

TECHNICAL CATALOGUE

PRIMARYRY

LARGE SINGLE SPLIT
DC-INVERTER SERIES

INDOOR UNITS

MODELS

DUCTED

RPIL-3.0UFE1NH
RPIH-3.5UFE1NH
RPIH-4.0UFE1NH
RPIH-5.0UFE1NH
RPIH-6.0UFE1NH
RPIH-6.5UFE1NH

CASSETTE

RCI-3.0UFE1NH
RCI-3.5UFE1NH
RCI-4.0UFE1NH
RCI-5.0UFE1NH
RCI-6.0UFE1NH
RCI-6.5UFE1NH

FLOOR CEILING

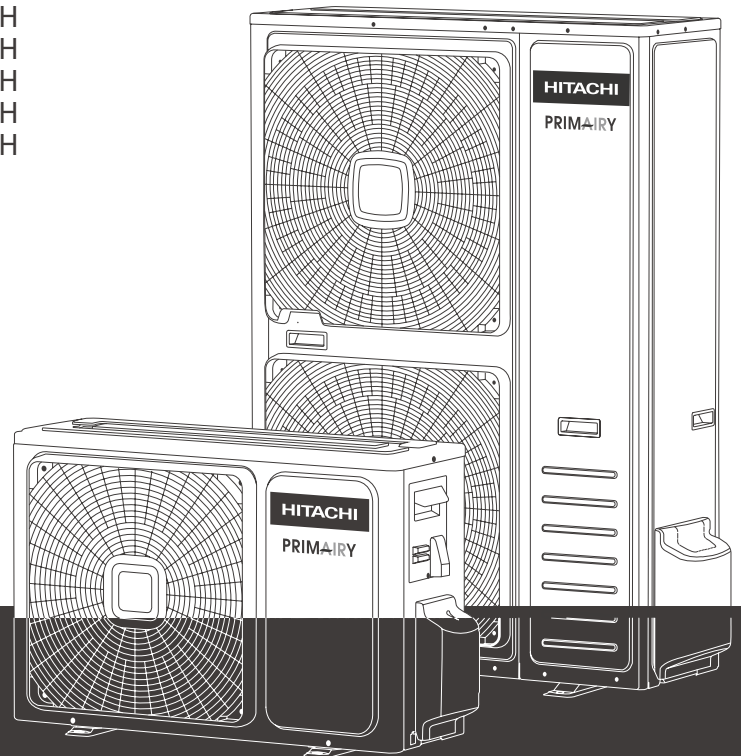
RPFC-3.0UFE1NH
RPFC-3.5UFE1NH
RPFC-4.0UFE1NH
RPFC-5.0UFE1NH
RPFC-6.0UFE1NH
RPFC-6.5UFE1NH

OUTDOOR UNITS

MODELS

RAS-3.0UFESNH1
RAS-3.5UFESNH1
RAS-4.0UFESNH1
RAS-5.0UFESMH1
RAS-6.0UFESMH1
RAS-6.5UFESMH1
RAS-5.0UFESNH1
RAS-6.0UFESNH1

HC2019308HF



air

SAFETY SUMMARY

IMPORTANT NOTICE

- We pursue a policy of continuing improvement in design and performance of products. The right is therefore reserved to vary specifications without notice.
- We cannot anticipate every possible circumstance that might involve a potential hazard.
- This air conditioner is designed for standard air conditioning only. Do not use this air conditioner for other purposes such as server room application, data center application, drying clothes, refrigerating foods or for any other similar cooling or heating process.
Do not let the air-out face animals or plants, it might have an adverse effect on them.
- The installer and system specialist shall secure safety against leakage according to local regulations or standards.
- Signal words (DANGER, WARNING and CAUTION) are used to identify levels of hazard seriousness. Definitions for identifying hazard levels are provided below with their respective signal words.

▲ DANGER

: Immediate hazards which WILL result in severe personal injury or death.

▲ WARNING

: Hazards or unsafe practices which COULD result in severe personal injury or death.

▲ CAUTION

: Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

NOTE

: Useful information for operation and/or maintenance.

- Installation should be performed by the dealer or other professional personnels. Improper installation may cause water leakage, electrical shock, or fire.

▲ DANGER

- Do not perform installation work, refrigerant piping work, drain piping and electrical wiring connection without referring to our installation manual. If the instructions are not followed, it may result in water leakage, electric shock or fire.
- Use refrigerant R32 in the refrigerant cycle.
- Do not pour water into the indoor or outdoor unit. These products are equipped with electrical parts. If poured, it will cause a serious electrical shock.
- Do not open the service cover or access panel for the indoor or outdoor units without turning OFF the main power supply.
- Do not touch or adjust safety devices inside the indoor or outdoor units. If these devices are touched or readjusted, it may cause a serious accident.
- Refrigerant leakage can cause difficulty in breathing due to insufficient air. Turn OFF the main switch, extinguish any naked flames and contact your service contractor, if refrigerant leakage occurs.
- Do perform air-tight test. Do not charge oxygen, acetylene or other flammable and poisonous gas into the refrigerant cycle when performing a leakage test or an air-tight test. These types of gas are extremely dangerous and can cause an explosion. It is recommended that nitrogen be used for this test.
- The installer and system specialist shall secure safety against refrigerant leakage according to local regulations or standards.
- Use an ELB (Electric Leakage Breaker). In the event of a fault, there is danger of an electric shock or a fire if it is not used.

▲ WARNING

- Do not use any sprays such as insecticide, lacquer, hair spray or other flammable gas within approximately one (1) meter from the system.

- If circuit breaker or fuse is often activated, stop the system and contact your service contractor.
- Check that the ground wire is securely connected. If the unit is not correctly grounded, it will lead to electric shock. Do not connect the ground wiring to gas piping, water piping, lightning conductor or ground wiring for telephone.
- Before performing any brazing work, check to ensure that there is no flammable material around. When using refrigerant, be sure to wear leather gloves to prevent cold injuries.
- Protect the wires, electrical parts, etc. from rats or other small animals. If not protected, rats may gnaw at unprotected parts, which may lead to a fire.
- Fix the cables securely. External force on the terminals could lead to a fire.
- Install the air conditioner on a solid base that can support the unit weight. An inadequate base or incomplete installation may cause injury in the event the unit falls off the base. Incomplete connections or clamping may cause terminal overheating or fire.
- Make sure that the outdoor unit is not covered with snow or ice, before operation.

 **CAUTION**

- Do not step or put any material on the product.
- Do not put any foreign material on the unit or inside the unit.

NOTE

- It is recommended that the room be ventilated every 3 to 4 hours.
- The air conditioner may not work properly under the following circumstances.
The power transformer provides the same power with the air conditioner. The electrical equipment is too close to the power supply of the air conditioner. With the sharp change of power consumption and switching action, the power supply of the air conditioner will generate a large induction surge voltage.

CHECKING PRODUCT RECEIVED

- Upon receiving this product, inspect it for any shipping damage. Claims for damage, either apparent or concealed, should be filed immediately with the shipping company.
- Check the model number, electrical characteristics (power supply, voltage and frequency) and accessories to determine if they are correct.
The standard utilization of the unit shall be explained in these instructions. Therefore, the utilization of the unit other than those indicated in these instructions is not recommended.
Please contact your local agent, as the occasion arises.


 • *The figures in this manual are based on the external view of a standard model. Consequently, the shape may differ from that of the air conditioner you have selected.*

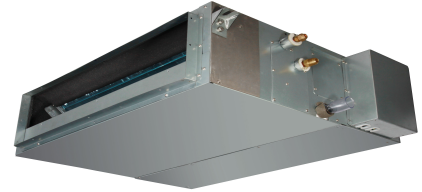
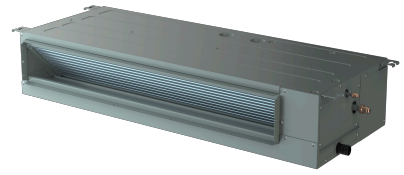
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1. GENERAL

1.1 Features

Ducted Type Air Conditioner



Features

- **Saving Installation Space**
The indoor unit can be installed inside the ceiling conveniently.
- **Optional Static Pressure**
Optional ESP, a variety of optional installation methods.
- **24-hour Timer ON and OFF**
This Timer can be set to automatically turn the unit on or off within a 24-hour period.
- **Mute Operation**
The excellent fan design enables smooth airflow with minimum noise.
- **Meeting Various Installation Requirements**
Both the back-air-inlet type and down-air-inlet type can be installed according to the actual installation space. Difference lies in that the noise of the down-air-inlet type increases by 5-6dB.
- **Auto Re-start from Power Break**
When the power supply is recovered after power break, all presets are still effective and the air conditioner will run according to the previous setting.
- **Fault Self-diagnosis Function**
When there is a problem in the air conditioner, the microcomputer could diagnose the faults, which can be read from the display and is convenient for maintenance.

1. GENERAL

Cassette Type Air Conditioner



Features

- **Saving Installation Space**
The indoor unit can be installed inside the ceiling conveniently.
- **24-hour Timer ON and OFF**
This Timer can be set to automatically turn the unit on or off within a 24-hour period.
- **Mute Operation**
The excellent fan design enables smooth airflow with minimum noise.
- **Auto Re-start from Power Break**
When the power supply is recovered after power break, all presets are still effective and the air conditioner will run according to the previous setting.
- **Fault Self-diagnosis Function**
When there is a problem in the air conditioner, the microcomputer can diagnose the faults, which can be read from the display and is convenient for maintenance.

1. GENERAL

Ceiling & Floor Air Conditioner



Features

- **Saving Installation Space**

The indoor unit is only 230mm high, so it can be installed inside the ceiling conveniently.
- **Flexible Installation Options**

According to the actual installation space, the indoor unit can be installed in the ceiling or on the floor. One unit, two installation methods.
- **24-hour Timer ON and OFF**

This Timer can be set to automatically turn the unit on or off within a 24-hour period.
- **Mute Operation**

The excellent fan design enables smooth airflow with minimum noise.
- **Various Refrigerant Pipe Connecting Methods**

The refrigerant pipe can be connected from 3 different directions (rear, right, or top).
- **Auto Re-start from Power Break**

When the power supply is recovered after power break, all presets are still effective and the air conditioner will run according to the previous setting.
- **Fault Self-diagnosis Function**

When there is a problem in the air conditioner, the microcomputer could diagnose the faults, which can be read from the display and is convenient for maintenance.

1. GENERAL

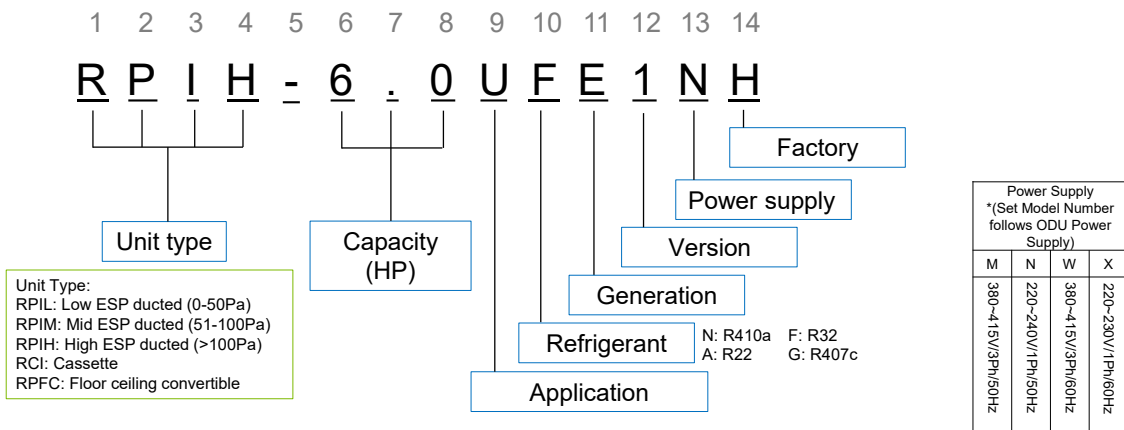
1.2 Product Lineup

Model (HP) \ Type	3.0	3.5	4.0	5.0	6.0	6.5
Ducted	●	●	●	●	●	●
Cassette	●	●	●	●	●	●
Floor Ceiling	●	●	●	●	●	●

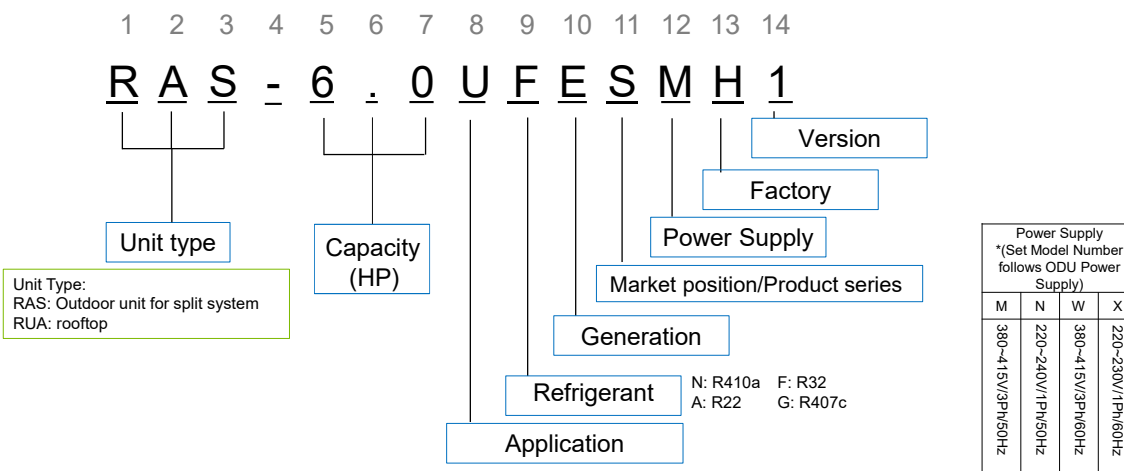
●: available model

1.3 Nomenclature for Hitachi PAC

Indoor unit model



Outdoor unit model



1. GENERAL

1.4 Unit Installation

1:1 system is the only compatible combination.

(Only one indoor unit can be connected with one outdoor unit.)

1.5 Working Range

Power Supply

Working voltage	176V~264V (Single phase 3.0HP-6.0HP),342V~438V (Three phase 5.0HP-6.5HP)
Voltage imbalance	Within a 3% deviation from each voltage at the main terminal of the outdoor unit
Starting voltage	Higher than 5% of the rated voltage

Operating temperature range

This air conditioner is designed for the following outdoor operating temperatures.

Type	Mode	Outdoor operating temperature (°C)	
		maximum	minimum
DC-Inverter Split Air Conditioner (Heat pump type)	Cooling Operation	48	-15
	Heating Operation	24	-15

Storage condition:

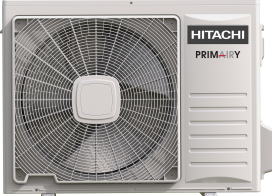

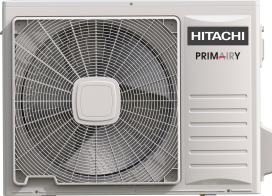

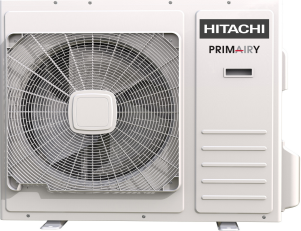
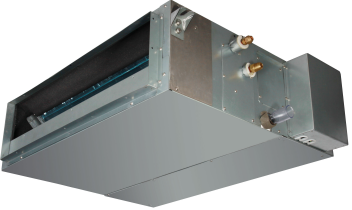

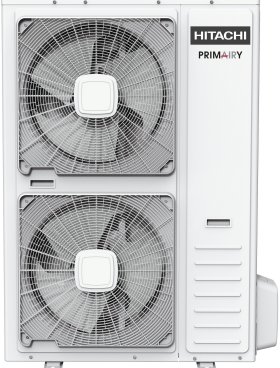
Temperature: -25~60°C

Humidity: 30%~80%

1. GENERAL

1.6 Product Appearance

Ducted type

Model (HP)	Indoor Unit	Outdoor Unit
3.0		
3.5		
4.0		
5.0		
6.0/6.5		

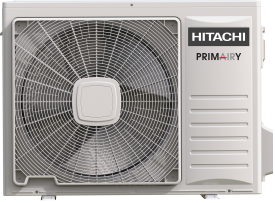



1. GENERAL

Cassette type

Model (HP)	Indoor Unit	Outdoor Unit
3.0/3.5		
4.0		
5.0		
6.0/6.5		

1. GENERAL

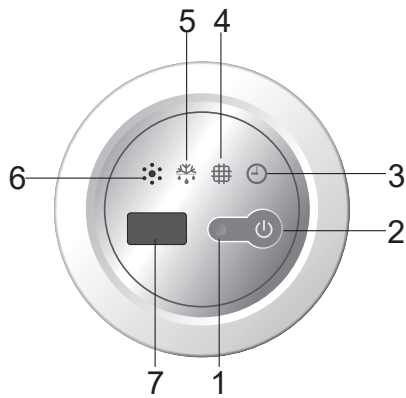
Floor ceiling type

Model (HP)	Indoor Unit	Outdoor Unit
3.0		
3.5		
4.0		
5.0		
6.0/6.5		

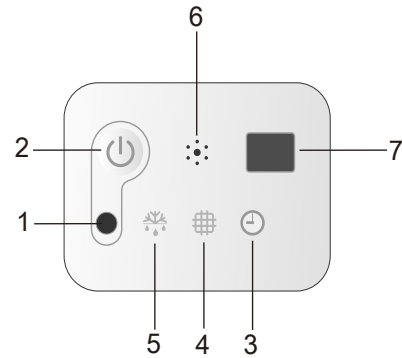
1. GENERAL

Display panel

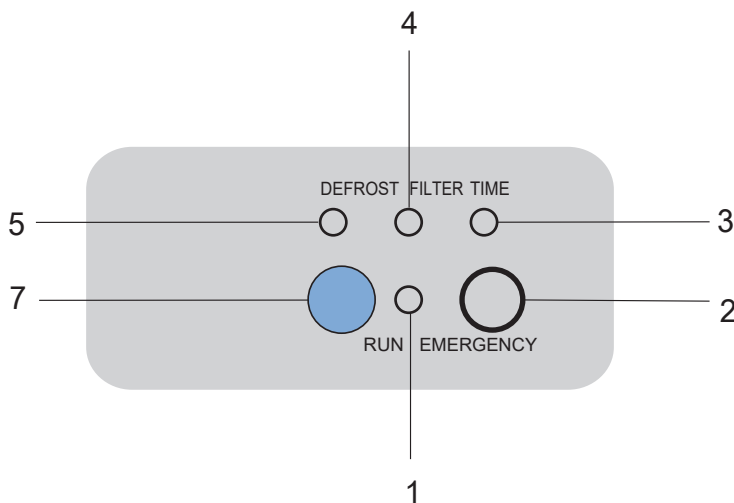
Ducted type



Cassette type



Floor ceiling type



Description

1 Run indicator (Red)

It lights on in operation. It lights off in SLEEP mode.

2 Emergency switch

The filter cleaning indicator is reset when the switch is pressed. The unit will be started or stopped once the switch is pressed. The unit will be operated in forced cooling mode if press the switch continuously for more than 5s when the unit is off.

3 Timer indicator (Green)

It lights on when timer is in use. It lights off when timer completes.

4 Filter cleaning (Yellow)

It lights on when the filter needs to be cleaned.

5 Defrosting indicator (Green)

It lights on during defrosting and it lights off when defrosting is completed.

6 Buzzer

It rings when the signal from remote controller is received.

7 Infrared receiver

Receives signal from the remote controller.

2. SPECIFICATIONS

2.1 Ducted Type

Indoor model				RPII-3.0UFE1NH	RPII-3.5UFE1NH	RPII-4.0UFE1NH	RPII-5.0UFE1NH	RPII-5.0UFE1NH	RPII-6.0UFE1NH	RPII-6.0UFE1NH	RPII-6.5UFE1NH	
Outdoor model				RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Electric parameter	Power supply	Indoor	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	
	Power supply	Outdoor	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	220-240/1/50	380-415/3/50	220-240/1/50	380-415/3/50	
	Input consumption	Max.	W	4100	4100	5100	6400	6400	7200	7200	7800	
	Input current	Max.	A	18.10	18.00	22.50	11.60	28.20	12.60	30.00	13.1	
Seasonal efficiency	Cooling	Pdesignc	kW	6.90	8.50	10.10	12.10	12.50	14.19	14.10	17.10	
		SEER	Btu/(W·h)	6.29	6.20	6.10	6.28	6.10	5.94	5.94	5.81	
		ηs,c	100%	-	-	-	248%	241%	235%	235%	229%	
		Energy Efficiency Class	-	A++	A++	A++	-	-	-	-	-	
		Annual energy consumption	kWh/a	395	499	577	761	698	849	829	943	
	Heating (Average Season)	Pdesignh	kW	6.00	6.50	8.20	9.50	9.00	12.40	12.10	11.00	
		SCOP	Btu/(W·h)	4.05	4.00	3.92	3.70	3.70	3.70	3.70	3.72	
		ηs,c	100%	-	-	-	145%	145%	145%	145%	146%	
		Energy Efficiency Class	-	A+	A+	A	-	-	-	-	-	
		Annual energy consumption	kWh/a	2007	2313	2926	3674	3392	4694	4503	4205	
		Tbiv	°C	-7	-7	-7	-7	-7	-7	-7	-7	
		Tol	°C	-15	-15	-15	-15	-15	-15	-15	-15	
	Cooling	Capacity	Rated	kW	6.90	8.50	10.10	12.10	12.50	14.19	14.10	17.10
			Range (Min~Max)	kW	2.45~7.85	4.00~9.50	3.50~11.00	3.30~13.20	3.30~13.20	3.20~16.00	3.20~16.00	3.30~18.50
Moisture Removal		L/h	L/h	1.95	3.20	4.40	5.30	5.30	6.00	6.00	6.40	
Input		Rated	kW	2.16	2.67	3.80	4.22	4.38	4.78	4.78	6.60	
		Range (Min~Max)	kW	0.33~4.10	0.90~4.10	0.90~5.10	0.88~6.40	0.88~6.40	0.80~7.20	0.80~7.20	1.67~7.80	
Current		Rated	A	9.50	11.60	17.10	7.40	19.00	8.70	21.00	12.50	
EER	Rated	W/W	3.19	3.18	2.66	2.87	2.85	2.97	2.95	2.59		
Heating	Capacity	Rated	kW	8.30	9.00	10.50	13.40	12.80	16.13	16.50	18.00	
		Range (Min~Max)	kW	2.20~8.70	3.50~9.40	3.32~12.00	3.00~14.60	3.00~14.60	3.40~18.50	3.40~18.50	3.00~19.50	
	Input	Rated	kW	2.22	2.40	3.50	4.07	3.82	4.65	4.85	6.10	

2. SPECIFICATIONS

Indoor model			RPII-3.0UFE1NH	RPII-3.5UFE1NH	RPII-4.0UFE1NH	RPII-5.0UFE1NH	RPII-5.0UFE1NH	RPII-6.0UFE1NH	RPII-6.0UFE1NH	RPII-6.5UFE1NH	
Outdoor model			RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Heating		Range (Min~Max)	kW	0.33~4.10	0.66~4.10	0.70~5.10	0.74~6.40	0.74~6.40	0.78~7.20	0.78~7.20	1.36~7.80
	Current	Rated	A	10.30	10.50	16.00	7.30	16.60	8.40	21.00	11.60
	COP	Rated	W/W	3.74	3.75	3.00	3.29	3.35	3.47	3.40	2.95
Indoor fan motor	Model		-	SIC-68CVL-F16 0-2	SIC-101CW-F12 10	SIC-101CW-F12 10	SIC-101CW-F12 50-4	SIC-101CW-F12 50-4	SIC-101CW-F12 50-4	SIC-101CW-F12 50-4	SIC-101CW-F12 50-4
	Qty		-	1	1	1	1	1	1	1	1
	Output		W	60	210	210	250	250	250	250	250
	Speed(Hi/Med/Lo)		r/min	950/800/670	900/800/640	1050/980/900	910/810/710	910/810/710	1100/1000/900	1100/1000/900	1100/1000/900
Indoor coil	Number of rows		-	3	3	3	3	3	3	3	3
	Tube pitch(a) ×Row pitch(b)		mm	21×13.6	21×13.6	21×13.6	21×18.19	21×18.19	21×18.19	21×18.19	21×18.19
	Fin spacing		mm	1.60	1.60	1.60	1.40	1.40	1.40	1.40	1.40
	Fin type		-	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside diameter and type		mm	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube
	Coil (Length ×Height ×Width)		mm	1002×210×40.8	960×336×40.8	960×336×40.8	1100×378×54.6	1100×378×54.6	1100×378×54.6	1100×378×54.6	1100×378×54.6
	Number of circuits		-	6	6	6	9	9	9	9	9
Indoor unit	Dimension	W×H×D	mm	1180×190×447	1140×268×720	1140×268×720	1300×350×800	1300×350×800	1300×350×800	1300×350×800	1300×350×800
	Packing	W×H×D	mm	1350×285×565	1330×360×870	1330×360×870	1550×410×940	1550×410×940	1550×410×940	1550×410×940	1550×410×940
	Weight	Net/Gross	kg	24.0/27.5	37.5/44.5	37.5/44.5	51.0/60.0	51.0/60.0	51.0/60.0	51.0/60.0	51.0/60.0
	Air Volume	Hi/Med/Lo	m³/h	1000/700/490	1450/1120/900	1800/1600/1400	1750/1500/1300	1750/1500/1300	2400/2200/1900	2400/2200/1900	2400/2200/1900
		Hi/Med/Lo	CFM	588/411/288	853/659/529	1059/941/824	1029/882/765	1029/882/765	1412/1294/1118	1412/1294/1118	1412/1294/1118
	Sound Level (SPL)	Hi/Med/Lo	dB(A)	38/34/31	41/38/33	42/40/38	43/40/37	43/40/37	47/45/42	47/45/42	48/45/43
	Sound Level (PWL)	Hi	dB(A)	61	63	65	69	69	77	77	77
	External Static Pressure	Rated	Pa	25	37	37	50	50	50	50	50
		Range	Pa	0~40	0~120	0~120	0~120	0~120	0~120	0~120	0~120
	Controller	Type	-	Wired	Wired	Wired	Wired	Wired	Wired	Wired	Wired
		Model	-	HCWA21NEWH	HCWA21NEWH	HCWA21NEWH	HCWA21NEWH	HCWA21NEWH	HCWA21NEWH	HCWA21NEWH	HCWA21NEWH
	Drainage water pipe diameter		mm	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32
	Drain pump		-	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	Air filter		-	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Qty' per 20' /40' /40'HQ		-	128/264/297	60/126/147	60/126/147	35/75/90	35/75/90	35/75/90	35/75/90	35/75/90	
Design	H/L	MPa	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	

2. SPECIFICATIONS

Indoor model				RPIL-3.0UFE1NH	RPIH-3.5UFE1NH	RPIH-4.0UFE1NH	RPIH-5.0UFE1NH	RPIH-5.0UFE1NH	RPIH-6.0UFE1NH	RPIH-6.0UFE1NH	RPIH-6.5UFE1NH
Outdoor model				RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1
Room temperature	Setting Temperature Range	Cooling	°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	16~30
		Heating	°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	16~30
Compressor	Model		-	KTM240D57UMT	KTM240D57UMT	KTF310D43UMT	KTF310D43UMT	KTF310D43UMT	KTF400D64UMT	KTF400D64UMT	KTQ420D1UMU
	Type		-	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Brand		-	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC
	Capacity		Btu/h	26323	26331	34154	34154	34154	34470	34470	46755
	Input		W	2085	2085	2765	2765	2765	3155	3155	3700
	Rated current(RLA)		A	9.45	9.45	5.38	5.38	5.38	13.20	13.20	7.02
	Refrigerant oil	Model		-	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74
Amount		ml	670	670	1000	1000	1000	1000	1000	1400	
Outdoor fan motor	Model		-	SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F812-1-1	SIC-81FW-F113-8-1	SIC-81FW-F113-8-1	SIC-71FW-D812-1-1 &SIC-71FW-D8121-2	SIC-71FW-D812-1-1 SIC-71FW-D812-1-2	SIC-71FW-D812-1-1 &SIC-71FW-D8121-2
	Qty		-	1	1	1	1	1	2	2	2
	Output		W	61	61	121	138	138	121	121	121
	Speed		r/min	880	880	830	810	810	810	810	810
Outdoor coil	Number of rows		-	2	2	2	2	2	2	2	2
	Tube pitch(a) x Row pitch(b)		mm	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65
	Fin spacing		mm	1.40	1.40	1.30	1.60	1.60	1.40	1.40	1.40
	Fin type		-	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside diameter and type		mm	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube
	Coil (Length*Height*Width)		mm	900×630×43.3	900×630×43.3	970×798×43.3	970×1008×43.3	970×1008×43.3	970×1344×43.3	970×1344×43	970×1344×43.3
Number of circuits		-	6	6	5	6	6	12	12	12	
Outdoor unit	Dimension	W×H×D	mm	860×670×310	860×670×310	950×840×340	950×1050×340	950×1050×340	950×1386×340	950×1386×340	950×1386×340
	Packing	W×H×D	mm	990×730×450	990×730×450	1110×920×460	1110×1200×460	1110×1200×460	1110×1530×460	1110×1530×460	1110×1530×460
	Weight	Net/Gross	kg	49.0/53.0	49.0/53.0	70.0/75.0	85.0/95.0	85.0/97.0	101.5/114.5	101.5/114.5	109.0/121.0
	Air Volume	Hi	m³/h	3150	3150	3800	5800	5800	6300	6300	6300
	Sound Level (SPL)	Hi	dB(A)	54	54	58	62	62	62	62	67

2. SPECIFICATIONS

Indoor model				RPII-3.0UFE1NH	RPIH-3.5UFE1NH	RPIH-4.0UFE1NH	RPIH-5.0UFE1NH	RPIH-5.0UFE1NH	RPIH-6.0UFE1NH	RPIH-6.0UFE1NH	RPIH-6.5UFE1NH	
Outdoor model				RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Outdoor unit	Sound Level (PWL)	Hi	dB(A)	69	70	70	76	76	76	76	80	
	Refrigerant	Type	-	R32	R32	R32	R32	R32	R32	R32	R32	R32
		Amount	kg	1.40	1.45	2.00	2.50	2.50	3.00	3.00	3.40	
		TCO2Eq	-	0.945	0.979	1.350	1.688	1.688	2.025	2.025	2.295	
		GWP	-	675	675	675	675	675	675	675	675	
	Throttle type			-	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV
	Qty'per 20' /40' /40'HQ			-	90/186/186	90/186/186	52/106/106	26/53/106	26/53/106	26/53/53	26/53/53	26/53/53
Design pressure	H/L	MPa	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	
Refrigerant piping	Liquid/ Gas		mm(inch)	Φ9.52/Φ15.88 (3/8'/5/8')	Φ9.52/Φ15.88 (3/8'/5/8')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	
	Pipe length	Max.	m	50	50	50	50	50	50	50	50	
	Height difference	Max. (OD lower)	m	30	30	30	30	30	30	30	30	30
		Max. (OD higher)	m	30	30	30	30	30	30	30	30	30
	Add Refrigerant Amount		g/m	28	28	28	28	28	28	28	28	28
	Pipe Length for Additional Refrigerant		m	5	5	5	5	5	5	5	5	5
Ambient Temperature Range	Cooling	°C	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	
	Heating	°C	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	

NOTE:

1. Test conditions:

Cooling : Indoor: DB27°C/ WB19°C Outdoor: DB35°C/ WB24°C

Heating: Indoor: DB20°C/ WB15°C Outdoor: DB7°C/ WB 6°C

2. The Sound Pressure Level is based on the following conditions:

Outdoor unit:

Measure the noise value of 3 points, which are 1 meter in front of the three sides of the unit surface (front/left/right) and 1/2(unit height +1) meter high from floor level, and calculate the weighted average of the noise.

Indoor unit:

Ducted:

Measure the noise value of the point 1.4m below the unit and 1.0m high from the ground.

3. The above data was measured in an anechoic chamber. Please take into consideration the reflected sound of your specific application environment.

4. All specifications are subject to change by the manufacturer without prior notice.

5. Standard Drain Pump for Ducted with Height Lift 700mm.

2. SPECIFICATIONS

2.2 Cassette Type

Indoor model				RCI-3.0UFE1NH	RCI-3.5UFE1NH	RCI-4.0UFE1NH	RCI-5.0UFE1NH	RCI-5.0UFE1NH	RCI-6.0UFE1NH	RCI-6.0UFE1NH	RCI-6.5UFE1NH
Outdoor model				RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1
Panel				PHKF160SAH1	PHKF160SAH1	PHKF160SAH1	PHKF160SAH1	PHKF160SAH1	PHKF160SAH1	PHKF160SAH1	PHKF160SAH1
Electric parameter	Power supply	Indoor	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
	Power supply	Outdoor	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	220-240/1/50	380-415/3/50	220-240/1/50	380-415/3/50
	Input consumption	Max.	W	4100	4100	5100	6400	6400	7100	7200	7800
	Input current	Max.	A	18.10	18.00	22.50	11.60	28.20	12.10	30.00	13.1
Seasonal efficiency	Cooling	Pdesignc	kW	7.00	8.70	10.10	12.10	12.70	13.89	14.00	16.90
		SEER	Btu(W/h)	6.73	6.10	6.10	6.05	5.90	5.64	5.70	5.60
		ηs,c	100%	-	-	-	239%	233%	223%	225%	221%
		Energy Efficiency Class	-	A++	A++	A++	-	-	-	-	-
		Annual energy consumption	kWh/a	388	511.00	580	757	705	894	859	883
		Heating (Average Season)	Pdesignh	kW	6.00	7.20	8.20	9.50	9.00	13.50	13.00
	SCOP		Btu(W/h)	4.33	4.20	3.92	3.98	3.80	3.81	3.75	3.87
	ηs,c		100%	-	-	-	156%	149%	149%	147%	152%
	Energy Efficiency Class		-	A+	A+	A	-	-	-	-	-
	Annual energy consumption		kWh/a	1907	2423	3018	3675	3305	5086	4765	4037
	Tbiv		°C	-7	-7	-7	-7	-7	-7	-7	-7
	Tol	°C	-15	-15	-15	-15	-15	-15	-15	-15	
Cooling	Capacity	Rated	kW	7.00	8.70	10.10	12.10	12.70	13.89	14.00	16.90
		Range (Min~Max)	kW	2.40~7.85	4.00~9.20	3.50~11.00	3.30~13.20	3.30~13.20	3.40~16.20	3.40~16.20	3.30~18.00
	Moisture Removal	L/h	L/h	1.95	3.20	4.40	5.30	5.30	6.00	6.00	6.40
		Input	Rated	kW	1.91	2.71	3.72	4.24	4.31	4.81	5.00
	Range (Min~Max)		kW	0.33~4.10	0.90~4.10	0.90~5.10	0.96~6.40	0.96~6.40	0.91~7.10	0.91~7.10	1.67~7.80
	Current	Rated	A	8.50	11.80	16.80	7.40	18.70	8.70	22.00	12.50
EER	Rated	W/W	3.66	3.21	2.72	2.85	2.95	2.89	2.80	2.51	
Heating	Capacity	Rated	kW	8.25	9.00	11.20	13.50	13.30	16.53	15.80	19.49
		Range (Min~Max)	kW	2.10~8.80	3.50~9.50	3.32~12.00	3.00~14.60	3.00~14.60	3.70~18.00	3.70~18.00	3.00~21.00

2. SPECIFICATIONS

Indoor model				RCI-3.0UFE1NH	RCI-3.5UFE1NH	RCI-4.0UFE1NH	RCI-5.0UFE1NH	RCI-5.0UFE1NH	RCI-6.0UFE1NH	RCI-6.0UFE1NH	RCI-6.5UFE1NH
Outdoor model				RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1
Heating	Input	Rated	kW	2.03	2.25	3.50	3.70	3.86	4.71	4.95	6.74
		Range (Min~Max)	kW	0.33~4.10	0.66~4.10	0.60~5.10	0.68~6.40	0.68~6.40	0.82~7.10	0.82~7.10	1.36~7.80
	Current	Rated	A	9.00	9.80	16.00	6.50	16.80	8.40	23.00	12.60
	COP	Rated	W/W	4.06	4.00	3.20	3.65	3.45	3.51	3.19	2.89
Indoor fan motor	Model		-	EHDS50AQH	EHDS50AQH	EHDS50AQH	SIC-72FW-D812 4-2B	SIC-72FW-D812 4-2B	SIC-72FW-D812 4-2B	SIC-72FW-D812 4-2B	SIC-72FW-D812 4-2B
	Qty		-	1	1	1	1	1	1	1	1
	Output		W	80	80	80	124	124	124	124	124
	Speed(Hi/Med/Lo)		r/min	460/400/300	550/480/390	600/480/390	630/600/570	630/600/570	700/540/460	700/540/460	740/540/460
Indoor coil	Number of rows		-	2	3	3	3	3	3	3	3
	Tube pitch(a) x Row pitch(b)		mm	21x13.6	21x13.6	21x13.6	21x13.6	21x13.6	21x13.6	21x13.6	21x13.6
	Fin spacing		mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Fin type		-	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside diameter and type		mm	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube
	Coil (Length x Height x Width)		mm	1870×189×27.2	1940×189×40.8	1940×189×40.8	1940×252×40.8	1940×252×40.8	1940×252×40.8	1940×252×40.8	1940×252×40.8
	Number of circuits		-	6	5	5	6	6	6	6	6
Indoor unit	Dimension	W×H×D	mm	840×248×840	840×248×840	840×248×840	840×298×840	840×298×840	840×298×840	840×298×840	840×298×840
	Packing	W×H×D	mm	996×370×956	996×370×956	996×370×956	996×420×956	996×420×956	996×420×956	996×420×956	996×420×956
	Weight	Net/Gross	kg	25.0/34.0	27.0/36.0	27.0/36.0	32.0/41.0	32.0/41.0	32.0/41.0	32.0/41.0	32.0/41.0
	Air Volume	Hi/Med/Lo	m ³ /h	1180/980/720	1400/1120/900	1600/1300/1000	1850/1700/1550	1850/1700/1550	2100/1700/1400	2100/1700/1400	2100/1700/1400
		Hi/Med/Lo	CFM	694/576/423	824/659/529	941/765/588	1088/1000/912	1088/1000/912	1235/1000/824	1235/1000/824	1235/1000/824
	Sound Level (SPL)	Hi/Med/Lo	dB(A)	45/42/37	48/46/42	50/45/42	51/49/47	51/49/47	51/45/42	51/45/42	52/45/42
	Sound Level (PWL)	Hi	dB(A)	59	62	65	64	64	65	65	68
	External Static Pressure	Rated	Pa	-	-	-	-	-	-	-	-
		Range	Pa	-	-	-	-	-	-	-	-
	Controller	Type	-	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless
		Model	-	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH
	Drainage water pipe diameter		mm	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32
	Drain pump		-	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard

