Multi Variable Air Conditioners
Indoor Unit for North America
Service Manual(R410A)

R410A/60Hz
(GC201609-Ⅰ)

GREE ELECTRIC APPLIANCES, INC.OF ZHUHAI

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CHAPTER 1 PRODUCT

1 Product List

1.1 Low Static Pressure Duct Type Indoor Unit

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW(Btu/h)	kW(Btu/h)			
GMV-ND07PLS/A-T(U)	CM810N0080	2.2 (7500)	2.5 (8500)	208/230V ~ 60Hz	R410A	
GMV-ND09PLS/A-T(U)	CM810N0090	2.8 (9500)	3.1 (10500)			
GMV-ND12PLS/A-T(U)	CM810N0100	3.5 (12000)	4.0 (13500)			
GMV-ND14PLS/A-T(U)	CM810N0120	4.0 (14000)	4.5 (15000)			
GMV-ND18PLS/A-T(U)	CM810N0070	5.3 (18000)	5.9 (20000)			
GMV-ND22PLS/A-T(U)	CM810N0110	6.3 (22000)	7.1 (24000)			

1.2 Four-way Cassette Type Indoor Unit

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			
GMV-ND07T/A-T(U)	CM500N0520	2.2 (7500)	2.5 (8500)	208/230V ~ 60Hz	R410A	
GMV-ND09T/A-T(U)	CM500N0530	2.8 (9500)	3.1 (10500)			
GMV-ND12T/A-T(U)	CM500N0540	3.5 (12000)	4.0 (13500)			
GMV-ND15T/A-T(U)	CM500N0670	4.4 (15000)	5 (17000)			
GMV-ND18T/A-T(U)	CM500N0510	5.3 (18000)	5.9 (20000)			
GMV-ND24T/A-T(U)	CM500N0550	7.0 (24000)	7.9 (27000)			
GMV-ND30T/A-T(U)	CM500N0560	8.8 (30000)	10 (34000)			
GMV-ND36T/A-T(U)	CM500N0570	10.6 (36000)	11.7 (40000)			
GMV-ND42T/A-T(U)	CM500N0580	12.3 (42000)	13.8 (47000)			
GMV-ND48T/A-T(U)	CM500N0590	14.1 (48000)	15.8 (54000)			

1.3 Wall Mounted Type Indoor Unit

Model	Product Code	Cooling Capacity kW (Btu/h)	Heating Capacity kW (Btu/h)	Power Supply	Refrigerant	Appearance
GMV-N07G/A3A-D(U)	CM100N1480	2.2 (7500)	2.5 (8500)	208/230V ~ 60Hz	R410A	
GMV-N09G/A3A-D(U)	CM100N1490	2.8 (9500)	3.2 (11000)			
GMV-N12G/A3A-D(U)	CM100N1500	3.5 (12000)	4.0 (13500)			
GMV-N18G/A3A-D(U)	CM100N1510	5.2 (18000)	5.8 (20000)			
GMV-N24G/A3A-D(U)	CM100N1520	7.0 (24000)	7.5 (25500)			

1.4 Console Type Indoor Unit

Model	Product Code	Cooling Capacity kW (Btu/h)	Heating Capacity kW (Btu/h)	Power Supply	Refrigerant	Appearance
GMV-ND07C/A-T(U)	CM400N0110	2.2 (7500)	2.5 (8500)	208/230V ~ 60Hz	R410A	
GMV-ND09C/A-T(U)	CM400N0120	2.8 (9500)	3.2 (11000)			
GMV-ND12C/A-T(U)	CM400N0100	3.5 (12000)	4.0 (13500)			
GMV-ND18C/A-T(U)	CM400N0130	5.3 (18000)	5.8 (20000)			

1.5 High Static Pressure Duct Type Indoor Unit

Model	Product Code	Cooling Capacity kW (Btu/h)	Heating Capacity kW (Btu/h)	Power Supply	Refrigerant	Appearance
GMV-ND18PHS/A-T(U)	CM810N0140	5.3 (18000)	5.9 (20000)	208/230V ~ 60Hz	R410A	
GMV-ND24PHS/A-T(U)	CM810N0150	7.0 (24000)	7.9 (27000)			
GMV-ND30PHS/A-T(U)	CM810N0160	8.8 (30000)	10.0 (34000)			
GMV-ND36PHS/A-T(U)	CM810N0170	10.6 (36000)	11.7 (40000)			
GMV-ND42PHS/A-T(U)	CM810N0180	12.3 (42000)	13.8 (47000)			
GMV-ND48PHS/A-T(U)	CM810N0190	14.1 (48000)	15.8 (54000)			
GMV-ND72PH/A-T(U)	CM810N0280	20.2 (72000)	22.6 (77000)			
GMV-ND96PHS/A-T(U)	CM810N0290	27.0 (92000)	30.2 (103000)			

1.6 Two-way Cassette Type Indoor Uint

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			
GMV-ND09TS/A-T(U)	CM500N0890	2.8 （9500）	3.1 (10500)	208/230 V~60Hz	R410A	
GMV-ND12TS/A-T(U)	CM500N0900	3.5 （12000）	4.0 (13500)			
GMV-ND15TS/A-T(U)	CM500N0910	4.4 （15000）	5.0 (17000)			
GMV-ND18TS/A-T(U)	CM500N0920	5.3 （18000）	5.9 (20000)			
GMV-ND24TS/A-T(U)	CM500N0930	7.0 （24000）	7.9 (27000)			

1.7 Floor Ceiling Type Indoor Uint

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			
GMV-ND09ZD/A-T(U)	CM600N0420	2.8 (9500)	3.1 (10500)	208/230 V~60Hz	R410A	
GMV-ND12ZD/A-T(U)	CM600N0430	3.5 (12000)	4.0 (13500)			
GMV-ND18ZD/A-T(U)	CM600N0440	5.3 (18000)	5.9 (20000)			
GMV-ND24ZD/A-T(U)	CM600N0450	7.0 (24000)	7.9 (27000)			
GMV-ND30ZD/A-T(U)	CM600N0460	8.8 (30000)	10.0 (33000)			
GMV-ND36ZD/A-T(U)	CM600N0470	10.6 (36000)	11.7 (40000)			
GMV-ND42ZD/A-T(U)	CM600N0480	12.3 (42000)	13.8 (47000)			
GMV-ND48ZD/A-T(U)	CM600N0490	14.1 (48000)	15.8 (54000)			

1.8 Fresh Air Processing Type Indoor Uint

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			
GMV-NDX72P/A-T(U)	CM810N0480	21.1 (72000)	16.1 (55000)	208/230 V~60Hz	R410A	
GMV-NDX96P/A-T(U)	CM810N0470	28.1 (96000)	20.0 (68000)			

1.9 Compact Four-way Cassette Type Indoor Unit

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			

GMV-ND07T/B-T(U)	CM500N0940	2.2 (7500)	2.5 (8500)	208/230V ~ 60Hz	R410A	
GMV-ND09T/B-T(U)	CM500N0950	2.8 (9500)	3.1 (10500)			
GMV-ND12T/B-T(U)	CM500N0960	3.5 (12000)	4.0 (13500)			
GMV-ND15T/B-T(U)	CM500N0970	4.4 (15000)	5.0 (17000)			
GMV-ND18T/B-T(U)	CM500N0980	5.3 (18000)	5.9 (20000)			

1.10 Super High Static Pressure Duct Type Indoor Unit

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			
GMV-ND07PHS/B-T(U)	CM810N0830	2.2 (7500)	2.5 (8500)	208/230V~60Hz	R410A	
GMV-ND09PHS/B-T(U)	CM810N0790	2.8 (9500)	3.1 (10500)			
GMV-ND12PHS/B-T(U)	CM810N0800	3.5 (12000)	4.0 (13500)	208/230V~60Hz	R410A	
GMV-ND15PHS/B-T(U)	CM810N0770	4.4 (15000)	5.0 (17000)			
GMV-ND18PHS/B-T(U)	CM810N0810	5.3 (18000)	5.9 (20000)			
GMV-ND22PHS/B-T(U)	CM810N0720	6.4 (22000)	7.0 (24000)			
GMV-ND24PHS/B-T(U)	CM810N0730	7.0 (24000)	7.9 (27000)			
GMV-ND30PHS/B-T(U)	CM810N0780	8.8 (30000)	10.0 (34000)	208/230V~60Hz	R410A	
GMV-ND36PHS/B-T(U)	CM810N0740	10.6 (36000)	11.7 (40000)			
GMV-ND42PHS/B-T(U)	CM810N0750	12.3 (42000)	13.8 (47000)			
GMV-ND48PHS/B-T(U)	CM810N0820	14.1 (48000)	15.0 (54000)			
GMV-ND54PHS/B-T(U)	CM810N0760	15.8 (54000)	17.6 (60000)			

1.11 Air Handler type Indoor Unit

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			
GMV-ND24A/A-T(U)	CM810N0660	7.0 (24000)	7.9 (27000)	208/230V~ 60Hz	R410A	
GMV-ND30A/A-T(U)	CM810N0670	8.8 (30000)	10.0 (34000)			
GMV-ND36A/A-T(U)	CM810N0700	10.6 (36000)	11.7 (40000)			
GMV-ND42A/A-T(U)	CM810N0690	12.3 (42000)	13.8 (47000)			
GMV-ND48A/A-T(U)	CM810N0680	14.1 (48000)	15.8 (54000)			
GMV-ND54A/A-T(U)	CM810N0710	15.8 (54000)	17.6 (60000)			

1.12 AHU-KIT Type Indoor Unit

Model	Product Code	Cooling Capacity	Heating Capacity	Power Supply	Refrigerant	Appearance
		kW (Btu/h)	kW (Btu/h)			
GMV-N12U/A-T(U)	CN750N0100	3.6 (12280)	4.0 (13650)	208/230V ～ 60Hz	R410A	 
GMV-N24U/A-T(U)	CN750N0060	7.1 (24230)	8.0 (27300)			
GMV-N48U/A-T(U)	CN750N0070	14.0 (47770)	16.0 (54590)			
GMV-N96U/A-T(U)	CN750N0080	28.0 (95540)	31.5 (107480)			
GMV-N192U/A-T(U)	CN750N0090	56.0 (191070)	62.5 (21325)			

2 Nomenclature

Nomenclature of Indoor Unit：

GMV	-	N	□	□	□	□	□	/	□	-	□	□
1		2	3	4	5	6	7		8		9	10

No.	Description	Options
1	Product code	GMV-Gree Multi VRF Units
2	indoor unit code	indoor unit -N
3	Motor type	D – DC motor NULL – AC motor
4	Function code	X-fresh air W- double thermal source
5	Cooling capacity/air volume code	Indoor unit: norminal cooling capacity /1000(Btu/h) All heat exchanger: air volume /100（m^3/h）

6	Unit type	PL- low static pressure duct type indoor unit P-standard static pressure duct type indoor unit PH- high static pressure duct type indoor unit PB-slim type duct type indoor unit T- Four-way cassete type indoor unit A-Air handler type indoor unit TD-one-way cassette type indoor unit TS- two-way cassette type indoor unit ZD- floor ceiling type indoor unit ZK- combine type indoor unit C-console type indoor unit G- wall-mounted type indoor unit L- Floor Standing type indoor unit U- AHU-KIT type indoor unit
7	With water pump or not	With wate pump –S (S is not displayed for the cassette unit with water pump)
8	Design serial No.	Nominate by A, B, C or expand it by 1, 2, 3…
9	Power	T – 208/230V～,60Hz
10	Sale Area code	(U)-North America

3 Product Features

3.1 Features of Low Static Pressure Duct Type Indoor Unit

- Low static pressure, low noise

Especially suitable for rooms of compact structure or samll installation space.Also it provides you with a comfortable and quiet living environment.

- Convenient installation

Tab type plastic filter, detachable fan motor, independent water pump assembly, all for covenient maintenance.

- Intelligent drainage device

Water heigh difference up to 3.3ft.which can effectively drain out condending water ande save space.

- Protection function

Water overflow protection, anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.

3.2 Features of Four-way Cassette Type Indoor Unit

- Strong and balanced airflow

Unit features auto operation, 4-way airflow, 7 fan speeds and strong circulating airflow.

- DC inverter motor

With good speed regulation performance, motor efficiency improved by 30% vs. normal motor.

- Ultra-low noise operation

DC inverter motor can realize stepless speed regulation to lower noise. Indoor unit can be set to work under auto quiet mode via wired controller.

- Protection function

Water overflow protection, anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.

- Intelligent drainage device

Water height difference up to 1.0m, which can effectively drain out condensing water and save space.

3.3 Features of Wall Mounted Type Indoor Unit

- Filter can be cleaned

The filter is removable and can be cleaned for easy maintenance.

- Quiet design

High-efficiency cross flow blade and imported silence valve are adopted, which greatly reduce the noise of entire unit.

- One IDU with several wired controller and several IDUs with one wired controller

One IDU can be connected with several wired controllers in order to control one IDU from different location; meanwhile, several IDUs can be connected with one wired controller in order to achieve centralized control of 16 IDUs in maximum.

- Wide air supply range

The air supply range is wide, so that the wind can be delivered to each corner of the room naturally and evenly.

- Super cooling and heating function

Intelligent temperature control technology is adopted with super cooling and heating function, so that the room temperature can reach set temperature rapidly.

- I-feel function

When I-feel function is activated, the unit can detect the temperature around the user and adjust the temperature, so that the comfort of user is improved. (Remote controller shall be equipped)

- Panel is removable

The panel of indoor unit can be removed easily for convenient maintenance.

The response of the system is quicker with more reliable communication; auto addressing, non-polar communication and free wiring are available.

- Multiple protections

Anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.

3.4 Features of Console Type Indoor Unit

- Multiple fan speed

The fan can operate in multiple speed and satisfy different air flow volume requirements.

- Detachable grille and long life filter

Grille is detachable for easy cleaning. With long life filter, cleaning cycle is 20 times longer.

- Protection function

Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection, auxiliary electric heating overheat protection (This function is not included in pure heat pump unit).

3.5 Features of High Static Pressure Duct Type Indoor Unit

- High static pressure design

  Static pressure can be up to 150Pa, especially suitable for places in need of long distance airflow.

- Convenient installation

  You can choose circular air duct or rectangular air duct according to actual needs. Or you can choose different ways of air return.

- Easy maintenance

  The system has maintenance port for easy maintenance.

- Protection function

  Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.

3.6 Features of Two-way Cassette Type Indoor Unit

- Beautiful Appearance

  With beautiful and elegant front panel, it is congenial to the indoor surroundings.

- Two-way air flow design

  Two-way air outlet, to stretch air outlet distance and solve air supply problem of elongated room.

- Intelligent drainage device

  Water height difference up to 1.0m, which can effectively drain out condensing water and save space.

- Multiple protections

  Anti-freezing protection, temperature malfunction protection, fan motor overload and humidity sensor protection.

3.7 Features of Floor Ceiling Type Indoor Unit

- Hoisted or seated, flexible installation

  Unit can be hoisted or seated. When seated, suspended ceiling is not needed.

- Protection function

  Anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.

- Beautiful appearance

  With beautiful and elegant front panel, it is congenial to the indoor surroundings.

- Horizontal and vertical air swing

  Wider air swing range for your comfortable working and living environment.

3.8 Features of Fresh air Processing Type Indoor Unit

- Fresh Air Processing Indoor Unit

  Airflow volume: 880CFM~2060CFM.

  Applicable range: Residential houses, villas, business buildings, hotels, apartments, etc.

- One system, two functions

  Adopted with DC inverter technology, Fresh Air DC Inverter Multi VRF System features air conditioning function and fresh air function.

- Enjoy fresh air

(1) Airflow volume: 880CFM~2060CFM, cooling capacity:72、96kBtu/h.

(2) Applicable for all kinds of structure.

(3) Direct evaporative cooling adopted，air conditioning+fresh air can be realized accurately and precisely.

(4) DC inverter technology adopted, constant humidity is enabled with less power consumption.

(5) Integrated system control with Gree GMV Multi VRF System.

- Air conditioning and fresh air, two in one

(1) Less investment

Fresh Air DC Inverter Multi VRF System can be combined with Gree GMV5. For a same room, if the same amount of fresh air is to be taken, then the cost of GMV5+Fresh air unit is equivalent to the cost of GMV+Air exchange fan.

(2) Less operation cost

Unit can control refrigerant output according to actual needs to ensure constant airflow temperature. By adjusting power output, light-load but high power operation can be avoided. Thus, operation cost can be greatly reduced.

(3) Less installation space

Save installation space for outdoor units. Especially suitable for places that have restricted installation space.

3.9 Features of Compact Four-way Cassette Type Indoor Unit

- Compact design for easy installation

Units maintain the uniform length and width with consistent ceiling opening and panel dimension, convenient for design and installation.

- Ultra-low noise operation

DC inverter motor can realize stepless speed regulation to lower noise. Indoor unit can be set to work under anto quiet mode via wired controller.

- Intelligent drainage device

Water height difference up to 3.3ft. which can effectively drain out condensing water and save space.

3.10 Features of Super High Static Pressure Duct Type Indoor Unit

- High static pressure design

Static pressure can be up to 200Pa(0.8 In.W.G), especially suitable for places in need of long distance airflow.

- Convenient installation

You can choose circular air duct or rectangular air duct according to actual needs. Or you can choose different ways of air return.

- Easy maintenance

The system has maintenance port for easy maintenance.

- Protection function

Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.

3.11 Features of Air Handler type Indoor Unit

- Multiple fan speed

  The fan can operate in multiple speed and satisfy different air flow volume requirements.

- DC inverter motor

  With good speed regulation performance, motor efficiency improved by 30% vs. normal motor.

- Ultra-low noise operation

  DC inverter motor can realize stepless speed regulation to lower noise. Indoor unit can be set to work under auto quiet mode via wired controller.

- Protection function

  Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.

3.12 Features of AHU-KIT type Indoor Unit

- Compact design for easy installation

Units maintain the uniform length and width with consistent ceiling opening and panel dimension, convenient for design and installation.

- The corresponding AHU-KIT unit needs to be selected for your air handling unit

4 Specifications

4.1 Low Static Pressure Duct Type Indoor Unit

Model			GMV-ND07PLS/A-T(U)	GMV-ND09PLS/A-T(U)	GMV-ND12PLS/A-T(U)
Product Code			CM810N0080	CM810N0090	CM810N0100
Cooling Capacity		Btu/h	7500	9500	12000
		kW	2.2	2.8	3.5
Heating Capacity		Btu/h	8500	10500	13500
		kW	2.5	3.1	4
Casing Finish			Galvanized Steel plate		
Dimensions (W×D×H）	Outline	mm	700×615×200	700×615×200	700×615×200
		in.	27-1/2×24-1/4×7-7/8	27-1/2×24-1/4×7-7/8	27-1/2×24-1/4×7-7/8
	Packaging	mm	893×743×305	893×743×305	893×743×305
		in.	35-1/8×29-1/4×12	35-1/8×29-1/4×12	35-1/8×29-1/4×12
Net Weight		lbs.	51	51	51
		kg	23	23	23
Gross Weight		lbs.	64	64	64
		kg	29	29	29
Pipe Connection	Liquid Side	mm	Φ6.35	Φ6.35	Φ6.35
		in.	Φ1/4	Φ1/4	Φ1/4
	Gas Side	mm	Φ9.52	Φ12.7	Φ12.7
		in.	Φ3/8	Φ1/2	Φ1/2
	Drain Pipe	mm	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1
Power supply			1-phase 208/230V 60Hz		

Fan	Type * Quantity			Centrifugal*2	Centrifugal*2	Centrifugal*2
	Driving Mechanism			Direct-driven		
	Motor Type			BLDC		
	Motor Power Input		W	43	43	43
	Motor Running Current		A	0.3	0.3	0.3
	Airflow Rate(H/M/L)		CFM	265/235/150	265/235/150	325/265/205
			m^3/h	450/400/250	450/400/250	550/450/350
	External Static Pressure	Default	in.W.G.	0.06	0.06	0.06
			Pa	15	15	15
		Range	in.W.G.	0~0.12	0~0.12	0~0.12
			Pa	0~30	0~30	0~30
Sound Pressure Level(H/M/L)			dB(A)	31/29/25	31/29/25	32/30/27
Heat Exchanger				Fenestrate plain film --hydrophilic film		
Air Filter				PP		
Refrigeration Control Device				EXV		
Protection Device				Fuse		

Model			GMV-ND14PLS/A-T(U)	GMV-ND18PLS/A-T(U)	GMV-ND22PLS/A-T(U)
Product Code			CM810N0120	CM810N0070	CM810N0110
Cooling Capacity		Btu/h	14000	18000	22000
		kW	4	5.3	6.3
Heating Capacity		Btu/h	15000	20000	24000
		kW	4.5	5.9	7.1
Casing Finish			Galvanized Steel plate		
Dimensions (W×D×H）	Outline	mm	900×615×200	1100×615×200	1100×615×200
		in.	35-3/8×24-1/4×7-7/8	43-1/4×24-1/4×7-7/8	43-1/4×24-1/4×7-7/8
	Packaging	mm	1123×743×305	1323×743×305	1323×743×305
		in.	44-1/2×29-1/4×12	52×29-1/4×12	52×29-1/4×12
Net Weight		lbs.	60	69	69
		kg	27	31	31
Gross Weight		lbs.	73	86	86
		kg	33	39	39
Pipe Connection	Liquid Side	mm	Φ6.35	Φ9.52	Φ9.52
		in.	Φ1/4	Φ3/8	Φ3/8
	Gas Side	mm	Φ12.7	Φ15.9	Φ15.9
		in.	Φ1/2	Φ5/8	Φ5/8
	Drain Pipe	mm	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1
Power Supply			1-phase 208/230V 60Hz		

Fan	Type * Quantity			Centrifugal*3	Centrifugal*4	Centrifugal*4
	Driving Mechanism			Direct-driven		
	Motor Type			BLDC		
	Motor Power Input		W	52	99	99
	Motor Running Current		A	0.5	0.7	0.7
	Airflow Rate(H/M/L)		CFM	410/353/265	590/470/355	590/470/355
			m^3/h	700/600/450	1000/800/600	1000/800/600
	External Static Pressure	Default	in.W.G.	0.06	0.06	0.06
			Pa	15	15	15
		Range	in.W.G.	0~0.12	0~0.12	0~0.12
			Pa	0~30	0~30	0~30
Sound Pressure Level(H/M/L)			dB(A)	33/31/28	35/33/30	35/33/30
Heat Exchanger				Fenestrate plain film --hydrophilic film		
Air Filter				PP		
Refrigeration Control Device				EXV		
Protection Device				Fuse		

4.2 Four-way Cassette Type Indoor Unit

Model			GMV-ND07T/A-T(U)	GMV-ND09T/A-T(U)	GMV-ND12T/A-T(U)	GMV-ND15T/A-T(U)	GMV-ND18T/A-T(U)
Product Code			CM500N0520	CM500N0530	CM500N0540	CM500N0670	CM500N0510
Cooling Capacity		Btu/h	7500	9500	12000	15000	18000
		kW	2.2	2.8	3.5	4.4	5.3
Heating Capacity		Btu/h	8500	10500	13500	17000	20000
		kW	2.5	3.1	4.0	5	5.9
Casing Finish			Galvanized Steel plate				
Dimensions(W×D×H)	Body Outline	mm	840×840×190	840×840×240	840×840×240	840×840×240	840×840×240
		in.	33×33×7-1/2	33×33×9-1/2	33×33×9-1/2	33×33×9-1/2	33×33×9-1/2
	Body Packaging	mm	963×963×272	963×963×325	963×963×325	963×963×325	963×963×325
		in.	37-15/16×37-15/16×10-11/16	37-15/16×37-15/16×12-13/16	37-15/16×37-15/16×12-13/16	37-15/16×37-15/16×12-13/16	37-15/16×37-15/16×12-13/16
	Panel Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
		in.	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2
	Panel Packaging	mm	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133
		in.	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4
Net Weigh	Main Body	lbs.	50	58	58	58	58
		kg	22.5	26.5	26.5	26.5	26.5
	Panel	lbs.	15	15	15	15	15
		kg	7	7	7	7	7
Gross Weigh	Main Body	lbs.	64	75	75	75	75
		kg	29	34	34	34	34
	Panel	lbs.	24	24	24	24	24
		kg	11	11	11	11	11
Pipe Connections	Liquid Side	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
		in.	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8
	Gas Side	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
		in.	Φ3/8	Φ1/2	Φ1/2	Φ1/2	Φ5/8

	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1	Φ1
Power supply			1-phase 208/230V 60Hz				
Fan	Type * Quantity		Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1
	Driving Mechanism		Direct-driven	Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
	Motor Power Input	W	48	59	59	59	59
	Motor Running Current	A	0.3	0.5	0.5	0.5	0.5
	Airflow Rate(H/M/L)	CFM	440/385/325	590/530/440	590/530/440	590/530/440	590/530/440
		m^3/h	750/650/550	1000/900/750	1000/900/750	1000/900/750	1000/900/750
Sound Pressure Level(H/M/L)		dB(A)	36/34/31	37/35/32	37/35/32	37/35/32	37/35/32
Heat Exchanger			Fenestrate plain film --hydrophilic film				
Air Filter			PP	PP	PP	PP	PP
Insulation Material			Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene
Refrigeration Control Device			EXV	EXV	EXV	EXV	EXV
Protection Device			Fuse	Fuse	Fuse	Fuse	Fuse
Panel Name			TC01	TC01	TC01	TC01	TC01

Model			GMV-ND24T/A-T(U)	GMV-ND30T/A-T(U)	GMV-ND36T/A-T(U)	GMV-ND42T/A-T(U)	GMV-ND48T/A-T(U)
Product Code			CM500N0550	CM500N0560	CM500N0570	CM500N0580	CM500N0590
Cooling Capacity		Btu/h	24000	30000	36000	42000	48000
		kW	7	8.8	10.6	12.3	14.1
Heating Capacity		Btu/h	27000	34000	40000	47000	54000
		kW	7.9	10	11.7	13.8	15.8
Casing Finish			Galvanized Steel plate				
Dimensions (W×D×H)	Body Outline	mm	840×840×240	840×840×320	840×840×320	840×840×320	840×840×320
		in.	33×33×9-1/2	33×33×12-5/8	33×33×12-5/8	33×33×12-5/8	33×33×12-5/8
	Body Packaging	mm	963×963×325	963×963×409	963×963×409	963×963×409	963×963×409
		in.	37-15/16×37-15/16×12-13/16	37-15/16×37-15/16×16-1/8	37-15/16×37-15/16×16-1/8	37-15/16×37-15/16×16-1/8	37-15/16×37-15/16×16-1/8
	Panel Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
		in.	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2	37-3/8×37-3/8×2-1/2
	Panel Packaging	mm	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133
		in.	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4	40-11/16×40-7/8×5-1/4
Net Weight	Main Body	lbs.	58	72	72	72	72
		kg	26.5	32.5	32.5	32.5	32.5
	Panel	lbs.	15	15	15	15	15
		kg	7	7	7	7	7
Gross Weight	Main Body	lbs.	75	88	88	88	88
		kg	34	40	40	40	40
	Panel	lbs	24	24	24	24	24
		kg	11	11	11	11	11

Pipe Connections	Liquid Side	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		in.	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas Side	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
		in.	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1	Φ1
Power Supply			1-phase 208/230V 60Hz				
Fan	Type * Quantity		Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1
	Driving Mechanism		Direct-driven	Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
	Motor Power Input	W	68	98	110	110	110
	Motor Running Current	A	0.5	0.8	0.9	0.9	0.9
	Airflow Rate(H/M/L)	CFM	695/590/470	885/795/650	1000/825/650	1095/885/680	1095/885/680
		m^3/h	1180/1000/800	1500/1350/1100	1700/1400/1100	1860/1500/1150	1860/1500/1150
Sound Pressure Level(H/M/L)		dB(A)	38/36/33	40/38/35	41/38/36	43/41/38	43/41/38
Heat Exchanger			Fenestrate plain film --hydrophilic film				
Air Filter			PP	PP	PP	PP	PP
Insulation Material			Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene
Refrigeration Control Device			EXV	EXV	EXV	EXV	EXV
Protection Device			Fuse	Fuse	Fuse	Fuse	Fuse
Panel Name			TC01	TC01	TC01	TC01	TC01

4.3 Wall Mounted Type Indoor Unit

Model			GMV-N07G/A3A-D(U)	GMV-N09G/A3A-D(U)	GMV-N12G/A3A-D(U)	GMV-N18G/A3A-D(U)	GMV-N24G/A3A-D(U)
Product Code			CM100N1480	CM100N1490	CM100N1500	CM100N1510	CM100N1520
Cooling Capacity		Btu/h	7500	9500	12000	18000	24000
		kW	2.2	2.8	3.5	5.2	7
Heating Capacity		Btu/h	8500	11000	13500	20000	25500
		kW	2.5	3.2	4	5.8	7.5
Casing Finish			Galvanized Steel plate				
Dimensions (W×D×H)	Outline	mm	843×180×275	843×180×275	940×200×298	940×200×298	1008×221×319
		in.	33-1/5×7×10-5/6	33-1/5×7×10-5/6	37×7-7/8×11-3/4	37×7-7/8×11-3/4	39-2/3×8-5/7×12-5/9
	Packaging	mm	973×258×370	973×258×370	1068×288×395	1068×288×395	1131×398×328
		in.	38-1/3×10-1/6×14-4/7	38-1/3×10-1/6×14-4/7	42×11-1/3×15-5/9	42×11-1/3×15-5/9	44-1/2×15-2/3×13
Net Weight		lbs.	22	22	27.6	27.6	33.1
		kg	10	10	12.5	12.5	15
Gross Weight		lbs.	27.6	27.6	33.1	33.1	40.8
		kg	12.5	12.5	15.5	15.5	18.5
Pipe Connections	Liquid Side	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
		in.	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8
	Gas Side	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9
		in.	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ5/8
	Drain Pipe	mm	Φ20	Φ20	Φ20	Φ20	Φ30
		in.	Φ4/5	Φ4/5	Φ4/5	Φ4/5	Φ1 1/6

Power supply			1-phase 208/230V 60Hz				
Fan	Type * Quantity		Cross-flow *1	Cross-flow *1	Cross-flow *1	Cross-flow *1	Cross-flow *1
	Driving Mechanism		Direct-driven				
	Motor Type		PG				
	Motor Power Input	W	50	50	60	60	70
	Motor Running Current	A	0.2	0.2	0.21	0.21	0.31
	Airflow Rate(H/M/L)	CFM	295/247/206	295/247/206	370/324/283	370/324/283	440/353/294
		m^3/h	500/420/350	500/420/350	630/550/480	630/550/480	750/600/500
Sound Pressure Level(H/M/L)		dB(A)	38/34/30	38/34/30	44/41/38	44/41/38	44/41/38
Heat Exchanger			Fenestrate plain film -- hydrophilic film				
Air Filter			PP+10%BCM+FP03				
Insulation Material			Foamed polystyrene				
Refrigeration Control Device			EXV				
Protection Device			Fuse				

4.4 Console Type Indoor Unit

Model			GMV-ND07C/A-T(U)	GMV-ND09C/A-T(U)	GMV-ND12C/A-T(U)	GMV-ND18C/A-T(U)
Product Code			CM400N0110	CM400N0120	CM400N0100	CM400N0130
Cooling Capacity		Btu/h	7500	9500	12000	18000
		kW	2.2	2.8	3.5	5.3
Heating Capacity		Btu/h	8500	11000	13500	20000
		kW	2.5	3.2	4	5.8
Casing Finish			Galvanized Steel plate			
Dimensions (W×D×H)	Outline	mm	700×215×600	700×215×600	700×215×600	700×215×600
		in.	27-9/16×8-1/2×23-5/8	27-9/16×8-1/2×23-5/8	27-9/16×8-1/2×23-5/8	27-9/16×8-1/2×23-5/8
	Packaging	mm	785×280×762	785×280×762	785×280×762	785×280×762
		in.	31×11×30	31×11×30	31×11×30	31×11×30
Net Weight		lbs.	35	35	35	35
		kg	16	16	16	16
Gross Weight		lbs.	42	42	42	42
		kg	19	19	19	19
Pipe Connections	Liquid Side	mm	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35
		in.	Φ 1/4	Φ 1/4	Φ 1/4	Φ 1/4
	Gas Side	mm	Φ 9.52	Φ 9.52	Φ 12.7	Φ 12.7
		in.	Φ 3/8	Φ 3/8	Φ1/2	Φ 1/2
	Drain Pipe	mm	Φ 28	Φ 28	Φ 28	Φ 28
		in.	Φ 1-1/9	Φ 1-1/9	Φ 1-1/9	Φ 1-1/9
Power Supply			1-phase 208/230V 60Hz			

Fan	Type * Quantity		Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1
	Driving Mechanism		Direct-driven			
	Motor Type		BLDC			
	Motor Power Input	W	38	38	38	38
	Motor Running Current	A	0.4	0.4	0.4	0.4
	Airflow Rate(H/M/L)	CFM	235	235	282	400
		m^3/h	400	400	480	680
Sound Pressure Level(H/M/L)		dB(A)	38	38	40	46
Heat Exchanger			Fenestrate plain film -- hydrophilic film			
Air Filter			PP			
Insulation Material			Foamed polystyrene			
Refrigeration Control Device			EXV			
Protection Device			Fuse			

4.5 High Static Pressure Duct Type Indoor Uint

Model			GMV-ND18PHS/A-T(U)	GMV-ND24PHS/A-T(U)	GMV-ND30PHS/A-T(U)	GMV-ND36PHS/A-T(U)	GMV-ND42PHS/A-T(U)	GMV-ND48PHS/A-T(U)
Product Code			CM810N0140	CM810N0150	CM810N0160	CM810N0170	CM810N0180	CM810N0190
Cooling Capacity		Btu/h	18000	24000	30000	36000	42000	48000
		kW	5.3	7.0	8.8	10.6	12.3	14.1
Heating Capacity		Btu/h	20000	27000	34000	40000	47000	54000
		kW	5.9	7.9	10	11.7	13.8	15.8
Casing Finish			Galvanized Steel plate					
Dimensions (W×D×H)	Outline	mm	1271×558×268	1271×558×268	1229×775×290	1229×775×290	1229×775×290	1229×775×290
		in.	50×22×10-1/2	50×22×10-1/2	48-3/8×30-1/2×11-3/8	48-3/8×30-1/2×11-3/8	48-3/8×30-1/2×11-3/8	48-3/8×30-1/2×11-3/8
	Packaging	mm	1348×597×283	1348×597×283	1338×877×305	1338×877×305	1338×877×305	1338×877×305
		in.	53 1/16×23-3/8×11 1/8	53 1/16×23-3/8×11 1/8	52-11/16×34-1/2×12	52-11/16×34-1/2×12	52-11/16×34-1/2×12	52-11/16×34-1/2×12
Net Weight		lbs.	77	77	104	104	104	104
		kg	35	35	47	47	47	47
Gross Weight		lbs.	88	88	119	119	119	119
		kg	40	40	54	54	54	54
Pipe Connections	Liquid Side	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		in.	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas Side	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
		in.	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1	Φ1	1Φ
Power Supply			1-phase 208/230V 60Hz					

Fan	Type * Quantity			Centrifugal*2	Centrifugal*2	Centrifugal*2	Centrifugal*2	Centrifugal*2	Centrifugal*2
	Driving Mechanism			Direct-driven	Direct-driven	Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type			BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
	Motor Power Input		W	120	130	200	200	220	220
	Motor Running Current		A	0.9	0.9	1.4	1.4	1.4	1.4
	Airflow Rate(H/M/L)		CFM	590/470/355	650/530/410	1000/855/650	1000/855/650	1180/910/705	1180/910/825
			m^3/h	1000/800/600	1100/900/700	1700/1450/1100	1700/1450/1100	2000/1550/1200	2000/1550/1400
	External Static Pressure	Default	in.W.G	0.28	0.28	0.28	0.28	0.28	0.28
			Pa	70	70	70	70	70	70
		Range	in.W.G	0～0.4	0～0.4	0～0.4	0～0.4	0～0.4	0～0.4
			Pa	0～100	0～100	0～100	0～100	0～100	0～100
Sound Pressure Level(H/M/L)			dB(A)	44/40/36	45/41/37	46/44/42	46/44/42	48/45/42	48/46/44
Heat Exchanger				Fenestrate plain film -- hydrophilic film					
Air Filter				PP	PP	PP	PP	PP	PP
Insulation Material				Foamed polystyrene					
Refrigeration Control Device				EXV	EXV	EXV	EXV	EXV	EXV
Protection Device				Fuse	Fuse	Fuse	Fuse	Fuse	Fuse

Model			GMV-ND72PH/A-T(U)	GMV-ND96PH/A-T(U)
Product Code			CM810N0280	CM810N0290
Cooling Capacity		Btu/h	69000	92000
		kW	20.2	27.0
Heating Capacity		Btu/h	77000	103000
		kW	22.6	30.2
Casing Finish			Galvanized Steel plate	
Dimensions(W×D×H)	Outline	mm	1483×791×385	1686×870×450
		in.	58-3/8×31-1/8×15-3/16	66-3/8×34-1/4×17-3/4
	Packaging	mm	1578×883×472	1788×988×580
		in.	62-1/8×34-3/4×18-9/16	70-3/8×38-7/8×22-7/8
Net Weight		lbs.	181	232
		kg	82	105
Gross Weight		lbs.	229	309
		kg	104	140
Pipe Connection	Liquid Side	mm	9.52	9.52
		in.	3/8	3/8
	Gas Side	mm	19.05	22.2
		in.	3/4	7/8
	Drain Pipe	mm	Φ30	Φ30
		in.	Φ1 1/4	Φ1 1/4
Power Supply			1-phase 208/230V 60Hz	

Fan	Type * Quantity			Centrifugal*2	Centrifugal*2
	Driving Mechanism			Direct-driven	
	Motor Type			BLDC	
	Motor Power Input		W	800	900
	Motor Running Current		A	5	6
	Airflow Rate(H/M/L)		CFM	2355/2120/1885	2590/2355/2120
			m^3/h	4000/3600/3200	4400/4000/3600
	External Static Pressure	Default	in.W.G	0.6	0.6
			Pa	150	150
		Range	in.W.G	0.2~0.8	0.2~0.8
			Pa	50~200	50~200
Sound Pressure Level(H/M/L)		dB(A)		54/52/49	55/52/50
Heat Exchanger				/	
Air Filter				PP	
Insulation Material				Foamed polystyrene	
Refrigeration Control Device				EXV	
Protection Device				Fuse	

4.6 Two-way Cassette Type Indoor Uint

Model			GMV-ND09TS/A-T(U)	GMV-ND12TS/A-T(U)	GMV-ND15TS/A-T(U)	GMV-ND18TS/A-T(U)	GMV-ND24TS/A-T(U)
Product Code			CM500N0890	CM500N0900	CM500N0910	CM500N0920	CM500N0930
Cooling Capacity		Btu/h	9500	12000	15000	18000	24000
		kW	2.8	3.5	4.4	5.3	7
Heating Capacity		Btu/h	10500	13500	17000	20000	27000
		kW	3.1	4.0	5	5.9	7.9
Casing Finish			Galvanized Steel plate				
Dimensions(W×D×H)	Body Outline	mm	1200×520×340	1200×520×340	1200×520×340	1200×520×340	1200×520×340
		in.	47-1/4×20-1/2×13-3/8	47-1/4×20-1/2×13-3/8	47-1/4×20-1/2×13-3/8	47-1/4×20-1/2×13-3/8	47-1/4×20-1/2×13-3/8
	Body Packaging	mm	1523×658×430	1523×658×430	1523×658×430	1523×658×430	1523×658×430
		in.	60×26×17	60×26×17	60×26×17	60×26×17	60×26×17
	Panel outline	mm	1443×630×33	1443×630×33	1443×630×33	1443×630×33	1443×630×33
		in.	56 13/16×24 13/16×1 1/4	56 13/16×24 13/16×1 1/4	56 13/16×24 13/16×1 1/4	56 13/16×24 13/16×1 1/4	56 13/16×24 13/16×1 1/4
	Panel Packaging	mm	1578×658×120	1578×658×120	1578×658×120	1578×658×120	1578×658×120
		in.	62-1/8×30-1/4×4-11/16	62-1/8×30-1/4×4-11/16	62-1/8×30-1/4×4-11/16	62-1/8×30-1/4×4-11/16	62-1/8×30-1/4×4-11/16
Net Weight	Body	lbs.	95	95	95	95	101
		kg	43	43	43	43	46
	Panel	lbs.	15	15	15	15	15
		kg	7	7	7	7	7
Gross Weight	Body	lbs.	119	119	119	119	123
		kg	54	54	54	54	56
	Panel	lbs.	24	24	24	24	24
		kg	11	11	11	11	11
Pipe	Liquid Side	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52

Connection		in.	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8
	Gas Side	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
		in.	Φ3/8	Φ1/2	Φ1/2	Φ1/2	Φ5/8
	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1	Φ1
Power Supply			1-phase 208/230V 60Hz		1-phase 208/230V 60Hz		
Fan	Type * Quantity		Centrifugal*3	Centrifugal*3	Centrifugal*3	Centrifugal*3	Centrifugal*3
	Driving Mechanism		Direct-driven				
	Motor Type		BLDC				
	Motor Power Input	W	55	55	55	55	91
	Motor Running Current	A	0.6	0.6	0.6	0.6	0.7
	Airflow Rate(H/M/L)	CFM	490/355/312	490/355/312	490/355/312	490/355/312	650/483/448
		m^3/h	830/600/530	830/600/530	830/600/530	830/600/530	1100/820/760
Sound Pressure Level(H/M/L)		dB(A)	35/33/31	35/33/31	35/33/31	35/33/31	39/37/35
Heat Exchanger			/				
Air Filter			PP				
Insulation Material			Foamed polystyrene				
Refrigeration Control Device			EXV				
Protection Device			Fuse				
Panel name			TE01	TE01	TE01	TE01	TE01

4.7 Floor Ceiling Type Indoor Uint

Model			GMV-ND09ZD/A-T(U)	GMV-ND12ZD/A-T(U)	GMV-ND18ZD/A-T(U)	GMV-ND24ZD/A-T(U)
Product Code			CM600N0420	CM600N0430	CM600N0440	CM600N0450
Cooling Capacity		Btu/h	9500	12000	18000	24000
		kW	2.8	3.5	5.3	7.0
Heating Capacity		Btu/h	10500	13500	20000	27000
		kW	3.1	4.0	5.9	7.9
Casing Finish			Galvanized Steel plate			
Dimensions(W×D×H)	Outline	mm	1220×700×225	1220×700×225	1220×700×225	1420×700×245
		in.	48×27-9/16×8-7/8	48×27-9/16×8-7/8	48×27-9/16×8-7/8	56×27-9/16×9-5/8
	Packaging	mm	1343×823×315	1343×823×315	1343×823×315	1548×828×345
		in.	52-7/8×32-3/8×12-3/8	52-7/8×32-3/8×12-3/8	52-7/8×32-3/8×12-3/8	60-15/16×32-5/8×13-9/16
Net Weight		lbs.	88	88	88	110
		kg	40	40	40	50
Gross Weight		lbs.	108	108	108	128
		kg	49	49	49	58
Pipe Connection	Liquid Side	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52
		in.	Φ1/4	Φ1/4	Φ3/8	Φ3/8
	Gas Side	mm	Φ9.52	Φ12.7	Φ15.9	Φ15.9
		in.	Φ3/8	Φ1/2	Φ5/8	Φ5/8
	Drain Pipe	mm	Φ17	Φ17	Φ17	Φ17
		in.	Φ11/16	Φ11/16	Φ11/16	Φ11/16
Power Supply			1-phase 208/230V 60Hz		1-phase 208/230V 60Hz	
Fan	Type * Quantity		Centrifugal*4	Centrifugal*4	Centrifugal*4	Centrifugal*3
	Driving Mechanism		Direct-driven		Direct-driven	

	Motor Type		BLDC		BLDC	
	Motor Power Input	W	40	40	50	75
	Motor Running Current	A	0.5	0.5	0.5	0.55
	Airflow Rate(H/M/L)	CFM	380/345/305	380/345/305	560/510/410	825/675/640
		m^3/h	650/585/520	650/585/520	950/865/699	1400/1150/1085
Sound Pressure Level(H/M/L)		dB(A)	36/34/32	36/34/32	42/38/33	44/42/39
Heat Exchanger			/	/	/	/
Air Filter			PP	PP	PP	PP
Insulation Material			Foamed polystyrene			
Refrigeration Control Device			EXV	EXV	EXV	EXV
Protection Device			Fuse	Fuse	Fuse	Fuse

Model			GMV-ND30ZD/A-T(U)	GMV-ND36ZD/A-T(U)	GMV-ND42ZD/A-T(U)	GMV-ND48ZD/A-T(U
Product Code			CM600N0460	CM600N0470	CM600N0480	CM600N0490
Cooling Capacity		Btu/h	30000	36000	42000	48000
		kW	8.8	10.6	12.3	14.1
Heating Capacity		Btu/h	33000	40000	47000	54000
		kW	10.0	11.7	13.8	15.8
Casing Finish			Galvanized Steel plate			
Dimensions(W×D×H)	Outline	mm	1420×700×245	1700×700×245	1700×700×245	1700×700×245
		in.	56×27-9/16×9-5/8	66-15/16×27-9/16×9-5/8	66-15/16×27-9/16×9-5/8	66-15/16×27-9/16×9-5/8
	Packaging	mm	1548×828×345	1828×828×345	1828×828×345	1828×828×345
		in.	60-15/16×32-5/8×13-9/16	71-15/16×32-5/8×13-9/16	71-15/16×32-5/8×13-9/16	71-15/16×32-5/8×13-9/16
Net Weight		lbs.	110	132	132	132
		kg	50	60	60	60
Gross Weight		lbs.	128	150	150	150
		kg	58	68	68	68
Pipe Connection	Liquid Side	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		in.	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas Side	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
		in.	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Drain Pipe	mm	Φ17	Φ17	Φ17	Φ17
		in.	Φ11/16	Φ11/16	Φ11/16	Φ11/16
Power Supply			1-phase 208/230V 60Hz		1-phase 208/230V 60Hz	
Fan	Type * Quantity		Centrifugal*3	Centrifugal*4	Centrifugal*4	Centrifugal*4
	Driving Mechanism		Direct-driven		Direct-driven	
	Motor Type		BLDC		BLDC	
	Motor Power Input	W	140	160	160	160
	Motor Running Current	A	0.6	0.7	0.7	0.7
	Airflow Rate(H/M/L)	CFM	940/850/695	1180/904/755	1180/1065/855	1180/1065/855
		m^3/h	1600/1445/1183	2000/1600/1282	2000/1813/1452	2000/1813/1452
Sound Pressure Level(H/M/L)		dB(A)	50/47/43	51/47/42	52/49/45	52/49/45
Heat Exchanger			/	/	/	/

Air Filter	PP	PP	PP	PP
Insulation Material	Foamed polystyrene			
Refrigeration Control Device	EXV	EXV	EXV	EXV
Protection Device	Fuse	Fuse	Fuse	Fuse

4.8 Fresh air Processing Type Indoor Unit

Model				GMV-NDX72P/A-T(U)	GMV-NDX96P/A-T(U)
Product Code				CM810N0480	CM810N0470
Cooling Capacity			Btu/h	72000	96000
			kW	21.1	28.1
Heating Capacity*1			Btu/h	55000	68000
			kW	16.1	20.0
Heating Capacity*2			Btu/h	68000	75000
			kW	20.0	22.0
Casing Finish				Galvanized Steel plate	
Dimensions(W×D×H)	Outline		mm	1483×791×385	1483×791×385
			in.	58-3/8×31-1/8×15-3/16	58-3/8×31-1/8×15-3/16
	Packaging		mm	1578×883×472	1578×883×472
			in.	62-1/8×34-3/4×18-9/16	62-1/8×34-3/4×18-9/16
Net Weight			lbs.	181	181
			kg	82	82
Gross Weight			lbs.	229	229
			kg	104	104
Pipe Connection	Liquid Side		mm	Φ9.52	Φ9.52
			in.	Φ3/8	Φ3/8
	Gas Side		mm	Φ19.05	Φ22.2
			in.	Φ3/4	Φ7/8
	Drain Pipe		mm	Φ30	Φ30
			in.	Φ1-1/4	Φ1-1/4
Power Supply				1-phase 208/230V 60Hz	
Fan	Type * Quantity			Centrifugal*2	Centrifugal*2
	Driving Mechanism			Direct-driven	
	Motor Type			BLDC	
	Motor Power Input		W	760	860
	Motor Running Current		A	4.3	4.9
	Airflow Rate(H/M/L)		CFM	1180/880~1765	1470/1180~2060
			m^3/h	2000/1500~3000	2500/2000~3500
	External Static Pressure	Default	in.W.G	0.80	0.80
			Pa	200	200
		Range	in.W.G	0.20~1.20	0.20~1.20
			Pa	50~300	50~300
Sound Pressure Level(H/M/L)			dB(A)	45~54	47~54
Heat Exchanger				/	
Air Filter				PP	
Insulation Material				Foamed polystyrene	
Refrigeration Control Device				EXV	
Protection Device				Fuse	

NOTICE!

a. Rated cooling capacity test conditions: indoor 95.0°F DB/82.4°F WB, outdoor 95.0°F DB; connection pipe length: 24-5/8ft., without height drop between units. The default air outlet temperature of the unit is 64.4°F.

b. Rated heating capacity test conditions: *1. indoor 44.6°F DB, outdoor 44.6°F DB/42.8 °F WB, *2 indoor 32°F DB, outdoor 32°F DB/26.8°F WB, connection pipe length: 24-5/8ft., without height drop between units. The default air outlet temperature of the unit is 71.6°F.

c. The Sound Pressure Level will change with the External Static Pressure.

d. This series can be matched with GMV5 only.

4.9 Compact Four-way Cassette Type Indoor Unit

Model			GMV-ND07T/B-T(U)	GMV-ND09T/B-T(U)	GMV-ND12T/B-T(U)	GMV-ND15T/B-T(U)	GMV-ND18T/B-T(U)
Product Code			CM500N0940	CM500N0950	CM500N0960	CM500N0970	CM500N0980
Cooling Capacity		Btu/h	7500	9500	12000	15000	18000
		kW	2.2	2.8	3.5	4.4	5.3
Heating Capacity		Btu/h	8500	10500	13500	17000	20000
		kW	2.5	3.1	4.0	5.0	5.9
Casing finish			Galvanized Steel plate				
Dimensions (W×D×H）	Body outline	mm	596×596×240	596×596×240	596×596×240	596×596×240	596×596×240
		in.	23-1/2×23-1/2×9-1/2	23-1/2×23-1/2×9-1/2	23-1/2×23-1/2×9-1/2	23-1/2×23-1/2×9-1/2	23-1/2×23-1/2×9-1/2
	Body Packaging	mm	778×738×300	778×738×300	778×738×300	778×738×300	778×738×300
		in.	30-5/8×29×11-3/4	30-5/8×29×11-3/4	30-5/8×29×11-3/4	30-5/8×29×11-3/4	30-5/8×29×11-3/4
	Panel outline	mm	670×670×50	670×670×50	670×670×50	670×670×50	670×670×50
		in.	26-3/8×26-3/8×2	26-3/8×26-3/8×2	26-3/8×26-3/8×2	26-3/8×26-3/8×2	26-3/8×26-3/8×2
	Panel Packaging	mm	763×763×105	763×763×105	763×763×105	763×763×105	763×763×105
		in.	30×30×4-1/8	30×30×4-1/8	30×30×4-1/8	30×30×4-1/8	30×30×4-1/8
Net Weigh	Main Body	lbs.	45	45	45	45	45
		kg	20.5	20.5	20.5	20.5	20.5
	Panel	lbs.	8	8	8	8	8
		kg	3.5	3.5	3.5	3.5	3.5
Gross Weigh	Main Body	lbs.	56	56	56	56	56
		kg	25.5	25.5	25.5	25.5	25.5
	Panel	lbs.	11	11	11	11	11
		kg	5	5	5	5	5
Pipe Connections	Liquid Side	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
		in.	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8
	Gas Side	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9
		in.	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ5/8
	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1	Φ1

Power supply			1-phase 208/230V 60Hz				
Fan	Type * Quantity		Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1
	Driving Mechanism		Direct-driven	Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
	Motor Power Input	W	35	35	35	45	45
	Motor Running Current	A	0.4	0.4	0.4	0.5	0.5
	Airflow Rate(H/M/L)	CFM	355/295/235	355/295/235	355/295/235	410/355/283	410/355/283
		m3/h	600/500/400	600/500/400	600/500/400	700/600/480	700/600/480
Sound Pressure Level(H/M/L)		dB(A)	41/39/35	41/39/35	41/39/35	45/43/38	45/43/38
Heat Exchanger			Fenestrate plain film --hydrophilic film				
Air Filter			PP	PP	PP	PP	PP
Insulation Material			Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene
Refrigeration Control Device			EXV	EXV	EXV	EXV	EXV
Protection Device			Fuse	Fuse	Fuse	Fuse	Fuse
Panel name			TC03	TC03	TC03	TC03	TC03

4.10 Super High Static Pressure Duct Type Indoor Unit

Model			GMV-ND07PHS/B-T(U)	GMV-ND09PHS/ B-T(U)	GMV-ND12PHS/B-T(U)	GMV-ND15PHS/B-T(U)
Product code			CM810N0830	CM810N0790	CM810N0800	CM810N0770
Cooling Capacity		Btu/h	7500	9500	12000	15000
		kW	2.2	2.8	3.5	4.4
Heating Capacity		Btu/h	8500	10500	13500	17000
		kW	2.5	3.1	4	5
Casing finish			Galvanized Steel plate			
Dimensions (W×D×H)	outline	mm	700x700×300	700x700×300	1000×700×300	1000×700×300
		in.	27-9/16×27-9/16×11-13/16	27-9/16×27-9/16×11-13/16	39-3/8×27-9/16×11-13/16	39-3/8×27-9/16×11-13/16
	Packaging	mm	897×808×360	897×808×360	1205×813×360	1205×813×360
		in.	35-5/16x32x14-3/16	35-5/16x32x14-3/16	47-7/16×32x14-3/16	47-7/16×32x14-3/16
Net Weight		lbs.	73	73	94	94
		kg	33	33	42.6	42.6
Gross Weight		lbs.	86	86	108	108
		kg	39	39	49	49
Pipe Connections	Liquid Side	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
		in.	Φ1/4	Φ1/4	Φ1/4	Φ1/4
	Gas Side	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7
		in.	Φ3/8	Φ1/2	Φ1/2	Φ1/2
	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1

Power supply				1-phase 208/230V 60Hz			
Fan	Type * Quantity			Centrifugal*1	Centrifugal*1	Centrifugal*2	Centrifugal*2
	Driving Mechanism			Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type			BLDC	BLDC	BLDC	BLDC
	Motor Power Input		W	150	150	200	200
	Motor Running Current		A	0.3	0.3	0.3	0.3
	Airflow Rate(H/M/L)		CFM	324/282/235	324/282/235	353/294/247	500/412/353
			m^3/h	550/480/400	550/480/400	600/500/420	850/700/600
	External Static Pressure	Default	in.W.G	0.24	0.24	0.24	0.24
			Pa	60	60	60	60
		Range	in.W.G	0～0.6	0～0.6	0～0.6	0～0.6
			Pa	0～150	0～150	0～150	0～150
Sound Pressure Level(H/M/L)			dB(A)	35/33/31	35/33/31	36/34/32	40/37/34
Heat Exchanger				Fenestrate plain film -- hydrophilic film			
Air Filter				PP	PP	PP	PP
Insulation Material				Foamed polystyrene			
Refrigeration Control Device				EXV	EXV	EXV	EXV
Protection Device				Fuse	Fuse	Fuse	Fuse

Model			GMV-ND18PHS/B-T(U)	GMV-ND22PHS/B-T(U)	GMV-ND24PHS/B-T(U)	GMV-ND30PHS/B-T(U)
Product code			CM810N0810	CM810N0720	CM810N0730	CM810N0780
Cooling Capacity		Btu/h	18000	22000	24000	30000
		kW	5.3	6.4	7	8.8
Heating Capacity		Btu/h	20000	24000	27000	34000
		kW	5.9	7	7.9	10
Casing finish			Galvanized Steel plate			
Dimensions (W×D×H)	outline	mm	1000×700×300	1000×700×300	1000×700×300	1400×700×300
		in.	39-3/8×27-9/16×11-13/16	39-3/8×27-9/16×11-13/16	39-3/8×27-9/16×11-13/16	55-1/8×27-9/16×11-13/16
	Packaging	mm	1205×813×360	1205×813×360	1205×813×360	1601×813×365
		in.	47-7/16×32x14-3/16	47-7/16×32x14-3/16	47-7/16×32x14-3/16	63-1/16x32x14-3/8
Net Weight		lbs.	94	94	94	121
		kg	42.6	42.6	42.6	55
Gross Weight		lbs.	108	108	108	137
		kg	49	49	49	62
Pipe Connections	Liquid Side	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		in.	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas Side	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
		in.	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1

Power supply				1-phase 208/230V 60Hz			
Fan	Type * Quantity			Centrifugal*2	Centrifugal*2	Centrifugal*2	Centrifugal*3
	Driving Mechanism			Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type			BLDC	BLDC	BLDC	BLDC
	Motor Power Input		W	200	200	200	350
	Motor Running Current		A	0.7	0.7	0.9	1.2
	Airflow Rate(H/M/L)		CFM	589/471/412	589/471/412	736/618/559	1059/853/736
			m^3/h	1000/800/700	1000/800/700	1250/1050/950	1800/1450/1250
	External Static Pressure	Default	in.W.G	0.36	0.36	0.36	0.36
			Pa	90	90	90	90
		Range	in.W.G	0～0.8	0～0.8	0～0.8	0～0.8
			Pa	0～200	0～200	0～200	0～200
Sound Pressure Level(H/M/L)			dB(A)	42/38/35	42/38/35	43/39/35	44/41/38
Heat Exchanger				Fenestrate plain film -- hydrophilic film			
Air Filter				PP	PP	PP	PP
Insulation Material				Foamed polystyrene			
Refrigeration Control Device				EXV	EXV	EXV	EXV
Protection Device				Fuse	Fuse	Fuse	Fuse

Model			GMV-ND36PHS/B-T(U)	GMV-ND42PHS/B-T(U)	GMV-ND48PHS/B-T(U)	GMV-ND54PHS/B-T(U)
Product code			CM810N0740	CM810N0750	CM810N0820	CM810N0760
Cooling Capacity		Btu/h	36000	42000	48000	54000
		kW	10.6	12.3	14.1	15.8
Heating Capacity		Btu/h	40000	47000	54000	60000
		kW	11.7	13.8	15	17.6
Casing finish			Galvanized Steel plate			
Dimensions (W×D×H)	outline	mm	1400×700×300	1400×700×300	1400×700×300	1400×700×300
		in.	55-1/8×27-9/16×11-13/16	55-1/8×27-9/16×11-13/16	55-1/8×27-9/16×11-13/16	55-1/8×27-9/16×11-13/16
	Packaging	mm	1601×813×365	1601×813×365	1678×808×365	1678×808×365
		in.	63-1/16x32x14-3/8	63-1/16x32x14-3/8	66-1/16x32x14-3/8	66-1/16x32x14-3/8
Net Weight		lbs.	121	121	119	119
		kg	55	55	54	54
Gross Weight		lbs.	137	137	148	148
		kg	62	62	67	67
Pipe Connections	Liquid Side	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		in.	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas Side	mm	Φ15.9	Φ15.9	Φ15.9	Φ19.05
		in.	Φ5/8	Φ5/8	Φ5/8	Φ3/4
	Drain Pipe	mm	Φ25	Φ25	Φ25	Φ25
		in.	Φ1	Φ1	Φ1	Φ1

Power supply				1-phase 208/230V 60Hz			
Fan	Type * Quantity			Centrifugal*3	Centrifugal*3	Centrifugal*3	Centrifugal*3
	Driving Mechanism			Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type			BLDC	BLDC	BLDC	BLDC
	Motor Power Input		W	350	350	560	560
	Motor Running Current		A	1.2	1.2	1.3	1.3
	Airflow Rate(H/M/L)		CFM	1177/942/824	1177/942/824	1383/1118/971	1471/1177/1030
			m^3/h	2000/1600/1400	2000/1600/1400	2350/1900/1650	2500/2000/1750
	External Static Pressure	Default	in.W.G	0.36	0.36	0.36	0.36
			Pa	90	90	90	90
		Range	in.W.G	0～0.8	0～0.8	0～0.8	0～0.8
			Pa	0～200	0～200	0～200	0～200
Sound Pressure Level(H/M/L)			dB(A)	45/42/40	45/42/40	46/43/41	47/44/42
Heat Exchanger				Fenestrate plain film -- hydrophilic film			
Air Filter				PP	PP	PP	PP
Insulation Material				Foamed polystyrene			
Refrigeration Control Device				EXV	EXV	EXV	EXV
Protection Device				Fuse	Fuse	Fuse	Fuse

4.11 Air Handler type Indoor Unit

Model			GMV-ND24 A/A-T(U)	GMV-ND30 A/A-T(U)	GMV-ND36 A/A-T(U)	GMV-ND42 A/A-T(U)	GMV-ND48 A/A-T(U)	GMV-ND54 A/A-T(U)
Product code			CM810N0660	CM810N0670	CM810N0700	CM810N0690	CM810N0680	CM810N0710
Cooling Capacity		Btu/h	24000	30000	36000	42000	48000	54000
		kW	7.0	8.8	10.6	12.3	14.1	15.8
Heating Capacity		Btu/h	27000	34000	40000	47000	54000	60000
		kW	7.9	10.0	11.7	13.8	15.8	17.6
Casing finish			Galvanized Steel plate					
Dimensions (W×D×H)	outline	mm	460x540×1105	460x540×1105	540×540×1224	540×540×1224	630×540×1224	632×540×1226
		in.	18-1/8×21-1/4×43-1/2	18-1/8×21-1/4×43-1/2	21-1/4×21-1/4×48-1/4	21-1/4×21-1/4×48-1/4	24-3/4×21-1/4×48-1/4	24-3/4×21-1/4×48-1/4
	Packaging	mm	517×620×1170	517×620×1170	597×620×1289	597×620×1289	687×621×1295	687×621×1295
		in.	20-3/8×24-3/8×46-1/8	20-3/8×24-3/8×46-1/8	23-1/2×24-3/8×50-3/4	23-1/2×24-3/8×50-3/4	27×24-1/2×51	27×24-1/2×51
Net Weight		lbs.	124	124	148	148	179	179
		kg	56	56	67	67	81	81
Gross Weight		lbs.	135	135	159	159	192	192
		kg	61	61	72	72	87	87
Pipe Connections	Liquid Side	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		in.	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas Side	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
		in.	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Drain Pipe	mm	Φ26	Φ26	Φ26	Φ26	Φ26	Φ26
		in.	Φ1	Φ1	Φ1	Φ1	Φ1	Φ1

Power supply				1-phase 208/230V 60Hz					
Fan	Type * Quantity			Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1	Centrifugal*1
	Driving Mechanism			Direct-driven	Direct-driven	Direct-driven	Direct-driven	Direct-driven	Direct-driven
	Motor Type			BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
	Motor Power Input		W	122.5	183.7	297	367.5	428.7	441
	Motor Running Current		A	1.1	1.4	2.6	2.7	3.4	3.5
	Airflow Rate(SH/H/M/L)		CFM	824/706/559/471	882/706/559/441	1353/1176/1000/824	1441/1265/1118/971	1618/1500/1353/1176	1676/1559/1382/1235
			m^3/h	1400/1200/950/800	1500/1200/950/750	2300/2000/1700/1400	2450/2150/1900/1650	2750/2550/2300/2000	2850/2650/2300/2150
	External Static Pressure	Default	in.W.G	0.1	0.148	0.148	0.148	0.2	0.2
			Pa	25	37	37	37	50	50
		Range	in.W.G	0～0.2	0～0.2	0～0.28	0～0.28	0～0.32	0～0.32
			Pa	0～50	0～50	0～70	0～70	0～80	0～80
Sound Pressure Level(SH/H/M/L)			dB(A)	45/43/41/39	46/44/42/40	49/47/45/43	50/48/46/44	51/49/47/45	52/50/48/46
Heat Exchanger				Fenestrate plain film -- hydrophilic film					
Air Filter				PP	PP	PP	PP	PP	PP
Insulation Material				Foamed polystyrene					
Refrigeration Control Device				EXV	EXV	EXV	EXV	EXV	EXV
Protection Device				Fuse	Fuse	Fuse	Fuse	Fuse	Fuse

