Motor Wire as shown in picture. (blue housing)	
		3) Disassemble the Hanger Bracket by removing the 1 screw.	

No	Parts	Procedure	Remark
		4) Loosen the 3 screws of Front Side.	
		5) Disassemble the assembly Front Cover Part.	
		6) Disconnect the Step Motor Wire as shown in picture.	
		7) Detach the Wire Clamp fixed in Base Part.	
		8) Detach the Front Cover assembly completely.	

No	Parts	Procedure	Remark
		9) Loosen the screw what is fix with Base Part and Drain Pan. (Upper Side:2EA)	
		10) Loosen the screw what is fix with Base Part and Drain Pan. (Lower Side:2EA)	
		11) Detach the Drain Pan completely.	

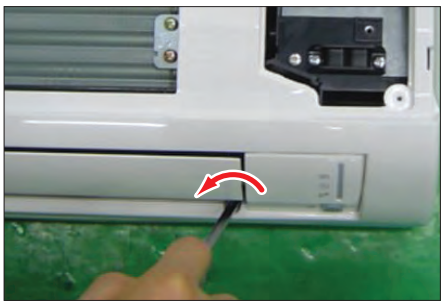
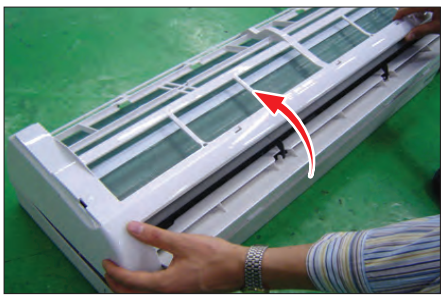
No	Parts	Procedure	Remark
		1) Disconnect the Thermistor Wire as shown in picture. (white housing)	
		2) Loosen the 2 screws shown in picture.	
		3) Loosen the 2 screws shown in picture and remove Plastic Part. (white)	
		4) Loosen the 2 screws shown in picture and remove Steel Bracket.	
		5) Disassemble the 4 screws Steel Plate in rear side of the unit.	

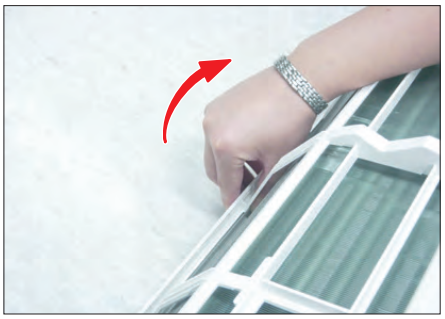
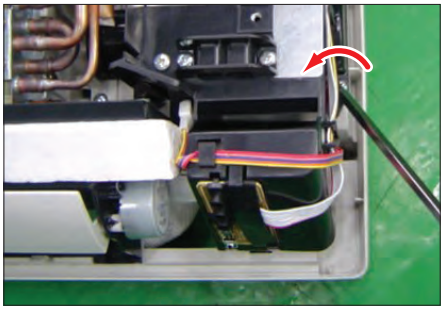
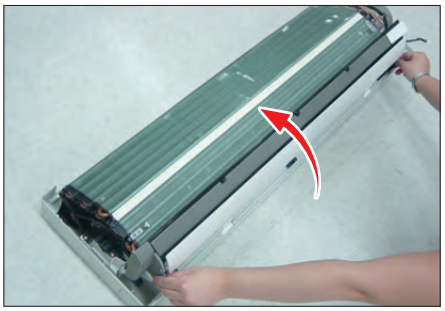
No	Parts	Procedure	Remark
		6) Loosen the 2 screws as shown in picture.	
		7) Detach the Plastic Cover as shown in picture.	
		8) Detach the Evaporator assembly.	

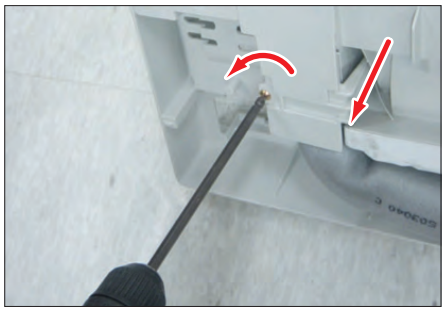
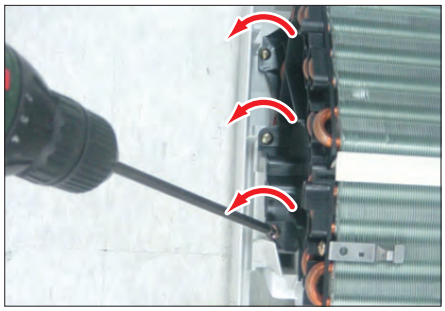
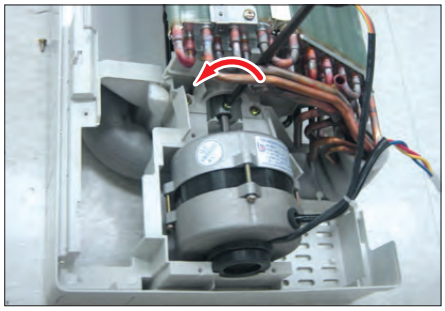
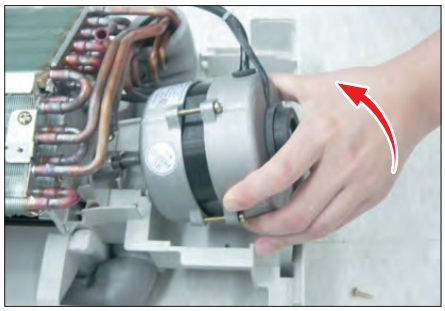
No	Parts	Procedure	Remark
5	Stepping Motor	1) Loosen the 4 screws in rear side of Front Cover assembly as shown in picture.	
		2) Loosen the 2 screws as shown in picture.	
		3) Disassemble the Blade and Stepping Motor assembly and remove the 2 Screws Stepping Motor.	
6	Display PCB	1) Loosen the 3 screws in rear side of Front Cover assembly as shown in picture.	
		2) Disassemble Display PCB assembly and Disconnect Wire. 3) Disassemble the Display PCB.	

■ Wall mounted type (Neo forte)

– All the procedure has to be verified because the cover should not open when the unit is installed.

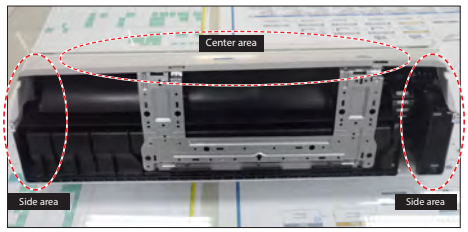
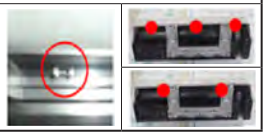
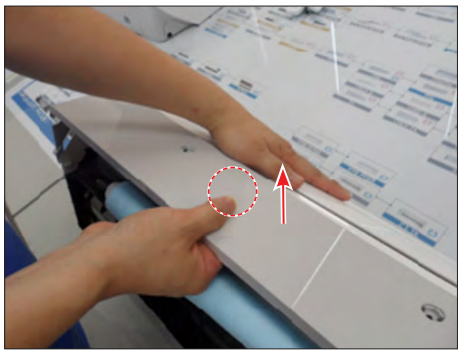
No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and shut off the main power.	
		2) Open the Front Grille by pulling right and left sides of the hook.	
		3) Loosen 1 of the right screw(CCW) and detach the Terminal Cover. (Use +Screw Driver.) 4) Detach the thermistor from the Front Grille.	
		5) Loosen 2 fixing screws(CCW) of Front Grille.	
		6) Unlock 3 hooks to fix Panel Front and Tray Drain. (Use +Screw Driver.)	

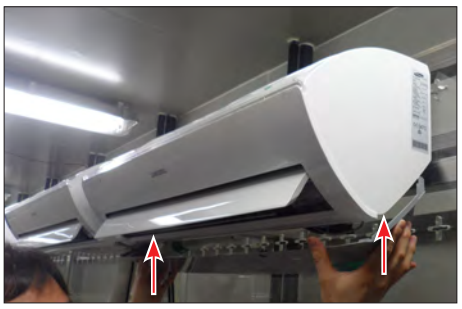
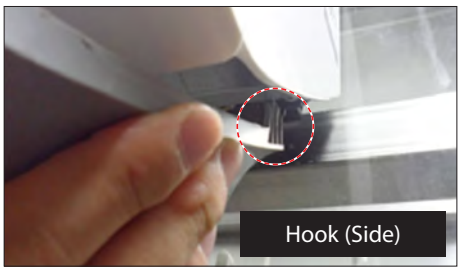
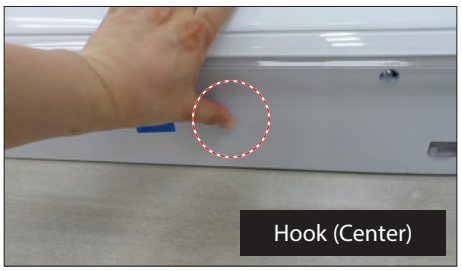
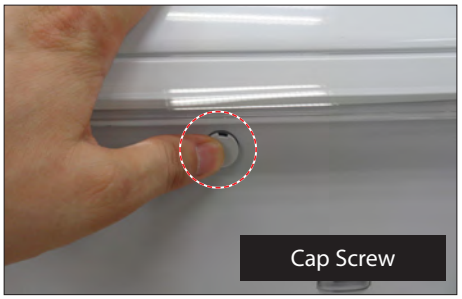
No	Parts	Procedure	Remark
		7) Unlock 3 hooks to fix Panel Front and Back-Body.	
2	Control-In (Main PCB)	1) Take all the connector of PCB upper side out. (Inclusion Power Cord) 2) Detach the outdoor unit connection wire from the Terminal Block. 3) Loosen 4 fixing screws(CCW) of Ass'y Control-In. (Use +Screw Driver.) ⚠ **You can disassembly Ass'y Control In without evaporator disassembled.**	
3	Tray Drain	1) Pull Tray Drain out from the Back Body.	

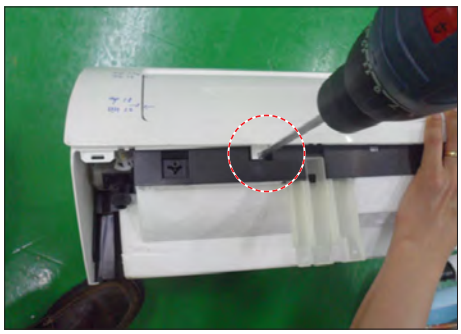
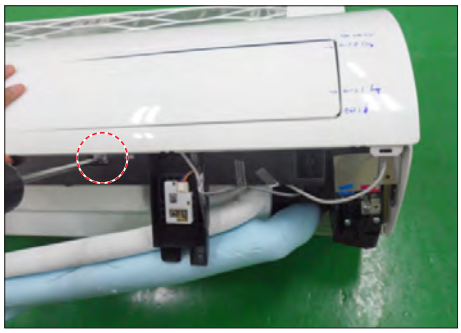
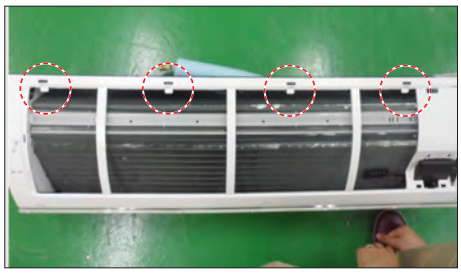
No	Parts	Procedure	Remark
4	Heat Exchanger	1) Loosen 2 fixing earth screws(CCW) of right side. (Use +Screw Driver.) 2) Detach the Connection Pipe. 3) Detach the Holder Pipe at the rear side.	
		4) Loosen the 4 fixing screws(CCW) of right and left side. (Use +Screw Driver.) 5) Lifting the Heat Exchanger up a little to push the up side for separation from the indoor unit. ⚠ **First, check Comp. Down and then disconnect the connection pipes before you disassemble the Evaporator from indoor unit.**	
5	Fan Motor & Cross Fan	1) Loosen the fixing screw(CCW). (Use +Screw Driver.) 2) Detach the Fan Motor from the Fan. 3) Detach the Fan From the left Holder Bearing.	
			

■ Wall Mounted type(A3050)

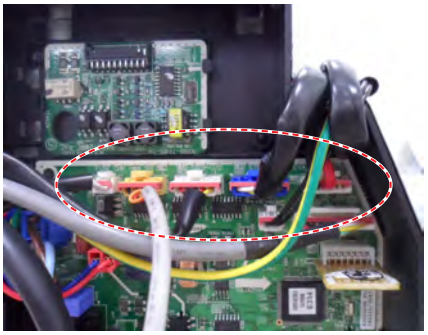
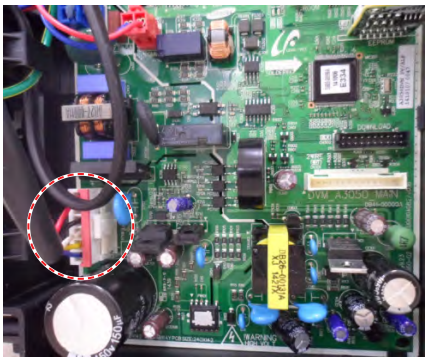
No	Parts	Procedure	Remark
1	PANEL-FRONT	1) Stop the driving of air conditioner and shut off main power supply.	
		2) Detach FILTER PRE from the PANEL FRONT.	
		3) Cover Panel is assembled on bottom of indoor unit as shown in the figure. Remove the Cap Screw as shown on the right side and then remove the screw and separate the Cover Panel.	  

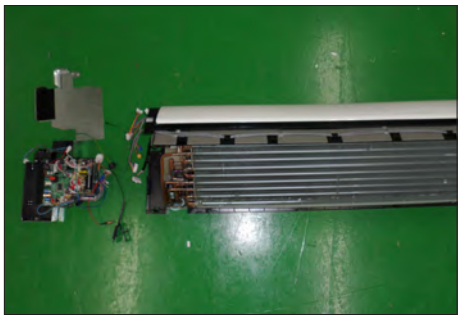
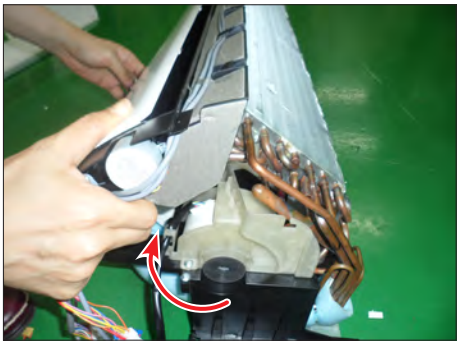
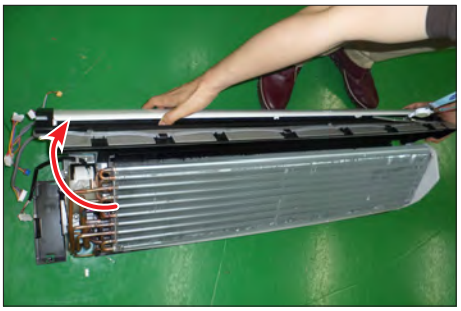
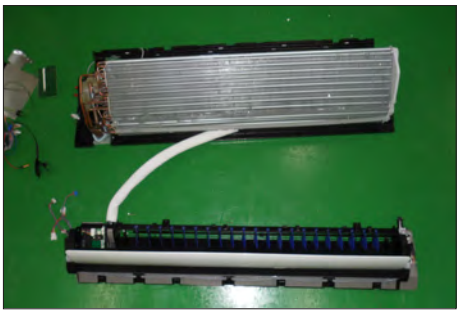
No	Parts	Procedure	Remark
		4) Cover Panel is fixed to body by Hook in center area and side area.	
			<table><tr><td></td><td>HOOK</td></tr><tr><td>015/022/028/ 036/045</td><td>  </td></tr><tr><td>056/071/082</td><td></td></tr></table>
		5) Separate the hook after pushing both end of Cover Panel as shown in the figure. (Watch out for the damage of the hook)	
		6) Raise front part upward obliquely as shown in the figure and then remove the hooks.	
			

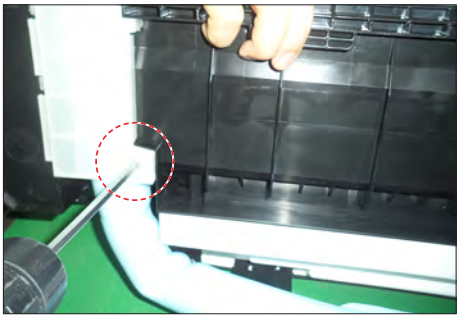
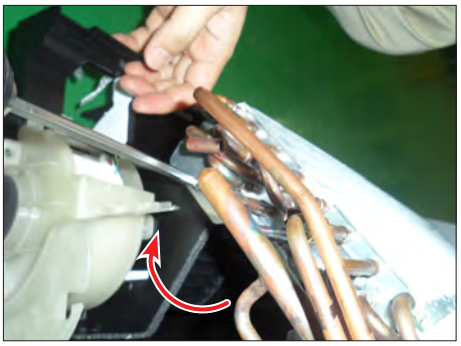
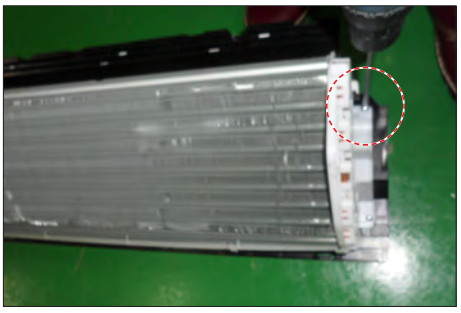
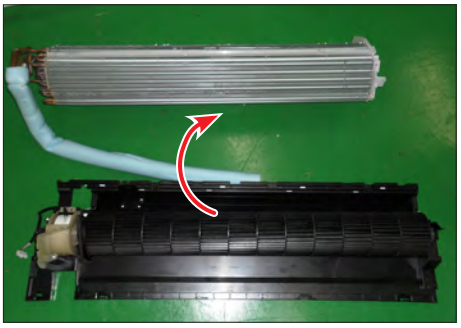
No	Parts	Procedure	Remark
		⚠ Assembly of Cover Panel after service end. - Reassembly is in the reverse order of the removal. - Piping and drain hose must be careful not to damage and Progress must be done with both hands.	    

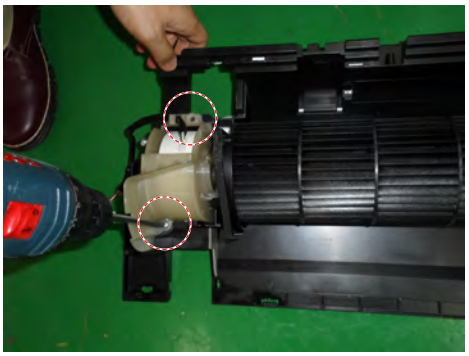
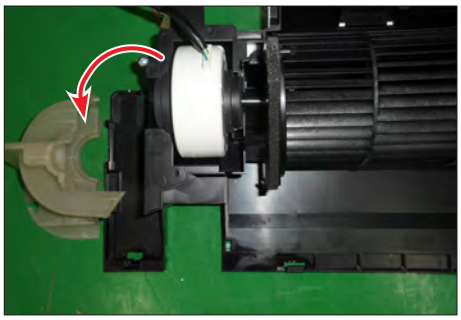
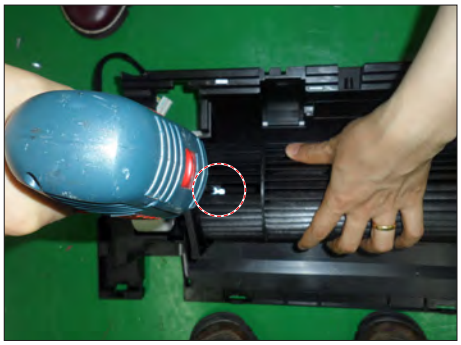
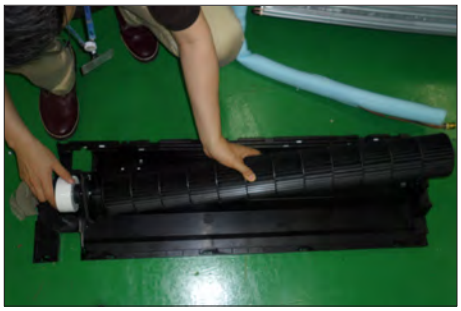
No	Parts	Procedure	Remark
		7) To detach the PANEL-FRONT from the main frame, unfasten 2 screws at the bottom. (use + Screw Driver)	 
		8) To detach the COVER-PANEL from the main frame, loosen 4 HOOK Structures. When separate the hook : Use the (-) screw Driver. (-)Screw Driver Insert the hook and then pull the hook as shown on the right side. (Watch out for the damage of the hook)	  

No	Parts	Procedure	Remark
		9) Remove the Panel Frame from the Main Frame as shown on the right side.	  

No	Parts	Procedure	Remark
2	CONTORL IN	1) Lossen Sub PBA Wire. ⚠ When you separate the connector, pull pressing the locking button.	
			
		2) Lossen Stepping Motor, EEV, Display, Sensor, SPI, Fuse Wire. ⚠ When you separate the connector, pull pressing the locking button.	
		3) Lossen Motor, Terminal Wire. ⚠ When you separate the connector, pull pressing the locking button.	
		4) Loosen Earth Wire.	

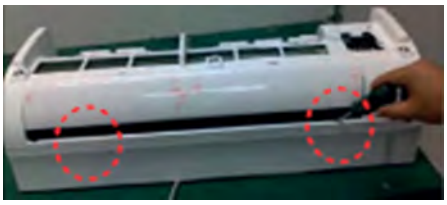
No	Parts	Procedure	Remark
5	EVAPORATOR	9) Take off the CASE-CONTROL from the main frame after loosen the remaining connector. **⚠ When you separate the connector, pull pressing the locking button.**	
3	TRAY DRAIN	1) To detach TRAY-DRAIN from the main frame, pull the bottom of the TRAY-DRAIN towards you.	  

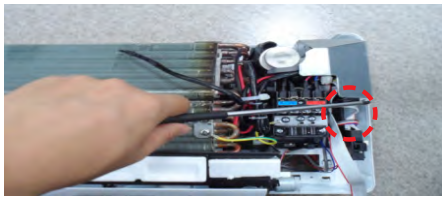
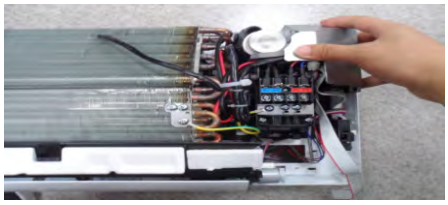
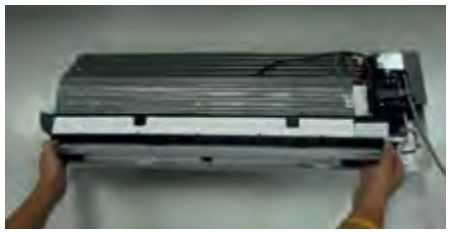
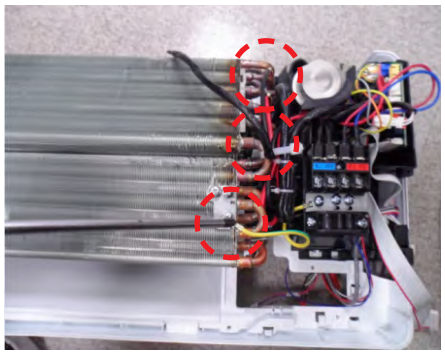
No	Parts	Procedure	Remark
4	Evaporator	1) Detach the HOLDER PIPE.	
		2) Unfasten the screw at the left side. (use + Screw Driver)	
		3) Unfasten the screw at the right side. (use + Screw Driver)	
		4) To detach Evaporator from the main frame, pull the bottom of the Evaporator towards you.	

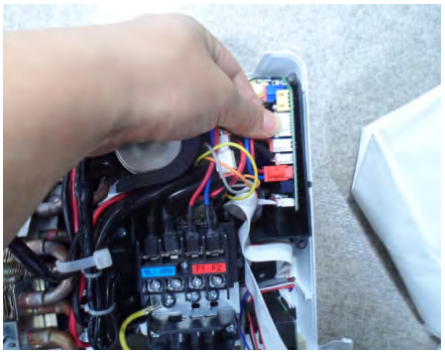
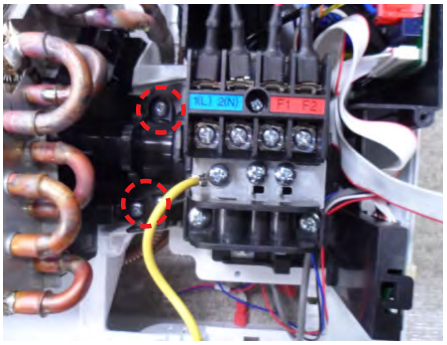
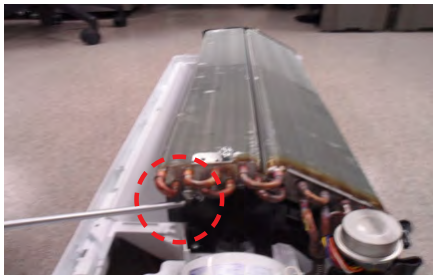
No	Parts	Procedure	Remark
5	FAN MOTOR & CROSS FAN	1) Unfasten the screw. (use + Screw Driver)	
		2) Detach the FAN Motor case.	
		3) Unfasten the screw a little. (use + Screw Driver)	
		4) Pull the CROSS-FAN to the left side.	

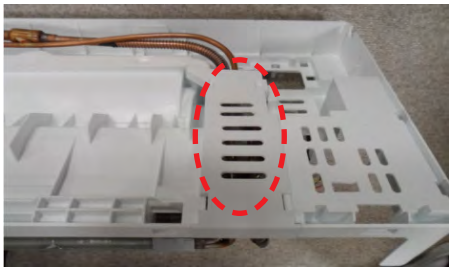
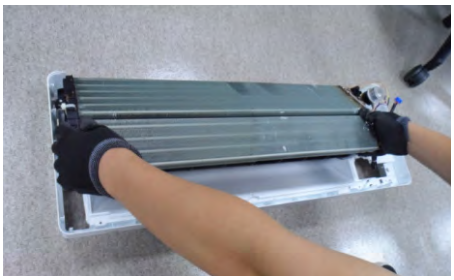
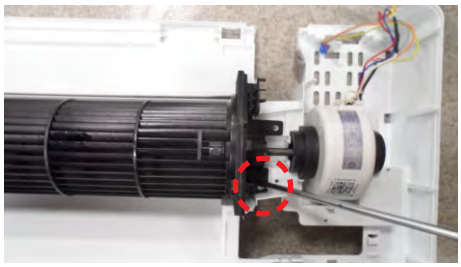
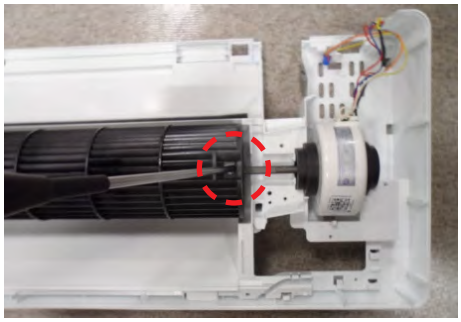
■ Wall Mounted type (Boracay)

– All the procedure has to be verified because the cover should not open when the unit is installed.

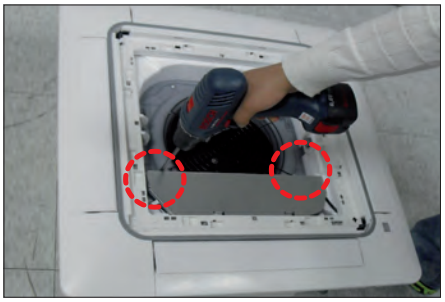
No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and shut off the main power. 2) Open the FRONT-GRILLE and pull out from the PANEL-FRONT.	
		3) Detach COVER-TERMINAL from the PANEL-FRONT. (Use +Screw Driver.)	
		4) Loosen connector wire (white) and detach the temperature sensor wire.	
		5) To detach the FRONT-PANEL the main frame unfasten 2 screw at the gutton. (Use +Screw Driver.)	
		6) Take off the FRONT-PANEL, lifting up the button.	

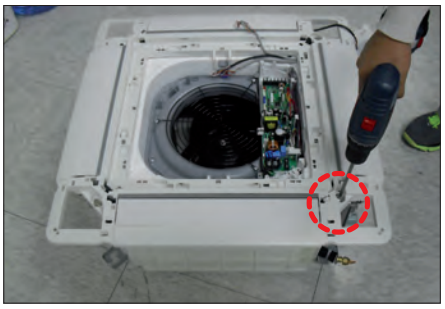
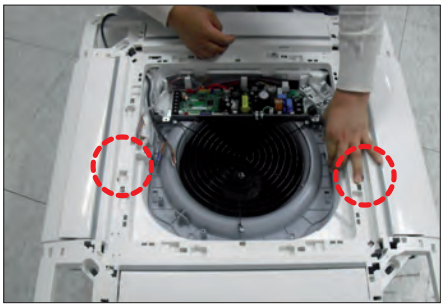
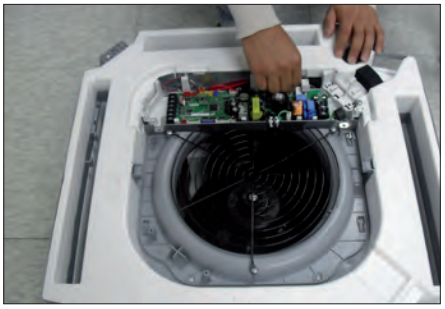
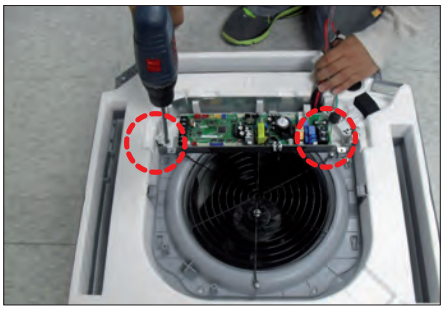
No	Parts	Procedure	Remark
2	TRAY DRAIN	1) Unfasten the screw.	
		2) Detach COVER- CONTROL from the CASE-CONTROL.	
		3) Loosen stepping motor wire and detach the hook of main frame.	
		4) To detach TRAY-DRAIN from the main frame pull the bottom of the TRAY - DRAIN towards you.	
3	Contol-box	1) Unfasten the earth screw. (use + Screw Driver) 2) Detach the temperature sensor.	

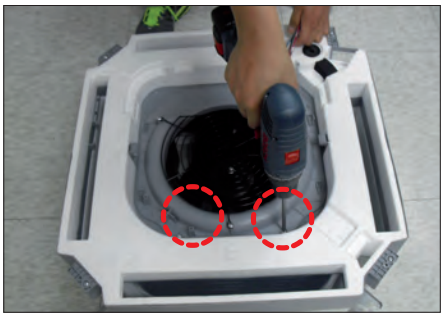
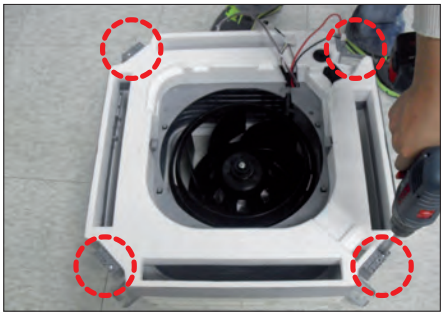
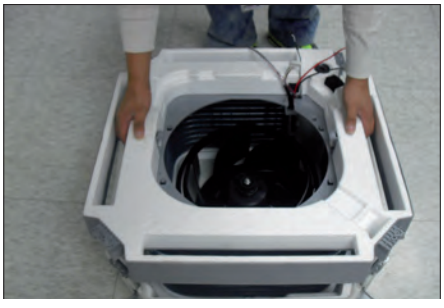
No	Parts	Procedure	Remark
		3) Disconnect the Connector Wire that is connected to the indoor unit's PBA from the PBA. 4) Unfasten the 2 screw. (use + Screw Driver) 5) Take off the CASE-CONTROL from the main frame.	  
3	EVAPORATOR	1) Unfasten the screw at the right side. (use+ Screw Driver) 2) Unfasten the screw at the LEFT side. (use+ Screw Driver)	 

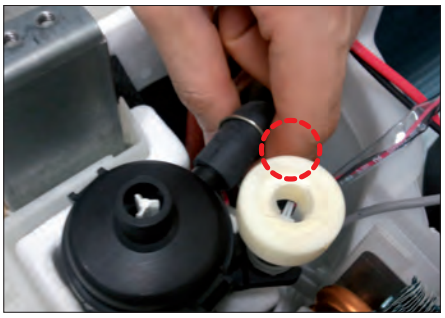
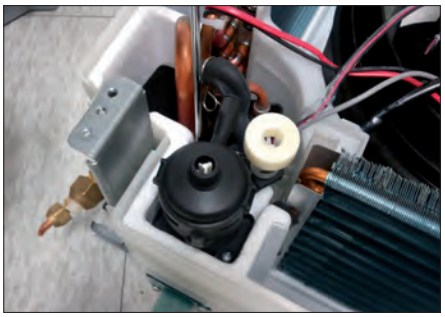
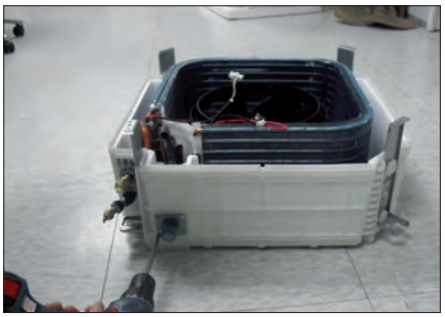
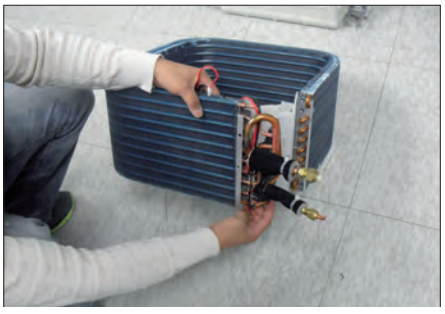
No	Parts	Procedure	Remark
		3) Detach the HOLDER PIPE.	
		4) Take off the EVAPORATOR from the main frame.	
5	FAN MOTOR & CROSS FAN	1) Unfasten the screw. (use+ Screw Driver) 2) Take off the ??? from the main frame.	
		3) Unfasten the screw a little. (use + Screw Driver) 4) Pull the CROSS-FAN & FAN MOTOR from the main frame.	

Global Mini 4way

No	Parts	Procedure	Remark
1	Panel	1) Pull both hooks and take the grille downward. Two safety clips are mounted to the front grille to prevent it from dropping.	
		2) Detach the safity clip and take up the grille.	
		3) Remove the 2 fixed screws to remove the Control-Box Cover. (Use +Screw Driver)	
		4) Remove the Remocon-Receiver and Blade Connector Wire from the PBA. (3EA)	
		5) Push the 4 panel corners and cover downwards to remove it.	

No	Parts	Procedure	Remark
		6) Disassemble the bolts that are assembled with the indoor unit at the 4 panel corners. 7) Press the Hangers at both sides of the panel inwards, to remove it from the indoor unit's hook. Remove the panel from the indoor unit.	 
2	Control-Box	1) Disconnect the Connector Wire that is connected to the indoor unit's PBA 2) Unscrew the 2 fixed screws on both sides of the Control Box, and disassemble the Control Box from the indoor unit. (Use +Screw Driver)	 

No	Parts	Procedure	Remark
3	Bell-Mouth	1) Unscrew the screw fixed on the Bell-Mouth. (Use +Screw Driver)	
		2) Push the Bell-Mouth in the direction opposite to where it's installed on the Control-Box to remove it.	
4	Drain Pan	1) Unscrew the screws on the 4 corners of the indoor unit. (Use +Screw Driver)	
		2) Remove the Drain Pan from the indoor unit.	

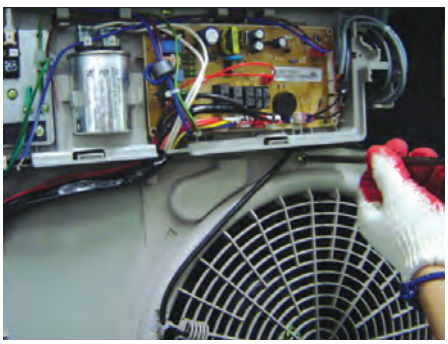
No	Parts	Procedure	Remark
5	Drain Pump & Hose	1) Remove the 2 fixed screws and disconnect the white drainage hose from the Drain Pump. (Use +Screw Driver)	 
		2) Remove the 2 screws and take the Drain-Hose out from the indoor unit to disassemble the transparent Drain-Hose fixed on the side of the indoor unit. (Use +Screw Driver)	
6	Evap. Temperature Sensor	1) Use your hand to remove the temperature sensor attached to the Evap Pipe along with the fixing clip.	

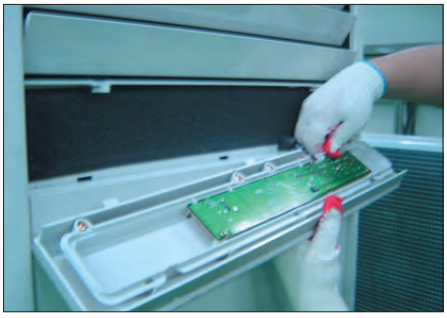
No	Parts	Procedure	Remark
7	Fan & Motor	1) Turn the hexangular nut attached to the top of the Fan counterclockwise to remove it. Take the Fan out of the Motor.	
		2) Turn the three hexangular nuts on the Motor counterclockwise to remove the nuts. Take the Motor Wires attached to these three locations out with your hands prior to removing the Motor.	 
8	Evaporator	1) Remove the screws of the Steel Holder Evaps that are used to fix the Heat Exchanger, and then remove it. (Use +Screw Driver)	
		2) Remove the 2 fixing screws of the Partition Evap at the Heat Exchanger's In/Out Pipe. (Use +Screw Driver)	

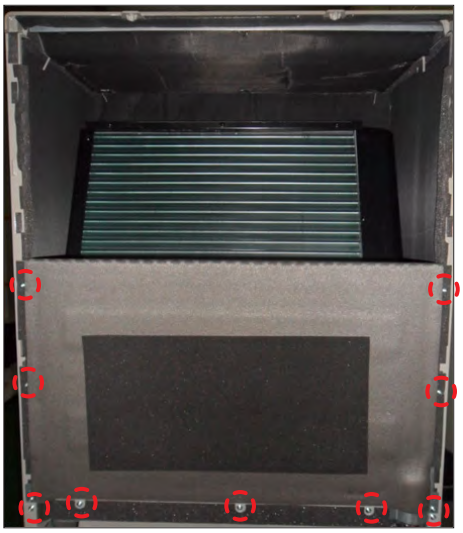
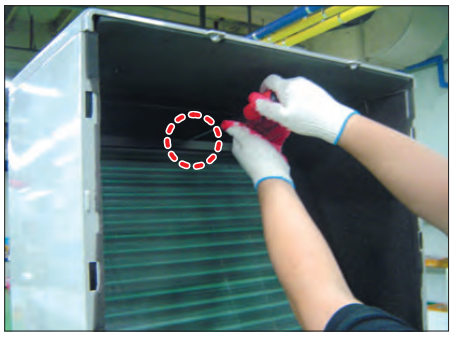
No	Parts	Procedure	Remark
		3) Remove the screw of the Cover Pipe that is used to fix the In/Out Pipe. Remove the In/Out Pipe. (Use +Screw Driver) 4) Remove the Heat Exchanger from the indoor unit's cabinet.	  

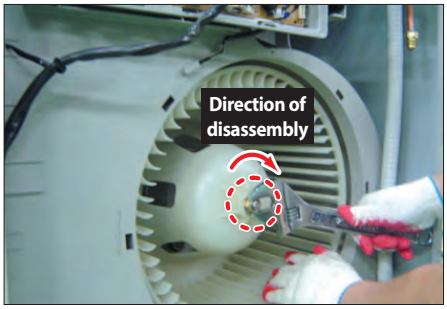
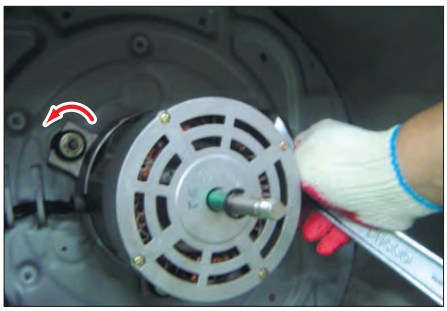
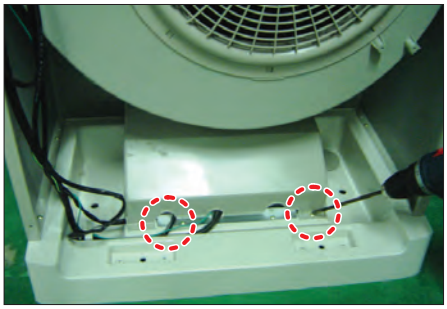
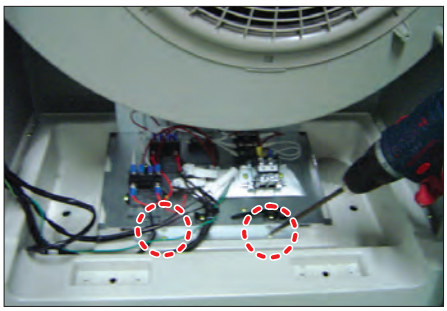
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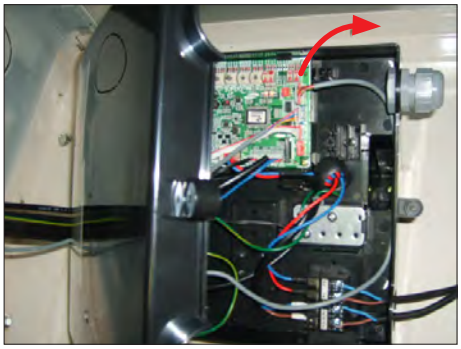
No	Parts	Procedure	Remark
1	Front View	1) Stop the operation of the air conditioner and disconnect the main power supply.	
2	ASS'Y INLET PART	1) Open the ASS'Y INLET and separate the safety clips. (If there is a dust collector in the ASS'Y INLET, separate the connector wire as well.)	
3	ASS'Y MAIN PCB PART	1) Remove the 1 screw which is fixed to COVER-MAIN PCB. (Use +Screw Driver)	
		2) Remove the 1 screw on the upper part of GUIDE-BELL MOUTH and separate the GUIDE-BELL MOUTH in a counter clockwise direction. (Use +Screw Driver)	

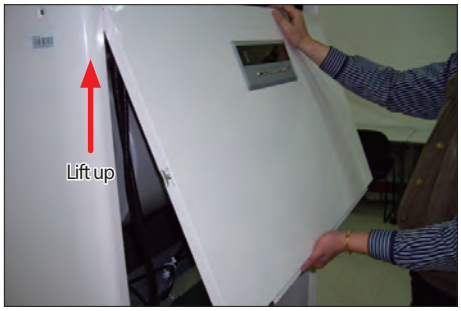
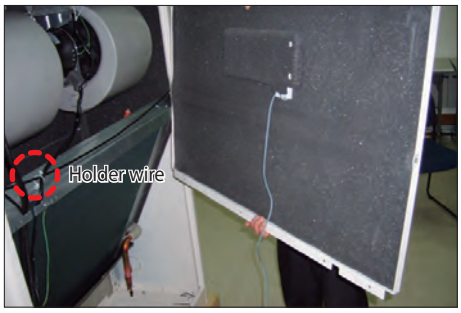
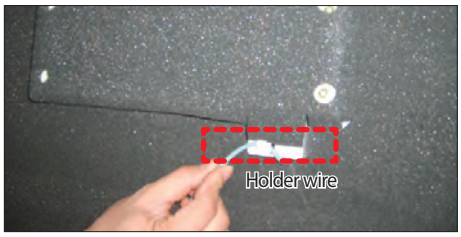
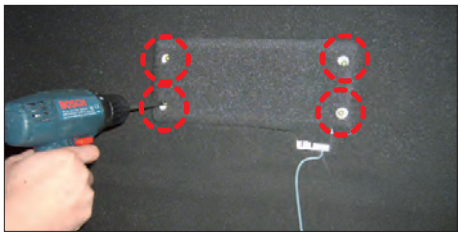
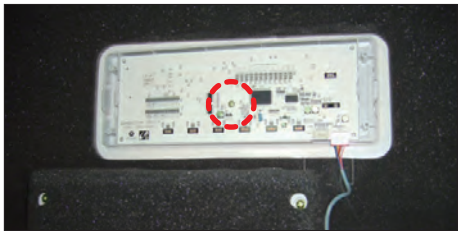
No	Parts	Procedure	Remark
4	ASS'Y OUTLET PART	1) Remove the 2 screws which is fixed to ASS'Y-PANEL DISPLAY. (Use +Screw Driver) ⚠ **Please be careful you do not scratch the blade during unscrewing.**	
		2) Separate the CONNECTOR-WIRE of ASS'Y-PANEL PCB.	
		3) Remove the 2 screws from the ASS'Y-OUTLET SHUTTER and remove the 2 screws from the front of COVER TOP. (Use +Screw Driver) And then separate by pushing it upwards.	 

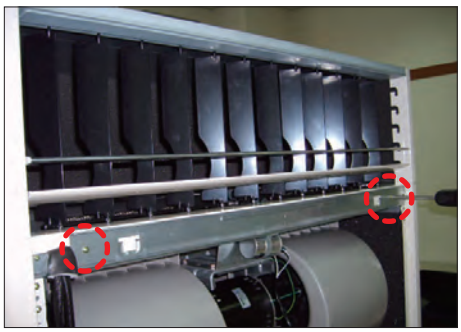
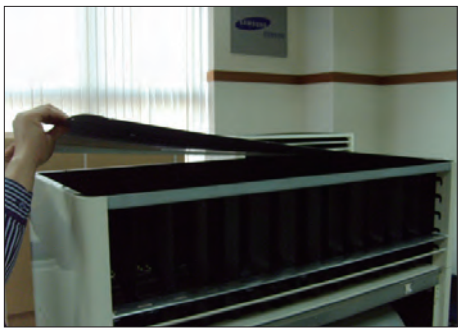
No	Parts	Procedure	Remark
5	ASS'Y EVAP PART	1) Remove the 9 screws which is fixed to PARTITION. (Use +Screw Driver)	
		2) Remove the 2 screws which is fixed to COVER EVAP COLLECTOR and then separate the ASS'Y EVAP. (Use +Screw Driver) ⚠ **Be careful not to crush the FIN during ASS'Y EVAP disassembly and avoid the sharp edge of the FIN.**	
		3) Remove the 4 screws which is fixed to ASS'Y-PANEL DRAIN.	

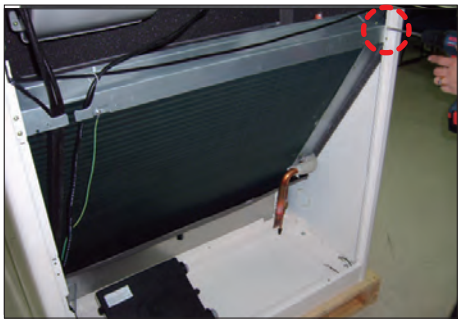
No	Parts	Procedure	Remark
6	ASS'Y MOTOR PART	1) Remove the BLOWER NUT and separate the BLOWER. (Use Monkey Spanner)	
		2) Remove the 3 fixing nut of the MOTOR and remove the ground wire fixing screw. (Use Monkey Spanner)	
7	ASS'Y CONTROL IN PART	1) Remove the 2 screws which is fixed to COVER CONTROL. (Use +Screw Driver)	
		2) Remove the 2 screws which is fixed to ASS'Y CONTROL IN. (Use +Screw Driver)	

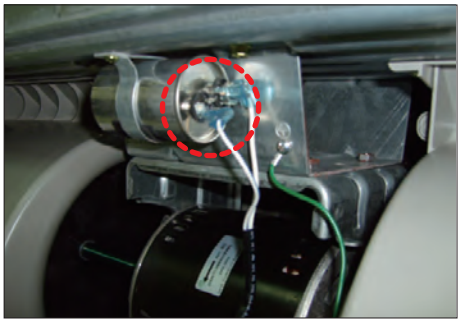
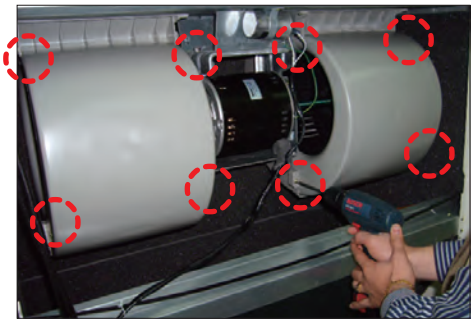
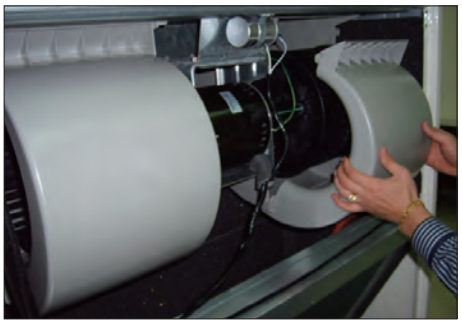
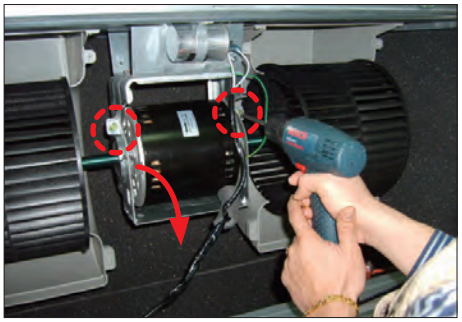
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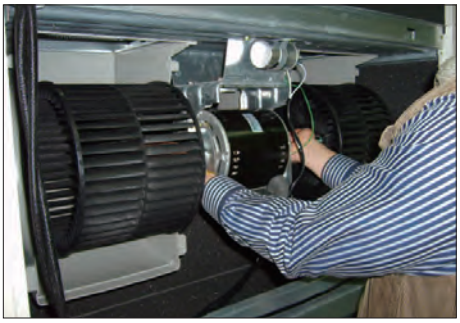
No	Parts	Procedure	Remark
1	Front View	1) Stop the operation of the air conditioner and disconnect the main power supply. 2) In the case of major repairs : First, collect all of the refrigerant to the outdoor unit by a refrigerant recovery operation. 3) In the case of major repairs that power unconnected : Collect all of the refrigerant to the refrigerant bombe. (Using the refrigerant recovery apparatus and refrigerant bombe.)	
2	ASS'Y INLET PART	1) Open the ASS'Y INLET GRILLE and separate the safety clips.	
3	ASS'Y MAIN PCB PART	1) Remove the 1 screw which is fixed to COVER-MAIN PCB. (Use +Screw Driver) 2) Separate the connector from the MAIN PCB.	 

No	Parts	Procedure	Remark
4	ASS'Y FRONT PANEL & DISPLAY PCB PART	1) Remove the 4 screws from the bottom of FRONT PANEL. (Use +Screw Driver)	
		2) Lift up the FRONT PANEL and separate it.	
		3) Separate the wire from the holder wire and place the FRONT PANEL in the flat floor.	
		4) Separate the wire from the holder wire of FRONT PANEL rear.	
		5) Remove the 4 screws from the DISPLAY COVER. (Use +Screw Driver)	
		6) Remove the 1 screw which is fixed to DISPLAY PCB. (Use +Screw Driver)	

No	Parts	Procedure	Remark
5	OUTLET GRILLE PART	1) Remove the 2 screws from the BRACKET FRONT BLOWER of OUTLET GRILLE. (Use +Screw Driver)	
		2) Remove the 14 screws from the COVER TOP. (Use +Screw Driver)	
		3) Separate the COVER TOP.	
		4) Lift up the OUTLET GRILLE and separate it.	 

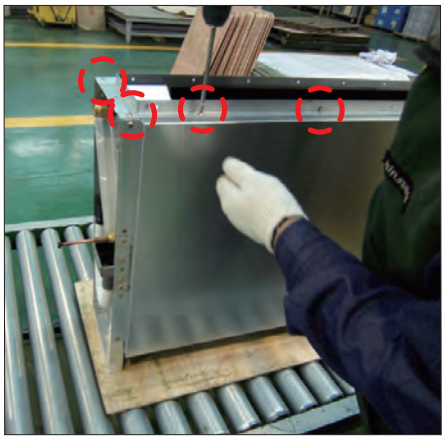
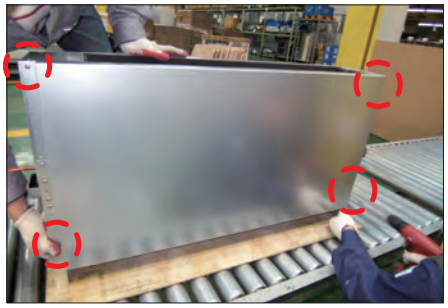
No	Parts	Procedure	Remark
6	ASS'Y EVAP PART	⚠ 1) **Heat exchanger service is major repairs service work.** 2) **First, collect all of the refrigerant to the outdoor unit by a refrigerant recovery operation and begin work.** 3) **Welding work qualification possession worker works.** 4) **Always place a fire extinguisher in preparation for an emergency.**	
		1) Remove the high pressure pipe flare nut. (Use Monkey Spanner) 2) Carefully separate the low pressure pipe (9/8 inch) using gas welding machine. ⚠ **Take care lest welding heat should go to drain fan. (It is made of plastic.)**	
		3) Remove the 4 screws from the upside of heat exchanger. (Use +Screw Driver) 4) Remove the 4 screws from the right side of heat exchanger cover. (Use +Screw Driver)	
		5) Remove the 4 screws from the left side of heat exchanger cover. (Use +Screw Driver)	

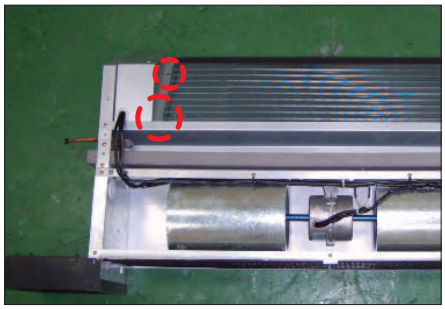
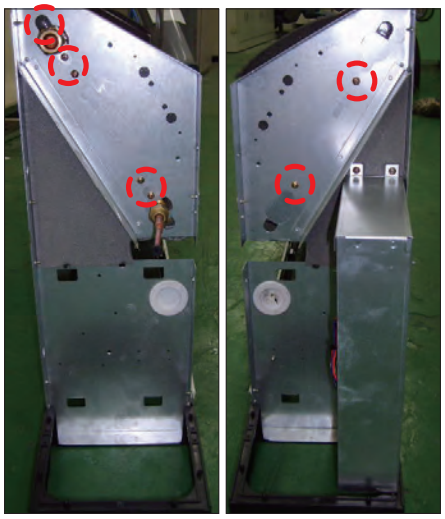
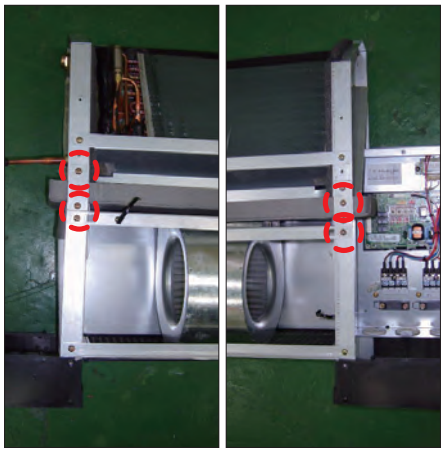
No	Parts	Procedure	Remark
7	FAN BLOWER & MOTOR PART	1) Separate the connector of motor drive capacitor.	
			
		2) Remove the 8 screws from the COVER-FAN BLOWER DUCT. (Use +Screw Driver)	
		3) Separate the COVER-FAN BLOWER.	
		4) Remove the 2 screws from the FAN MOTOR BRACKET. (Use +Screw Driver) 5) Pull out the FAN MOTOR BRACKET and separate it.	

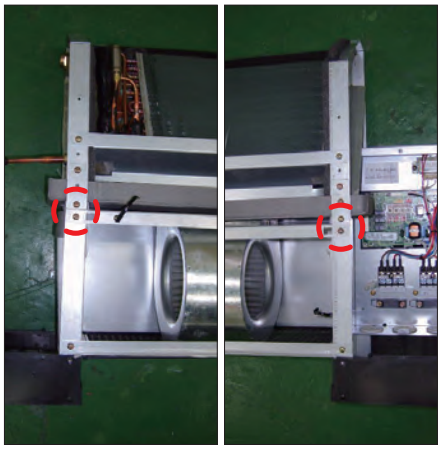
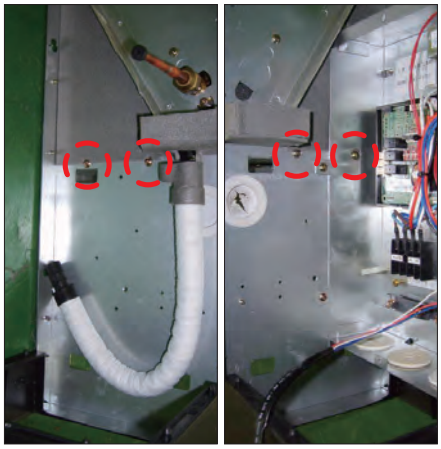
No	Parts	Procedure	Remark
		6) Hold up with both hands a FAN and MOTOR and then pull out the FAN and MOTOR.	

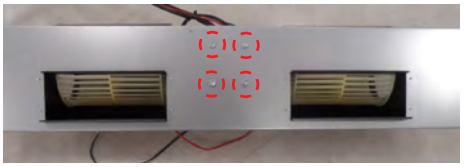
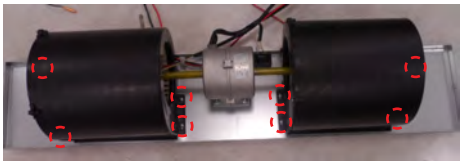
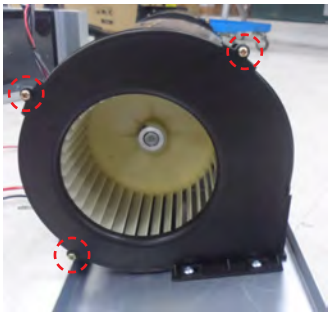
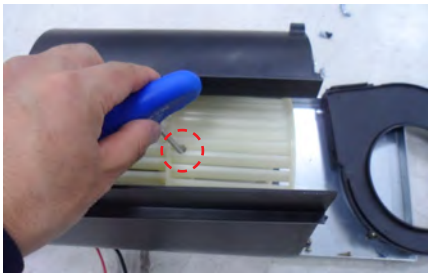
■ Floor Standing Type (CONCEALED)

– All the procedure has to be verified because the cover should not open when the unit is installed.

No	Parts	Procedure	Remark
1	Cabinnet	1) Unscrew fixed screw of the upper part cabinet, and please separate	
		2) Please separate front cabinet.	
			

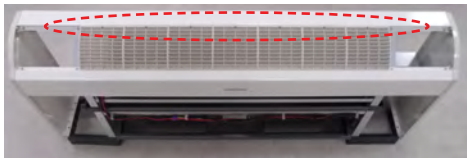
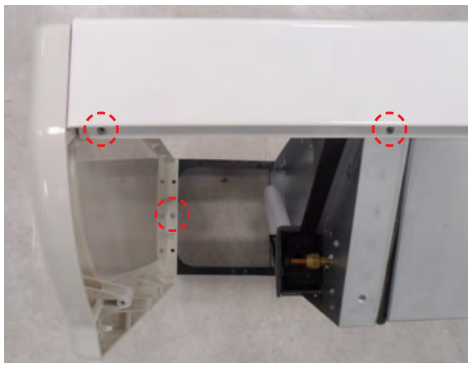
No	Parts	Procedure	Remark
2	Heat Exchanger	1) Unscrew two fixed screws, and please separate heat exchanger cover.	
		2) Unscrew fixed screw on both side of heat exchanger plate. And then pulls heat exchanger to the right side, and please separate.	 
3	Drain Pan	1) Please remove PLATE for fixation of DRAIN PAN located in the side.	

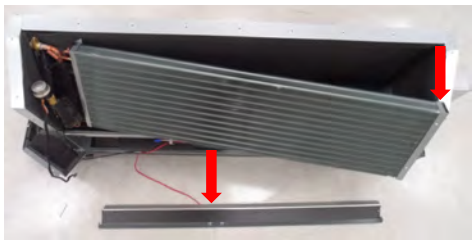
No	Parts	Procedure	Remark
4	Motor & Fan	1) Process hopes for DRAIN PAN isolation work in this work earlier. 2) Unscrew MOTOR BRACKET fixation screw located in the front surface, and please separate.	
		3) Unscrew MOTOR BRACKET fixation screw located in the side, and please separate.	
		4) Separate out MOTOR BRACKET for front side.	

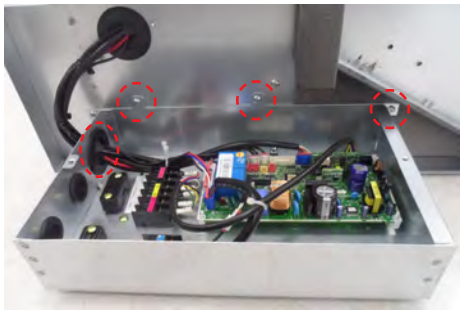
No	Parts	Procedure	Remark
4	Motor & Fan	5) Please separate screw between the MOTOR and the MOTOR BLACKET.	
		6) Please separate screw between the MOTOR BLACKET and the FAN BLOWER.	
		7) Please separate screw between the MOTOR BLACKET and the FAN BLOWER.	
		8) Please separate the FAN screw using hexa-gon-wrench.	

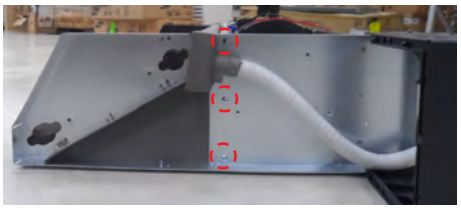
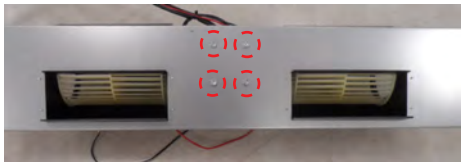
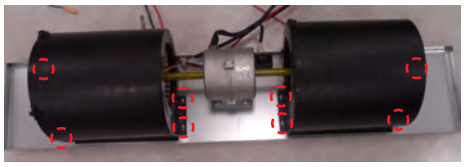
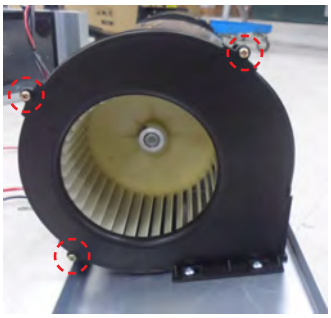
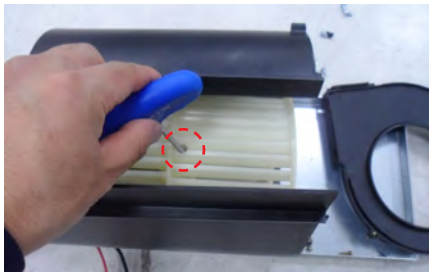
■ Floor Standing Type (EXPOSED)

– All the procedure has to be verified because the cover should not open when the unit is installed.

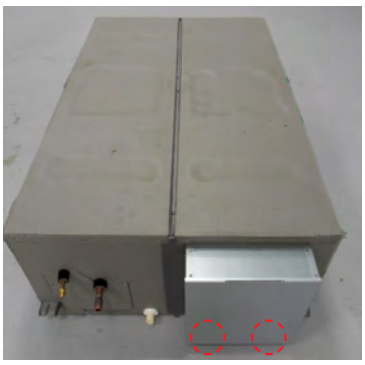
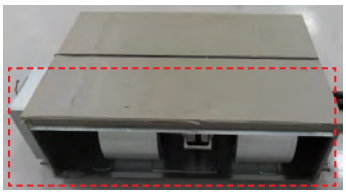
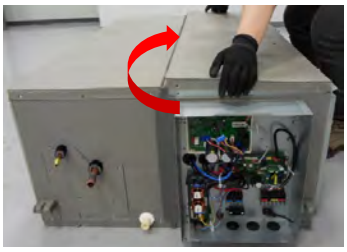
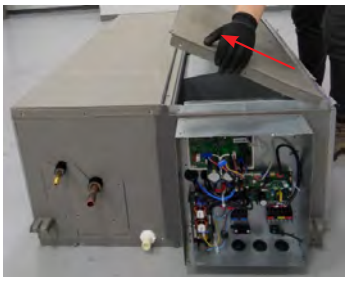
No	Parts	Procedure	Remark
1	Cabinnet	1) Please separate the DOOR HAND & the DOOR BODY by pulling upwards.	
		2) Please unscrew the FRONT MID screw and separate the FRONT MID by pulling downwards.	
		3) Please unscrew the GRILLE screw and separate the GRILLE.	
		4) Please unscrew the FRONT MID Screw and separate the FRONT MID.	
			
		5) Please unscrew the FRONT UPPER & the FRONT SIDE screw and separate the FRONT SIDE.	
		6) Please unscrew the FRONT UPPER screw of the back side and separate the FRONT UPPER.	

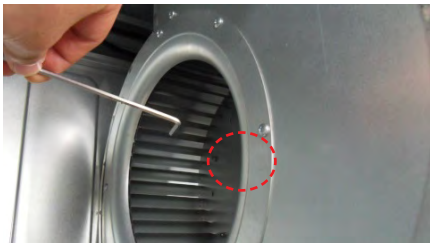
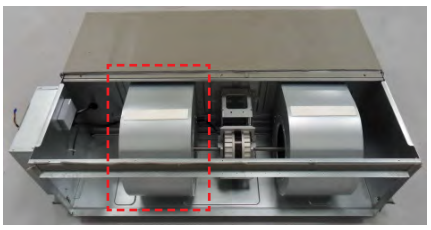
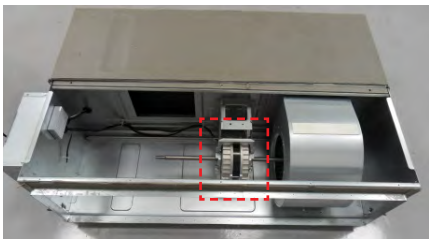
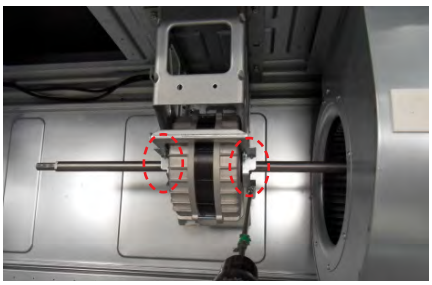
No	Parts	Procedure	Remark
2	Heat Exchanger	1) Please unscrew the screw and separate the COVER.	
		2) Please unscrew the SIDE CABINET screw.	 
		3) Please disassemble the fixing plate of heat exchanger and separate the heat exchanger.	

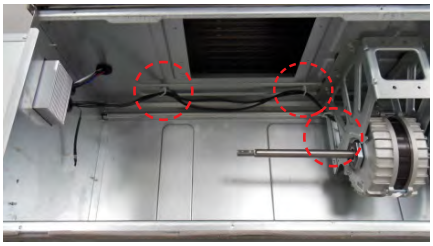
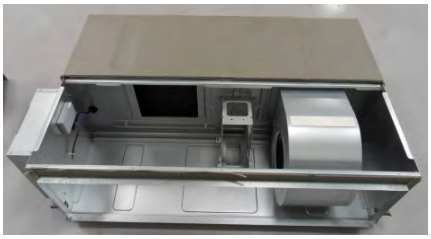
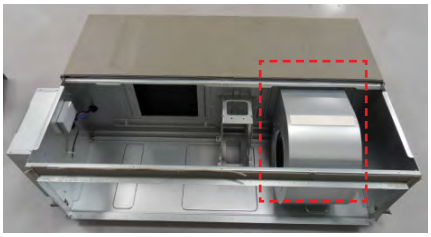
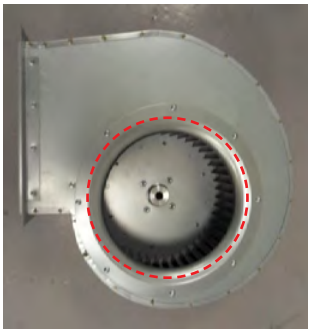
No	Parts	Procedure	Remark
3	Control Box	1) Please unscrew the screw and separates the C-BOX COVER.	
		2) Please unscrew the screw and separates the C-BOX.	

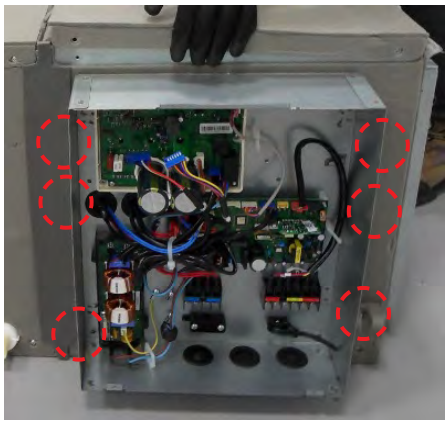
No	Parts	Procedure	Remark
4	MOTOR & FAN	1) Please unscrew the CABINET SIDE screw and separates the MOTOR CABINET.	 
		2) Please separate screw between the MOTOR and the MOTOR BLACKET.	
		3) Please separate screw between the MOTOR BLACKET and the FAN BLOWER.	
		4) Please separate screw between the MOTOR BLACKET and the FAN BLOWER.	
		5) Please separate the FAN screw using hexa-gon-wrench.	

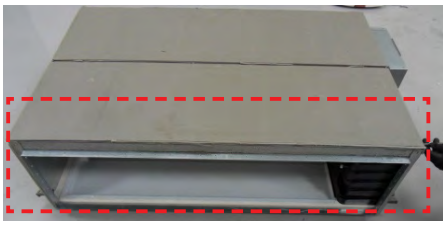
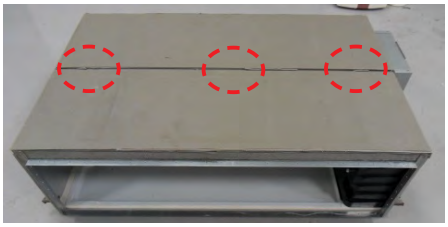
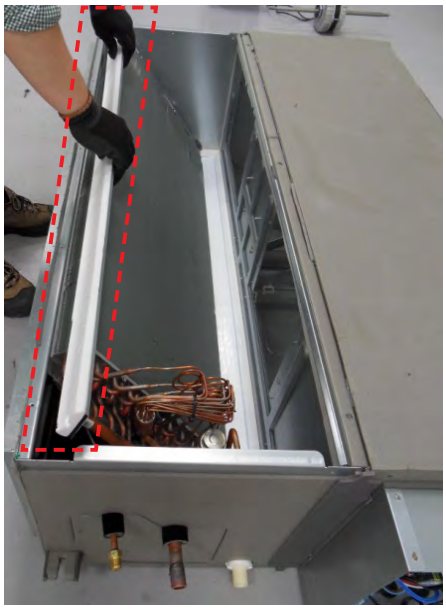
■ OAP Duct type

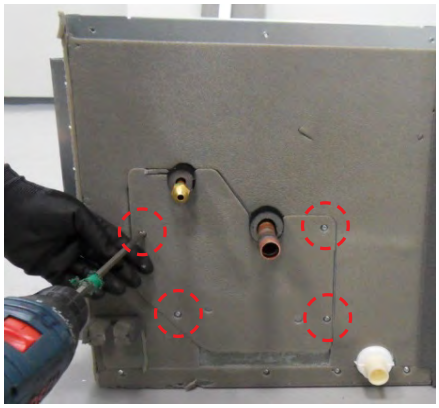
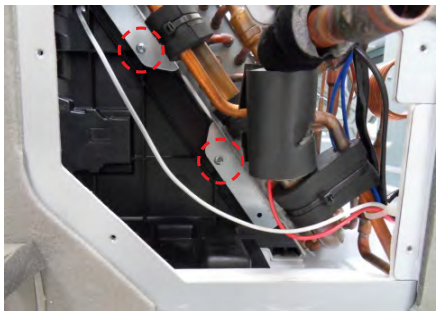
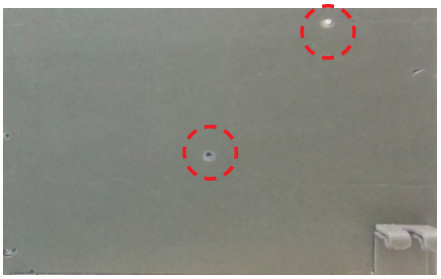
No	Parts	Procedure	Remark
1	Commom	2) Disasseble the Cover Control. - Unscrew 2 screws. ⚠ **You must turn off the Power before disassembly.**	
2	Motor & Fan	**< Service from Top & Bottom side >** 1) Disassemble the connection wire to take the Motor Fan out.	
		2) Disassemble the Canibet Top Fan. - Unscrew 6 screws.	
		3) Disassemble the Link Screw. - Unscrew 3 screws.	
		4) Disassemble Cabinet Top Fan.	 

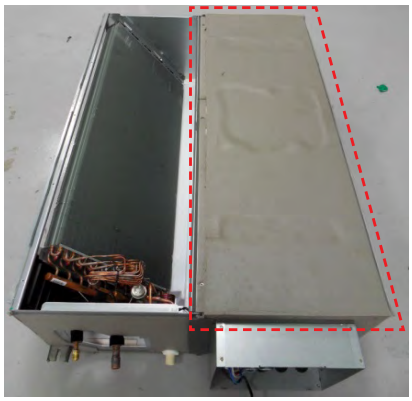
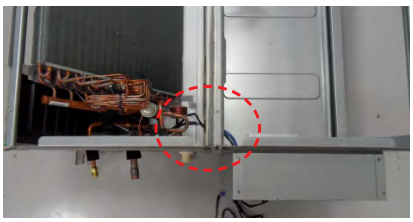
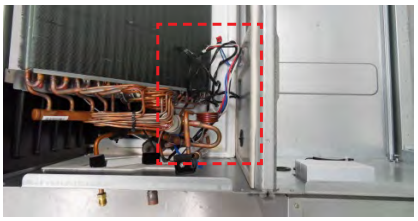
No	Parts	Procedure	Remark
		5) Disassemble C/BOX side Case Blower. - Unscrew 1 Blower screw using 3mm wrench. - Unscrew 6 screws.	
			
		6) Disassemble 1 Holder Motor. - Unscrew 2 screws.	
			
		7) Disassemble Blower screw of opposite side - Unscrew 1 Blower screw using 3mm wrench	

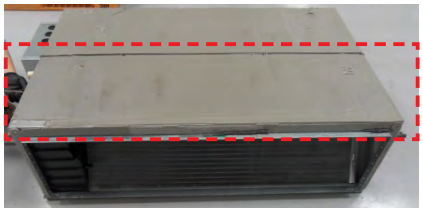
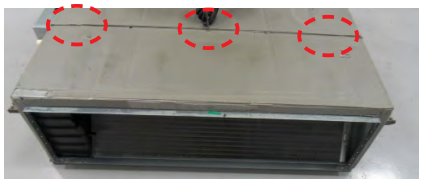
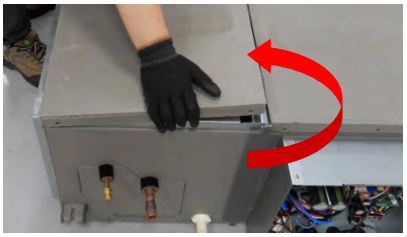
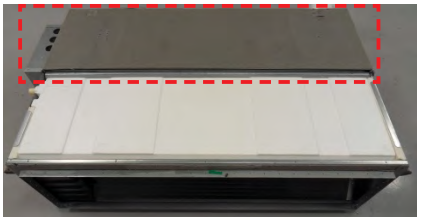
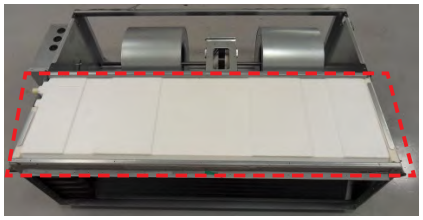
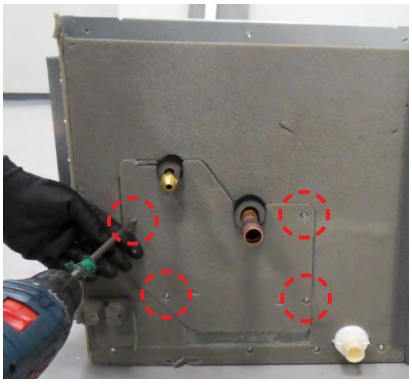
No	Parts	Procedure	Remark
		8) Disassemble Motor from the set - Disassemble motor wire from 3 holder wires . ⚠ **Please be careful, Avoiding injury when disassembly the steel blower.**	
			
		9) Disassemble Case blower. - Unscrew 6 screws	
			
		10) Disassemble the Bell mouth for Blower change . - Unscrew 8 screws ⚠ **Please be careful, Avoiding injury when disassembly the steel blower.**	

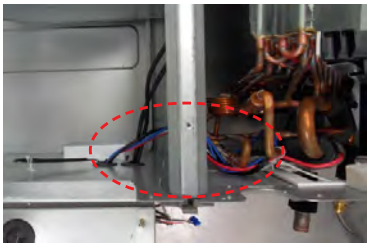
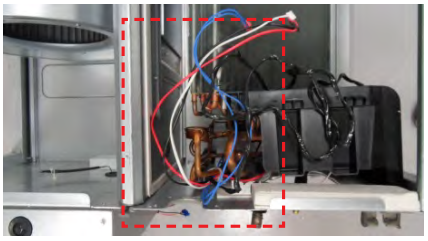
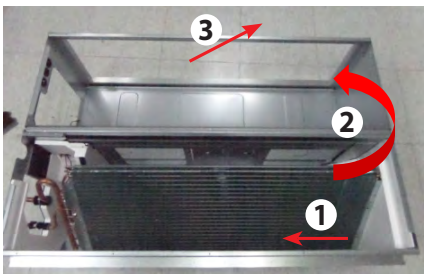
No	Parts	Procedure	Remark
3	Control Box	1) Disassemble Evap Sensor wire,EEV wire, Motor wire and Solenoid V/V wire.	
		2) Disassemble the Case Control. - Unscrew 6 screws	

No	Parts	Procedure	Remark
4	Evap	**< Service from Top side >** 1) Disassemble The Case Evap Top. - Unscrew 6 screws.	
		2) Disassemble the Link Screw. - Unscrew 3 screws.	
		3) Disassemble the Case Evap Top.	 
		4) Disassemble The Plate Front.	

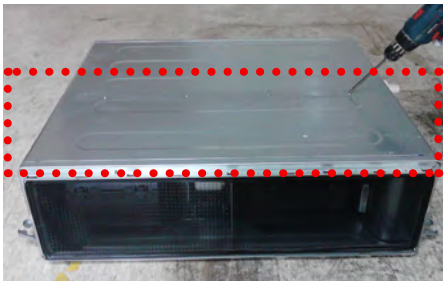
No	Parts	Procedure	Remark
4	Evap	5) Disassemble The Cover pipe. - Unscrew 4 screws	
		6) Remove The cable tie on the Support Evap.	
		7) Disassemble The Evap. - Unscrew 4 screws.	 

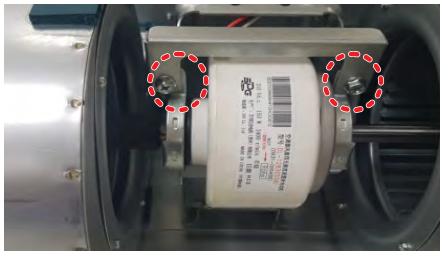
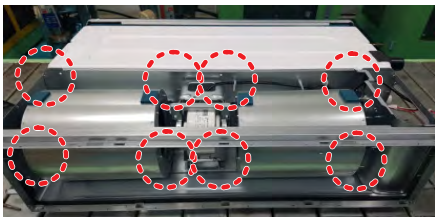
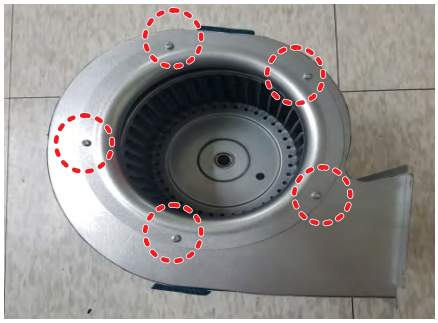
No	Parts	Procedure	Remark
4	Evap	8) Disassemble the Case Fan Top. - Unscrew 6 screws.	
		9) Disassemble Evap Sensor wire,EEV wire and Solenoid V/V wire from C/BOX.	
			
			
		10) Disassemble the Evap.	
			

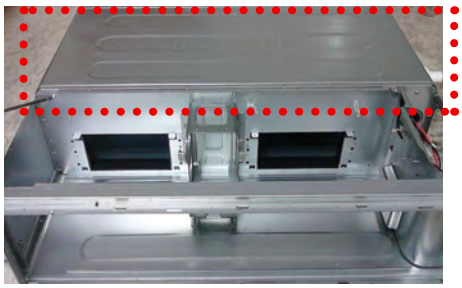
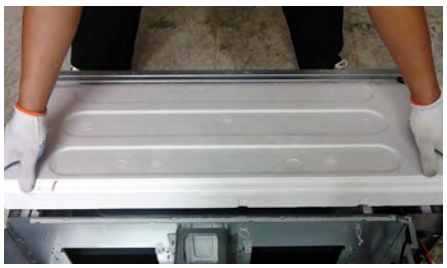
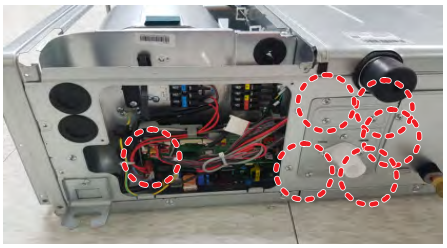
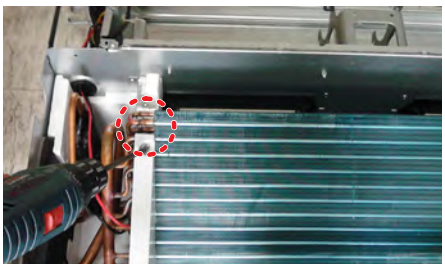
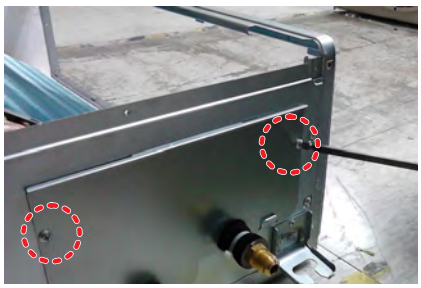
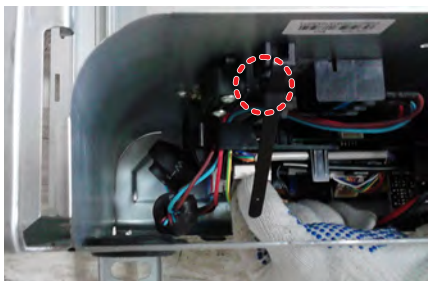
No	Parts	Procedure	Remark
	Evap	**< Service from Bottom side >** 1) Disassemble The Case Evap Bottom. - Unscrew 7 screws.	
		2) Disassemble the Link Screw. - Unscrew 3 screws.	
		3) Disassemble the Case Evap Bottom.	
			
		4) Disassemble The Case Fan Bottom. - Unscrew 6 screws.	
		5) Disassemble the Drain Pan.	
		6) Disassemble The Cover pipe. - Unscrew 4 screws.	

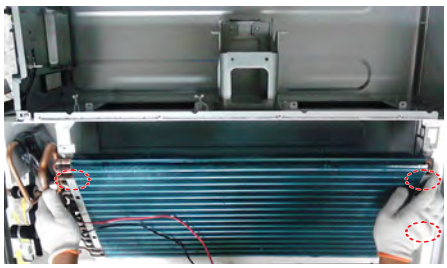
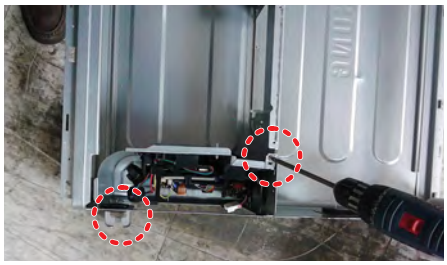
No	Parts	Procedure	Remark
	Evap	7) Disassemble Evap Sensor wire, EEV wire and Solenoid V/V wire from C/BOX.	  
		8) Disassemble The Evap. - Unscrew 2 screws.	  

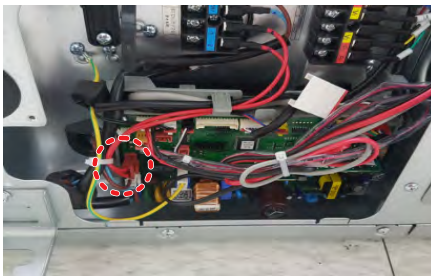
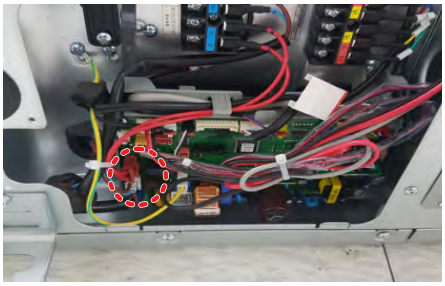
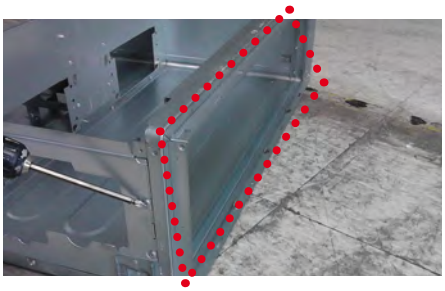
Global Duct 1 (AM007/009/012/015/018MNMDCH/AA)

No	Parts	Procedure	Remark
1	Motor & Blower	1) Disassemble the Cabinet Bottom Fan. - Unscrew 10 screws	
		2) Disassemble the Case Filter Pre.	
		3) Disassemble the Cabinet Bottom Evap. - Unscrew 10 screws	
		4) Disassemble the Cover Control. - Unscrew 2 screws	
		5) Cut the cable-tie	

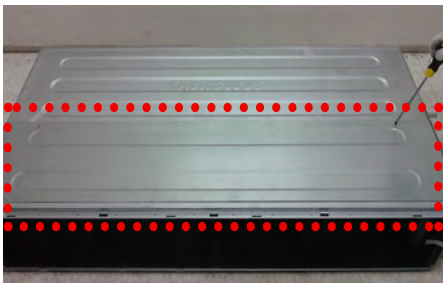
No	Parts	Procedure	Remark
		6) Disconnect the wire between assy control out and motor.	
		7) Disassemble the 2 Holder Motor. - Unscrew 2 screws	
		8) Disassemble the fan casing. - Unscrew 8 screws	
		9) Disassemble the motor. - Unscrew 2 screws.	
		10) Disassemble the fan. - Unscrew 5 screws.	

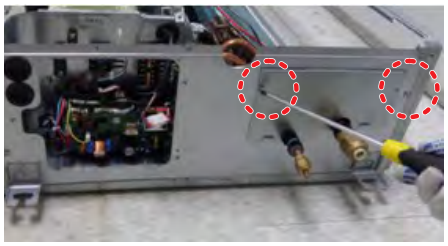
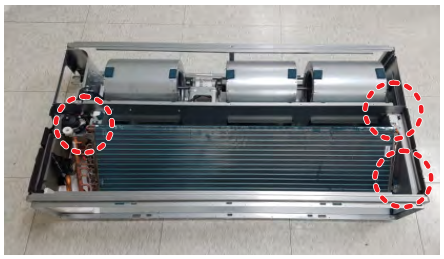
No	Parts	Procedure	Remark
2	Drain Pan& Drain Pump	1) Disassemble the Cabinet Bottom Evap. - Unscrew 7 screws.	
		2) Pull the Drain Pan Out.	
		3) Disassemble the drain Pump. - Unscrew 5 screws and disassemble 2 conectors.	
3	EVAP	1) Disassemble the Support Evap. - Unscrew 1 screws	
		2) Disassemble the Cover Pipe. - Unscrew 2 screws	
		3) Disconnect the wire between assy control out and Evap. (TEMP sensor, EEV)	

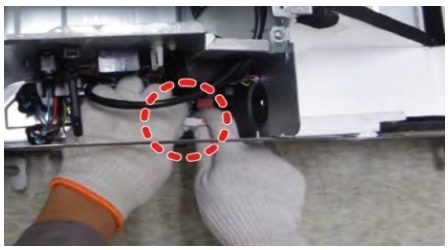
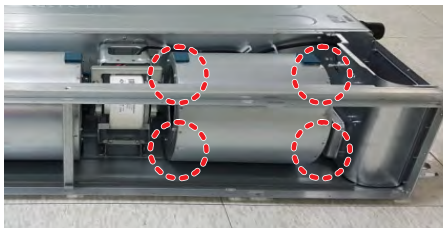
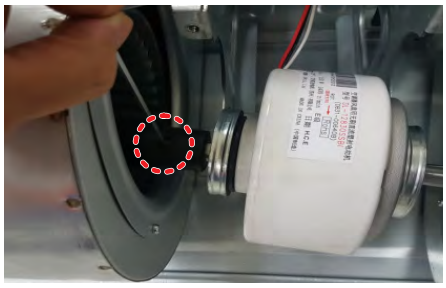
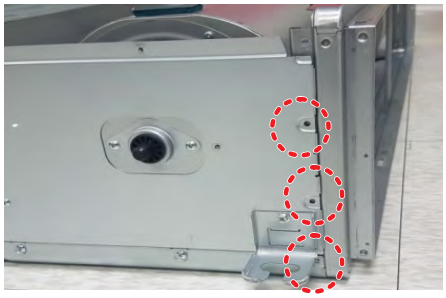
No	Parts	Procedure	Remark
		4) Disassemble the Evap. - Unscrew 3 screws. Then pull the Evap out	
4	Control	1) Disassemble the Case Control. - Unscrew 2 screws	

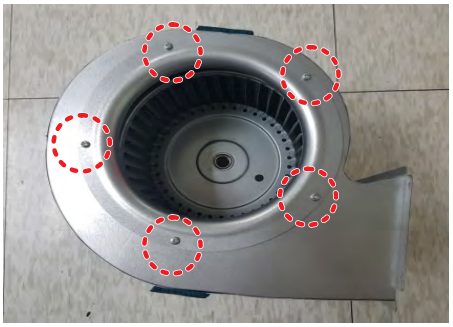
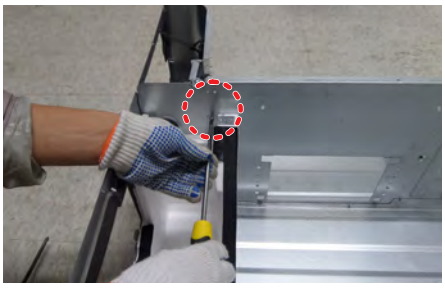
No	Parts	Procedure	Remark
5	PBA	1) Disassemble the main PBA. - Unscrew 1 screw & disassembe conectors.	
		2) Disassemble the case PBA. - Unscrew 2 screws.	
		3 Disassemble the BLDC PBA. - Unscrew 1 screw.	
6	Frame	1) Disassemble the Frame. - Unscrew 6 screws	

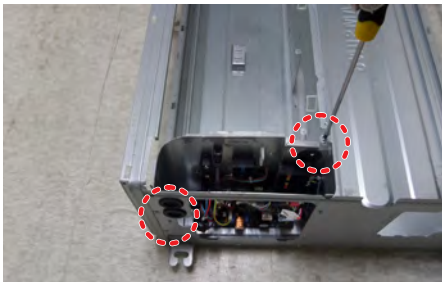
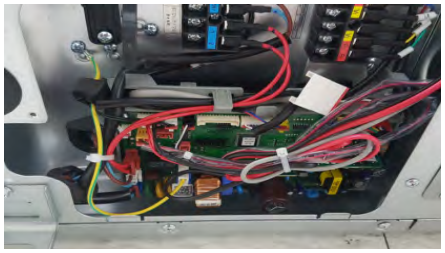
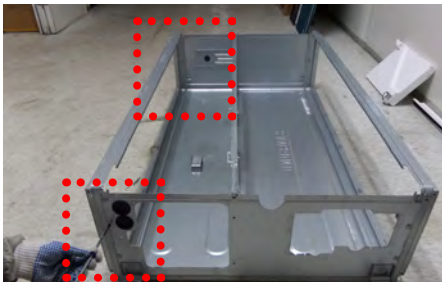
Global Duct 2,3 (AM024/027/030/036/048MNMDCH/AA)

No	Parts	Procedure	Remark
1	Common	1) Disassemble the Cabinet Bottom Fan. - Unscrew 11 screws	
		2) Disassemble the Case Filter Pre.	
		3) Disassemble the Cover Control. - Unscrew 2 screws	
		4) Disassemble the Cabinet Bottom Evap. - Unscrew 8 screws	

No	Parts	Procedure	Remark
2	Drain Pan & Evap	1) Disassemble the Drain Pan from the set.	
		2) Disassemble the Cover Pipe. - Unscrew 2 screws	
		3) Disassemble the Support Evap. - Unscrew 1 screws	
		4) Disassemble the Evap. - Unscrew 3 screws	

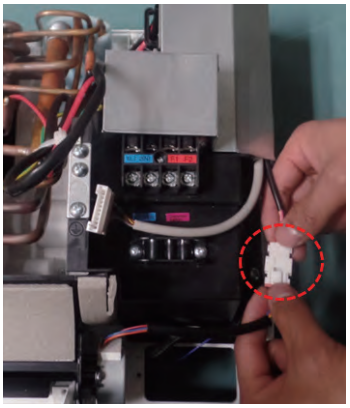
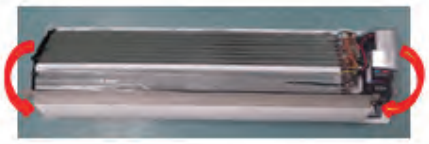
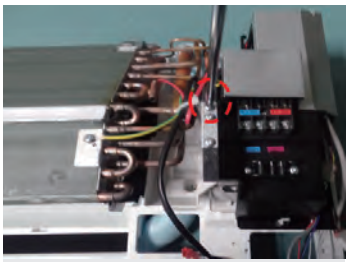
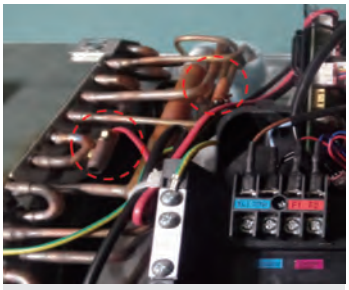
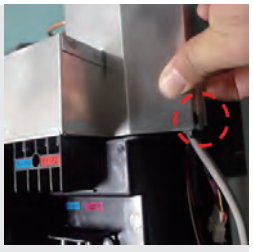
No	Parts	Procedure	Remark
3	Motor & Fan	1) Disassembl the connection wire,the take the Motor Fan out	
		2) Disassemble the 3 holder motor. - Unscrew 2 screws	
		3) Disassemble the fan casing. - Unscrew 4 screws	
		4) Disassemble the holder-shaft. - Unscrew 1 screw.	
		5) Disassemble the frame. - Unscrew both side 3 screws.	