2. SPECIFICATIONS

Indoor model			RCI-3.0UFE1NH	RCI-3.5UFE1NH	RCI-4.0UFE1NH	RCI-5.0UFE1NH	RCI-5.0UFE1NH	RCI-6.0UFE1NH	RCI-6.0UFE1NH	RCI-6.5UFE1NH	
Outdoor model			RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Indoor unit	Air filter	-	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	
	Qty/per 20' /40' /40'HQ	-	60/124/140	60/124/140	60/124/140	50/114/128	50/114/128	50/114/128	50/114/128	50/114/128	
	Design	H/L	MPa	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	
Panel	Dimension	W×H×D	mm	950×37×950	950×37×950	950×37×950	950×37×950	950×37×950	950×37×950	950×37×950	
	Packing	W×H×D	mm	990×115×1010	990×115×1010	990×115×1010	990×1150×1010	990×115×1010	990×115×1010	990×115×1010	
	Weight	Net/Gross	kg	6.0/10.0	6.0/10.0	6.0/10.0	6.0/10.0	6.0/10.0	6.0/10.0	6.0/10.0	
Room temperature	Setting Temperature Range	Cooling	°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	
		Heating	°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	
Compressor	Model		-	KTM240D57UMT	KTM240D57UMT	KTF310D43UMT	KTF310D43UMT	KTF310D43UMT	KTF400D64UMT	KTF400D64UMT	KTQ420D1UMU
	Type		-	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Brand		-	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC
	Capacity		Btu/h	26323	26331	34154	34154	34154	34470	34470	46755
	Input		W	2085	2085	2765	2765	2765	3155	3155	3700
	Rated current(RLA)		A	9.45	9.45	5.38	5.38	5.38	13.20	13.20	7.02
	Refrigerant oil	Model	-	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74
Amount		ml	670	670	1000	1000	1000	1000	1000	1400	
Outdoor fan motor	Model		-	SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F812 1-1	SIC-81FW-F113 8-1	SIC-81FW-F113 8-1	SIC-71FW-D812 1-1 & SIC-71FW-D81 21-2	SIC-71FW-D812 1-1 & SIC-71FW-D81 21-2	SIC-71FW-D812 1-1 & SIC-71FW-D81 21-2
	Qty		-	1	1	1	1	1	2	2	2
	Output		W	61	61	121	138	138	121	121	121
	Speed		r/min	880	880	830	810	810	810	810	810
Outdoor coil	Number of rows		-	2	2	2	2	2	2	2	
	Tube pitch(a) x Row pitch(b)		mm	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65
	Fin spacing		mm	1.4	1.4	1.3	1.6	1.6	1.4	1.4	1.4
	Fin type		-	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside diameter and type		mm	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube
	Coil (Length×Height×Width)		mm	900×630×43.3	900×630×43.3	970×798×43.3	970×1008×43.3	970×1008×43.3	970×1344×43.3	970×1344×43	970×1344×43.3
	Number of circuits		-	6	6	5	6	6	12	12	12

2. SPECIFICATIONS

Indoor model				RCI-3.0UFE1NH	RCI-3.5UFE1NH	RCI-4.0UFE1NH	RCI-5.0UFE1NH	RCI-5.0UFE1NH	RCI-6.0UFE1NH	RCI-6.0UFE1NH	RCI-6.5UFE1NH	
Outdoor model				RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Outdoor unit	Dimension	W×H×D	mm	860×670×310	860×670×310	950×840×340	950×1050×340	950×1050×340	950×1386×340	950×1386×340	950×1386×340	
	Packing	W×H×D	mm	990×730×450	990×730×450	1110×920×460	1110×1200×460	1110×1200×460	1110×1530×460	1110×1530×460	1110×1530×460	
	Weight	Net/Gross	kg	49.0/53.0	49.0/53.0	70.0/75.0	85.0/95.0	85.0/97.0	101.5/114.5	101.5/114.5	109.0/121.0	
	Air Volume	Hi	m³/h	3150	3150	3800	5800	5800	6300	6300	6300	
	Sound Level (SPL)	Hi	dB(A)	54	54	58	62	62	62	62	67	
	Sound Level (PWL)	Hi	dB(A)	69	70	70	76	76	76	76	80	
	Refrigerant	Type	-	R32	R32	R32	R32	R32	R32	R32	R32	R32
		Amount	kg	1.40	1.45	2.00	2.50	2.50	3.00	3.00	3.00	3.40
		TCO2Eq	-	0.945	0.979	1.350	1.688	1.688	2.025	2.025	2.025	2.295
		GWP	-	675	675	675	675	675	675	675	675	675
Throttle type	-	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV		
Qty'per 20' /40' /40'HQ	-	90/186/186	90/186/186	52/106/106	26/53/106	26/53/106	26/53/106	26/53/53	26/53/53	26/53/53		
Design	H/L	MPa	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6		
Refrigerant piping	Liquid/ Gas	Mm (inch)	Φ9.52/Φ15.88 (3/8'/5/8')	Φ9.52/Φ15.88 (3/8'/5/8')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	
	Pipe length	Max.	m	50	50	50	50	50	50	50	50	
	Height difference	Max. (OD lower)	m	30	30	30	30	30	30	30	30	30
		Max. (OD higher)	m	30	30	30	30	30	30	30	30	30
	Add Refrigerant Amount	g/m	28	28	28	28	28	28	28	28	28	
Pipe Length for Additional Refrigerant	m	5	5	5	5	5	5	5	5	5		
Ambient Temperature Range	Cooling	°C	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	
	Heating	°C	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	

NOTE:

1. Test conditions:

Cooling : Indoor: DB27°C/ WB19°C Outdoor: DB35°C/ WB24°C

Heating: Indoor: DB20°C/ WB15°C Outdoor: DB7°C/ WB 6°C

2. The Sound Pressure Level is based on the following conditions:

Outdoor unit:

Measure the noise value of 3 points, which are 1 meter in front of the three sides of the unit surface

(front/left/right) and 1/2(unit height +1) meter high from floor level, and calculate the weighted average of the noise.

Indoor unit:

Cassette:

Measure the noise value of the point 1.4m below the unit and 1.0m high from the ground.

3. The above data was measured in an anechoic chamber. Please take into consideration the reflected sound of your specific application environment.

4. All specifications are subject to change by the manufacturer without prior notice.

5. Standard Drain Pump for Ducted with Height Lift 700mm.

2. SPECIFICATIONS

2.3 Floor Ceiling Type

Indoor model				RPFC-3.0UFE1NH	RPFC-3.5UFE1NH	RPFC-4.0UFE1NH	RPFC-5.0UFE1NH	RPFC-5.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.5UFE1NH	
Outdoor model				RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Electric parameter	Power supply	Indoor	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	
	Power supply	Outdoor	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	220-240/1/50	380-415/3/50	220-240/1/50	380-415/3/50	
	Input	Max.	W	4100	4100	5100	6400	6400	7000	7200	7800	
	Input current	Max.	A	18.10	18.00	22.50	11.60	28.20	12.00	30.00	13.10	
Seasonal efficiency	Cooling	Pdesignc	kW	6.50	8.60	9.80	12.10	12.70	13.76	14.00	16.30	
		SEER	Btu(Wh)	5.81	6.10	5.87	5.70	5.93	5.33	5.45	5.30	
		ηs,c	100%	-	-	-	225%	234%	210%	215%	209%	
		Energy Efficiency Class	-	A+	A++	A+	-	-	-	-	-	
	Annual energy consumption	kWh/a	391	509	585	803	709	940	899	876		
	Heating (Average Season)	Pdesignh	kW	6.00	6.50	7.90	9.50	8.70	12.20	12.00	11.00	
		SCOP	Btu(Wh))	4.01	4.10	3.82	3.78	3.78	3.55	3.68	3.78	
		ηs,c	100%	-	-	-	148%	148%	139%	144%	148%	
		Energy Efficiency Class	-	A+	A+	A	-	-	-	-	-	
		Annual energy consumption	kWh/a	2168	2192	2825	3868	3133	5015	4887	4509	
		Tbiv	°C	-7	-7	-7	-7	-7	-7	-7	-7	-7
		Toi	°C	-15	-15	-15	-15	-15	-15	-15	-15	-15
	Cooling	Capacity	Rated	kW	6.50	8.60	9.80	12.10	12.70	13.76	14.00	16.30
			Range(Min~Max)	kW	2.45~7.85	3.50~9.00	3.50~11.00	3.30~13.20	3.30~13.20	3.10~16.10	3.10~16.10	3.30~18.00
Moisture Removal		L/h	L/h	1.95	3.20	4.40	5.30	5.30	6.00	6.00	6.40	
		Input	Rated	kW	1.94	2.95	3.75	4.40	4.53	5.00	5.15	6.83
Range(Min~Max)			kW	0.33~4.10	0.90~4.10	0.90~5.10	0.58~6.40	0.58~6.40	0.85~7.00	0.85~7.00	1.67~7.80	
Current		Rated	A	9.10	12.70	16.90	7.50	19.70	8.50	22.50	12.50	
EER	Rated	W/W	3.35	2.92	2.61	2.75	2.80	2.75	2.72	2.39		
Heating	Capacity	Rated	kW	7.35	8.70	10.50	13.50	13.30	16.59	16.50	18.00	
		Range(Min~Max)	kW	2.20~8.70	3.00~9.20	3.32~12.00	3.00~14.60	3.00~14.60	3.60~18.00	3.60~18.00	3.00~19.00	
	Input	Rated	kW	2.07	2.30	3.65	4.17	4.04	4.85	5.40	6.83	
		Range(Min~Max)	kW	0.33~4.10	0.66~4.10	0.60~5.10	0.69~6.40	0.69~6.40	0.79~7.00	0.79~7.00	1.36~7.80	
	Current	Rated	A	9.70	10.00	16.50	7.30	17.60	9.00	23.50	11.60	
	COP	Rated	W/W	3.55	3.78	2.88	3.24	3.29	3.42	3.06	2.64	

2. SPECIFICATIONS

Indoor model			RPFC-3.0UFE1NH	RPFC-3.5UFE1NH	RPFC-4.0UFE1NH	RPFC-5.0UFE1NH	RPFC-5.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.5UFE1NH		
Outdoor model			RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1		
Indoor fan motor	Model	-	SIC-70CW-F1100-6	SIC-70CW-F1140-3	SIC-70CW-F1140-3	SIC-101CW-F1181-2	SIC-101CW-F1181-2	SIC-101CW-F1181-1	SIC-101CW-F1181-1	SIC-101CW-F1181-1		
	Qty	-	1	1	1	1	1	1	1	1		
	Output	W	100	140	140	181	181	181	181	181		
	Speed(Hi/Med/Lo)	r/min	1150/1030/910	1150/930/800	1220/1160/1080	1200/1100/1000	1200/1100/1000	1250/1000/800	1250/1000/800	1250/1000/800	1250/1100/950	
Indoor coil	Number of rows	-	3	3	3	3	3	3	3	3		
	Tube pitch(a) × Row pitch(b)	mm	21×13.6	21×13.6	21×13.6	21×13.6	21×13.6	21×13.6	21×13.6	21×13.6		
	Fin spacing	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
	Fin type	-	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	
	Tube outside diameter and type	mm	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	Φ7, Innergroove tube	
	Coil (Length× Height ×Width)	mm	660×336×40.8	930×336×40.8	930×336×40.8	1200×336×40.8	1200×336×40.8	1200×336×40.8	1200×336×40.8	1200×336×40.8	1200×336×54.4	
	Number of circuits	-	6	4	4	7	7	7	7	7	7	
Indoor unit	Dimension	W× H×D	mm	990×680×230	1285×680×230	1285×680×230	1580×680×230	1580×680×230	1580×680×230	1580×680×230	1580×680×230	
	Packing	W× H×D	mm	1100×820×350	1400×820×350	1400×820×350	1690×820×350	1690×820×350	1690×820×350	1690×820×350	1690×820×350	
	Weight	Net/Gross	kg	30.0/35.0	37.0/44.0	37.0/44.0	48.0/56.0	48.0/56.0	48.0/56.0	48.0/56.0	48.0/56.0	
	Air Volume	Hi/Med/Lo	m³/h	1100/950/800	1450/1120/900	1700/1500/1300	2000/1800/1600	2000/1800/1600	2000/1600/1200	2000/1600/1200	2000/1600/1200	2000/1700/1500
		Hi/Med/Lo	CFM	647/559/471	853/659/529	1000/882/765	1176/1059/941	1176/1059/941	1176/941/706	1176/941/706	1176/941/706	1176/941/706
	Sound Level (SPL)	Hi/Med/Lo	dB(A)	51/48/44	54/48/43	54/52/51	54/51/48	54/51/48	58/52/46	58/52/46	56/53/48	
	Sound Level (PWL)	Hi	dB(A)	65	65	65	68	68	75	75	74	
	External Static Pressure	Rated	Pa	-	-	-	-	-	-	-	-	
		Range	Pa	-	-	-	-	-	-	-	-	
	Controller	Type	-	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless	
		Model	-	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	HCRA31NEWH	
	Drainage water pipe diameter	mm	mm	ODΦ25	ODΦ25	ODΦ25	ODΦ25	ODΦ25	ODΦ25	ODΦ25	ODΦ25	
	Drain pump	-	-	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
	Air filter	-	-	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	
	Qty'per 20' /40' /40'HQ	-	-	84/168/196	66/132/153	66/132/153	42/84/98	42/84/98	42/84/98	42/84/98	42/84/98	
Design	H/L	MPa	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6		
Room temperature	Setting Temperature Range	Cooling	°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	16~30	
		Heating	°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	16~30	

2. SPECIFICATIONS

Indoor model			RPFC-3.0UFE1NH	RPFC-3.5UFE1NH	RPFC-4.0UFE1NH	RPFC-5.0UFE1NH	RPFC-5.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.5UFE1NH	
Outdoor model			RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Compressor	Model	-	KTM240D57UM T	KTM240D57UM T	KTF310D43UM T	KTF310D43UM T	KTF310D43UM T	KTF400D64UM T	KTF400D64UM T	KTQ420D1UMU	
	Type	-	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	
	Brand	-	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	
	Capacity	Btu/h	24361	26331	34154	34154	34154	34470	34470	46755	
	Input	W	1940	2085	2765	2765	2765	3155	3155	3700	
	Rated current(RLA)	A	9.45	9.45	5.38	5.38	5.38	13.20	13.20	7.02	
	Refrigerant oil	Model	-	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74	POE VG74
Amount		ml	670	670	1000	1000	1000	1000	1000	1400	
Outdoor fan motor	Model	-	SIC-61FW-F161 -1	SIC-61FW-F161 -1	SIC-71FW-F812 1-1	SIC-81FW-F113 8-1	SIC-81FW-F113 8-1	SIC-71FW-D81 21-1 &SIC-71FW-D8 121-2	SIC-71FW-D81 21-1 &SIC-71FW-D8 121-2	SIC-71FW-D81 21-1 &SIC-71FW-D8 121-2	
	Qty	-	1	1	1	1	1	2	2	2	
	Output	W	61	61	121	138	138	121	121	121	
	Speed	r/min	880	880	830	810	810	810	810	810	
Outdoor coil	Number of rows	-	2	2	2	2	2	2	2	2	
	Tube pitch(a) x Row pitch(b)	mm	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	21×21.65	
	Fin spacing	mm	1.4	1.4	1.3	1.6	1.6	1.4	1.4	1.4	
	Fin type	-	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	
	Tube outside diameter and type	mm	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	Φ7.94, Innergroove tube	
	Coil (Length x Height x Width)	mm	900×630×43.3	900×630×43.3	970×798×43.3	970×1008×43.3	970×1008×43.3	970×1344×43.3	970×1344×43.3	970×1344×43.3	
	Number of circuits	-	6	6	5	6	6	12	12	12	
Outdoor unit	Dimension	W×H×D	mm	860×670×310	860×670×310	950×840×340	950×1050×340	950×1050×340	950×1386×340	950×1386×340	950×1386×340
	Packing	W×H×D	mm	990×730×450	990×730×450	1110×920×460	1110×1200×460	1110×1200×460	1110×1530×460	1110×1530×460	1110×1530×460
	Weight	Net/Gross	kg	49.0/53.0	49.0/53.0	70.0/75.0	85.0/95.0	85.0/97.0	101.5/114.5	101.5/114.5	109.0/121.0
	Air Volume	Hi	m ³ /h	3150	3150	3800	5800	5800	6300	6300	6300
	Sound Level	Hi	dB(A)	54	54	58	62	62	62	62	67
	Sound Level	Hi	dB(A)	69	70	70	76	76	76	76	80
	Refrigerant	Type	-	R32	R32	R32	R32	R32	R32	R32	R32
Amount		kg	1.40	1.45	2.00	2.50	2.50	3.00	3.00	3.40	

2. SPECIFICATIONS

Indoor model			RPFC-3.0UFE1NH	RPFC-3.5UFE1NH	RPFC-4.0UFE1NH	RPFC-5.0UFE1NH	RPFC-5.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.0UFE1NH	RPFC-6.5UFE1NH	
Outdoor model			RAS-3.0UFESNH1	RAS-3.5UFESNH1	RAS-4.0UFESNH1	RAS-5.0UFESMH1	RAS-5.0UFESNH1	RAS-6.0UFESMH1	RAS-6.0UFESNH1	RAS-6.5UFESMH1	
Outdoor unit	Refrigerant	TCO2Eq	-	0.95	0.98	1.35	1.688	1.688	2.03	2.03	2.30
		GWP	-	675	675	675	675	675	675	675	675
	Throttle type		-	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV
	Qty'per 20' /40' /40'HQ		-	90/186/186	90/186/186	52/106/106	26/53/106	26/53/106	26/53/53	26/53/53	26/53/53
	Design	H/L	MPa	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6	4.3/1.6
Refrigerant piping	Liquid/ Gas		Mm (inch)	Φ9.52/Φ15.88 (3/8'/5/8')	Φ9.52/Φ15.88 (3/8'/5/8')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')	Φ9.52/Φ19.05 (3/8'/3/4')
	Pipe length	Max.	m	50	50	50	50	50	50	50	50
	Height difference	Max. (OD lower)	m	30	30	30	30	30	30	30	30
		Max. (OD higher)	m	30	30	30	30	30	30	30	30
	Add Refrigerant Amount		g/m	28	28	28	28	28	28	28	28
Pipe Length for Additional		m	5	5	5	5	5	5	5	5	
Ambient Temperature Range	Cooling	°C	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	
	Heating	°C	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	

NOTE:

1. Test conditions:

Cooling : Indoor: DB27°C/ WB19°C Outdoor: DB35°C/ WB24°C

Heating: Indoor: DB20°C/ WB15°C Outdoor: DB7°C/ WB 6°C

2. The Sound Pressure Level is based on the following conditions:

Outdoor unit:

Measure the noise value of 3 points, which are 1 meter in front of the three sides of the unit surface (front/left/right) and 1/2(unit height +1) meter high from floor level, and calculate the weighted average of the noise.

Indoor unit:

Floor ceiling:

Test the noise value of the point 1.0m below the unit, 1.0m ahead of the unit and 1.0m high from the ground.

3. The above data was measured in an anechoic chamber. Please take into consideration the reflected sound of your specific application environment.

4. All specifications are subject to change by the manufacturer without prior notice.

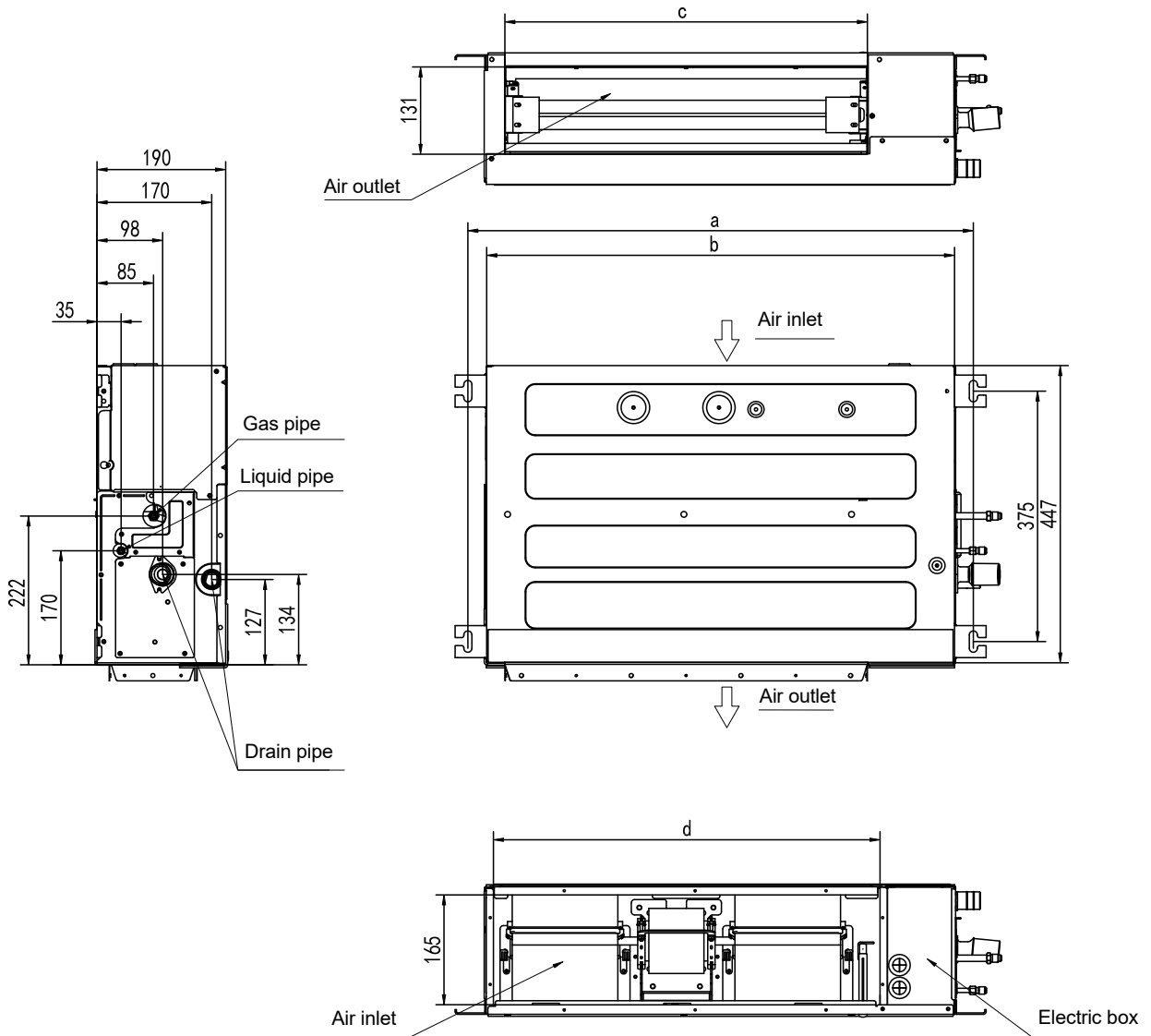
3. OUTLINES AND DIMENSIONS

3.1 Indoor Units

Ducted

3.0HP

Unit: mm

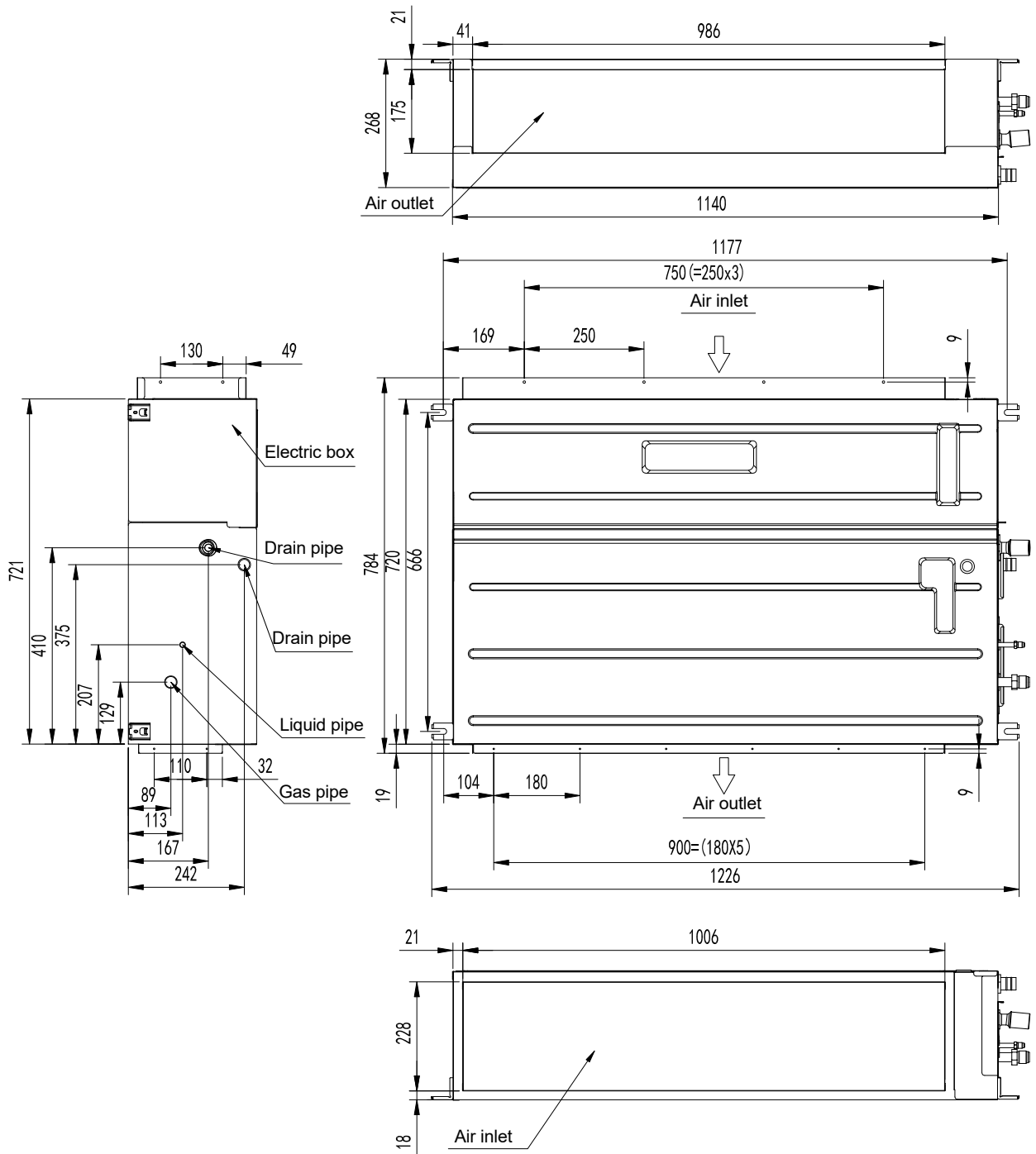


Model	a	b	c	d
3.0HP	1231	1180	1019	1056

3. OUTLINES AND DIMENSIONS

3.5/4.0HP

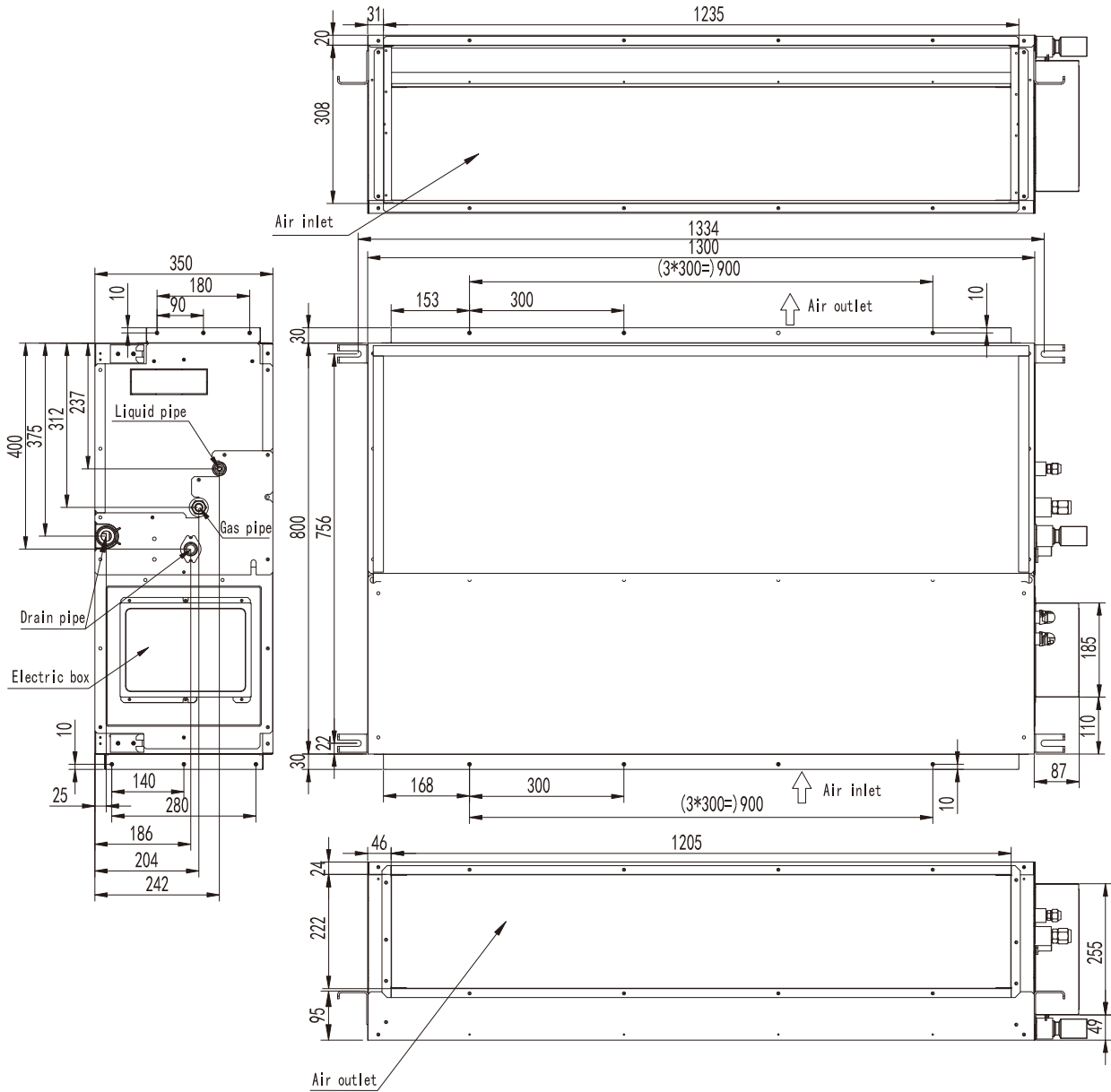
Unit: mm



3. OUTLINES AND DIMENSIONS

5.0/6.0/6.5HP

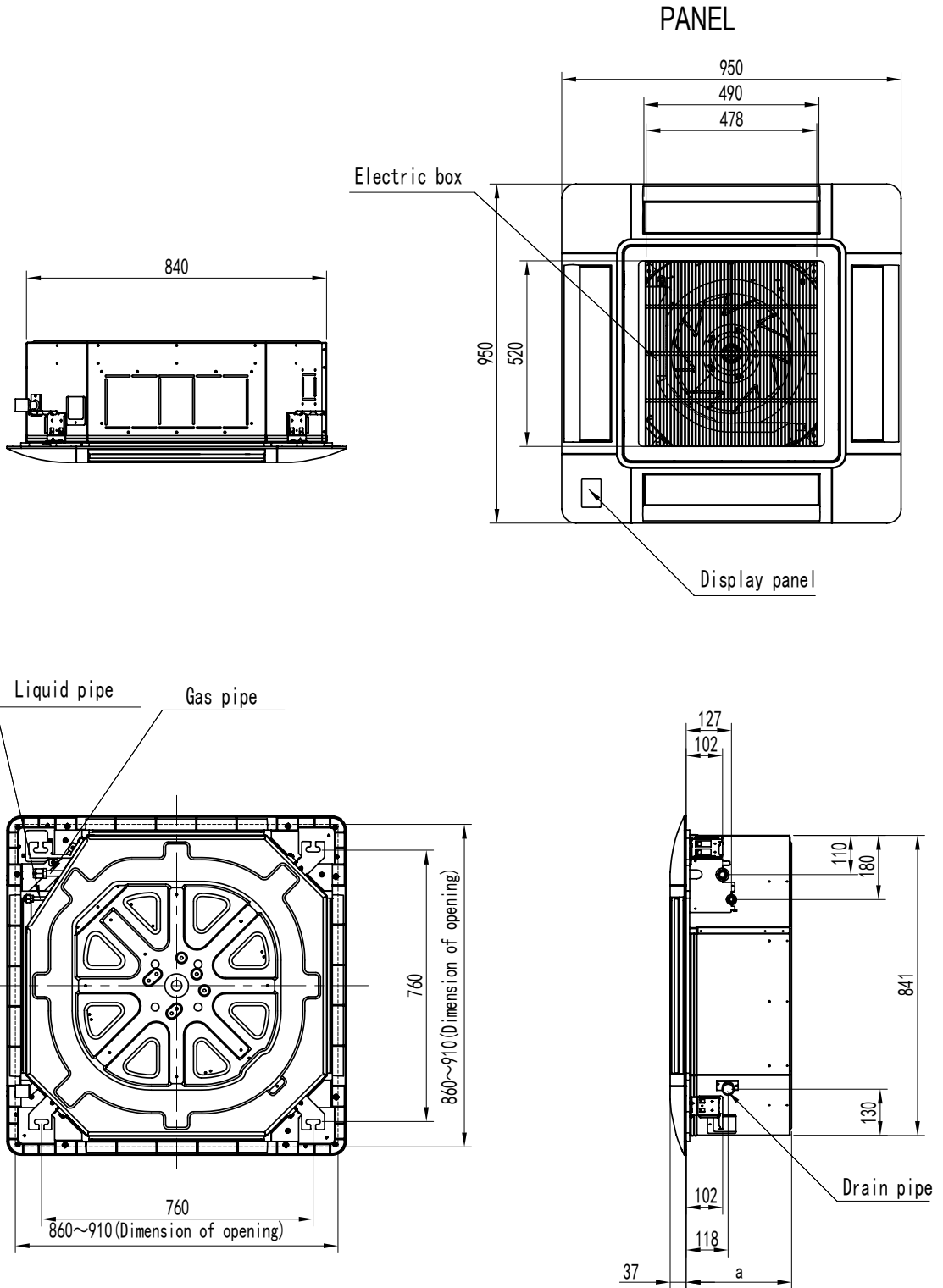
Unit: mm



3. OUTLINES AND DIMENSIONS

Cassette

Unit: mm

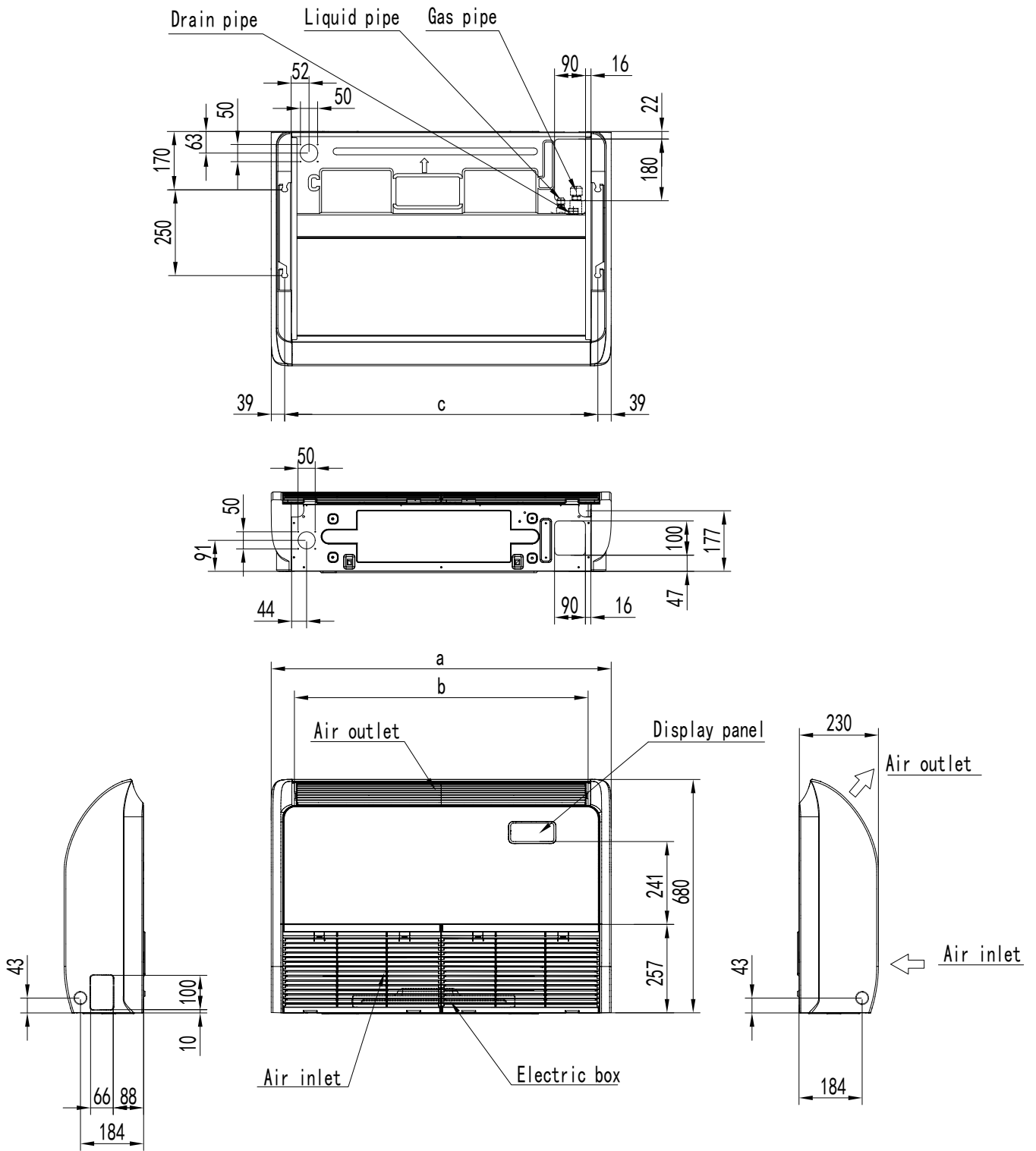


Model	a
3.0/3.5/4.0HP	248
5.0/6.0/6.5HP	298

3. OUTLINES AND DIMENSIONS

Floor ceiling

Unit: mm



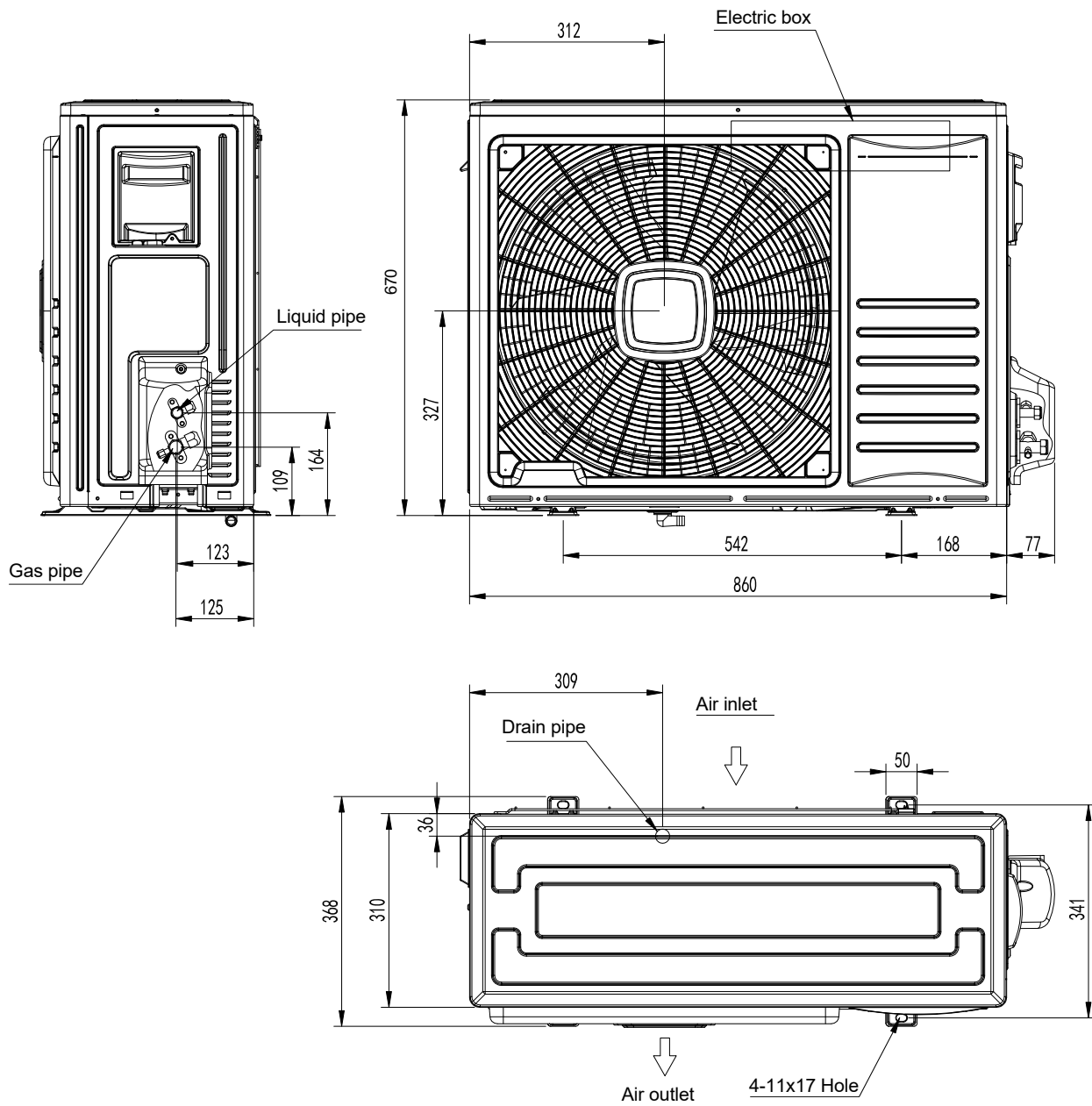
Model	a	b	c
3.0HP	990	855	912
3.5/4.0HP	1285	1150	1207
5.0/6.0/6.5HP	1580	1445	1502