4.12 AHU-KIT type Indoor Unit

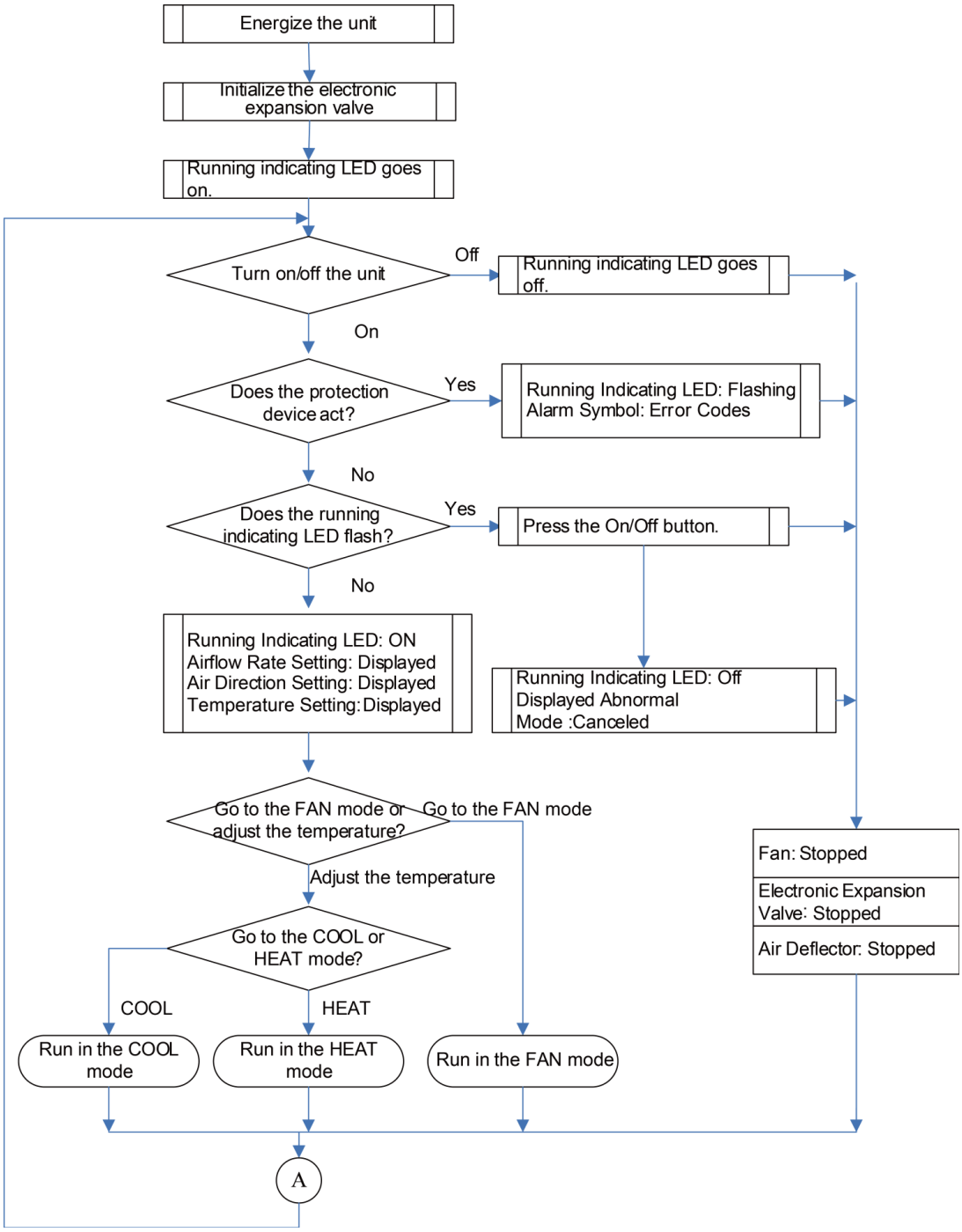
Model			GMV-N12U/A-T(U)	GMV-N24U/A-T(U)	GMV-N48U/A-T(U)	GMV-N96U/A-T(U)	GMV-N192U/A-T(U)
Power		V/Ph/Hz	208~230/1/60				
Defaulted capacity of ex-factory	Cooling	Btu/h	12280	24230	47770	95540	191070
	Heating	Btu/h	13650	27300	54590	107480	21325
Adjustable capacity	Cooling	Btu/h	9550/12280	15350/19110/24230	30710/38210/47770	76430/95540	153540/171950/191070
	Heating	Btu/h	10920/13650	17060/21500/27300	34120/42650/54590	85300/107480	170600/192780/213250
Power		W	5	5	5	5	5
Size of connection pipe	Liquid pipe	in	1/4" ,1/4"	1/4",3/8", 3/8"	3/8",3/8",3/8"	3/8",3/8"	1/2",5/8",5/8"
		mm	Φ6.35/Φ6.35	Φ6.35/Φ9.52/Φ9.52	Φ9.52/Φ9.52/Φ9.52	Φ9.52/Φ9.52	Φ12.7/Φ15.9/Φ15.9
	Gas pipe	in	3/8",3/8"	1/2",5/8",5/8"	5/8",5/8",5/8"	3/4",7/8"	1 1/8",1 1/8",1 1/8"
		mm	Φ9.52Φ/9.52	Φ12.7/Φ15.9/Φ15.9	Φ15.9/Φ15.9/Φ15.9	Φ19.05/Φ22.2	Φ28.6/Φ28.6/Φ28.6
Connection method		—	Brazing Connection	Brazing Connection	Brazing Connection	Brazing Connection	Brazing Connection

Outline dimension（W×D×H）	Electronic expansion valve box	mm	203×326×85	203×326×85	203×326×85	203×326×85	246×500×120
		in	8×12-7/8×3-3/8	8×12-7/8×3-3/8	8×12-7/8×3-3/8	8×12-7/8×3-3/8	9-5/8×19-5/8×4-3/4
	Control box	mm	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111
		in	13-1/8×11-1/8×4-3/8	13-1/8×11-1/8×4-3/8	13-1/8×11-1/8×4-3/8	13-1/8×11-1/8×4-3/8	13-1/8×11-1/8×4-3/8
Packing size（W×D×H）		mm	539×461×247	539×461×247	539×461×247	539×461×247	759×645×180
		in	21-1/4×18-1/8×9-5/8	21-1/4×18-1/8×9-5/8	21-1/4×18-1/8×9-5/8	21-1/4×18-1/8×9-5/8	29-7/8×25-3/8×7
Net weight/gross weight		Kg	8.6/11.5	8.6/11.5	8.6/11.5	8.6/11.5	11.8/15.5
		lbs	19.0/25.4	19.0/25.4	19.0/25.4	19.0/25.4	26.0/34.2
Loading	40'GP	set	981	981	981	981	702
	40'HQ	set	1090	1090	1090	1090	756

CONTROL

CHAPTER 2 CONTROL

1 Operation Flowchart



2 Wired Controller

2.1 Control Panel

2.1.1 XK46 Wired Controller

Fig.2.1 Appearance of wired controller

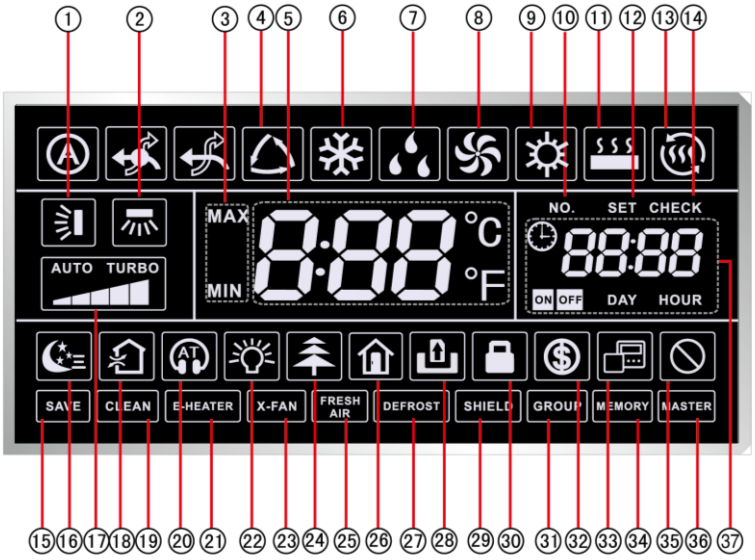
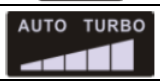


Fig2.2 LED graphics of wired controller

Table 2.1 LED display instruction

No.	Symbols	Instructions
1		Up and down swing function
2	 *	Left and right swing function
3		It's valid under Save mode and displays during setting process. Temperature lower limit for Cooling: Limit the minimum temperature value under Cooling or Dry mode. Temperature upper limit for Heating: Limit the maximum temperature value under Heating, Space Heating or 3D Heating mode.
4	 *	Auto mode (Under Auto mode, the indoor units will automatically select their operating mode as per the temperature change so as to make the ambient comfortable.)
5		It shows the setting temperature value(In case the wired controller is controlling a Fresh Air Indoor Unit, then the temperature zone will display FAP)
6		Cooling mode
7		Dry mode
8		Fan mode
9		Heating mode
10		When inquiring or setting project number of indoor unit, it displays "NO." icon
11	 *	Floor Heating mode (When Heating and Floor Heating simultaneously shows up, it indicates 3D Heating is activated.)
12		Display "SET" icon under parameter setting interface
13	 *	Space Heating mode
14		Display "CHECK" icon under parameter view interface
15		Outdoor unit operates under Save mode/upper limit of system capacitor less 100%/remote Save status
16		Sleep status
17		Current set fan speed (including auto, low speed, medium-low speed, medium speed, medium-high speed, high speed and turbo seven status)
18	 *	Air status, Indoor unit optional function
19		Remind to clean the filter
20		Quiet status (including Quiet and Auto Quiet two status)
21	 *	Allow auxiliary electric heating On icon
22		Light On/Off function

23	X-FAN	X-fan function
24	*	Health function, Indoor unit optional function
25	FRESH AIR *	Reserved function
26		Out function
27	DEFROST	Outdoor unit defrosting status
28		Gate-control function
29	SHIELD	Shielding status
30		Child Lock status
31	GROUP	One wired controller controls multiple indoor units
32		Save status of indoor unit
33		It indicates the current wired controller is the slave wired controller (address of wired controller is 02)
34	MEMORY	Memory status (The indoor unit resumes the original setting state after power failure and then power recovery)
35		Invalid operation
36	MASTER	Current wired controller connects master indoor unit
37	88:88 ON OFF DAY HOUR	Timer zone:Display system clock and timer status
NOTICE! When wired controller is connected with different indoor units, some functions will be different		

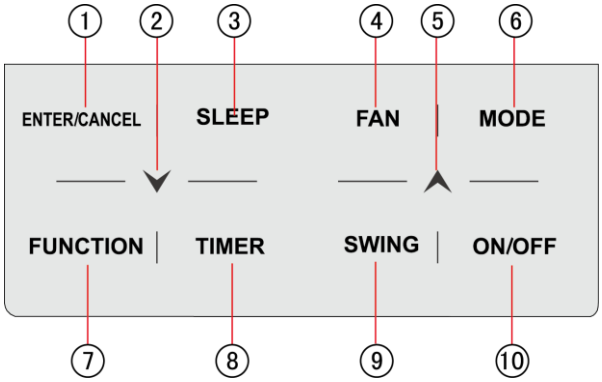


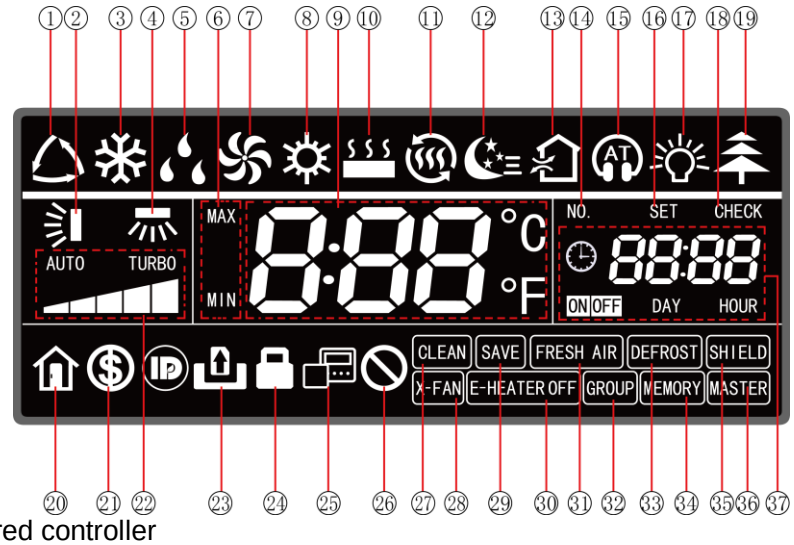
Fig.2.3 Button graphics

Function instruction of buttons

No.	Buttons	Instructions
1	ENTER/CANCEL	Select and cancel function
2	▼	(1) Set operating temperature of indoor unit (2) Set Timer (3) Switch Quiet mode, Air grade, Clean grade, set upper and lower temperature limit under Save mode (4) Set and inquiry parameter
5	▲	
3	SLEEP	Set Sleep mode
4	FAN	Switch among auto, low speed, low-medium speed, medium speed, medium-high speed, high speed and turbo status
6	MODE	Switch Auto, Cooling, Dry, Fan, Heating, Floor Heating, 3D Heating and Space Heating modes for indoor unit. (NOTICE!The Floor Heating, 3D Heating and Space Heating function icon will show up when the unit has those functions.)
7	FUNCTION	Switch among Air, Quiet, Light, Health, Absence, Save, Clean, E-heater and X-fan functions.
8	TIMER	Timer setting
9	SWING	Set up and down swing status
10	ON/OFF	Indoor unit On/Off
2+5	▲+▼	Simultaneously press "▲" and "▼" for 5s to enter or cancel the Child Lock function.

2.1.2 XK79 Wired Controller

Appearance of wired controller

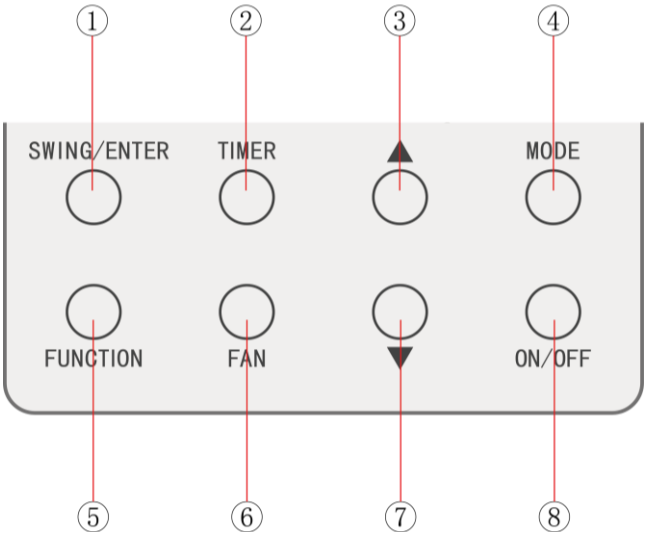


LED graphics of wired controller

Table LCD display instruction

No.	Symbols	Instructions
1	*	Auto mode (Under Auto mode, the indoor units will automatically select their operating mode as per the temperature change so as to make the ambient comfortable.)
2		Up and down swing function
3		Cooling mode
4	*	Left and right swing function
5		Dry mode
6	MAX MIN	It's valid under Save mode and displays during setting process. Temperature lower limit for Cooling: Limit the minimum temperature value under Cooling or Dry mode. Temperature upper limit for Heating: Limit the maximum temperature value under Heating, Space Heating or 3D Heating mode.
7		Fan mode
8		Heating mode
9	°C °F	It shows the setting temperature value (In case the wired controller is controlling a Fresh Air Indoor Unit, then the temperature zone will display FAP)
10	*	Floor Heating mode (When Heating and Floor Heating simultaneously shows up, it indicates 3D Heating is activated.)
11	*	Space Heating mode
12		Sleep status
13	*	Air status, Indoor unit optional function
14	NO.	When inquiring or setting project number of indoor unit, it displays "NO." icon
15		Quiet status (including Quiet and Auto Quiet two status)
16	SET	Display "SET" icon under parameter setting interface
17		Light On/Off function

18	CHECK	Display "CHECK" icon under parameter view interface
19	*	Health function, Indoor unit optional function
20		Absence function
21		Save status of indoor unit
22	AUTO TURBO	Current set fan speed (including auto, low speed, medium-low speed, medium speed, medium-high speed, high speed and turbo seven status)
23		Gate-control function
24		Child Lock status
25		It indicates the current wired controller is the slave wired controller (address of wired controller is 02)
26		Invalid operation
27	CLEAN	Remind to clean the filter
28	X-FAN	X-fan function
29	SAVE	Outdoor unit operates under Save mode/upper limit of system capacitor less 100%/remote Save status
30	E-HEATER *	Allow auxiliary electric heating On icon
31	FRESH AIR	Reserved function
32	GROUP	One wired controller controls multiple indoor units
33	DEFROST	Outdoor unit defrosting status
34	MEMORY	Memory status (The indoor unit resumes the original setting state after power failure and then power recovery)
35	SHIELD	Shielding status
36	MASTER	Current wired controller connects master indoor unit
37	88:88 ON/OFF DAY HOUR	Timer zone: Display system clock and timer status



Button graphics

Table Function instruction of buttons

No.	Buttons	Instructions
1	SWING/ENTER	(1) Set vertical air swing (2) Select and cancel functions
2	TIMER	Timer setting
3	▲	(1) Set operating temperature of indoor unit (2) Set Timer (3) Switch Quiet mode, Air grade, Clean grade, set upper and lower temperature limit under Save mode (4) Set and inquiry parameter
7	▼	
4	MODE	Switch Auto, Cooling, Dry, Fan, Heating, Floor Heating, 3D Heating and Space Heating modes for indoor unit. (NOTICE! The Floor Heating, 3D Heating and Space Heating function icon will show up when the unit has those functions.)
5	FUNCTION	Switch among Air, Quiet, Light, Health, Absence, Save, Clean, E-heater and X-fan functions.
6	FAN	Switch among auto, low speed, low-medium speed, medium speed, medium-high speed, high speed and turbo status
8	ON/OFF	Indoor unit On/Off
3 + 7	▲+▼	Simultaneously press "▲" and "▼" for 5s to enter or cancel the Child Lock function.

2.2 Installation and Removal

2.2.1 Installation Dimensions

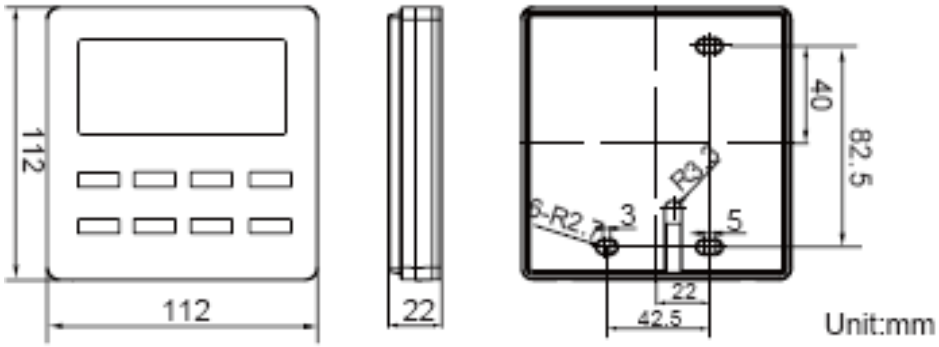
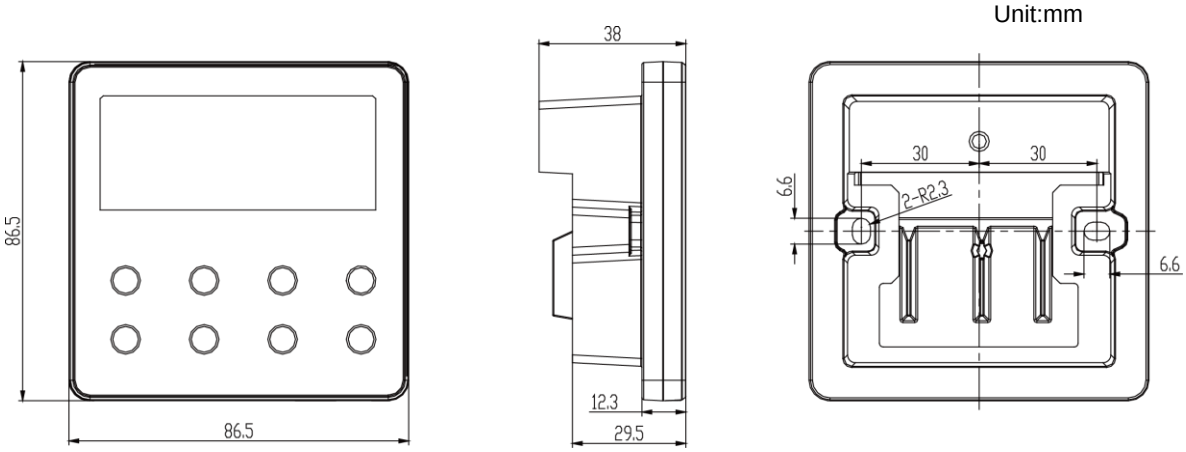


Fig.2.4 Installation dimensions for XK46

mm	112	22	2.7	3.3	5	42.5	40	82.5
in.	4.41	0.87	0.11	0.13	0.20	1.67	1.57	3.25

Unit:mm



Dimension of wired controller XK79

2.2.2 Installation Method

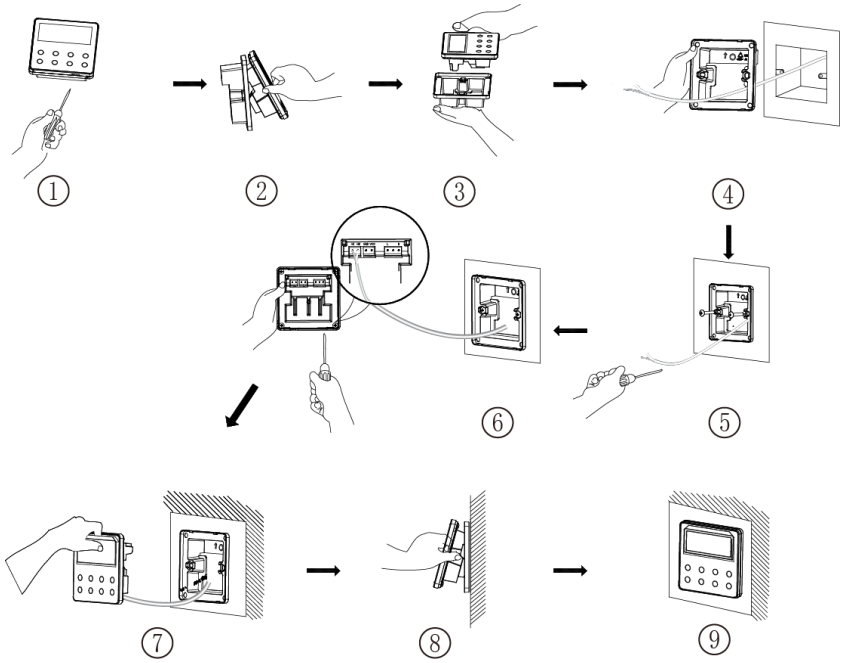


Fig.2.5 Installation of Wired Controller

Above is a simple installation method of wired controller. Please pay attention to the following:

(1) Before installation, disconnect power of the indoor unit. Do not operate when power is connected.

(2) Pull out the 2-core twisted pair cable from the installation hole on the wall and lead it through the hole ∩ on the back plate of wired controller.

(3) Place the wired controller on wall and secure its back plate on wall with screw M4X25.

(4) Connect the 2-core twisted pair cable to terminal H1 and terminal H2. Tighten up the screws.

(5) Stick the cable in the slot that is left of the terminals and buckle the wired controller's panel with its back plate.

⚠WARNING
If caliber of the communication cord is too large, which causes difficulty in leading or sticking the cord according to above point 2 and point 5, strip some of the sheath of the communication cable to meet the installation requirement.

2.2.3 Removal Method

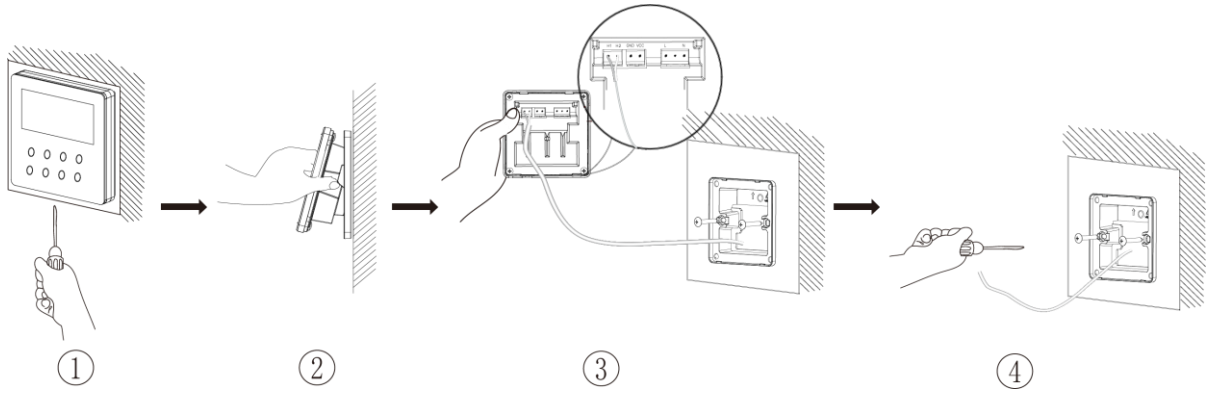


Fig.2.6 Removal of Wired Controller

2.2.4 Connection of Communication Cord

There are 4 ways to connect wired controller with indoor units' network:

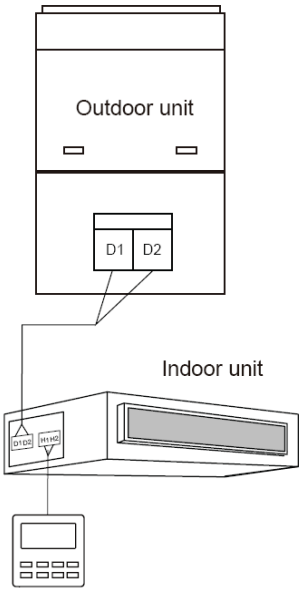


Fig. 2.7 One wired controller control one indoor unit

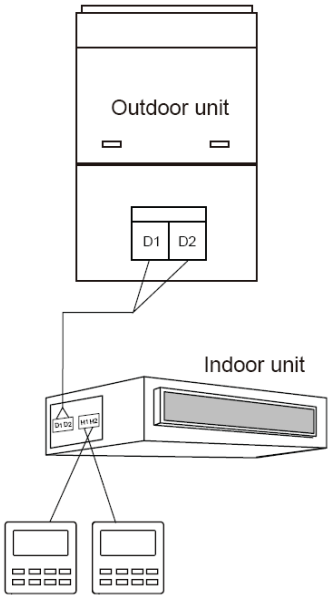


Fig. 2.8 Two wired controllers controls one indoor unit

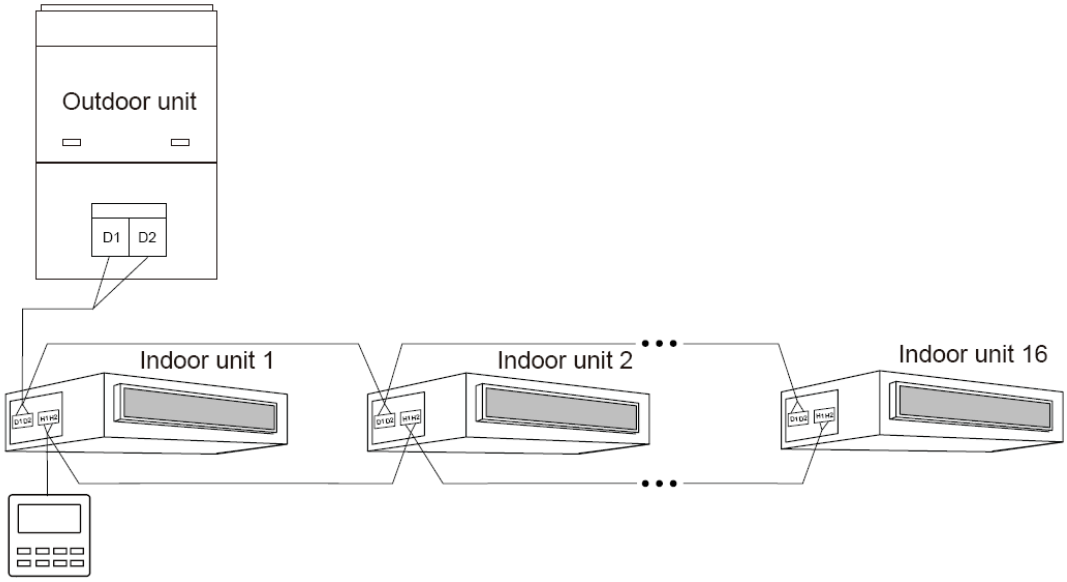


Fig. 2.9 One wired controller controls multiple indoor units simultaneously.

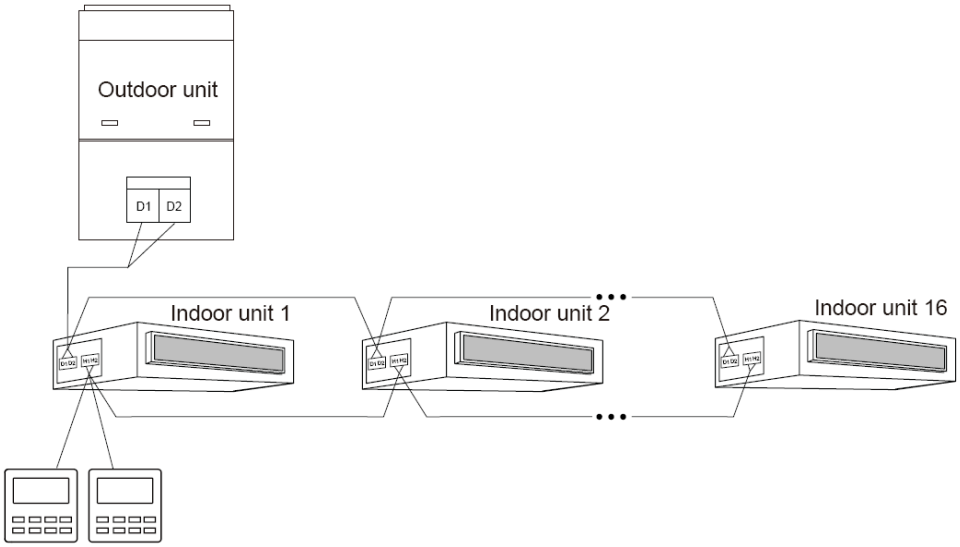
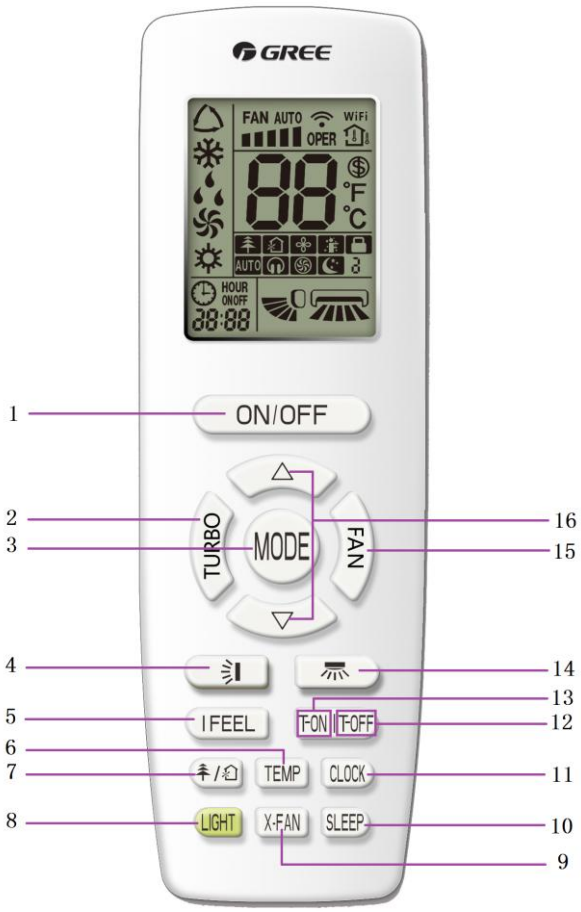


Fig. 2.10 Two wired controllers control multiple indoor units simultaneously.

3 Remote Controller

3.1 Remote Controller YAP1F



Button name and function introduction

No.	Button name	Function
1	ON/OFF	Turn on or turn off the unit
2	TURBO	Set turbo function
3	MODE	Set operation mode
4		Set up&down swing status
5	I FEEL	Set I FEEL function
6	TEMP	Switch temperature displaying type on the unit's display
7		Set health function and air function
8	LIGHT	Set light function
9	X-FAN	Set X-FAN function
10	SLEEP	Set sleep function
11	CLOCK	Set clock of the system
12	TOFF	Set timer off function
13	TON	Set timer on function
14		Set left&right swing status
15	FAN	Set fan speed
16	△/▽	Set temperature and time

3.2 Remote Controller YV1L1

No.	Button name	Function
1	ON/OFF	Turn on or turn off the unit
2	FAN	Set fan speed
3	▲/▼	Set temperature and time
4	MODE	Set operation mode
5		Set quiet function
6		Set health function and air function
7		Set left&right swing status
8		Set up&down swing status
9	X-FAN	Set X-FAN function
10	TIMER ON	Set timer on function
11	TIMER OFF	Set timer off function
12	SAVE	Set energy-saving function
13	SLEEP	Set sleep function
14	LIGHT	Set light function
15	CLOCK	Set clock of the system
16	I FEEL	Set I FEEL function
17	TEMP	Switch temperature displaying type on the unit's display

4 Introduction to Unit Functions

Function Application of IDUs

Indoor unit functions cover user operation functions and engineering application functions. For user operation functions, refer to operating instructions of the IDU, wired controller, and remote controller.

Engineering application functions include:

SN	Function Name
1	Master IDU query and settings
2	Indoor unit project number query and settings
3	User parameter query
4	User parameter settings
5	Engineering parameter query
6	Engineering parameter settings

Engineering application functions can be operated through the IDU wired controller (XK46 、XK49or XK79) or remote controller (YV1L1, fittings selectable).

4.1 Engineering Application Functions Operated through the XK46 Wired Controller

4.1.1 Master IDU Settings

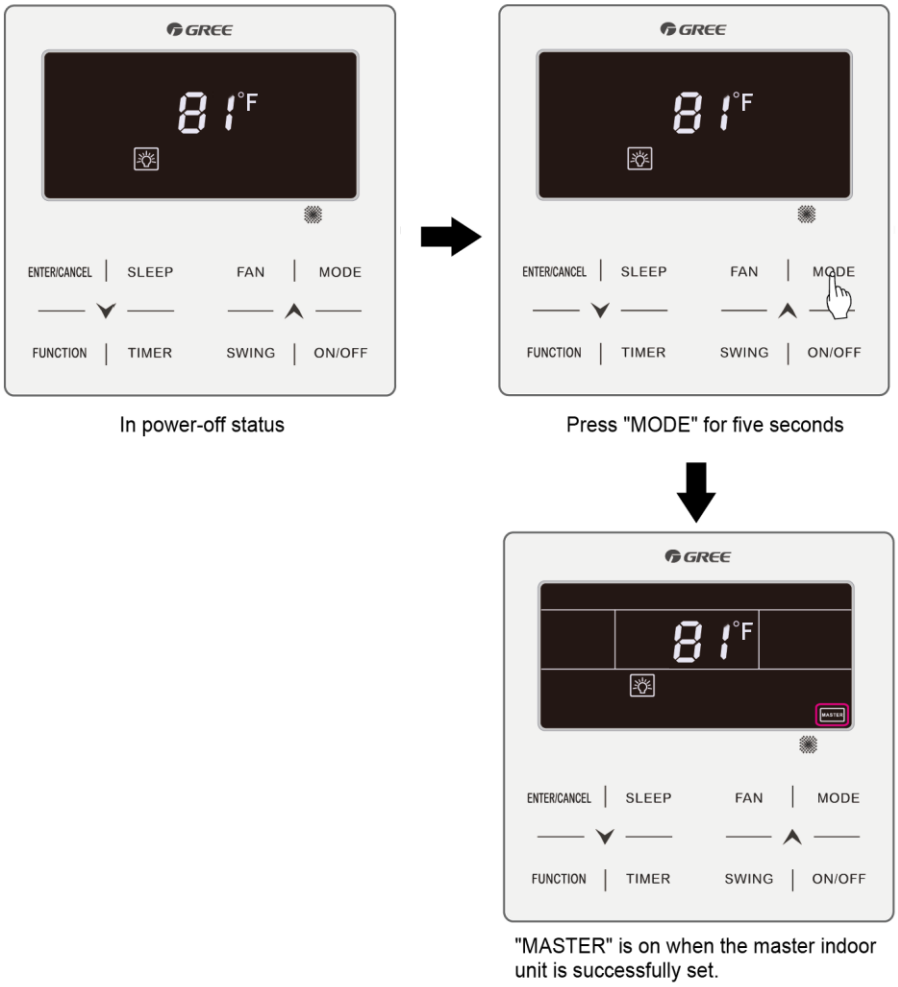
The master IDU can be set through the wired controller or remote controller. The methods for setting the master IDU through the wired controller are as follows:

Method 1:

Step 1: Set an IDU to power-off status.

Step 2: Press and hold the "MODE" button on the wired controller for more than five seconds.

Step 3: Check whether the setting is successful. If it is, "MASTER" on the wired controller will be on. Otherwise, repeat steps 1 and 2.



Method 2:

Step 1: Press and hold the “FUNCTION” button for five seconds in power-on or power-off status to enter the parameter query interface.

Step 2: Press and hold the “FUNCTION” button for five seconds in "C00" status to enter the parameter setting interface.

Step 3: Press “▲” or “▼” to switch level 2 parameter codes till “P10” is displayed on the temperature area.

Step 4: Press the “MODE” button to set the parameter to "01" and then Press the “ENTER” button. If the setting is successful, "MASTER" on the wired controller will be on.

4.1.2 Master IDU Display

For IDUs connected with wired controllers, "MASTER" on the wired controller connected with the master IDU will be on.

For IDUs embedded or connected with LED panels, the operation LED on the LED panel of the master IDU will blink three times.

NOTICE! After the master IDU is successfully set, stick the " 

" flag to the wired controller or unit panel for convenience of user operation and engineering maintenance. This flag is placed in the package bag of the ODU.

4.1.3 Project Number Query and Settings

(1) Project number query of a single IDU

Press and hold the "FUNCTION" button for five seconds in power-on or power-off status to enter the parameter query interface "C00". The timer area of the wired controller displays the project number of the current IDU. Synchronously, the double-eight digital LED of the IDU embedded or connected with an LED panel displays its own project number. If the current wired controller works in one-to-many mode, the timer area displays the IDU that has the minimum project number.

(2) Project number of multiple IDUs

1) Project number query of IDUs in one-to-many mode: Press and hold the "FUNCTION" button for five seconds in power-on or power-off status to enter the parameter query interface "C00". Press "▽" to switch to "C01". Press the "MODE" button to enter query. The timer area displays the project numberes of IDUs from small to large. Press "△ " or "▽" to switch project numberes. Synchronously, the double-eight digital LED of the IDU embedded or connected with an LED panel displays its own project number.

NOTICE! It is normal if the buzzer of the IDU operated by the wired controller rings. The purpose of ringing the buzzer is to facilitate engineering commissioning personnel to locate the IDU, especially for the IDU without any LED panel because it cannot display its project number.

2) Project number query of IDUs in the entire communication network: Press and hold the "FUNCTION" button for five seconds in power-on or power-off status to enter the parameter query interface "C00". Press "▽" to switch to "C18". Press the "MODE" button to enter query. The timer area of each wired controller in the entire network displays the project number of the corresponding IDU. Synchronously, the double-eight digital LED of each IDU embedded or connected with an LED panel displays its own project number.

Method for quitting query:

Quit the "C18" query interface.

Press the "ON/OFF" button on any wired controller in the network.

(3) Project number settings of IDU

Press and hold the "FUNCTION" button for five seconds in power-on or power-off status to enter the parameter query interface "C00". Continuously press the "MODE" button for three times, and then press and hold the "FUNCTION" button for five seconds to enter the engineering parameter setting interface. The temperature area displays "P00". Press "▽" to switch to "P42".

Single IDU: Press the "MODE" button. The project number blinks in the timer area. Press "△ " or "▽" to adjust the project number, and then Press the "ENTER" button to confirm and return to the upper-level menu.

One-to-many: Press the "MODE" button to enter the IDU selection menu. Press "△ " or "▽" to switch IDUs. Press the "MODE" button to set the project number of the current IDU in the same method as above.

4.1.4 User Parameter Query

User parameters can be queried in power-on or power-off status.

(1) Press and hold the “FUNCTION” button for five seconds to enter the user parameter query interface. The temperature area displays “C00” and “View” is on.

(2) Select a parameter code by pressing “⮝” or “⮟”.

(3) Press the “ENTER/CANCEL” button to return to the upper-level menu till quitting parameter query.

The user parameter query list is as follows:

Table 4.1 User Parameter Query List

Parameter Code	Parameter Name	Parameter Range	View Method
C00	Parameter setting ingress	-	**Display mode:** Timer area: displays the project number of the current IDU. NOTICE! If the current HBS network consists of multiple IDUs, only the IDU that has the minimum project number is displayed.
C01	Project number query of IDU and faulty IDU location	1-255: project number of online IDU	**Operation method:** In “C01” status, press the “MODE” button to enter project number query of IDU. Press “▲” or “▼” to switch the IDU SN. **Display mode:** Temperature area: displays the fault of the current IDU (in the case of multiple faults, they are circularly displayed every three seconds). Timer area: displays (project number conflict C5 fault)/project number of the current IDU (project numberes are arranged from small to large). **Special operations:** After users press the “MODE” button to enter project number query, the buzzer of the IDU operated by the wired controller will ring till users quit "C01" query or switch to the next IDU.
C03	Indoor unit quantity query in the system network	1-80	**Timer area:** displays the number of IDUs in the system network.
C06	Preferential operation query	00: common operation 01: preferential operation	**Operation method:** In “C06” status, press the “MODE” button to enter the preferential operation query interface. Press “⮝” or “⮟” to switch the IDU SN. **Display mode:** Temperature area: displays the project number of the current IDU. Timer area: displays the preferential operation setting value of the current IDU.
C07	Indoor environment temperature query	-	**Operation method:** In “C07” status, press the “MODE” button to enter the indoor environment temperature query interface. Press "⮝" or "⮟" to switch the IDU SN. **Display mode:** Temperature area: displays the project number of the current IDU. Timer area: displays the temperature value of the indoor environment temperature sensor after replenishment.
C08	Prompt time query for air filter cleaning	4-416: days	Timer area: displays the prompt time for air filter cleaning.
C09	Wired controller adress query	01, 02	Timer area: displays the adress of the current wired controller.

C11	Indoor unit quantity query in one-to-many mode	1-16	Timer area: displays the number of IDUs controlled by the wired controller.
C12	Outdoor environment temperature query	-	Timer area: displays the temperature value of the environment temperature sensor of the master ODU.
C17	Indoor relative humidity query	20-90	**Operation method:** In “C17” status, press the “MODE” button to enter the indoor relative humidity query interface. Press “▲” or “▼” to switch the IDU SN. Display mode: Temperature area: displays the project number of IDU (project numberes are arranged from small to large). Timer area: displays the relative humidity value. If the HBS network consists of only one IDU, the timer area directly displays the IDU relative humidity value in the “C17” interface.
C18	Indoor unit project number query in the communication network	1-255	**Operation method:** In “C18” status, press the “MODE” button to enter the IDU project number query interface. Press “▲” or “▼” to switch the IDU SN. Cancellation method: ① If users quit the "C18" query interface within 20 seconds, the project number display is cancelled. ② If the query interface is quit after 20 seconds upon timeout, press the “ON/OFF” button in power-on or power-off status to cancel the project number display. ③ The method for cancelling the project number display on any wired controller in the network is the same as ②. **Display mode:** ◆ Temperature area: displays the SN of the current IDU (project numberes are arranged from small to large). ◆ Timer area: displays the project number of the current IDU. Each IDU/wired controller in the network displays its own project number (the wired controller circularly displays project numberes of IDUs every three seconds from small to large).
C20	Fresh-air IDU outlet temperature query	-9 to 99	**Operation method:** In “C20” status, press the “MODE” button to enter the fresh-air IDU temperature query interface. Press “▲” or “▼” to switch the IDU SN. **Display mode:** Temperature area: displays the project number of the current IDU (1-16, project numberes are arranged from small to large). Timer area: displays the fresh-air IDU outlet temperature. If the HBS network consists of only one IDU, the timer area directly displays the fresh-air IDU outlet temperature in the "C20" interface.

NOTICE! In parameter query status, "FAN", “TIMER”, "SLEEP", and "SWING" are invalid. By pressing the “ON/OFF” button, users can return to the main interface but not power on/off the unit.

In parameter query status, signals of the remote controller are invalid.

4.1.5 User Parameter Settings

User parameters can be set in power-on or power-off status.

(1) Press and hold the “FUNCTION” button for five seconds. The temperature area displays “C00”. Press and hold the “FUNCTION” button for another five seconds to enter the wired controller parameter setting interface. The temperature area displays “P00”.

(2) Select a parameter code by pressing “⮝” or “⮟”. Press the “MODE” button to switch to

parameter value settings. The parameter value blinks. Adjust the parameter value by pressing "∧" or "∨" and then press the "ENTER/CANCEL" button to complete settings.

(3) Press the "ENTER/CANCEL" button to return to the upper-level menu till quitting parameter settings.

The user parameter setting list is as follows:

Table 4.2 User Parameter Setting List

Parameter Code	Parameter Name	Parameter Range	Default Value	Remark
P10	Master IDU settings	00: does not change the master/slave status of the current IDU 01: sets the current IDU to master IDU	00	After the IDU connected with the current wired controller is successfully set to master IDU, "MASTER" on the wired controller is on.
P11	Infrared connection settings of wired controller	00: disabled 01: enabled	01	This setting can only be enabled through the master wired controller. When the infrared remote receiving function of the wired controller is disabled, neither the master nor slave wired controller can receive remote signals. The wired controllers can only be operated by pressing.
P13	Wired controller address settings	01: master wired controller 02: slave wired controller	01	When two wired controllers simultaneously control one or more IDUs, the two wired controllers should use different addresses. The slave wired controller (address: 02) does not have the unit parameter setting function except its own address settings.
P14	One wired controller controls multiple IDUs quantity settings	00: disabled 01-16: number of indoor units	01	This value is set based on the number of connected IDUs. If the current value is inconsistent with the actual number of group-controlled IDUs, an "L9" fault may occur.
P30	Static pressure settings for indoor fan	Type 1: 03.04.05.06.07 Type 2: 01.02.03.04.05.06.07.08.09	05	After identifying the IDU type, the wired controller only displays the available static pressure levels. ①. The static pressure levels fall into five levels and nine levels for VRF IDUs. Wired controller can be adapted to the different types of indoor units that it possesses 1-9 level selection for setting static pressure.If the static pressure levels received by the IDU from the wired controller, remote controller, or remote monitoring system exceed the setting range, the limit value prevails. ②. During power-on and synchronization, the setting value of static pressure levels is determined by settings of the IDU.
P31	High-ceiling installation	00: standard-ceiling installation height 01: high-ceiling installation height	00	Only applicable to cassette units
P33	Timer function settings	00: count down timing 01: time-point timing	00	
P34	Repeating validity for time-point timing	00: single timing 01: repeated everyday	00	This setting is valid only when the timer function is set to time-point timing.
P37	Cooling setting	17°C -30°C	25	Cooling setting temperature – heating

	temperature in automatic mode			setting temperature ≥ 1. NOTICE! The two settings are still valid in remote shielding status.
P38	Heating setting temperature in automatic mode	16°C -29°C	20	
P43	Preferential operation settings	00: common operation 01: preferential operation	00	When power supply is insufficient, users are allowed to power on/off the IDU set with preferential operation and other IDUs are forcibly powered off. A fault code is displayed on the IDU that is forcibly powered off.
P46	Accumulated time clearing for air filter cleaning	00: not cleared 01: cleared	00	
P49	Opening angle of indoor unit air-return plate*	01：angle 1(25°/77°F) 02：angle 2(30°/86°F) 03：angle 3(35°/95°F)	01	Only applicable to units with air-return plate
P50	Air outlet temperature setting for Fresh Air Indoor Unit in cooling*	16°C~30°C (61°F~86°F)	18°C (64°F)	Only applicable to Fresh Air Indoor Unit
P51	Air outlet temperature setting for Fresh Air Indoor Unit in heating*	16°C~30°C (61°F~86°F)	22°C (71°F)	Only applicable to Fresh Air Indoor Unit
P54	Union setting of Fresh Air Indoor Unit*	00: without union control 01: with union control	00	After union function is set, Fresh Air Indoor Unit will be turned on/off following the on/off status of common indoor unit. Besides, Fresh Air Indoor Unit can also be turned on/off manually. NOTICE! only applicable to Fresh Air Indoor Unit

NOTICE! In parameter setting status, "FAN", “TIMER”, "SLEEP", and "SWING" are invalid. By pressing the “ON/OFF” button, users can return to the main interface but not power on/off the unit.

In parameter setting status, signals of the remote controller are invalid.

4.1.6 Engineering Parameter Query

Engineering parameters can be queried in power-on or power-off status.

Press and hold the “FUNCTION” button for five seconds to enter the engineering parameter query interface. The temperature area displays “C00” and “View” is on.

(1) Within five seconds after “C00” is displayed, continuously press the “MODE” button for three times in an interval less than one second to enter engineering parameter query.

(2) Select a parameter code by pressing “∧” or “∨”.

(3) Press the “ENTER/CANCEL” button to return to the upper-level menu till quitting parameter query.

In the engineering parameter query interface, users can also query user parameters listed in Table 4.3.

The engineering parameter query list is as follows:

Table 4.3 Engineering Parameter Query List

Parameter Code	Parameter Name	Parameter Range	View Method
C00	Parameter setting ingress (default)	-	Display mode: Timer area: displays the project number of the current IDU. NOTICE! If the current HBS network consists of multiple IDUs, only the IDU that has the minimum project number is displayed.
C02	Indoor unit capacity query	-	Operation method: In “C02” status, press the “MODE” button to enter the preferential operation query interface. Press "⮝" or "⮟" to switch the project number of IDU. Display mode: Temperature area: displays the project number of the current IDU. Timer area: displays the current IDU capacity/IDU capacity after adjustment.
C04	Project number query of master IDU	1-255: project number 00: no master IDU	Timer area: displays the project number of the master IDU/00.
C05	Historical fault query ingress of IDU	Five historical faults	Operation method: 1. In “C05” status, press the “MODE” button to enter the historical fault query interface. Press "⮝" or "⮟" to switch the project number of IDU. Press the “MODE” button to enter fault code query of the current IDU. Press “⮝” or “⮟” to switch the fault SN. Press the “ENTER/CANCEL” button to return to the upper-level menu. Display mode: Temperature area: displays the fault SN and fault code. Timer area: displays the project number of IDU.
C10	Static pressure setting query of ODU	00: 0 Pa 20: 20 Pa 50: 50 Pa 82: 82 Pa	Operation method: In “C10” status, press the “MODE” button to enter static pressure setting query of ODU. Press "⮝" or "⮟" to switch the ODU address. Display mode: Temperature area: displays the address of the current ODU. Timer area: displays the static pressure setting value.
C13	Outdoor unit network number query	1-255	Timer area: displays the network number of the current ODU.
C14	Temperature query for inlet-tube temperature sensor of IDU	-9 to 99	Operation method: In “C14” status, press the “MODE” button to enter inlet-tube temperature sensor query of IDU. Press "⮝" or "⮟" to switch the IDU SN. Display mode: Temperature area: displays the project number of the current IDU. Timer area: displays the temperature value. If the HBS network consists of only one IDU, the timer area directly displays the temperature value in the “C14” interface. No matter Fahrenheit or Centigrade remote signals are received, the temperature is displayed in Centigrade. When the wired controller displays the inlet-tube temperature after receiving signals from the remote controller, the inlet-tube temperature of the IDU that has the minimum project number in the HBS network is displayed by default.
C15	Temperature query for outlet-tube temperature sensor of IDU	-9 to 99	Operation method: In “C15” status, press the “MODE” button to enter outlet temperature sensor query of IDU. Press "⮝" or "⮟" to switch the IDU SN. Display mode: Temperature area: displays the project number of the current IDU. Timer area: displays the temperature value. If the HBS network consists of only one IDU, the timer area directly displays the temperature value in the "C15" interface. When the wired controller displays the outlet-tube temperature after receiving signals from the remote controller, the inlet-tube temperature of the IDU that has the minimum project number in the HBS network is displayed by default.

C16	Opening degrees query of electronic expansion valve of IDU	0-20	Operation method: In “C16” status, press the “MODE” button to enter electronic expansion valve opening degree query of IDU. Press "⮝" or "⮟" to switch the IDU SN. Display mode: Temperature area: displays the project number of the current IDU. Timer area: displays the opening degree value. If the HBS network consists of only one IDU, the timer area directly displays the opening degree value of electronic expansion valve in the “C16” interface. When the wired controller displays the opening degree of electronic expansion valve after receiving signals from the remote controller, the opening degree of electronic expansion valve of the IDU that has the minimum project number in the HBS network is displayed by default.
n2	Capacity configuration ratio upper-limit of outdoor/IDU	35: 135% 50: 150%	Temperature area: displays the parameter code. Timer area: displays the setting value of capacity configuration ratio of the current outdoor/IDU.
n6	Historical fault query ingress of ODU	Five historical faults	Operation method: In “n6” status, press the “MODE” button to enter fault code query of ODU (when a wired controller controls multiple IDUs, only the faults memorized by the IDU that has the minimum project number can be queried). Press “⮝” or “⮟” to switch the fault SN. Press the “ENTER/CANCEL” button to return to the upper-level menu. Display mode: Temperature area: displays the fault SN and fault code from left to right (1-5, faults are arranged from the earliest to the latest). Timer area: displays the project number of the ODU.

<table>
<tr>
<td>n7</td>
<td>Parameter query ingress of ODU</td>
<td>01-13
25-29</td>
<td>Operation method (n7 query is not supported for the slave wired controller):
In “n7” status, the timer area is not displayed. Press the “MODE” button to enter parameter query of ODU. The first bit in the temperature area (display bit of the ODU module ID) blinks. Press “▲” or “▼” to switch the ODU module ID. Press the “MODE” button to select an ODU module. In this case, the first bit in the temperature area stops blinking, and the second and third bits in the temperature area display the parameter code. The timer area displays a corresponding parameter value. Press “▲” or “▼” to switch the parameter code and press the “ENTER/CANCEL” button to return to the upper-level menu.
Display mode:
Temperature area: displays the ODU module ID and parameter code from left to right.
Timer area: displays a corresponding parameter value to the right.
<table>
<tr><th>Parameter Code</th><th>Parameter Name</th><th>Unit</th></tr>
<tr><td>01</td><td>Outdoor environment temperature</td><td>°C/°F</td></tr>
<tr><td>02</td><td>Operation frequency of compressor 1</td><td>Hz</td></tr>
<tr><td>03</td><td>Operation frequency of compressor 2</td><td>Hz</td></tr>
<tr><td>04</td><td>Operation frequency of outdoor fan</td><td>Hz</td></tr>
<tr><td>05</td><td>Module high-pressure</td><td>°C/°F</td></tr>
<tr><td>06</td><td>Module low-pressure</td><td>°C/°F</td></tr>
<tr><td>07</td><td>Discharge temperature of compressor 1</td><td>°C/°F</td></tr>
<tr><td>08</td><td>Discharge temperature of compressor 2</td><td>°C/°F</td></tr>
<tr><td>09</td><td>Discharge temperature of compressor 3</td><td>°C/°F</td></tr>
<tr><td>10</td><td>Discharge temperature of compressor 4</td><td>°C/°F</td></tr>
<tr><td>11</td><td>Discharge temperature of compressor 5</td><td>°C/°F</td></tr>
<tr><td>12</td><td>Discharge temperature of compressor 6</td><td>°C/°F</td></tr>
<tr><td>13</td><td>Operation frequency of compressor 3</td><td>Hz</td></tr>
<tr><td>25</td><td>Outdoor unit heating EXV1
(Actual value = Displayed value * 10)</td><td>PLS</td></tr>
<tr><td>26</td><td>Outdoor unit heating EXV2
(Actual value = Displayed value * 10)</td><td>PLS</td></tr>
<tr><td>27</td><td>Subcooler EXV
(Actual value = Displayed value * 10)</td><td>PLS</td></tr>
<tr><td>28</td><td>Defrosting temperature</td><td>°C/°F</td></tr>
<tr><td>29</td><td>Liquid-extracting temperature of subcooler</td><td>°C/°F</td></tr>
<tr><td>30</td><td>Outlet temperature of accumulator</td><td>°C/°F</td></tr>
<tr><td>31</td><td>Oil return temperature</td><td>°C/°F</td></tr>
<tr><td>32</td><td>Inlet-tube temperature of condenser</td><td>°C/°F</td></tr>
<tr><td>33</td><td>Outlet temperature of condenser</td><td>°C/°F</td></tr>
</table>
</td>
</tr>
<tr>
<td>A6</td>
<td>Unit cooling/heating function</td>
<td>nA: cooling/heating
nC: single-cooling
nH: single-heating
nF: air supply</td>
<td>Temperature area: displays the function code.
Timer area: displays the cooling/heating function setting value of the current unit.</td>
</tr>
<tr>
<td>nb</td>
<td>Bar code query of IDU</td>
<td>0-9, A-Z, a-z, -</td>
<td>Operation method (nb query is not supported for the slave wired controller):
In “nb” status, the timer area is not displayed. Press the “MODE” button to enter bar code query. The temperature area displays “nb” and the project number in the timer area blinks. Press “▲” or “▼” to switch the project number of IDU.
Press the “MODE” button to select an IDU. The temperature area displays “Un” and the timer area displays “-n”. Press “▲” or “▼” to display the entire-unit bar code and controller bar code of IDU. Press the “ENTER/CANCEL” button to return to the upper-level menu. The temperature area displays “nb” and the timer area displays the</td>
</tr>
</table>

project number of the queried IDU. Press the “ENTER/CANCEL” button again to return to the upper-level menu.
Display mode:
Temperature area: displays nb/Un/Pc/bar code.
Timer area: displays -n/project number/bar code.
The following is an example:

Example	Temperature Area	Timer Area	Remark 1	Remark 2
Entire-init bar code of IDU N1r0128150066	Un (to the right)	-n (in the middle)	It indicates that the following is the entire-unit bar code of IDU.	Press “▼” to display downward and press “▲” to display upward.
	N1r	0128	It indicates the former seven bits of the bar code.	
	150	066	It indicates the latter six bits of the bar code.	
Controller bar code of IDU N1r0128150067	Pc	-n	It indicates that the following is the controller bar code of IDU.	
	N1r	0128	It indicates the former seven bits of the bar code.	
	150	067	It indicates the latter six bits of the bar code.	

NOTICE!

①. Un indicates the entire-unit bar code of IDU and Pc indicates the controller bar code of IDU.

②. When there is only one IDU, press the “MODE” button in “nb” status to enter bar code query without selecting the project number of IDU.

③. The system quits the query status if no operations are performed in 60 seconds.

④. The bar code query starts from the entire-unit bar code of IDU and ends at the controller bar code of IDU without circulation. That is, the query does not start again even if users press “▼”.

NOTICE!

In parameter query status, "FAN", “TIMER”, "SLEEP", and "SWING" are invalid. By pressing the “ON/OFF” button, users can return to the main interface but not power on/off the unit.

In parameter query status, signals of the remote controller are invalid.

4.1.7 Engineering Parameter Settings

Engineering parameters can be set in power-on or power-off status.

(1) Press and hold the “FUNCTION” button for five seconds. The temperature area displays “C00”. Continuously press the “MODE” button for three times, and then press and hold the “FUNCTION” button for five seconds to enter the engineering parameter setting interface. The temperature area displays “P00”.

(2) Select a parameter code by pressing “▲” or “▼”. Press the “MODE” button to switch to parameter value settings. The parameter value blinks. Adjust the parameter value by pressing “▲” or “▼” and then press the “ENTER/CANCEL” button to complete settings.

(3) Press the “ENTER/CANCEL” button to return to the upper-level menu till quitting parameter settings.

In the engineering parameter setting interface, users can also set user parameters listed in Table 4.4.

The engineering parameter setting list is as follows:

Table 4.4 Engineering Parameter Setting List

Parameter Code	Parameter Name	Parameter Range	Default Value	Remark
P15	Power-down memory mode	00: standby after power-down recovery 01: restoring the original status after power-down recovery	00	
P17	Historical fault clearing for IDU	00: not cleared 01: cleared	00	Historical faults of all IDUs controlled by the current wired controller are cleared.
P20	Environment temperature sensor settings for IDU	01: temperature sensor of air return vent 02: temperature sensor of wired controller 03: temperature sensor of air return vent for cooling, dehumidifying, and air supply; temperature sensor of wired controller for heating 04: temperature sensor of wired controller for cooling, dehumidifying, and air supply; temperature sensor of air return vent for heating	03	When there are master and slave wired controllers and the temperature sensor of wired controller is used, only the temperature sensor of the master wired controller is used by default. NOTICE! 1. In automatic mode, the environment temperature sensor settings are invalid for a common IDU but the setting value is memorized. 2. The environment temperature sensor settings are invalid for a fresh-air IDU. The temperature sensor of air return vent is used by default.
P21	Corrected value of environment temperature sensor of IDU (for cooling, dehumidifying, and air supply)	-15 to +15	Temperature sensor of unit: 0°C; temperature sensor of wired controller: 0°C	Press “▲” or “▼” to add or reduce by 1°C.

P22	Corrected value of environment temperature sensor of IDU (for heating, fast heating, and air warming)	-15 to +15	Temperature sensor of unit: -2°C; temperature sensor of wired controller: 0°C	Press "▲" or "▼" to add or reduce by 1°C. The temperature sensor of unit and the temperature sensor of wired controller share the same corrected value. In heating mode, corrected value of temperature sensor of unit = corrected value of temperature sensor of wired controller - 2°C.
P32	Capacity adjustment function of IDU	-40% to +40%	00	Press "▲" or "▼" to add or reduce by 10%.
P35	Factory setting recovery for user functions	00: invalid 01: valid	00	Select "01" and then press and hold the "ENTER/CANCEL" button to restore the factory settings for user functions (factory setting recovery fails if remote shielding is valid).
P36	Factory setting recovery for engineering settings	00: invalid 01: valid	00	Select "01" and then press and hold the "ENTER/CANCEL" button to restore the factory status for engineering settings (factory setting recovery fails if remote shielding is valid).
P40	Prevention for heat collection	00: disabled 10: 10 seconds 20: 20 seconds 30: 30 seconds 40: 40 seconds 50: 50 seconds 60: 60 seconds	00	It indicates the number of seconds for enabling the low-level fan every 15 minutes.
P42	Project number settings of IDU	1-255	Automatically generated upon the initial system operation	In "P42" status, press the "MODE" button to enter the setting menu. The project number blinks in the timer area. Press "▲" or "▼" to adjust the project number. Press the "ENTER/CANCEL" button to confirm settings and return to the upper-level menu.
P45	One-key project number reset for IDU	00: invalid 01: valid	00	When it is set to "01", the wired controller initiates an IDU project number reset command.
P48	Minimum opening degree setting for heating breakdown of IDU expansion valves	00: automatically controlled 1-500	00	After the default minimum opening degree for heating breakdown is manually modified, the opening degree remains unchanged upon heating breakdown.
P54	Linked settings for fresh-air IDU	00: no linked control (default) 01: linked control		There is not linked control by default upon factory departure. After the linked control function is set, the fresh-air IDU can be independently controlled.
P55	Static pressure settings for DC Fresh Air Indoor Unit	Setting range：01、02、03、04、05、06、07、08、09、10、11、12、13	08	Only applicable to DC Fresh Air Indoor Unit
n0	System conservation operation settings	00: comfortability preferred 01: conservation preferred	00	
n1	Defrosting period settings	40: 40 minutes 50: 50 minutes 60: 60 minutes	50	

n3	Forcible defrosting	00: common 01: forcible defrosting		After settings, it automatically restores to "00".
n4	Highest capacity output limitation settings for ODU	08: 80% 09: 90% 10: 100%	10	Enter query in “n4” status. The temperature area displays the function code and the timer area displays the corresponding function setting value.
A7	Silent function of ODU	00: no silent function 01-09: intelligent nighttime silent mode 10-12: forcible silent mode	00	Enter query in “A7" status. The temperature area displays the function code and the timer area displays the corresponding function setting value.