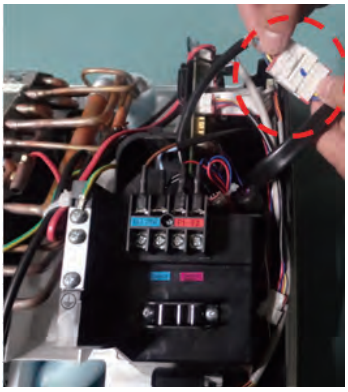
No	Parts	Procedure	Remark
		6) Disassemble the motor. - Unscrew 1 screw.	
		7) Disassemble the fan. - Unscrew 5 screws.	
4	Cushion	1) Disassemble the Assy Cushion Right. - Unscrew 1 screws	
		2) Disassemble the Seal Cushion LF. - Unscrew 1 screws	

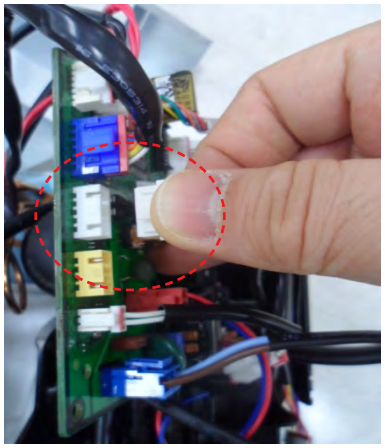
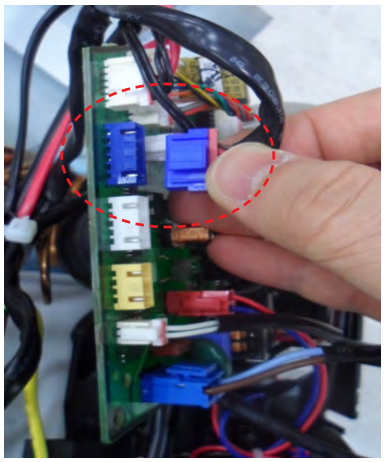
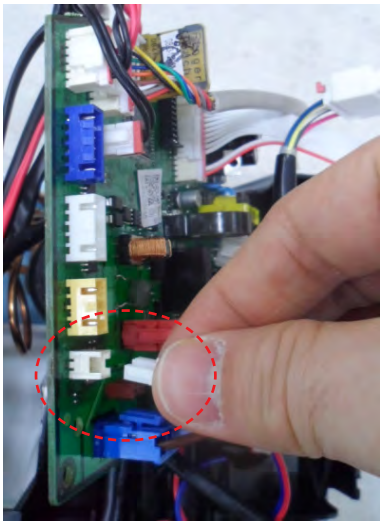
No	Parts	Procedure	Remark
5	Control	1) Disassemble the Case Control. - Unscrew 2screws	
6	PBA	1) Disassemble the main PBA. - Unscrew 1 screw & disassembe conectors.	 **(Global Duct 2)**
		2) Disassemble the case PBA. - Unscrew 2 screws.	 **(Global Duct 3)**
		3) Disassemble the BLDC PBA. - Unscrew 1 screw.	 **(Global Duct 3)**
7	Frame	1) Disassemble the Frame.- Unscrew 6 screws	

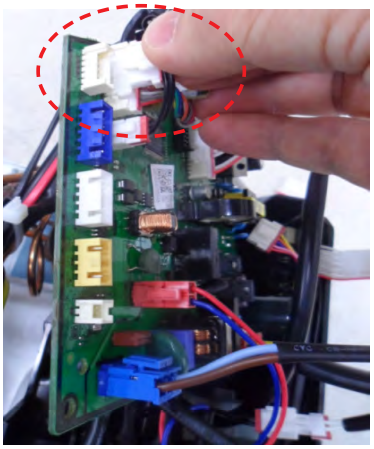
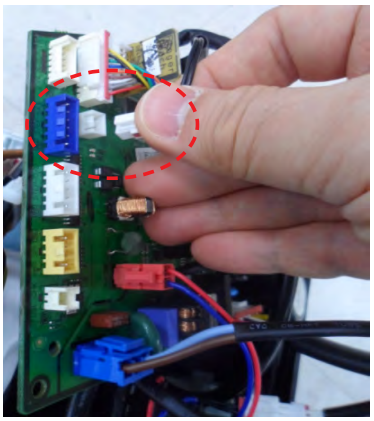
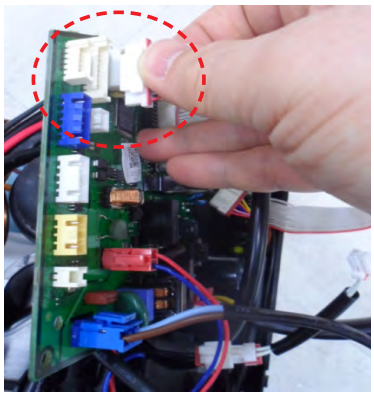
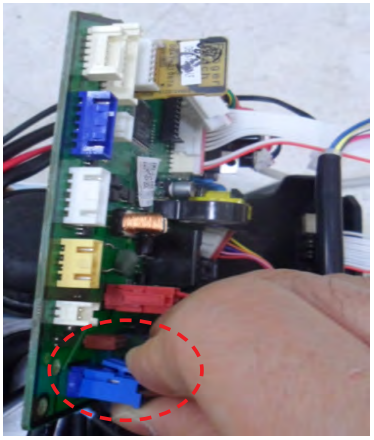
■ Wall Mounted type (MAX)

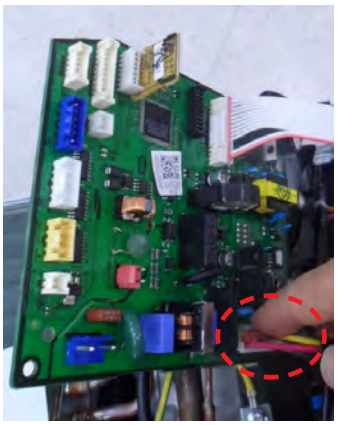
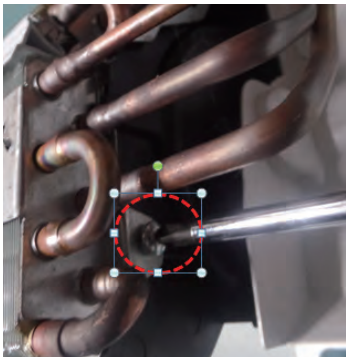
No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and shut off the main power. 2) Open the FRONT-GRILLE and pull out from the PANEL-FRONT.	
		3) Detach COVER-TERMINAL from the PANEL-FRONT. (Use +Screw Driver.)	
		4) Loosen connector wire (white) and detach the temperature sensor wire.	
		5) To detach the FRONT-PANEL the main frame unfasten 2 screw at the gutton. (Use +Screw Driver.)	
		6) Take off the FRONT-PANEL, lifting up the button.	

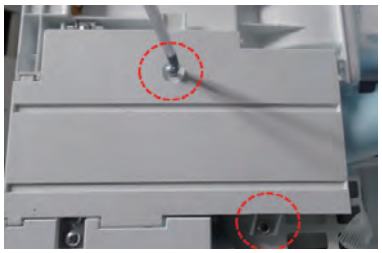
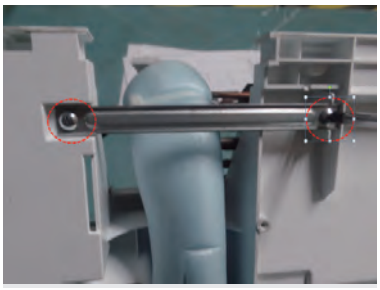
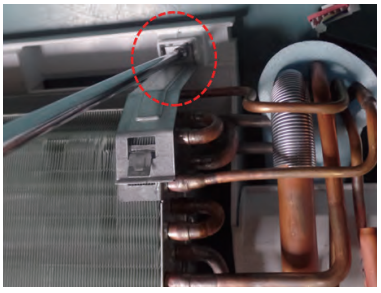
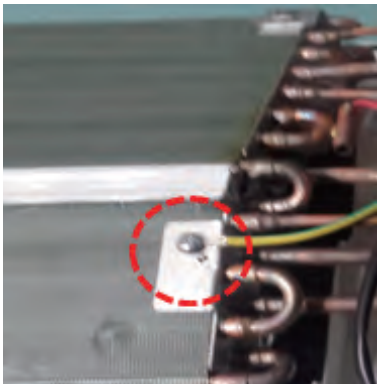
No	Parts	Procedure	Remark
2	TRAY DRAIN	1) Loosen stepping motor wire and detach the hook of main frame.	
		2) To detach TRAY-DRAIN from the main frame, pull the bottom of the TRAY-DRAIN towards you.	
		3) To detach TRAY-DRAIN from the main frame , pull the bottom of the TRAY-DRAIN towards you.	
3	CONTROL IN	1) Unfasten the earth screw. (use + ScrewDriver)	
		2) Detach the temperature sensor and Humidity sensor.	
		3) Detach the temperature sensor.	 

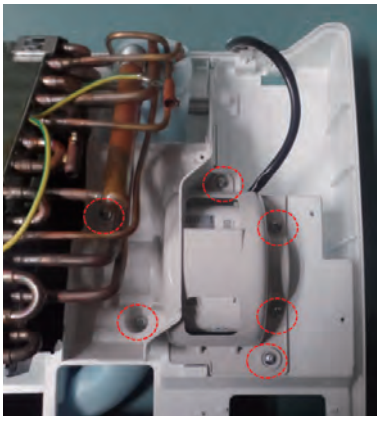
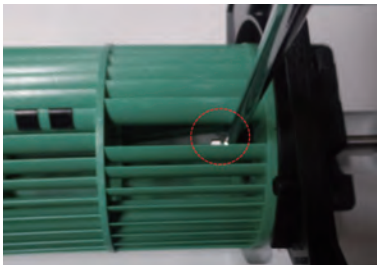
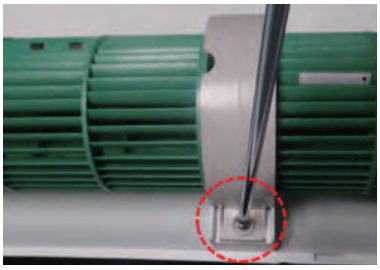
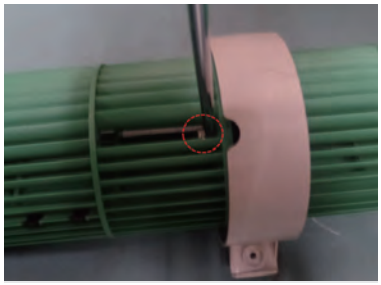
No	Parts	Procedure	Remark
		4) Loosen MOTOR wires(white).	
		5) Take off the CASE-CONTROL from the main frame. (use + Screw Driver)	

No	Parts	Procedure	Remark
4	PBA	1) Loosen the STEP UP/DOWN connector(CN802). ⚠ When you separate the connector, pull pressing the locking button.	
		2) Loosen the EEV connector(CN801). ⚠ When you separate the connector, pull pressing the locking button.	
		3) Loosen the FUSE CHK connector (CN140). ⚠ When you separate the connector, pull pressing the locking button.	

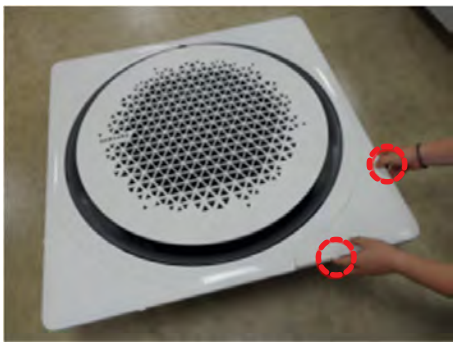
No	Parts	Procedure	Remark
		4) Loosen the EVA IN/OUT connector. (CN403) ⚠ **When you separate the connector, pull pressing the locking button.**	
		5) Loosen the Humidity sensor connector(CN401). → Option connector. ⚠ **The terminal is locking type. So, when you separate terminals, pull pressing the button.**	
		6) Loosen the DISPLAY connector. (CN501). ⚠ **The terminal is locking type. So, when you separate terminals, pull pressing the button.**	
		7) Loosen the POWER connector. ⚠ **When you separate the connector, pull pressing the locking button.**	

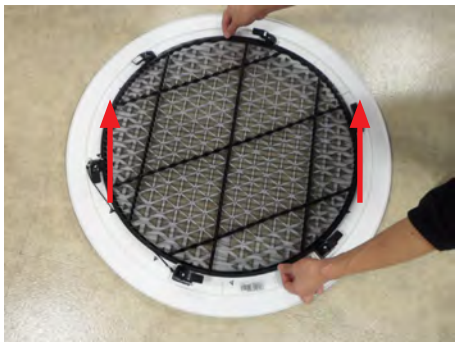
No	Parts	Procedure	Remark
		8) Loosen the COMM wire connector(CN303). ⚠ **When you take off the PBA, don't touch the components. Please hold the PBA both side.**	
		9) Loosen the Motor connector(CN701). ⚠ **When you separate the connector, pull pressing the locking button.**	
		10) Take off the main PBA from the ASS'Y Control in. ⚠ **When you take off the PBA, don't touch the components. Please hold the PBA both side.**	
5	EVAPORATOR	1) Unfasten the screw at the right side. (use + ScrewDriver)	

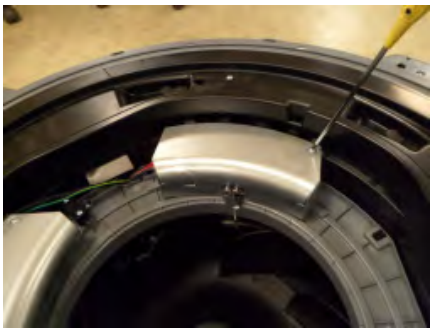
No	Parts	Procedure	Remark
		2) Unfasten the screw at the left side. (use + ScrewDriver)	
		3) Detach the HOLDER PIPE. (use + Screw Driver)	
		4) Detach the BRACKET-EVAP. (use + Screw Driver)	
		5) Detach the HOLDER EVAP. (use + Screw Driver)	
		6) Loosen 1 fixing earth screw right side. (use + Screw Driver)	

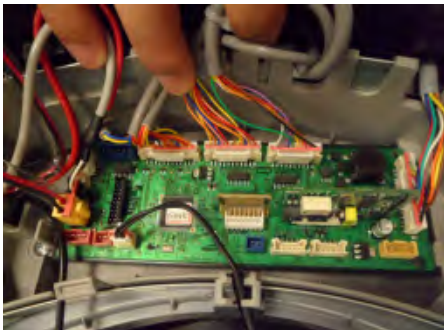
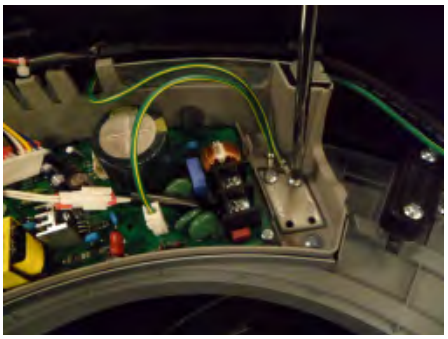
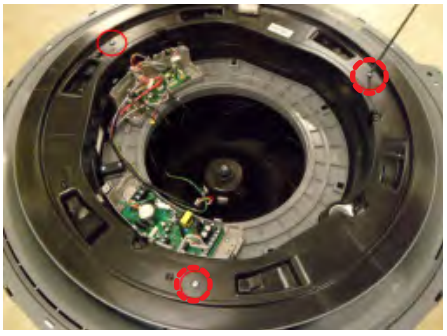
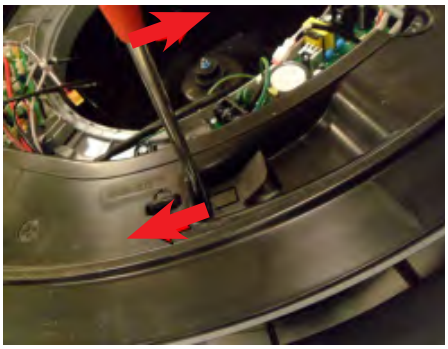
No	Parts	Procedure	Remark
6	FAN MOTOR & CROSS FAN	1) Loosen 6 fixing screws of HOLDER-MOTOR.	
		2) Unfasten the screw a little. (use + Screw Driver)	
		3) Unfasten the screw a little and pull the MOTOR FAN to the right side. (use + Screw Driver)	
		4) Loosen 1 fixing screws of HOLDER-FAN. (use + Screw Driver)	
		5) Unfasten the screw a little. (use + Screw Driver)	

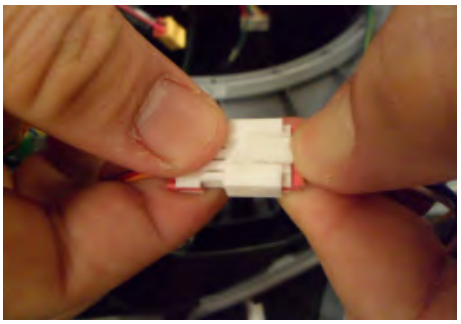
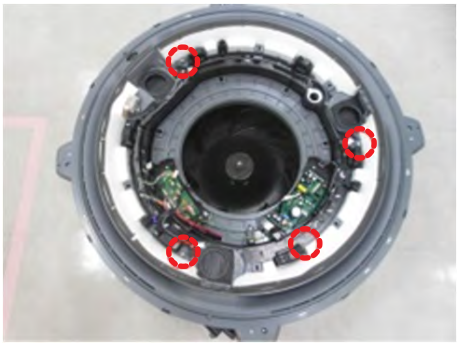
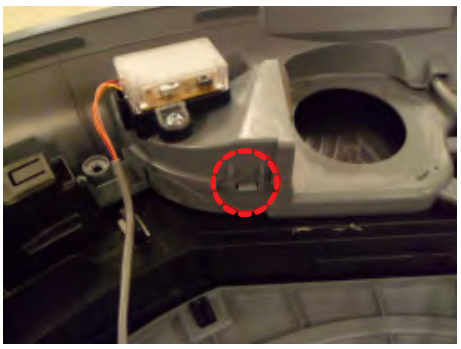
■ 360 Cassette Type

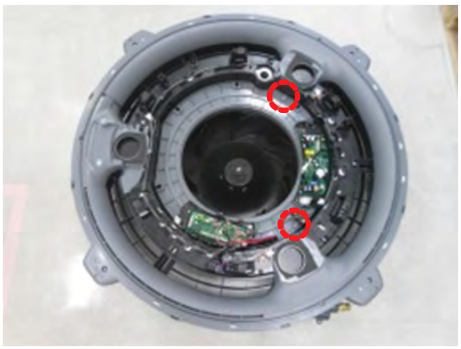
No.	Parts	Procedure	Remark
1	Panel	▶ Ceiling type Panel 1) Pull up the corner 4 places of Panel and separate it.	
		2) Remove the 4 screws from the corner of Panel. (Use +Screw Driver)	
		3) Pull the hook of Panel and then separate the Panel from the Indoor Unit.	
1	Panel	▶ Open type Panel 1) Rotate the outside Panel to counterclockwise direction and then separate it.	 

No.	Parts	Procedure	Remark
1	Panel	2) Rotate the Grille to counterclockwise direction.	
		3) Remove the safety clip of Grill inside and then separate the Panel from the Indoor Unit.	
		4) Pull up the Filter from the Grill and separate it.	
2	Control Box	1) Reomove the 2 screws which is fixed to the Indoor Unit upper part.(Use +Screw Driver)	
		2) Rotate the Guard Fan to counterclockwise direction and separate it	

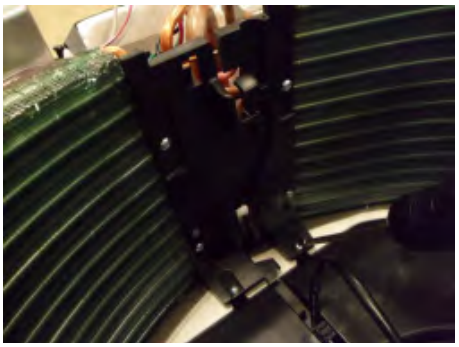
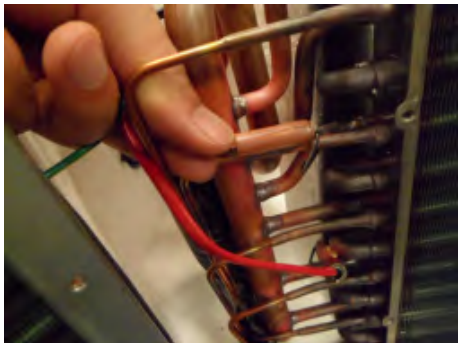
No.	Parts	Procedure	Remark
2	Control Box	3) Reomove the 1 screw which is fixed to the Indoor Unit upper part.(Use +Screw Driver)	
		4) Put finger in the "PULL" marked groove and then pull up the Cover	
			
		5) Put finger in the "PULL" marked groove and then avoids the hook and it opens the Control Box Cover	
			

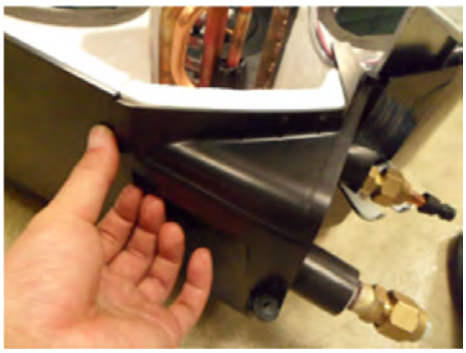
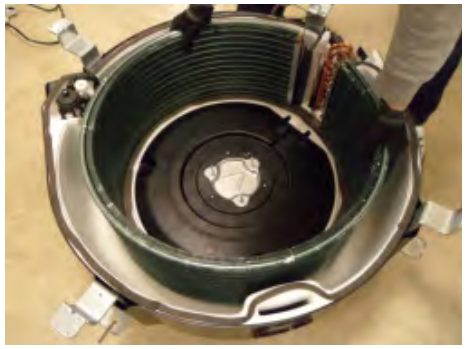
No.	Parts	Procedure	Remark
2	Control Box	6) Separate the connectors from the Control Box.	
		7) Remove the ground screw. (Use +Screw Driver)	
3	Top Cover & Drain Pan	1) Remove the 3 screws. (Use +Screw Driver)	
		2) Push the hook and separate the Cover. ⚠ Damage can occur to product in case of use a sharp tool.	
		3) Remove the screw which is fixed to Booster Fan. (Use +Screw Driver)	

No.	Parts	Procedure	Remark
3	Top Cover & Drain Pan	4) Pull the Booster Fan connector and separate the connector.	 
		5) Remove the 4 screws. (Use +Screw Driver)	
		6) Push the hook and separate the Cover.	 

No.	Parts	Procedure	Remark
3	Top Cover & Drain Pan	7) Remove the screw and separate the Display Cover. (Use +Screw Driver)	
		8)) Remove the 2 screws. (Use +Screw Driver)	
		9) Push the hook and separate the Cover.	
		10) Remove the 8 screws. (Use +Screw Driver)	
		11) Separate the Indoor Unit upper part from the Body	

No.	Parts	Procedure	Remark
3	Top Cover & Drain Pan	12) Remove the 3 screws. (Use +Screw Driver) 13) Pull the hook that is on the side and separate the Cover.	   
4	Drain Pump & Hose	1) Separate the Drain Hose from the Drain Pump.	

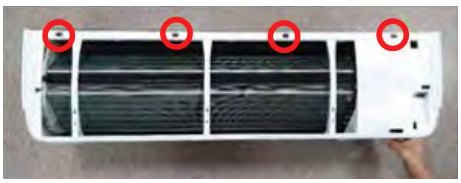
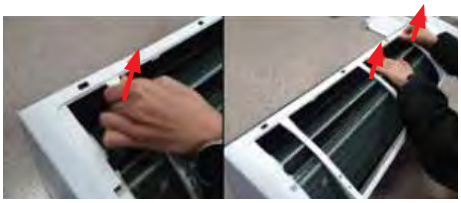
No.	Parts	Procedure	Remark
4	Drain Pump & Hose	2) Remove the 2 screws and separate the Drain Hose that is on the side lower part of Indoor Unit (Use +Screw Driver)	
5	Fan & Motor	1) Remove the hex nut which is fixed to top of Fan and separate the Fan from the Motor. (Use Monkey Spanner)	
		2) Remove the 3 hex nuts which is fixed to Motor and separate the Motor from the Indoor Unit. (Use Monkey Spanner)	
6	Temperature Sensor	1) Remove the 6 screws which is fixed to Evaporator and separate the Partition.	
		2) Separates the Temperature Sensor which is fixed to Evaporator Pipe with the fixing clip together by the hand.	

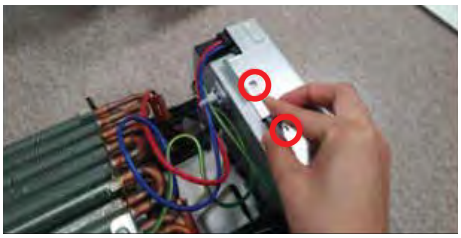
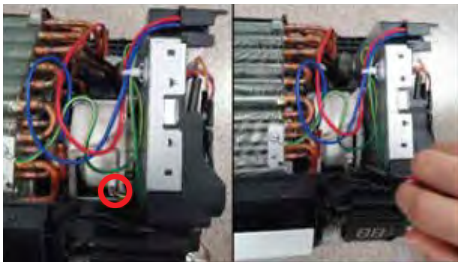
No.	Parts	Procedure	Remark
4	Evaporator	1) Remove the screws which is fixed to Indoor Unit and separate the Evaporator fixing bracket. (Use +Screw Driver)	
		2) Remove screws which is fixed to Indoor Unit and pull the hook and then separate the Drain Cover. (Use +Screw Driver)	
			
		⚠ When assemble, be careful with the interference structure of piping projecting part.	
		3) Separate the Evaporator from the Indoor Unit. ⚠ If you remove the Evaporator withbare hands, it may injure your hands, gloves must be worn.	

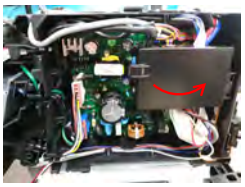
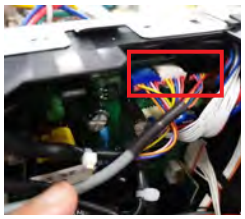
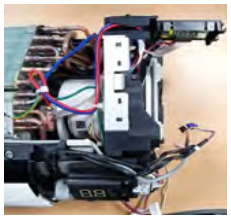
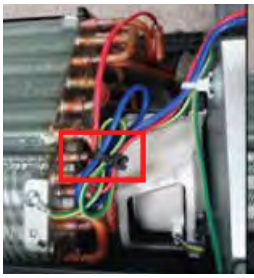
■ Wall Mounted type(Premium Plus Windfree)

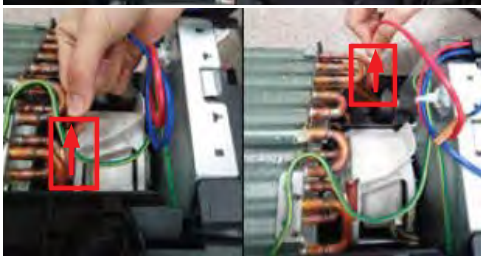
No	Parts	Procedure	Remark
1	PANEL-FRONT	1) Stop the driving of air conditioner and shut off main power supply.	
		2) Detach FILTER PRE from the PANEL FRONT.	
		3) The COVER PANEL is fixed to body by hooks in center and side area.	
		4) Separate the hook pulling end of the COVER PANEL as shown in figures.(Watch out for the damage of hooks)	
			
			

No	Parts	Procedure	Remark
1	PANEL-FRONT	⚠ Caution: Assembly of Cover Panel after service end. - Piping and Drain Hose must be caseful not to damage and progress must be done with both hands. - Need to check all bottom hooks in holes of the main frame before you push to assemble. ⚠ Caution: - Assemble(push) side hooks. - Assemble(push) center 5 hooks each.	      

No	Parts	Procedure	Remark
1	PANEL-FRONT	5) The GRILLE INLET is fixed to body by hooks in the center and side area.	
		6) Separate the hook pulling end of the GRILLE INLET as shown in figures.(Watch out for the damage of hooks)	
			
		7) To detach the PANEL FRONT from the main frame, unfasten 2 screws at the bottom. (use (+) Screw Driver)	
		8) To detach the PANEL FRONT from the main frame, loosen 4 hook structures. When separate the hooks: pull out each ribs near the hooks as shown in figures. (Watch out for the damage of hooks)	
			
			

No	Parts	Procedure	Remark
1	PANEL-FRONT	9) Raise the PANEL FRONT upward as shown in the figure to separate the 3 hooks.	 
2	CONTROL-IN	1) To open the CONTROL-IN, raise the side flanges of the PLATE-RIGHT at an angle and unlock 2 hooks. 2) To detach the CONTROLIN, unfasten a screw back of the PLATE-LEFT as shown in figures. (use (+) Screw Driver)	  

No	Parts	Procedure	Remark
2	CONTROL-IN	3) Rotate CASE PCB 90 degrees as shown in figures. (Watch out for damage of hinge in CASE PCB)	  
		4) Separate Fan Moter wire as shown in figures. ⚠ Caution: When you separate the connector, pull pressing the locking button.	  
		5) Separate Blade Moter wire as shown in figures. ⚠ Caution: When you separate the connector, pull pressing the locking button.	   
		6) Cut off the Cable Tie tied up wires.	 

No	Parts	Procedure	Remark
2	CONTROL-IN	7) Unfasten a screw of the Ground wire and pick up Temperature wires from ASSY EVAP. (Use (+) Screw Driver.)	 
		8) The CONTROL-IN is fixed to HOLER PIPE by a hook bottom of the case as shown in the last figure. (Please loosen remaining connectors before detaching CASECONTROL. ⚠ Caution: When you separate the connector, pull pressing the locking button	
		9) Put down of the HOLDER PIPE and push up the hook and lean side the case as shown in figures.	  

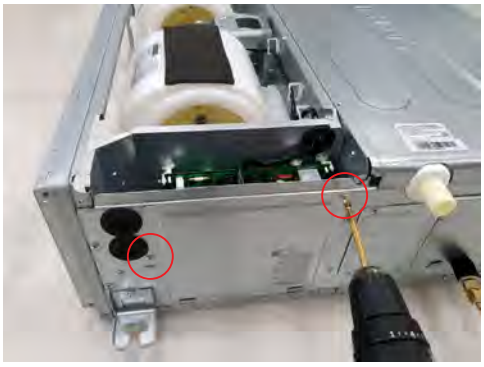
No	Parts	Procedure	Remark
3	TRAY DRAIN	1) To detach the TRAY DRAIN from the main frame, pull the bottom of the TRAY DRAIN and it leans toward to you as shown in figures. 2) Pull out the Drain Hose.	   

No	Parts	Procedure	Remark
4	EVAPORATOR	1) The HOLDER PIPE is fixed to body by 2 hooks as shown in the figure.	
		2) To detach the HOLDER PIPE from the main frame,loosen 2 hook structhres. When separate hooks: Use the (-) Screw Driver. Insert the (-) Screw Driver into the gap of the hook and lean to the Moter side as shown in figures. (Watch out for the damate of hooks)	
		3) Remove the HOLDER PIPE.	
		4) Unfasten a screw of the Fan Moter side. (Use (+) Screw Driver.)	
		5) Unfasten 2 screws of the opposite side of the Fan Moter. (Use (+) Screw Driver.)	

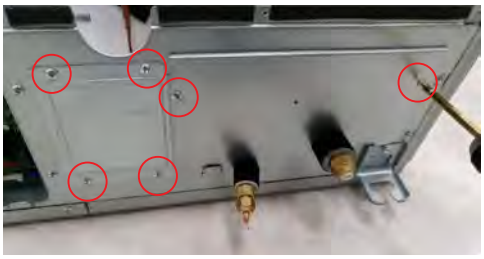
No	Parts	Procedure	Remark
4	EVAPORATOR	6) Pull up the EVAPORATOR of the opposite side of the Fan Moter.	
		7) loosen a hook of the Fan Moter side.	
			
		8) Pull up the EVAPORATOR toward to you.	
			
			

No	Parts	Procedure	Remark
5	FAN MOTOR & CROSS FAN	1) Unfasten a screw on the COVER MOTER. (Use (+) Screw Driver.)	
		2) Unwind the Moter Wire.	
		3) Detach the COVER MOTER.	
		4) Unfasten a screw of the CROSS FAN a little. (Use (+) Screw Driver.)	
		5) Raise up the CROSS FAN of the left side and pull out from the Moter.	 

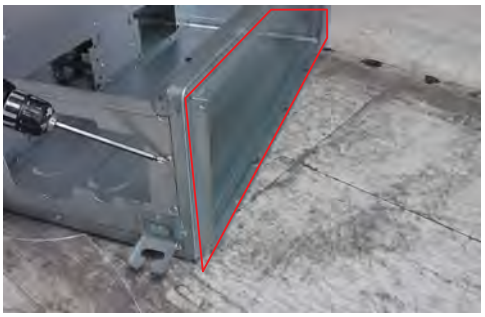
■ AM006/007/009/012/015ANMDCH

No.	Parts	Procedure	Remark
1	Motor & Blower	1) Disassemble the Cabinet Bottom Fan. - Unscrew 10 screws	
		2) Disassemble the 2 Case Blower Bottom. - Unscrew 4 screws	
		3) Disassemble the Cover Control. - Unscrew 2 screws	
		4)Disconnect the motor wire.	

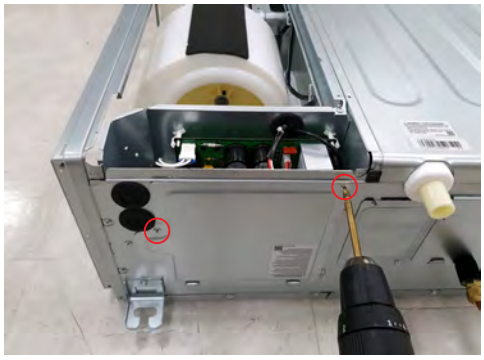
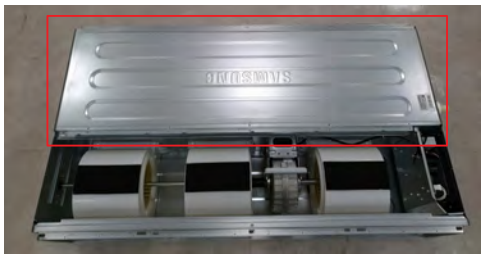
No.	Parts	Procedure	Remark
1	Motor & Blower	5) Disassemble the 2 Holder Motor. - Unscrew 2 screws.	
		6) After disassembling the Motor and Blower for the set, disassemble the Blower by use of 3mm wrench.	
		7) Disassemble the both of Case Blower Out. - Unscrew 4 screws	

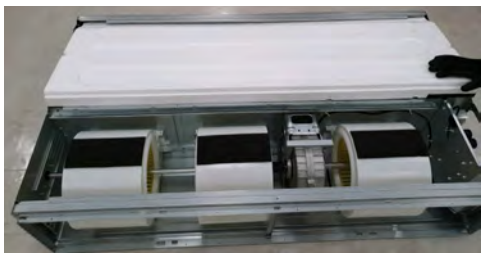
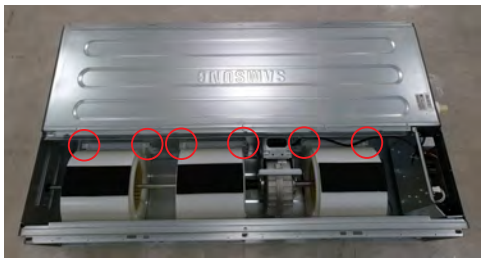
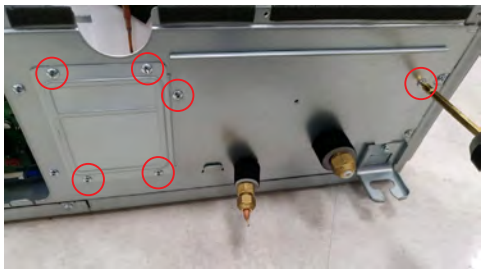
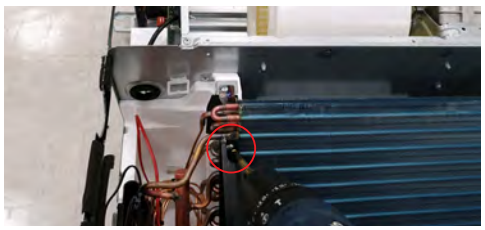
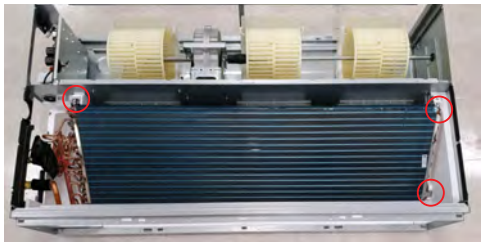
No.	Parts	Procedure	Remark
2	Drain Pan	1) Disassemble the Cabinet Bottom Evap. - Unscrew 7 screws	
		2) Pull the Drain Pan Out.	
3	EVAP	1) Disassemble the Support Evap. - Unscrew 1 screws	
		2) Disassemble the Cover - Unscrew 6 screws	
		3) Disconnect the wire between assy control out and Evap.	

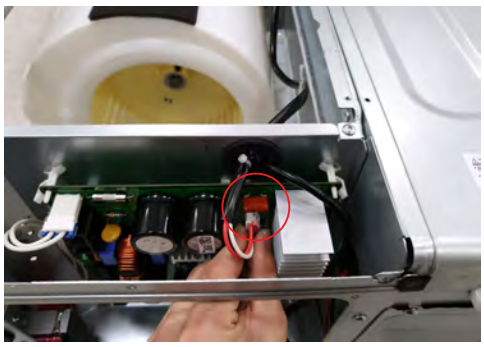
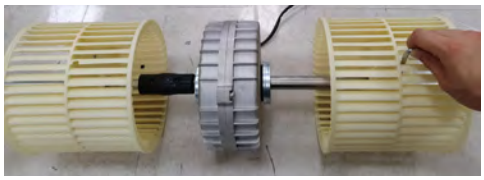
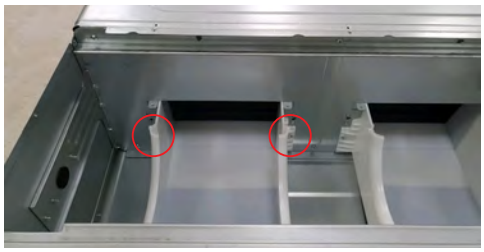
No.	Parts	Procedure	Remark
3	EVAP	4) Disassemble the Evap. - Unscrew 3 screws. Then pull the Evap out	
4	Cushion	1) Pull out the Cushion.	
		2) Disassemble the Seal Cushion LF. - Unscrew 1 screws	
		3) Disassemble the Assy Cushion Right. - Unscrew 1 screws	

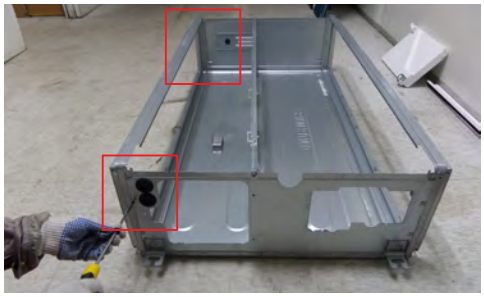
No.	Parts	Procedure	Remark
5	Case Blower & Bracket Motor	1) Disassemble the both of Case Blower Out. - Unscrew 4 screws 2) Disassemble the Bracket Motor. - Unscrew 6 screws	 
6	Control	1) Disassemble the Case Control. - Unscrew 2 screws	
7	Frame	1) Disassemble the Frame. - Unscrew 6 screws	

■ AM018ANMDCH, AM024/027/030ANHDCH

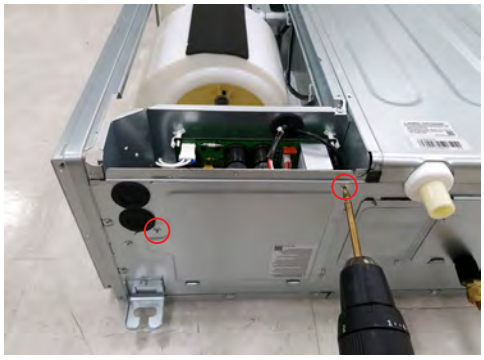
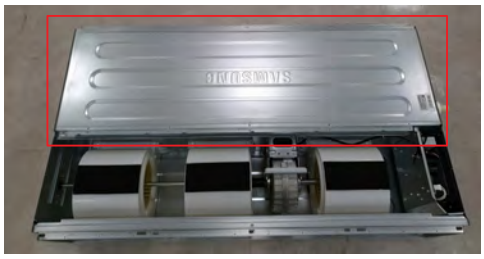
No	Parts	Procedure	Remark
1	Common	1) Disassemble the Cabinet Bottom Fan. - Unscrew 11 screws	
		2) Disassemble the Cover Control. - Unscrew 2 screws	
		3) Disassemble the Cabinet Bottom Evap. - Unscrew 8 screws	

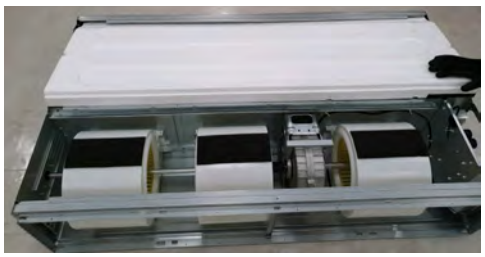
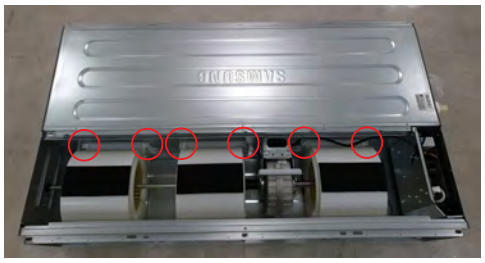
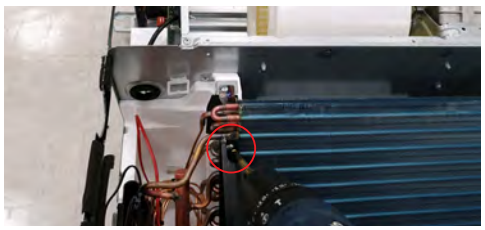
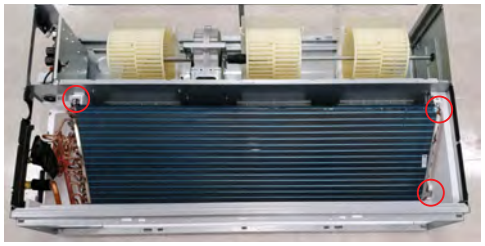
No	Parts	Procedure	Remark
2	Drain Pan & Evap	1) Disassemble the Drain Pan from the set.	
		2) Disassemble the 3 Case Blower Bottom. - Unscrew 6 screws	
		3) Disassemble the Cover - Unscrew 6 screws	
		4) Disconnect the wire between assy control out and Evap.	
		5) Disassemble the Support Evap. - Unscrew 1 screws	
		6) Disassemble the Evap. - Unscrew 3 screws	

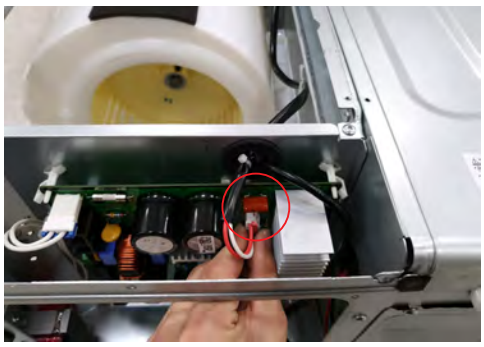
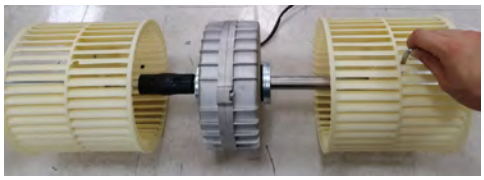
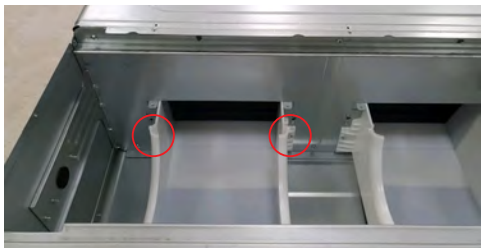
No	Parts	Procedure	Remark
3	Motor & Blower	1) Disconnect the motor wire	
		2) Disassemble the 1 Bracket Motor and 2 Holder Motors - Unscrew 2 screws	
		3) After disassembling the Motor and Blower for the set, disassemble the Blower by use of 3mm wrench.	
		4) Disassemble the 3 Case Blower Top. - Unscrew 6 screws	
		5) Disassemble the Bracket Motor. - Unscrew 6 screws	
			

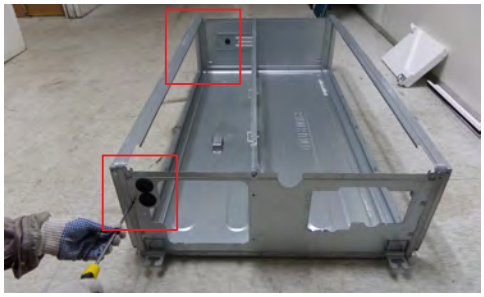
No	Parts	Procedure	Remark
3	Motor & Blower	6) Disassemble the 3 Case Blower Out. - Unscrew 6 screws	
4	Cushion	1) Pull out the Cushion	
		2) Disassemble the Assy Cushion Right. - Unscrew 1 screws	
		3) Disassemble the Seal Cushion LF. - Unscrew 1 screws	
5	Control	1) Disassemble the Case Control. - Unscrew 3screws	
6	Frame	1) Disassemble the Frame. - Unscrew 6 screws	

■ AM036/048ANHDCH

No	Parts	Procedure	Remark
1	Common	1) Disassemble the Cabinet Bottom Fan. - Unscrew 11 screws	
		2) Disassemble the Cover Control. - Unscrew 2 screws	
		3) Disassemble the Cabinet Bottom Evap. - Unscrew 8 screws	

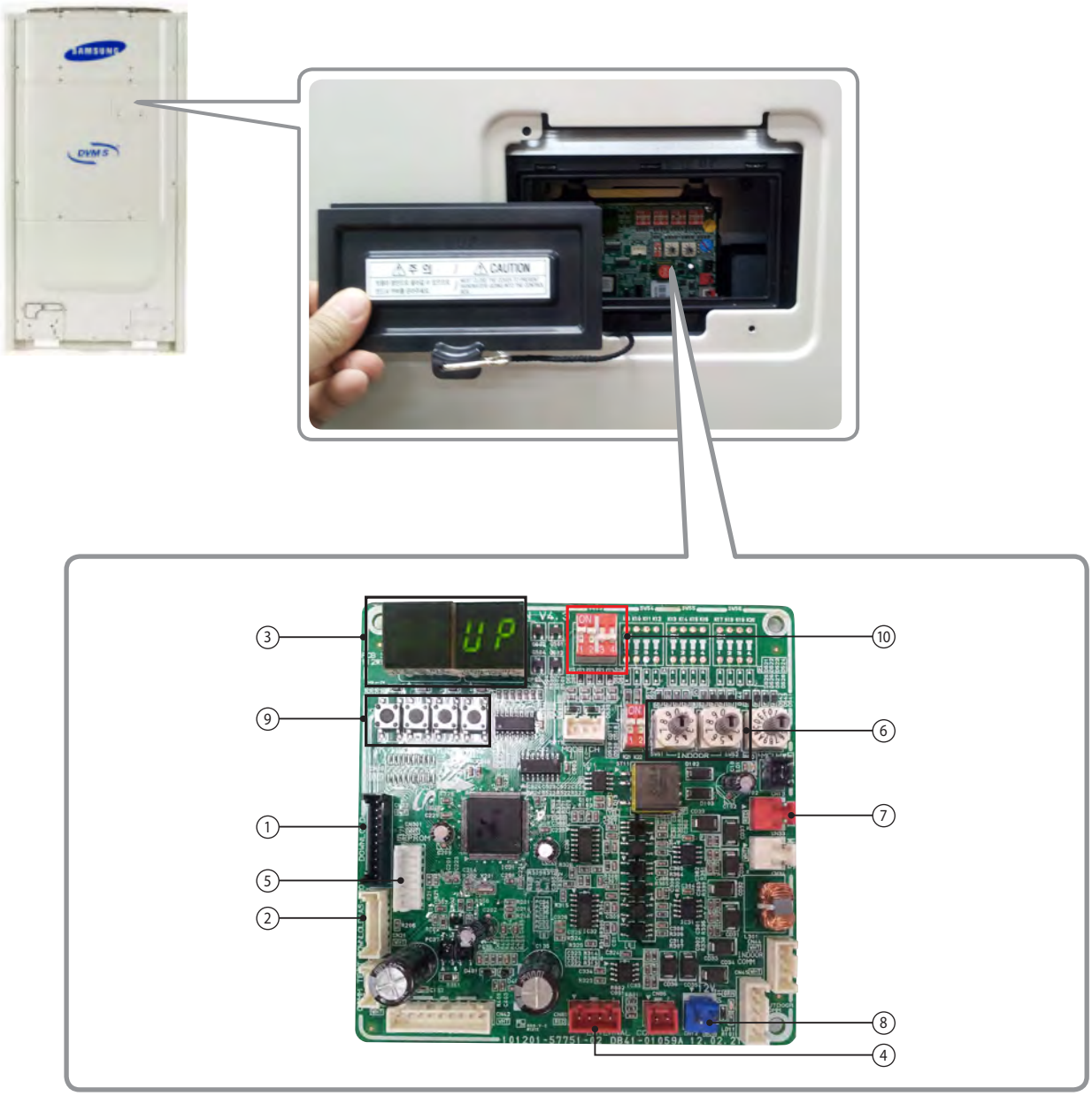
No	Parts	Procedure	Remark
2	Drain Pan & Evap	1) Disassemble the Drain Pan from the set.	
		2) Disassemble the 3 Case Blower Bottom. - Unscrew 6 screws	
		3) Disassemble the Cover - Unscrew 6 screws	
		4) Disconnect the wire between assy control out and Evap.	
		5) Disassemble the Support Evap. - Unscrew 1 screws	
		6) Disassemble the Evap. - Unscrew 3 screws	

No	Parts	Procedure	Remark
3	Motor & Blower	1) Disconnect the motor wire	
		2) Disassemble the 1 Bracket Motor and 2 Holder Motors - Unscrew 2 screws	
		3) After disassembling the Motor and Blower for the set, disassemble the Blower by use of 3mm wrench.	
		4) Disassemble the 3 Case Blower Top. - Unscrew 6 screws	
		5) Disassemble the Bracket Motor. - Unscrew 6 screws	 

No	Parts	Procedure	Remark
3	Motor & Blower	6) Disassemble the 3 Case Blower Out. - Unscrew 6 screws	
4	Cushion	1) Pull out the Cushion	
		2) Disassemble the Assy Cushion Right. - Unscrew 1 screws	
		3) Disassemble the Seal Cushion LF. - Unscrew 1 screws	
5	Control	1) Disassemble the Case Control. - Unscrew 3 screws	
6	Frame	1) Disassemble the Frame. - Unscrew 6 screws	

4. Troubleshooting

4-1 Check-up Window Description



No.	Function	No.	Function
1	CN22 download (PC) (SMW200-10 black)	6	Set up the number of connected indoor units
2	MICOM. download (AS-PRO) (SMW200-07P white)	7	For checking indoor unit communication (YW396-02P red)
3	ERROR DISPLAY	8	Transmitter 12V (YW396-02P blue)
4	State Check (SMW250-04P red)	9	Outdoor Unit Tact Switch
5	EEPROM SOCKET	10	Outdoor Unit Dip Switch

4-2 Special Operation

► Key input of the outdoor unit when the service enters the operation mode.

K1 (Number of press)	Key operation	Display on segment
1 time	Refrigerant charging in Heating mode	K, 1, BLANK, BLANK
2 times	Trial operation in Heating mode	K, 2, BLANK, BLANK
3 times	Pump out in Heating mode (Outdoor unit address 1)	K, 3, BLANK, 1
4 times	Pump out in Heating mode (Outdoor unit address 2)	K, 3, BLANK, 2
5 times	Pump out in Heating mode (Outdoor unit address 3)	K, 3, BLANK, 3
6 times	Pump out in Heating mode (Outdoor unit address 4)	K, 3, BLANK, 4
7 times	Vacuumig (Outdoor unit address 1)	K, 4, BLANK, 1
8 times	Vacuumig (Outdoor unit address 2)	K, 4, BLANK, 2
9 times	Vacuumig (Outdoor unit address 3)	K, 4, BLANK, 3
10 times	Vacuumig (Outdoor unit address 4)	K, 4, BLANK, 4
11 times	Vacuuming (All outdoor units)	K, 4, BLANK, A
12 times	End Key operation	-
Press and hold 1 time	Auto trial operation	K, K, BLANK, BLANK

K2 (Number of press)	Key operation	Display on segment
1 time	Refrigerant charging in Cooling mode	K, 5, BLANK, BLANK
2 times	Trial operation in Cooling mode	K, 6, BLANK, BLANK
3 times	Pump down all units in Cooling mode	K, 7, BLANK, BLANK
4 times	H/R: Checking the pipe connection H/P: Automatic setting of operation mode (Cooling/Heating) for trail operation	K, 8, BLANK, BLANK
5 times	Checking the amount of refrigerant	K 9 X X (Display of last two digits may differ depending on the progress)
6 times	Discharge mode of DC link voltage	K, A, BLANK, BLANK
7 times	Forced defrost operation	K, B, BLANK, BLANK
8 times	Forced oil collection	K, C, BLANK, BLANK
9 times	End Key operation	-

※ Inv1 & Inv2 voltage during discharge mode are displayed alternately.

※ Outdoor Power Off even when the Inverter PCB, Fan PCB is a high DC voltage charging contacts at danger.

※ When you run the repair and replacement of the PCB should work after the power is turned off, the DC voltage discharge.
(Natural discharge until Please wait for at least 15 minutes.)

※ If an error occurs, the discharge mode may not work properly.
In particular, E464 & E364 is power devices can be damaged.
Therefore, the discharge mode, do not use.

■ Commissioning

► After initial installation, stable operation for a certain period of time limited to operation conditions.

	Cooling	Heating
Method of Entry	K2 Tact Switch twice	K2 Tact Switch twice
Compressor	Normal operation, but the maximum frequency limit (differ by model)	
Indoor Unit	Whole operation (The set temperature=3˚C)	Whole operation (The set temperature=40˚C)
Outdoor fan and valves	Normally control conduct	
Operation time	Min : 60 minutes, Max : 10 hours	
Etc.	· Exceed the maximum operating time at stops and waits. · Protection and control, self-diagnosis is performed.	

■ Refrigerant filling operation

► Operation to filling the refrigerant compressor was fixed at a certain frequency.

	Cooling	Heating
Method of Entry	K2 Tact Switch one time	K1 Tact Switch one time
Compressor	Starting frequency (Mild Start frequency) operation	
Indoor Unit	Whole operation (The set temperature=3˚C)	Whole operation (The set temperature=40˚C)
Outdoor fan and valves	Normally control conduct	
Operation time	60 minutes	
Etc.	During the filling operation does not enter the special operation, such as oil recovery, defrost.	

■ Heating Pump Out

► Operation for the repair of the Individual outdoor unit, the outdoor unit refrigerant emissions to the indoor part.
► Liquid pipe service valve and the gas pipe service valve operation, the operator manually need to close.

► Observe low pressure using View Mode of K4 button if compressor operate.
If low pressure goes down below about 0.2 MPa.g : Immediately lock the gas side service valve, Pump Out operation is shut down.
(Pump out operation shut down : K1 button once more press or K3 button one time press)
► If operation of low pressure goes down below 0.1 MPa.g : Will be stopped automatically for the protection of the compressor.

How to Initiate	K1 Tact Switch 3 times~6 times
Compressor	60Hz
Indoor Unit	Whole Operation (The set temperature=40℃)
4Way Valve	ON (Heating Mode)
Outdoor Fan	Maximum air flow
Main EEV	Operation side : 700 Step (Stop side : 0 step)
Maximum Operation Time	10 minutes
Protection Control	Conduct the discharge temperature, high pressure control. (Low pressure protection control is not carried out) ※ Low pressure is outside normal limits : Operation is shut down after gas pipe manually closed.
Etc.	Entry after safety start. (Only the corresponding Outdoor Unit operation.) To pump out more than 2 : Except communication between Outdoor Unit of relevant set after working for one, remainder set makes Pump Out add.

■ Cooling Pump Down

► Recover the refrigerant of Indoor Unit and Piping to outdoor side.
► Liquid pipe service valve and the gas pipe service valve operation, the operator manually need to close.
► If the installation of the long pipe : Any refrigerant into the outdoor unit can not be recovered, therefore should use a separate container.
► Observe low pressure using View Mode of K4 button if compressor operate.
If low pressure goes down below about 0.2 MPa.g : Immediately lock the gas side service valve, Pump Out operation is shut down.
(Pump out operation shut down : K1 button once more press or K3 button one time press)
► If operation of low pressure goes down below 0.1 MPa.g : Will be stopped automatically for the protection of the compressor.

How to Initiate	K2 Tact Switch 3 times
Compressor	Address No.1 Outdoor Unit - 60Hz (Other Outdoor Unit COMP OFF)
Indoor Unit	Whole Operation (The set temperature=3℃)
4Way Valve	OFF (Cooling Mode)
Outdoor Fan	Maximum air flow
Main EEV	Operation side : 2000 Step , Stop side : 2000 step
Maximum Operation Time	30 minutes
Etc.	Does not conduct the operation of the special operation, and protection control. Pressure and temperature is outside normal limits : Operation is shut down after gas pipe manually closed.

■ Vacuum Operation

► Operation to facilitate vacuum to open the valve after the Outdoor Unit repair.

How to Initiate	K1 Tact Switch 7 times~11 times
Compressor	OFF
Indoor Unit/Outdoor Fan	OFF
4Way Valve	OFF
Valves	Open all valves maximum
Etc.	If not turn off the vacuum mode, the start of normal operation is prohibited.

■ Piping Inspection Operation

► Operation mode to check the status of the piping between the MCU and the indoor unit.

► Heat Pump Model : Outdoor temperature is more than 15℃ / Cooling commissioning start
Outdoor temperature is less than 15℃ / Heating commissioning start

■ Discharge Mode Operation

► Outdoor power is turned off, the Inverter PCB and Fan PCB charging a high DC voltage, so dangerous to touch.
- To replace the PCB, first turn off the power and the begin if DC voltage is discharged.
- If not use the discharge mode, the discharge time of about 15 minutes takes.
- If an error occurs, the discharge mode may not properly run. (Wait until natural discharge.)
- In particular, E 464, E364, power devices may be damaged, therefore do not use the discharge mode.

► Block the Inverter PCB 3-phase relay after connected the power, and through compressor, DC voltage is discharging.
- INV1 and INV2 DC voltage during discharge mode are displayed alternately.
- Discharge mode Display (Rotate the three page display, as shown below.)
'K' 'A' '' ''→DC Link Volt1 (For example, 120[V] 0 1 2 0 display)
→DCLinkVolt2 (For example, 120[V] 0 1 2 0 display)→'K' 'A' '' ''→DC Link Volt1 …

► Discharge is complete, the power of the Inverter PCB and Fan PCB is being blocked, communication function is blocked, E206 will occur.

► If want operation again after complete discharge mode : Restart after K3 key to Reset or Power Reset.

■ Forced defrost operation

► Forced defrost operation : Is operation when Frost Formation occurs in the outdoor. (When carried out the service)

Method of Entry	K2 Tact Switch 6 times
Start pattern	Heating commissioning pattern
Defrost start	Defrost start : It is after 10 minutes which Safety Start finishes.
Defrost off	General defrost operation conditions are the same as.
Etc.	Defrost shut down and stop the normal pattern of the outdoor unit stop.

■ Forced oil recovery operation

► Forced oil recovery operation : Oil recovery in the outdoor unit for the purpose of moving, installation if necessary.

Method of Entry	K2 Tact Switch 7 times
Start pattern	Outdoor temperature is more than 10℃ : Cooling commissioning Outdoor temperature is less than 10℃ : Heating commissioning
Oil recovery start	Oil recovery start : It is after 10 minutes which Safety Start finishes.
Etc.	Oil recovery shut down and stop the normal pattern of the outdoor unit stop.

4-3 Troubleshooting

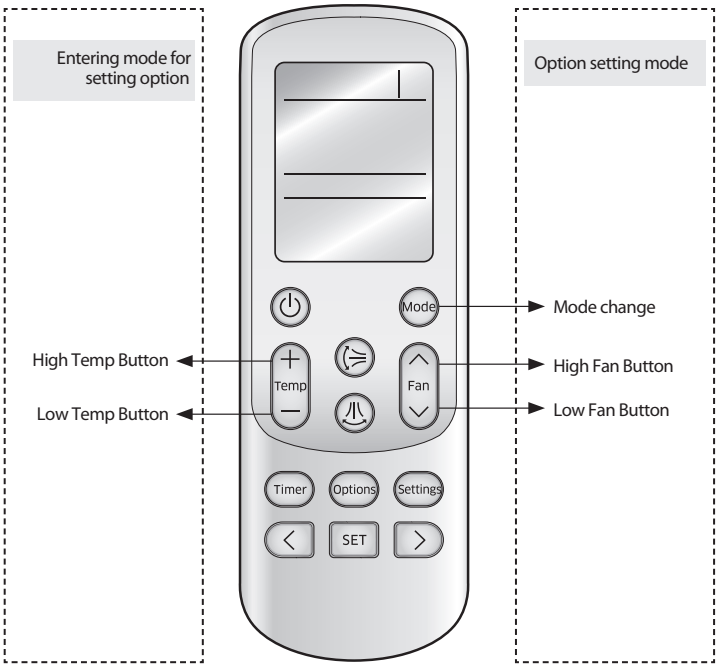
4-3-1 Setting Option Setup Method

4-3-1-1 PCB option code input method

■ Slim 1way, 4way Series

▶ Set the indoor unit address and installation option with remote controller option.
Set the each option separately since you cannot set the ADDRESS setting and indoor unit installation setting option at the same time.You need to set twice when setting indoor unit address and installation option.

■ The procedure of setting option



Step 1 **Entering mode for option setting.**

1. Remove batteries from the remote controller.
2. Insert the batteries while you press [+ Temperature] and [- Temperature] button at the same time.
3. Check if you have entered the option setting status. 

Step 2 **Option setting procedure. (The option setting procedure is the same for other models.)**

After entering the option setting status, select the option as listed below.

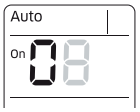
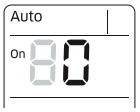
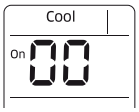
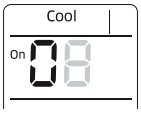
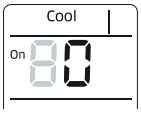
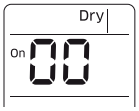
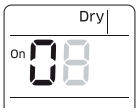
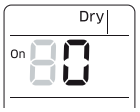
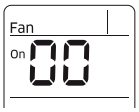
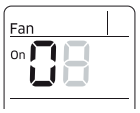
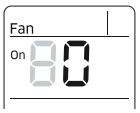
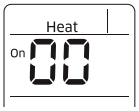
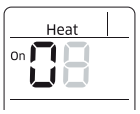
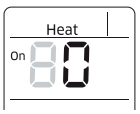
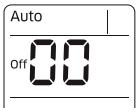
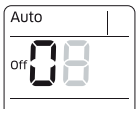
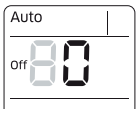
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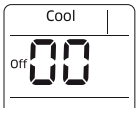
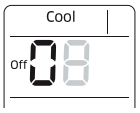
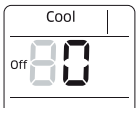
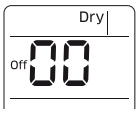
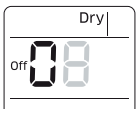
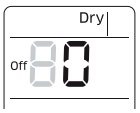
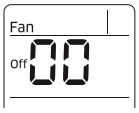
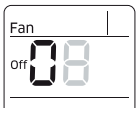
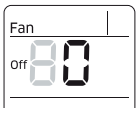
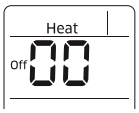
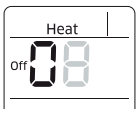
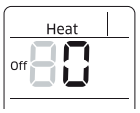
- Option setting is available from SEG1 to SEG 24.
- SEG1, SEG7, SEG13, SEG19 are not set as page option.
- Set the SEG2~SEG6, SEG8~SEG12 in the ON status and SEG14~18, SEG20~24 in the OFF status.

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
0	X	X	X	X	X	1	X	X	X	X	X
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18	SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
2	X	X	X	X	X	3	X	X	X	X	X

On(SEG1~12)	Off(SEG13~24)
	

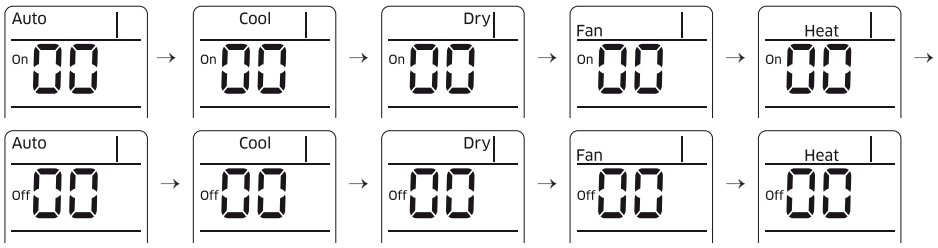
■ The procedure of setting option

Option setting	Status
1. Setting SEG2, SEG3 option Press Low Fan button(∨) to enter SEG2 value. Press High Fan button(∧) to enter SEG3 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG2  SEG3
2. Setting Cool mode Mode Press Mode button to be changed to Cool mode in the ON status.	
3. Setting SEG4, SEG5 option Press Low Fan button(∨) to enter SEG4 value. Press High Fan button(∧) to enter SEG5 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG4  SEG5
4. Setting Dry mode Mode Press Mode button to be changed to DRY mode in the ON status.	
5. Setting SEG6, SEG8 option Press Low Fan button(∨) to enter SEG6 value. Press High Fan button(∧) to enter SEG8 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG6  SEG8
6. Setting Fan mode Mode Press Mode button to be changed to FAN mode in the ON status.	
7. Setting SEG9, SEG10 option Press Low Fan button(∨) to enter SEG9 value. Press High Fan button(∧) to enter SEG10 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG9  SEG10
8. Setting Heat mode Mode Press Mode button to be changed to HEAT mode in the ON status.	
9. Setting SEG11, SEG12 option Press Low Fan button(∨) to enter SEG11 value. Press High Fan button(∧) to enter SEG12 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG11  SEG12
10. Setting Auto mode Mode Press Mode button to be changed to AUTO mode in the OFF status.	
11. Setting SEG14, SEG15 option Press Low Fan button(∨) to enter SEG14 value. Press High Fan button(∧) to enter SEG15 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG14  SEG15

Option setting	Status
12. Setting Cool mode Mode Press Mode button to be change to Cool mode in the OFF status.	
13. Setting SEG16, SEG17 option Press Low Fan button(∨) to enter SEG16 value. Press High Fan button(∧) to enter SEG17 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG16  SEG17
14. Setting Dry mode Mode Press Mode button to be change to Dry mode in the OFF status.	
15. Setting SEG18, SEG20 option Press Low Fan button(∨) to enter SEG18 value. Press High Fan button(∧) to enter SEG20 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG18  SEG20
16. Setting Fan mode Mode Press Mode button to be change to Fan mode in the OFF status.	
17. Setting SEG21, SEG22 option Press Low Fan button(∨) to enter SEG21 value. Press High Fan button(∧) to enter SEG22 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG21  SEG22
18. Setting Heat mode Mode Press Mode button to be change to HEAT mode in the OFF status.	
19. Setting SEG23, SEG24 mode Press Low Fan button(∨) to enter SEG23 value. Press High Fan button(∧) to enter SEG24 value. Each time you press the button, 0 → 1 → … E → F will be selected in rotation.	 SEG23  SEG24

Step 3. Check the option you have set

After setting option, press Mode button to check whether the option code you input is correct or not.



Step 4. Input option

Press the operation button with the direction of remote control for set.

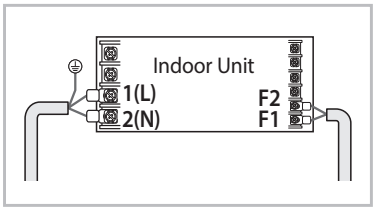
For the correct option setting, you must input the option twice.

Step 5. Check operation

1) Reset the indoor unit by pressing the RESET button of indoor unit or outdoor unit.
2) Take the batteries out of the remote controller and insert them again and then press the operation button.

- Setting an indoor unit address and installation option

■ Setting an indoor unit installation option (suitable for the condition of each installation location)



1. Check whether power is supplied or not.
   - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
2. The panel(display) should be connected to an indoor unit to receive option.
3. Set the installation option according to the installation condition of an air conditioner.
   - The default setting of an indoor unit installation option is 020010-100000-200000-300000.
   - Individual control of a remote controller(SEG20) is the function that controls an indoor unit individually when there is more than one indoor unit.
4. Set the indoor unit option by wireless remote controller.

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	RESERVED	External room temperature sensor / Minimizing fan operation when themostat is off	Central control	FAN RPM compensation
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	Drain pump	Hot water heater	Electronic heater	Opening the electronic expansion valve	Master / Slave
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	External control	External control output / External heater On or off signal	S-Plasma ion	Buzzer	Number of hours using filter
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	Individual control of a remote controller	Heating setting compensation	EEV opening of an indoor unit stopped during oil return or Defrost operation.	-	Human sensor

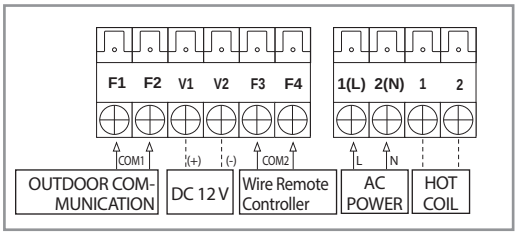
▶ 1WAY/2WAY/4WAY MODEL : Drain pump(SEG8) will be set to 'USE + 3minute delay' even if the drain pump is set to 0.

▶ 1 WAY/2WAY/4WAY,DUCT MODEL : Number of hours using filter(SEG18) will be set to '1000hour' even if the SEG18 is set to exept for 2 or 6.

▶ If you input a number other than 0~4 of the individual control of the indoor unit(SEG20), the indoor is set as indoor 1.

▶ SEG5 central control option is basically set as 1 (Use), so you don't need to set the central control option additionally. However, if the central control is not connected but it doesn't indicate an error message, you need to set the central control option as 0 (Disuse) to exclude the indoor unit from the central control.

▶ The output of hot water heater in SEG9 is generated from the hot coil part of the terminal board in duct models.



* The output of hot coil terminal is AC 220 V / 230 V (The same as Indoor Unit's input Power)

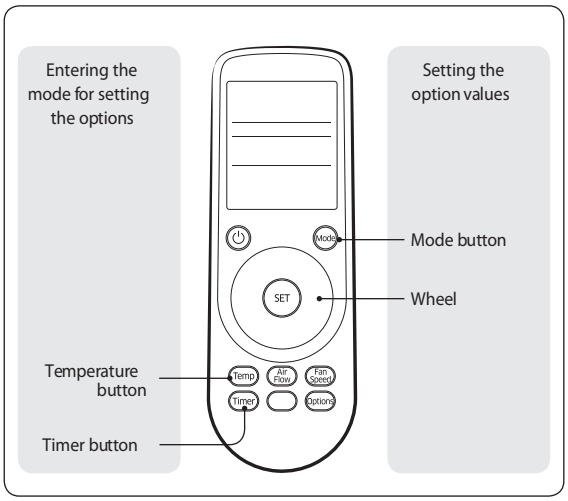
▶ The external output of SEG15 is generated by MIM-B14 connection. (Refer to the manual of MIM-B14.)

▶ 360 cassette

You cannot set both of the indoor unit addresses and the installation options in a batch: set both of them respectively.

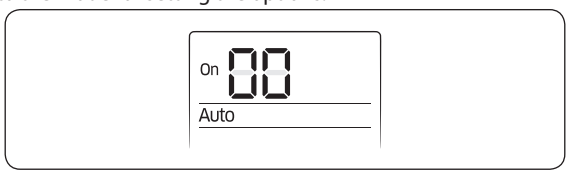
Common steps for setting the addresses and options

AR-KH00E remote control (for 360 cassette only)



NOTE
The remote control display may vary depending on the model.

1. Enter the mode for setting the options:
   a. Remove the batteries from the remote control.
   b. While holding down the (Temp) (Temp) and (Timer) (Timer) buttons simultaneously, insert the batteries into the remote control.
   c. Make sure that you are entered to the mode for setting the options:

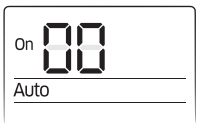
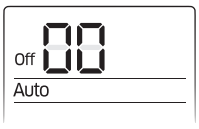


2. Set the option values.

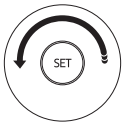
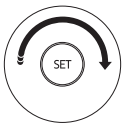
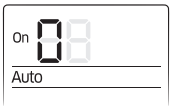
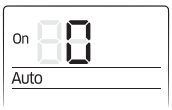
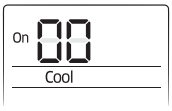
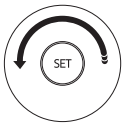
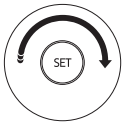
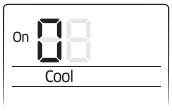
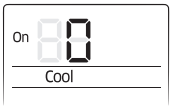
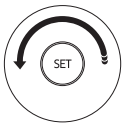
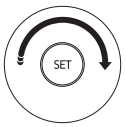
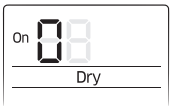
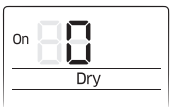
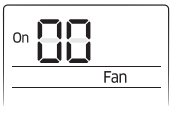
⚠ **CAUTION**

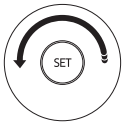
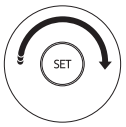
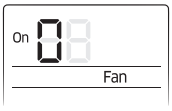
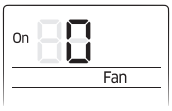
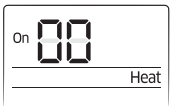
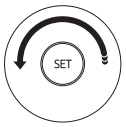
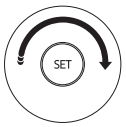
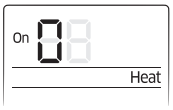
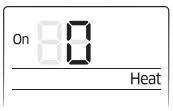
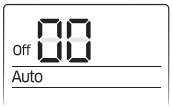
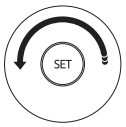
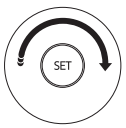
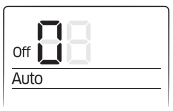
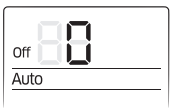
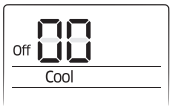
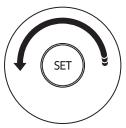
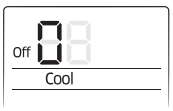
- The total number of available options are 24: SEG1 to SEG24.
- Because SEG1, SEG7, SEG13, and SEG19 are the page options used by the previous remote control models, the modes to set values for these options are skipped automatically.
- Set a 2-digit value for each option pair in the following order: SEG2 and SEG3 → SEG4 and SEG5 → SEG6 and SEG8 → SEG9 and SEG10 → SEG11 and SEG12 → SEG14 and SEG15 → SEG16 and SEG17 → SEG18 and SEG20 → SEG21 and SEG22 → SEG23 and SEG24.

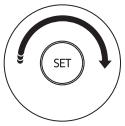
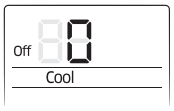
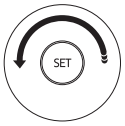
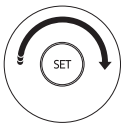
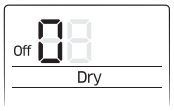
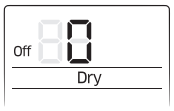
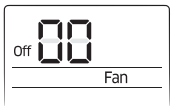
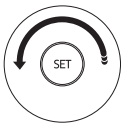
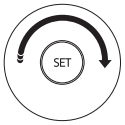
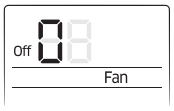
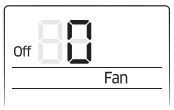
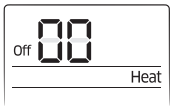
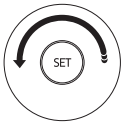
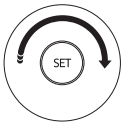
SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	X	X	X	X	X
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	X	X	X	X	X
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	X	X	X	X	X
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	X	X	X	X	X

On (SEG1 to SEG12)	Off (SEG13 to SEG24)
	

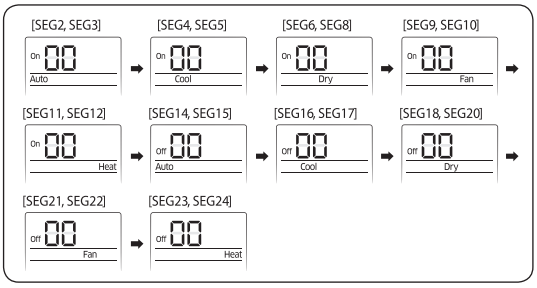
Take the steps presented in the following table:

Steps	Remote control display
1 Set the SEG2 and SEG3 values: a Set the SEG2 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG3 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG2  SEG3
2 Press the (Mode) button. Cool and On appear on the remote control display.	
3 Set the SEG4 and SEG5 values: a Set the SEG4 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG5 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG4  SEG5
4 Press the (Mode) button. Dry and On appear on the remote control display.	
5 Set the SEG6 and SEG8 values: a Set the SEG6 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG8 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG6  SEG8
6 Press the (Mode) button. Fan and On appear on the remote control display.	

Steps	Remote control display
7 Set the SEG9 and SEG10 values: a Set the SEG9 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG10 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG9  SEG10
8 Press the (Mode) button. Heat and On appear on the remote control display.	
9 Set the SEG11 and SEG12 values: a Set the SEG11 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG12 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG11  SEG12
10 Press the (Mode) button. Auto and Off appear on the remote control display.	
11 Set the SEG14 and SEG15 values: a Set the SEG14 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG15 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG14  SEG15
12 Press the (Mode) button. Cool and Off appear on the remote control display.	
13 Set the SEG16 and SEG17 values: a Set the SEG16 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display. 	 SEG16

Steps	Remote control display
b Set the SEG17 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG17
14 Press the (Mode) button. Dry and Off appear on the remote control display.	
15 Set the SEG18 and SEG20 values: a Set the SEG18 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG20 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG18  SEG20
16 Press the (Mode) button. Fan and Off appear on the remote control display.	
17 Set the SEG21 and SEG22 values: a Set the SEG21 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG22 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG21  SEG22
18 Press the (Mode) button. Heat and Off appear on the remote control display.	
19 Set the SEG23 and SEG24 values: a Set the SEG23 value by rotating the Wheel counterclockwise until the value you want to set appears on the remote control display.  b Set the SEG24 value by rotating the Wheel clockwise until the value you want to set appears on the remote control display.  When you rotate the Wheel, values appear in the following order: 0 → 1 → ··· E → F	 SEG23  SEG24

3. Check whether the option values that you have set are correct by pressing the (Mode) button repeatedly.



4. Save the option values into the indoor unit: Point the remote control to the remote control sensor on the indoor unit and then press the (Power) button on the remote control twice. Make sure that this command is received by the indoor unit. When it is successfully received, you can hear a short sound from the indoor unit.

   If the command is not received, press the (Power) button again.

5. Check whether the air conditioner operates in accordance with the option values you have set:
   a. Reset the indoor unit by disconnecting and then reconnecting the power cable of the indoor unit or by pressing the RESET button on the outdoor unit.
   b. Remove the batteries from the remote control, insert them again, and then press the (Power) button on the remote control.

NOTE

- If the fan is set to off for cooling only indoor unit by setting the SEG9=3 or SEG15=3, you need to use an external sensor or wired remote control sensor to detect indoor temperature exactly..

Installation options for the 02 series

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	-	Use of external temperature sensor / Minimizing fan operation when thermostat is off	Use of central control	Compensation of the fan RPM
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	Use of drain pump	Use of hot water heater	-	EEV step when heating stops	-
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	Use of external control	Setting the output of external control / External heater On or Off signal	-	Buzzer control	Maximum filter usage time
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	Individual control with remote control	Heating setting compensation offset / Removing condensated water in the Heat mode	EEV step of stopped unit during the oil return or the defrost mode	Motion detection sensor	Cycle time of Swing

- Even if you set the Use of drain pump (SEG8) option to 0, it is automatically set to 2 (the drain pump is used with 3 minute delay).
- If you set the Maximum filter usage time (SEG18) option to a value other than 2 and 6, it is automatically set to 2 (1000 hours).
- If you set an option to a value that is out of range specified above, the option is automatically set to 0 by default.
- The SEG5 option (Use of central control) is set to 1 (Use) by default. Therefore, you don't need to set the SEG5 option additionally. Note that even if the central control system is not connected, no errors occur. If you want a specific indoor unit not to be controlled by the central control system, set the SEG option of that indoor unit to 0 (Disuse).
- The external output of SEG15 is generated via MIM-B14 connection. (Refer to the manual of MIM-B14.)
- If you set the Individual control with remote control (SEG20) option to a value other than 0 to 4, it is automatically set to 0 (Indoor 1).

■ 02 series installation option(Detailed)

Option No. : 02XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4			SEG5		SEG6	
Explanation	PAGE		MODE		Evaporator Drying		Use of external room temperature sensor / Minimizing fan operation when thermostat is off			Use of central control		FAN RPM compensation	
	Indication	Details	Indication	Details	Indication	Details	Indication	Details: Use of External room temperature sensor	Details: Minimizing fan operation when thermostat is off	Indication	Details	Indication	Details
Indication and Details	0		2		0	Disuse	0	Default	Default	0	Disuse	0	Disuse
							1	Use	Disuse				
							2	Disuse	Use (Heating) (*2)				
					2	Use (5min) (*1)	3	Use	Use (Heating) (*2)				
							4	Disuse	Use (Cooling) (*2)				
							5	Use	Use (Cooling) (*2)				
					4	Use (10min) (*1)	6	Disuse	Use (Heating / Cooling) (*2)	1	Use	1	RPM compen-sation
							7	Use	Use (Heating / Cooling) (*2)				
							8	Disuse	Use (Cooling Ultra Low Fan) (*2)				
					6	Use (30min) (*1)	9	Use	Use (Cooling Ultra Low Fan) (*2)				
							A	Disuse	Use (Heating / Cooling Ultra Low Fan) (*2)				
							B	Use	Use (Heating / Cooling Ultra Low Fan) (*2)				

Option	SEG13		SEG14		SEG15		SEG16	SEG17		SEG18	
Explanation	PAGE		Use of external control		Setting the output of external control / External heater signal / Cooling operation signal / Free Cooling control signal			Buzzer control		Hours of filter usage	
	Indication	Details	Indication	Details	Indication	Details		Indication	Details	Indication	Details
Indication and Details	2		0	Disuse	0	External control (Thermo On)		0	Use buzzer	2	1000 Hour
			1	ON/OFF control	1	External control (Operation On)					
					2	External heater signal (*4)					
			2	"OFF control"	3	External heater signal (*4)					
					4	Cooling operation signal (*5)		1	Disuse buzzer	6	2000 Hour
			3	Window ON/OFF control	5	Free Cooling control (Cooling Thermo On) (*6)					
					6	Free Cooling control (Cooling/Dry Thermo On) (*6)					

Option	SEG19		SEG20		SEG21		SEG22		SEG23	SEG24
Explanation	PAGE		Individual control of a remote controller		Heating setting compensation		Adjusted EEV step of stopped unit during oil return /defrost mode.			
	Indication	Details	Indication	Details	Indication	Details	Indication	Details		
Indication and Details	3		0 or 1	channel 1	0	Default	0	Default		
			2	channel 2	1	2 ℃	1	Adjusted EEV positon		
			3	channel 3	2	5 ℃				
			4	channel 4						

(*1) When Cooling or dry mode is off. The indoor fan operate in setting minutes.

(*2) Minimizing fan operation when thermostat is off- Fan operates for 20 seconds at an interval of 5 minutes in heat mode.
- Fan stops or operates Ultra low in Coolong when thermostat is off.

(*3) 1: Fan is turned on continually when the hot water heater is turned on,
3: Fan is turned off when the hot water heater is turned on with cooling only indoor unit
Cooling only indoor unit: To use this option,install the Mode Select switch(MCM-C200) on the outdoor unit and fix it as cool mode.

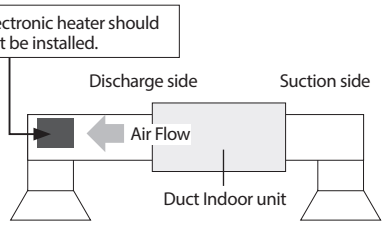
(*4) When the following 2 or 3 is used as external heater On/Off signal, the signal for monitoring external contact control will not be output.
2: Fan is turned on continually when the external heater is turned on,
3: Fan is turned off when the external heater is turned on with cooling only indoor unit
Cooling only indoor unit: To use this option,install the Mode Select switch(MCM-C200) on the outdoor unit and fix it as cool mode.
· If Fan is set to off for cooling only indoor unit by setting the SEG9=3 or SEG15=3, you need to use an external sensor or wired remote controller sensor to detect indoor temperature exactly."

(*5) When indoor unit is in cooling or Dry mode, The output signal is "ON"

(*6) For free cooling control, Economizer controller is required.

CAUTION

• Do not install the electronic heater in the flow channel of the indoor unit fan.



■ 05 series installation option(Detailed)

Option No. : 05XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		Use of Auto Change Over for HR only in Auto mode / Use of Cooling only indoor unit of HR		(When setting SEG3) Standard heating temp. Offset		(When setting SEG3) Standard cooling temp. Offset		(When setting SEG3) Standard for mode change Heating → Cooling	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		5		0	Follow product option	0	0 ˚C	0	0 ˚C	0	1 ˚C
							1	0.5 ˚C	1	0.5 ˚C	1	1.5 ˚C
					1	Use Auto Change Over for HR only	2	1 ˚C	2	1 ˚C	2	2 ˚C
							3	1.5 ˚C	3	1.5 ˚C	3	2.5 ˚C
							4	2 ˚C	4	2 ˚C	4	3 ˚C
					2	Use Cooling only indoor unit for HR	5	2.5 ˚C	5	2.5 ˚C	5	3.5 ˚C
							6	3 ˚C	6	3 ˚C	6	4 ˚C
							7	3.5 ˚C	7	3.5 ˚C	7	4.5 ˚C

Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12
Explanation	PAGE		(When setting SEG3) Standard for mode changing Cooling → Heating mode		(When setting SEG3) Time required for mode change		Compensation option for Long pipe or height diffference between indoor units		MTFC (*3)		
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	
	1		0	1 ˚C	0	5min	0	Default	0	Default	
			1	1.5 ˚C	1	7min	1	(*1) Height difference is more than 30m or (*2) Distance is longer than 110m			
			2	2 ˚C	2	9min					
			3	2.5 ˚C	3	11min					
			4	3 ˚C	4	13min	2	(*1) Height difference is 15~30m or (*2) Distance is 50~110m	2	Use	
			5	3.5 ˚C	5	15min					
			6	4 ˚C	6	20min					
			7	4.5 ˚C	7	30min					

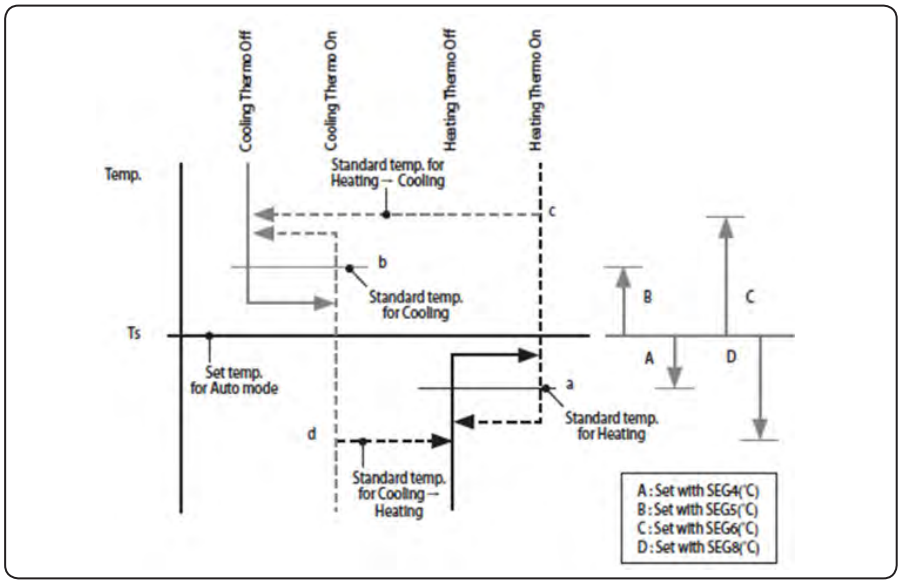
Option	SEG13		SEG14	SEG15	SEG16	SEG17	SEG18		
Explanation							Control variables when using hot water / external heater (*4)		
Indication and Details	Indication	Details					Indication	Details	
								Set temp. for heater On/Off	Delay time for heater On
	2						0	At the same time as thermo on	No delay
							1	At the same time as thermo on	10 minutes
							2	At the same time as thermo on	20 minutes
							3	1.5 ℃	No delay
							4	1.5 ℃	10 minutes
							5	1.5 ℃	20 minutes
							6	3.0 ℃	No delay
							7	3.0 ℃	10 minutes
							8	3.0 ℃	20 minutes
							9	4.5 ℃	No delay
							A	4.5 ℃	10 minutes
							B	4.5 ℃	20 minutes
							C	6.0 ℃	No delay
							D	6.0 ℃	10 minutes
							E	6.0 ℃	20 minutes

Option	SEG19		SEG20	SEG21	SEG22	SEG23			SEG24
Explanation	PAGE					Forcing FAN Operation for Heating and Cooling			
Indication and Details	Indication	Details				Indication	Details		
							Cooling Fan Setting	Heating Fan Setting	
	3					0	Disuse	Disuse	
						1	Disuse	Use (Fan: User setting)	
						2	Disuse	Use (Fan: High)	
						3	Disuse	Use (Fan: Low)	
						4	Use (Fan: User setting)	Disuse	
						5	Use (Fan: User setting)	Use (Fan: User setting)	
						6	Use (Fan: User setting)	Use (Fan: High)	
						7	Use (Fan: User setting)	Use (Fan: Low)	
						8	Use (Fan: High)	Disuse	
						9	Use (Fan: High)	Use (Fan: User setting)	
						A	Use (Fan: High)	Use (Fan: High)	
						B	Use (Fan: High)	Use (Fan: Low)	
						C	Use (Fan: Low)	Disuse	
						D	Use (Fan: Low)	Use (Fan: User setting)	
						E	Use (Fan: Low)	Use (Fan: High)	
						F	Use (Fan: Low)	Use (Fan: Low)	

(*1) Height difference : The difference of the height between the corresponding indoor uint and the indoor unit installed at the lowest place.
For example, When the indoor unit is installed 40m higher than the indoor unit installed at the lowest place, select the option "1".
(*2) Distance : The difference between the pipe length of the indoor unit istalled at farthest place from an outdoor unit and the pipe length of the corresponding indoor unit from an outdoor unit.
For example, when the farthest pipe length is 100 m(328 ft) and the corresponding indoor unit is 40 m away from an outdoor unit, select the option "2". (100 - 40 = 60m)
(*3) For MTFC option, MTFC(Multi Tenant Function Controller) kit is required.
(*4) Heater operation when the SEG9 of 02 series installation option is set to using hot water heater or when SEG15 is set to using external heater
e.g. 1) Setting 02 series SEG9 ="1" / Setting 05 series SEG18 = "0": Hot water heater is turned on at the same time as the heating thermostat is on, and turned off when the heating thermostat is off.
e.g. 2) Setting 02 series SEG15 ="2" / Setting 05 series SEG18 ="A":Room temp. ≤ set temp. + f(heating compensation temp.)
- External heater is turned on when the temperature is maintained as 4.5 °C for 10 minutes. Room temp. > set temp. + f(heating compensation temp.)
- External heater is turned off when the temperature is maintained as 4.5 °C + 1 °C (1 °C is the Hysteresis for On/Off selection.)

SEG 3, 4, 5, 6, 8, 9 additional information

When the SEG 3 is set as "1" and follow Auto Change Over for HR only operation, it will operation, it will operate as follows.



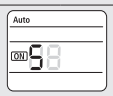
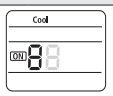
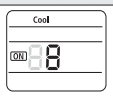
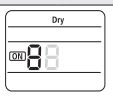
Cooling/Heating mode can be changed when Thermo Off status is maintained during the time with SEG9.

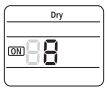
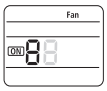
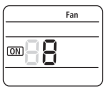
4-3-2 Option Items

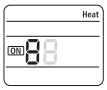
TYPE		SAMSUNG MODEL NUMBER	Static Pressure	Option	Install Code	Cycle code	Install Code 2
Slim 1WAY	JSF-1	AM007FN1DCH/AA	-	017044-1180C8-201616-330010	020010-100000-200000-300000	030000-100000-200000-300000	050000-100000-200000-300000
		AM009FN1DCH/AA	-	017044-1180F8-201C1C-330010			
		AM012FN1DCH/AA	-	017044-11545D-202323-330010			
Slim 1WAY (Wind free)	JSF-1	AM007NN1DCH/AA	-	017044-1180C8-201616-330010			
		AM009NN1DCH/AA	-	017044-1180F8-201C1C-330010			
		AM012NN1DCH/AA	-	017044-11545D-202323-330011			
Slim 1WAY (Wind free)	JSF-1	AM007NN1DCH/AZ	-	017044-1180C8-201616-330010			
		AM009NN1DCH/AZ	-	017044-1180F8-201C1C-330010			
		AM012NN1DCH/AZ	-	017044-11545D-202323-330011			
	JSF-2	AM018NN1DCH/AZ	-	018044-19543C-203838-330015			
		AM024NN1DCH/AZ	-	018044-19945F-204747-330018			
Mini 4WAY	Small	AM009FNDNCH/AA	-	01504F-19540A-201C1C-330000			
		AM012FNDNCH/AA	-	01504F-19342C-202323-330000			
		AM018FNDNCH/AA	-	01504F-19547F-203434-330000			
		AM020FNDNCH/AA	-	01504F-195591-203C3C-330000			
4WAY	Small	AM009FN4DCH/AA	-	014047-195064-201A1A-330000			
		AM018FN4DCH/AA	-	014047-195097-203434-330000			
		AM024FN4DCH/AA	-	014047-1950C7-204848-330000			
	Large	AM030FN4DCH/AA	-	014047-195409-205A5A-330020			
		AM036FN4DCH/AA	-	014047-19541B-206E6E-330020			
		AM048FN4DCH/AA	-	014047-19544F-209191-330020			
SLIM DUCT	Slim1	AM007FNLDCH/AA	0 mmAq	010054-1254AE-201616-331110			
			1 mmAq	010054-1255D1-201616-331110			
			2 mmAq	010054-1255D1-201616-331110			
			4 mmAq	010054-125904-201616-331110			
		AM009FNLDCH/AA	0 mmAq	010054-121913-201C1C-331110			
			1 mmAq	010054-121946-201C1C-331110			
			2 mmAq	010054-121946-201C1C-331110			
			4 mmAq	010054-121979-201C1C-331110			
		AM012FNLDCH/AA	0 mmAq	010054-121946-202323-331110			
			1 mmAq	010054-121979-202323-331110			
			2 mmAq	010054-121979-202323-331110			
			4 mmAq	010054-1219AC-202323-331110			
	Slim2	AM018FNLDCH/AA	0 mmAq	010054-1259BA-203434-331110			
			1 mmAq	010054-1259ED-203434-331110			
			2 mmAq	010054-1259ED-203434-331110			
			4 mmAq	010054-125E10-203434-331110			
		AM024FNLDCH/AA	0 mmAq	010054-125D2D-204848-331110			
			1 mmAq	010054-125E50-204848-331110			
			2 mmAq	010054-125E50-204848-331110			
			4 mmAq	010054-125E83-204848-331110			
	Slim3	AM030FNLDCH/AA	0 mmAq	010054-1B5915-205A5A-331110			
			1 mmAq	010054-1B5948-205A5A-331110			
			3 mmAq	010054-1B599F-205A5A-331110			
			6 mmAq	010054-1B5AE4-205A5A-331110			
		AM036FNLDCH/AA	0 mmAq	010054-1B5956-206E6E-331110			
			1 mmAq	010054-1B5989-206E6E-331110			
			3 mmAq	010054-1B5AD0-206E6E-331110			
			6 mmAq	010054-1B5E25-206E6E-331110			
		AM048FNLDCH/AA	0 mmAq	010054-1B59B9-209191-331110			
			1 mmAq	010054-1B59EC-209191-331110			
			3 mmAq	010054-1B5E33-209191-331110			
			6 mmAq	010054-1B5E88-209191-331110			
MSP DUCT	MSP-S	AM018FNMDCH/AA	0 mmAq	010054-125904-204747-331110			
			2 mmAq	010054-125593-203434-331110			
			4 mmAq	010054-1255C5-203434-331110			
			6 mmAq	010054-1255F5-203434-331110			
			8 mmAq	010054-125957-203434-331110			
		AM024FNMDCH/AA	0 mmAq	010054-125904-204848-331110			
			2 mmAq	010054-125936-204848-331110			
			4 mmAq	010054-125979-204848-331110			
			6 mmAq	010054-125DF9-204848-331110			
			8 mmAq	010054-125DFC-204848-331110			
	MSP-1	AM030FNMDCH/AA	6 mmAq	010054-1259CE-205A5A-331110			
			8 mmAq	010054-125E02-205A5A-331110			
			10 mmAq	010054-125E46-205A5A-331110			
		AM036FNMDCH/AA	6 mmAq	010054-125E00-206E6E-331110			
			8 mmAq	010054-125E44-206E6E-331110			
			10 mmAq	010054-125E88-206E6E-331110			

■ 05 series installation option(Detailed)

Option No. : 05XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		Use of Auto Change Over for HR only in Auto mode		(When setting SEG3) Standard heating temp. Offset		(When setting SEG3) Standard cooling temp. Offset		(When setting SEG3) Standard for mode change Heating → Cooling	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		5		0	Follow product option	0	0	0	0	0	1
					1	Use Auto Change Over for HR only	1	0.5	1	0.5	1	1.5
							2	1	2	1	2	2
							3	1.5	3	1.5	3	2.5
							4	2	4	2	4	3
							5	2.5	5	2.5	5	3.5
							6	3	6	3	6	4
							7	3.5	7	3.5	7	4.5

Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12	
Explanation	PAGE		(When setting SEG3) Standard for mode changing Cooling → Heating mode		(When setting SEG3) Time required for mode change		Compensation option for Long pipe or height diffference between indoor units					
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details				
	1		0	1	0	5 min.	0	Use default value				
			1	1.5	1	7 min.	1	1) Height difference(*1) is more than 30 m or 2) Distance(*2) is longer than 110 m				
			2	2	2	9 min.						
			3	2.5	3	11 min.						
			4	3	4	13 min.	2	1) Height difference(*1) is 15~30 m or 2) Distance(*2) is 50~110 m				
			5	3.5	5	15 min.						
			6	4	6	20 min.						
			7	4.5	7	30 min.						