3. OUTLINES AND DIMENSIONS

3.2 Outdoor Units

3.0/3.5HP

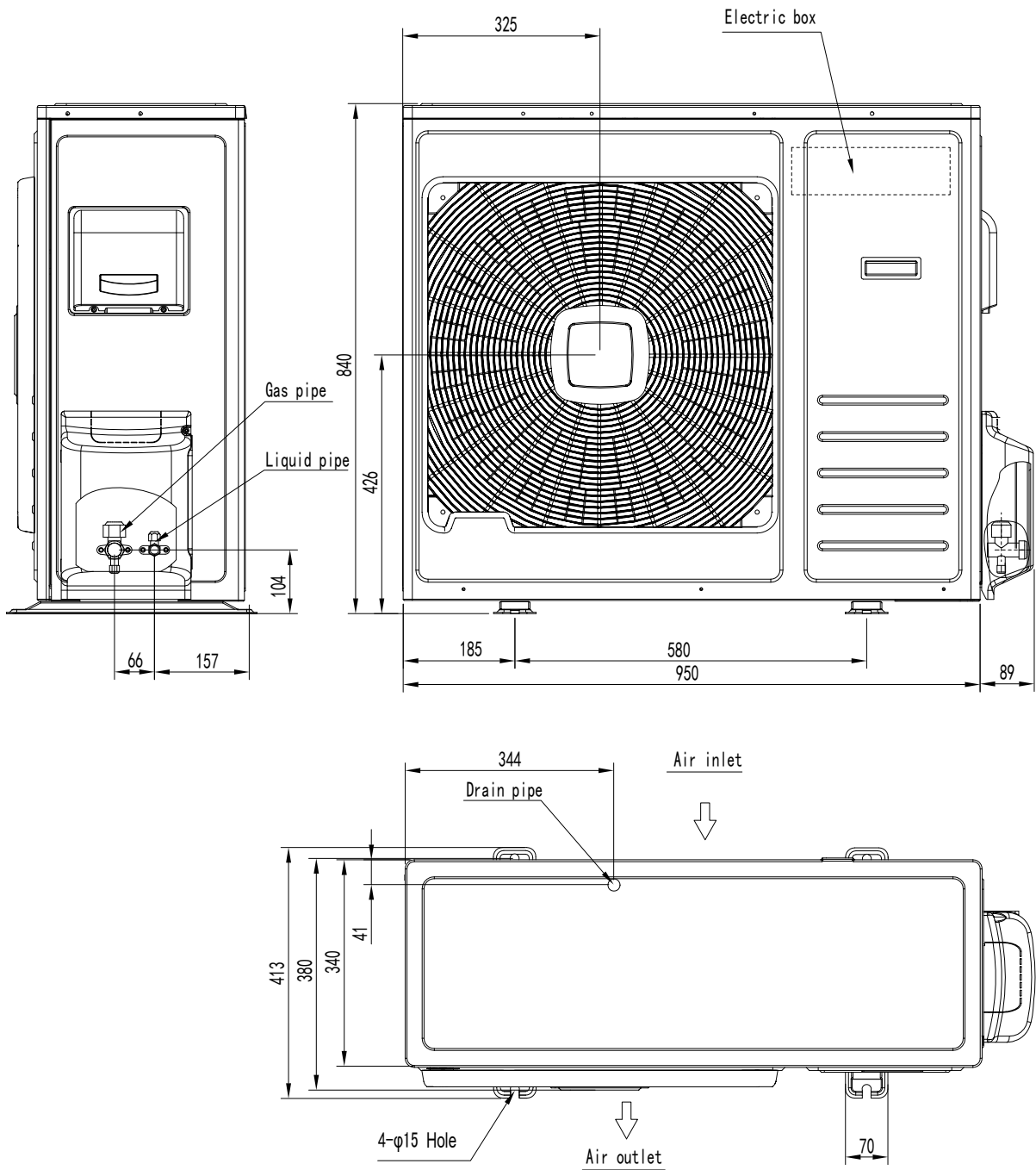
Unit: mm



3. OUTLINES AND DIMENSIONS

4.0HP

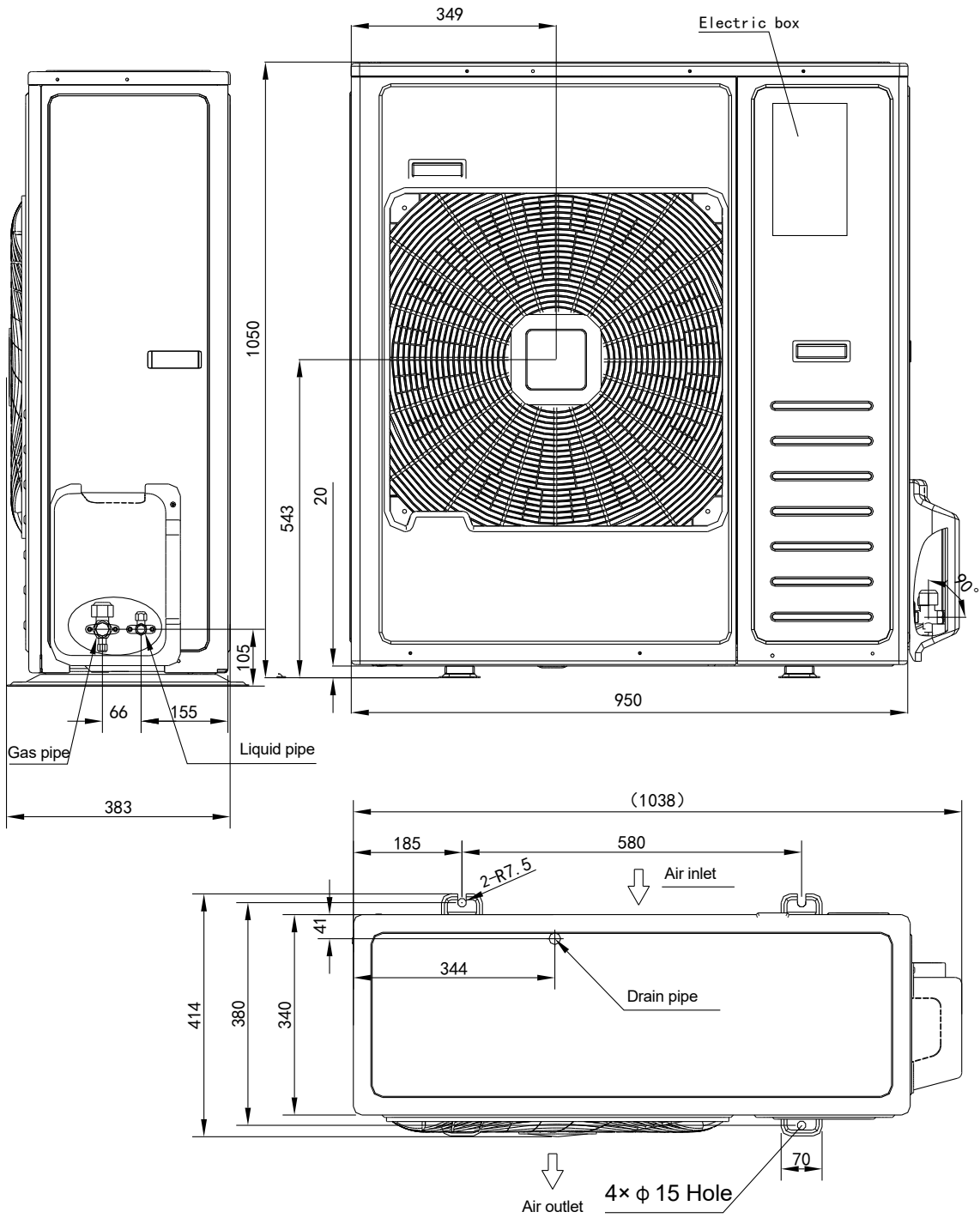
Unit: mm



3. OUTLINES AND DIMENSIONS

5.0HP

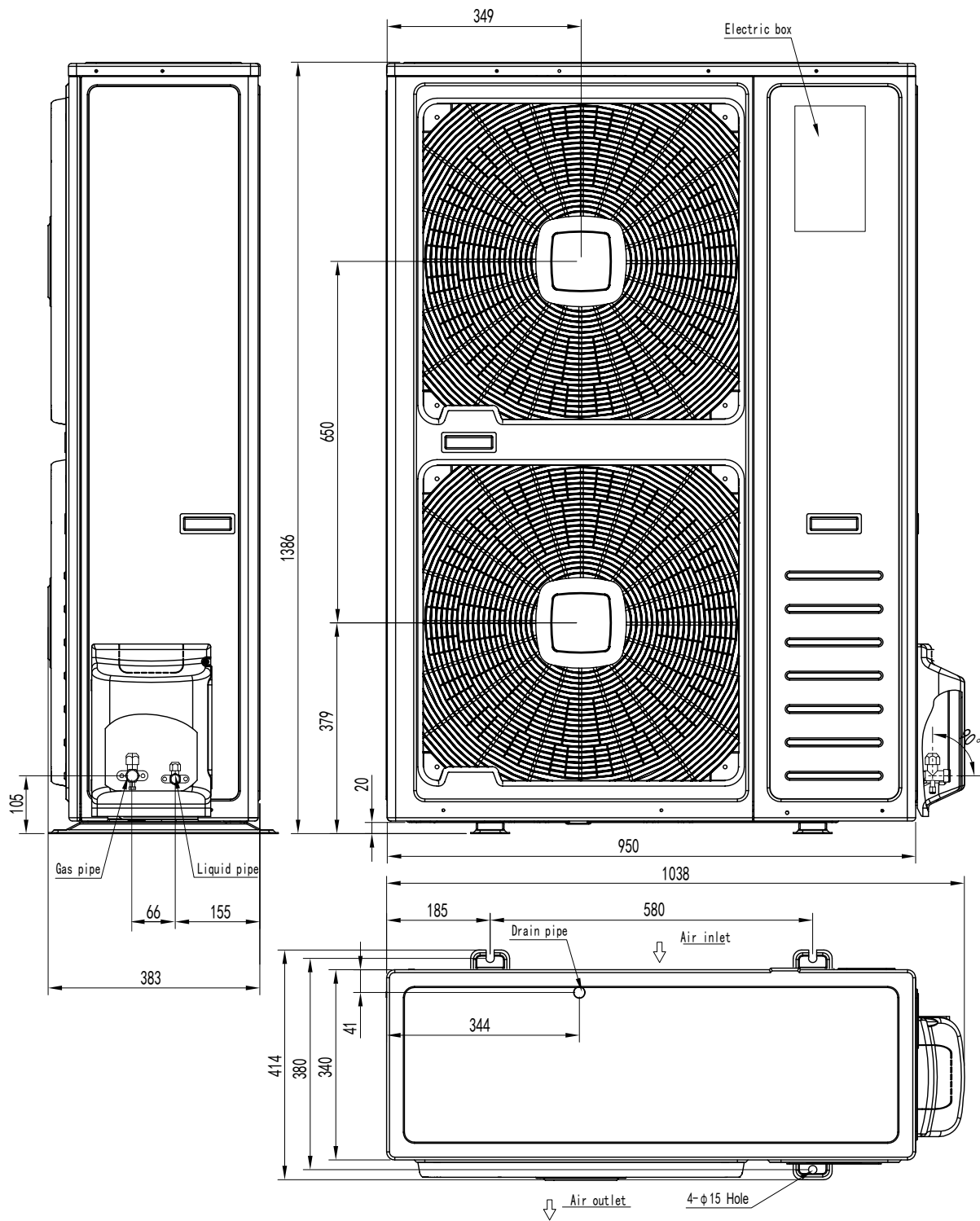
Unit: mm



3. OUTLINES AND DIMENSIONS

6.0/6.5HP

Unit: mm



4. ELECTRICAL DATA

Electrical data

Outdoor unit	Power supply			Applicable voltage		ELB	
	Voltage (V)	PH	Frequency (Hz)	Umin (V)	Umax (V)	Nominal current (A)	Nominal sensitive current (mA)
RAS-3.0UFESNH1	220-240	1	50	176	264	25	30
RAS-3.5UFESNH1	220-240	1	50	176	264	25	30
RAS-4.0UFESNH1	220-240	1	50	176	264	40	30
RAS-5.0UFESNH1	220-240	1	50	176	264	50	30
RAS-6.0UFESNH1	220-240	1	50	176	264	50	30
RAS-5.0UFESMH1	380-415	3	50	342	438	32	30
RAS-6.0UFESMH1	380-415	3	50	342	438	32	30
RAS-6.5UFESMH1	380-415	3	50	342	438	32	30

NOTE:

1. The above compressor data is based on 100% capacity combination of indoor units at the rated operating frequency.
2. This data is based on the same conditions as the nominal heating and cooling capacities.
3. The compressor is started by an inverter, resulting in extremely low starting current.

5. CAPACITIES AND SELECTION DATA

5.1 Capacity Characteristic Charts

The following charts show the characteristics of outdoor unit capacity, which corresponds with the operating ambient temperature of outdoor unit.

Conditions:

- ① Pipe length/height difference : 5m / 0m
- ② Compressor at rated inverter frequency
- ③ Indoor fan speed at high fan speed
- ④ Capacity loss due to white frost and defrost operation is not included.

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIL-3.0UFE1NH+RAS-3.0UFESNH1																
CAPACITY: 8.30 kW INPUT: 2220 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	4.40	1221	5.24	1443	6.30	1730	7.39	1952	8.46	2109	9.55	2243	10.53	2308	11.62	2354
21	4.15	1332	4.98	1554	5.97	1841	7.06	2044	8.04	2197	9.13	2308	10.12	2377	11.15	2465
26	3.65	1443	4.49	1665	5.55	1952	6.56	2155	7.63	2308	8.72	2419	9.70	2488	10.79	2553

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIH-3.5UFE1NH+RAS-3.5UFESNH1																
CAPACITY: 9.00 kW INPUT: 2400 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	4.77	1320	5.68	1560	6.83	1871	8.02	2111	9.17	2280	10.35	2425	11.42	2495	12.60	2545
21	4.50	1440	5.40	1680	6.47	1991	7.65	2209	8.72	2375	9.90	2495	10.97	2569	12.09	2665
26	3.96	1560	4.87	1800	6.02	2111	7.12	2329	8.27	2495	9.45	2615	10.52	2689	11.70	2760

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIH-4.0UFE1NH+RAS-4.0UFESNH1																
CAPACITY: 10.50 kW INPUT: 3500 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	5.56	1925	6.63	2275	7.97	2728	9.35	3078	10.70	3325	12.08	3536	13.32	3639	14.70	3711
21	5.25	2100	6.30	2450	7.55	2903	8.93	3222	10.17	3464	11.55	3639	12.80	3747	14.11	3886
26	4.62	2275	5.68	2625	7.02	3078	8.30	3397	9.65	3639	11.03	3814	12.27	3922	13.65	4025

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIH-5.0UFE1NH+RAS-5.0UFESMH1 CAPACITY: 13.40 kW																
INPUT: 4070 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	7.10	2238	8.46	2646	10.18	3173	11.93	3580	13.65	3867	15.41	4112	17.00	4232	18.76	4315
21	6.70	2442	8.04	2849	9.63	3376	11.39	3746	12.98	4028	14.74	4232	16.33	4357	18.01	4519
26	5.89	2645	7.24	3053	8.96	3580	10.59	3950	12.31	4232	14.07	4435	15.66	4560	17.42	4681

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIH-6.0UFE1NH+RAS-6.0UFESMH1 CAPACITY: 16.13 kW																
INPUT: 4650 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	8.54	2557	10.18	3023	12.25	3625	14.37	4090	16.43	4418	18.55	4698	20.46	4835	22.58	4930
21	8.06	2790	9.68	3255	11.59	3857	13.71	4280	15.63	4602	17.74	4835	19.66	4978	21.67	5163
26	7.09	3022	8.72	3488	10.79	4090	12.75	4513	14.82	4835	16.94	5067	18.85	5210	20.97	5348

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIH-6.5UFE1NH+RAS-6.5UFESMH1																
CAPACITY: 18.00 kW INPUT: 6100 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	9.54	3355	11.36	3965	13.67	4755	16.03	5365	18.34	5795	20.70	6163	22.84	6342	25.20	6468
21	9.00	3660	10.80	4270	12.94	5060	15.30	5615	17.44	6037	19.80	6342	21.94	6530	24.19	6773
26	7.92	3965	9.73	4575	12.04	5365	14.23	5920	16.54	6342	18.90	6647	21.04	6835	23.40	7015

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIH-5.0UFE1NH + RAS-5.0UFESNH1 CAPACITY: 12.80 kW																
INPUT: 3820 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	6.78	2101	8.08	2483	9.72	2978	11.40	3360	13.04	3629	14.72	3859	16.24	3972	17.92	4050
21	6.40	2292	7.68	2674	9.20	3169	10.88	3516	12.40	3781	14.08	3972	15.60	4089	17.20	4241
26	5.63	2483	6.92	2865	8.56	3360	10.12	3707	11.76	3972	13.44	4163	14.96	4280	16.64	4393

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPIH-6.0UFE1NH+RAS-6.0UFESNH1																
CAPACITY: 16.50 kW INPUT: 4850 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	8.74	2667	10.42	3153	12.53	3781	14.70	4266	16.81	4608	18.98	4900	20.93	5043	23.10	5142
21	8.25	2910	9.90	3395	11.86	4023	14.03	4464	15.98	4800	18.15	5043	20.11	5192	22.17	5385
26	7.26	3152	8.92	3638	11.03	4266	13.05	4707	15.16	5043	17.33	5285	19.28	5434	21.45	5578

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-3.0UFE1NH+RAS-3.0UFESNH1																
CAPACITY: 8.25 kW INPUT: 2030 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	4.37	1116	5.21	1320	6.26	1582	7.35	1785	8.40	1929	9.49	2051	10.47	2111	11.55	2152
21	4.12	1218	4.95	1421	5.93	1684	7.01	1869	7.99	2009	9.08	2111	10.05	2173	11.09	2254
26	3.63	1319	4.46	1523	5.52	1785	6.52	1970	7.58	2111	8.66	2212	9.64	2275	10.73	2335

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-3.5UFE1NH+RAS-3.5UFESNH1																
CAPACITY: 9.00 kW INPUT: 2250 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	4.77	1237	5.68	1560	6.83	1871	8.02	2111	9.17	2280	10.35	2425	11.42	2495	12.60	2545
21	4.50	1350	5.40	1680	6.47	1991	7.65	2209	8.72	2375	9.90	2495	10.97	2569	12.09	2665
26	3.96	1462	4.87	1800	6.02	2111	7.12	2329	8.27	2495	9.45	2615	10.52	2689	11.70	2760

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-4.0UFE1NH+RAS-4.0UFESNH1																
CAPACITY: 11.20 kW INPUT: 3500 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	5.94	1925	7.07	2275	8.51	2728	9.98	3078	11.41	3325	12.88	3536	14.21	3639	15.68	3711
21	5.60	2100	6.72	2450	8.05	2903	9.52	3222	10.85	3464	12.32	3639	13.65	3747	15.05	3886
26	4.93	2275	6.06	2625	7.49	3078	8.86	3397	10.29	3639	11.76	3814	13.09	3922	14.56	4025

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-5.0UFE1NH+RAS-5.0UFESMH1																
CAPACITY: 13.50 kW INPUT: 3700 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	7.15	2035	8.52	2405	10.25	2884	12.02	3254	13.75	3515	15.53	3738	17.13	3847	18.90	3923
21	6.75	2220	8.10	2590	9.70	3069	11.48	3406	13.08	3662	14.85	3847	16.45	3961	18.14	4108
26	5.94	2405	7.30	2775	9.03	3254	10.67	3591	12.40	3847	14.18	4032	15.78	4146	17.55	4255

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-6.0UFE1NH+RAS-RAS-6.0UFESMH1																
CAPACITY: 16.53kW INPUT: 4710W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	8.76	2590	10.43	3062	12.55	3671	14.72	4142	16.84	4475	19.01	4758	20.97	4897	23.14	4994
21	8.26	2826	9.92	3297	11.88	3907	14.05	4336	16.01	4662	18.18	4897	20.15	5042	22.21	5229
26	7.27	3061	8.94	3533	11.05	4142	13.07	4571	15.19	4897	17.36	5133	19.32	5278	21.49	5417

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-6.5UFE1NH+RAS-6.5UFESMH1																
CAPACITY: 19.49 kW INPUT: 6740 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	10.32	3707	12.30	4381	14.80	5254	17.36	5928	19.86	6403	22.41	6809	24.73	7008	27.29	7146
21	9.74	4044	11.69	4718	14.01	5591	16.57	6204	18.88	6671	21.44	7008	23.75	7215	26.19	7483
26	8.57	4381	10.54	5055	13.03	5928	15.41	6541	17.91	7008	20.46	7345	22.78	7552	25.34	7751

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-5.0UFE1NH+RAS-5.0UFESNH1																
CAPACITY: 13.30 kW INPUT: 3860 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	7.05	2123	8.40	2509	10.10	3009	11.85	3395	13.55	3667	15.30	3900	16.87	4013	18.62	4093
21	6.65	2316	7.98	2702	9.56	3202	11.31	3553	12.88	3820	14.63	4013	16.21	4132	17.87	4286
26	5.85	2509	7.19	2895	8.89	3395	10.52	3746	12.22	4013	13.97	4206	15.54	4325	17.29	4439

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RCI-6.0UFE1NH+RAS-6.0UFESNH1																
CAPACITY: 15.80 kW INPUT: 4950 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	8.37	2722	9.97	3218	12.00	3858	14.07	4353	16.10	4703	18.17	5001	20.05	5147	22.12	5248
21	7.90	2970	9.48	3465	11.36	4106	13.43	4557	15.31	4899	17.38	5147	19.26	5299	21.23	5496
26	6.95	3217	8.54	3713	10.57	4353	12.49	4804	14.52	5147	16.59	5394	18.47	5547	20.54	5693

Remarks:
 Q: Total Heating Capacity (Gross) **kW**
 INPUT: Power Input (including the
 compressor, evap. fan motor &
 cond. fan motor) **W**
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

INDOOR INDOOR DB (°C) WB (°C)		PERFORMANCE DATA (Cooling Operation at Rated Frequency)											
		RPF3-3.5UFE1NH+RAS-3.5UFESNH1											
		CAPACITY: 8.60 kW SHF: 0.70 INPUT: 2950 W											
		OUTDOOR DB (°C)											
		-15	-7	0	10	15	21	25	27	30	35	40	48
		Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT	Q SHC SHF INPUT
21	18	5.98 3.11 0.52 806	5.98 3.11 0.52 895	5.98 3.11 0.52 983	6.64 3.45 0.52 1042	6.64 3.45 0.52 1160	10.10 5.25 0.52 2391	9.66 5.02 0.52 2514	9.29 4.83 0.52 2630	8.93 4.65 0.52 2751	8.43 4.38 0.52 2930	7.74 4.02 0.52 3112	7.16 3.72 0.52 3230
21	20	6.28 2.51 0.40 846	6.28 2.51 0.40 935	6.28 2.51 0.40 1023	6.98 2.79 0.40 1082	6.98 2.79 0.40 1200	10.61 4.25 0.40 2424	10.16 4.06 0.40 2549	9.77 3.91 0.40 2666	9.39 3.76 0.40 2789	8.86 3.54 0.40 2970	8.13 3.25 0.40 3154	7.52 3.01 0.40 3274
22	18	5.98 3.35 0.56 806	5.98 3.35 0.56 895	5.98 3.35 0.56 983	6.64 3.72 0.56 1042	6.64 3.72 0.56 1160	10.10 5.65 0.56 2391	9.66 5.41 0.56 2514	9.29 5.20 0.56 2630	8.93 5.00 0.56 2751	8.43 4.72 0.56 2930	7.74 4.33 0.56 3112	7.16 4.01 0.56 3230
22	20	6.28 2.76 0.44 846	6.28 2.76 0.44 935	6.28 2.76 0.44 1023	6.98 3.07 0.44 1082	6.98 3.07 0.44 1200	10.61 4.67 0.44 2424	10.16 4.47 0.44 2549	9.77 4.30 0.44 2666	9.39 4.13 0.44 2789	8.86 3.90 0.44 2970	8.13 3.58 0.44 3154	7.52 3.31 0.44 3274
22	22	6.66 2.13 0.32 885	6.66 2.13 0.32 974	6.66 2.13 0.32 1062	7.39 2.37 0.32 1121	7.39 2.37 0.32 1239	11.25 3.60 0.32 2456	10.77 3.44 0.32 2582	10.35 3.31 0.32 2701	9.95 3.18 0.32 2825	9.39 3.00 0.32 3009	8.62 2.76 0.32 3196	7.97 2.55 0.32 3317
23	18	5.98 3.59 0.60 806	5.98 3.59 0.60 895	5.98 3.59 0.60 983	6.64 3.98 0.60 1042	6.64 3.98 0.60 1160	10.10 6.06 0.60 2391	9.66 5.80 0.60 2514	9.29 5.57 0.60 2630	8.93 5.36 0.60 2751	8.43 5.06 0.60 2930	7.74 4.64 0.60 3112	7.16 4.29 0.60 3230
23	20	6.28 3.01 0.48 846	6.28 3.01 0.48 935	6.28 3.01 0.48 1023	6.98 3.35 0.48 1082	6.98 3.35 0.48 1200	10.61 5.09 0.48 2424	10.16 4.87 0.48 2549	9.77 4.69 0.48 2666	9.39 4.51 0.48 2789	8.86 4.25 0.48 2970	8.13 3.90 0.48 3154	7.52 3.61 0.48 3274
23	22	6.66 2.40 0.36 885	6.66 2.40 0.36 974	6.66 2.40 0.36 1062	7.39 2.66 0.36 1121	7.39 2.66 0.36 1239	11.25 4.05 0.36 2456	10.77 3.88 0.36 2582	10.35 3.73 0.36 2701	9.95 3.58 0.36 2825	9.39 3.38 0.36 3009	8.62 3.10 0.36 3196	7.97 2.87 0.36 3317
24	18	5.98 3.82 0.64 806	5.98 3.82 0.64 895	5.98 3.82 0.64 983	6.64 4.25 0.64 1042	6.64 4.25 0.64 1160	10.10 6.46 0.64 2391	9.66 6.18 0.64 2514	9.29 5.95 0.64 2630	8.93 5.72 0.64 2751	8.43 5.39 0.64 2930	7.74 4.95 0.64 3112	7.16 4.58 0.64 3230
24	20	6.28 3.27 0.52 846	6.28 3.27 0.52 935	6.28 3.27 0.52 1023	6.98 3.63 0.52 1082	6.98 3.63 0.52 1200	10.61 5.52 0.52 2424	10.16 5.28 0.52 2549	9.77 5.08 0.52 2666	9.39 4.88 0.52 2789	8.86 4.61 0.52 2970	8.13 4.23 0.52 3154	7.52 3.91 0.52 3274
24	22	6.66 2.66 0.40 885	6.66 2.66 0.40 974	6.66 2.66 0.40 1062	7.39 2.96 0.40 1121	7.39 2.96 0.40 1239	11.25 4.50 0.40 2456	10.77 4.31 0.40 2582	10.35 4.14 0.40 2701	9.95 3.98 0.40 2825	9.39 3.76 0.40 3009	8.62 3.45 0.40 3196	7.97 3.19 0.40 3317
24	24	7.06 1.98 0.28 925	7.06 1.98 0.28 1014	7.06 1.98 0.28 1102	7.84 2.19 0.28 1161	7.84 2.19 0.28 1279	11.92 3.34 0.28 2488	11.41 3.20 0.28 2617	10.97 3.07 0.28 2737	10.55 2.95 0.28 2863	9.95 2.79 0.28 3049	9.14 2.56 0.28 3238	8.45 2.37 0.28 3361
25	18	5.98 4.06 0.68 806	5.98 4.06 0.68 895	5.98 4.06 0.68 983	6.64 4.51 0.68 1042	6.64 4.51 0.68 1160	10.10 6.87 0.68 2391	9.66 6.57 0.68 2514	9.29 6.32 0.68 2630	8.93 6.07 0.68 2751	8.43 5.73 0.68 2930	7.74 5.26 0.68 3112	7.16 4.87 0.68 3230
25	20	6.28 3.52 0.56 846	6.28 3.52 0.56 935	6.28 3.52 0.56 1023	6.98 3.91 0.56 1082	6.98 3.91 0.56 1200	10.61 5.94 0.56 2424	10.16 5.69 0.56 2549	9.77 5.47 0.56 2666	9.39 5.26 0.56 2789	8.86 4.96 0.56 2970	8.13 4.55 0.56 3154	7.52 4.21 0.56 3274
25	22	6.66 2.93 0.44 885	6.66 2.93 0.44 974	6.66 2.93 0.44 1062	7.39 3.25 0.44 1121	7.39 3.25 0.44 1239	11.25 4.95 0.44 2456	10.77 4.74 0.44 2582	10.35 4.55 0.44 2701	9.95 4.38 0.44 2825	9.39 4.13 0.44 3009	8.62 3.79 0.44 3196	7.97 3.51 0.44 3317
25	24	7.06 2.26 0.32 925	7.06 2.26 0.32 1014	7.06 2.26 0.32 1102	7.84 2.51 0.32 1161	7.84 2.51 0.32 1279	11.92 3.82 0.32 2488	11.41 3.65 0.32 2617	10.97 3.51 0.32 2737	10.55 3.38 0.32 2863	9.95 3.18 0.32 3049	9.14 2.92 0.32 3238	8.45 2.70 0.32 3361
26	18	5.98 4.30 0.72 806	5.98 4.30 0.72 895	5.98 4.30 0.72 983	6.64 4.78 0.72 1042	6.64 4.78 0.72 1160	10.10 7.27 0.72 2391	9.66 6.96 0.72 2514	9.29 6.69 0.72 2630	8.93 6.43 0.72 2751	8.43 6.07 0.72 2930	7.74 5.57 0.72 3112	7.16 5.15 0.72 3230
26	20	6.28 3.77 0.60 846	6.28 3.77 0.60 935	6.28 3.77 0.60 1023	6.98 4.19 0.60 1082	6.98 4.19 0.60 1200	10.61 6.37 0.60 2424	10.16 6.09 0.60 2549	9.77 5.86 0.60 2666	9.39 5.63 0.60 2789	8.86 5.31 0.60 2970	8.13 4.88 0.60 3154	7.52 4.51 0.60 3274
26	22	6.66 3.20 0.48 885	6.66 3.20 0.48 974	6.66 3.20 0.48 1062	7.39 3.55 0.48 1121	7.39 3.55 0.48 1239	11.25 5.40 0.48 2456	10.77 5.17 0.48 2582	10.35 4.97 0.48 2701	9.95 4.78 0.48 2825	9.39 4.51 0.48 3009	8.62 4.14 0.48 3196	7.97 3.83 0.48 3317
26	24	7.06 2.54 0.36 925	7.06 2.54 0.36 1014	7.06 2.54 0.36 1102	7.84 2.82 0.36 1161	7.84 2.82 0.36 1279	11.92 4.29 0.36 2488	11.41 4.11 0.36 2617	10.97 3.95 0.36 2737	10.55 3.80 0.36 2863	9.95 3.58 0.36 3049	9.14 3.29 0.36 3238	8.45 3.04 0.36 3361
26	26	7.41 1.78 0.24 965	7.41 1.78 0.24 1054	7.41 1.78 0.24 1142	8.23 1.98 0.24 1201	8.23 1.98 0.24 1319	12.52 3.00 0.24 2521	11.98 2.88 0.24 2651	11.52 2.76 0.24 2773	11.08 2.66 0.24 2901	10.45 2.51 0.24 3089	9.59 2.30 0.24 3281	8.87 2.13 0.24 3405
27	18	5.98 4.54 0.76 806	5.98 4.54 0.76 895	5.98 4.54 0.76 983	6.64 5.04 0.76 1042	6.64 5.04 0.76 1160	10.10 7.67 0.76 2391	9.66 7.34 0.76 2514	9.29 7.06 0.76 2630	8.93 6.79 0.76 2751	8.43 6.41 0.76 2930	7.74 5.88 0.76 3112	7.16 5.44 0.76 3230
27	19	6.10 4.27 0.70 826	6.10 4.27 0.70 915	6.10 4.27 0.70 1003	6.77 4.74 0.70 1062	6.77 4.74 0.70 1180	10.30 7.21 0.70 2408	9.86 6.90 0.70 2532	9.48 6.64 0.70 2648	9.12 6.38 0.70 2770	8.60 6.02 0.70 2950	7.89 5.53 0.70 3133	7.30 5.11 0.70 3252
27	20	6.28 4.02 0.64 846	6.28 4.02 0.64 935	6.28 4.02 0.64 1023	6.98 4.46 0.64 1082	6.98 4.46 0.64 1200	10.61 6.79 0.64 2424	10.16 6.50 0.64 2549	9.77 6.25 0.64 2666	9.39 6.01 0.64 2789	8.86 5.67 0.64 2970	8.13 5.20 0.64 3154	7.52 4.81 0.64 3274
27	22	6.66 3.46 0.52 885	6.66 3.46 0.52 974	6.66 3.46 0.52 1062	7.39 3.84 0.52 1121	7.39 3.84 0.52 1239	11.25 5.85 0.52 2456	10.77 5.60 0.52 2582	10.35 5.38 0.52 2701	9.95 5.18 0.52 2825	9.39 4.88 0.52 3009	8.62 4.48 0.52 3196	7.97 4.15 0.52 3317
27	24	7.06 2.82 0.40 925	7.06 2.82 0.40 1014	7.06 2.82 0.40 1102	7.84 3.14 0.40 1161	7.84 3.14 0.40 1279	11.92 4.77 0.40 2488	11.41 4.56 0.40 2617	10.97 4.39 0.40 2737	10.55 4.22 0.40 2863	9.95 3.98 0.40 3049	9.14 3.65 0.40 3238	8.45 3.38 0.40 3361
27	26	7.41 2.07 0.28 965	7.41 2.07 0.28 1054	7.41 2.07 0.28 1142	8.23 2.30 0.28 1201	8.23 2.30 0.28 1319	12.52 3.51 0.28 2521	11.98 3.35 0.28 2651	11.52 3.23 0.28 2773	11.08 3.10 0.28 2901	10.45 2.93 0.28 3089	9.59 2.69 0.28 3281	8.87 2.48 0.28 3405
28	18	5.98 4.78 0.80 806	5.98 4.78 0.80 895	5.98 4.78 0.80 983	6.64 5.31 0.80 1042	6.64 5.31 0.80 1160	10.10 8.08 0.80 2391	9.66 7.73 0.80 2514	9.29 7.43 0.80 2630	8.93 7.15 0.80 2751	8.43 6.74 0.80 2930	7.74 6.19 0.80 3112	7.16 5.73 0.80 3230
28	20	6.28 4.27 0.68 846	6.28 4.27 0.68 935	6.28 4.27 0.68 1023	6.98 4.74 0.68 1082	6.98 4.74 0.68 1200	10.61 7.22 0.68 2424	10.16 6.91 0.68 2549	9.77 6.64 0.68 2666	9.39 6.38 0.68 2789	8.86 6.02 0.68 2970	8.13 5.53 0.68 3154	7.52 5.11 0.68 3274
28	22	6.66 3.73 0.56 885	6.66 3.73 0.56 974	6.66 3.73 0.56 1062	7.39 4.14 0.56 1121	7.39 4.14 0.56 1239	11.25 6.30 0.56 2456	10.77 6.03 0.56 2582	10.35 5.80 0.56 2701	9.95 5.57 0.56 2825	9.39 5.26 0.56 3009	8.62 4.83 0.56 3196	7.97 4.46 0.56 3317