NOTICE!

In parameter setting status, "FAN", “TIMER”, "SLEEP", and "SWING" are invalid. By pressing the “ON/OFF” button, users can return to the main interface but not power on/off the unit.

In parameter setting status, signals of the remote controller are invalid.

4.1.8 Failure Display

When a fault occurs during the system operation, the temperature area of wired controller displays the fault code. When multiple faults occur, fault codes are circularly displayed.

When a fault occurs, power off the unit and ask for professional maintenance personnel for help.

The following figure shows the power-on high-pressure protection fault interface.

Power-on High-pressure Protection Fault Interface

NOTICE!

If the IDU connected with the current wired controller is a fresh-air IDU, “FAP” is displayed on the main interface of the wired controller. Only the outlet temperature can be set for the fresh-air IDU. For the setting method, see the "IDU Function Settings" section.

4.2 Engineering Application Functions Operated through the XK49 Wired Controller

XK49 Wired Controller

4.2.1 Master IDU Settings

Method 1: In power-off status, press and hold the “MODE” button for five seconds to set the IDU connected with the current wired controller to master IDU. If the setting is successful, “MASTER” will be on.

Method 2:

Step 1: In power-on or power-off status, press and hold the “MODE” button and "SWING" simultaneously for five seconds to enter the parameter query interface.

Step 2: In "C00" status, press and hold the “MODE” button and "SWING" simultaneously for five seconds to enter the parameter setting interface.

Step 3: Press "▲" or "▼" to switch level 2 parameter codes till “P10” is displayed on the temperature area.

Step 4: Press the “MODE” button to set the parameter to "01" and then Press the “ENTER” button. If the setting is successful, "MASTER" on the wired controller will be on.

4.2.2 User Parameter Query

User parameters can be queried in power-on or power-off status.

(1) Press and hold the “MODE” button and "SWING" simultaneously for five seconds to enter the user parameter query interface. The temperature area displays “C00” and “View” is on.

(2) Select a parameter code by pressing “∨” or “∧”.

(3) Press the “SWING” button to return to the upper-level menu till quitting parameter query.

For the user parameter query list of the XK49 wired controller, refer to the user parameter query list in XK46 user parameter query.

NOTICE!

In parameter query, the function of "SWING" on the XK49 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.2.3 User Parameter Settings

User parameters can be set in power-on or power-off status.

(1) Press and hold the “MODE” button and "SWING" simultaneously for five seconds. The temperature area displays “C00”. Press and hold the “MODE” button and "SWING" simultaneously for another five seconds to enter the wired controller user parameter setting interface. The temperature area displays “P00”.

(2) Select a parameter code by pressing “∨” or “∧”. Press the “MODE” button to switch to parameter value settings. The parameter value blinks. Adjust the parameter value by pressing “∨” or “∧” and then press the “SWING” button to complete settings.

(3) Press the “SWING” button to return to the upper-level menu till quitting parameter settings.

For the user parameter setting list of the XK49 wired controller, refer to the user setting query list in XK46 user parameter settings.

NOTICE!

In parameter settings, the function of "SWING" on the XK49 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.2.4Engineering Parameter Query

Engineering parameters can be queried in power-on or power-off status.

(1) Press and hold the “MODE” and "SWING" button simultaneously for five seconds to enter the engineering parameter query interface. The temperature area displays “C00” and “VIEW” is on.

(2) In "C00" status, continuously press the “MODE” button for three times to enter engineering parameter query.

(3) Select a parameter code by pressing “∨” or “∧”.

(4) Press the “SWING” button to return to the upper-level menu till quitting parameter query.

For the engineering parameter query list of the XK49 wired controller, refer to the engineering parameter query list in XK46 engineering parameter query.

NOTICE! In parameter query, the function of "SWING" on the XK49 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.2.5 Engineering Parameter Settings

Engineering parameters can be set in power-on or power-off status.

(1) Press and hold the “MODE” and "SWING" button simultaneously for five seconds. The temperature area displays “C00”. Continuously press the “MODE” button for three times, and then press and hold the “MODE” button and "SWING" simultaneously for another five seconds to enter the wired controller engineering parameter setting interface. The temperature area displays “P00”.

(2) Select a parameter code by pressing “∨” or “∧”. Press the “MODE” button to switch to parameter value settings. The parameter value blinks. Adjust the parameter value by pressing “∨” or “∧” and then press the “SWING” button to complete settings.

(3) Press the “SWING” button to return to the upper-level menu till quitting parameter settings.

For the engineering parameter setting list of the XK49 wired controller, refer to the engineering setting query list in XK46 engineering parameter settings.

NOTICE! In parameter settings, the function of "SWING" on the XK49 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.3 Engineering Application Functions Operated through the XK79 Wired Controller

4.3.1 Master IDU Settings

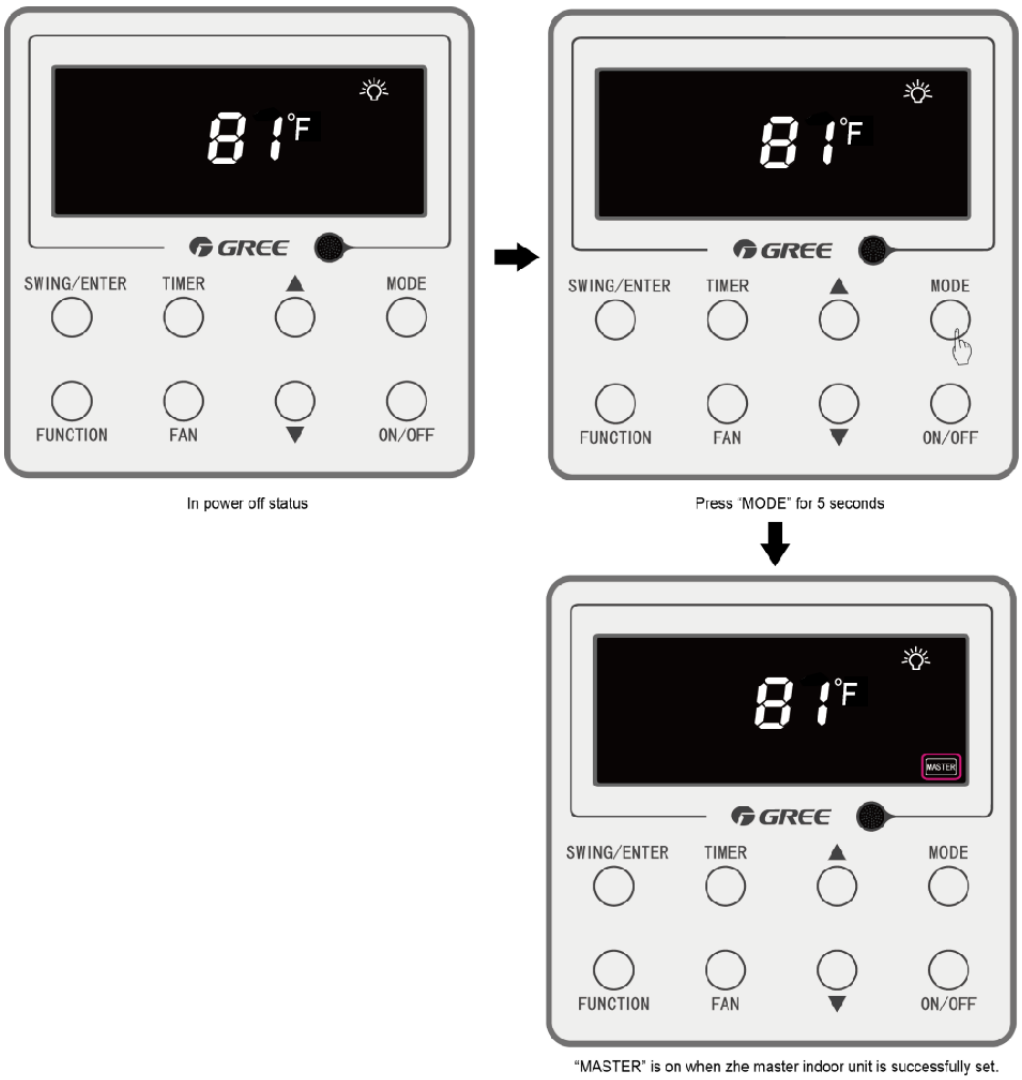
The master IDU can be set through the wired controller or remote controller. The methods for setting the master IDU through the wired controller are as follows:

Method 1:

Step 1: Set an IDU to power-off status.

Step 2: Press and hold the "MODE" button on the wired controller for more than five seconds.

Step 3: Check whether the setting is successful. If it is, "MASTER" on the wired controller will be on. Otherwise, repeat steps 1 and 2.



In power off status

Press "MODE" for 5 seconds

"MASTER" is on when zhe master indoor unit is successfully set.

Method 2:

Step 1: Press and hold the “FUNCTION” button for five seconds in power-on or power-off status to enter the parameter query interface.

Step 2: Press and hold the “FUNCTION” button for five seconds in "C00" status to enter the parameter setting interface.

Step 3: Press “▲” or “▼” to switch level 2 parameter codes till “P10” is displayed on the temperature area.

Step 4: Press the “MODE” button to set the parameter to "01" and then Press the “SWING/ENTER” button. If the setting is successful, "MASTER" on the wired controller will be on.

Master IDU Display

① For IDUs connected with wired controllers, "MASTER" on the wired controller connected with the master IDU will be on.

② For IDUs embedded or connected with LED panels, the operation LED on the LED panel of the master IDU will blink three times.

Note: After the master IDU is successfully set, stick the “ ” flag to the wired controller or unit panel for convenience of user operation and engineering maintenance. This flag is placed in the package bag of the ODU.

4.3.2 User Parameter Query

User parameters can be queried in power-on or power-off status.

(1) Press and hold the “FUNCTION”button for five seconds to enter the user parameter query interface. The temperature area displays “C00” and “View” is on.

(2) Select a parameter code by pressing “▲” or “▼”.

(3) Press the “SWING/ ENTER” button to return to the upper-level menu till quitting parameter query.

(4) For the user parameter query list of the XK79 wired controller, refer to the user parameter query list in XK46 user parameter query.

Note: In parameter query, the function of "SWING/ ENTER " on the XK79 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.3.3 User Parameter Settings

User parameters can be set in power-on or power-off status.

(1) Press and hold the “FUNCTION”button for five seconds. The temperature area displays “C00”. Press and hold the “FUNCTION”button for another five seconds to enter the wired controller user parameter setting interface. The temperature area displays “P00”.

(2) Select a parameter code by pressing“▲” or “▼”. Press the “MODE” button to switch to parameter value settings. The parameter value blinks. Adjust the parameter value by pressing “▲” or “▼” and then press the “SWING/ ENTER” button to complete settings.

(3) Press the “SWING/ ENTER” button to return to the upper-level menu till quitting parameter settings.

(4) For the user parameter setting list of the XK79 wired controller, refer to the user setting query list in XK46 user parameter settings.

Note: In parameter settings, the function of "SWING/ ENTER" on the XK79 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.3.4Engineering Parameter Query

Engineering parameters can be queried in power-on or power-off status.

(1) Press and hold the “FUNCTION”button for five seconds to enter the engineering parameter query interface. The temperature area displays “C00” and “VIEW” is on.

(2) In "C00" status, continuously press the “MODE” button for three times to enter engineering parameter query.

(3) Select a parameter code by pressing “▲” or “▼”.

(4) Press the “SWING/CANCEL” button to return to the upper-level menu till quitting parameter query.

(5) For the engineering parameter query list of the XK79 wired controller, refer to the engineering parameter query list in XK46 engineering parameter query.

Note: In parameter query, the function of "SWING/CANCEL" on the XK79 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.3.5 Engineering Parameter Settings

Engineering parameters can be set in power-on or power-off status.

(1) Press and hold the “FUNCTION”button for five seconds. The temperature area displays “C00”. Continuously press the “MODE” button for three times, and then press and hold the “FUNCTION”button for another five seconds to enter the wired controller engineering parameter setting interface. The temperature area displays “P00”.

(2) Select a parameter code by pressing “▲” or “▼”. Press the “MODE” button to switch to parameter value settings. The parameter value blinks. Adjust the parameter value by pressing“▲” or “▼” and then press the “SWING/CANCEL” button to complete settings.

(3) Press the “SWING/CANCEL” button to return to the upper-level menu till quitting parameter settings.

For the engineering parameter setting list of the XK79 wired controller, refer to the engineering setting query list in XK46 engineering parameter settings.

Note: In parameter settings, the function of "SWING/CANCEL" on the XK79 wired controller is equivalent to the function of “ENTER/CANCEL” on the XK46 wired controller.

4.4 Engineering Application Functions Operated through the YV1L1 Remote Controller

The YV1L1 remote controller provides all engineering application functions. It is set to common type by default upon factory departure. It can use engineering application functions only after being set to professional type. The following only describes engineering application functions. For other user operation functions, refer to the "Remote Controller Operating Instructions".

Method for setting the professional remote controller: Press "MODE" and "TEMP" simultaneously in power-off status. If "  " blinks for three times, it indicates that the setting succeeds.

Method for restoring the common remote controller: Press "MODE" and "TEMP" simultaneously in power-off status. If "  " blinks for three times, it indicates that the setting succeeds.

No.	Button name	Function
1	ON/OFF	Turn on or turn off the unit
2	FAN	Set fan speed
3	▲/▼	Set temperature and time
4	MODE	Set operation mode
5		Set quiet function
6		Set health function and air function
7		Set left & right swing status
8		Set up & down swing status
9	X-FAN	Set X-FAN function
10	TIMER ON	Set timer on function
11	TIMER OFF	Set timer off function
12	SAVE	Set energy-saving function
13	SLEEP	Set sleep function
14	LIGHT	Set light function
15	CLOCK	Set clock of the system
16	I FEEL	Set I FEEL function
17	TEMP	Switch temperature displaying type on the unit’s display

4.4.1 Master IDU Settings

The master IDU can be set through the wired controller or remote controller. The methods for setting the master IDU through the remote controller are as follows:

Step 1: Set an IDU to air-supply status and set the temperature to 30°C.

Step 2: Continuously press “—” and “+” for three times within five seconds.

Step 3: Check whether the setting is successful. If it is, the LED panel of the IDU will display "UC" for five seconds and "MASTER" on the wired controller will be on. Otherwise, repeat steps 1 and 2.

4.4.2 Parameter Query

Engineering application functions cover parameter query and parameter settings.

For parameter query, users can query user parameters and engineering parameters of the unit. The parameter query method is as follows:

(1) On the professional remote controller of YV1L1, press and hold "CLOCK" for five seconds to enter the parameter query status. The viewing text is displayed. The query code "C00" blinks in the temperature area.

(2) Press "▲ ▼" to switch the query code and select a unit parameter to be queried (see Table 2.5 for parameters that can be queried).

(3) If the timer area displays query sub-items, it indicates that there are level 2 query menus. Press "MODE" to enter level 2 query menu selection. The content blinks in the timer area. Press "▲ ▼" to switch query sub-items and select a level 2 menu to be queried.

(4) Press "TEMP" to confirm query and return to step 2.

After entering the engineering application function, the system automatically quits the engineering commissioning status if no valid operations are performed within 20 seconds. To directly quit the engineering commissioning status, press "CLOCK".

Table 2.5 Query Parameters

Query Code	Query Content	Query Sub-item	Level 2 Query Content
C00	Invalid		
C01	Project number query of the current IDU		
C02	Capacity query of the current IDU		
C03	Indoor unit quantity query in the CAN1 network		
C04	Project number query of the master IDU		
C05	Historical fault query ingress of the current IDU	01	Fault 1
		02	Fault 2
		03	Fault 3
		04	Fault 4
		05	Fault 5
C06	Preferential operation query		
C07	Temperature query for environment temperature sensor of the current IDU		
C08	Prompt time query for air filter cleaning		
C10	Static pressure setting query of ODU	01	Module 1
		02	Module 2
		03	Module 3

		04	Module 4
C11	Indoor unit quantity query in one-to-many control mode		
C12	Temperature query for outdoor environment temperature sensor		
C13	CAN2 bus line ID query		
C14	Inlet-tube temperature query of IDU		
C15	Outlet temperature query of IDU		
C16	Opening degrees query of electronic expansion valve of IDU		
n2	Capacity configuration ratio upper-limit query of outdoor and IDUs		
n4	Highest capacity output limitation query		
n6	Historical fault query ingress of ODU	01	Fault 1
		02	Fault 2
		03	Fault 3
		04	Fault 4
		05	Fault 5
A6	Unit cooling/heating function		
A7	Outdoor silent mode		

4.4.3 Parameter Settings

For parameter settings, users can set user parameters and engineering parameters of the unit. The parameter setting method is as follows:

(1) After entering parameter query, switch the query code to "C00". Press and hold "CLOCK" for five seconds to enter the parameter setting status. The setting text is displayed and "P00" blinks in the temperature area.

(2) Press "▲▼" to switch the setting code and select a unit parameter to be set (see Table 2.6 for parameters that can be set).

(3) Press "TEMP" to enter parameter settings. The current parameter value blinks in the timer area. Press "▲▼" to change the parameter value.

(4) Press "TEMP" to confirm query and return to step 2.

After entering engineering commissioning, the system automatically quits the engineering commissioning status if no valid operations are performed within 20 seconds. To directly quit the engineering commissioning status, press "CLOCK".

Table 2.6 Setting Parameters

Setting Code	Setting Content	Setting Value
P00	Invalid	
P10	Master IDU settings	00: not changing the current settings 01: setting the corresponding IDU to master IDU 001-255: setting the IDU corresponding to *** to master IDU
P15	Power-down memory mode settings	00: standby after power-down recovery 01: restoring the original status after power-down recovery
P17	Historical fault clearing	00: not cleared 01: cleared
P20	Indoor environment temperature value	01: temperature sensor of air return vent 02: temperature sensor of wired controller 03: temperature sensor of air return vent for cooling, dehumidifying, and air supply; temperature sensor of wired controller for heating 04: temperature sensor of wired controller for cooling, dehumidifying, and air supply; temperature sensor of air return vent for heating and automatic mode

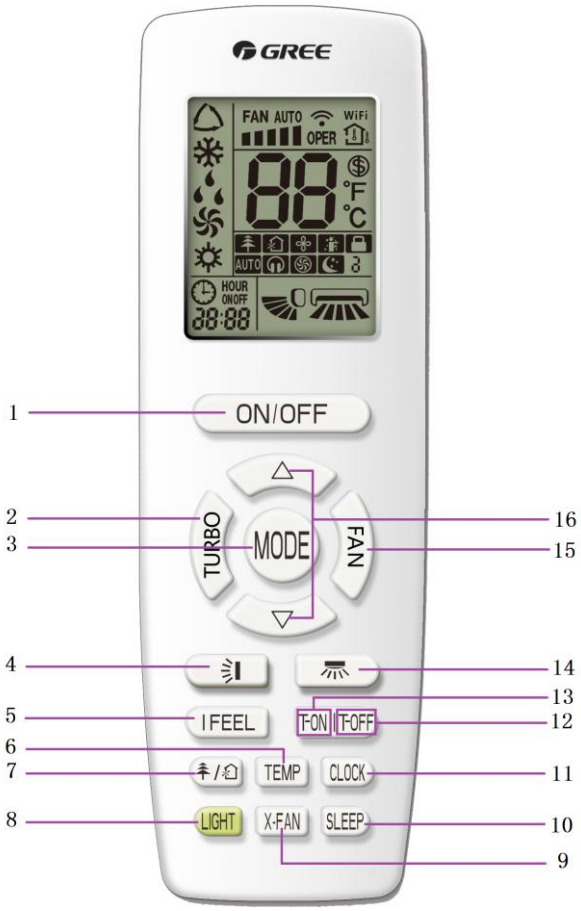
P21	Corrected value settings of environment temperature sensor of IDU (for cooling, dehumidifying, and air supply)	-15 to 15
P22	Corrected value settings of environment temperature sensor of IDU (for heating)	-15 to 15
P30	Static pressure settings for indoor fan	Type 1: 03.04.05.06.07 Type 2: 01.02.03.04.05.06.07.08.09
P31	High-ceiling installation settings	00: standard-ceiling installation height 01: high-ceiling installation height
P32	Capacity adjustment function of IDU	-40% to +40%
P34	Repeating validity for time-point timing	00: invalid 01: valid
P35	Factory setting recovery for user functions	00: invalid 01: factory setting recovery
P36	Factory setting recovery for engineering settings	00: invalid 01: factory setting recovery
P40	Prevention for heat collection	00: disabled 10: 10 seconds 20: 20 seconds 30: 30 seconds 40: 40 seconds 50: 50 seconds 60: 60 seconds
P42	Project number settings of IDU	1-255
P43	Preferential operation settings	00: no preferential operation 01: preferential operation
P44	One-key project number setting query for IDU	00: not displayed 01: displayed
P45	One-key project number reset for IDU	00: invalid 01: project number reset
P46	Accumulated time clearing for air filter cleaning	00: not cleared 01: cleared
P47	Prompt settings for air filter cleaning	00: no cleaning prompt settings 10-39: The first digit indicates the pollution degree of the using place and the second digit indicates the accumulated operating time of IDU. The two digits are described as follows: ①. Slight pollution: The first digit is "1". If the second digit is "0", it indicates that the accumulated operating time is 5500 hours. The accumulated operating time is added by 500 hours when the second digit is increased by "1". When the second digit is "9", the accumulated operating time is 10000 hours. ②. Medium pollution: The first digit is "2". If the second digit is "0", it indicates that the accumulated operating time is 1400 hours. The accumulated operating time is added by 400 hours when the second digit is increased by "1". When the second digit is "9", the accumulated operating time is 5000 hours. ③. Heavy pollution: The first digit is "3". If the second digit is "0", it indicates that the accumulated operating time is 100 hours. The accumulated operating time is added by 100 hours when the second digit is increased by "1". When the second digit is "9", the accumulated operating time is 1000 hours.
n0	System conservation operation settings	00: comfortability preferred 01: conservation preferred
n1	Defrosting period settings	40: 40 minutes 50: 50 minutes 60: 60 minutes
n3	Forcible defrosting	00: no defrosting 01: forcible defrosting

A7	Silent function of ODU	00: no silent function 01-09: intelligent nighttime silent mode 10-12: forcible silent mode
n4	Highest capacity output limitation settings	08: highest energy consumption limitation being 80% 09: highest energy consumption limitation being 90% 10: no conservation limitation

4.5 Engineering Application Functions Operated through the YAP1F Remote Controller

The YAP1F remote controller only provides engineering application functions for setting the master IDU. For other user operation functions, refer to the "Remote Controller Operating Instructions".

The method for setting the master IDU through the YAP1F remote controller is as follows:



No.	Button name	Function
1	ON/OFF	Turn on or turn off the unit
2	TURBO	Set turbo function
3	MODE	Set operation mode
4		Set up&down swing status
5	I FEEL	Set I FEEL function
6	TEMP	Switch temperature displaying type on the unit's display
7		Set health function and air function
8	LIGHT	Set light function
9	X-FAN	Set X-FAN function
10	SLEEP	Set sleep function
11	CLOCK	Set clock of the system
12	TOFF	Set timer off function
13	TON	Set timer on function
14		Set left&right swing status
15	FAN	Set fan speed
16	△/▽	Set temperature and time

(For details about the above figures, refer to the instructions 66174100016.)

Perform settings by pressing "▲" and "▼" in air supply mode:

1) Set the temperature to 30°C.
2) Press "▼" and then "▲" in five seconds. Repeat this operation for three times.

After successful settings, "UC" is displayed on the receiving indicator panel of the remote controller for five seconds and"MASTER" is displayed on the wired controller.

INSTALLATION

CHAPTER 3 INSTALLATION

1 Engineering Installation Preparation and Notice

1.1 Installation Notice

Personnel and property safety are highly concerned during the entire installation process. Installation implementation must abide by relevant national safety regulations to ensure personnel and property safety.

All personnel involved in the installation must attend safety education courses and pass corresponding safety examinations before installation. Only qualified personnel can attend the installation. Relevant personnel must be held responsible for any violation of the regulation.

1.2 Installation Key Points and Importance

VRF air conditioning systems use refrigerant, instead of other agent, to directly evaporate to carry out the system heat. High level of pipe cleanness and dryness is required in the system. Since various pipes need to be prepared and laid out onsite, carelessness or maloperation during installation may leave impurities, water, or dust inside refrigerant pipes. If the design fails to meet the requirement, various problems may occur in the system or even lead to system breakdown.

Problems that usually occur during installation are as follows:

No.	Installation Problem	Possible Consequence
1	Dust or impurities enter into the refrigeration system.	Pipes are more likely to be blocked; air conditioning performance is reduced; compressor wear is increased or even hinder the normal operation of the system and burn the compressor.
2	Nitrogen is not filled into the refrigerant pipe or insufficient Nitrogen is filled before welding.	Pipes are more likely to be blocked; air conditioning performance is reduced; compressor wear is increased or even hinder the normal operation of the system and burn the compressor.
3	The vacuum degree in the refrigerant pipe is insufficient.	The refrigeration performance is reduced. The system fails to keep normal operation due to frequent protection measures. When the problem getting serious, compressor and other major components can be damaged.
4	Water enters into the refrigeration system.	Copper plating may appear on the compressor and reduce the compressor efficiency with abnormal noise generated; failures may occur in the system due to ice plug.
5	The refrigerant pipe specifications do not meet the configuration requirements.	Smaller configuration specifications can increase the system pipe resistance and affect the cooling performance; larger configuration specifications are waste of materials and can also reduce the cooling performance.
6	Refrigerant pipe is blocked.	The cooling performance is reduced; in certain cases, it may cause long-term compressor operating under overheat conditions; the lubricating effect can be affected and the compressor may be burnt if impurities were mixed with the lubricating oil.
7	Refrigerant pipe exceeds the limit.	The loss in pipe is considerable and the unit energy efficiency decreases, which are harmful for long-term running of the system.
8	Incorrect amount of refrigerant is filled.	The system cannot correctly control the flow allocation; the compressor may be operating under over-heating environment or running when the refrigerant flows back to the compressor.
9	The refrigerant pipe leaks.	Insufficient refrigerant circulating in the system decreases the cooling performance of the air conditioner. Long-term operation under such circumstance may cause an overheating compressor or even damage the compressor.
10	Water drainage from the condensate water pipe is not smooth.	Residual water in IDUs can affect the normal operation of the system. The possible water leakage can damage the IDU's decoration.

11	The ratio of slop for condensate water pipe is insufficient or the condensate water pipe is incorrectly connected.	Reverse slop or inconsistent connection of condensate water pipe can hinder the smooth drainage and cause leakage of the IDU.
12	The air channel is improperly fixed.	The air channel will deform; vibration and noise occur during unit operating.
13	The guide vane of air channel is not reasonably manufactured.	Uneven air quantity allocation reduces the overall performance of the air conditioner.
14	The refrigerant pipe or condensate water pipe does not meet the insulation requirement.	Water can easily condensate and drip to damage the indoor decoration, or even trigger the protection mode of system due to overheating operation.
15	The installation space for IDU is insufficient.	Since there is a lack of space for maintenance and checking, indoor decoration might need to be damaged during such operation.
16	The IDU or the location of the air outlet or return air inlet is not designed reasonably.	The air outlet or return air inlet may be short-circuited, thus affecting the air conditioning performance.
17	The ODU is improperly installed.	The ODU is difficult to be maintained; unit exhaust is not smooth, which reduces the heat exchanging performance or even prevent the system from normal operation; in addition, the cold and hot air for heat exchange and the noise may annoy people in surrounding areas.
18	Power cables are incorrectly provided.	Unit components may be damaged and potential safety hazard may occur.
19	Control communication cables are incorrectly provided or improperly connected.	The normal communication in the system fails or the control over IDUs and ODUs turn in a mess.
20	Control communication cables are not properly protected.	The communication cables are short-circuited or disconnected, and the unit cannot be started up due to communication failure.

Understand the special requirement (if any) for unit installation before implementation to ensure installation quality. Relevant installers must have corresponding engineering construction qualifications.

Special type operators involved in the engineering implementation, such as welders, electricians, and refrigeration mechanics must have relevant operating licenses and are accredited with vocational qualification certification.

2 Installation Materials Selection

The materials, equipment and instruments used during air conditioning engineering construction must have certifications and test reports. Products with fireproof requirements must be provided with fireproof inspection certificates and must meet national and relevant compulsory standards. If environmentally-friendly materials are to be used as required by customers, all such materials must meet national environmental protection requirement and be provided with relevant certificates.

2.1 Refrigerant Piping

(1) Material requirement: Dephosphorization drawing copper pipe for air conditioners;

(2) Appearance requirement: The inner and outer surface of pipe should be smooth without pinhole, crack, peeling, blister, inclusion, copper powder, carbon deposition, rust, dirt or severe oxide film, and without obvious scratch, pit, spot and other defects.

(3) Test report: Certifications and quality test reports must be provided.

(4) The tensile strength must be at least 240 kgf/mm^2.

(5) Specifications requirement

R410A Refrigerant System		
OD (mm/in.)	Wall Thickness (mm)	Model
Φ6.35(1/4)	≥0.8	O
Φ9.52(3/8)	≥0.8	O
Φ12.70(1/2)	≥0.8	O
Φ15.9(5/8)	≥1.0	O
Φ19.05(3/4)	≥1.0	O

(6) After the inner part of the copper pipe is cleaned and dried, the inlet and outlet must be sealed tightly by using pipe caps, plugs or adhesive tapes.

2.2 Condensate Water Pipe

(1) Pipes that can be used for air conditioner drainage include: water supplying UPVC pipe, PP-R pipe, PP-C pipe, and HDG steel pipe;

(2) All relevant certificates and quality test reports are provided.

(3) Requirements for specifications and wall thickness.

Water supplying UPVC pipe:

Φ32mm×2mm , Φ40mm×2mm, Φ50mm×2.5mm.

HDG steel pipe:

Φ25mm×3.25mm, Φ32mm×3.25mm.

Φ40mm×3.5mm, Φ50mm×3.5mm.

2.3 Insulation Material

(1) Rubber foam insulation material;

(2) Flame retardancy level: B1 or higher;

(3) Refractoriness: at least 120℃ (248℉);

(4) The insulation thickness of condensate water pipe: at least 10mm (3/8in.);

(5) When the diameter of copper pipe is equal to or greater than Φ15.9mm(5/8in.), the thickness of insulation material should be at least 20mm(3/4in.); when the diameter of copper pipe is less than 15.9mm(5/8in.), the thickness of insulation material should be at least 15 mm(5/8in.).

2.4 Communication Cable and Control Cable

NOTICE! For air conditioning units installed in places with strong electromagnetic interference, shielded wire must be used as the communication cables of the IDU and wired controller, and shielded twisted pairs must be used as the communication cables between IDUs and between the IDU and ODU.

Communication cable selection for ODU and IDUs

Material Type	Total Length L (m) of Communication Cable between Indoor Unit and Indoor (Outdoor) Unit	Wire size (mm^2/AWG)	Material Standard	Remarks
Light/Ordinary polyvinyl chloride sheathed cord. (60227 IEC 52 /60227 IEC 53)	L≤1000m（3280-5/6ft）	≥ 2×0.75(2×AWG 18)	IEC 60227-5	1. If the wire diameter is enlarged to 2×1 mm^2, the total communication line length can reach 1500 m. 2. The cord shall be Circular cord (the cores shall be twisted together). 3. If unit is installed in places with intense magnetic field or strong interference, it is necessary to use shielded wire.

Communication cable selection for IDU and wired controller

Material type	Total length of communication line between indoor unit and wired controller	Wire size(mm^2/AWG)	Material Standard	Remarks
Light/Ordinary polyvinyl chloride sheathed cord. (60227 IEC 52 /60227 IEC 53)	L≤250m(820-1/5ft)	2×0.75~2×1.25 (2×AWG18~2×AWG16)	IEC 60227-5	①. Total length of communication line can't exceed 250m. ②. The cord shall be Circular cord (the cores shall be twisted together). ③. If unit is installed in places with intense magnetic field or strong interference, it is necessary to use shielded wire.

2.5 Power Cable

Only copper conductors can be used as power cables. The copper conductors must meet relevant national standard and satisfy the carrying capacity of unit.

2.6 Hanger Rod and Support

(1) Hanger rod: M8 or M10;

(2) U-steel: 14# or above;

(3) Angle steel: 30mm (1-1/6in.)×30mm (1-1/6in.)×3mm (1/8in.) or above;

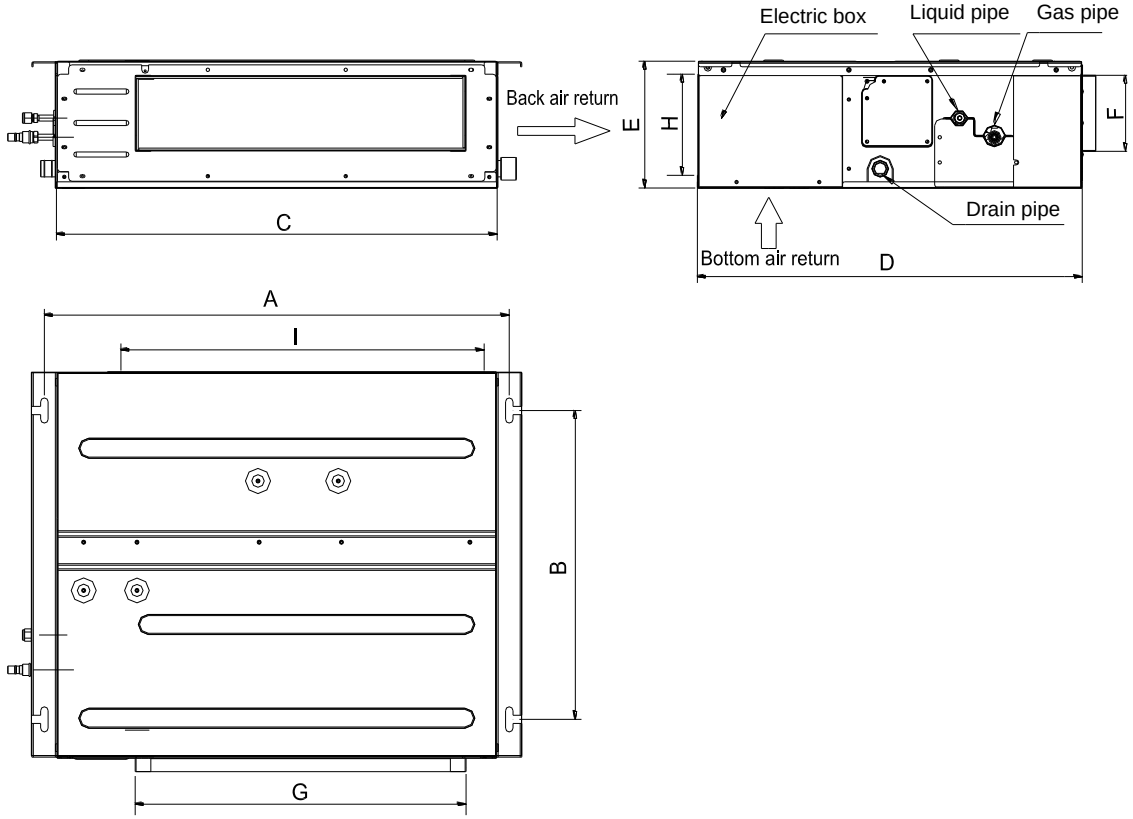
(4) Round steel: Φ10mm (4/10in.) or above

3 Installation of Indoor Unit

3.1 Installation of Low Static Pressure Duct Type Indoor Unit

3.1.1 Outline and Installation Dimension

The following diagram is applicable for units with the cooling capacity ranging from 7k Btu/h to 22kBtu/h.



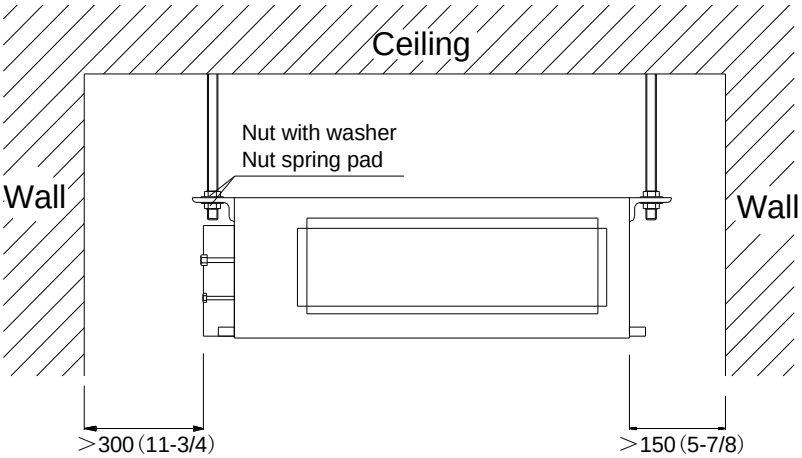
The following table lists the detailed dimensions.

Unit: mm（in.）

Item / Model	A	B	C	D	E	F	G	H	I
GMV-ND07PLS/A-T(U) GMV-ND09PLS/A-T(U) GMV-ND12PLS/A-T(U)	742 (29 3/16)	491 (19 5/16)	700 (27-1/2)	615 (24-1/4)	200 (7-7/8)	121 (4-3/4)	528 (20-13/16)	161 (6-5/16)	580 (22-13/16)
GMV-ND14PLS/A-T(U)	942 (37-1/16)	491 (19-5/16)	900 (35-3/8)	615 (24-1/4)	200 (7-7/8)	121 (4-3/4)	728 (28-11/16)	161 (6-5/16)	780 (30-11/16)
GMV-ND18PLS/A-T(U) GMV-ND22PLS/A-T(U)	1142 (44-15/16)	491 (19-5/16)	1100 (43-1/4)	615 (24-1/4)	200 (7-7/8)	121 (4-3/4)	928 (36--9/16)	161 (6-5/16)	980 (38-9/16)

3.1.2 Installation Space

Unit: mm（in.）



3.1.3 Installation Notice

(1) Installation dimension (refer to the outline dimension in the figure)

(2) Installation foundation

Make sure the top hanging rod, ceiling and building structure have sufficient strength to withstand the weight of unit.

(3) Installation site and environment

Keep the unit from insolation and rain;

Keep the unit from fire, flammable objects, corrosive gap or exhaust gas;

Please reserve ventilation space;

Please reserve sufficient space for maintenance;

Please take proper measures to reduce noise and vibration.

(4) Electrical installation of unit

All electrical installation must be done by professionals according to national and local laws and regulations.

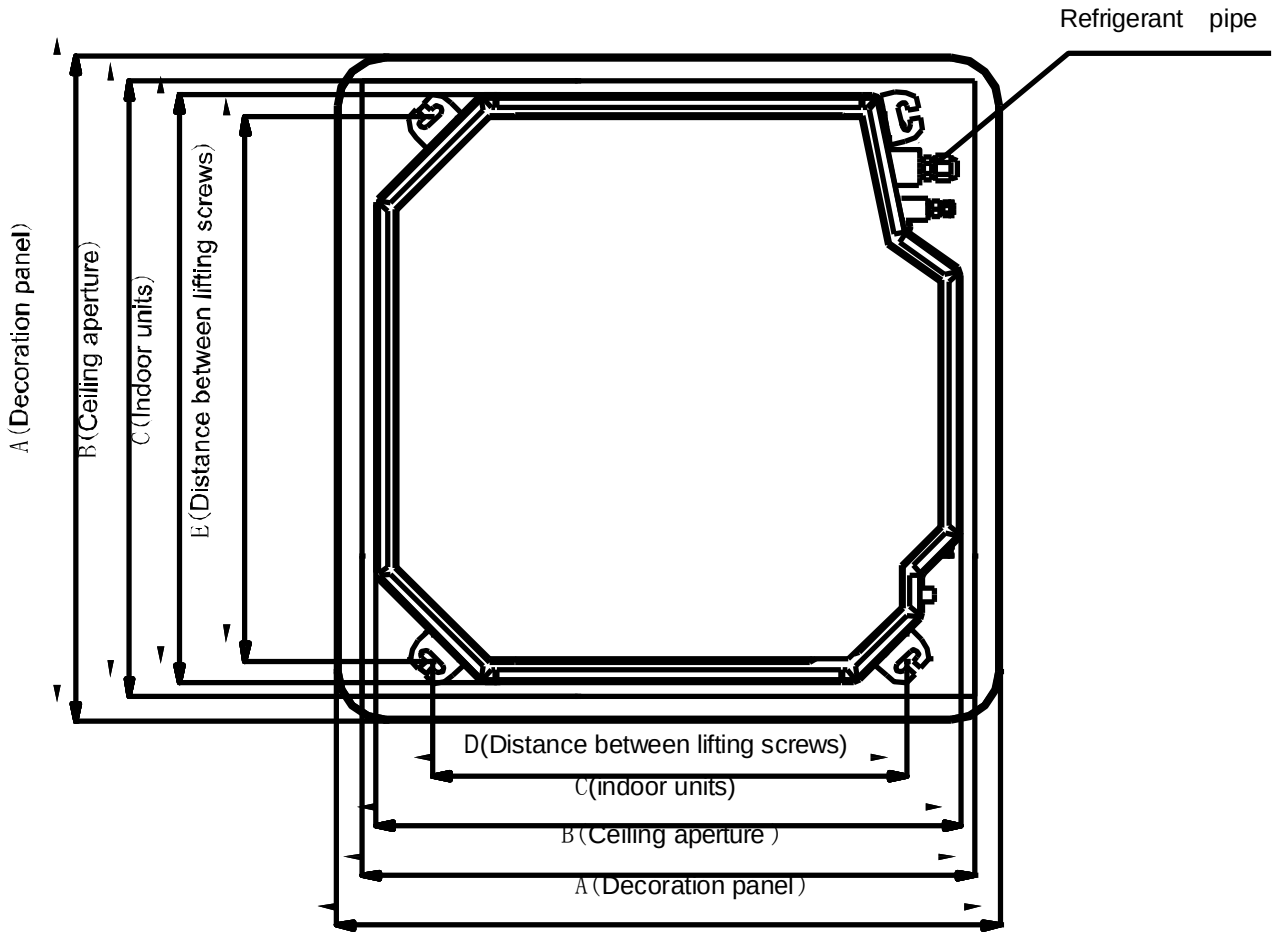
The unit must be grounded reliably. Please connect wire according to the wiring diagram on the unit.

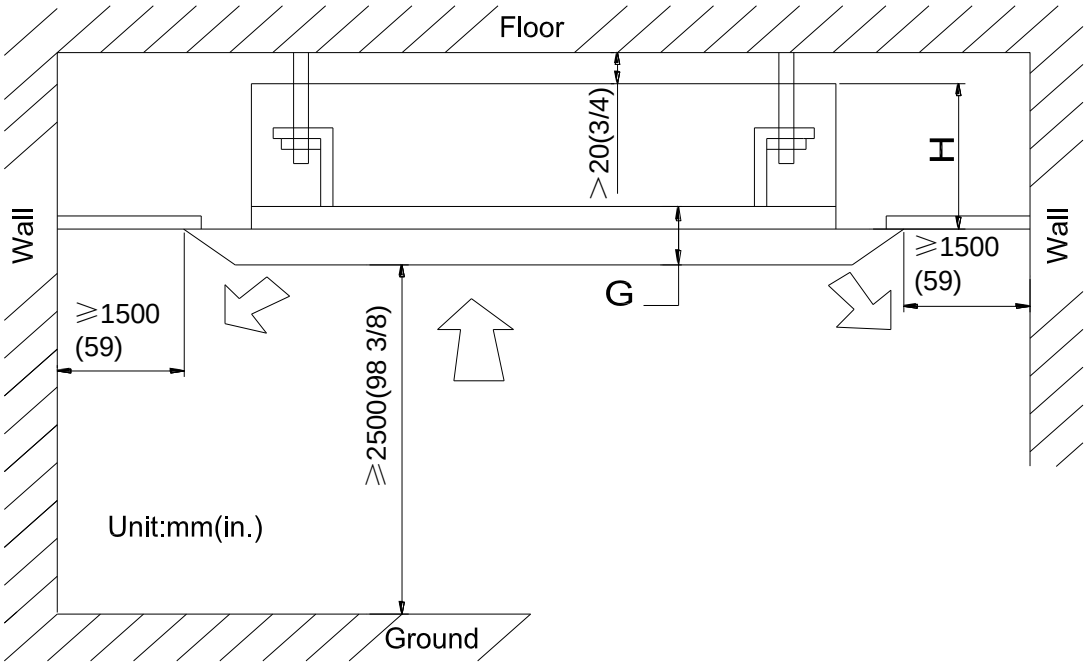
3.1.4 Selection of Air Switch and Power Cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-ND07PLS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND09PLS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND12PLS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND14PLS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND18PLS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND22PLS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18

3.2 Installation of Four-way Cassette Type Indoor Unit

3.2.1 Requirements for External Dimensions and Installation and Maintenance Spaces





Unit: mm (in.)

Model	A	B	C	D	E	G	H
GMV-ND07T/A-T(U)	950 （37-3/8）	890 （35）	840 （33）	680 （26-3/4）	780 （30-3/4）	65 （2-1/2）	210 （8-1/4）
GMV-ND09T/A-T(U) GMV-ND12T/A-T(U) GMV-ND15T/A-T(U) GMV-ND18T/A-T(U) GMV-ND24T/A-T(U)	950 （37-3/8）	890 （35）	840 （33）	680 （26-3/4）	780 （30-3/4）	65 （2-1/2）	260 （10-1/4）
GMV-ND30T/A-T(U) GMV-ND36T/A-T(U) GMV-ND42T/A-T(U) GMV-ND48T/A-T(U)	950 （37-3/8）	890 （35）	840 （33）	680 （26-3/4）	780 （30-3/4）	65 （2-1/2）	340 （13-3/8）

3.2.2 Installation Notice

◆This indoor unit may be installed on ceilings up to 3.5 m (137-3/4in.) in height(for 30~48k units:4.0m(157-1/2in.)). Install then unit higher than 2.5 m (98-3/8in.) to avoid accidental touching.

◆The unit shall be installed by the professional personnel according to this installation instruction to ensure proper use.

◆Please contact the local Gree appointed service center before installation. Any malfunctioncaused by the unit that is not installed by the Gree appointed service center would probably not be dealt with on time because of the inconvenience of the business contact.

◆It should be guided under the professional personnel when the air conditioner unit is moved to other place.

◆The unit shall be installed in accordance with national standards or local regulations.

◆Only qualified personnel can carry out installation work, please contact with local dealer before installation.

◆Make sure all the installation work completed before energizing.

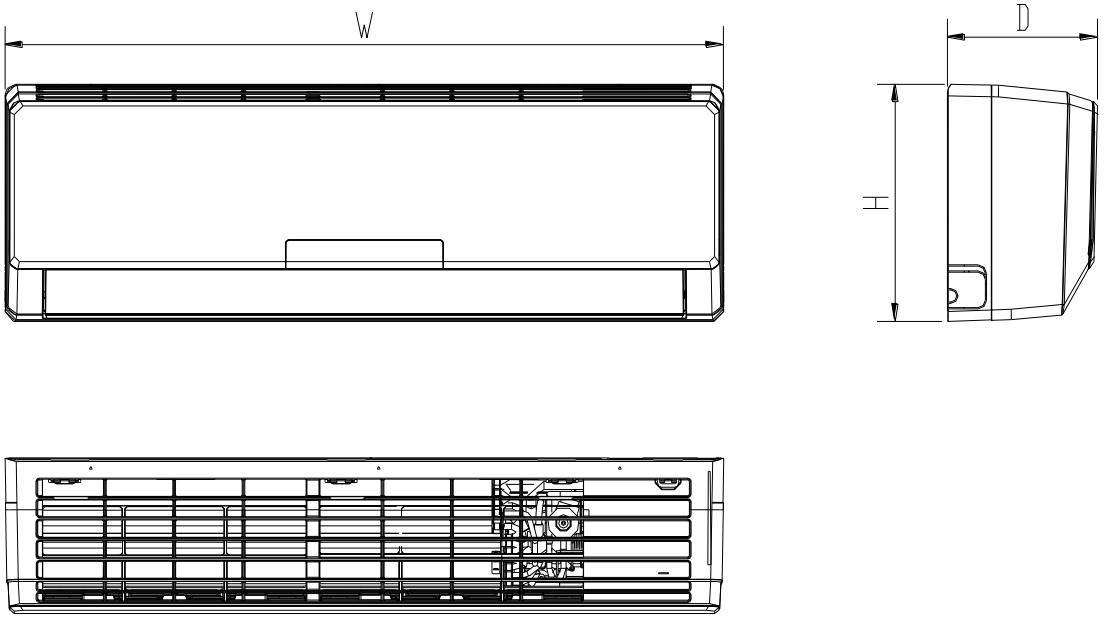
◆The appliances are not accessible to general public.

3.2.3 Selection of Air Switch and Power Cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-ND07T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND09T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND12T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND15T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND18T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND24T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND30T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND36T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND42T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND48T/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18

3.3 Installation of Wall-mounted Indoor Unit

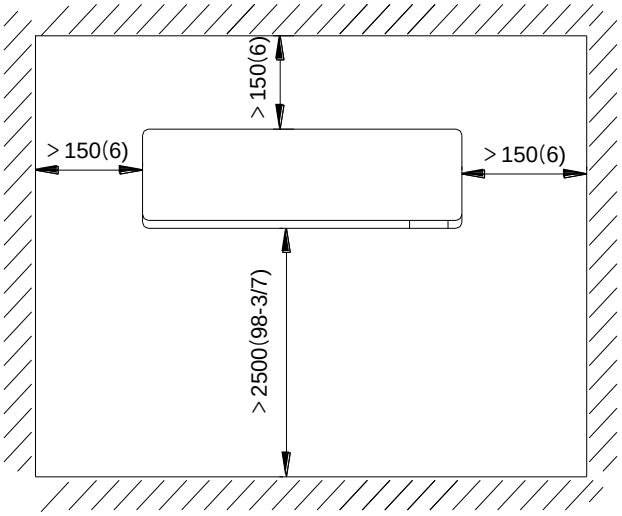
3.3.1 Outline and Installation Dimension

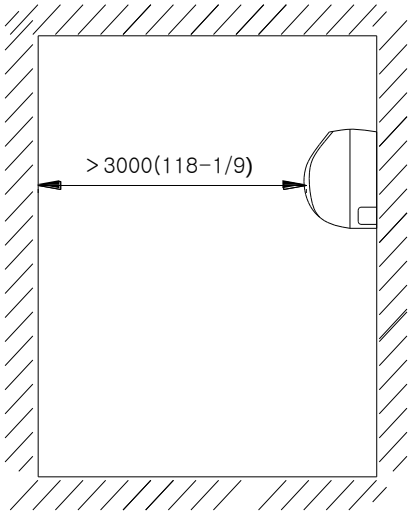


Unit: mm (in.)

Model	W	H	D
GMV-N07G/A3A-D(U) GMV-N09G/A3A-D(U)	843 (33-1/5)	275 (10-5/6)	180 (7)
GMV-N12G/A3A-D(U) GMV-N18G/A3A-D(U)	940 (37)	298 (11-3/4)	200 (7-7/8)
GMV-N24G/A3A-D(U)	1008 (39-2/3)	319 (12-5/9)	221 (8-5/7)

3.3.2 Installation Space





3.3.3 Installation Notice

(1) Installation dimension (refer to the outline dimension in the figure shown above)

(2) Installation foundation

Make sure the top hanger has sufficient strength to withstand the weight of unit.

(3) Installation site and environment

Keep the unit from insolation and rain;

Water can be drained from drainage pipe conveniently;

Keep the unit from fire, flammable objects, corrosive gap or exhaust gas;

There can't be any obstacle at air inlet and air outlet to in order to keep good ventilation;

Please reserve sufficient space for maintenance;

Please take proper measures to reduce noise and vibration.

3.3.4 Electrical Installation of Unit

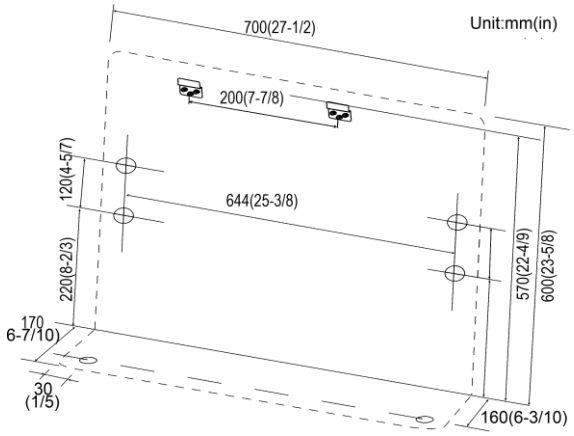
All electrical installation must be done by professionals according to national and local laws and regulations.

The unit must be grounded reliably according to related requirements.

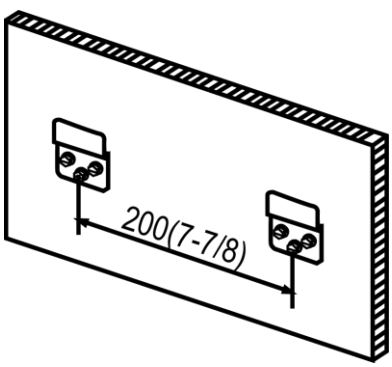
Please connect wire according to the wiring diagram on the unit.

3.4 Installation of Console Type Indoor Unit

3.4.1 Outline and Installation Dimension

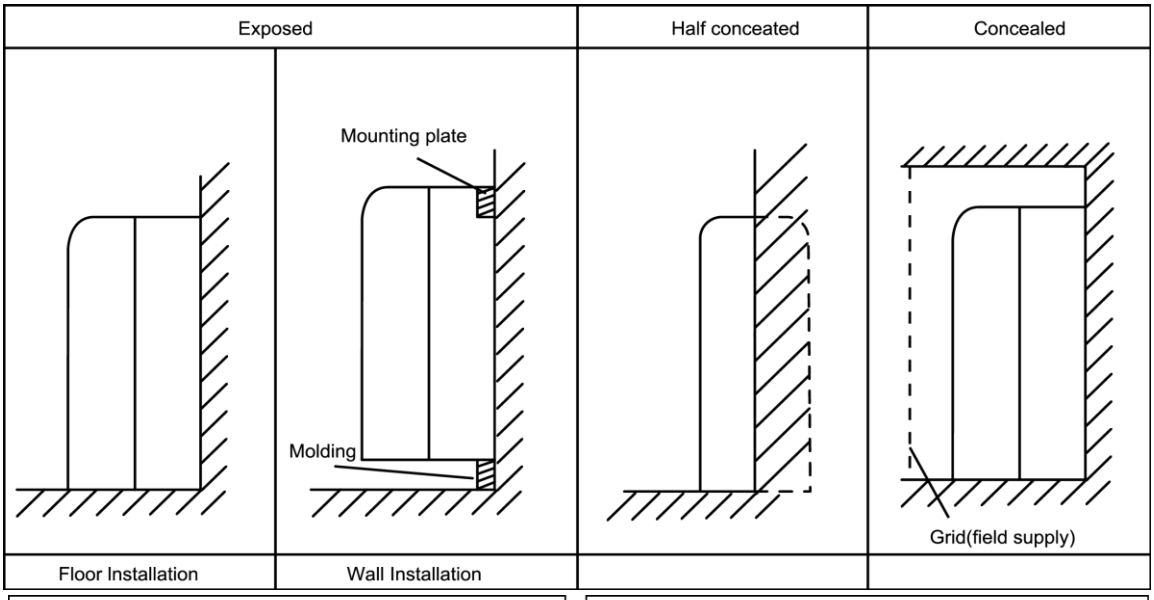


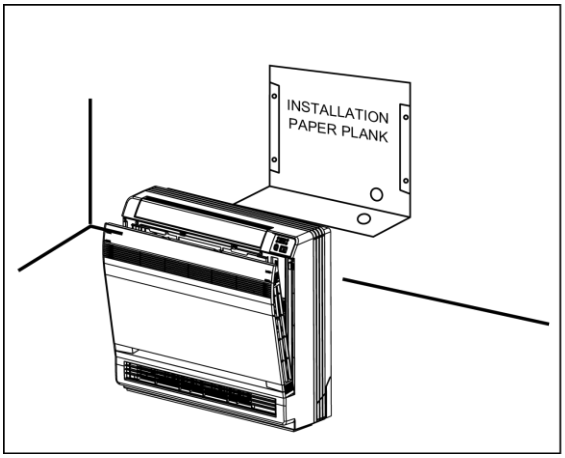
Location for securing the installation pane

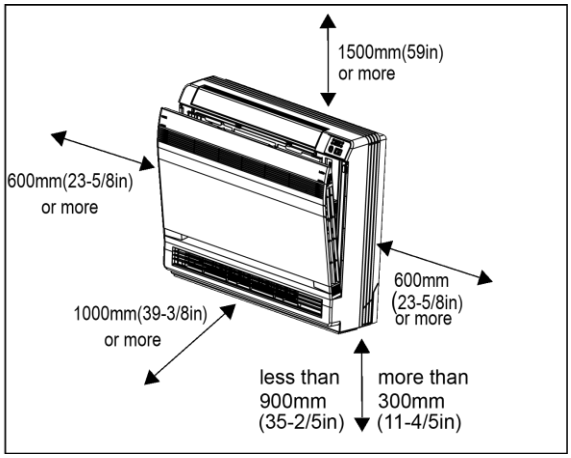


Schematic drawing of hooks

3.4.2 Installation Space







3.4.3 Installation Notice

(1) Installation dimension (refer to the outline dimension in the figure)

(2) Installation foundation

Make sure building structure have sufficient strength to withstand the weight of unit.

(3) Installation site and environment

Keep the unit from insolation and rain;

Keep the unit from fire, flammable objects, corrosive gap or exhaust gas;

Please reserve ventilation space;

Please reserve sufficient space for maintenance;

Please take proper measures to reduce noise and vibration.

(4) Electrical installation of unit

All electrical installation must be done by professionals according to national and local laws and regulations.

The unit must be grounded reliably. Please connect wire according to the wiring diagram on the unit.

3.4.4 Electrical Installation of Unit

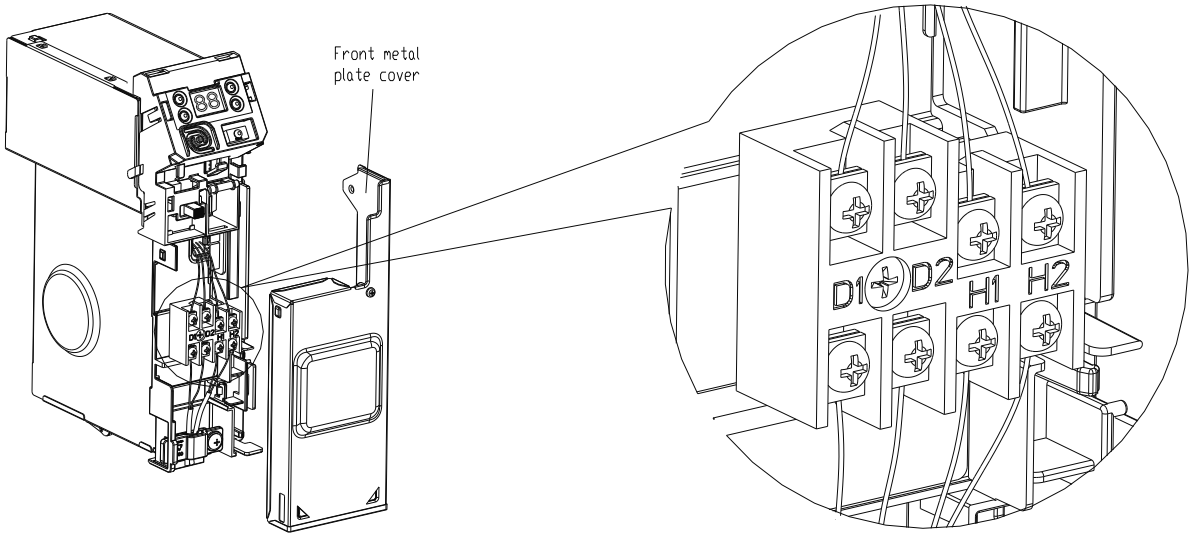
Live the sensor securing plate, remove the front metal plate cover, and connect the wire to the therminal board.

(1) Open the cover of electric box of indoor unit.

(2) Lead the communication line across the rubber ring.

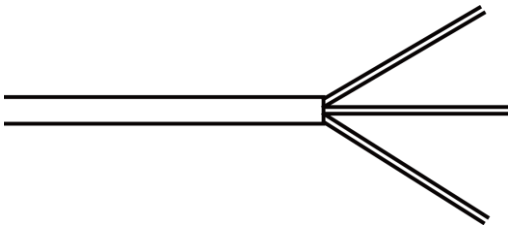
(3) Connect the communication line to terminal D1 and D2 on the wiring board of indoor unit.

(4) Secure the communication line with the wire clamp on the electric box. Pull wires to make sure that they are securely latches up, then retain wires with wire retainer.



⚠WARNING
①. The power of every indoor unit should be unity power supply.
②. Do not use tapped wires, stranded wires, extensioncords, or starburst connections, as they may cause overheating, electrical shock, or fire.
③. Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc, from the terminal block.) Doing so may cause electric shock or fire.)

(1) The power connection cord have been inserted on the mainboard through the piping hole of the chassis.Please connect the power connection cord with the breaker. If the power cord is not long enough, please prolong it with terminal block.



(2) Reinstall the wiring cover on the original place and tighten the bolt;

(3) Recover the surface panel.

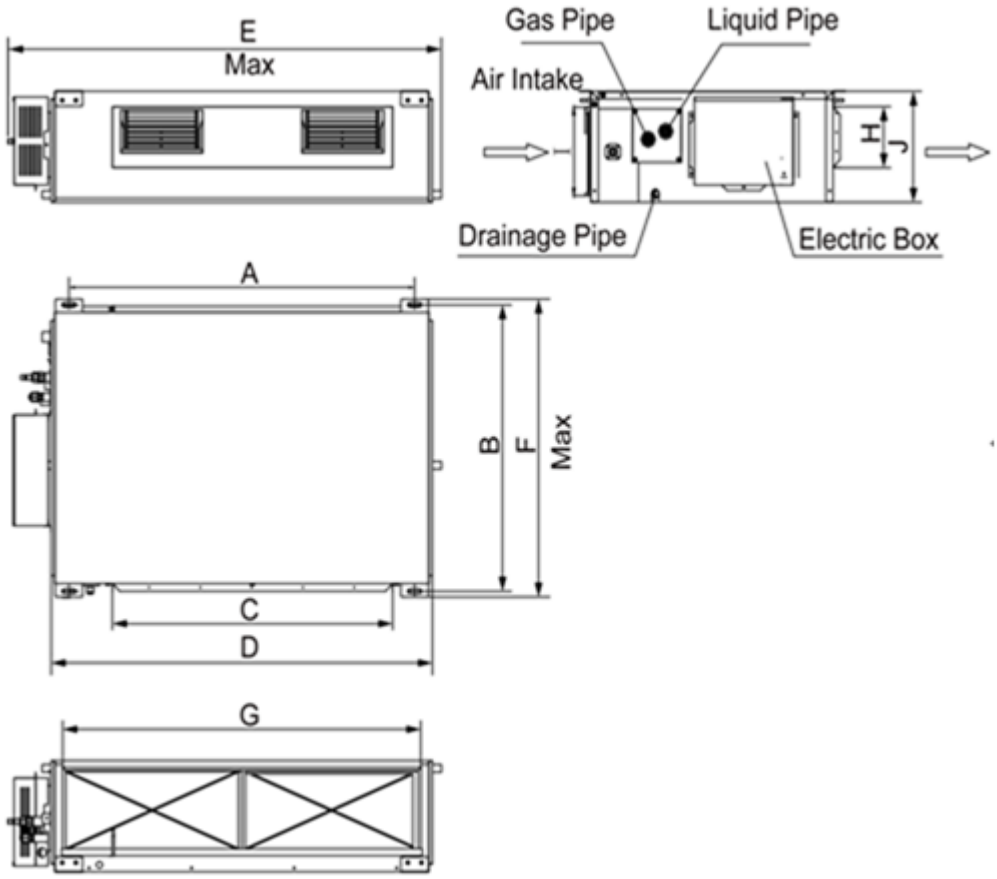
3.4.5 Selection of Air Switch

Mode	Power Supply Specification	Circuit Breaker Capacity/A
GMV-ND07C/A-T(U)	208-230V~60Hz	6
GMV-ND09C/A-T(U)	208-230V~60Hz	6
GMV-ND12C/A-T(U)	208-230V~60Hz	6
GMV-ND18C/A-T(U)	208-230V~60Hz	6

3.5 Installation of High Static Pressure Duct Type Indoor Uint

3.5.1 Outline and Installation Dimension

The following diagram is applicable for units with the cooling capacity ranging from 18 kBtu/h to 48 kBtu/h.