Option	SEG13	SEG14	SEG15	SEG16	SEG17	SEG18 (*3)		
Explanation						Control variables when using hot water / external heater		
Remote Controller Display								
Indication and Details						Indication	Details	
							Set temp. for heater On/Off	Delay time for heater On
						0	At the same time as thermo on	No delay
						1	At the same time as thermo on	10 minutes
						2	At the same time as thermo on	20 minutes
						3	2.7 °F (1.5 °C)	No delay
						4	2.7 °F (1.5 °C)	10 minutes
						5	2.7 °F (1.5 °C)	20 minutes
						6	5.4 °F (3.0 °C)	No delay
						7	5.4 °F (3.0 °C)	10 minutes
						8	5.4 °F (3.0 °C)	20 minutes
						9	8.1 °F (4.5 °C)	No delay
						A	8.1 °F (4.5 °C)	10 minutes
						B	8.1 °F (4.5 °C)	20 minutes
						C	10.8 °F (6.0 °C)	No delay
						D	10.8 °F (6.0 °C)	10 minutes
						E	10.8 °F (6.0 °C)	20 minutes

(*1) Height difference : The difference of the height between the corresponding indoor uint and the indoor unit installed at the lowest place.
For example, When the indoor unit is installed 40 m(131.23 ft) higher than the indoor unit installed at the lowest place, select the option 1.

(*2) Distance : The difference between the pipe length of the indoor unit istalled at farthest place from an outdoor unit and the pipe length of the corresponding indoor unit from an outdoor unit.
For example, when the farthest pipe length is 100 m(328 ft) and the corresponding indoor unit is 40 m(131.23 ft) away from an outdoor unit, select the option 2.
(100 m(328 ft) - 40 m(131.23 ft) = 60 m(196.85 ft))

(*3) Heater operation when the SEG9 of 02 series installation option is set to using hot water heater or when SEG15 is set to using external heater

e.g. 1) Setting 02 series SEG9 =1 / Setting 05 series SEG18 = 0: Hot water heater is turned on at the same time as the heating thermostat is on, and turned off when the heating thermostat is off.

e.g. 2) Setting 02 series SEG15 =2 / Setting 05 series SEG18 =A:
Room temp. ≤ set temp. + f(heating compensation temp.)
- External heater is turned on when the temperature is maintained as 8.1 °F(4.5 °C) for 10 minutes.
Room temp. > set temp. + f(heating compensation temp.)
- External heater is turned off when the temperature is maintained as 8.1 °F(4.5 °C) + 1.8 °F(1 °C)
(1 °C is the Hysteresis for On/Off selection.)

Option Items(cont.)

TYPE		SAMSUNG MODEL NUMBER	Static Pressure	Option	Install Code	Cycle code	Install Code 2
MSP DUCT	MSP-2	AM048FNMDCH/AA	6 mmAq	010054-125E20-209191-331110			
			8 mmAq	010054-125E43-209191-331110			
			10 mmAq	010054-125E86-209191-331110			
		AM054KNMDCH/AZ	4 mmAq	010054-125E79-20A0A0-331110			
			6 mmAq	010054-125EAA-20A0A0-331110			
			8 mmAq	010054-125EDB-20A0A0-331110			
			10 mmAq	010054-125EFC-20A0A0-331110			
			12 mmAq	010054-125EFD-20A0A0-331110			
			14 mmAq	010054-125EFE-20A0A0-331110			
NEO FORTE (without EEV)	Small	AM007FNTDCH/AA	-	010044-1170FA-201616-330000			
		AM009FNTDCH/AA	-	010044-1170FA-201C1C-330000			
		AM012FNTDCH/AA	-	010044-11744D-202323-330000			
	Large	AM018FNTDCH/AA	-	010044-11645E-203434-330020			
		AM020FNTDCH/AA	-	010044-11646F-203C3C-330020			
		AM024FNTDCH/AA	-	010044-11648F-204848-330020			
NEO FORTE (with EEV)	Small	AM007HNQDCH/AA	-	010044-1170FA-201616-330000			
		AM009HNQDCH/AA	-	010044-1170FA-201C1C-330000			
		AM012HNQDCH/AA	-	010044-11744D-202323-330000			
	Large	AM018HNQDCH/AA	-	010044-11645E-203434-330020			
		AM020HNQDCH/AA	-	010044-11646F-203C3C-330020			
		AM024HNQDCH/AA	-	010044-11648F-204848-330020			
A3050		AM005MNVDCH/AA	-	012044-1990D9-200F0F-310000			
		AM007MNVDCH/AA	-	012044-19942A-201616-310000			
		AM019MNVDCH/AA	-	012044-19945C-201C1C-310000			
		AM012MNVDCH/AA	-	012044-19845E-202424-310010			
		AM015MNVDCH/AA	-	012044-1955A2-202D2D-310010			
		AM018MNVDCH/AA	-	012044-19942C-203838-310020			
		AM024MNVDCH/AA	-	012044-19847F-204747-310020			
		AM028MNVDCH/AA	-	012044-1955A3-205252-310020			
BORACAY		AM007KNQDCH/AZ	-	010044-1190FA-201616-310000			
		AM009KNQDCH/AZ	-	010044-1160C8-201C1C-310000			
		AM012KNQDCH/AZ	-	010044-11540B-202323-310000			
		AM018KNQDCH/AZ	-	010044-11542C-203434-310020			
		AM020KNQDCH/AZ	-	010044-11542C-203C3C-310020			
		AM024KNQDCH/AZ	-	010044-11644F-204848-310020			
BORACAY (with EEV)		AM007KNTDCH/AZ	-	010044-1160C8-201C1C-330000			
		AM009KNTDCH/AZ	-	010044-1160C8-201C1C-330000			
		AM012KNTDCH/AZ	-	010044-11540B-202323-330000			
		AM018KNTDCH/AZ	-	010044-11542C-203434-330020			
		AM020KNTDCH/AZ	-	010044-11542C-203C3C-330020			
		AM024KNTDCH/AZ	-	010044-11644F-204848-330020			
HSP DUCT	Small	AM036FNHDCH/AA	5 mmAq	010054-135A50-206E6E-331110			
			10 mmAq	010054-135AD7-206E6E-331110			
			15 mmAq	010054-135E5F-206E6E-331110			
			20 mmAq	010054-135F96-206E6E-331110			
		AM048FNHDCH/AA	5 mmAq	010054-135AC3-209191-331110			
			10 mmAq	010054-135E6A-209191-331110			
			15 mmAq	010054-135FA3-209191-331110			
			20 mmAq	010054-135FC8-209191-331110			
	BIG DUCT	AM076FNHDCH/AA	5 mmAq	011054-195097-20DCDC-331110			
			10 mmAq	011054-1950C7-20DCDC-331110			
			15 mmAq	011054-1950E8-20DCDC-331110			
			20 mmAq	011054-19544D-20DCDC-331110			
			25 mmAq	011054-19549F-20DCDC-331110			
		AM096FNHDCH/AA	5 mmAq	011054-195407-231C1C-331110			
			10 mmAq	011054-195429-231C1C-331110			
			15 mmAq	010054-19545B-231C1C-331110			
			20 mmAq	011054-19549E-231C1C-331110			
			25 mmAq	011054-1955D1-231C1C-331110			
			28 mmAq	011054-1955F3-231C1C-331110			
Ceiling		AM018FNCDCH/AA	-	013054-105000-203434-330010			
		AM024FNCDCH/AA	-	013054-105000-204848-330010			
Big Ceiling		AM036JNCDCH/AA	-	013054-1C2479-206969-330000			
		AM048JNCDCH/AA	-	013054-1C54BE-208D8D-330000			

TYPE		SAMSUNG MODEL NUMBER	Static Pressure	Option	Install Code	Cycle code	Install Code 2
Floor Standing	CONCEALED	AM006JNFDCH/AA	-	01A054-105000-201212-330010			
		AM009JNFDCH/AA	-	01A054-105000-201C1C-330010			
		AM012JNFDCH/AA	-	01A054-105000-202323-330010			
		AM018JNFDCH/AA	-	01A054-105000-203434-330010			
		AM024JNFDCH/AA	-	01A054-105000-204848-330010			
	EXPOSED	AM006JNGDCH/AA	-	01A054-105000-201212-330010			
		AM009JNGDCH/AA	-	01A054-105000-201C1C-330010			
		AM012JNGDCH/AA	-	01A054-105000-202323-330010			
		AM018JNGDCH/AA	-	01A054-105000-203434-330010			
		AM024JNGDCH/AA	-	01A054-105000-204848-330010			
OAP DUCT		AM072JNESCH/AA	5mmAq	01B064-193020-231515-333000			
			10mmAq	01B064-193051-231515-333000			
			15mmAq	01B064-193097-231515-333000			
			20mmAq	01B064-1930EC-231515-333000			
			25mmAq (Standard)	01B064-19343E-231515-333000			
			30mmAq	01B064-19348E-231515-333000			
		AM096JNESCH/AA	5mmAq	01B064-193030-231C1C-333000			
			10mmAq	01B064-193061-231C1C-333000			
			15mmAq	01B064-1930A8-231C1C-333000			
			20mmAq	01B064-19340E-231C1C-333000			
			25mmAq (Standard)	01B064-19345E-231C1C-333000			
			30mmAq	01B064-1934AE-231C1C-333000			
360 CST		AM009KN4DCH/AA	-	01004F-1950B9-201A1A-330000			
		AM012KN4DCH/AA	-	01004F-1950B9-202323-330000			
		AM018KN4DCH/AA	-	01004F-1950B9-203434-330000			
		AM024KN4DCH/AA	-	01004F-1950E9-204848-330000			
		AM030KN4DCH/AA	-	01004F-19542D-205A6A-330020			
		AM036KN4DCH/AA	-	01004F-19545F-206E6E-330020			
		AM048KN4DCH/AA	-	01004F-195581-209191-330020			
Premium Plus Windfree		AM005TNVDCH/AA	-	0110C4-1980A8-200F0F-310002			
		AM007TNVDCH/AA	-	0110C4-1980C8-201616-310002			
		AM009TNVDCH/AA	-	0110C4-1980A8-201C1C-310002			
		AM012TNVDCH/AA	-	0110C4-1980E9-202424-310003			
		AM015TNVDCH/AA	-	0110C4-1970B8-202D2D-310020			
		AM018TNVDCH/AA	-	0110C4-1970E9-203838-310021			
		AM024TNVDCH/AA	-	0110C4-19741B-204747-310023			
		AM028TNVDCH/AA	-	0110C4-197551-205252-310029			

Item	Model	SEG																							Static Pressure
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
MAX	AM032MNQDCH/AA	0	1	3	0	4	4	1	9	7	4	6	E	2	0	5	D	5	D	3	1	0	0	2	0	-

Model	AM007JNMDCH	AM009JNMDCH	AM012JNMDCH	AM015JNMDCH	AM018JNMDCH
Static Pressure (mmAq)	Option code for indoor unit				
0 < SP ≤ 1	010054-1B5095-201616-331110	010054-1B5096-201C1C-331110	010054-1B50A5-202323-331110	010054-1B50F9-202C2C-331110	010054-1B542C-203535-331110
1< SP ≤3	010054-1B50F8-201616-331110	010054-1B50FA-201C1C-331110	010054-1B5409-202323-331110	010054-1B544D-202C2C-331110	010054-1B5570-203535-331110
3 < SP ≤ 5	010054-1B544B-201616-331110	010054-1B544D-201C1C-331110	010054-1B545C-202323-331110	010054-1B5580-202C2C-331110	010054-1B55B4-203535-331110
5 < SP ≤ 7.5	010054-1B549E-201616-331110	010054-1B5591-201C1C-331110	010054-1B54AF-202323-331110	010054-1B55D3-202C2C-331110	010054-1B5907-203535-331110
7.5 < SP ≤ 10	010054-1B55D1-201616-331110	010054-1B55E4-201C1C-331110	010054-1B55F2-202323-331110	010054-1B5915-202C2C-331110	010054-1B594A-203535-331110
10 < SP ≤ 12.5	010054-1B5913-201616-331110	010054-1B5917-201C1C-331110	010054-1B5934-202323-331110	010054-1B5968-202C2C-331110	010054-1B599D-203535-331110
12.5 < SP ≤ 15	010054-1B5956-201616-331110	010054-1B595A-201C1C-331110	010054-1B5967-202323-331110	010054-1B59AB-202C2C-331110	010054-1B5AD0-203535-331110

Model	AM024JNHDCH	AM027JNHDCH	AM030JNHDCH	AM036JNHDCH	AM048JNHDCH
Static Pressure (mmAq)	Option code for indoor unit				
3 < SP ≤ 5.2	010054-1355A6-204646-331110	010054-1355C7-204F4F-331110	010054-1355D8-205858-331110	010054-135919-206969-331110	010054-135A60-208D8D-331110
5.2 < SP ≤ 7.5	010054-1355F9-204646-331110	010054-13591C-204F4F-331110	010054-13593A-205858-331110	010054-135A70-206969-331110	010054-135AC5-208D8D-331110
7.5 < SP ≤ 10	010054-13594E-204646-331110	010054-13595F-204F4F-331110	010054-13598E-205858-331110	010054-135AB4-206969-331110	010054-135E18-208D8D-331110
10 < SP ≤ 12.5	010054-135A70-204646-331110	010054-135A93-204F4F-331110	010054-135AB1-205858-331110	010054-135AF7-206969-331110	010054-135E5B-208D8D-331110
12.5 < SP ≤ 15	010054-135AA3-204646-331110	010054-135AC5-204F4F-331110	010054-135AF4-205858-331110	010054-135E39-206969-331110	010054-135E9F-208D8D-331110
15 < SP ≤ 17.5	010054-135AE6-204646-331110	010054-135E08-204F4F-331110	010054-135E37-205858-331110	010054-135E6C-206969-331110	010054-135FB2-208D8D-331110
17.5 < SP ≤ 20	010054-135E18-204646-331110	010054-135E3A-204F4F-331110	010054-135E59-205858-331110	010054-135EAF-206969-331110	010054-135FC5-208D8D-331110

Note :
- represents E.S.P (External Static Pressure)range of factory setting.
  You don't have to adjust the fan speed separately if the external static pressure of the installation place is in .
  When it is out of , input the appropriate option code.
- If you input the inappropriate option code,error may occur or the air conditioner is out of order.
  The option code must be inputted correctly by the installation specialist or service agent.

Model	AM007MNMDCH	AM009MNMDCH	AM012MNMDCH	AM015MNMDCH	AM018MNMDCH
Static Pressure (mmAq)	Option code for indoor unit				
0 < SP ≤ 1	010054-1E5060-201616-331100	010054-1E5060-201C1C-331100	010054-1E5072-202323-331100	010054-1E5095-202C2C-331100	010054-1E50F8-203535-331100
1< SP ≤3	010054-1E50D4-201616-331100	010054-1E50D4-201C1C-331100	010054-1E50D6-202323-331100	010054-1E50F9-202C2C-331100	010054-1E545B-203535-331100
3 < SP ≤ 5	010054-1E5437-201616-331100	010054-1E5437-201C1C-331100	010054-1E5449-202323-331100	010054-1E545D-202C2C-331100	010054-1E54DF-203535-331100
5 < SP ≤ 7.5	010054-1E54DA-201616-331100	010054-1E54DA-201C1C-331100	010054-1E54DD-202323-331100	010054-1E55D3-202C2C-331100	010054-1E5914-203535-331100
7.5 < SP ≤ 10	010054-1E581E-201616-331100	010054-1E581E-201C1C-331100	010054-1E5911-202323-331100	010054-1E5938-202C2C-331100	010054-1E5979-203535-331100
10 < SP ≤ 12.5	010054-1E5972-201616-331100	010054-1E5972-201C1C-331100	010054-1E5976-202323-331100	010054-1E598D-202C2C-331100	010054-1E59CD-203535-331100
12.5 < SP ≤ 15	010054-1E59C5-201616-331100	010054-1E59C5-201C1C-331100	010054-1E59C9-202323-331100	010054-1E5AD0-202C2C-331100	010054-1E5E10-203535-331100

Model	AM024MNMDCH	AM027MNMDCH	AM030MNMDCH	AM036MNMDCH	AM048MNMDCH
Static Pressure (mmAq)	Option code for indoor unit				
3 < SP ≤ 5.2	010054-1E54BB-204646-331110	010054-1E55C0-204F4F-331110	010054-1E55D3-205858-331110	010054-1E542A-206969-331120	010054-1E548D-208D8D-331129
1< SP ≤3	010054-1E581F-204646-331110	010054-1E5924-204F4F-331110	010054-1E5938-205858-331110	010054-1E546C-206969-331120	010054-1E55C0-208D8D-33112A
3 < SP ≤ 5	010054-1E5973-204646-331110	010054-1E5989-204F4F-331110	010054-1E598C-205858-331110	010054-1E55B0-206969-331120	010054-1E55F2-208D8D-33112A
5 < SP ≤ 7.5	010054-1E59C6-204646-331110	010054-1E59DC-204F4F-331110	010054-1E5E01-205858-331110	010054-1E55F3-206969-331120	010054-1E5935-208D8D-33112A
7.5 < SP ≤ 10	010054-1E5D1A-204646-331110	010054-1E5E20-204F4F-331110	010054-1E5E35-205858-331110	010054-1E5936-206969-331120	010054-1E5989-208D8D-33112A
10 < SP ≤ 12.5	010054-1E5D6D-204646-331110	010054-1E5E63-204F4F-331110	010054-1E5E78-205858-331110	010054-1E597A-206969-331120	010054-1E59CC-208D8D-33112A
12.5 < SP ≤ 15	010054-1E5EA0-204646-331110	010054-1E5EB7-204F4F-331110	010054-1E5ECC-205858-331110	010054-1E59BD-206969-331120	010054-1E5D0F-208D8D-33112A

Note : ● represents E.S.P (External Static Pressure)range of factory setting.
You don't have to adjust the fan speed separately if the external static pressure of the installation place is in .
When it is out of , input the appropriate option code.
● If you input the inappropriate option code,error may occur or the air conditioner is out of order.
The option code must be inputted correctly by the installation specialist or service agent.

Model	AM006ANMDCH	AM007ANMDCH	AM009ANMDCH	AM012ANMDCH	AM015ANMDCH	AM018ANMDCH
Static Pressure (mmAq)	Option code for indoor unit					
0 ≤ SP ≤ 1	010054-1E5051-201313-331100	010054-1E5051-201616-331100	010054-1E5061-201C1C-331100	010054-1E5062-202323-331100	010054-1E5082-202C2C-331100	010054-1E5084-203535-331110
1 < SP ≤ 3	010054-1E50B5-201313-331100	010054-1E50B5-201616-331100	010054-1E50C6-201C1C-331100	010054-1E50C7-202323-331100	010054-1E50E6-202C2C-331100	010054-1E50C7-203535-331110
3 < SP ≤ 5	010054-1E5419-201313-331100	010054-1E5419-201616-331100	010054-1E542A-201C1C-331100	010054-1E542A-202323-331100	010054-1E5449-202C2C-331100	-
5 < SP ≤ 7.5	010054-1E548D-201313-331100	010054-1E548D-201616-331100	010054-1E549D-201C1C-331100	010054-1E549E-202323-331100	010054-1E54AD-202C2C-331100	-
7.5 < SP ≤ 10	010054-1E55D4-201313-331100	010054-1E55D4-201616-331100	010054-1E55E3-201C1C-331100	010054-1E55E4-202323-331100	010054-1E55F3-202C2C-331100	-
10 < SP≤12.5	010054-1E5928-201313-331100	010054-1E5928-201616-331100	010054-1E5936-201C1C-331100	010054-1E5938-202323-331100	010054-1E5946-202C2C-331100	-
12.5 < SP ≤ 15	010054-1E5979-201313-331100	010054-1E5979-201616-331100	010054-1E597D-201C1C-331100	010054-1E597E-202323-331100	010054-1E59A3-202C2C-331100	-
3 < SP ≤ 7	-	-	-	-	-	010054-1E547B-203535-331110
7 < SP ≤ 11	-	-	-	-	-	010054-1E5900-203535-331110
11 < SP ≤ 15	-	-	-	-	-	010054-1E5983-203535-331110
15 < SP ≤ 17.5	-	-	-	-	-	010054-1E59C8-203535-331110
17.5 < SP ≤ 20	-	-	-	-	-	010054-1E5D0B-203535-331110

Model	AM024ANHDCH	AM027ANHDCH	AM030ANHDCH	AM036ANHDCH	AM048ANHDCH
Static Pressure (mmAq)	Option code for indoor unit				
3 ≤ SP ≤ 5.2	010054-1E5458-204646-331110	010054-1E5478-204F4F-331110	010054-1E54A8-205858-331110	010054-1E5406-206A6A-331120	010054-1E5467-208D8D-331120
5.2 < SP ≤ 7.5	010054-1E54AA-204646-331110	010054-1E54CA-204F4F-331110	010054-1E54FA-205858-331110	010054-1E5458-206A6A-331120	010054-1E54A9-208D8D-331120
7.5 < SP ≤ 10	010054-1E580C-204646-331110	010054-1E582C-204F4F-331110	010054-1E584B-205858-331110	010054-1E54AB-206A6A-331120	010054-1E54EA-208D8D-331120
10 < SP ≤ 12.5	010054-1E585E-204646-331110	010054-1E586F-204F4F-331110	010054-1E589D-205858-331110	010054-1E54EB-206A6A-331120	010054-1E582D-208D8D-331120
12.5 < SP ≤ 15	010054-1E5992-204646-331110	010054-1E59B0-204F4F-331110	010054-1E59D0-205858-331110	010054-1E5910-206A6A-331120	010054-1E585F-208D8D-331120
15 < SP ≤ 17.5	010054-1E59E3-204646-331110	010054-1E59F3-204F4F-331110	010054-1E5D03-205858-331110	010054-1E5950-206A6A-331120	010054-1E5982-208D8D-331120
17.5 < SP ≤ 20	010054-1E5D18-204646-331110	010054-1E5D28-204F4F-331110	010054-1E5D38-205858-331110	010054-1E5982-206A6A-331120	010054-1E59B4-208D8D-331120

Note :
- represents E.S.P (External Static Pressure)range of factory setting.
  You don't have to adjust the fan speed separately if the external static pressure of the installation place is in .
  When it is out of , input the appropriate option code.
- If you input the inappropriate option code,error may occur or the air conditioner is out of order.
  The option code must be inputted correctly by the installation specialist or service agent.

4-3-3 What to check before diagnosis

4-3-3-1 Lamp combination expression method display (cassette type indoor unit)

- Slim 1-Way, 2 -Way, Mini 4-Way cassette type

■ Error detection and restart

- When error occurs during operation, indicate a problem with LED flashes, and no other operations but LED stops.
- When restarting operation with remote controller or switch, it will determine the appropriate error mode after normal operation

■ LED lamp display with error detection

Abnormal condition	Error code	LED Display				
		⏻		⏲	✲	▦
		Green	Red			
Error on indoor temperature sensor (Short or Open)	E121	×	×	◑	×	×
1. Error on Eva-in sensor (Short or Open) 2. Error on Eva-out sensor (Short or Open) 3. Discharge sensor error (Short or Open)	E122 E123 E126	◑	×	◑	×	×
Indoor fan error	E154	×	×	×		×
1. Error on outdoor temperature sensor (Short or Open) 2. Error on cond sensor 3. Error on discharge sensor Other outdoor unit sensor error that is not on the above list	E221 E237 E251	◑	×	×	◑	×
1. When there is no communication between the indoor·outdoor units for 2 minutes 2. Communication error received from the outdoor unit 3. 3 miniute tracking error on outdoor unit 4. Communication error after tracking due to unmatching number of installed units 5. Error due to repeated communication address 6. Communication address not confirmed Other outdoor unit communication error that is not on the above list	E101 E102 E202 E201 E108 E109	×	×	◑	◑	×
Self diagnosis error display 1. Error due to opened EEV (2nd detection) 2. Error due to closed EEV (2nd detection) 3. Eva in sensor is detached 4. Eva out sensor is detached 5. Thermal fuse error (Open)	E151 E152 E128 E129 E198	×	×	◑	◑	◑

● : On ◑ : Flickering × : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- When E108 error occurs, change the address and reset the system.
  Ex.) When address of the indoor unit #1 and #2 are set as 5, address of the indoor unit #1 will become 5 and indoor unit #2 will display E108, A002.

■ **LED lamp display with error detection (cont.)**

Abnormal condition	Error code	LED Display				
		Green	Red			
1. COND mid sensor is detached 2. Refrigerant leakage (2nd detection) 3. Abnomally high temperature on Cond (2nd detection) 4. Low pressure s/w (2nd detection) 5. Abnomally high temperature on discharged air on outdoor unit (2nd detection) 6. Indoor operation stop due to unconfirmed error on outdoor unit 7. Error due to reverse phase detection 8. Comp stop due to freeze detection (6th detection) 9. High pressure sensor is detached 10. Low pressure sensor is detached 11. Outdoor unit copression ration error 12. Outdoor sump down_1 prevetion control 13. Compressor down due to low pressure sensor prevention control_1 14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection) 15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection) Other outdoor unit self-diagnosis error that is not on the above list	E241 E554 E450 E451 E416 E559 E425 E403 E301 E306 E428 E413 E410 E180 E181	×	×	◑	◑	◑
Flowating s/w (2nd detection)	E153	×	×	×	◑	◑
EEPROM error	E162	◑	◑	◑	◑	◑
EEPROM option error	E163	◑	◑	◑	◑	◑
Error due to incompatible indoor unit	E164	×	×	×	×	◑

● : On ◑ : Flickering × : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- When E108 error occurs, change the address and reset the system.
  Ex.) When address of the indoor unit #1 and #2 are set as 5, address of the indoor unit #1 will become 5 and indoor unit #2 will display E108, A002.

- Global 4way cassette type

■ Error detection and restart

- When error occurs during operation, indicate a problem with LED flashes, and no other operations but LED stops.
- When restarting operation with remote controller or switch, it will determine the appropriate error mode after normal operation

■ LED lamp display with error detection

Abnormal condition	Error code	LED Display			
		Operation	Defrost	Timer	Filter
Error on indoor temperature sensor (Short or Open)	E121	×	◑	×	×
1. Error on Eva-in sensor (Short or Open) 2. Error on Eva-out sensor (Short or Open) 3. Discharge sensor error (Short or Open)	E122 E123 E126	◑	◑	×	×
Indoor fan error	E154	×	×	◑	×
1. Error on outdoor temperature sensor (Short or Open) 2. Error on cond sensor 3. Error on discharge sensor Other outdoor unit sensor error that is not on the above list	E221 E237 E251	◑	×	◑	×
1. When there is no communication between the indoor·outdoor units for 2 minutes 2. Communication error received from the outdoor unit 3. 3 miniute tracking error on outdoor unit 4. Communication error after tracking due to unmatching number of installed units 5. Error due to repeated communication address 6. Communication address not confirmed Other outdoor unit communication error that is not on the above list	E101 E102 E202 E201 E108 E109	×	◑	◑	×
Self diagnosis error display 1. Error due to opened EEV (2nd detection) 2. Error due to closed EEV (2nd detection) 3. Eva in sensor is detached 4. Eva out sensor is detached 5. Thermal fuse error (Open)	E151 E152 E128 E129 E198	×	◑	◑	◑
1. COND mid sensor is detached. 2. Refrigerant leakage (2nd detection). 3. Abnomally high temperature on Cond. (2nd detection) 4. Low pressure s/w. (2nd detection) 5. Abnomally high temperature on discharged air on outdoor unit. (2nd detection) 6. Indoor operation stop due to unconfirmed error on outdoor unit. 7. Error due to reverse phase detection. 8. Comp stop due to freeze detection. (6th detection) 9. High pressure sensor is detached. 10. Low pressure sensor is detached. 11. Outdoor unit copression ration error 12. Outdoor sump down_1 prevetion control 13. Compressor down due to low pressure sensor prevention control_1 14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection) 15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection) Other outdoor unit self-diagnosis error that is not on the above list	E241 E554 E450 E451 E416 E559 E425 E403 E301 E306 E428 E413 E410 E180 E181	×	◑	◑	◑

■ **LED lamp display with error detection (cont.)**

Abnormal condition	Error code	LED Display			
		Operation	Defrost	Timer	Filter
					
Flowating s/w (2nd detection)	E153	×	×	◑	◑
EEPROM error	E162	◑	◑	◑	◑
EEPROM option error	E163	◑	◑	◑	◑
Error due to incompatible indoor unit	E164	◑	◑	×	◑

● : On ◑ : Flickering × : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- When E108 error occurs, change the address and reset the system.
  Ex.) When address of the indoor unit #1 and #2 are set as 5, address of the indoor unit #1 will become 5 and indoor unit #2 will display E108, A002.

- Duct type

■ Error detection and restart

- When error occurs during operation, indicate a problem with LED flashes, and no other operations but LED stops.
- When restarting operation with remote controller or switch, it will determine the appropriate error mode after normal operation

■ LED lamp display with error detection(Remote Control Receiver)

Abnormal condition	Error code	LED Display				
		⏻		⏲		
Error on indoor temperature sensor (Short or Open)	E121	×	×	◑	×	×
1. Error on Eva-in sensor (Short or Open) 2. Error on Eva-out sensor (Short or Open) 3. Discharge sensor error (Short or Open)	E122 E123 E126	◑	×	◑	×	×
Indoor fan error	E154	×	×	×	◑	×
1. Error on outdoor temperature sensor (Short or Open) 2. Error on cond sensor 3. Error on discharge sensor Other outdoor unit sensor error that is not on the above list	E221 E237 E251	◑	×	×	◑	×
1. When there is no communication between the indoor·outdoor units for 2 minutes 2. Communication error received from the outdoor unit 3. 3 miniute tracking error on outdoor unit 4. Communication error after tracking due to unmatching number of installed units 5. Error due to repeated communication address 6. Communication address not confirmed Other outdoor unit communication error that is not on the above list	E101 E102 E202 E201 E108 E109	×	×	◑	◑	×
Self diagnosis error display 1. Error due to opened EEV (2nd detection) 2. Error due to closed EEV (2nd detection) 3. Eva in sensor is detached 4. Eva out sensor is detached 5. Thermal fuse error (Open)	E151 E152 E128 E129 E198	×	×	◑	◑	◑

● : On ◑ : Flickering × : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- When E108 error occurs, change the address and reset the system.Ex.) When address of the indoor unit #1 and #2 are set as 5, address of the indoor unit #1 will become 5 and indoor unit #2 will display E108, A002.

■ **LED lamp display with error detection(Remote Control Receiver) (cont.)**

Abnormal condition	Error code	LED Display				
		⏻		⏲		
1. COND mid sensor is detached 2. Refrigerant leakage (2nd detection) 3. Abnomally high temperature on Cond (2nd detection) 4. Low pressure s/w (2nd detection) 5. Abnomally high temperature on discharged air on outdoor unit (2nd detection) 6. Indoor operation stop due to unconfirmed error on outdoor unit 7. Error due to reverse phase detection 8. Comp stop due to freeze detection (6th detection) 9. High pressure sensor is detached 10. Low pressure sensor is detached 11. Outdoor unit copression ration error 12. Outdoor sump down_1 prevetion control 13. Compressor down due to low pressure sensor prevention control_1 14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection) 15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection) Other outdoor unit self-diagnosis error that is not on the above list	E241 E554 E450 E451 E416 E559 E425 E403 E301 E306 E428 E413 E410 E180 E181	×	×	◑	◑	◑
Flowating s/w (2nd detection)	E153	×	×	×	◑	◑
EEPROM error	E162	◑	◑	◑	◑	◑
EEPROM option error	E163	◑	◑	◑	◑	◑
Error due to incompatible indoor unit	E164	×	×	×	×	◑

● : On ◑ : Flickering × : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- When E108 error occurs, change the address and reset the system.Ex.) When address of the indoor unit #1 and #2 are set as 5, address of the indoor unit #1 will become 5 and indoor unit #2 will display E108, A002.

- Ceiling type

■ Error detection and reoperation

- If an error occurs during the operation, an LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

■ Indoor unit LED lamp display at error detecting

Abnormal condition	Error code	LED Display				
						
Error on indoor temperature sensor (Short or Open)	E121	×	×	◑	×	×
1. Error on Eva-in sensor (Short or Open) 2. Error on Eva-out sensor (Short or Open)	E122 E123	◑	×	◑	×	×
Indoor fan error	E154	×	×	×	◑	×
1. Error on outdoor temperature sensor (Short or Open) 2. Error on cond sensor 3. Error on discharge sensor	E221 E237 E251	◑	×	×	◑	×
1. When there is no communication between the indoor·outdoor units for 2 minutes 2. Communication error received from the outdoor unit 3. 3 miniute tracking error on outdoor unit 4. Communication error after tracking due to unmatching number of installed units 5. Error due to repeated communication address	E101 E102 E202 E201 E108	×	×	◑	◑	×
Self diagnosis error display 1. Error due to opened EEV (2nd detection) 2. Error due to closed EEV (2nd detection) 3. Eva in sensor is detached 4. Eva out sensor is detached 5. Thermal fuse error (Open)	 E151 E152 E128 E128 E198	×	×	◑	◑	◑
1. COND mid sensor is detached 2. Refrigerant leakage (2nd detection) 3. Abnomally high temperature on Cond (2nd detection) 4. Low pressure s/w. (2nd detection) 5. Abnomally high temperature on discharged air on outdoor unit. (2nd detection) 6. Indoor operation stop due to unconfirmed error on outdoor unit 7. Error due to reverse phase detection 8. Comp stop due to freeze detection (6th detection) 9. High pressure sensor is detached 10. Low pressure sensor is detached 11. Outdoor unit copression ration error 12. Outdoor sump down_1 prevetion control 13. Compressor down due to low pressure sensor prevention control_1 14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection) 15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection)	E241 E554 E450 E451 E416 E559 E425 E403 E301 E306 E428 E413 E410 E180 E181	×	×	◑	◑	◑
Flowating s/w (2nd detection)	E153	×	×	×	◑	◑
EEPROM error	E162	◑	◑	◑	◑	◑
EEPROM option error	E163	◑	◑	◑	◑	◑
Error due to incompatible indoor unit	E164	×	×	×	×	◑

● : On ◑ : Flickering × : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

- Big Ceiling

■ Error detection and reoperation

- If error occurs during the operation, badness is indicated by LED flickering and all operation is stopped except LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

■ Indoor unit LED lamp display at error detecting

Error mode	Product operation with error				Remarks
	Blue	Green	Orange	Red	
Power reset	◑	X	X	X	0.5[S]=On, O.5[S]=Off
Operation on	●	X	X	X	
Operation off	X	X	X	X	-
Reservation	X	●	X	X	-
Filter sign	X	X	●	X	-
Defrosting	◑	X	X	X	1[S]=On, 9[S]=Off
Communication error between indoor units	X	◑	X	X	-
EEPROM error / EEPROM option error	◑	X	X	◑	-
Error of temperature sensor in indoor unit(open/short)	X	X	X	◑	-
Error of outdoor Unit/ Self-Diagn osis	X	X	◑	X	-
Error of the indoor Unit pipe sensor	X	◑	X	◑	
Indoor fan error	◑	◑	X	X	
Thermal Fuse open error	◑	X	◑	X	
Indoor unit float S/W 2nd detection	X	◑	◑	X	

● : On ◑ : Flickering ⨯ : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner,it operates nomally at first,then detects an error again.
- If the LED displays olny one color, it is turned on for a second and turned off for a second.
- If the LED displays more than two colors, each color is shown for a second alternately.

- Wall-mounted type

■ Error detection and reoperation

- If an error occurs during the operation, an LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

■ Indoor unit LED lamp display at error detecting

Abnormal condition	Error code	LED Display		
		⏻	⏲	TURBO
Error on indoor temperature sensor (Short or Open)	E121	×	◑	×
1. Error on Eva-in sensor (Short or Open) 2. Error on Eva-out sensor (Short or Open)	E122 E123	◑	◑	×
Indoor fan error	E154	×	×	◑
1. Error on outdoor temperature sensor (Short or Open) 2. Error on cond sensor 3. Error on discharge sensor	E221 E237 E251	◑	×	◑
1. When there is no communication between the indoor·outdoor units for 2 minutes 2. Communication error received from the outdoor unit 3. 3 miniute tracking error on outdoor unit 4. Communication error after tracking due to unmatching number of installed units 5. Error due to repeated communication address	E101 E102 E202 E201 E108	×	◑	◑
Self diagnosis error display 1. Error due to opened EEV (2nd detection) 2. Error due to closed EEV (2nd detection) 3. Eva in sensor is detached 4. Eva out sensor is detached 5. Thermal fuse error (Open)	 E151 E152 E128 E128 E198	●	◑	◑
1. COND mid sensor is detached 2. Refrigerant leakage (2nd detection) 3. Abnomally high temperature on Cond (2nd detection) 4. Low pressure s/w (2nd detection) 5. Abnomally high temperature on discharged air on outdoor unit (2nd detection) 6. Indoor operation stop due to unconfirmed error on outdoor unit 7. Error due to reverse phase detection 8. Comp stop due to freeze detection (6th detection) 9. High pressure sensor is detached 10. Low pressure sensor is detached 11. Outdoor unit copression ration error 12. Outdoor sump down_1 prevetion control 13. Compressor down due to low pressure sensor prevention control_1 14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection) 15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection)	E241 E554 E450 E451 E416 E559 E425 E403 E301 E306 E428 E413 E410 E180 E181	●	◑	◑
EEPROM error	E162	◑	◑	◑
EEPROM option error	E163	◑	◑	◑
Error due to incompatible indoor unit	E164	◑	●	◑

● : On ◑ : Flickering × : Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

- 360 Cassette Type

Condition of the indoor unit	Error code	Indoor unit display indications			
		Ice blue	Yellow green	Blue	Red
Power reset (blinking once every 2 seconds)	NO ERROR	◑	X	X	X
In the defrost operation (blinking once every 10 seconds)	NO ERROR	◑	X	X	X
Open or short circuit error of the indoor-temperature sensor	E121	X	X	X	◑
Open or short circuit error of the evaporator-in sensor	E122	X	◑	X	◑
Open or short circuit error of the evaporator-out sensor	E123	X	X	◑	◑
Error of the fan in the indoor unit	E154	X	X	◑	X
1. Open or short circuit error of the outdoor-temperature sensor	E221				
2. Open or short circuit error of the condenser sensor	E237				
3. Open or short circuit error of the discharge sensor	E251				
Errors of the sensors of the outdoor unit other than the errors listed above					
1. Error due to the opened EEV (2nd detection)	E151				
2. Error due to the closed EEV (2nd detection)	E152				
3. The evaporator-in sensor is detached.	E128				
4. The evaporator-out sensor is detached.	E129				
5. The condenser mid sensor is detached.	E241				
6. Refrigerant leakage (2nd detection)	E554				
7. Abnormal high temperature on the condenser (2nd detection)	E554				
8. Low pressure switch (2nd detection)	E451				
9. Abnormal high temperature on the air discharged from the outdoor unit (2nd detection)	E416				
10. The indoor unit stops due to an unknown error of the outdoor unit.	E559				
11. Error of detection of a reverse phase	E425				
12. The compressor stops due to freeze detection (6th detection)	E403				
13. The high pressure sensor is detached.	E301				
14. The low pressure sensor is detached.	E306				
15. Compression ratio error of the outdoor unit	E428	X	X	◑	X
16. Outdoor sump down_1 prevention control	E413				
17. Compressor shutdown due to the low-pressure-sensor prevention control_1	E410				
18. Simultaneous opening of the cooling and heating MCU SOL valves (1st detection)	E180				
19. Simultaneous opening of the cooling and heating MCU SOL valves (2nd detection)	E181				
Self-diagnosis errors other than the errors listed above					

Condition of the indoor unit	Error code	Indoor unit display indications			
		Ice blue	Yellow green	Blue	Red
No communication occurs between the indoor and outdoor units for 2 minutes.	E101	X	◑	X	X
Communication error received from the outdoor unit	E102				
Error of 3 minute tracking on the outdoor unit	E202				
The number of the installed indoor units that is transmitted via communication after the tracking is different.	E201				
Error of duplicated communication addresses (NASA only)	E108				
The communication address is not confirmed. (NASA only)	E109				
Communication errors other then the errors listed above					
Error of the second detection of the float switch	E153	X	◑	◑	X
EEPROM error	E162	◑	◑	X	◑
EEPROM option error	E163				
Error of incompatibility of the indoor unit	E164	◑	X	X	◑
Error of mixed operation	E161	◑	◑	X	X
Open circuit error of the thermal fuse	E198	◑	X	◑	X

● : On ◑ : Flickering ⨯ : Off



Ice blue	Yellow green
	
Blue	**Red**
	

4-3-4 Number Display Method (Outdoor Unit, MCU, Cable remote control, wall-mount, etc.)

■ How to Display Integrated Error Code

► Meanings of First Alphabetical Character / Number of Error Code

Displayed alphabet	Explanation	
E	When displaying Error 101~700	
P	When displaying Error 701~800	
C	When E206 occurs	Displays address of subordinate within the set C001 : HUB, C002: FAN, C003: INV1, C004: INV2
	When MCU error occurs	Displays address of MCU Ex) C100: MCU address 0, C101: MCU address 1, C102: MCU address 2
U	When displaying outdoor unit address Ex) U200: Outdoor unit 1, U201: Outdoor unit 2, U202: Outdoor unit 3, U203: Indoor unit 4	
A	When displaying indoor unit address Ex) A000: Indoor unit adress 0, A001: Indoor unit address 1, A002: Indoor unit address 2	

► Order of Error Display

Classification	Error display method	Display Example
Display method for error that occurred in indoor unit	Error Number → Indoor unit address → Error Number, repeat display	E471 → A002 → E471 → A002
Display method for error that occurred in outdoor unit and other methods of error display	Error Number → Outdoor unit address → Error Number, repeat display	E471 → U200 → E471 → U200 E206 → C001 → E206 → C002

■ Diagnosis and Adjustment (Error Code)

► Error code related indoor unit

CODE	Explanation
E-101	Indoor unit communication error. Indoor unit can not receive any data from outdoor unit.
E-102	Communication error between indoor unit and outdoor unit. Displayed in indoor unit.
E-108	Error due to repeated address setting (When 2 or more devices has same address within the network)
E-121	Error on indoor temperature sensor of indoor unit (Short or Open)
E-122	Error on EVA IN sensor of indoor unit (Short or Open)
E-123	Error on EVA OUT sensor of indoor unit (Short or Open)
E-128	EVA IN temperature sensor of indoor unit is detached from EVA IN pipe
E-129	EVA OUT temperature sensor of indoor unit is detached from EVA OUT pipe
E-130	Heat exchanger in/out sensors of indoor unit are detached
E-135	RPM feedback error of indoor unit's cleaning fan
E-151	Error due to opened EEV of indoor unit (2nd detection)
E-152	Error due to closed EEV of indoor unit (2nd detection)
E-153	Error on floating switch of indoor unit (2nd detection)
E-154	RPM feedback error of indoor unit
E-161	Mixed operation mode error of indoor unit; When outdoor unit is getting ready to operate in cooling (or heating) and some of the indoor unit is trying to operate in heating (or cooling) mode
E-162	EEPROM error of MICOM (Physical problem of parts/circuit)
E-163	Indoor unit's remote controller option input is Incorrect or missing. Outdo or unit EEPROM data error
E-180	Simultaneous opening of cooling/heating MCU SOL V/V (1st detection)
E-181	Simultaneous opening of cooling/heating MCU SOL V/V (2nd detection)
E-185	Cross wiring error between communication and power cable of indoor unit
E-186	Connection error or problem on SPi
E-190	No temperature changes in EVA IN during pipe inspection or changes in temperature is seen in indoor unit with wrong address
E-191	No temperature changes in EVA OUT during pipe inspection or changes in temperature is seen in indoor unit with wrong address
E-198	Error due to disconnected thermal fuse of indoor unit

■ Diagnosis and Adjustment (Error Code)

► Error code related to the Communications / Settings / HW (cont.)

CODE	Explanation
E-201	Communication error between indoor and outdoor units (installation number setting error, repeated indoor unit address, indoor unit communication cable error)
E-202	Communication error between indoor and outdoor units (Communication error on all indoor unit, outdoor unit communication cable error)
E-203	Communication error between main and sub outdoor units
E-205	Communication error on all PBA within the outdoor unit C-Box, communication cable error
E-206	E206-C001: HUB PBA communication error / E206-C002: FAN PBA communication errorE206-C003: INV1 PBA communication error / E206-C004: INV2 PBA communication error
E-211	When single indoor unit uses 2 MCU ports that are not in series.
E-212	If the rotary switch (on the MCU) for address setting of the indoor unit has 3 or more of the same address
E-213	When total number of indoor units assigned to MCU is same as actual number of installed indoor units but there is indoor unit that is not installed even though it is assigned on MCU
E-214	When number of MCU is not set correctly on the outdoor unit or when two or more MCU was installed some of them have the same address
E-215	When two different MCU's have same address value on the rotary switch
E-216	When indoor unit is not installed to a MCU port but the switch on the port is set to On.
E-217	hen indoor unit is connected to a MCU port but indoor unit is assigned to a MCU and the switch on the port is set to Off
E-218	When there's at least one or more actual number of indoor unit connection compared to number of indoor units assigned to MCU
E-219	Error on temperature sensor located on MCU intercooler inlet (Short or Open)
E-220	Error on temperature sensor located on MCU intercooler outlet (Short or Open)
E-221	Error on outdoor temperature sensor of outdoor unit (Short or open)
E-231	Error on COND OUT temperature sensor of main outdoor unit (Short or Open)
E-241	COND OUT sensor is detached
E-251	Error on discharge temperature sensor of compressor 1 (Short or Open)
E-257	Error on discharge temperature sensor of compressor 2 (Short or Open)
E-262	Discharge temperature sensor of compressor 1 is detached from the sensor holder on the pipe
E-263	Discharge temperature sensor of compressor 2 is detached from the sensor holder on the pipe
E-266	Top sensor of compressor 1 is detached
E-267	Top sensor of compressor 2 is detached
E-269	Suction temperature sensor is detached from the sensor holder on the pipe
E-276	Error on top sensor of compressor 1 (Short or Open)
E-277	Error on top sensor of compressor 2 (Short or Open)
E-291	Refrigerant leakage or error on high pressure sensor (Short or Open)
E-296	Refrigerant leakage or error on low pressure sensor (Short or Open)
E-308	Error on suction temperature sensor (Short or Open)

■ Diagnosis and Adjustment (Error Code)

► Error code related to the Communications / Settings / HW (cont.)

CODE	Explanation
E-311	Error on temperature sensor of double layer pipe/liquid pipe(sub heat exchanger) (Short or Open)
E-321	Error on EVI (ESC) IN temperature sensor (Short or Open)
E-322	Error on EVI (ESC) OUT temperature sensor (Short or Open)
E-323	Error on suction sensor 2 (Short or Open)
E-346	Error due to operation failure of Fan2
E-347	Motor wire of Fan2 is not connected
E-348	Lock error on Fan2 of outdoor unit
E-353	Error due to overheated motor of outdoor unit's Fan2
E-355	Error due to overheated IPM of Fan2
E-361	Error due to operation failure of inverter compressor 2
E-364	Error due to over-current of inverter compressor 2
E-365	V-limit error of inverter compressor 2
E-366	Error due to over voltage /low voltage of inverter PBA2
E-367	Error due to unconnected wire of compressor 2
E-368	Output current sensor error of inverter PBA2
E-369	DC voltage sensor error of inverter PBA2
E-374	Heat sink temperature sensor error of inverter PBA2
E-378	Error due to overcurrent of Fan2
E-385	Error due to input current of inverter 2
E-386	Over-voltage/low-voltage error of Fan2
E-387	Hall IC connection error of Fan2
E-389	V-limit error on Fan2 of compressor
E-393	Output current sensor error of Fan2
E-396	DC voltage sensor error of Fan2
E-399	Heat sink temperature sensor error of Fan2
E-400	Error due to overheat caused by contact failure on IPM of Inverter PBA2
E-407	Compressor operation stop due to high pressure protection control
E-410	Compressor operation stop due to low pressure protection control or refrigerant leakage
E-416	Compressor operation stop due to discharge temperature protection control
E-425	Phase reversal or phase failure (3Ø outdoor unit wiring, R-S-T-N), connection error on 3 phase input
E-428	Compressor operation stop due abnormal compression ratio
E-438	EVI (ESC) EEV leakage or internal leakage of intercooler or incorrect connector insertion of EVI (ESC) EEV
E-439	Error due to refrigerant leakage
E-440	Heating mode restriction due to high air temperature
E-441	Cooling mode restriction due to low air temperature
E-442	Refrigerant charing restriction in heating mode when air temperature is over 15 °C
E-443	Operation prohibited due to low pressure
E-445	CCH is deatched
E-446	Error due to operation failure of Fan1

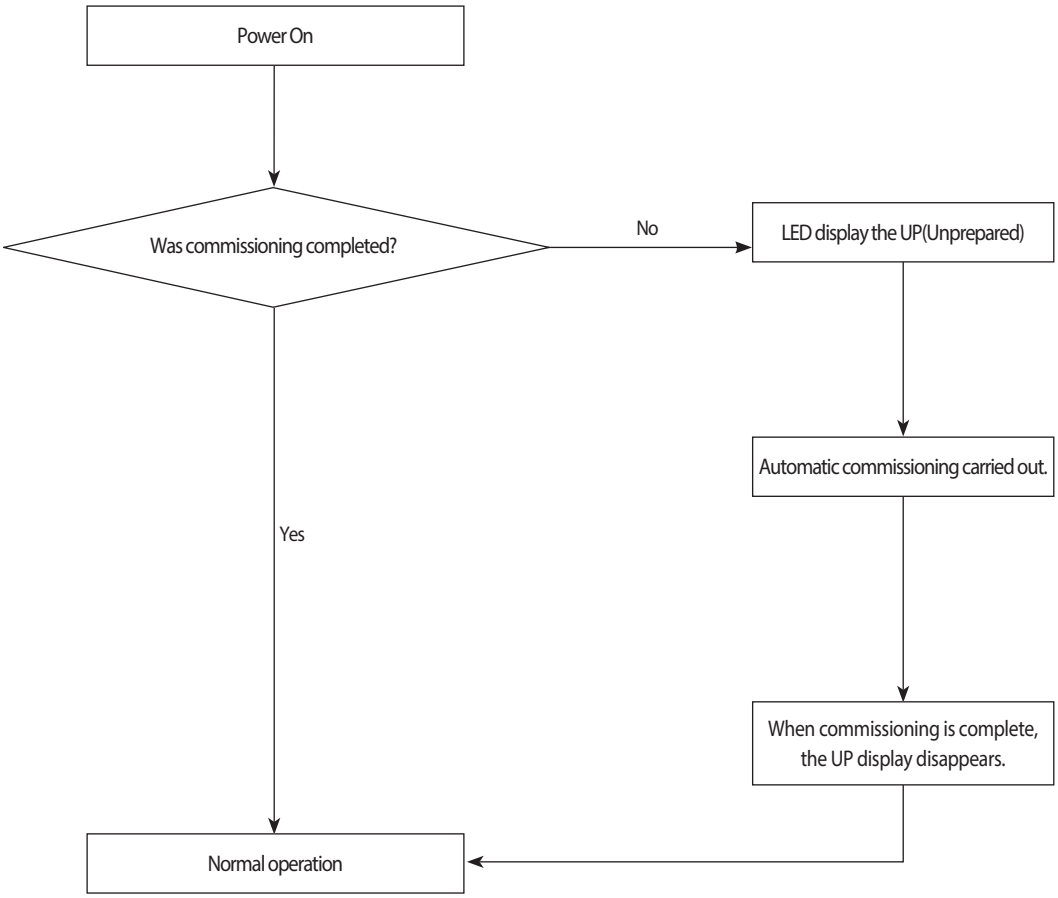
■ Diagnosis and Adjustment (Error Code)

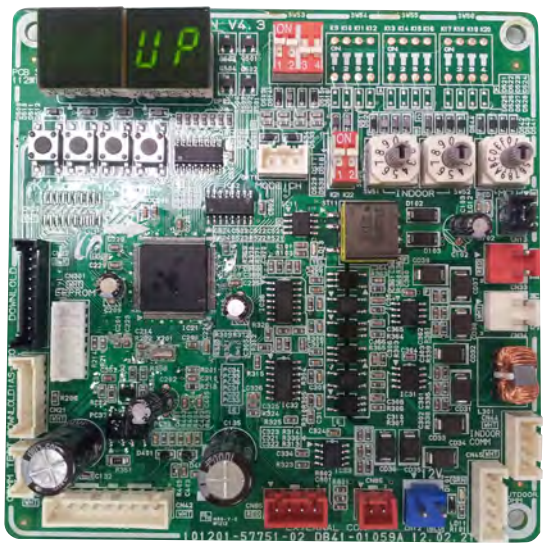
► Error code related to the Communications / Settings / HW (cont.)

CODE	Explanation
E-447	Motor wire of Fan1 is not connected
E-448	Lock error on Fan1
E-452	Error due to ZPC detection circuit problem or power failure
E-453	Error due to overheated motor of outdoor unit's Fan1
E-455	Error due to overheated IPM of Fan1
E-461	Error due to operation failure of inverter compressor 1
E-462	Compressor stop due to full current control or error due to low current on CT2
E-464	Error due to over-current of inverter compressor 1
E-465	V-limit error of inverter compressor 1
E-466	Error due to over voltage /low voltage of inveter PBA1
E-467	Error due to unconnected wire of compressor 1
E-468	Output current sensor error of inverter PBA1
E-469	DC voltage sensor error of inver PBA1
E-474	Heat sink temperature sensor error of inverter PBA1
E-478	Error due to overcurrent of Fan1
E-485	Error due to input current of inverter 1
E-486	Error due to over voltage/low voltage of Fan
E-487	Hall IC error of Fan1
E-489	V-limit error on Fan1 of compressor
E-493	Output current sensor error of Fan1
E-496	DC voltage sensor error of Fan1
E-499	Heat sink temperature sensor error of Fan1
E-500	Error due to overheat caused by contact failure on IPM of Inverter PBA1
E-503	Error due to alert the user to check if the service valve is closed
E-504	Error due to self diagnosis of compressor operation
E-505	Error due to self diagnosis of high pressure sensor
E-506	Error due to self diagnosis of low pressure sensor
E-560	Outdoor unit's option switch setting error (when iinappropriate option switch is on)
E-563	Error due to module installation of indoor unit with old version (Micom version needs to be checked)
E-573	Error due to using single type outdoor unit in a module installation
E-665	External contact input error
E-702	Error due to closed EEV of indoor unit (1st detection)
E-703	Error due to opened EEV of indoor unit (1st detection)
UP	Trial operation incompleted (UnPrepared) - It will be cleared when trial operation was executed for 1 hour or when automatic inspection is completed

4-4 Appropriate Measures for Different Symptom

4-4-1 Outdoor Unit Operation Flow





Commissioning if it is not running - UP is displayed

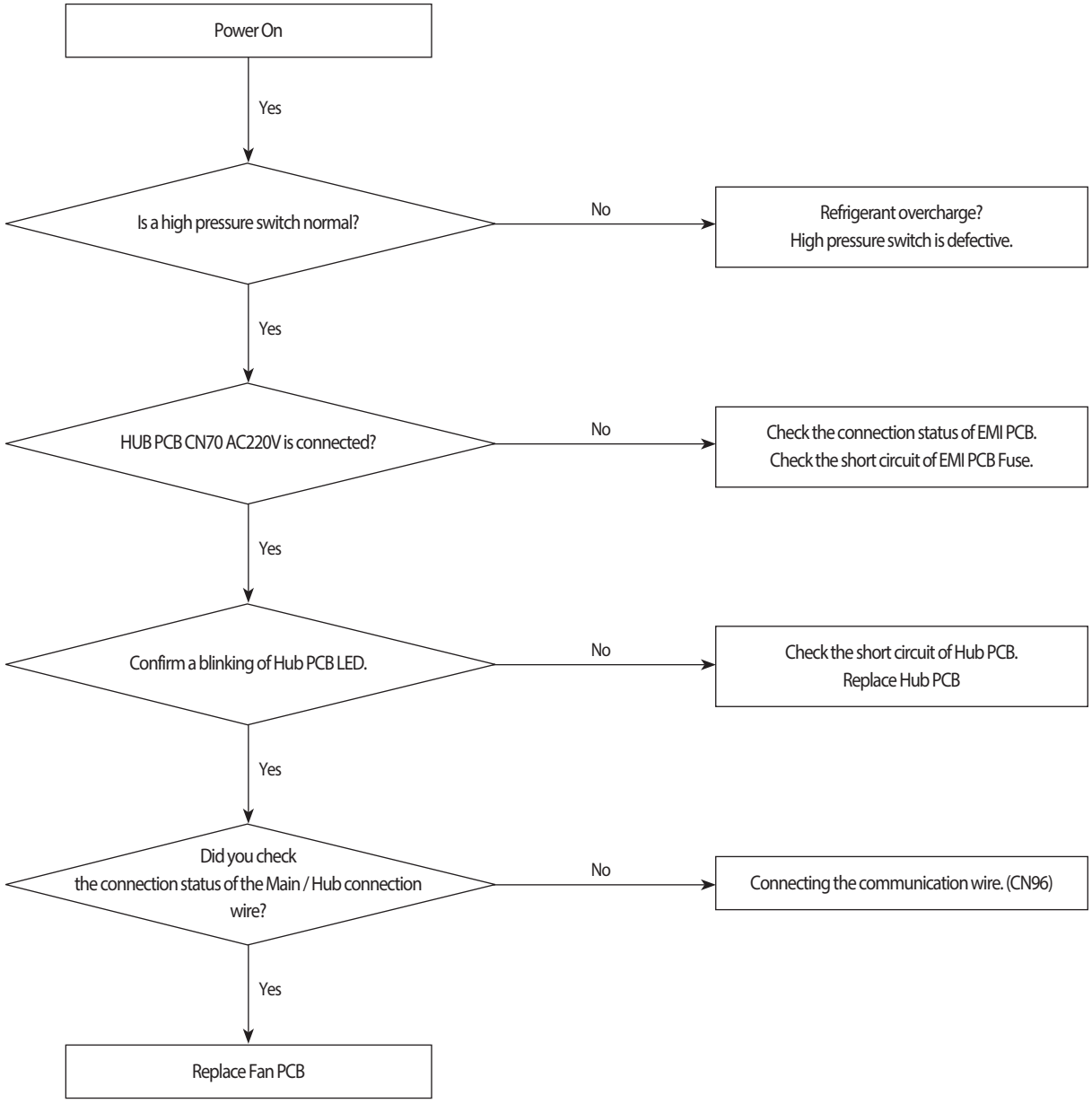
Prior to starting the air conditioning operation after the initial installation and automatic commissioning is carried out. This process, the stable operation to protect the system and verify the defect of the product.

1. Tracking is complete and after the initial installation, if you do not have a history of commissioning is completed, UP will be displayed.
2. Execute the automatic commissioning by Tact Switch.
3. UP display disappears after commissioning is complete, normal operation is possible.
4. Automatic commissioning is completed, if there is a history, normal operation execution immediately.

4-4-2 Main PCB has no power phenomenon

Outdoor unit display	Main PCB has no power phenomenon (7-seg does not blink)
Judgment Method	Hub PCB power and connection wire to detect.
Cause of problem	· HUB PCB connector wire defects and the connection is not. · Main PCB defective. · Hub PCB defective. · High pressure switch operation

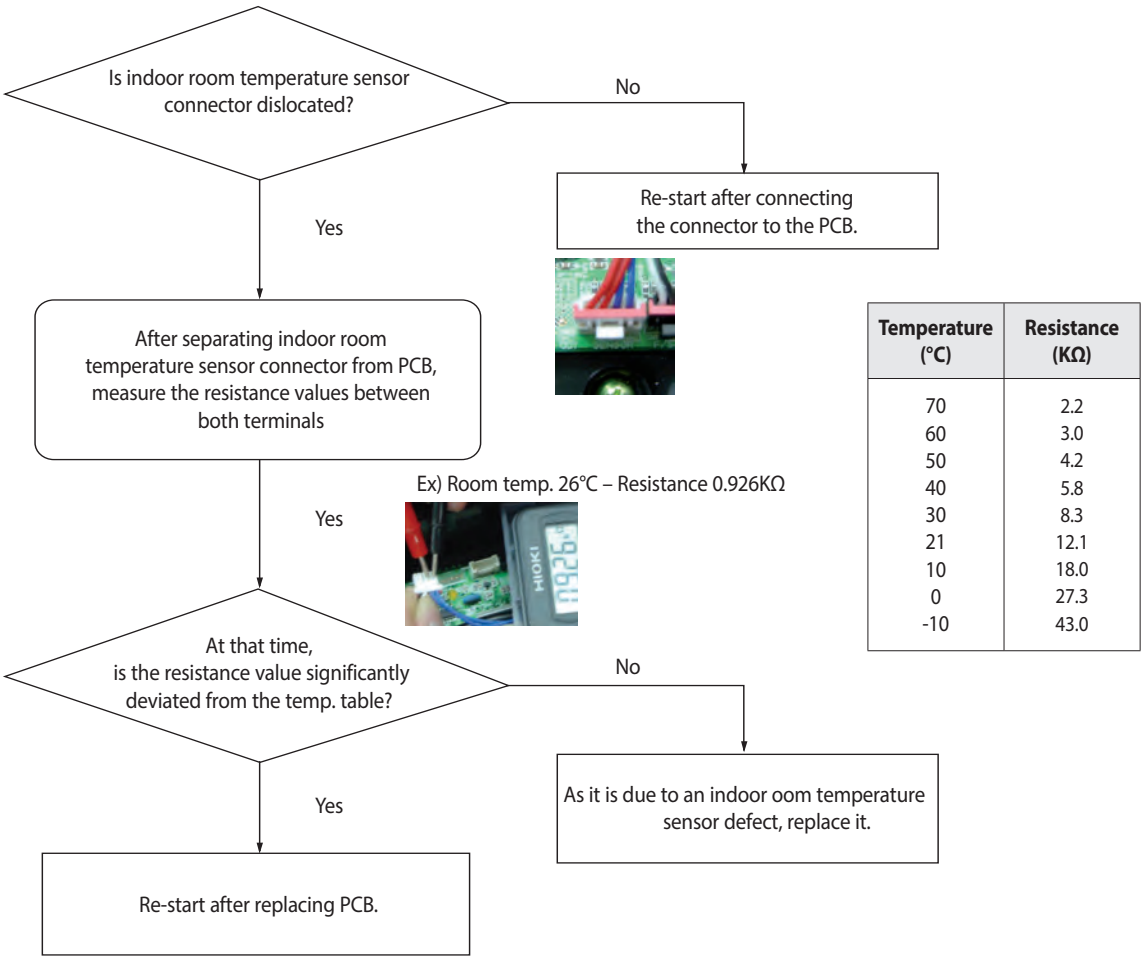
1. Cause of problem



4-4-3 Indoor Unit ROOM sensor Error (Open/Short)

Outdoor unit display	E 12 1 ↔ A x x x (x x x : The address of the error occurred indoor unit)
Indoor unit display	×(Operation) ◑ (Timer) ×(Fan) ×(Filter) ×(Defrost)
Criteria	• Refer to how to determine below
Cause of problem	• The room temperature sensor of No. XXX indoor unit has defective OPEN/SHORT

1. How to check

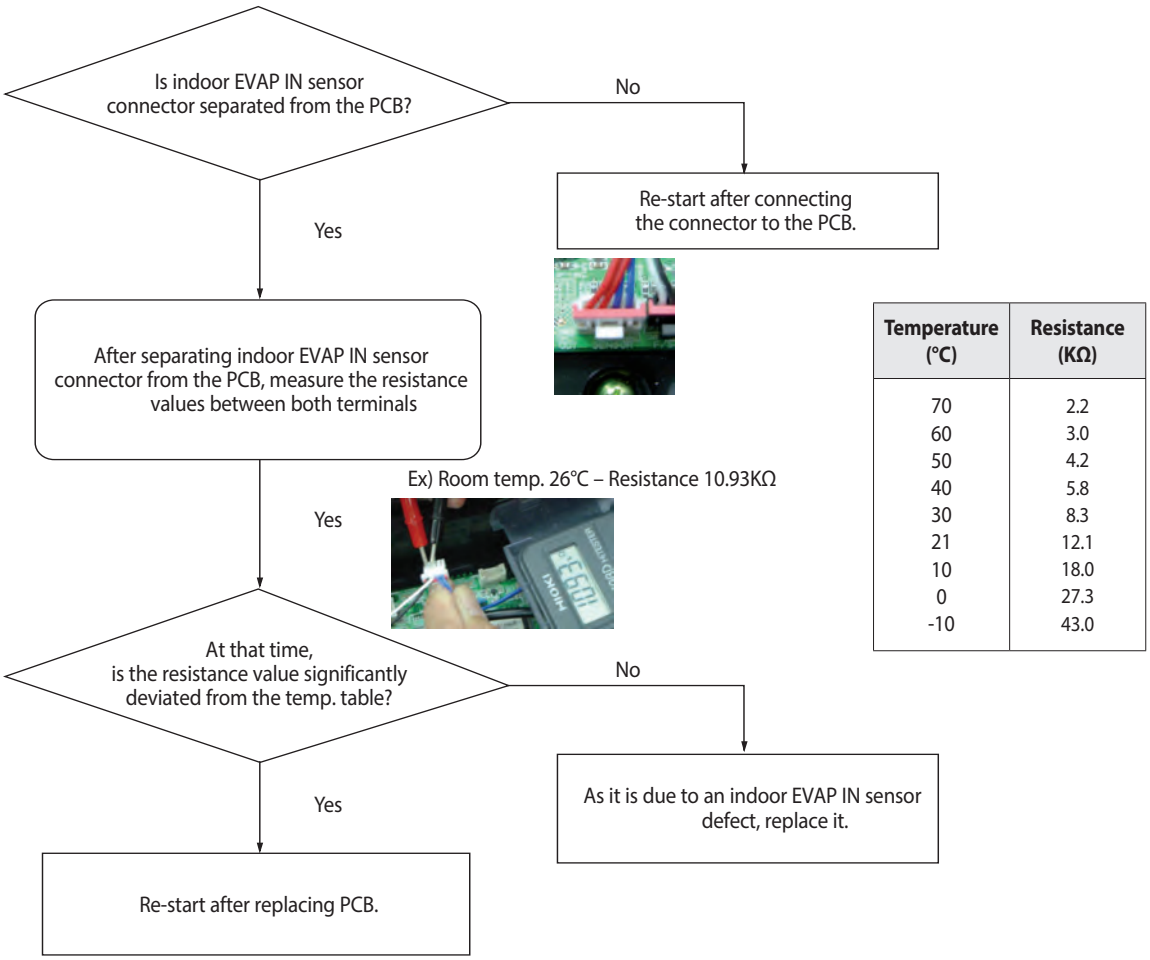


Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
21	12.1
10	18.0
0	27.3
-10	43.0

4-4-4 Indoor unit EVAP IN sensor Error (Open/Short)

Outdoor unit display	E 122 ↔ A xxx (x x x : The address of the error occurred indoor unit)
Indoor unit display	◑ (Operation) ◑ (Timer) ×(Fan) ×(Filter) ×(Defrost)
Criteria	• Refer to how to determine below
Cause of problem	• The EVAP IN sensor of No. XXX indoor unit has defective OPEN/SHORT

1. How to check

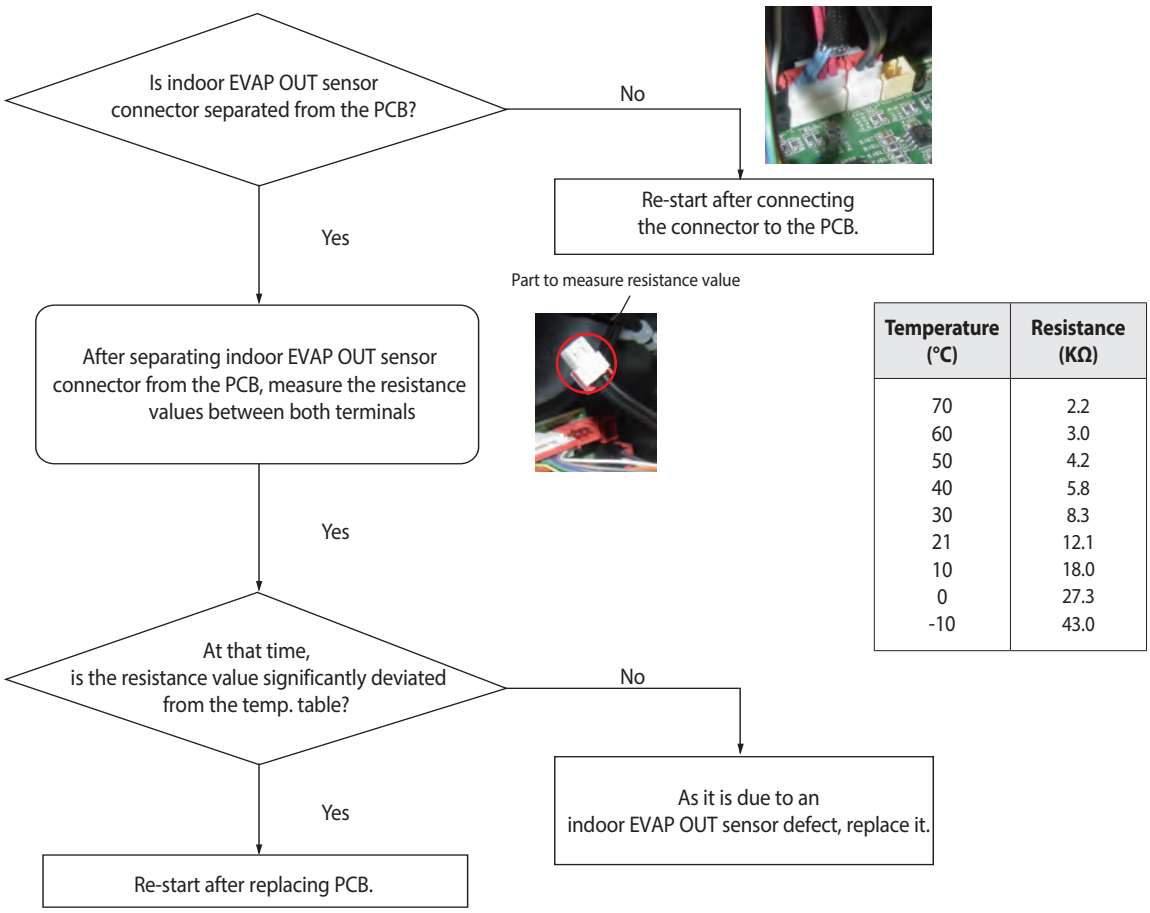


Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
21	12.1
10	18.0
0	27.3
-10	43.0

4-4-5 Indoor EVAP OUT sensor Error (Open/Short)

Outdoor unit display	E 123 ↔ A xxx (x x x : The address of the error occurred indoor unit)
Indoor unit display	◑(Operation) ◑(Timer) ×(Fan) ×(Filter) ×(Defrost)
Criteria	• Refer to how to determine below
Cause of problem	• The EVAP out sensor of No. XXX indoor unit has defective OPEN/SHORT

1. How to check



Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
21	12.1
10	18.0
0	27.3
-10	43.0

4-4-6 Indoor Heat Exchanger's EVAP IN sensor dislocation error

Outdoor unit display	E 128 ↔ A xxx (xxx : The address of the error occurred indoor unit)
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Refer to how to determine below
Cause of problem	• Indoor heat exchanger's EVAP IN piping sensor has been dislocated

1. How to diagnose

1) During Cooling Operation

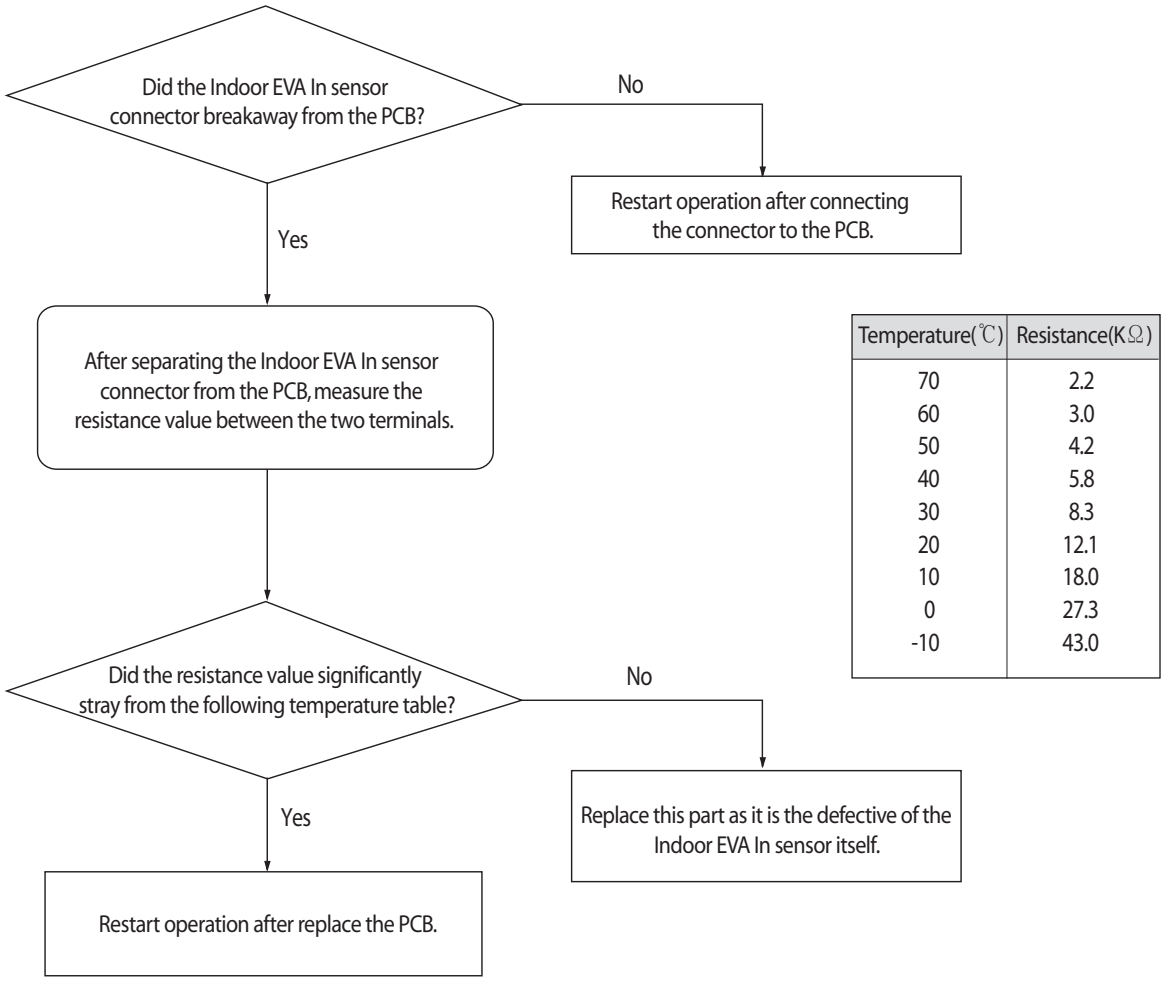
Tcond, out - Tair, out > 3℃	OK
Tair, in - Teva, out > 4℃	NO
Tair, in - Teva, out > 4℃	OK
Compressor in operation & Indoor Unit operation & Thermo On	OK
Error details	Breakaway Error of Indoor Heat Exchanger EVA Out sensor

* Hydro Unit : Before and after the Compressor operation, EVA Out temperature difference is less than 3℃.

2) During Heating operation

Average high pressure > 25kg/㎠	OK
Average low pressure > 8.5kg/㎠	OK
Tcond, out - Tair, out ≥ 3℃	OK
Tair, in - Teva, out ≥ 2℃	NO
Tcond, out - Tair, out < -2℃	OK
Compressor in operation & Indoor Unit operation & Thermo On	OK
Error details	Breakaway Error of Indoor Heat Exchanger EVA Out sensor

2. How to check



Temperature(℃)	Resistance(KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-7 Indoor Heat Exchanger's EVA OUT sensor dislocation error (Open/Short)

Outdoor unit display	E 129 ↔ A xxx (x x x : The address of the error occurred indoor unit)
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Refer to the judgment method below.
Cause of problem	• Breakaway of Indoor Heat Exchanger EVA Out sensor

1. How to diagnose

1) During Cooling Operation

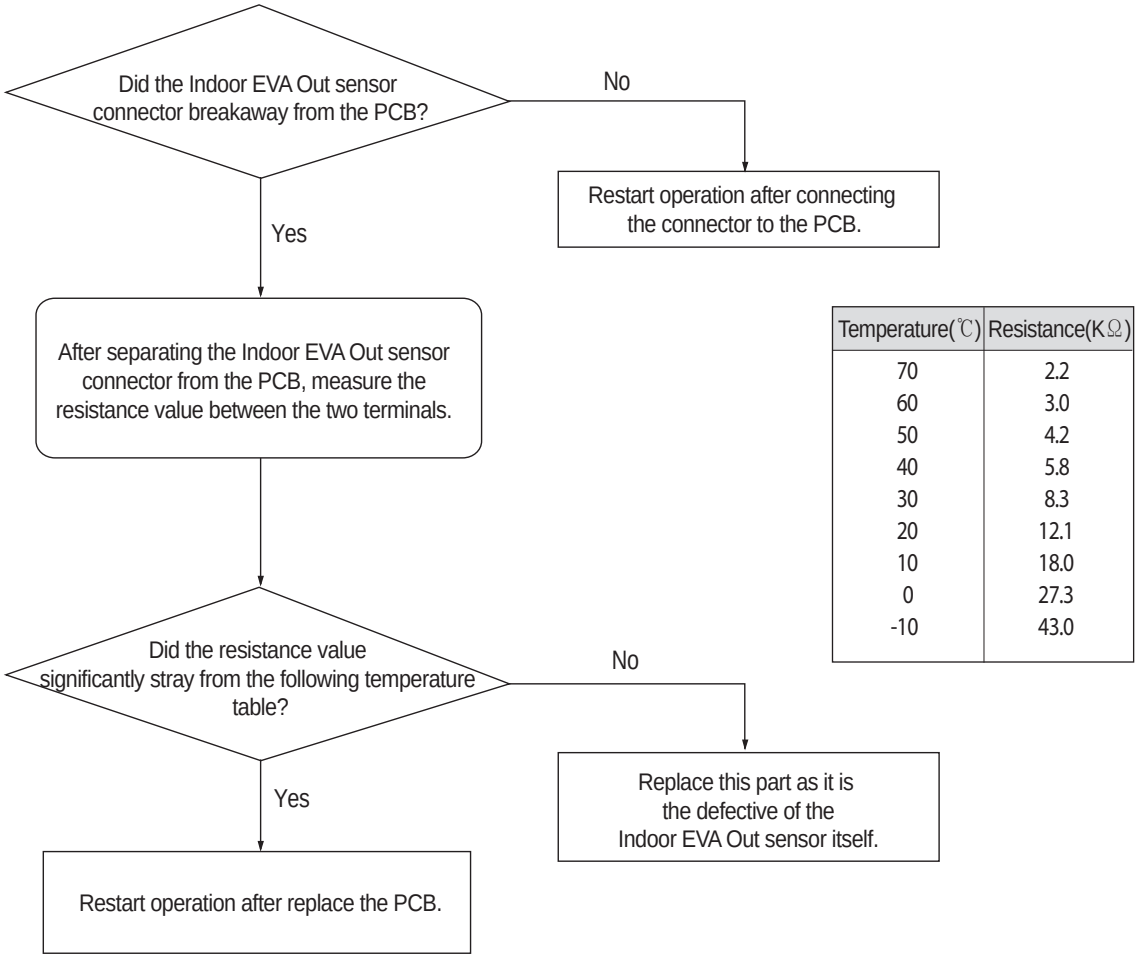
Tcond, out - Tair, out > 3℃	OK
Tair, in - Teva, out > 4℃	NO
Tair, in - Teva, out > 4℃	OK
Compressor in operation & Indoor Unit operation & Thermo On	OK
Error details	Breakaway Error of Indoor Heat Exchanger EVA Out sensor

* Hydro Unit : Before and after the Compressor operation, EVA Out temperature difference is less than 3℃.

2) During Heating operation

Average high pressure > 25kg/㎠	OK
Average low pressure > 8.5kg/㎠	OK
Tcond, out - Tair, out ≥ 3℃	OK
Tair, in - Teva, out ≥ 2℃	NO
Tcond, out - Tair, out < -2℃	OK
Compressor in operation & Indoor Unit operation & Thermo On	OK
Error details	Breakaway Error of Indoor Heat Exchanger EVA Out sensor

2. How to check



Temperature(℃)	Resistance(KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-8 Simultaneous Indoor Heat Exchanger's EVA IN, OUT sensor dislocation error (Open/Short)

1. How to diagnose
   1) During Cooling Operation

Tcond, out - Tair, out > 3°C	OK
Tair, in - Teva, out > 4°C	NO
Tair, in - Teva, out > 4°C	NO
Compressor in operation & Indoor unit operation & Thermo On	OK
Error details	Simultaneous indoor heat exchanger's EVA IN, OUT sensor dislocation error

   2) During Heating operation

Average high pressure > 25kg/㎠	OK
Average low pressure > 8.2kg/㎠	OK
Teva, out - Tair, out ≥ 3°C	NO
Tair, in - Teva, out ≥ 2°C	NO
Tcond, out - Tair, out < -2°C	OK
Compressor in operation & Indoor unit operation & Thermo On	OK
Error details	Simultaneous Indoor heat exchanger's EVA IN, OUT sensor dislocation error

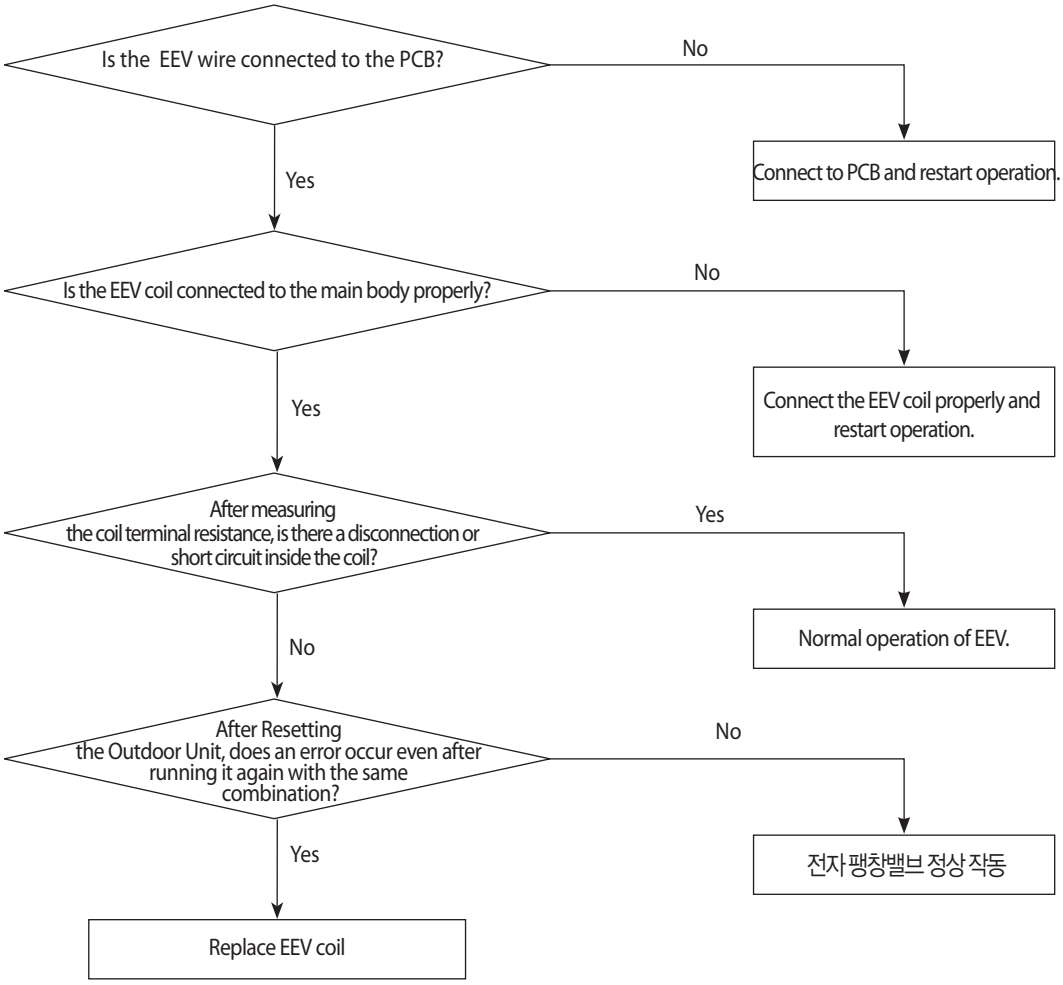
2. How to check
   Check if an Indoor heat exchanger's EVA IN, OUT sensor has been dislocated then is correct after assembling.

4-4-9 Electronic Expansion Valve opening malfunction (2nd stage) - E 135

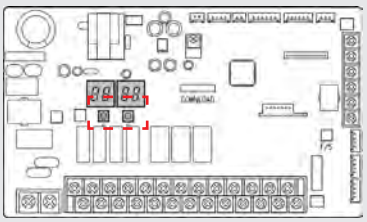
Outdoor unit display	1st detection : P703 (Outdoor Unit display only) 2nd detection : E 135 ↔ A xxx (x x x : The address of the error occurred indoor unit)
Indoor unit display	×(Operation) ×(Timer) ◑(Fan) ×(Filter) ×(Defrost)
Criteria	• Refer to the judgment method below.
Cause of problem	• Faulty Indoor Unit EEV action. (Refrigerant will leak into the stopped Indoor Unit.)

1. How to diagnose
   - During Cooling operation, the temperature of the inlet or outlet of stopped Heat Exchanger is kept lower than 0˚C for more than 20 minutes without cessation.
   - Hydro Unit : During the defrost operation, detection from stop-side Indoor Unit. (Temperature of the inlet of Heat Exchanger is kept lower than 0˚C for more than 20 minutes without cessation.)

2. How to check



*** How to turn off the Hydro Unit E151**
- Hydro Unit PCB k1, k2 switch : At the same time push for more than 4 seconds.
- After resolving the cause of the error, restart operation.
  (Excessive reset operation, can cause damage to the Heat Exchanger.)



4-4-10 Breakdown of EEV (2nd)

1. How to diagnose
   Detect only on cooling operation. (No detection during heating operation.)
   During cooling operation, the temperature of the inlet or outlet ducts of heat exchanger is kept below 0˚C for more than 20 minutes without cessation

2. How to check
   1) Check if the wire of electronic expansion valve is correctly connected to the PCB of indoor unit.
   2) Check if the coil of an electronic expansion valve is correctly plugged into the main body.
   3) Check if there is any rust on the surface of the electronic expansion valve with naked eyes then check the resistance between each terminal to find any wire breaking or short circuit.
   4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
      - In case of closure problem, operate the indoor unit in which the error has occurred.
      - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
   5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
      - As an electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please check the above items before replacement.

4-4-11 Problem with EEV closure (2nd)

1. How to diagnose
   1) During Cooling operation(Each of the below conditions have to be met for at least 20 minutes.)

Tcond, out - Tair, out > 3°C	OK
Tair, in - Teva, out > 4°C	NO
Tair, in - Teva, out > 4°C	NO
Compressor in operation & Indoor unit operation & Thermo On	OK
Error details	Electrically operated valve closure breakdown

   2) During heating operation (must satisfy all conditions below)
   - When more than 2 indoor units are on Thermo On heating operation.
   - When average high pressure is over 18kg/cm^2
   - 5 minutes after finishing Safety Start
   - Keep Indoor units' T(Eva_In)<T(Room) +3˚C and T(Eva_Out)<T(Room) +3˚C condition for more than 5 minutes

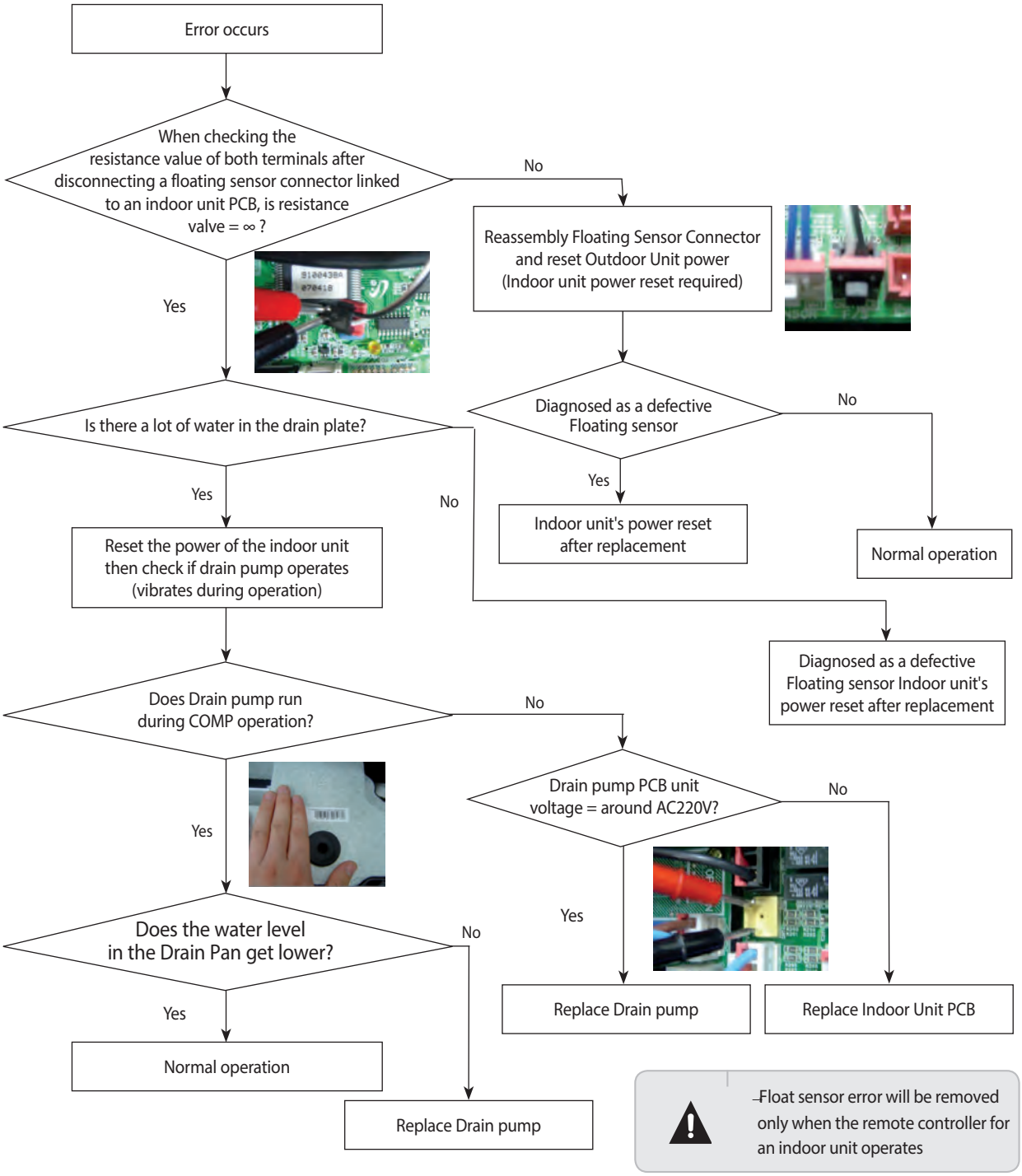
2. How to check
   1) Check if the wire of electronic expansion valve is correctly connected to the PCB of indoor unit.
   2) Check if the coil of electronic expansion valve is correctly plugged into the main body.
   3) Check if there is any rust on the surface of the electronic expansion valve with naked eye then check the resistance between each terminal to find any wire breaking or short circuit.
   4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
      - In case of closure problem, operate the indoor unit in which the error has occurred.
      - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
   5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
      - As electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please check the above items before replacement.

4-4-12 E 153 : Detection of Floating Switch of Indoor Unit's Drain Pump

Outdoor unit display	E 153 ↔ A x x x(x x x : The address of the error occurred indoor unit)
Indoor unit display	×(Operation) ×(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Refer to how to determine below
Cause of problem	• Due to the breakdown of a drain pump of the indoor unit, an increase in the water level in the drainage plate or defective detection sensor

S To release E153 error, you must reset the power of the indoor unit.

1. How to check



4-4-13 The operational error of Indoor Unit's Fan Motor

Outdoor unit display	E 154 ↔ A x x x(x x x : The address of the error occurred indoor unit)
Indoor unit display	×(Operation) ×(Timer) ◑(Fan) ×(Filter) ×(Defrost)
Criteria	• Refer to how to determine below.
Cause of problem	• The operational error of the fan motor of No. XXX indoor unit.

1. How to diagnose
   1) Occurs when RPM valve fails to feedback to MICOM at a PID control-type fan motor

2. How to check
   1) Check HALL IC connector that carries out feedback of RPM value.
   2) If a fan motor operation capacitor is a PCB separating type, check the connection terminal.
   3) Check the operational status of the fan motor.
   4) If there is no problem with the above checkup items, replace the PCB.