5. CAPACITIES AND SELECTION DATA

		PERFORMANCE DATA (Cooling Operation at Rated Frequency)																																															
		RPFC-6.0UFE1NH+RAS-6.0UFESMH1																																															
		CAPACITY: 13.76 kW SHF: 0.75 INPUT: 5000 W																																															
		OUTDOOR DB (°C)																																															
INDOOR DB (°C)	INDOOR WB (°C)	-15			-7			0			10			15			21			25			27			30			35			40			48														
		Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF	Q	SHC	SHF						
21	18	9.56	5.45	0.57	1380	9.56	5.45	0.57	1530	9.56	5.45	0.57	1680	10.62	6.05	0.57	1780	10.62	6.05	0.57	1980	16.16	9.21	0.57	4064	15.46	8.81	0.57	4274	14.87	8.47	0.57	4470	14.29	8.15	0.57	4676	13.48	7.69	0.57	4980	12.38	7.06	0.57	5289	11.45	6.53	0.57	5490
21	20	10.05	4.52	0.45	1420	10.05	4.52	0.45	1570	10.05	4.52	0.45	1720	11.16	5.02	0.45	1820	11.16	5.02	0.45	2020	16.98	7.64	0.45	4097	16.25	7.31	0.45	4308	15.62	7.03	0.45	4506	15.02	6.76	0.45	4714	14.17	6.38	0.45	5020	13.01	5.85	0.45	5331	12.03	5.42	0.45	5534
28	22	10.65	6.50	0.61	1459	10.65	6.50	0.61	1609	10.65	6.50	0.61	1759	11.83	7.22	0.61	1859	11.83	7.22	0.61	2059	18.00	10.98	0.61	4129	17.22	10.51	0.61	4342	16.56	10.10	0.61	4541	15.92	9.71	0.61	4750	15.02	9.16	0.61	5059	13.79	8.41	0.61	5373	12.76	7.78	0.61	5577

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPFC-3.0UFE1NH+RAS-3.0UFESNH1																
CAPACITY: 7.35 kW INPUT: 2070W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	3.89	1138	4.64	1346	5.58	1614	6.55	1821	7.49	1967	8.45	2091	9.33	2152	10.29	2195
21	3.67	1242	4.41	1449	5.28	1717	6.25	1905	7.12	2049	8.09	2152	8.96	2216	9.88	2298
26	3.23	1345	3.97	1553	4.92	1821	5.81	2009	6.75	2152	7.72	2256	8.59	2319	9.56	2381

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPFC-3.5UFE1NH+RAS-3.5UFESNH1																
CAPACITY: 8.70 kW INPUT: 2300 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	4.61	1265	5.49	1495	6.61	1793	7.75	2023	8.86	2185	10.01	2324	11.04	2391	12.18	2439
21	4.35	1380	5.22	1610	6.25	1908	7.40	2117	8.43	2276	9.57	2391	10.60	2462	11.69	2554
26	3.82	1495	4.70	1725	5.82	2023	6.88	2232	7.99	2391	9.14	2506	10.17	2577	11.31	2645

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPFC-4.0UFE1NH+RAS-4.0UFESNH1																
CAPACITY: 10.50 kW INPUT: 3650W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	5.56	2007	6.63	2373	7.97	2845	9.35	3210	10.70	3468	12.08	3687	13.32	3795	14.70	3870
21	5.25	2190	6.30	2555	7.55	3028	8.93	3360	10.17	3613	11.55	3795	12.80	3907	14.11	4052
26	4.62	2372	5.68	2738	7.02	3210	8.30	3542	9.65	3795	11.03	3978	12.27	4090	13.65	4198

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPFC-5.0UFE1NH+RAS-5.0UFESMH1																
CAPACITY:13.50 kW INPUT: 4170 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	7.15	2293	8.52	2711	10.25	3250	12.02	3667	13.75	3962	15.53	4213	17.13	4336	18.90	4421
21	6.75	2502	8.10	2919	9.70	3459	11.48	3839	13.08	4127	14.85	4336	16.45	4464	18.14	4630
26	5.94	2710	7.30	3128	9.03	3667	10.67	4047	12.40	4336	14.18	4544	15.78	4673	17.55	4796

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPFC-6.0UFE1NH+RAS-6.0UFESMH1																
CAPACITY:16.59 kW INPUT: 4850 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	8.79	2667	10.47	3153	12.60	3781	14.78	4266	16.90	4608	19.08	4900	21.05	5043	23.23	5142
21	8.29	2910	9.95	3395	11.92	4023	14.10	4464	16.07	4800	18.25	5043	20.22	5192	22.29	5385
26	7.30	3152	8.97	3638	11.09	4266	13.12	4707	15.24	5043	17.42	5285	19.39	5434	21.57	5578

PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPFC-6.5UFE1NH+RAS-6.5UFESMH1																
CAPACITY:18.00kW INPUT: 6830 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	9.54	3756	11.36	4440	13.67	5324	16.03	6007	18.34	6489	20.70	6900	22.84	7101	25.20	7242
21	9.00	4098	10.80	4781	12.94	5665	15.30	6287	17.44	6760	19.80	7101	21.94	7312	24.19	7583
26	7.92	4439	9.73	5123	12.04	6007	14.23	6629	16.54	7101	18.90	7443	21.04	7653	23.40	7855

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

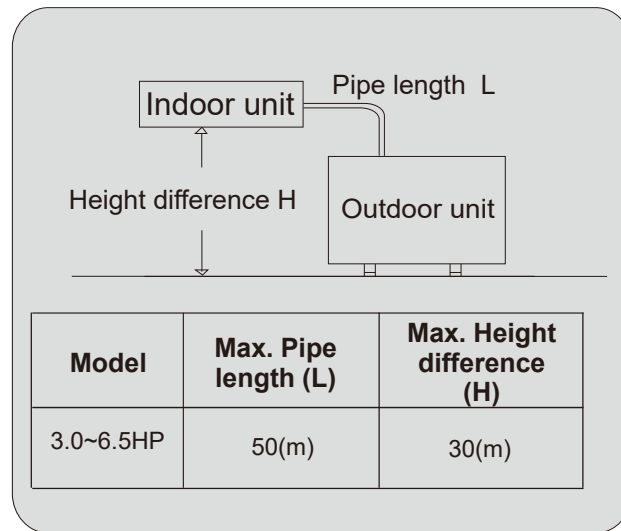
PERFORMANCE DATA (Heating Operation at Rated Frequency)																
RPFC-5.0UFE1NH+RAS-5.0UFESNH1																
CAPACITY: 13.30 kW INPUT: 4040 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	7.05	2222	8.40	2626	10.10	3149	11.85	3553	13.55	3838	15.30	4081	16.87	4201	18.62	4283
21	6.65	2424	7.98	2828	9.56	3351	11.31	3719	12.88	3999	14.63	4201	16.21	4325	17.87	4485
26	5.85	2626	7.19	3030	8.89	3553	10.52	3921	12.22	4201	13.97	4403	15.54	4527	17.29	4646

PERFORMANCE DATA (Heating Operation at Rated frequency)																
RPFC-6.0UFE1NH+RAS-6.0UFESNH1																
CAPACITY: 16.50 kW INPUT: 5400 W																
INDOOR DB(°C)	OUTDOOR WB (°C)															
	-15		-10		-5		0		5		10		15		20	
	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT	Q	INPUT
15	8.74	2970	10.42	3510	12.53	4209	14.70	4749	16.81	5130	18.98	5455	20.93	5615	23.10	5725
21	8.25	3240	9.90	3780	11.86	4479	14.03	4971	15.98	5345	18.15	5615	20.11	5781	22.17	5995
26	7.26	3510	8.92	4050	11.03	4749	13.05	5241	15.16	5615	17.33	5885	19.28	6051	21.45	6210

Remarks:
 Q: Total Heating Capacity (Gross) kW
 INPUT: Power Input (including the compressor, evap. fan motor & cond. fan motor) W
 DB: Dry Bulb Temperature
 WB: Wet Bulb Temperature

5. CAPACITIES AND SELECTION DATA

5.2 Piping Length Correction Factor



The correction factor is based on the equivalent piping length in meters (EL) and the height difference between outdoor and indoor units in meters (H).

H:

Height difference between indoor unit and outdoor unit (m).

- $H > 0$: Position of outdoor unit is higher than that of the indoor unit (m).
- $H < 0$: Position of outdoor unit is lower than that of the indoor unit (m).

L:

Actual one-way piping length between indoor unit and outdoor unit (m).

EL:

Equivalent one-way piping length between indoor unit and outdoor unit (m).

Gas Diameter (mm/inch)	9.52 (3/8')	12.7 (1/2')	15.88 (5/8')	19.05 (3/4')
90° Elbow	0.15	0.2	0.25	0.35

5. CAPACITIES AND SELECTION DATA

Cooling

EL Model	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
3.0HP	1.0	0.98	0.97	0.96	0.94	0.92	0.90	0.89	0.87	0.86
3.5HP	1.0	0.94	0.92	0.90	0.88	0.84	0.82	0.80	0.77	0.73
4.0HP	1.0	0.95	0.93	0.90	0.88	0.85	0.83	0.80	0.78	0.75
5.0HP	1.0	0.95	0.92	0.88	0.87	0.85	0.83	0.80	0.78	0.75
6.0/6.5HP	1.0	0.98	0.96	0.94	0.92	0.89	0.86	0.83	0.79	0.75

Heating

EL Model	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
3.0HP	1.0	0.98	0.97	0.96	0.94	0.92	0.90	0.88	0.87	0.85
3.5HP	1.0	0.93	0.90	0.88	0.84	0.82	0.78	0.75	0.72	0.69
4.0/5.0HP	1.0	0.94	0.91	0.88	0.85	0.82	0.79	0.76	0.73	0.70
6.0/6.5HP	1.0	0.99	0.98	0.97	0.95	0.93	0.90	0.87	0.84	0.80

The correction factor of height between indoor unit and outdoor unit

Height difference	5m	10m	30m
Factor	0.01	0.02	0.025

To ensure correct unit selection, consider the farthest indoor unit.

NOTE:

1. Above data is assuming that the height difference between indoor unit and outdoor unit is 0m.
2. Be sure to minimize length of connection pipes to optimize performance. If the outdoor unit is installed higher or lower than the indoor unit, it is necessary to apply height correction factor additionally to length correction factor to calculate cooling/heating.

If outdoor unit is higher, correction should be applied to cooling capacity, if outdoor unit is lower, correction should be applied to heating capacity.

5. CAPACITIES AND SELECTION DATA

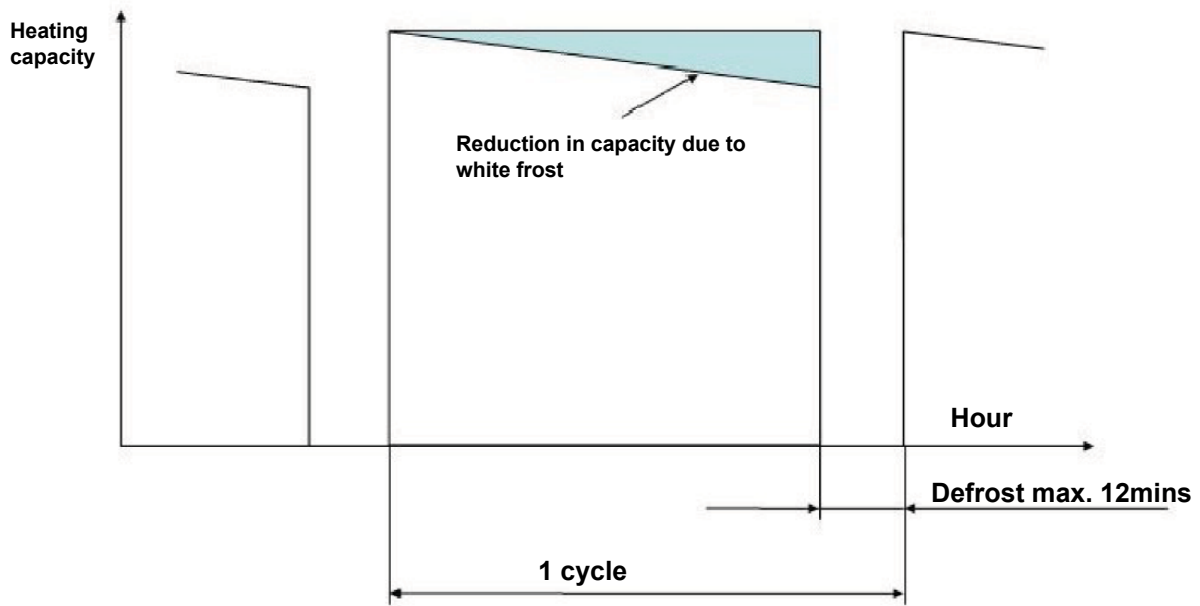
5.3 Correction Factors according to Defrosting Operation

The heating capacity in the preceding paragraph, excludes the condition of defrosting operation period. In consideration of defrosting operation, the heating capacity is corrected by the equation below.

Corrected heating capacity = Defrost Correction factor x unit capacity

Outdoor temperature(°CDB)	-15	-10	-5	0	7	10	15
Correction factor (humidity rate 85% RH)	0.95	0.95	0.91	0.81	1.0	1.0	1.0

Correction Factor



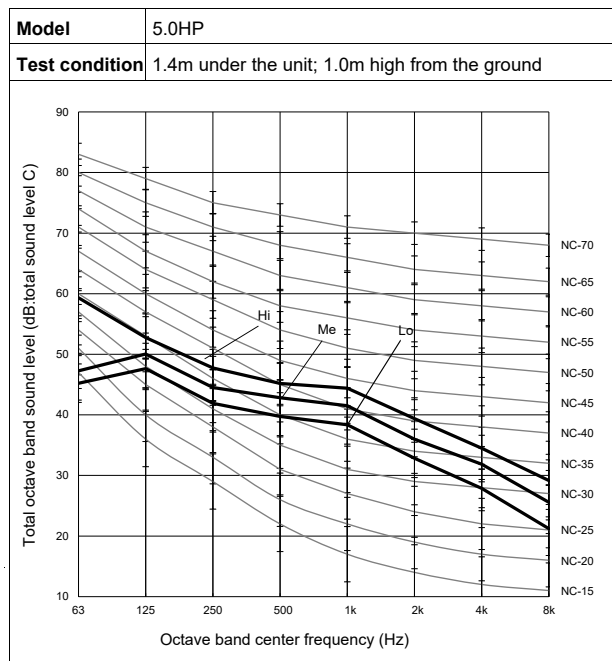
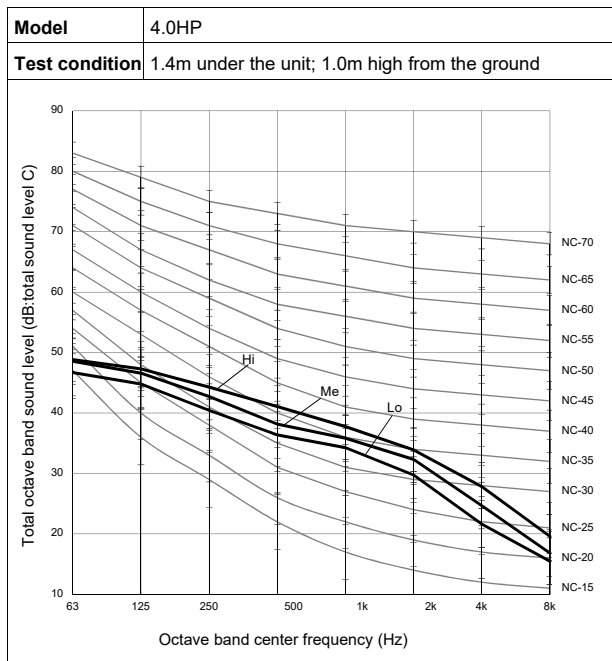
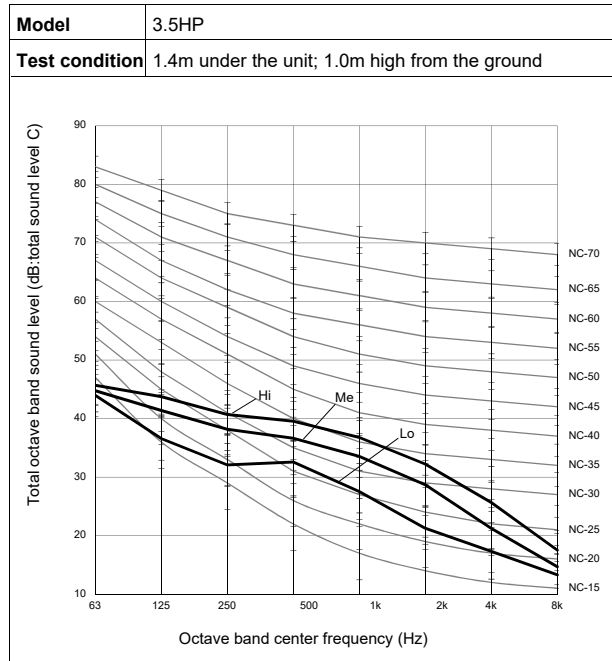
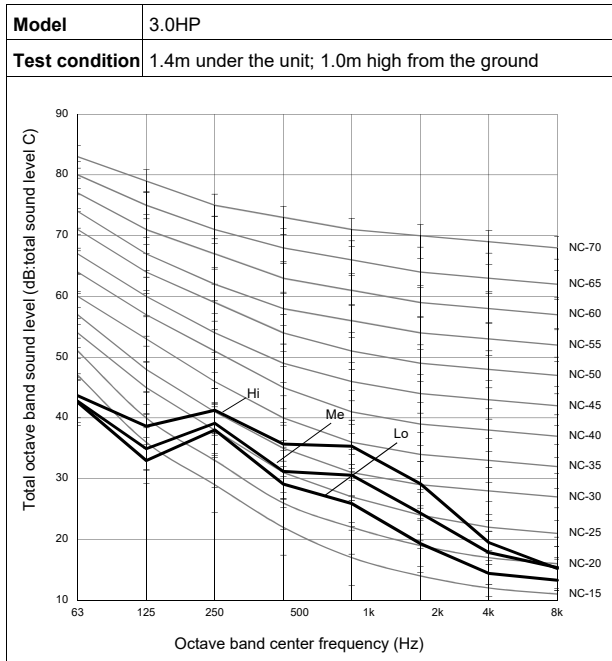
NOTE:

The correction factor is not valid for special conditions such as snowfall or operation in a transitional period.

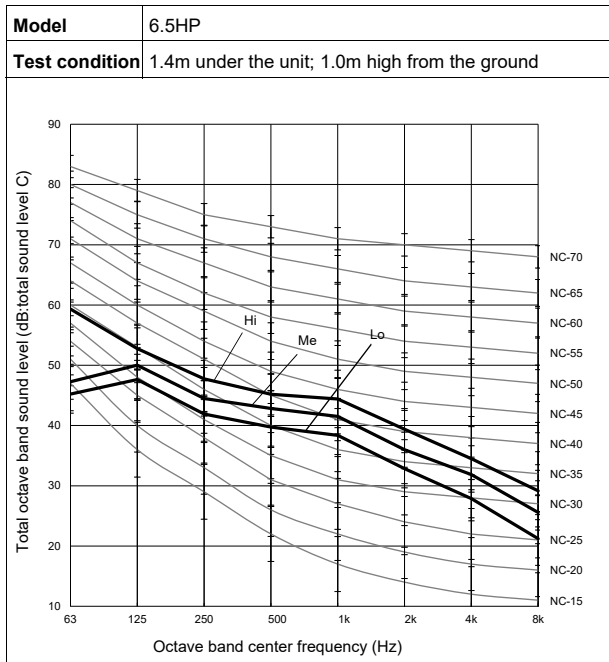
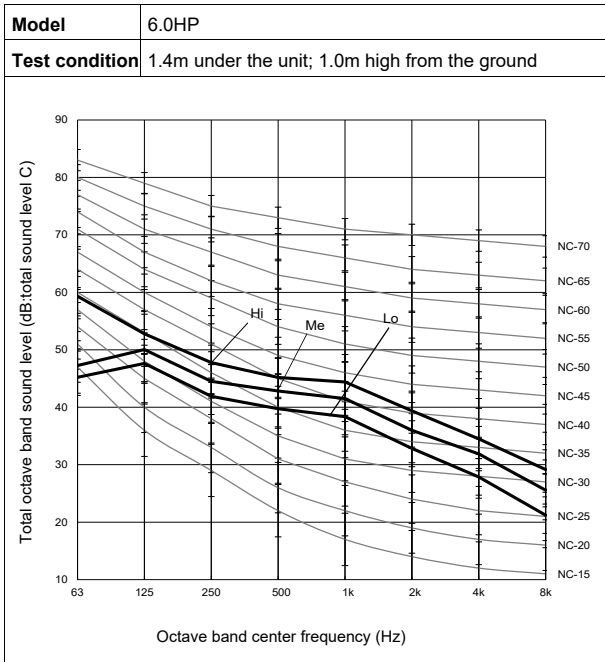
6. SOUND PRESSURE DATA

Indoor unit

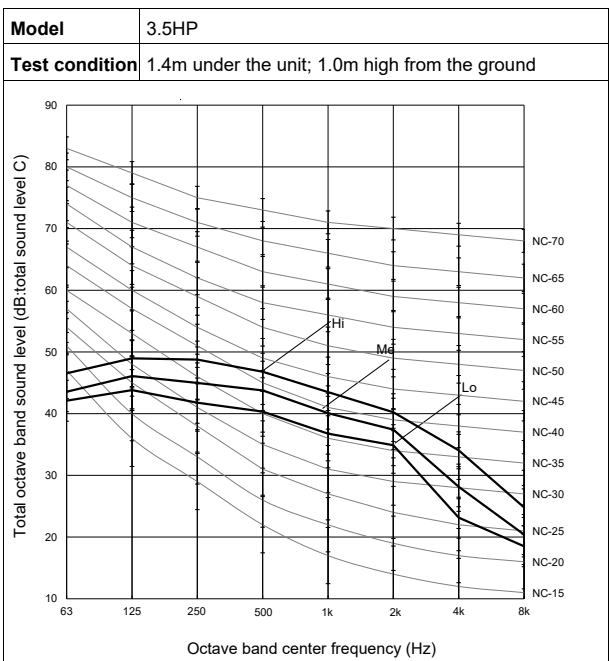
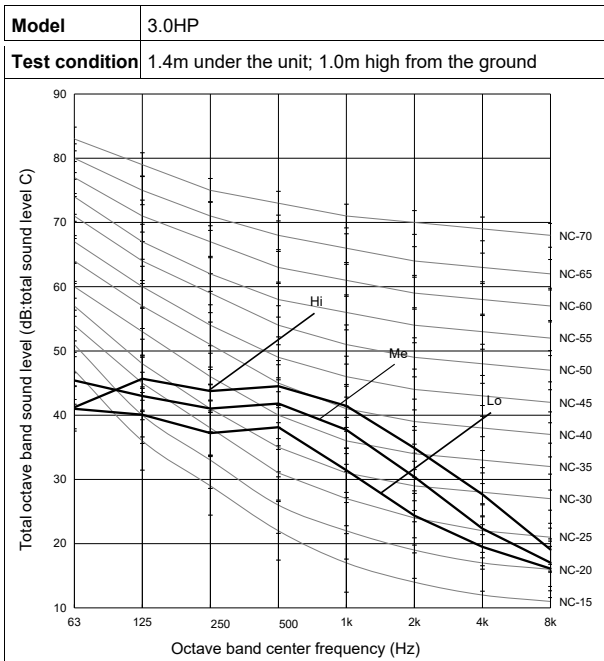
Ducted



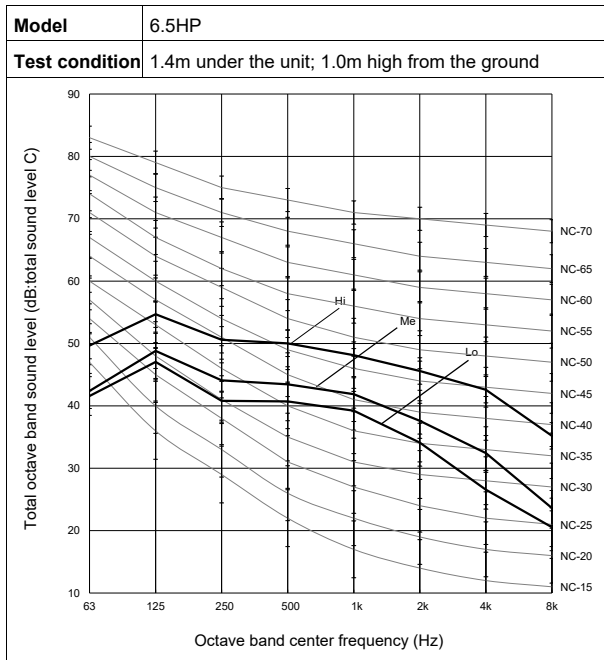
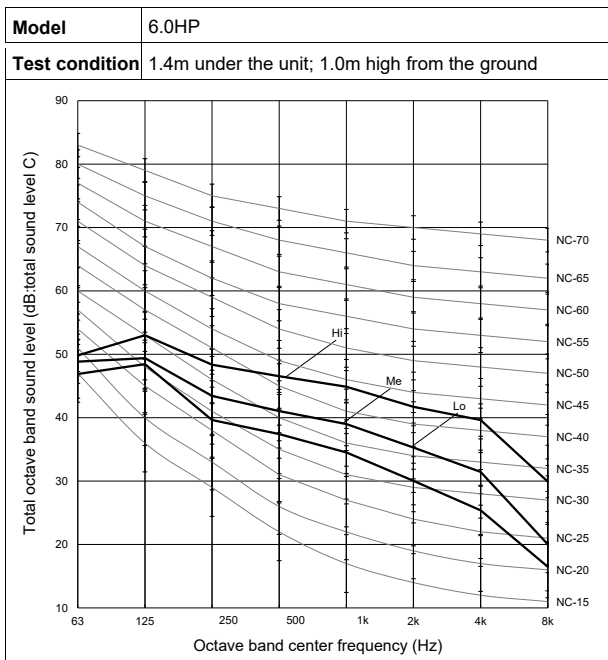
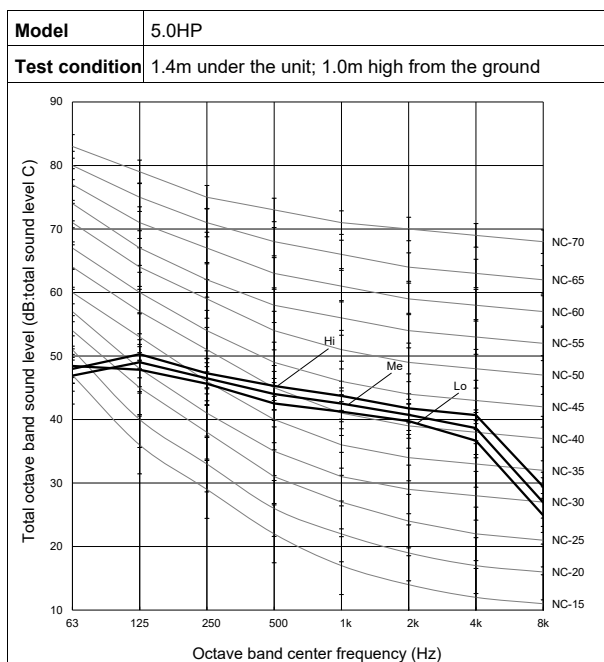
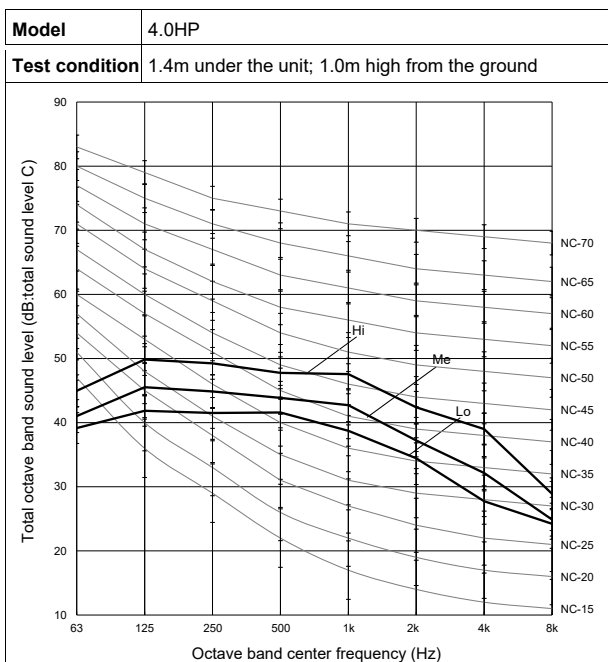
6. SOUND PRESSURE DATA



Cassette

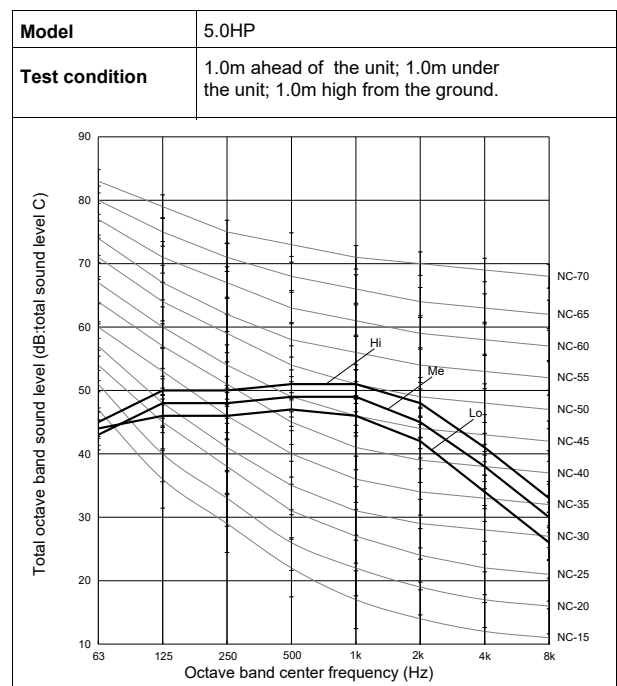
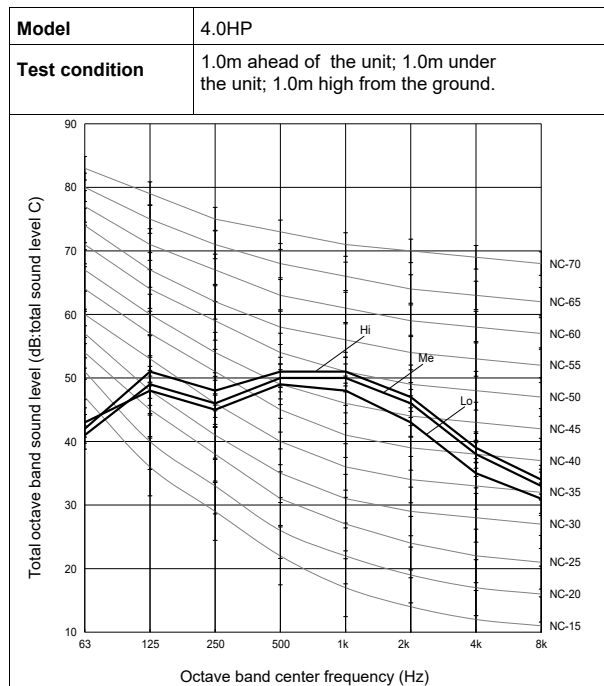
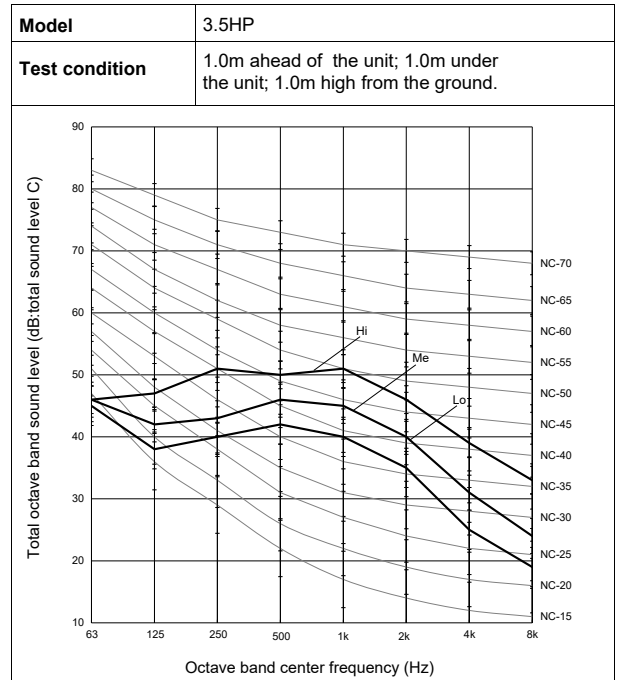
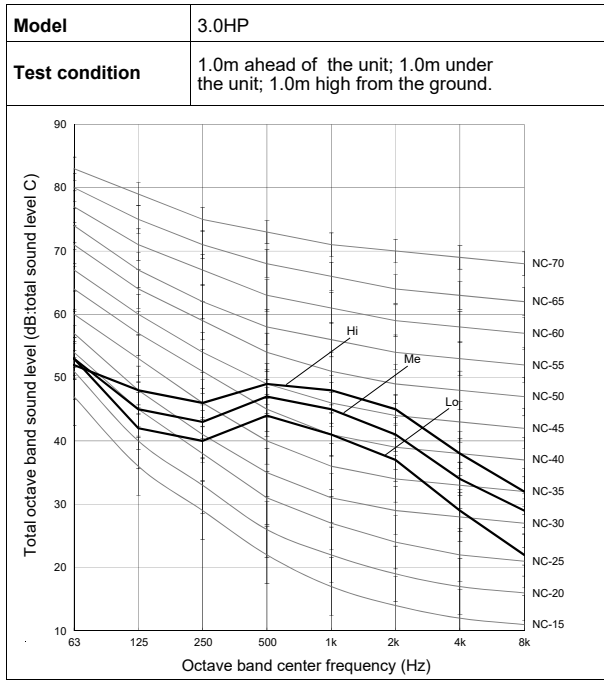


6. SOUND PRESSURE DATA

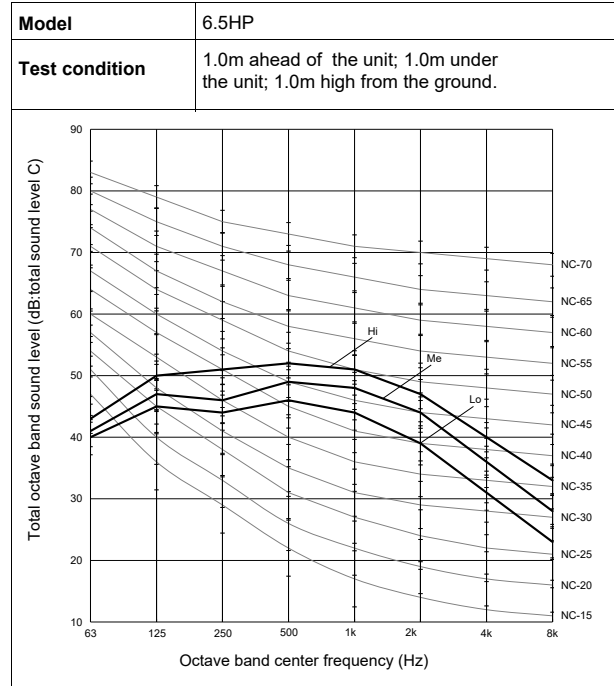
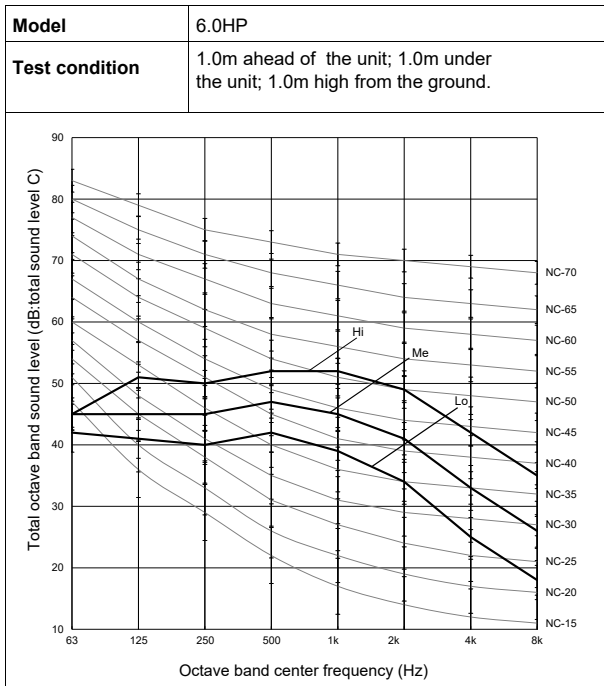