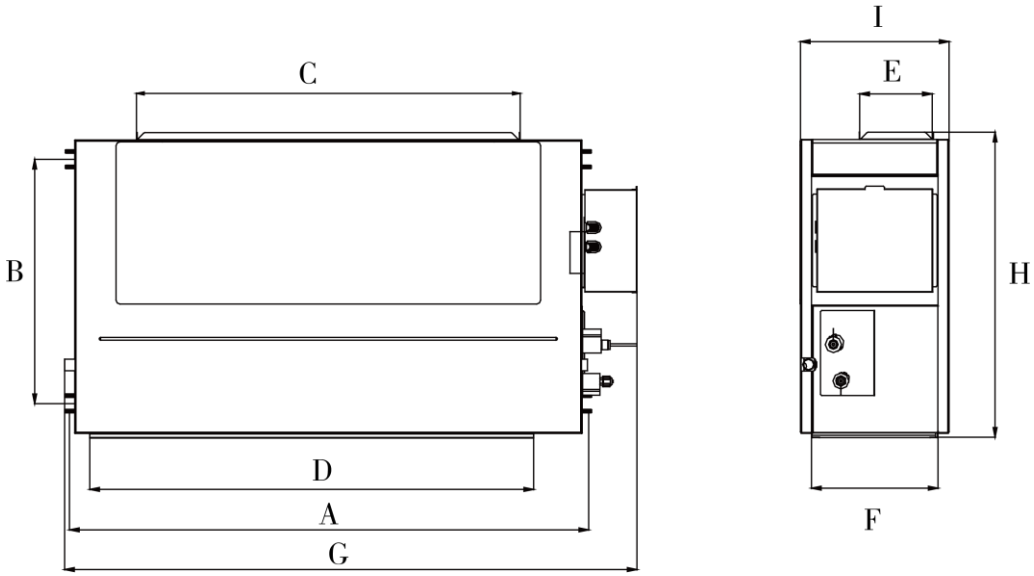


Below are dimensions of A, B, C, etc. for different models:

Unit: mm (in.)

Model	A	B	C	D	E	F	G	H	I	J
GMV-ND18PHS/A-T(U)	1101 (43-3/8)	517 (20-3/8)	820 (32-1/4)	1159 (45-5/8)	1271 (50)	558 (22)	1002 (39-1/2)	160 (6-1/4)	235 (9-1/4)	268 (10-1/2)
GMV-ND24PHS/A-T(U)										
GMV-ND30PHS/A-T(U)	1011 (39-3/4)	748 (29-1/2)	820 (32-1/4)	1115 (43-7/8)	1229 (48-3/8)	775 (30-1/2)	979 (38-1/2)	160 (6-1/4)	231 (9-1/8)	290 (11-3/8)
GMV-ND36PHS/A-T(U)										
GMV-ND42PHS/A-T(U)										
GMV-ND48PHS/A-T(U)										

The following diagram is applicable for units with the cooling capacity 72、 96 kBtu/h.



Below are dimensions of A, B, C, etc. for different models:

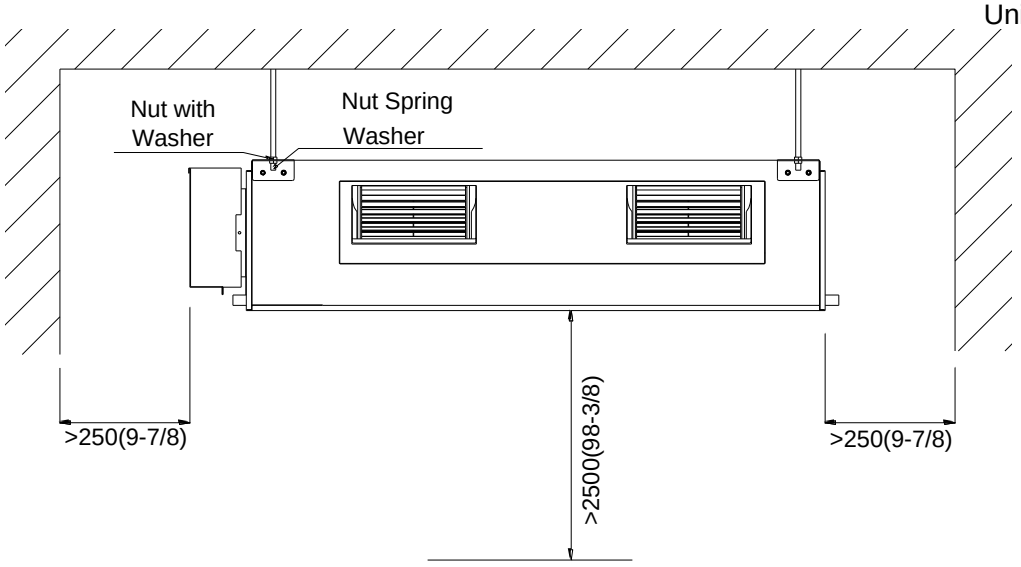
Unit: mm (in.)

Model	A	B	C	D	E	F	G	H	I
GMV-ND72H/A-T(U)	1353 (53-1/4)	632 (24-7/8)	992 (39)	1150 (45-1/4)	192 (7-1/2)	327 (12-7/8)	1483 (58-3/8)	791 (31-1/8)	385 (15-3/16)
GMV-ND96PH/A-T(U)	1563 (61-1/8)	706 (27-3/4)	992 (39)	1350 (53-1/8)	192 (7-1/2)	402 (15-7/8)	1686 （66-3/8）	870 （34-1/4）	450 （17-3/4）

3.5.2 Installation Space

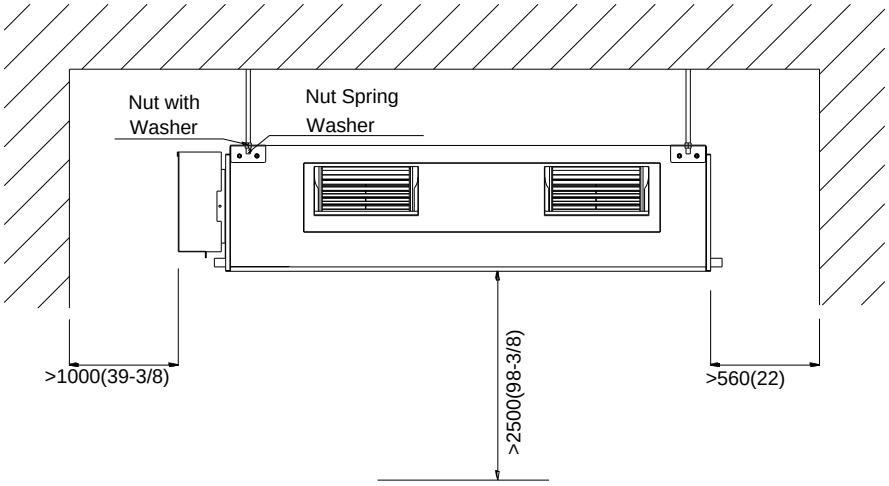
Model：GMV-ND18PHS/A-T(U)~ GMV-ND48PHS/A-T(U)

Unit: mm (in.)



Model：GMV-ND72PH/A-T(U)、GMV-ND96PH/A-T(U)

Unit: mm (in.)



3.5.3 Installation Notice

◆The unit shall be installed by the professional personnel according to this installation instruction to ensure proper use.

◆Please contact the local Gree appointed service center before installation. Any malfunctioncaused by the unit that is not installed by the Gree appointed service center would probably not be dealt with on time because of the inconvenience of the business contact.

◆It should be guided under the professional personnel when the air conditioner unit is moved to other place.

◆Installation of the unit must be in accordance with National Electric Codes and local regulations.

◆Improper installation will affect unit's performance, so do not install the unit by yourself. Please contact local dealer to arrange professional technicians for the installation.

◆Do not connect power until all installation work is finished.

◆If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard

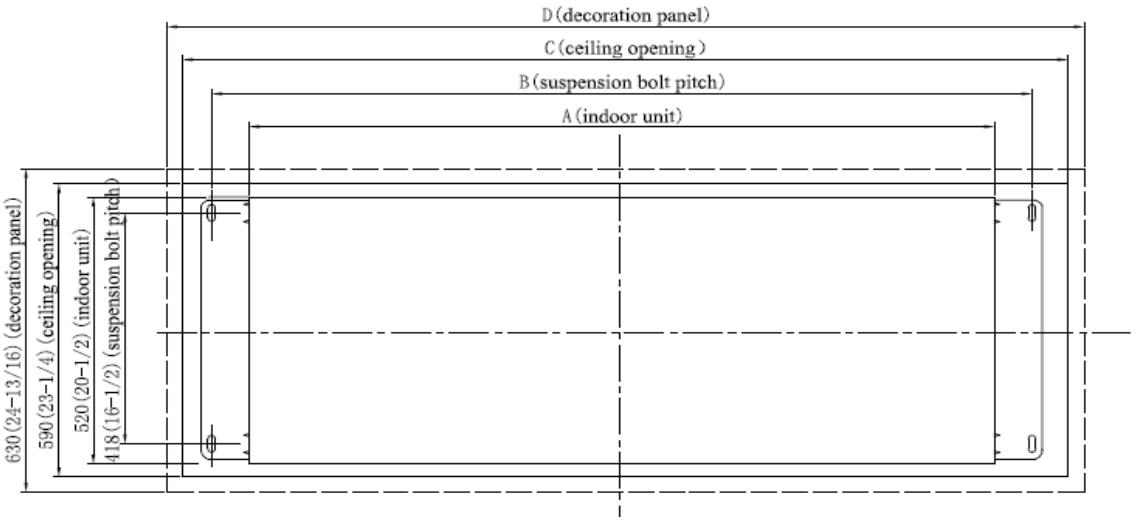
3.5.4 Selection of Air Switch and Power Cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-ND18PHS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND24PHS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND30PHS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND36PHS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND42PHS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND48PHS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND72PH/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND96PHS/A-T(U)	208/230V/60Hz	15	1.5/AWG18	1.5/AWG18

3.6 Installation of Two-way Cassette Type Indoor Uint

3.6.1 Outline and Installation Dimension

Unit: mm (in.)

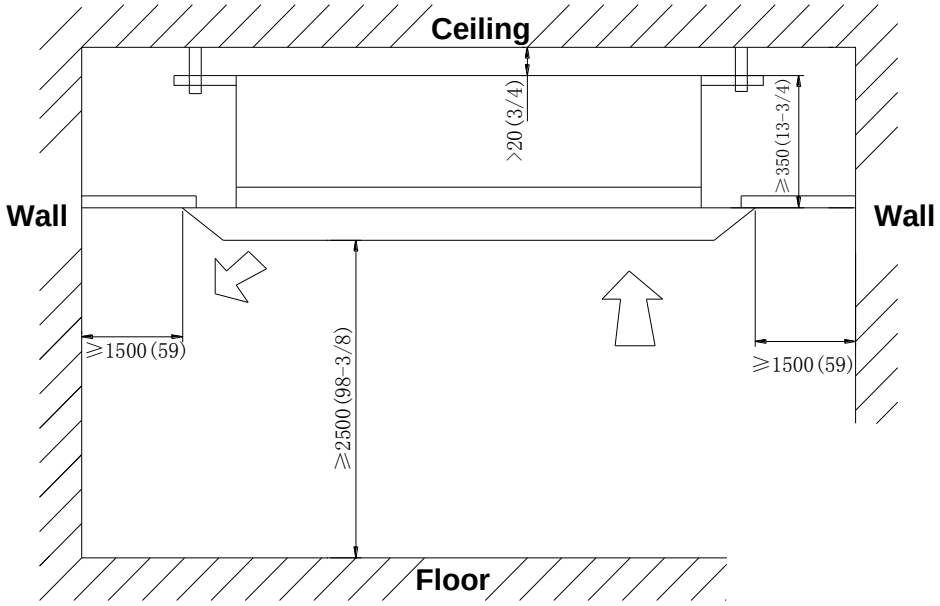


Unit: mm (in.)

Model	Indoor unit(A)	Suspension bolt pitch(B)	Ceiling opening(C)	Decoration panel(D)
GMV-ND09TS/A-T(U)	1200(47-1/4)	1252(49-5/16)	1403(55-1/4)	1443(56-13/16)
GMV-ND12TS/A-T(U) GMV-ND15TS/A-T(U)	1200(47-1/4)	1252(49-5/16)	1403(55-1/4)	1443(56-13/16)
GMV-ND18TS/A-T(U) GMV-ND24TS/A-T(U)	1200(47-1/4)	1252(49-5/16)	1403(55-1/4)	1443(56-13/16)

3.6.2 Installation Space

Unit: mm (in.)



3.6.3 Installation Notice

◆The unit shall be installed by the professional personnel according to this installation instruction to ensure proper use.

◆Please contact the local Gree appointed service center before installation. Any malfunctioncaused by the unit that is not installed by the Gree appointed service center would probably not be dealt with on time because of the inconvenience of the business contact.

◆It should be guided under the professional personnel when the air conditioner unit is moved to other place.

◆The unit shall be installed in accordance with national standards or local regulations.

◆Only qualified personnel can carry out installation work, please contact with local dealer before installation..

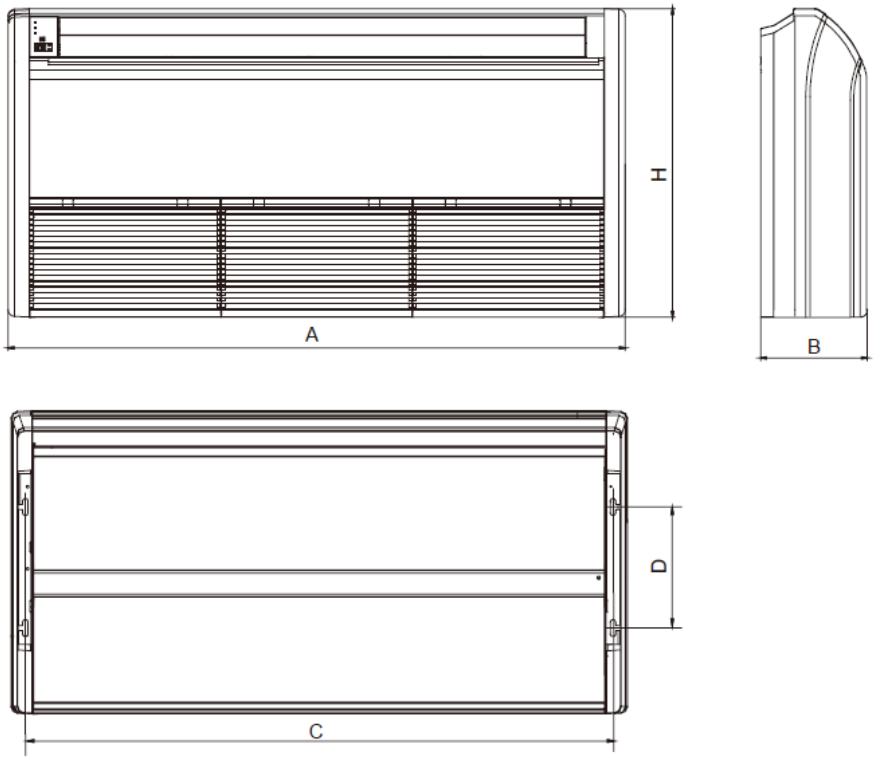
◆Make sure all the installation work completed before energizing.

3.6.4 Selection of Air Switch and Power Cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-ND09TS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND12TS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND15TS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND18TS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND24TS/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18

3.7 Installation of Floor Ceiling Type Indoor Uint

3.7.1 Outline and Installation Dimension



Below are dimensions of A, B, C, etc. for different models:

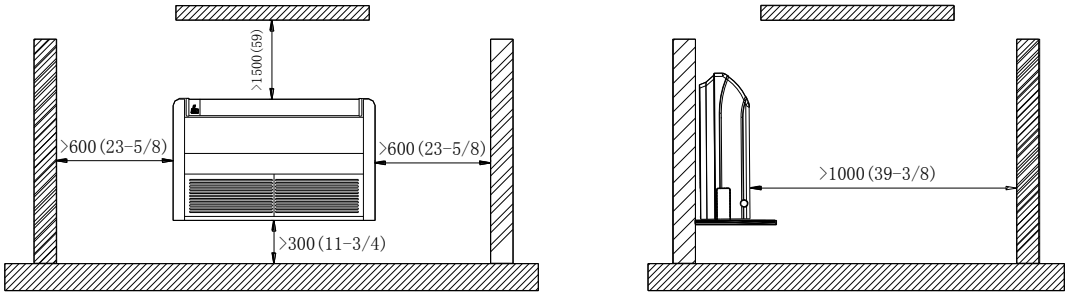
Unit: mm（in.）

Models	A	B	C	D	H
GMV-ND09ZD/A-T(U) GMV-ND12ZD/A-T(U) GMV-ND18ZD/A-T(U)	1220 （48）	225 （8-7/8）	1158 （45-5/8）	280 （11）	700 （27-9/16）
GMV-ND24ZD/A-T(U) GMV-ND30ZD/A-T(U)	1420 （56）	245 （9-5/8）	1354 （53-5/16）	280 （11）	700 （27-9/16）
GMV-ND36ZD/A-T(U) GMV-ND42ZD/A-T(U) GMV-ND48ZD/A-T(U)	1700 （66-15/16）	245 （9-5/8）	1634 （64-5/16）	280 （11）	700 （27-9/16）

3.7.2 Installation Space

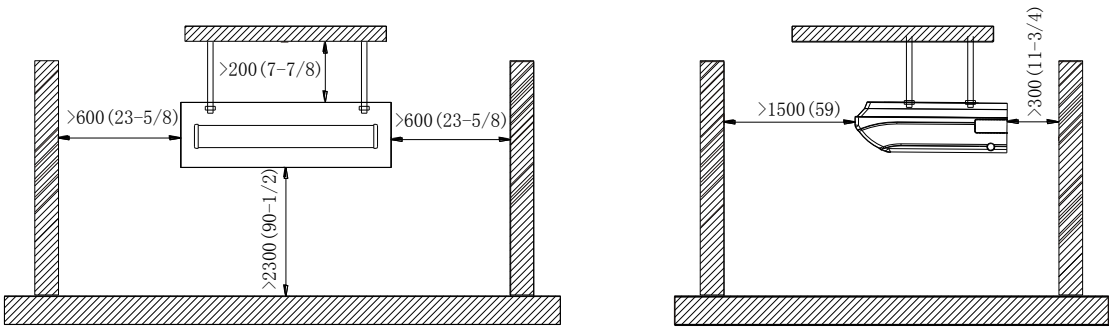
Floor type

Unit: mm(in.)



Ceiling type

Unit: mm(in.)



3.7.3 Installation Notice

◆The unit shall be installed by the professional personnel according to this installation instruction to ensure proper use.

◆Please contact the local Gree appointed service center before installation. Any malfunctioncaused by the unit that is not installed by the Gree appointed service center would probably not be dealt with on time because of the inconvenience of the business contact.

◆It should be guided under the professional personnel when the air conditioner unit is moved to other place.

◆The unit shall be installed in accordance with national standards or local regulations.

◆Only qualified personnel can carry out installation work, please contact with local dealer before installation.

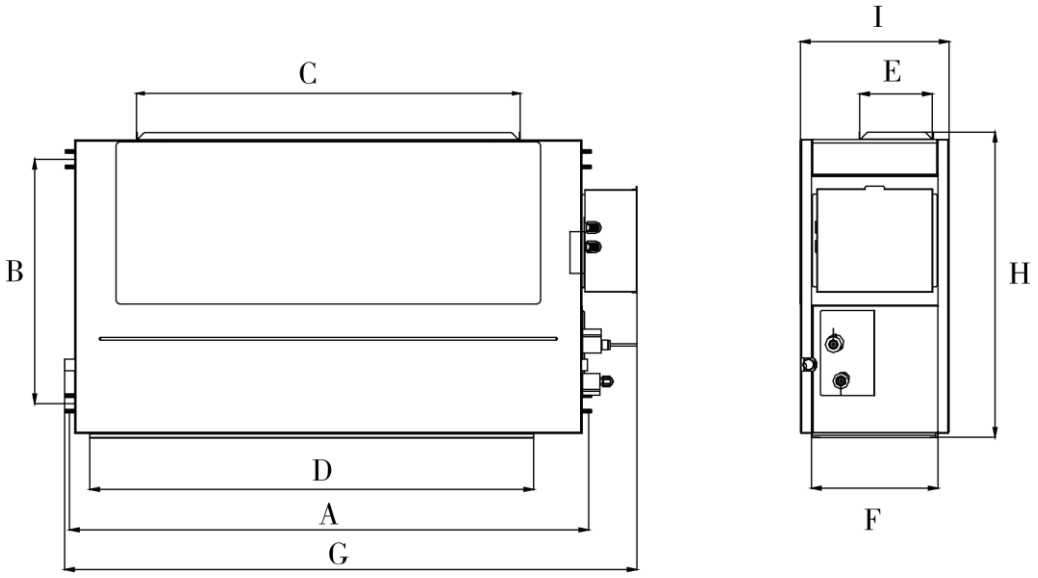
◆Make sure all the installation work completed before energizing.

3.7.4 Selection of Air Switch and Power Cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-ND09ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND12ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND18ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND24ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND30ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND36ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND42ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND48ZD/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18

3.8 Installation of Fresh Air Processing Indoor Unit

3.8.1 Outline and Installation Dimension

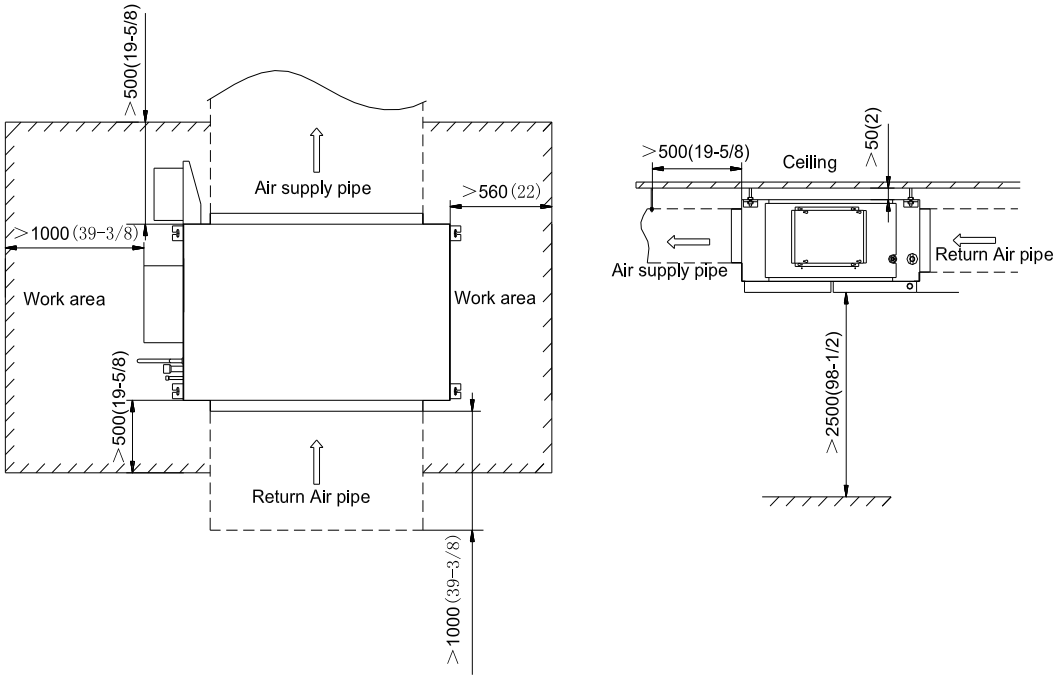


The table below lists the detailed dimensions.

Unit: mm(in.)

Item / Model	A	B	C	D	E	F	G	H	I
GMV-NDX72P/A-T(U)	1353 (53-1/4)	632 (24-7/8)	992 (39)	1150 (45-1/4)	192 (7-1/2)	327 (12-7/8)	1483 (58-3/8)	791 (31-1/8)	385 (15-3/16)
GMV-NDX96P/A-T(U)	1353 (53-1/4)	632 (24-7/8)	992 (39)	1150 (45-1/4)	192 (7-1/2)	327 (12-7/8)	1483 (58-3/8)	791 (31-1/8)	385 (15-3/16)

3.8.2 Installation Space



NOTICE!

①. Installation of the unit must be in accordance with National Electric Codes and local safety regulations.

②. Improper installation will affect unit's performance, so do not install the unit by yourself. Please contact local dealer to arrange professional technicians for the installation.

③. Do not connect power until all installation work is finished.

3.8.3 Installation Notice

◆The unit shall be installed by the professional personnel according to this installation instruction to ensure proper use.

◆Please contact the local Gree appointed service center before installation. Any malfunctioncaused by the unit that is not installed by the Gree appointed service center would probably not be dealt with on time because of the inconvenience of the business contact.

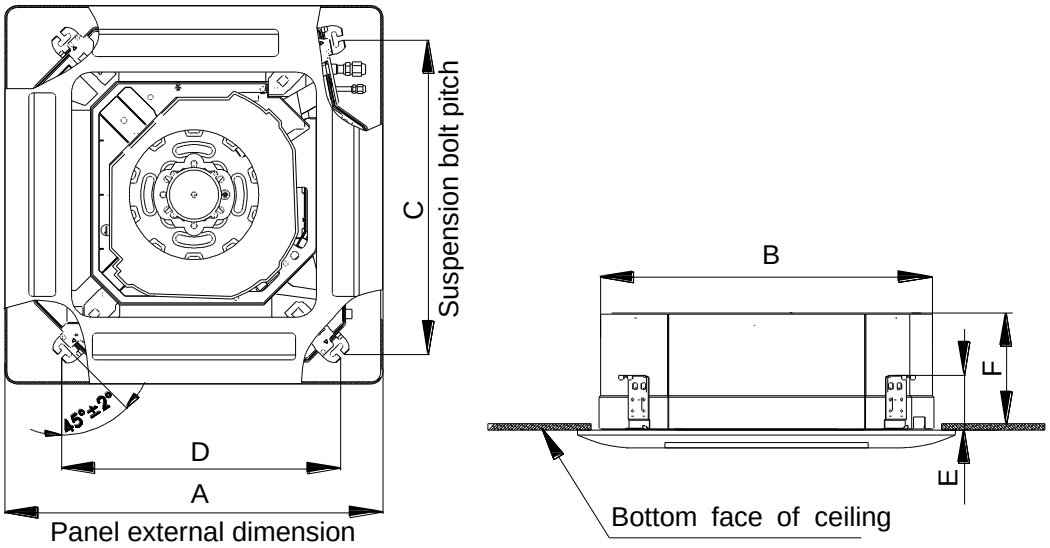
◆It should be guided under the professional personnel when the air conditioner unit is moved to other place.

3.8.4 Selection of Air Switch and Power Cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-NDX72P/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18
GMV-NDX96P/A-T(U)	208/230V/60Hz	15	1.0/AWG18	1.0/AWG18

3.9 Installation of Compact Four-way Cassette Type Indoor Unit

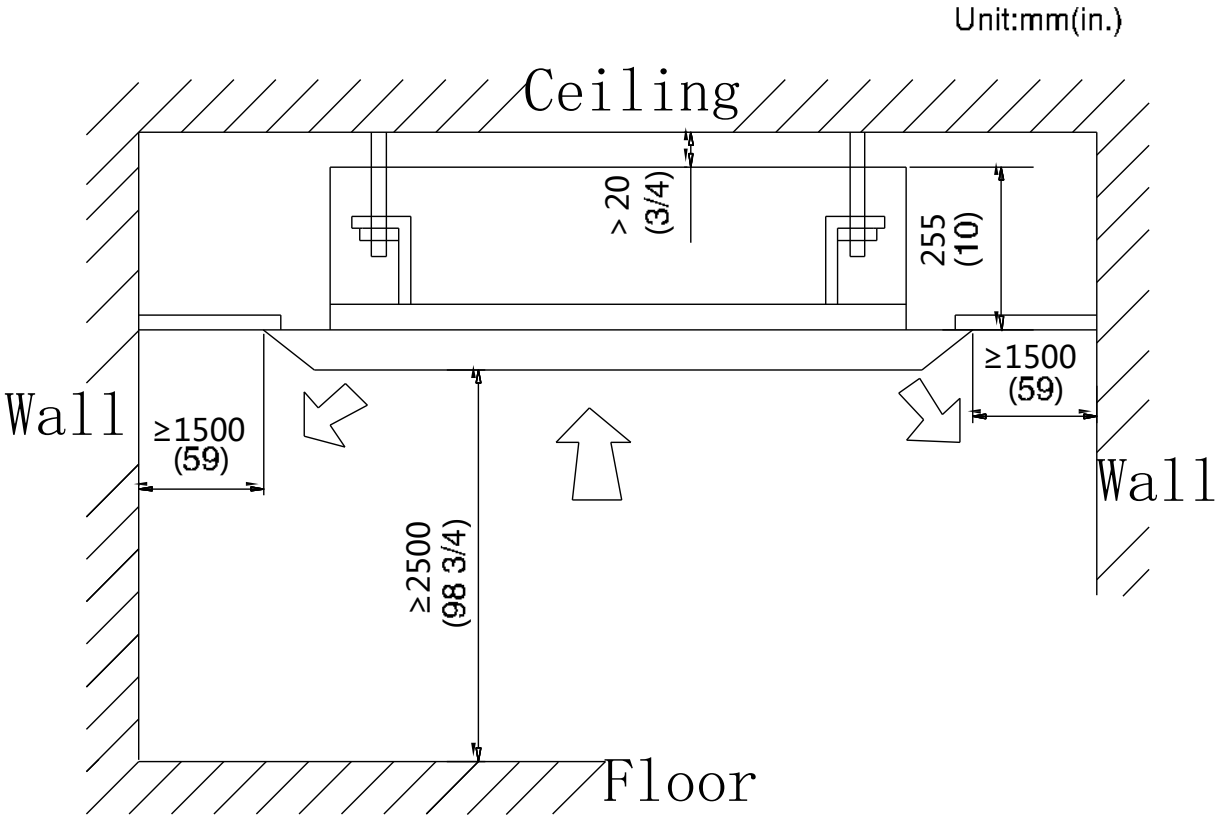
3.9.1 Outline and installation dimension



Unit: mm(in.)

Model	A	B	C	D	E	F
GMV-ND07T/B-T(U) GMV-ND09T/B-T(U) GMV-ND12T/B-T(U) GMV-ND15T/B-T(U) GMV-ND18T/B-T(U)	670 (26-3/8)	596 (23-1/2)	592 (23-5/16)	571 (22-1/2)	145 (5-11/16)	240 (9-1/2)

3.9.2 Installation space



3.9.3 Installation notice

◆The unit shall be installed by the professional personnel according to this installation instruction to ensure proper use.

◆Please contact the local Gree appointed service center before installation. Any malfunctioncaused by the unit that is not installed by the Gree appointed service center would probably not be dealt with on time because of the inconvenience of the business contact.

◆It should be guided under the professional personnel when the air conditioner unit is moved to other place.

◆The unit shall be installed in accordance with national standards or local regulations.

◆Only qualified personnel can carry out installation work, please contact with local dealer before installation.

◆Make sure all the installation work completed before energizing.

◆The appliances are not accessible to general public.

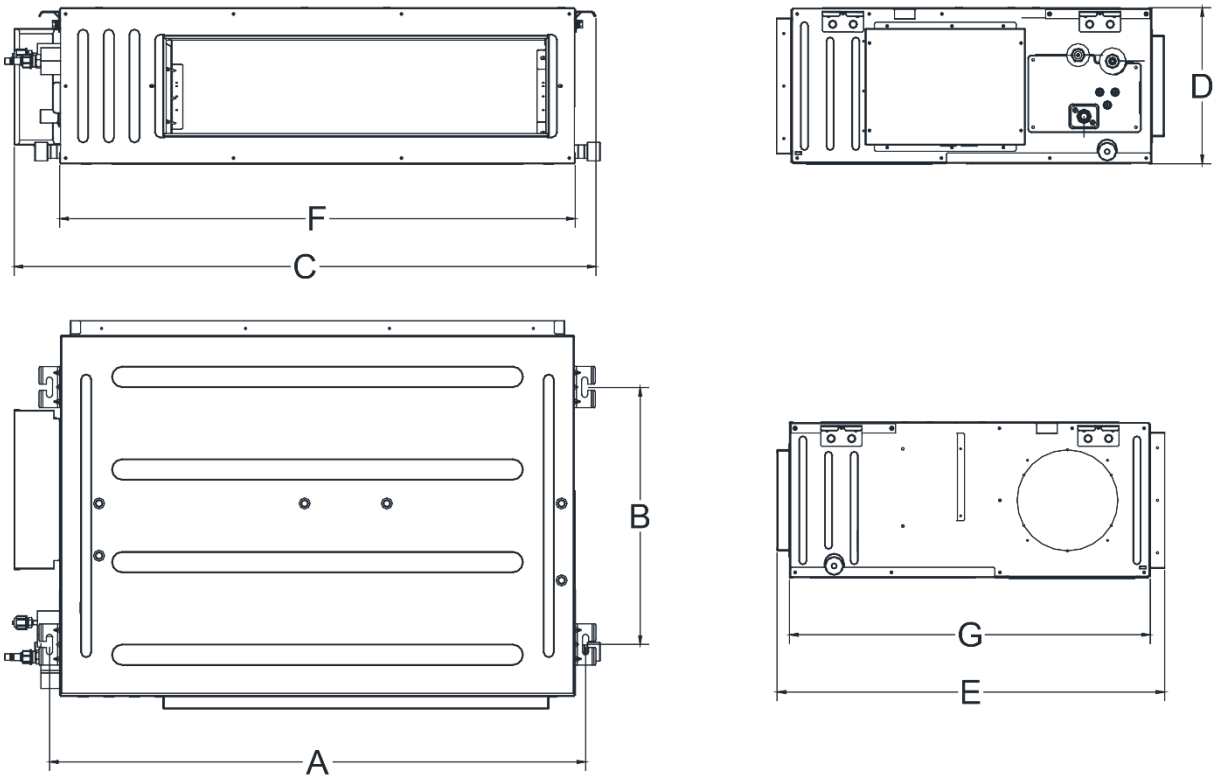
3.9.4 Selection of air switch and power cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (AWG)	Minimum Sectional Area of Power Cord (AWG)
GMV-ND07T/B-T(U)	208/230V~,60Hz	15	AWG18	AWG18
GMV-ND09T/B-T(U)	208/230V~,60Hz	15	AWG18	AWG18

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (AWG)	Minimum Sectional Area of Power Cord (AWG)
GMV-ND12T/B-T(U)	208/230V~,60Hz	15	AWG18	AWG18
GMV-ND15T/B-T(U)	208/230V~,60Hz	15	AWG18	AWG18
GMV-ND18T/B-T(U)	208/230V~,60Hz	15	AWG18	AWG18

3.10 Installation of Super High Static Pressure Duct Type Indoor Unit

3.10.1 Outline and Installation Dimension



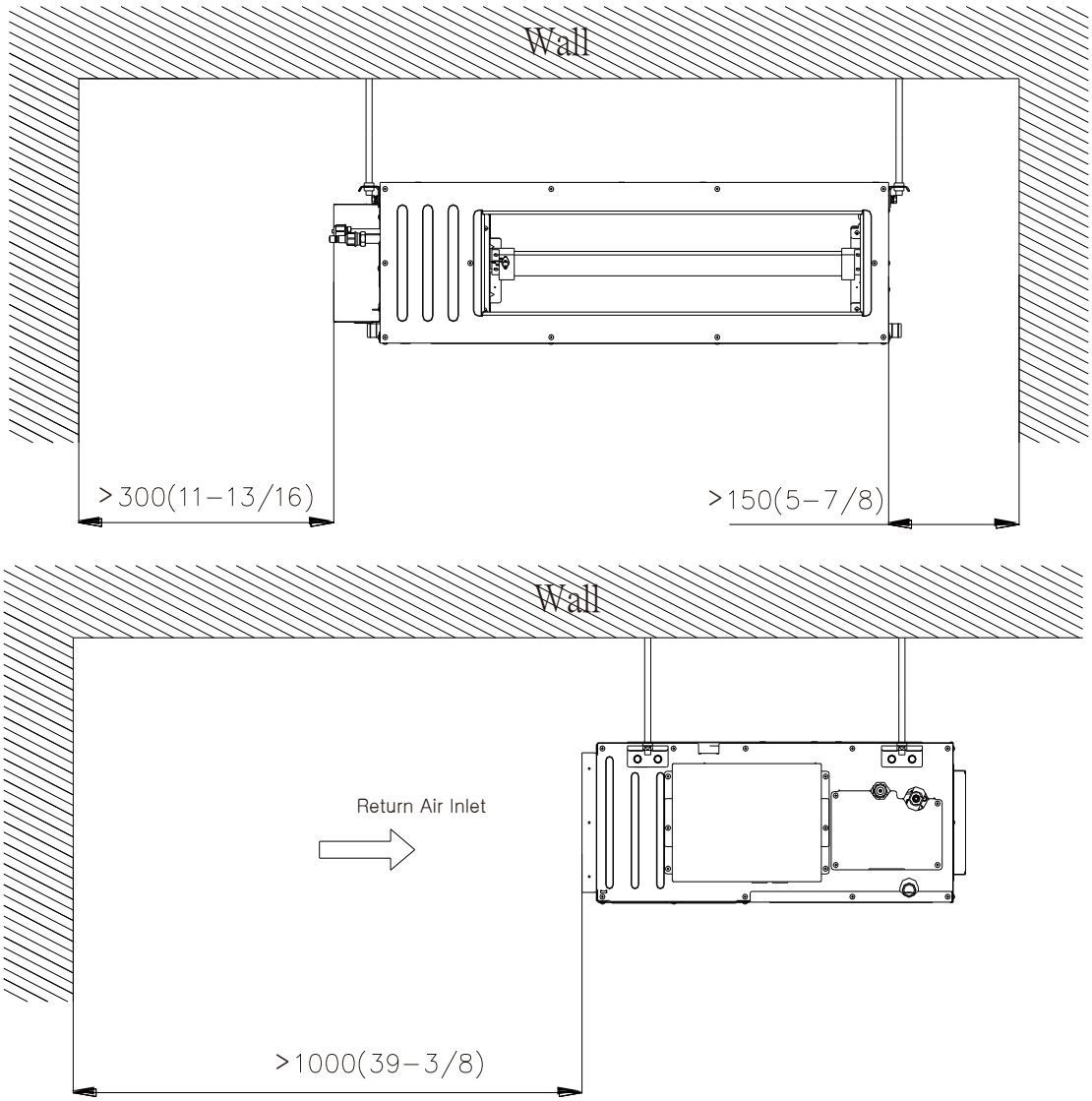
Below are dimensions of A, B, C, etc. for different models:

Unit: mm(in.)

Model	A	B	C	D	E	F	G
GMV-ND07~09PHS/B-T(U)	740 (29-1/8)	500 (19-11/16)	830 (32-11/16)	300 (11-13/16)	754 (29-11/16)	700 (27-9/16)	700 (27-9/16)
GMV-ND12~24PHS/B-T(U)	1040 (40-15/16)	500 (19-11/16)	1130 (44-31/64)	300 (11-13/16)	754 (29-11/16)	1000 (39-3/8)	700 (27-9/16)
GMV-ND30~42PHS/B-T(U)	1440 (56-11/16)	500 (19-11/16)	1530 (60-1/4)	300 (11-13/16)	754 (29-11/16)	1400 (55-1/8)	700 (27-9/16)
GMV-ND48~54PHS/B-T(U)	1440 (56-11/16)	500 (19-11/16)	1580 (62-7/32)	300 (11-13/16)	754 (29-11/16)	1400 (55-1/8)	700 (27-9/16)

3.10.2 Installation space

Unit: mm(in.)



3.10.3 Installation notice

◆The unit shall be installed by the professional personnel according to this installation instruction to ensure proper use.

◆Please contact the local Gree appointed service center before installation. Any malfunctioncaused by the unit that is not installed by the Gree appointed service center would probably not be dealt with on time because of the inconvenience of the business contact.

◆It should be guided under the professional personnel when the air conditioner unit is moved to other place.

◆Installation of the unit must be in accordance with National Electric Codes and local regulations.

◆Improper installation will affect unit's performance, so do not install the unit by yourself. Please contact local dealer to arrange professional technicians for the installation.

◆Do not connect power until all installation work is finished.

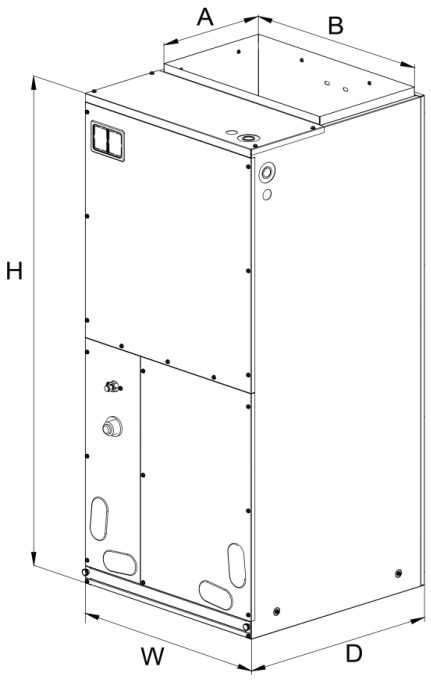
◆If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard

3.10.4 Selection of air switch and power cord

Model	Power Cord Size	Air Switch apacity (A)	Minimum Sectional Area of Ground Wire (mm2/AWG)	Minimum Sectional Area of Power Cord (mm2/AWG)
GMV-ND07PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND09PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND12PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND15PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND18PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND22PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND24PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND30PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND36PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND42PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND48PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND54PHS/B-T(U)	208-230V~60Hz	15	1.0/AWG18	1.0/AWG18

3.11 Installation of Air Handler type Indoor Unit

3.11.1 Outline and installation dimension



Unit: mm（in.）

MODEL	DIMENSION				
	W	D	H	A	B
GMV-ND24A/A-T(U)	460 （18-1/8）	540 （21-1/4）	1105 （43-1/2）	295 （11-5/8）	426 （16-3/4）
GMV-ND30A/A-T(U)	460 （18-1/8）	540 （21-1/4）	1105 （43-1/2）	295 （11-5/8）	426 （16-3/4）
GMV-ND36A/A-T(U)	540 （21-1/4）	540 （21-1/4）	1224 （48-1/4）	295 （11-5/8）	508 （20）
GMV-ND42A/A-T(U)	540 （21-1/4）	540 （21-1/4）	1224 （48-1/4）	295 （11-5/8）	508 （20）
GMV-ND48A/A-T(U)	630 （24-7/8）	540 （21-1/4）	1224 （48-1/4）	295 （11-5/8）	508 （20）
GMV-ND54A/A-T(U)	630 （24-7/8）	540 （21-1/4）	1224 （48-1/4）	295 （11-5/8）	508 （20）

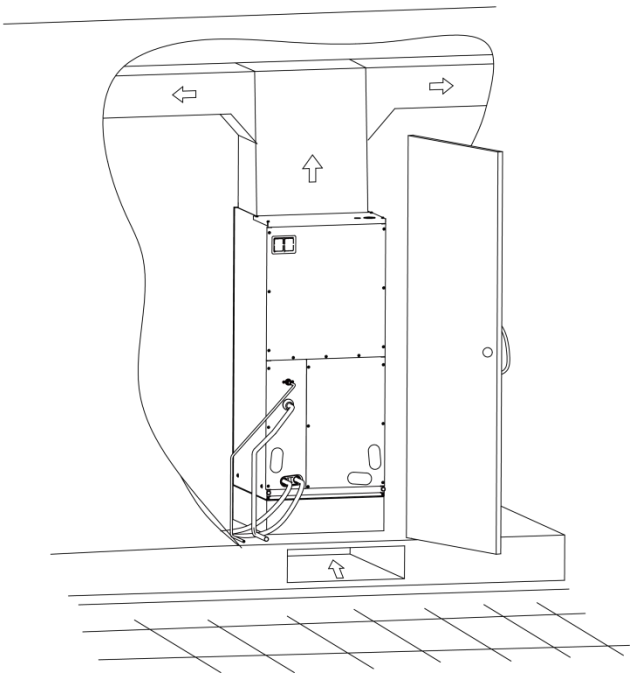
3.11.2 Installation notice

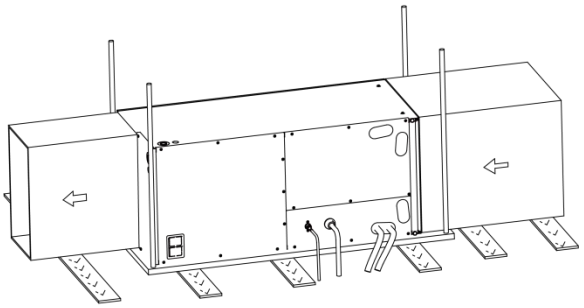
When installing the air handler, take consideration to minimize the length of refrigerant tubing as much as possible. Do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser. Service clearance is to take precedence. Allow a minimum of 24” in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. See local and state codes for requirements. When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage.

This air handler is designed for a complete supply and return ductwork system. Do not operate this product without all ductwork attached.

Based upon the actual conditions, if air handler is installed as type (A), the air handler should be concealed in a specific room or space and make sure the air handler is not accessible to the general public.

Based upon the actual conditions, if air handler is installed as type (B), make sure that there is enough space for care and maintenance and the height between the air handler and ground is above 2500mm. And the air handler is not accessible to the general public.





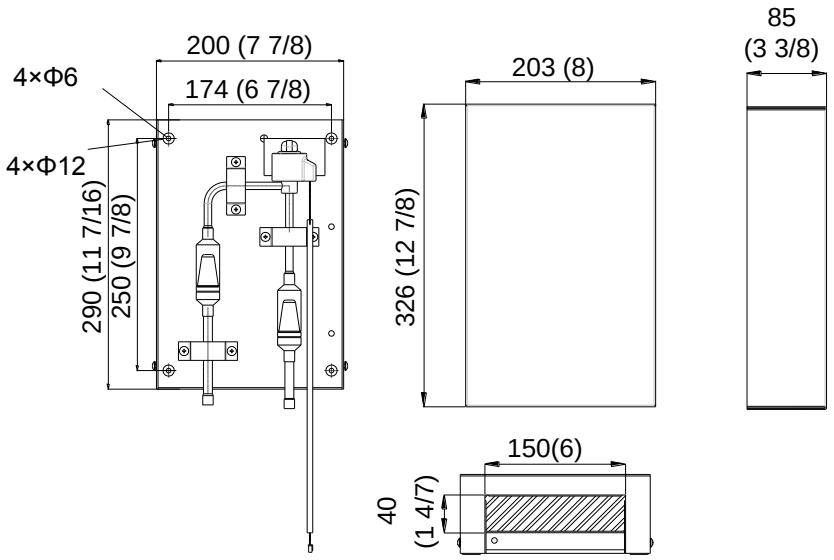
3.11.3 Selection of air switch and power cord

Model	Power Supply	Circuit Breaker Capacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-ND24A/A-T(U)	208/230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND30A/A-T(U)	208/230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND36A/A-T(U)	208/230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND42A/A-T(U)	208/230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND48A/A-T(U)	208/230V~60Hz	15	1.0/AWG18	1.0/AWG18
GMV-ND54A/A-T(U)	208/230V~60Hz	15	1.0/AWG18	1.0/AWG18

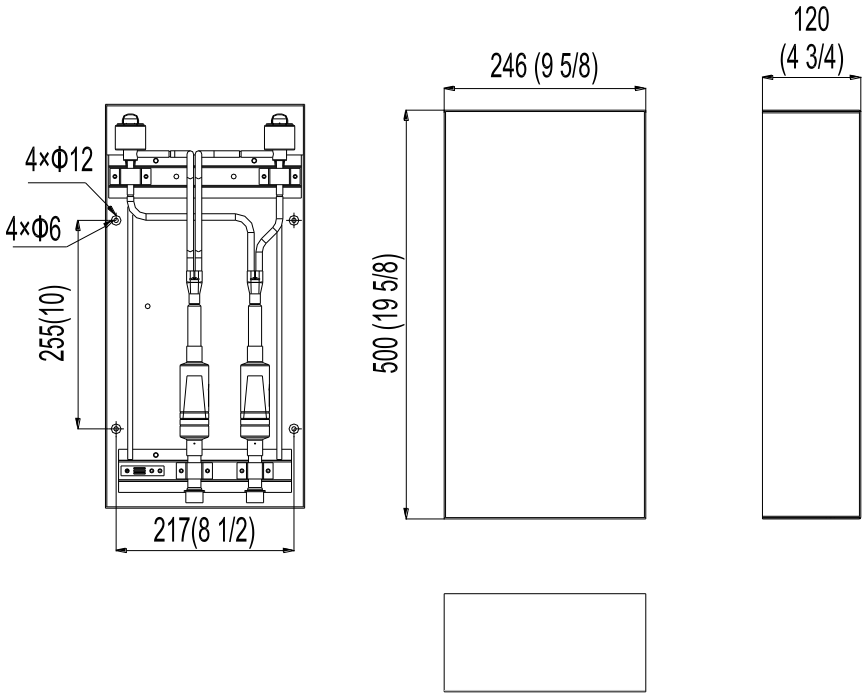
3.12 Installation of AHU-KIT type Indoor Unit

3.12.1 Outline and installation dimension

Size of EXV box for GMV-N12U/A-T(U) 、 GMV-N24U/A-T(U)、GMV-N48U/A-T(U) and GMV-N96U/A-T(U) (Unit: mm(in.)):

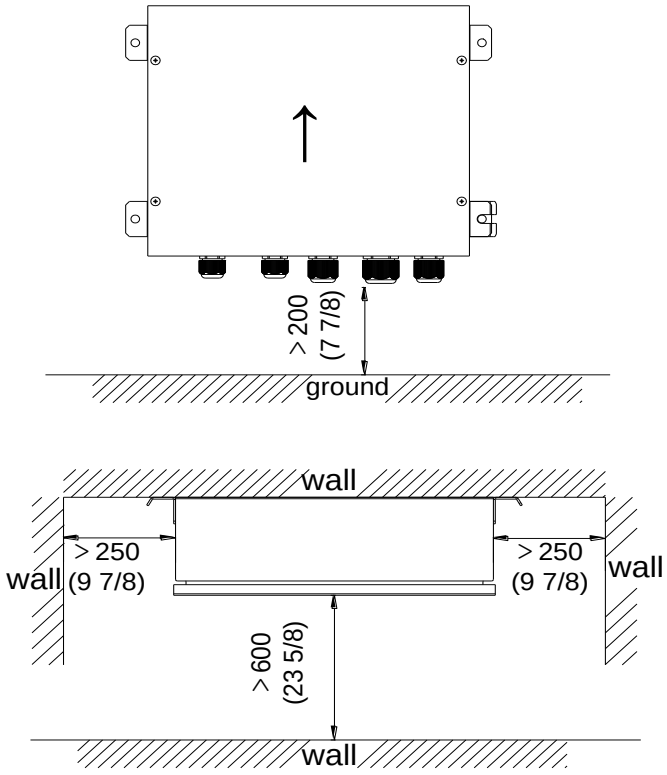


Size of EXV box for GMV-N192U/A-T(U) (Unit: mm(in.)):



3.12.2 Installation space

Maintenance space of control space (Unit: mm(in.)):



The control box must be installed upwards as the direction of the arrow shown in the figure

Maintenance space of EXV box (Unit: mm(in.)):

3.12.3 Installation notice

◆Make sure that the EXV box is installed upwards.

◆Make sure there is enough free space in front and in the side of the box for future maintenance.

◆Make sure that the other parts such as electrical box, tie wraps and wires are protected from direct brazing flames during brazing.

◆The EXV box is required to be installed in a vertical direction within the range of 90±15° (not allowed for horizontal work). Welding the connection tubes first before refrigerant pipes in order to avoid face-down soldering

3.12.4 Selection of air switch and power cord

Model	Power Supply	Circuit Breaker Capacity (A)	Minimum Sectional Area of Ground Wire (mm^2/AWG)	Minimum Sectional Area of Power Cord (mm^2/AWG)
GMV-N12U/A-T(U)	208/230V-1ph-60Hz	15	1.0/AWG18	1.0/AWG18
GMV-N24U/A-T(U)		15	1.0/AWG18	1.0/AWG18
GMV-N48U/A-T(U)		15	1.0/AWG18	1.0/AWG18
GMV-N96U/A-T(U)		15	1.0/AWG18	1.0/AWG18
GMV-N192U/A-T(U)		15	1.0/AWG18	1.0/AWG18

4 Installation of Connection Pipe

⚠CAUTION

①. Conform to the following principles during pipe connection: Connection pipe should be as short as possible, so is the height difference between indoor and outdoor units. Keep the number of bends as little as possible. Radius of curvature should be as large as possible.

②. Weld the connection pipe between indoor and outdoor units. Please strictly follow the requirements for welding process. Rosin joint or pin hole is not allowed.

③. When laying the pipe, be careful not to distort it. Radius of bending parts should be over 200mm (8in.). Note that pipes cannot be repeatedly bent or stretched; otherwise the material will get harder. Do not bend or stretch the pipe for more than 3 times at the same position.

4.1 Flaring Process

(1) Use pipe cutter to cut the connection pipe in case it is unshaped.

(2) Keep the pipe downward in case cutting scraps get into the pipe. Clear away the burrs after cutting.

(3) Remove the flared nut connecting indoor connection pipe and outdoor unit. Then use flaring tool to fix the flared nut into the pipe (as shown in Fig.4.1).

(4) Check if the flared part is flaring evenly and if there is any crack.

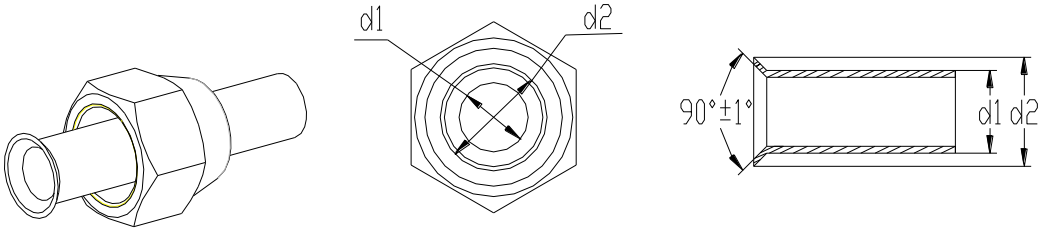


Fig. 4.1

4.2 Pipe Bending

(1) Reshape the pipe by hand. Be careful not to damage the pipe.

(2) Do not bend the pipe over 90°.

(3) If pipe is repeatedly bent or stretched, it will get hard and difficult to bend and stretch again. Therefore, do not bend or stretch the bend for over 3 times.

(4) In case that direct bending will open cracks to the pipe, first use sharp cutter to cut the insulating layer, as shown in Fig. 4.3. Do not bend the pipe until it is exposed. When bending is done, wrap the pipe with insulating layer and then secure it with adhesive tape.

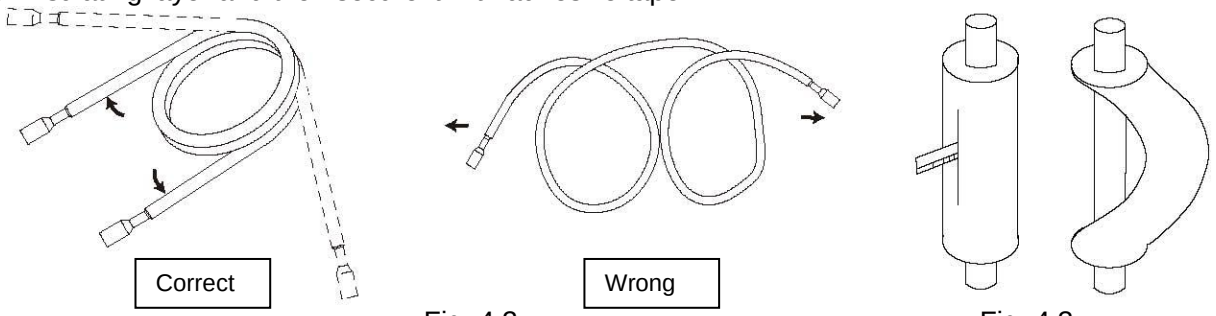


Fig. 4.2 Fig. 4.3

4.3 Indoor Pipe Connection

(1) Remove pipe cover and pipe plug.

(2) Direct the flared part of copper pipe to the center of screwed joint. Twist on the flared nut tightly by hand, as in Fig. 4.4. (Make sure indoor pipe is correctly connected. Improper location of the center will prevent flared nut from being securely twisted. Thread of nut will get damaged if the flared nut is twisted forcibly.)

(3) Use torque wrench to twist on the flared nut tightly until the wrench gives out a click sound. (Hold the handle of wrench and make it at right angle to the pipe. as in Fig. 4.5

⚠CAUTION
①. Use sponge to wrap the un-insulated connection pipe and joint. Then tie the sponge tightly with plastic tape.
②. Connection pipe should be supported by a bearer rather than the unit.
③. The bending angle of piping should not be too small; otherwise the piping might have cracks. Please use a pipe bender to bend the pipe.
④. When connecting IDU with connection pipe, do not pull the big and small joints of IDU with force in case the capillary tube or other tubes have cracks and cause leakage.

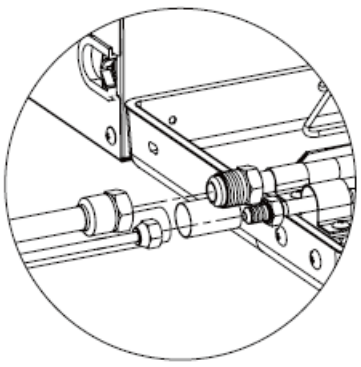


Fig. 4.4

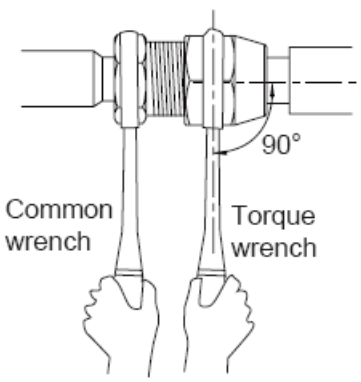


Fig. 4.5

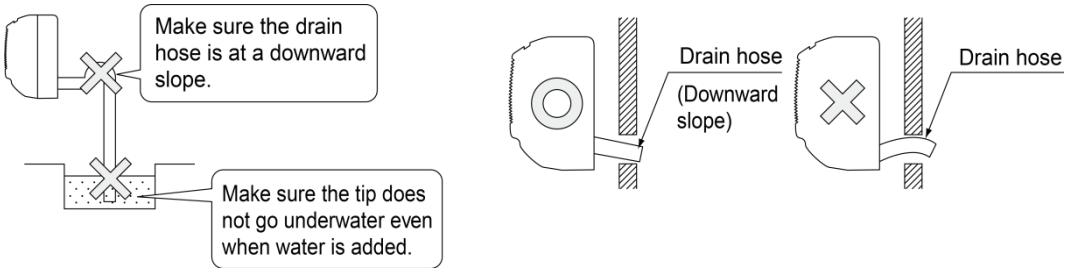
Pipe Diameter（mm/in.）	Tightening Torque
6(1/4)	15-30N·m(11-22ft.-1b.)
9.5(3/8)	35-40N·m(26-29ft.-1b.)
12.7(1/2)	45-50N·m(33-37ft.-1b.)
16(5/8)	60-65N·m(44-48ft.-1b.)

5 Installation of Drain Pipe

5.1 Precautions When Doing the Piping Work

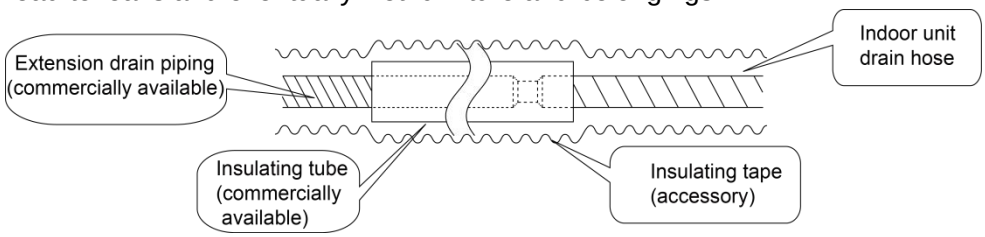
◆ Keep piping as short as possible and slope it downwards at a gradient of at least 1/100 so that air may not remain trapped inside the pipe.

For example:

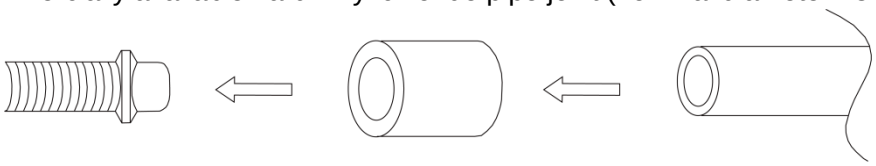


◆Keep pipe size equal to or greater than that of the connecting pipe.

◆Install the drain piping as shown and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.



◆When directly connecting a hard vinyl chloride pipe joint to the drain hose connected to the indoor unit, use a commercially available hard vinyl chloride pipe joint (nominal diameter 13mm).



◆ Drain hose connectedto the indoor unitCommercially availablehard vinyl chloride pipejoint (nominal diameter 13mm)Commercially availablehard vinyl chloride pipe(nominal diameter 13mm)

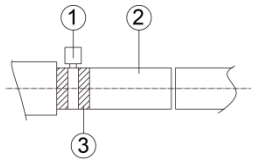
◆Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.

5.2 Installing the Drain Pipes

◆ Insert the drain hose into the drain outlet, and tighten the clamp securely with tape.

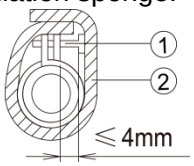
◆Tighten the clamp until the screw head is less then 4 mm from the hose.

①. Metal clamp (accessory)
②. Drain hose (accessory)
③. Grey tape (accessory)

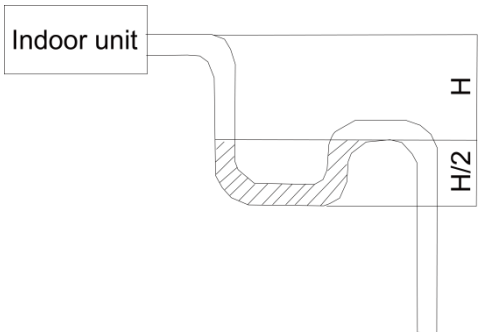


◆Insulate the pipe clamp and the drain hose using heat insulation sponge.

①. Metal clamp (accessory)
②. Insulation sponge (accessory)



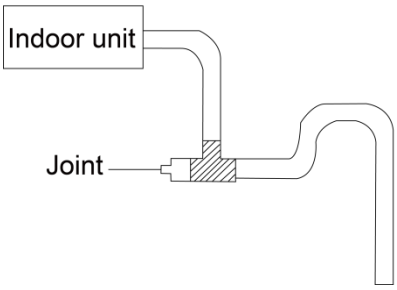
◆If the air flow of indoor unit is high, this might cause negative pressure and result in return suction of outdoor air. Therefore, U-type water trap shall be designed on the drainage side of each indoor unit.