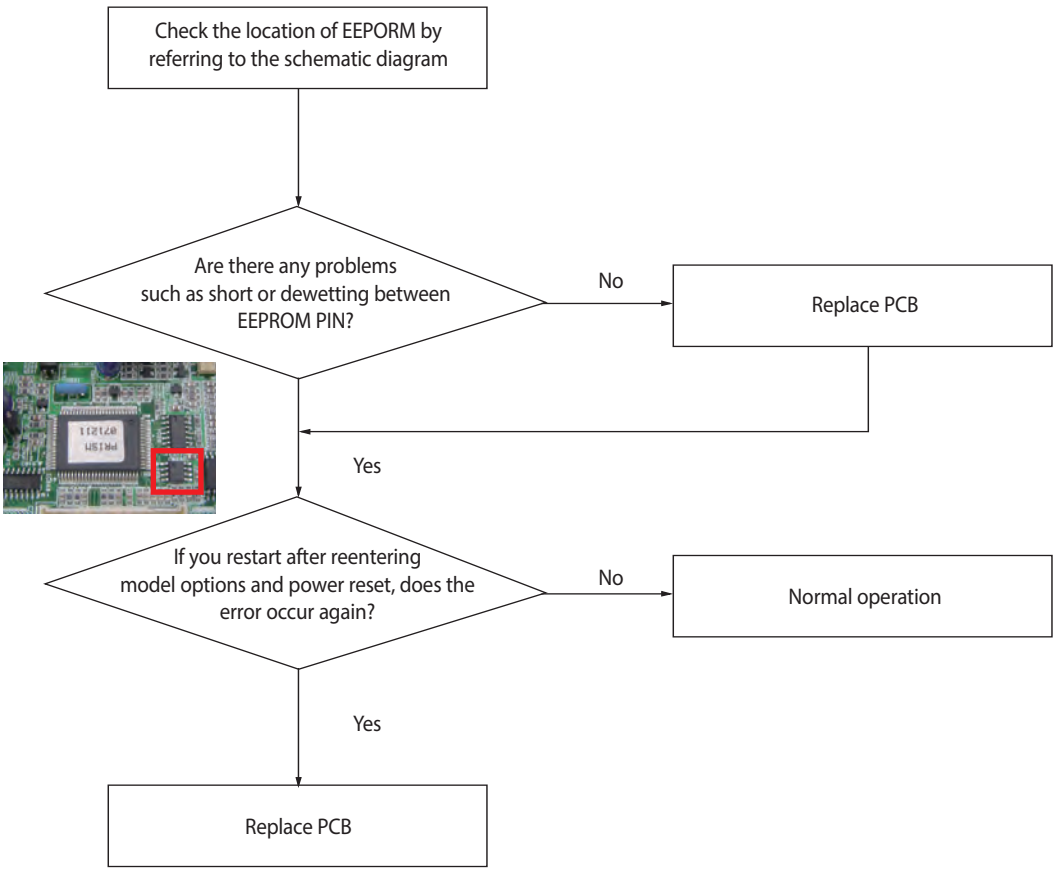
4-4-14 Mixed operation Error (Only applicable to Heat Pump Model/Not to HR model)

- Mixed operation error is applicable only to Heat Pump Model and not to HR model.
- Mixed operation error is not due to a product problem but is displayed when the operational mode input in an indoor unit is different from current operational status (other indoor unit's operational mode).
- Check the operational mode of outdoor unit or other indoor unit then re-enter or stop the operational mode of the relevant unit.
- If it is necessary to apply a different operational mode to an indoor unit from others, please stop other indoor units then operate the indoor unit.

4-4-15 EEPROM error

Outdoor unit display	E 162
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Communication failure between EEPROM and MICOM.
Cause of problem	• PCB replacement due to defective EEPROM.

1. How to check



4-4-16 Option error of the Remote Controller for an Indoor Unit

Outdoor unit display	E 163
Indoor unit display	◑(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ◑(Defrost)
Criteria	• Display number type of indoor unit – E163 occurs, Lamp type – all lamps flash.
Cause of problem	• Missed or erroneous input of remote controller options.

● Check relevant remote controller options for each model then enter correct options

4-4-17 Error due to confused use of Fahrenheit and Celsius

Outdoor unit display	E 170
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Display number type of indoor unit – E170 occurs, Lamp type – all lamps flash. • Occurs in an indoor unit with Celsius setting.
Cause of problem	• Missed input of remote controller options.

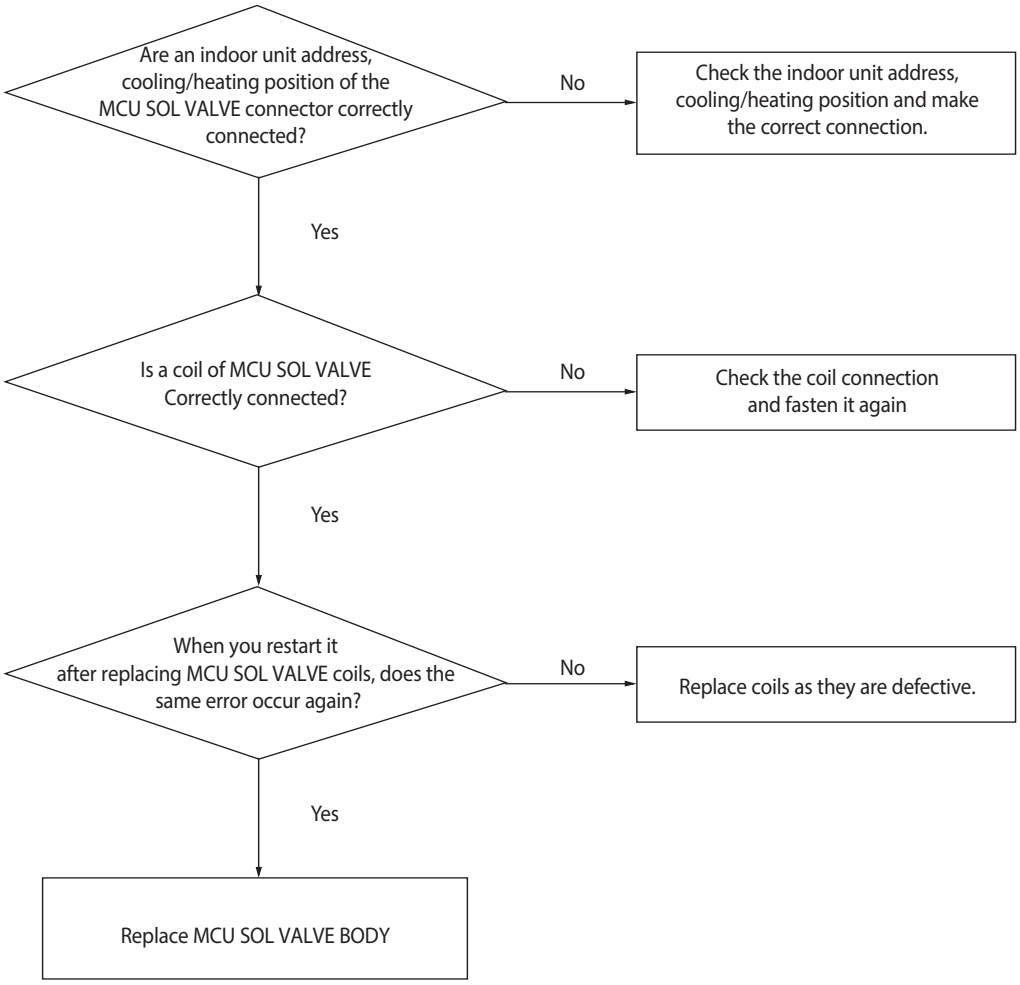
● Check relevant remote controller options for each model then enter correct options

● As this happens only in a Celsius setting model, it is necessary to reenter option codes for error-free models in a region where Celsius is used.

4-4-18 Simultaneous opening of Cooling/heating MCU SOL Valves 1st/2nd

● During the first detection, as the system restarts after making an automatic stop to check a problem with the system
● During the second detection, please refer to the following check-up methods.

1. How to check



4-4-19 Error due to incorrect Indoor Unit Power/Communication Cable Connection

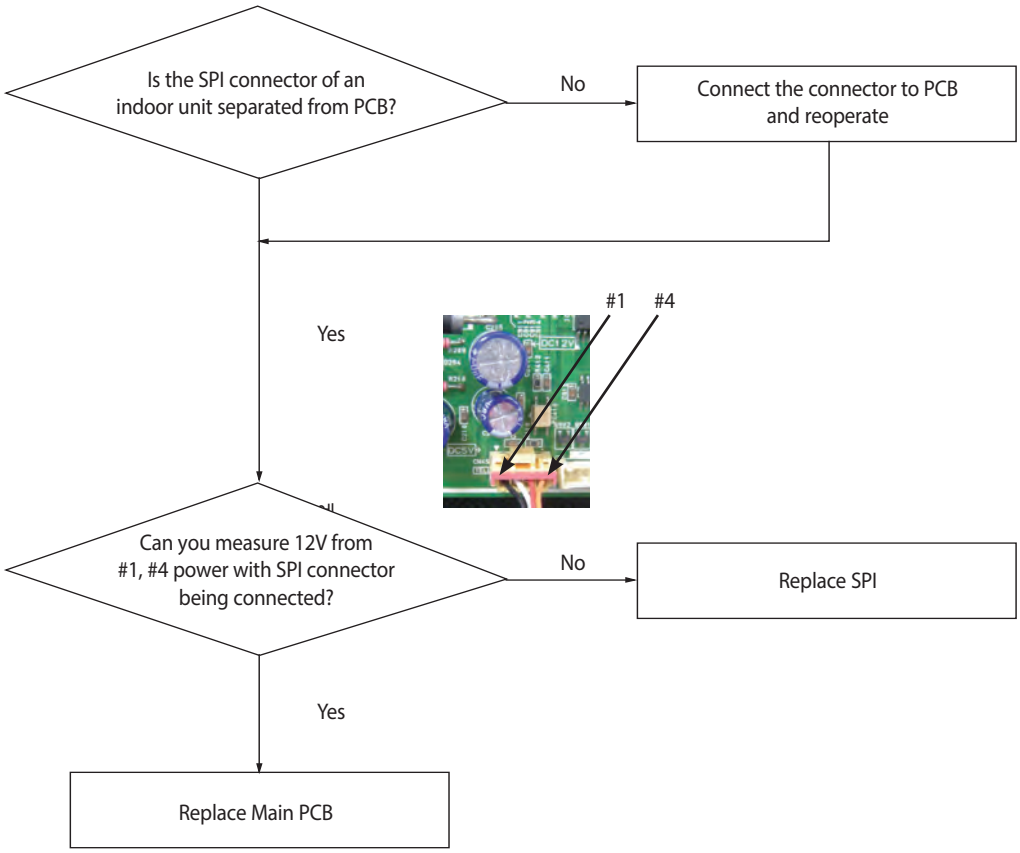
Outdoor unit display	E 185
Indoor unit display	E 185 (wall mount type)
Criteria	• Check for Power input(220V) for the Terminal block(F1/F2).
Cause of problem	• Apply power (220V) to the terminal of the indoor unit communication block (F1/F2).

● Check for disconnected line after turning off the Main power.

4-4-20 SPI Feedback Error

Outdoor unit display	E 186
Indoor unit display	◑(Operation) ◑(Timer) ×(Fan) ◑(Filter) ×(Defrost)
Criteria	• Check if the output of SPI Feedback is 12V.
Cause of problem	• SPI defect

1. How to check



4-4-21 Outdoor Unit Pipe Inspection Error

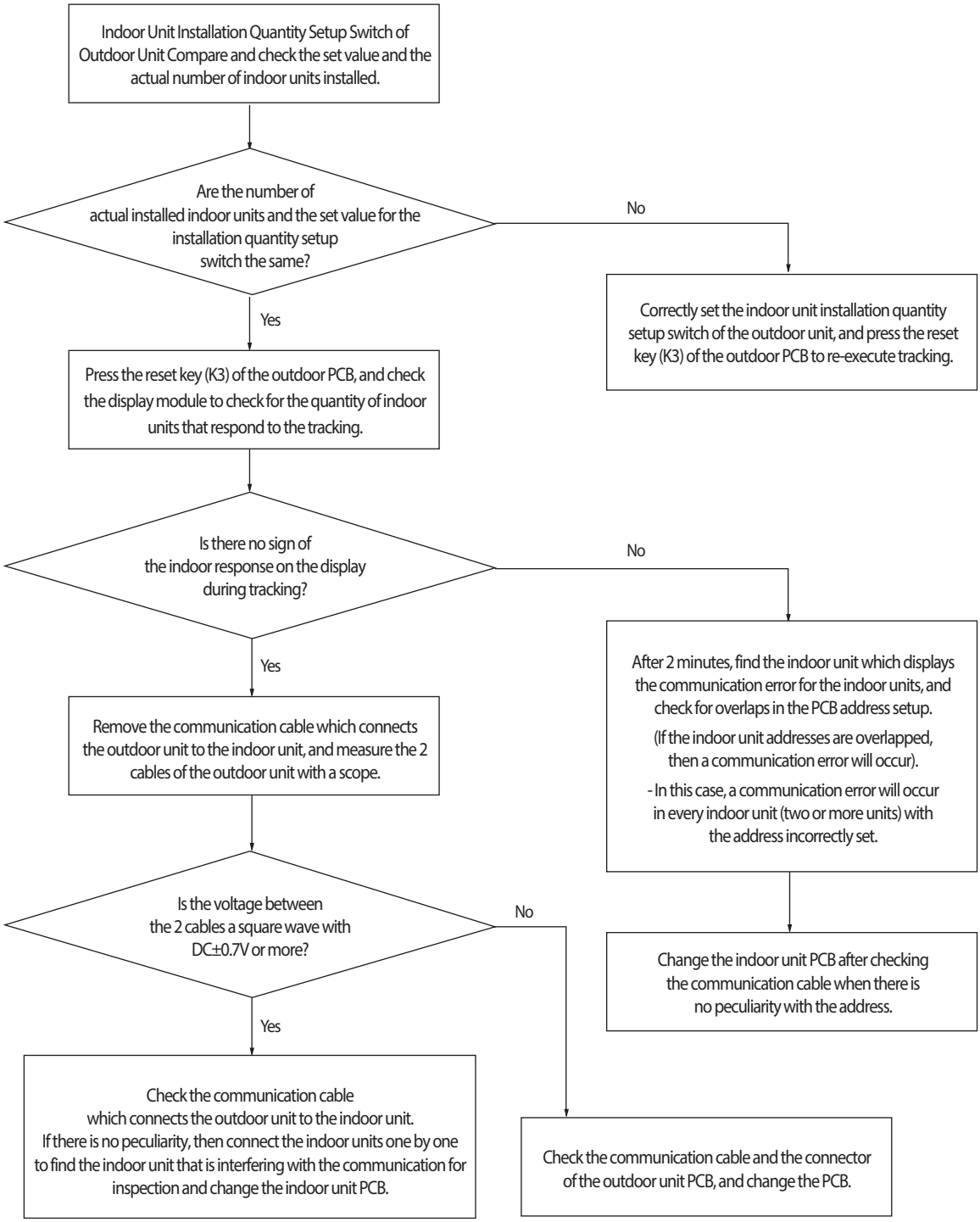
Outdoor Unit Display	E 190 : No change of EVA IN or wrong EVAN IN change during pipe inspection. E 191 : No change of EVA OUT or wrong EVA OUT change during pipe inspection.
Indoor Unit Display	-
Judgment Method	• Refer to the judgment method below
Special Cause	• The liquid pipe/gas pipe of the indoor unit is not correctly connected to the port set in MCU.

1. Judgment Method
   - Check if the indoor address settings are the same for the address of the indoor units connected to each port of the MCU and the address of the indoor units of the relevant MCU ports.
   - Check if the indoor unit usage setup switch is turned on for the MCU port connected to the indoor unit.

4-4-22 Communication Error between Indoor and Outdoor Units during Tracking

Outdoor unit display	E201
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Communication error between indoor and outdoor units.
Cause of problem	· Refer to the judgment method below.

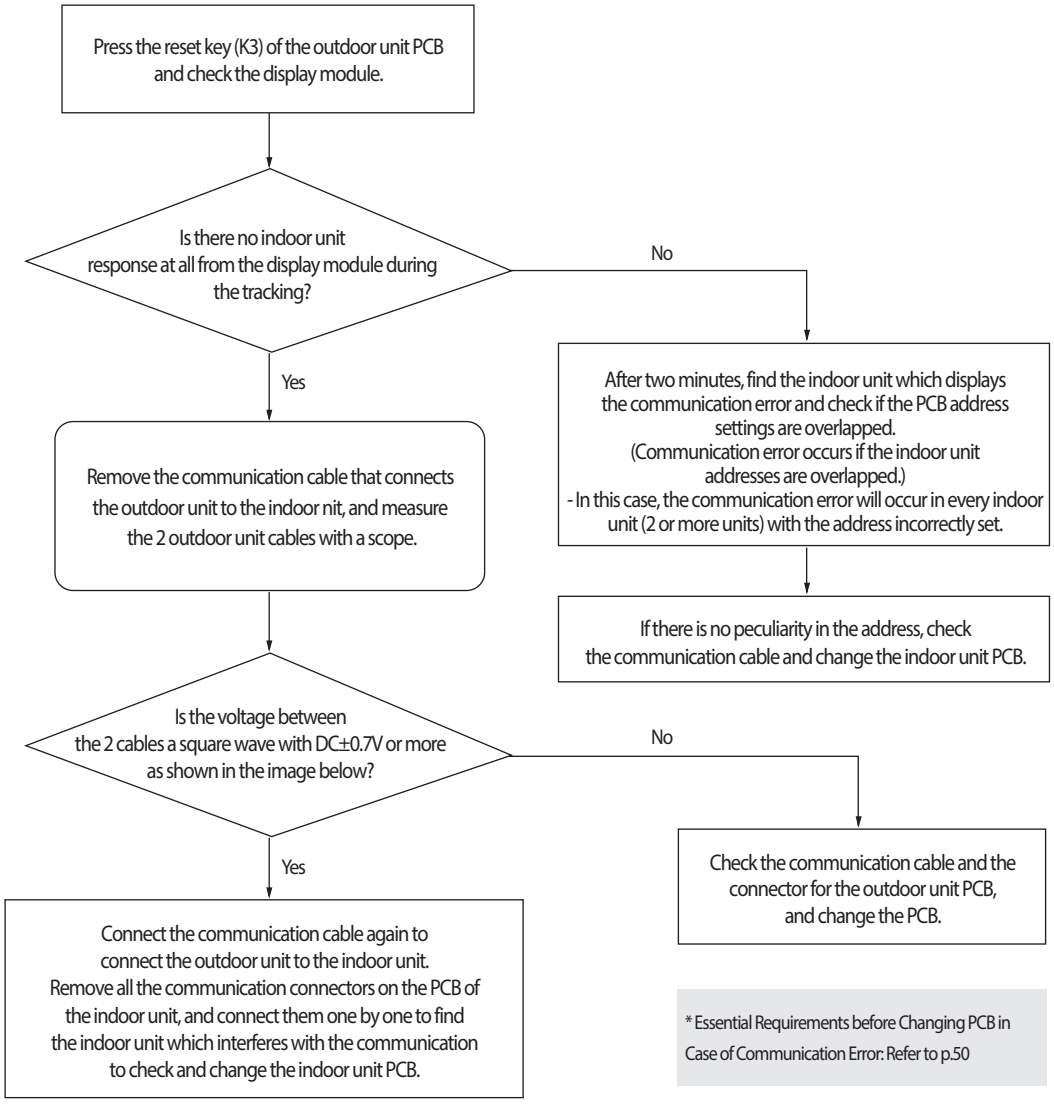
1. Cause of problem

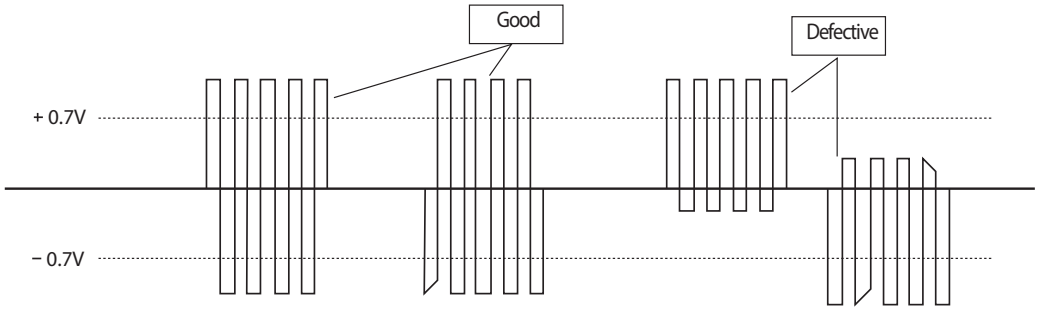


4-4-23 Communication Error between Indoor and Outdoor Units after Tracking

Outdoor unit display	E202
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Outdoor unit is unable to communicate for two minutes during operation. (no reception of relocation)
Cause of problem	· Communication error between indoor and outdoor units and setup error of indoor unit installation quantity setup switch.

1. Cause of problem

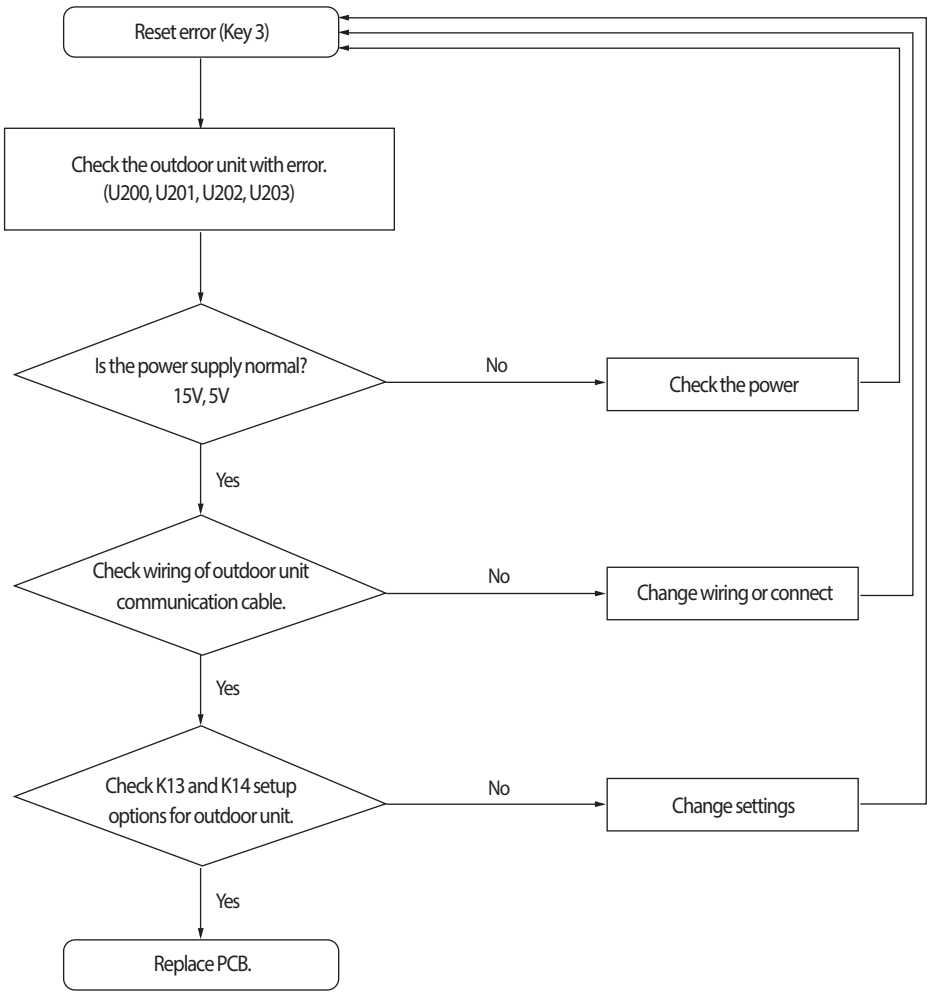




4-4-24 Communication error between main and sub Unit of outdoor unit or between outdoor units

Outdoor unit display	E203
Indoor unit display	-
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Communication error between outdoor units.

1. Cause of problem

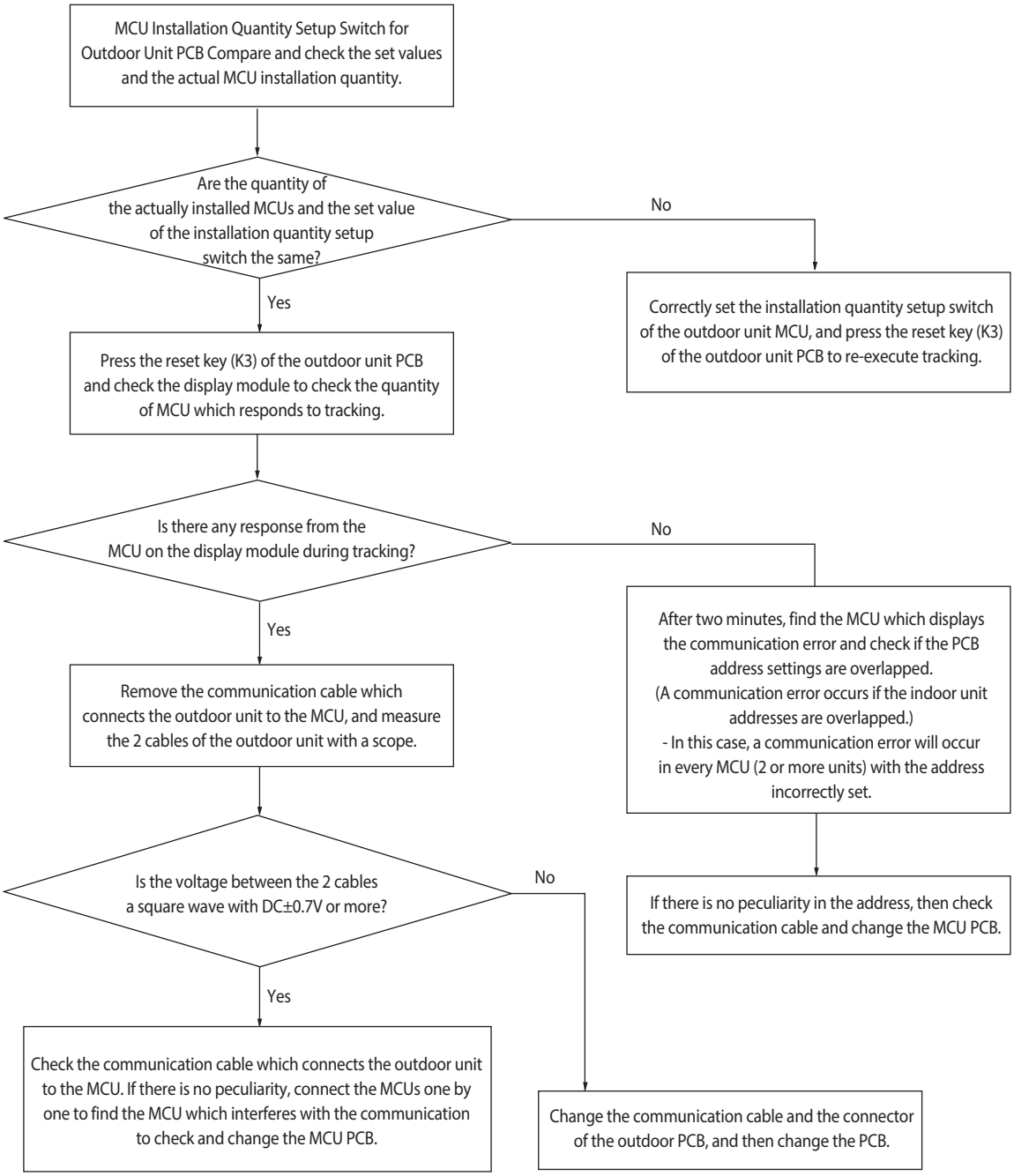


Essential Requirements before Changing PCB in Case of Communication Error: Refer to p.59

4-4-25 Communication Error between MCU and Outdoor Unit

Outdoor unit display	E204
Indoor unit display	-
Judgment Method	• Communication Error between MCU and outdoor unit.
Special Cause	• Reference below.

1. Inspection Method

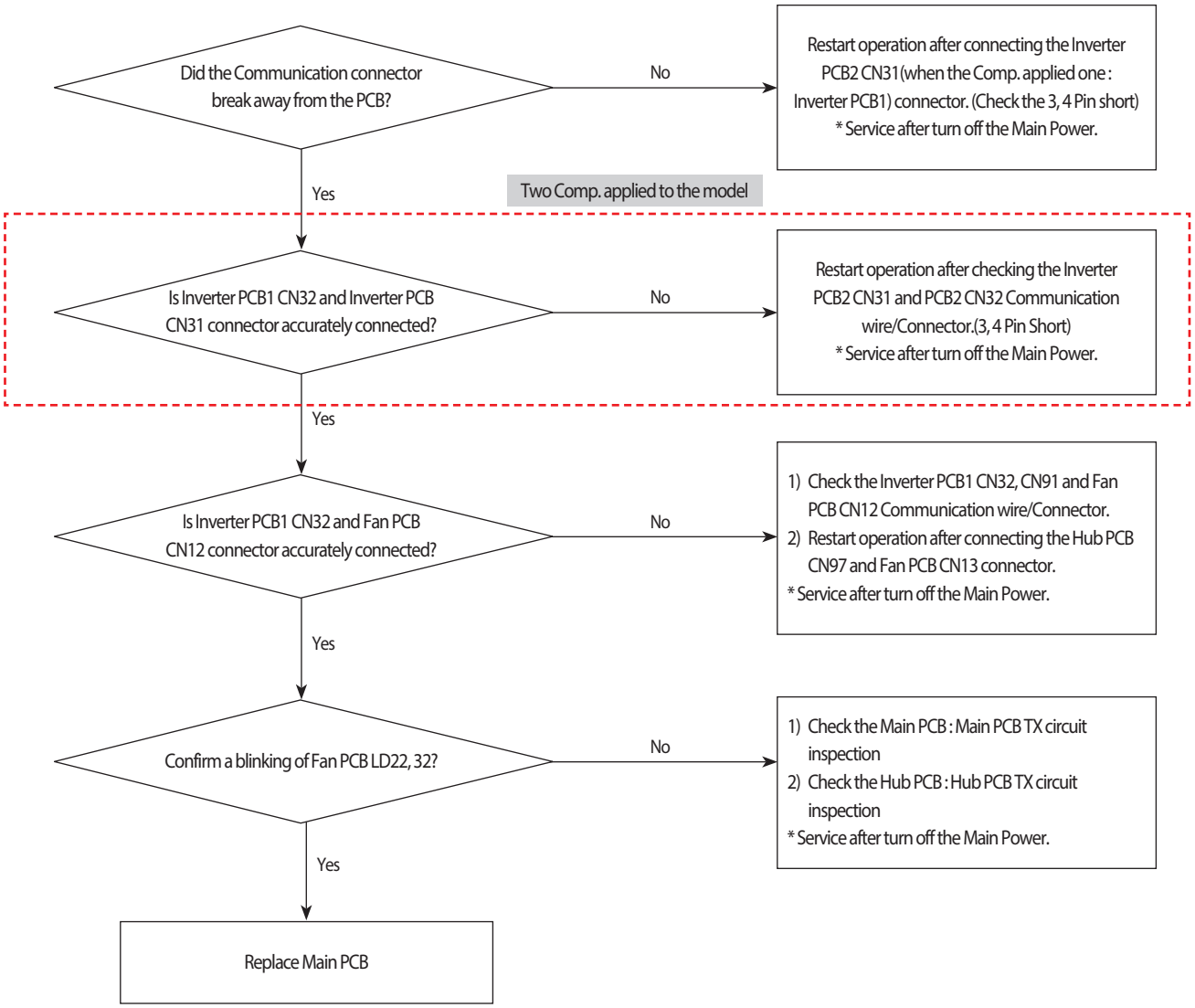


Essential Requirements before Changing PCB in Case of Communication Error: Refer to p.4-80

4-4-26 Internal Communication error of the Outdoor Unit C-Box

Outdoor unit display	E205
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Communication error between the C-Box PCB
Cause of problem	· Communication wire inside the C-Box is unconnected · Main PCB defective

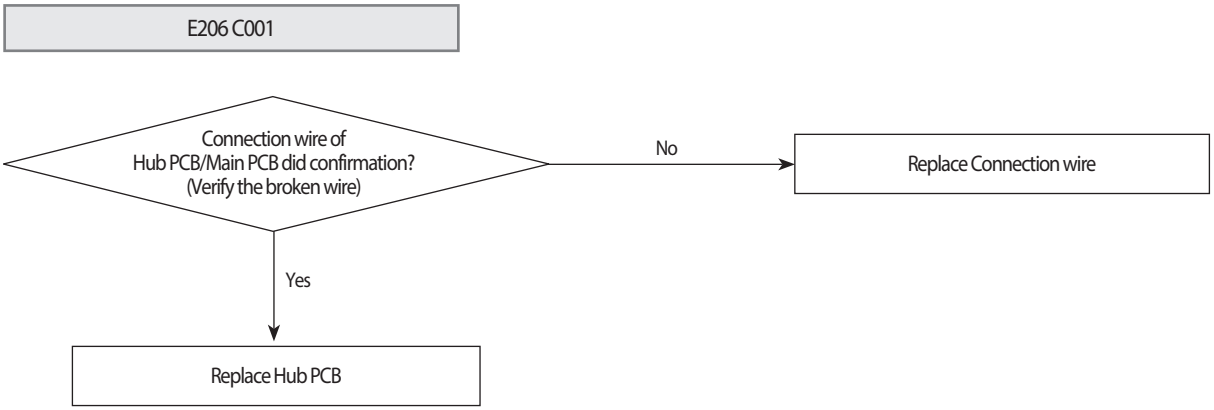
1. Cause of problem

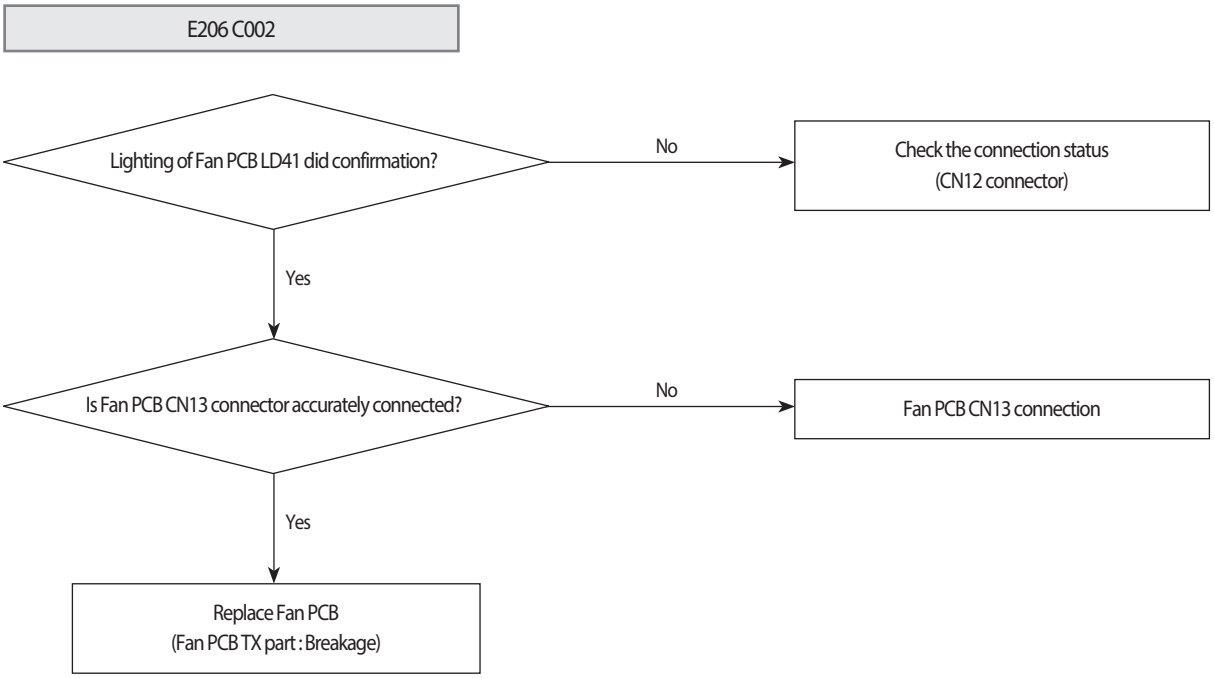


4-4-27 Internal PCB Communication error of the Outdoor Unit C-Box

Outdoor unit display	E206
Indoorunit display	×(Operation) ◑ (Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· PCB does not respond to the invoked Main PCB
Cause of problem	· C-Box internal Inverter PCB, Fan PCB, Hub PCB defective

1. Cause of problem

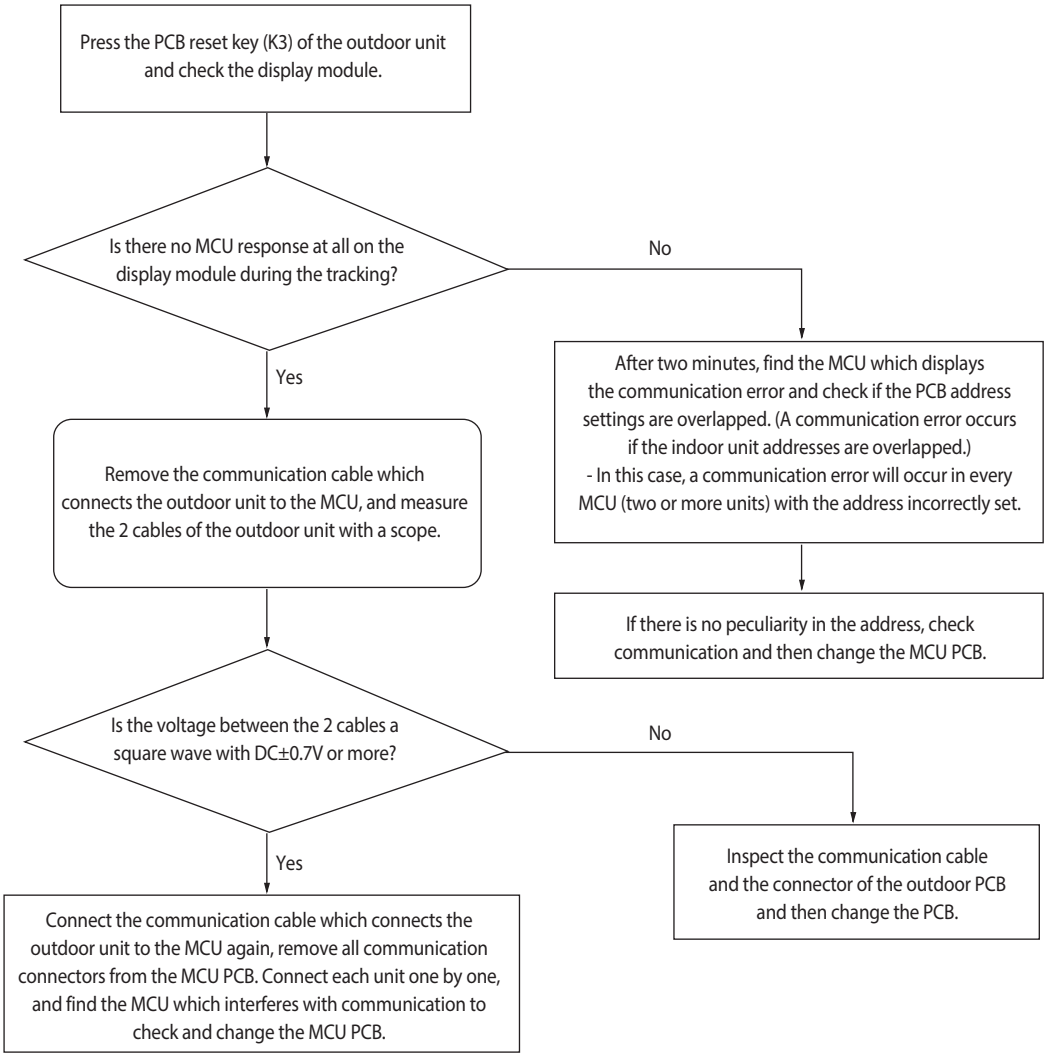




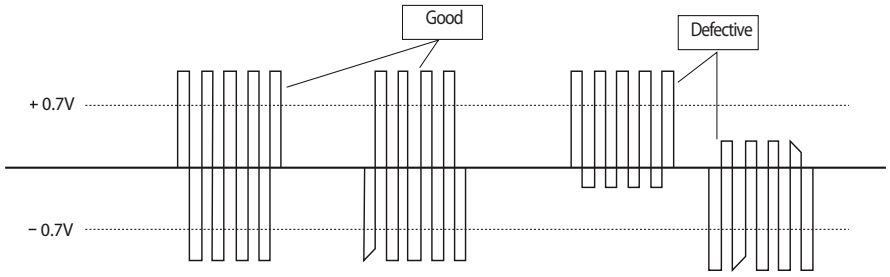
4-4-28 Communication Error between MCU and Outdoor Unit after Tracking is Completed

Outdoor unit display	E2 10
Indoor unit display	-
Judgment Method	• Outdoor unit is unable to communicate for two or more minutes during operation (no reception of relocation)
Special Cause	• Communication error between indoor and outdoor units and setup error of indoor unit installation quantity setup switch

1. Inspection Method



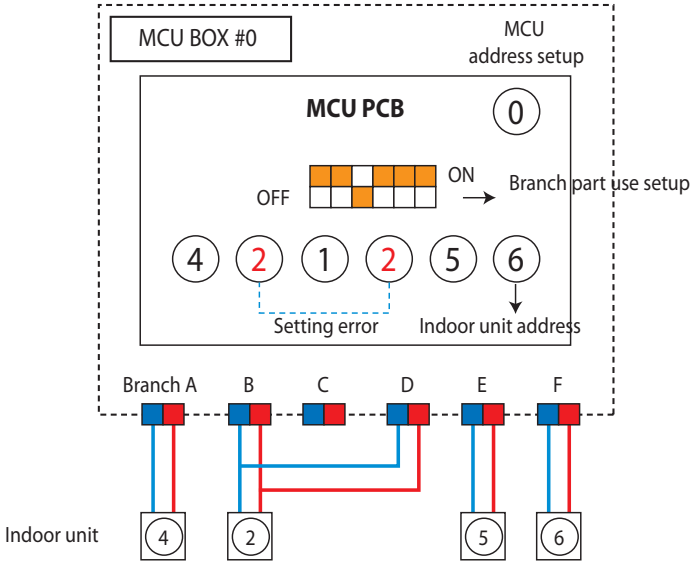
Essential Requirements before Changing PCB in Case of Communication Error: Refer to p.4-80



4-4-29 MCU branch part setup error – inconsecutive connection with the use of 2 branch parts

Outdoor unit display	E211
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• When 2 branch parts are used for one indoor unit without connecting them consecutively.
Cause of problem	• Branch part assembly error.

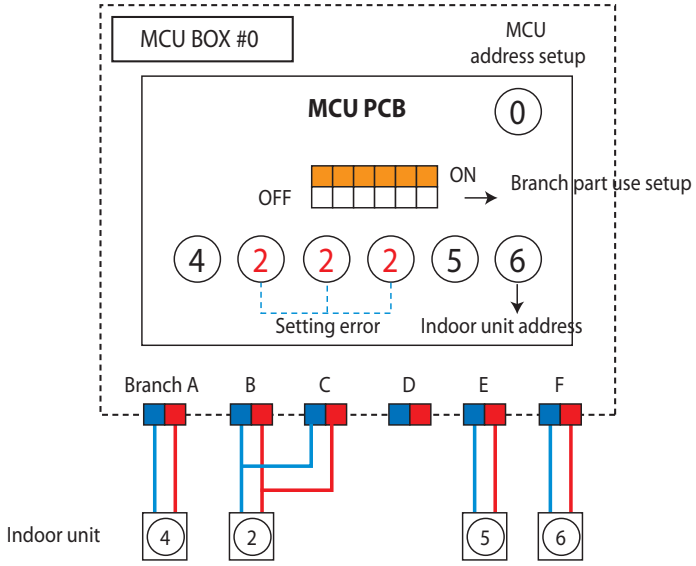
1. How to check
   Find an MCU that is composed as the following picture to carry out assembly of branch part again. After completing the re-setting, press K3 button on the button to reset or turn it off to restart.



4-4-30 MCU branch part setup error – Repeated setup for the same address over 3 times

Outdoor unit display	E2 12
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• The same indoor unit address was setup more than 3 times in MCU.
Cause of problem	• MCU indoor unit address setting error.

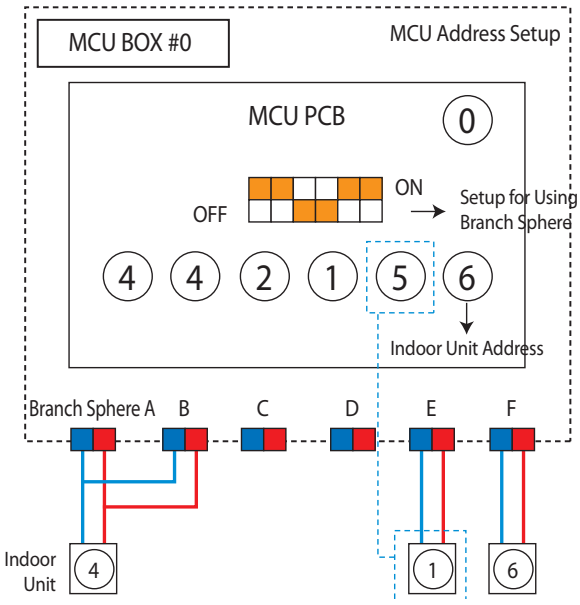
1. How to check
   Find an MCU that is composed as the following picture to carry out assembly of branch part again. After completing the re-setting, press K3 button on the button to reset or turn it off to restart.



4-4-31 MCU branch part setup error – non-installed address setup

Outdoor unit display	E213
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• If there is an indoor unit that is not installed among MCU registered indoor units
Cause of problem	• Indoor unit, with the assigned address on MCU, not installed.

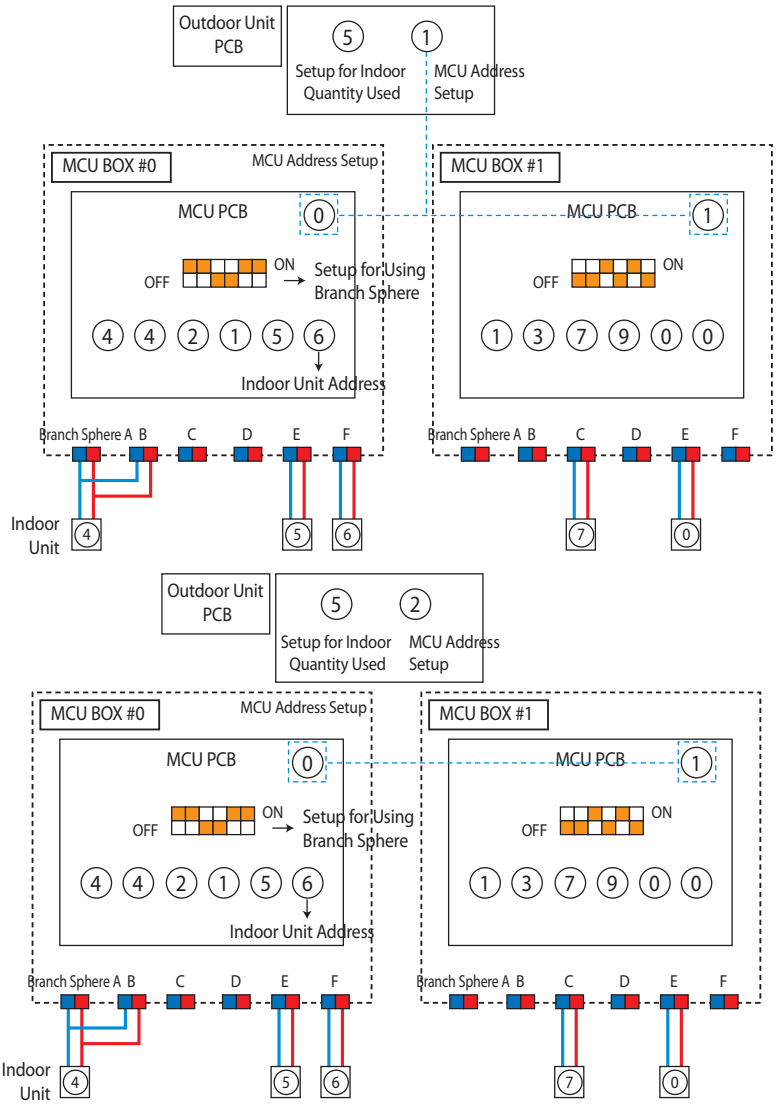
1. How to check
   Find an MCU that is composed as the following picture to carry out assembly of branch part again. After completing the re-setting, press K3 button on the button to reset or turn it off to restart.



4-4-32 Setup Error for MCU Branch part – Setup Error for MCU Quantity Used

Outdoor unit display	E214
Indoor unit display	×(Operation) ◑(Reservation) ◑(Blast) ◑(Filter) ×(Defrost)
Judgment Method	• Occurs when the quantity of MCU is incorrectly set by the outdoor unit. • Occurs when same addresses are found when two or more MCU are connected.
Special Cause	• Outdoor unit MCU setup and same address errors when connecting two or more MCUs .

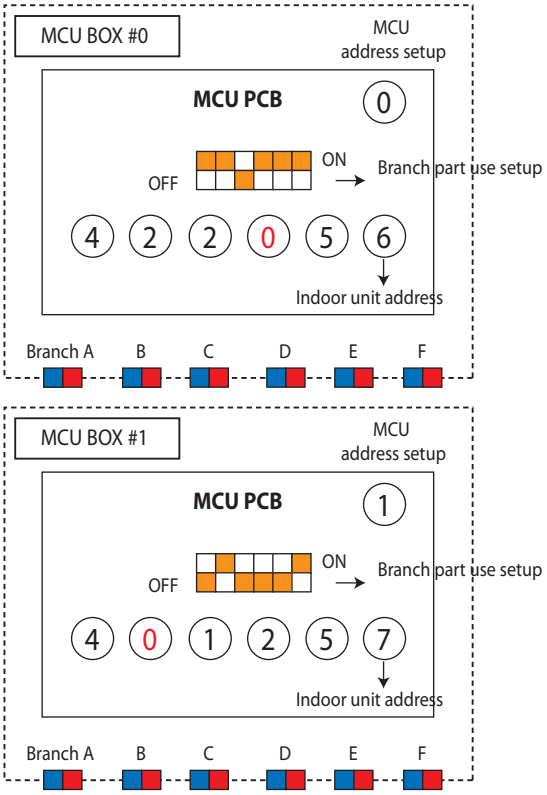
1. Inspection Method : Re-check the MCU quantity setup switch from the outdoor unit.
   Check for overlaps in each MCU address setup switch.
   To use, reset by pressing the K3 button of the outdoor unit after the reset is completed, or reset after turning off the power and then turn it on again.



4-4-33 MCU branch part setup error – Overlapping Indoor unit Address setup

Outdoor unit display	E2 15
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Occurs when an indoor unit address setup switch in MCU has been overlapped.
Cause of problem	• Repeated indoor unit address.

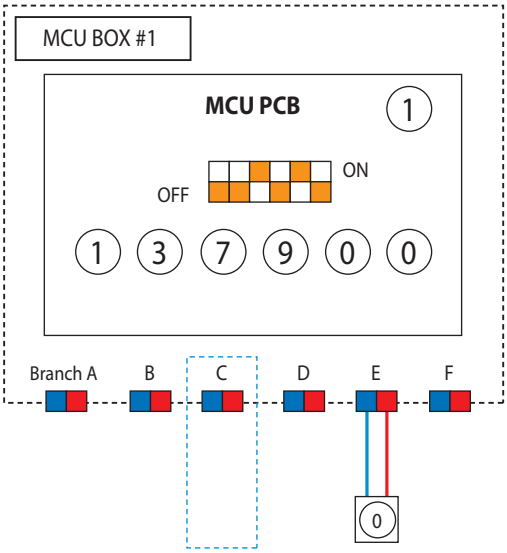
1. How to check
   Check the setup switch for the number of indoor units in MCU
   After completing resetting, press the outdoor unit's K3 button to reset or turn off to restart.



4-4-34 MCU branch part setup error – Set as being used without connection to an Indoor unit

Outdoor unit display	E216
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Occurs when MCU PIPE is set as being used, yet not connected to an indoor unit.
Cause of problem	• Pipe is not installed to the indoor unit with assigned address on MCU.

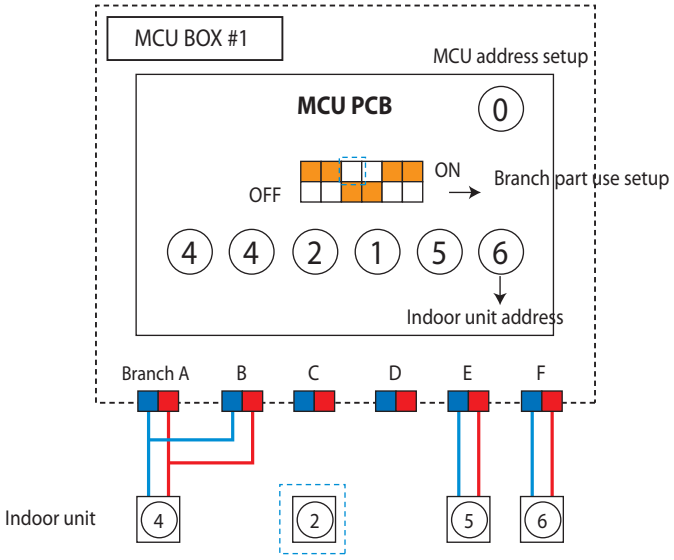
1. How to check
   Adjust the Dip switch that sets up the use of MCU branch part to 'Not-Used'. After completing resetting, press the outdoor unit's K3 button to reset or turn off to restart.



4-4-35 MCU branch part setup error – Connect an Indoor unit to a branch part not being used

Outdoor unit display	E2 17
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Occurs when MCU PIPE is turned off, yet an indoor unit is registered
Cause of problem	• Indoor unit connection to the unused branch part

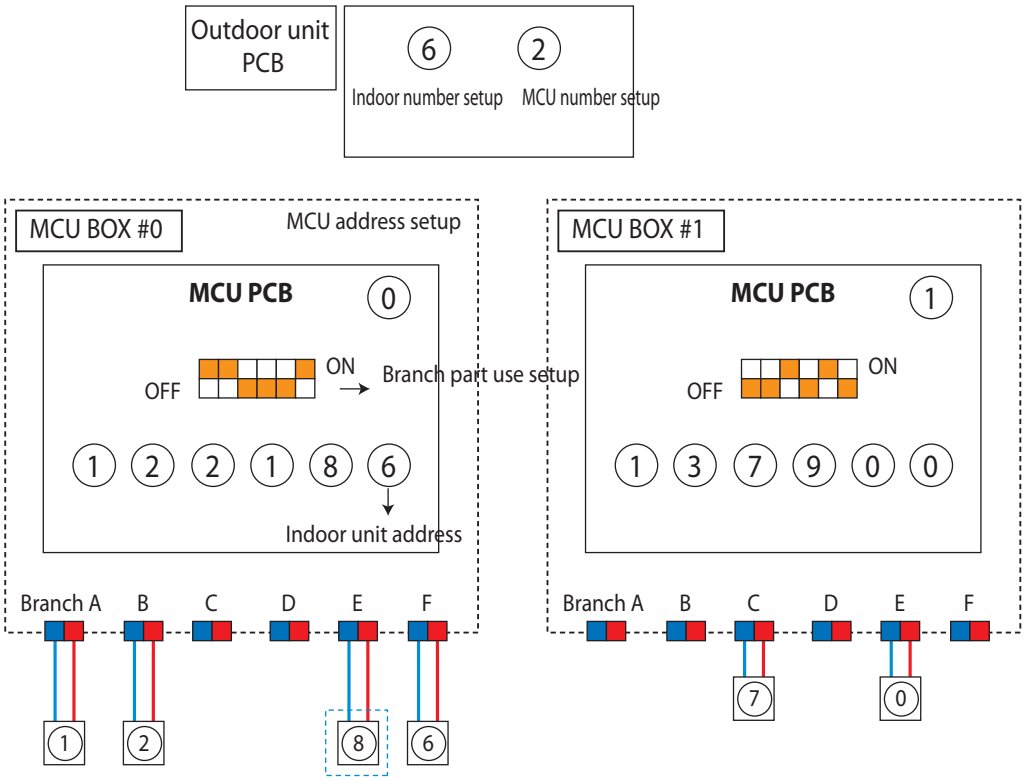
1. How to check
   Check the actual use of the branch part. If it is used, turn on the Dip switch for branch part setup. After completing resetting, press the outdoor unit's K3 button to reset or turn off to restart.



4-4-36 MCU branch part setup error – Connect more Indoor units than what is actually set up in MCU

Outdoor unit display	E218
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	• Occurs when the number of indoor units installed exceeds that registered in MCU.
Cause of problem	• Number of indoor units exceeds number of indoor units entered on MCU setting.

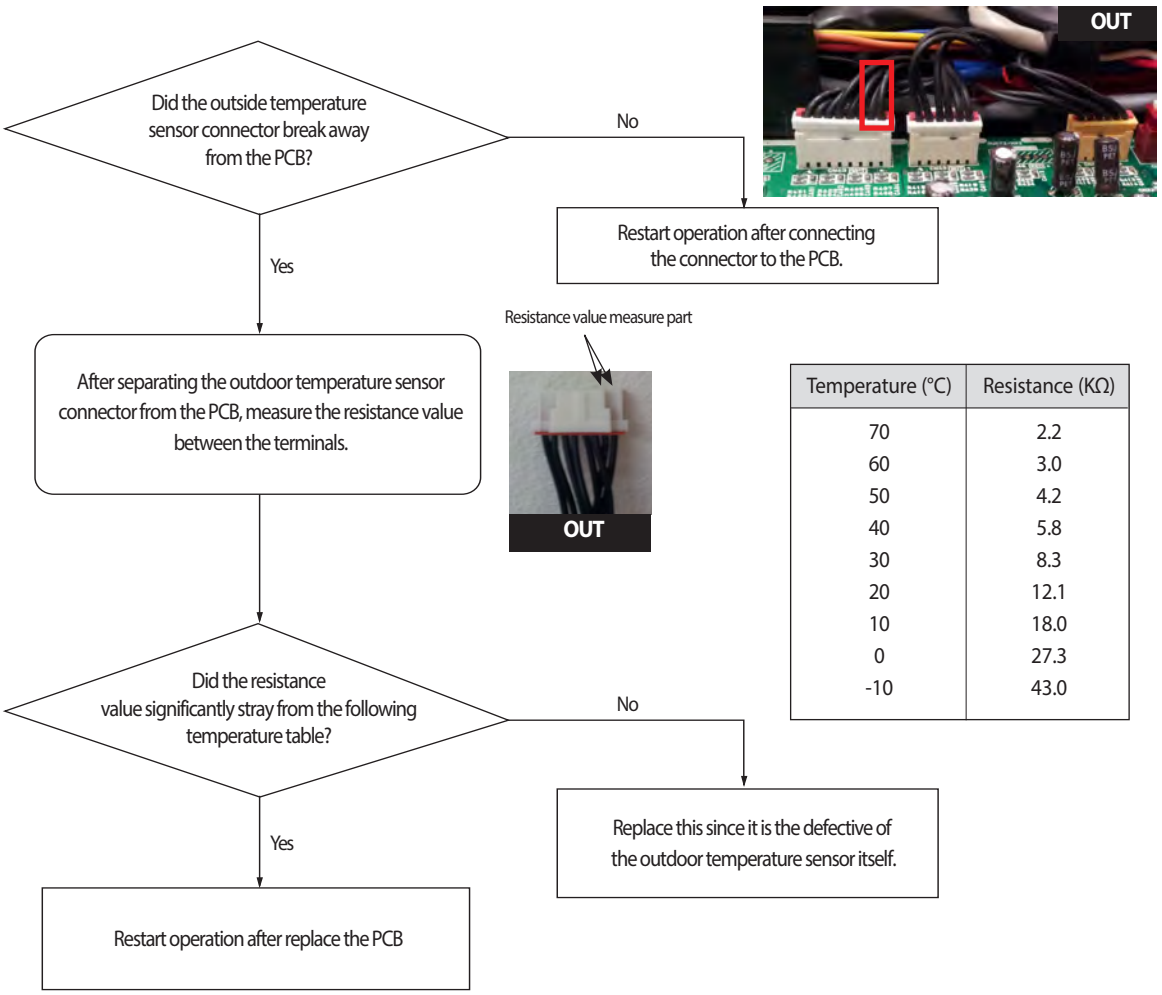
1. How to check
   Check the number of indoor units connected to MCU then readjust the switch for the number of units
   After completing resetting, press the outdoor unit's K3 button to reset or turn off to restart.



4-4-37 Outdoor Temperature Sensor Error

Outdoor unit display	E221
Indoor unit display	◑ (Operation) ×(Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Criteria	· Refer to the judgment method below.
Cause of problem	· Outdoor temperature sensor Open/Short is defective.

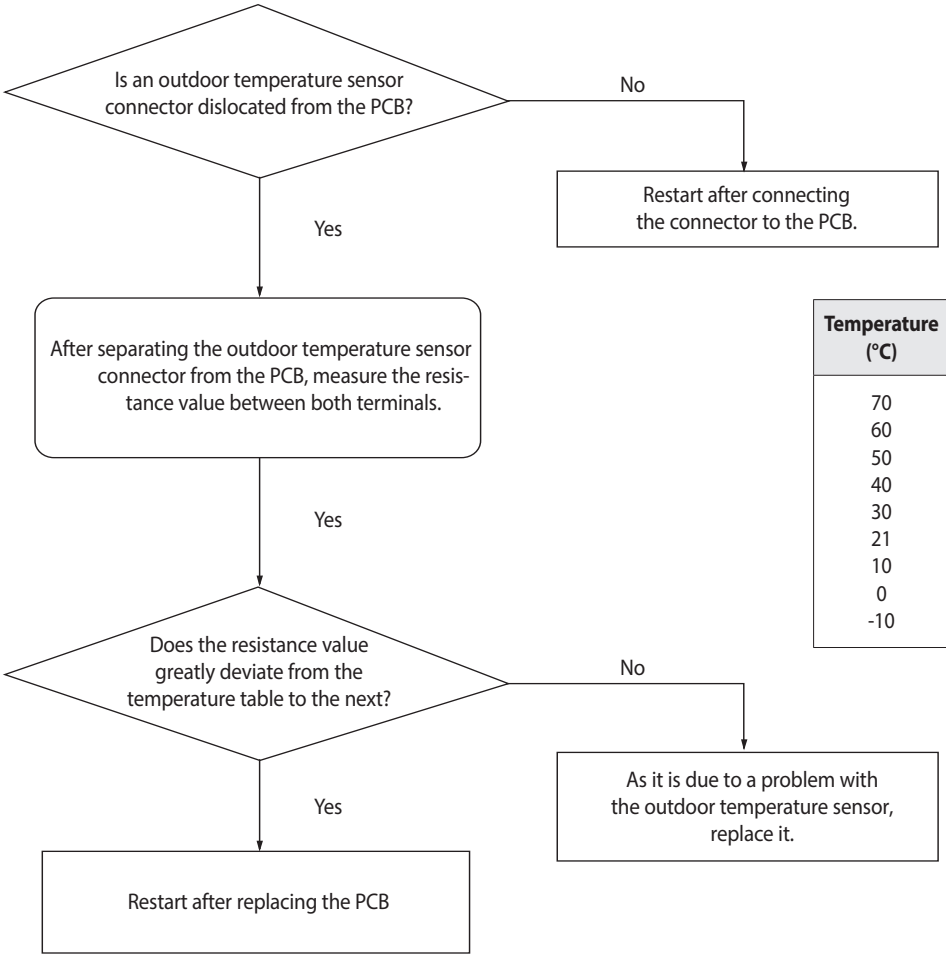
1. Cause of problem



Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-38 Outdoor Temperature dislocation error

1. How to check

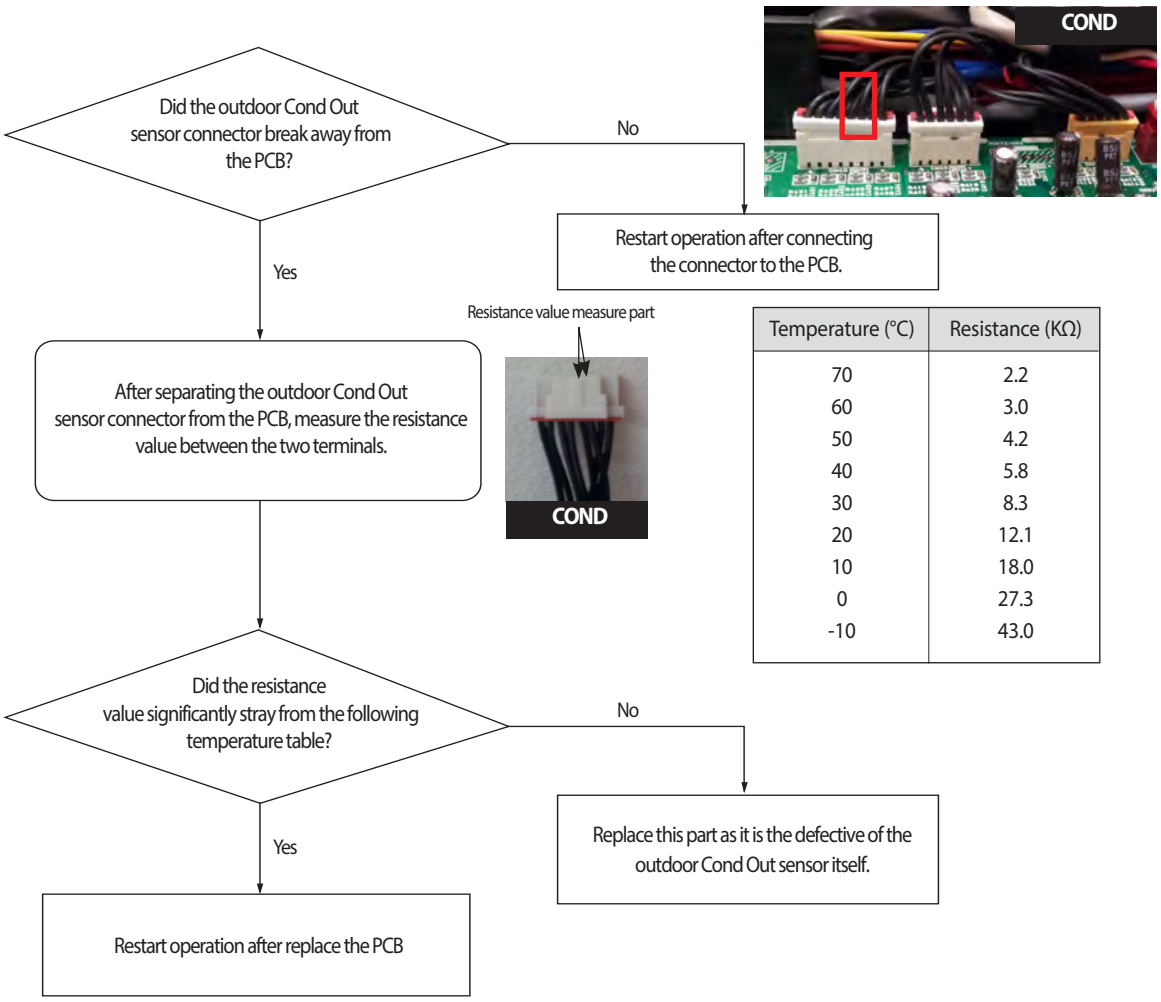


Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
21	12.1
10	18.0
0	27.3
-10	43.0

4-4-39 Cond Out Temperature Sensor Error (Open/Short)

Outdoor unit display	E231
Indoor unit display	◑ (Operation) ×(Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Disconnection or breakdown of relevant sensor.

1. Cause of problem



Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-40 Outdoor Cond Out sensor breakaway error

Outdoor unit display	E241
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Outdoor Cond Out sensor breakaway/defective/ relevant path blocked.

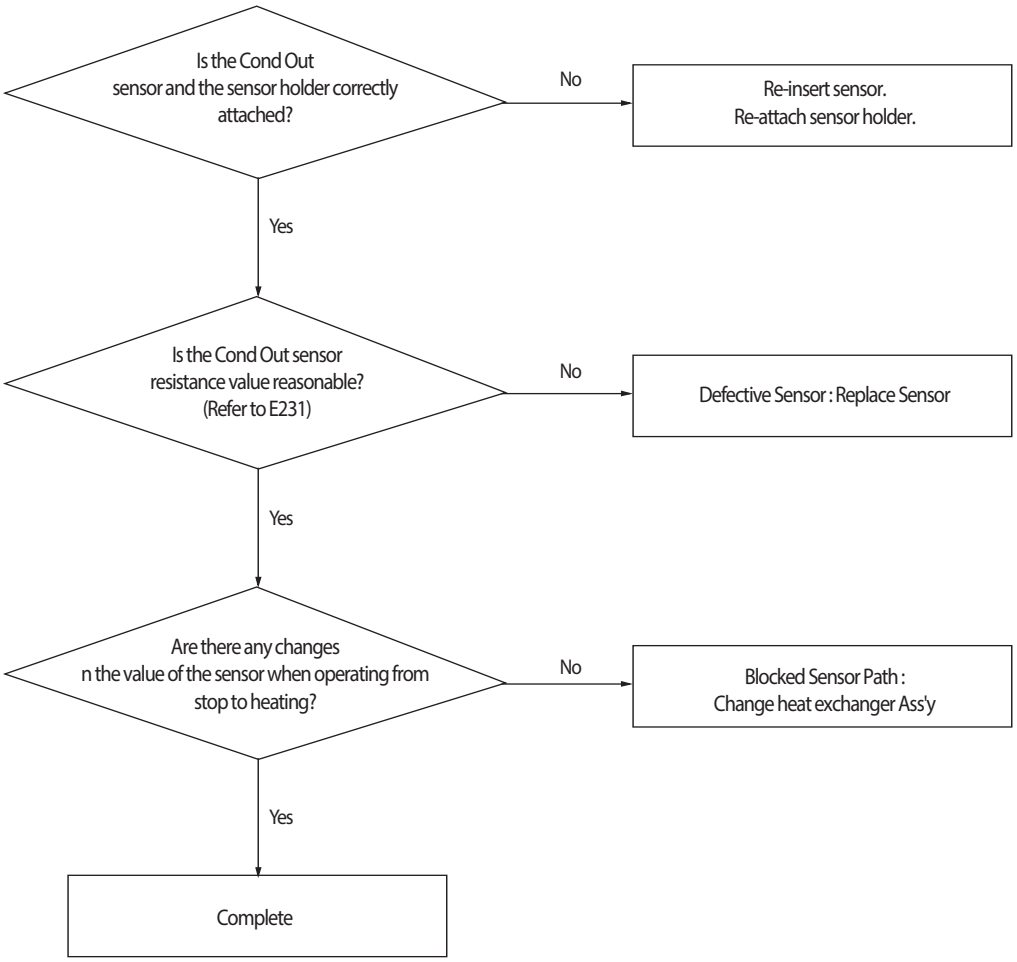
1. Judgment Method

   1) No inspection for Cooling operation.

   2) For heating operation (Each of the conditions below needs to be satisfied for more than 20 minutes.)

High pressure average > 25kg/cm^2	OK
Low pressure average < 8.5kg/cm^2	OK
Teva, out - Tair, in ≥ 3℃	OK
Teva, in - Tair, in ≥ 2℃	OK
Tcond, out - Tair, out ≤ 0℃	NO
Every compressor is in operation & indoor unit operation and Thermo On	OK
Error Content	Outdoor Cond Out sensor breakaway error

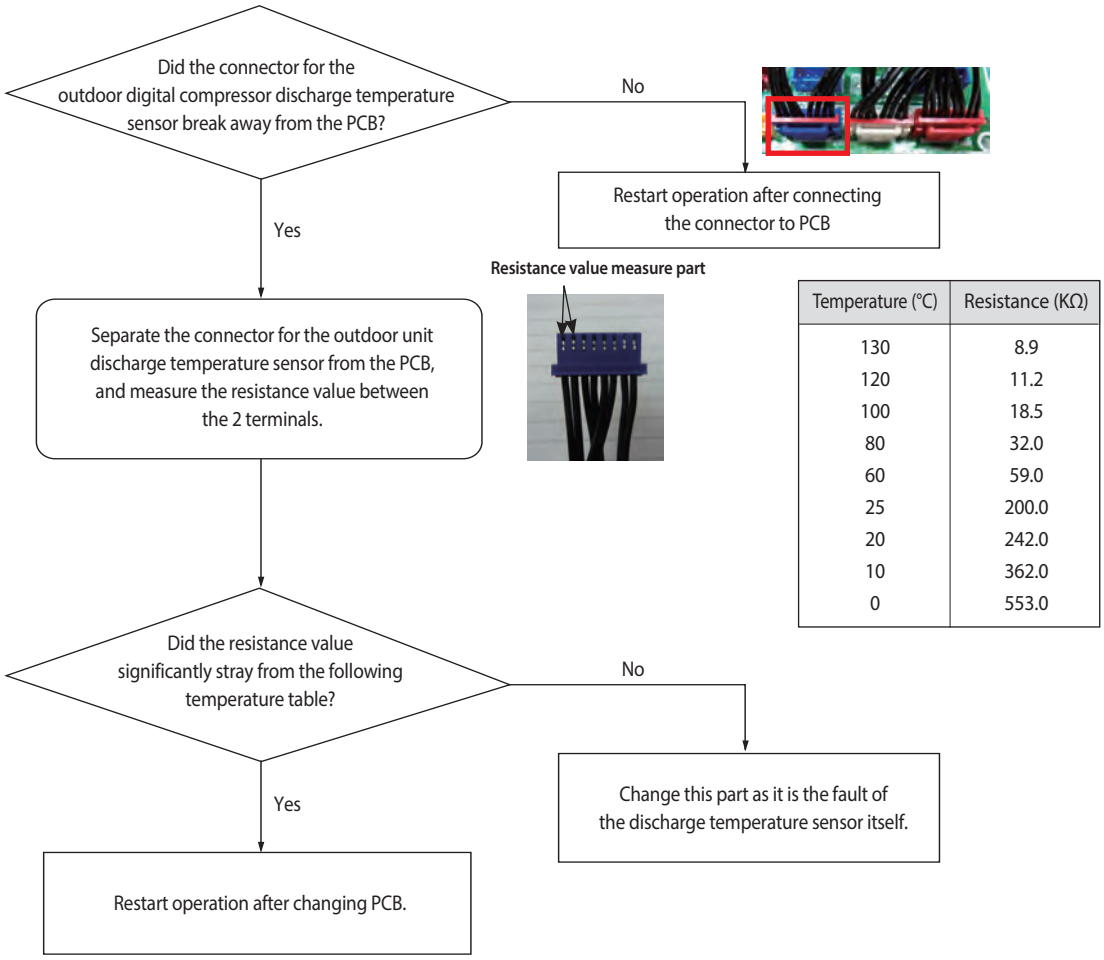
2. Cause of problem



4-4-41 Digital Compressor Discharge Temperature Sensor Error (OPEN/SHORT)

Outdoor Unit Display	E251
Indoor Unit Display	◑(Operation) ×(Reservation) ◑(Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the inspection method below.
Special Cause	· Digital compressor discharge temperature sensor OPEN/SHORT problem.

1. Inspection Method

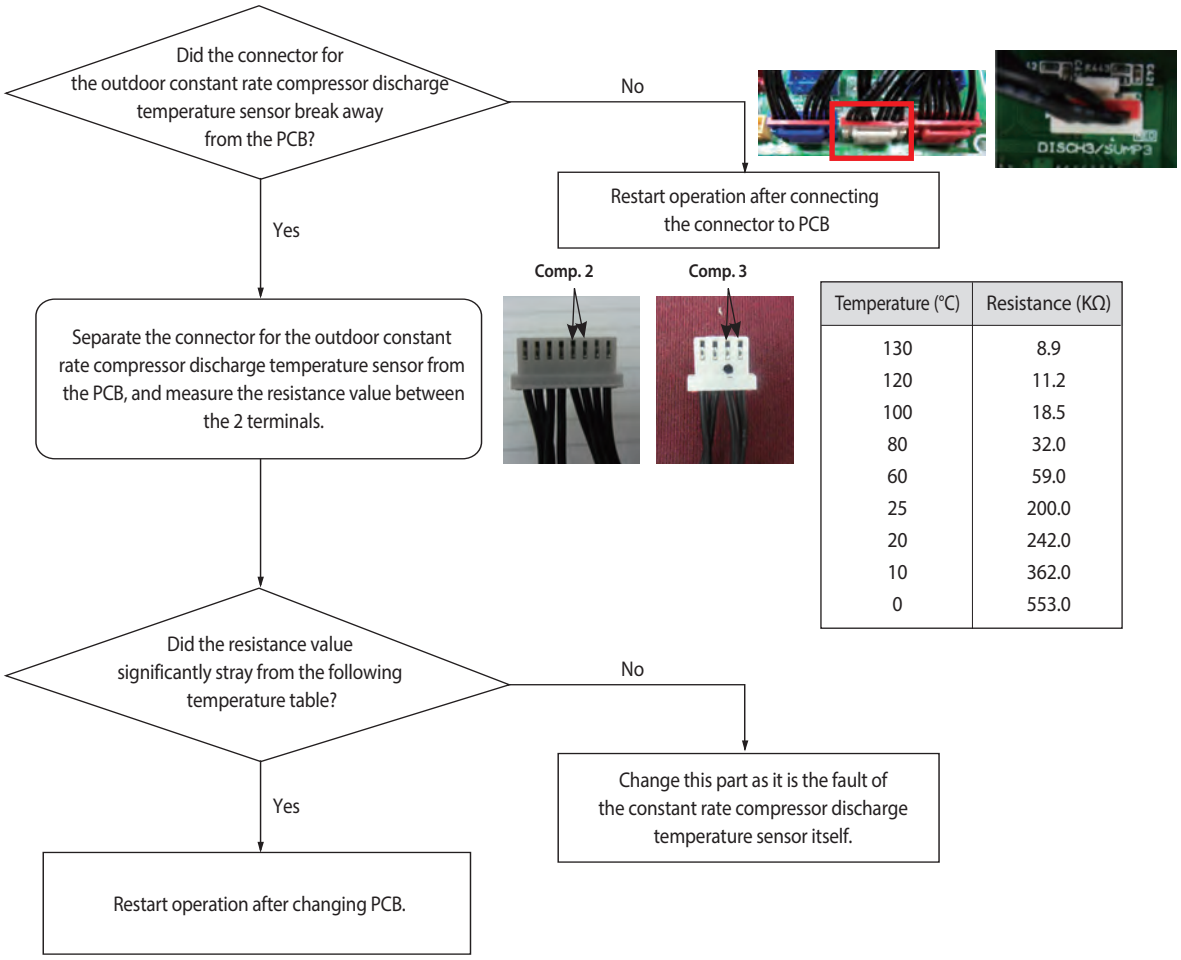


Temperature (°C)	Resistance (KΩ)
130	8.9
120	11.2
100	18.5
80	32.0
60	59.0
25	200.0
20	242.0
10	362.0
0	553.0

4-4-42 Constant Rate Compressor Discharge Temperature Sensor Error (OPEN/SHORT)

Outdoor Unit Display	E257, E258 (Compressor 2, Compressor 3)
Indoor Unit Display	◑(Operation) ×(Reservation) ◑(Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the inspection method below.
Special Cause	· Constant rate compressor discharge temperature sensor OPEN/SHORT problem

1. Inspection Method



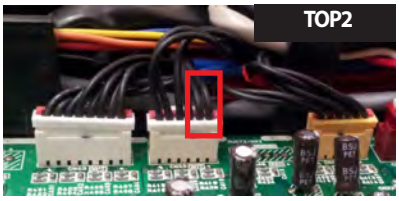
Temperature (°C)	Resistance (KΩ)
130	8.9
120	11.2
100	18.5
80	32.0
60	59.0
25	200.0
20	242.0
10	362.0
0	553.0

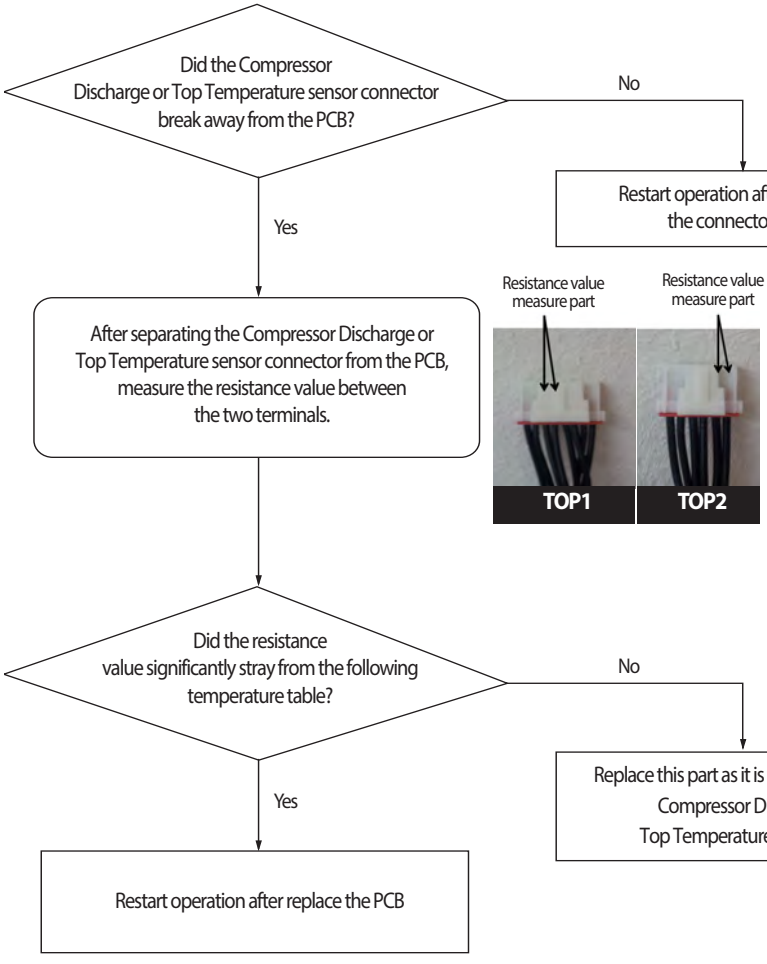
4-4-43 Compressor Discharge or Top 1/2 Temperature sensor error

Outdoor unit display	E262 (Compressor 1 Discharge) E263 (Compressor 2 Discharge) E266 (Compressor 1 Top) E267 (Compressor 2 Top)
Indoorunit display	◑ (Operation) ×(Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Compressor Discharge or Top Temperature sensor defective. (Open/Short)

1. Cause of problem







Temperature (°C)	Resistance (KΩ)
130	8.9
120	11.2
100	18.5
80	32.0
60	59.0
25	200.0
20	242.0
10	362.0
0	553.0

4-4-44 E265 : Dislocation error of Compressor SUMP Temperature (oil temperature) Sensor

Outdoor unit display	E265 (digital compressor or fixed compressor 1)
Indoor unit display	×(Operation) ◑(Timer) ◑(Fan) ◑(Filter) ×(Defrost)
Criteria	· Refer to how to determine below
Cause of problem	· Sump (oil) temperature sensor dislocation error

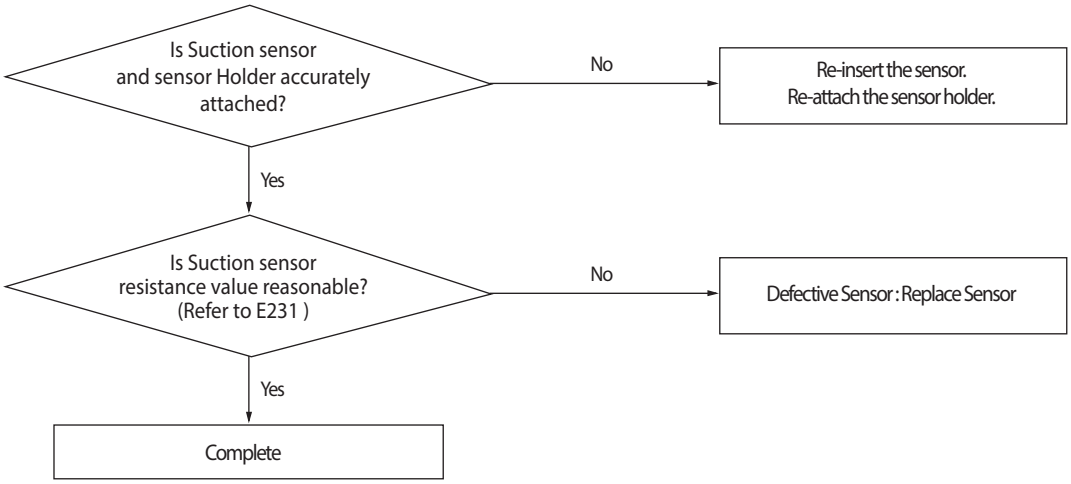
1. How to diagnose
   1) If the Sump temperature right before the start of compressor = Tsump.ini, current compressor's SUMP temp =Tsump. real,
   When the difference between Tsump.ini and Tsump.real is an absolute value so that it cannot be more than 2˚C,
   In other words, the condition of Tsump.real-Tsump.ini<2˚C has been satisfied for 60 minutes since a compressor started, it is diagnosed as an error.
   After 60 minutes of compressor operation, there will be no Sump sensor dislocation detection.

2. How to check
   1) Check if a sensor of the relevant compressor has been dislocated in accordance with error code, assemble and correct the error.

4-4-45 E269 : Suction Temperature sensor breakaway error

Outdoor unit display	E269
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	· If the suction temperature right before operating the Comp, when the operating order is highest, is set at Tsuc, ini, and the suction temperature of the current Comp is set at Tsuc, real, it is considered to have an error if the condition of Tsuc, real < Tsuc,ini| < 2℃ is maintained for 30 minutes.
Cause of problem	· Suction temperature sensor breakaway/defective.

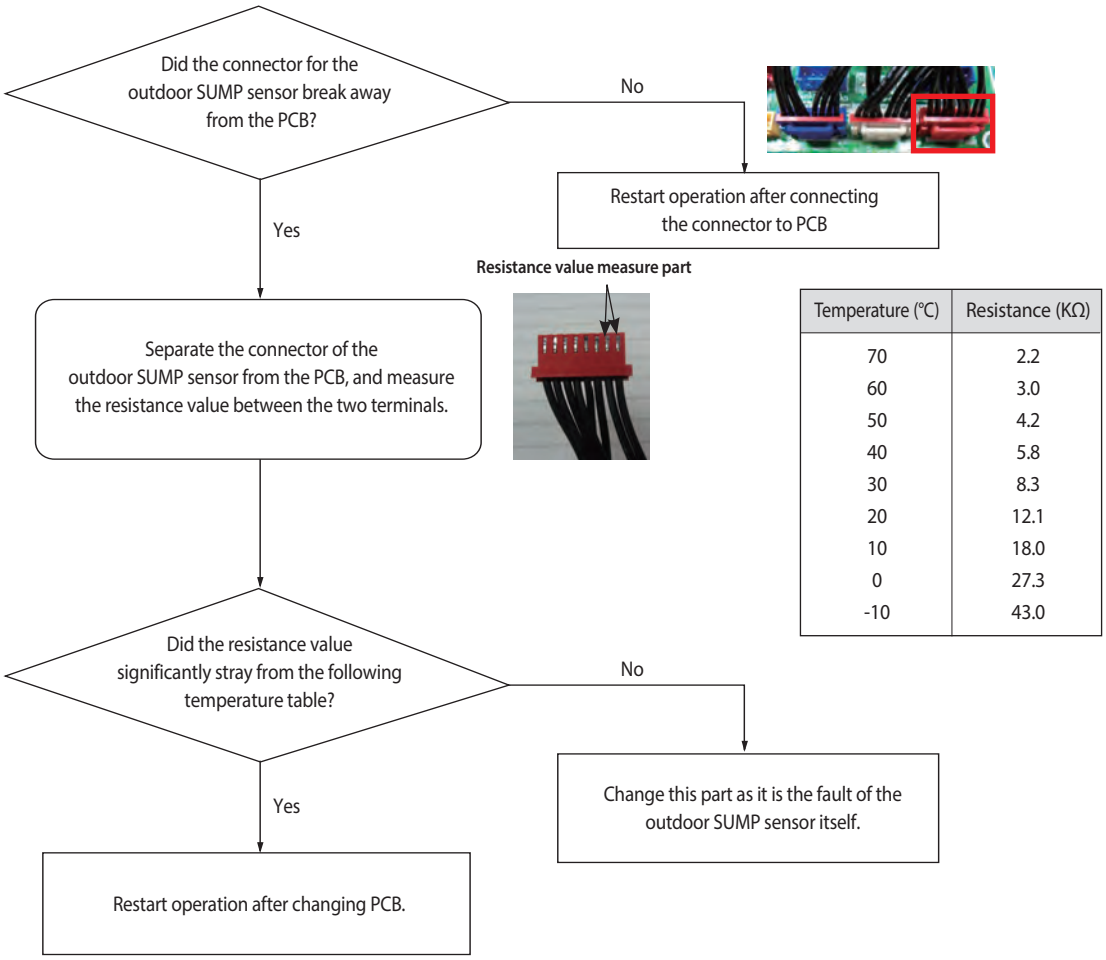
1. Cause of problem



4-4-46 SUMP Temperature Sensor Error (OPEN/SHORT)

Outdoor Unit Display	E271
Indoor Unit Display	◑(Operation) ×(Reservation) ◑(Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Special Cause	· Disconnection or breakdown of relevant sensor

1. Inspection Method



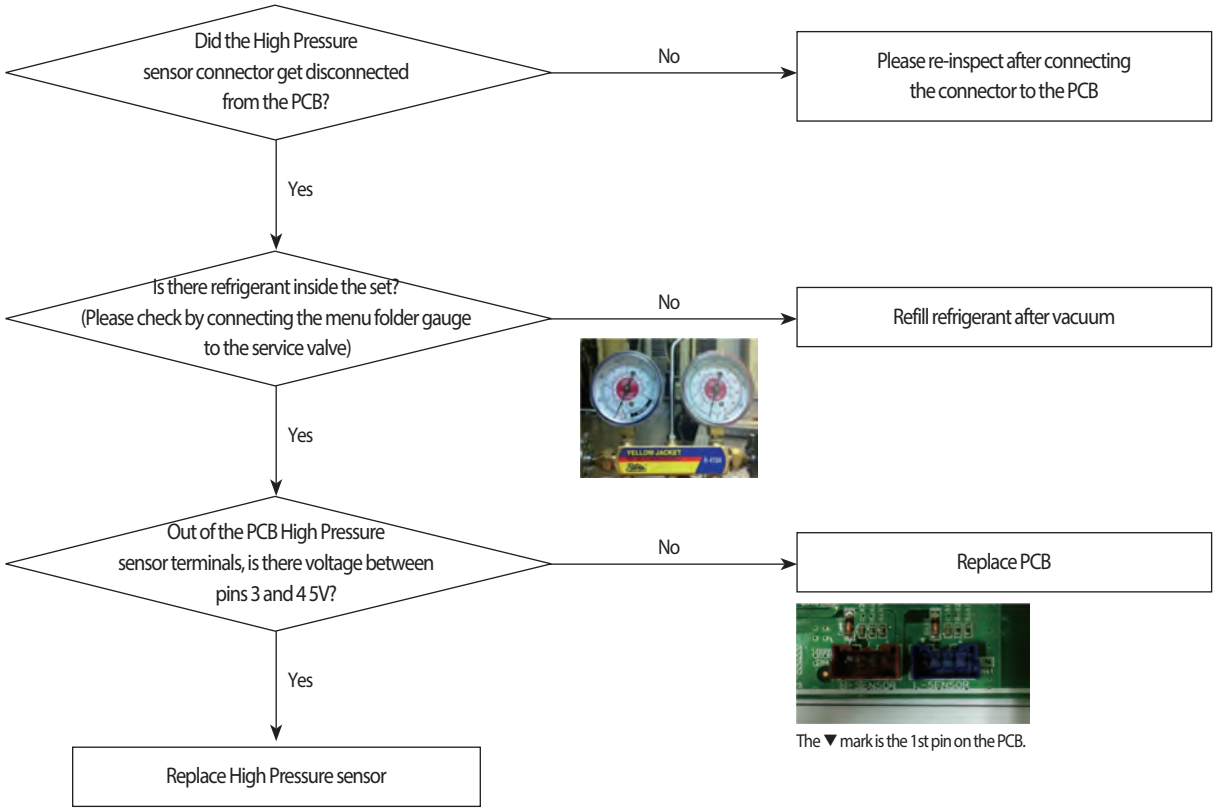
Temperature (℃)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-47 High Pressure sensor error (Open/Short)

Outdoor unit display	E291
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Disconnection or breakdown of relevant sensor.

1. High Pressure sensor Open/Short error determination method
   1) Identifies from when power is supplied or 2 minutes after RESET, and only when set is stopped.
   2) An Open/Short error will occur if the input voltage standard range of 0.5V ~ 4.95V is exceeded.

2. Inspection Method

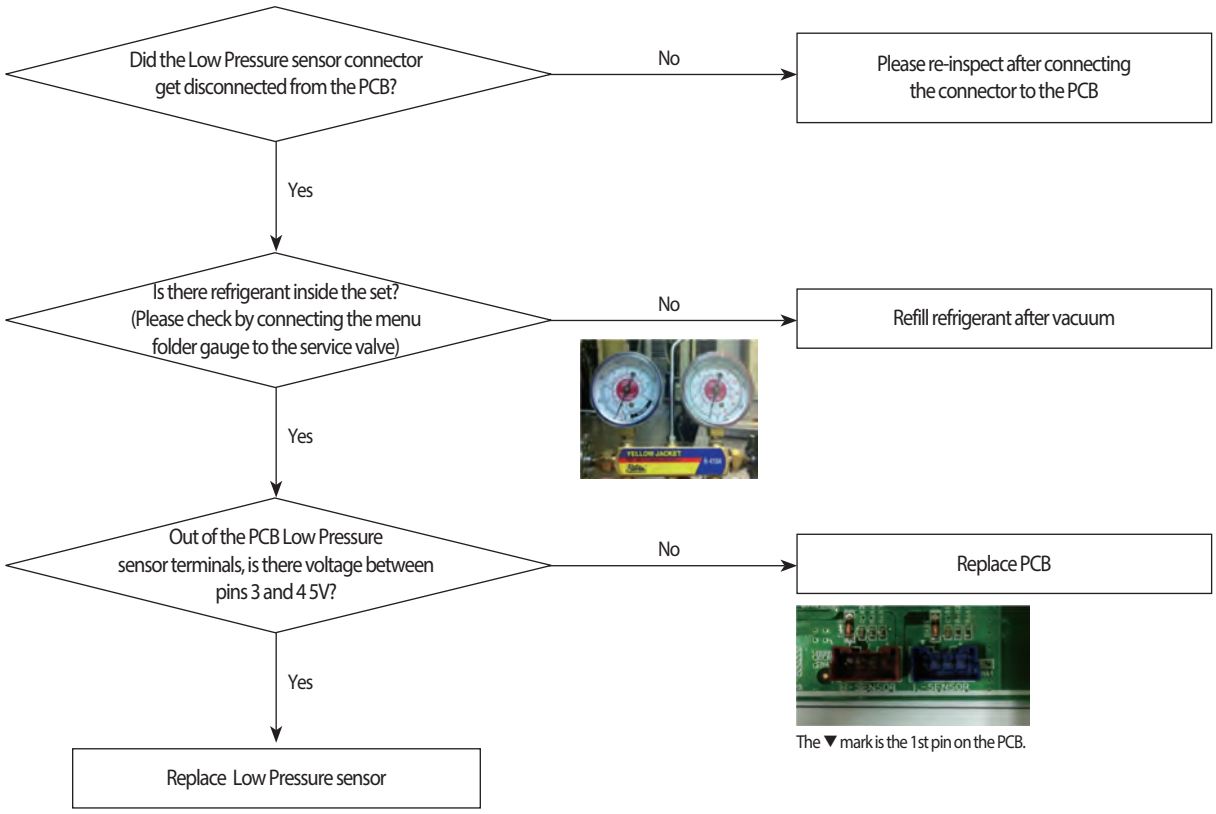


4-4-48 Low Pressure sensor error (Open/Short)

Outdoor unit display	E296
Indoor unit display	◑ (Operation) ◑ (Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Disconnection or breakdown of relevant sensor.

1. Low Pressure sensor Open/Short error determination method
   1) Identifies from when power is supplied or 2 minutes after RESET, and only when set is stopped.
   2) An Open/Short error will occur if the input voltage standard range of 0.5V ~ 4.95V is exceeded.