6. SOUND PRESSURE DATA

Floor ceiling

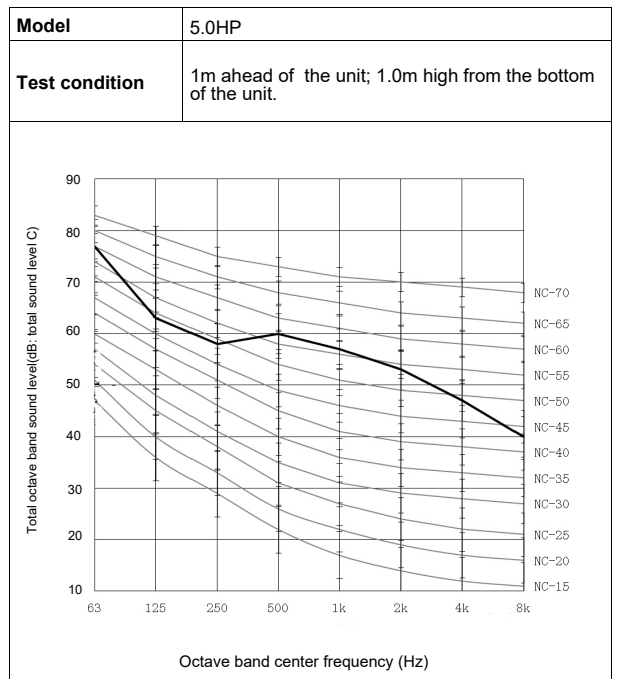
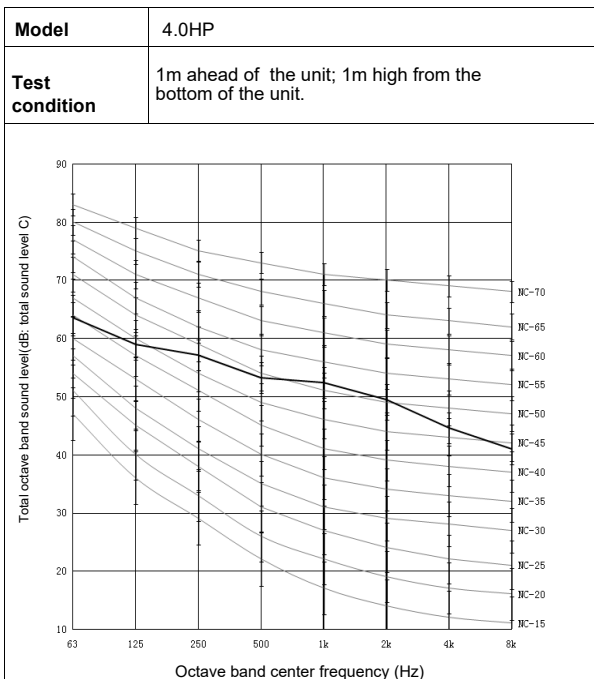
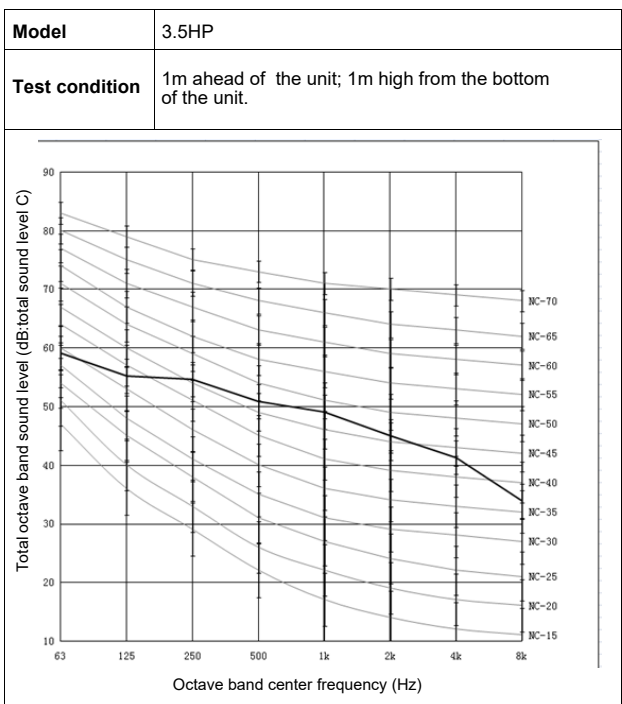
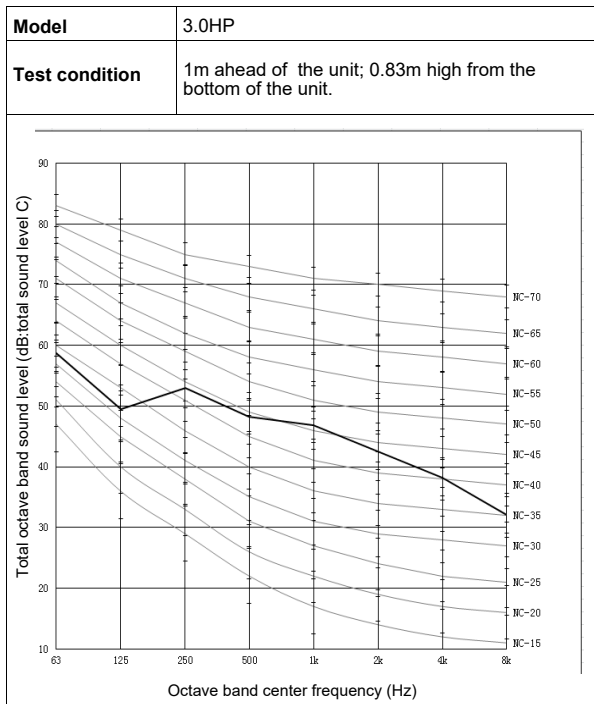


6. SOUND PRESSURE DATA

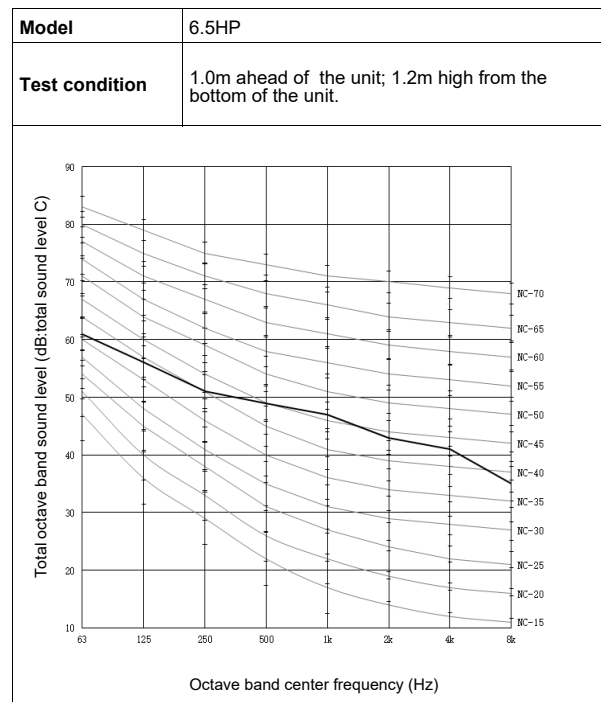
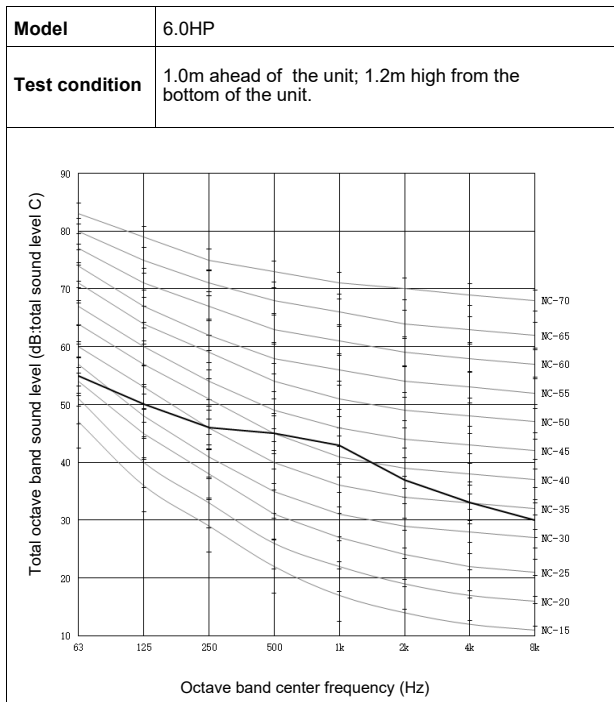


6. SOUND PRESSURE DATA

Outdoor unit



6. SOUND PRESSURE DATA

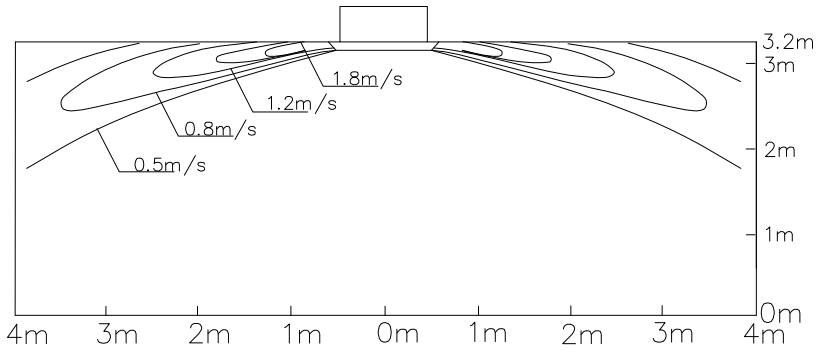


7. AIR FLOW DISTRIBUTION

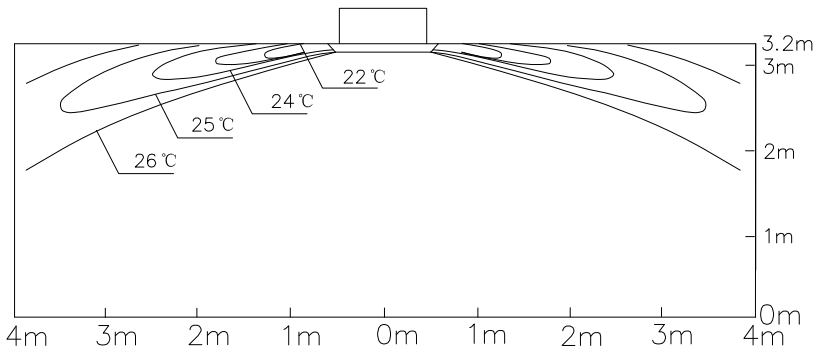
7.1 Cassette

3.0HP

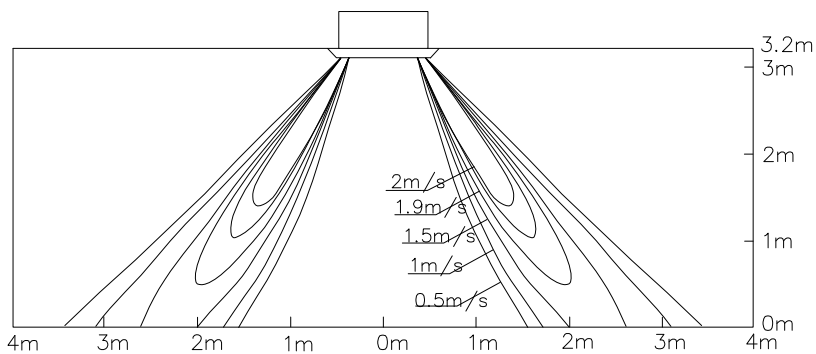
1) Cooling/Air Velocity Distribution



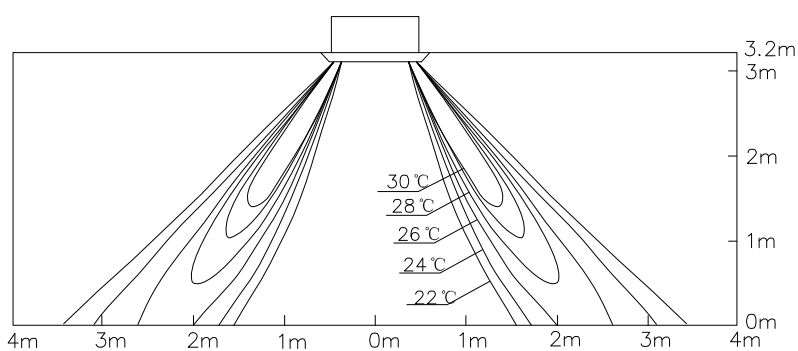
2) Cooling/Air Temperature Distribution



3) Heating/Air Velocity Distribution



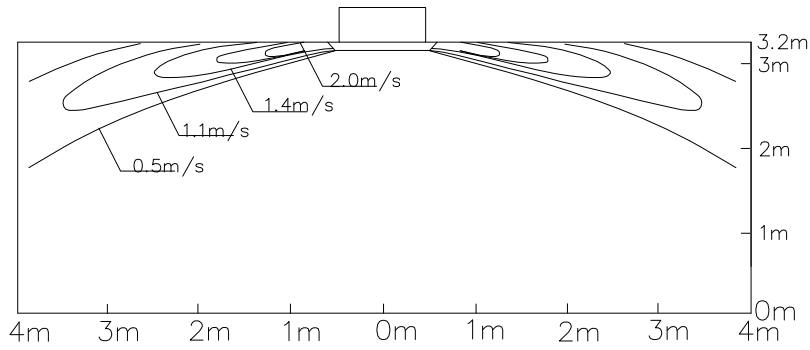
4) Heating/Air Temperature Distribution



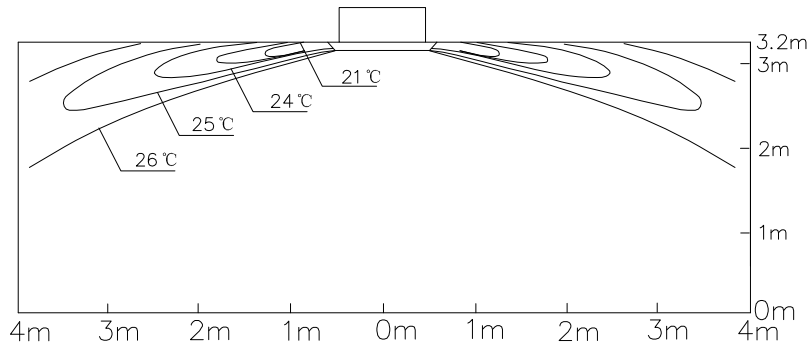
7. AIR FLOW DISTRIBUTION

3.5HP

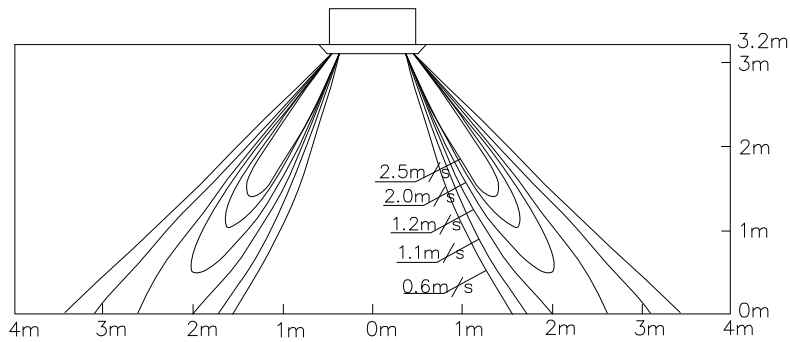
1) Cooling/Air Velocity Distribution



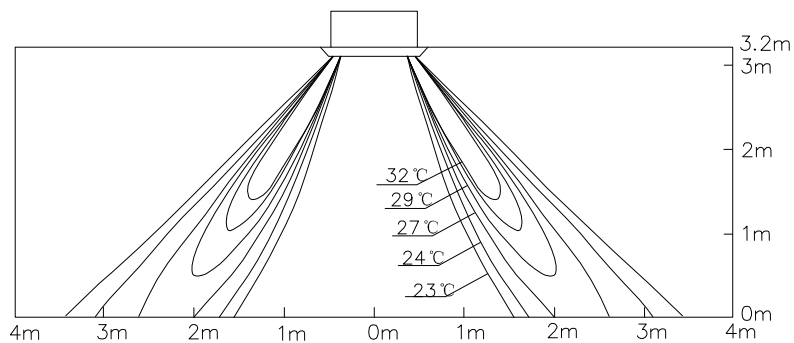
2) Cooling/Air Temperature Distribution



3) Heating/Air Velocity Distribution



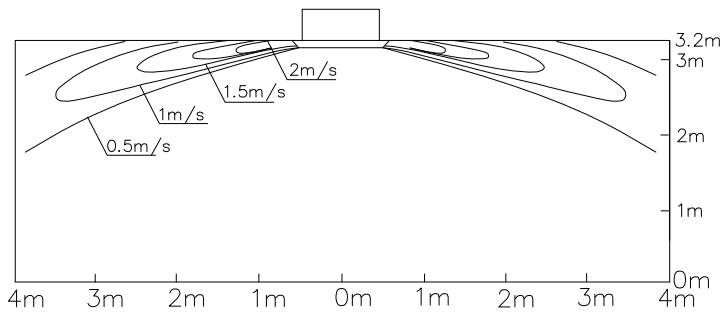
4) Heating/Air Temperature Distribution



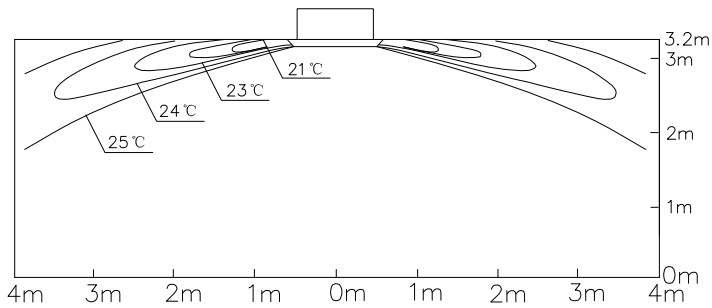
7. AIR FLOW DISTRIBUTION

4.0HP

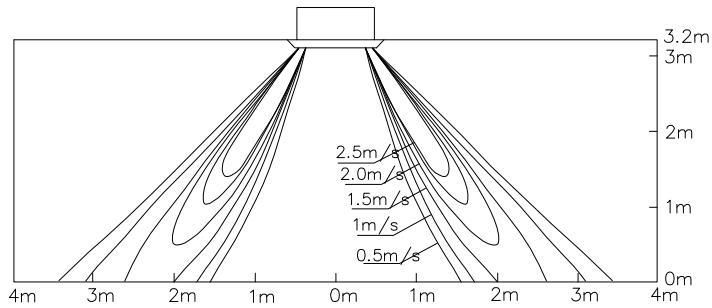
1) Cooling/Air Velocity Distribution



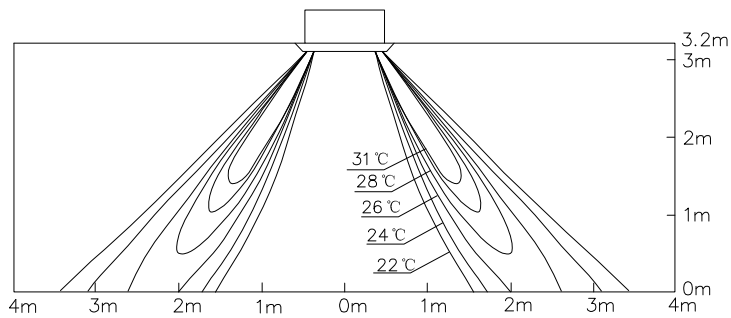
2) Cooling/Air Temperature Distribution



3) Heating/Air Velocity Distribution



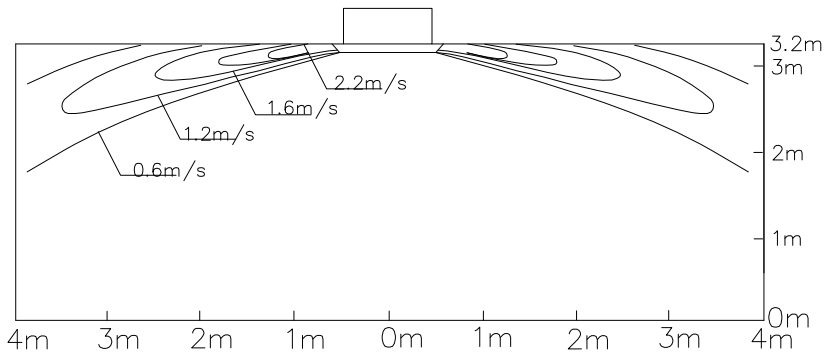
4) Heating/Air Temperature Distribution



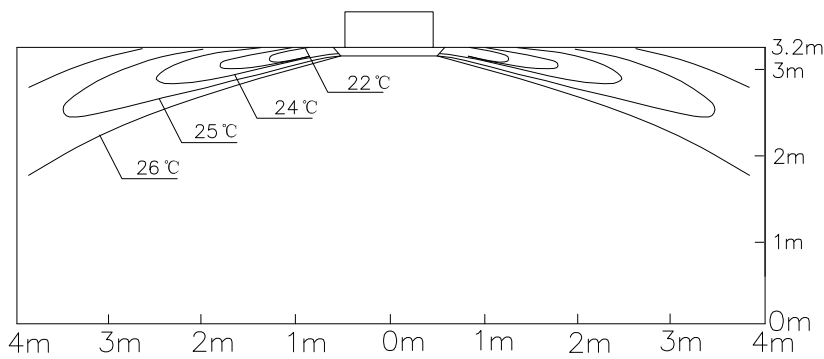
7. AIR FLOW DISTRIBUTION

5.0HP

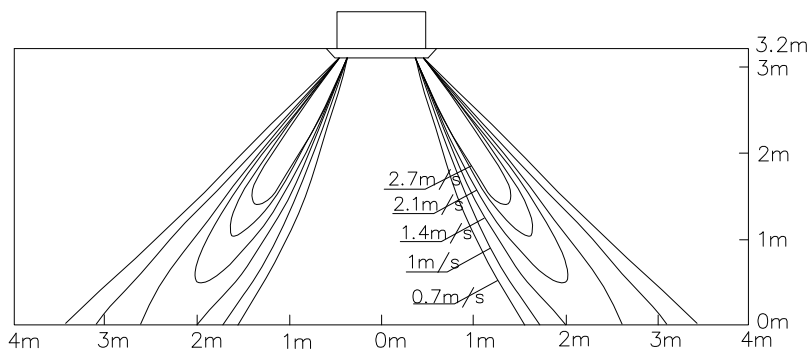
1) Cooling/Air Velocity Distribution



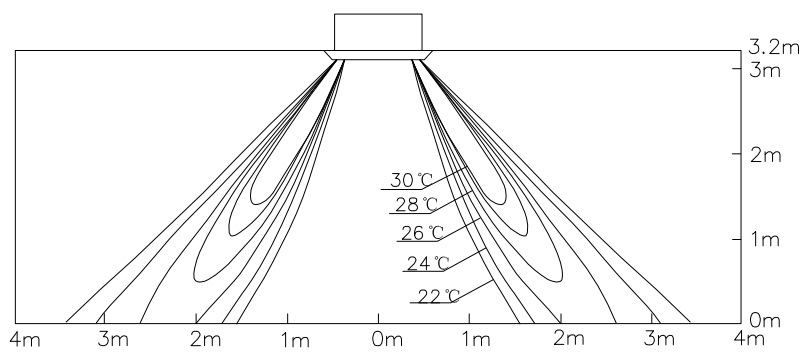
2) Cooling/Air Temperature Distribution



3) Heating/Air Velocity Distribution



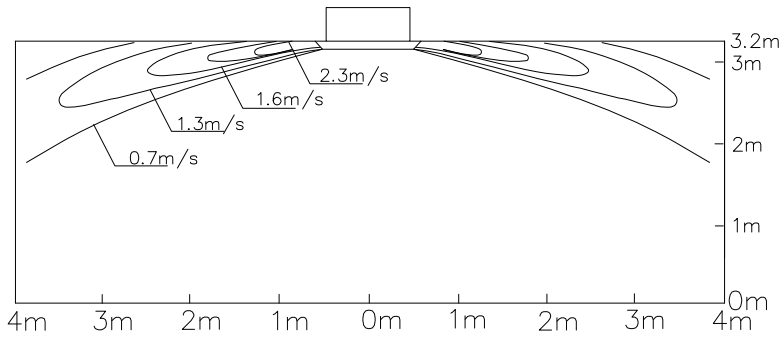
4) Heating/Air Temperature Distribution



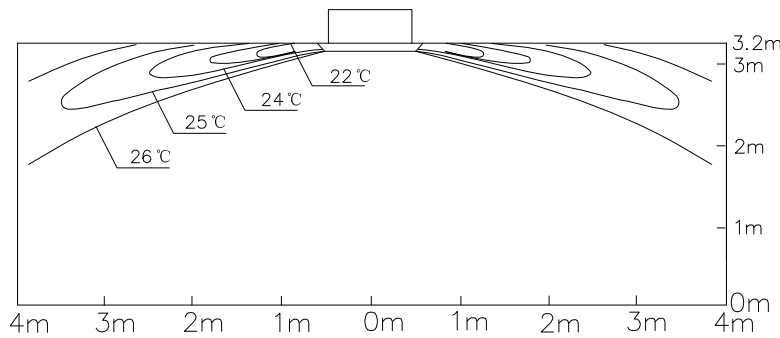
7. AIR FLOW DISTRIBUTION

6.0HP

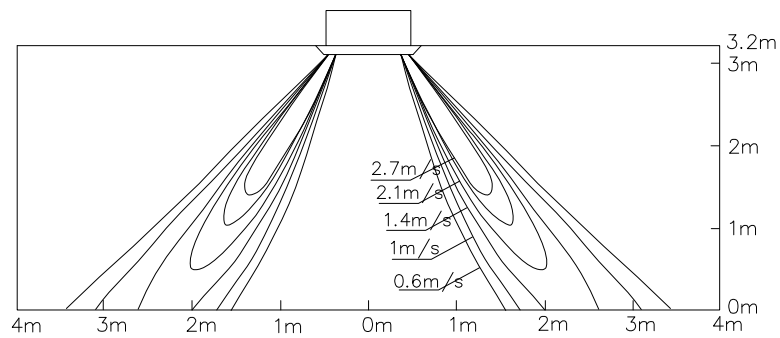
1) Cooling/Air Velocity Distribution



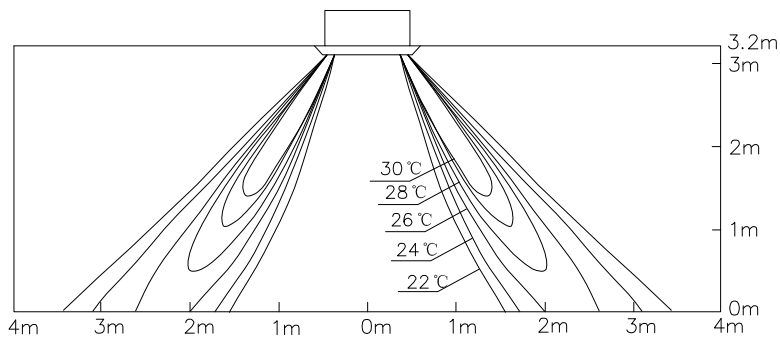
2) Cooling/Air Temperature Distribution



3) Heating/Air Velocity Distribution



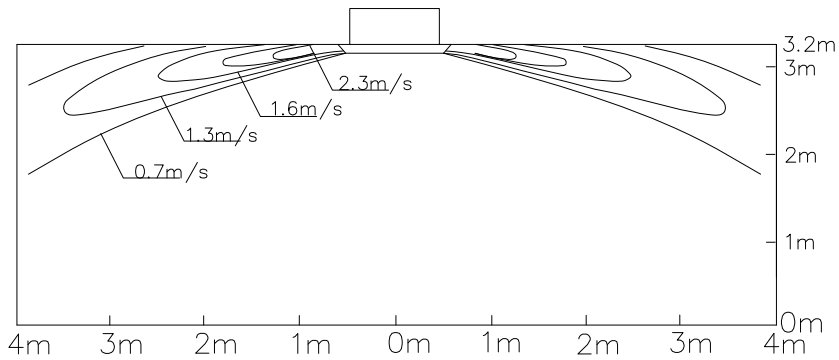
4) Heating/Air Temperature Distribution



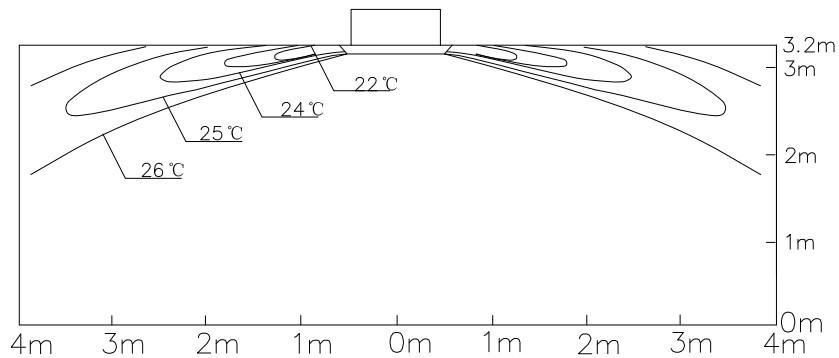
7. AIR FLOW DISTRIBUTION

6.5HP

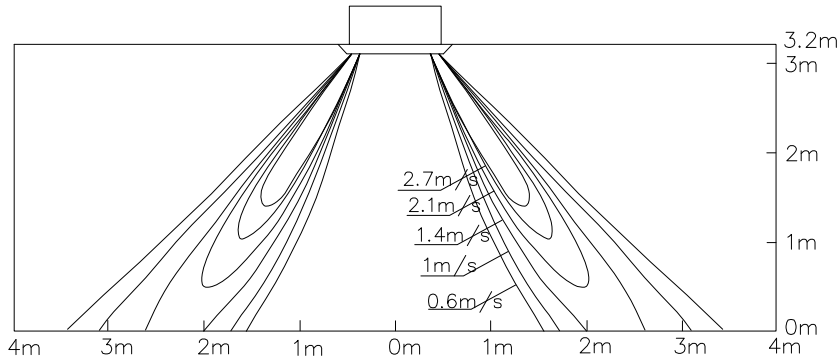
1) Cooling/Air Velocity Distribution



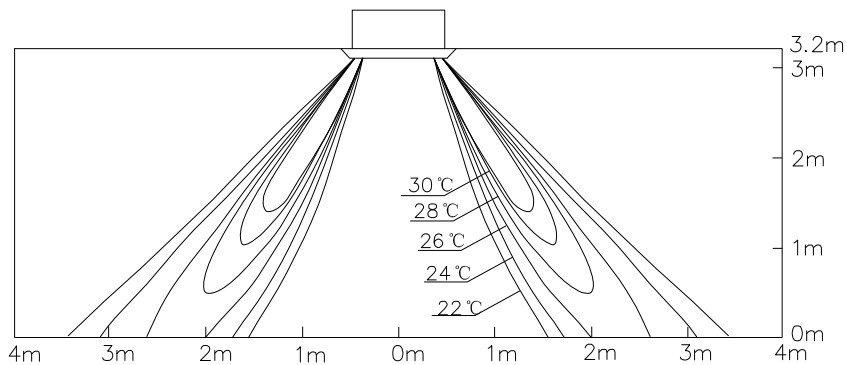
2) Cooling/Air Temperature Distribution



3) Heating/Air Velocity Distribution (Blow angle: XX)



4) Heating/Air Temperature Distribution

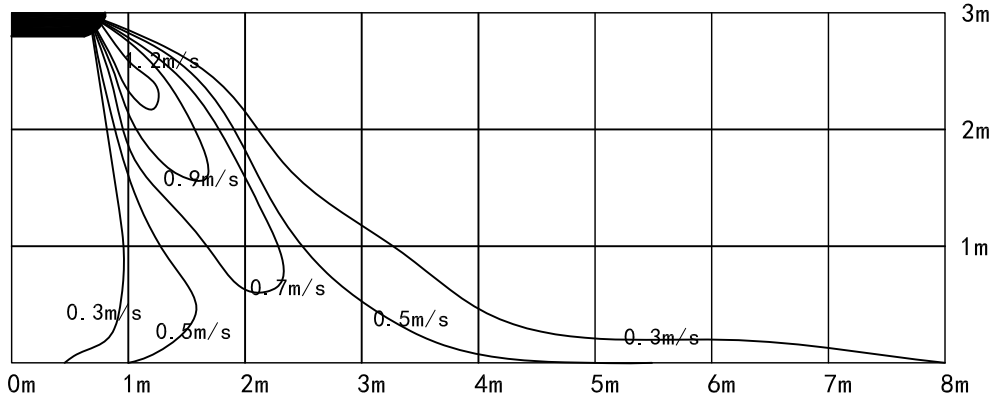


7. AIR FLOW DISTRIBUTION

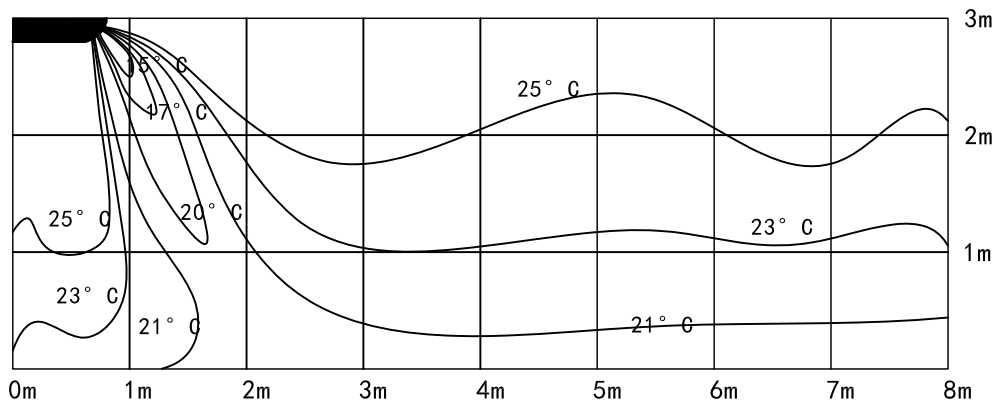
7.2 Floor Ceiling

3.0HP

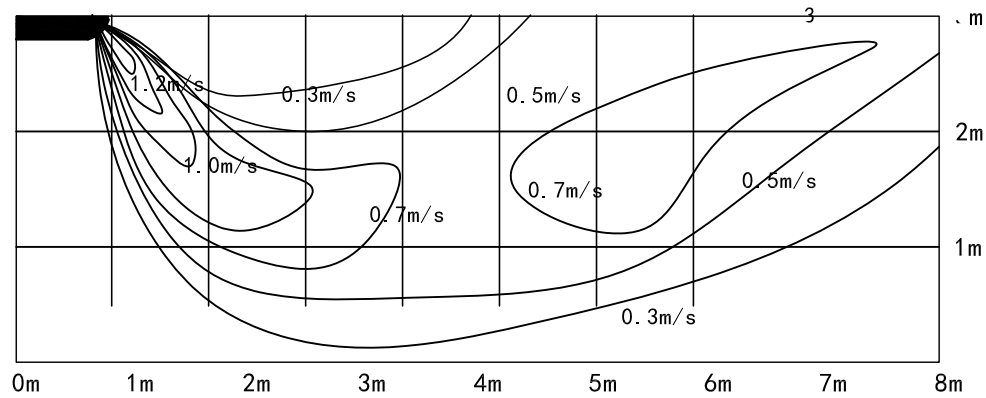
1) Ceiling installation/Cooling/Air velocity distribution



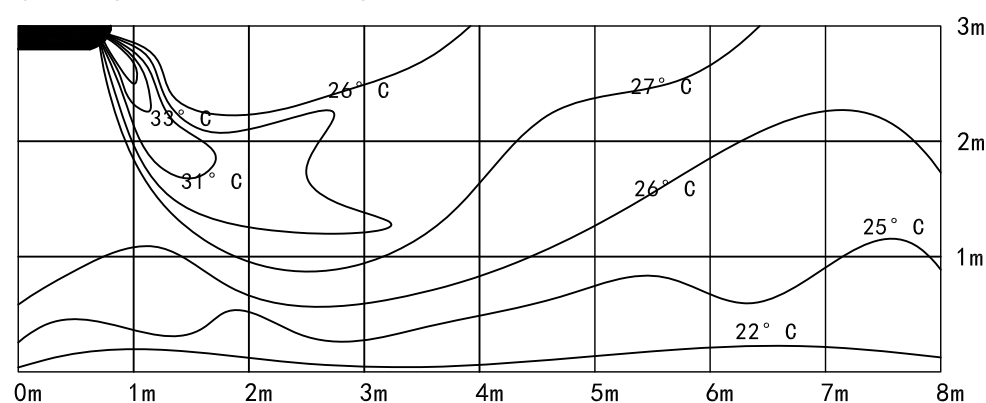
2) Ceiling installation/Cooling/Air temperature distribution