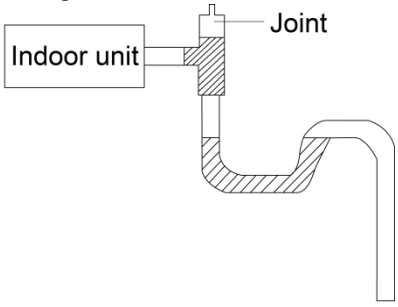


◆ Install water trap as shown below

◆ Install one water trap for each unit

◆Installation of water trap shall consider easy cleaning in the future.

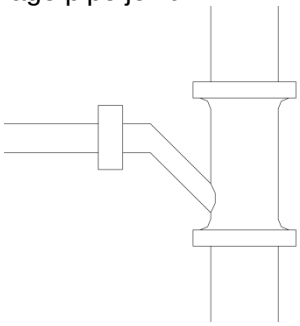




◆Connection of drainage branch pipe to the standpipe or horizontal pipe of drainage main pipe

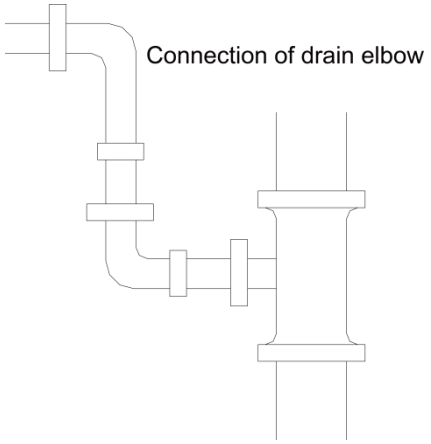
◆The horizontal pipe cannot be connected to the vertical pipe at a same height. It can be connected in a manner as shown below:

N01:3-way connection of drainage pipe joint

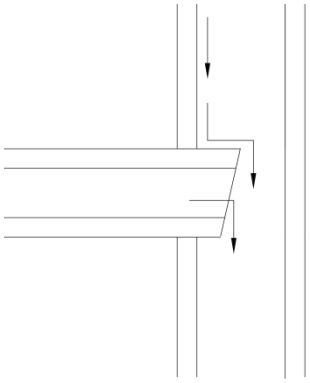


3-way connection
of drainage pipe joint

NO2: Connection of drain elbow

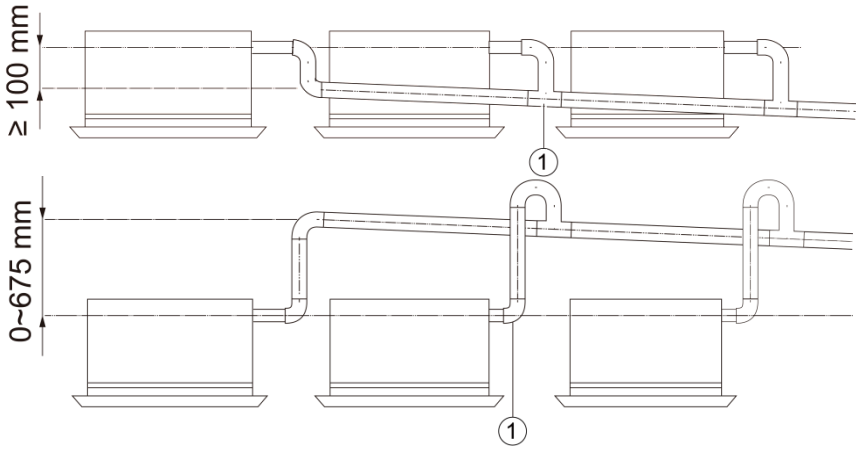


NO3: Connection of horizontal pipe



Connection of horizontal pipe

◆ When unifying multiple drain pipes, install the pipes as shown below. Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.(take the cassette type unit for example)



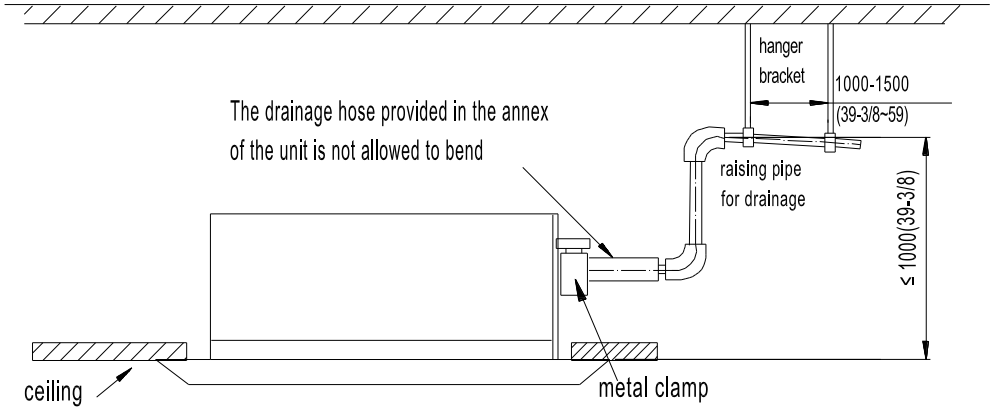
5.3 Precautions When Doing Riser Piping Work

◆Make sure that heat insulation work is executed on the following 2 spots to prevent any possible water leakage due to dew condensation.

a) Connect the drain hose to the drain raiser pipe, and insulate them.

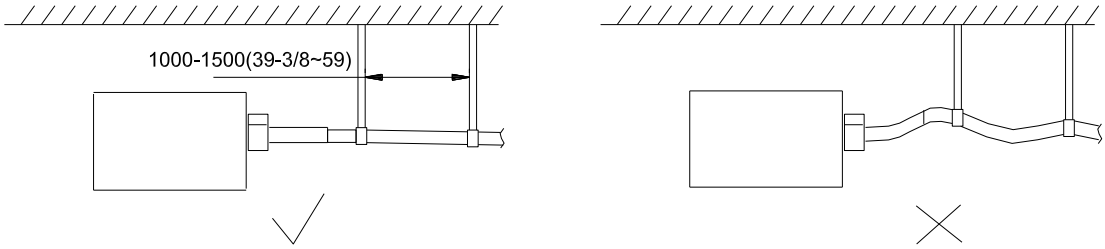
b) Connect the drain hose to the drain outlet on the indoor unit, and tighten it with the clamp.

Unit：mm (in.)



◆Secure a downward gradient of 1/100 or more for the drain pipe. To accomplish this, mount supporting brackets at an interval of 1 -1.5 m (39-3/8~59in.).

Unit：mm (in.)



5.4 Testing of Drain Piping

◆ After piping work is finished, check if drainage flows smoothly.

◆Shown in the figure, Add approximately 1liter of water slowly into the drain pan and check drainage flow during COOL running.

6 Electrical Installation

◆The wiring must be in accordance with the local rules.

◆Rated supply voltage and special circuit for air conditioner must be used.

◆Do not pull the power cord forcefully.

◆All the electric installations must be carried out by specialist technicians in accordance with the local laws, rules and these instructions.

◆The diameter of flexible wire should be wide enough. Replace the damaged power cord and connecting wire with special flexible wire.

◆The earthing shall be reliable and connected to the special earthing device on the construction. The installation must be done by specialist technicians. The leak protection switch and air switch with enough capacity must be installed. The air switch shall have both the magnetic tripping and thermal tripping functions to ensure protection against the short circuit and overload.

● Earthed Requirements

◆The air conditioner belongs to I type electric appliances. The reliable earthed action is a must.

◆The yellow and green wire inside the air conditioner is the earthed wire. Do not use it for other purpose or even cut off it. Do not fix it with tapping screw, Otherwise it may cause electric shock.

◆The earthed resistance must meet the requirements of national standard GB17790.

◆There should be reliable earthed terminal for the power supply. Never connect the earth lead to the following articles:

①water pipe; ②gas pipe; ③drain pipe; ④unreliable place considered by professionals.

MAINTENANCE

CHAPTER 4 MAINTENANCE

1 Malfunction List

1.1 Malfunction List for the Wired Controller

Error Code	Content	Error Code	Content	Error Code	Content
L0	Indoor Unit Error	LA	Indoor Units Incompatibility Error	d9	Jumper Cap Error
L1	Indoor Fan Protection	LH	Low Air Quality Warning	dA	Indoor Unit Network Address Error
L2	E-heater Protection	LC	ODU-IDU Incompatibility Error	dH	Wired Controller PCB Error
L3	Water Full Protection	d1	Indoor Unit PCB Error	dC	Capacity DIP Switch Setting Error.
L4	Wired Controller Power Supply Error	d3	Ambient Temperature Sensor Error	dL	Outlet Air Temperature Sensor Error
L5	Freeze protection	d4	Inlet Pipe Temperature Sensor Error	dE	Indoor Unit CO2 Sensor Error
L7	No Master Indoor Unit Error	d6	Outlet Pipe Temperature Sensor Error	dy	Water Temperature Sensor Error
L8	Power Insufficiency Protection	d7	Humidity Sensor Error	C0	Communication Error
L9	Quantity Of Group Control Indoor Units Setting Error	d8	Water Temperature Error	AJ	Filter Cleaning Reminder
db	Special Code: Field Debugging Code				

1.2 Display of Light Board (Only for Two-way Cassette Type Indoor Uint)

The panel of this model is without nixie tube display. The error codes will be displayed through the power light, operation light and timer light; ○, ● and ◎ stand for on, off and blink respectively.

Power light	○	◎	◎	◎	◎
Operation light	◎	●	○	○	◎
Timer light	●	○	●	○	●

Error code display sheet

Error Code	Content	Error Code	Content	Error Code	Content
L0	Indoor Unit Error	LA	Indoor Units Incompatibility Error	d9	Jumper Cap Error
L1	Indoor Fan Protection	LH	Low Air Quanlity Warning	dA	Indoor Unit Network Address Error
L2	E-heater Protection	LC	ODU-IDU Incompatibility Error	dH	Wired Controller PCB Error
L3	Water Full Protection	d1	Indoor Unit PCB Error	dC	Capacity DIP Switch Setting Error.
L4	Wired Controller Power Supply Error	d3	Ambient Temperature Sensor Error	dL	Indoor Unit CO2 Sensor Error
L5	Freeze protection	d4	Inlet Pipe Temperature Sensor Error	dE	Capacity DIP Switch Setting Error.
L7	No Master Indoor Unit Error	d6	Outlet Pipe Temperature Sensor Error	dy	Water Temperature Error
L8	Power Insufficiency Protection	d7	Humidity Sensor Error	C0	Communication Error
L9	Quantity Of Group Control Indoor Units Setting Error	d8	Water Temperature Sensor Error	AJ	Filter Cleaning Reminder
db	Special Code: Field Debugging Code				

2 After-sales Emergency Masures

When some unrecoverable fault occurs to one module which is connected with several others in parallel, the following emergency measures are recommended to guarantee the heating or cooling capacity of the indoor units and the service life of modules except the faulted one are not affected.

Step 1: set all indoor units under “Off” mode and cut off the power supply to the indoor and outdoor units.

Step 2:.shut off all cutoff valves of the faulted outdoor unit, including the cutoff valves of the liquid/gas pipe as well as the oil balancing valve.

Step 3: cut off the air switch of the module.

Step 4: remove the communication line between the faulted module and other modules which are still kept connected through the communication line.

Step 5: readjust the address and quantity settings on the main board of the modules except the faulted one.

Step 6: power and restart the unit.

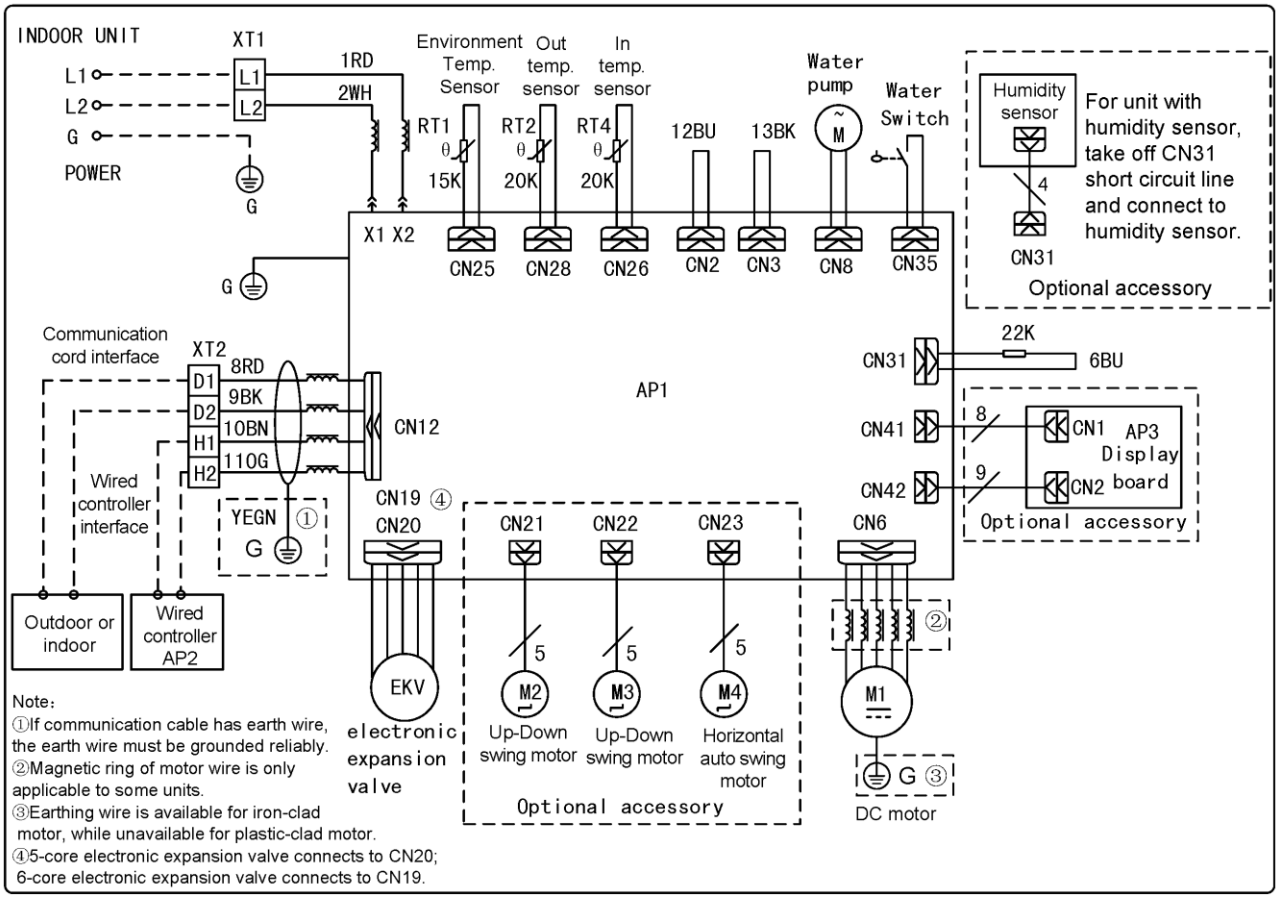
3 Wiring Diagram

NOTICE!

This drawing is just for reference; please always refer to the electric wiring stuck to the unit for actual wiring.

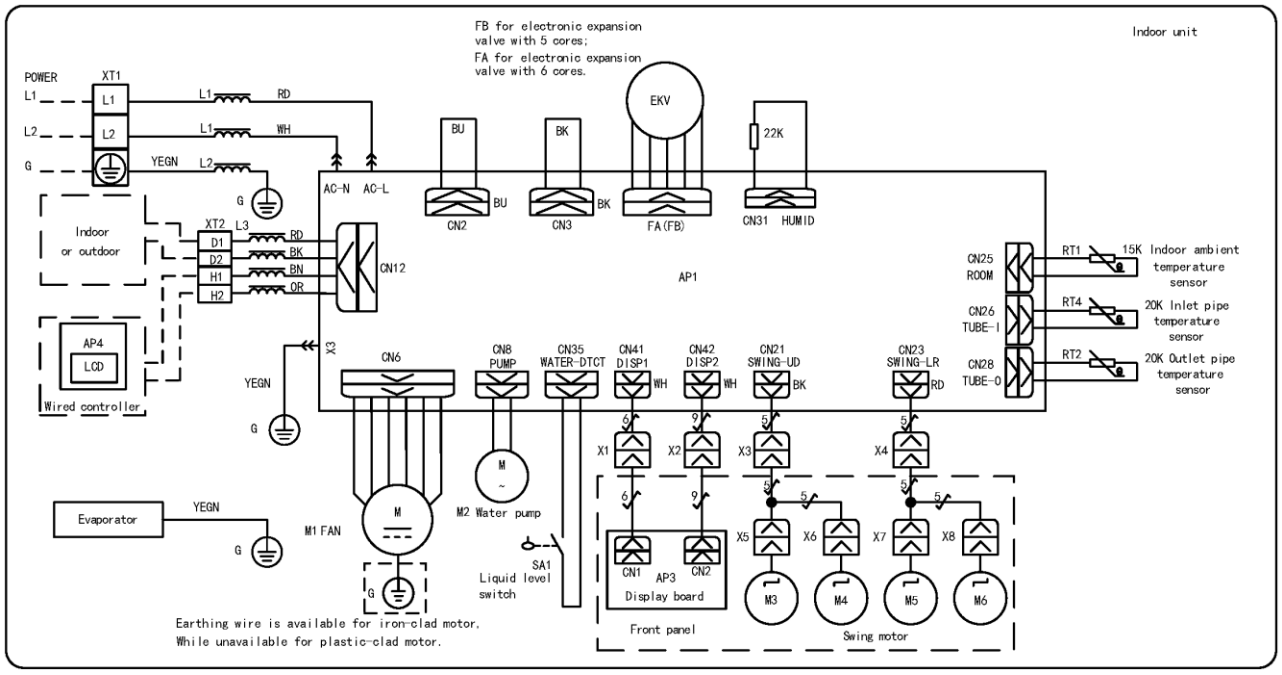
3.1 Low Static Pressure Duct Type Indoor Unit

Model：GMV-ND07PLS/A-T(U) ~ GMV-ND22PLS/A-T(U)



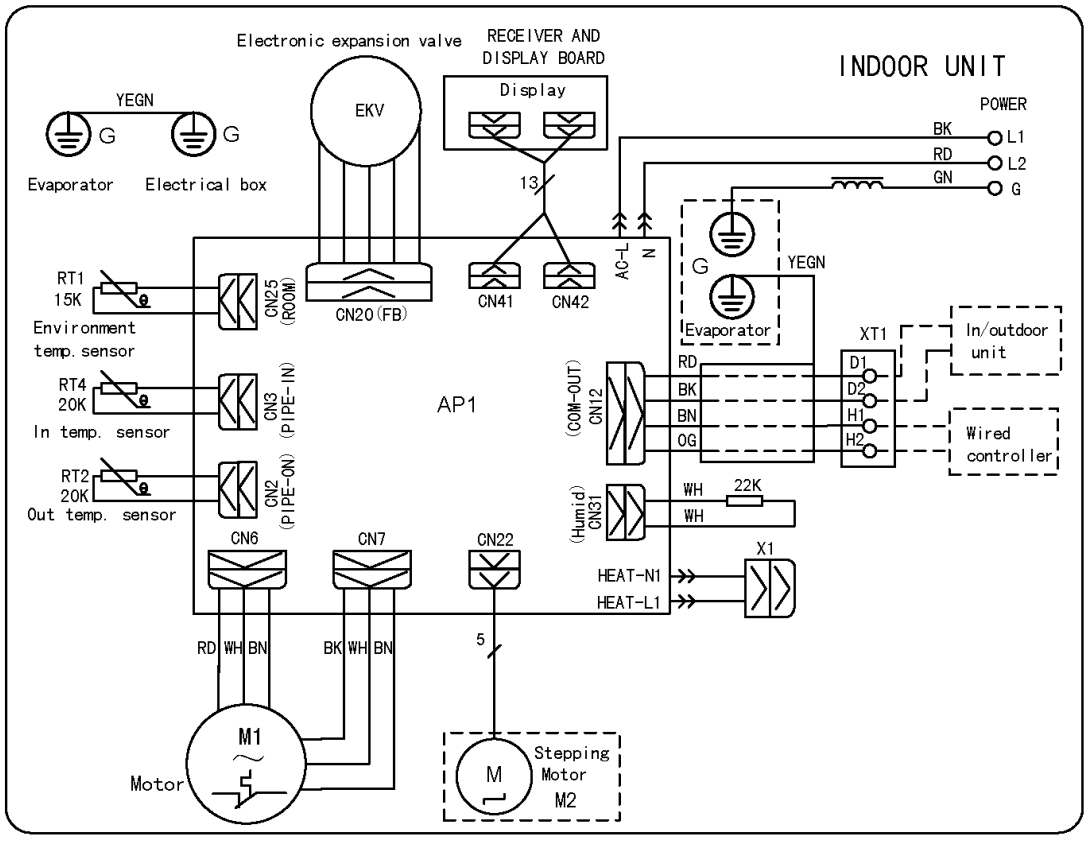
3.2 Four-way Cassette Type Indoor Unit

Model：GMV-ND07T/A-T(U) ~ GMV-ND48T/A-T(U)



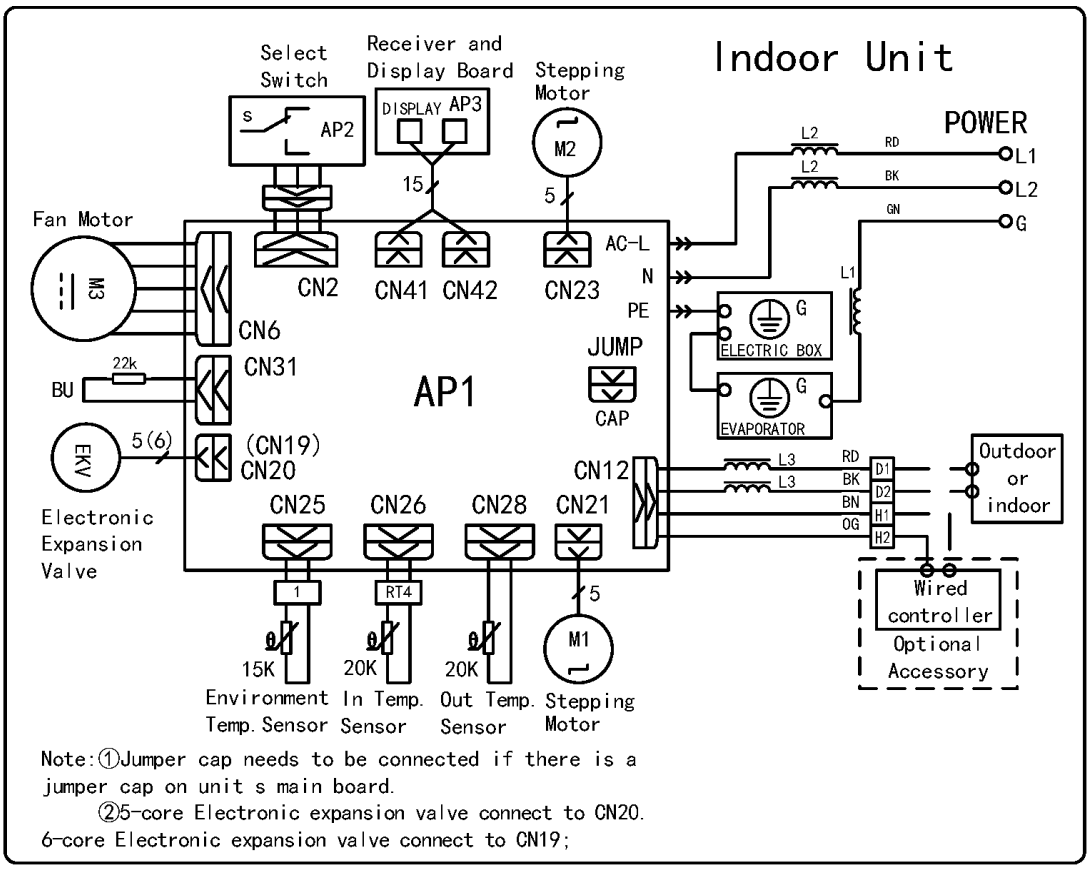
3.3 Wall Mounted Type Indoor Unit

Model：GMV-N07G/A3A-D(U)~GMV-N24G/A3A-D(U):



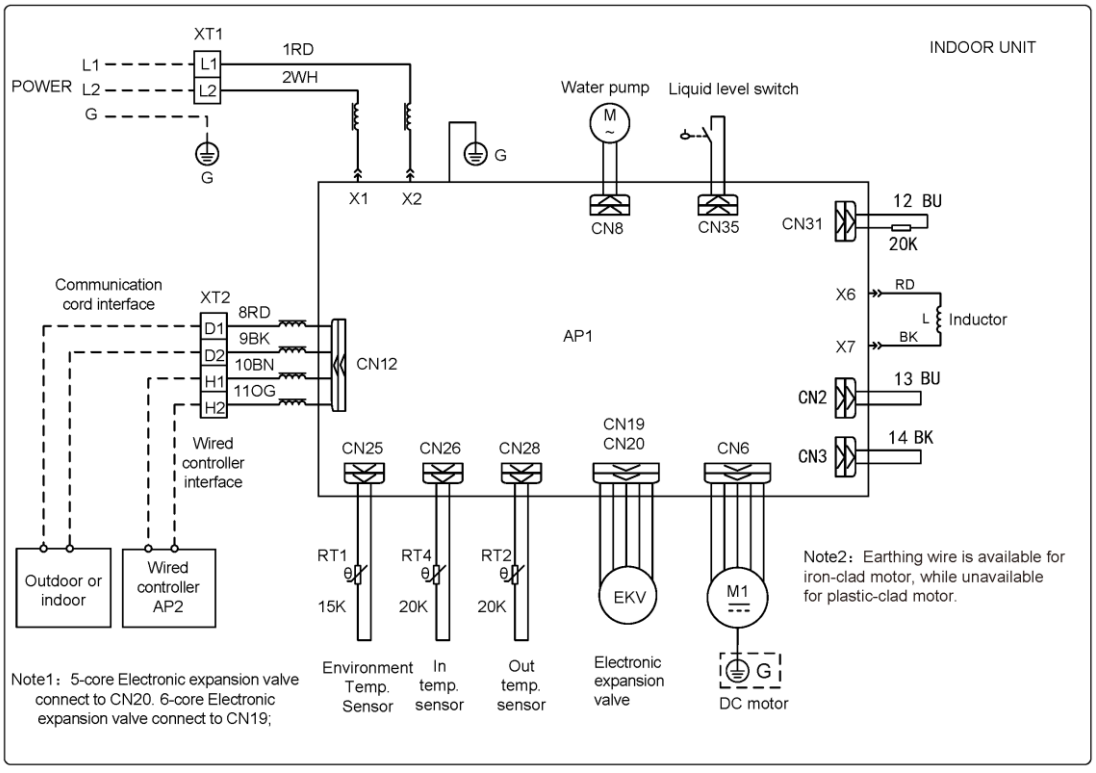
3.4 Console Type Indoor Unit

Model：GMV-ND07C/A-T(U)~ GMV-ND18C/A-T(U):

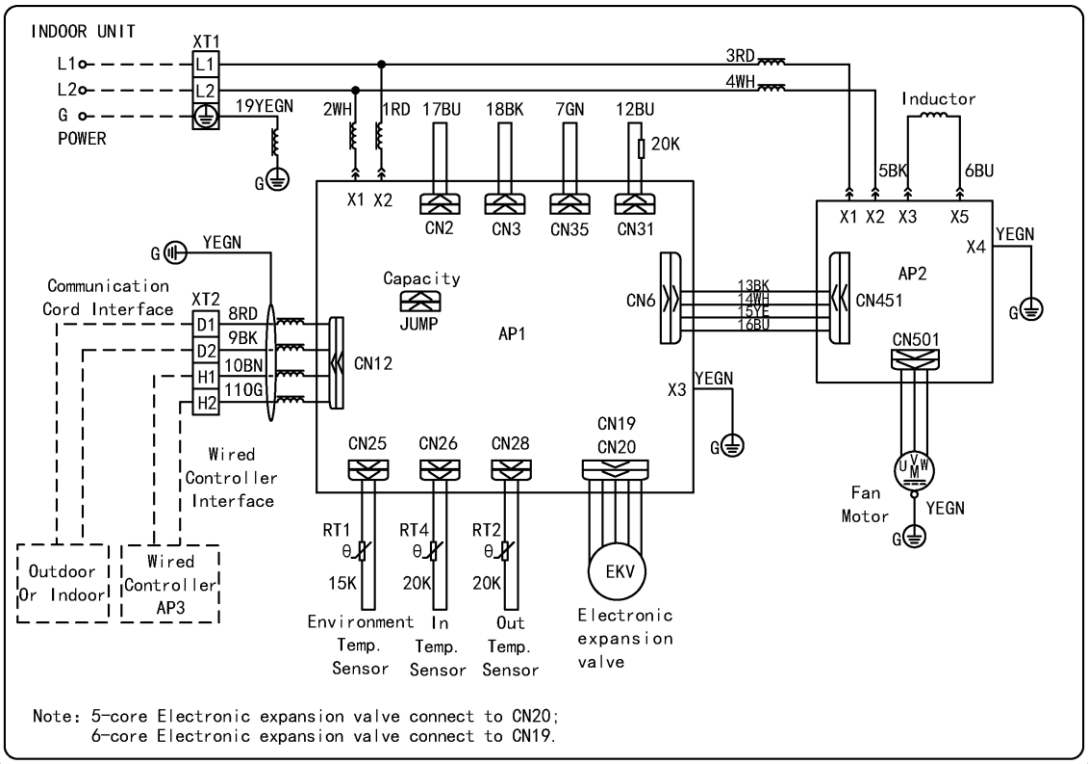


3.5 High Static Pressure Duct Type Indoor Uint

Model：GMV-ND18PHS/A-T(U) ~ GMV-ND48PHS/A-T(U)

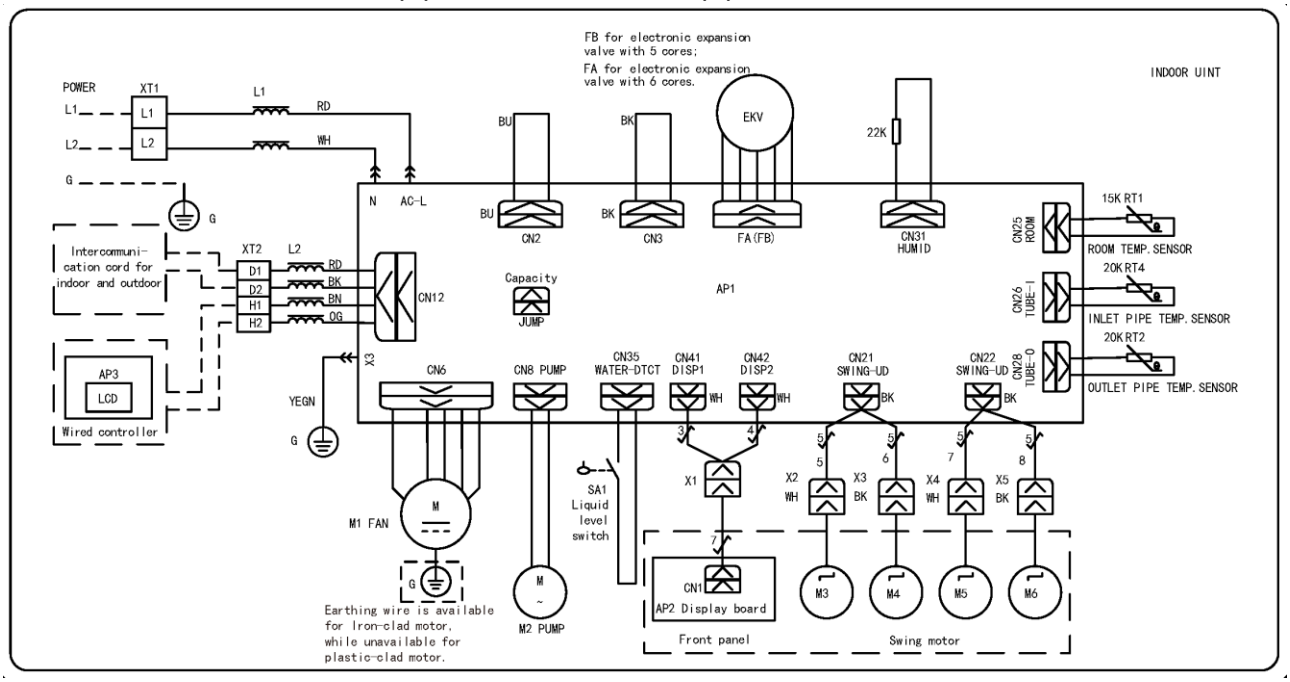


Model：GMV-ND72PH/A-T(U)、GMV-ND96PH/A-T(U)



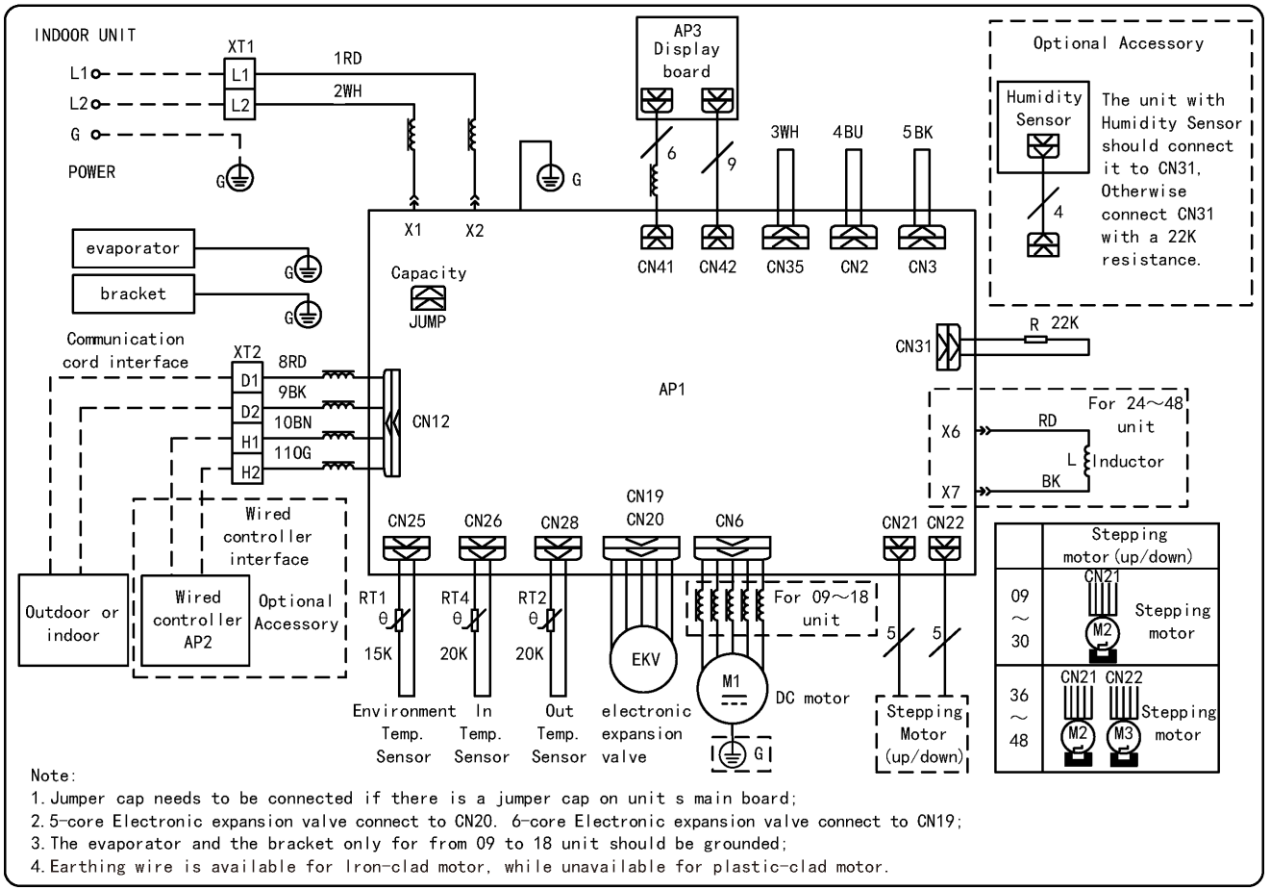
3.6 Two-way Cassette Type Indoor Uint

Model：GMV-ND09TS/A-T(U) ~ GMV-ND24TS/A-T(U)



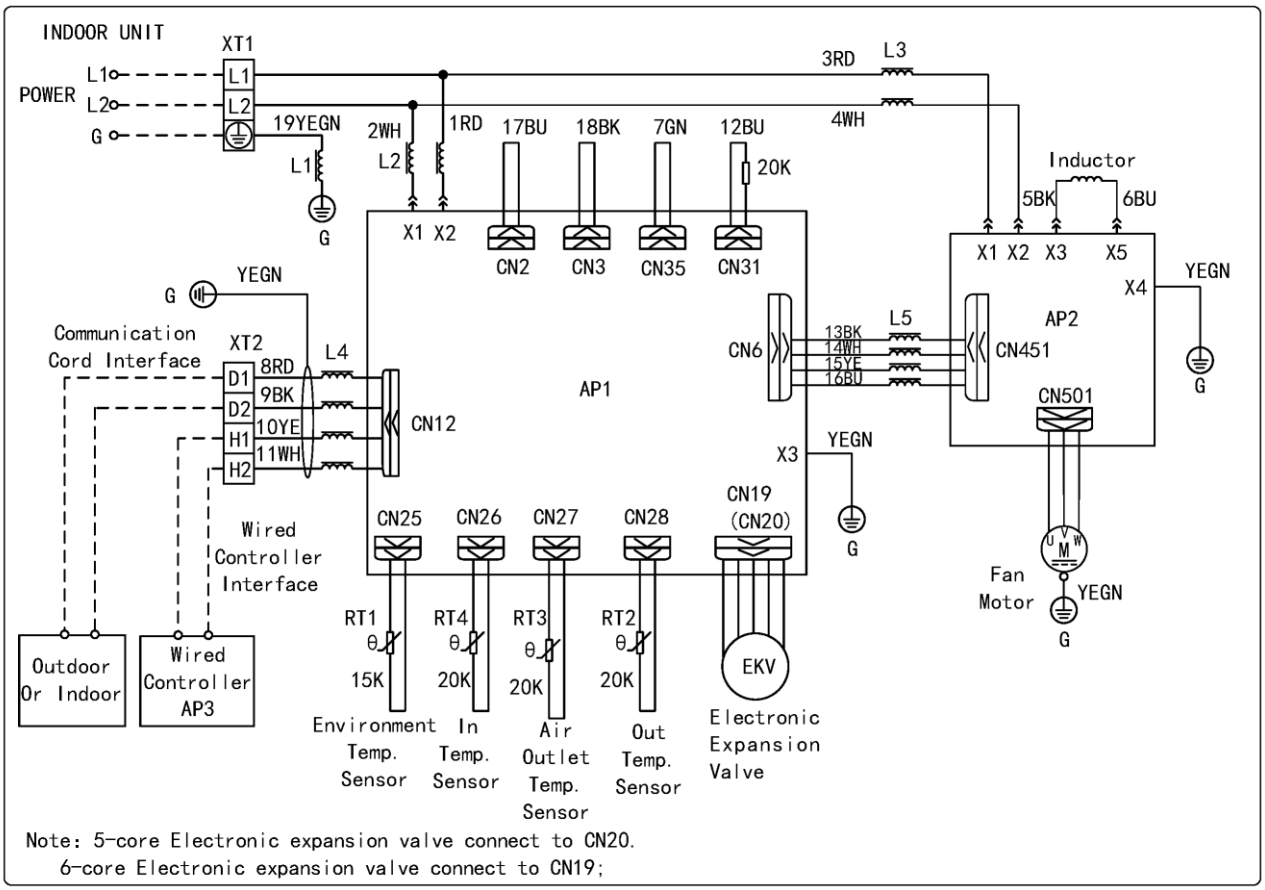
3.7 Floor Ceiling Type Indoor Unit

Model：GMV-ND09ZD/A-T(U) ~ GMV-ND48ZD/A-T(U)



3.8 Fresh Air Processing Indoor Unit

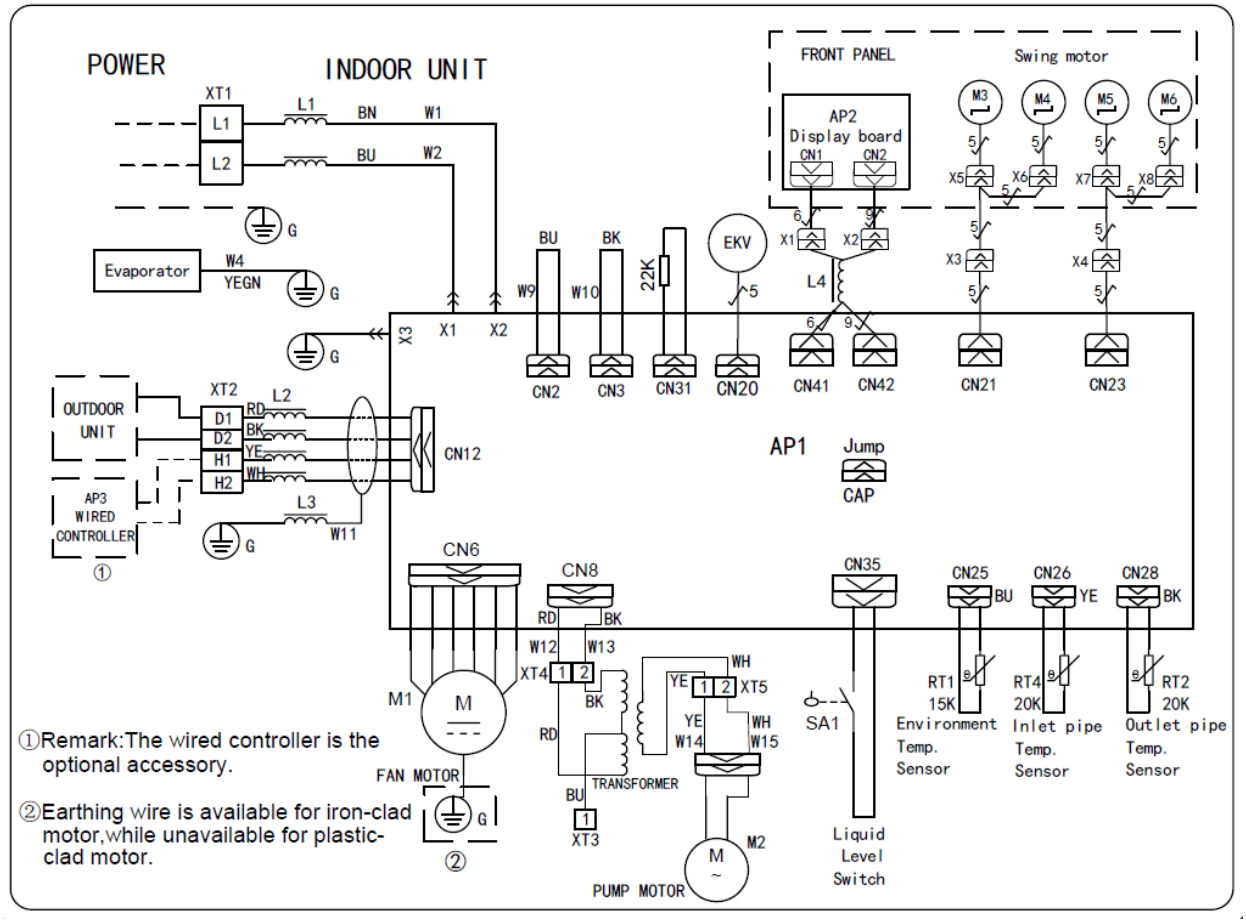
Model：GMV-NDX72P/A-T(U)、GMV-NDX96P/A-T(U)



Note: 5-core Electronic expansion valve connect to CN20.
6-core Electronic expansion valve connect to CN19;

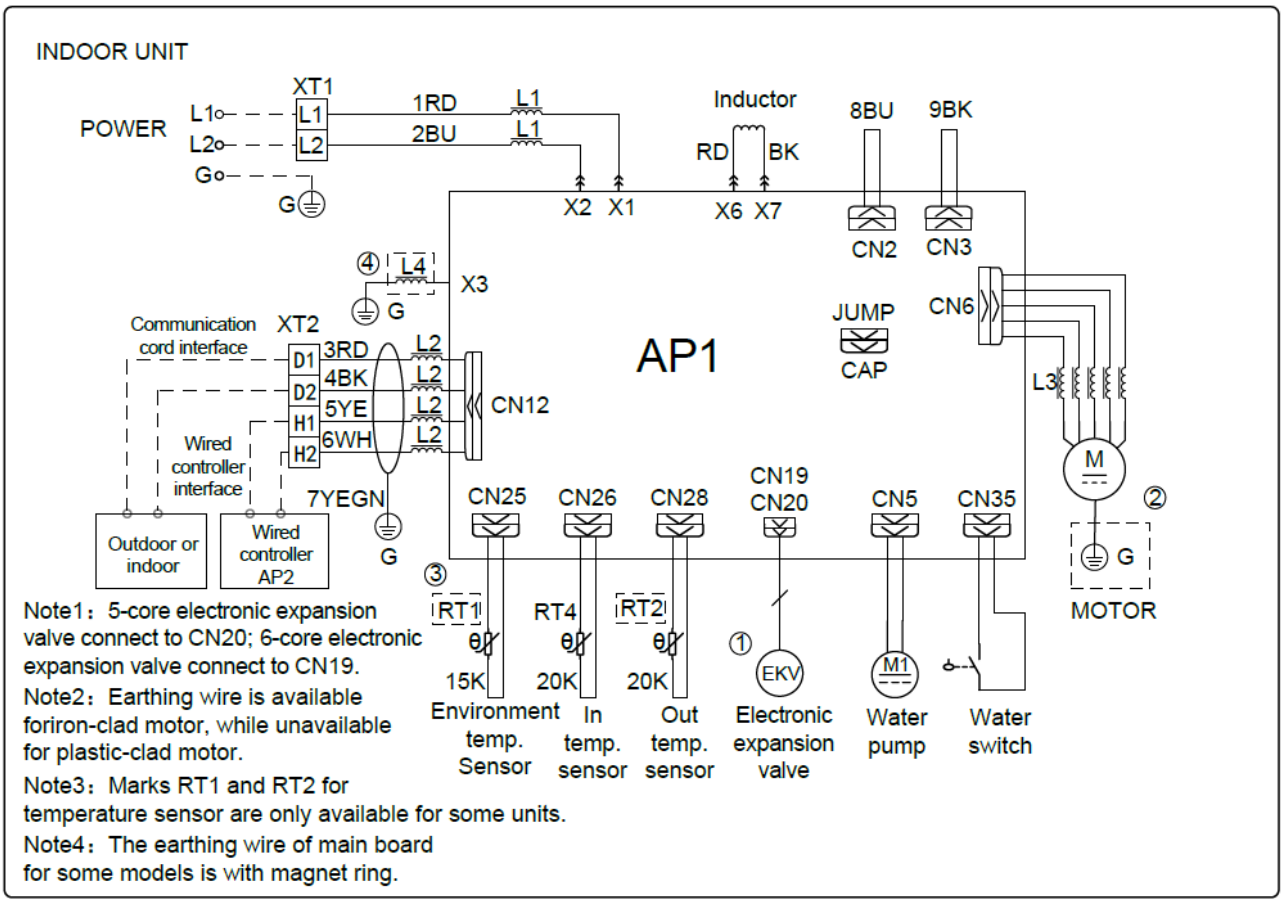
3.9 Compact Four-way Cassette Type Indoor Unit

Model：GMV-ND07T/B-T(U) ~ GMV-ND18T/B-T(U)

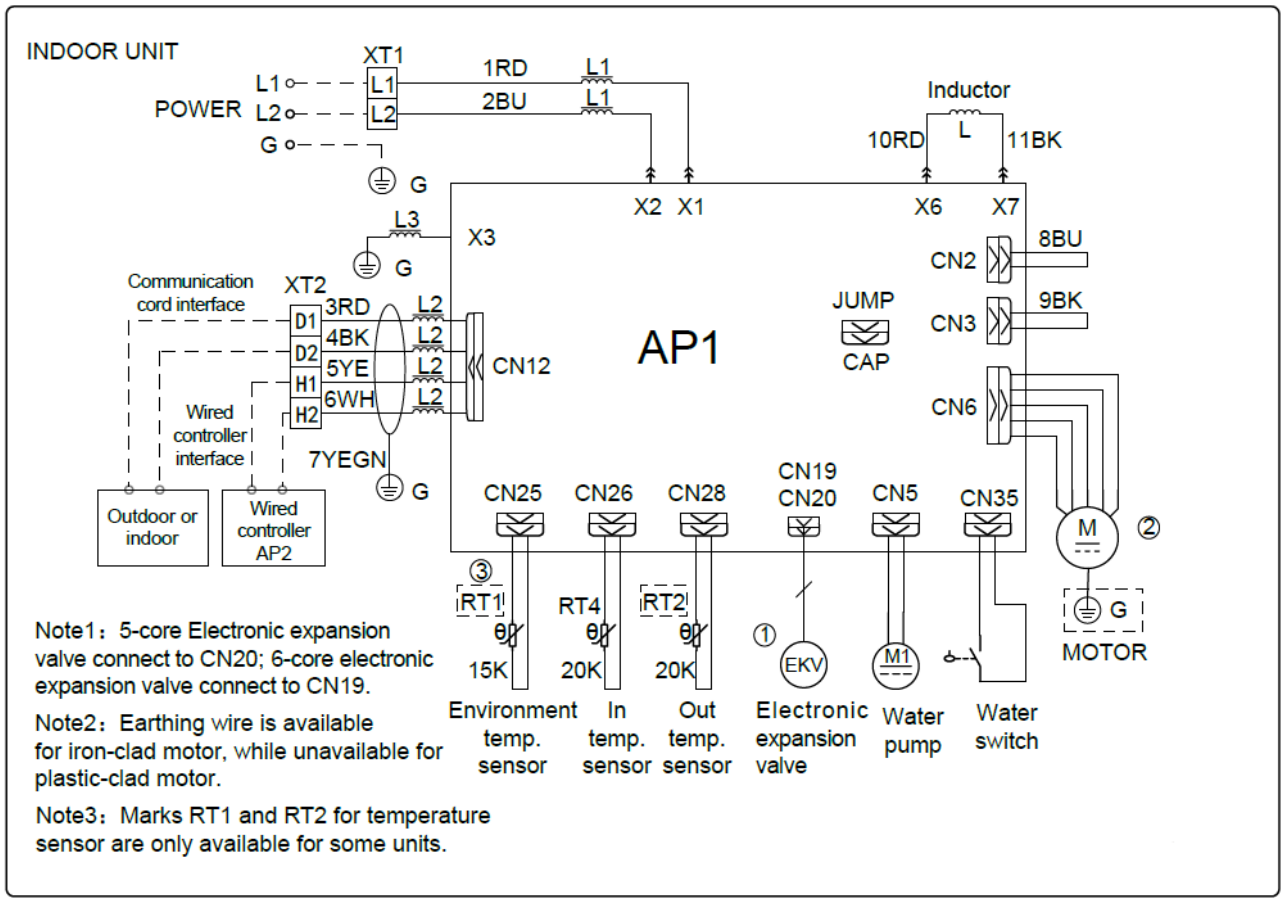


3.10 Super High Static Pressure Duct Type Indoor Unit

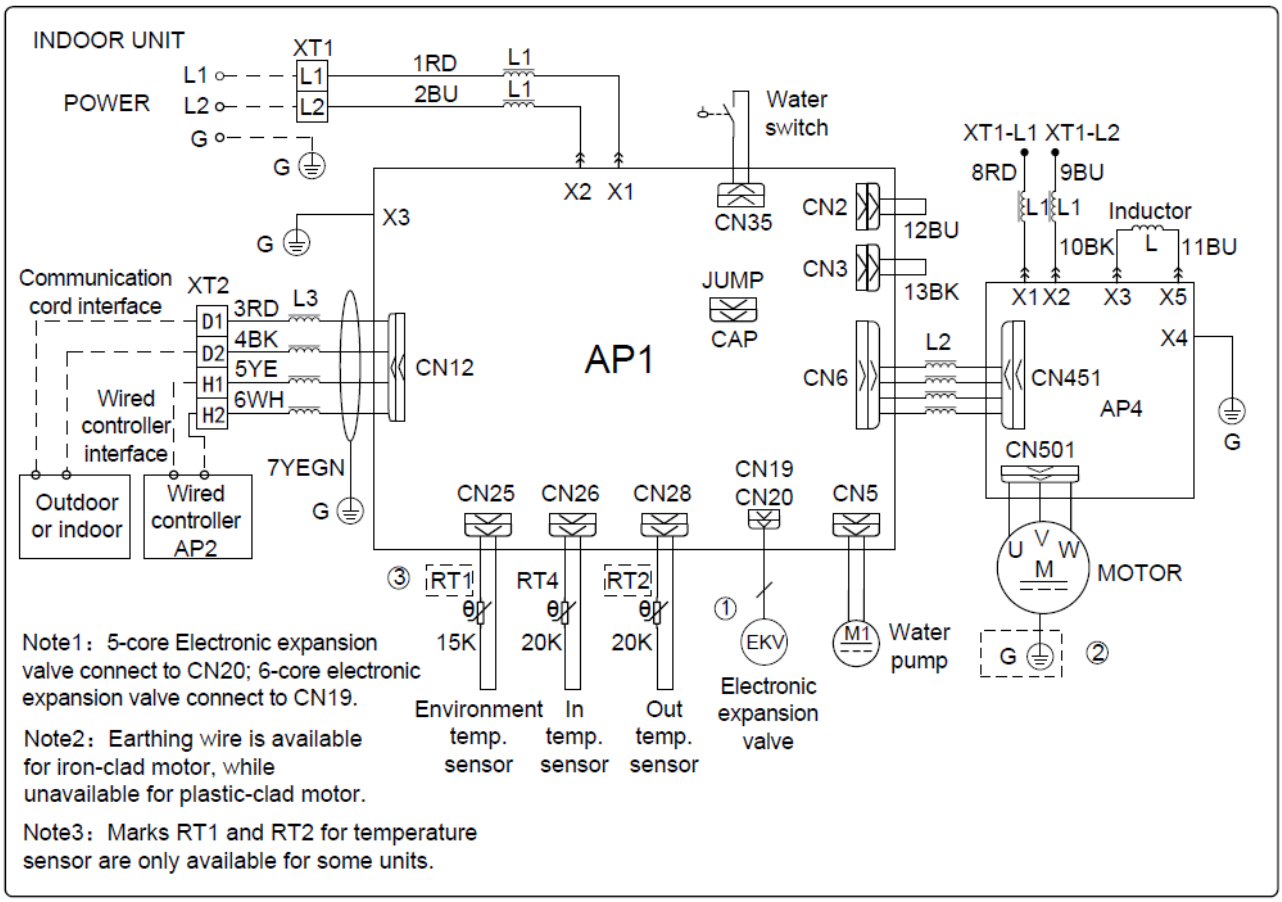
Model：GMV-ND07PHS/B-T(U) ~GMV-ND24PHS/B-T(U)



Model：GMV-ND30PHS/B-T(U) ~GMV-ND42PHS/B-T(U)

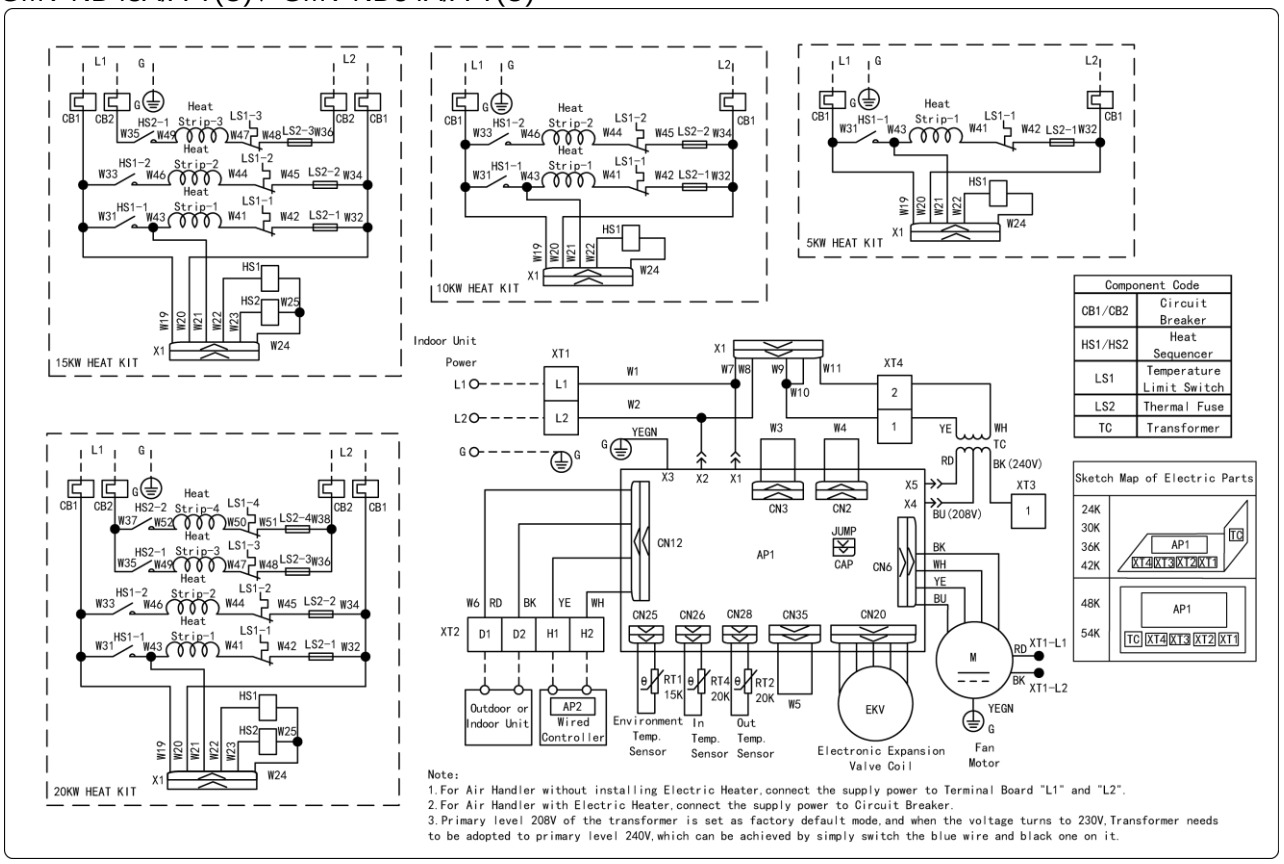


Model：GMV-ND48PHS/B-T(U) ~GMV-ND54PHS/B-T(U)



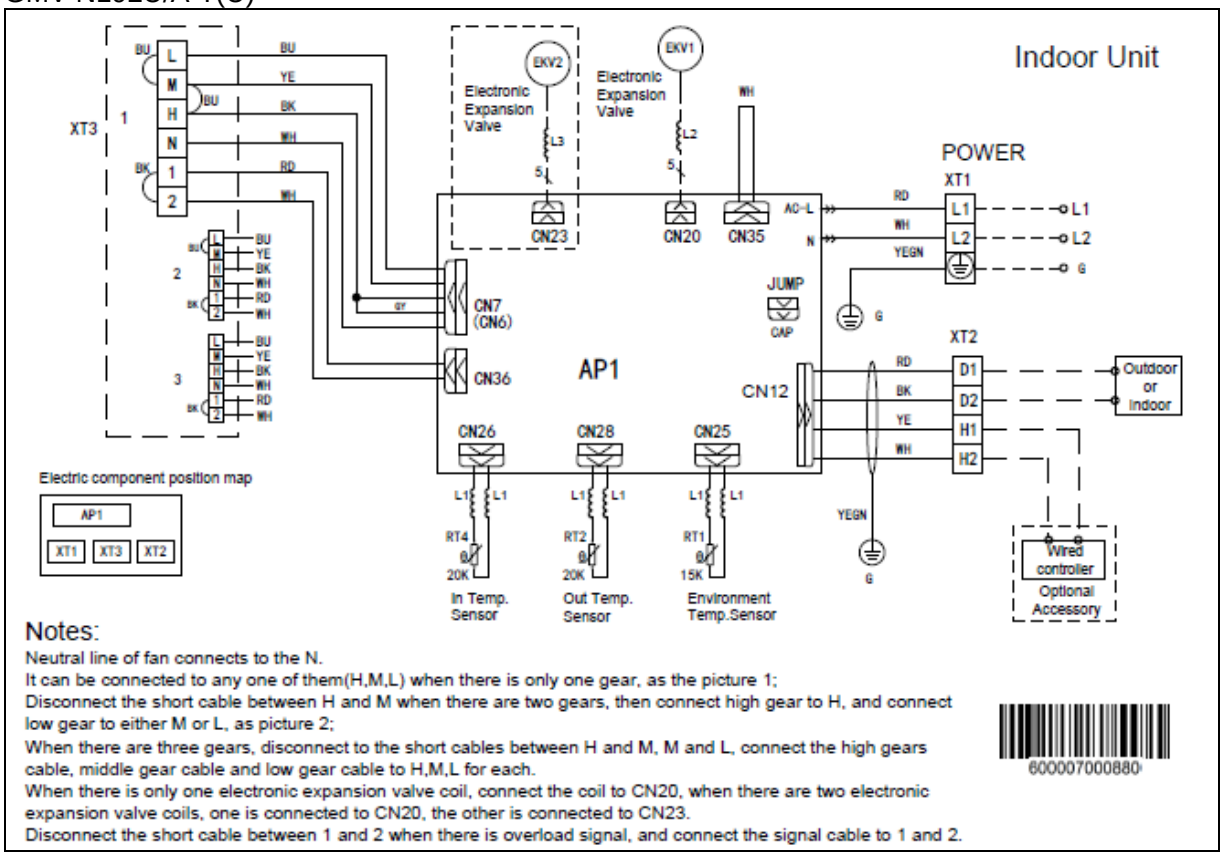
3.11 Air Handler type Indoor Unit

Model： GMV-ND24A/A-T(U)、 GMV-ND30A/A-T(U)、 GMV-ND36A/A-T(U)、 GMV-ND42A/A-T(U)、 GMV-ND48A/A-T(U)、GMV-ND54A/A-T(U)



3.12 AHU-KIT type Indoor Unit

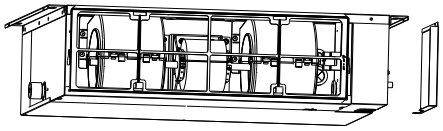
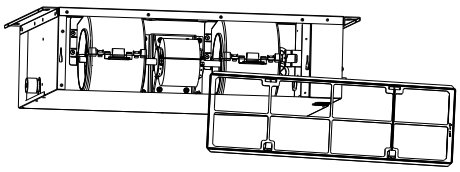
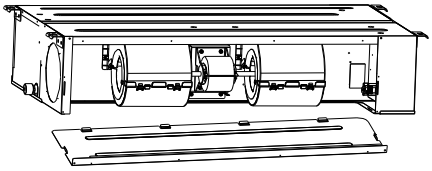
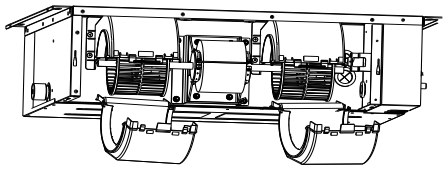
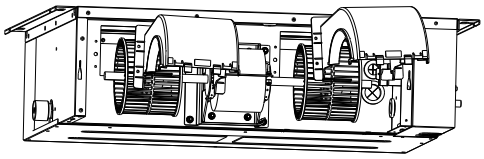
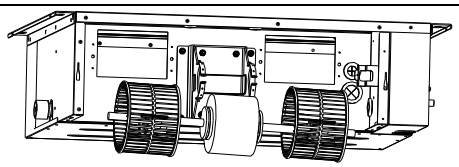
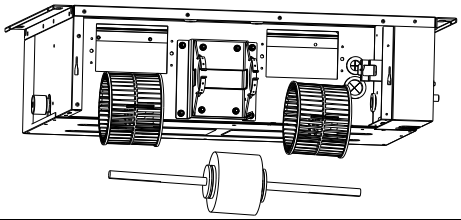
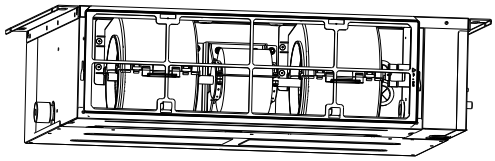
Model： GMV-N12U/A-T(U) 、 GMV-N24U/A-T(U) 、 GMV-N48U/A-T(U) 、 GMV-N96U/A-T(U) 、 GMV-N192U/A-T(U)



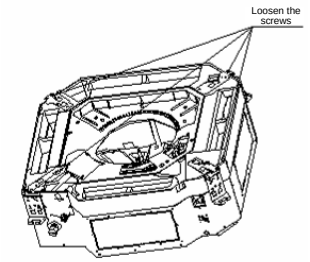
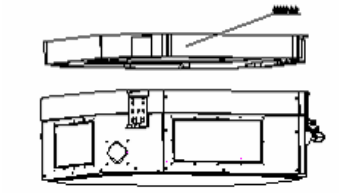
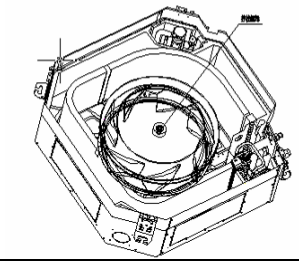
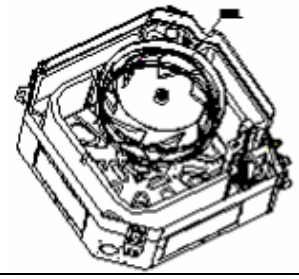
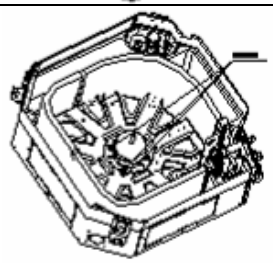
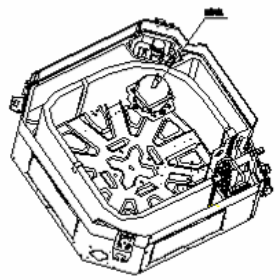
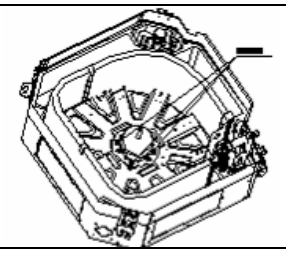
4 Disassembly And Assembly Procedure of Main Parts

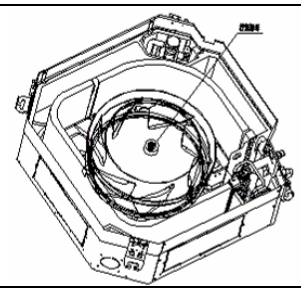
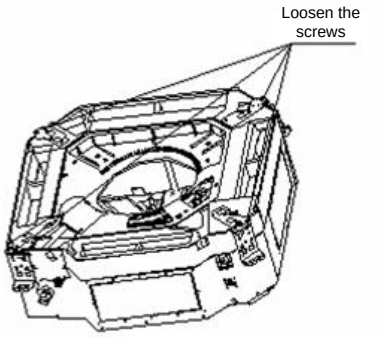
4.1 Low Static Pressure Duct Type Indoor Unit

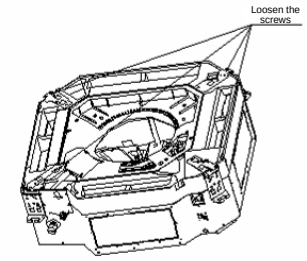
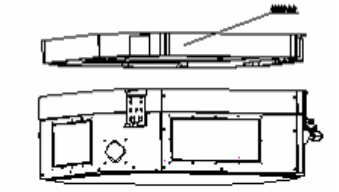
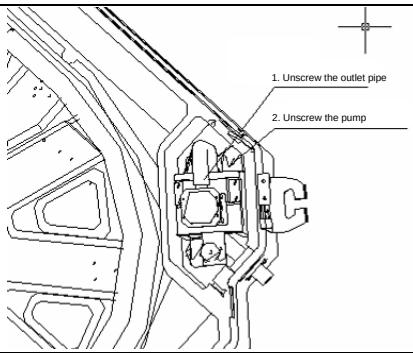
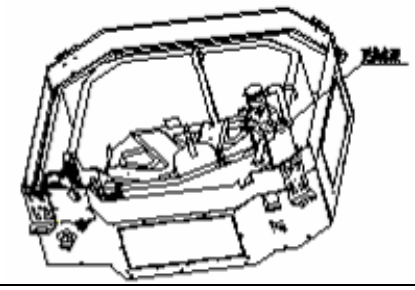
NOTICE! The following steps are specific for GMV-ND09PLS/A-T(U) units. For other units, the assembly and disassembly procedure is similar except the numbers of centrifugal fans and motors.