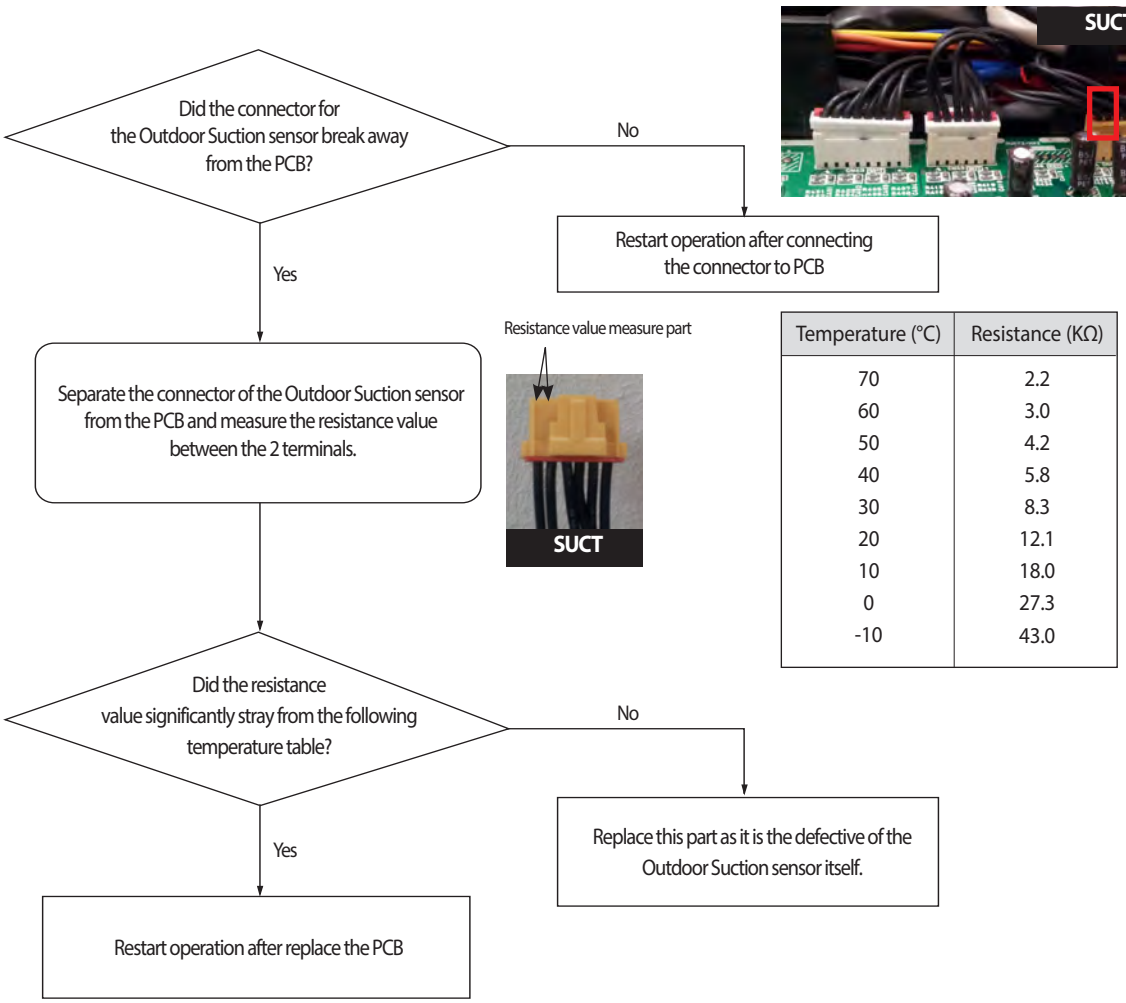
2. Inspection Method



4-4-49 Suction Temperature sensor error (Open/Short)

Outdoor unit display	E308
Indoor unit display	◑ (Operation) ×(Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Disconnection or breakdown of relevant sensor.

1. Cause of problem



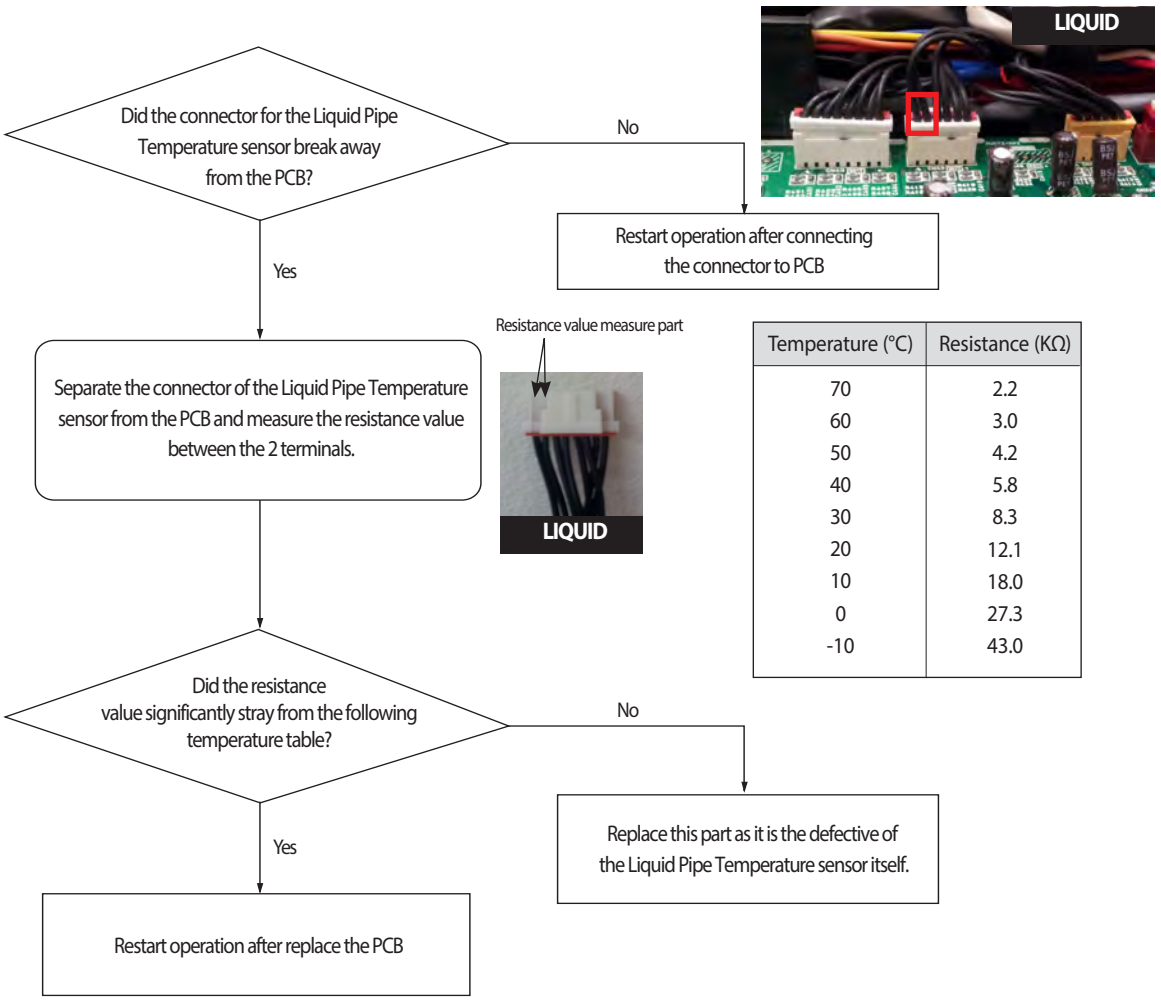


Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-50 Liquid Pipe Temperature sensor error (Open/Short)

Outdoor unit display	E311
Indoor unit display	◑ (Operation) ×(Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Disconnection or breakdown of relevant sensor.

1. Cause of problem

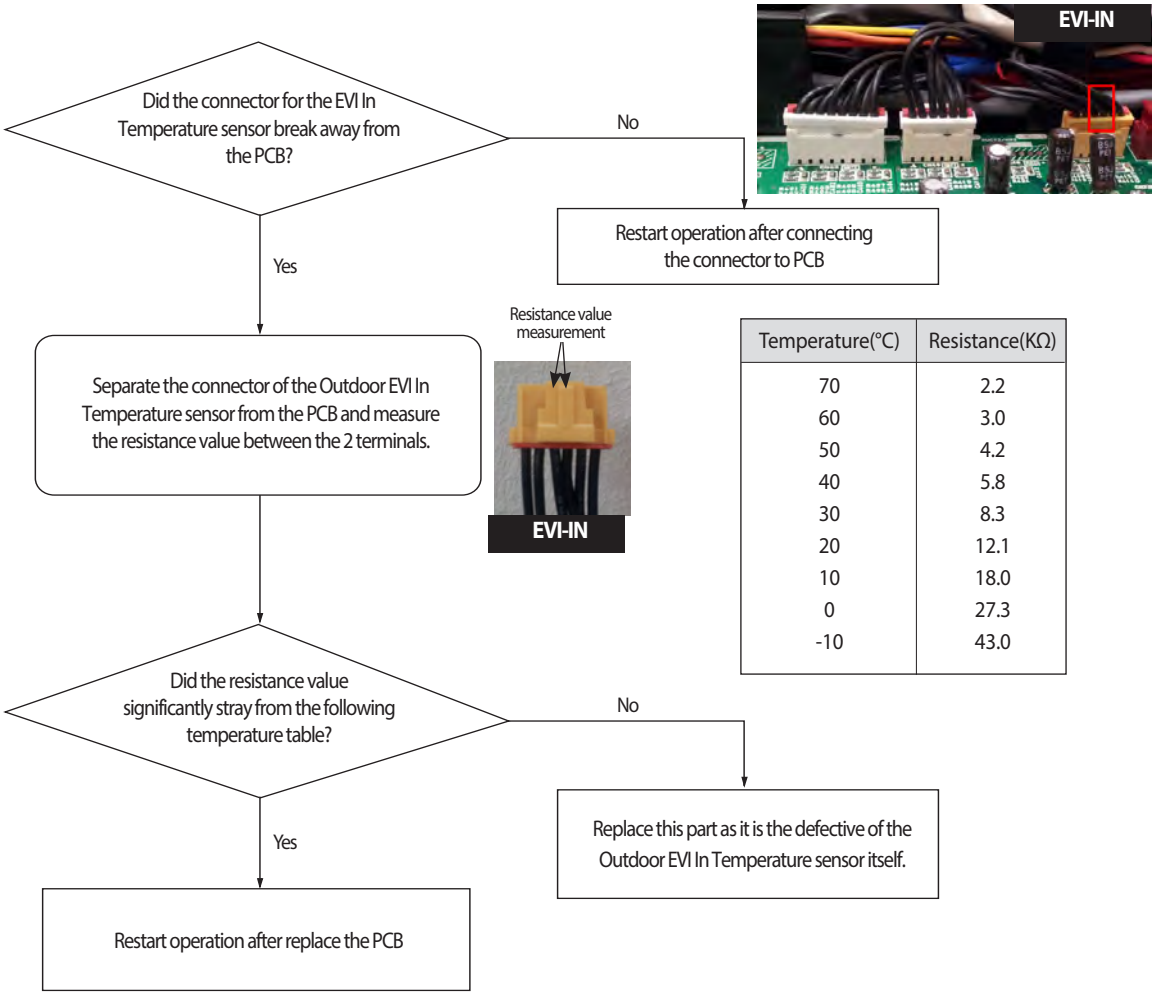


Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-51 EVI In Temperature sensor error (Open/Short)

Outdoor unit display	E321
Indoor unit display	◑ (Operation) ×(Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Disconnection or breakdown of relevant sensor.

1. Cause of problem

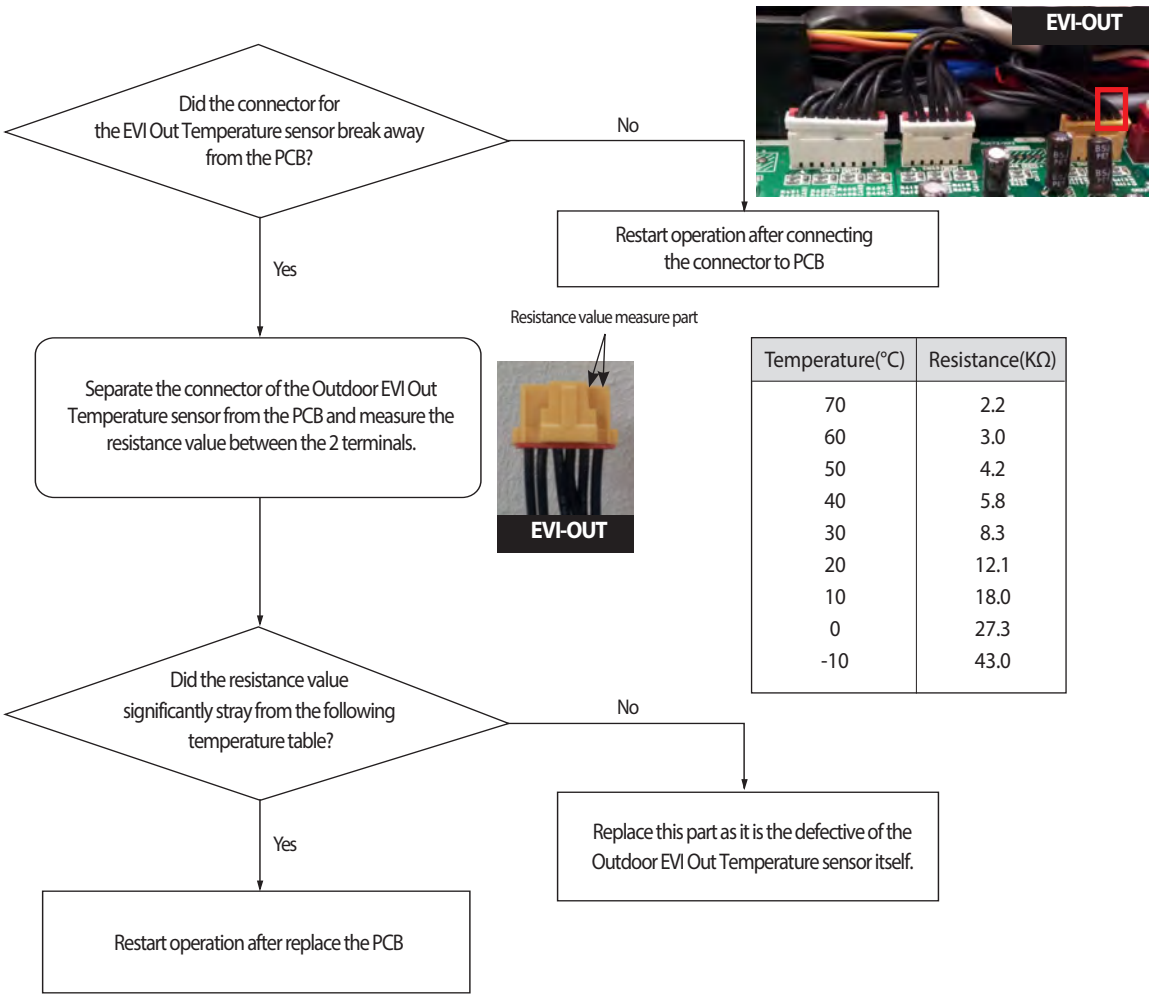


Temperature(°C)	Resistance(KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-52 EVI Out Temperature sensor error (Open/Short)

Outdoor unit display	E322
Indoor unit display	◑ (Operation) ×(Reservation) ◑ (Blast) ×(Filter) ×(Defrost)
Judgment Method	· Refer to the judgment method below.
Cause of problem	· Disconnection or breakdown of relevant sensor.

1. Cause of problem

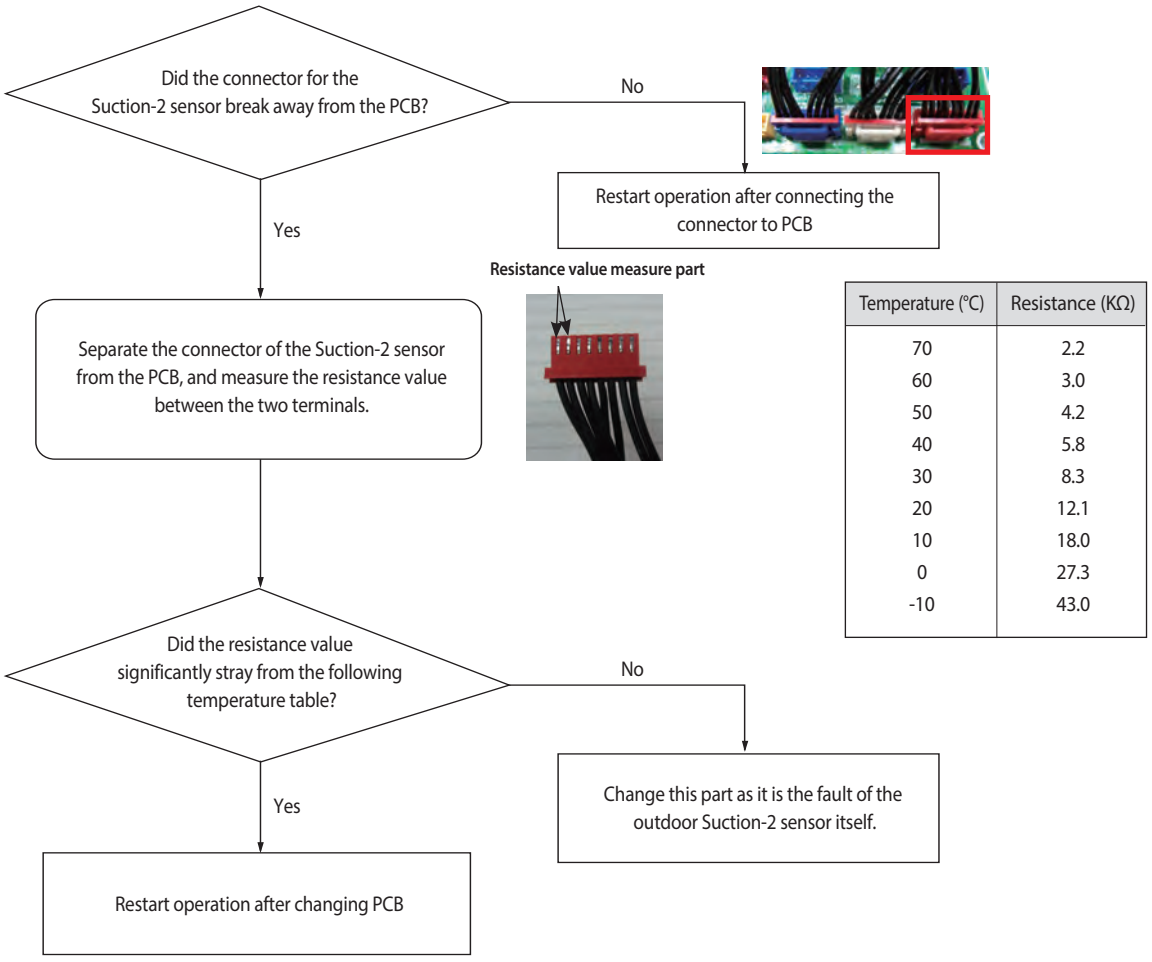


Temperature(°C)	Resistance(KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-53 Suction-2 Temperature Sensor Error (OPEN/SHORT)

Outdoor unit display	E323
Indoor unit display	◑(Operation) ×(Reservation) ◑(Blast) ×(Filter) ×(Defrost)
Judgment Method	• Refer to the judgment method below.
Special Cause	• Disconnection or breakdown of relevant sensor

1. Inspection Method

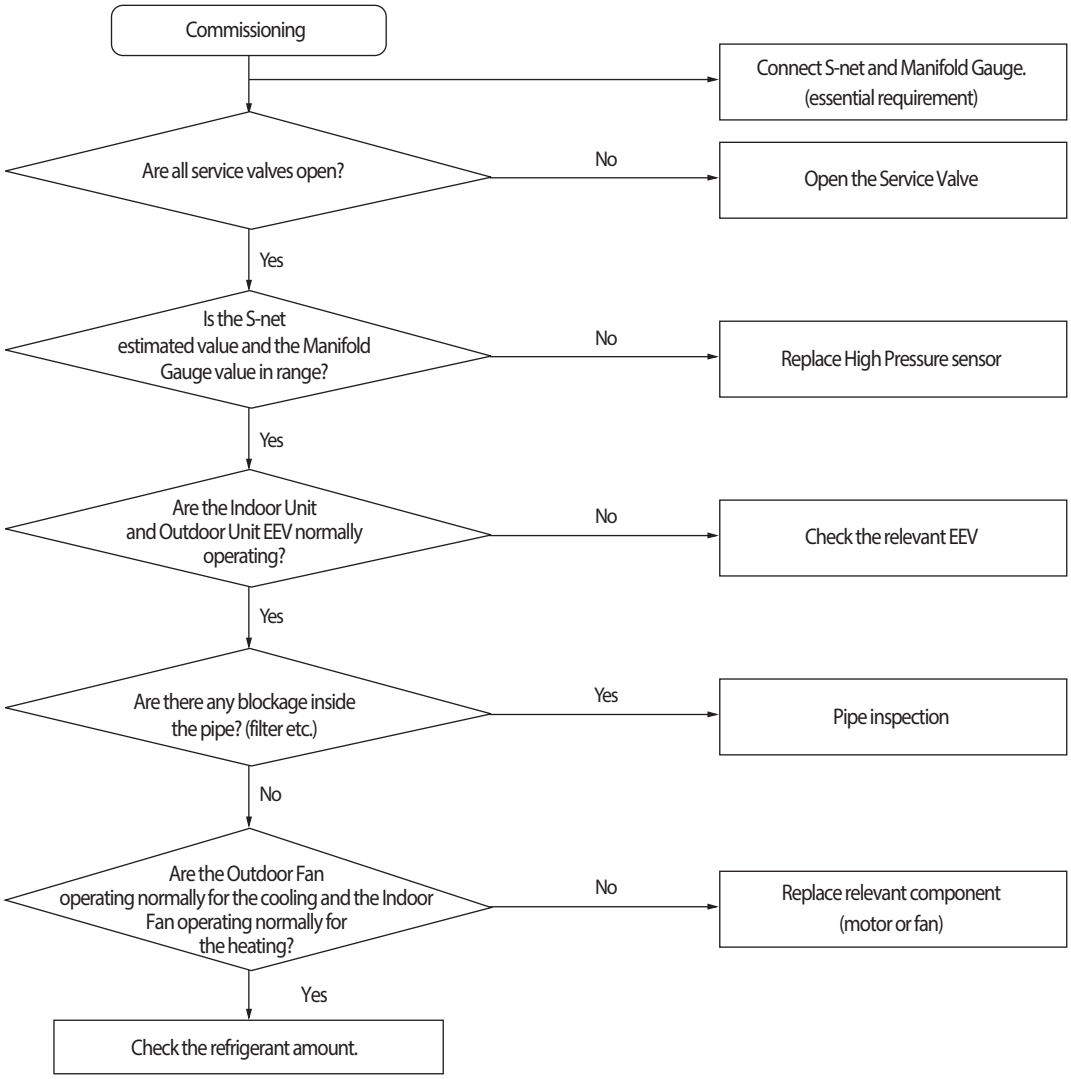


Temperature (°C)	Resistance (KΩ)
70	2.2
60	3.0
50	4.2
40	5.8
30	8.3
20	12.1
10	18.0
0	27.3
-10	43.0

4-4-54 E407 : Comp. Down due to High Pressure Protection Control

Outdoor unit display	E407
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	Value of the high pressure sensor is detected at 40kg/cm^2 or more
Cause of problem	**<Cooling Operation>** · Outdoor unit fan motor problem (constrained, defective) · Motor driver defective or wire is cut · Outdoor heat exchanger is contaminated. · Service valve locked/Fill refrigerant **<Heating Operation>** · Outdoor unit fan motor problem (constrained, defective) · Motor driver defective or wire is cut · Service valve locked/Excessive refrigerant

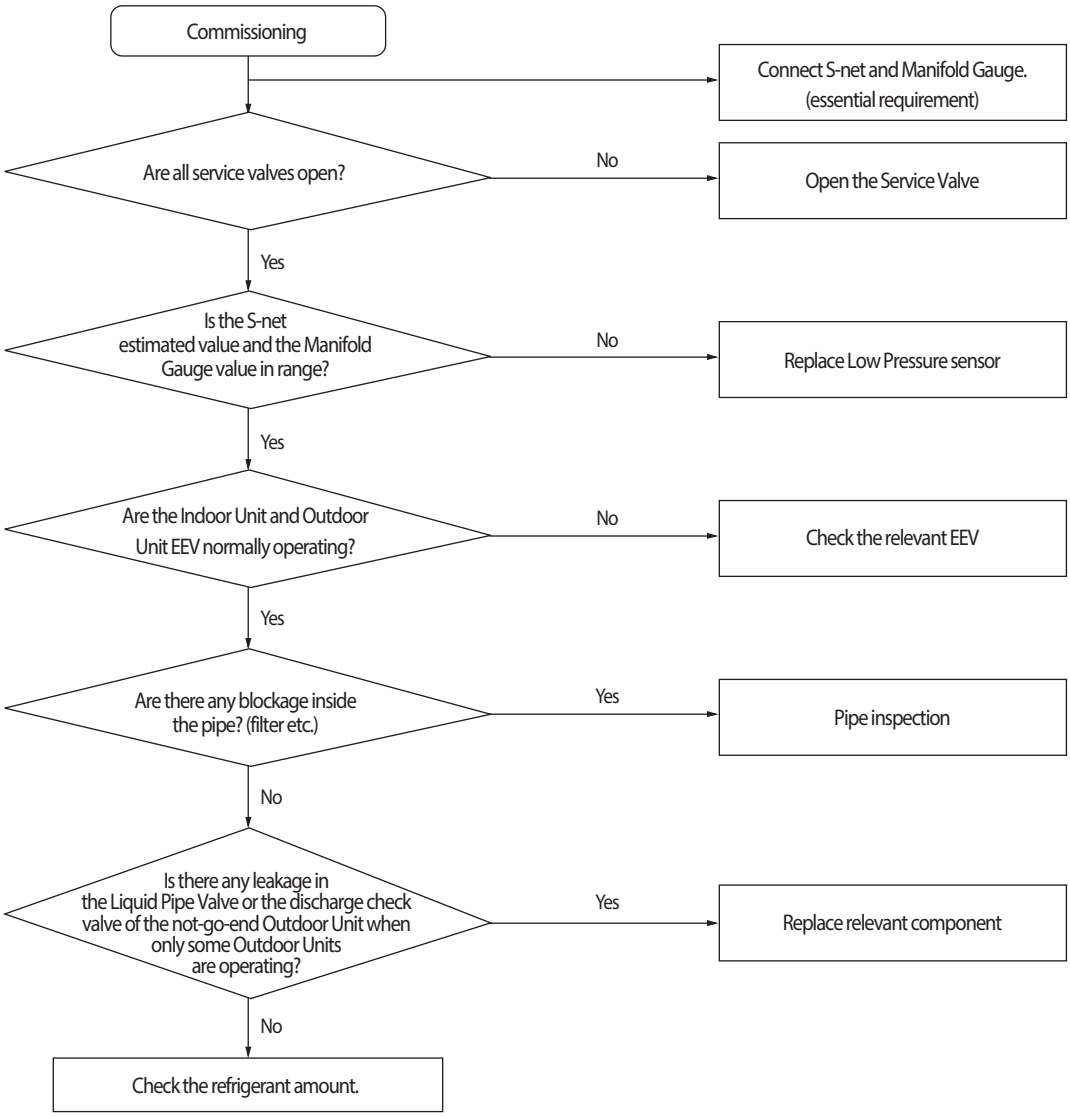
1. Cause of problem



4-4-55 E410 : Comp. Down due to Low Pressure Protection Control

Outdoor unit display	E410
Indoor unit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	· Inspection when the value of low pressure sensor is 0.8kg//cm^2, or less for air conditioning and 0.6kg//cm^2 for heating
Cause of problem	· Refrigerant shortage · Electronic expansion valve blocked · Service valve blocked · Low pressure sensor defective · Leakage of compressor discharge check valve of not-go-end outdoor unit · Error may be found when used in temperature range outside the conditions of use (Operating outside temperature at -20°C or less for heating and operating outside temperature at -5°C or less for Cooling)

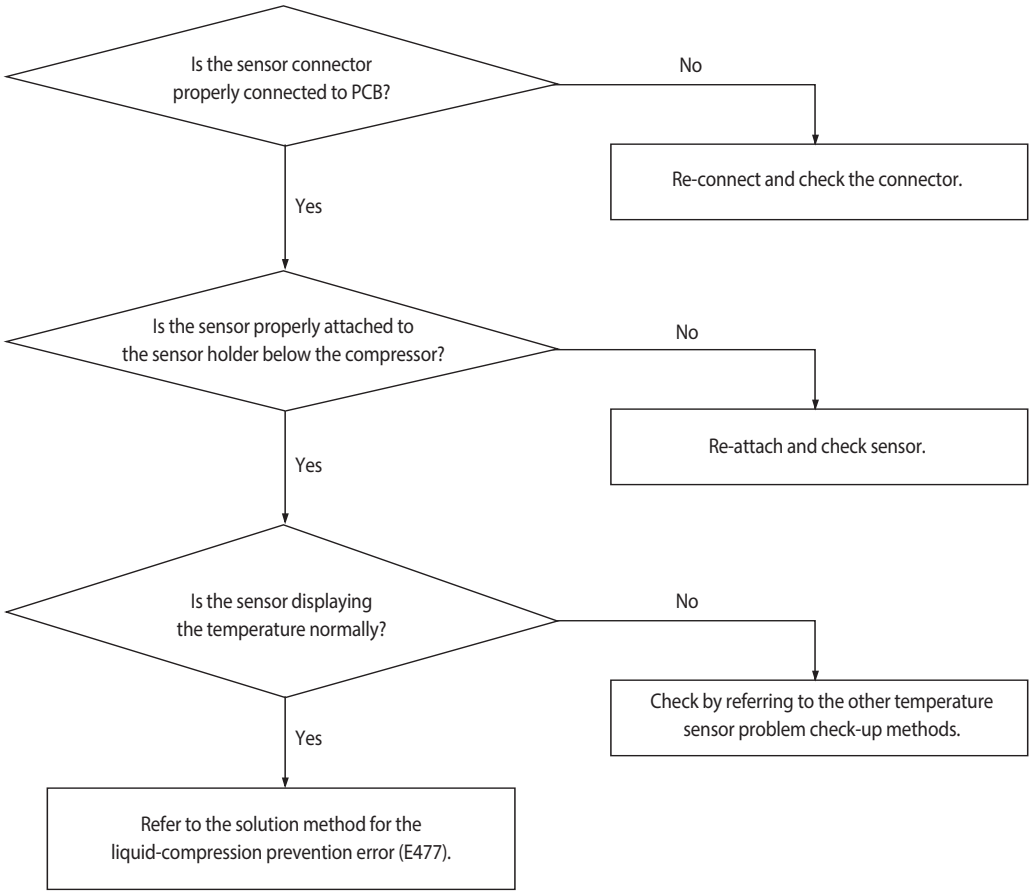
1. Cause of problem



4-4-56 Sump Sensor Error Due to Protection Control

Outdoor Unit Display	E413
Indoor Unit Display	×(Operation) ◑(Reservation) ◑(Blast) ◑(Filter) ×(Defrost)
Judgment Method	• Maintain sump temperature of 95℃ or more for five minutes
Special Cause	• Compressor loading faulty/sump temperature sensor faulty

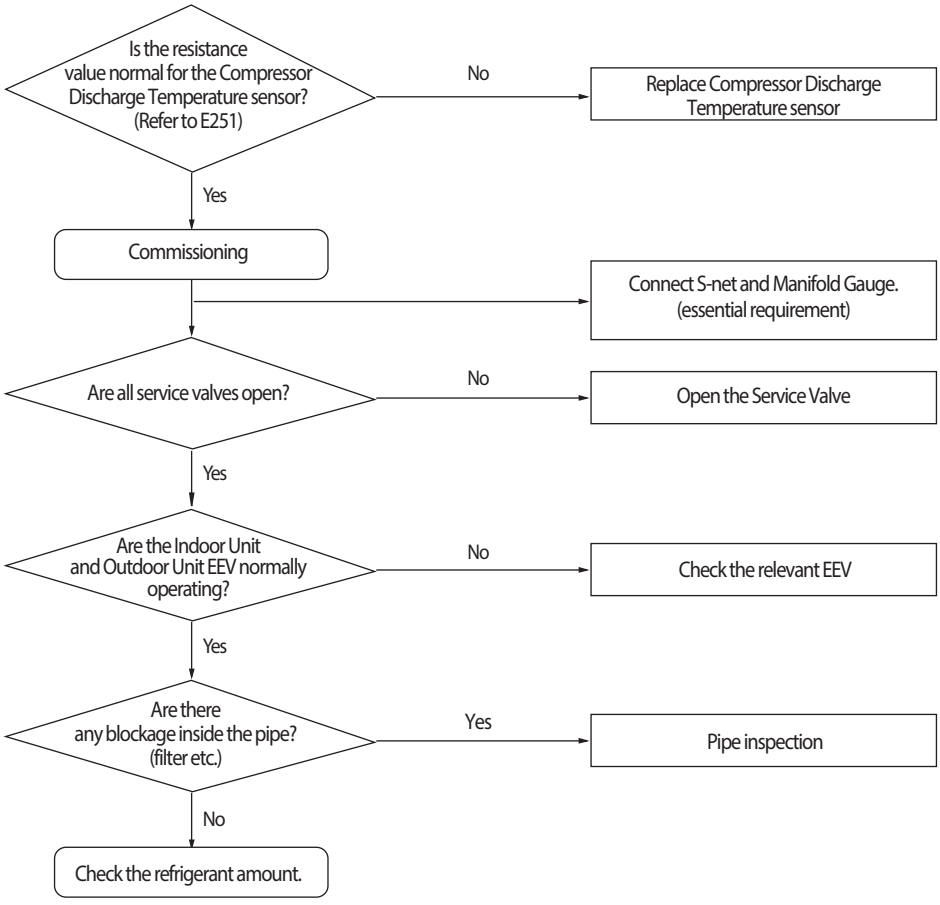
1. Inspection Method



4-4-57 E416 : Comp. Down due to Compressor Discharge Temperature sensor

Outdoor Unit Display	E416
Indoor Unit Display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	· When value of compressor discharge temperature sensor is checked at 120℃ or more .
Cause of problem	· Refrigerant shortage · Electronic expansion valve is blocked. · Service valve blocked · Defective discharge temperature sensor · Blocked pipe and defective · Leakage of compressor discharge check valve of not-go-end outdoor unit

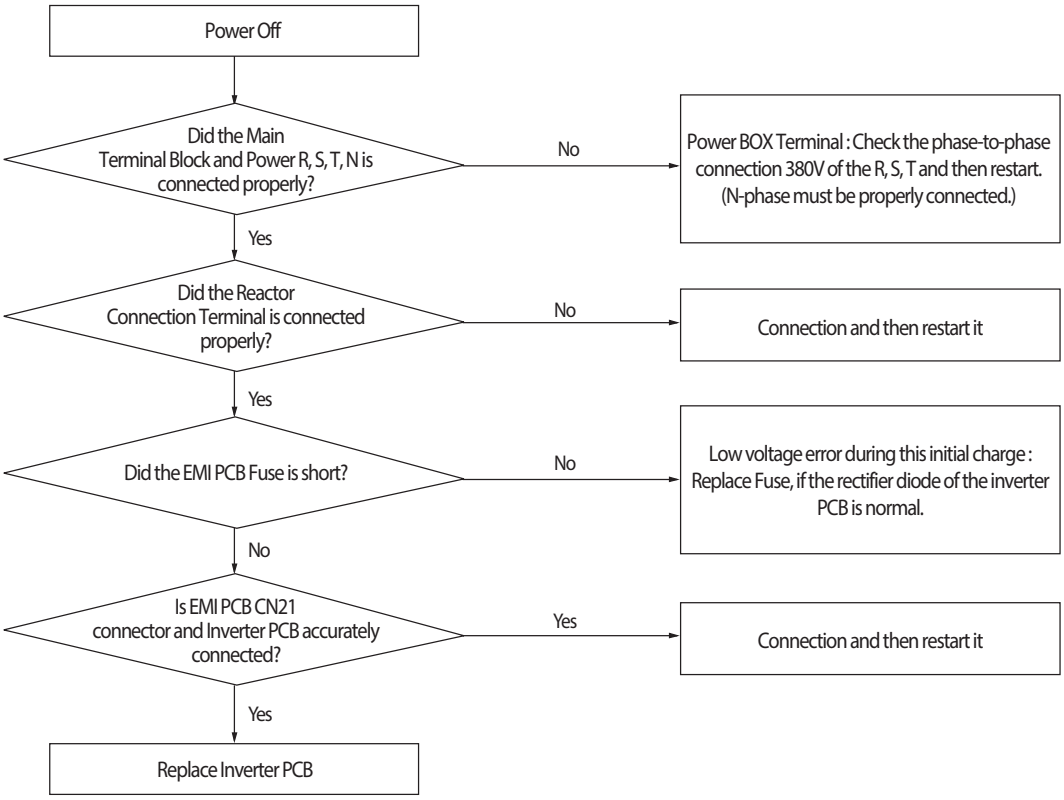
1. Cause of problem



4-4-58 3-phase Input Wiring error

Outdoor unit display	E425
Indoorunit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	. When turn on the power and check the status of the power from the inverter. If the phase does not connect the power(no phase) : E425 or E466 (E366) is displayed (Air conditioner to maintain the normal state.) However) N-phase must be properly connected.
Cause of problem	· Check the input wiring · EMI Fuse short

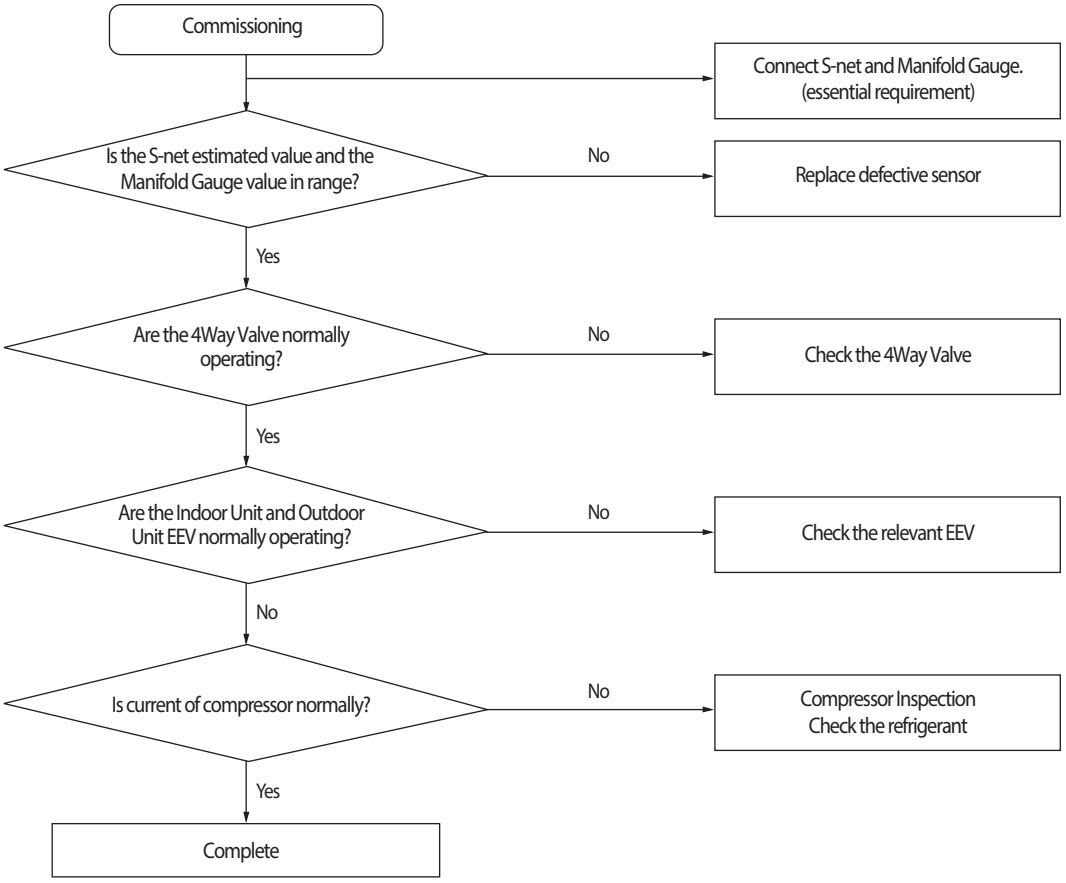
1. Cause of problem



4-4-59 E428 : Comp. Down by Compression Ratio Control

Outdoor unit display	E428
Indoorunit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	· When compression ratio (high pressure+1)/(low pressure+1) less than 1.5 and lasts for 10 minutes or more · Differential pressure (high pressure - low pressure) less than 0.4 MPa.g and lasts for 10 minutes or more
Cause of problem	· Indoor and Outdoor EEV breakdown · 4Way Valve breakdown · High and Low pressure sensor defective · Refrigerant shortage

1. Cause of problem



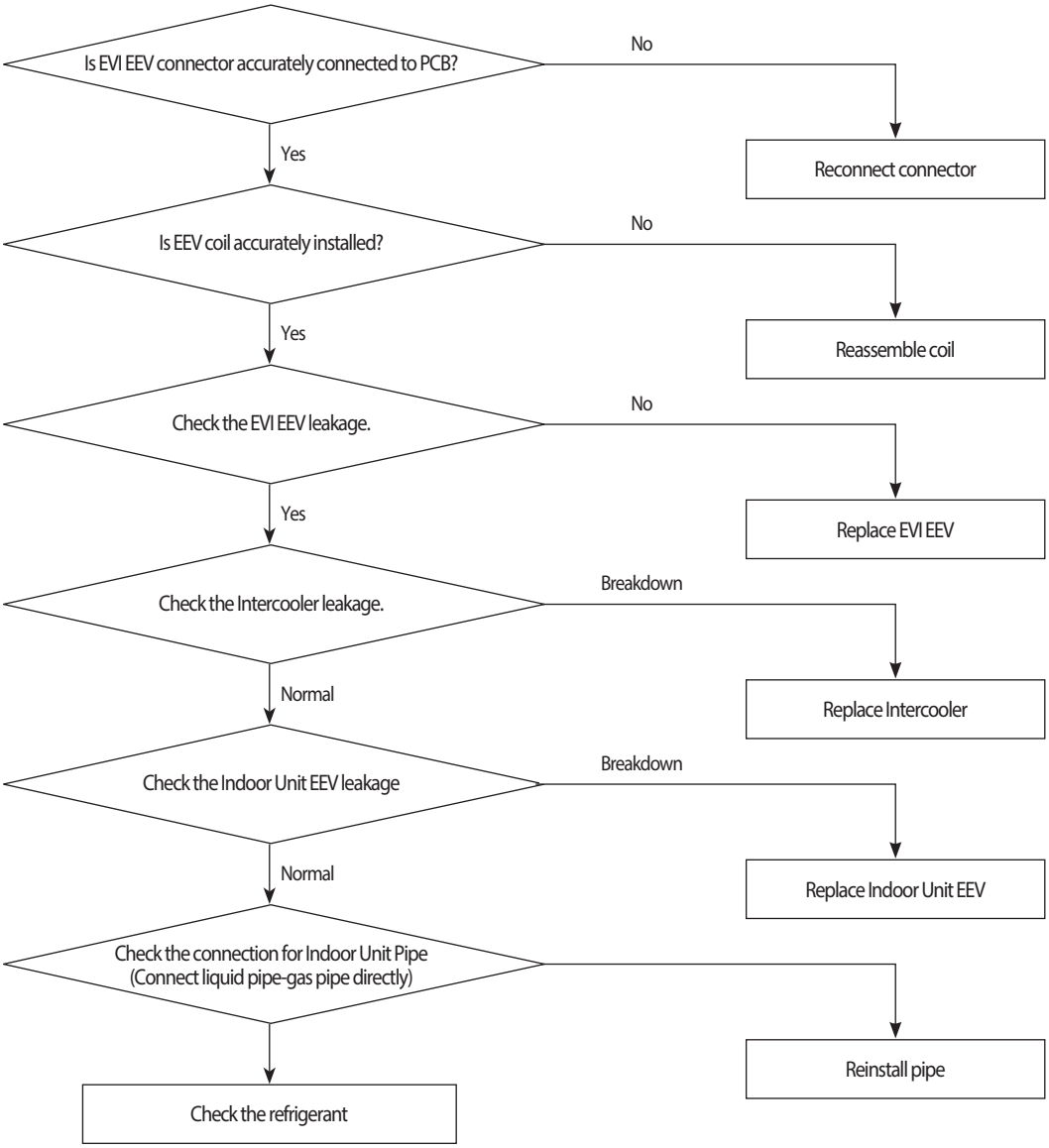
4-4-60 EVI EEV Open error

Outdoor unit display	E438
Indoorunit display	-
Judgment Method	. DSH <10 °C, EVI Out-in <= 0°C & frequency> 65Hz 40 minutes maintaining
Cause of problem	. EVI EEV and Intercooler leakage, excessive refrigerant amount, Outdoor Check Valve inserted opposite. . Indoor Unit EEV leakage, direct connection between Indoor Liquid Pipe and the Gas Pipe.

※ Indoor EEV leakage can be easily checked during the operation of cooling operation and during the not-go-end blast operation.
(In case it is normal, the EVA In and Out temperatures for the blast may rise.)

※ If cooling operation is operated for low temperature with excessive refrigerant amount, then the DSH may descend.

1. Cause of problem



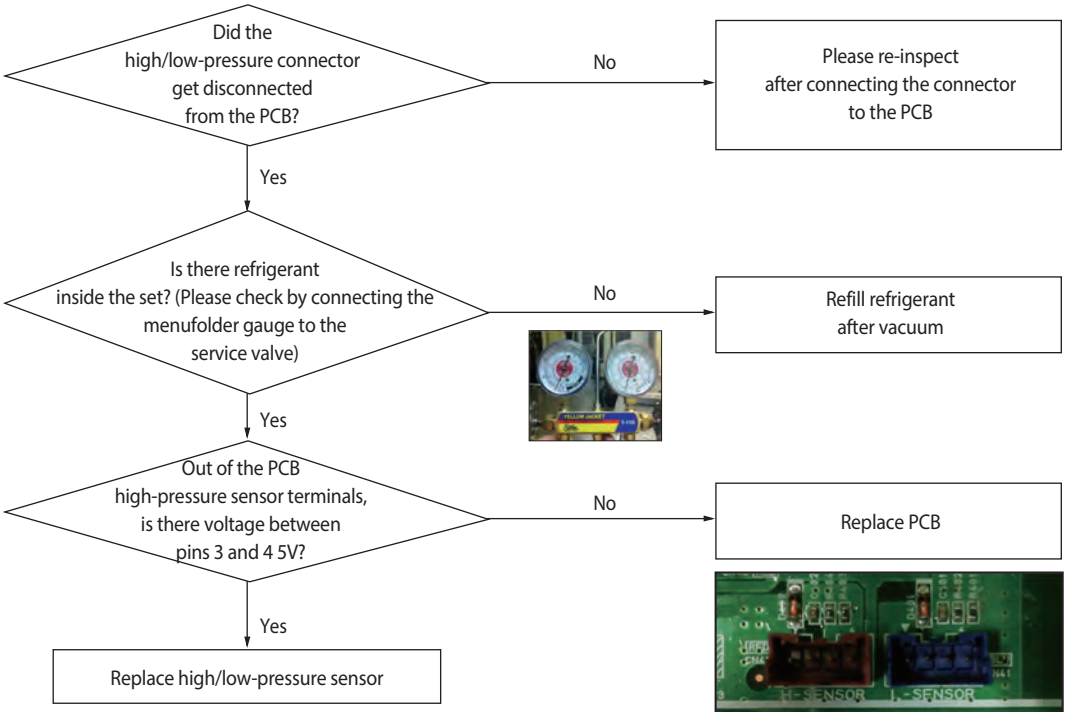
4-4-61 Refrigerant Leakage Error

Outdoor Unit Display	E439
Indoor Unit Display	×(Operation) ◑(Reservation) ◑(Blast) ◑(Filter) ×(Defrost)
Judgment Method	• Refer to the judgment method below.
Special Cause	• Leakage of refrigerant, simultaneous malfunction of pressure sensor.

■ Low-pressure sensor OPEN/SHORT error determination method

1. Identifies from when power is supplied or 2 minutes after RESET, and only when set is stopped.
2. An E439 error will occur if the input voltage standard ranges of 0.5V ~ 4.95V of both the high- and low-pressure sensors are exceeded.
3. Will occur if the measured value of both high- and low-pressure sensors is 1kgf/cm²G

1. Inspection method



The ▼ mark is the 1st pin on the PCB.

4-4-62 E440 , E442 : Prohibition of the operation of Compressor due to Ooutdoor Temperature

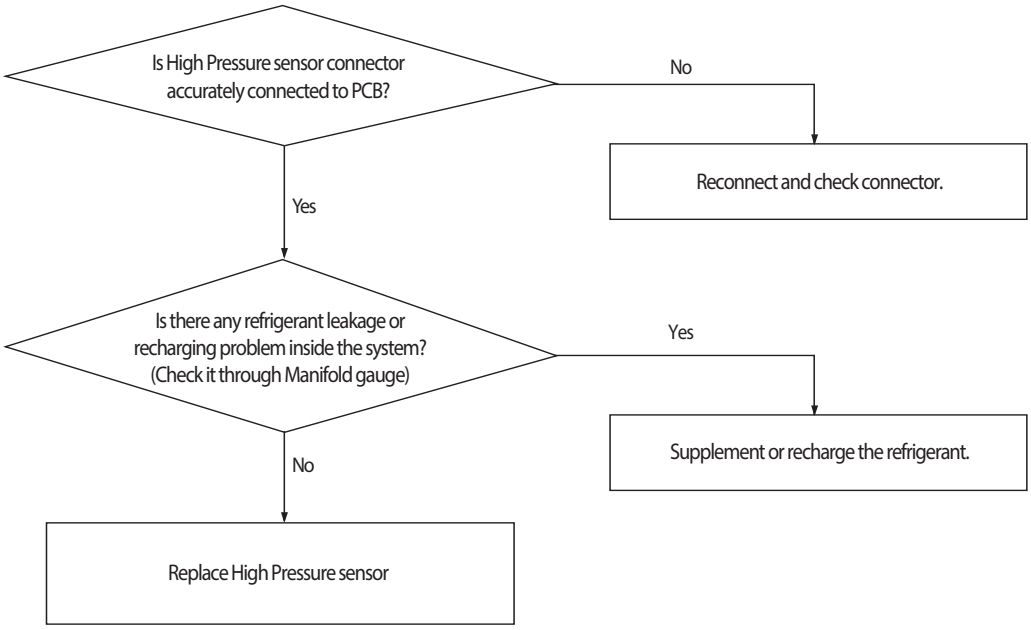
Outdoor unit display	E440 (prohibit heating operation in outdoor temperature over 30°C) E442 (prohibit heat filling operation in outdoor temperature over 15°C)
Indoor unit display	No sign
Criteria	E440 : Right before an outdoor unit starts heating operation by On signal of an indoor Remocon, the error occurs and prohibits the operation in outdoor temperature over 30°C E442 : Right before operating heat refrigerant filling mode by the K1 switch of an outdoor PCB, the error occurs and prohibits the operation in outdoor temperature over 15°C
Cause of problem	· Operation Prohibition mode by the indoor temperature limit

1. How to check
   The above error code is not caused by a product's problem but a function to protect the product by limiting the available temperature range so please refer to the usable temperature range in the product manual.
   If the error code is displayed despite a condition that does not belong to any of the above diagnosis methods, read the temperature sensor value of the outdoor inlet air with View Mode or S-net, and if the actual outdoor temperature is different, please replace the temperature sensor.

4-4-63 High Pressure Standard Not Met before Air Conditioning (Inability to Re-operate)

Outdoor unit display	E443
Indoorunit display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	. Operation should be forbidden if High Pressure sensor value of the Main Unit before the pump down is started at 2.2kg/cm^{2}g or below for air-conditioning and 1.0kg/cm^{2}G or less for heating for three consecutive seconds. (Restarting operation is not possible, and an error displayed on the indoor unit.)
Cause of problem	· Refrigerant leakage/fault in High Pressure sensor .

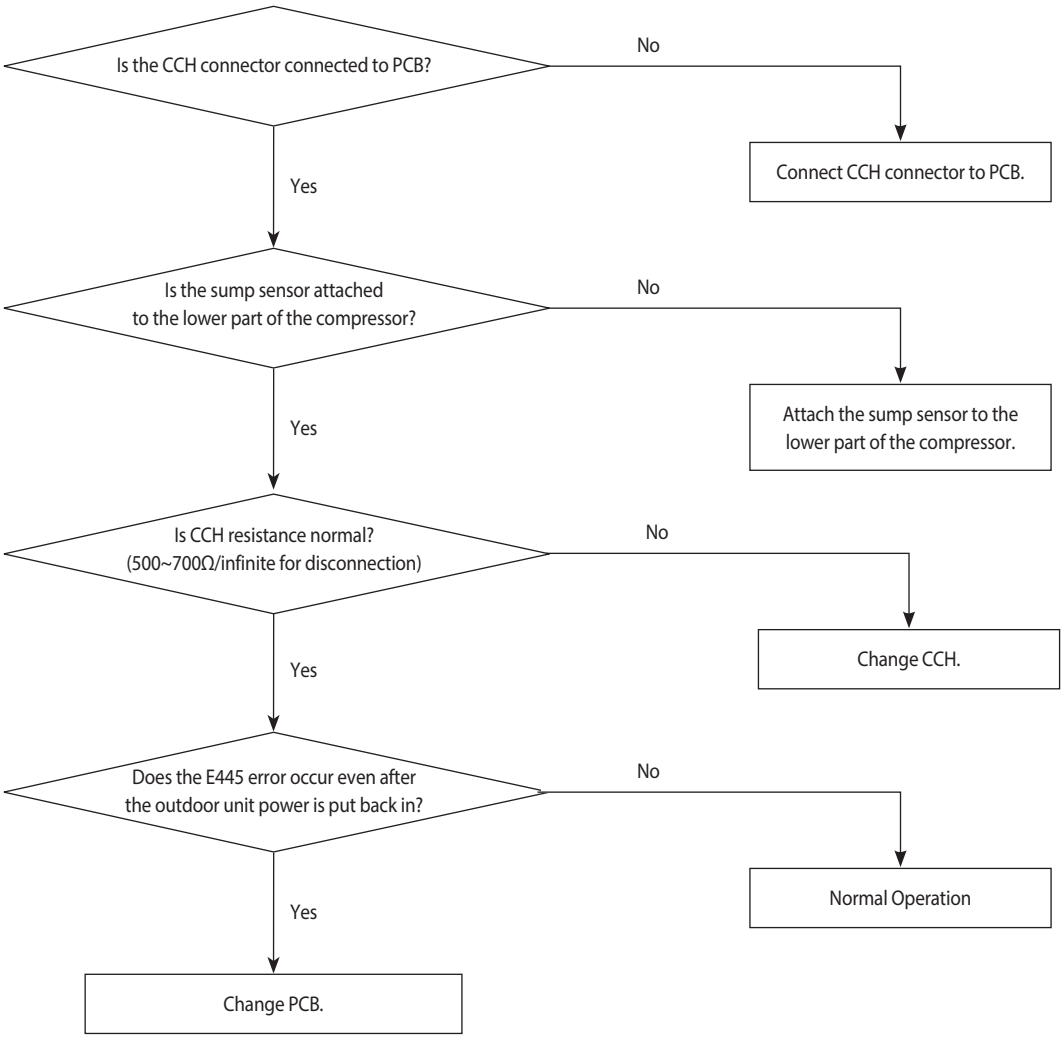
1. Cause of problem



4-4-64 CCH Malfunction and Sump Sensor Miswiring Error

Outdoor Unit Display	E445
Indoor Unit Display	-
Judgment Method	• Refer to the judgment method below
Special Cause	• CCH Connector PCB is not connected /Sump sensor compressor separated / Own problem of CCH

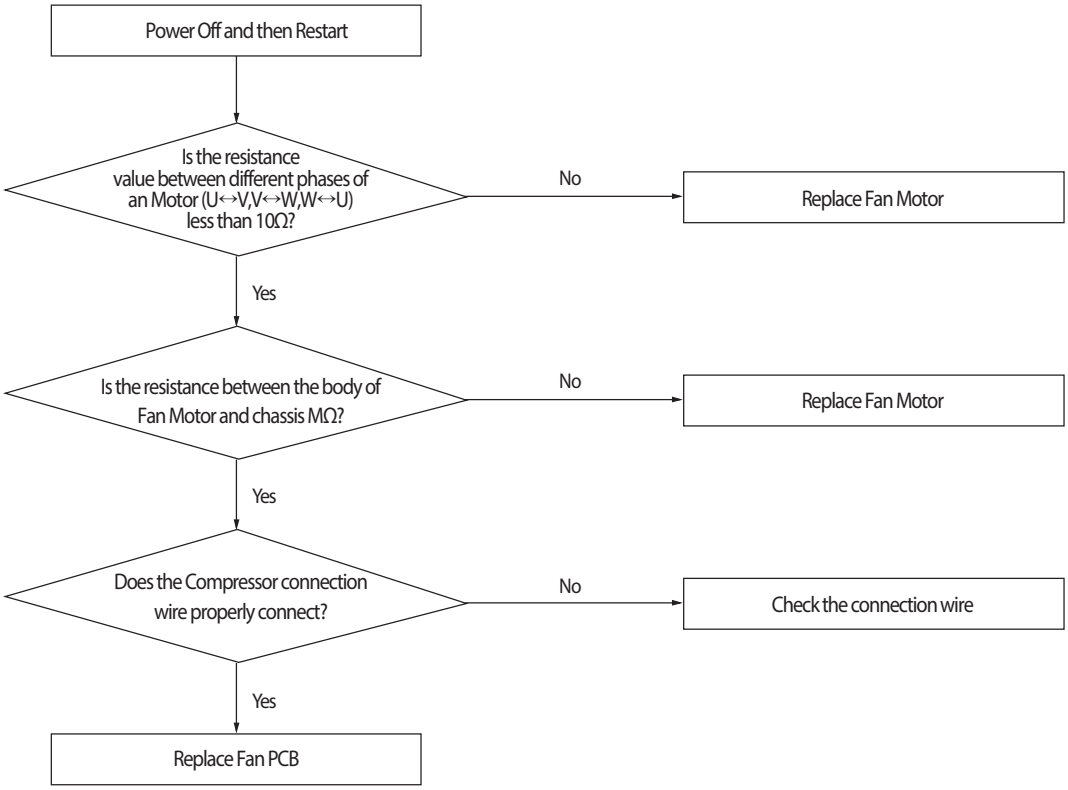
1. Judgment Method
   Tini = Sump temperature when entering the CH operation delay condition
   Tlast= Sump temperature when maintaining CH operation delay for two hours
   Outside Air Temperature Sensor Value: Outside air temperature when maintaining CH operation delay for two hours
   ① Tlast – Tini < 2°C
   ② Tlast < Outside Air Temperature Sensor Value + 2°C
   ③ Outside Air Temperature Sensor Value < 30°C
   If ① , ② and ③ are satisfied at the same time, then display E445.



4-4-65 Fan starting error

Outdoor unit display	E446 (FAN PCB(FAN1)) E346 (FAN PCB(FAN2))
Judgment Method	· Startup, and then if the speed increase is not normally. · Detected by H/W or S/W
Cause of problem	· Compressor connection error · Defective Compressor · Defective PCB

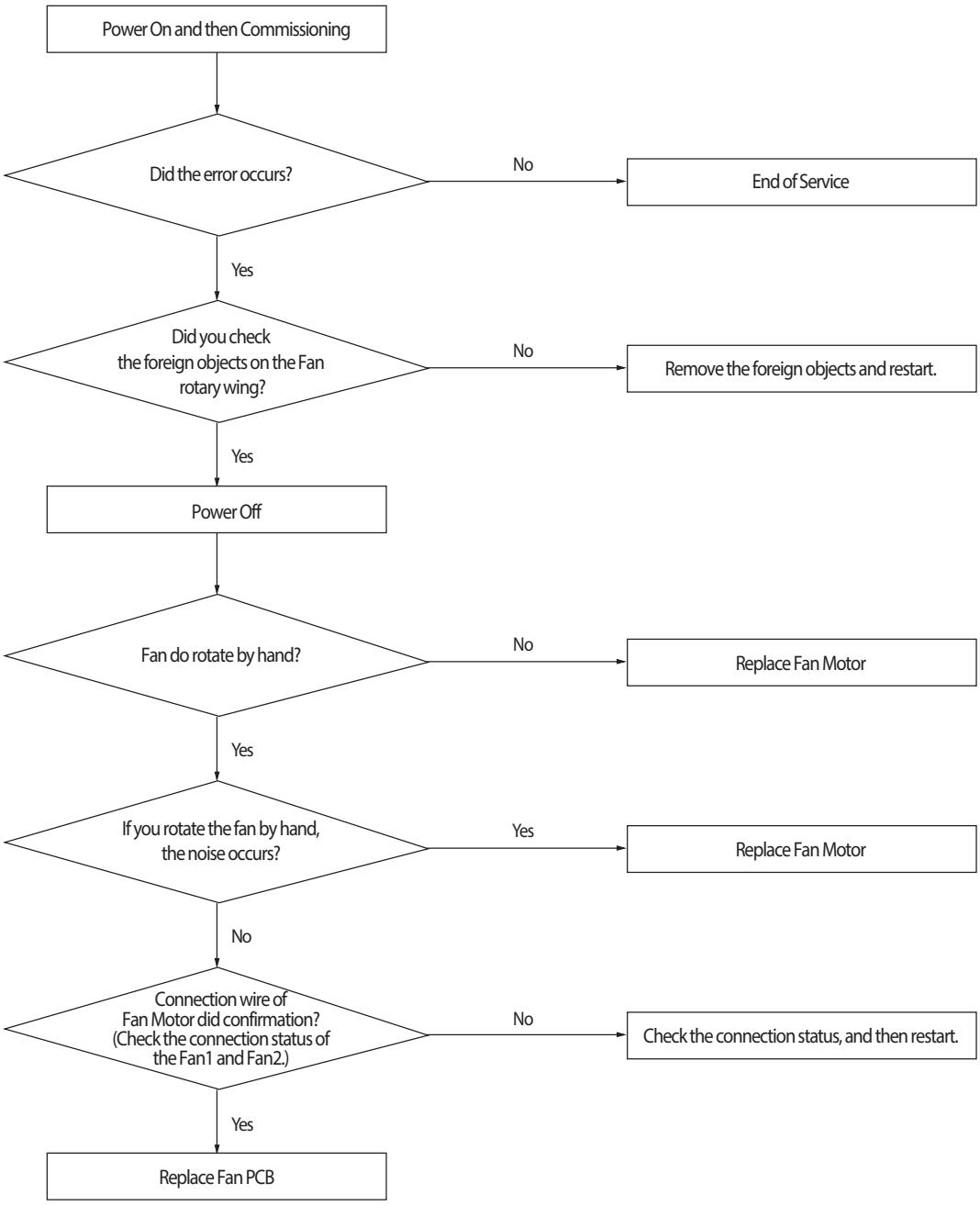
1. Cause of problem



4-4-66 Fan lock error

Outdoor unit display	E448 (FAN PCB(FAN1)) E348 (FAN PCB(FAN2))
Judgment Method	· Is checked symptoms by phase current of Fan Motor.
Cause of problem	· Fan Motor connection error. · Defective Fan · Defective PCB

1. Cause of problem



4-4-67 Momentary Blackout error

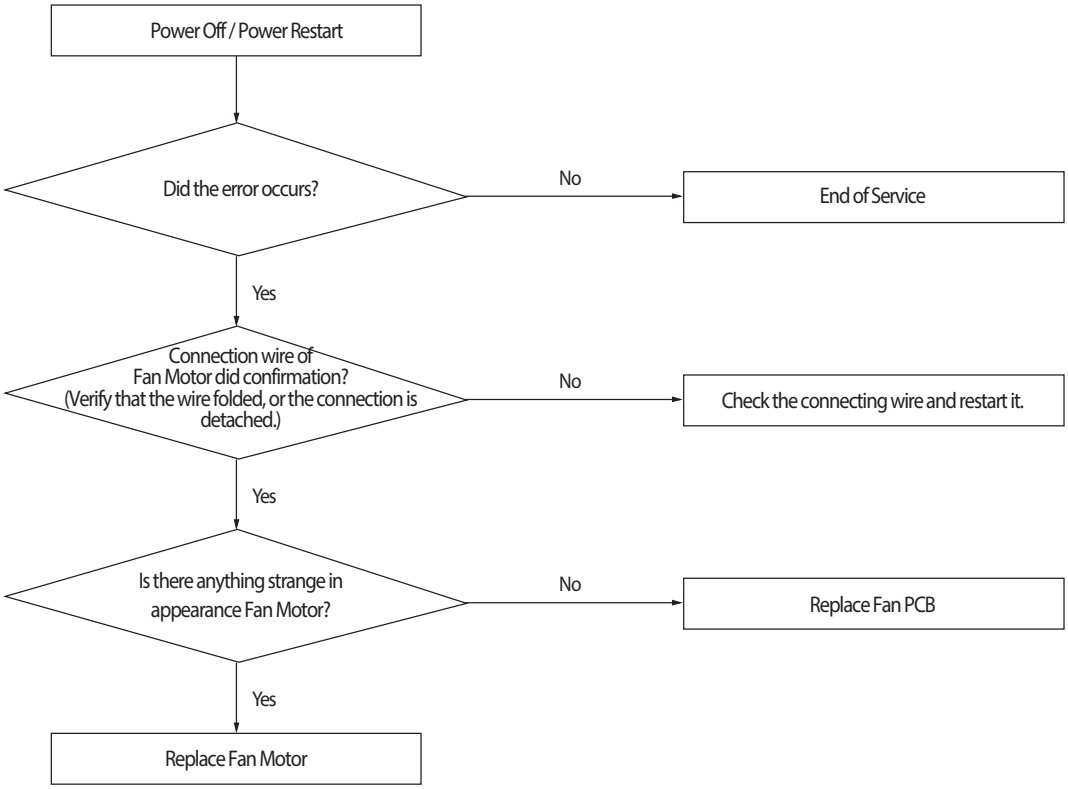
Outdoor Unit Display	E452
Indoor Unit Display	×(Operation) ◑ (Reservation) ◑ (Blast) ◑ (Filter) ×(Defrost)
Judgment Method	· Momentary stop of compressor due to momentary blackout.
Cause of problem	· Momentary stop of compressor due to momentary blackout.

1. Precautions : Replace Hub PCB or Main Hub Connection wire.

4-4-68 Outdoor Fan Motor overheating

Outdoor unit display	E453 (FAN PCB(FAN1)) E353 (FAN PCB(FAN2))
Judgment Method	· Overheating due to the internal sensor of the Fan Motor.
Cause of problem	· Defective connection wire · Defective Fan Motor · Defective PCB · Defective installation conditions

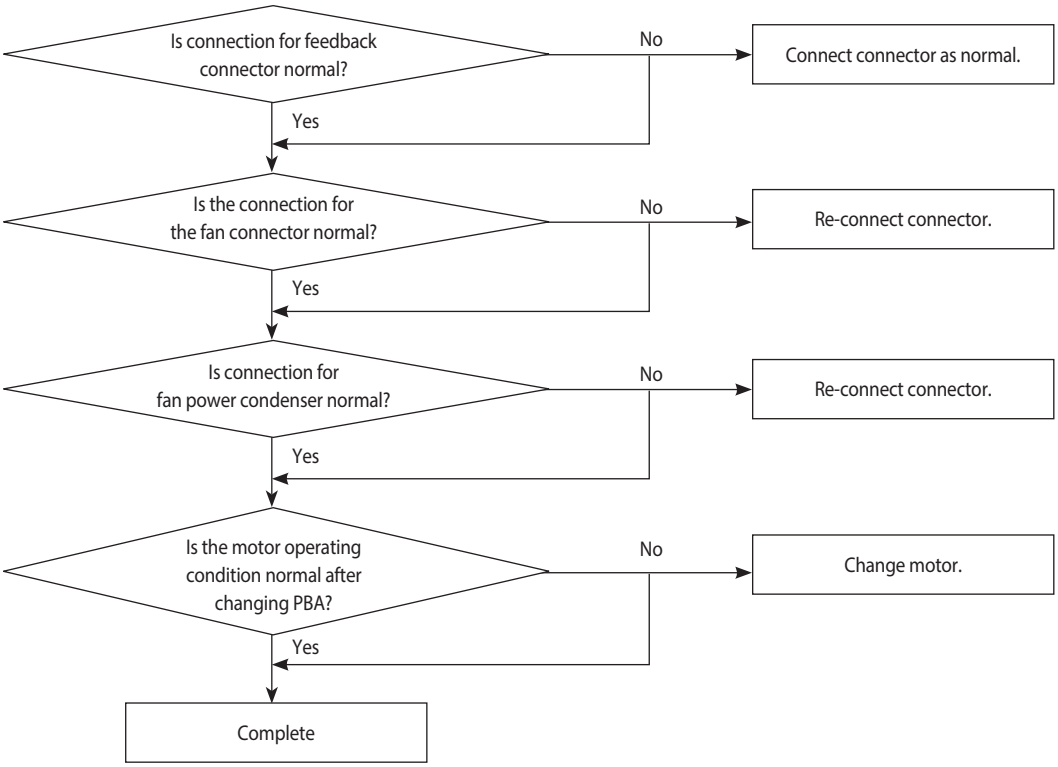
1. Cause of problem



4-4-69 Outdoor Unit Fan Motor RPM Error

Outdoor Unit Display	E454
Indoor Unit Display	-
Judgment Method	· In case the number of the revolutions of the outdoor unit fan motor in motion is different by 100 rpm or more compared to the instructed value.
Special Cause	· Outdoor unit fan motor constrained or faulty of operation

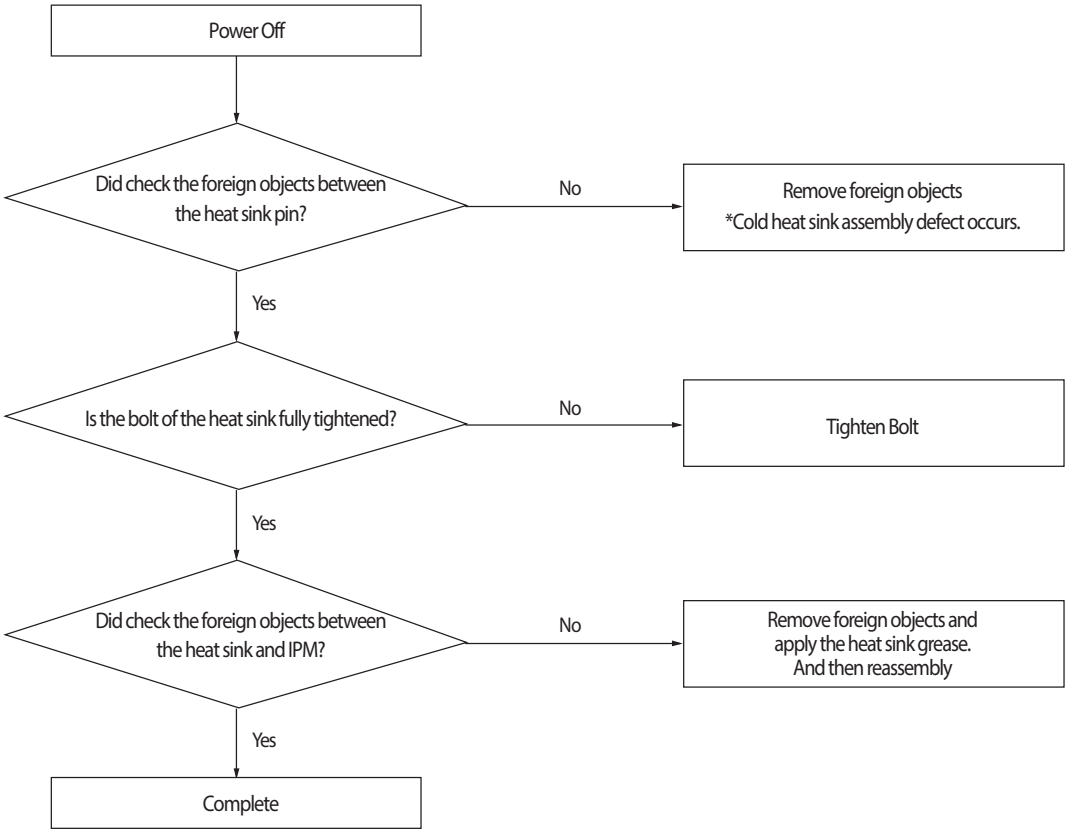
1. Inspection Method



4-4-70 Fan IPM Overheat error

Outdoor unit display	E455 (FAN1 PCB) E355 (FAN2 PCB)
Judgment Method	· IPM internal temperature more than 85°C (E455, E355)
Cause of problem	· Heat sink and IPM assembly defective. · Defective heat sink cooling

1. Cause of problem



4-4-71 Over-Voltage Error of an Outdoor Fan Motor

Outdoor unit display	E456
Indoor unit display	-
Criteria	· When the current of an operating outdoor fan motor is more then 7A for 1 minute
Cause of problem	· Outdoor fan motor lock or defect · Occurs by abrupt start or overload

1. How to check
   1) Check if outdoor fan motor rotates or is locked
   2) If it is not locked, the above error occurs due to overload and signals by abnormal operation, and it indicates the overload status. Thus, it is not breakdown.
   3) Need to check if there is a problem with fan load status

4-4-72 Counter-Rotation Error of an Outdoor Fan Motor

Outdoor unit display	E457
Indoor unit display	-
Criteria	• When the rotational direction of an outdoor fan motor is counter-clockwise before operating
Cause of problem	• Due to wind that can run the fan counter-wise

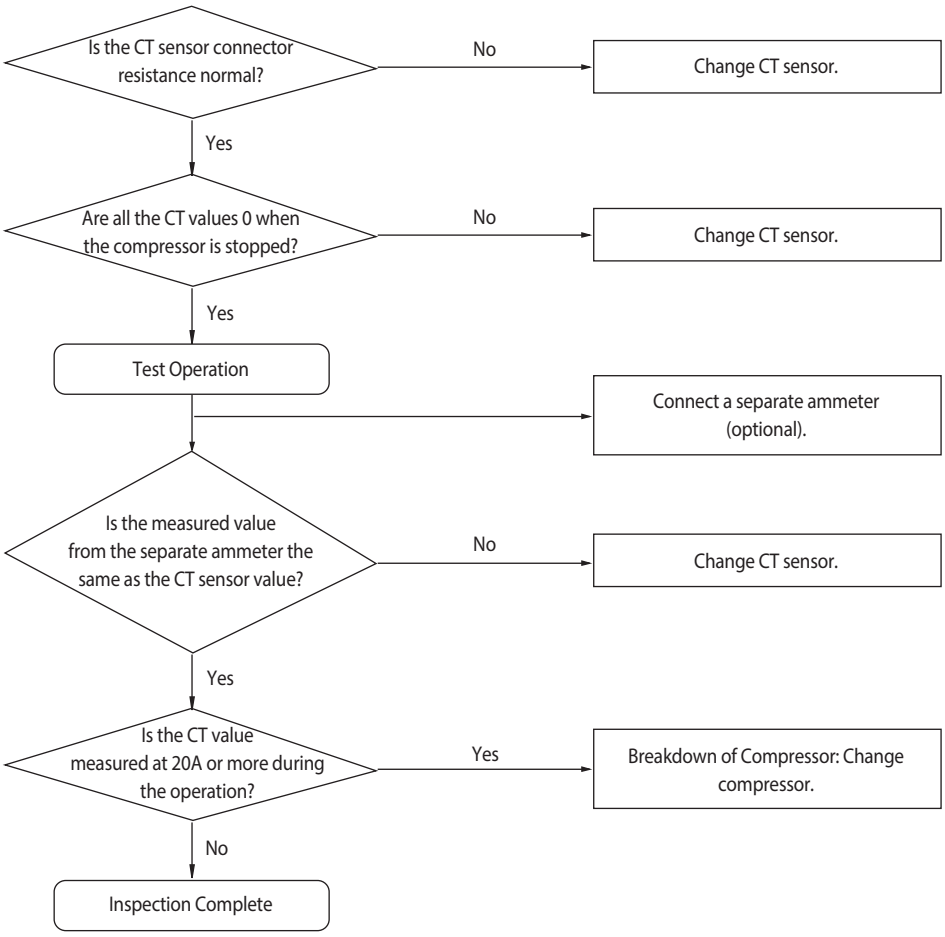
1. How to diagnose
   1) Check if the start instruction of outdoor unit's fan is counter-clockwise

2. How to check
   1) It is a signal to protect a motor by checking the operational condition of the outdoor unit's fan motor without power so as not to operate it in counter-clockwise condition.
   2) Check if there is wind strong enough to force a fan to rotate counter-clockwise where the outdoor unit is installed.

4-4-73 E458 : Compressor Excess Current Error

Outdoor Unit Display	E458
Indoor Unit Display	×(Operation) ◑(Reservation) ◑(Blast) ◑(Filter) ×(Defrost)
Judgment Method	· Error displayed if the CT sensor value of the relevant compressor is 20A or more and is maintained for more than 3 seconds.
Special Cause	· Breakdown of compressor/Faulty CT sensor

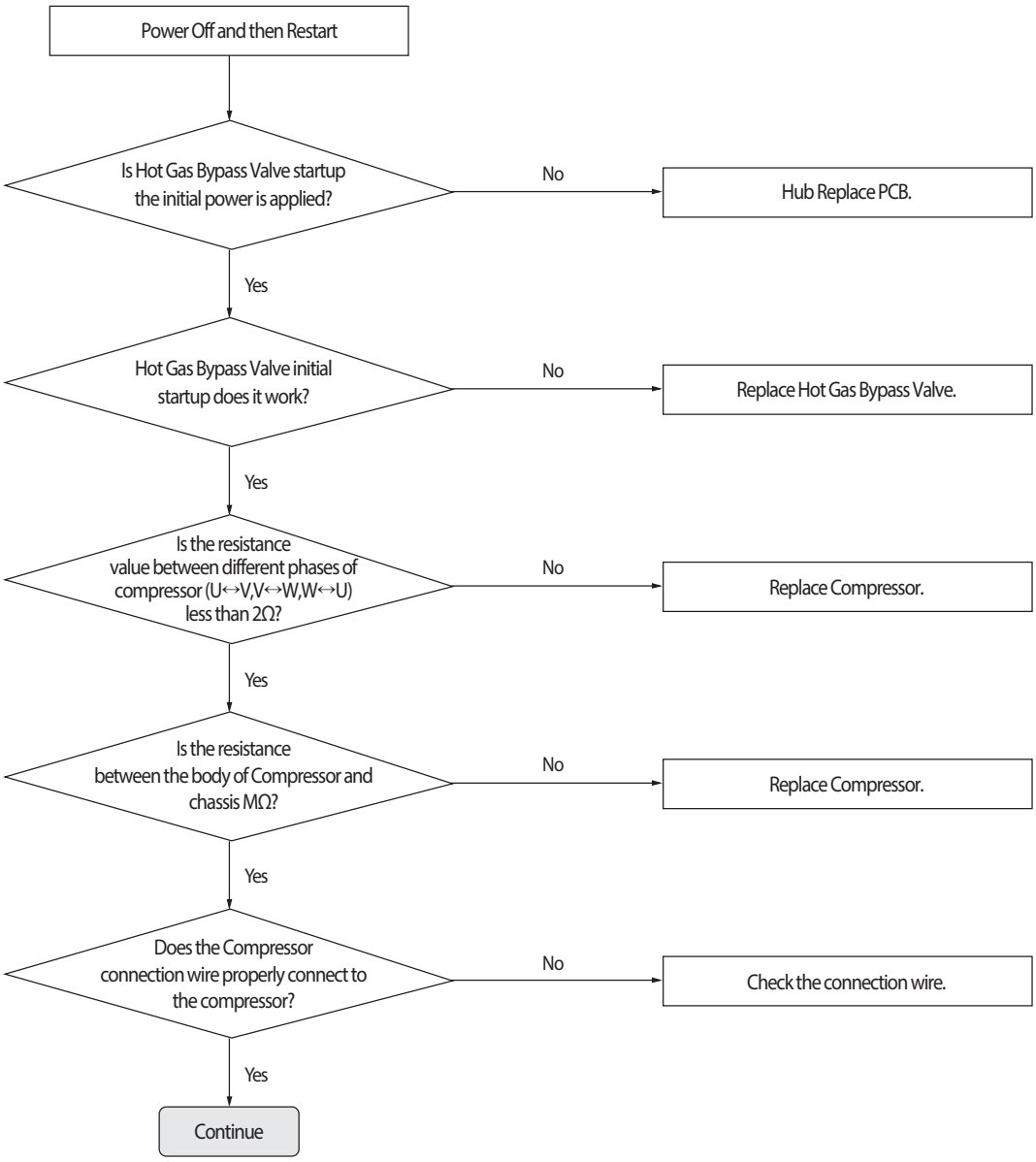
1. Inspection Method



4-4-74 Compressor starting error

Outdoor unit display	E461 (INVERTER1 PCB) E361 (INVERTER2 PCB)
Judgment Method	· Startup, and then if the speed increase is not normally. · Detected by H/W or S/W.
Cause of problem	· Compressor connection error · Defective Compressor · Defective PCB

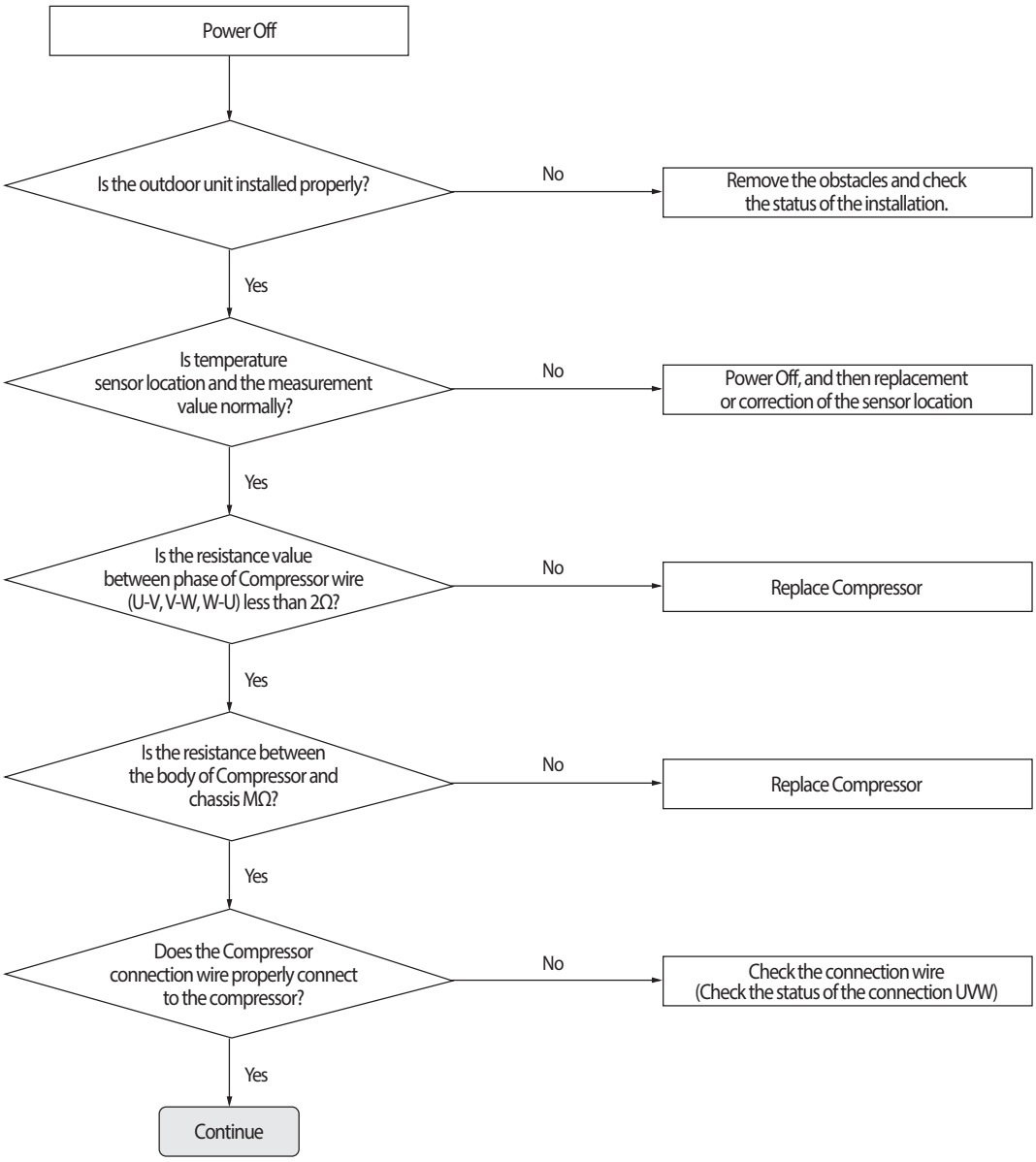
1. Cause of problem



4-4-75 Inverter Overcurrent error

Outdoor unit display	E464/E465 (INVERTER1 PCB) E364/E365 (INVERTER2 PCB)
Judgment Method	· Will occur if the overcurrent flowing in the IPM. · Detected by H/W or S/W
Cause of problem	· Installation defective · Comp. defective · PCB defective · Connection wire error · Motor defective

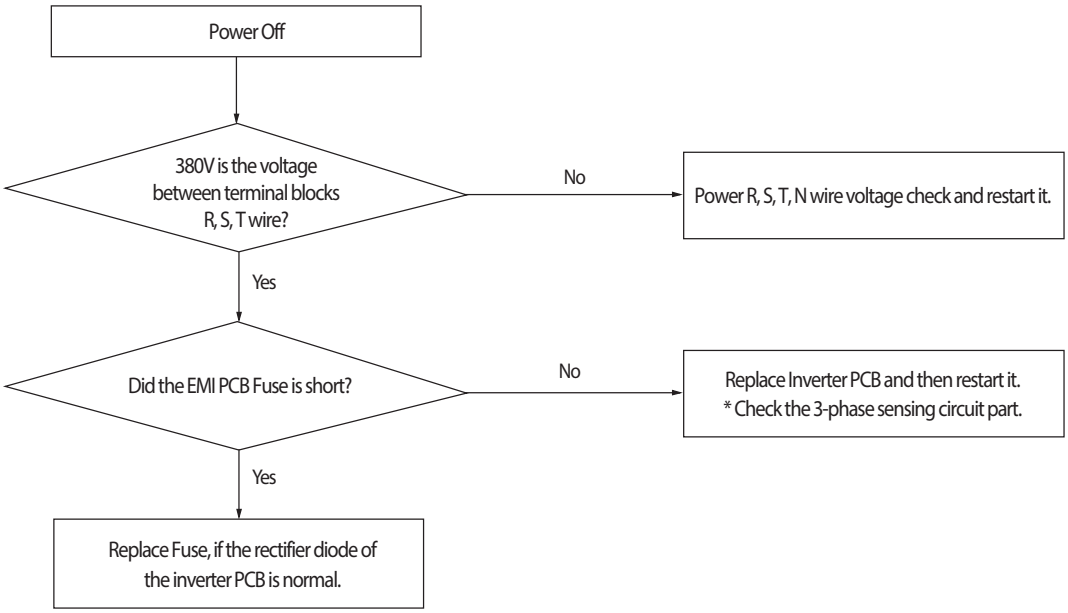
1. Cause of problem



4-4-76 Overvoltage / Low voltage error

Outdoor unit display	E466 (INVERTER1 PCB) E366 (INVERTER2 PCB)
Judgment Method	· N-phase wiring error and EMI Fuse short. · DC-Link Overvoltage / Low voltage occurs.
Cause of problem	· Check the input wiring · EMI Fuse short

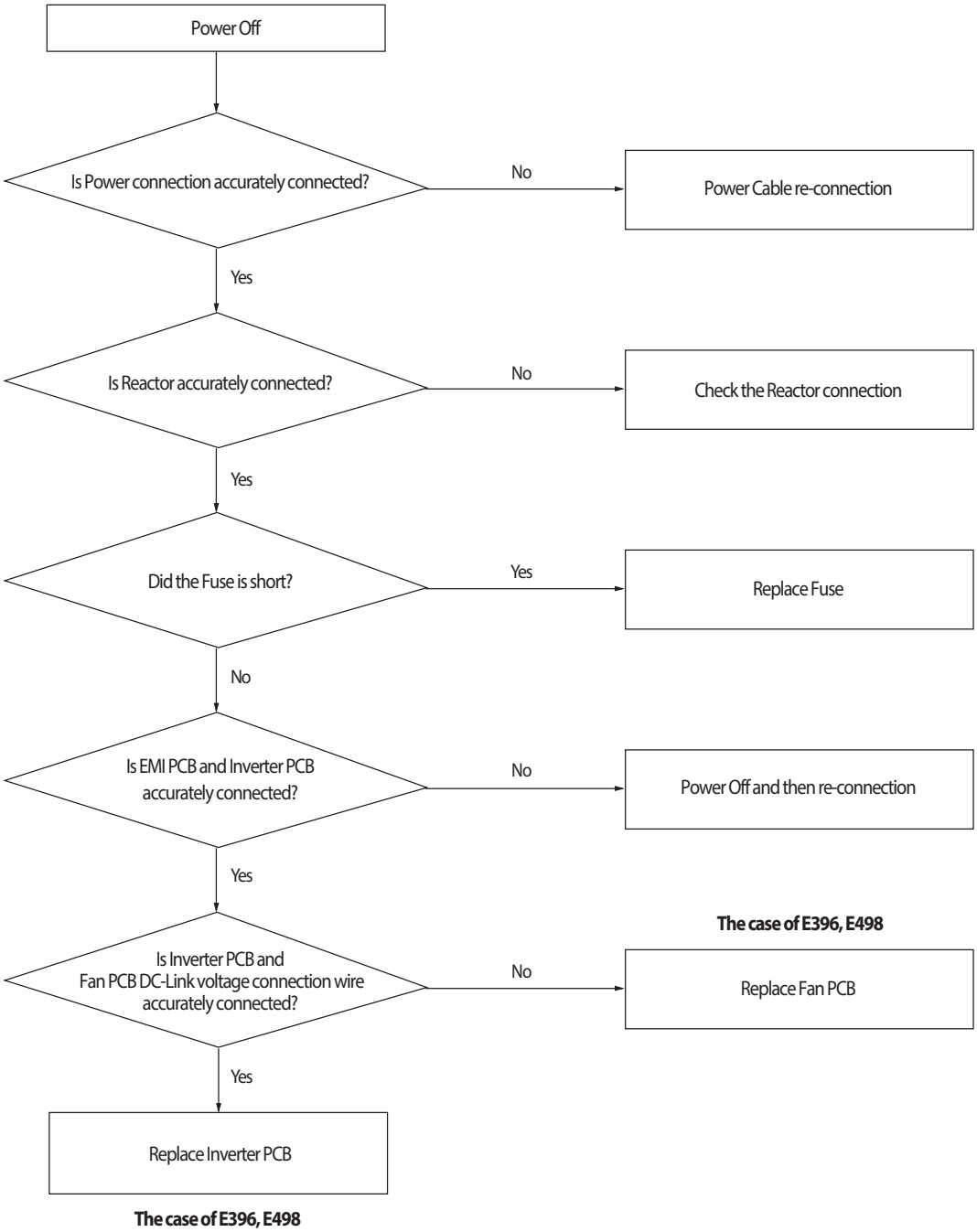
1. Cause of problem



4-4-77 DC Link voltage sensor error

Outdoor unit display	E469 (INVERTER1 PCB) E369 (INVERTER2 PCB) E496 (OUTDOOR FAN 1 PCB) E396 (OUTDOOR FAN 2 PCB)
Judgment Method	· DC voltage detection : Judged as an error if the detected value is more than 2.8V or 0.2V less than
Cause of problem	· Input voltage defective · AC Power wiring error · Momentary Overvoltage / Low voltage occurs · PCB voltage sensing circuit defective

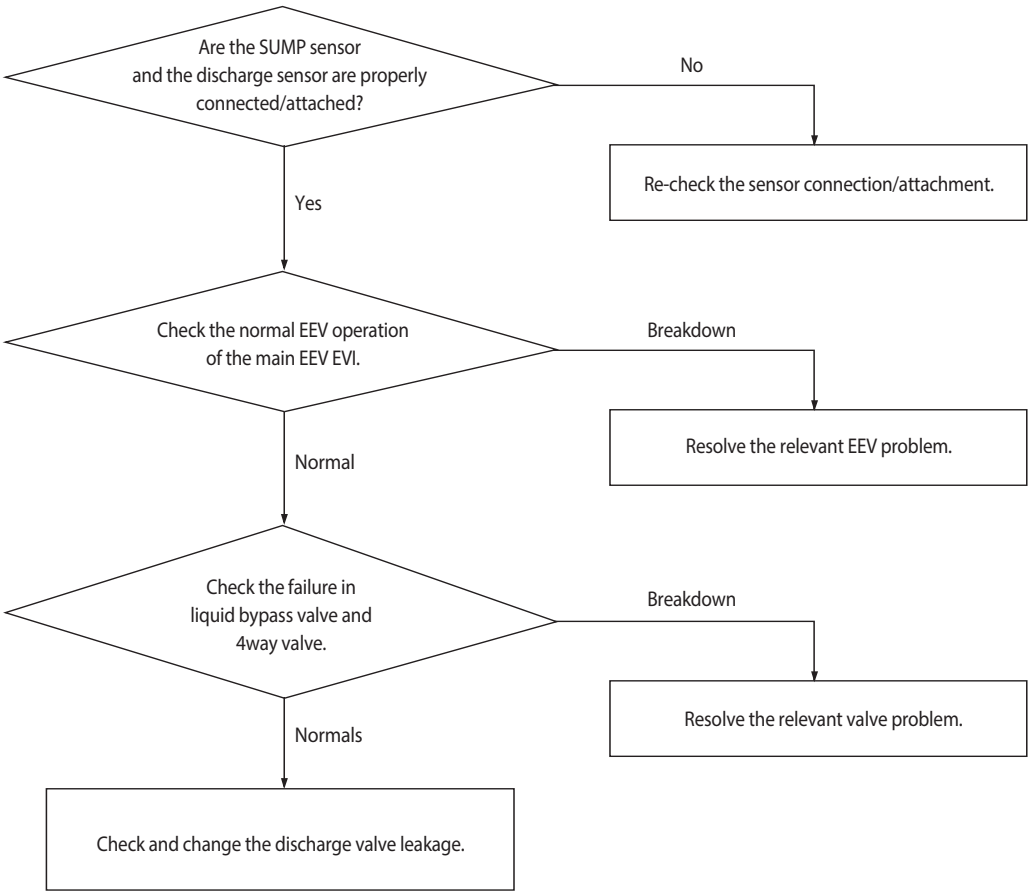
1. Cause of problem



4-4-78 Liquid Compression Prevention Control

Outdoor Unit Display	E477
Indoor Unit Display	-
Judgment Method	• SUMP temperature decrease & DSH < 5°C 25 min.
Special Cause	• EVI EEV and super cooler, liquid bypass valve leakage, refrigerant overcharge, indoor unit EEV leakage, direct connection between indoor liquid pipe-gas pipe, faulty main EEV, and failure to operate compressor

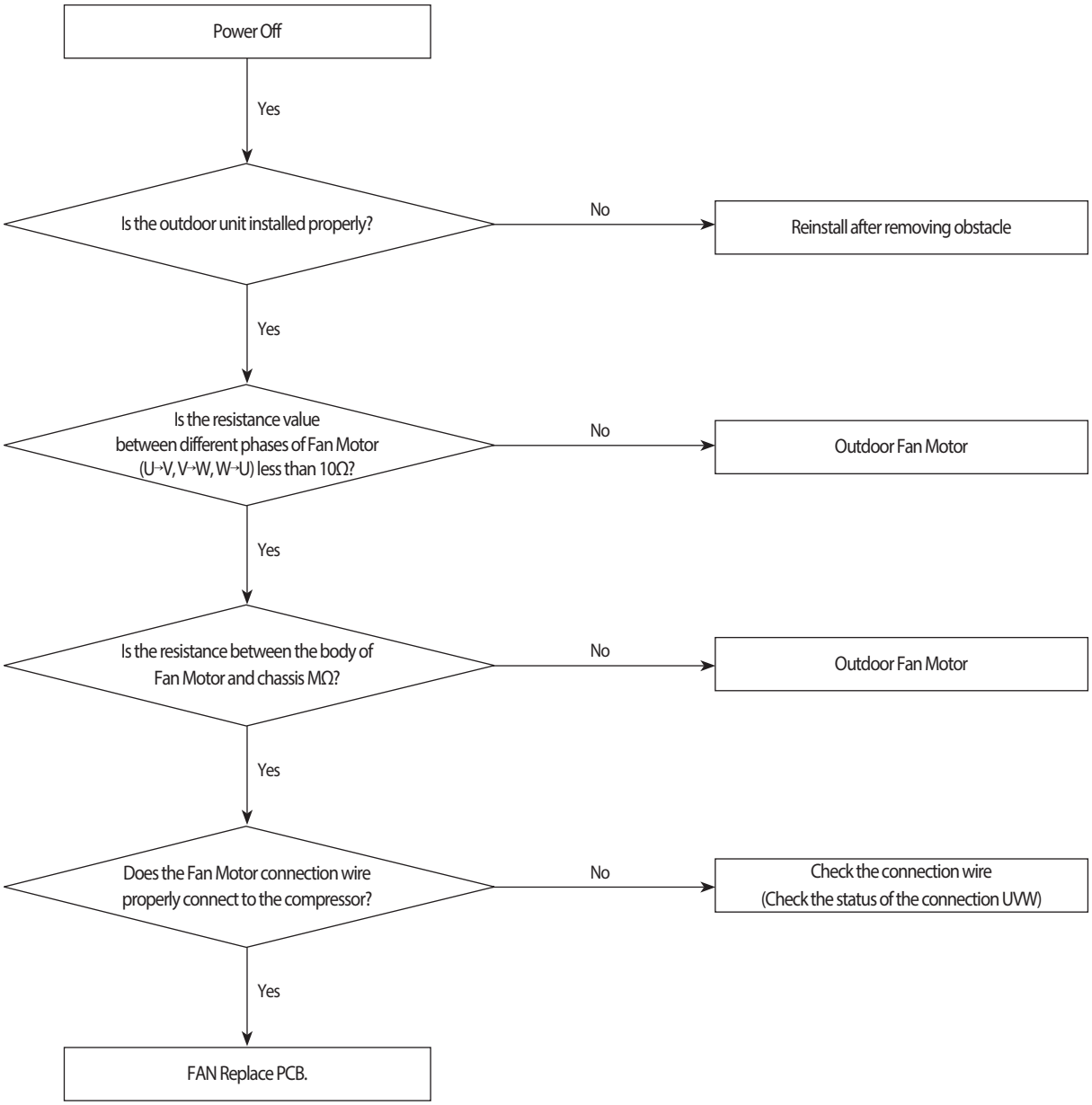
1. Inspection Method



4-4-79 Fan Motor Overcurrent error

Outdoor unit display	E478/E489 (FAN PCB(FAN1)) E378/E389 (FAN PCB(FAN2))
Judgment Method	· Occurs when overcurrent flows in the IPM. · Detected by H/W or S/W
Cause of problem	· Installation error · Defective Comp · Defective PCB · Connector error · Defective Motor

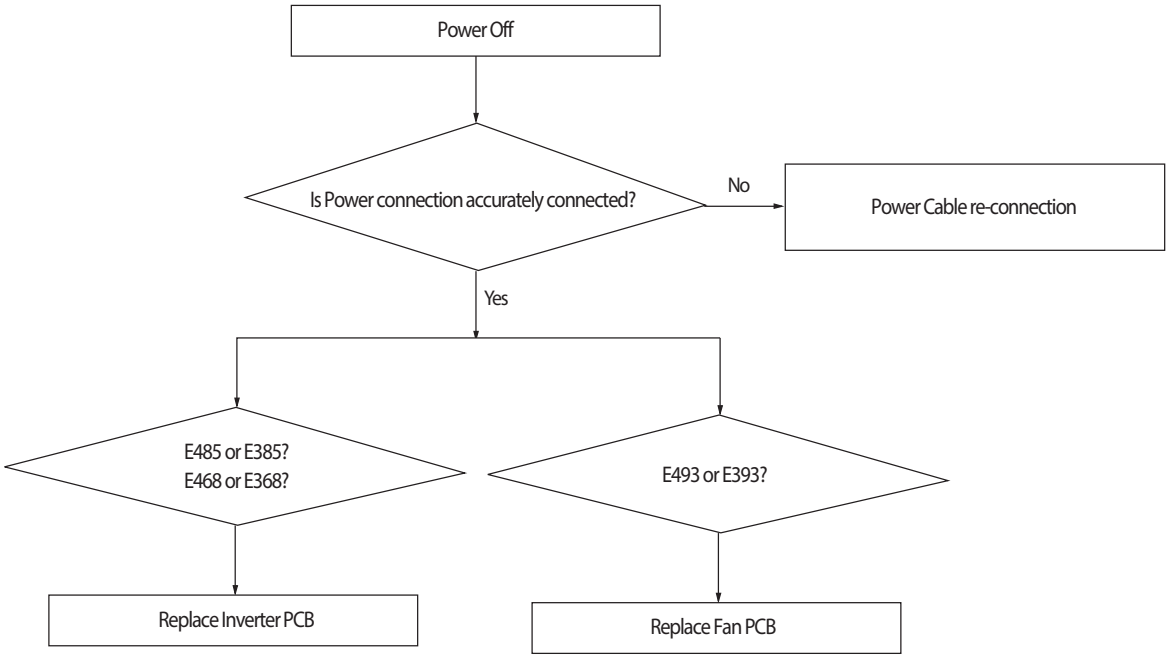
1. Cause of problem



4-4-80 Input / Output Current sensor error

Outdoor unit display	E485 INVERTER1 PCB(Input Current sensor) E385 INVERTER2 PCB(Input Current sensor) E468 INVERTER1 PCB(Output Current sensor) E368 INVERTER 2 PCB(Output Current sensor) E493 OUTDOOR FAN PCB (FAN1 Output Current sensor) E393 OUTDOOR FAN PCB (FAN2 Output Current sensor)
Judgment Method	· Sensor Output detection : Judged as an error if the detected value is more than 2.8V or 0.2V less than
Cause of problem	· Input voltage defective · PCB voltage sensing circuit defective

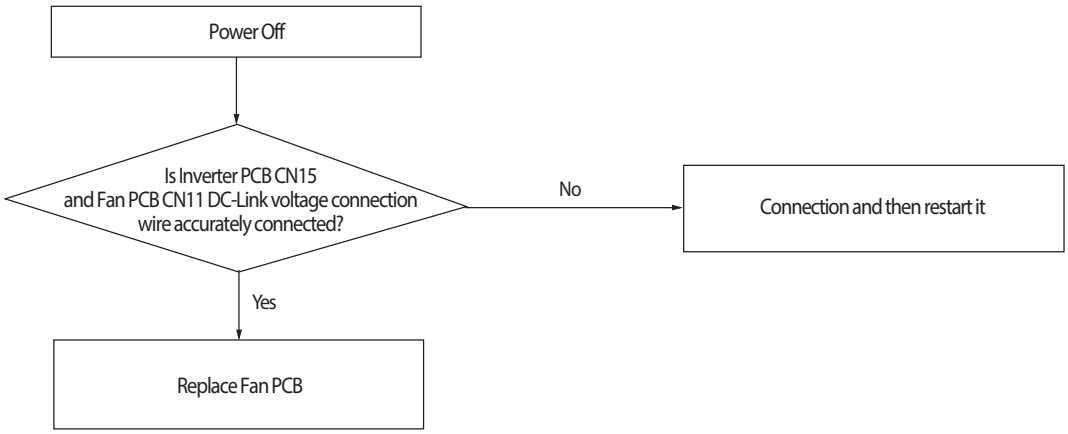
1. Cause of problem



4-4-81 Outdoor Fan PCB Overvoltage / Low voltage error

Outdoor unit display	E486
Judgment Method	· N-phase wiring error and EMI Fuse short. · DC-Link Overvoltage / Low voltage occurs.
Cause of problem	· Check the input wiring · EMI Fuse short

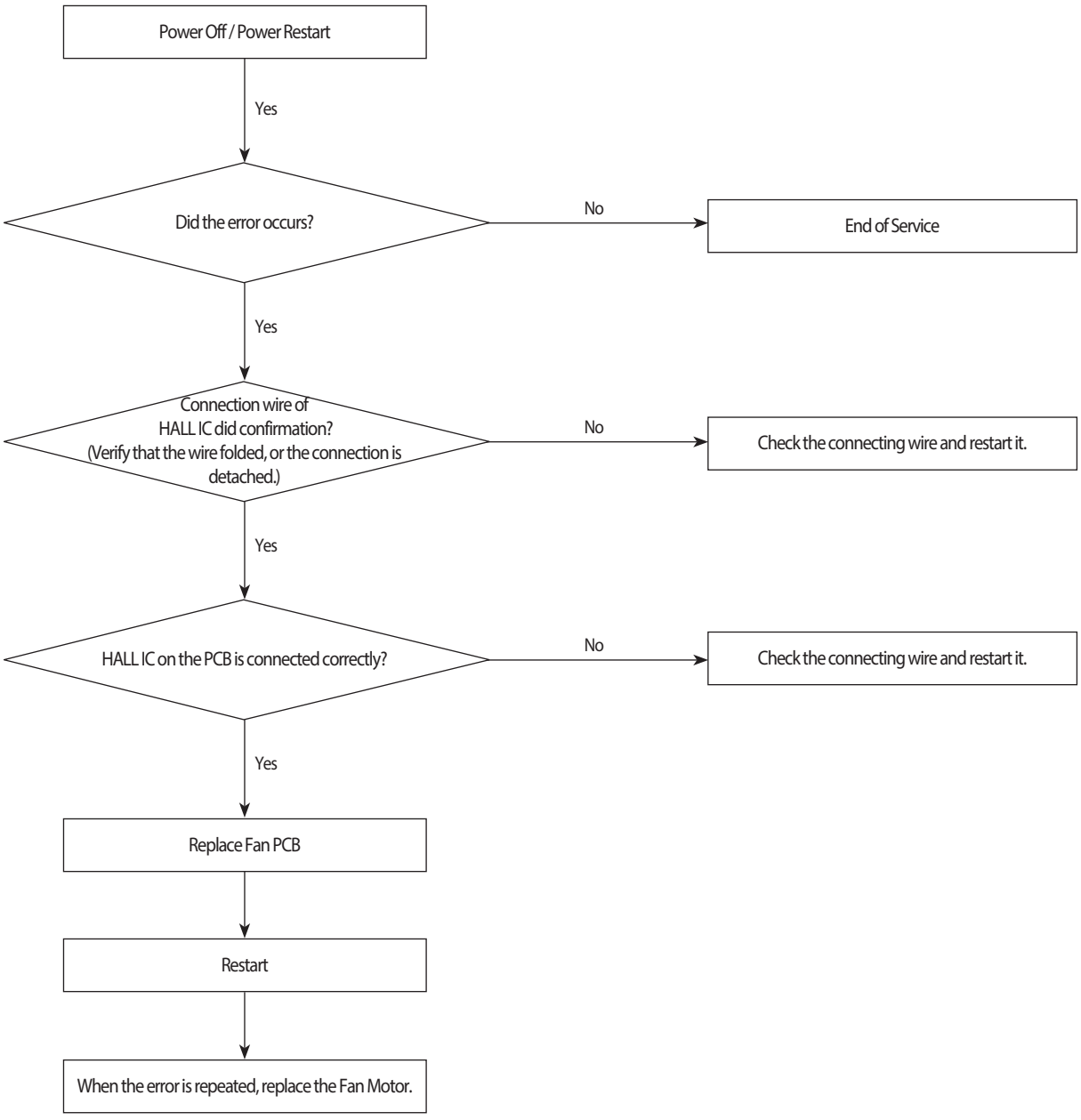
1. Cause of problem



4-4-82 Hall IC(Fan) error

Outdoor unit display	E487 (FAN PCB(FAN1)) E387 (FAN PCB(FAN2))
Judgment Method	· Fan rotation defective or vibration and noise of the defective operation. · Hall IC there is no signal input.
Cause of problem	· Connection status error. · Hall IC wire disconnection. · Defective circuit parts and defective manufacturing. · Fan Motor defective.