3) Ceiling installation/Heating/Air velocity distribution

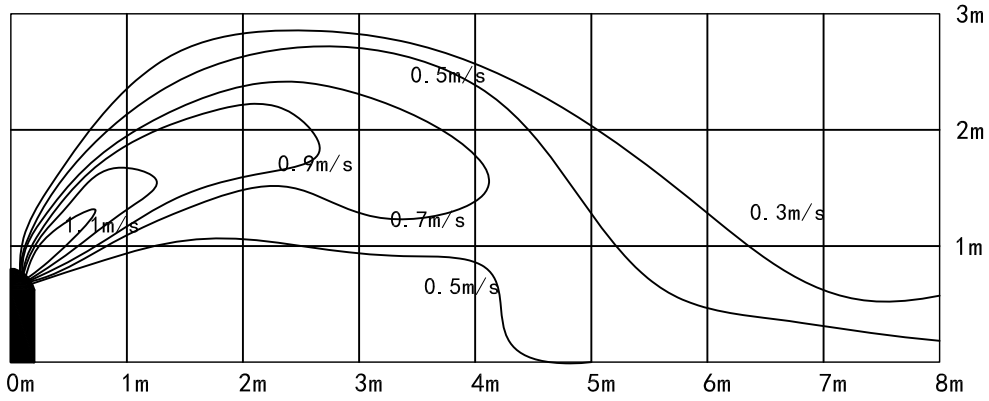


4) Ceiling installation/Heating/Air temperature distribution

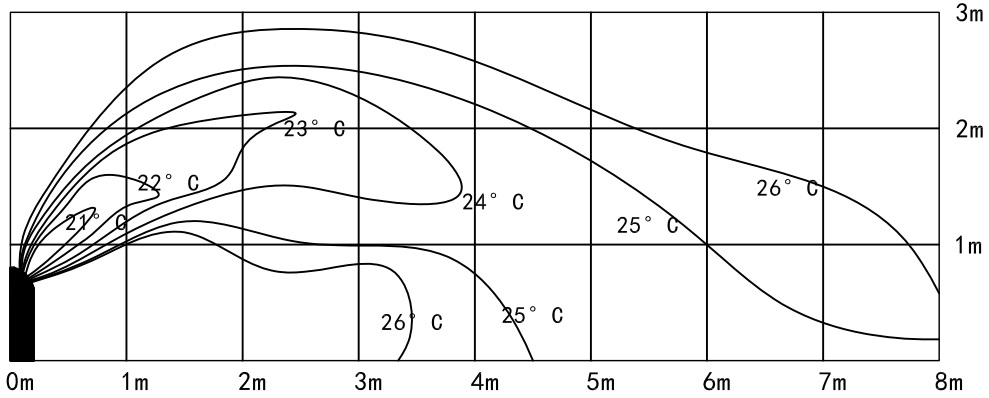


7. AIR FLOW DISTRIBUTION

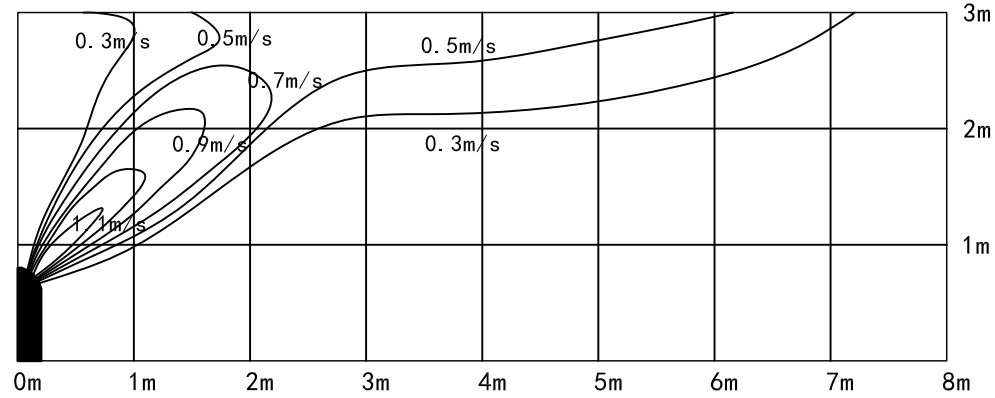
5) Floor installation/Cooling/Air velocity distribution



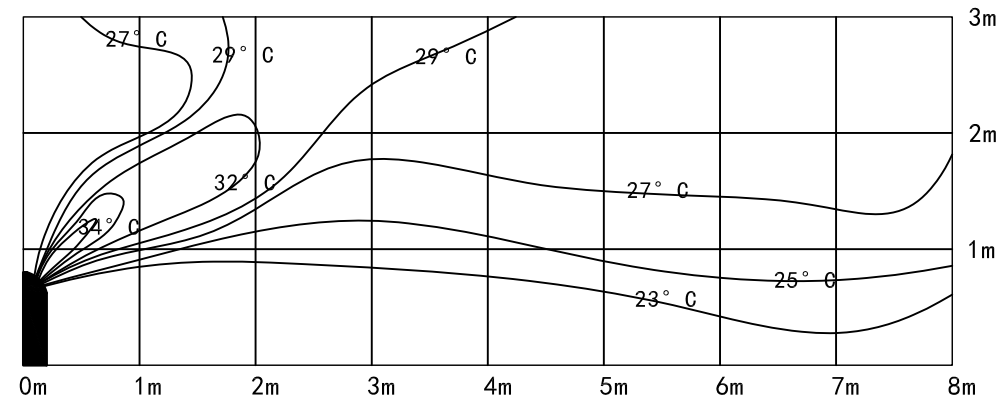
6) Floor installation/Cooling/Air temperature distribution



7) Floor installation/Heating/Air velocity distribution



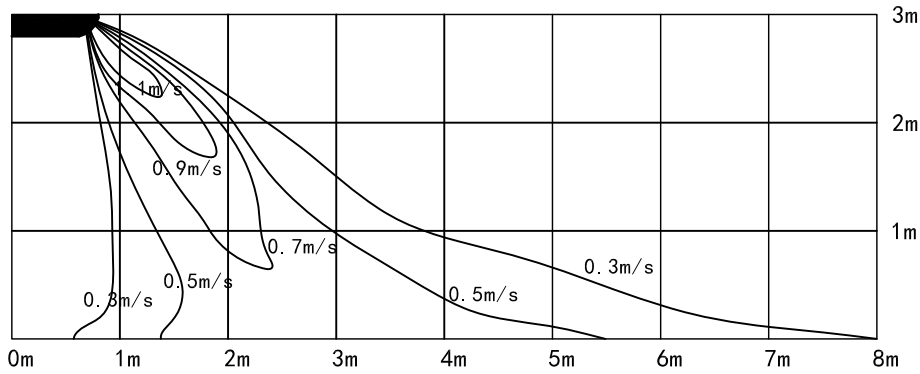
8) Floor installation/Heating/Air temperature distribution



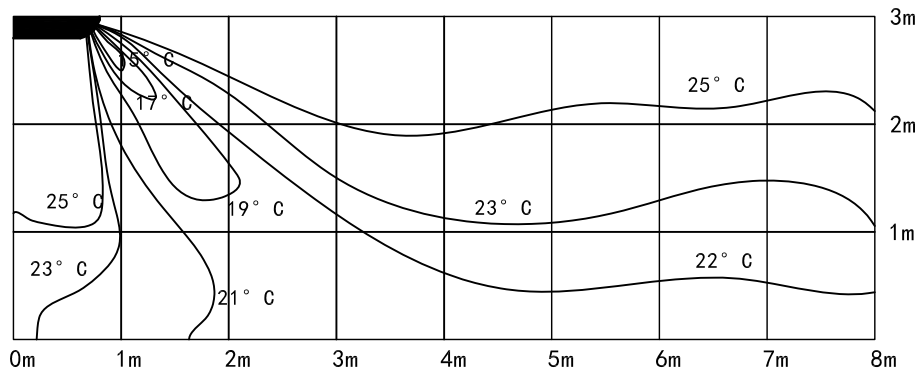
7. AIR FLOW DISTRIBUTION

3.5HP

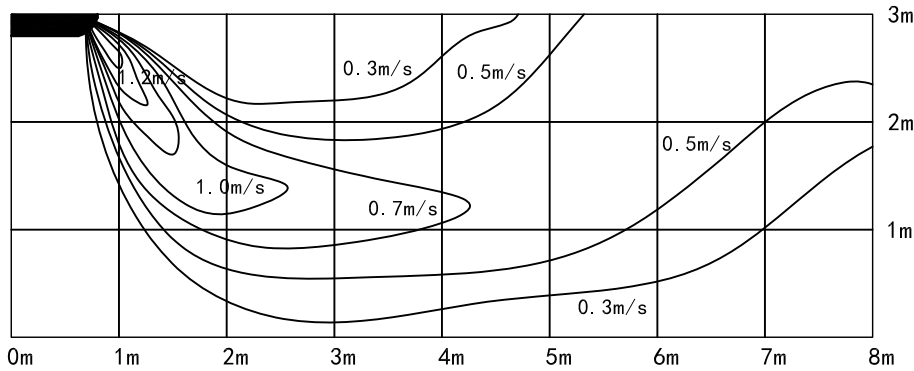
1) Ceiling installation/Cooling/Air velocity distribution



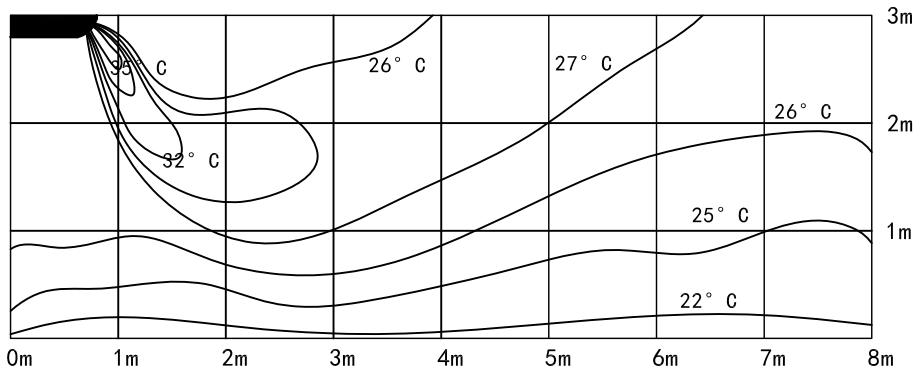
2) Ceiling installation/Cooling/Air temperature distribution



3) Ceiling installation/Heating/Air velocity distribution

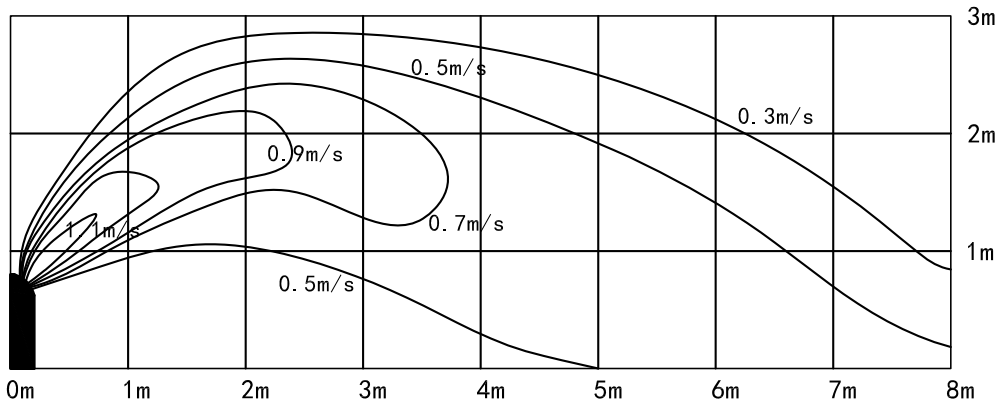


4) Ceiling installation/Heating/Air temperature distribution

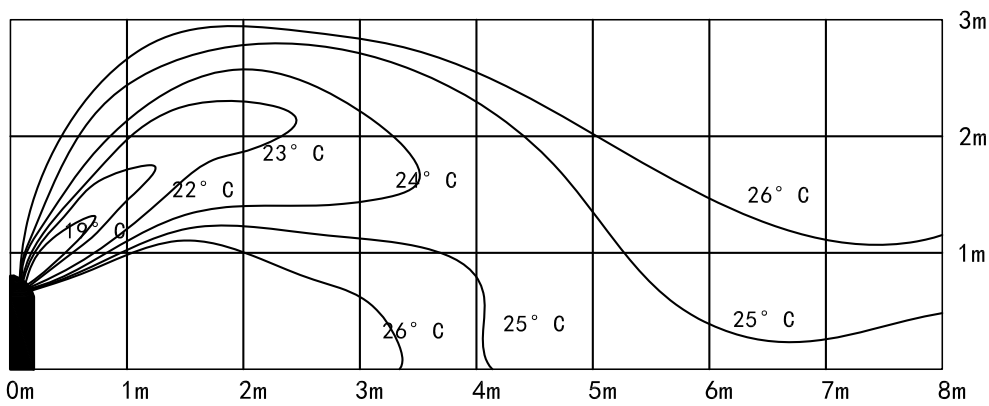


7. AIR FLOW DISTRIBUTION

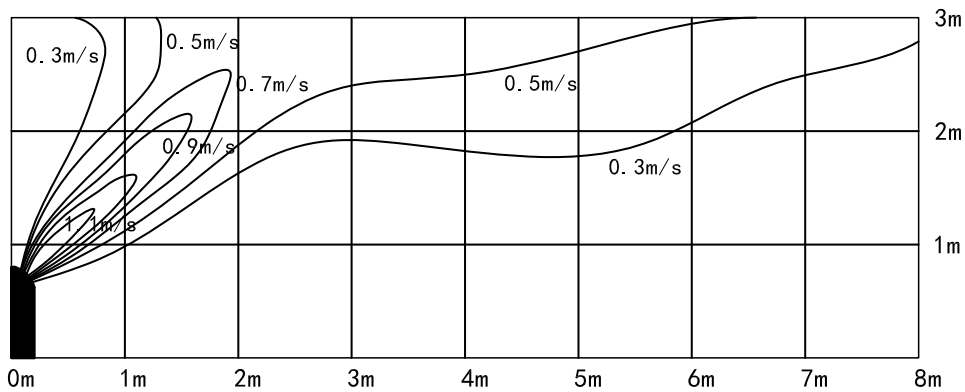
5) Floor installation/Cooling/Air velocity distribution



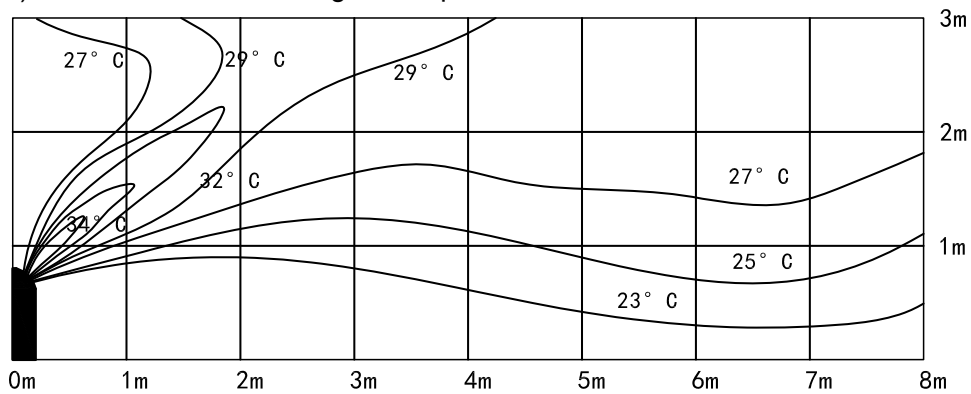
6) Floor installation/Cooling/Air temperature distribution



7) Floor installation/Heating/Air velocity distribution



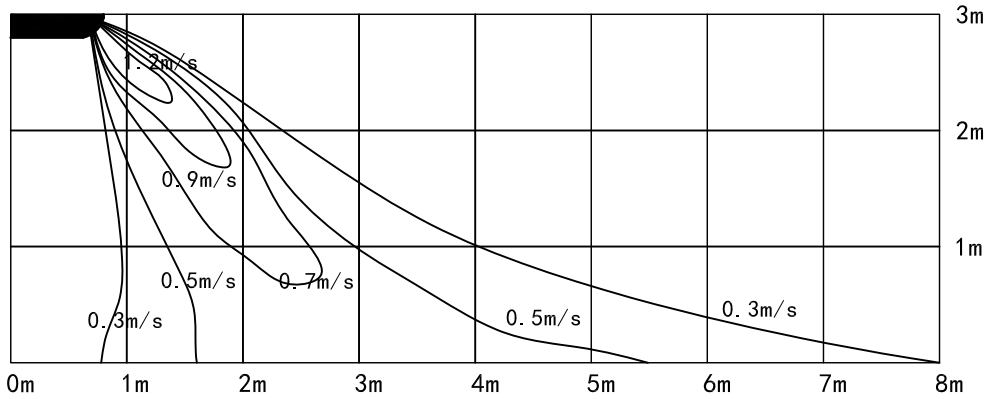
8) Floor installation/Heating/Air temperature distribution



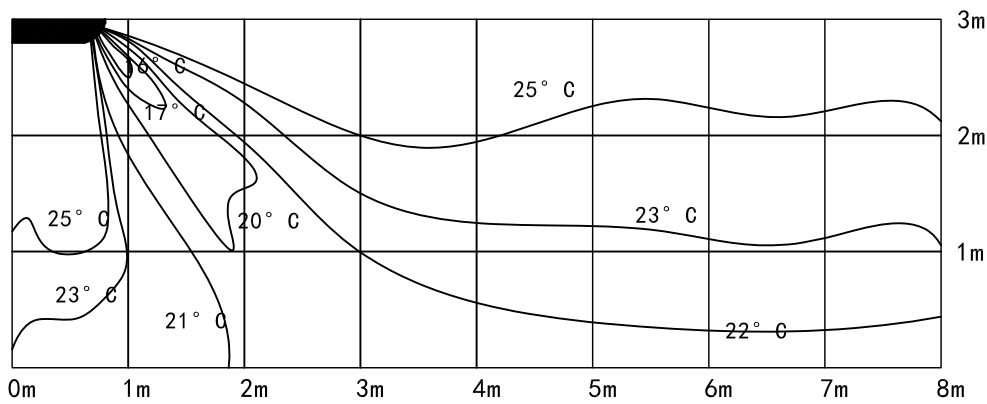
7. AIR FLOW DISTRIBUTION

4.0HP

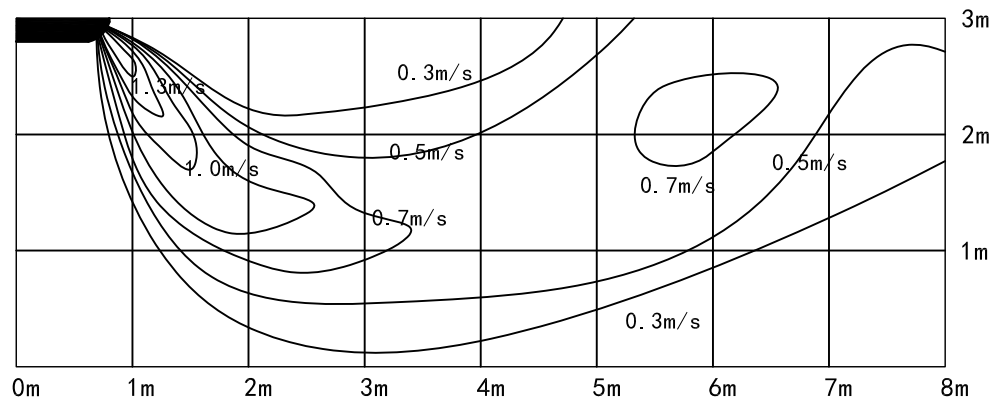
1) Ceiling installation/Cooling/Air velocity distribution



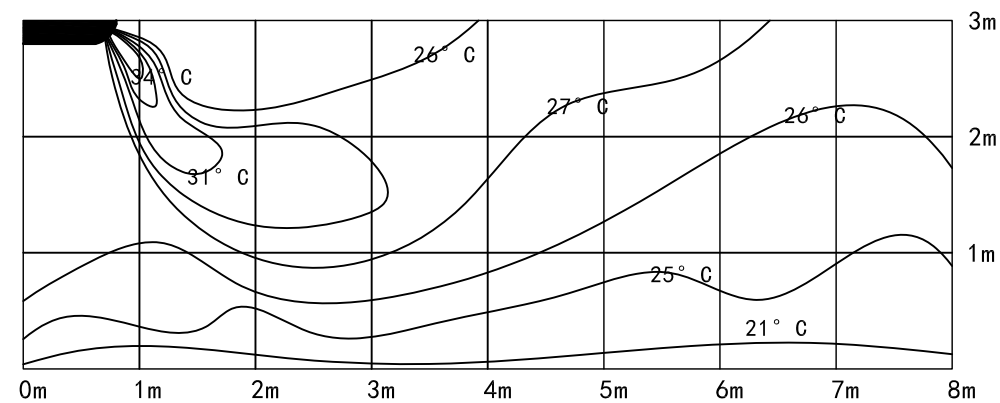
2) Ceiling installation/Cooling/Air temperature distribution



3) Ceiling installation/Heating/Air velocity distribution

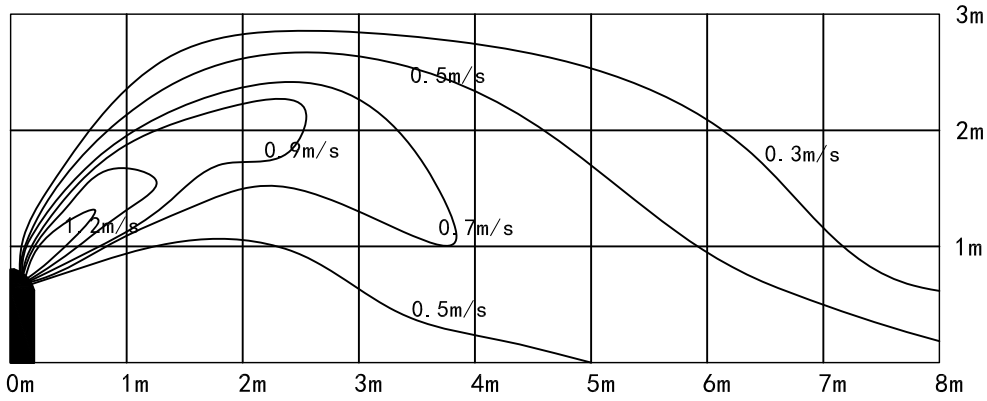


4) Ceiling install/Heating/Air temperature distribution

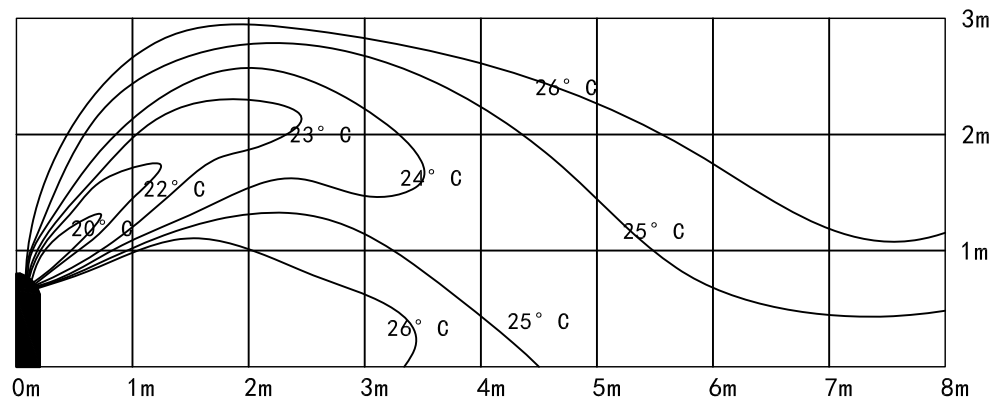


7. AIR FLOW DISTRIBUTION

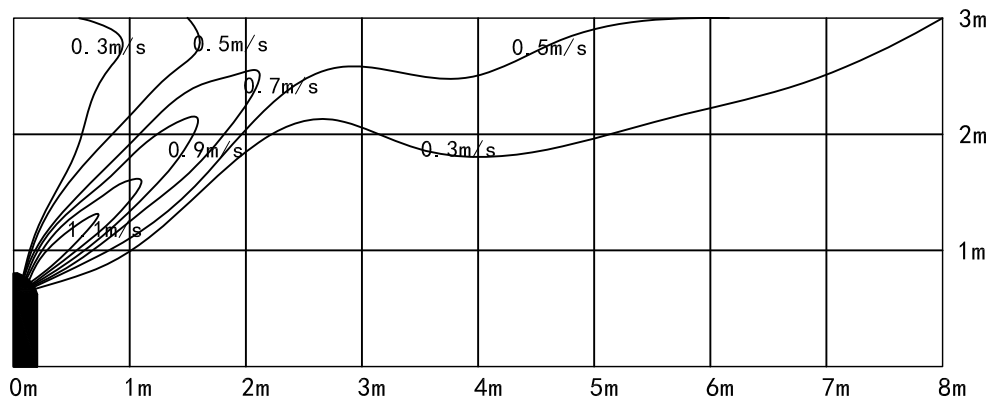
5) Floor installation/Cooling/Air velocity distribution



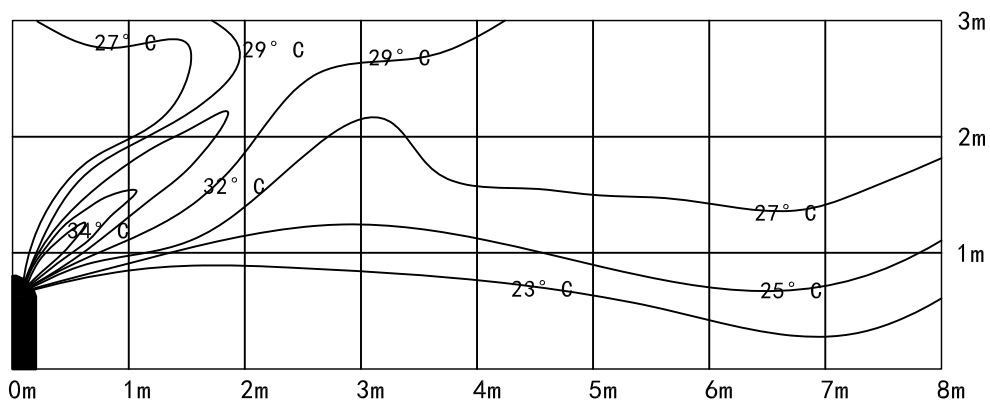
6) Floor installation/Cooling/Air temperature distribution



7) Floor installation/Heating/Air velocity distribution



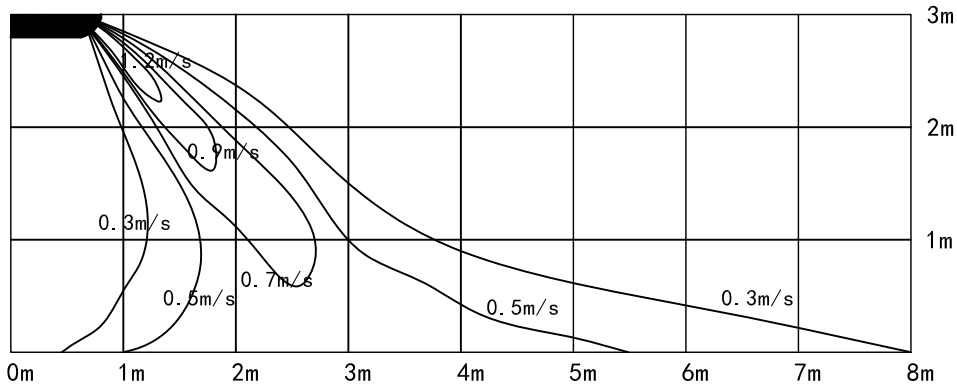
8) Floor installation/Heating/Air temperature distribution



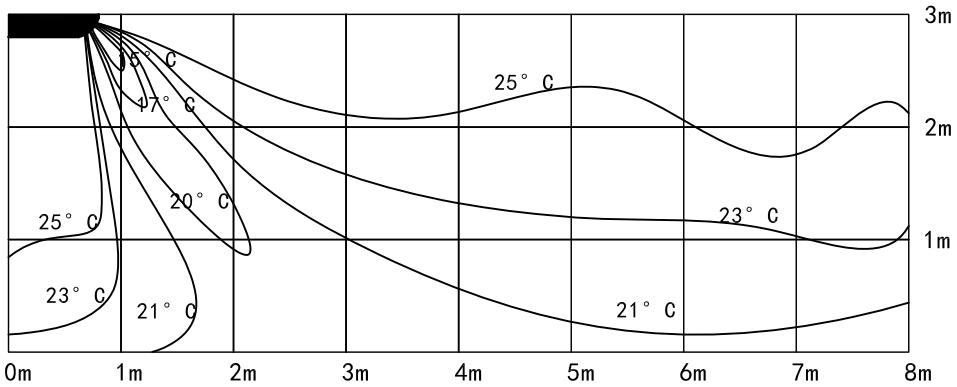
7. AIR FLOW DISTRIBUTION

5.0HP

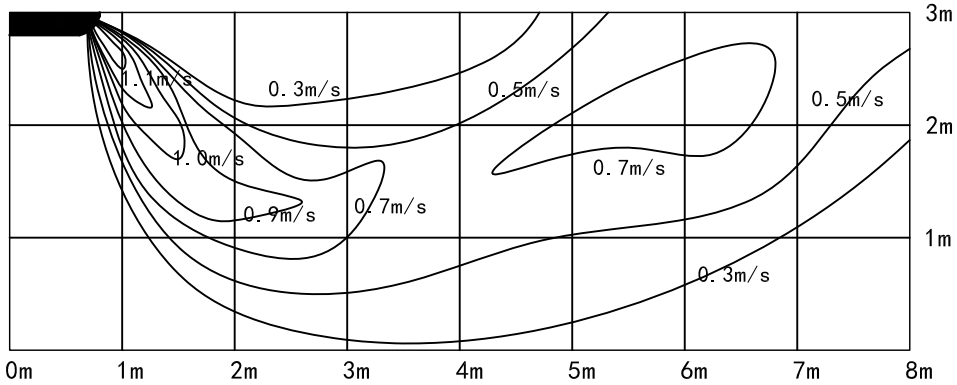
1) Floor installation/Cooling/Air velocity distribution



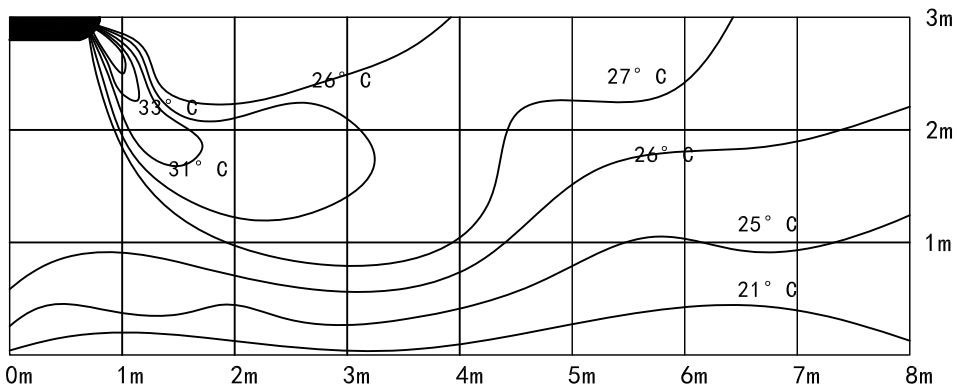
2) Floor installation/Cooling/Air temperature distribution



3) Floor installation/Heating/Air velocity distribution

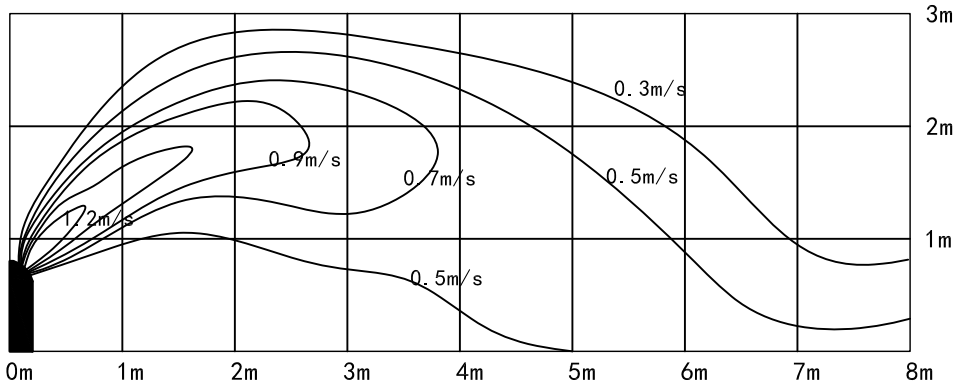


4) Floor installation/Heating/Air temperature distribution

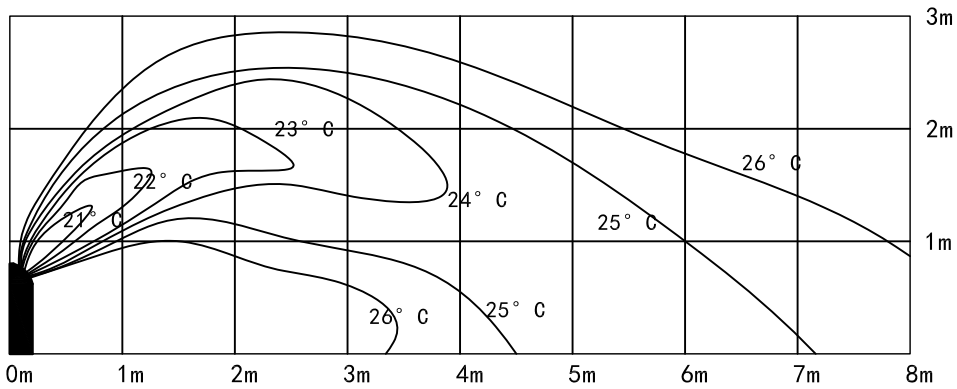


7. AIR FLOW DISTRIBUTION

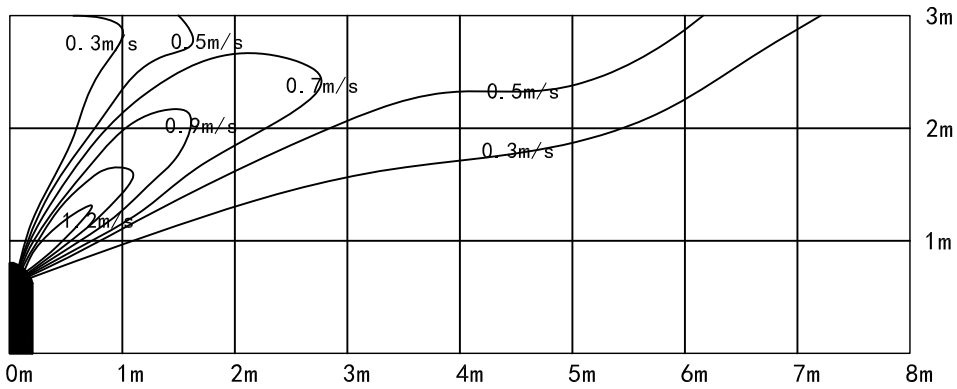
5) Floor installation/Cooling/Air velocity distribution



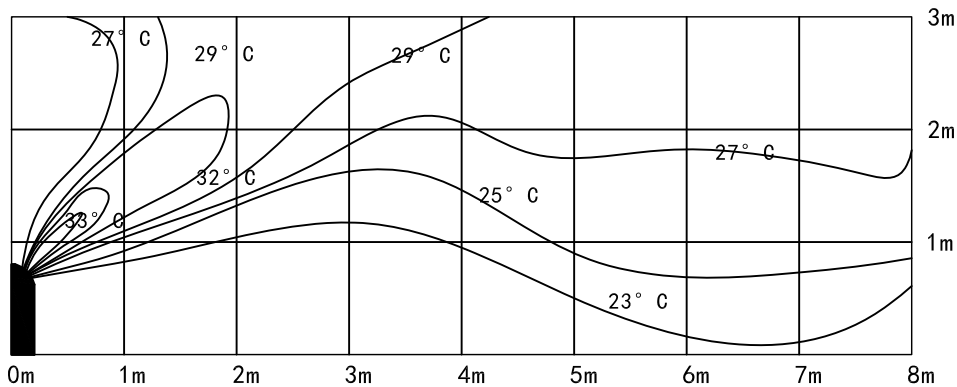
6) Floor installation/Cooling/Air temperature distribution



7) Floor installation/Heating/Air velocity distribution



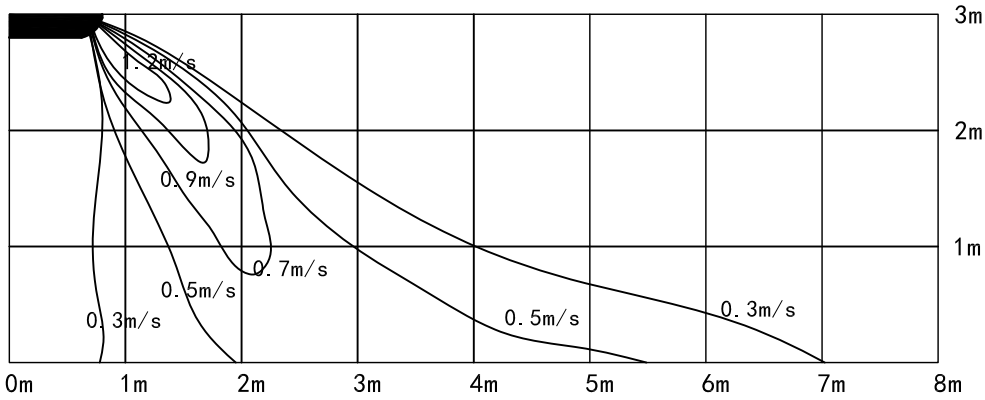
8) Floor installation/Heating/Air temperature distribution



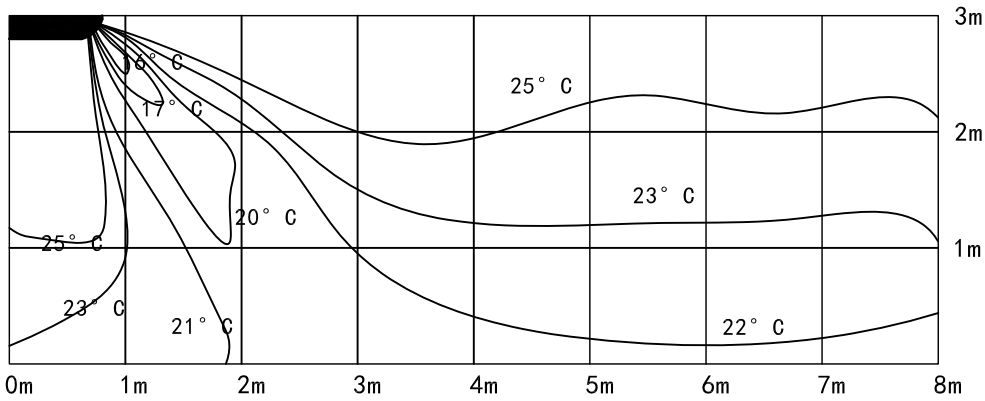
7. AIR FLOW DISTRIBUTION

6.0HP

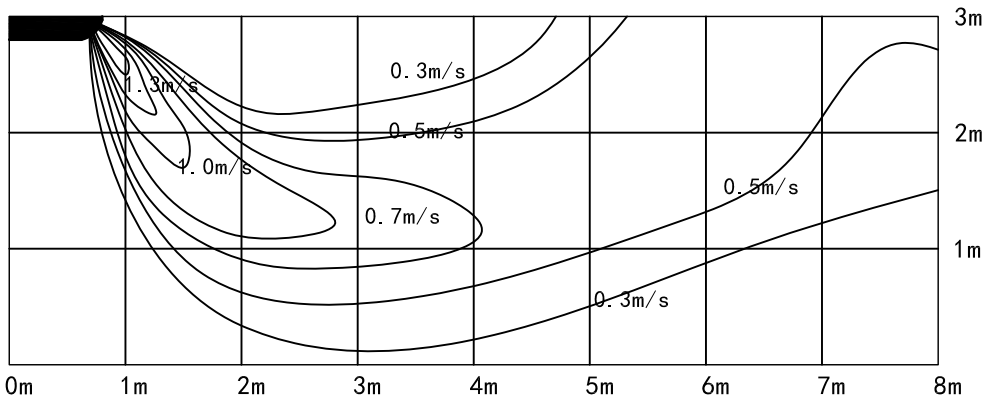
1) Ceiling installation/Cooling/Air velocity distribution