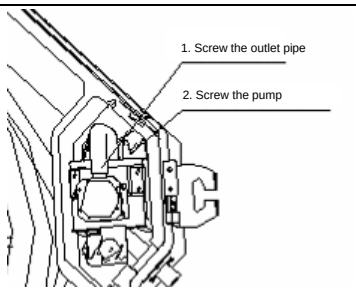
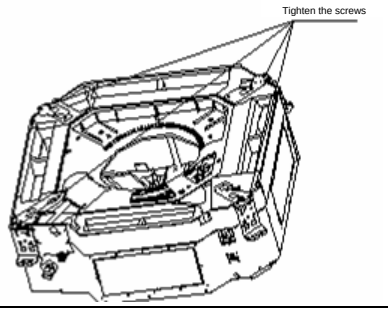
Motor and fan		
Precondition: The power supply has been disconnected.		
Step	Diagram	Operation Procedure
1. Remove the line connecting to the motor.		●Use a screwdriver to unscrew the electric box cover. ●Remove from the master board the line connecting to the motor and remove the tie.
2. Remove the filter.		●Remove the filter from the air return frame.
3. Remove the air return cover plate.		●Use a screwdriver to unscrew the air return cover plate.
4. Remove the rear volute casing.		●Loosen the fasteners that connect the rear volute casing with the front volute casing and remove the rear volute casing.
5. Remove the front volute casing.		●Use a screwdriver to unscrew the front volute casing and then remove the volute casing.
6. Loosen the centrifugal fan and motor.		●Use a hexagon to unscrew the centrifugal fan and loosen the fasteners of the motor.
7. Remove the motor.		●Remove the motor from the support and remove the centrifugal fan from the motor axle. Then, remove the motor. ●For motors that are accompanied with supports, the supports need removing as well.
8. Install a new motor.		●Assemble units based on the reverse order of this procedure and power on the units for test.

4.2 Four-way Cassette Type Indoor Unit

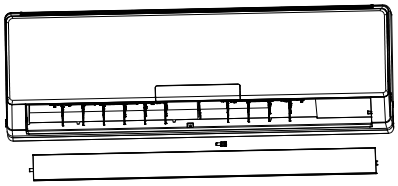
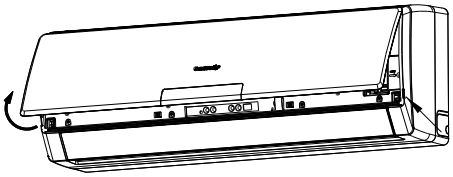
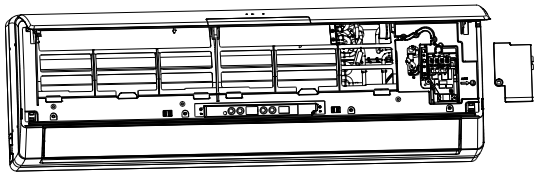
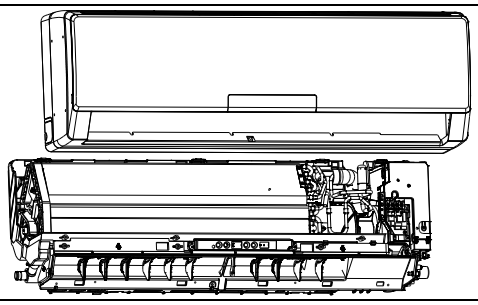
Motor and fan		
Step	Diagram	Operation Procedure
1. Unscrew the water tray.		●Use a screwdriver to unscrew the water tray.
2. Remove the water tray.		●Remove the water tray.
3. Unscrew the centrifugal fan.		●Use a wrench to unscrew the centrifugal fan.
4. Remove the centrifugal fan.		●Remove the centrifugal fan.
5. Unscrew the motor.		●Use a screwdriver to unscrew the motor.
6. Replace the motor with a new one.		●Replace the motor with a new one.
7. Screw the motor.		●Use a screwdriver to screw the motor.

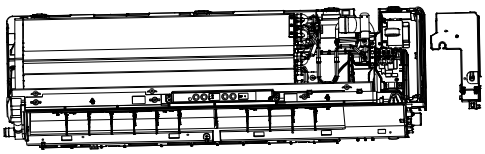
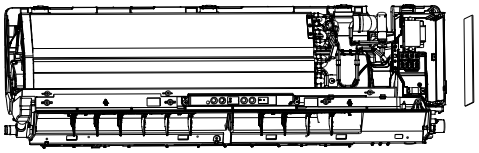
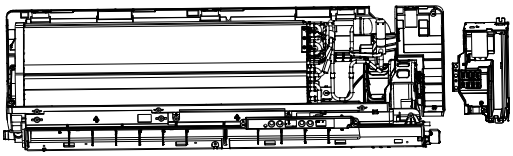
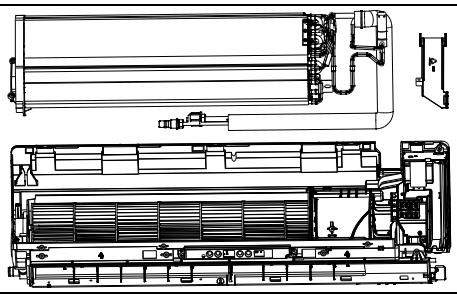
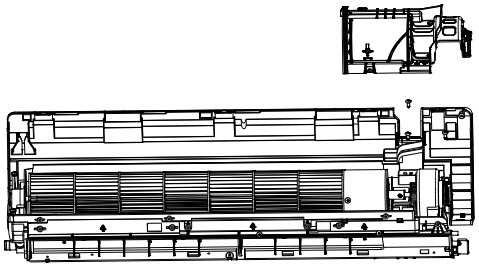
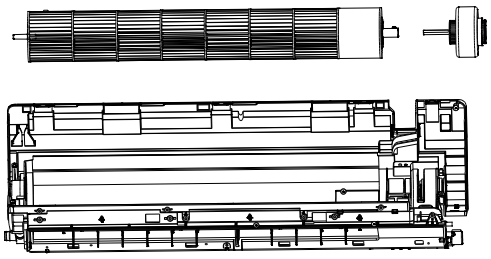
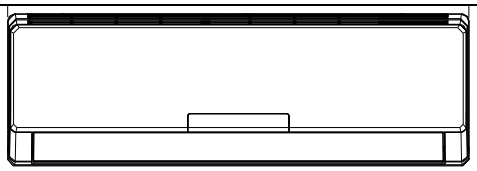
8. Install and screw the centrifugal fan.		●Install the centrifugal fan and use a wrench to screw the centrifugal fan.
9. Install and screw the water tray.		●Use a screwdriver to screw the water tray

Pump		
Step	Diagram	Operation Procedure
1. Unscrew the water tray.		●Use a screwdriver to unscrew the water tray.
2. Remove the water tray.		●Replace the water tray.
3. Remove the drainage duct and unscrew the pump.		3. Remove the drainage duct and use a screwdriver to unscrew the pump.
4. Replace the pump.		●Replace the pump.

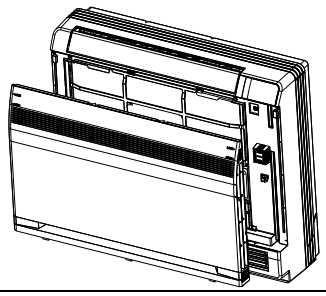
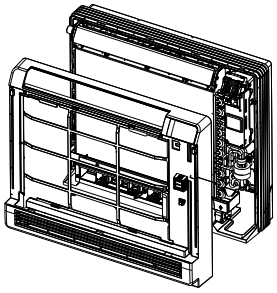
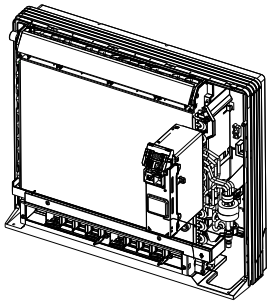
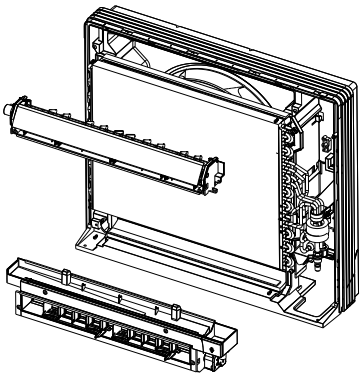
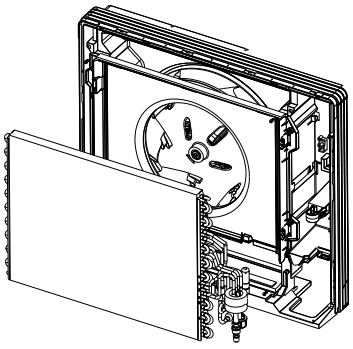
5. Connect the drainage duct and screw the new pump.		●Connect the drainage duct and use a screwdriver to screw the new pump.
6. Install and screw the water tray.		●Use a screwdriver to screw the water tray.

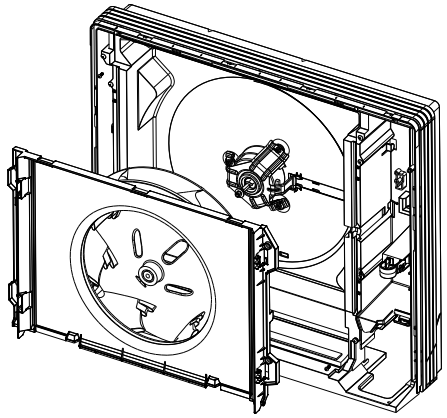
4.3 Wall Mounted Type Indoor Unit

Removal of Fan Motor		
Remark: before removing, making sure power is disconnected.		
Step	Diagram	Operation Procedure
1. Remove the louver		●Take off the axle bush of the louver. ●Remove the louver.
2. Open the front panel		●Hold the indents on both sides of the panel and pull it out in the direction shown by the arrow.
3. Remove the electrical box cover 2		●Unscrew the screws fixing the electrical box cover with a screwdriver. Take off the box cover 2. ●Detach the ambient temperature sensor from the conduit.
4. Remove the front panel assembly		●Unscrew the screws fixing the front panel assembly. ●Remove the front panel assembly.

5. Remove the electrical box cover 1		●Press on the buckle of the box cover 1 and then take off the cover.
6. Remove the main board		●Release the wiring terminals connected to the main board. ●Remove the main board.
7. Remove the electrical box		●Unscrew the screws fixing the electrical box with a screwdriver. ●Remove the electrical box.
8. Remove the evaporator		●Use a screwdriver to unscrew the screws fixing the press plate of connection pipe on the back of the unit and take off the press plate. ●Unscrew the screws of evaporator with a screwdriver and then remove the evaporator.
9.Remove motor's pressing plate		●Unscrew the fixing screws of the pressing plate with a screwdriver and then remove it.
10. Remove the motor and fan		●Take off the motor and fan directly. ●Use a screwdriver to unscrew the screws connecting the motor and the fan.
11. Install a new motor.		●Assemble units based on the reverse order of this procedure and power on the units for test.

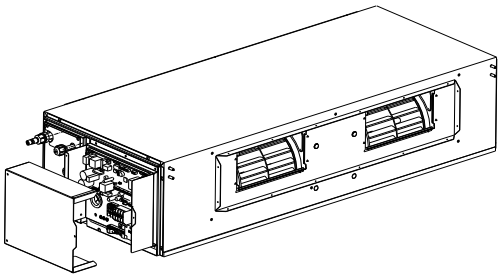
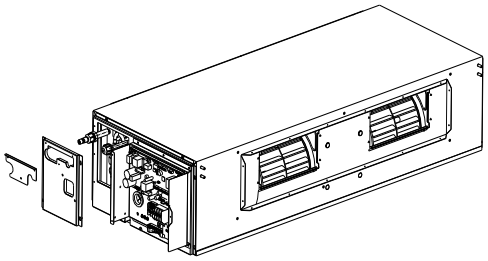
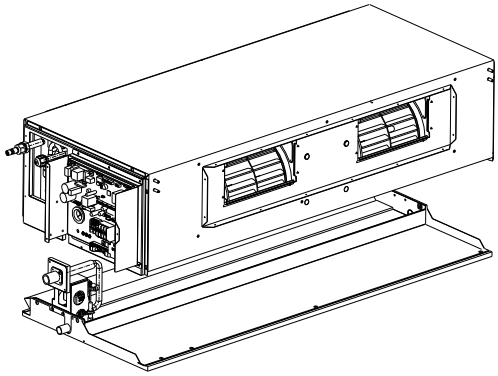
4.4 Console Type Indoor Unit

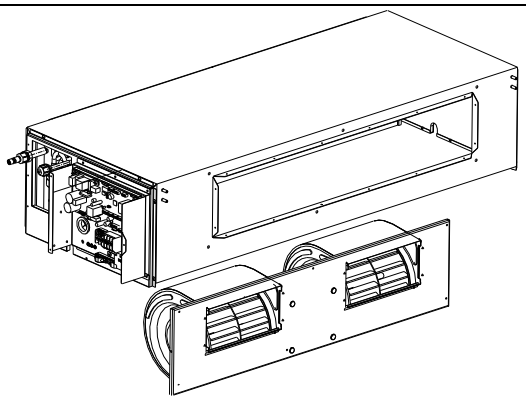
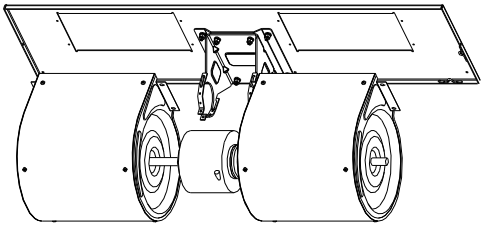
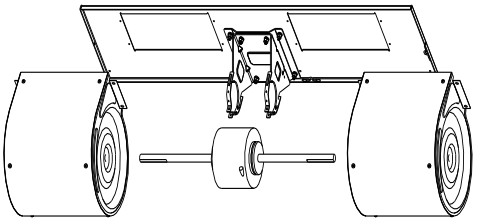
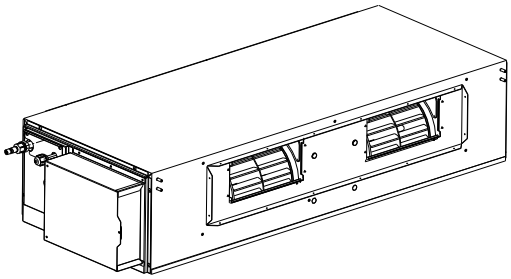
Removal of Fan Motor		
Remark: before removing, making sure power is disconnected.		
Step	Diagram	Operation Procedure
1. Open the panel		●Press clasps at both sides to “OPEN” position.
2. Remove filter and front case		●Remove 5 screws fixing the front case.
3. Remove electric box		●Open electric box cover, loosen all connection wires and then remove screws.
4. Remove water tray and swing motor		●Remove 2 screws fixing water tray and swing motor respectively.
5. Remove evaporator		●Remove the fixer fixing the evaporator, press 2 clasps at left side and then remove the evaporator.

6. Remove reversion loop and centrifugal blade		●Remove 4 screws fixing the reversion loop and then remove the reversion loop' remove nuts on blade and then remove the centrifugal blade.

4.5 High Static Pressure Duct Type Indoor Uint

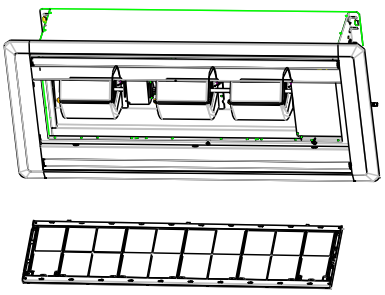
NOTICE! The following steps are specific for GMV-ND18PHS/A-T(U) units. For other units, the assembly and disassembly procedure is similar except the specifications of centrifugal fans and motors.

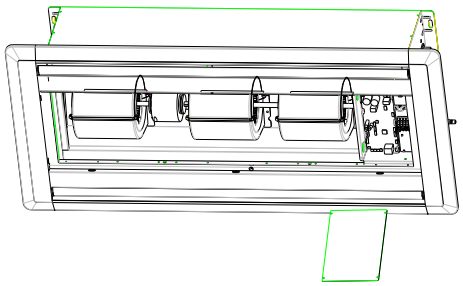
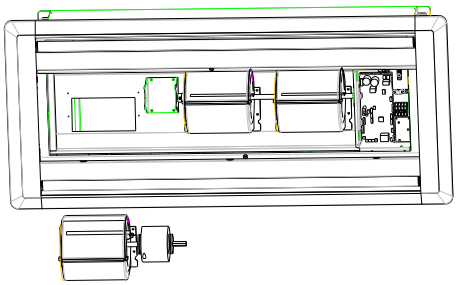
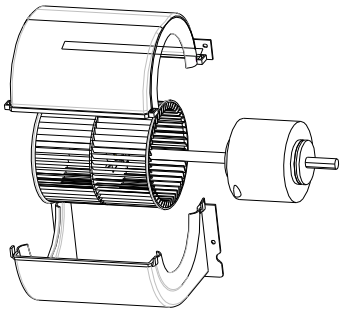
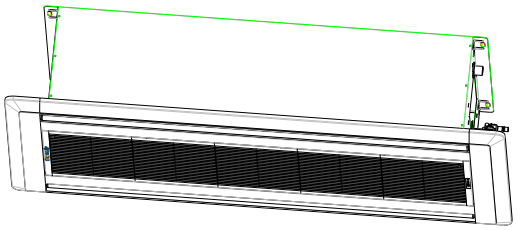
Motor and fan		
Precondition: The power supply has been disconnected.		
Step	Diagram	Operation Procedure
1. Remove the line connecting to the motor.		●Use a screwdriver to unscrew the electric box cover. ●Remove from the master board the line connecting to the motor and remove the tie.
2. Disassemble the seal plate and cover plate.		●Use a screwdriver to unscrew the seal plate and cover plate and then remove them.
3. Remove the cover plate component.		●Use a screwdriver to unscrew the cover plate component.

4. Disassemble the centrifugal fan.		●Use a screwdriver to unscrew the centrifugal fan.
5. Remove the motor and centrifugal fan.		●Use a screwdriver to unscrew the centrifugal fan. ●Loosen the fasteners of the motor and remove the motor from the support. ●For motors that are accompanied with supports, the supports need removing as well.
6. Remove the centrifugal fan.		●Use a hexagon to unscrew the fan and remove the centrifugal fan from the motor axle.
8. Install a new motor.		●Assemble units based on the reverse order of this procedure and power on the units for test.

4.6 Two-way Cassette Type Indoor Uint

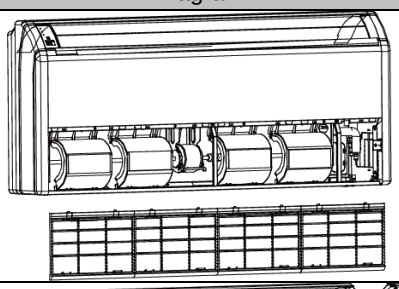
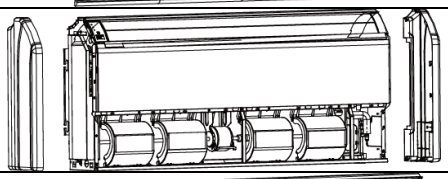
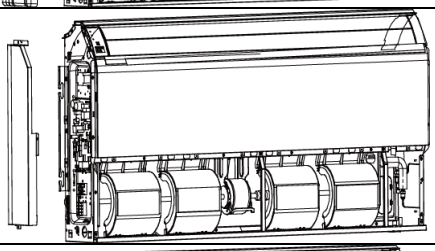
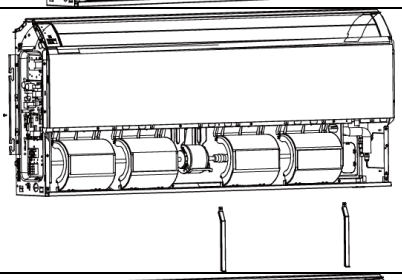
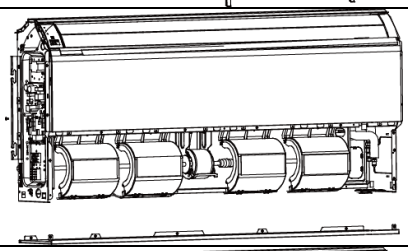
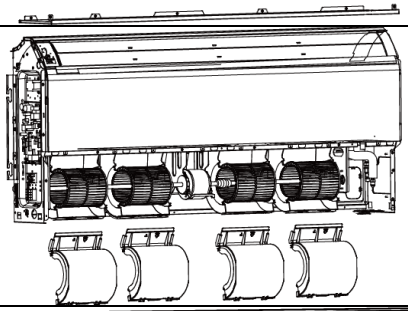
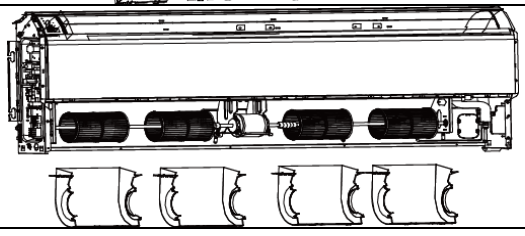
NOTICE! The following steps are specific for GMV-ND09TS/A-T(U) units. For other units, the assembly and disassembly procedure is similar except the numbers of centrifugal fans and motors.

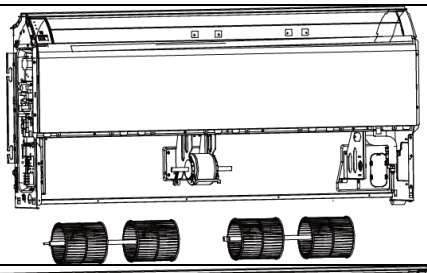
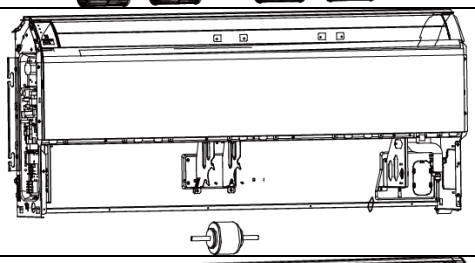
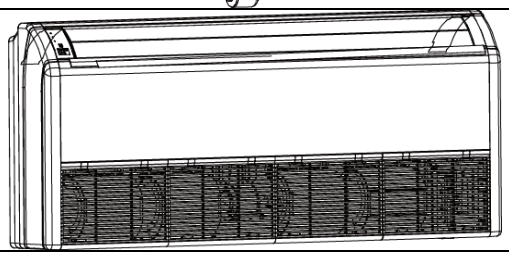
Removal of Fan Motor		
Precondition: The power supply has been disconnected.		
Step	Diagram	Operation Procedure
1. Remove the grille		●Slip the fasteners on the panel, open the grille, remove it

2. Remove the line connecting to the motor.		●Use a screwdriver to unscrew the electric box cover. ●Remove from the master board the line connecting to the motor and remove the tie.
3.Remove the motor、Remove the motor from the support		●Use a screwdriver to unscrew the motor、volute casing subassembly and joint slack。 ●Loosen the fasteners of the motor ,remove the motor from the support ●Remove the volute casing subassembly as well
4.Remove the centrifugal fan		●Remove the volute casing ●Use a hexagon to unscrew the centrifugal fan，remove it from motor axle
5.Replace the motor with a new one.		●Assemble units based on the reverse order of this procedure and power on the units for test.

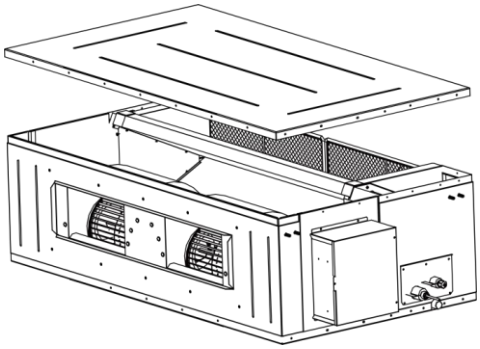
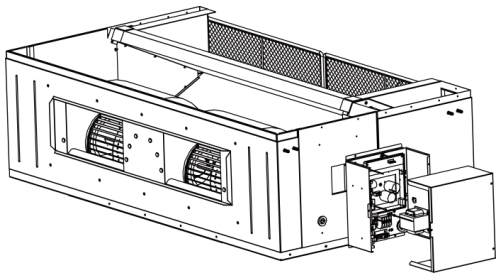
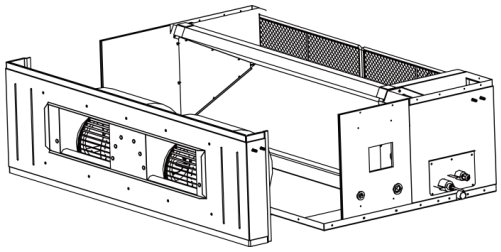
4.7 Floor Ceiling Type Indoor Unit

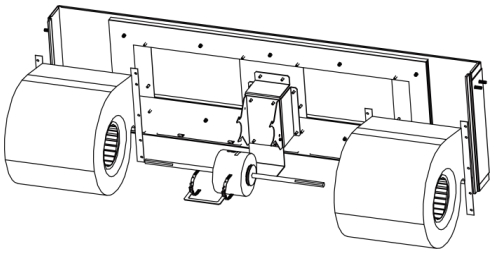
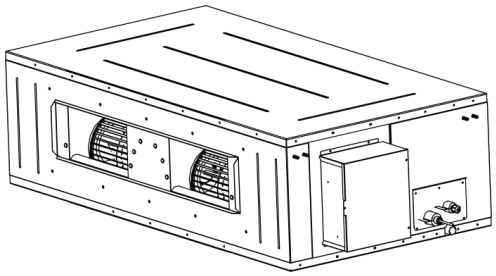
NOTICE! The following steps are specific for GMV-ND48ZD/A-T(U) units. For other units, the assembly and disassembly procedure is similar except the numbers of centrifugal fans and motors.

Motor and fan		
Precondition: The power supply has been disconnected.		
Step	Diagram	Operation Procedure
1. Remove the air return grille.		●Loosen the fasteners of the air return grille and then remove the grille.
2. Remove the left and right cover plates.		●Use a screwdriver to unscrew the left and right cover plates and then remove the cover plates.
3. Remove the electric box cover and the line connecting to the motor.		●Use a screwdriver to unscrew the electric box cover. ●Remove from the master board the line connecting to the motor and remove the tie.
4. Remove the limit board.		●Use a screwdriver to unscrew the limit board and then remove the board.
5. Remove the rear connecting board.		●Use a screwdriver to unscrew the rear connecting board and them remove the board.
6. Remove the rear volute casing.		●Loosen the fasteners that connect the rear volute casing with the front volute casing and remove the rear volute casing.
7. Remove the front volute casing.		●Use a screwdriver to unscrew the front volute casing and then remove the volute casing.

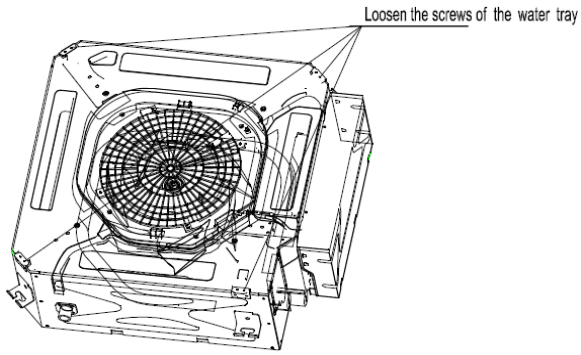
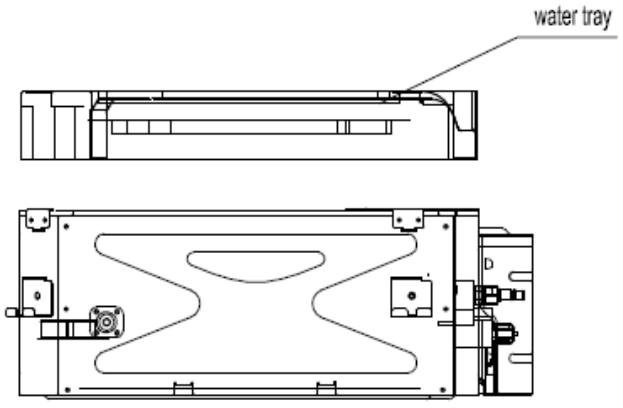
8. Remove the centrifugal fan.		●Loosen the fasteners that connect the coupler with the motor axle and remove the centrifugal fan.
9. Remove the motor.		●Remove the motor from the support and remove the centrifugal fan from the motor axle. Then, remove the motor. ●For motors that are accompanied with supports, the supports need removing as well.
10. Install a new motor.		●Assemble units based on the reverse order of this procedure and power on the units for test.

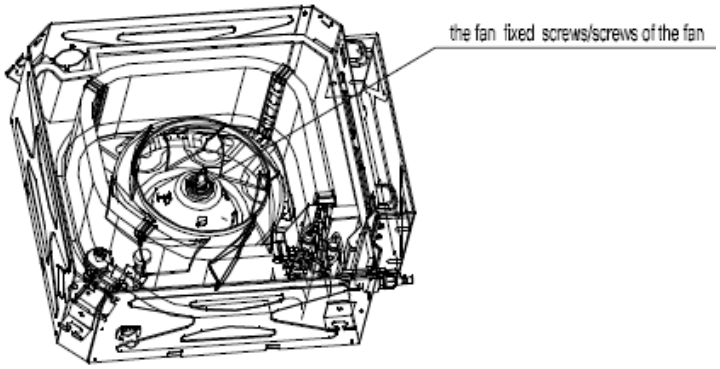
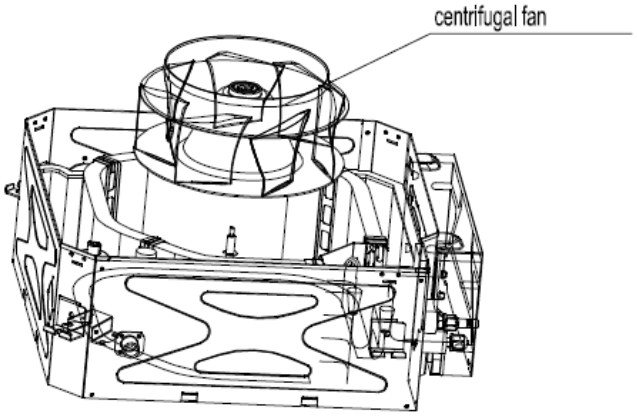
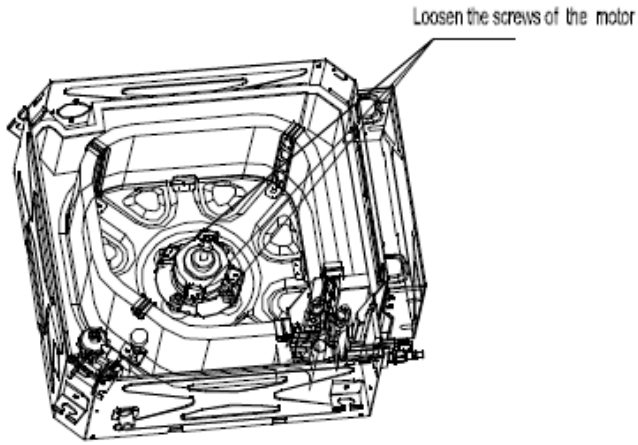
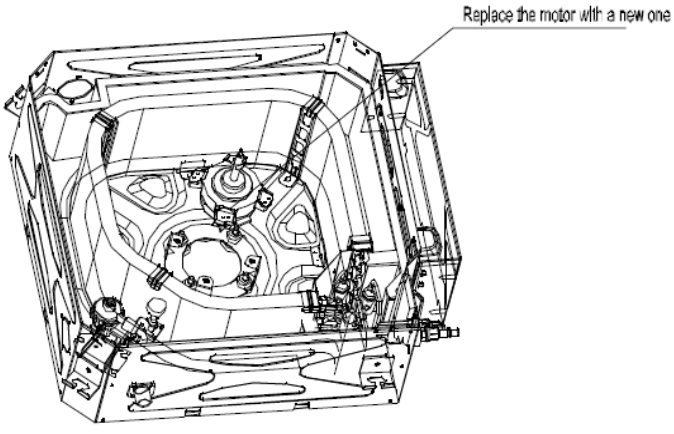
4.8 Fresh Air Processing Indoor Unit

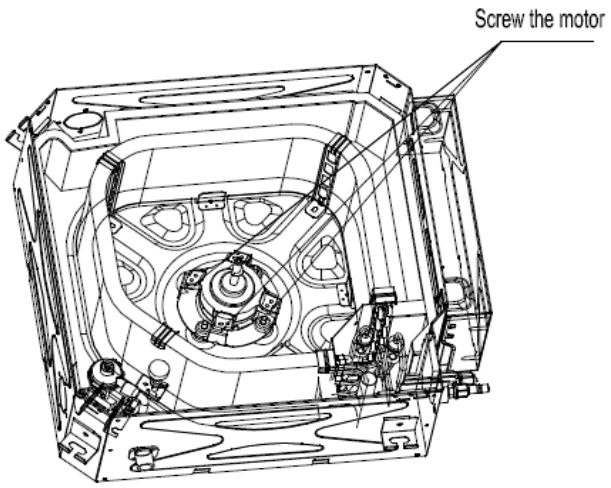
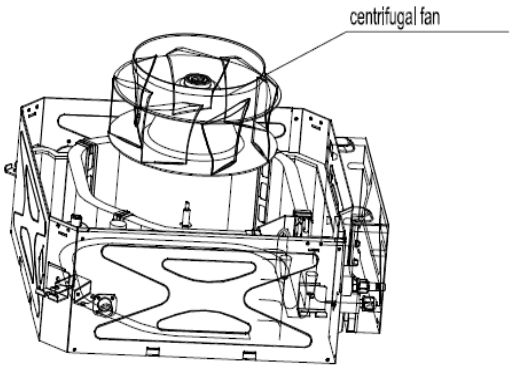
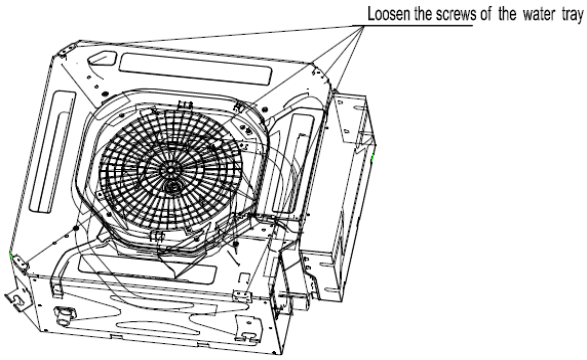
Motor and fan		
Precondition: The power supply has been disconnected.		
Step	Diagram	Operation Procedure
1. Remove the cover plate component.		●Use a screwdriver to unscrew the cover plate component.
2. Remove the line connecting to the motor.		●Use a screwdriver to unscrew the electric box cover. ●Remove from the master board the line connecting to the motor and remove the tie.
3. Disassemble the centrifugal fan.		●Use a screwdriver to unscrew the centrifugal fan.

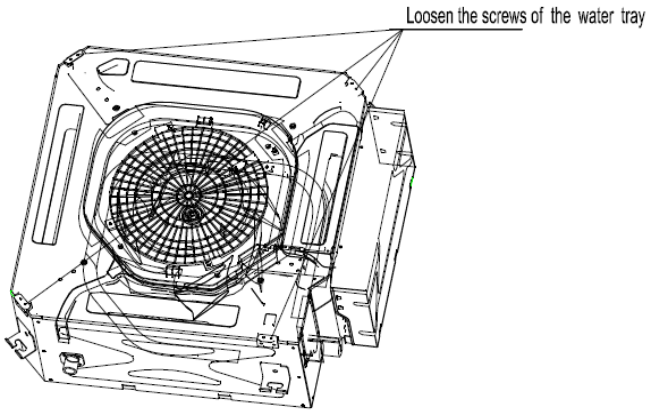
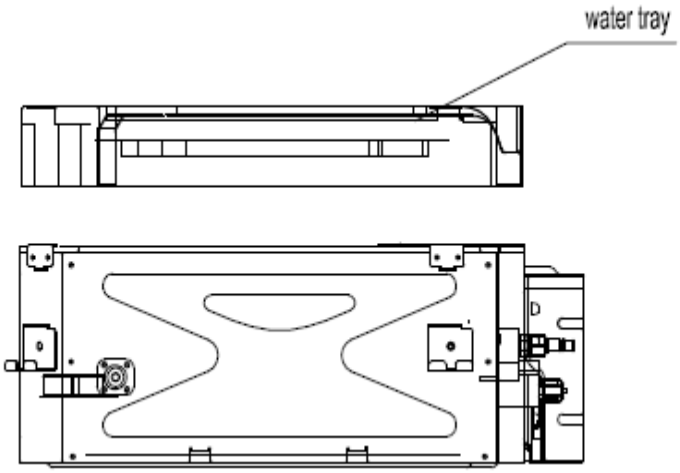
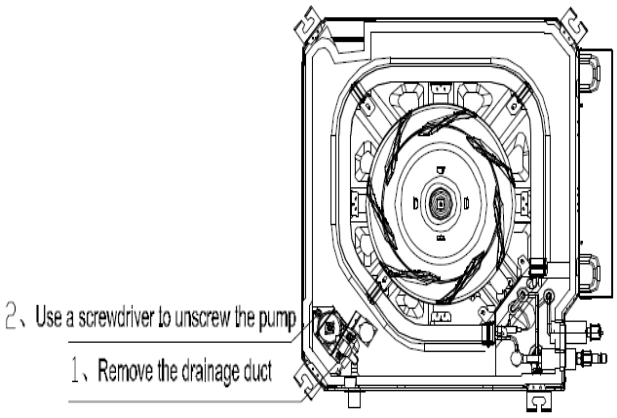
4. Remove the centrifugal fan.		●Use a hexagon to unscrew the centrifugal fan and remove the centrifugal fan from the motor axle.
5. Install a new motor.		●Assemble units based on the reverse order of this procedure and power on the units for test.

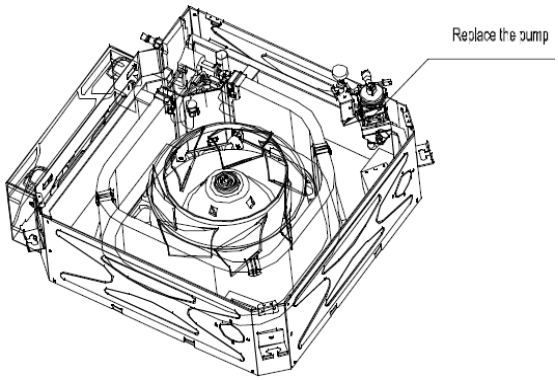
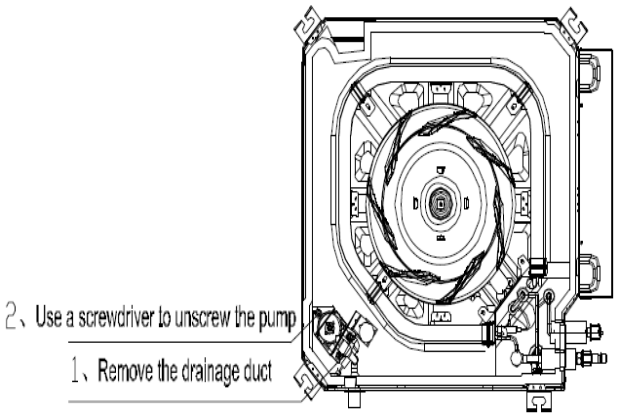
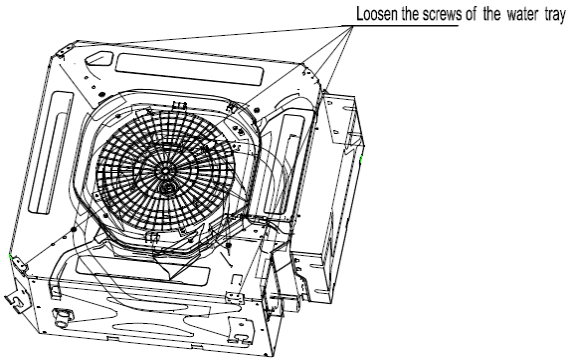
4.9 Compact Four-way Cassette Type Indoor Unit

Motor and fan		
Step	Diagram	Operation Procedure
1. Unscrew the water tray.		●Use a screwdriver to unscrew the water tray.
2. Remove the water tray.		●Remove the water tray.

Motor and fan		
Step	Diagram	Operation Procedure
3. Unscrew the centrifugal fan.		●Use a wrench to unscrew the centrifugal fan.
4. Remove the centrifugal fan.		●Remove the centrifugal fan.
5. Unscrew the motor.		●Use a screwdriver to unscrew the motor.
6. Replace the motor with a new one.		●Replace the motor with a new one.

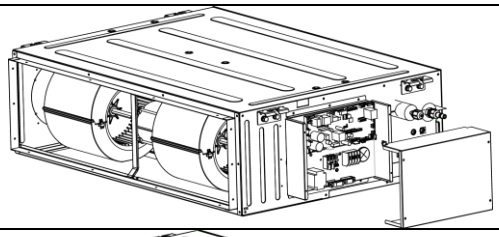
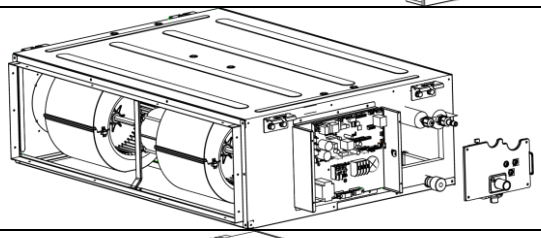
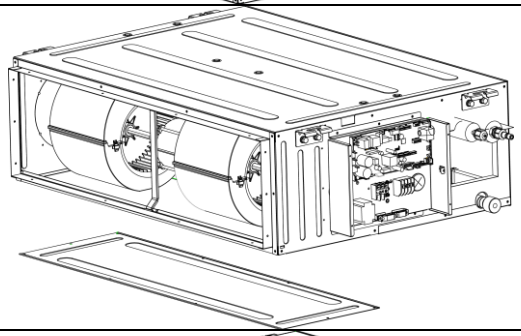
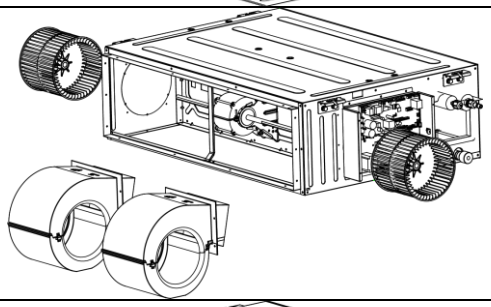
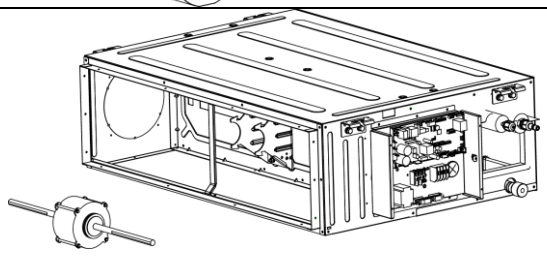
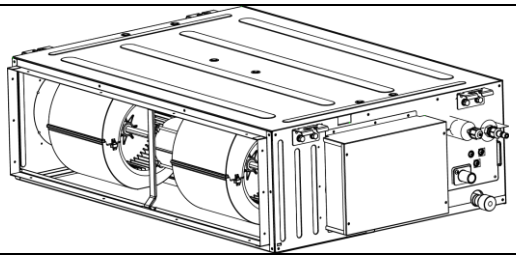
Motor and fan		
Step	Diagram	Operation Procedure
7. Screw the motor.		●Use a screwdriver to screw the motor.
8. Install and screw the centrifugal fan.		●Install the centrifugal fan and use a wrench to screw the centrifugal fan.
9. Install and screw the water tray.		●Use a screwdriver to screw the water tray

Pump		
Step	Diagram	Operation Procedure
1. Unscrew the water tray.		●Use a screwdriver to unscrew the water tray.
2. Remove the water tray.		●Replace the water tray.
3. Remove the drainage duct and unscrew the pump.		3. Remove the drainage duct and use a screwdriver to unscrew the pump.

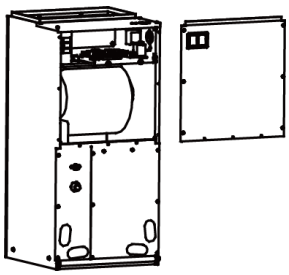
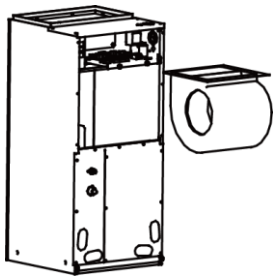
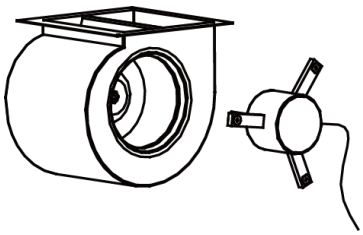
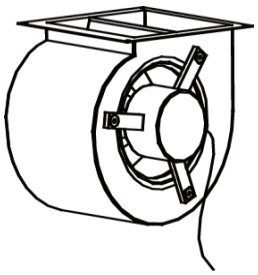
Pump		
Step	Diagram	Operation Procedure
4. Replace the pump.		●Replace the pump.
5. Connect the drainage duct and screw the new pump.		●Connect the drainage duct and use a screwdriver to screw the new pump.
6. Install and screw the water tray.		●Use a screwdriver to screw the water tray.

4.10 Super High Static Pressure Duct Type Indoor Unit

Note: The following steps are specific for GMV-ND24PHS/B-T(U) units. For other units, the assembly and disassembly procedure is similar except the specifications of centrifugal fans and motors.

Motor and fan		
Precondition: The power supply has been disconnected.		
Step	Diagram	Operation Procedure
1.Remove the line connecting to the motor.		●Use a screwdriver to unscrew the electric box cover. ●Remove from the master board the line connecting to the motor and remove the tie.
2. Disassemble the seal plate and cover plate.		●Use a screwdriver to unscrew the seal plate and cover plate and then remove them.
3.Remove the grille		●Use a screwdriver to unscrew the cover plate component.
4. Remove the centrifugal fan.		●Use a screwdriver to unscrew the front volute casing and then remove the volute casing.
5. Remove the motor.		Remove the motor from the support and remove the centrifugal fan from the motor axle. Then, remove the motor. ●For motors that are accompanied with supports, the supports need removing as well.
6. Install a new motor.		●Assemble units based on the reverse order of this procedure and power on the units for test.

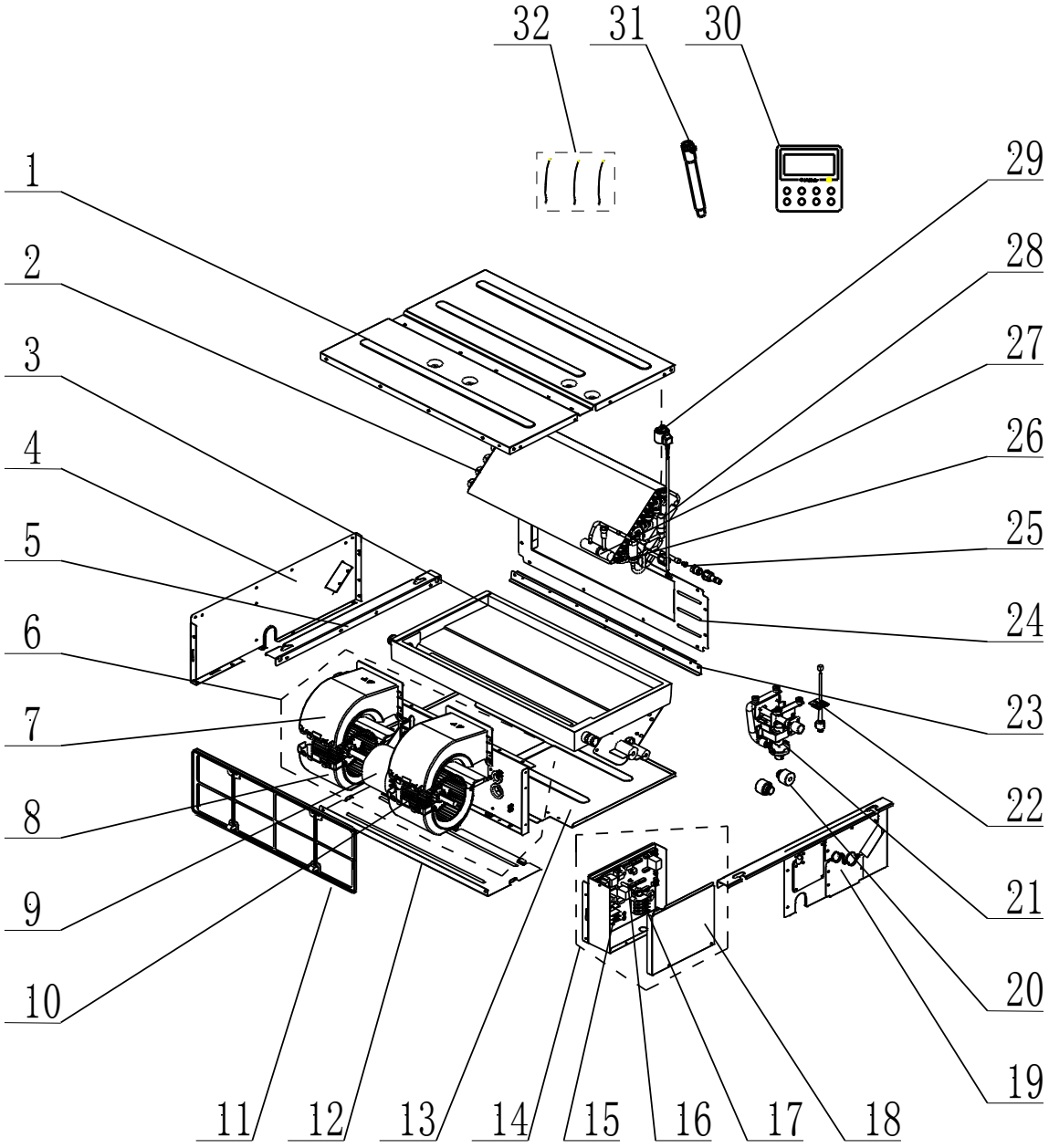
4.11 Air Handler type Indoor Unit

Motor and fan		
Precondition: The power supply has been disconnected.		
Procedures	Diagrams	Operating Instructions
1. Remove the upper panel.		● Loosen screws round the upper panel with a screwdriver. ● Remove the upper panel from unit.
2. Remove the fan.		● Disconnect the wires of the fan from the wiring terminal and draw them out. ● Loosen screws located at the front of the fan with a screwdriver. ● Remove the fan from the unit.
3. Remove the motor.		● Loosen screws fixing the motor and fan blades. ● Loosen screw bolts fixing the bracket. ● Remove the motor rightward from the fan.
4. Reinstall the fan.		● Place the motor at the proper position. ● Tighten screws fixing the motor and fan blades. ● Tighten screw bolts fixning the motor bracket. ● After the installation, reassemble the unit as before.