1. Cause of problem



4-4-83 Inverter Overheat error

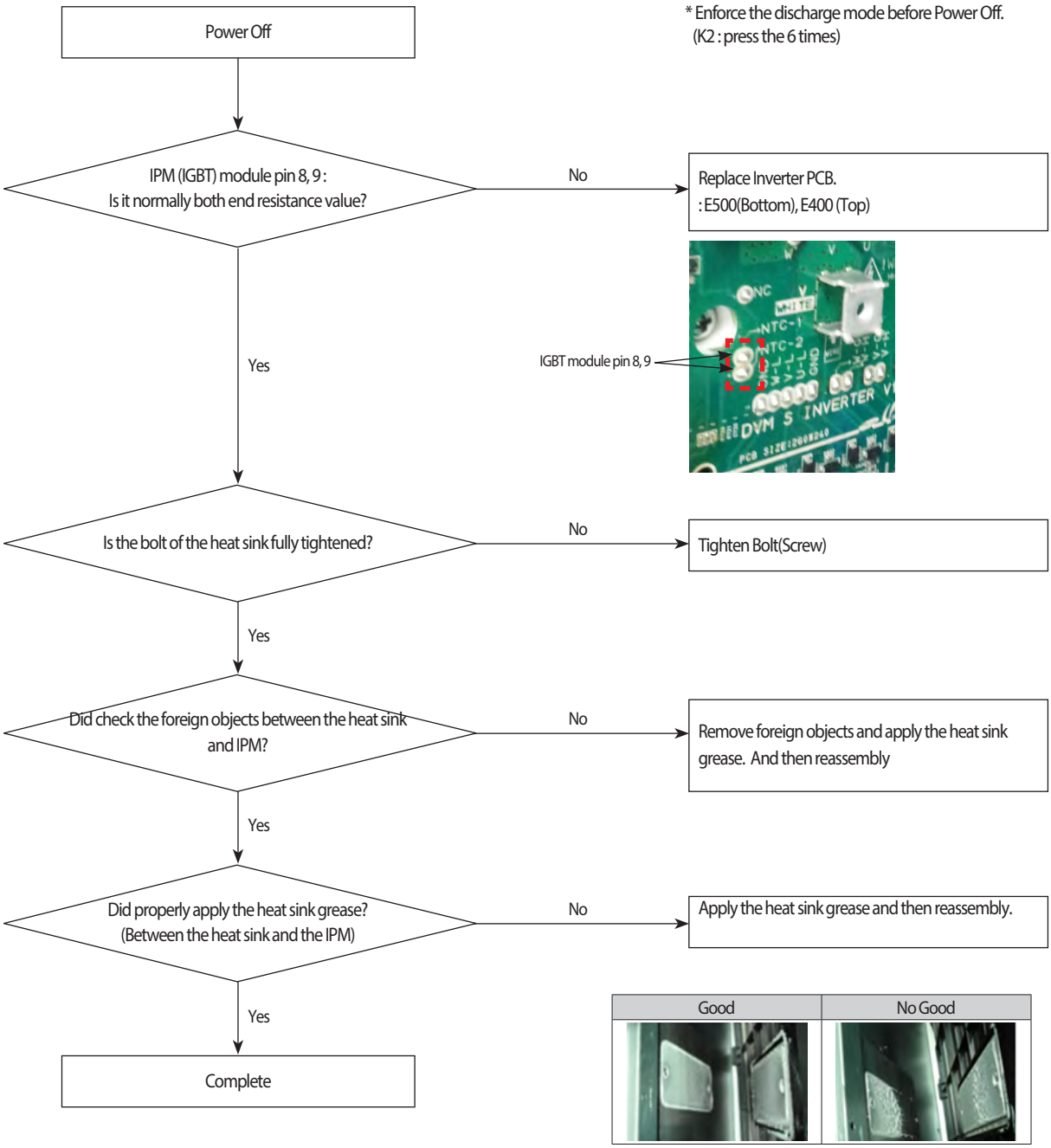
Outdoor unit display	E500 (INVERTER1 PCB) E400 (INVERTER2 PCB)
Judgment Method	· IGBT module internal temperature : 105℃ more than (E500, E400)
Cause of problem	· Cooling Pin and the IGBT junction part assembly defective. · Refrigerant cooling heat sink and refrigerant piping assembly defective. · Assembled bolt defective.

Both end resistance values of IGBT module pin(8, 9 pin)

Temperature [℃]	NTC [ohm]	AD [V]
10	9000	2.58
20	6000	2.33
30	4000	2.03
40	3000	1.80
50	2000	1.47
60	1600	1.29
70	1200	1.07
80	750	0.76
90	650	0.68

Temperature [℃]	NTC [ohm]	AD [V]
100	500	0.55
105	450	0.51
110	380	0.44
120	300	0.35
130	250	0.30
140	200	0.25

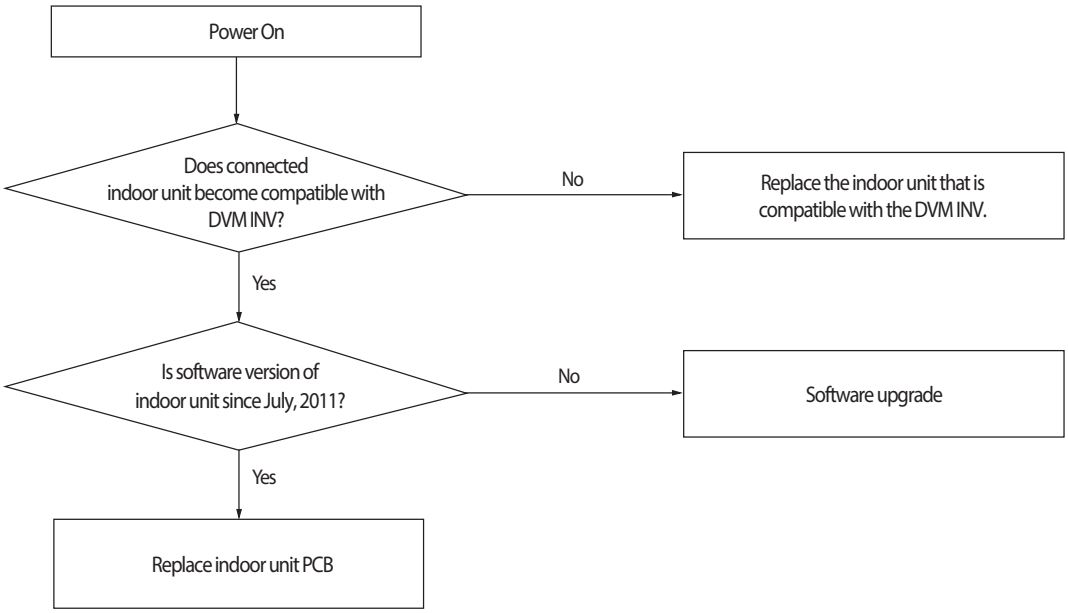
1. Cause of problem



4-4-84 Model mismatching of Indoor unit.

Outdoor unit display	E563
Judgment Method	· Prior to July 2011, if the software version of the indoor unit. · Prior to July 2011, if the software version of the indoor unit.
Cause of problem	· Check the software version of the indoor unit. · Check whether the support of the indoor unit.

1. Cause of problem



4-4-85 Breakdown of an EEV(1st)

1. How to diagnose
   Detect only on cooling operation. (No detection during heating operation.)
   During cooling operation, the temperature of the inlet or outlet ducts of heat exchanger is kept lower than 0˚C for more than 20 minutes without cessation

2. How to check
   1) Check if the wire of an electronic expansion valve is correctly connected to the PCB of indoor unit.
   2) Check if the coil of an electronic expansion valve is correctly plugged into the main body.
   3) Check if there is any rust on the surface of the coil of an electronic expansion valve with the naked eye, and then check the resistance between each terminal to find any wire breaking or short circuit.
   4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
      - In case of closure problem, operate the indoor unit in which the error has occurred.
      - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
   5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
      - As an electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please make sure to check the above items before replacement.

4-4-86 Breakdown of an EEV closure

1. How to diagnose

   1) During cooling operation (It must satisfy each of the following conditions for over 20minutes.)

Tair in - Teva in in ≥ 4℃	OK
Tair in - Teva out in ≥ 4℃	OK
Tcond, out - Tair, out > 3℃	NO
Compressor in operation & Indoor unit operation & Thermo On	OK
Error details	EEV closure breakdown

   2) During heating operation (It must satisfy each of the following conditions for over 20minutes.)

   · When more than 2 indoor units are on Thermo On heating operating.

   · When average high pressure is over 25 kg/cm^{2}G

   · 5 minutes after finishing Safety Start.

   · Keep indoor units' T(Eva_IN)<T(Room)+3℃ and T(Eva_Out)<T(Room)+3℃ condition for more than five minutes.

2. How to check

   1) Check if the wire of an electronic expansion valve is correctly connected to the PCB of indoor unit.

   2) Check if the coil of an electronic expansion valve is correctly plugged into the main body.

   3) Check if there is any rust on the surface of the coil of an electronic expansion valve with the naked eye, and then check the resistance between each terminal to find any wire breaking or short circuit.

   4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.

      - In case of closure problem, operate the indoor unit in which the error has occurred.

      - In case of opening problem, please do not operate the indoor unit in which the error has occurred.

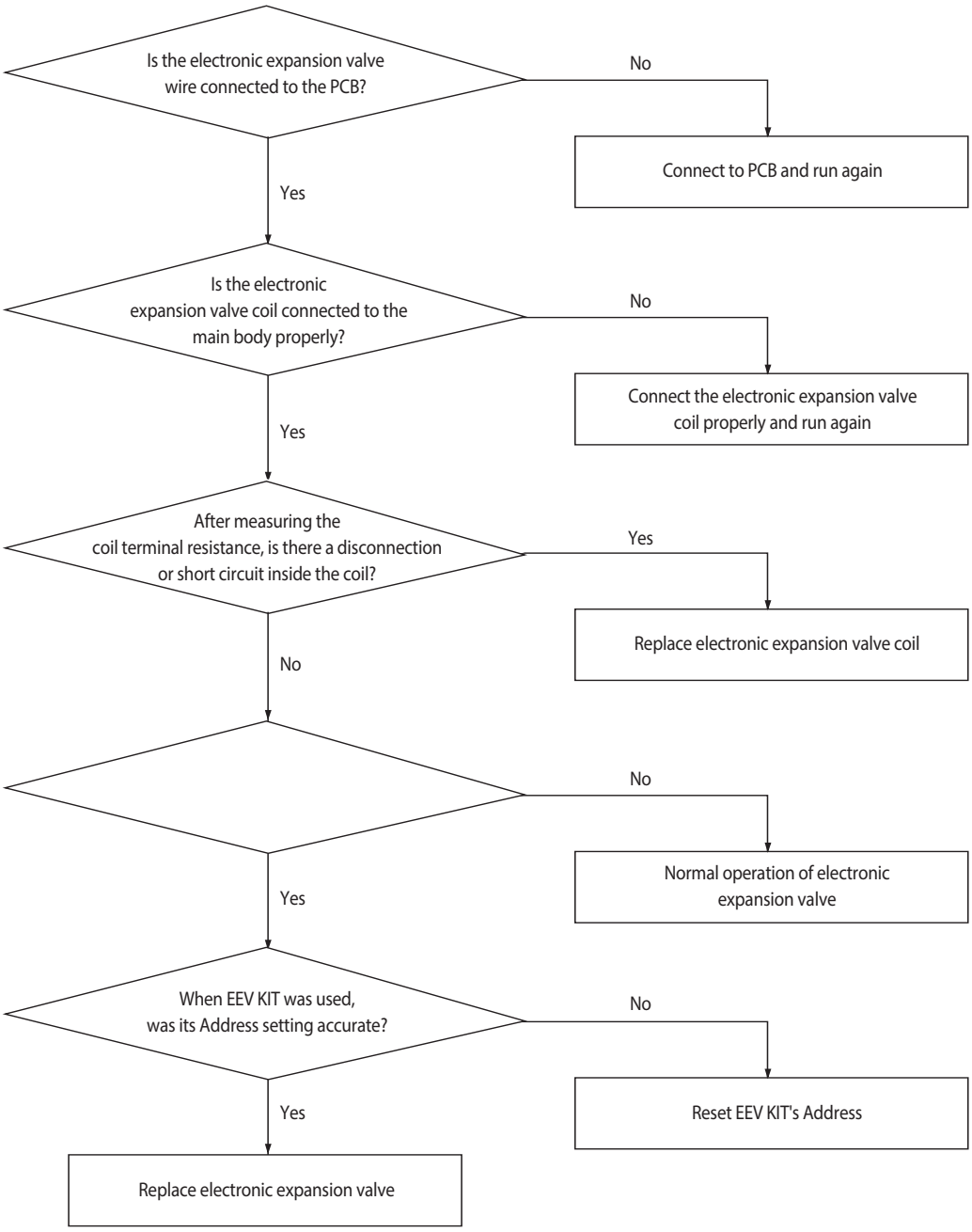
   5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.

      - As an electronic expansion valve replacement is tricky work that requires collecting refrigerant in all systems, please make sure to check the above items before replacement.

4-4-87 Electronic expansion valve closing malfunction (2nd stage)

Outdoor unit display	1st stage inspection: P702 (only displays on outdoor unit) 2nd stage inspection: E 152 ↔ Axxx (x x x: error occurred)
Indoor unit display	×(Operation) ◑(Reservation) ◑(Blast) ◑(Filter) ×(Defrost)
Criteria	· Please refer to determining method below
Cause of problem	· Faulty indoor unit electronic expansion valve action (valve will not open) · Address setup error in indoor unit (RAC) using EEV KIT

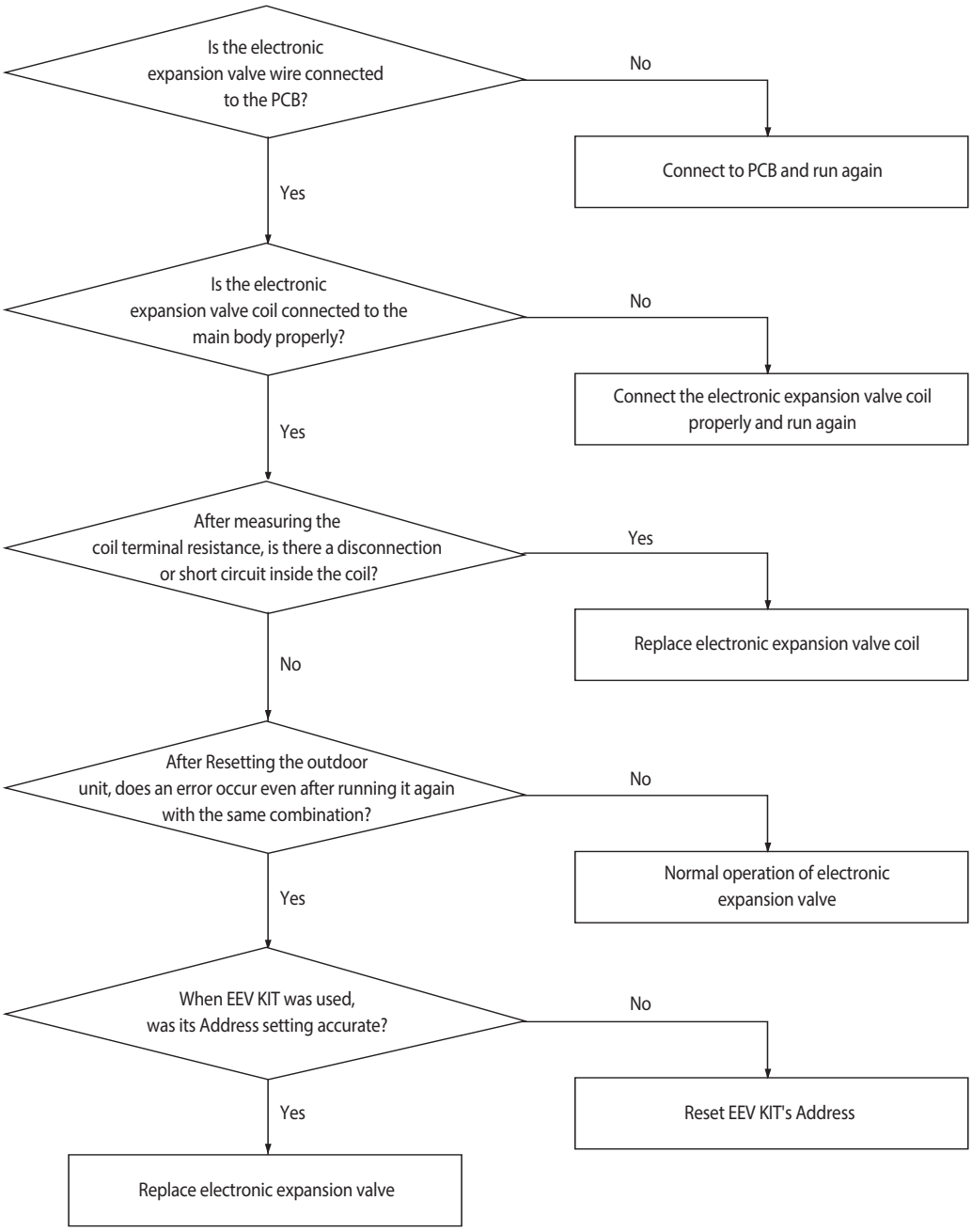
1. Inspection Method



4-4-88 Electronic expansion valve opening malfunction (2nd stage)

Outdoor unit display	1st stage inspection: P703 (only displays on outdoor unit) 2nd stage inspection: E151 ↔ Axxx (x x x: indoor unit address of where error occurred)
Indoor unit display	×(Operation) ◑(Reservation) ◑(Blast) ◑(Filter) ×(Defrost)
Criteria	· Please refer to determining method below
Cause of problem	· Faulty indoor unit electronic expansion valve action (refrigerant will leak into the stopped indoor unit) · Address setup error in indoor unit (RAC) using EEV KIT

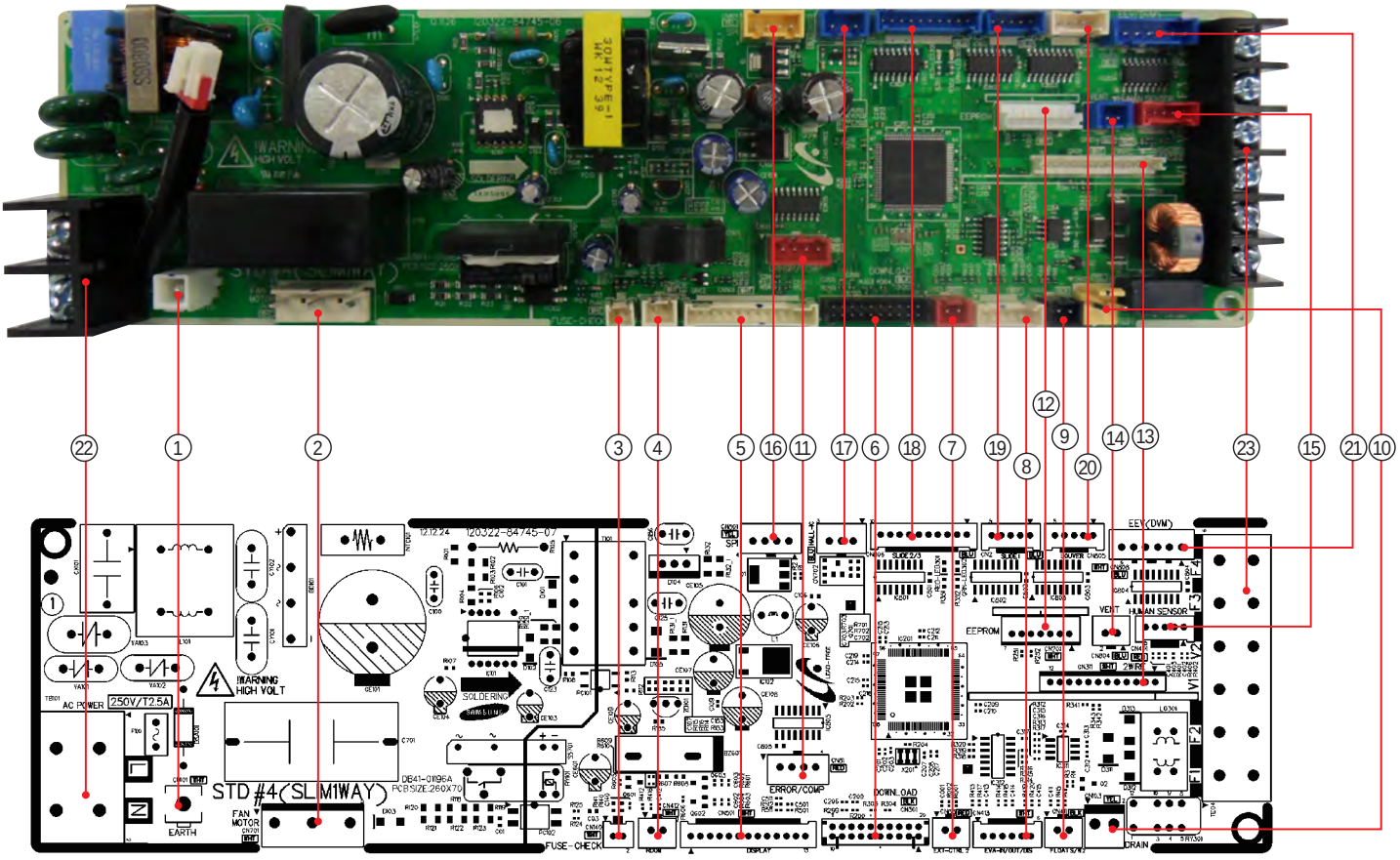
1. Inspection Method



5. PCB Diagram and Parts List

5-1 Indoor Unit

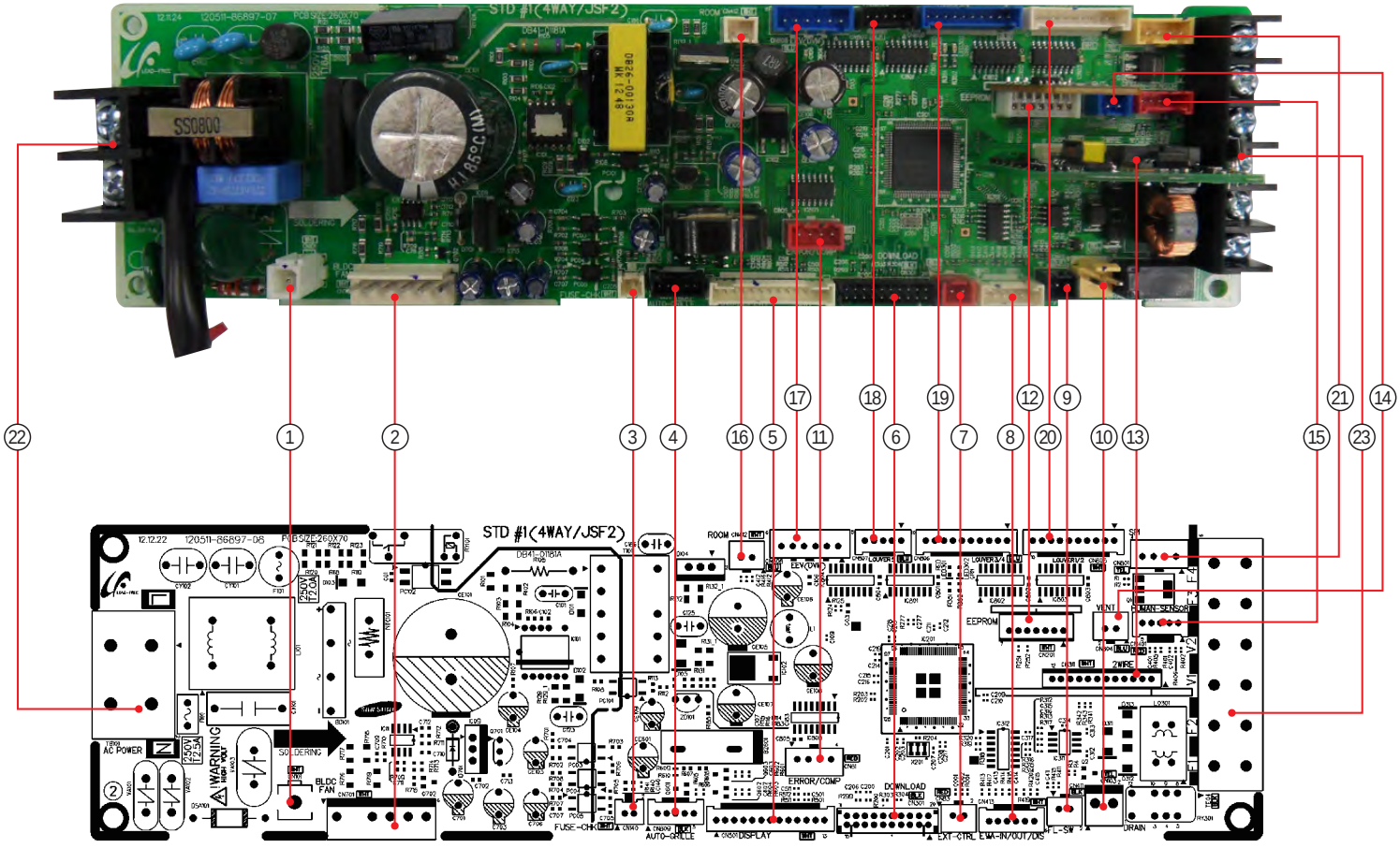
5-1-1 Slim 1 way cassette type



Slim 1 way cassette type

① **CN101-GND** #1: GND	② **CN701-FAN MOTOR** #1: POWER(N) #3 : SSR MOTOR POWER(L) #5 : POWER(N)	③ **CN140-FUSE CHECK** #1: FUSE CHECK SIGNAL #2: GND	④ **CN412-ROOM THERMISTOR** #1 : ROOM THERMISTOR #2 : GND
⑤ **CN501-DISPLAY** #1: DC12V #2: LED_0 #3: LED_1 #4: LED_2 #5: LED_3 #6: LED_4 #8: REMOCON_OUTPUT_SIGNAL #9 : AUTO SWITCH #10: REMOCON_INPUT_SIGNAL #11: GND #12: DC5V #13: GND	⑥ **CN301-DOWNLOAD** #1: DC12V #2: GND	⑦ **CN83-EXT CTRL** #1: GND #2: EXT-CTRL SIGNAL	⑧ **CN413:THERMISTOR** #1 : EVA-IN THERMISTOR #2 : GND #3 : EVA-OUT THERMISTOR #4 : GND #5 : DISCHARGE THERMISTOR #6 : GND
⑨ **CN411-FLOAT SWITCH** #1: F/S SIGNAL #2: GND	⑩ **CN103-DRAIN PUMP** #1: D/ P POWER(DC12V) #2: GND	⑪ **CN81-ERROR/COMP CHECK** #1: DC12V #2: ERROR SIGNAL OUTPUT(GND) #3: DC12V #4: COMP/OPER. SIGNAL OUTPUT(GND)	⑫ **CN201-EEPROM** #1: GND #3: DC5V #4: EEPROM_SELECT #5: EEPROM_SO #6: EEPROM_SI #7: EEPROM_CLK
⑬ **CN311-2WIRED REMOCON**	⑭ **CN804-VENTILATOR** #1: DC12V #2: VENT SIGNAL OUTPUT(GND)	⑮ **CN401-HUMAN SENSING** #1: DC12V #2: HUMAN SENSOR COMM(TXD) #3: HUMAN SENSOR COMM(RXD) #4: GND	⑯ **CN801-SPI** #1: GND #2: GND #3: SPI POWER OUTPUT(DC12V)
⑰ **CN702-HALL IC** #1 : DC5V #2 : GND #3 : MOTOR FEEDBACK	⑱ **CN806-SLIDE 2/3** #1 : DC12V #2~#5: LOUVER SIGNAL OUTPUT #6 : DC12V #7~#10: LOUVER SIGNAL OUTPUT	⑲ **CN2-SLIDE 1** #1 : DC12V #2~#5: LOUVER SIGNAL OUTPUT	⑳ **CN805-LOUVER** #1 : DC12V #2~#5: LOUVER SIGNAL OUTPUT
㉑ **CN808-EEV** #1~#4: EEV SIGNAL OUTPUT #5 : DC12V #6 : DC12V	㉒ **TB101-AC POWER** #1: POWER(L) #2: POWER(N)	㉓ **TE04-COMMUNICATION** #1: COM1(F1) #2: COM1(F2) #3: V1(DC12V) #4: V2(GND) #5: COM2(F3) #6: COM2(F4)	

5-1-2 4way cassette , mini 4way casette type

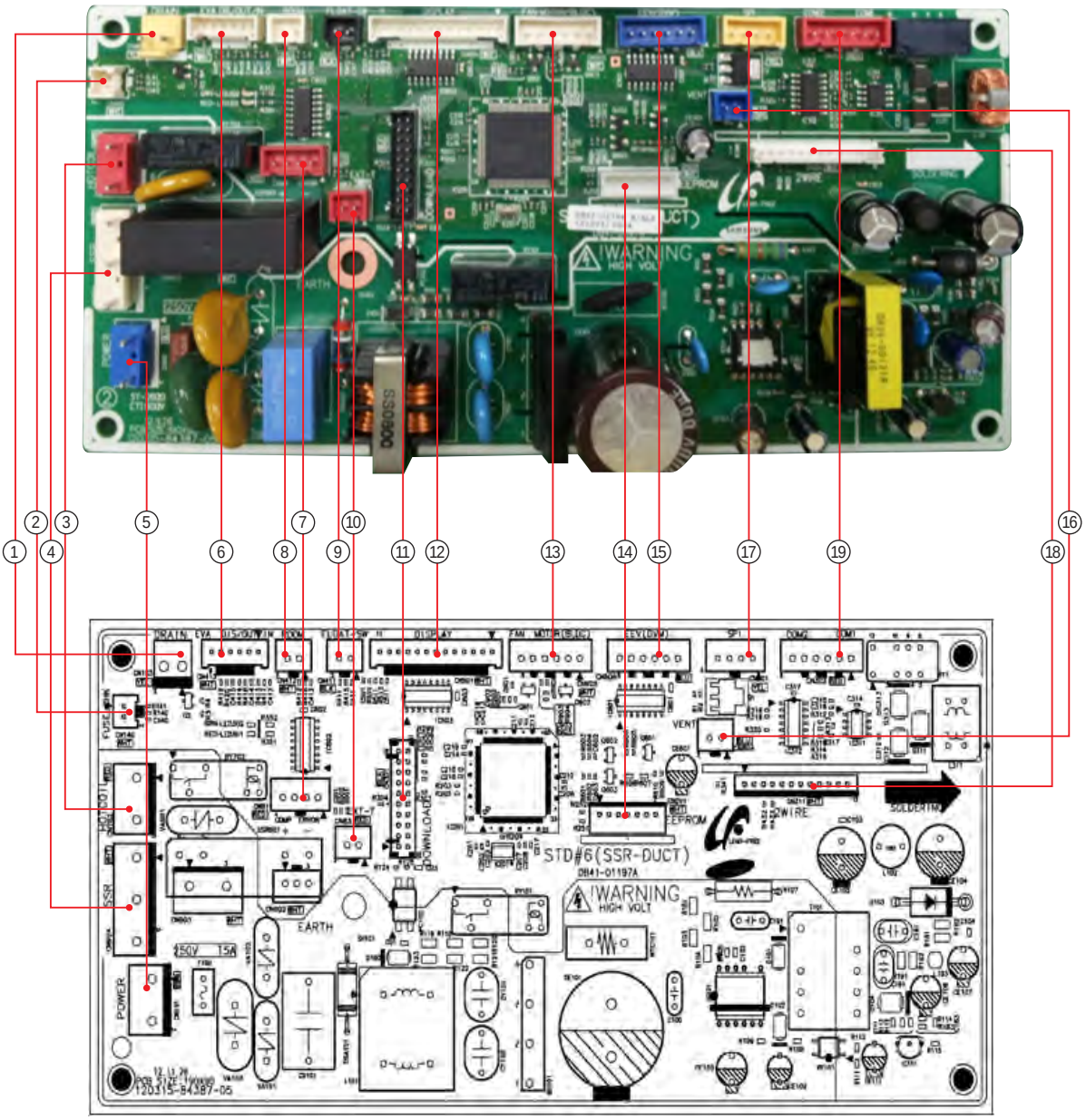


4way cassette , mini 4way casette type

① **CN101-GND** #1: GND	② **CN701-BLDC MOTOR** #1: DC310V #3 : GND #4 : DC15V #5 : FAN RPM #6 : RPM FEEDBACK	③ **CN140-FUSE CHECK** #1: FUSE CHECK SIGNAL #2: GND	④ **CN809-AUTO GRILL** #1 : DC12V #4 : REMOCON SIGNAL #5 : GND
⑤ **CN501-DISPLAY** #1: DC12V #2: LED_0 #3: LED_1 #4: LED_2 #5: LED_3 #6: LED_4 #7: LED_5 #8: REMOCON_OUTPUT_SIGNAL #9 : AUTO SWITCH #10: REMOCON_INPUT_SIGNAL #11: GND #12: DC5V #13: GND	⑥ **CN301-DOWNLOAD**	⑦ **CN83-EXT CTRL** #1: GND #2: EXT-CTRL SIGNAL	⑧ **CN413:THERMISTOR** #1 : EVA-IN THERMISTOR #2 : GND #3 : EVA-OUT THERMISTOR #4 : GND #5 : DISCHARGE THERMISTOR #6 : GND
⑨ **CN411-FLOAT SWITCH** #1: F/S SIGNAL #2: GND	⑩ **CN103-DRAIN PUMP** #1: D/ P POWER(DC12V) #2: GND	⑪ **CN81-ERROR/COMP CHECK** #1: DC12V #2: ERROR SIGNAL OUTPUT(GND) #3: DC12V #4: COMP/OPER. SIGNAL OUTPUT(GND)	⑫ **CN201-EEPROM** #1: GND #3: DC5V #4: EEPROM_SELECT #5: EEPROM_SO #6: EEPROM_SI #7: EEPROM_CLK
⑬ **CN311-2WIRED REMOCON**	⑭ **CN804-VENTILATOR** #1: DC12V #2: VENT SIGNAL OUTPUT(GND)	⑮ **CN401-HUMAN SENSING** #1: DC12V #2: HUMAN SENSOR COMM(TXD) #3: HUMAN SENSOR COMM(RXD) #4: GND	⑯ **CN412-ROOM THERMISTOR** #1 : ROOM THERMISTOR #2 : GND
⑰ **CN808-EEV** #1~#4: EEV SIGNAL OUTPUT #5 : DC12V #6 : DC12V	⑱ **CN807-LOUVER5** #1 : DC12V #2~#5: LOUVER SIGNAL OUTPUT	⑲ **CN806-LOUVER3/4** #1 : DC12V #2~#5: LOUVER SIGNAL OUTPUT #6 : DC12V #7~#10: LOUVER SIGNAL OUTPUT	⑳ **CN805-LOUVER1/2** #1 : DC12V #2~#5: LOUVER SIGNAL OUTPUT
㉑ **CN801-SPI** #1: GND #2: GND #3: SPI POWER OUTPUT(DC12V)	㉒ **TB101-AC POWER** #1: POWER(L) #2: POWER(N)	㉓ **TE04-COMMUNICATION** #1: COM1(F1) #2: COM1(F2) #3: V1(DC12V) #4: V2(GND) #5: COM2(F3) #6: COM2(F4)	

5-1-3 Duct type (SLIM Duct 1,2)

■ MAIN PCB



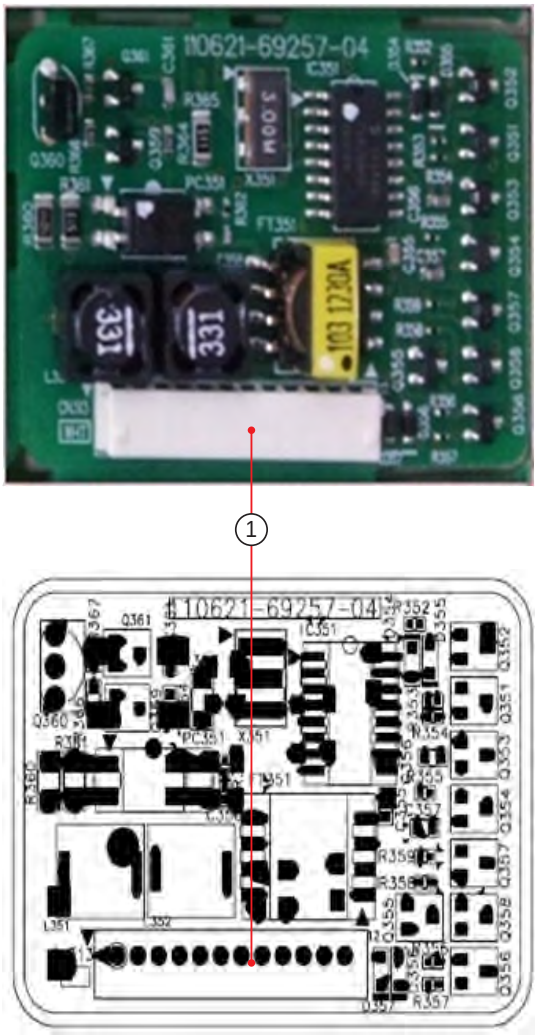
Duct type (SLIM Duct 1,2) (cont.)

■ MAIN PCB

① **CN103-DRAIN** #1:POWER #2:GND	② **CN140-FUSE CHK** #1:POWER #2:GND	③ **CN702-HOTCOIL** #1:N #3:L	④ **CN904-SSR** #1,#5:N #3:L #2,#4:NO USED
⑤ **CN101-POWER** #1:L #3:N	⑥ **CN413-EVA DIS/OUT/IN** #1:EVA-IN #3:EVA-OUT #5:DISCHARGE #2,#4,#6:GND	⑦ **CN81-COMP ERROR** #1,#3:12V #2:ERROR_CHK_OUT #4:COMP_CHK_OUT	⑧ **CN412-ROOM** #1:ROOM #2:GND
⑨ **CN411-FLOAT SW** #1:FLOAT SW #2:GND	⑩ **CN83-EXT T** #1:GND #2:EXT_CTRL	⑪ **CN301-DOWNLOAD** - For Developer only,Not available in Actual Site - 20 Pin Down Loader	⑫ **CN501-DISPLAY** 12.CN501-DISPLAY #1:12V #2~#6:DISPLAY LED CONTROL #7:BZ_1 #8:REMOCON SIGNAL OUT #9:AUTO_SW #10:REMOCON_INT #11:GND #12:VCC #13:BZ_2
⑬ **CN905-FAN MOTOR** #1:12V #2:GND #3:VCC #4:MOTOR SIGNAL PWM1 OUT #5:R903 CONTROL SIGNAL #6:INRUSH OUT	⑭ **CN201-EEPROM** #1:GND #2:NO USED #3:VCC #4:EEPROM_SELECT #5EEPROM_SO #6:EEPROM_SI #7:EEPROM CLK	⑮ **CN808-EEV(DVM)** #1~4:CONTROL SIGNAL #5~6:12V	⑯ **CN804-VENT** **#1:12V** **#2:VENT_OUT**
⑰ **CN801-SPI** #1:GND #2:GND #3:CONTROL SIGNAL #4:NOT USED	⑱ **CN311-2WIRE** #1:12V #2:COM2_PCTRL_MICOM #3:COM2_VCHECK_A #4:COM2_VCHECK_B #5:COM2_MICOM_AD #6:VCC #7:COM2_ENABLE #8:COM2_C #9:COM2_D #10:COM2_Tx #11:COM2_Rx #12:GND	⑲ **CN302-COM1 COM2** #1~2:COM1 #3:12V #4:GND #5~6:COM2	

Duct type (SLIM Duct 1,2) (cont.)

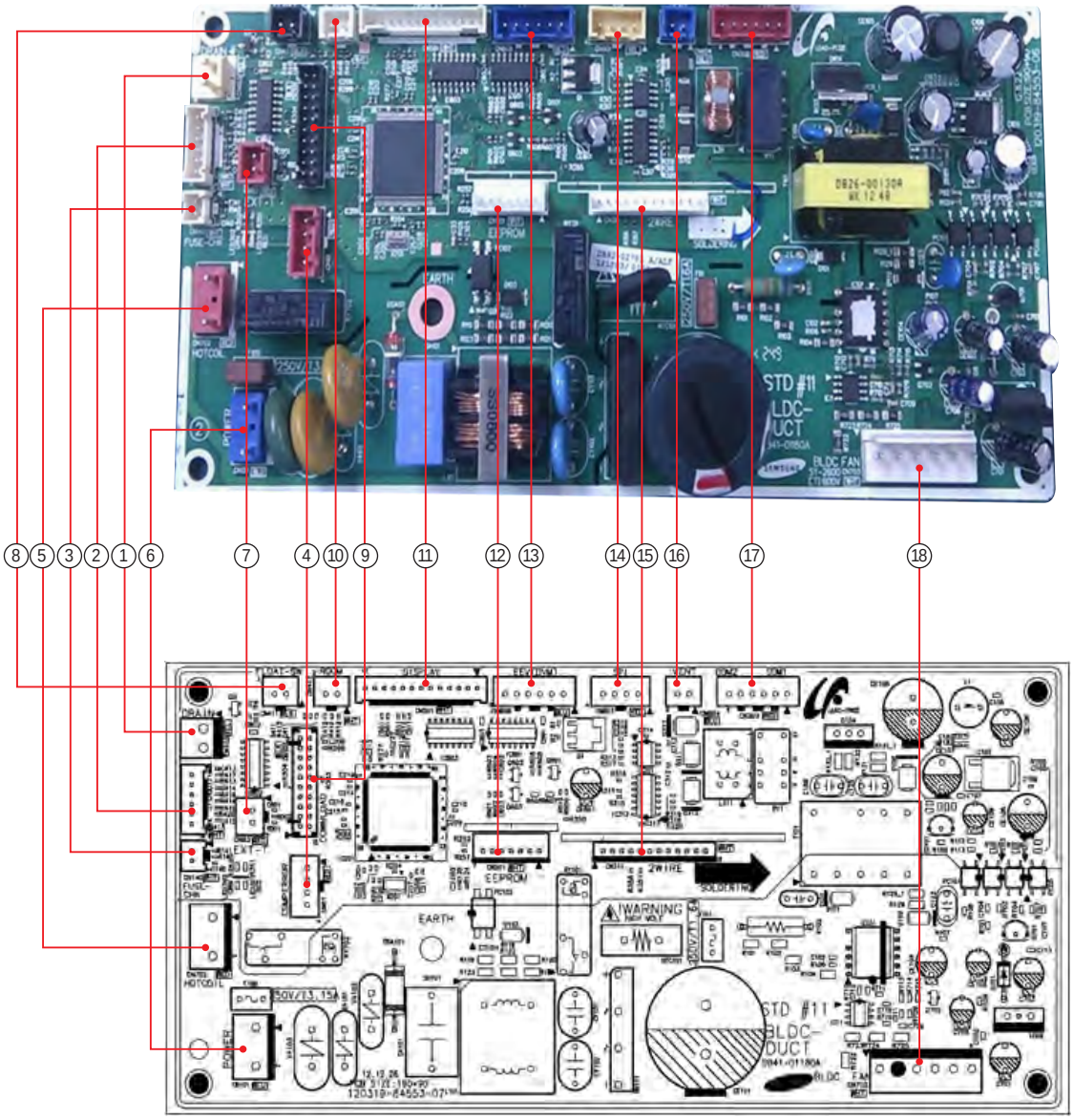
■ Sub PCB



① CN313-2WIRES COMM.
#1:12V
#2:COM2_PCTRL_MICOM
#3:COM2_VCHECK_A
#4:COM2_VCHECK_B
#5:COM2_MICOM_AD
#6:VCC
#7:NO UESD
#8:COM2_C
#9:COM2_D
#10:COM2_TXD
#11:COM2_RXD
#12:GND

5-1-4 Duct type (Slim Duct 3, MA-1(Drain Pump Built-in)

■ MAIN PCB



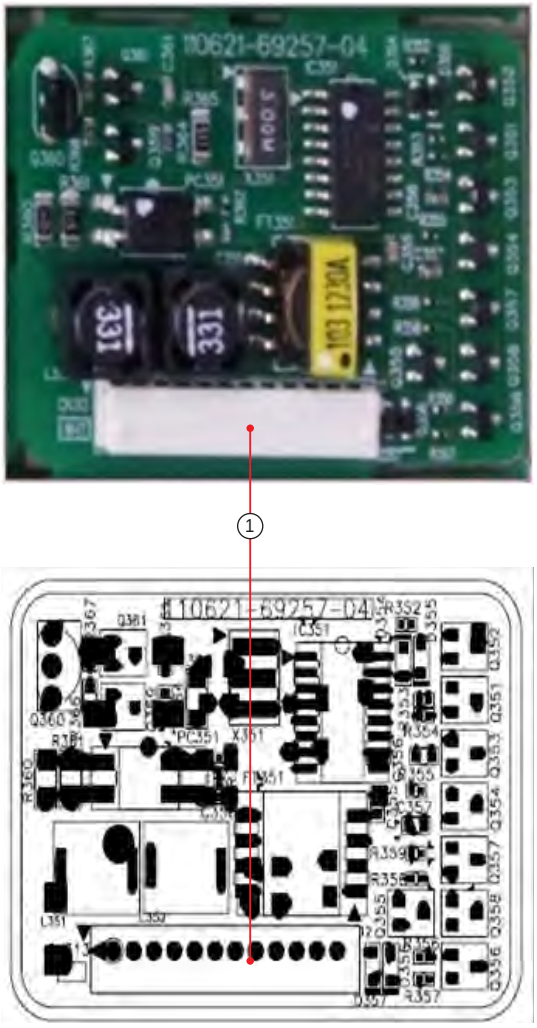
Duct type (Slim Duct 3, MA-1(Drain Pump Built-in)) (cont.)

■ MAIN PCB

① **CN103-DRAIN** #1:POWER #2:GND	② **CN413-EVA DIS/OUT/IN** #1:EVA-IN #3:EVA-OUT #5:DISCHARGE #2,#4,#6:GND	③ **CN140-FUSE CHK** #1:POWER #2:GND	④ **CN81-COMP ERROR** #1,#3:12V #2:ERROR_CHK_OUT #4:COMP_CHK_OUT
⑤ #1:N #3: **CN702-HOTCOIL**	⑥ #1:L #3: **CN101-POWER**	⑦ #1:GND #2: **CN83-EXT T**	⑧ #1:FLOAT SW #2: **CN411-FLOAT SW**
⑨ →For Developer only.Not available in Ac **CN301-DOWNLOAD** →20 Pin Down Loader	⑩ #1:ROOM #2: **CN412-ROOM**	⑪ #1:12V #2: **CN501-DISPLAY** #7:BZ_1 #8:REMOCON SIGNAL OUT #9:AUTO_SW #10:REMOCON_INT #11:GND #12:VCC #13:BZ_2	⑫ #1:GND #2: **CN201-EEPROM** #3:VCC #4:EEPROM_SELECT #5EEPROM_SO #6:EEPROM_SI #7:EEPROM CLK
⑬ #1~4:CONTROL SIGNAL #5 **CN808-EEV(DVM)**	⑭ #1:GND #2: **CN801-SPI** #3:CONTROL SIGNAL #4:NOT USED	⑮ #1:12V #2: **CN311-2WIRE** #3:COM2_VCHECK_A #4:COM2_VCHECK_B #5:COM2_MICOM_AD #6:VCC #7:COM2_ENABLE #8:COM2_C #9:COM2_D #10:COM2_Tx #11:COM2_Rx #12:GND	⑯ #1:12V #2: **CN804-VENT**
⑰ #1~2:COM1 #3: **CN302-COM1 COM2** #4:GND #5~6:COM2	⑱ #1:DC310V #2: **CN703-BLDC FAN** #3:AGND #4:DC15V #5:PC04 OUTPUT #6:RPM OUTPUT		

Duct type (Slim Duct 3, MA-1(Drain Pump Built-in))

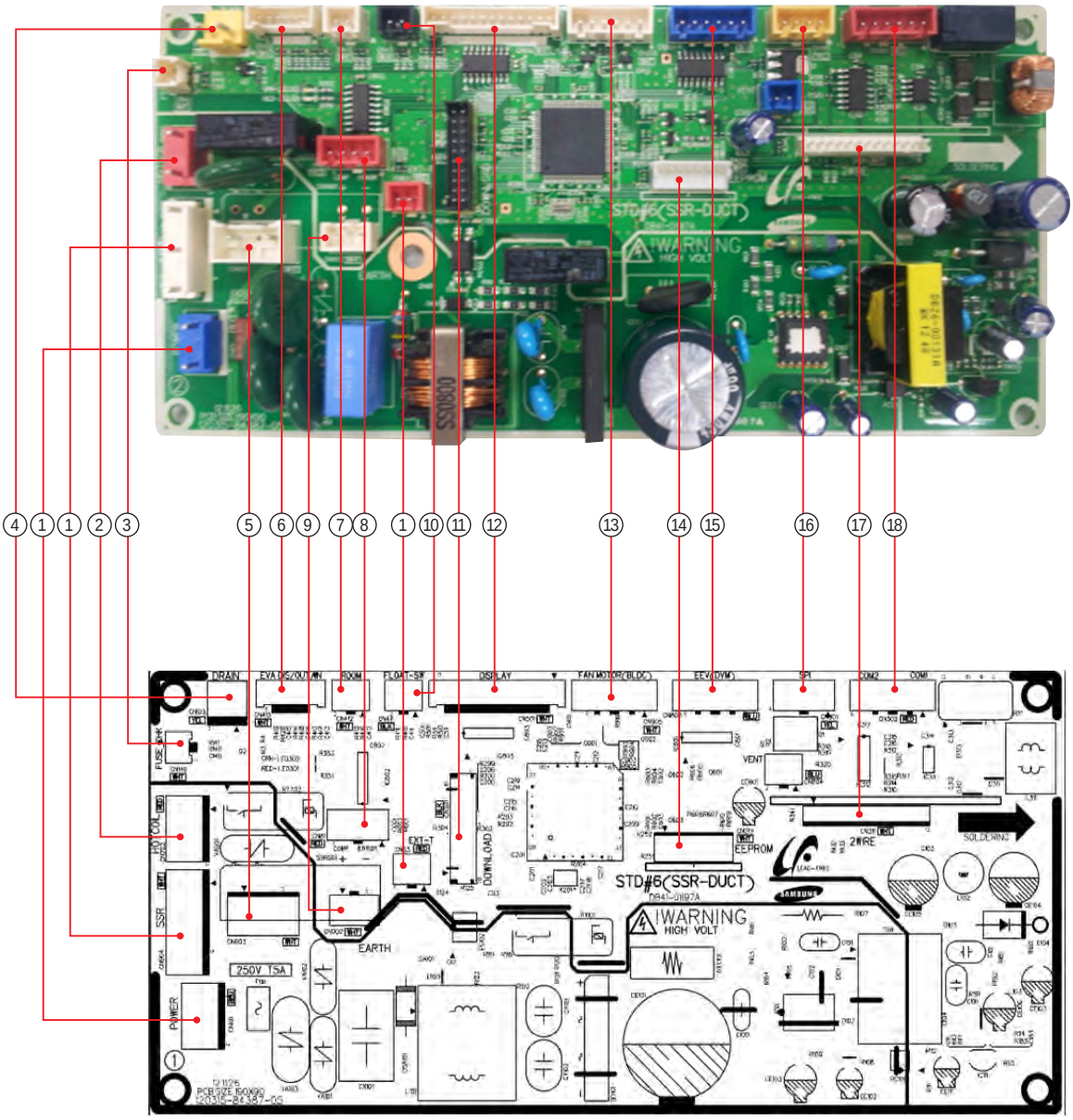
■ Sub PCB



① CN313-2WIRES COMM.
#1:12V
#2:COM2_PCTRL_MICOM
#3:COM2_VCHECK_A
#4:COM2_VCHECK_B
#5:COM2_MICOM_AD
#6:VCC
#7:NO UESD
#8:COM2_C
#9:COM2_D
#10:COM2_TXD
#11:COM2_RXD
#12:GND

5-1-5 Duct type (MSP, HSP Small, BIG Duct, MA-2(Drain Pump Built-in)

■ MAIN PCB



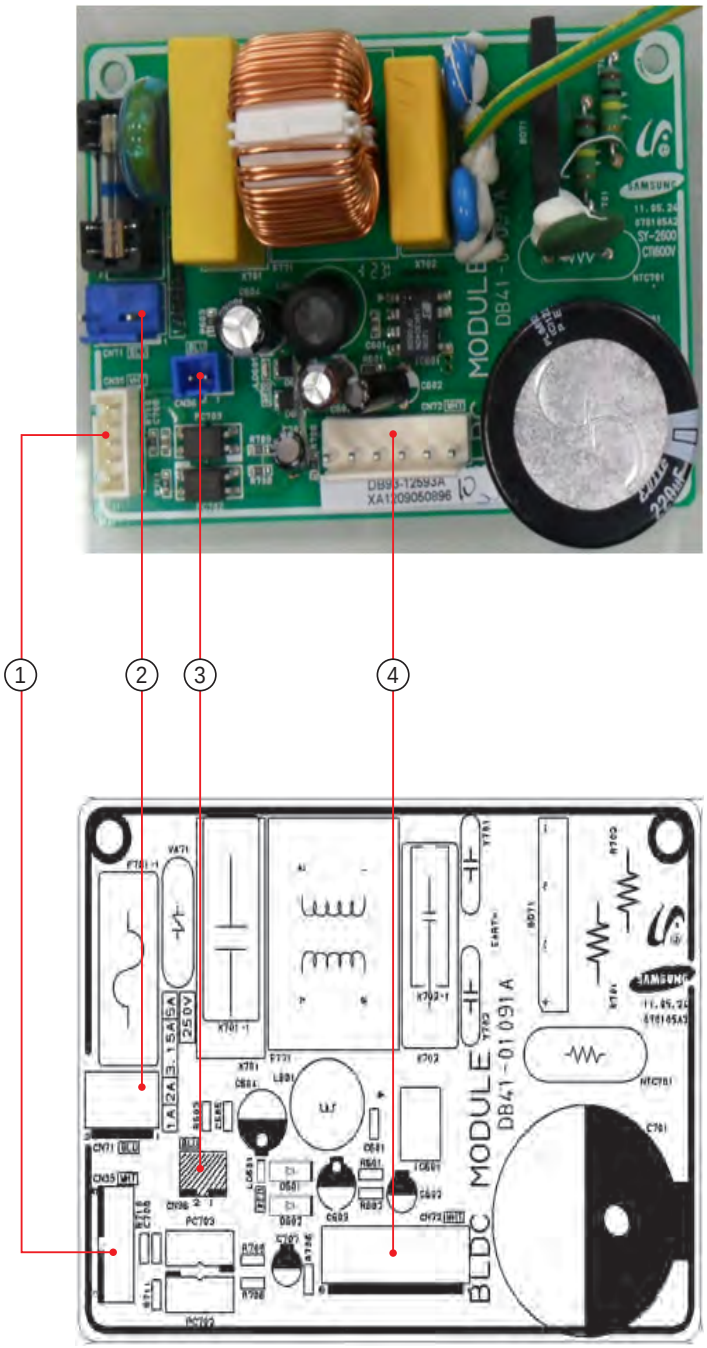
Duct type (MSP, HSP Small, BIG Duct, MA-2(Drain Pump Built-in)) (cont.)

■ MAIN PCB

① **CN904-SSR MOTOR** #1: N #2: L #3: N	② **CN702-HOT COIL** #1: L #2: N	③ **CN140-FUSE CHECK** #1:FUSE CHECK #2:GND	④ **CN103-DRAIN PUMP** #1: 12V #2 : GND
⑤ #1: L Input #2: **CN903-SSR AC Control**	⑥ #1 : EVA IN TEMP #2,4 **CN413 - Temperature sensor** #3 : EVA OUT TEMP #5 : DISCHARGE TEMP	⑦ #1: Temperature type #2: **CN412-ROOM Temperature type**	⑧ #1,3: 12V #2: **CN81-EXTERNAL CONTROL OUT** #4: COM CHK OUT
⑨ #1: 12V #2: **CN902- SSR DC Output**	⑩ #1: GND #2: **CN83-EXTERNAL CONTROL**	⑪ **CN301-MICOM DOWNLOAD**	⑫ #1:12V #2~ **CN501-DISPLAY** #7: BZ1 #8: Remote control signal output #9: AUTO SW #10: REMOCON INT #11:GND #12:VCC #13:BZ2
⑬ #1: 12V #2: GND **CN905-BLDC MOTOR** #3: VCC #4: MOTOR SIGNAL PWM #5: MOTOR FEEDBACK #6:INRUSH OUT #12:VCC	⑭ **CN201-E2P Module**	⑮ #1~4: Control jeondongbyeon #5, **CN808-Control jeondongbyeon**	⑯ #1,2:GND #3: **CN801-SPI**
⑰ **CN311-2 Communication**	⑱ #1,2 **CN302-Indoor and Outdoor Telecommunications and cable** #3:12V #4:GND #5: Wired remote control communication	⑲ #1: L #2: N **CN101-AC INPUT**	

Duct type (HSP Small , MA-2(Drain Pump Built-in)) (cont.)

■ BLDC PCB



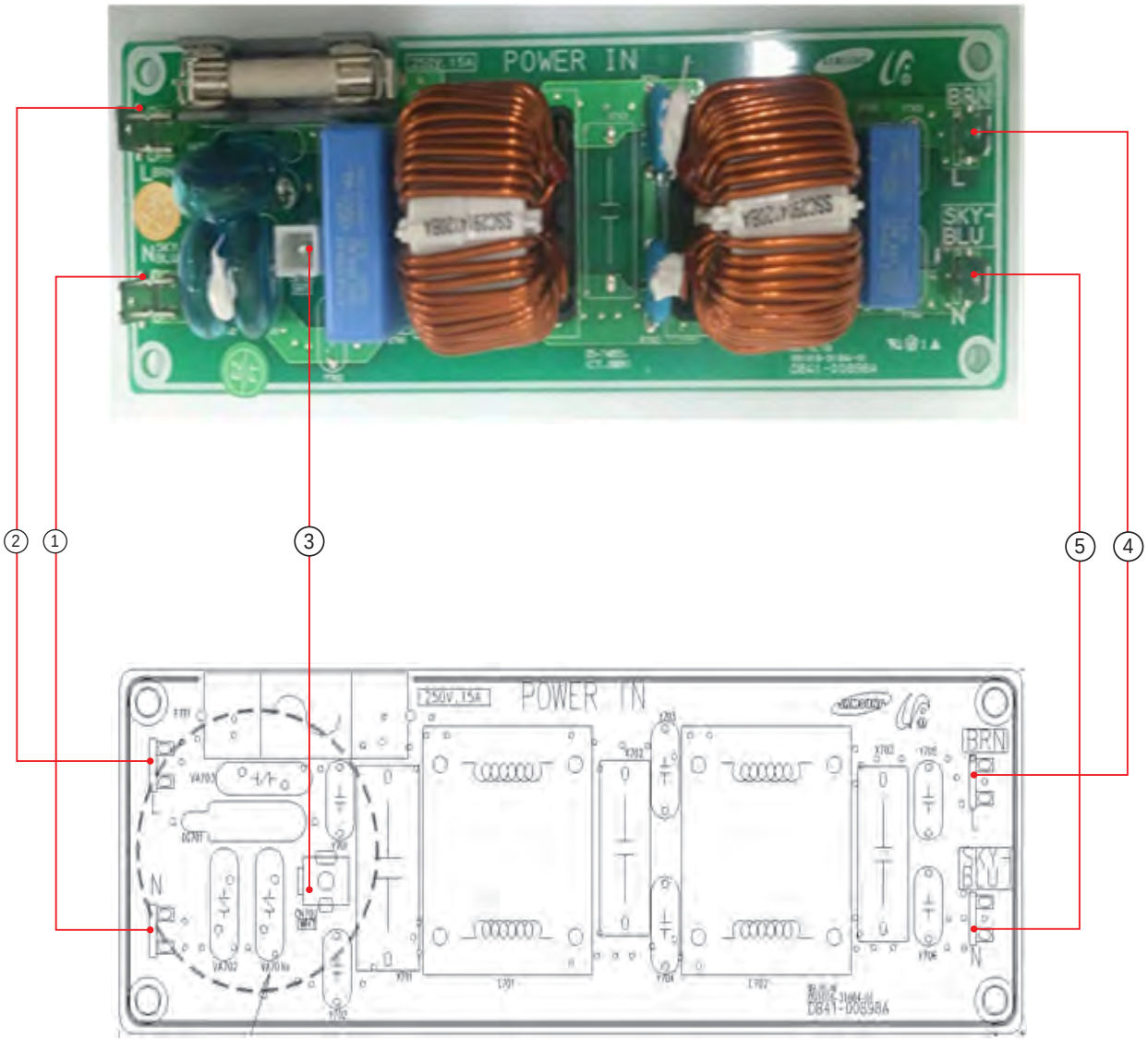
Duct type (HSP Small , MA-2(Drain Pump Built-in)) (cont.)

■ BLDC PCB

① CN35-Main PCB Connection	② CN71-AC Power	③ CN36-BLDC PCB Connection	④ CN12-Motor Connector
#1: DC12V #2: Fan Signal #3: DC5V #4: Fan feedback signal #5: GND	#1: AC power L #2: AC power N	#1: DC12V #2: Fan signal	#1: DC310V #3: GND #4: DC15V #5: Fan signal #6: Fan feedback signal

Duct type (BIG Duct) (cont.)

■ EMI PCB

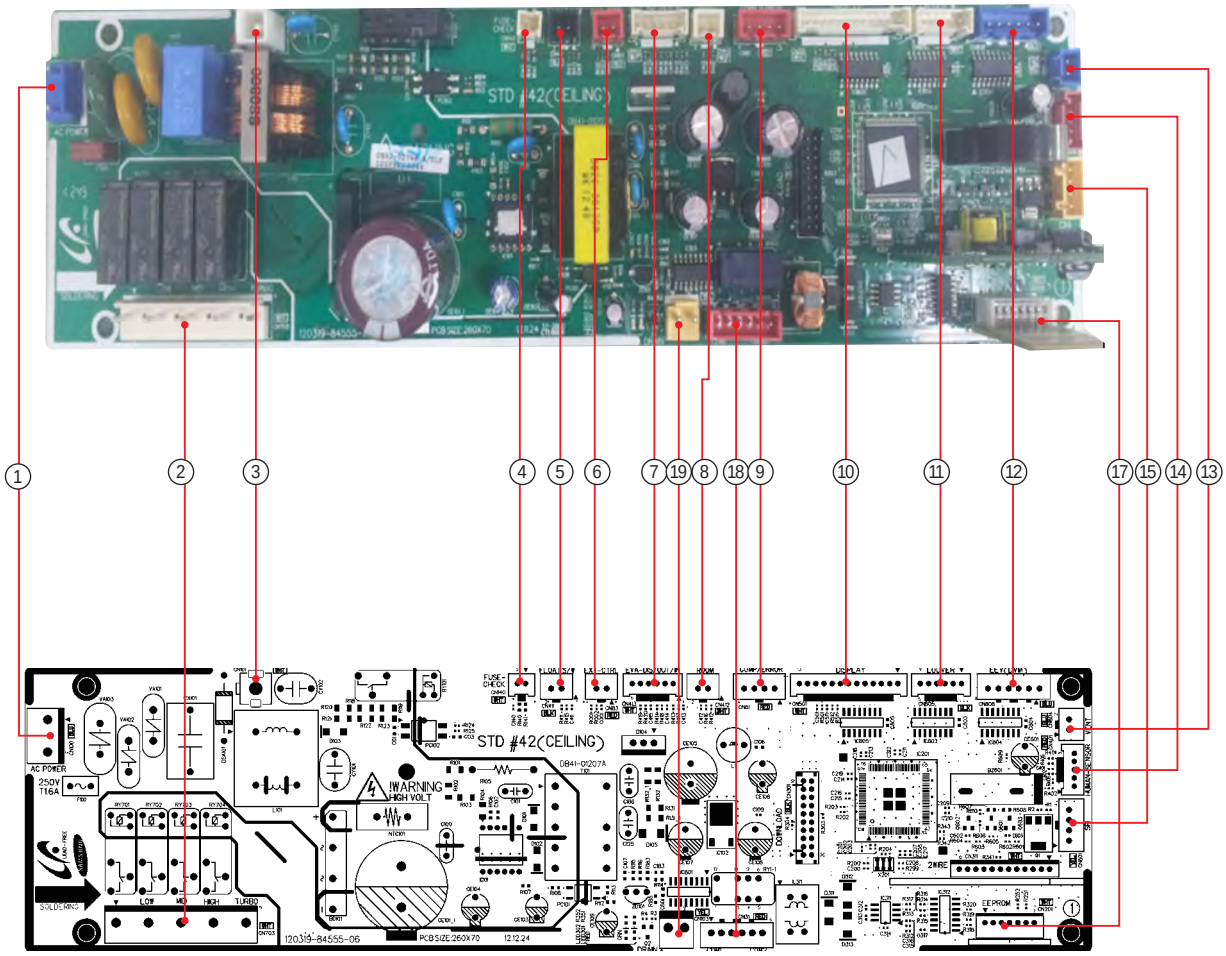


Duct type (BIG Duct)

■ EMI PCB

① Power Input L	② Power Input N	③ Earth	④ Power Output L
⑤ Power Output N			

5-1-6 Celing type

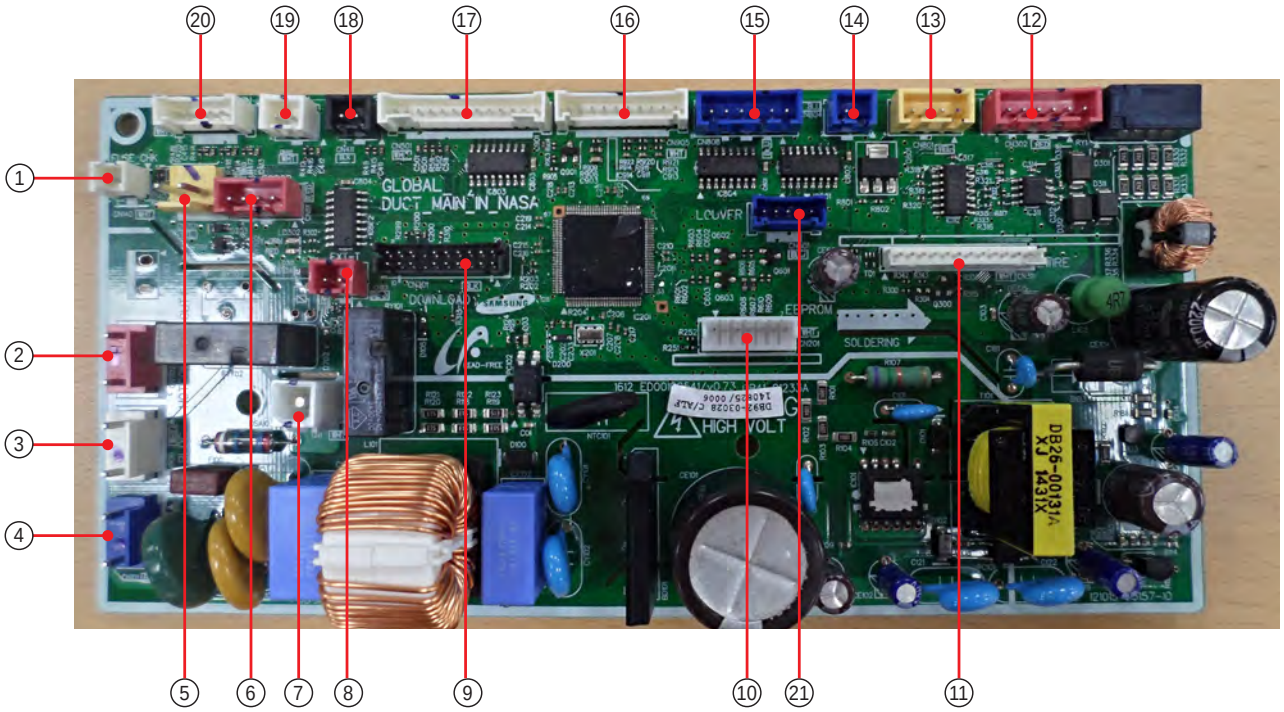


Celing type

① **CN100-VENTILATOR** #1: L #3: N	② **CN703-FAN MOTOR** #1: N #3: RY701 OUTPUT #5: RY702 OUTPUT #7: RY703 OUTPUT #9: RY704 OUTPUT	③ **CN101-GND** #1: GND	④ **CN140-FUSE CHECK** #1: FUSE CHECK #2: GND
⑤ **CN411-FLOAT S/W** #1: FLOAT_SW #2: GND	⑥ **CN83-EXT CTRL** #1: GND #2: EXT_CTRL	⑦ **CN413-EVA-DIS/OUT/IN** #1: VEA_IN_MID_TEMP #2: GND #3: EVA_OUT_TEMP #4: GND #5: EVA_DIS_TEMP #6: GND	⑧ **CN412-ROOM** #1: ROOM_TEMP #2: GND
⑨ **CN81-COMP/ERROR** #1: DC 12V #2: ERROR_CHK_OUT #3: DC 12V #4: COMP_CHK_OUT	⑩ **CN501-DISPLAY** #1: DC 12V #2~#7: LED SIGNAL #8: REMOCON_SIGN_OUT #9: AUTO_SW #10: REMOCON_INT #11: GND #12: DC 5V #13: NOT USED	⑪ **CN805-LOUVER** #1: DC 12V #2: DC 12V #3~#6: LVR SIGNAL	⑫ **CN808-EEV(DVM)** #1~#4: EEV SIGNAL #5: DC 12V #6: DC 12V
⑬ **CN804-VENT** #1: DC 12V #2: VENT_OUT	⑭ **CN401-HUMAN_SENSOR** #1: DC 12V #2: COM4_TXD #3: COM4_RXD #4: NOT USED #5: GND	⑮ **CN801-SPI** #1: #2: GND #3: Q1_OUT #4: NOT USED	⑯ **CN311-2WIRE OPTION** #1:DC12V #2~#5:COMM. SIGNAL #6:VCC(DC5V) #7~#11:COMM. SIGNAL #12:GND
⑰ #1: **CN201-EEPROM** #2:NOT USED #3:VCC(DC5V) #4~#7:EEPROM SIGNAL	⑱ #1 **CN31-HUMAN_SENSOR** #3: DC12V #4: GND #5~#6: COM2 SIGNAL	⑲ #1 **CN103-DRAIN** #2: GND	

5-1-7 Big Ceiling

■ **MAIN PBA** (AM036/048JNCDCH/AA)



No	part code	location No.	Function	Description
1	3711-003942	CN140	Fuse Check	SMW200-02P WHT
2	3711-000203	CN906	BLDC POWER	YW396-03AV WHT
3	3711-003407	CN702	Comp Signal	YW396-03AV RED
4	3711-003404	CN101	MAIN POWER	YW396-03AV BLU
5	3711-000179	CN701	DRAIN	YW396-02V YEL
6	3711-000939	CN81	COMP ERROR	SMW250-04 RED
7	3711-000744	CN1	EARTH	YDW236-01WHT
8	3711-000796	CN83	EXT-T	SMW250-02 RED
9	3711-002001	CN301	DOWNLOAD	YDW200-20
10	3711-007817	CN201	EPPROM	B7P-MQ WHT
11	3711-004773	CN311	2 WIRE	BMW200-12 WHT
12	3711-001037	CN302	COMM	SMW250-06 RED
13	3711-000941	CN801	SPI	SMW250-04 YEL
14	3711-000795	CN804	VEN	SMW250-02 BLU
15	3711-001036	CN808	EEV	SMW250-06 BLU
16	3711-004182	CN905	FAN MOTOR COMM	SMW200-10P WHT
17	3711-003895	CN501	DISPLAY	SMW200-13P WHT
18	3711-000794	CN411	FLOAT-SW	SMW250-02 BLK
19	3711-000015	CN412	ROOM SENSOR	SMW250-02 WHT
20	3711-004236	CN413	EVA DIS/OUT SENSOR	SMW200-06P WHT
21	3711-005097	CN601	LOUVER	SMW200-5P BLU

Big Ceiling (cont.)

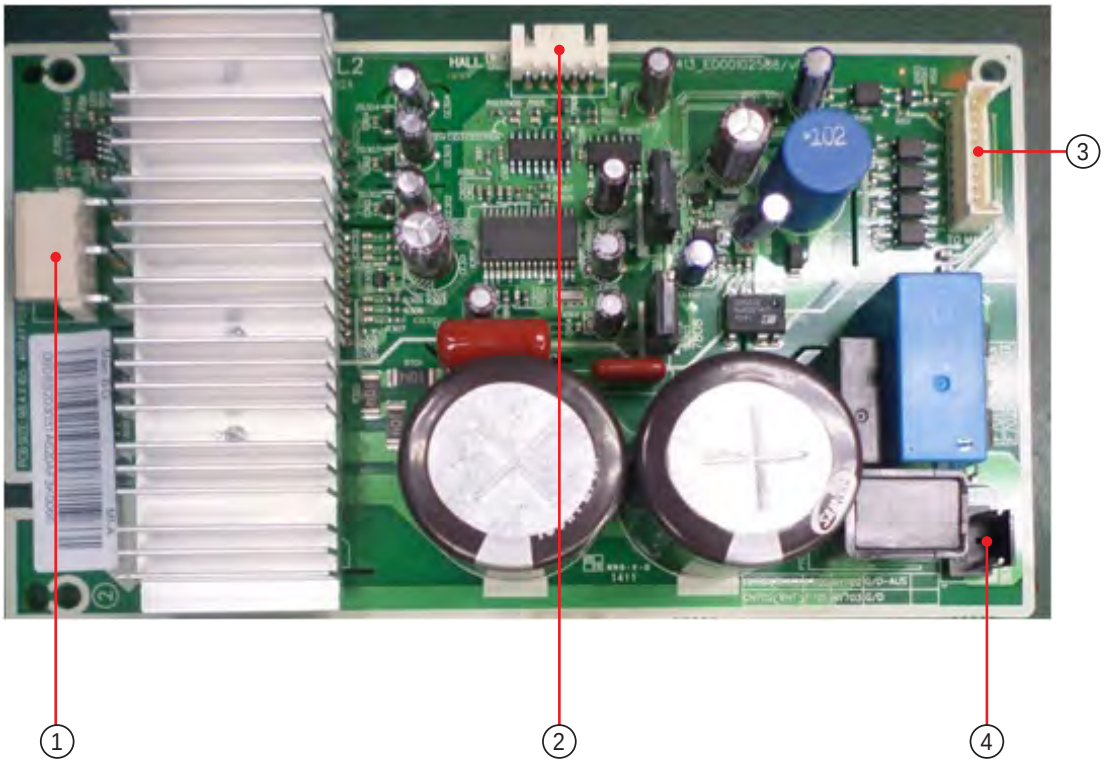
■ **SUB PCB DIAGRAM** (AM048JNCDCH/AA)



No	Part Code	Local	Function	Description
1	3711-003381	CN301	FAN MOTOR	1WALL,5P,1R,3.96mm,ANGLE,SN,WHT #1 - U, #2 - V, #3- W
2	3711-000992	CN101	HALL	BOX,5P,1R,2.5MM,ANGLE,SN,WHT #1 - 5V, #2~4 - HALL, #5 - GND
3	3711-004531	CN501	FAN MOTOR COMM	BOX,10P,1R,2mm,STRAIGHT,SN,WHT #1 - 12V, #2 - GND #3 - 5V, #4 - BLDC POWER RELAY #5 - OVER TEMP #6 - RST #7 - REV OUT, #8 - FAN FEEDBACK #9 - INRUSH RELAY, #10 - FAN PWM
4	3711-003380	CN701	POWER	1WALL,2P,1R,7.92mm,STRAIGHT,SN,BLK #1 - N, #2- L

Big Ceiling (cont.)

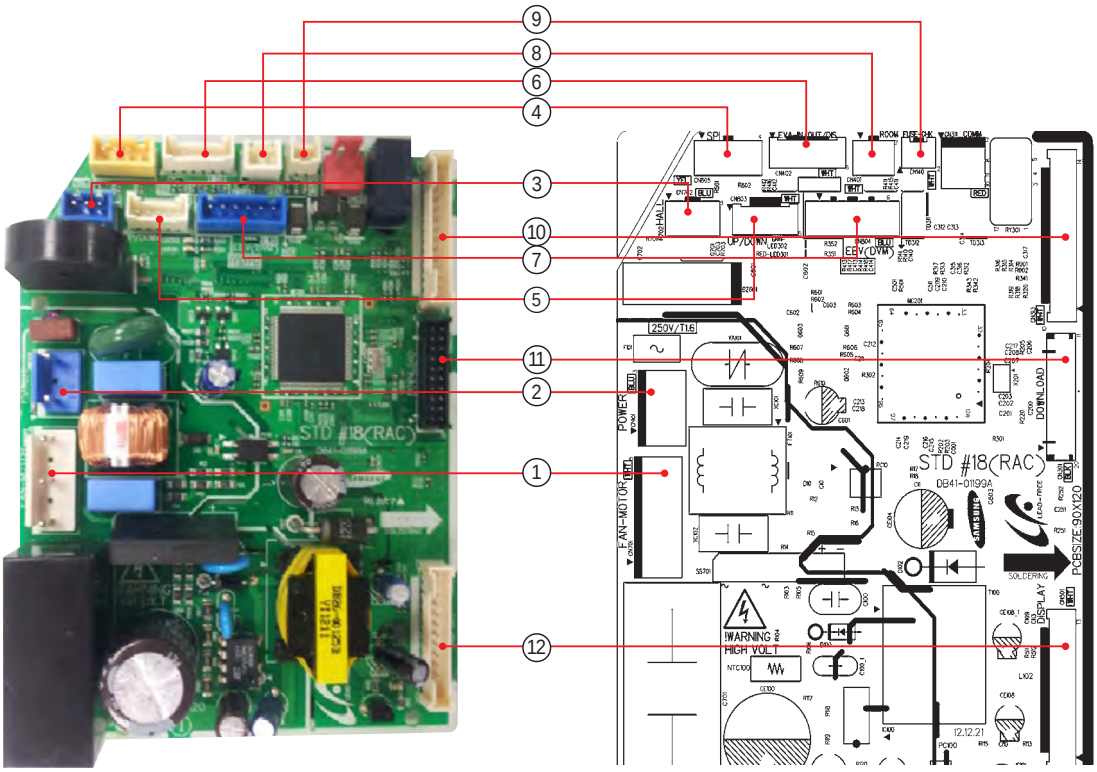
■ **SUB PCB DIAGRAM** (AM036JNCDCH/AA)



No	Part Code	Local	Function	Description
1	3711-003381	CN301	FAN MOTOR	1WALL,5P,1R,3.96mm,ANGLE,SN,WHT #1 - U, #2 - V, #3- W
2	3711-000992	CN101	HALL	BOX,5P,1R,2.5MM,ANGLE,SN,WHT #1 - 5V, #2~4 - HALL, #5 - GND
3	3711-004182	CN501	FAN MOTOR COMM	BOX,10P,1R,2mm,STRAIGHT,SN,WHT #1 - 12V, #2 - GND #3 - 5V, #4 - BLDC POWER RELAY #5 - OVER TEMP #6 - RST #7 - REV OUT, #8 - FAN FEEDBACK #9 - INRUSH RELAY, #10 - FAN PWM
4	3711-003405	CN701	POWER	1WALL,2P,1R,7.92mm,STRAIGHT,SN,BLK #1 - N, #2- L

5-1-8 Wall-Mounted type (Neo Forte)

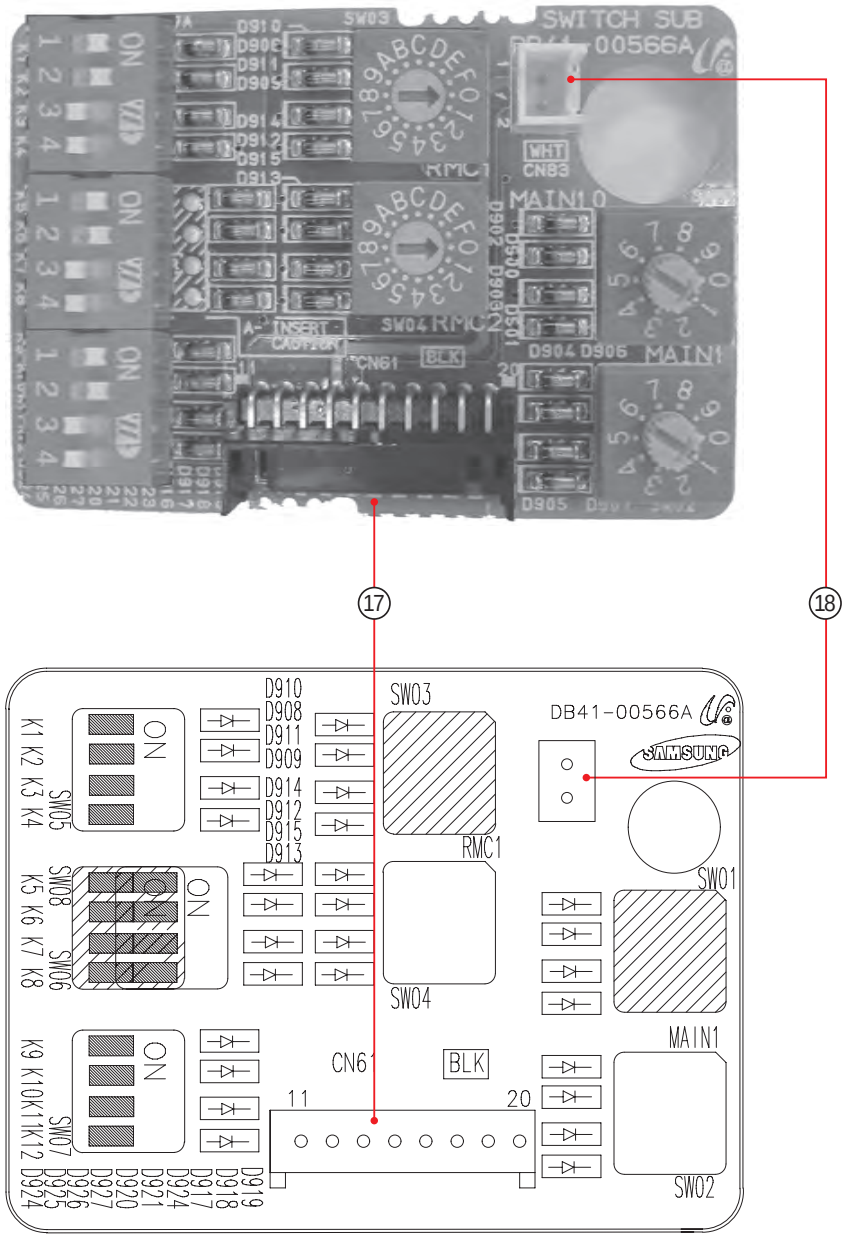
■ MAIN



① **CN701-SSR MOTOR** #1: 12V #2: MOTOR SSR OUT	② **CN101-AC INPUT** #1: L #2: N	③ **CN702-HALL IC** 입력 #1: VCC #2: GND #3: Hall Sensor 값 입력	④ **CN805-SPI** #1~2 : GND #3:SPI 제어
⑤ **CN803-** 상하 블레이드 #1: VCC #2~5: 블레이드 제어	⑥ **CN402-**온도 센서 #1 : EVA IN TEMP #2,4,6: GND #3 : EVA OUT TEMP #5 : DISCHARGE TEMP	⑦ **CN804-** 전동변 #1~4: 전동변 제어 #5,6: 12V	⑧ **CN401-ROOM** 온도센서 #1: 온도 입력 #2: GND
⑨ **CN140 - FUSE Check** #1:FUSE CHECK #2:GND	⑩ **CN313-2** 선통신	⑪ **CN301-MICOM DOWNLOAD**	⑫ **CN501-DISPLAY** #1:12V #2~7:LED 제어 #8: 리모컨 신호 출력 #9: AUTO SW #10: REMOCON INT #11:GND #12:VCC

Wall-Mounted type (Neo Forte) (cont.)