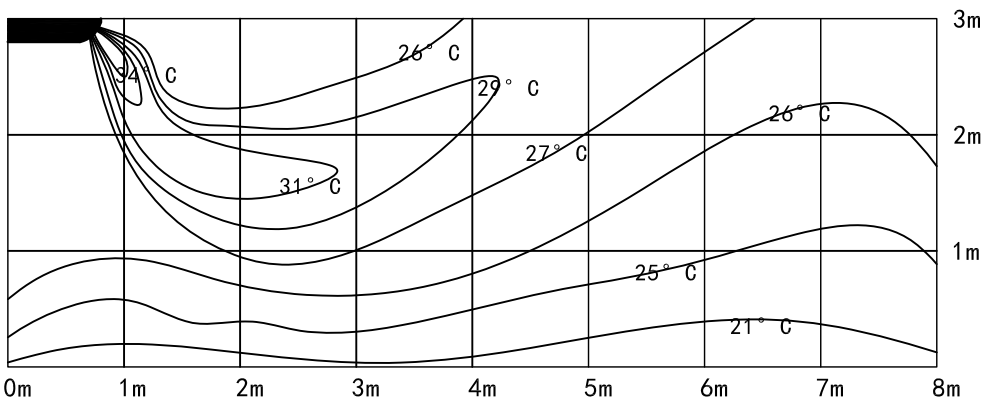
2) Ceiling installation/Cooling/Air temperature distribution



3) Ceiling installation/Heating/Air velocity distribution

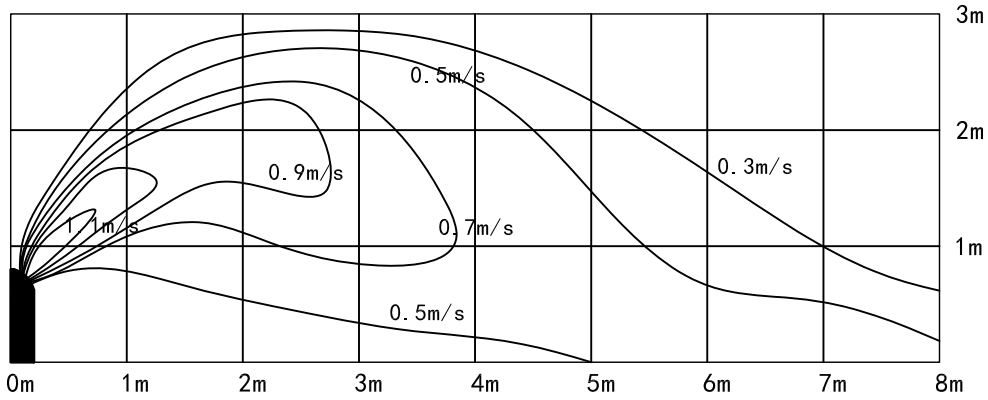


4) Ceiling installation/Heating/Air temperature distribution

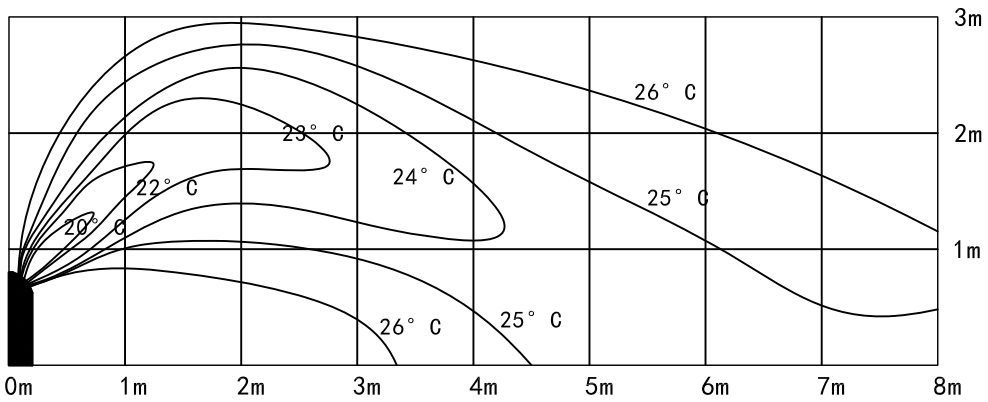


7. AIR FLOW DISTRIBUTION

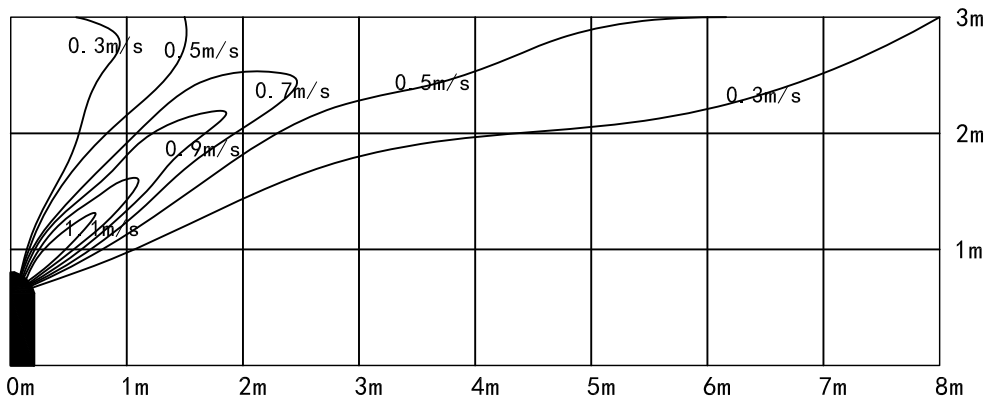
5) Floor installation/Cooling/Air velocity distribution



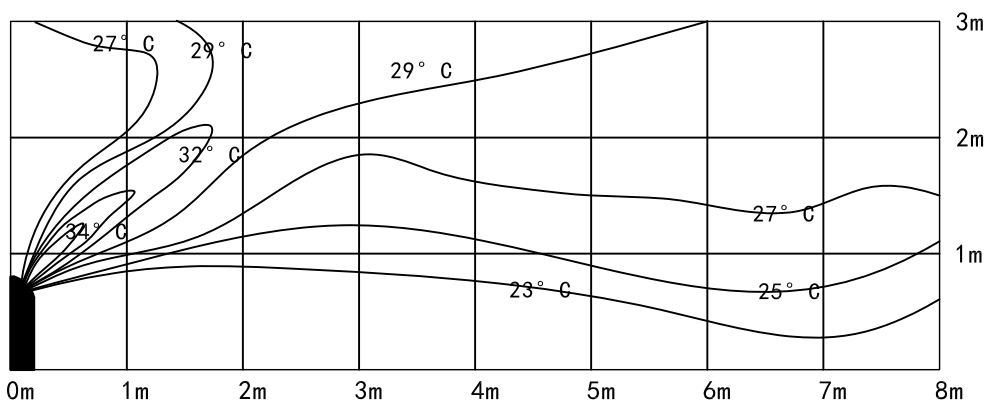
6) Floor installation/Cooling/Air temperature distribution



7) Floor installation/Heating/Air velocity distribution



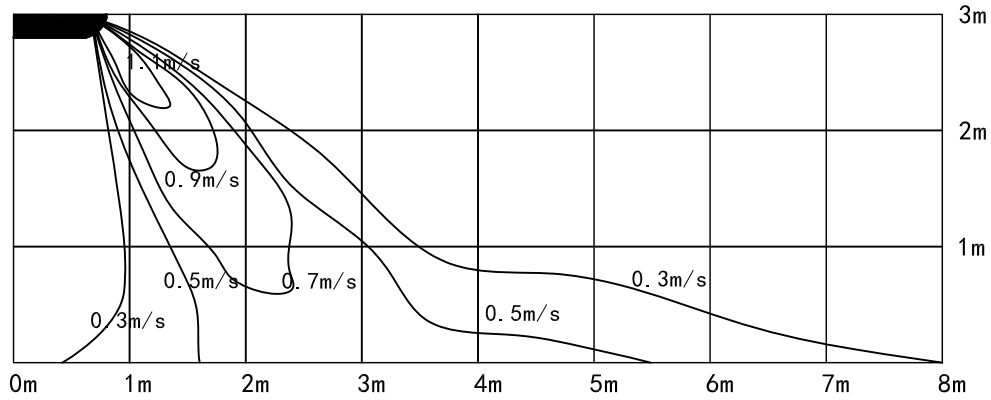
8) Floor installation/Heating/Air temperature distribution



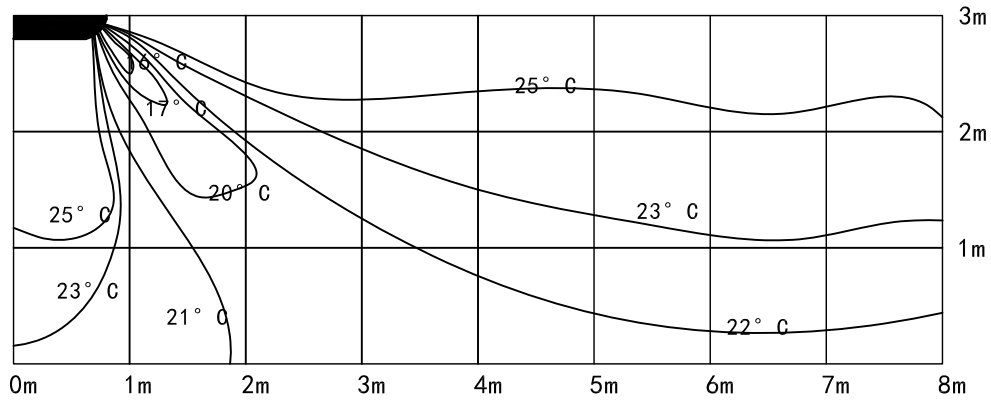
7. AIR FLOW DISTRIBUTION

6.5HP

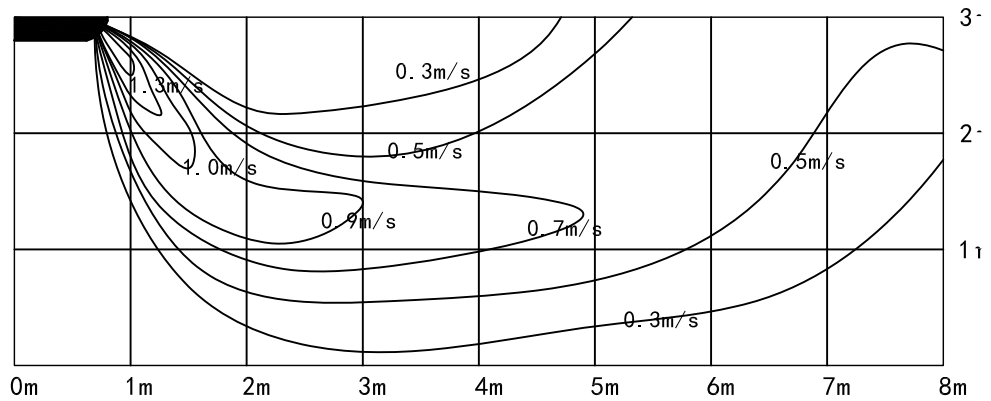
1) Ceiling installation/Cooling/Air velocity distribution



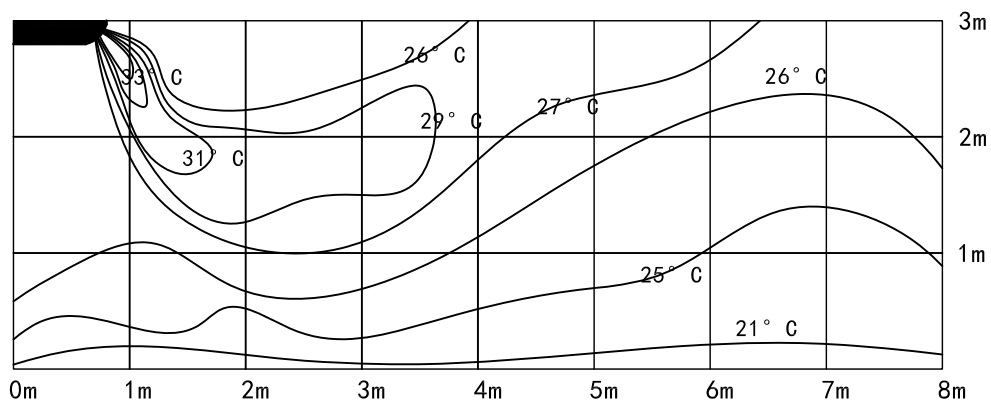
2) Ceiling installation/Cooling/Air temperature distribution



3) Ceiling installation/Heating/Air velocity distribution

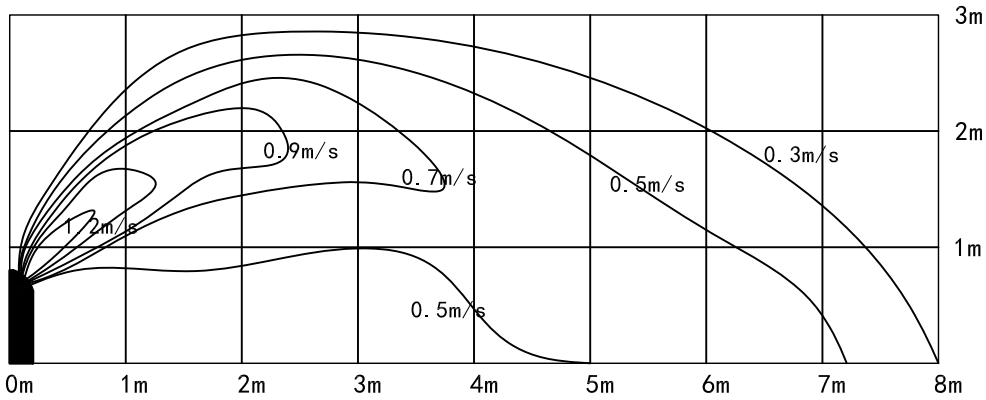


4) Ceiling installation/Heating/Air temperature distribution

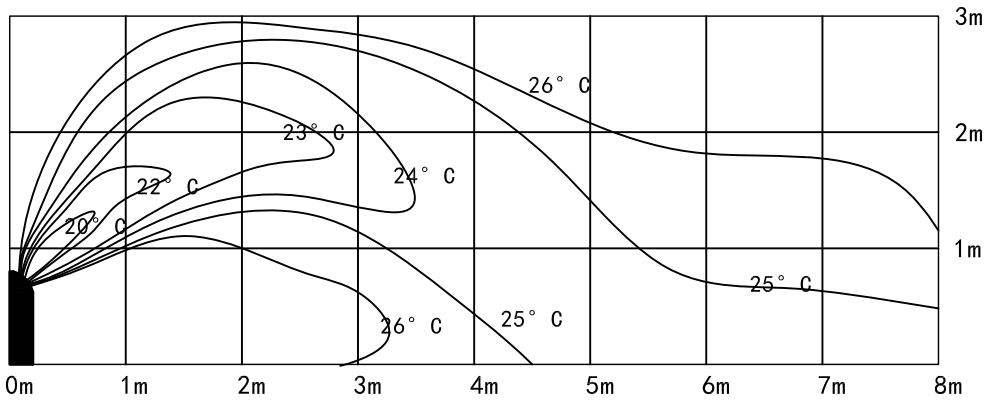


7. AIR FLOW DISTRIBUTION

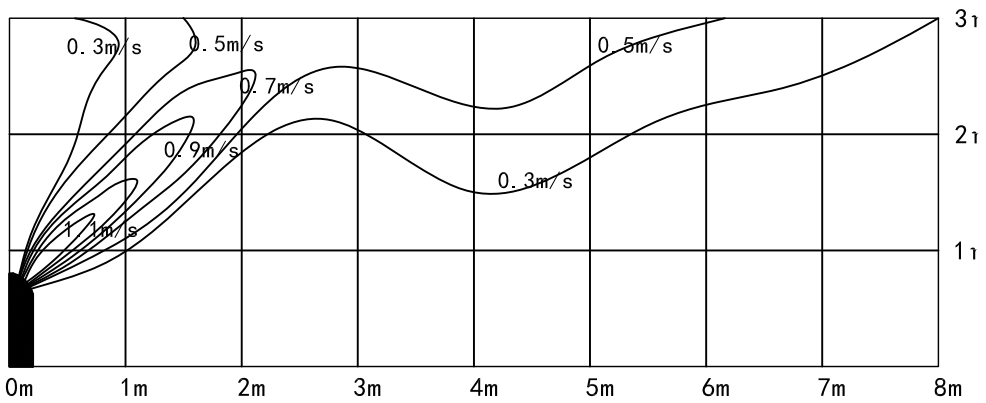
5) Floor installation/Cooling/Air velocity distribution



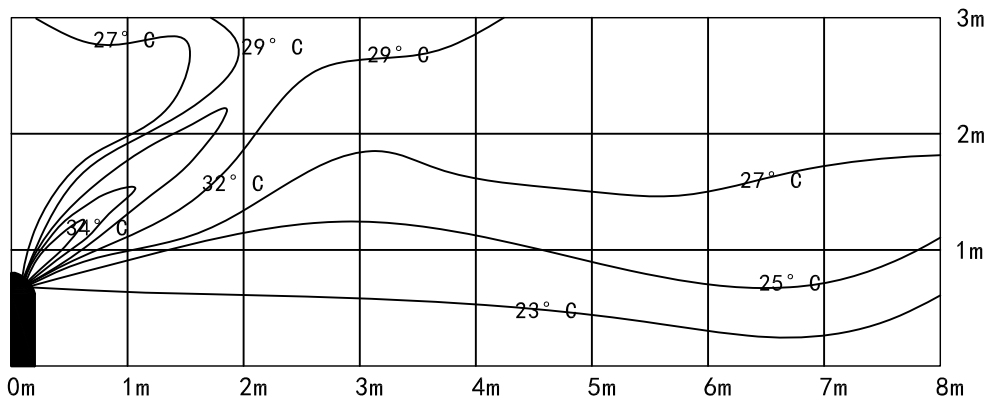
6) Floor installation/Cooling/Air temperature distribution



7) Floor installation/Heating/Air velocity distribution



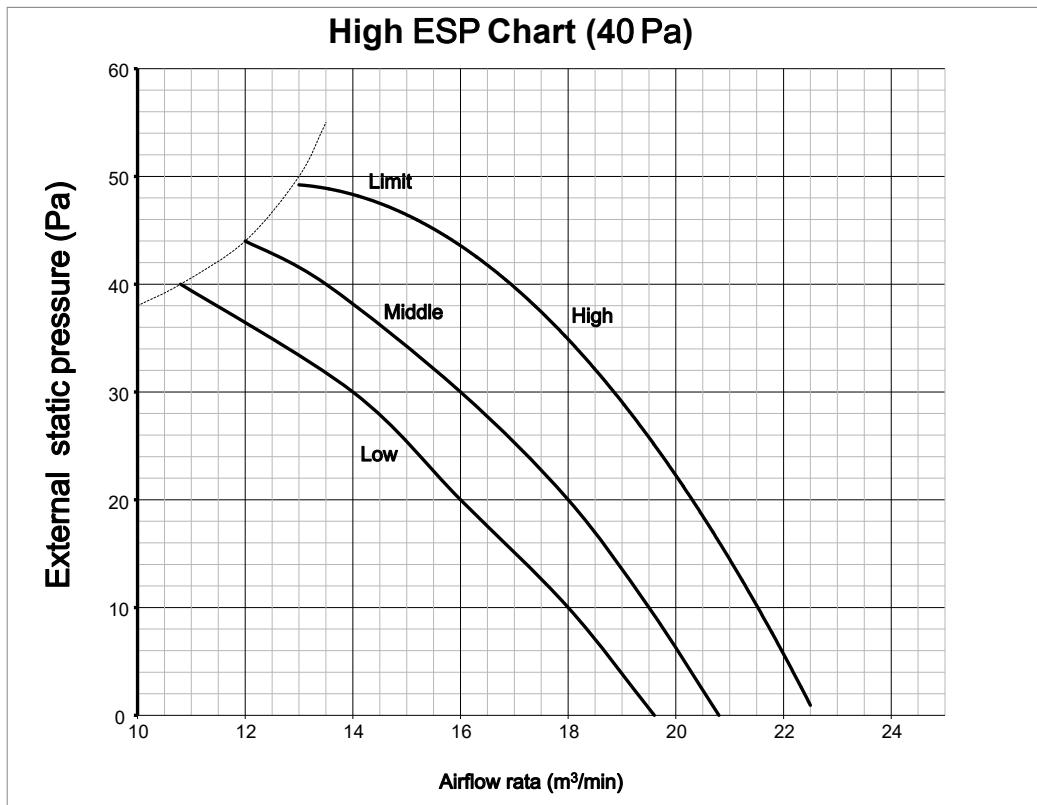
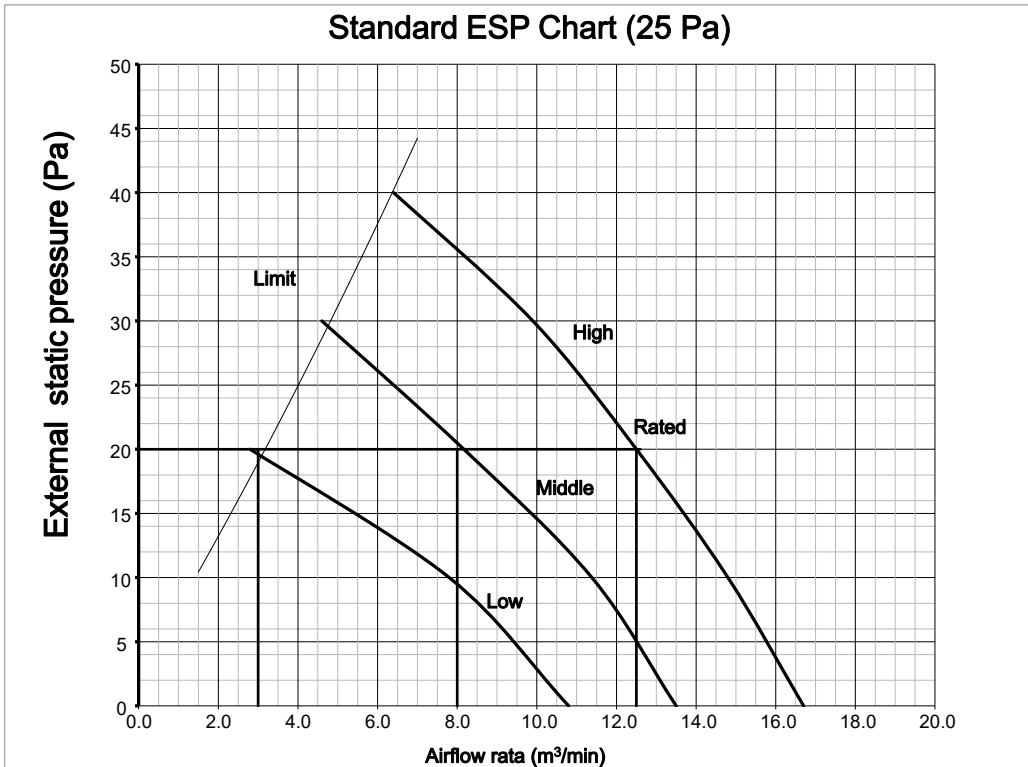
8) Floor installation/Heating/Air temperature distribution



8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

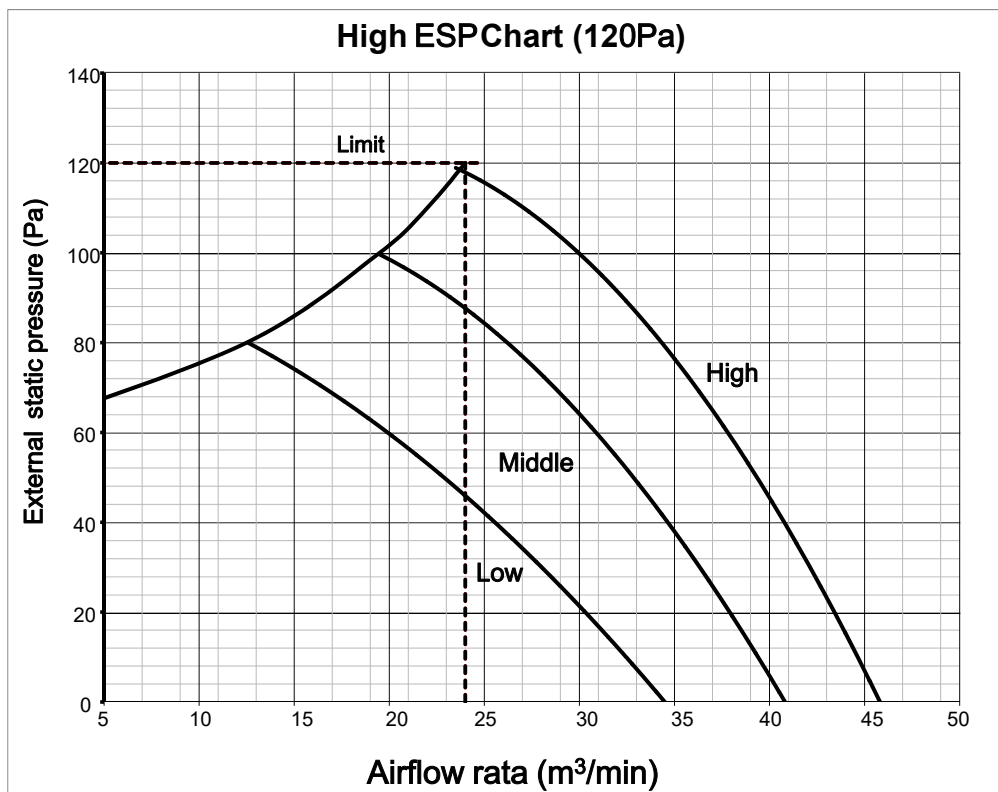
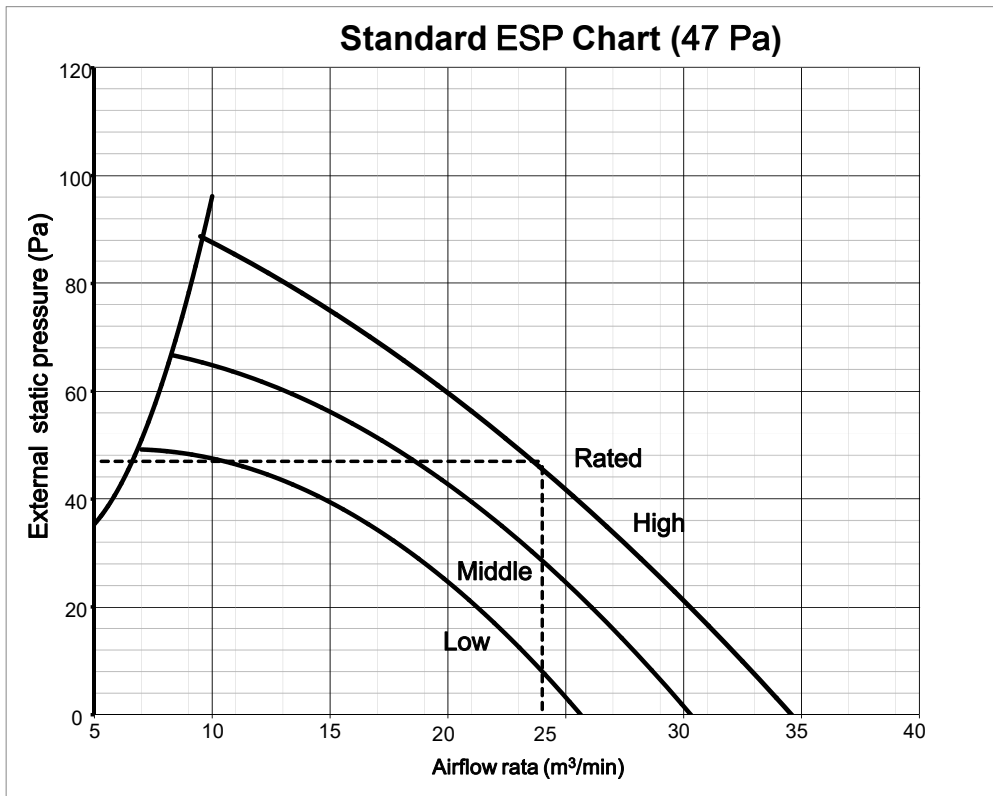
ESP (External Static Pressure) Chart (Ducted Type)

3.0HP



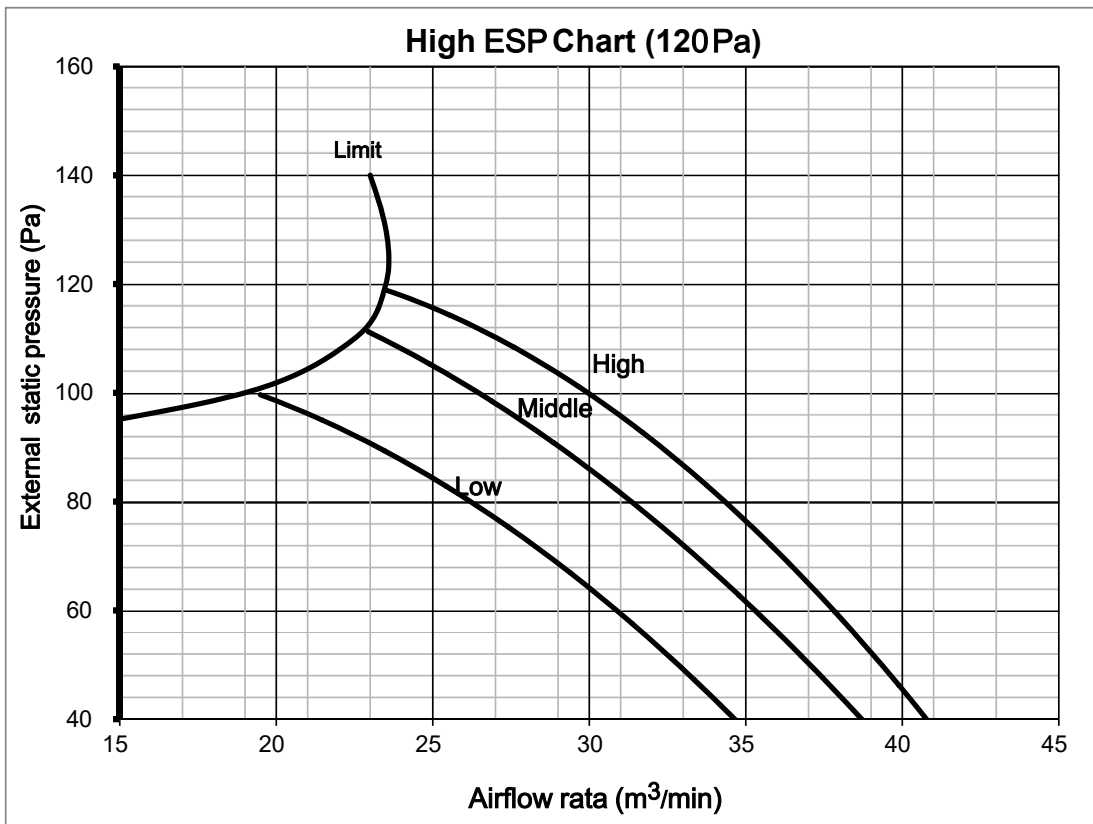
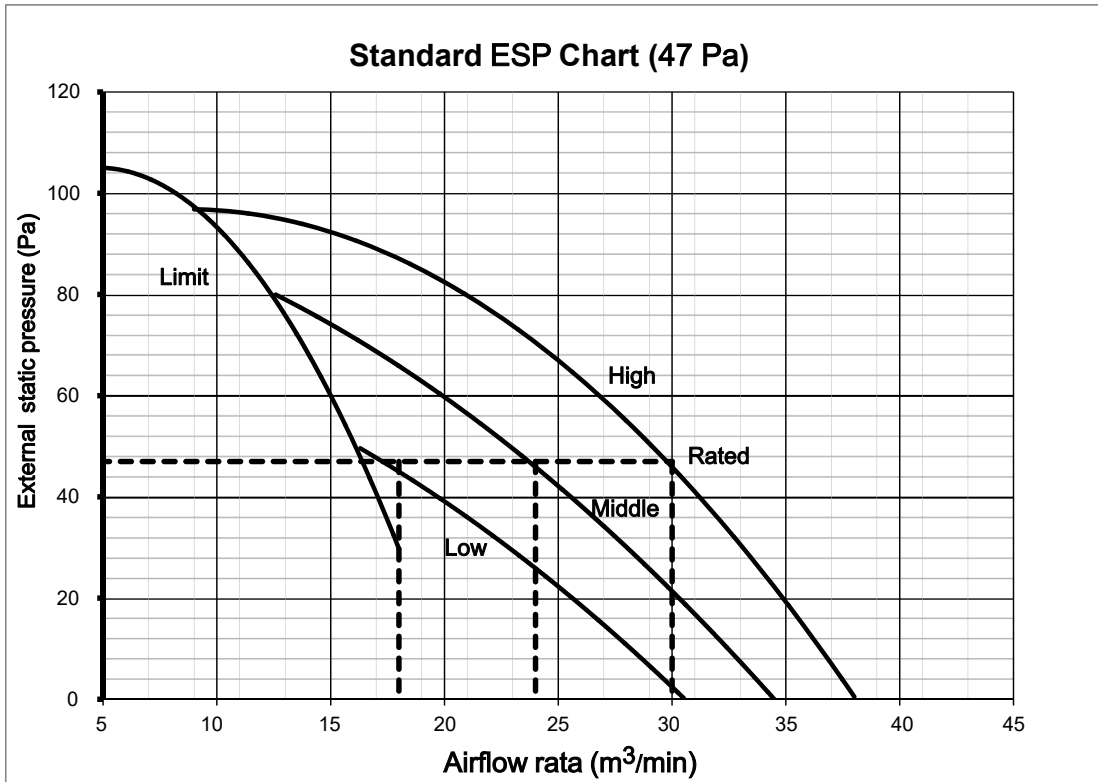
8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

3.5HP



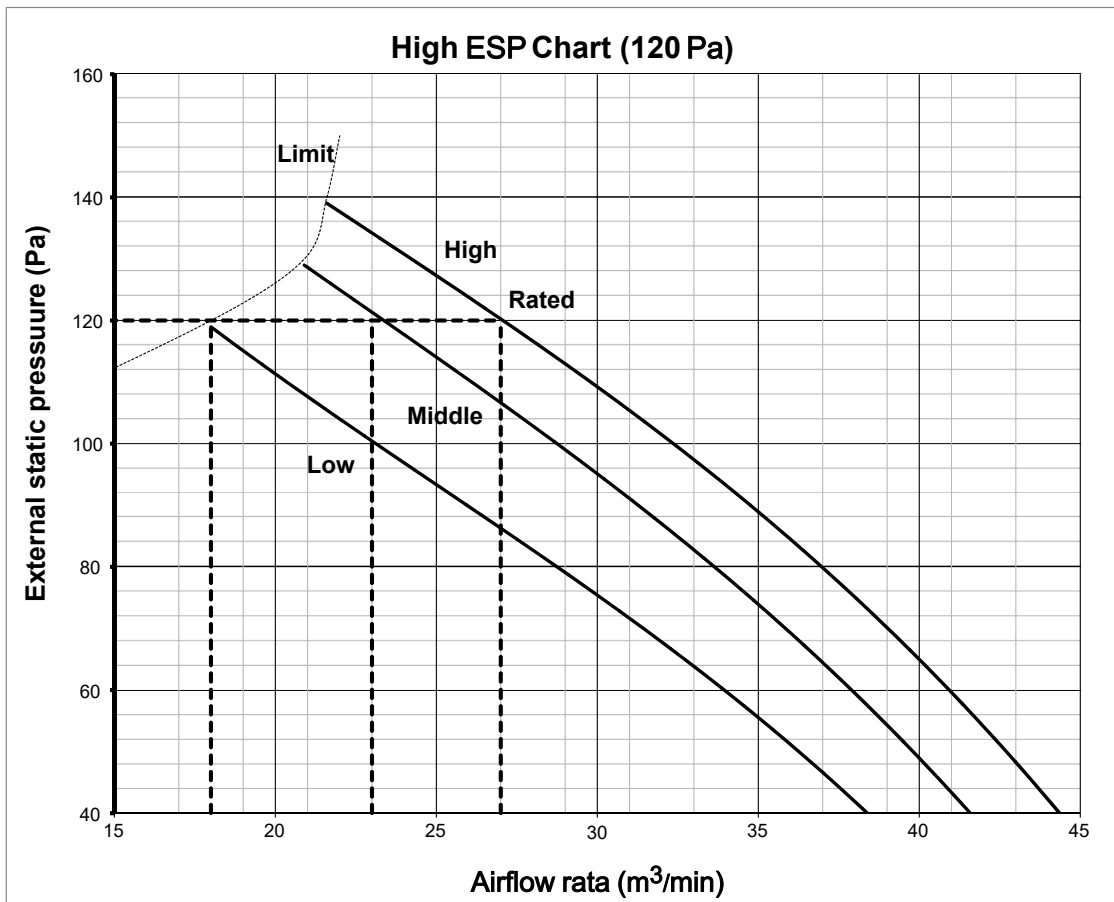
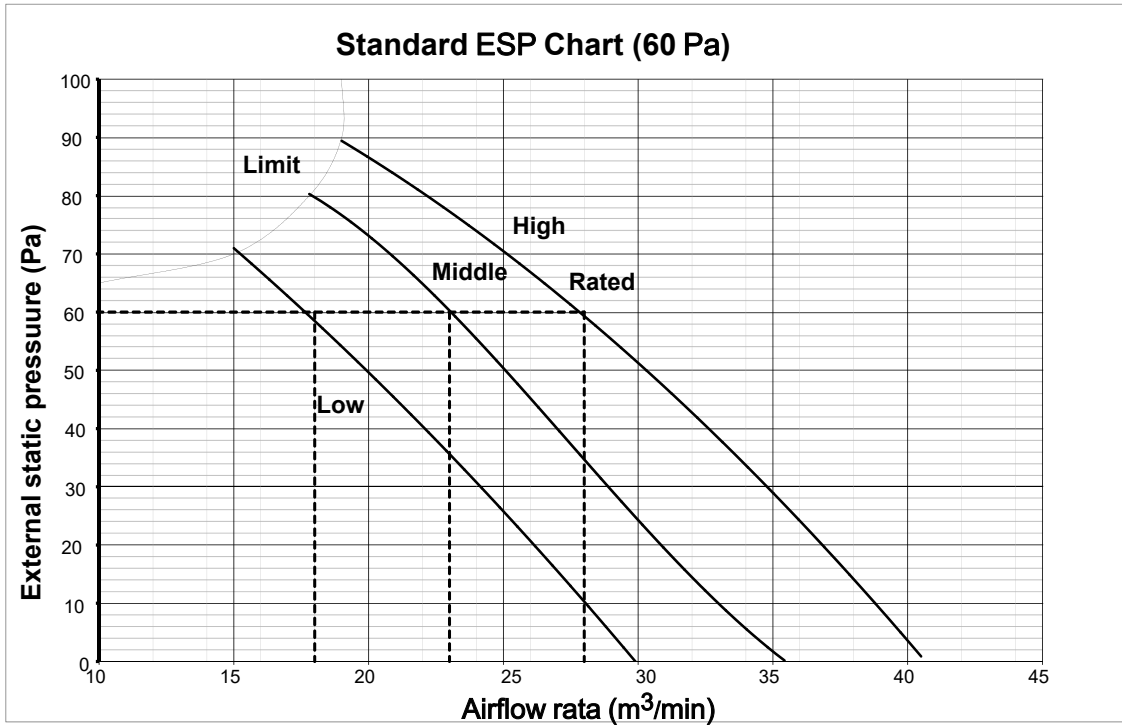
8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