5 Exploded Views And Part List

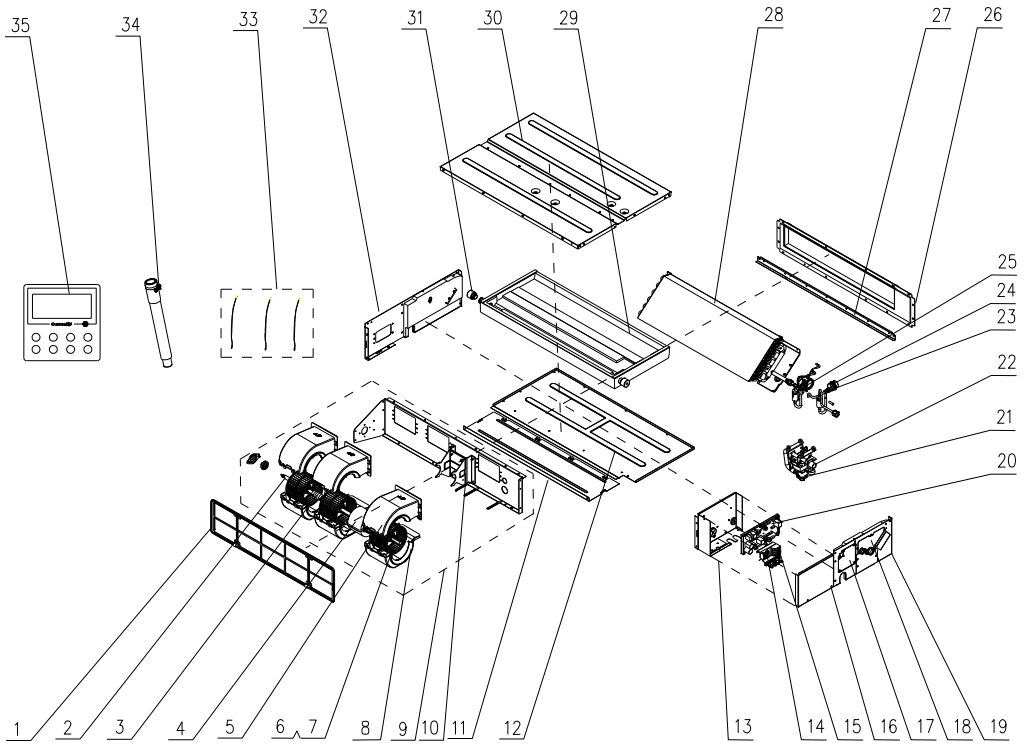
5.1 Low Static Pressure Duct Type Indoor Unit

Exploded View of GMV-ND07PLS/A-T(U)、GMV-ND09PLS/A-T(U)、GMV-ND12PLS/A-T(U)：



No.	Name of part	For the following unit		For the following unit	
		Unit	Product Code	Unit	Product Code
		GMV-ND07PLS/A-T(U)	CM810N0080	GMV-ND09PLS/A-T(U)	CM810N0090
		/	/	GMV-ND12PLS/A-T(U)	CM810N0100
		Part code	Quantity	Part code	Quantity
1	Top Cover Board Assy	'01265325	1	'01265325	1
2	Evaporator Assy	01024100155	1	01024100136	1
3	Water Tray Assy	'01285332	1	'01285332	1
4	Right Side Plate Assy	'01315335	1	'01315335	1
5	Supporter	'01895225	2	'01895225	2
6	Centrifugal fan assy	'15404100022	1	'15404100022	1
7	Front Volute Casing	'26905205	2	'26905205	2
8	Rear Volute Casing	'26905206	2	'26905206	2
9	Fan Motor	'15704100001	1	'15704100001	1
10	Centrifugal Fan	'10425200	2	'10425200	2
11	Filter Sub-Assy	'11725209	1	'11725209	1
12	Cover board (Fan motor)	'01265300	1	'01265300	1
13	Bottom Cover Plate	'01265299	1	'01265299	1
14	Electric Box Assy	'01394100433	1	'01394100433	1
15	Terminal Board	'4201115402	1	'4201115402	1
16	Main Board	'30226000029	1	'30226000029	1
17	Terminal Board	'4201800002601	1	'4201800002601	1
18	Electric Box Cover	'01424100035	1	'01424100035	1
19	Left Side Plate Assy	'01315200087	1	'01315200087	1
20	Choke Plug of Drain Pipe	'76815214	2	'76815214	2
21	Water Pump	'43130324	1	'43130324	1
22	Water Level Switch	'45020216	1	'45020216	1
23	Cover of air outlet	'01265298	1	'01265298	1
24	Air Outlet Frame Assy	'01374636	1	'01374636	1
25	Filter Sub-Assy	/	/	/	/
26	Strainer	0741410000601	1	0741410000601	1
27	Strainer	07414100015	1	07414100015	1
28	Electronic Expansion Valve	'07334463	1	'07334463	1
29	Electric Expand Valve Fitting	'4304413215	1	'4304413215	1
30	Display Board	'30296000040	1	'30296000040	1
31	Drain Hose Sub-Assy	'05232050	1	'05232050	1
32	Sensor Sub-assy	'39004168G	1	'39004168G	1

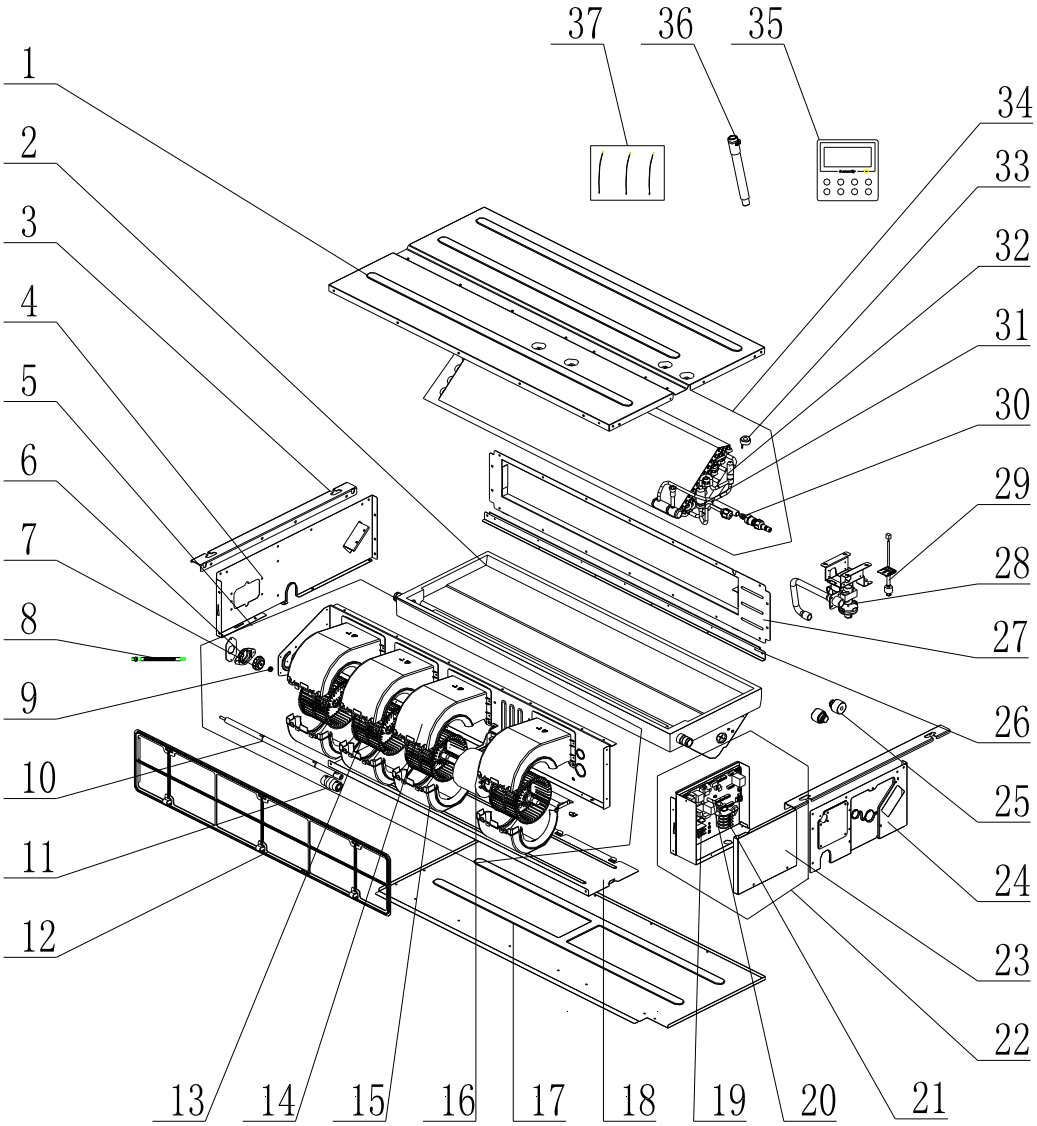
Exploded View of GMV-ND14PLS/A-T(U)：



No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND14PLS/A-T(U)	CM810N0120
		Part code	Quantity
1	Filter Sub-Assy	11725210	1
2	Rotary Axis Sub-Assy	73018020	1
3	Joint Slack	73018731	1
4	Brushless DC Motor	15704100001	1
5	Front Volute Casing	26905205	3
6	Centrifugal Fan	10425200	3
7	Fan Bearing	76512210	1
8	Rear Volute Casing	26905206	3
9	Centrifugal fan assy	15404100023	1
10	Supporter	01804100140	1
11	Cover board (Fan motor)	01265333	1
12	Bottom Cover Plate	01265332	1
13	Electric Box Assy	01394100433	1
14	Terminal Board	4201115402	1
15	Terminal Board	4201800002601	1
16	Electric Box Cover	01424100035	1
17	Sealplate sub-assy (drainage)	01495315	1

18	Sealplate sub-assy (outlet)	01495316	1
19	Left Side Plate Assy	01315200087	1
20	Main Board	30226000029	1
21	Water Pump	43130324	1
22	Water Level Switch	45020216	1
23	Electronic Expansion Valve	07334466	1
24	Electric Expand Valve Fitting	4304413215	1
25	Strainer	0741410000601	1
26	Air Outlet Frame Assy	01374637	1
27	Cover of Air Outlet	01265331	1
28	Evaporator Assy	01024100110	1
29	Water Tray Assy	01285333	1
30	Top Cover Board Assy	01265328	1
31	Choke Plug of Drain Pipe	76815214	2
32	Right Side Plate Assy	01305263	1
33	Sensor Sub-assy	39004168G	1
34	Drain Hose Sub-Assy	05232050	1
35	Display Board	30296000040	1

Exploded View of GMV-ND18PLS/A-T(U)、GMV-ND22PLS/A-T(U)：

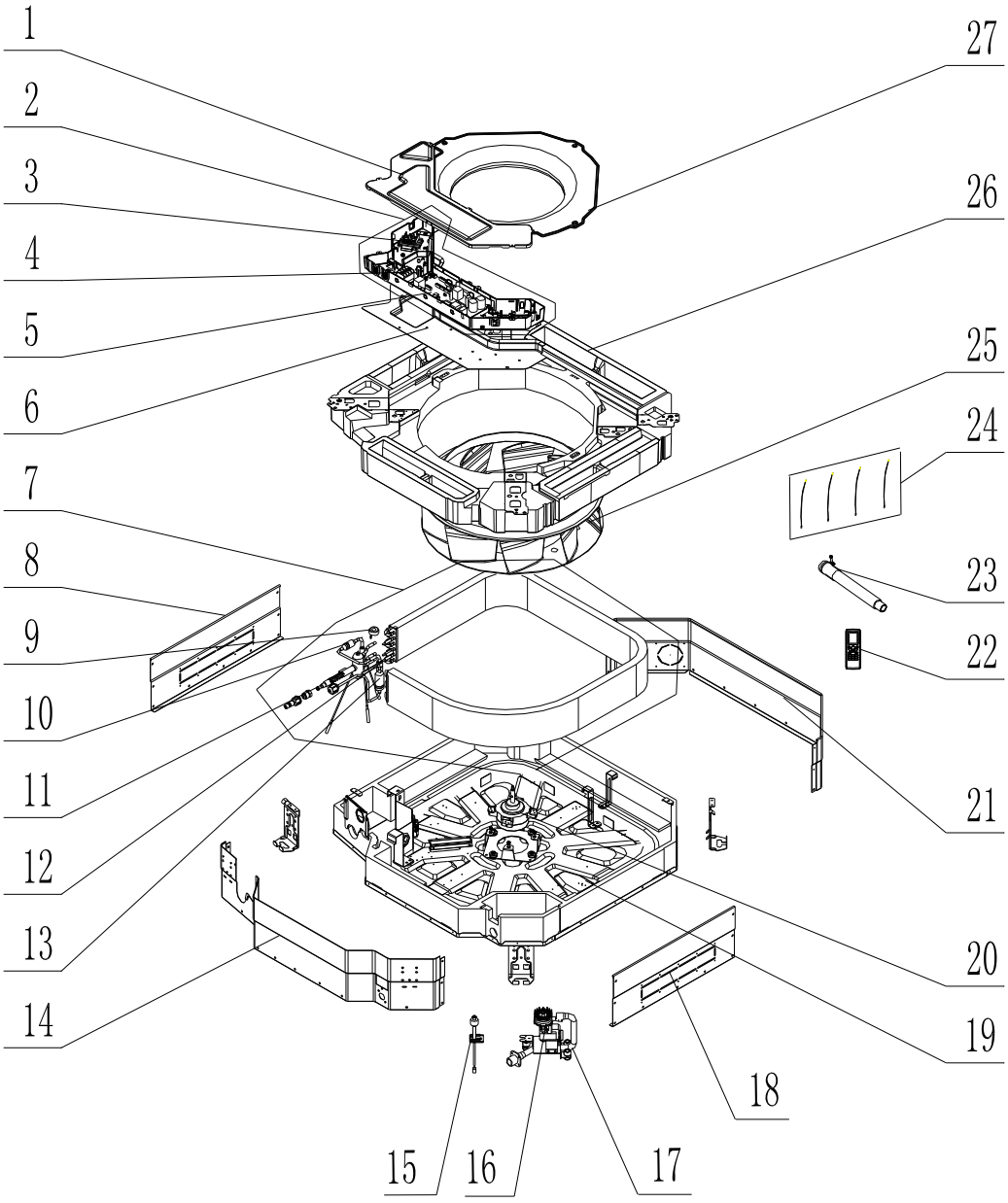


No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND18PLS/A-T(U)	CM810N0070
		GMV-ND22PLS/A-T(U)	CM810N0110
		Part code	Quantity
1	Lower Cover Plate Sub-Assy	'01265339	1
2	Water Tray Assy	'01285334	1
3	Supporter	'01895225	2
4	Right Side Plate Assy	'01305263	1
5	Centrifugal fan assy	'15404100024	1
6	Support Of Motor Bearing	'01792408	1
7	O-Gasket of Bearing	'76512404	1
8	Corrugated Pipe	05015408	1
9	Fan Bearing	'76512210	1
10	Rotary Axis Sub-Assy	'73018000029	1

11	Joint Slack	'73018731	1
12	Filter Sub-Assy	11725208	1
13	Centrifugal Fan	'10425200	4
14	Front Volute Casing	'26905205	4
15	Rear Volute Casing	'26905206	4
16	Fan Motor	'15704100001	1
17	Bottom Cover Plate	'01265337	1
18	Cover board (Fan motor)	'01265338	1
19	Terminal Board	‘4201115402	1
20	Main Board	'30226000029	1
21	Terminal Board	'4201800002601	1
22	Electric Box Assy	'01394100433	1
23	Electric Box Cover	'01424100035	1
24	Left Side Plate Assy	'01315200087	1
25	Choke Plug of Drain Pipe	'76815214	2
26	Cover of Air Outlet	'01265335	1
27	Air Outlet Frame Assy	'01374635	1
28	Water Pump	'43130324	1
29	Water Level Switch	'45020216	1
30	Filter Sub-Assy	'07210028	1
31	Strainer	'0741410000601	1
32	Electronic Expansion Valve	'07334466	1
33	Electric Expand Valve Fitting	'4304413215	1
34	Evaporator Assy	'01024100133	1
35	Display Board	'30296000040	1
36	Drain Hose Sub-Assy	'05232050	1
37	Sensor Sub-assy	'39004168G	1

5.2 Four-way Cassette Type Indoor Unit

Exploded View of GMV-ND07T/A-T(U)：

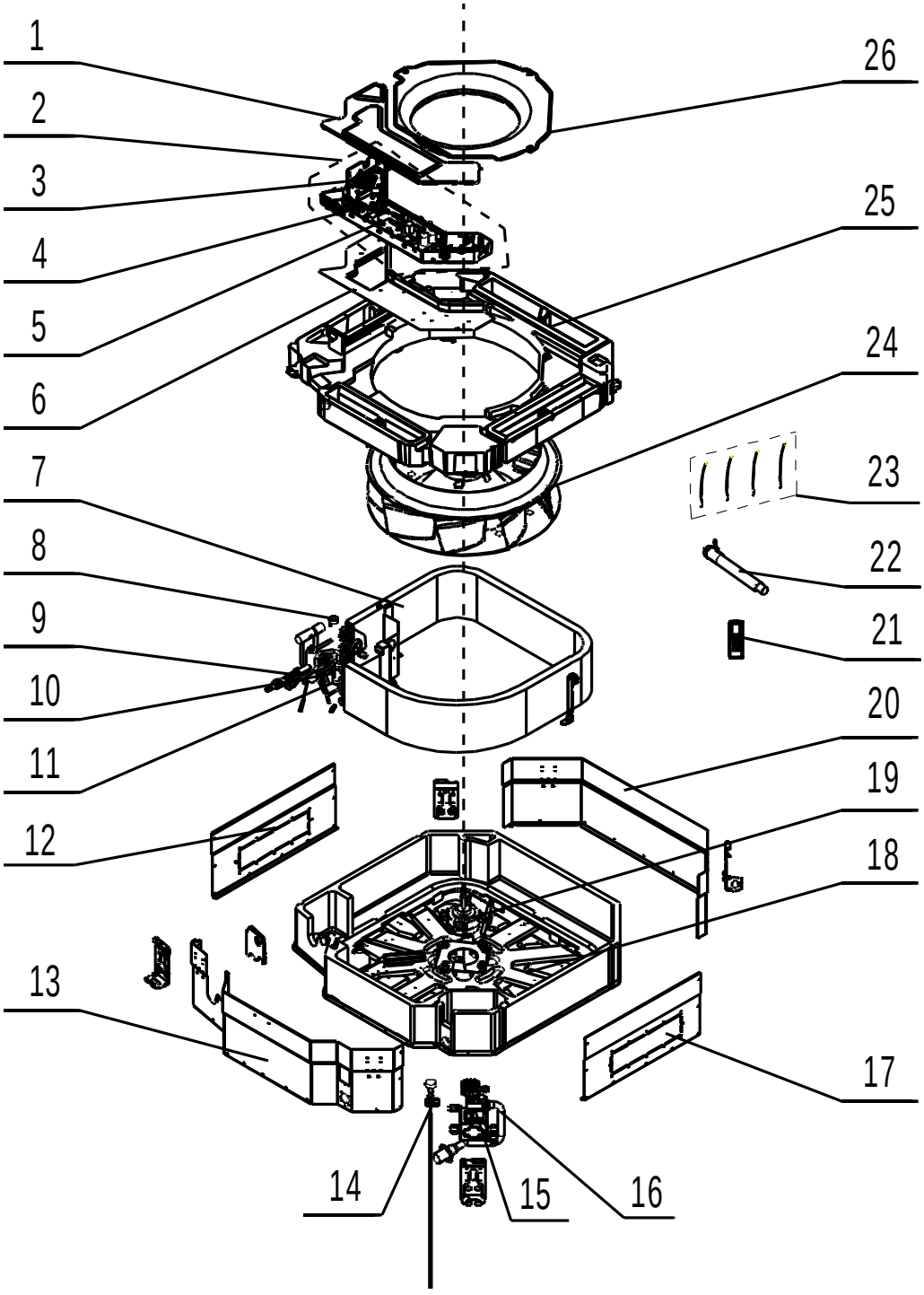


No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND07T/A-T(U)	CM500N0520
		Part code	Quantity
1	Electric Box cover	0142410004801	1
2	Electric Box Assy	01394100434	1
3	Terminal Board	42011222	1
4	Terminal Board	4201800002601	1
5	Main Board	30226000029	1
6	Electric base plate	01412721	1
7	Evaporator Assy	01024100135	1
8	Left Side Plate	01302733	1

9	Electric Expand Valve Fitting	4304413215	1
10	Strainer	07415200002	1
11	Filter Sub-Assy	/	/
12	Electronic Expansion Valve	07334463	1
13	Strainer	07414100006	1
14	Front Side Plate	01302731	1
15	Water Level Switch	45020216	1
16	Water Pump	43138000068	1
17	Pump Drainpipe	05232721	1
18	Right Side Plate	01302734	1
19	Base Plate Assy	01222701	1
20	Brushless DC Motor	15704100007	1
21	Rear Side Plate	01302732	1
22	Remote Controller	30510589	1
23	Drain Hose Sub-Assy	05232050	1
24	Sensor Sub-assy	39008000013G	1
25	Centrifugal Fan	10312721	1
26	Water Tray Assy	01289400013	1
27	Diversion Circle	10372701	1

Above data is subject to change without notice,pls refer the SP in global service website.

Exploded View of GMV-ND09T/A-T(U)、GMV-ND12T/A-T(U)、GMV-ND15T/A-T(U)、GMV-ND18T/A-T(U) 、GMV-ND24T/A-T(U)、GMV-ND30T/A-T(U)、GMV-ND36T/A-T(U)、GMV-ND42T/A-T(U)、GMV-ND48T/A-T(U)：



No.	Name of part	For the following unit		For the following unit	
		Unit	Product Code	Unit	Product Code
		GMV-ND09T/A-T(U)	CM500N0530	GMV-ND15T/A-T(U)	CM500N0670
		GMV-ND12T/A-T(U)	CM500N0540	GMV-ND18T/A-T(U)	CM500N0510
		/	/	GMV-ND24T/A-T(U)	CM500N0550
		Part code	Quantity	Part code	Quantity
1	Electric Box Cover	0142410004801	1	0142410004801	1
2	Electric Box Assy	01394100434	1	01394100434	1
3	Terminal Board	42011222	1	42011222	1
4	Terminal Board	4201800002601	1	4201800002601	1
5	Main Board	30226000029	1	30226000029	1
6	Electric Base Plate	01412721	1	01412721	1
7	Evaporator Assy	0102410013401	1	01024100134	1
8	Electric Expand Valve Fitting	4304413215	1	4304413215	1
9	Corrugated Pipe	05025134	1	05015408	1
10	Strainer	0741410000601	1	0741410000601	1
11	Electronic Expansion Valve	07334466	1	07334466	1
12	Left Side Plate	01302705	1	01302705	1
13	Front Side Plate	01302701	1	01302701	1
14	Water Level Switch	45020216	1	45020216	1
15	Water Pump	43138000068	1	43138000068	1
16	Pump Drainpipe	'05230026	1	'05230026	1
17	Right Side Plate	01302707	1	01302707	1
18	Base Plate Assy	01222701	1	01222701	1
19	Brushless DC Motor	15709400004	1	15709400004	1
20	Rear Side Plate	01302703	1	01302703	1
21	Remote Controller	30510589	1	30510589	1
22	Drain Hose Sub-Assy	05232702	1	05232702	1
23	Sensor Sub-assy	39008000013G	1	39008000013G	1
24	Centrifugal Fan	'10312705	1	'10312705	1
25	Water Tray Assy	01289400013	1	01289400013	1
26	Diversion Circle	10372701	1	10372701	1

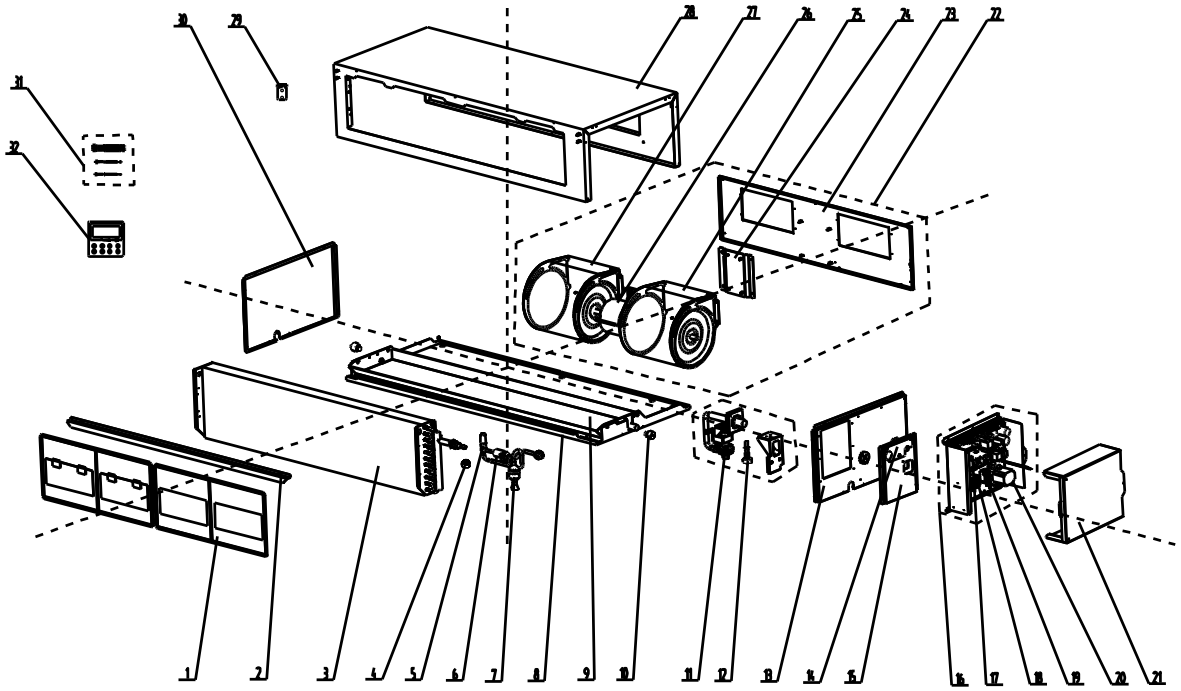
Above data is subject to change without notice,pls refer the SP in global service website.

No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND30T/A-T(U)	CM500N0560
		GMV-ND36T/A-T(U)	CM500N0570
		GMV-ND42T/A-T(U)	CM500N0580
		GMV-ND48T/A-T(U)	CM500N0590
		Part code	Quantity
1	Electric Box Cover	0142410004801	1
2	Electric Box Assy	01394100434	1
3	Terminal Board	42011222	1
4	Terminal Board	4201800002601	1
5	Main Board	30226000029	1
6	Electric Base Plate	01412721	1
7	Evaporator Assy	01024100116	1
8	Electric Expand Valve Fitting	01302733	1
9	Corrugated Pipe	4304413215	1
10	Strainer	0741410000601	1
11	Electronic Expansion Valve	07334468	1
12	Left Side Plate	01302725	1
13	Front Side Plate	01302721	1
14	Water Level Switch	45020216	1
15	Water Pump	43138000068	1
16	Pump Drainpipe	05230026	1
17	Right Side Plate	01302727	1
18	Base Plate Assy	01222701	1
19	Brushless DC Motor	15709400003	1
20	Rear Side Plate	01302723	1
21	Remote Controller	30510589	1
22	Drain Hose Sub-Assy	05232702	1
23	Sensor Sub-assy	39008000013G	1
24	Centrifugal Fan	10310101	1
25	Water Tray Assy	01289400013	1
26	Diversion Circle	10372722	1

Above data is subject to change without notice,pls refer the SP in global service website.

5.3 High Static Pressure Duct Type Indoor Uint

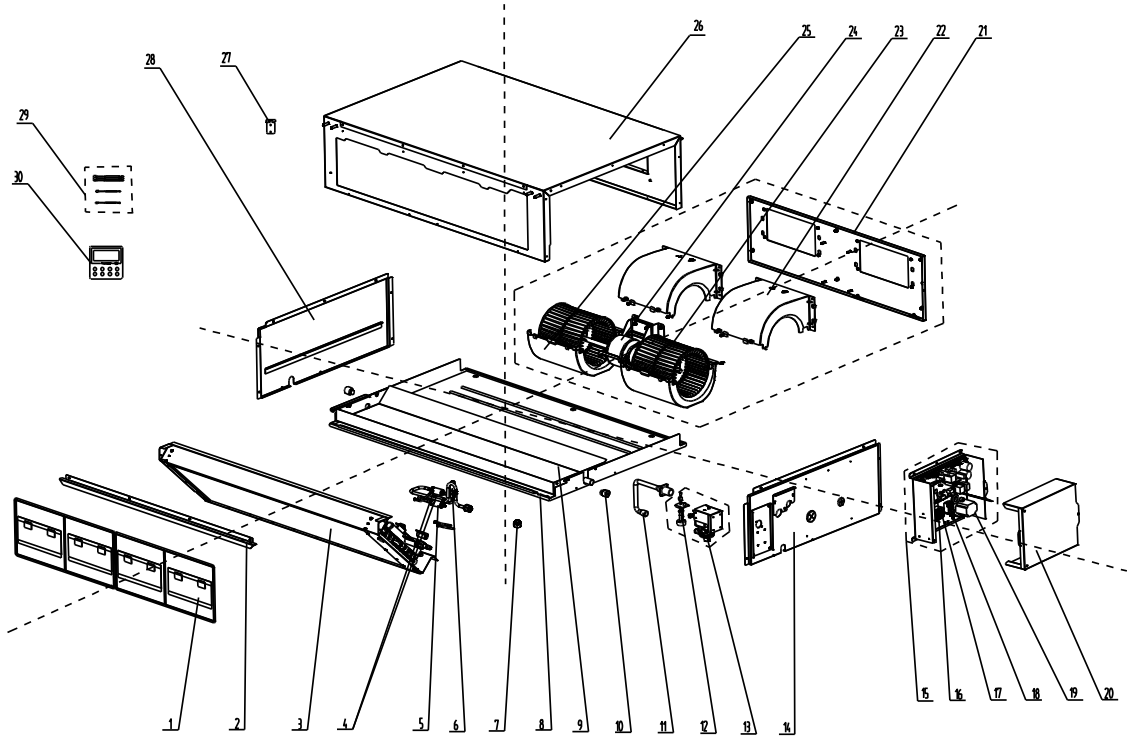
Exploded View ofGMV-ND18PHS/A-T(U)、GMV-ND24PHS/A-T(U)：



No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND18PHS/A-T(U)	CM810N0140
		GMV-ND24PHS/A-T(U)	CM810N0150
		Part code	Quantity
1	Filter Sub-Assy	11125303	2
2	Guide groove of the filter screen	02285301	1
3	Evaporator Assy	01024100090	1
4	Electric Expand Valve Fitting	4304413215	1
5	Electronic Expansion Valve	'07334466	1
6	Strainer	0741410000601	1
7	Filter	07415210	1
8	Lower Cover Plate Sub-Assy	01265304	1
9	Water Tray Assy	01285317	1
10	Choke Plug of Drain Pipe	'76712455	2
11	Water Pump	'4313822001	1
12	Water Level Switch	450127011	1
13	Right Side Plate	01314100063	1
14	Seal plate'	01494100008	1
15	Cover Plate	01264100036	1

16	Electric Box Assy	01394100501	1
17	Main Board	30226000027	1
18	Terminal Board	4201800002601	1
19	Terminal Board	4201115402	1
20	Inductance	43128000014	1
21	Electric Box Cover	01424100132	1
22	Centrifugal fan assy	15405200029	1
23	Blower Mounting Plate Sub-Assy	01325200039	1
24	Supporter	01804100140	1
25	Blower	15012454	1
26	Brushless DC Motor	15705200006	1
27	Blower	15012458	1
28	Top Cover Board Assy	01265226	1
29	Hook	02112446	4
30	Left Side Plate Assy	01314155	1
31	Sensor Sub-assy	39004169G	1
32	Display Board	30296000040	1

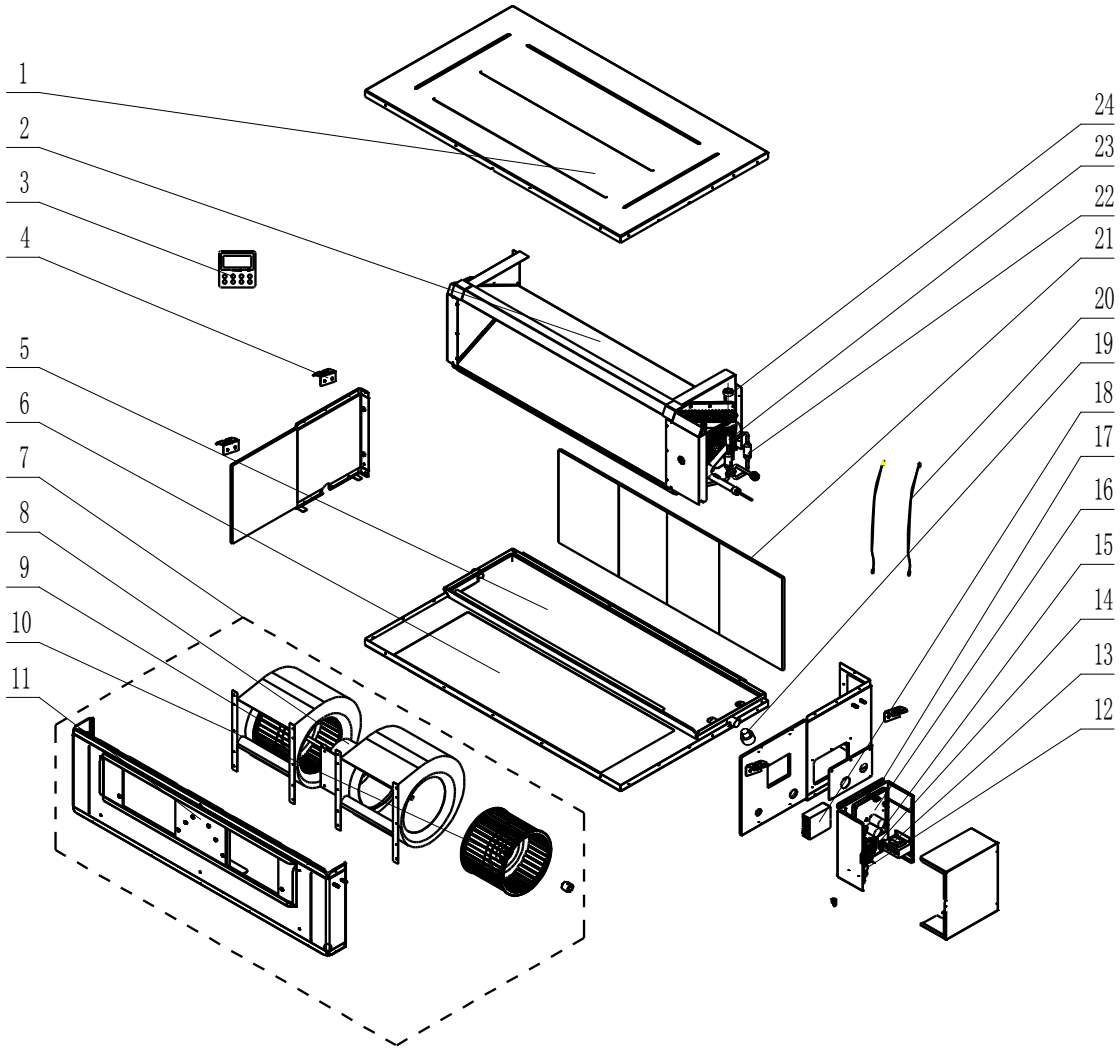
Exploded View of GMV-ND30PHS/A-T(U)、GMV-ND36PHS/A-T(U)、GMV-ND42PHS/A-T(U)、GMV-ND48PHS/A-T(U)：



No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND30PHS/A-T(U)	CM810N0160
		GMV-ND36PHS/A-T(U)	CM810N0170
		GMV-ND42PHS/A-T(U)	CM810N0180
		GMV-ND48PHS/A-T(U)	CM810N0190
		Part code	Quantity
1	Filter Sub-Assy	111253031	2
2	Side Plate of Air intake	01375301	1
3	Evaporator Assy	01024100077	1
4	Strainer	'0741410000601	2
5	Strainer	07220005	1
6	Electronic Expansion Valve	'07334468	1
7	Electric Expand Valve Fitting	4304413215	1
8	Lower Cover Plate Sub-Assy	15265301	1
9	Water Tray Assy	01285323	1
10	Choke Plug of Drain Pipe	76712455	2
11	Pump Drainpipe	05235301	1
12	Water Level Switch	45018012	1
13	Water Pump	43138220	1
14	Right Side Plate Sub-Assy	01315200100	1
15	Electric Box Assy	01394100501	1

16	Main Board	30226000027	1
17	Terminal Board	4201800002601	1
18	Terminal Board	4201115402	1
19	Inductance	43128000014	1
20	Electric Box Cover	01424100132	1
21	Blower Mounting Plate Sub-Assy	01325200044	1
22	Propeller Housing(Upper)	26904100051	2
23	Centrifugal Fan	10424100001	2
24	Brushless DC Motor	15709400006	1
25	Propeller Housing(Lower)	26904100052	2
26	Top Cover Board Assy	01264100039	1
27	Hook	02112466	4
28	Left Side Plate Assy	01315306	1
29	Sensor Sub-assy	39004169G	1
30	Display Board	30296000040	1

Exploded View of GMV-ND72PH/A-T(U)、GMV-ND96PHS/A-T(U)：

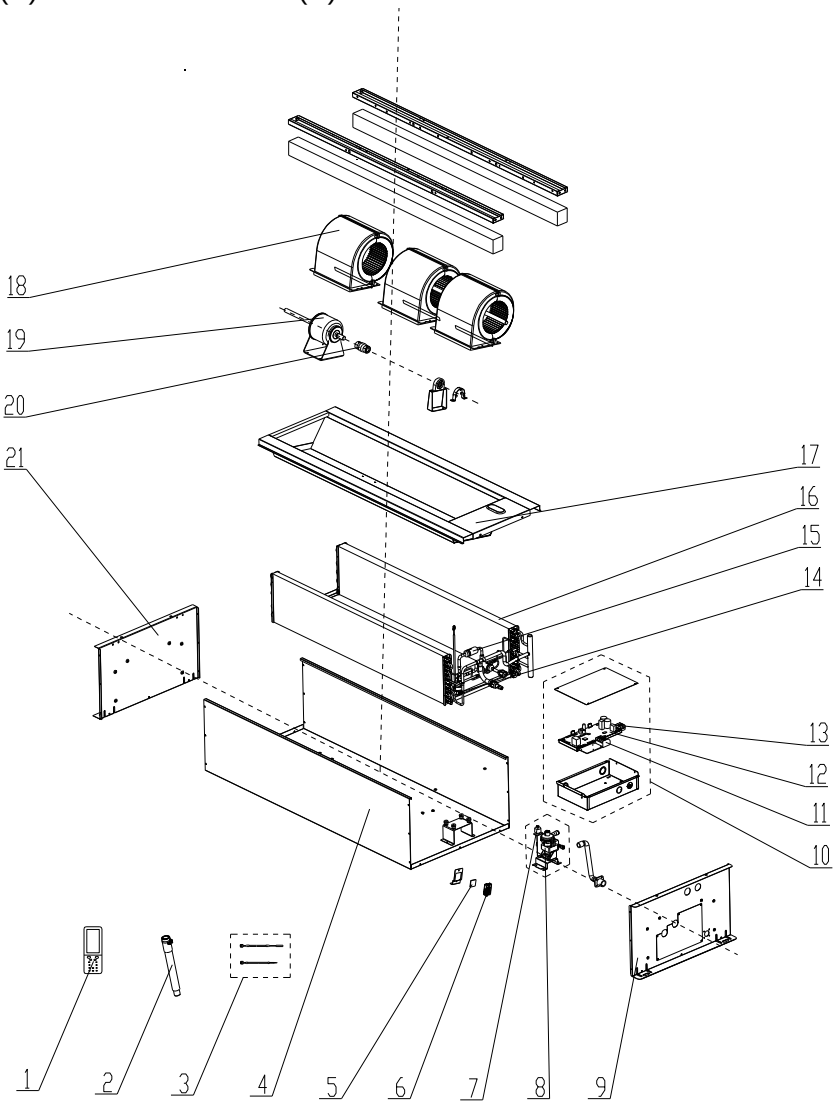


No.	Name of part	For the following unit		For the following unit	
		Unit	Product Code	Unit	Product Code
		GMV-ND72PH/A-T(U)	CM810N0280	GMV-ND96PHS/A-T(U)	CM810N0290
		Part code	Quantity	Part code	Quantity
1	Top Cover Board Assy	'01264100086	1	'01264100090	1
2	Evaporator Assy	01024100119	1	01024100124	1
3	Display Board	'30296000040	1	'30296000040	1
4	Hook	'02112466	4	'02112466	4
5	Water Tray Assy	'01284620	1	01284305	1
6	Bottom Cover Plate Assy	'01264100087	1	01264100089	1
7	Centrifugal fan assy	'15404100078	1	15404100079	1
8	Brushless DC Motor	'15704100009	1	15704100009	1
9	Motor	'15705306	1	15704118	1

10	Motor	'15705307	1	1570411801	1
11	Front Side Plate assy	'01315374	1	01314100128	1
12	Main Board	30226000064	1	30226000064	1
13	Reactor	43130189	1	43130189	1
14	Terminal Board	4201800002601	1	4201800002601	1
15	Terminal Board	42010259	1	42010259	1
16	Main Board	30221000023	1	30221000023	1
17	Electric Box Assy	01394100584	1	01394100584	1
18	Radiator	49018000068	1	49018000068	1
19	Choke Plug of Water Pipe	'76712454	2	'76712454	2
20	Sensor Sub-assy	'39008000103G	1	'39008000103G	1
21	Filter Sub-Assy	'11725211	2	'11724102	2
22	Strainer	'0741410000601	1	'0741410000601	1
23	Electronic Expansion Valve	'07331139	1	'07331139	1
24	Electric Expand Valve Fitting	'4304413205	1	'4304413205	1

5.4 Two-way Cassette Type Indoor Uint

Exploded View of GMV-ND09TS/A-T(U)、GMV-ND12TS/A-T(U)、GMV-ND15TS/A-T(U)、GMV-ND18TS/A-T(U)、GMV-ND24TS/A-T(U)：



No.	Name of part	For the following unit		For the following unit	
		Unit	Product Code	Unit	Product Code
		GMV-ND09TS/A-T(U)	CM500N0890	GMV-ND24TS/A-T(U)	CM500N0930
		Part code	Quantity	Part code	Quantity
1	Remote Controller	'30510589	1	'30510589	1
2	Drain Hose Sub-Assy	'05232050	1	'05232050	1
3	Sensor Sub-assy	'39008000013G	1	'39008000013G	1
4	Seat Board Sub-Assy	02224100024	1	02224100024	1
5	Humidity Sensor	/	/	/	/
6	Humidity Sensor Cover	/	/	/	/
7	Water Level Switch	'4501270301	1	'4501270301	1

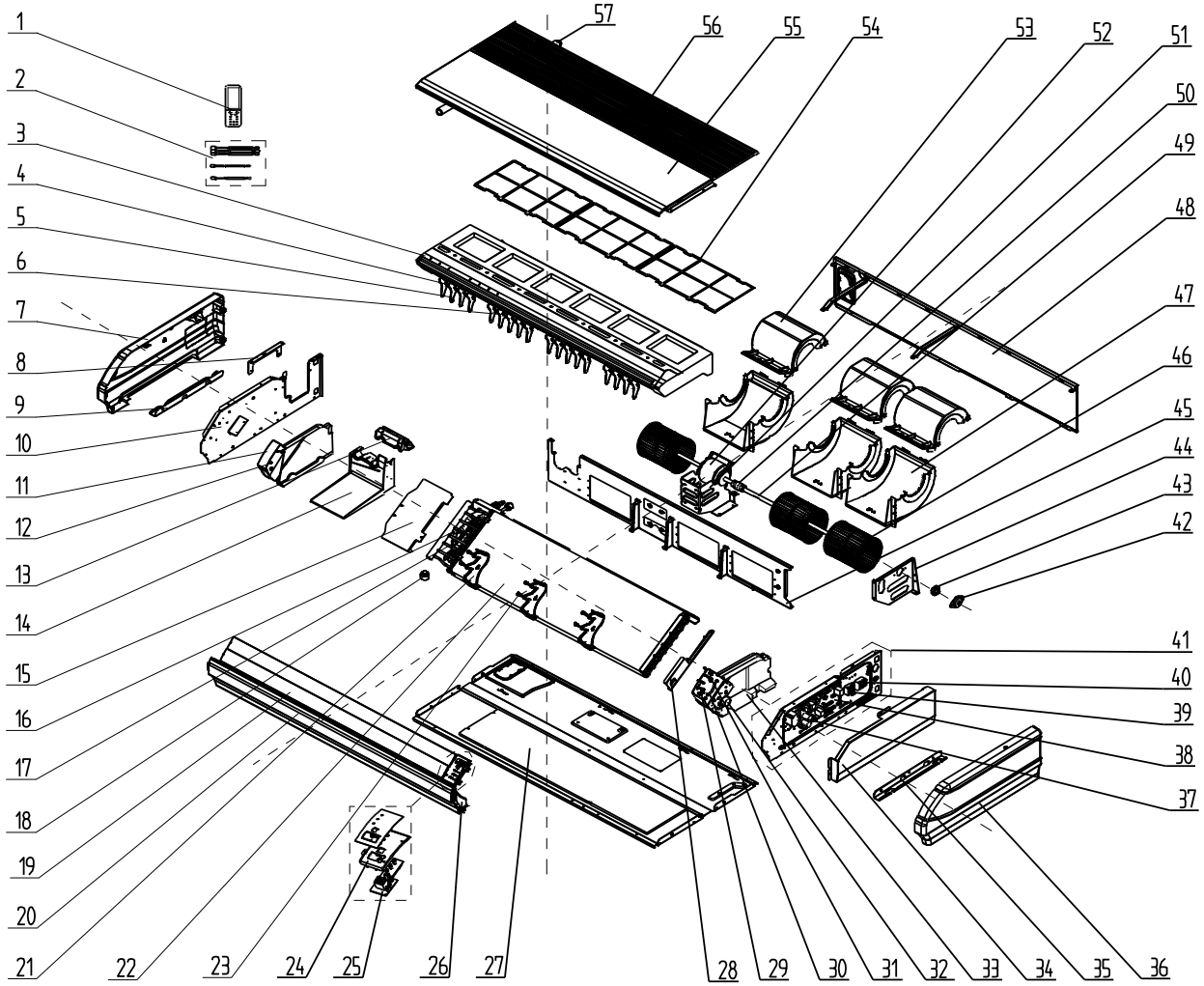
8	Water Pump	'43138220	1	'43138220	1
9	Right Side Plate Sub-Assy	0131410008001	1	0131410008001	1
10	Electric Box Assy	'01394100582	1	'01394100582	1
11	Terminal Board	'4201800002601	1	'4201800002601	1
12	Main Board	'30226000029	1	'30226000029	1
13	Terminal Board	4201115402	1	4201115402	1
14	Electronic Expansion Valve	07334494	1	07334494	1
15	Strainer	'0741410000601	2	'0741410000601	2
16	Evaporator Assy	'0102410009401	1	'01024100094	1
17	Water Tray Sub-Assy	01284100137P	1	01284100137P	1
18	Propeller Housing Sub-assy	'22202030	3	'22202030	3
		22202029	3	22202029	3
19	Brushless DC Motor	'15704100003	1	'15704100003	1
20	Joint Slack	'73018731	1	'73018731	1
21	Left Side Plate Sub-Assy	01314100104	1	01314100104	1

No.	Name of part	For the following unit		For the following unit	
		Unit	Product Code	Unit	Product Code
		GMV-ND18TS/A-T(U)	CM500N0920	GMV-ND24TS/A-T(U)	CM500N0930
		Part code	Quantity	Part code	Quantity
1	Remote Controller	'30510589	1	'30510589	1
2	Drain Hose Sub-Assy	'05232050	1	'05232050	1
3	Sensor Sub-assy	'39008000013G	1	'39008000013G	1
4	Seat Board Sub-Assy	02224100024	1	02224100024	1
5	Humidity Sensor	/	/	/	/
6	Humidity Sensor Cover	/	/	/	/
7	Water Level Switch	'4501270301	1	'4501270301	1
8	Water Pump	'43138220	1	'43138220	1
9	Right Side Plate Sub-Assy	0131410008001	1	0131410008001	1
10	Electric Box Assy	'01394100582	1	'01394100582	1
11	Terminal Board	'4201800002601	1	'4201800002601	1
12	Main Board	'30226000029	1	'30226000029	1
13	Terminal Board	4201115402	1	4201115402	1
14	Electronic Expansion Valve	07334494	1	07334494	1
15	Strainer	'0741410000601	2	'0741410000601	2
16	Evaporator Assy	'0102410009402	1	'01024100093	1

17	Water Tray Sub-Assy	01284100137P	1	01284100137P	1
18	Propeller Housing Sub-assy	'22202030	3	'22202030	3
		22202029	3	22202029	3
19	Brushless DC Motor	'15704100003	1	'15704100003	1
20	Joint Slack	'73018731	1	'73018731	1
21	Left Side Plate Sub-Assy	01314100104	1	01314100104	1

5.5 Floor Ceiling Type Indoor Unit

Exploded View of GMV-ND09ZD/A-T(U)、 GMV-ND12ZD/A-T(U)、GMV-ND18ZD/A-T(U) ：



No.	Name of part	For the following unit		For the following unit	
		Unit	Product Code	Unit	Product Code
		GMV-ND09ZD/A-T(U)	CM600N0420	GMV-ND12ZD/A-T(U)	CM600N0430
		Part code	Quantity	Part code	Quantity
1	Sensor Sub-assy	'39008000101G	1	'39008000101G	1
2	Connection Board	'02229406	1	'02229406	1
3	Right Cover Plate	'26909444	1	'26909444	1
4	Plate Board of Water Releasing Flume	'26909442	1	'26909442	1
5	Installation Supporting Frame	'01809402	1	'01809402	1

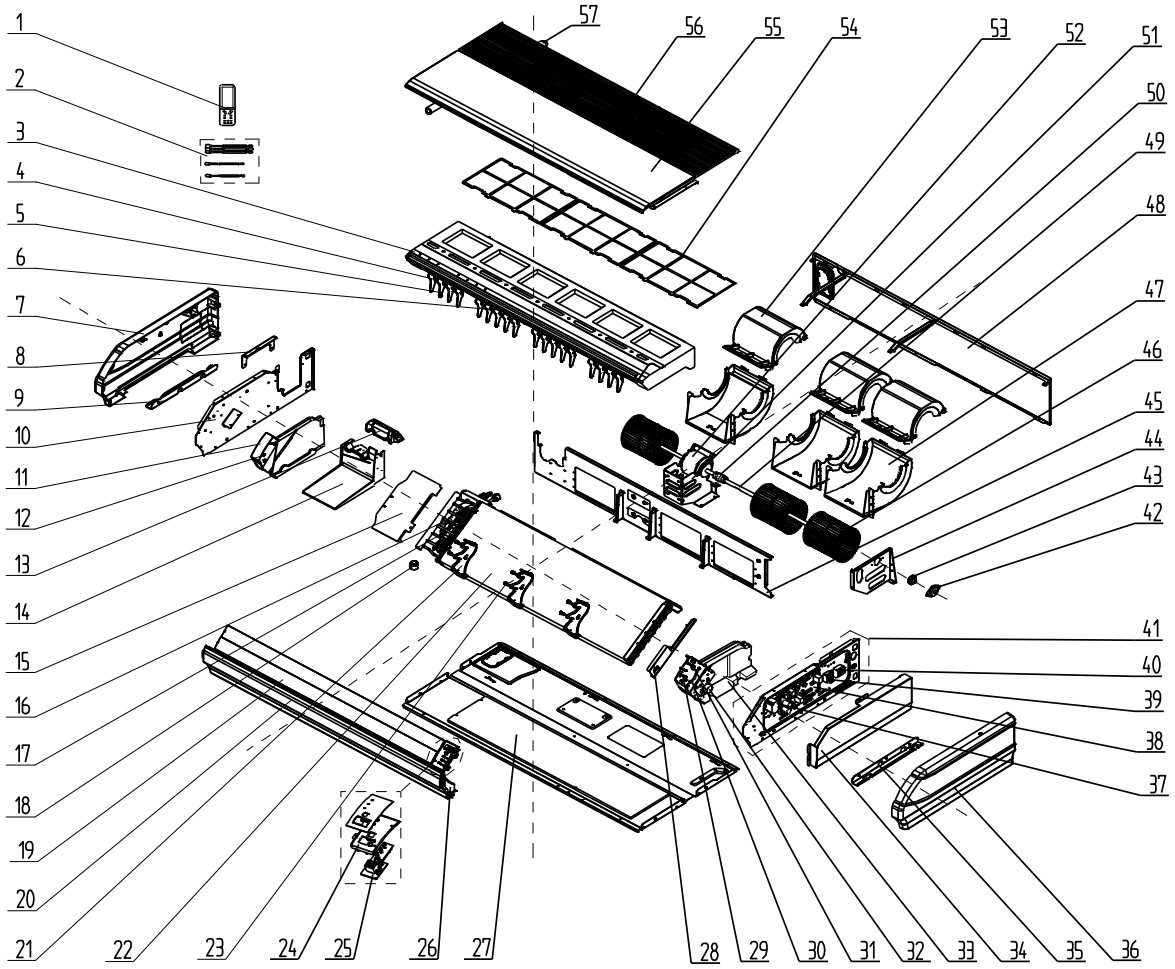
6	Axile Bush	'10542704	2	'10542704	2
7	Right Side Plate Sub-Assy	'01319429	1	'01319429	1
8	Water Releasing Flume	'02284106P	1	'02284106P	1
9	Connection Board	'01344115	1	'01344115	1
10	Electronic Expansion Valve	' 07334463	1	' 07334463	1
11	Strainer	'0741410000601	2	'0741410000601	2
12	Guide Louver	'10619403	2	'10619403	2
13	Front Connection Board	'01349414P	1	'01349414P	1
14	Air Louver	'10619404	16	'10619404	16
15	Rotating Shaft	'26909430	4	'26909430	4
16	Guide Louver Supporter Sub-assy	'0180941601	1	'0180941601	1
17	Fixed Mount	'26909426R	1	'26909426R	1
18	Display Board	'30294000009	1	'30294000009	1
19	Rear Side Plate Assy	'01319400008	1	'01319400008	1
20	Evaporator Assy	01024100126	1	'01024100096	1
21	Rotating Shaft	'26909413	1	'26909413	1
22	Connecting Rod	'26909411	1	'26909411	1
23	Rotating Shaft	'26909412	1	'26909412	1
24	Stepping Motor	'1521240206	1	'1521240206	1
25	Installation Supporting Frame	'01809401	1	'01809401	1
26	Left Side Plate Sub-Assy	'01319428	1	'01319428	1
27	Electric Box Assy	'01394100587	1	'01394100587	1
28	Main Board	'30226000029	1	'30226000029	1
29	Electric Box Cover	'01429420	1	'01429420	1
30	Left Cover Plate	2690944302	1	'2690944302	1
31	Terminal Board	'42011106	1	'42011106	1
32	Terminal Board	'4201800002601	1	'4201800002601	1
33	Mid-clapboard sub-assy	'01249400004	1	'01249400004	1
34	Support Of Motor Bearing	'01792408	2	'01792408	2
35	O-Gasket of Bearing	'76512404	2	'76512404	2
36	Rotary Axis Sub-Assy	'73018000037	2	'73018000037	2
37	Centrifugal Fan	'10425200	4	'10425200	4
38	Joint Slack	'73018731	2	'73018731	2
39	Supporter	01809400002	1	01809400002	1
40	Fan Motor	'15704100001	1	'15704100001	1
41	Supporter	'01809400001	1	'01809400001	1
42	Rear Connection board	'01349422	1	'01349422	1
43	Front Volute Casing	'26905205	4	'26905205	4
44	Rear Volute Casing	'26905206	4	'26905206	4
45	Remote Controller	'30510589	1	'30510589	1

46	Electric expand valve fitting	'4304413203	1	'4304413203	1
47	Water Tray Assy	'01289404	1	'01289404	1
48	Top Cover Board Sub-assy	'01269409	1	'01269409	1
49	Front Grill sub-assy	'01579403	2	'01579403	2
50	Drainage Pipe Sub-assy	'05235434	1	'05235434	1

No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND18ZD/A-T(U)	CM600N0440
		Part code	Quantity
1	Sensor Sub-assy	'39008000101G	1
2	Connection Board	'02229406	1
3	Right Cover Plate	'26909444	1
4	Plate Board of Water Releasing Flume	'26909442	1
5	Installation Supporting Frame	'01809402	1
6	Axile Bush	'10542704	2
7	Right Side Plate Sub-Assy	'01319429	1
8	Water Releasing Flume	'02284106P	1
9	Connection Board	'01344115	1
10	Electronic Expansion Valve	' 07334463	1
11	Strainer	'0741410000601	2
12	Guide Louver	'10619403	2
13	Front Connection Board	'01349414P	1
14	Air Louver	'10619404	16
15	Rotating Shaft	'26909430	4
16	Guide Louver Supporter Sub-assy	'0180941601	1
17	Fixed Mount	'26909426R	1
18	Display Board	'30294000009	1
19	Rear Side Plate Assy	'01319400008	1
20	Evaporator Assy	01029400066	1
21	Rotating Shaft	'26909413	1
22	Connecting Rod	'26909411	1
23	Rotating Shaft	'26909412	1
24	Stepping Motor	'1521240206	1
25	Installation Supporting Frame	'01809401	1
26	Left Side Plate Sub-Assy	'01319428	1
27	Electric Box Assy	'01394100587	1
28	Main Board	'30226000029	1
29	Electric Box Cover	'01429420	1

30	Left Cover Plate	'2690944302	1
31	Terminal Board	'42011106	1
32	Terminal Board	'4201800002601	1
33	Mid-clapboard sub-assy	'01249400004	1
34	Support Of Motor Bearing	'01792408	2
35	O-Gasket of Bearing	'76512404	2
36	Rotary Axis Sub-Assy	'73018000037	2
37	Centrifugal Fan	'10425200	4
38	Joint Slack	'73018731	2
39	Supporter	01809400002	1
40	Fan Motor	'15704100001	1
41	Supporter	'01809400001	1
42	Rear Connection board	'01349422	1
43	Front Volute Casing	'26905205	4
44	Rear Volute Casing	'26905206	4
45	Remote Controller	'30510589	1
46	Electric expand valve fitting	'4304413203	1
47	Water Tray Assy	'01289404	1
48	Top Cover Board Sub-assy	'01269409	1
49	Front Grill sub-assy	'01579403	2
50	Drainage Pipe Sub-assy	'05235434	1

Exploded View of GMV-ND24ZD/A-T(U)、GMV-ND30ZD/A-T(U)：

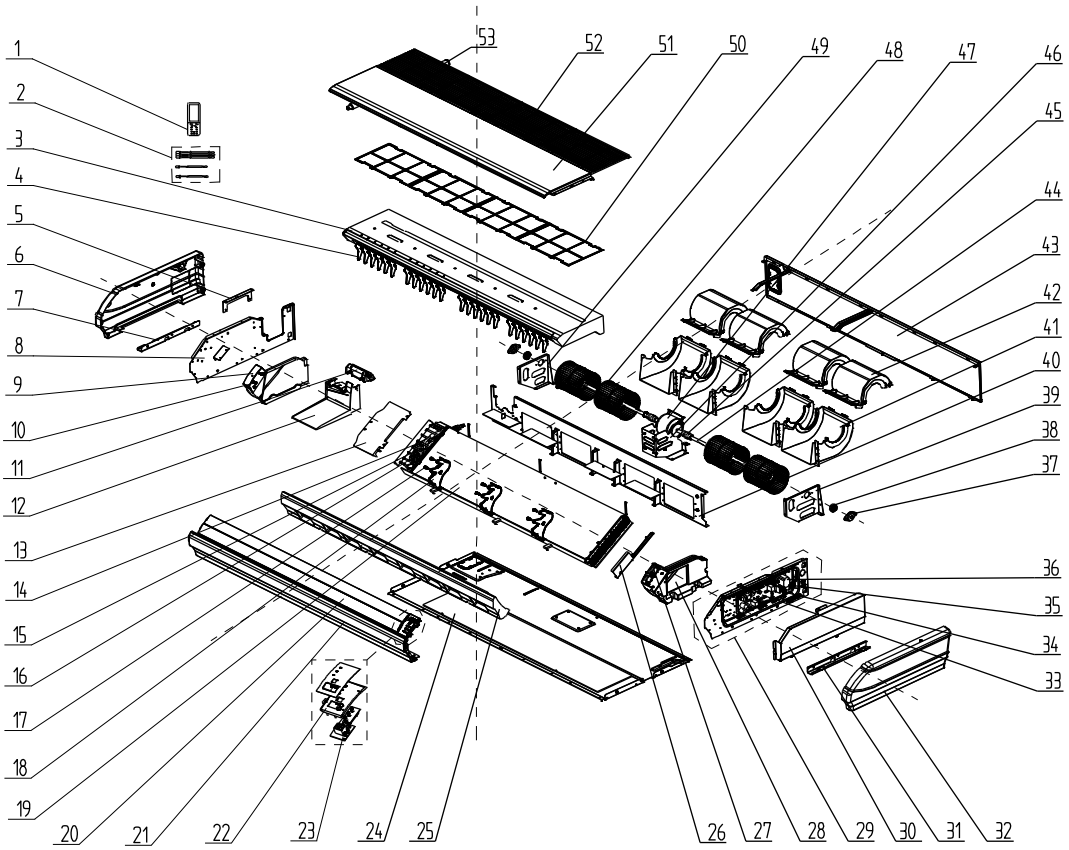


No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND24ZD/A-T(U)	CM600N0450
		GMV-ND30ZD/A-T(U)	CM600N0460
		Part code	Quantity
1	Remote Controller	'30510589	1
2	Sensor Sub-assy	'39008000100G	1
3	Water Tray Assy	'01289405	1
4	Swing Lever	'10582008	2
5	Air Louver	'26909418	18
6	Swing Lever	'10582009	2
7	Right Cover Plate	'2690942201	1
8	Connection Board	'02229406	1
9	Installation Supporting Frame	'01809402	1
10	Right Side Plate Sub-Assy	'01319408	1
11	Right Foam Assy	'12509425	1

12	Axile Bush	'10542704	2
13	Plate Board of Water Releasing Flume	'26909442	1
14	Water Releasing Flume	'26909441	1
15	connected board (evaporator)	'01344108	1
16	Strainer	'0741410000601	2
17	Electronic Expansion Valve	'07334466	1
18	Electric expand valve fitting	'4304413203	1
19	Guide Louver	'26909432	2
20	Front Connection Board	'01349408P	1
21	Supporter	'26909409	3
22	Evaporator Assy	'01024100104	1
23	Rotating Shaft	'26909430	6
24	Fixed Mount	'26909426R	1
25	Display Board	'30294000009	1
26	Front Connection Board Foam Assy	'12509424	1
27	Rear Side Plate Assy	'01319400005	1
28	Water Releasing Flume	'02289402P	1
29	Rotating Shaft	'26909413	1
30	Connecting Rod	'26909411	1
31	Rotating Shaft	'26909412	1
32	Stepping Motor	'1521240206	1
33	Left Foam Assy	'12509408	1
34	Electric Box Cover	'01429410P	1
35	Installation Supporting Frame	'01809401	1
36	Left Cover Plate	'26909416	1
37	Inductance	'43128000014	1
38	Main Board	'30226000027	1
39	Terminal Board	'42011106	1
40	Terminal Board	'4201800002601	1
41	Electric Box Assy	'01394100586	1
42	Support Of Motor Bearing	'01792408	1
43	O-Gasket of Bearing	'76512404	1
44	Bracket 1	'01809404	1
45	Clapboard Sub-Assy	'01249400002	1
46	Centrifugal fan	'1041410101	3
47	Front volute casing	'26905208	3
48	Rear Connection board	'01349418	1
49	Rotary Axis Sub-Assy	'73018052	1

50	Joint Slack	'73018731	1
51	Motor Support Sub-Assy	'01809400029	1
52	Brushless DC Motor	'15705200005	1
53	Rear volute casing	'26909419	3
54	Filter	'11126002	1
55	Top Cover Board Sub-assy	'01269405	1
56	Front Grill sub-assy	'01579402	3
57	Drainage Pipe Sub-assy	'05235434	1

Exploded View of GMV-ND36ZD/A-T(U)、GMV-ND42ZD/A-T(U)、GMV-ND48ZD/A-T(U)：

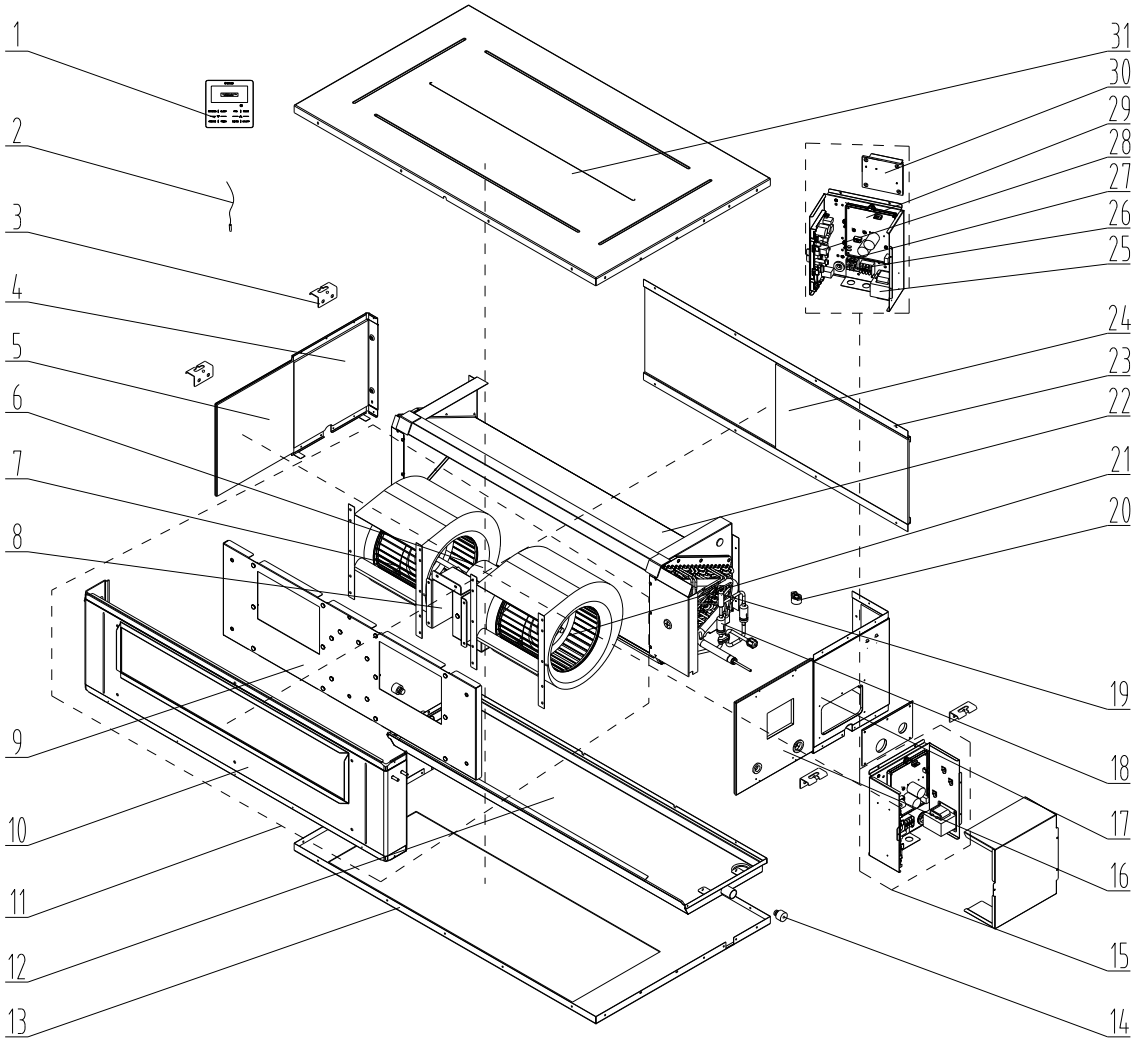


No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND36ZD/A-T(U)	CM600N0470
		GMV-ND42ZD/A-T(U)	CM600N0480
		GMV-ND48ZD/A-T(U)	CM600N0490
		Part code	Quantity
1	Remote Controller	'30510589	1
2	Sensor Sub-assy	'39008000100G	1
3	Water Tray Assy	'01289401	1
4	Air Louver	'26909418	24
5	Connection Board	'02229406	1
6	Right Cover Plate	'26909422	1

7	Installation Supporting Frame	'01809402	1
8	Right Side Plate Sub-Assy	'01319408	1
9	Right Foam Assy	'12509425	1
10	Axile Bush	'10542704	2
11	Plate Board of Water Releasing Flume	'26909442	1
12	Water Releasing Flume	'26909441	1
13	connected board (evaporator)	'01344108	1
14	Strainer	'0741410000601	2
15	Electronic Expansion Valve	'07334468	1
16	Electric expand valve fitting	'4304413203	1
17	Rotating Shaft	'26909430	6
18	Supporter	'26909409	3
19	Evaporator Assy	'01024100105	1
20	Guide Louver	'10619405	2
21	Front Connection Board	'01349404P	1
22	Fixed Mount	'26909426R	1
23	Display Board	'30294000009	1
24	Rear Side Plate Sub-Assy	'01319442	1
25	Front Connection Board Foam Assy	'12509434	1
26	Water Releasing Flume	'02289402P	1
27	Stepping Motor	'1521240206	2
28	Left Foam Assy	'12509437	1
29	Electric Box Assy	'01394100586	1
30	Electric Box Cover	'01429410P	1
31	Installation Supporting Frame	'01809421	1
32	Left Cover Plate	'2690941601	1
33	Main Board	'30226000027	1
34	Terminal Board	'42011106	1
35	Terminal Board	'4201800002601	1
36	Inductance	'43128000014	1
37	Support Of Motor Bearing	'01792408	2
38	O-Gasket of Bearing	'76512404	2
39	Bracket 1	'01809404	1
40	Clapboard Sub-Assy	'01249400006	1
41	Front volute casing	'26905208	4
42	Rear volute casing	'26909419	4
43	Rear Connection board	'01349419	1
44	Rotary Axis Sub-Assy	'73018052	2
45	Joint Slack	'73018731	2
46	Motor Support Sub-Assy	'0180940002901	1

47	Brushless DC Motor	'15709400005	1
48	Centrifugal fan	'1041410101	4
49	Supporter	'01809403	1
50	Filter	'11126002	1
51	Top Cover Board Sub-assy	'01269400002	1
52	Front Grill sub-assy	'01579401	4
53	Drainage Pipe Sub-assy	'05235434	1