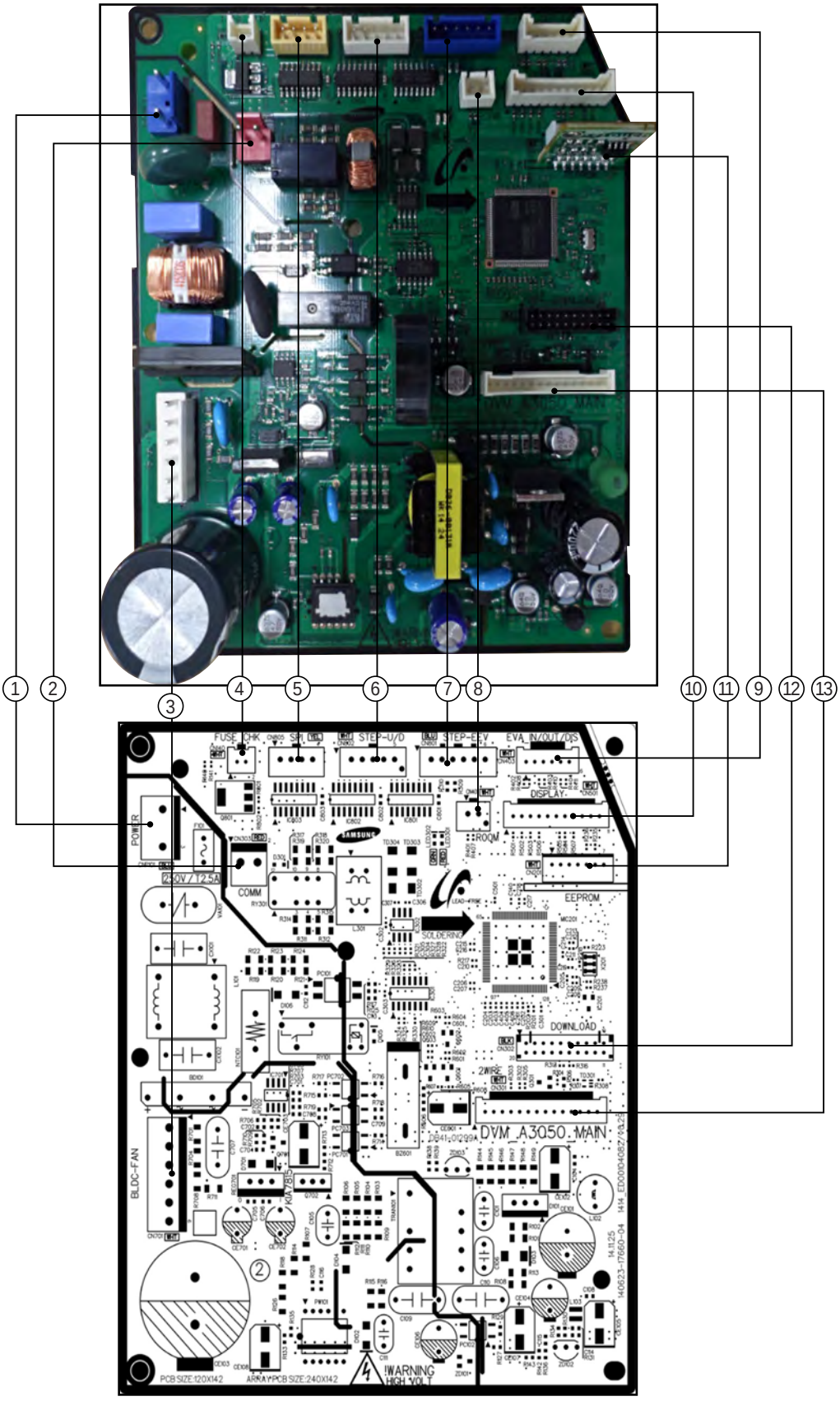
■ SUB SWITCH



No.	CN #	COLOR	FUNCTION
⑰	CN61	Black	Main-Sub PCB Connecor
⑱	CN83	White	External Contact Control

5-1-9 Wall Mounted type(A3050, MAX)

■ Main PBA



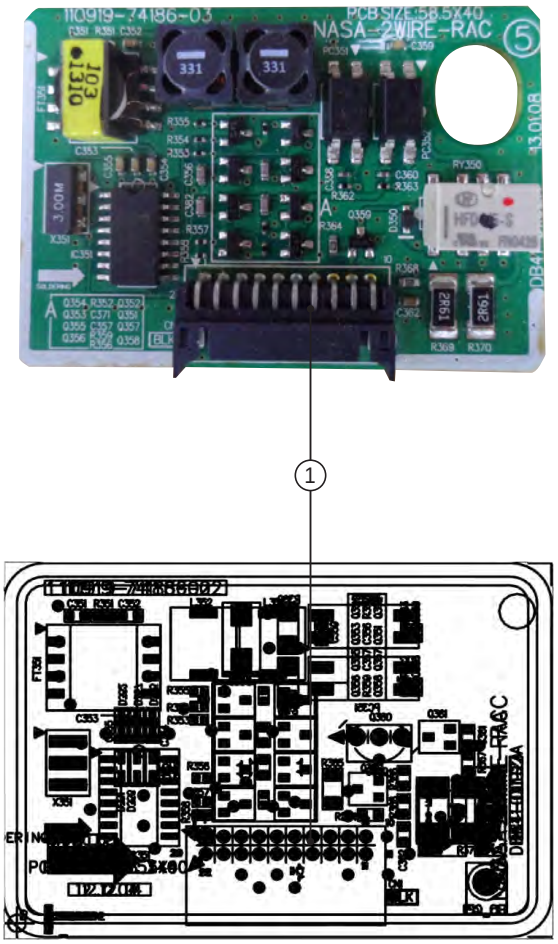
Wall Mounted type(A3050, MAX) (cont.)

■ Main PBA

① **CNP101-POWER** #1 : L #2 : NOT USED #3 : N	② **CN303-COM1** #1~2 : COMMUNICATION SIGNAL	③ **CN701-BLDC FAN** #1 : DC 310V #2 : NOT USED #3 : GND #4 : PWM SIGNAL #5 : FEEDBACK SIGNAL	④ **CN140-FUSE CHECK** #1 : THERMAL FUSE SIGNAL #2 : GND
⑤ **CN805-SPI** #1~2 : GND #3 : SPI CONTROL SIGNAL #4 : NOT USED	⑥ **CN802-STEP UP/DOWN** #1 : DC 12V #2~5 : LOUVER SIGNAL	⑦ **CN801-EEV** #1~4 : EEV SIGNAL #5~6 : DC 12V	⑧ **CN401-ROOM** #1 : OOM TEMPERATURE SENSOR SIGNAL #2 : GND
⑨ **CN403-EVA IN/OUT/DIS** #1 : EVA IN TEMPERATURE SENSOR SIGNAL #2 : GND #3 : EVA OUT TEMPERATURE SENSOR SIGNAL #4 : GND #5 : DISCHARGE TEMPERATURE SENSOR SIGNAL #6 : GND	⑩ **CN501-DISPLAY** #1~3 : LED SIGNAL #4 : REMOCON SIGNAL #5 : GND #6 : DC 5V #7~8 : REMOCON SIGNAL #9~11 : NOT USED	⑪ **CN201-EEPROM** #1 : GND #2 : NOT USED #3 : DC 5V #4~7 : EEPROM SIGNAL	⑫ **CN302-DOWNLOAD** #1~8 : DOWNLOAD SIGNAL #9 : GND #10~11 : DC 5V #12~16 : DOWNLOAD SIGNAL #17 : GND #18~20 : DOWNLOAD SIGNAL
⑬ **CN301-to 2WIRE SUB** #1~2 : COMMUNICATION SIGNAL #3~4 : SUB PBA SIGNAL #5 : EXTERNAL CONTROL SIGNAL #6 : COMP CHECK SIGNAL #7 : ERROR CHECK SIGNAL #8 : DC 5V #9 : GND #10 : DC 12V #11~14 : COMMUNICATION SIGNAL			

Wall Mounted type(A3050, MAX) (cont.)

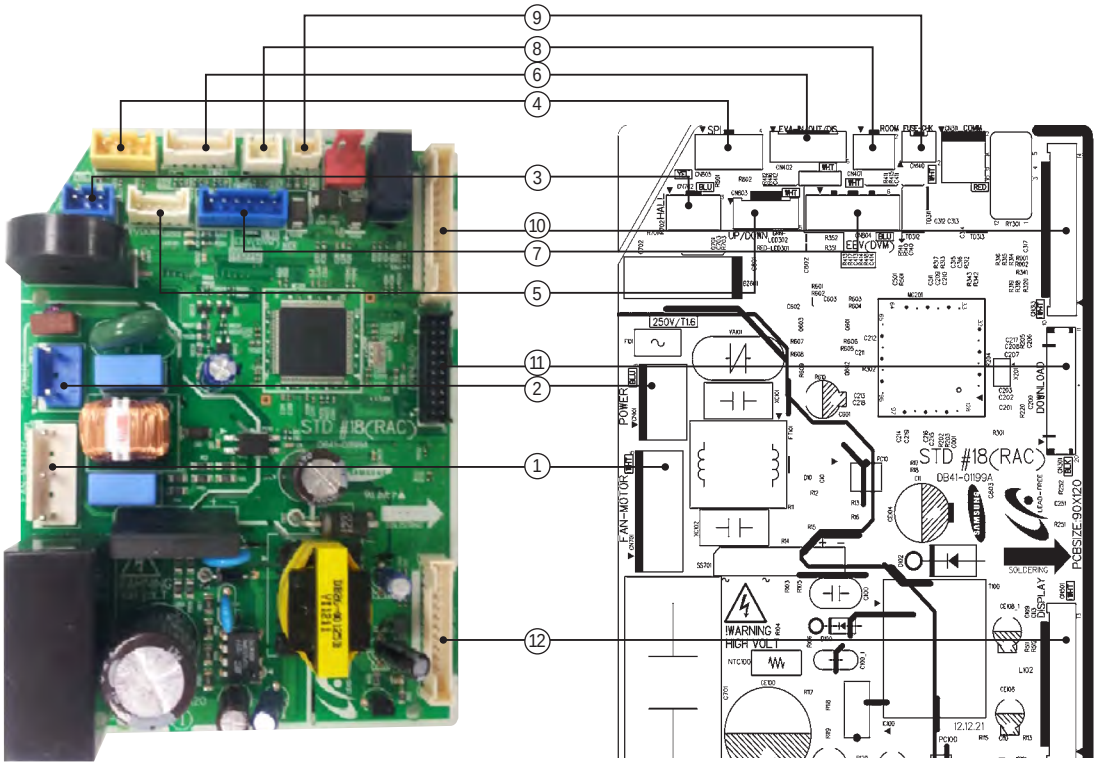
■ **Sub PCB** (cont.)



① **CN1-2WIRES COMM.**

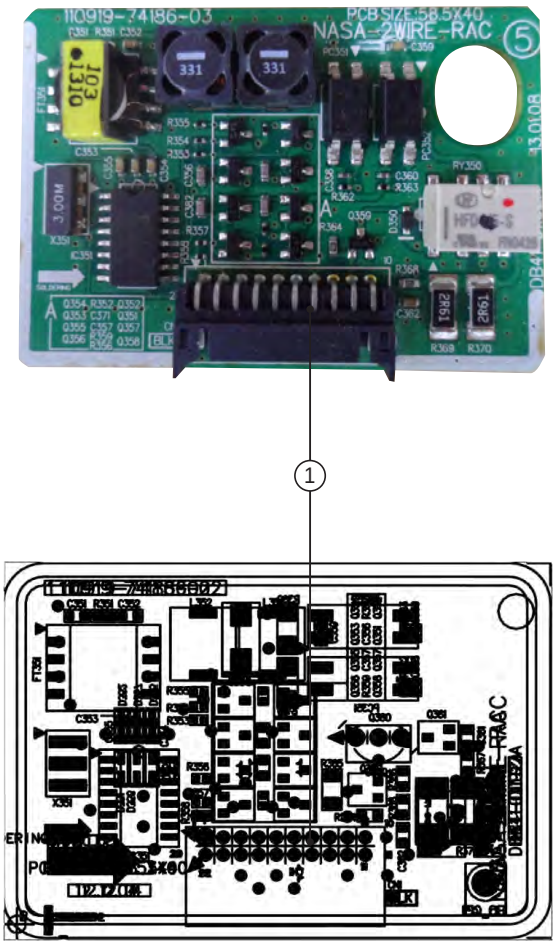
#1,#2,#19,#20:COMM. SIGNAL
#3,#18:EXTERNAL CONTROL
#4,#17:COMP CHECK
#5,#16:ERROR CHECK
#6:VCC(DC5V)
#7,#14:GND
#8,#13,#15:DC12V
#9~#12:COMM. SIGNAL

5-1-10 Wall-Mounted type (Boracay)



① CN701-SSR MOTOR	② CN101-AC INPUT	③ CN702-HALL IC INPUT	④ CN805-SPI
#1: 12V #2: MOTOR SSR OUT	#1: L #2: N	#1: VCC #2: GND #3: INPUT HALL SENSOR VALUE	#1~2 : GND #3: SPI CONTROL
⑤ CN803-UP/DOWN BLADE	⑥ CN402-TEMP SENSOR	⑦ CN804-EEV	⑧ CN401-ROOM TEMP SENSOR
#1: VCC #2~5: BLADE CONTROL	#1 : EVA IN TEMP #2,4,6: GND #3 : EVA OUT TEMP #5 : DISCHARGE TEMP	#1~4: EEV CONTROL #5,6: 12V	#1: INPUT TEMP #2: GND
⑨ CN140 - FUSE CHECK	⑩ CN313-2 WIRE COMM	⑪ CN301-MICOM DOWNLOAD	⑫ CN501-DISPLAY
#1:FUSE CHECK #2:GND			#1: 12V #2~7: LED CONTROL #8: OUTPUT SIGNAL REMOCON #9: AUTO SW #10: REMOCON INT #11:GND #12:VCC

Wall-Mounted type (Boracay)(Cont.)

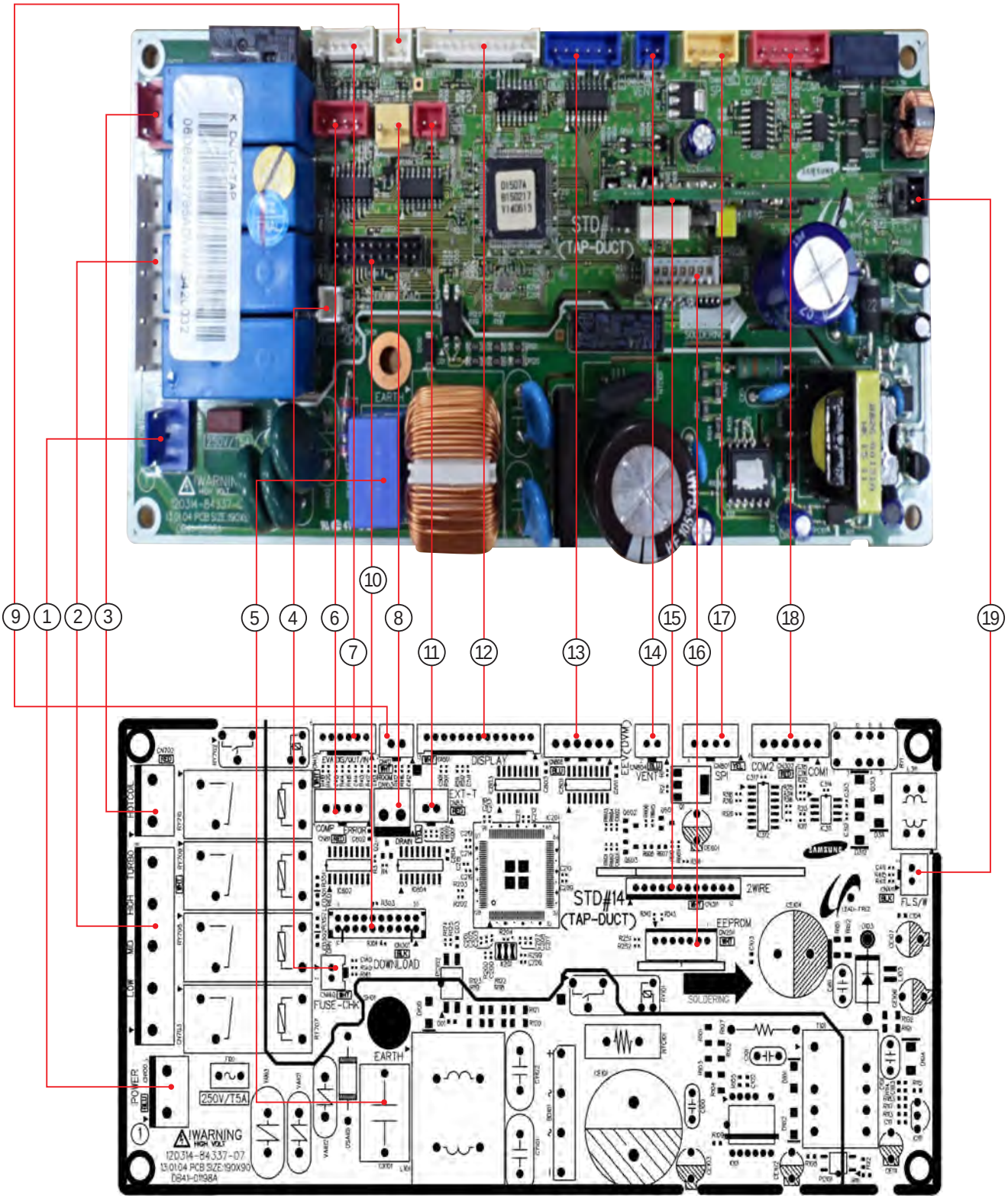


① **CN1-2WIRES COMM.**

#1,#2,#19,#20:COMM. SIGNAL
#3,#18:EXTERNAL CONTROL
#4,#17:COMP CHECK
#5,#16:ERROR CHECK
#6:VCC(DC5V)
#7,#14:GND
#8,#13,#15:DC12V
#9~#12:COMM. SIGNAL

5-1-11 Floor Stand Type

■ **MAIN**



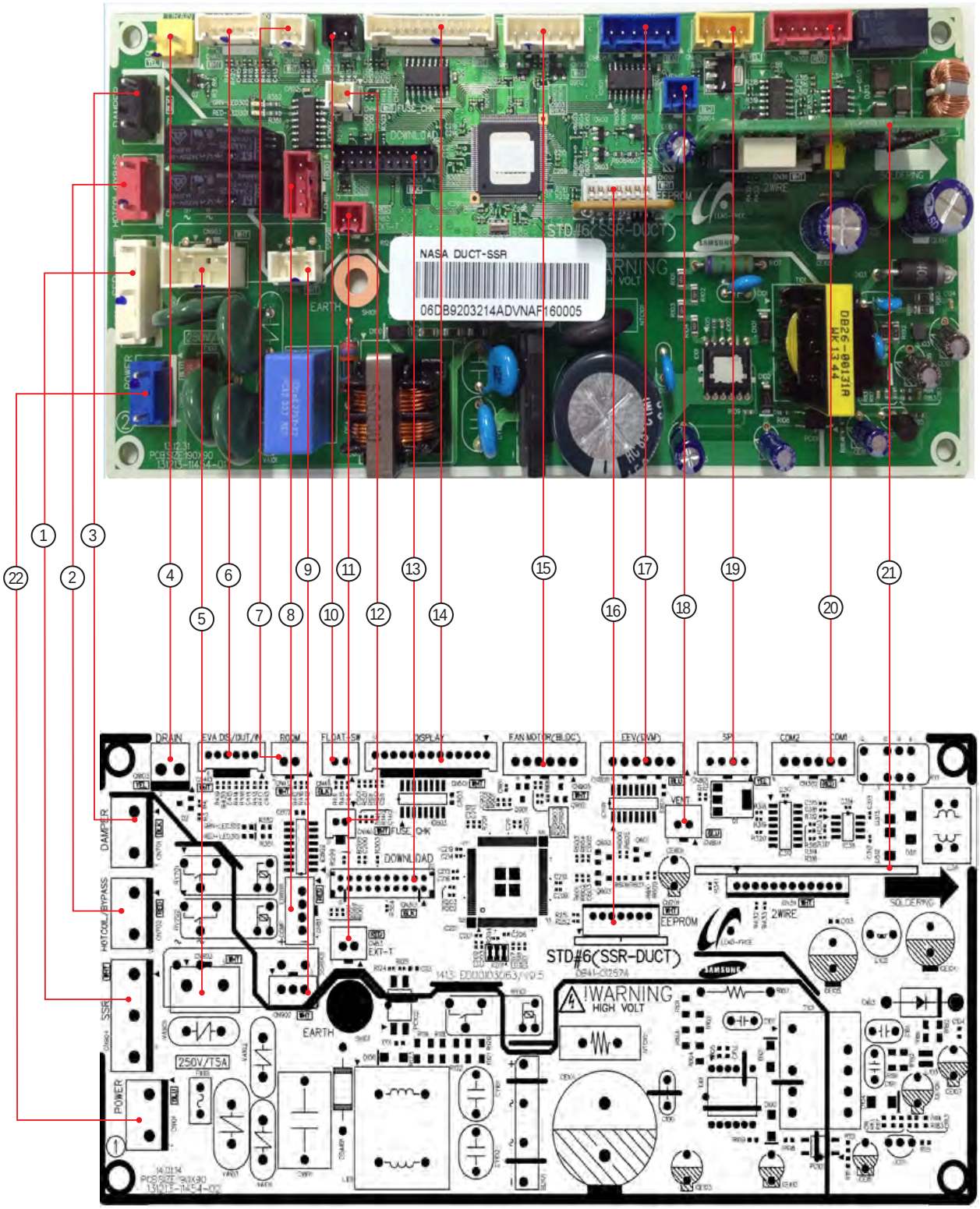
Floor Stand Type

■ MAIN

① **CN100-AC POWER** #1 : L #3 : N	② **CN703-MOTOR** #1 : N #3,5,7,9 : FAN MOTOR CONTROL SIGNAL	③ **CN702-HOT COIL** #1 : N #3 : HOT COIL CONTROL SIGANL	④ **CN140-THERMAL FUSE** #1 : THERMAL FUSE SIGNAL #2 : GND
⑤ **SH01-EARTH** #1 : EARTH	⑥ **CN81-ERROR/COMP CHECK** #1 : DC 12V #2 : ERROR CHECK SIGNAL #3 : DC 12V #4 : COMP CHECK SIGNAL	⑦ **CN413-EVA IN/OUT/DIS TEMP. SENSOR** #1 : EVI IN TEMP. SENSOR #3 : EVI OUT TEMP. SENSOR #5 : DISCHARGE TEMP. SENSOR #2,4,6 : GND	⑧ **CN103-DRAIN PUMP** #1 : DRAIN PUMP CONTROL SIGNAL #2 : GND
⑨ **CN412-ROOM TEMP. SENSOR** #1 : ROOM TEMP. SENSOR #2 : GND	⑩ **CN301-DOWNLOAD** #1~8 : DOWNLOAD SIGNAL #9 : GND #10~11 : DC 5V #12~16 : DOWNLOAD SIGNAL #17 : GND #18~20 : DOWNLOAD SIGNAL	⑪ **CN83-EXTERNAL CONTROL** #1 : GND #2 : EXTERNAL CONTROL SIGNAL	⑫ **CN501-DISPLAY** #1 : DC 12V #3~10,13 : PANEL SIGNAL #11 : GND #12 : DC 5V
⑬ **CN808-EEV(DVM)** #1~4 : EEV CONTROL SIGNAL #5~6 : DC 12V	⑭ **CN804-VENTILATOR** #1 : DC 12V #2 : VENTILATOR CONTROL SIGNAL	⑮ **CN311-2WIRE SUB** #1 : DC 12V #2~5 : COMMUNICATION SIGNAL #6 : DC 5V #7~12 : COMMUNICATION SIGNAL	⑯ **CN201-EEPROM** #1 : GND #2 : NOT USED #3 : DC 5V #4~7 : EEPROM SIGNAL
⑰ **CN302-COM1 COM2** #1~2 : GND #3 : SPI CONTROL SIGNAL #4 : NOT USED	⑱ **CN302-COMMUNICATION** #1~2 : COM1 COMMUNICATION SIGNAL #3 : DC 12V #4 : GND #4~6 : COM2 COMMUNICATION SIGNAL	⑲ **CN411-FLOAT SWITCH** #1 : FLOAT SWITCH SIGNAL #2 : GND	

5-1-12 OAP DUCT (AM✳✳✳JNESCH/AA)

■ MAIN PCB



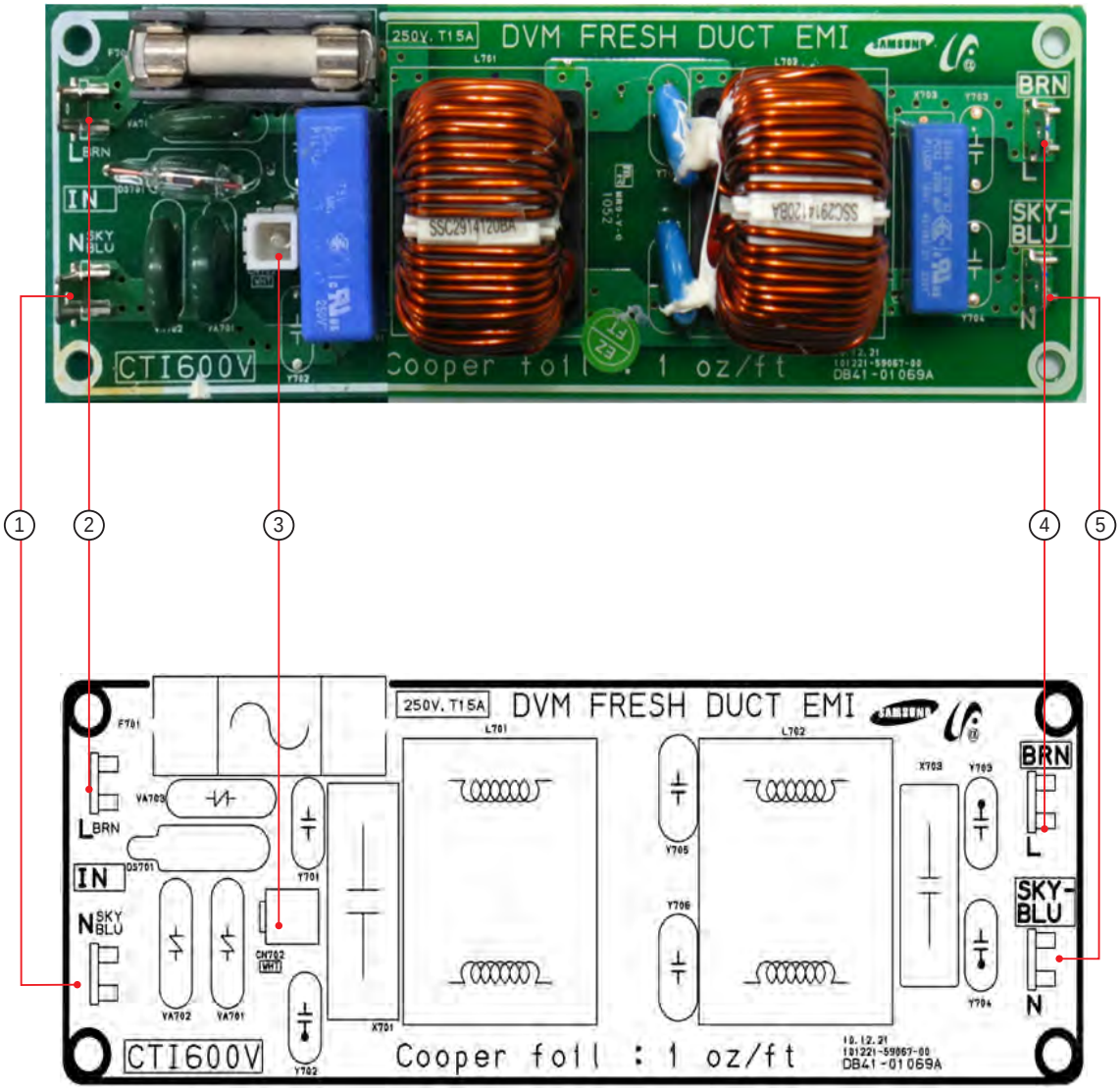
OAP DUCT (AM✳JNESCH/AA) (cont.)

■ MAIN PCB

① **CN100-AC INPUT** #1: N #2: L #3: N	② **CN702-HOT COIL** #1: L #2: N	③ **CN701-DAMPER** #1: L #2: N	④ **CN103-DRAIN PUMP** #1: 12V #2 : GND
⑤ **CN903-SSR AC Control** #1: L Input #2: L Output	⑥ **CN413-Temperature Sensor** #1 : EVA IN TEMP #2,4,6: GND #3 : EVA OUT TEMP #5 : DISCHARGE TEMP	⑦ **CN412-ROOM Temperature Sensor** #1: Temperature Input #2 : GND	⑧ **CN81-EXTERNAL CONTROL OUT** #1,3: 12V #2: ERROR CHECK OUT #4: COM CHK OUT
⑨ **CN902- SSR DC Output** #1: 12V #2: MOTOR SSR OUT	⑩ **CN411-FLOAT S/W** #1: FLOAT SW Input #2: GND	⑪ **CN83-EXTERNAL CONTROL** #1: GND #2: EXTERNAL INPUT	⑫ **CN140-FUSE CHECK** #1:FUSE CHECK #2:GND
⑬ **CN301-MICOM DOWNLOAD**	⑭ **CN501-DISPLAY** #1:12V #2~6:LED Control #7: BZ1 #8: Remote control signal output #9: AUTO SW #10: REMOCON INT #11:GND #12:VCC #13:BZ2	⑮ **CN905-BLDC MOTOR** #1:12V #2: GND #3: VCC #4: MOTOR SIGNAL PWM #5: MOTOR FEEDBACK #6:INRUSH OUT	⑯ **CN201-E2P Modules**
⑰ **CN808- Electric sides** #1~4: EEV #5,6: 12V	⑱ **CN804-VENTILATOR** #1: 12V #2: VENT OUT	⑲ **CN801-SPI** #1,2:GND #3:SPI Control	⑳ **CN302- Indoor/outdoor communication / wired remote communications** #1,2: Indoor and outdoor group communication #3:12V #4:GND #5: Wired remote communication
㉑ **CN311-2 Communication**	㉒ **CN101-AC INPUT** #1: L #2: N		

OAP DUCT (AM✳JNESCH/AA) (cont.)

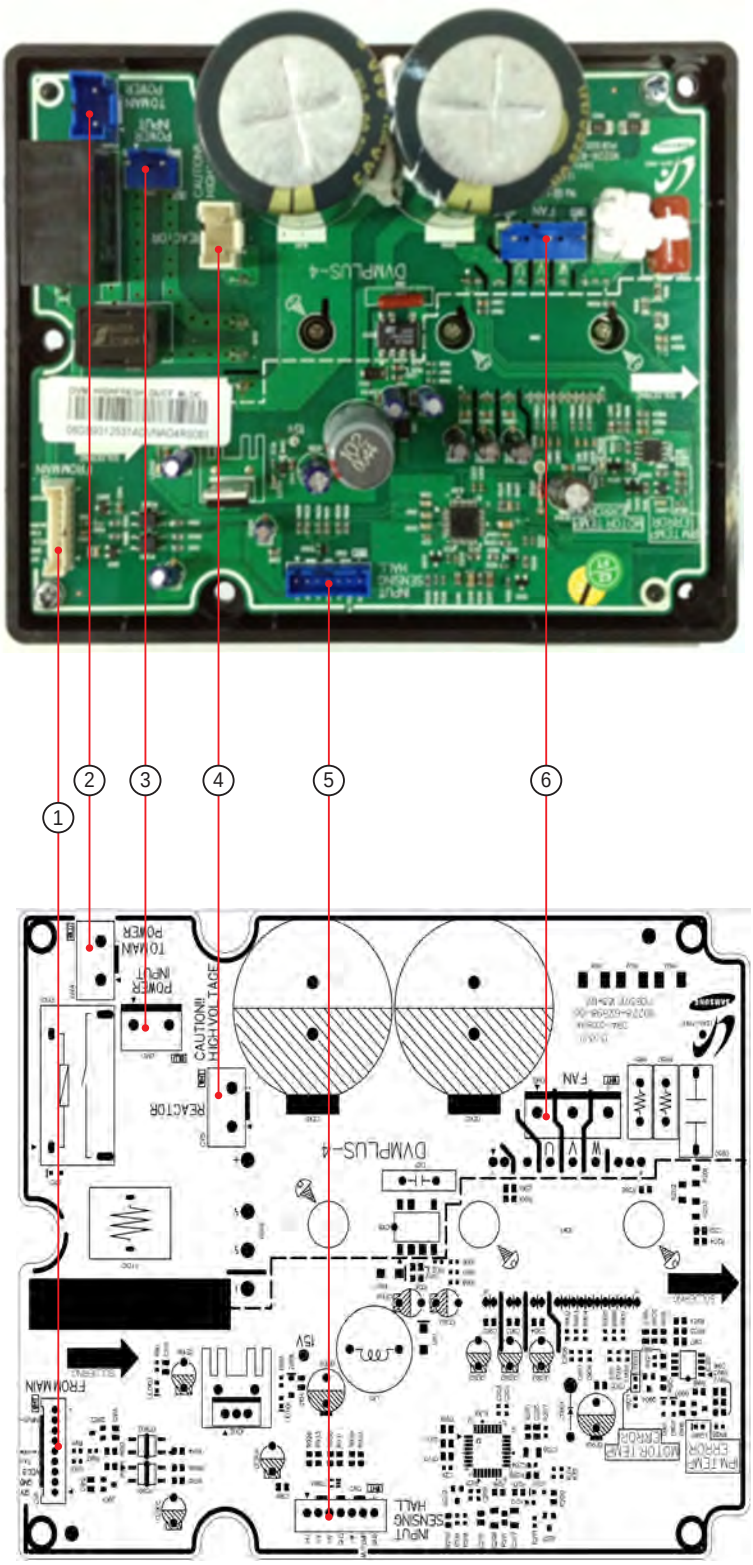
■ EMI PCB



① N-N TOP	② L-L TOP	③ CN702-Earth	④ L-L TOP
⑤ N-N TOP			

OAP DUCT (AM✳JNESCH/AA) (cont.)

■ BLDC Driver PCB



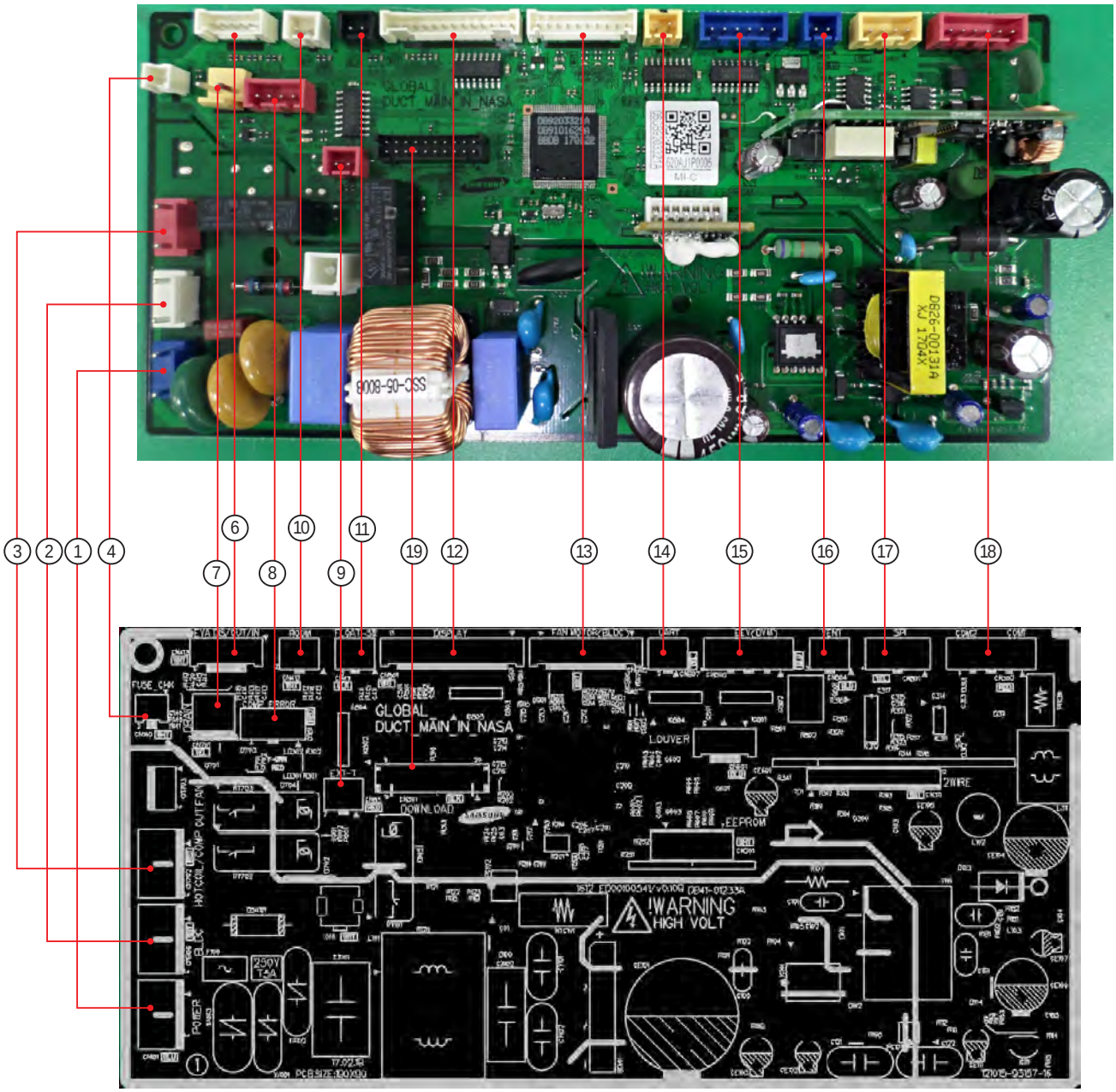
OAP DUCT (AM✳JNESCH/AA)

■ BLDC Driver PCB

① **CN11- Main-BLDC COMM** #1:12V #2:GND #3: VCC #4: FAN RPM #5: Fan Feedback #8: INRUSH	② **CN14-MAIN POWER** #1: L #2: N	③ **CN10-POWER INPUT** #1:N #2: N	④ **CN15-REACTOR**
⑤ **CN12-BLDC-MOTOR COMM** #1: HU #2 : 5V #3: HW #4: GND #5: HV #6: MOTOR TEMP #7: GND	⑥ **CN13-MOTOR** #1: U #2 : V #3: W		

5-1-13 Global Duct -1,2 (AM007/009/012/015/018/024/027/030MNMDCH/AA)

■ MAIN PCB



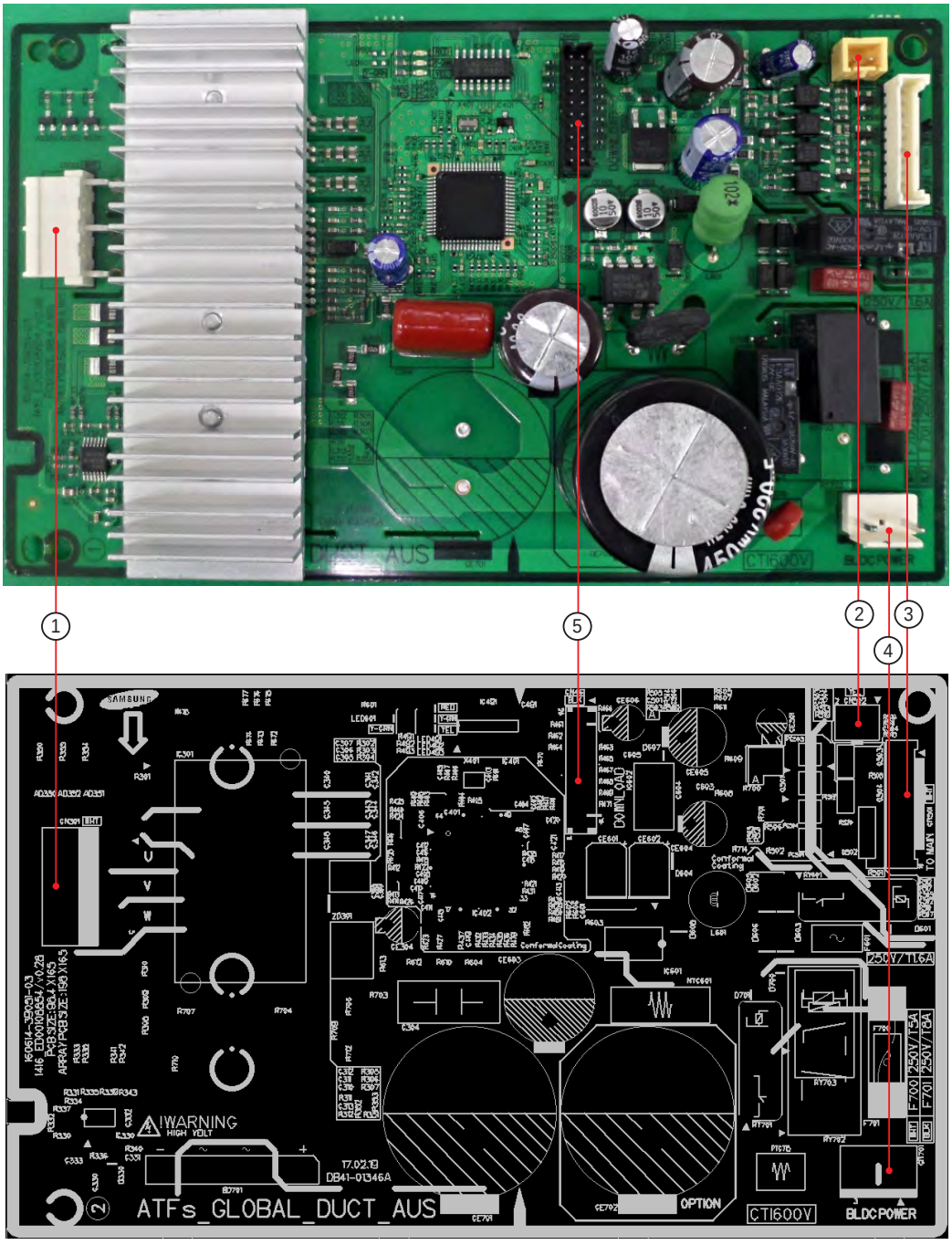
Global Duct -1,2 (AM007/009/012/015/018/024/027/030MNMDCH/AA)

■ MAIN PCB

① **CN101 - FAN DC LINK** #1: L (Main) #2: - #3: N (Main)	② **CN906 - BLDC POWER** #1: N #2: - #3: L	③ **CN702 - HOT COIL/COMP OUT** #1 : N_OUT #2 : - #3 : L_OUT	④ **CN140 – FUSE CHECK** #1 : N_OUT #2 : -
⑤ **CN1-GND** #1: GND	⑥ **CN413 – EVA-IN, EVA-OUT, DISCHARGE SENSOR** #1 : EVA-IN SENSOR #2 : GND #3 : EVA-OUT SENSOR #4 : GND #5 : DISCHARGE SENSOR #6 :GND	⑦ **CN701 – DRAN** #1 : 12V #2 : GND	⑧ **CN81 – COMP CHECK** #1 : 12V #2 : ERROR CHECK #3 : 12V #4 : COMP CHECK
⑨ **CN83 – EXT-CTL** #1 : EXTERNAL CONTROL SIGNAL #2 : GND	⑩ **CN412 – ROOM SENSOR** #1 :ROOM-TEMP SENSOR #2 :GND	⑪ **CN411 – FLOAT SWITCH** #1 :FLOAT-SWITCH #2 :GND	⑫ **CN501-DISPLAY** #1 : 12V #2 : LED_0_OUT #3 : LED_1_ OUT #4 : LED_2_OUT #5 : LED_3_OUT #6 : LED_4_OUT #7 : BUZZER 1 #8 : REMOCON SIGN OUT #9 : AUTO S/W SIGNAL #10 : REMOCON_INT #11 : GND #12 : VCC #13 : BUZZER 2
⑬ **CN905-BLDC FAN MOTOR** #1 : 12V #2 : GND #3 : VCC #4 : BLDC POWER OUT #5 : OVER_TEMP #6 : IPM_FO #7 : REV_OUT #8 : FAN FEEDBACK #9 : INRUSH_OUT #10 : FAN_PWM1	⑭ **CN907 – UART** #1 : MAIN_RXD_INV_TXD #2 : MAIN_TXD_INV_RXD	⑮ **CN808-EEV** #1 : EEV_B_bar_OUT #2 : EEV_A_bar_OUT #3 : EEV_B_OUT #4 : EEV_A_OUT #5 : 12V #6 : 12V	⑯ **CN804-VENTILATOR** #1 : 12V #2 : VENT_OUT
⑰ **CN801 – SPI** #1 : GND #2 : GND #3 : 12V #4 : -	⑱ **CN302 - COM1,COM2** #1 : COM1_A #2 : COM1_B #3 : 12V #4 : GND #5 : COM2_C #6 : COM2_D	⑲ **CN301 – DOWNLOAD** #1 : COM1_RXD #2 : COM1_TXD #3 : nTRST #4 : TDO #5 : TCK #6 : TDI #7 : TMS #8 : TRACE_CLK #9 : GND #10 : VCC #11 : VCC #12 : MODE_0 #13 : RESET # 14 : TRACE_3 # 15 : LVR3_A_bar # 16 : LVR3_B_bar # 17 : GND # 18 : TRACE_2 # 19 : TRACE_1 # 20 : TRACE_0	

Global Duct -1,2 (AM007/009/012/015/018/024/027/030MNMDCH/AA)

■ ATFs PCB



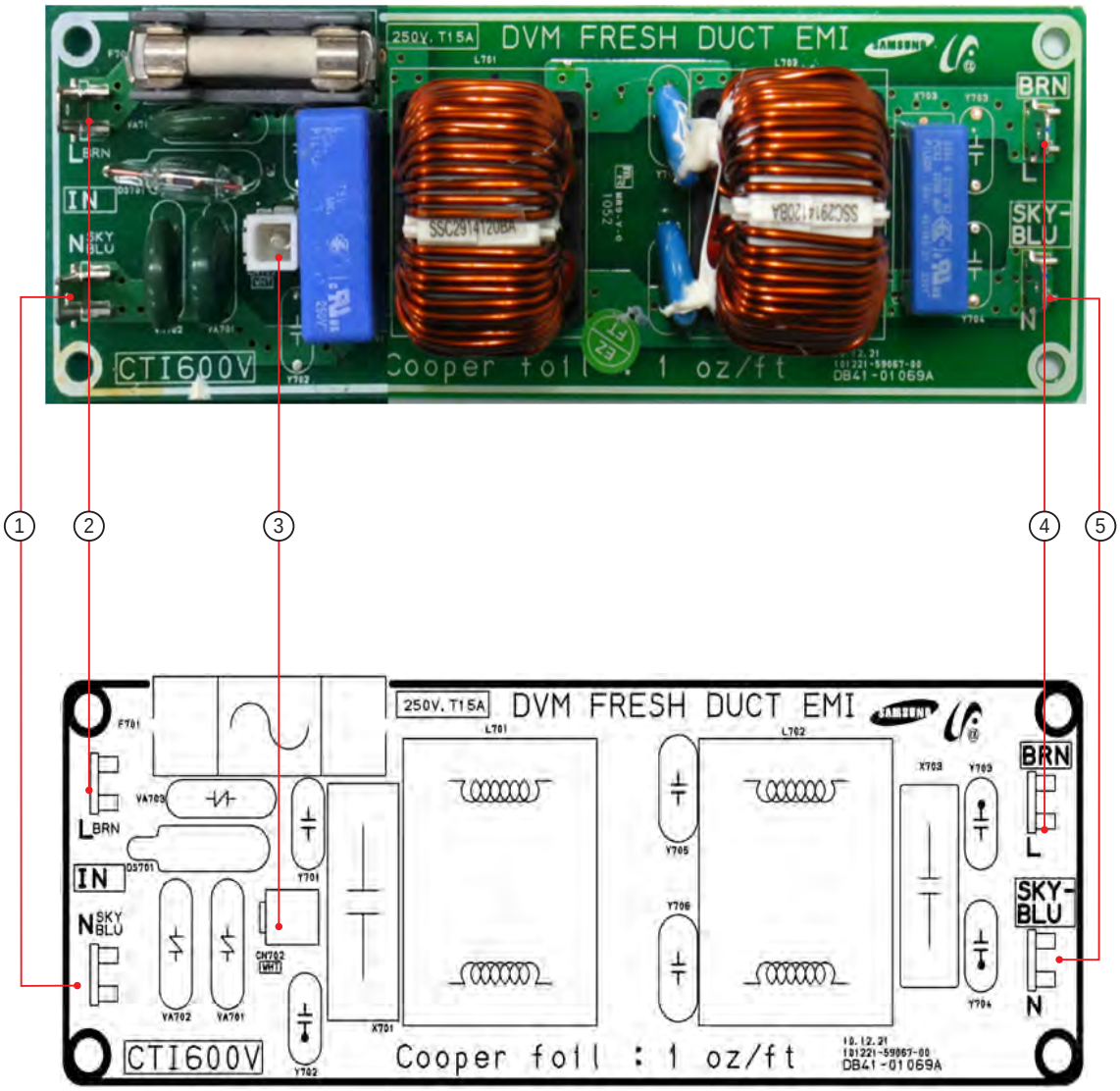
Global Duct -1,2 (AM007/009/012/015/018/024/027/030MNMDCH/AA)

■ ATFs PCB

① CN301 – MOTOR	② CN502-UART	③ CN501- TO MAIN	④ CN701 – BLDC POWER
#1 : U #2 : - #3 : V #4 : - #5 : W	#1 : MAIN_RXD_INV_TXD #2 : MAIN_TXD_INV_RXD	#1 : 12V #2 : GND #3 : 5V #4 : BLDC POWER OUT #5 : #6 : #7 : GND #8 : FAN RPM #9 : #10 : FAN_DUTY	#1 : N #2 : - #3 : L
⑤ CN301 – DOWNLOAD #1 : RXD_ATARO #2 : TXD_ATARO #3 : BOOT #4 : TDO #5 : TCK #6 : TDI #7 : TMS #8 : nTRST #9 : GND #10 : VCC #11 : VCC #12 : #13 : #14 : ENC_B/Y #15 : #16 : #17 : GND #18 : ENC_A/G #19 : ENC_Z/R #20 : SUB			

Global Duct -1,2 (AM007/009/012/015/018/024/027/030MNMDCH/AA)

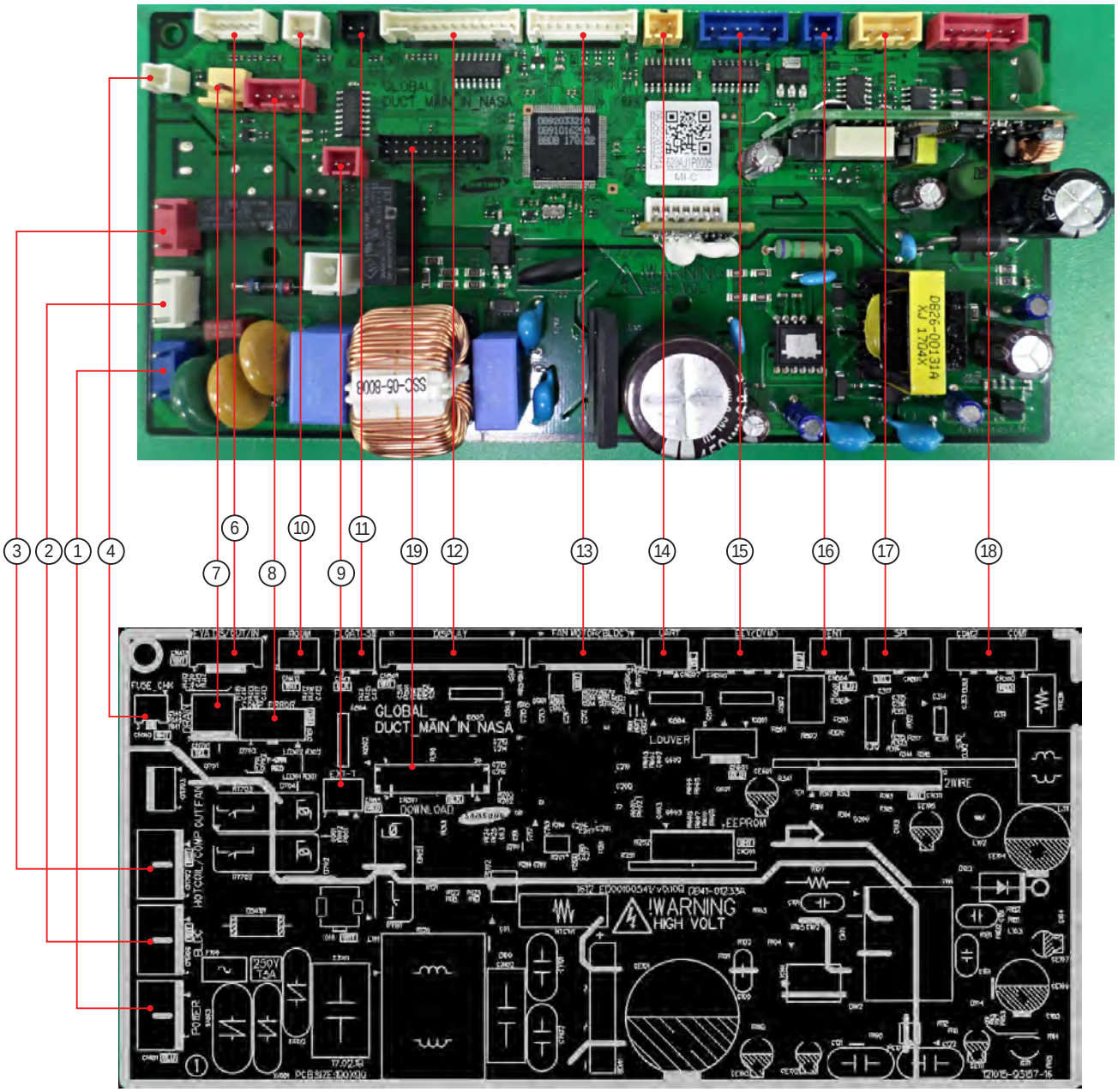
■ EMI PCB



① N-N TOP	② L-L TOP	③ CN702-Earth	④ L-L TOP
⑤ N-N TOP			

5-1-14 Global Duct -3 (AM036/048MNMDCH/AA)

■ MAIN PCB



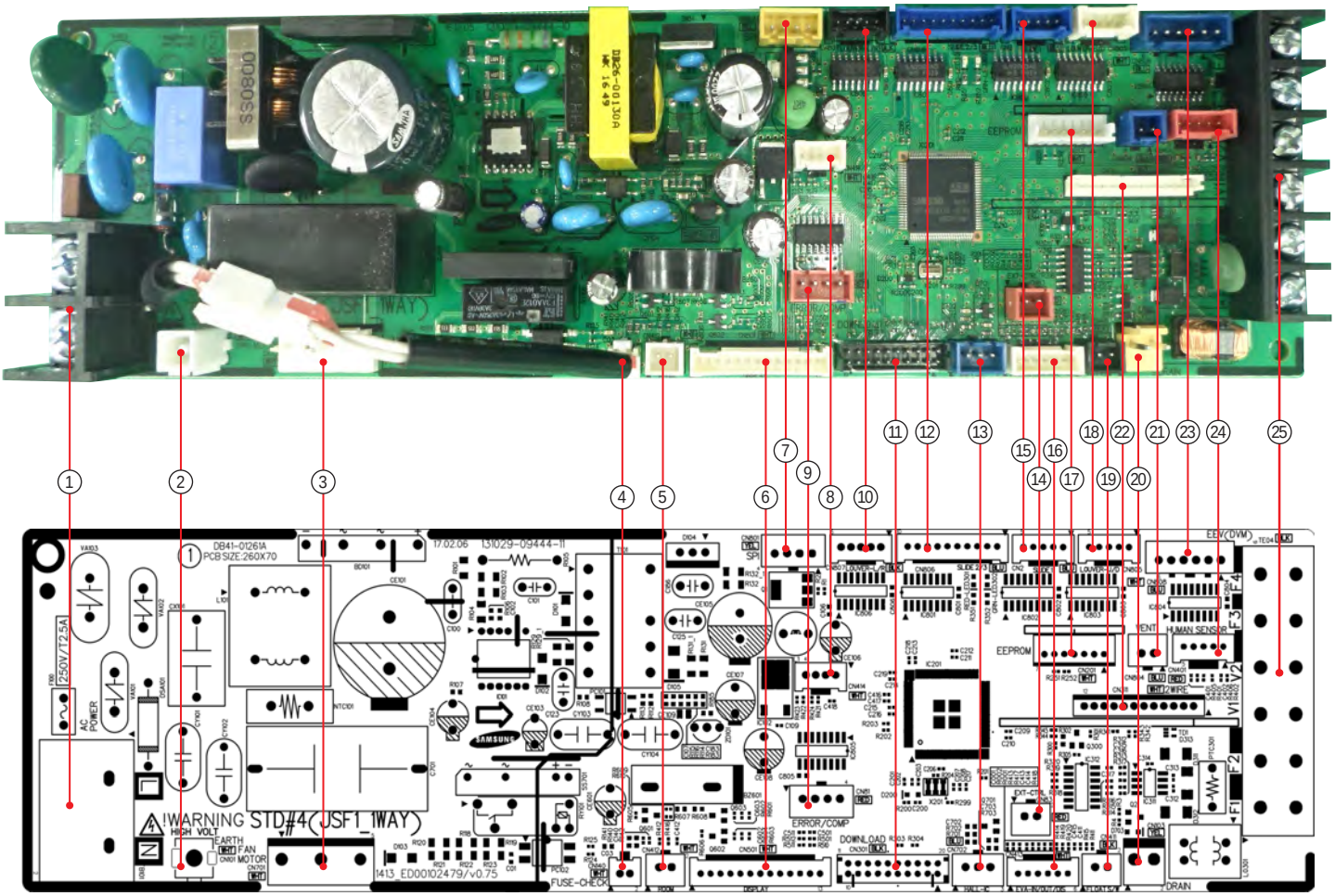
Global Duct -3 (AM036/048MNMDCH/AA)

■ MAIN PCB

① **CN101 - FAN DC LINK** #1: L (Main) #2: - #3: N (Main)	② **CN906 - BLDC POWER** #1: N #2: - #3: L	③ **CN702 - HOT COIL/COMP OUT** #1 : N_OUT #2 : - #3 : L_OUT	④ **CN140 – FUSE CHECK** #1 : N_OUT #2 : -
⑤ **CN1-GND** #1: GND	⑥ **CN413 – EVA-IN, EVA-OUT, DISCHARGE SENSOR** #1 : EVA-IN SENSOR #2 : GND #3 : EVA-OUT SENSOR #4 : GND #5 : DISCHARGE SENSOR #6 :GND	⑦ **CN701 – DRAN** #1 : 12V #2 : GND	⑧ **CN81 – COMP CHECK** #1 : 12V #2 : ERROR CHECK #3 : 12V #4 : COMP CHECK
⑨ **CN83 – EXT-CTL** #1 : EXTERNAL CONTROL SIGNAL #2 : GND	⑩ **CN412 – ROOM SENSOR** #1 :ROOM-TEMP SENSOR #2 :GND	⑪ **CN411 – FLOAT SWITCH** #1 :FLOAT-SWITCH #2 :GND	⑫ **CN501-DISPLAY** #1 : 12V #2 : LED_0_OUT #3 : LED_1_ OUT #4 : LED_2_OUT #5 : LED_3_OUT #6 : LED_4_OUT #7 : BUZZER 1 #8 : REMOCON SIGN OUT #9 : AUTO S/W SIGNAL #10 : REMOCON_INT #11 : GND #12 : VCC #13 : BUZZER 2
⑬ **CN905-BLDC FAN MOTOR** #1 : 12V #2 : GND #3 : VCC #4 : BLDC POWER OUT #5 : OVER_TEMP #6 : IPM_FO #7 : REV_OUT #8 : FAN FEEDBACK #9 : INRUSH_OUT #10 : FAN_PWM1	⑭ **CN907 – UART** #1 : MAIN_RXD_INV_TXD #2 : MAIN_TXD_INV_RXD	⑮ **CN808-EEV** #1 : EEV_B_bar_OUT #2 : EEV_A_bar_OUT #3 : EEV_B_OUT #4 : EEV_A_OUT #5 : 12V #6 : 12V	⑯ **CN804-VENTILATOR** #1 : 12V #2 : VENT_OUT
⑰ **CN801 – SPI** #1 : GND #2 : GND #3 : 12V #4 : -	⑱ **CN302 - COM1,COM2** #1 : COM1_A #2 : COM1_B #3 : 12V #4 : GND #5 : COM2_C #6 : COM2_D	⑲ **CN301 – DOWNLOAD** #1 : COM1_RXD #2 : COM1_TXD #3 : nTRST #4 : TDO #5 : TCK #6 : TDI #7 : TMS #8 : TRACE_CLK #9 : GND #10 : VCC #11 : VCC #12 : MODE_0 #13 : RESET # 14 : TRACE_3 # 15 : LVR3_A_bar # 16 : LVR3_B_bar # 17 : GND # 18 : TRACE_2 # 19 : TRACE_1 # 20 : TRACE_0	

5-1-15 Wind-free 1way cassette type

- Main PBA (AM007/009/012NN1DCH✳)



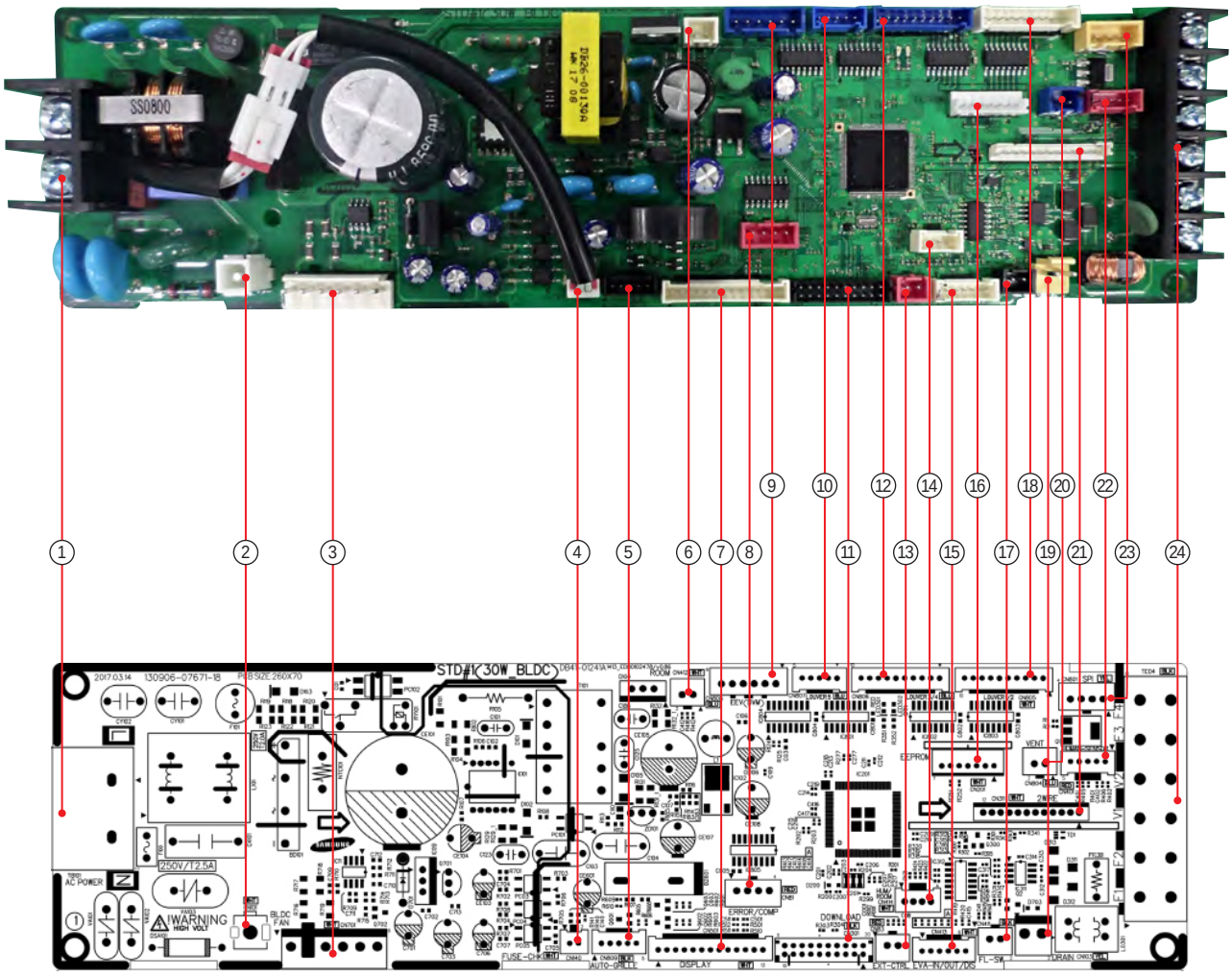
Wind-free 1way cassette type (cont.)

- Main PBA (AM007/009/012NN1DCH✳)

① TB101-AC POWER #1: AC POWER(L) #2: AC POWER(N)	② CN101-GND #1: GND	③ CN701-BLDC MOTOR #1: POWER(N) #3 : SSR MOTOR POWER(L) #5 : POWER(N)	④ CN140-FUSE CHECK #1: FUSE CHECK SIGNAL #2: GND
⑤ CN412-THERMISTOR #1 : ROOM TEMPERATURE SENSOR #2 : GND	⑥ CN501- 디스플레이부 #1: DC12V #2: LED_0 #3: LED_1 #4: LED_2 #5: LED_3 #6: LED_4 #7: LED_5 #8: REMOCON OUTUPUT SIGNAL #9 : AUTO SWITCH #10: REMOCON INPUT SIGNAL #11: GND #12: DC5V #13: GND	⑦ CN801-SPI #1: GND #2: GND #3: SPI CONTROL SIGNAL	⑧ CN414-HUMIDITY SENSOR #1 : DC5V #2 : GND #3 : TEMPERATURE SENSOR #4 : HUMIDITY SENSOR
⑨ CN81- ERROR/COMP CHECK #1: DC12V #2: ERROR CHECK(GND) #3: DC12V #4: COMP/OPER. CHECK(GND)	⑩ CN807-LOUVER L/R #1 : DC12V #2~#5: LOUVER CHECK	⑪ CN301- DOWNLOAD	⑫ CN807-LOUVER5 #1 : DC12V #2~#5: LOUVER CHECK #6 : DC12V #7~#10: LOUVER CHECK
⑬ CN702-HALL IC #1 : DC5V #2 : GND #3 : MOTOR FEEDBACK SIGNAL	⑭ CN83- EXTERNAL CONTROL #1: GND #2: EXTERNAL CONTROL SIGNAL	⑮ CN806-LOUVER3/4 #1 : DC12V #2~#5: LOUVER CHECK	⑯ CN413:THERMISTOR #1 : EVA-IN TEMPERATURE SNESOR #2 : GND #3 : EVA-OUT TEMPERATURE SNESOR #4 : GND #5 : DISCHARGE TEMPERATURE SNESOR #6 : GND
⑰ CN201-EEPROM #1: GND #3: DC5V #4: EEPROM_SELECT #5: EEPROM_SO #6: EEPROM_SI #7: EEPROM_CLK	⑱ CN805-LOUVER1/2 #1 : DC12V #2~#5: LOUVER CHECK	⑲ CN411-FLOAT SWITCH #1: F/S SIGNAL #2: GND	⑳ CN103-DRAIN PUMP #1: D/ P POWER(DC12V) #2: GND
㉑ CN804-VENTILATOR #1: DC12V #2: VENT CONTROL SIGNAL	㉒ CN311-2 선리모컨	㉓ CN808-EEV #1~#4: EEV CHECK #5 : DC12V #6 : DC12V	㉔ CN401- CLEAN PANEL COMMUNICATION #1: DC12V #2: CLEAN PANEL COMMUNICAITON(TXD) #3: CLEAN PANEL COMMUNICAITON(RXD) #4: GND
㉕ TE04-COMMUNICATION #1: COM1(F1) #2: COM1(F2) #3: V1(DC12V) #4: V2(GND) #5: COM2(F3) #6: COM2(F4)			

Wind-free 1way cassette type (cont.)

- Main PBA (AM018/024NN1DCH/AZ)



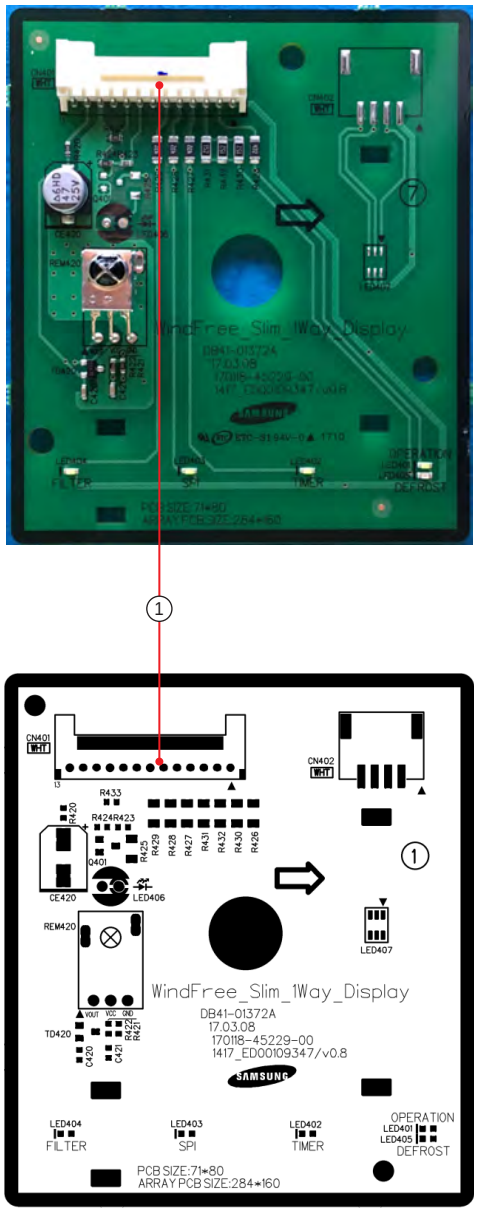
Wind-free 1way cassette type (cont.)

- Main PBA (AM007/009/012NN1DCH✳)

① TB101-AC POWER #1: AC POWER(L) #2: AC POWER(N)	② CN101-GND #1: GND	③ CN310 – 2WIRE SUB #1: DC310V #3 : GND #4 : DC15V #5 : FAN RPM #6 : RPM FEEDBACK	④ CN140-FUSE CHECK #1: FUSE CHECK SIGNAL #2: GND
⑤ CN809-AUTO GRILLE #1 : DC12V #4 : REMOCON CONTROL SIGNAL #5 : GND	⑥ CN412-THERMISTOR #1 : ROOM TEMPERATURE SENSOR #2 : GND	⑦ CN501-DISPLAY #1: DC12V #2: LED_0 #3: LED_1 #4: LED_2 #5: LED_3 #6: LED_4 #7: LED_5 #8: REMOCON OUTPUT SIGNAL #9 : AUTO SWITCH #10: REMOCON INPUT SIGNAL #11: GND #12: DC5V #13: GND	⑧ CN81-ERROR/COMP CHECK #1: DC12V #2: ERROR CHECK(GND) #3: DC12V #4: COMP/OPER. CHECK(GND)
⑨ CN808-EEV #1~#4: EEV CONTROL SIGNAL #5 : DC12V #6 : DC12V	⑩ CN807-LOUVER5 #1 : DC12V #2~#5: LOUVER CONTROL SIGNAL	⑪ CN301-DOWNLOAD	⑫ CN806-LOUVER3/4 #1 : DC12V #2~#5: LOUVER CONTROL SIGNAL #6 : DC12V #7~#10: LOUVER CONTROL SIGNAL
⑬ CN83-EXTERNAL CONTROL #1: GND #2: EXTERNAL CONTROL SIGNAL	⑭ CN414-HUMIDITY SENSOR #1 : DC5V #2 : GND #3 : TEMPERATURE SENSOR #4 : HUMIDITY SENSOR	⑮ CN413:THERMISTOR #1 : EVA-IN TEMPERATURE SENSOR #2 : GND #3 : EVA-OUT TEMPERATURE SENSOR #4 : GND #5 : DISCHARGE TEMPERATURE SENSOR #6 : GND	⑯ CN201-EEPROM #1: GND #3: DC5V #4: EEPROM_SELECT #5: EEPROM_SO #6: EEPROM_SI #7: EEPROM_CLK
⑰ CN411-FLOAT SWITCH #1: FLOAT SWITCH SIGNAL INPUT #2: GND	⑱ CN805-LOUVER1/2 #1 : DC12V #2~#5: LOUVER CONTROL SIGNAL	⑲ CN103-DRAIN PUMP #1: DRAIN PUMP CONTROL SIGNAL #2: GND	⑳ CN804-VENTILATOR #1: DC12V #2: VENT CONTROL SIGNAL
㉑ CN311-2WIRE SUB PBA	㉑ CN401-CLEAN PANEL COMMUNICAITON #1: DC12V #2: CLEAN PANEL COMMUNICAITON(TXD) #3: CLEAN PANEL COMMUNICAITON(RXD) #4: GND	㉓ CN801-SPI #1: GND #2: GND #3: SPI CONTORL SIGNAL	㉔ TE04-COMMUNICATION #1: COM1(F1) #2: COM1(F2) #3: V1(DC12V) #4: V2(GND) #5: COM2(F3) #6: COM2(F4)

Wind-free 1way cassette type (cont.)

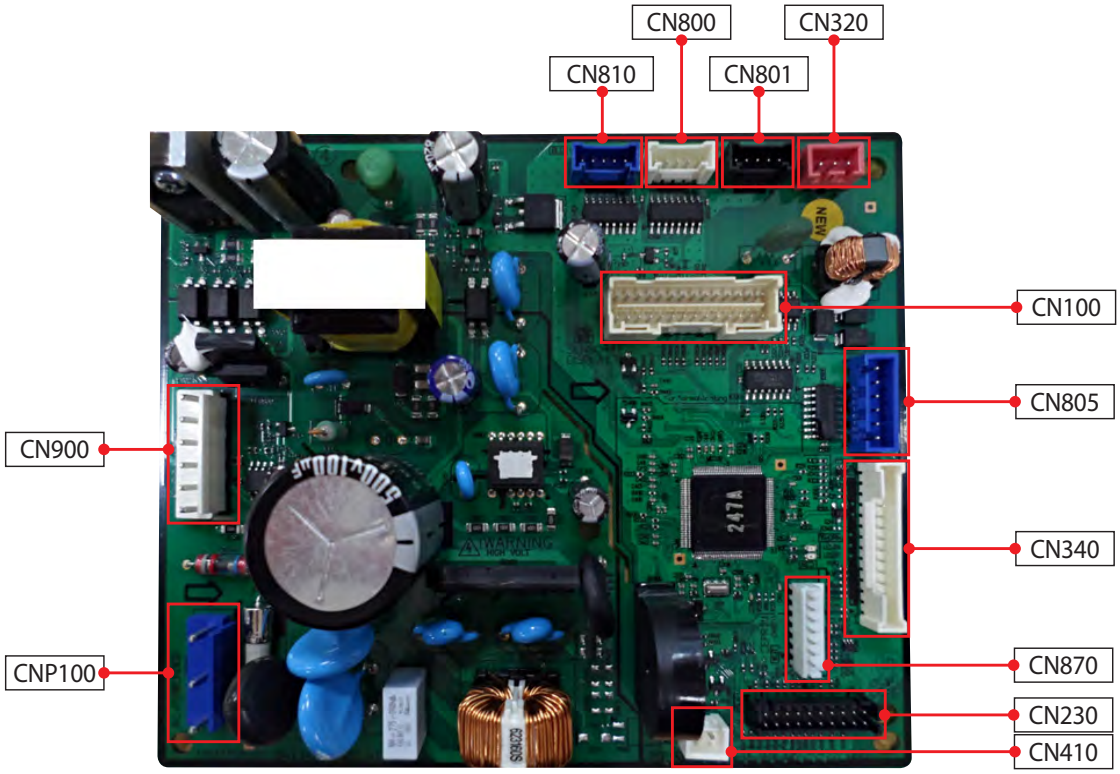
- DISPLAY PBA (AM007/009/012NN1DCH✳) (Cont.)



① CN401-DISPLAY
#1: DC12V
#2: LED_0
#3: LED_1
#4: LED_2
#5: LED_3
#6: LED_4
#7: -
#8: REMOCON OUTPUT SIGNAL
#9 : PANEL SELECTION
#10: REMOCON INPUT SIGNAL
#11: GND
#12: DC5V
#13: -

5-1-16 Wall Mounted type(Premium Plus Windfree)

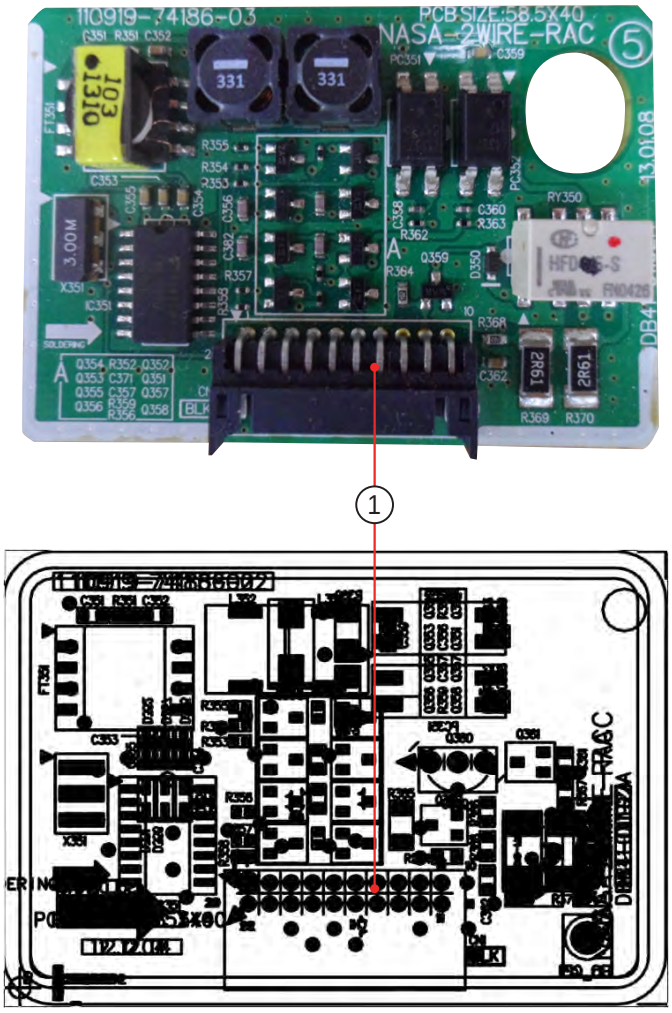
- Main PBA (AM***TNVDCH**)



CN810 : STEP MOTOR(V-Blade)	CN800 : STEP MOTOR(H-BLADE1)	CN801 : STEP MOTOR(H-BLADE3)	
#1: 12V #2: SIGNAL1 #3: SIGNAL2 #4: SIGNAL3 #5: SIGNAL4	#1: 12V #2: SIGNAL1 #3: SIGNAL2 #4: SIGNAL3 #5: SIGNAL4	#1: 12V #2: SIGNAL1 #3: SIGNAL2 #4: SIGNAL3 #5: SIGNAL4	
CN230 : DOWNLOAD	**CN340 : WIRED REMOCON**	**CN100 : DISPLAY&Thermistor**	
#1: COM1_RXD #2: COM1_TXD #3: nTRST #4: TDO #5: TCK #6: TDI #7: TMS #8: TraceCLK #9: SGND #10: 5VDC #11: 5VDC #12: MODE0 #13: RESET_IN #14: Trace3 #15: AS_PRO_B #16: AS_PRO_A #17: SGND #18: Trace_2 #19: Trace_1 #20: Trace_0	#1: COM2_Tx #2: COM2_Rx #3: COM2_INVERSE #4: COM2_ENABLE #5: EXT_CTRL #6: COMP_CHK_OUT #7: ERROR_CHK_OUT #8: COM2_PS_OUT #9: SGND #10: 12VDC #11: COM2_PCTRL_MICOM #12:COM2_VCHECK_A #13:COM2_VCHECK_B #14:COM2_MICOM_AD	#1: LED_DIO #3: LED_CLK(DIS) #5: LED_STB(DIS) #7: AUTO_SW #9: SGND #11: 5VDC #13: REMOCON_INT(DIS) #15: REMOCON_SIGN_OUT(DIS) #17: NULL #19: NULL #21: NULL #23: 12VDC #25: MDS_2(DIS_DETECT) #27: MDS_1(DIS_DETECT)	#2: 5VDC #4: SGND #6: H_ROOM_TEMP #8: HUM_SENSOR #10: ROOM_TEMP #12: SGND #14: EVA_IN_TEMP #16: GND #18: EVA_OUT_TEMP #20: SGND #22: NULL #24: NULL #26: NULL #28: 5VDC_1
	CNP100 : AC POWER	**CN900 : BLDC MOTOR**	**CN805 : EEV**
	#1 : L #2 : NULL #3 : N #4 : NULL #5 : GND	#1: 310VDC #2: NULL #3: P_GND #4: 15VDC #5: MOTOR SIGNAL #6: FEEDBACK SIGNAL	#1: EEV_B_bar_OUT #2: EEV_A_bar_OUT #3: EEV_B_OUT #4: EEV_A_OUT #5: 12V #6: 12V
CN320 : 485COMM	**CN410 : ROOM SENSOR2**	**CN870 : EEPROM**	
#1: RX #2: TX	#1: ROOM_TEMP_2 #2: GND	#1: SGND #2: NULL #3: 5VDC #4: EEPROM_CS #5: EEPROM_MISO #6: EEPROM_MOSI #7: EEPROM_CLK	

Wall Mounted type(Premium Plus Windfree)(Cont.)

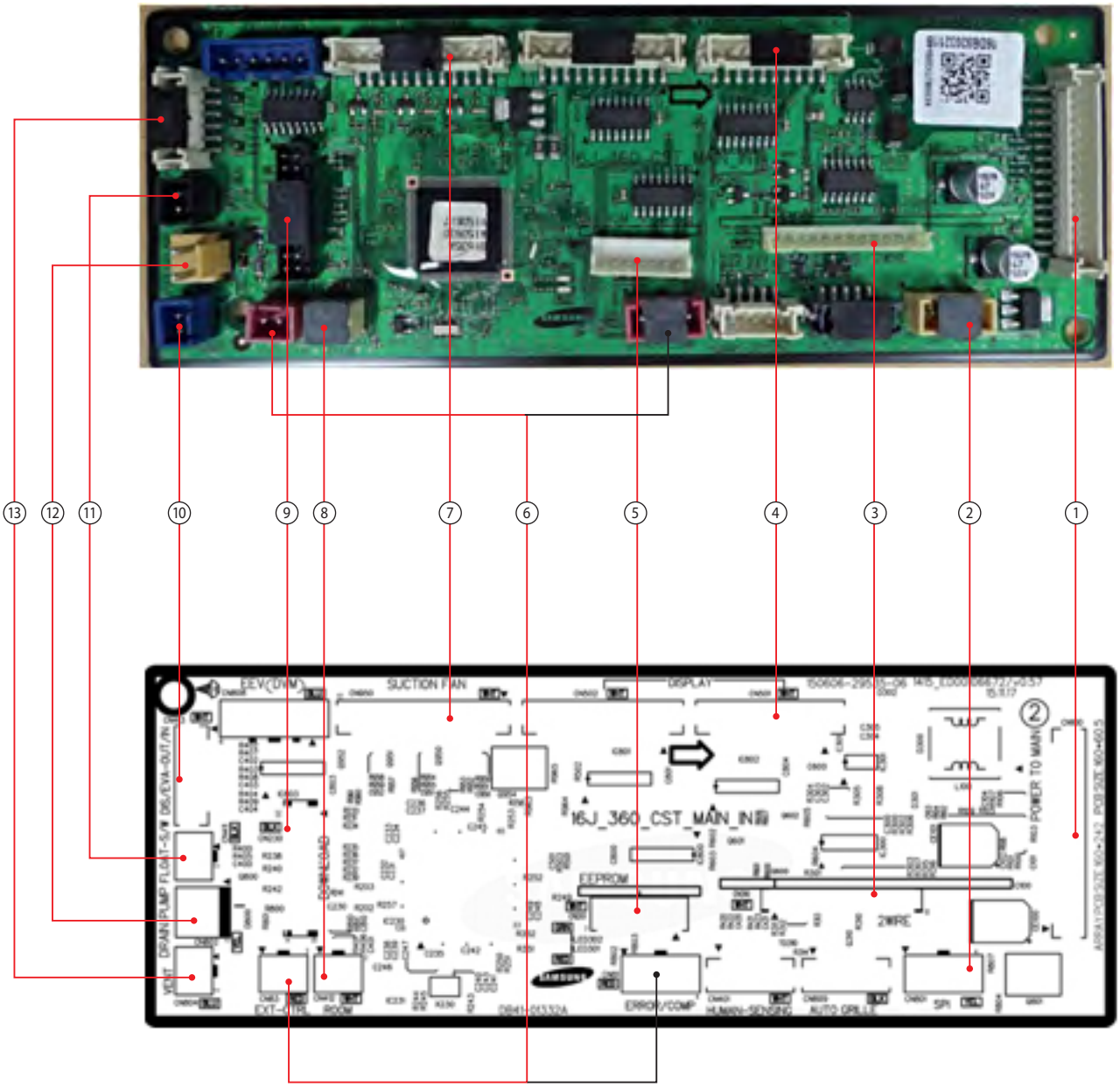
- Sub PCB (AM*TNVDCH**) (cont.)**



① CN1-2WIRES COMM.
#1,#2,#19,#20:COMM. SIGNAL
#3,#18:EXTERNAL CONTROL
#4,#17:COMP CHECK
#5,#16:ERROR CHECK
#6:VCC(DC5V)
#7,#14:GND
#8,#13,#15:DC12V
#9~#12:COMM. SIGNAL

5-1-17 360 cassette

- **MAIN PCB**

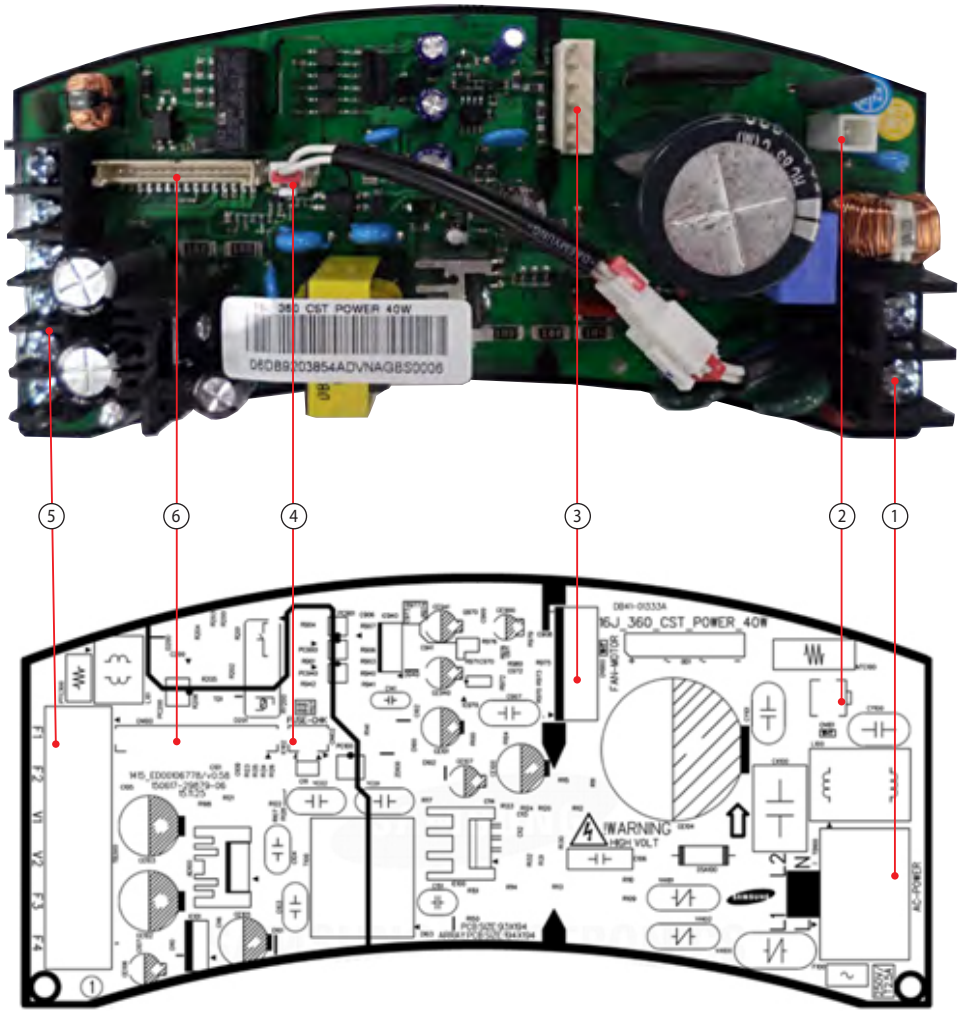


360 cassette (cont.)

- MAIN PCB

① CN100 – POWER TO MAINCONNECTOR #1, 2 : 12V #3, 4 : SGND #5 : 5V #6 : FUSE SHORT/OPEN CHK #7 : 15V OUTPUT ON/OFF #8 : ZEROCROSSING SIGNAL #9 : ZC STANDBY MODE ON/OFF #10 : MAIN FAN MOTOR PWM #11 : MAIN FAN MOTOR F/B #12 : F3 - WIRED REMOTE CONTROL COMMUNICATION #13 : F4 - WIRED REMOTE CONTROL COMMUNICATION #14 : F1 - INDOOR/OUTDOOR COMMUNICATION #15 : F2 - INDOOR/OUTDOOR COMMUNICATION	② CN801 – SPI #1 : SGND #3 : 12V #2,4 : NC	③ CN310 – 2WIRE SUB #1 : 12V #2 : COM2_PCTRL_MICOM #3 : COM2_VCHECK_A #4 : COM2_VCHECK_B #5 : COM2_MICOM_AD #6 : VCC STANDBY MODE ON/OFF #7 : COM2_ENABLE #8 : COM2_C #9 : COM2_D #10 : COM2_TX #11 : COM2_RX #12 : SGND	④ CN501, 502 [CN501] #1, 2 : BUZZER #3 : CENTER 3 COLOR LED - BLUE #4 : CENTER 3 COLOR LED - GREEN #5 : CENTER 3 COLOR LED - RED #6 : CENTER LED – ICE BLUE #7~10 : CENTER LED [CN502] #1 : 12V #2~6 : VISUALIZATION LED #7~11 : REMOTE CONTROL RECEIVER PBA CONNECTION
⑤ CN201 – EEPROM #1 : SGND #2 : NC #3 : 5V #4 : EEPROM_SELECT #5 : EEPROM_SO #6 : EEPROM_SI #7 : EEPROM_CLK	⑥ CN81, 83 – AIM-B14 [CN81] #1, 3 : 12V #2 : ERROR CHK (12V JUNCTION) #4 : COMP CHK (12V JUNCTION) [CN83] #1 : EXT_CTRL (5V) #2 : SGND	⑦ CN950 – SUCTION FAN #1, 5, 9 : SUCTION VCC (12V) #2, 6, 10 : SUCTION FAN F/B #3, 7, 11 : SGND #4, 8, 12 : SUCTION PWM	⑧ CN412 – INDOOR TEMPERATURE SENSOR #1 : ROOM TEMP #2 : SGND
⑨ CN230 – DOWNLOAD #1~20 : DOWNLOAD	⑩ CN413 – EVA TEMPERATURE SENSOR #1 : EVA IN TEMP #3 : EVA OUT TEMP #5 : DISCHARGE TEMP #2, 4, 6 : SGND	⑪ CN411 – FLOAT SW #1 : FLOAT SW #2 : SGND	⑫ CN802 – DRAIN PUMP #1 : DRAIN PUMP (12V) #2 : SGND
⑬ CN804 – VENTILATOR #1 : VENT (MICOM OUTPUT) #2 : BUFFER OUTPUT(HIGH/LOW)			

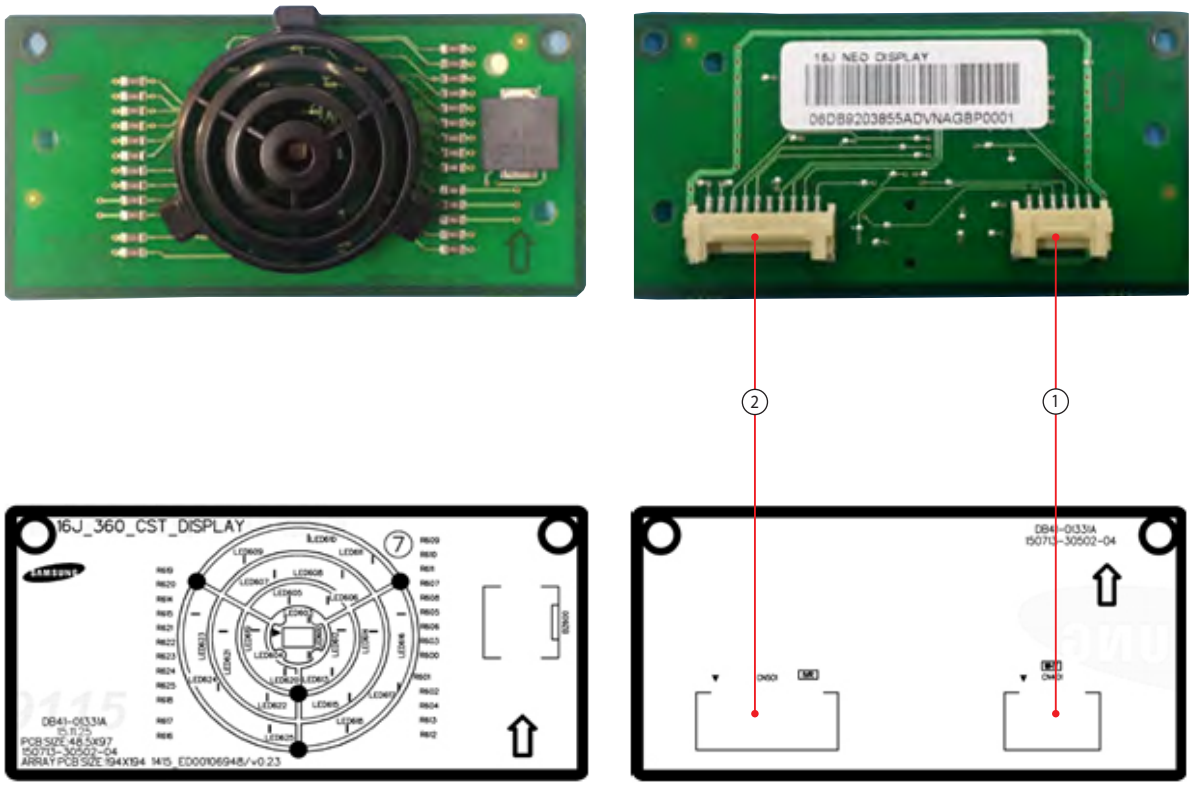
5-1-18 Indoor Unit Power PCB



① TB100 - POWER T/B #1 : POWER CORD CONNECTION - L (L1) #2 : POWER CORD CONNECTION - N (L2)	② CN101 - EARTH #1 : EARTH (PBA – SET GND)	③ CN900 - MAIN FAN MOTOR [CN81] #1 : 310V (DC LINK) #2 : NC #3 : PGND #4 : 15V (VCC) #5 : MAIN FAN MOTOR PWM #6 : MAIN FAN MOTOR F/B	④ CN102 – THERMAL FUSE #1 : FUSE SHORT/OPEN CHK #2 : SGND
⑤ TB300 - COMM. T/B #1 : F1 – INDOOR/OUTDOOR COMM. #2 : F2 – INDOOR/OUTDOOR COMM. #3 : V1 – 12V #4 : V2 - SGND #5 : F3 - WIRED REMOTE CONTROL COMM. #6 : F4 - WIRED REMOTE CONTROL COMM.	⑥ CN100 – POWER TO MAIN CONNECTOR [CN81] #1, 3 : 12V #2 : ERROR CHK (12V JUNCTION) #4 : COMP CHK (12V JUNCTION) [CN83] #1 : EXT_CTRL (5V) #2 : SGND		

5-1-19 Display PCB

■ 360 Cassette

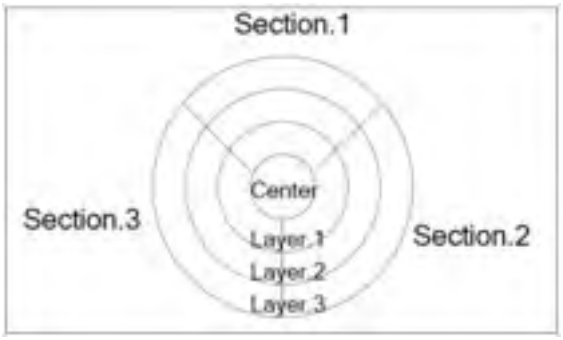


① CN401 – DISPLAY 1

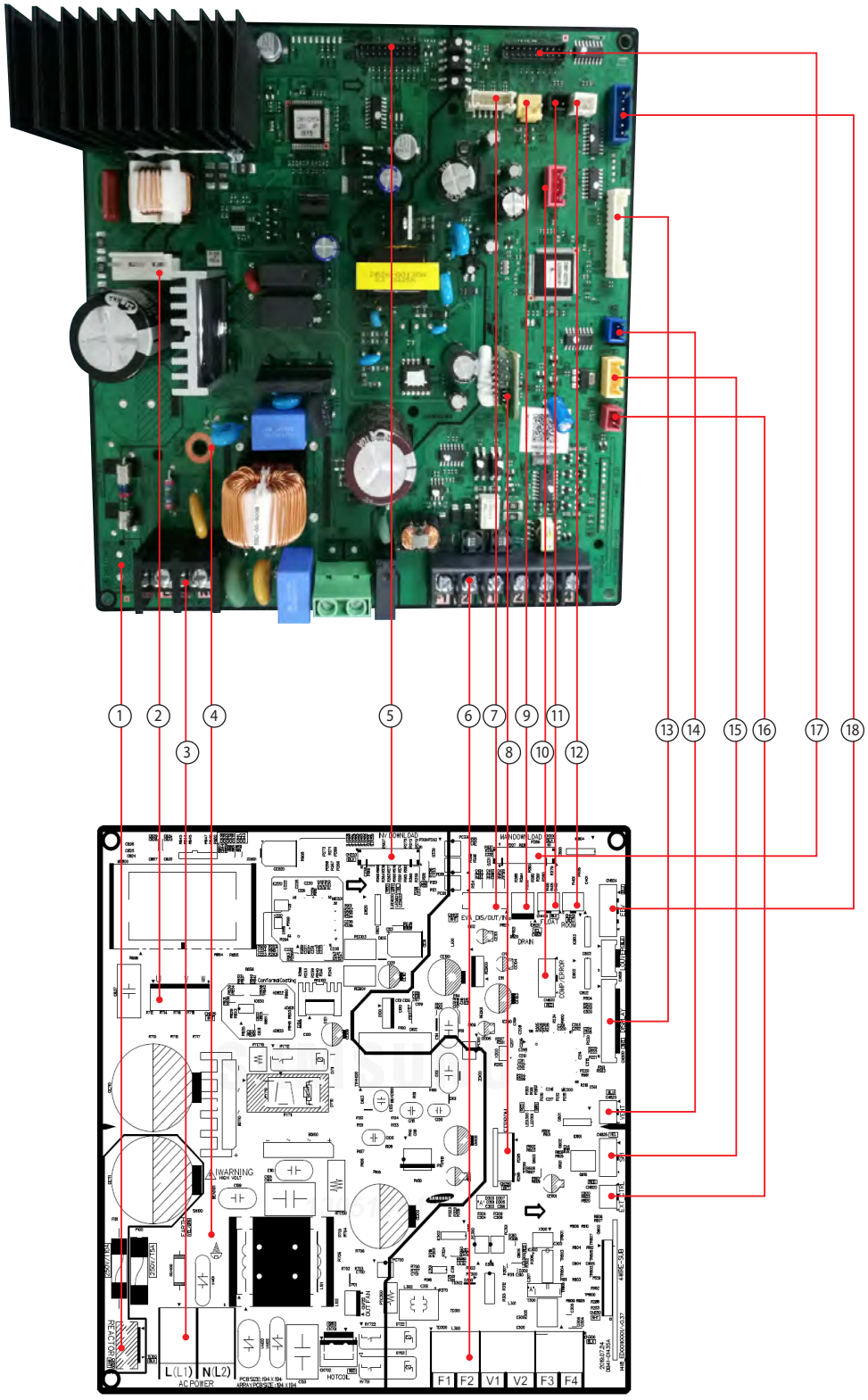
#1 : 12V
#2 : VISUALIZATION LED_SECTION2, LAYER2
#3 : VISUALIZATION LED_SECTION2, LAYER3
#4 : VISUALIZATION LED_SECTION3, LAYER1
#5 : VISUALIZATION LED_SECTION3, LAYER2
#6 : VISUALIZATION LED_SECTION3, LAYER3

② CN501 – DISPLAY 2

#1 : BUZZER1
#2 : BUZZER2
#3 : CENTER 3 COLOR LED - BLUE
#4 : CENTER 3 COLOR LED - GREEN
#5 : CENTER 3 COLOR LED - RED
#6 : CENTER LED – ICE BLUE
#7 : VISUALIZATION LED_SECTION1, LAYER1
#8 : VISUALIZATION LED_SECTION1, LAYER2
#9 : VISUALIZATION LED_SECTION1, LAYER3
#10 : VISUALIZATION LED_SECTION2, LAYER1



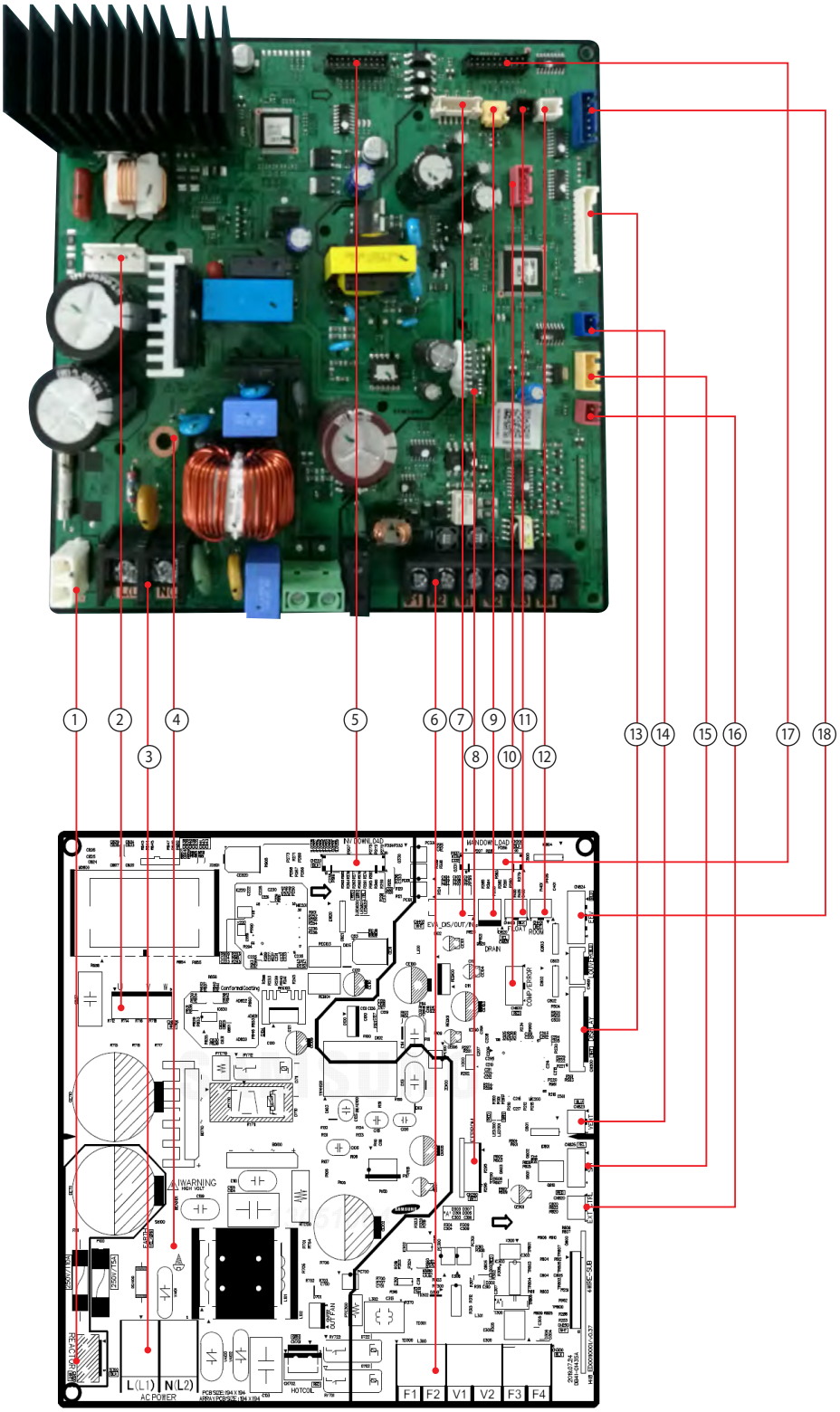
5-1-20 Duct S (cont.)



Duct S (cont.)

① CN100-REACTOR #1: AC POWER(L1) #2: AC POWER(L1)	② CN826 : FAN MOTOR #1: MOTOR-U PHASE #3: MOTOR-V PHASE #5: MOTOR-W PHASE	③ TE100-AC POWER #1: AC POWER(L1) #2: AC POWER(L2)	④ SH100-EARTH #1: GND-EARTH
⑤ CN220-INV DOWNLOAD	⑥ CN300-COMMUNICATION #1:COM1(F1) #2:COM1(F2) #3:V1(DC12V) #4:V2(GND) #5:COM2(F3) #1:COM2(F4)	⑦ CN402:THERMISTOR #1 : EVA-IN SENSOR #2 : GND #3 : EVA-OUT SENSOR #4 : GND #5 : DISCHARGE SENSOR #6 : GND	⑧ CN290-EEPROM #1: GND #3: DC5V #4: EEPROM_SELECT #5: EEPROM_SO #6: EEPROM_SI #7: EEPROM_CLK
⑨ CN821-DRAIN PUMP #1: DRAIN PUMP(DC12V) #2: GND	⑩ CN822-COMP/ERROR MONITOR #1: DC12V #2: ERROR OUT(GND) #3: DC12V #4: COMP/OPER.OUT(GND)	⑪ CN400-FLOAT SWITCH #1: FLOAT SWITCH SIGNAL #2: GND	⑫ CN401-ROOM SENSOR #1 : ROOM SENSOR #2 : GND
⑬ CN500-DISPLAY #1 : DC12V #2~#6 : LED_OUT(0,1,2,3,4) #7 : BUZZER_1 #8 : REMOCON_SIGN_OUT #9 : AUTO_SW #10 : REMOCON_INT #11 : GND #12 : DC5V #13 : BUZZER_2	⑭ CN823-VENTILATOR #1: DC12V #2: VENT SIGNAL OUTPUT(GND)	⑮ CN825-SPI #1: GND #2: GND #3: SPI SIGNAL(DC12V)	⑯ CN820-EXT CTRL #1: GND #2: EXTERNAL CONTROL SIGNAL
⑰ CN200-MAIN DOWNLOAD	⑱ CN824-EEV #1 : EEV_B_BAR_OUT #2 : EEV_A_BAR_OUT #3 : EEV_B_OUT #4 : EEV_A_OUT #5 : DC12V #6 : DC12V		

Duct S (cont.)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
L(L1)
N(L2)
AC POWER
F1
F2
V1
V2
F3
F4

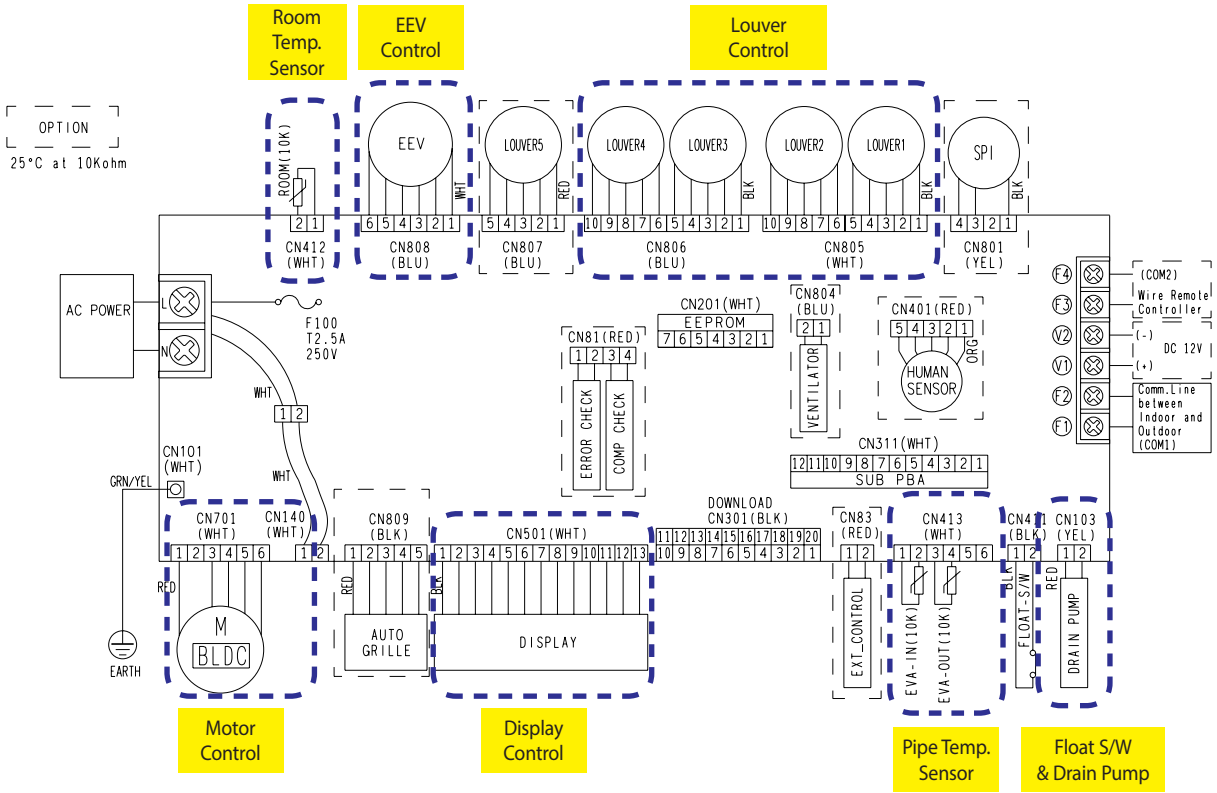
Duct S (cont.)

① CN100-REACTOR #1: AC POWER(L1) #2: AC POWER(L1)	② CN826 : FAN MOTOR #1: MOTOR-U PHASE #3: MOTOR-V PHASE #5: MOTOR-W PHASE	③ TE100-AC POWER #1: AC POWER(L1) #2: AC POWER(L2)	④ SH100-EARTH #1: GND-EARTH
⑤ CN220-INV DOWNLOAD	⑥ CN300-COMMUNICATION #1:COM1(F1) #2:COM1(F2) #3:V1(DC12V) #4:V2(GND) #5:COM2(F3) #1:COM2(F4)	⑦ CN402:THERMISTOR #1 : EVA-IN SENSOR #2 : GND #3 : EVA-OUT SENSOR #4 : GND #5 : DISCHARGE SENSOR #6 : GND	⑧ CN290-EEPROM #1: GND #3: DC5V #4: EEPROM_SELECT #5: EEPROM_SO #6: EEPROM_SI #7: EEPROM_CLK
⑨ CN821-DRAIN PUMP #1: DRAIN PUMP(DC12V) #2: GND	⑩ CN822-COMP/ERROR MONITOR #1: DC12V #2: ERROR OUT(GND) #3: DC12V #4: COMP/OPER.OUT(GND)	⑪ CN400-FLOAT SWITCH #1: FLOAT SWITCH SIGNAL #2: GND	⑫ CN401-ROOM SENSOR #1 : ROOM SENSOR #2 : GND
⑬ CN500-DISPLAY #1 : DC12V #2~#6 : LED_OUT(0,1,2,3,4) #7 : BUZZER_1 #8 : REMOCON_SIGN_OUT #9 : AUTO_SW #10 : REMOCON_INT #11 : GND #12 : DC5V #13 : BUZZER_2	⑭ CN823-VENTILATOR #1: DC12V #2: VENT SIGNAL OUTPUT(GND)	⑮ CN825-SPI #1: GND #2: GND #3: SPI SIGNAL(DC12V)	⑯ CN820-EXT CTRL #1: GND #2: EXTERNAL CONTROL SIGNAL
⑰ CN200-MAIN DOWNLOAD	⑱ CN824-EEV #1 : EEV_B_BAR_OUT #2 : EEV_A_BAR_OUT #3 : EEV_B_OUT #4 : EEV_A_OUT #5 : DC12V #6 : DC12V		

6. Wiring Diagram

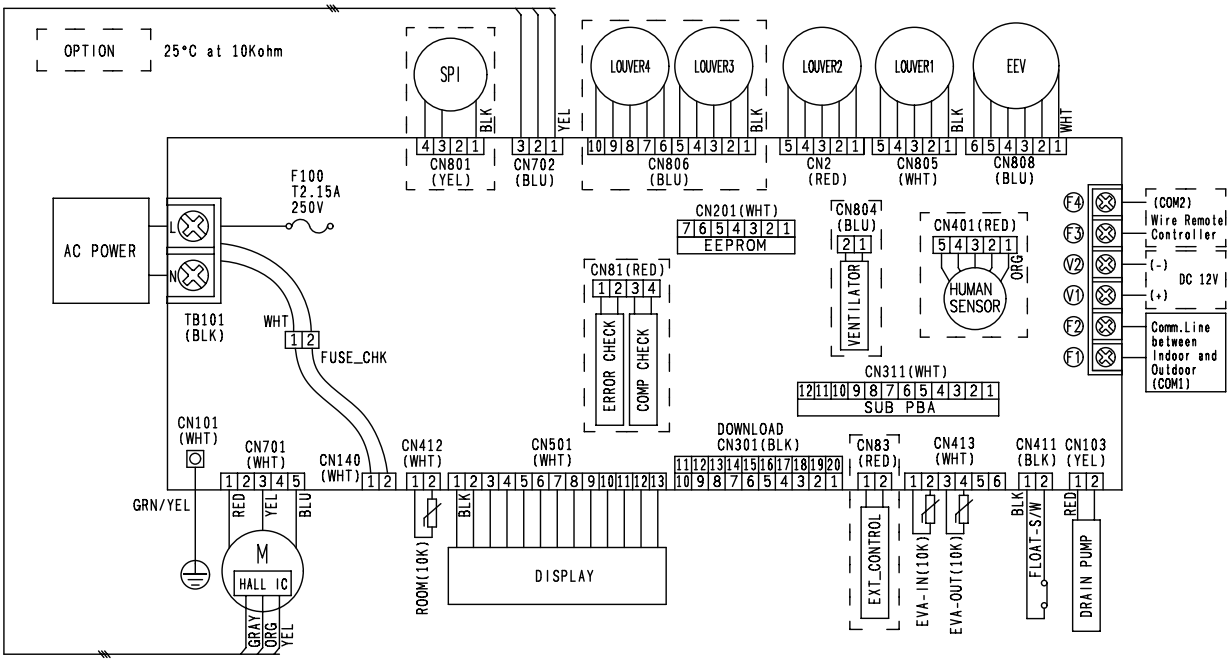
6-1 Indoor

6-1-1 Global 4way(Global Mini-4way) cassteet type



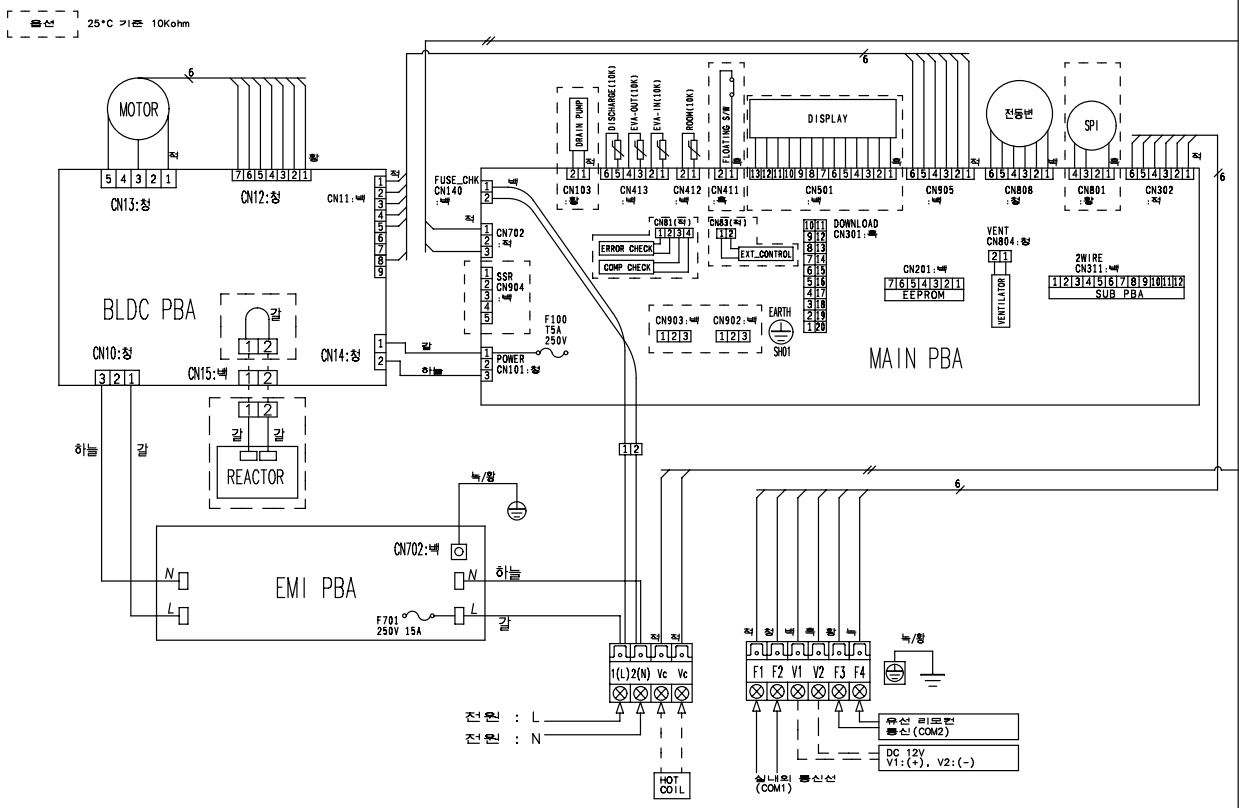
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6-1-2 Slim 1way cassette type



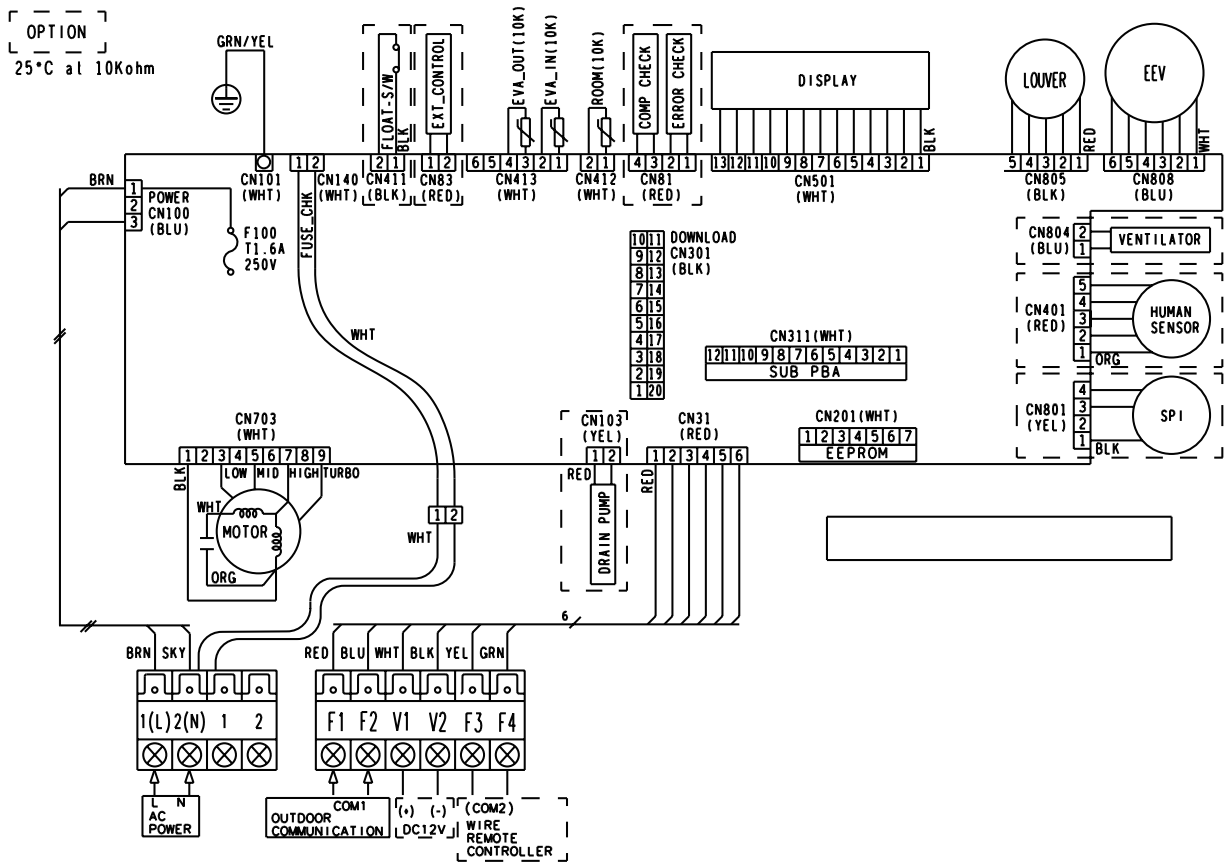
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6-1-3 BIG Duct



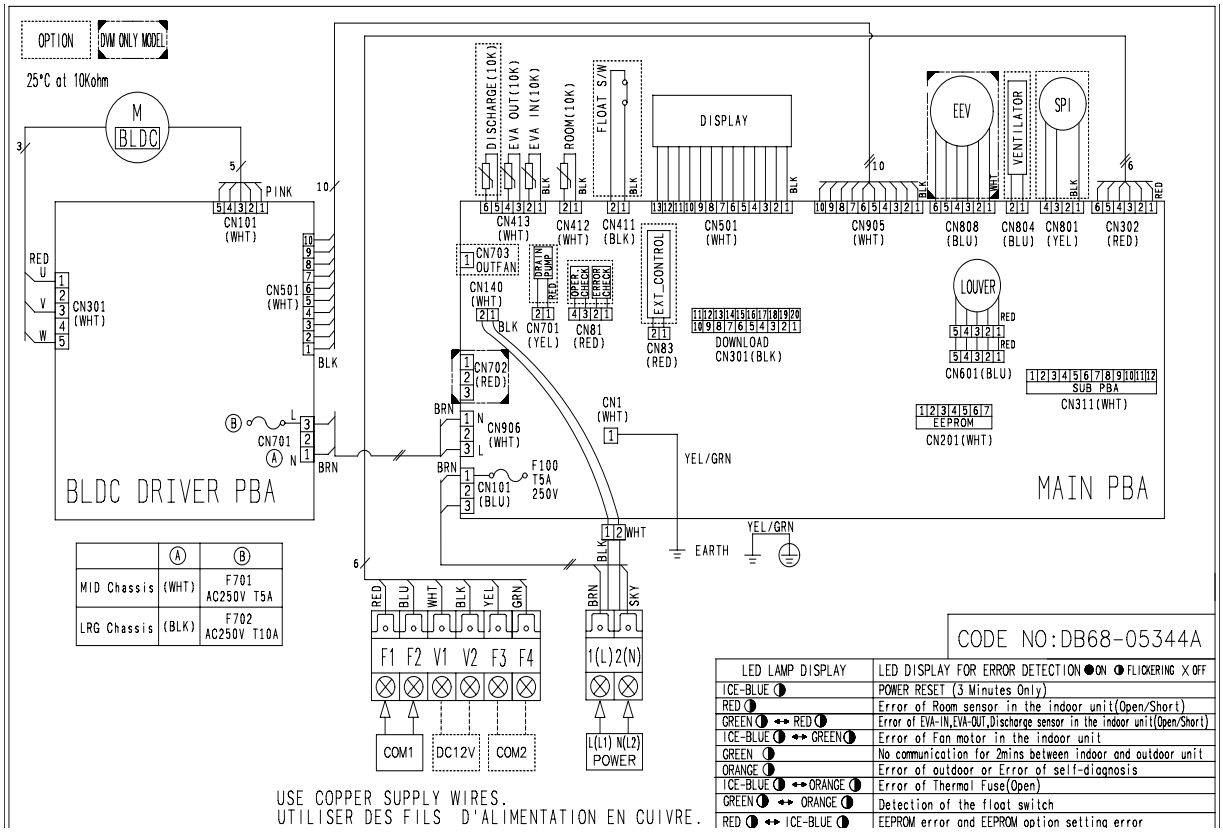
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6-1-4 Ceiling



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6-1-5 Big Ceiling (AM036/048JNCDCH/AA)

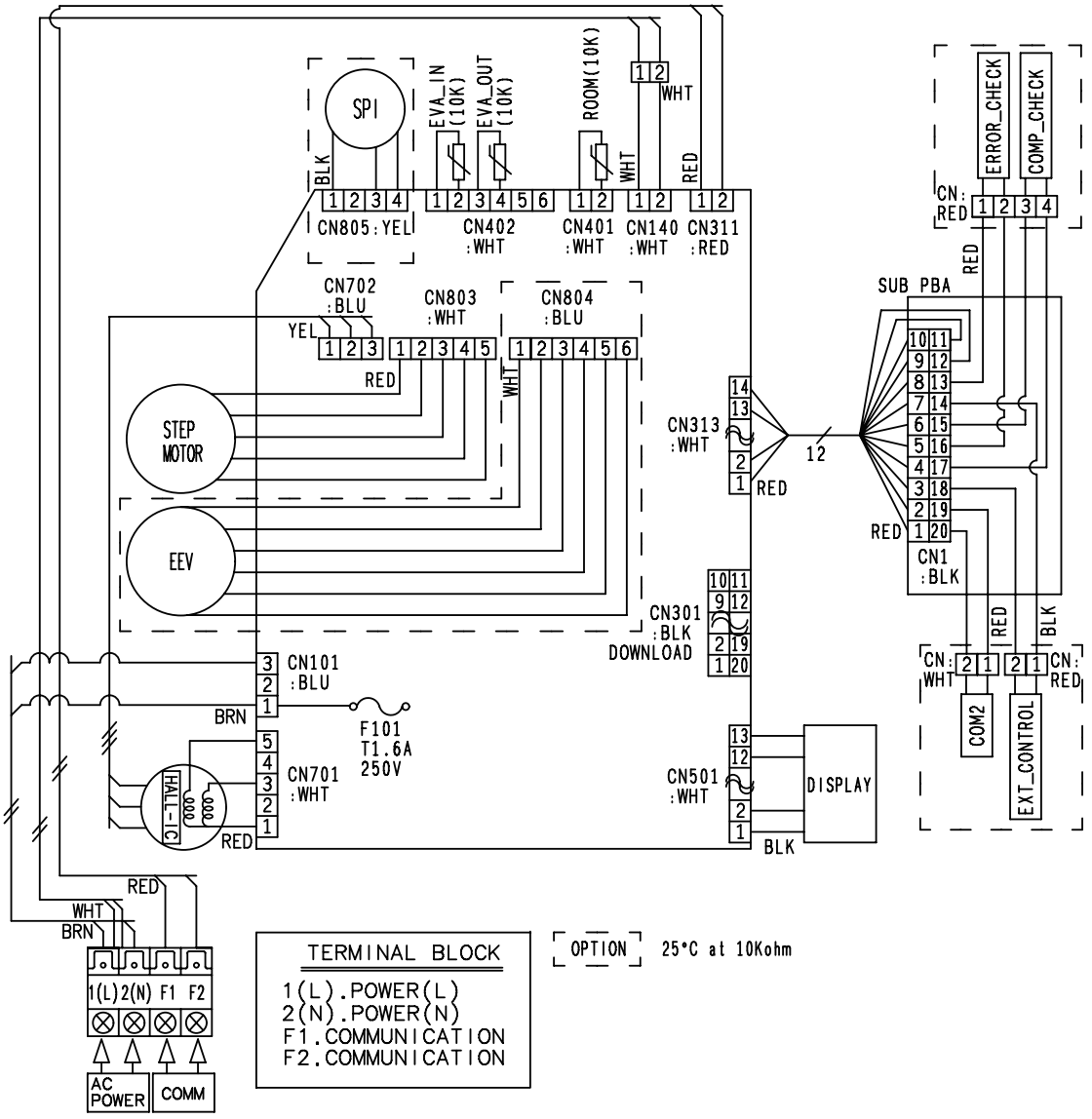


	Ⓐ	Ⓑ
MID Chassis	(WHT)	F701 AC250V T5A
LRG Chassis	(BLK)	F702 AC250V T10A

LED LAMP DISPLAY	LED DISPLAY FOR ERROR DETECTION ●ON ◑FLICKERING XOFF
ICE-BLUE ◑	POWER RESET (3 Minutes Only)
RED ◑	Error of Room sensor in the indoor unit(Open/Short)
GREEN ◑ ↔ RED ◑	Error of EVA-IN,EVA-OUT,Discharge sensor in the indoor unit(Open/Short)
ICE-BLUE ◑ ↔ GREEN ◑	Error of Fan motor in the indoor unit
GREEN ◑	No communication for 2mins between indoor and outdoor unit
ORANGE ◑	Error of outdoor or Error of self-diagnosis
ICE-BLUE ◑ ↔ ORANGE ◑	Error of Thermal Fuse(Open)
GREEN ◑ ↔ ORANGE ◑	Detection of the float switch
RED ◑ ↔ ICE-BLUE ◑	EEPROM error and EEPROM option setting error

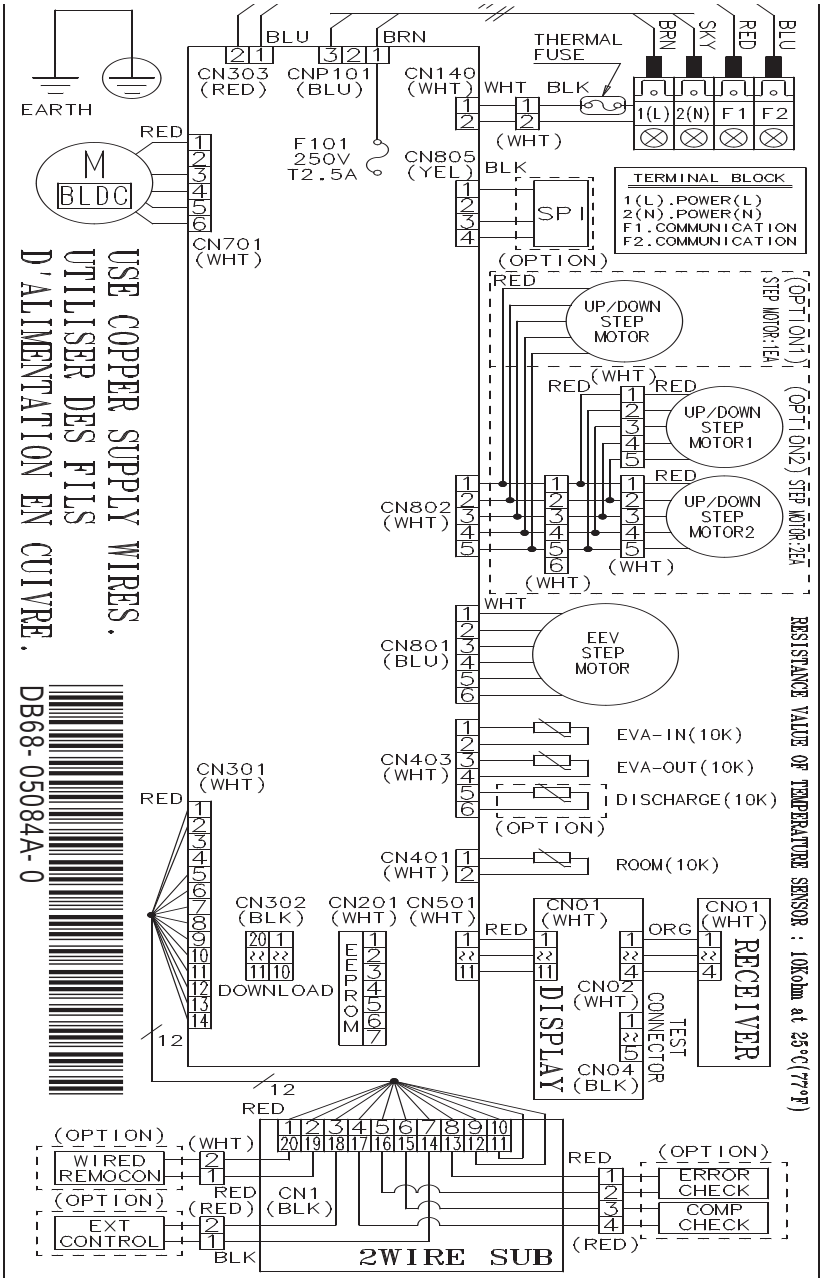
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6-1-6 RAC(Neo Forte)



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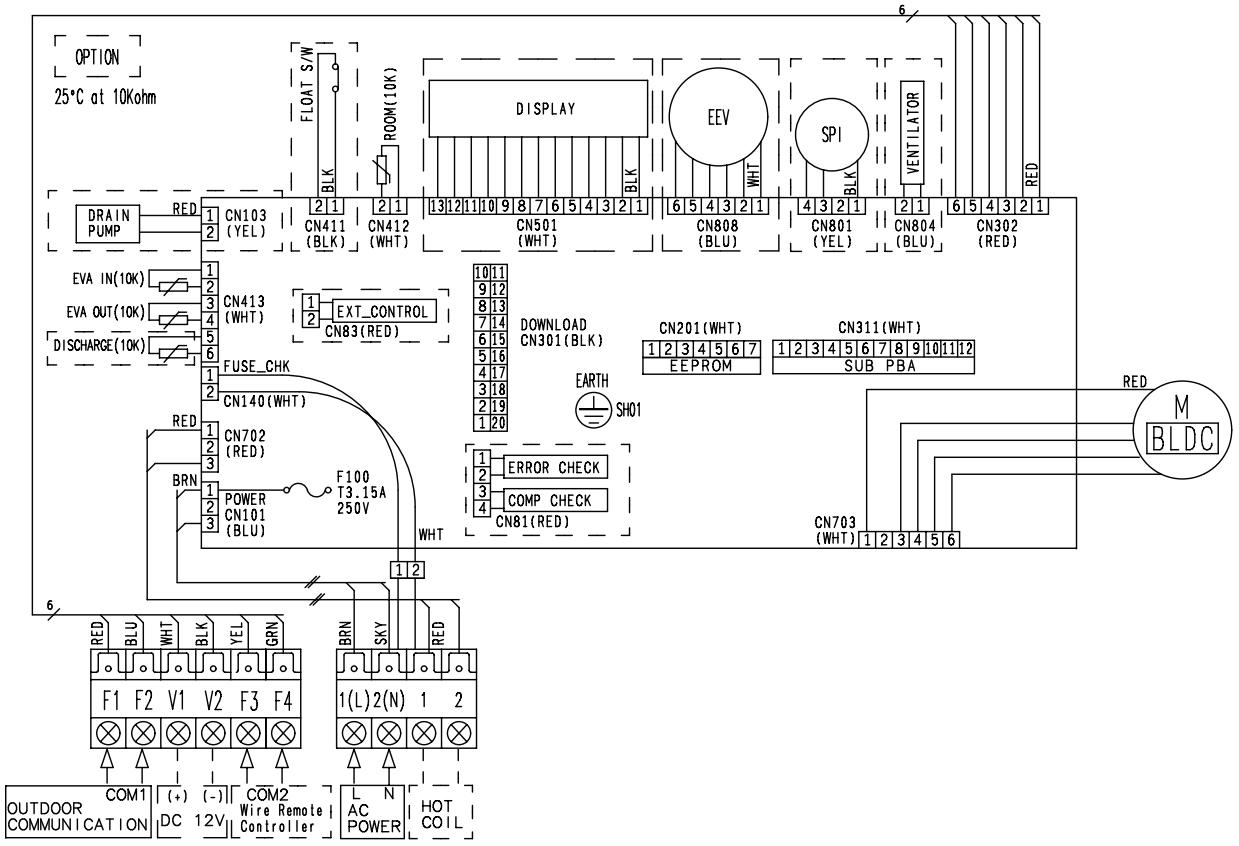
6-1-7 Wall Mounted type(A3050, MAX)



LED LAMP DISPLAY			DESCRIPTION
OPERATION	TIMER	TURBO	●:ON ×:OFF ◑:BLINKS
◑	◑	×	ROOM TEMPERATURE SENSOR ERROR(OPEN/SHORT)
◑	◑	×	EVA-IN/OUT TEMPERATURE SENSOR ERROR(OPEN/SHORT)
×	×	◑	FAN RPM FEEDBACK ERROR(INDOOR UNIT)
◑	×	◑	TEMPERATURE SENSOR ERROR(OUTDOOR UNIT)
×	◑	◑	COMMUNICATION ERROR(OUTDOOR UNIT↔INDOOR UNIT)
●	◑	◑	SELF-DIAGNOSIS/ERROR OF OUTDOOR UNIT (CHECK ERROR CODE AT OUTDOOR UNIT'S OR SOLUTION DISPLAY)
◑	◑	◑	EEPROM ERROR/EEPROM OPTION ERROR(INDOOR UNIT)
◑	●	◑	NO MATCH BETWEEN OUTDOOR UNIT AND INDOOR UNIT

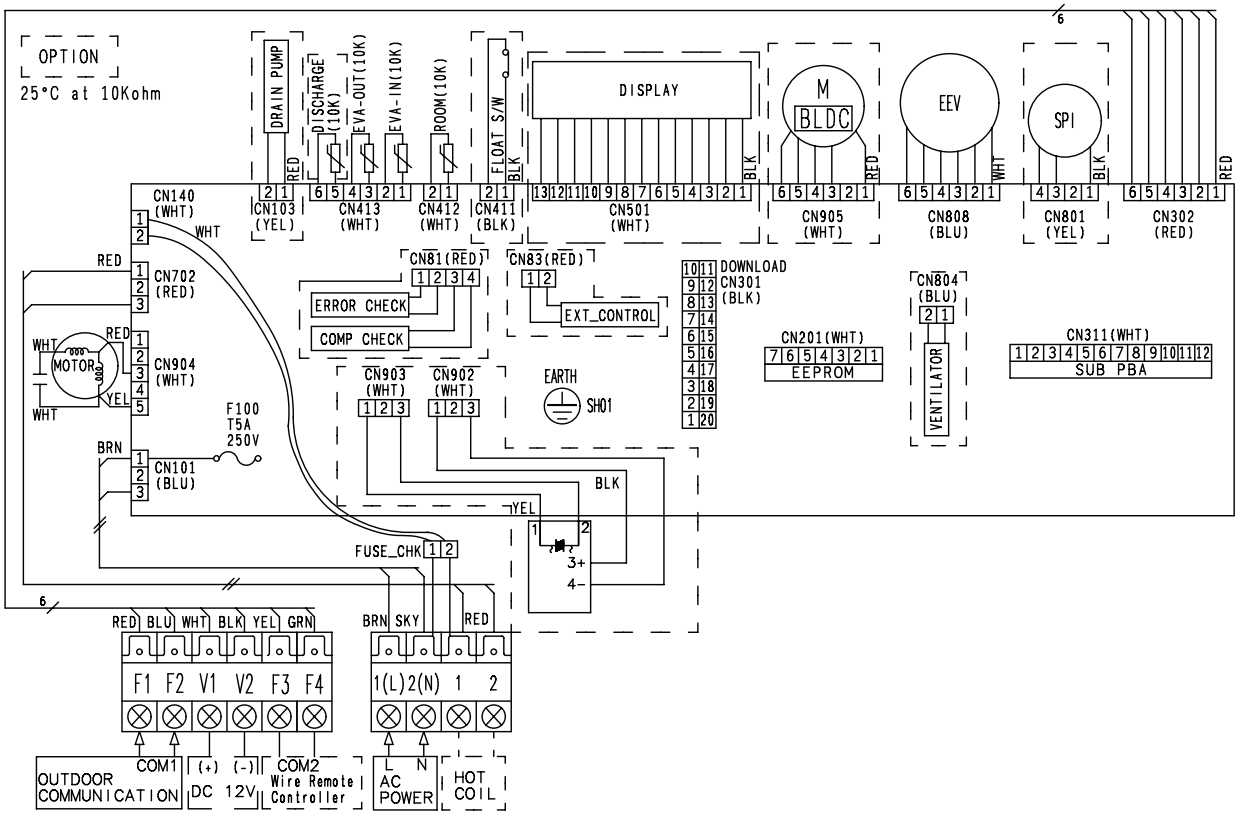
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6-1-8 DUCT type (Slim Duct 3, MA-1(Drain Pump Built-in))



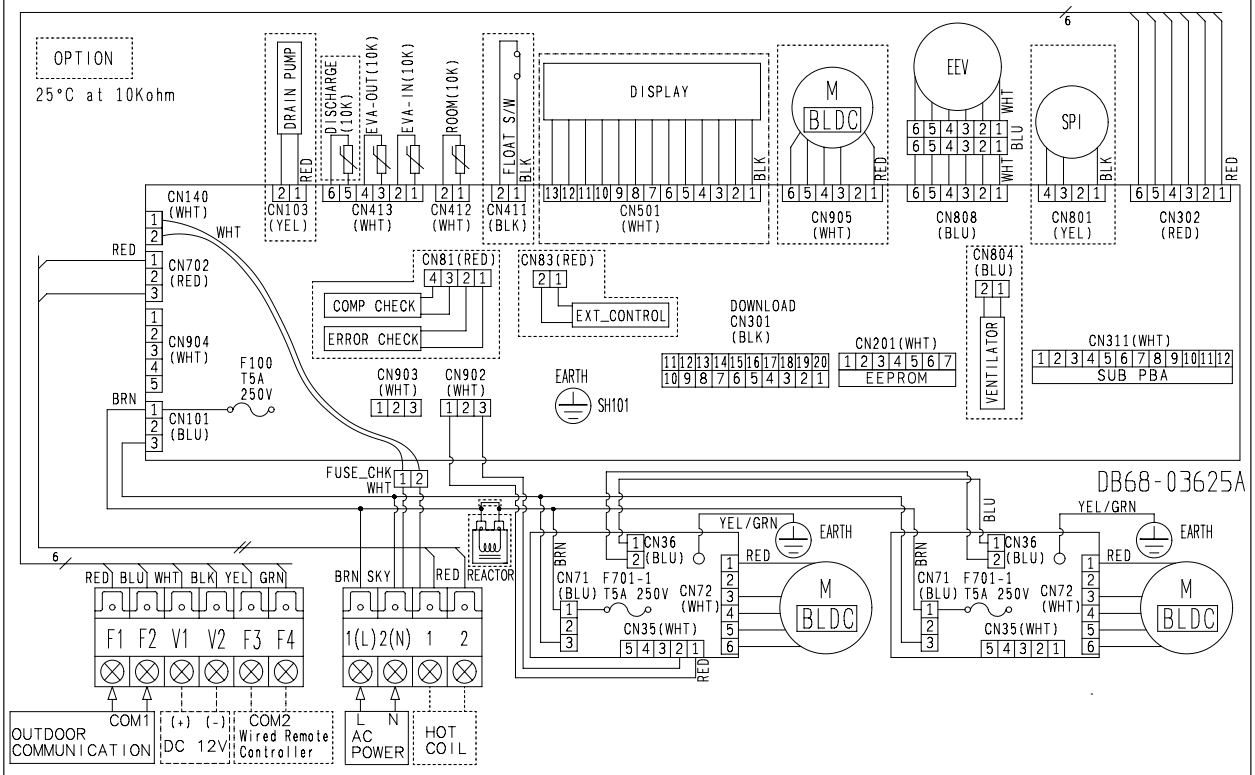
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6-1-9 DUCT type (Slim Duct 1,2, MSP)



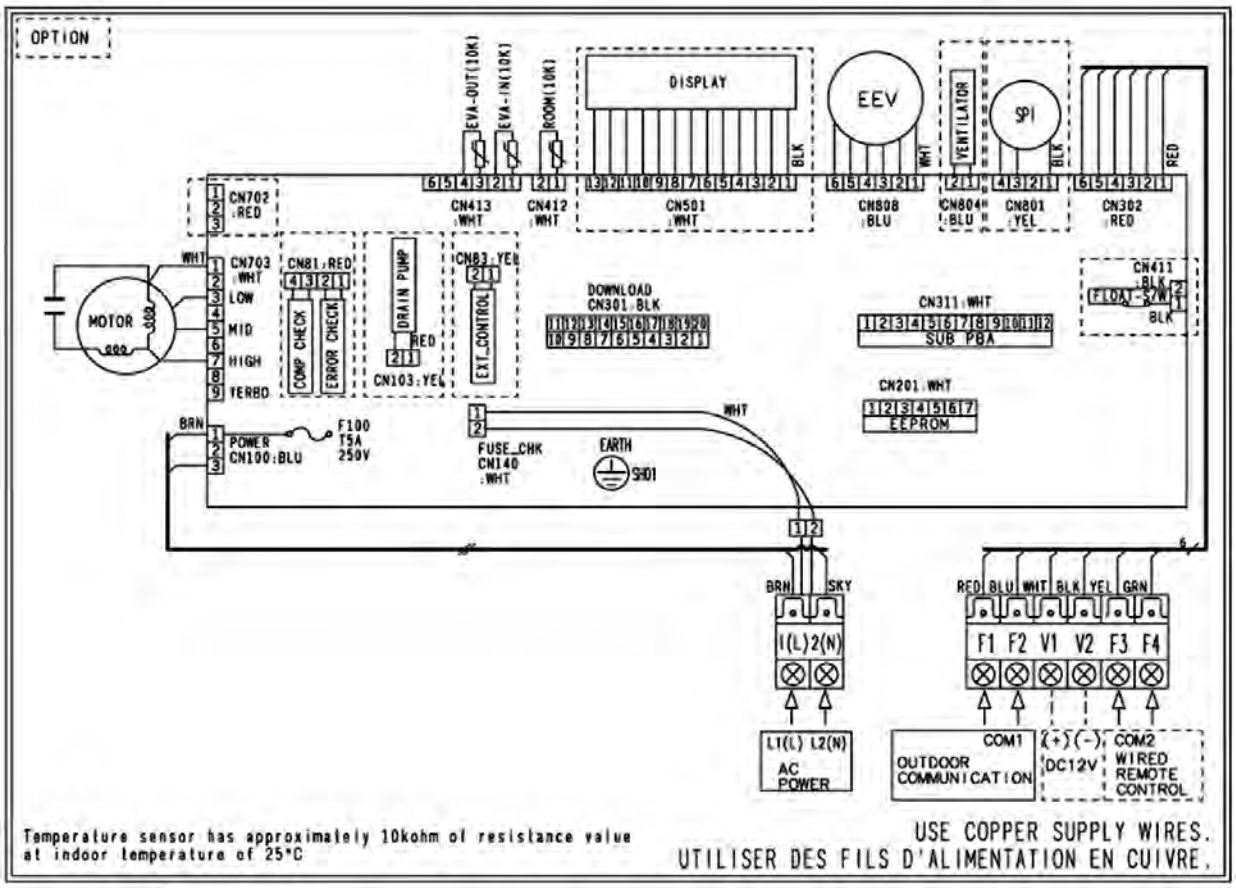
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6-1-10 DUCT type (HSP Small , MA-2(Drain Pump Built-in))



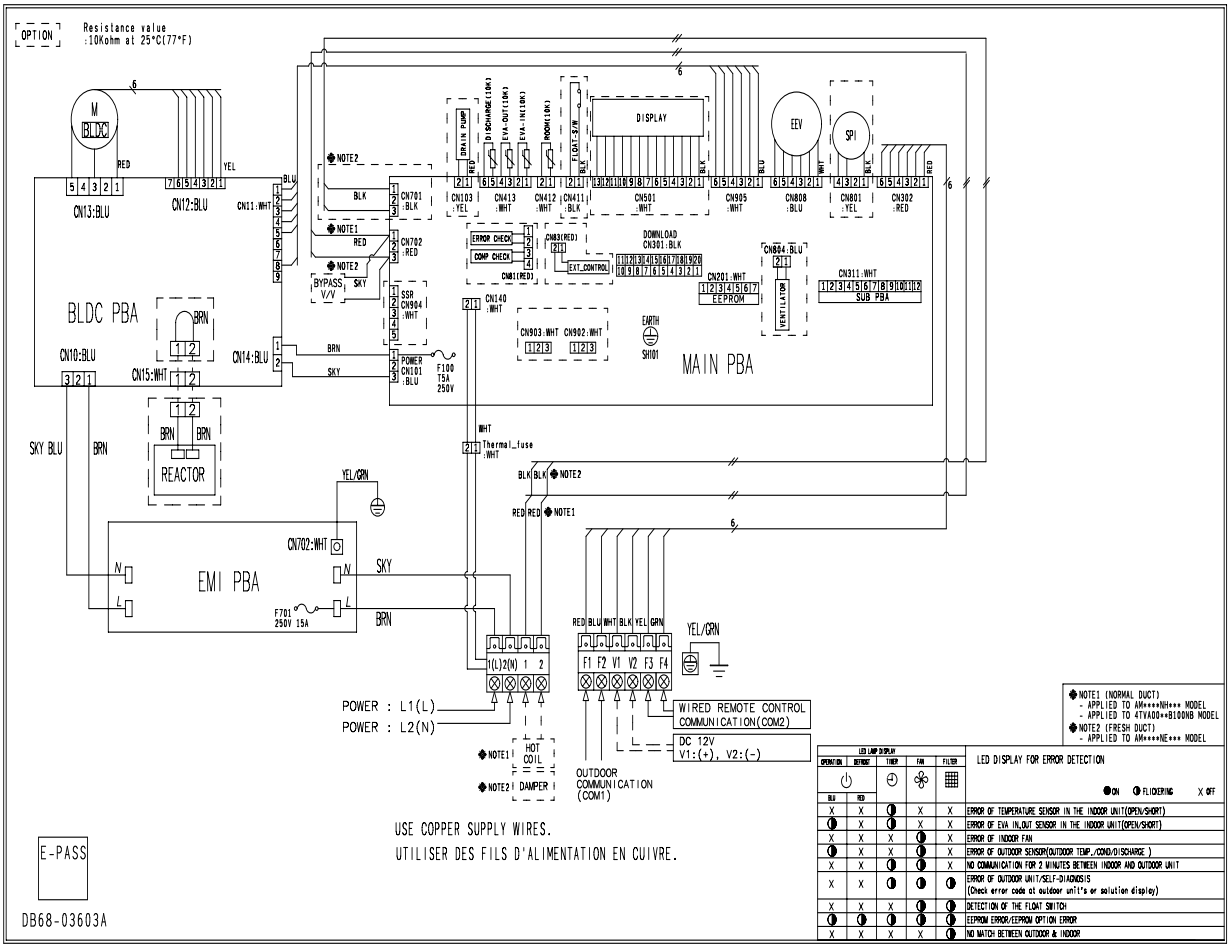
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6-1-11 Floor Stand Type



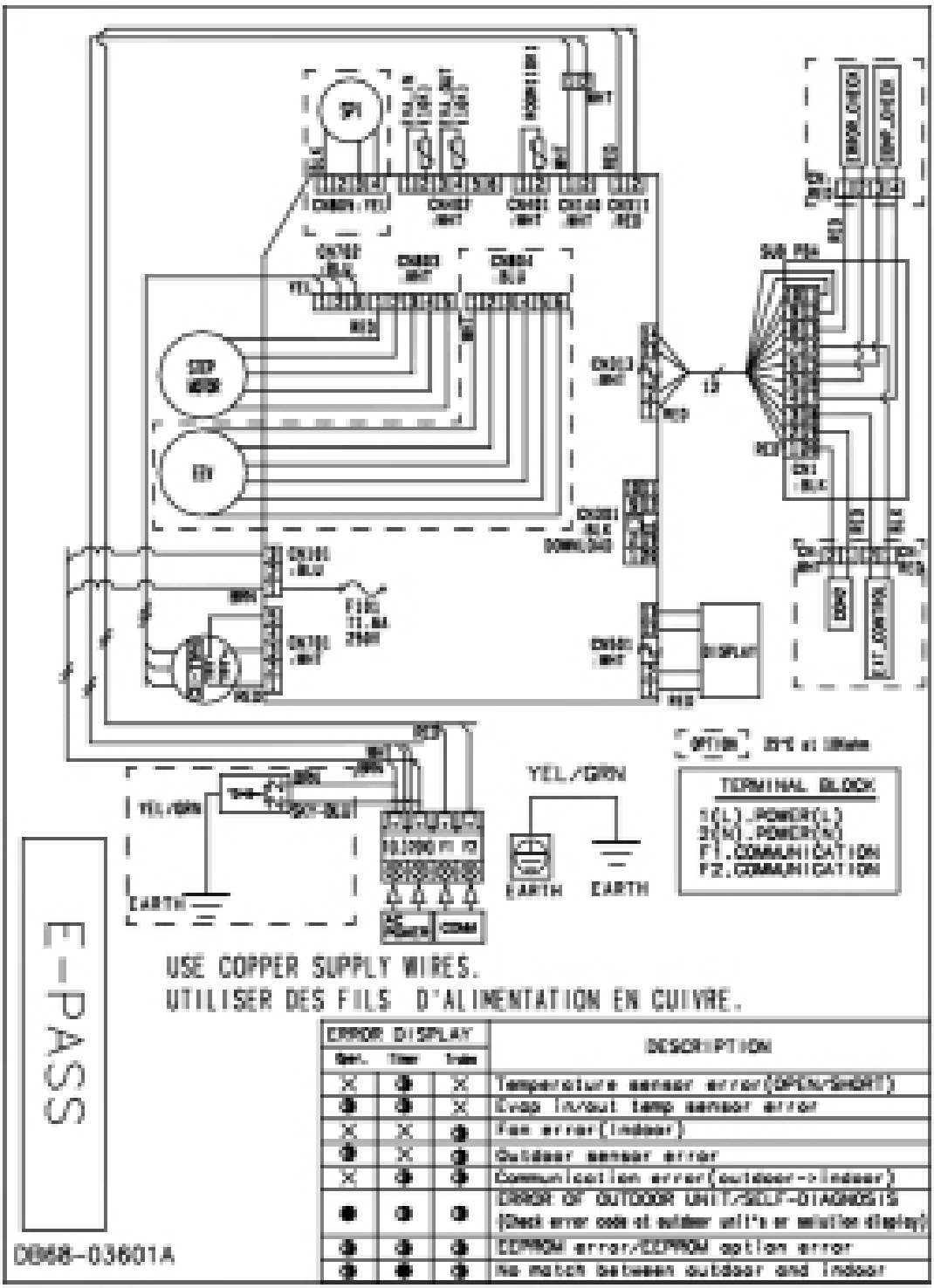
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6-1-12 OAP Duct type



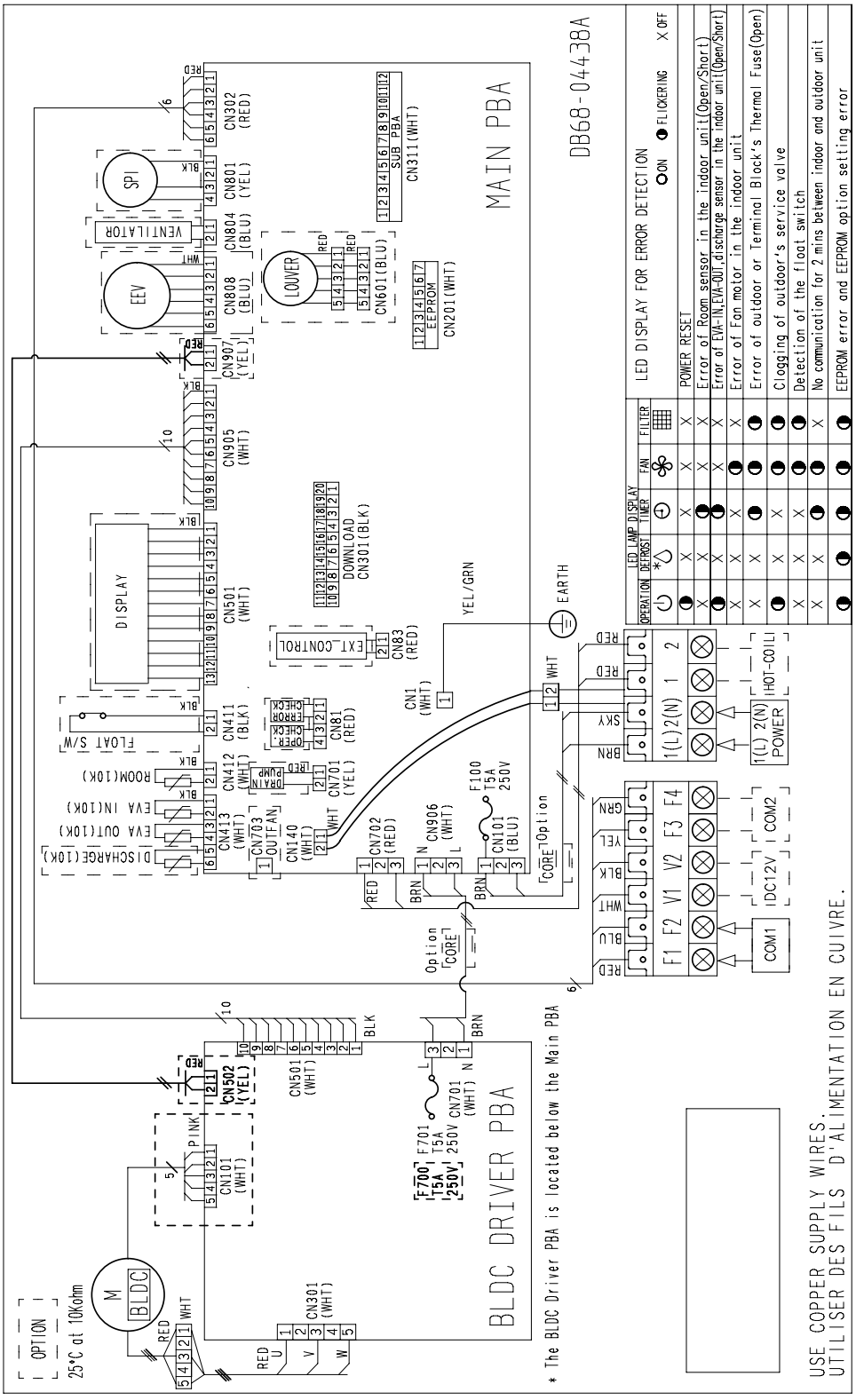
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6-1-13 Wall-Mounted type (Boracay)



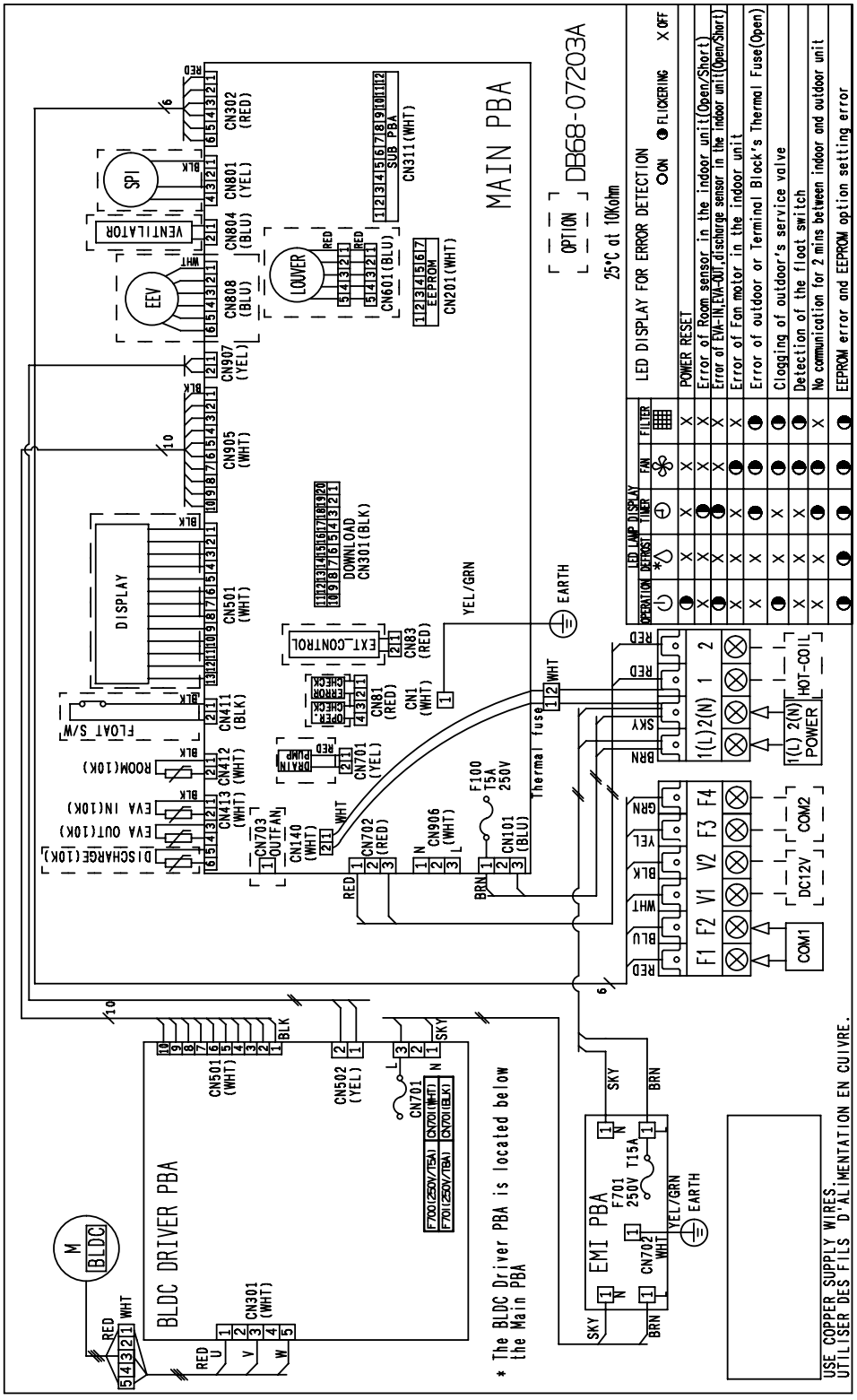
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6-1-14 Global Duct (AM007/009/012/015/018/024/027/030MNMDCH/AA)



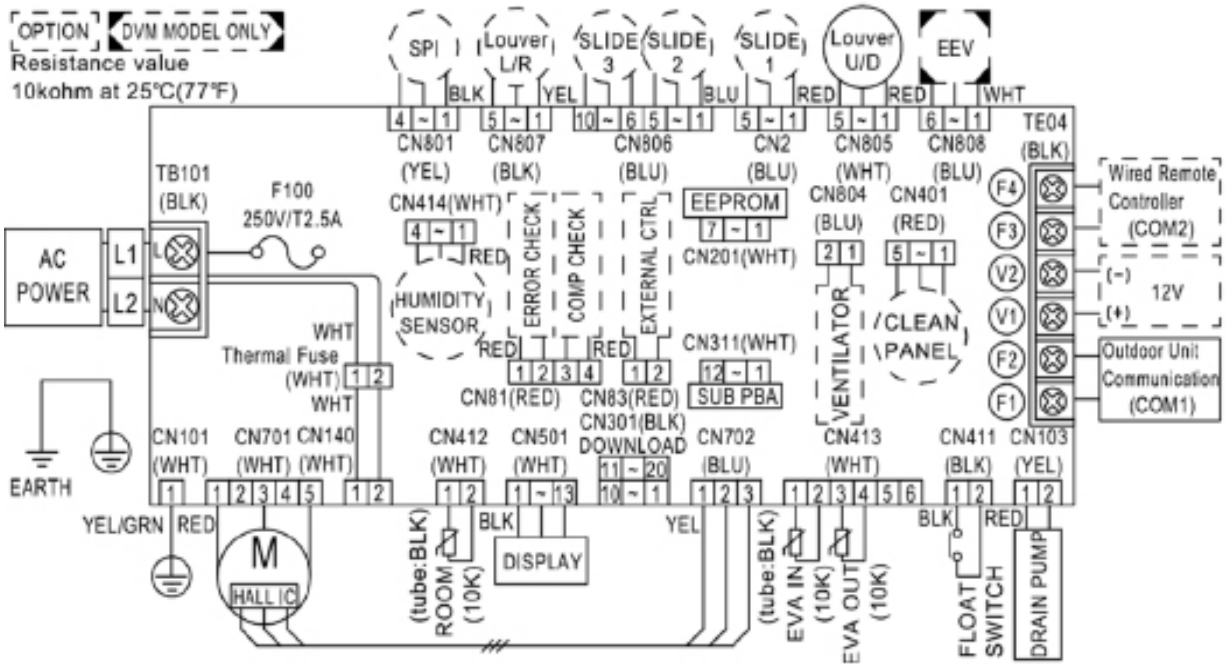
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6-1-15 Global Duct (AM036/048MNMDCH/AA)



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6-1-16 Wind-free 1way cassette type (AM007/009/012NN1DCH✳)



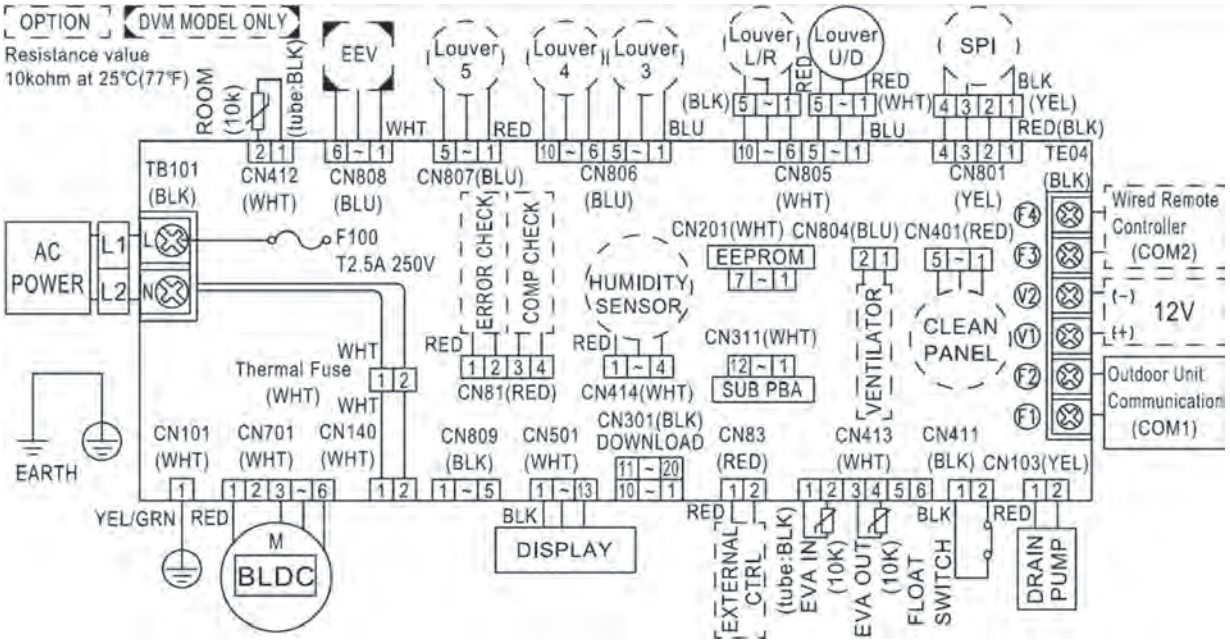
F100	FUSE	EEV	Electronic expansion valve	EVA-IN(10K)	Thermistor EVA IN(10K)
M [HALL IC]	Motor (IDU fan)	SPI	S-Plasma ion	EVA-OUT(10K)	Thermistor EVA OUT(10K)
Thermal Fuse	Terminal Block thermal fuse	ROOM(10K)	Thermistor ROOM(10K)		

NOTES

1. This wiring diagram applies only to the indoor unit.
2. Symbols show as follow :
   BLK : black, RED : red, BLU : blue, WHT : white, YEL : yellow, BRN : brown, SKY : sky blue, GRN : green
3. For connection wiring indoor-outdoor transmissioin F1-F2, indoor-wired remote controller transmission F3-F4.
4. ⏚ Protective earth (SCREW).

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6-1-17 Wind-free 1way cassette type (AM018/024NN1DCH/AZ)

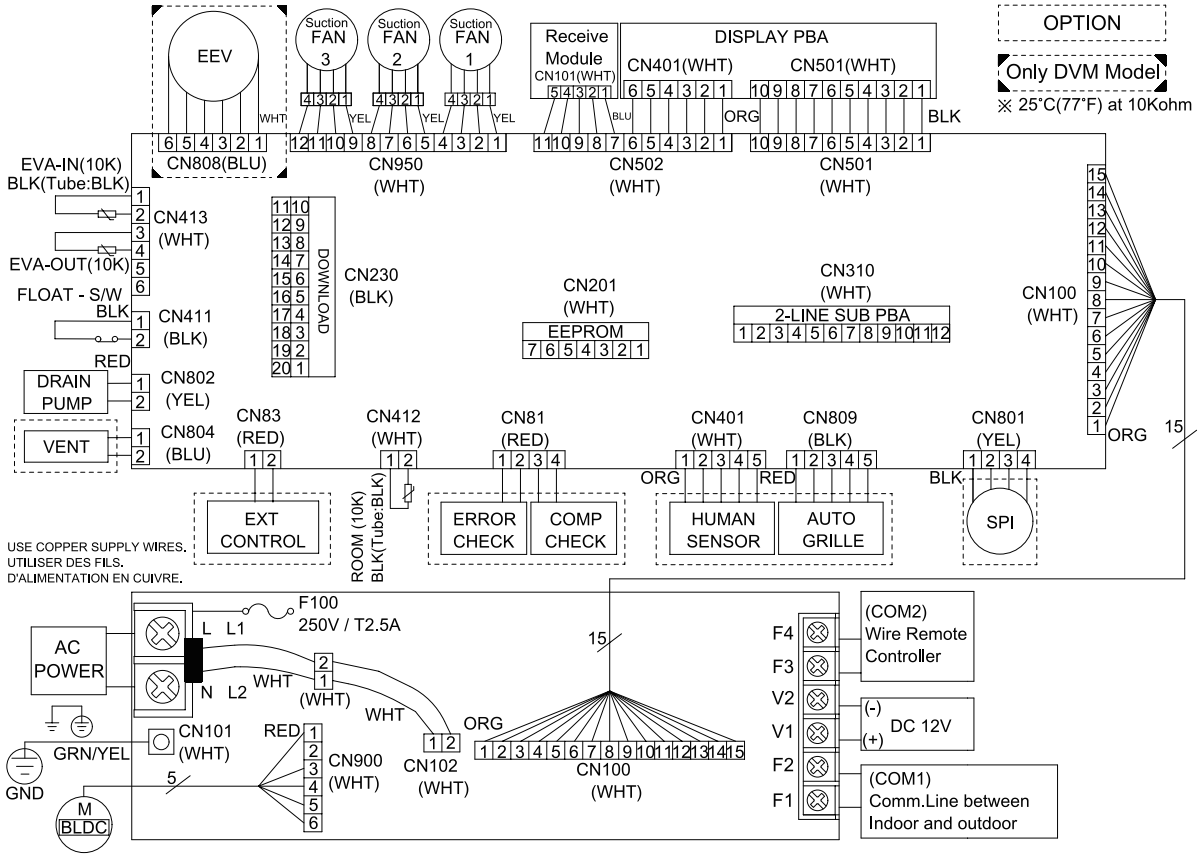


F100	FUSE	EEV	Electronic expansion valve	EVA-IN(10K)	Thermistor EVA IN(10K)
M [BLDC]	Motor (IDU fan)	SPI	S-Plasma ion	EVA-OUT(10K)	Thermistor EVA OUT(10K)
Thermal Fuse	Terminal Block thermal fuse	ROOM(10K)	Thermistor ROOM(10K)		

NOTES

1. This wiring diagram applies only to the indoor unit.
2. Symbols show as follow :
   BLK : black, RED : red, BLU : blue, WHT : white, YEL : yellow, BRN : brown, SKY : sky blue, GRN : green
3. For connection wiring indoor-outdoor transmissioin F1-F2, indoor-wired remote controller transmission F3-F4.
4. ⏚ Protective earth (SCREW).

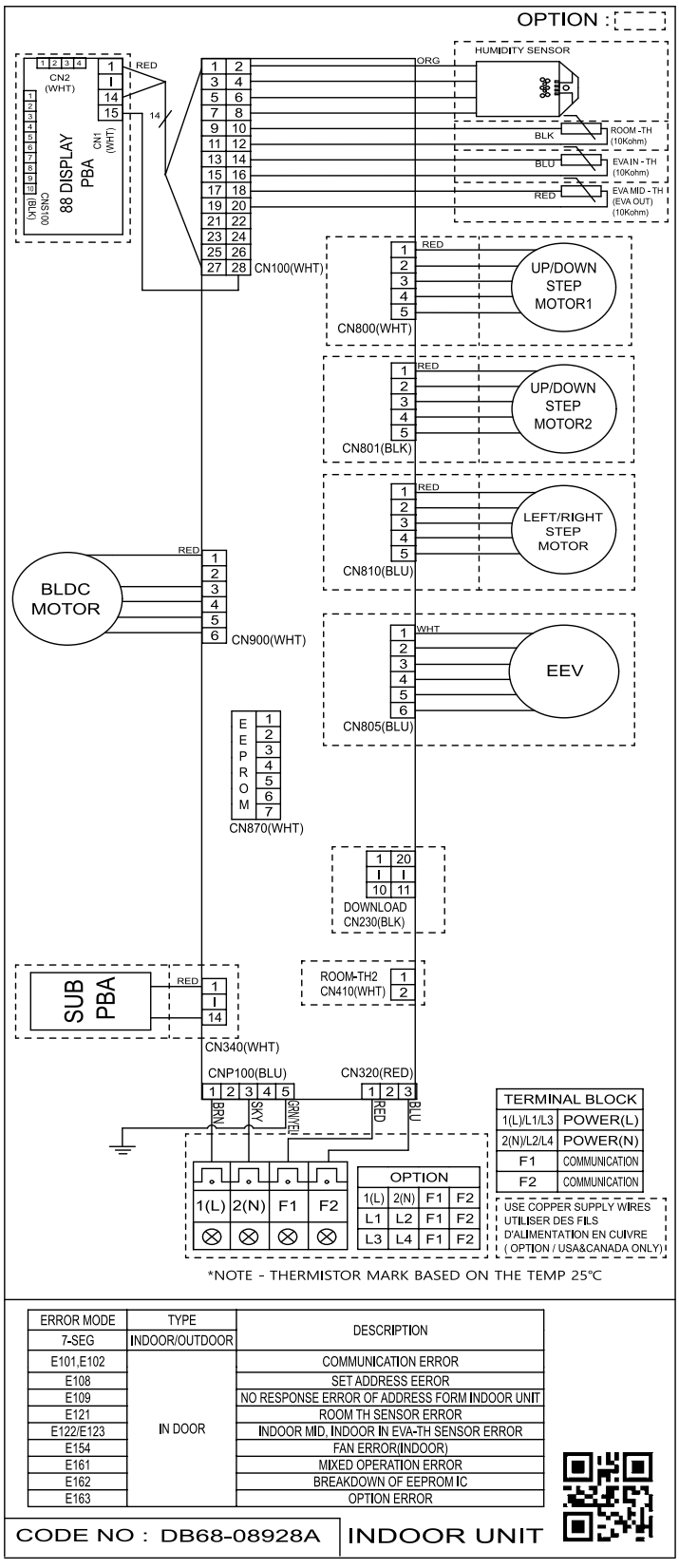
6-1-18 360 cassette (AM009/012/018/024/030/036/048KN4DCH/AA)



LED LAMP DISPLAY ● On ◑ Flickering	LED DISPLAY FOR ERROR DETECTION	LED LAMP DISPLAY ● On ◑ Flickering	LED DISPLAY FOR ERROR DETECTION
● ICE BLU	Operating	● RED	Smart Install Error(Only CAC Model)
◑ ICE BLU	Power Reset (Flickering every 2 seconds)	◑ RED - GRN Alternation of Flickering	Error of EVA- IN / OUT / DISCHARGE Sensor In the Indoor Unit (Open/short)
◑ ICE BLU	Defrosting Operation (Flickering every 10 Seconds)	◑ RED - BLU Alternation of Flickering	Error of Fan Motor In the Indoor Unit
● BLU	Reserving Mode	◑ GRN - BLU Alternation of Flickering	Detection of the Float Switch
● GRN	Filter Usage Expiration	◑ ICE BLU - BLU Alternation of Flickering	Detection of the Thermal Fuse Open
◑ RED	Error of Room Sensor In the Indoor Unit (Open/short)	◑ ICE BLU - RED Alternation of Flickering	Miss Matching Of Indoor and Outdoor Unit(Only DVM Model)
◑ BLU	Error Of Outdoor Unit	◑ ICE BLU - GRN Alternation of Flickering	Mixed Operation Mode Error of Indoor Unit(Only DVM Model)
◑ GRN	No Communication For 2 Minutes Between Indoor and Outdoor Unit	◑ RED - ICE BLU - GRN Alternation of Flickering	Error of EEPROM

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6-1-19 Premium Plus Windfree (AM***TNVDCH**)

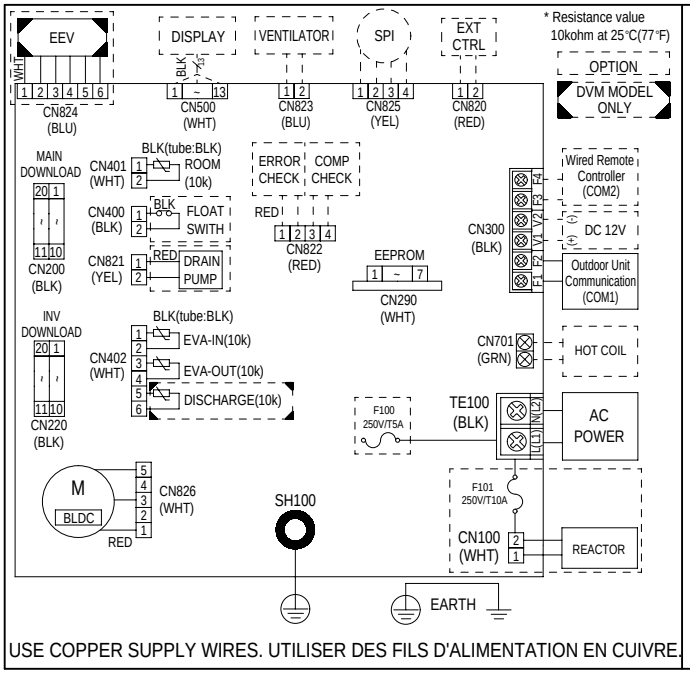


ERROR MODE	TYPE	DESCRIPTION
7-SEG	INDOOR/OUTDOOR	
E101,E102	IN DOOR	COMMUNICATION ERROR
E108		SET ADDRESS EERROR
E109		NO RESPONSE ERROR OF ADDRESS FORM INDOOR UNIT
E121		ROOM TH SENSOR ERROR
E122/E123		INDOOR MID, INDOOR IN EVA-TH SENSOR ERROR
E154		FAN ERROR(INDOOR)
E161		MIXED OPERATION ERROR
E162		BREAKDOWN OF EEPROM IC
E163		OPTION ERROR

CODE NO : DB68-08928A INDOOR UNIT

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6-1-20 Duct S (AM***AN*DCH/AA)



USE COPPER SUPPLY WIRES. UTILISER DES FILS D'ALIMENTATION EN CUIVRE.

LED LAMP DISPLAY				LED DISPLAY FOR ERROR DETECTION
OPERATION	TIMER	FAN	FILTER	●ON FLICKERING ×OFF
	×	×	×	Power Reset
×		×	×	Error of room temperature sensor in the indoor unit (open/short)
		×	×	Error of eva in,out,discharge temperature sensor in the indoor unit (open/short)
×	×		×	Error of fan motor in the indoor unit
	×		×	Error of outdoor sensor (Outdoor temperature/cond/discharge)
×			×	No communication for 2 minutes beween indoor and outdoor unit
×				Error of outdoor unit/self-diagnosis (Check error code at outdoor unit's or solution display)
×	×			Detection of the float switch
				EEPROM error/EEPROM option error
×	×	×		No match between outdoor and indoor unit

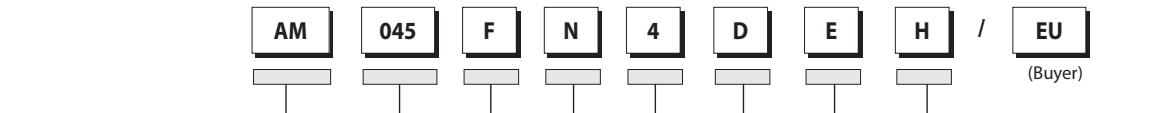
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7. Reference Sheet

7-1 Index for Model Name

7-1-1 Indoor Unit

Model Code



Classification	
AM	DVM

Capacity
BTU/H(*1000)

Version	
E	2012
F	2013
H	2014
J	2015
K	2016
M	2017
N	2018
R	2019
T	2020
A	2021

Product Type	
X	Outdoor Unit
N	Indoor Unit

Product Notation	
1	1 way cassette
2	2 way cassette
N	Mini 4 way cassette
4	4 way cassette
L	LSP Duct (Slim Duct)
M	MSP Duct
H	HSP Duct
C	Ceiling
J	Console
F	Floor Standing
T	NEO FORTE
Q	NEO FORTE (EEV)
B	HYDRO UNIT (Floor Standing)
K	FLAT(CEILING TYPE) VTL
V	RAC(EEV)-A3050, Premium Plus Windfree

Feature	
D	DELUXE
F	FLAGSHIP
G (EHS)	CASCADE (EEV)

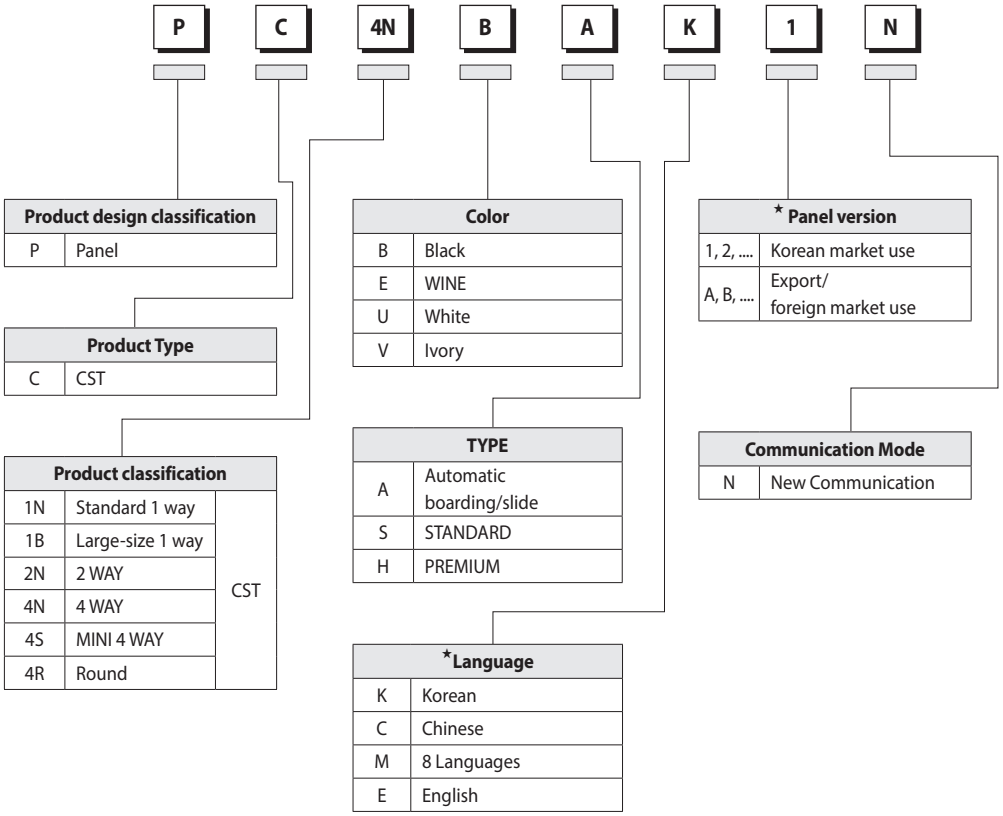
Rating Voltage	
E	1Ø, 220~240V, 50Hz
G	3Ø, 380~415V, 50Hz
C	1Φ, 208~230V, 60Hz

Mode	
H	Heat Pump (R-410A)
R	Heat Pump (R-134A)

Index for Model Name(cont.)

7-1-2 Panel

Model Code



Product design classification	
P	Panel

Product Type	
C	CST

Product classification		
1N	Standard 1 way	CST
1B	Large-size 1 way	
2N	2 WAY	
4N	4 WAY	
4S	MINI 4 WAY	
4R	Round	

Color	
B	Black
E	WINE
U	White
V	Ivory

TYPE	
A	Automatic boarding/slide
S	STANDARD
H	PREMIUM

★Language	
K	Korean
C	Chinese
M	8 Languages
E	English

★ Only display the Global 4 way with Korean/ English K separator.

	Pattern	Waffle	Stripe
Global 4 Way Panel	Korean market use	1	5
	Export/ foreign market use	A	E

★ Panel version	
1, 2, ...	Korean market use
A, B, ...	Export/ foreign market use

Communication Mode	
N	New Communication

※ Model name for the column/bundle packaging is "~S".

7-2 Pump-down Method

7-2-1 Precautions for Pump-down

1. If the pressure is kept low for a long time to completely replenish the refrigerant of the pipe during the pump-down, then the compressor may be damaged. Therefore, close the valve immediately if the pressure goes below 2kg/cm².g.

2. If the length of the pipe is too long or the outside temperature is too high, then it may not be able to pump down all of the refrigerant. In this case, use an empty refrigerant container which can be used for recharge to place some of the system refrigerant inside the container. The pump down can be easily carried out if only the remaining refrigerant is pumped down.

> ⚠ CAUTION
> Please use a rechargeable container for exclusive use when putting the refrigerant in the container.
> Accidents such as explosions can happen and result in damage if normal refrigerant containers are used after illegal modification.

7-2-2 For Single Installation of Outdoor Unit (Only One Outdoor Unit Installed)

1. Close the liquid pipe SVC valve.

2. Press the K2 Button on the PCB of the main outdoor unit. ("K7" mark displayed on the outdoor unit PCB LED.)

3. Observe for low pressure by using the K4 button's view mode once the compressor starts operating.
   (If the first number of the LED is "4," then the following three digits represent the low pressure, expressed up to the first decimal point.)
   Example: 41 22 → 4 means the value of the low pressure, and 122 means that the low pressure is 12.2kg/cm²,g.

4. If the low pressure goes below around 2kg/cm²,g, then immediately close the SVC valve for the gas and finish the pump-down operation.
   (Finish the pump-down operation, press K2 button two more times, or reset the operation by pressing the K3 button once more.)

7-2-3 When Two or More Outdoor Units are Installed

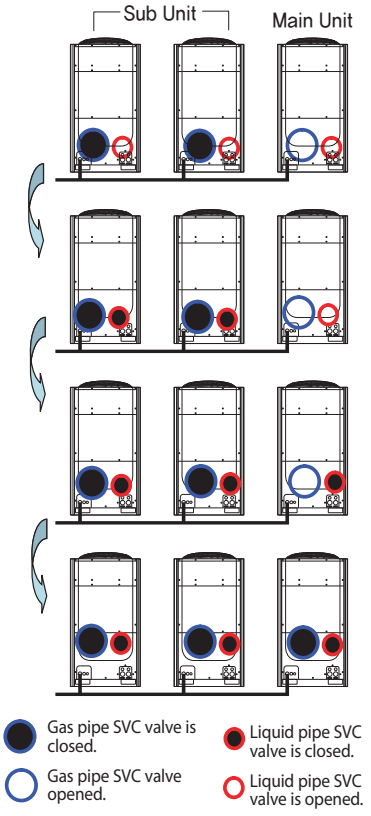
1. Close the gas valves of each sub unit.

2. Press the K2 button of the outdoor unit PCB three times. At this time, K7 will be displayed on the PCB LED. After pressing the button, wait for about 20~30 minutes once the main unit compressor starts operating.

3. Close the liquid pipe valves of each sub unit.

4. Close the liquid pipe valves of the main unit, and observe for low pressure as in the case of a single outdoor unit.

5. Close the gas valve of the main unit if the pressure drops down, and then finish the pump-down operation mode.



7-3 How to Put Refrigerant in Refrigerant Container

7-3-1 How to put refrigerant in container before pump-down

1. Prepare a rechargeable exclusive refrigerant container, a scale, and a Manifold gauge.

2. Check the amount of refrigerant remaining in the overall system at the time.

3. Connect the refrigerant container to the outdoor unit as shown in the following figure, and operate only about 50% of the total indoor units in air conditioning mode.

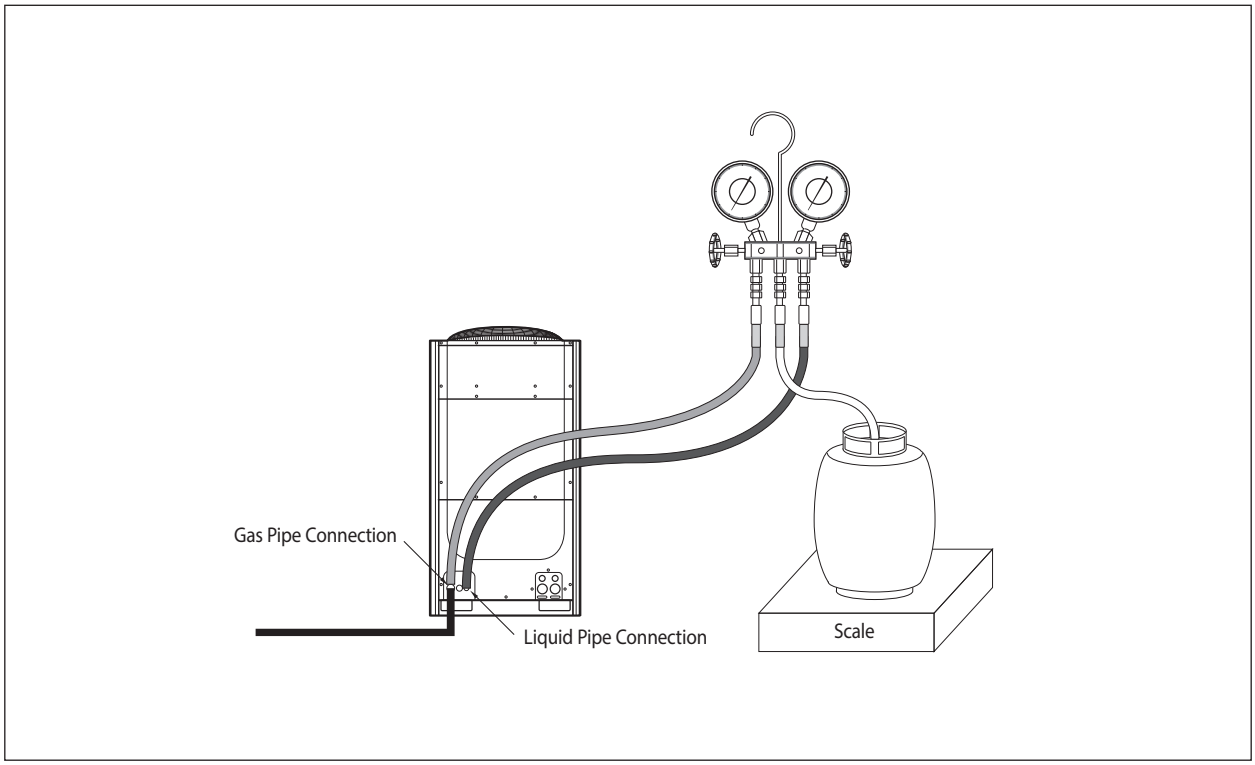
4. Check the high pressure from the Manifold gauge 10 minutes after the air conditioning begins operation.
   Reduce the number of indoor units in operation if the high pressure goes above 30kg/cm2,g. to lower the high pressure below 30kg/cm²,g.

5. Check that the high pressure goes below 30kg/cm²,g, and open the Manifold gauge connected to the liquid pipe, as well as the refrigerant container valve, so that the refrigerant flows from the liquid pipe to the refrigerant container.

6. Check the changes in the weight of the container using the scale. Once the desired amount of refrigerant is filled up inside the container, close the valves, and then remove the Manifold gauge.

7. The amount of refrigerant that can be contained inside the container is about 50% of the amount of refrigerant inside the over all system.

8. Please take extra caution by precisely determining the amount of the refrigerant that can be put in each container so that too much refrigerant is not contained in the container.
   The weight must be measured by using a scale to avoid putting more refrigerant than the amount originally contained in the container.



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Printed in Korea.
Code No. AC-00015E_15