5.6 Fresh Air Processing Type Indoor Unit

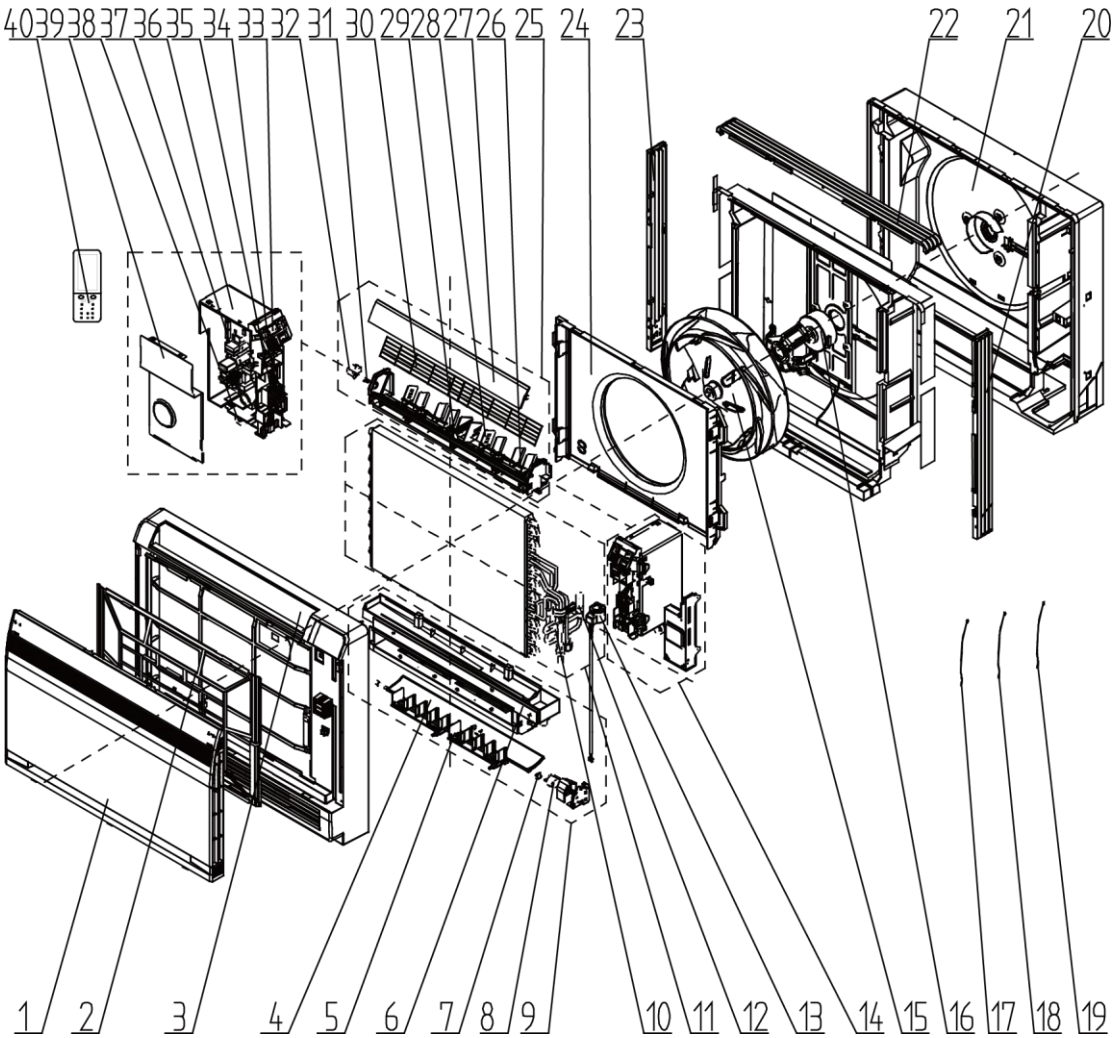


NO.	Model	GMV-NDX72P/A-T(U)	GMV-NDX96P/A-T(U)	Qty.
	Product Code	CM810N0480	CM810N0470	
	Part Name	Part Code	Part Code	
1	Display Board	'30296000040	'30296000040	1
2	Sensor Sub-Assy	'39004165G	'39004165G	1
3	Hook	'02112466	'02112466	4
4	Left Side Plate Assy	'01315367	'01315367	1
5	Left Side Plate Sub-Assy 1	'01314100127	'01314100127	1

6	Brushless DC Motor	'15704100009	'15704100009	1
7	Motor for Centrifugal Fan	'1570530601	'1570530601	1
8	Motor Support	'01805200228	'01805200228	1
9	Blower Mounting Plate Sub-Assy	'01324100064	'01324100064	1
10	Front Side Plate Sub-Assy	'01315374	'01315374	1
11	Centrifugal Fan Assy	'15404100088	'15404100088	1
12	Water Tray Assy	'01284620	'01284620	1
13	Bottom Cover Plate Assy	'01264100087	'01264100087	1
14	Choke Plug of Water Pipe	'76712454	'76712454	2
15	Electric Box Assy	'01394100619	'01394100619	1
16	Right Side Plate Sub-Assy 1	'01314100125	'01314100125	1
17	Right Side Plate Assy	'01314100124	'01314100124	1
18	Strainer	'0741410000601	'0741410000601	2
19	Electronic Expansion Valve	'07331139	'07331139	1
20	Electric Expand Valve Fitting	'4304413205	'4304413205	1
21	Evaporator Assy	'01024100120	'01024100120	1
22	Filter Guide Groove	'02284107	'02284107	2
23	Filter Sub-Assy	'11725211	'11725211	2
24	Blower(Right)	'15705307	'15705307	1
25	Reactor	'43130189	'43130189	1
26	Terminal Board	'4201800002601	'4201800002601	1
27	Terminal Board	'42010259	'42010259	1
28	Main Board	'30226000090	'30226000090	1
29	Main Board	'30221000023	'30221000023	1
30	Radiator	'49018000068	'49018000068	1
31	Top Cover Board Assy	'01264100086	'01264100086	1

5.7 Console Type Indoor Unit

Exploded View of GMV-ND07C/A-T(U)、GMV-ND09C/A-T(U)、GMV-ND12C/A-T(U)、GMV-ND18C/A-T(U)

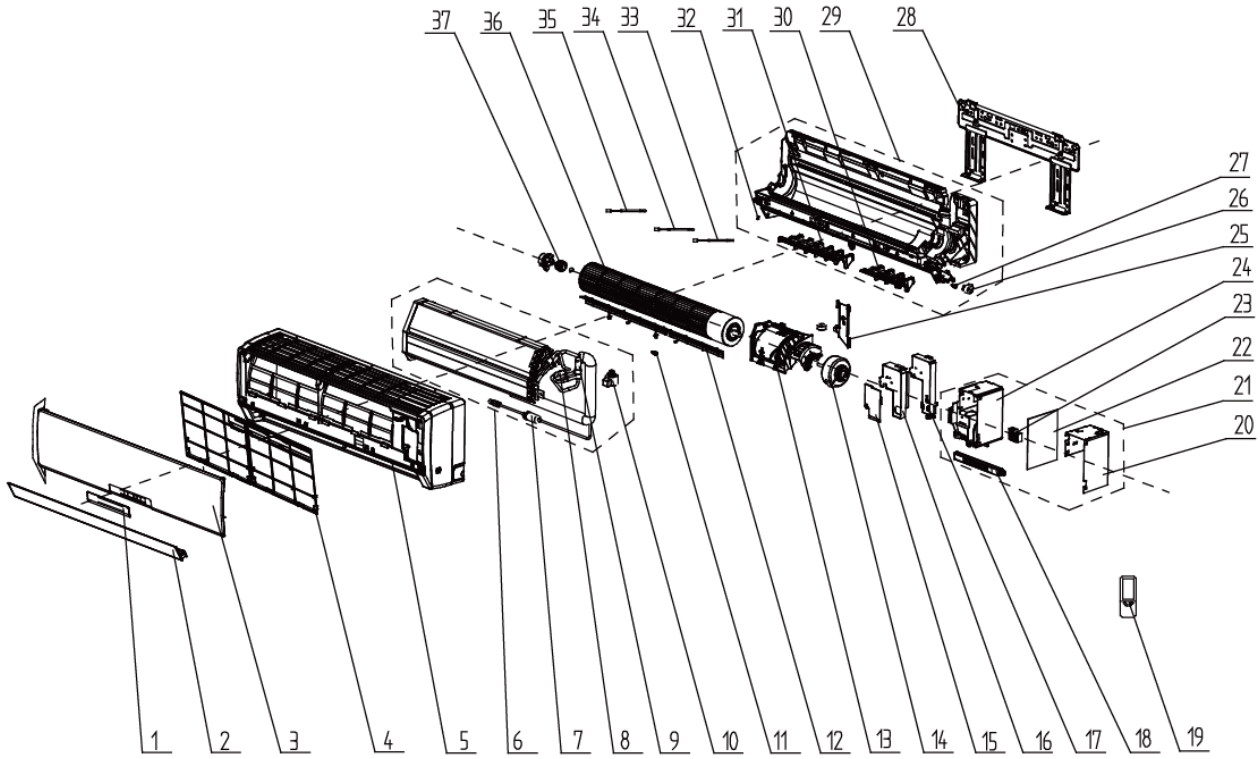


No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND07C/A-T(U)	CM400N0110
		GMV-ND09C/A-T(U)	CM400N0120
		GMV-ND12C/A-T(U)	CM400N0100
		GMV-ND18C/A-T(U)	CM400N0130
		Part code	Quantity
1	Front Panel Assy	` 20012756	1
2	Filter Sub-Assy	` 11122139	1
3	Front Case Assy	` 20012601	1
4	Air Louver(lower)	` 10512146	1
5	Air Louver(lower)	` 10512144	2
6	Water Tray	` 20182140	1
7	Axis(lower step motor)	` 10542034	1
8	Stepping Motor	` 1521210101	1

9	Water Tray Assy	` 20182141	1
10	Strainer	` 07213029	1
11	Evaporator Assy	` 01024100143	1
12	Electronic Expansion Valve	` 07334282	1
13	Electric Expand Valve Fitting	` 4304000102	1
14	Electric Box Assy	` 01394100489	1
15	Centrifugal Fan	` 01394100489	1
16	Brushless DC Motor	` 15704100012	1
17	Temperature Sensor	` 3900005910	1
18	Temperature Sensor	` 390000597	1
19	Temperature Sensor	` 3900019824	1
20	Let Side Plate	` 20052011	1
21	Rear Case	` 22202461	1
22	Top Side Plate	` 20052013	1
23	Right Side Plate	` 20052012	1
24	Diversion Circle	` 10371212	1
25	Louver Motor Sub-assy	' 00021100001	1
26	Swing Lever	` 10582096	2
27	Guide Louver (upper)	` 10512145	1
28	Air Louver(upper)	` 10512143	2
29	Shaft of Guide Louver	` 10542020	2
30	Rear Grill	` 01472024	1
31	Crank	` 73012005	1
32	Stepping Motor	` 1521210101	1
33	Display Board	` 30568131	1
34	Pinboard	` 30278000001	1
35	Terminal Board	` 42010268	1
36	Electric Board	` 20112116	1
37	Main Board	` 30226000080	1
38	Magnetic Ring	` 49010104	1
39	Shield Cover of Electric Box Sub-assy	` 01592169	1
40	Remote Controller	` 30510589	1

5.8 Wall Mounted type Indoor Unit

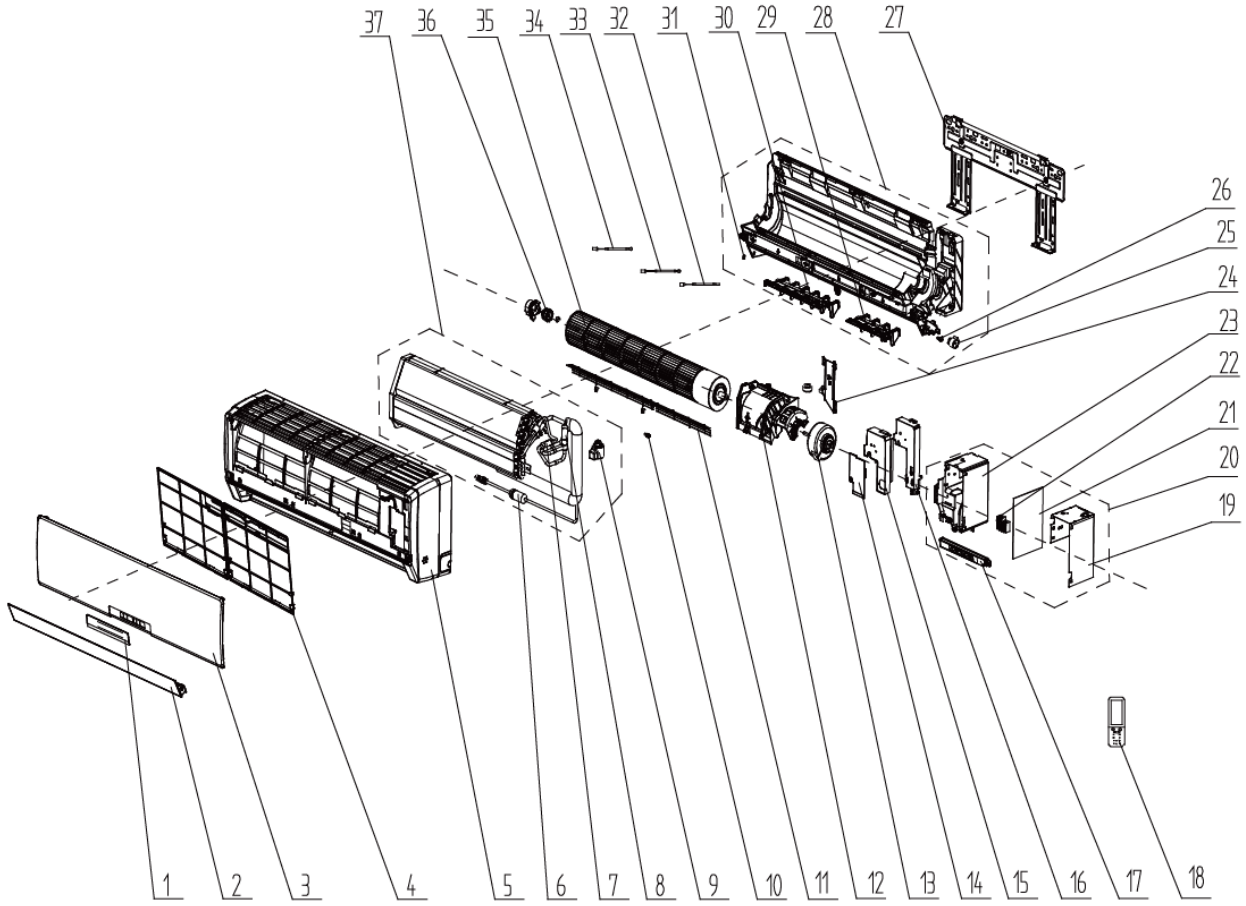
Exploded View of G GMV-N07G/A3A-D(U)、GMV-N09G/A3A-D(U)



No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-N07G/A3A-D(U)	CM100N1480
		GMV-N09G/A3A-D(U)	CM100N1490
		Part code	Quantity
1	Receiver Window	'22432230	1
2	Guide Louver	'10512157	1
3	Front Panel B1	'20012122S	1
4	Filter Sub-Assy	1112220403	1
5	Front Case Sub-assy	'2001213931	1
6	Evaporator Assy	01024100097	.2
7	Strainer	'07414100006	...4
8	Strainer	'07213050	...4
9	Electronic Expansion Valve	'07334463	...4
10	Electric Expand Valve Fitting	'4304413217	.2
11	Axile Bush	'10542036	1
12	Rear Grill	'01472013	1
13	Motor Press Plate	'26904100117	1
14	Fan Motor	'1501208905	1
15	Electric Box Cover2	'2012207504	1

16	Shield Cover of Electric Box Sub-assy	'01592073	1
17	Electric Box Cover1	'2224213502	1
18	Display Board	'30565007	.2
19	Remote Controller	'30510589	1
20	Lower Shield Sub-assy of Electric Box	'01592072	.2
21	Electric Box Assy	'01394100451	1
22	Main Board	'30226000061	.2
23	Terminal Board	'42010268	.2
24	Electric Box	'2011216702	.2
25	Connecting pipe clamp	'26112164	1
26	Stepping Motor	'1521212901	.2
27	Crank	'10582070	.2
28	Wall Mounting Frame	'01252021	1
29	Rear Case Sub-Assy	'2220294712	.2
30	Air Louver 1	'10512164	.2
31	Air Louver 2	'10512165	.2
32	Left Axile Bush	'10512037	.2
33	Temperature Sensor	'390000454	1
34	Temperature Sensor	'39000076G	1
35	Temperature Sensor	'390002072G	1
36	Cross Flow Fan	'10454101	1
37	O-Gasket of Cross Fan Bearing	'76512203	..3

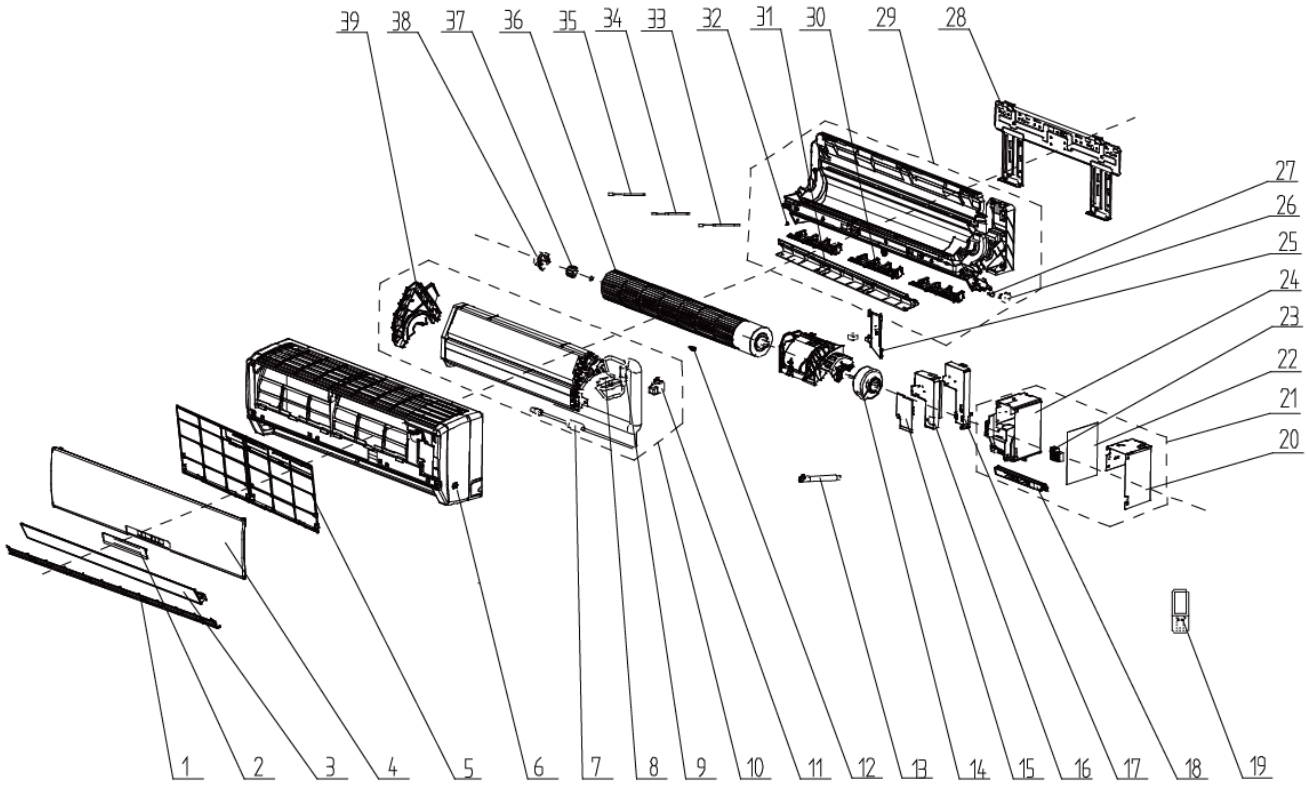
GMV-N12G/A3A-D(U)、GMV-N18G/A3A-D(U)



No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-N36G/A3A-K	CM100N1360
		GMV-N45G/A3A-K	CM100N1370
		GMV-N50G/A3A-K	CM100N1330
		Part code	Quantity
1	Receiver Window	22432173	1
2	Guide Louver	10512115	1
3	Front Panel Assy	20012260	1
4	Filter Sub-Assy	1112000000	2
5	Front Case Sub-assy	20022172	1
6	Strainer	` 07414100006	1
7	Strainer	7213050	1
8	Electronic Expansion Valve	7334466	1
9	Electric Expand Valve Fitting	4304000000	1
10	Axile Bush	10542036	1
11	Mesh Enclosure(Air Outlet)	1472015	1
12	Motor Press Plate	26904264	1
13	Fan Motor	1501000000	1
14	Electric Box Cover	2011000000	1
15	Shield Cover of Electric Box	1592092	1
16	Electric Box Cover1	2012000000	1
17	Display Board	30565038	1
18	Remote Controller	30510589	1
19	Lower Shield of Electric Box	1592091	1

20	Electric Box Assy	1394000000	1
21	Main Board	30230000000	1
22	Terminal Board	42010268	1
23	Electric Box	2011000000	1
24	Connecting pipe clamp	26112164	1
25	SteppingMotor	15012086	1
26	Crank	10582070	1
27	Wall Mounting Frame	1252218	1
28	Rear Case Sub-Assy	2220000000	1
29	Air Louver 1	10512708	1
30	Air Louver 2	10512709	1
31	Left Axile Bush	10512037	1
32	Temperature Sensor	39000076G	1
33	Temperature Sensor	390000454	1
34	Temperature Sensor	390002072G	1
35	Cross Flow Fan	10454102	1
36	O-Gasket of Cross Fan Bearing	76512203	1
37	Evaporator Assy	` 01024100101	1

GMV-N24G/A3A-D(U)

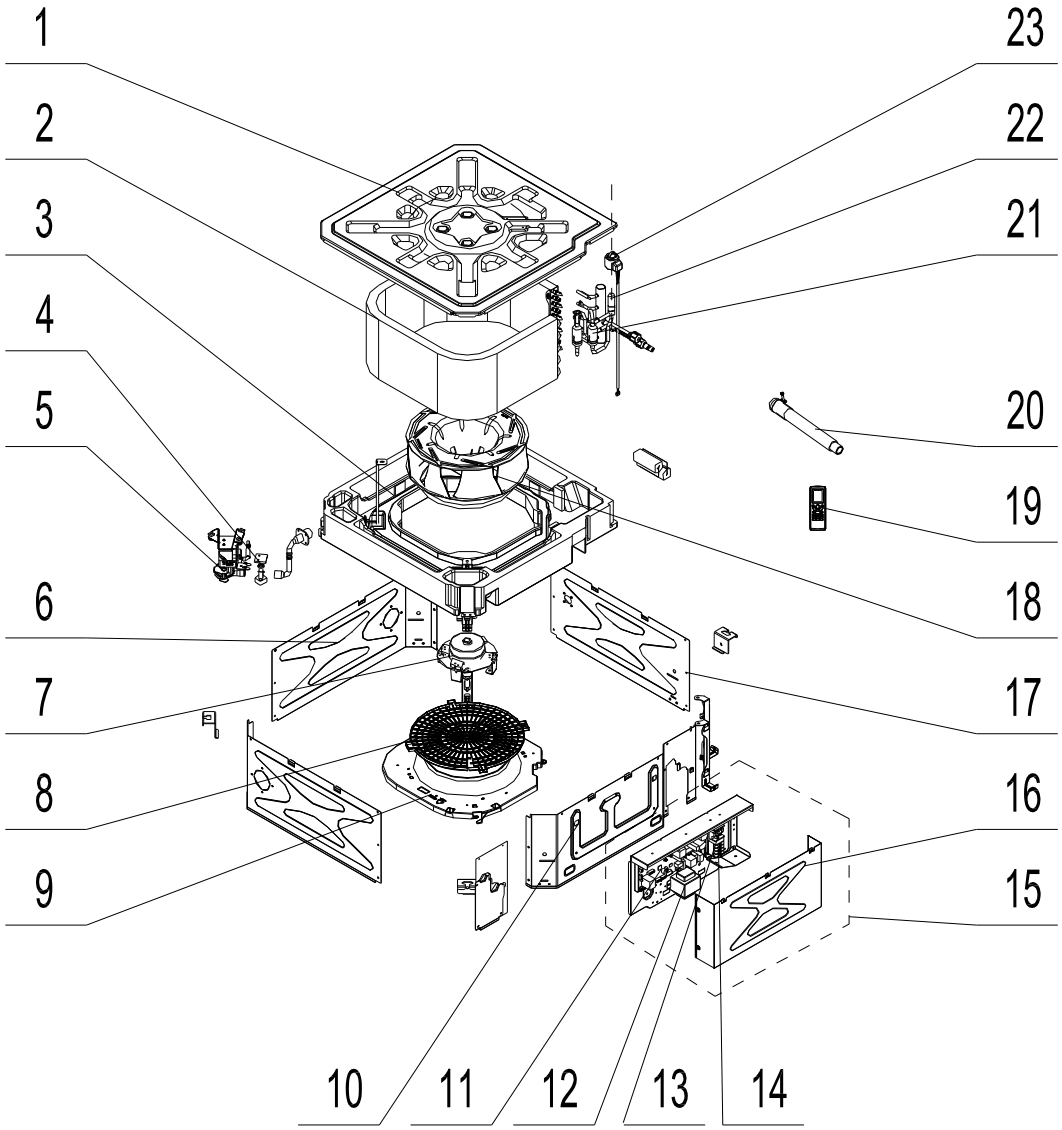


No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-N24G/A3A-D(U)	CM100N1520
		Part code	Quantity
1	Receiver Window	'22432230	1
2	Guide Louver	'10512157	1
3	Front Panel B1	'20012122S	1
4	Filter Sub-Assy	1112220403	1
5	Front Case Sub-assy	'2001213931	1

6	Evaporator Assy	01024100097	.2
7	Strainer	'07414100006	...4
8	Strainer	'07213050	...4
9	Electronic Expansion Valve	'07334463	...4
10	Electric Expand Valve Fitting	'4304413217	.2
11	Axile Bush	'10542036	1
12	Rear Grill	'01472013	1
13	Motor Press Plate	'26904100117	1
14	Fan Motor	'1501208905	1
15	Electric Box Cover2	'2012207504	1
16	Shield Cover of Electric Box Sub-assy	'01592073	1
17	Electric Box Cover1	'2224213502	1
18	Display Board	'30565007	.2
19	Remote Controller	30510589	1
20	Lower Shield Sub-assy of Electric Box	'01592072	.2
21	Electric Box Assy	'01394100451	1
22	Main Board	'30226000061	.2
23	Terminal Board	'42010268	.2
24	Electric Box	'2011216702	.2
25	Connecting pipe clamp	'26112164	1
26	Stepping Motor	'1521212901	.2
27	Crank	'10582070	.2
28	Wall Mounting Frame	'01252021	1
29	Rear Case Sub-Assy	'2220294712	.2
30	Air Louver 1	'10512164	.2
31	Air Louver 2	'10512165	.2
32	Left Axile Bush	'10512037	.2
33	Temperature Sensor	'390000454	1
34	Temperature Sensor	'39000076G	1
35	Temperature Sensor	'390002072G	1
36	Cross Flow Fan	'10454101	1
37	O-Gasket of Cross Fan Bearing	'76512203	3

5.9 Compact Four-way Cassette Type Indoor Unit

Exploded View of GMV-ND07T/B-T(U)、GMV-ND09T/B-T(U)、GMV-ND12T/B-T(U)、GMV-ND15T/B-T(U)、GMV-ND18T/B-T(U)



No.	Name of part	For the following unit		For the following unit	
		Unit	Product Code	Unit	Product Code
		GMV-ND07T/B-T(U)	CM500N0940	GMV-ND12T/B-T(U)	CM500N0960
		GMV-ND09T/B-T(U)	CM500N0950	GMV-ND15T/B-T(U)	CM500N0970
		Part code	Quantity	Part code	Quantity
1	Base Plate Assy	02229400007	1	02229400007	1
2	Evaporator Assy	01024100149	1	01024100137	1
3	Water Tray Assy	01289400004	1	01289400004	1
4	Liquid Level Switch	450102013	1	450102013	1
5	Water Pump	43138000024	1	43138000024	1
6	Right Side Plate Sub-Assy	01319400013	2	01319400013	2

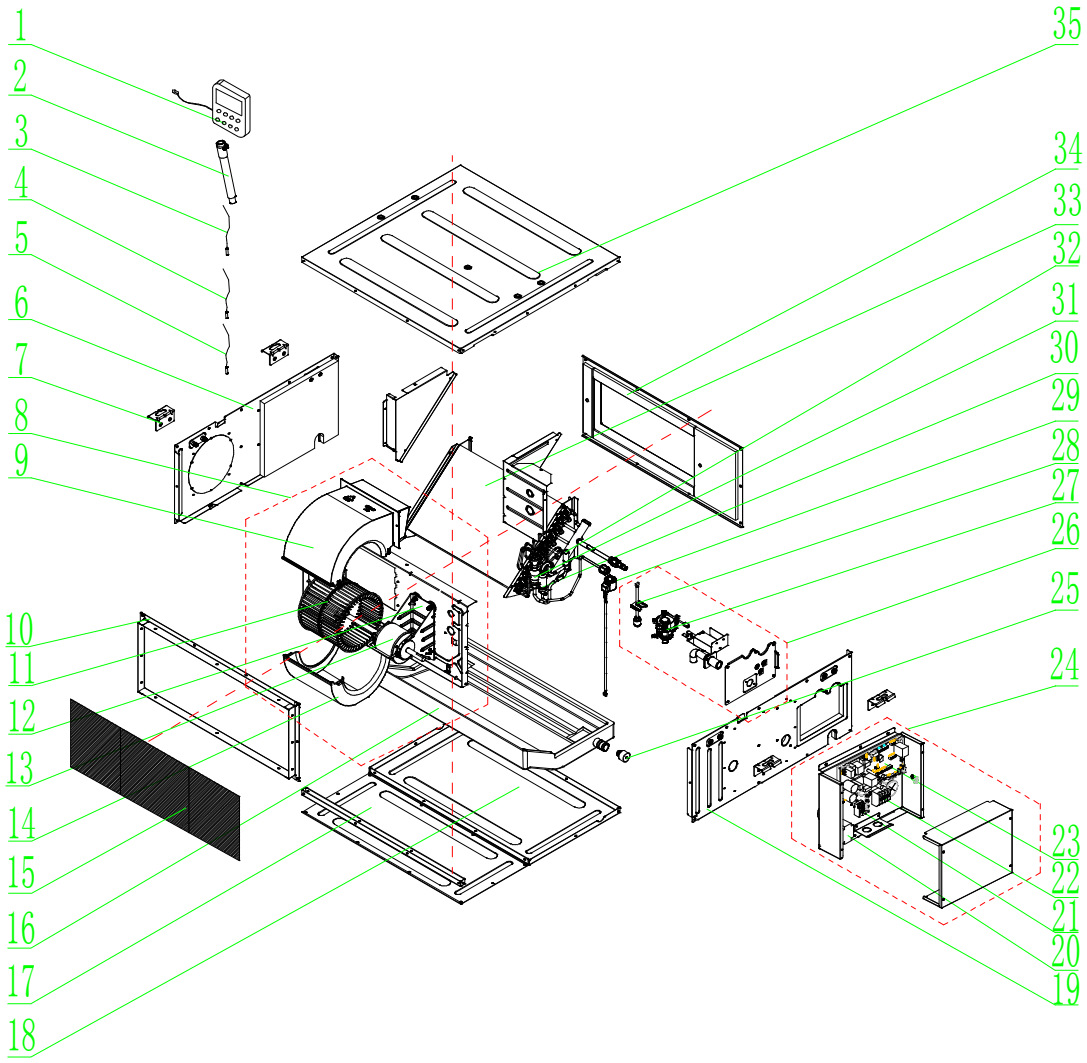
7	Brushless DC Motor	15709400004	1	15709400004	1
8	Rear Grill	26909400007	1	26909400007	1
9	Diversion Circle	10479400001	1	10479400001	1
10	Front Side Plate Sub-Assy	01319400014	1	01319400014	1
11	Main Board	30226000029	1	30226000029	1
12	Transformer	43118000015	1	43118000015	1
13	Terminal Board	42011106	1	42011106	1
14	Terminal Board	4201800002601	1	4201800002601	1
15	Electric Box Assy	100002001831	1	100002001831	1
16	Electric Box Cover	01429400002	1	01429400002	1
17	Left Side Plate Sub-Assy	01319400012	1	01319400012	1
18	Centrifugal Fan	10429400001	1	10429400001	1
19	Remote Controller	30510589	1	30510589	1
20	Drain Hose Sub-Assy	05232050	1	05232050	1
21	Strainer	0741410000601	2	0741410000601	2
22	Electronic Expansion Valve	07334463	1	07334463	1
23	Electric Expand Valve Fitting	4304413215	1	4304413215	1

No.	Name of part	For the following unit	
		Unit	Product Code
		GMV-ND18T/B-T(U)	CM500N0980
		Part code	Quantity
1	Base Plate Assy	02229400007	1
2	Evaporator Assy	01024100152	1
3	Water Tray Assy	01289400004	1
4	Liquid Level Switch	450102013	1
5	Water Pump	43138000024	1
6	Right Side Plate Sub-Assy	01319400013	2
7	Brushless DC Motor	15709400004	1
8	Rear Grill	26909400007	1
9	Diversion Circle	10479400001	1
10	Front Side Plate Sub-Assy	01319400014	1
11	Main Board	30226000029	1
12	Transformer	43118000015	1
13	Terminal Board	42011106	1
14	Terminal Board	4201800002601	1
15	Electric Box Assy	100002001831	1
16	Electric Box Cover	01429400002	1

17	Left Side Plate Sub-Assy	01319400012	1
18	Centrifugal Fan	10429400001	1
19	Remote Controller	30510589	1
20	Drain Hose Sub-Assy	05232050	1
21	Strainer	0741410000601	2
22	Electronic Expansion Valve	07334463	1
23	Electric Expand Valve Fitting	4304413215	1

5.10 Super High Static Pressure Duct Type Indoor Unit

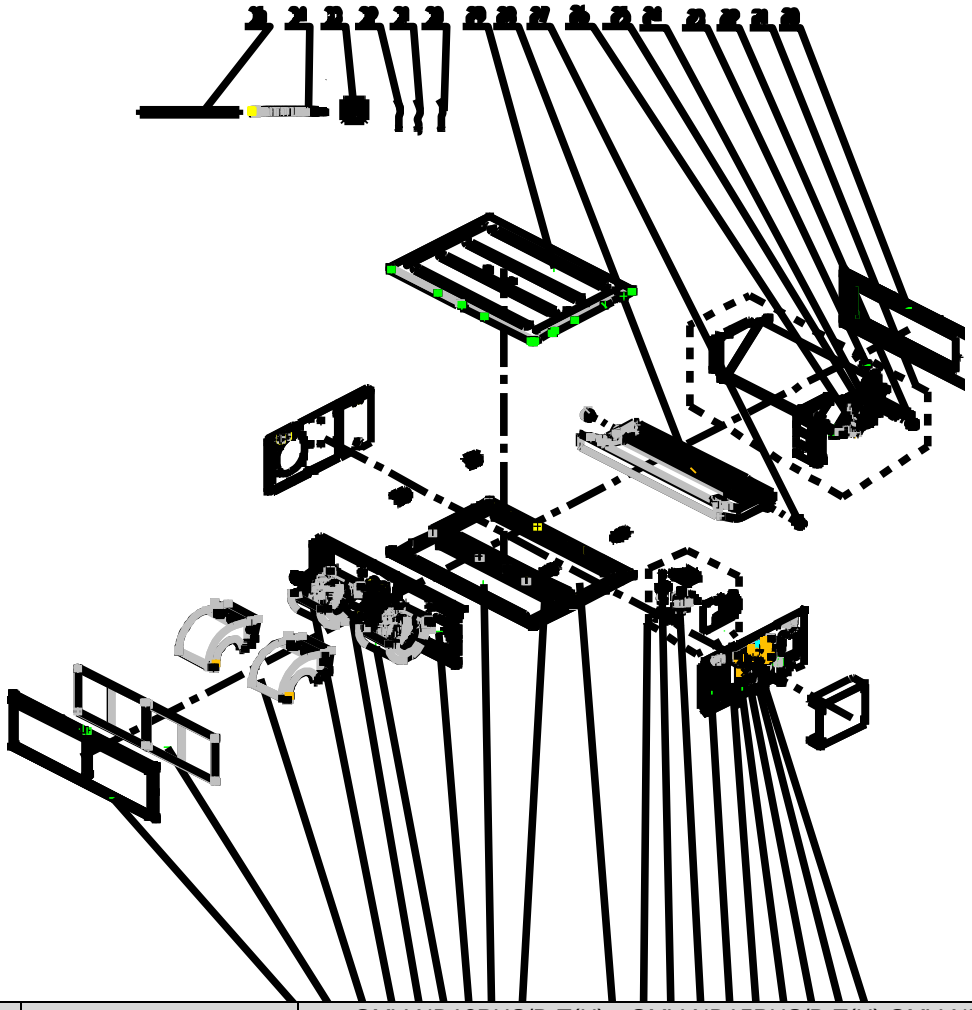
Exploded View of GMV-ND07PHS/B-T(U)、GMV-ND09PHS/B-T(U)：



NO.	Model	GMV-ND48PHS/B-T(U)、GMV-ND54PHS/B-T(U)	Qty.
	Product Code	CM810N0820、CM810N0760	
	Part Name	Part Code	
1	Display Board	'30296000040	1
2	Drain Hose Sub-Assy	'05232050	1
3	Temperature Sensor	'390000454	1
4	Temperature Sensor	'390000592	1
5	Temperature Sensor	'3900005910	1
6	Right Side Plate Assy	'01315200148	1

7	Hook	'02112466	4
8	Centrifugal Fan Assy	'15404100074	1
9	Propeller Housing(Upper)	'26905200078	1
10	Return Air Frame Sub-Assy	'017026000004	1
11	Centrifugal Fan	'10455200003	1
12	Supporter(Fan motor)	'0180520027201	1
13	Brushless DC Motor	'1570520000501	1
14	Propeller Housing(Lower)	'26905200079	1
15	Filter Sub-Assy	111001000055	1
16	Foam Sub-assy	'12505200038	1
17	Cover Of Air-In	'01265200182	1
18	Bottom Cover Plate	'01265200181	1
19	Left Side Plate Assy	'01315200147	1
20	Inductance	'43128000014	1
21	Terminal Board	'4201115402	1
22	Terminal Board	4201800002601	1
23	Main Board	'30226000089	1
24	Electric Box Assy	'100002000985	1
25	Choke Plug Of Drain Pipe	'76815214	2
26	Seal Plate Assy	'01495200079	1
27	Water Pump	'43138000058	1
28	Water Level Switch	'45020216	1
29	Electric Expand Valve Fitting	'4304413215	1
30	Strainer	'07415210	1
31	Strainer	'0741410000601	1
32	Electronic Expansion Valve	'07334466	1
33	Evaporator Assy	'011001000296 '01024100171	1
34	Air Outlet Frame Assy	'01374100070	1
35	Top Cover Board Assy	01264100081	1

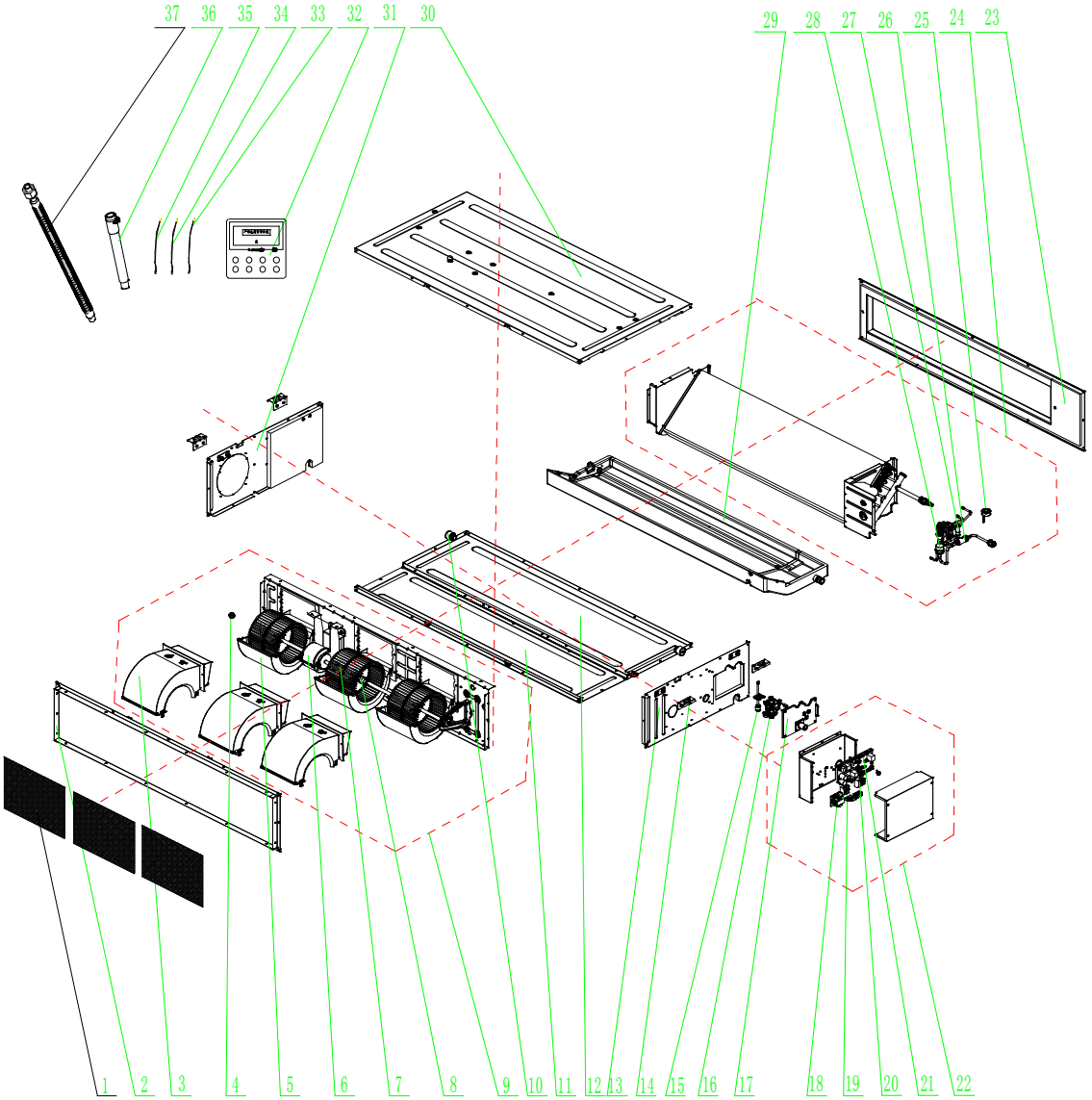
Exploded View of GMV-ND12PHS/B-T(U)、GMV-ND15PHS/B-T(U)、GMV-ND18PHS/B-T(U)、GMV-ND22PHS/B-T(U) GMV-ND24PHS/B-T(U)：



NO.	Model	GMV-ND12PHS/B-T(U)、GMV-ND15PHS/B-T(U) GMV-ND18PHS/B-T(U)、GMV-ND22PHS/B-T(U) GMV-ND24PHS/B-T(U)	Qty.
	Product Code	CM810N0800、CM810N0770、CM810N0810、CM810N0720、CM810N0730	
	Part Name	Part Code	
1	Centrifugal Fan Assy	'017026000002	1
2	Filter Sub-Assy	'111001000045	2
3	Propeller Housing(Upper)	'26905200078	2
4	Centrifugal Fan	'10455200003	2
5	Brushless DC Motor	'15705200016	1
6	Propeller Housing(Lower)	'26905200079	2
7	Blower Mounting Plate Sub-Assy	'01325200079	1
8	Cover Of Air-In	'01265200132	1
9	Hook	'02112466	4
10	Bottom Cover Plate	'01265200131	1
11	Seal plate Assy	'01495200079	1
12	Water Level Switch	'45020216	1
13	Water Pump	'43138000058	1
14	Left Side Plate Assy	'01315200147	1
15	Electric Box Assy	'100002000985	1
16	Inductance	'43128000014	1

17	Terminal Board	'4201115402	1
18	Main Board	'30226000089	1
19	Terminal Board	'4201800002601	1
20	Air Outlet Frame Assy	'01375200026	1
21	Evaporator Assy	'01024100173 '0102410017301	1
22	Sealing Cap(Pressure Warning)	'2611219201	1
23	Electric Expand Valve Fitting	'4304413215	1
24	Electronic Expansion Valve	'07334466	1
25	Strainer	'0741410000601	1
26	Strainer	'07415210	1
27	Choke Plug of Drain Pipe	'76815214	2
28	Foam Sub-assy	'12505200025	1
29	Top Cover Board Assy	'01265200130	1
30	Temperature Sensor	'3900005910	1
31	Temperature Sensor	'390000592	1
32	Temperature Sensor	'390000454	1
33	Display Board	'30296000040	1
34	Corrugated Pipe	'05015408	1
35	Drain Hose Sub-Assy	'05232050	1

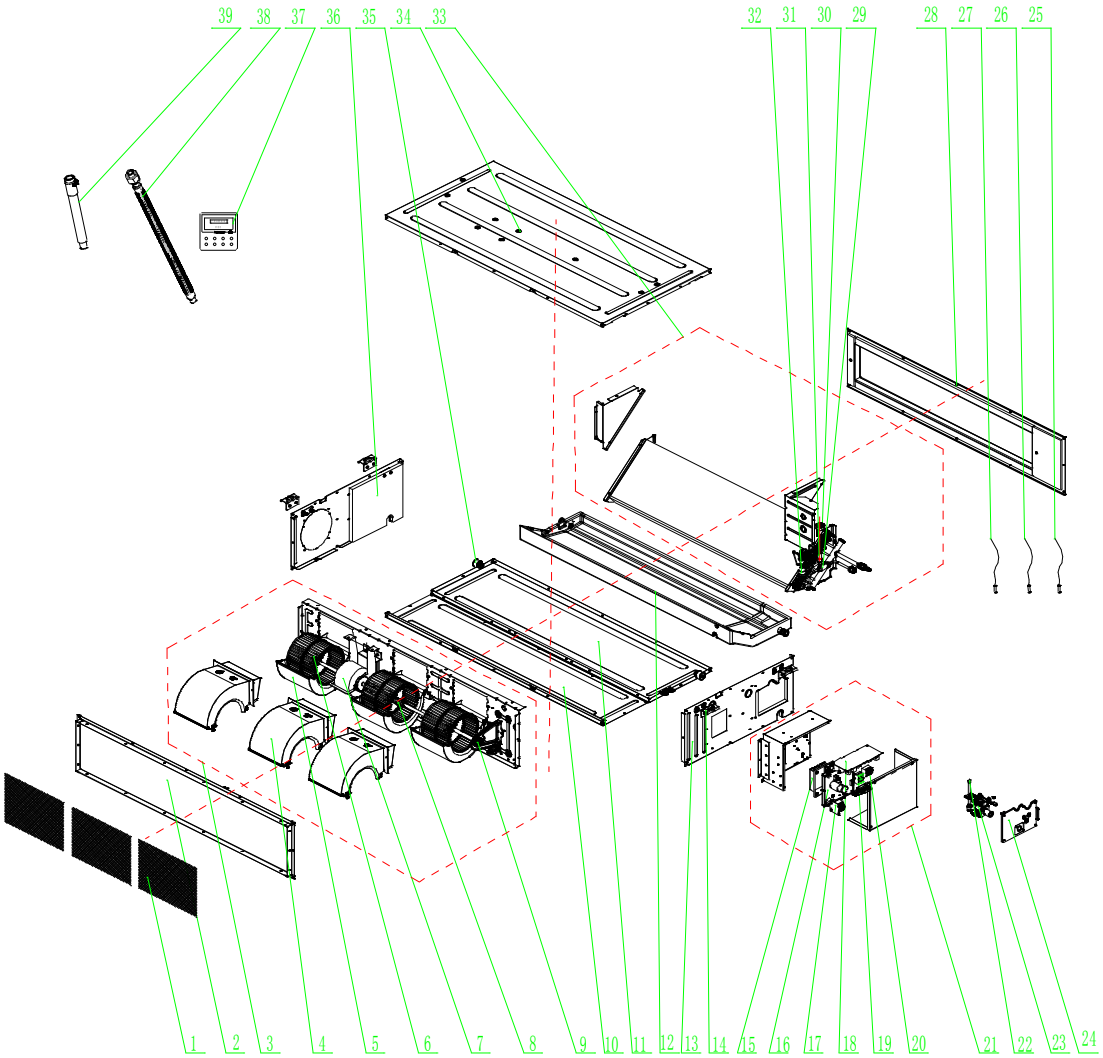
Exploded View of GMV-ND30PHS/B-T(U)、GMV-ND36PHS/B-T(U)、GMV-ND42PHS/B-T(U)：



NO.	Model	GMV-ND30PHS/B-T(U)、GMV-ND36PHS/B-T(U) GMV-N42PHS/B-T(U)	Qty.
	Product Code	CM810N0780、CM810N0740、CM810N0750	
	Part Name	Part Code	
1	Filter Sub-Assy	111001000052	3
2	Return Air Frame Sub-Assy	'017026000003	1
3	Propeller Housing(Upper)	'26905200078	3
4	Fan Bearing	'76512210	1
5	Propeller Housing(Lower)	'26905200079	3
6	Brushless DC Motor	'1570940000601	1
7	Centrifugal Fan	'10455200003	3
8	Joint Slack	'73018731	1
9	Centrifugal Fan Assy	'000052000028	1
10	Choke Plug Of Drain Pipe	'76815214	2

11	Cover Plate(Air Return)	'01265200123	1
12	Bottom Cover Plate	'01265200125	1
13	Left Side Plate Assy	'01315200147	1
14	Hook	'02112466	4
15	Water Level Switch	'45020216	1
16	Water Pump	'43138000058	1
17	Seal Plate	01495200078	1
18	Reactor	'43138000047	1
19	Terminal board	'4201115402	1
20	Terminal Board	4201800002601	1
21	Main Board	'300002000009	1
22	Electric Box Assy	'100002000984	1
23	Air Outlet Frame Assy	'01375200023	1
24	Evaporator Assy	011001000070	1
25	Electric Expand Valve Fitting	'4304413215	1
26	Strainer	0741410000601	1
27	Electronic Expansion Valve	'07334468	1
28	Strainer	'07415210	1
29	Foam Sub-Assy	12505200021	1
30	Top Cover Board Assy	'01264100105	1
31	Right Side Plate Assy	'01315200148	1
32	Display Board	'30296000040	1
33	Temperature Sensor	'3900005910	1
34	Temperature Sensor	'390000592	1
35	Temperature Sensor	'390000454	1
36	Drain Hose Sub-Assy	'05232050	1
37	Corrugated Pipe	'05015408	1

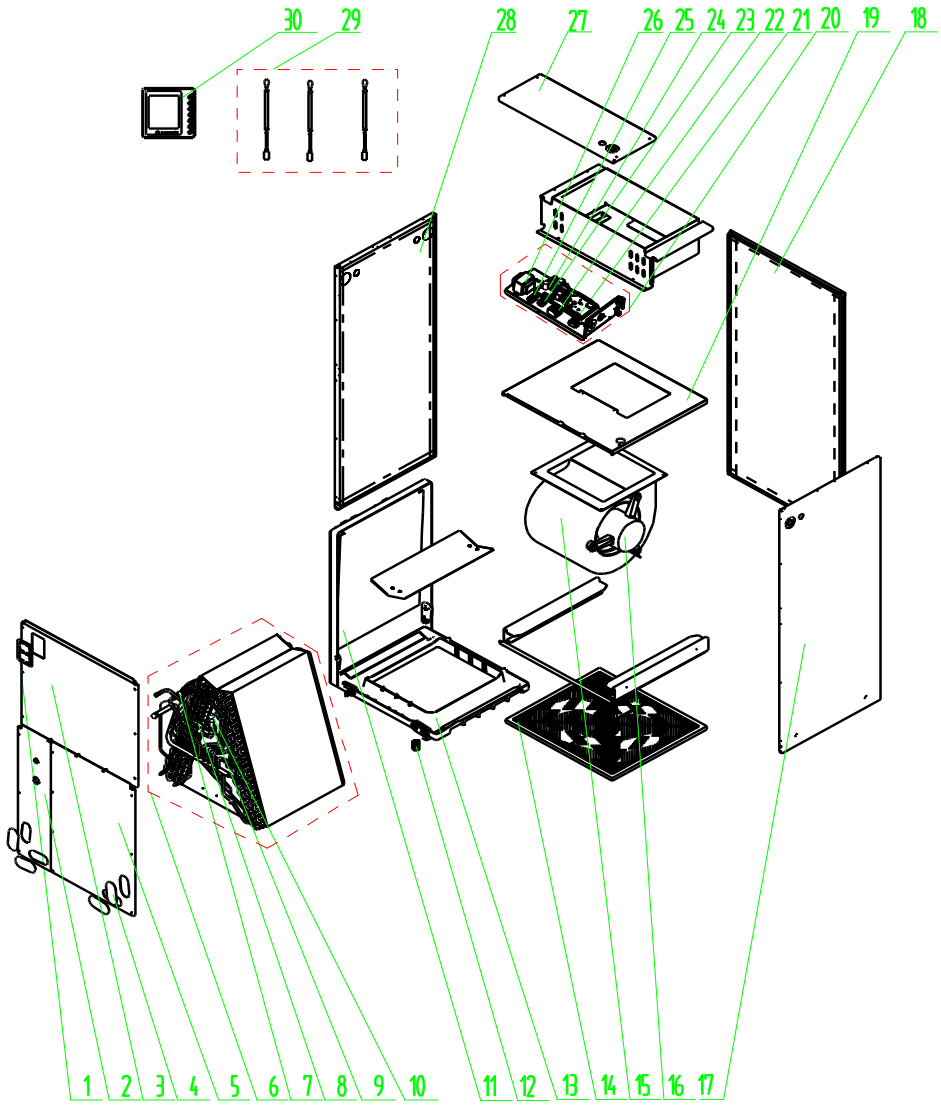
Exploded View of GMV-ND48PHS/B-T(U)、GMV-ND54PHS/B-T(U)：



NO.	Model	GMV-ND48PHS/B-T(U)、GMV-ND54PHS/B-T(U)	Qty.
	Product Code	CM810N0820、CM810N0760	
	Part Name	Part Code	
1	Filter Sub-Assy	'111001000052	3
2	Return Air Frame Sub-Assy	'017026000003	1
3	Centrifugal Fan Assy	'000052000029	1
4	Propeller Housing(Upper)	'26905200078	3
5	Propeller Housing(Lower)	'26905200079	3
6	Centrifugal Fan	'10455200003	3
7	Brushless DC Motor	'1570940000801	1
8	Joint Slack	'73018731	1
9	Fan Bearing	'76512210	1
10	Cover Plate(Air return)	'01265200123	1
11	Bottom Cover Plate	'01265200125	1
12	Foam Sub-Assy(Water Tray)	'12505200021	1
13	Left Side Plate Assy	'01314100118	1

14	Hook	'02112466	4
15	Radiator	49018000068	1
16	Main Board	30221000033	1
17	Reactor	'43138000047	1
18	Main Board	30226000092	1
19	Terminal board	4201115402	1
20	Terminal Board	4201800002601	1
21	Electric Box Assy	'100002001512	1
22	Water Level Switch	'45020216	1
23	Water Pump	'43138000058	1
24	Seal Plate	'01495200078	1
25	Temperature Sensor	'3900005910	1
26	Temperature Sensor	'390000592	1
27	Temperature Sensor	'390000454	1
28	Air Outlet Frame Assy	'01375200023	1
29	Strainer	0741410000601	1
30	Electric Expand Valve Fitting	'4304413215	1
31	Electronic Expansion Valve	'07334468	1
32	Strainer	07415210	1
33	Evaporator Assy	'011001000070 '011001000238	1
34	Top Cover Board Assy	'01264100105	1
35	Choke Plug Of Drain Pipe	'76815214	2
36	Right Side Plate Assy	'01315200148	1
37	Display Board	'30296000040	1
38	Corrugated Pipe	'05015408	1
39	Drain Hose Sub-Assy	'05232050	1

5.11 Air Handler type Indoor Unit



Exploded View of GMV-ND24A/A-T(U)、GMV-ND30A/A-T(U)

NO.	Model	GMV-ND24A/A-T(U) GMV-ND30A/A-T(U)	Qty.
	Product Code	CM810N0660 CM810N0670	
	Part Name	Part Code	
1	insulating board	75142201	1
2	Lower cover plate 1	01264100070	1
3	Top Cover Board Sub-assy	01262200007	1
4	Plastic Cover	26902209	4
5	Lower cover plate sub-assy 2	01262200009	1
6	Evaporator Assy	01024100162	1
7	Current Divider	072241303	1
8	Strainer	0721200101	2
9	Electronic Expansion Valve	07334466	1
10	Electric Expand Valve Fitting	4304413205	1
11	Secondary Water Tray	26902200002	1

12	Choke Plug	76718209	8
13	Main water Tray	26902200001	1
14	Filter Sub-Assy	1172220202	1
15	Motor for Centrifugal Fan	1570220101	1
16	Fan Motor	150104000014	1
17	Right Side Plate Sub-Assy	01312200007	1
18	Rear Side Plate Sub-Assy	01312200009	1
19	Blower Mounting Plate	0132220000801	1
20	Electric cabinet board	100003000225	1
21	Terminal Board	4201115402	1
22	Terminal Board	4201800002601	1
23	Terminal Board	42011147	1
24	Main Board	300002000321	1
25	Terminal Board	42011103	1
26	Transformer	43110286	1
27	Top Cover Plate Sub-assy	01262200010	1
28	Left Side Plate Sub-assy	01312200005	1
29	Sensor Sub-assy	39008000103G	1
30	Display Board	30296000040	1

Exploded View of GMV-ND36A/A-T(U)、GMV-ND42A/A-T(U)

NO.	Model	GMV-ND36A/A-T(U) GMV-ND42A/A-T(U)	Qty.
	Product Code	CM810N0700 CM810N0690	
	Part Name	Part Code	
1	insulating board	75142201	1
2	Lower cover plate 1	01264100069	1
3	Top Cover Board Sub-assy	01262200019	1
4	Plastic Cover	26902209	4
5	Lower cover plate sub-assy 2	01262200017	1
6	Evaporator Assy	01024100166	1
7	Current Divider	0722443501	1
8	Strainer	0721200101	2
9	Electronic Expansion Valve	07334468	1
10	Electric Expand Valve Fitting	4304413205	1
11	Secondary Water Tray	26902205	1
12	Choke Plug	76718209	8
13	Main water Tray	26902204	1
14	Filter Sub-Assy	1172220201	1
15	Motor for Centrifugal Fan	1570220201	1
16	Fan Motor	150104000014	1
17	Right Side Plate Sub-Assy	01312200017	1
18	Rear Side Plate Sub-Assy	01312200019	1
19	Blower Mounting Plate	0132220000601	1
20	Electric cabinet board	100003000225	1
21	Terminal Board	4201115402	1
22	Terminal Board	4201800002601	1
23	Terminal Board	42011147	1
24	Main Board	300002000321	1

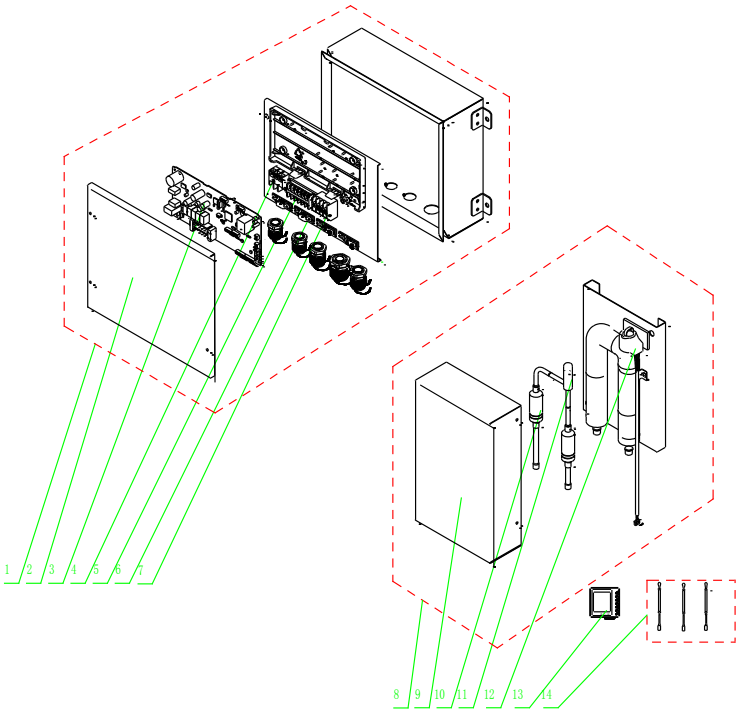
25	Terminal Board	42011103	1
26	Transformer	43110286	1
27	Top Cover Plate Sub-assy	01262200013	1
28	Left Side Plate Sub-assy	01312200015	1
29	Sensor Sub-assy	39008000103G	1
30	Display Board	30296000040	1

Exploded View of GMV-ND48A/A-T(U)、GMV-ND54A/A-T(U)

NO.	Model	GMV-ND48A/A-T(U) GMV-ND54A/A-T(U)	Qty.
	Product Code	CM810N0680 CM810N0710	
	Part Name	Part Code	
1	insulating board	75142201	1
2	Lower cover plate 1	01264100065	1
3	Top Cover Board Sub-assy	01262200024	1
4	Plastic Cover	26902209	4
5	Lower cover plate sub-assy 2	01262200026	1
6	Evaporator Assy	01024100159	1
7	Current Divider	0722443501	1
8	Strainer	0721200101	2
9	Electronic Expansion Valve	07334468	1
10	Electric Expand Valve Fitting	4304413205	1
11	Secondary Water Tray	26902205	1
12	Choke Plug	76718209	8
13	Main water Tray	26902206	1
14	Filter Sub-Assy	11722202	1
15	Motor for Centrifugal Fan	1570220301	1
16	Fan Motor	150104000013	1
17	Right Side Plate Sub-Assy	01312200026	1
18	Rear Side Plate Sub-Assy	01312200028	1
19	Blower Mounting Plate	0132220001401	1
20	Electric cabinet board	100003000224	1
21	Terminal Board	4201115402	1
22	Terminal Board	4201800002601	1
23	Terminal Board	42011147	1
24	Main Board	300002000321	1
25	Terminal Board	42011103	1
26	Transformer	43110286	1
27	Top Cover Plate Sub-assy	01262200028	1
28	Left Side Plate Sub-assy	01312200030	1
29	Sensor Sub-assy	39008000103G	1
30	Display Board	30296000040	1

Above data is subject to change without notice,pls refer the SP in global service website.

5.12 AHU-KIT Type Indoor Unit



Exploded View of GMV-N12U/A-T(U)、GMV-N24U/A-T(U)

NO.	Model	GMV-N12U/A-T(U) GMV-N24U/A-T(U)	Qty.
	Product Code	CN750N0100 CN750N0060	
	Part Name	Part Code	
1	Electric Box Assy	'100002001936	1
2	Electric Box Cover	'01424100135P	1
3	Main Board	'30226000081	1
4	Terminal Board	'42010259	1
5	Terminal Board	'42011117	1
6	Wire Clamp	'71010003	2
7	Terminal Board	'4201800002601	1
8	Electronic Expansion Valve assy	'030174000026	1
9	Cover Plate	'01264100061P	1
10	Bidirection Strainer	'07220016	2
11	Electronic Expansion Valve	'07334463	1
12	Electric Expand Valve Fitting	'4304413239	1
13	Display Board	'30296000040	1
14	Sensor Sub-assy	'39008000130G	1

Exploded View of GMV-N48U/A-T(U)、GMV-N96U/A-T(U)

NO.	Model	GMV-N48U/A-T(U) GMV-N96U/A-T(U)	Qty.
	Product Code	CN750N0070 CN750N0080	
	Part Name	Part Code	

1	Electric Box Assy	'100002001936	1
2	Electric Box Cover	'01424100135P	1
3	Main Board	'30226000081	1
4	Terminal Board	'42010259	1
5	Terminal Board	'42011117	1
6	Wire Clamp	'71010003	2
7	Terminal Board	'4201800002601	1
8	Electronic Expansion Valve assy	'43044100226	1
9	Cover Plate	'01264100061P	1
10	Bidirection Strainer	'07220016	2
11	Electronic Expansion Valve	'07334412	1
12	Electric Expand Valve Fitting	'4304413239	1
13	Display Board	'30296000040	1
14	Sensor Sub-assy	'39008000130G	1

Exploded View of GMV-N192U/A-T(U)

NO.	Model	GMV-N192U/A-T(U)	Qty.
	Product Code	**CN750N0090**	
	Part Name	**Part Code**	
1	Electric Box Assy	'100002001936	1
2	Electric Box Cover	'01424100135P	1
3	Main Board	'30226000081	1
4	Terminal Board	'42010259	1
5	Terminal Board	'42011117	1
6	Wire Clamp	'71010003	2
7	Terminal Board	'4201800002601	1
8	Electronic Expansion Valve assy	' 43044100220	1
9	Cover Plate	'01264100061P	1
10	Bidirection Strainer	'07220016	2
11	Electronic Expansion Valve	' 07331139	1
12	Electric Expand Valve Fitting	'4304413239	1
13	Display Board	'30296000040	1
14	Sensor Sub-assy	'39008000130G	1

Above data is subject to change without notice,pls refer the SP in global service website.

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