4.0HP



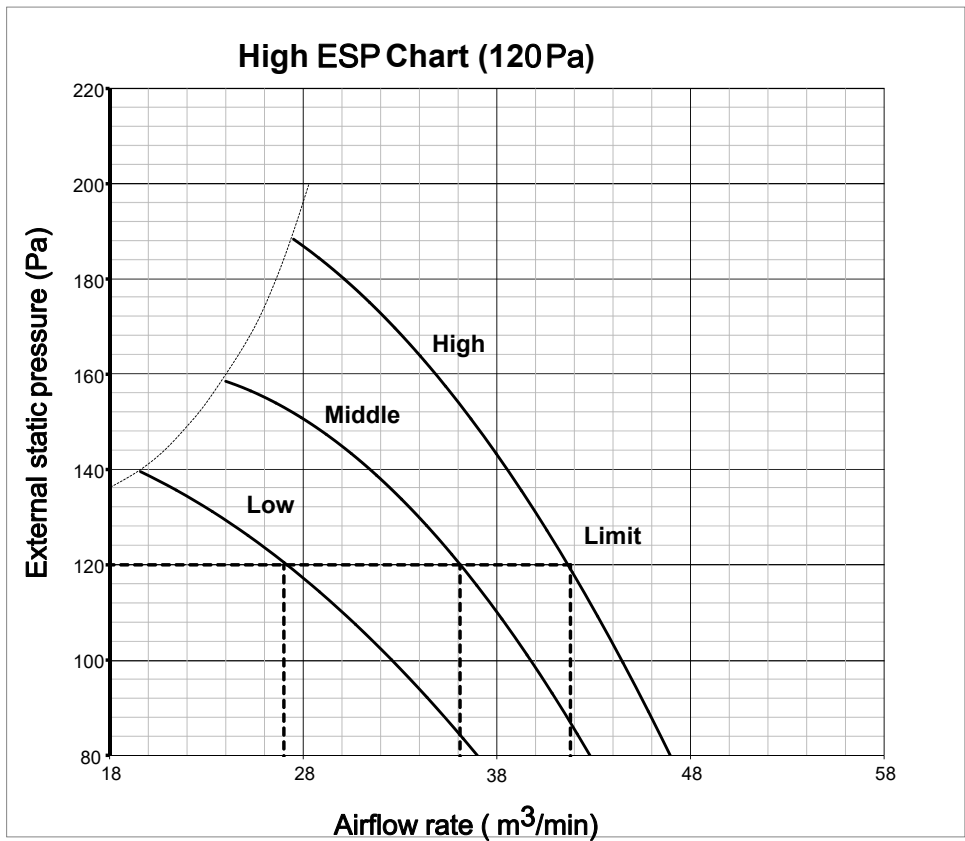
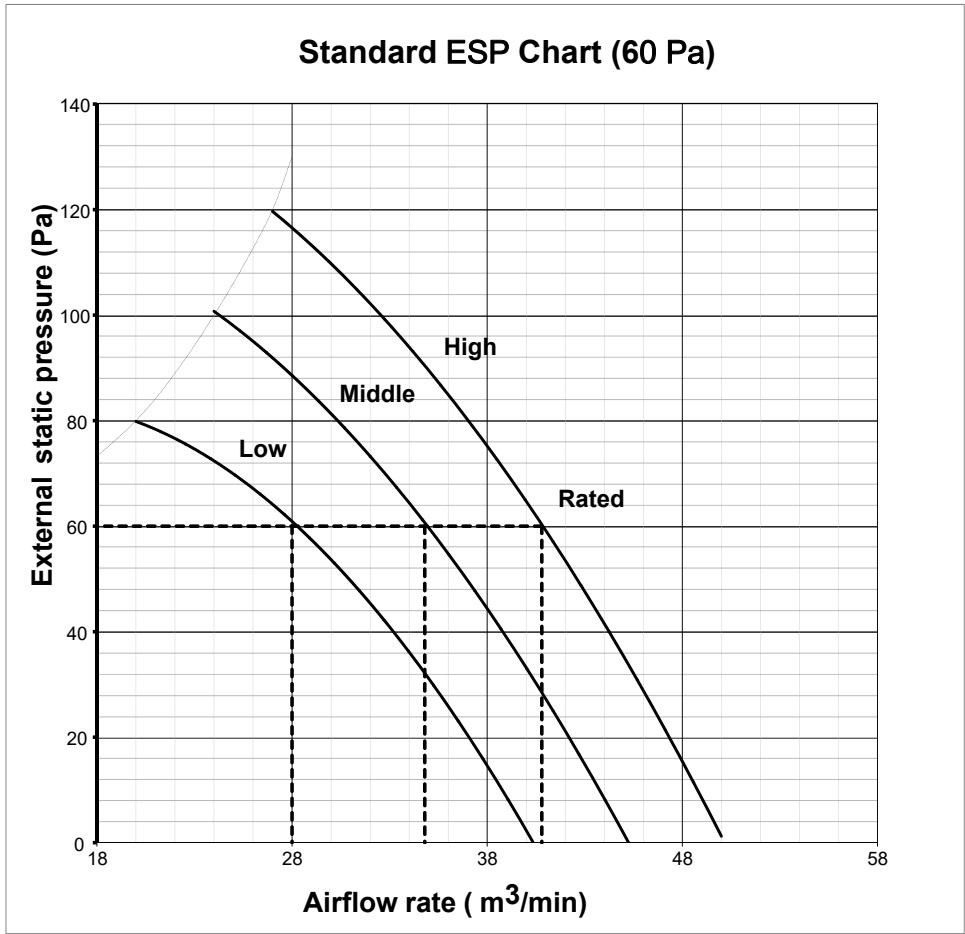
8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

5.0HP



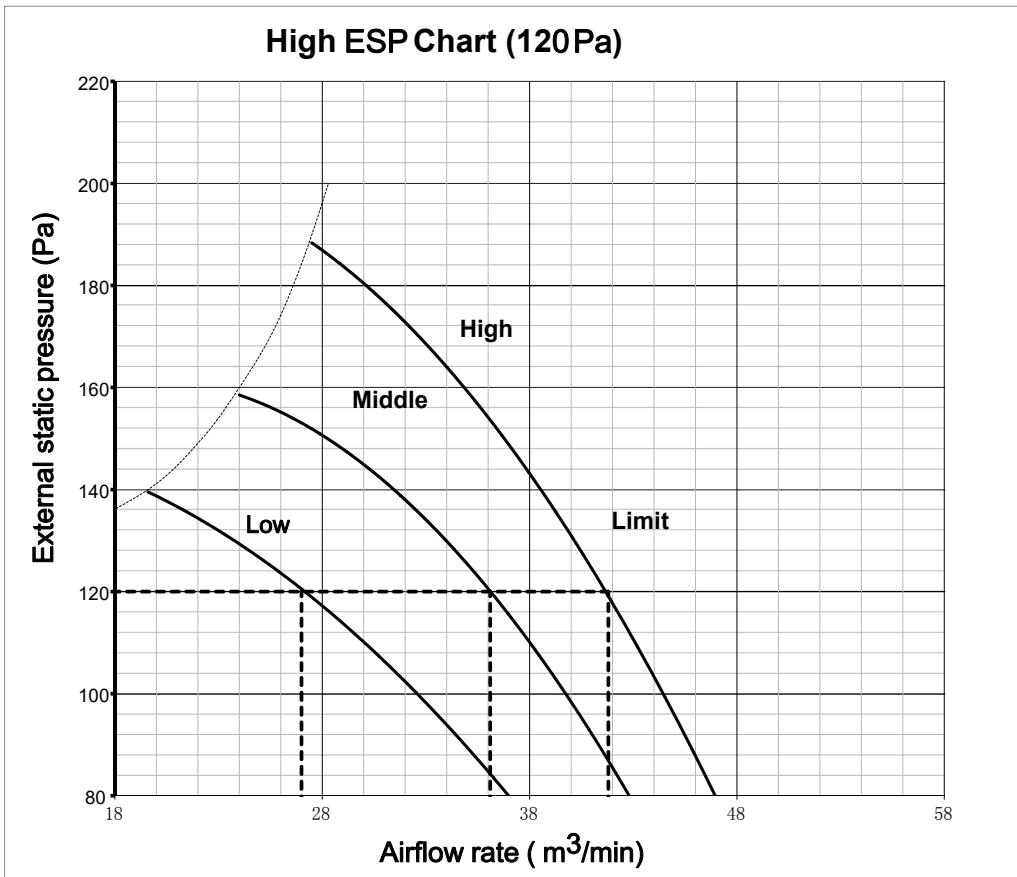
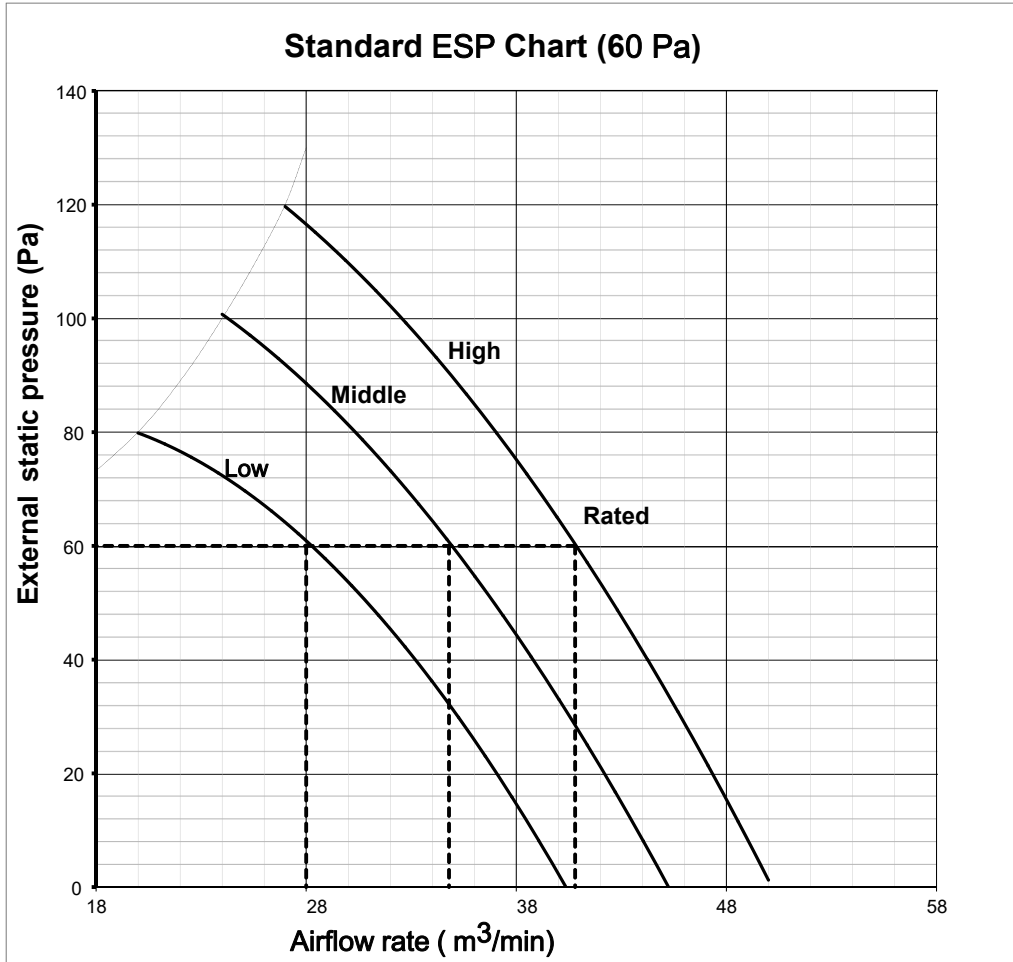
8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

6.0HP



8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

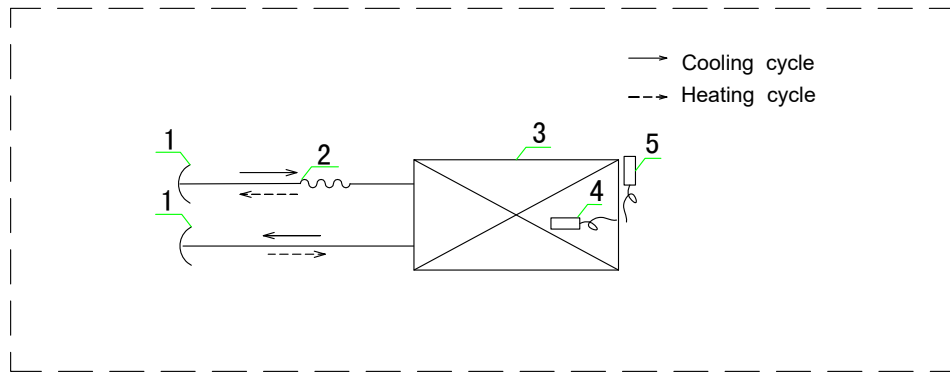
6.5HP



9. REFRIGERANT CYCLE

Refrigerant cycle

Indoor unit

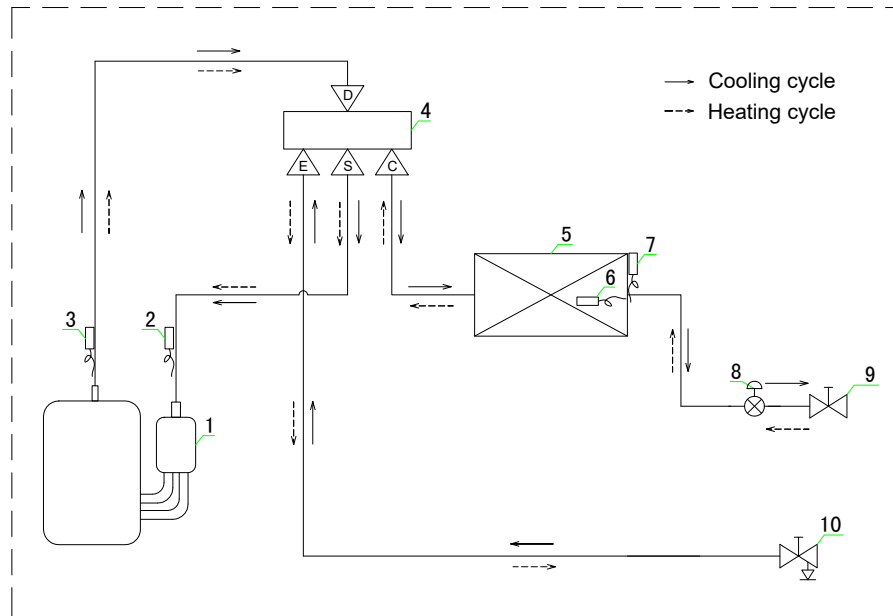


List of components	
1	Hexagon nut
2	Split capillary
3	Indoor heat exchanger
4	Ambient temperature sensor
5	Coil temperature sensor

9. REFRIGERANT CYCLE

Outdoor unit

3.0/3.5HP

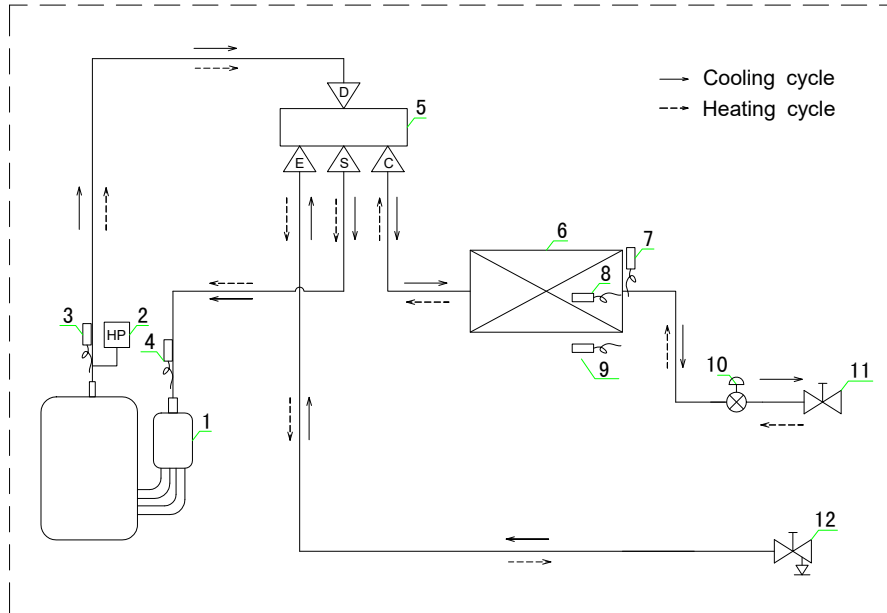


List of components

List of components	
1	Compressor
2	Suction temperature sensor
3	Discharge temperature sensor
4	4-way valve
5	Outdoor heat exchanger
6	Ambient temperature sensor
7	Coil temperature sensor
8	Electronic expansion valve
9	Stop valve (Liquid)
10	Stop valve (Gas)

9. REFRIGERANT CYCLE

4.0HP

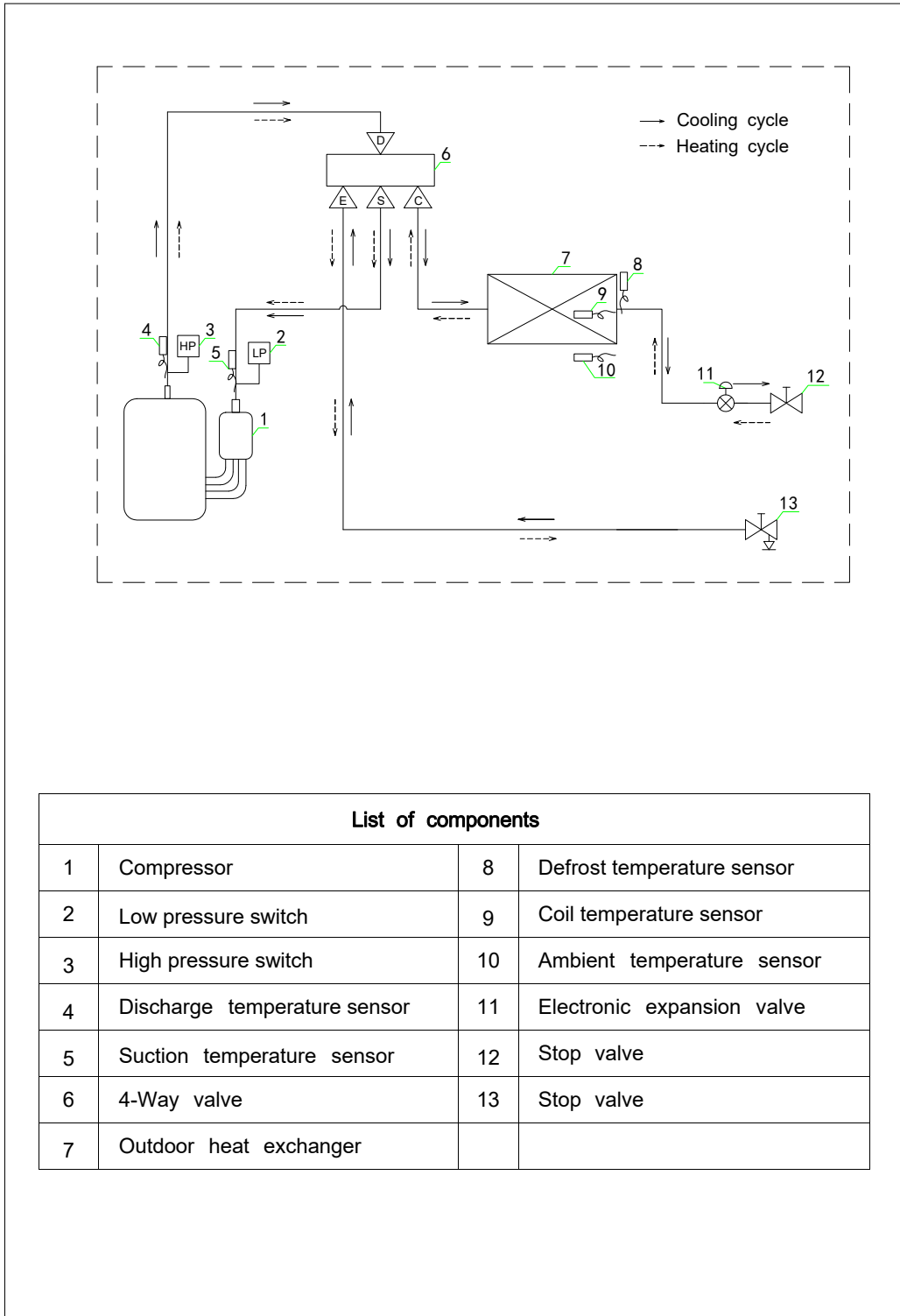


List of components

1	Compressor	7	Coil temperature sensor
2	High pressure switch	8	Defrost temperature sensor
3	Discharge temperature sensor	9	Ambient temperature sensor
4	Suction temperature sensor	10	Electronic expansion valve
5	4-Way valve	11	Stop valve (Liquid)
6	Outdoor heat exchanger	12	Stop valve (Gas)

9. REFRIGERANT CYCLE

5.0HP

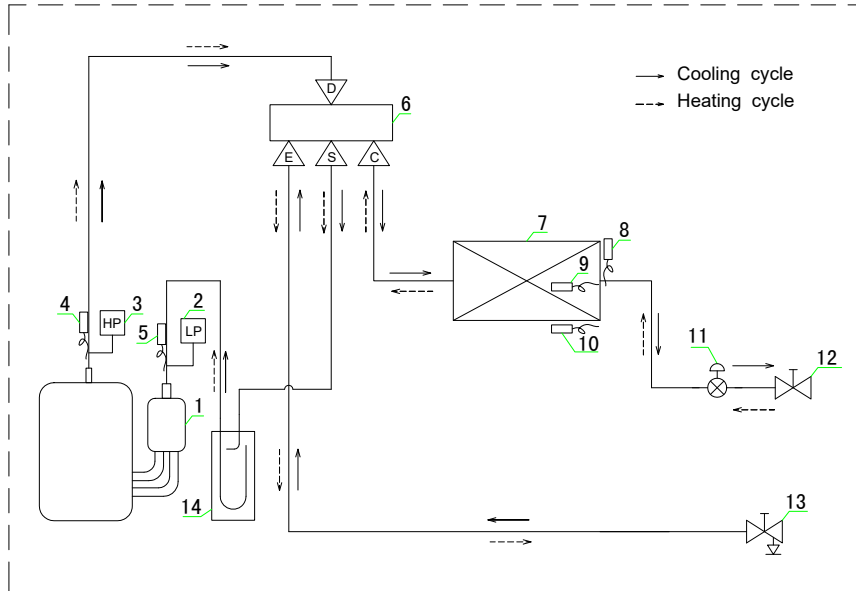


List of components

1	Compressor	8	Defrost temperature sensor
2	Low pressure switch	9	Coil temperature sensor
3	High pressure switch	10	Ambient temperature sensor
4	Discharge temperature sensor	11	Electronic expansion valve
5	Suction temperature sensor	12	Stop valve
6	4-Way valve	13	Stop valve
7	Outdoor heat exchanger		

9. REFRIGERANT CYCLE

6.0/6.5HP



List of components

1	Compressor	8	Coil temperature sensor
2	Low pressure switch	9	Ambient temperature sensor
3	High pressure switch	10	Defrost temperature sensor
4	Discharge temperature sensor	11	Electronic expansion valve
5	Suction temperature sensor	12	Stop valve
6	4-Way valve	13	Stop valve
7	Outdoor heat exchanger	14	Gas-liquid separator

10. FRESH AIR INTAKE FUNCTION

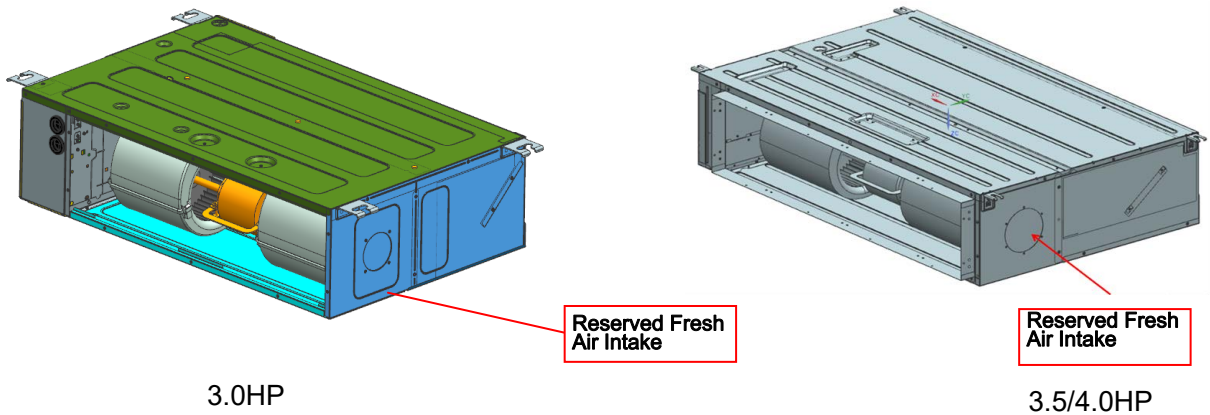
Fresh air intake function

Ducted (3.0/3.5/4.0HP)

Indoor unit can take fresh air from the reserved fresh air intake, the size of the fresh air intake hole is $\Phi 65\text{mm}$ (3.0HP), $\Phi 125\text{mm}$ (3.5/4.0HP).

Please follow the steps below when needed.

- 1) Cut off the reserved metal circular hole on the base board.
- 2) Connect air duct with the fresh air intake.

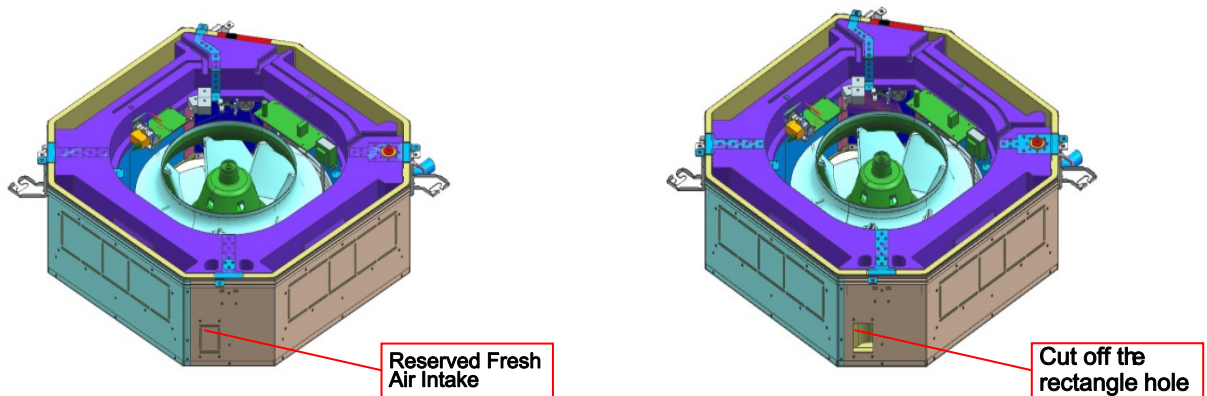


Cassette

Indoor unit can take fresh air from the reserved fresh air intake, the size of the fresh air intake hole is $75 \times 53(\text{mm})$.

Please follow the steps below when needed.

- 1) Cut off the reserved metal rectangular hole on the base board.
- 2) Cut off the foam material on the a rectangular hole.
- 3) Connect air duct with the fresh air intake.

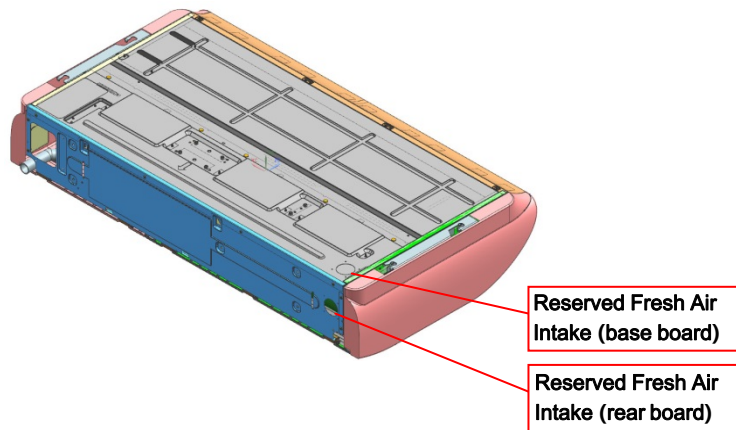


10. FRESH AIR INTAKE FUNCTION

Floor ceiling

The floor ceiling indoor units are provided with fresh air function. Indoor unit can take the fresh air from the reserved fresh air intake, the size of the fresh air intake hole is $\Phi 50(\text{mm})$. Please follow the steps below when needed.

- 1) Cut off the reserved metal circular hole on the base board or rear board according to installation location.
- 2) Connect air duct with the fresh air intake.

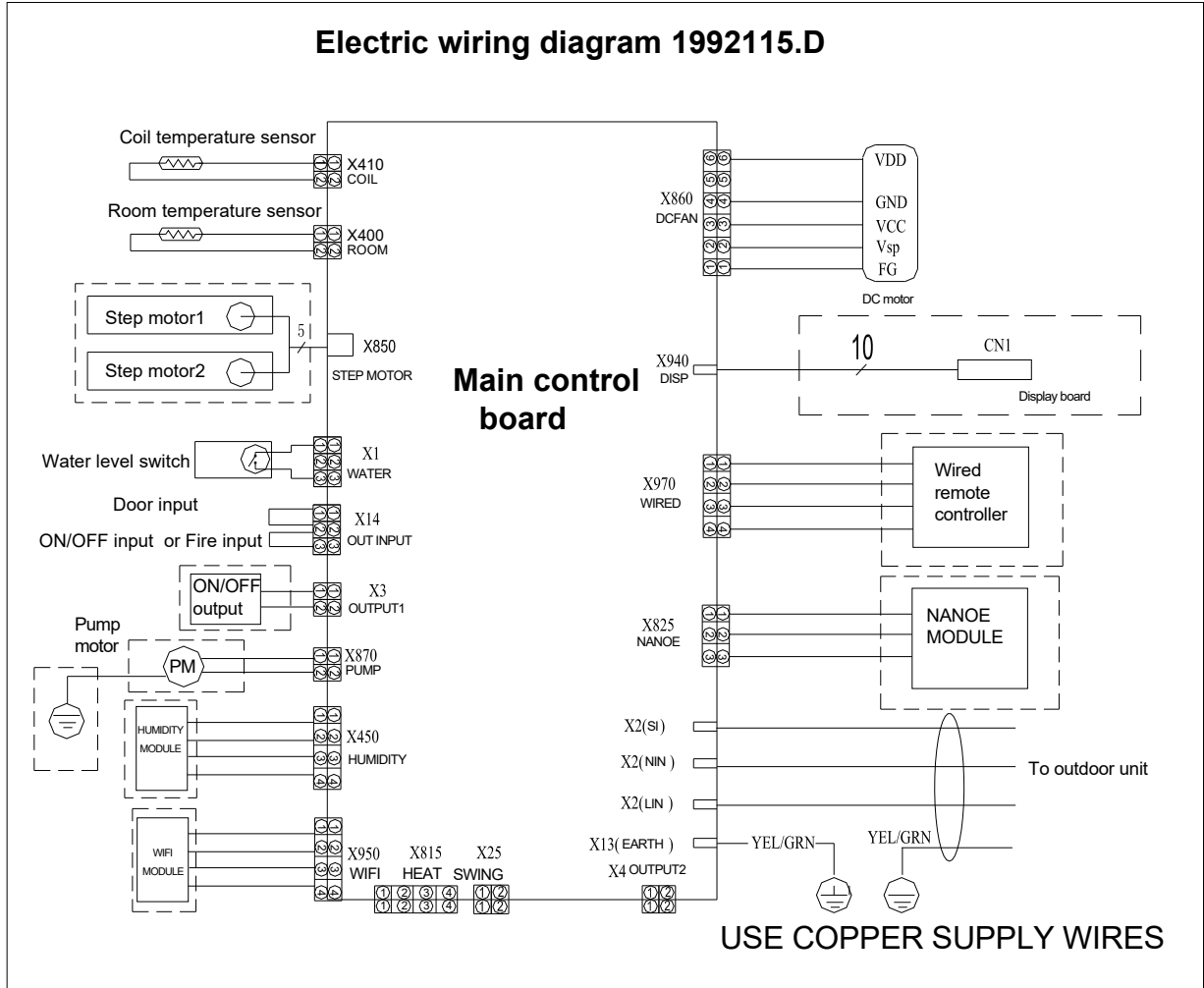


11. WIRING DIAGRAM

11.1 Electrical Wiring Diagram

Indoor unit

Duct type (3.0HP)



Remark:

Dashed parts are not available in some models.

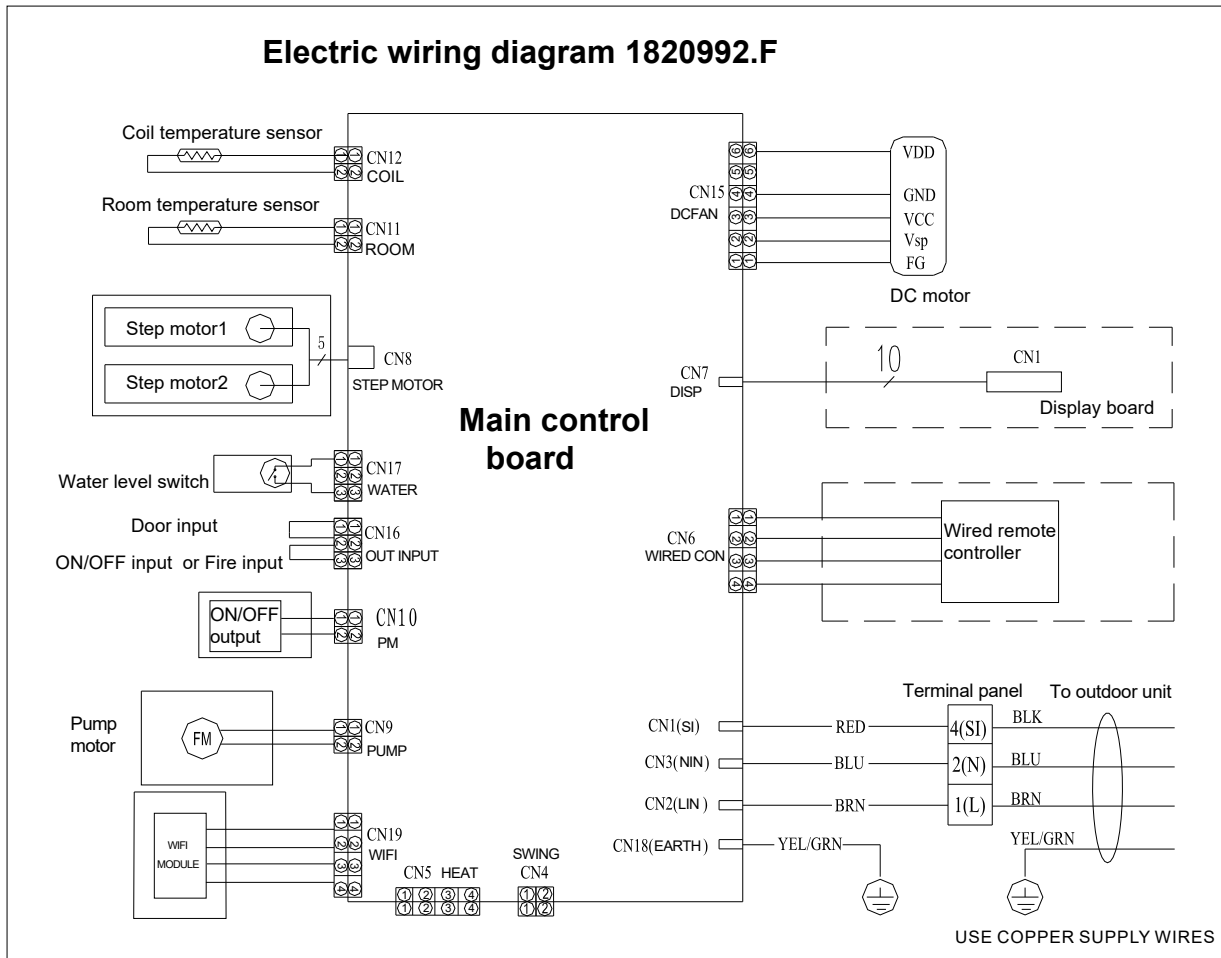
For details, see the table below.

	Indoor units model	Step motor	Pump motor	Humidity	WIFI Module	NANOE Module	Display board	Wired remote controller	ON/OFF output
Ducted	3.0HP							●	●

●--available part

11. WIRING DIAGRAM

Ducted type (3.5~6.0HP)



Remark:

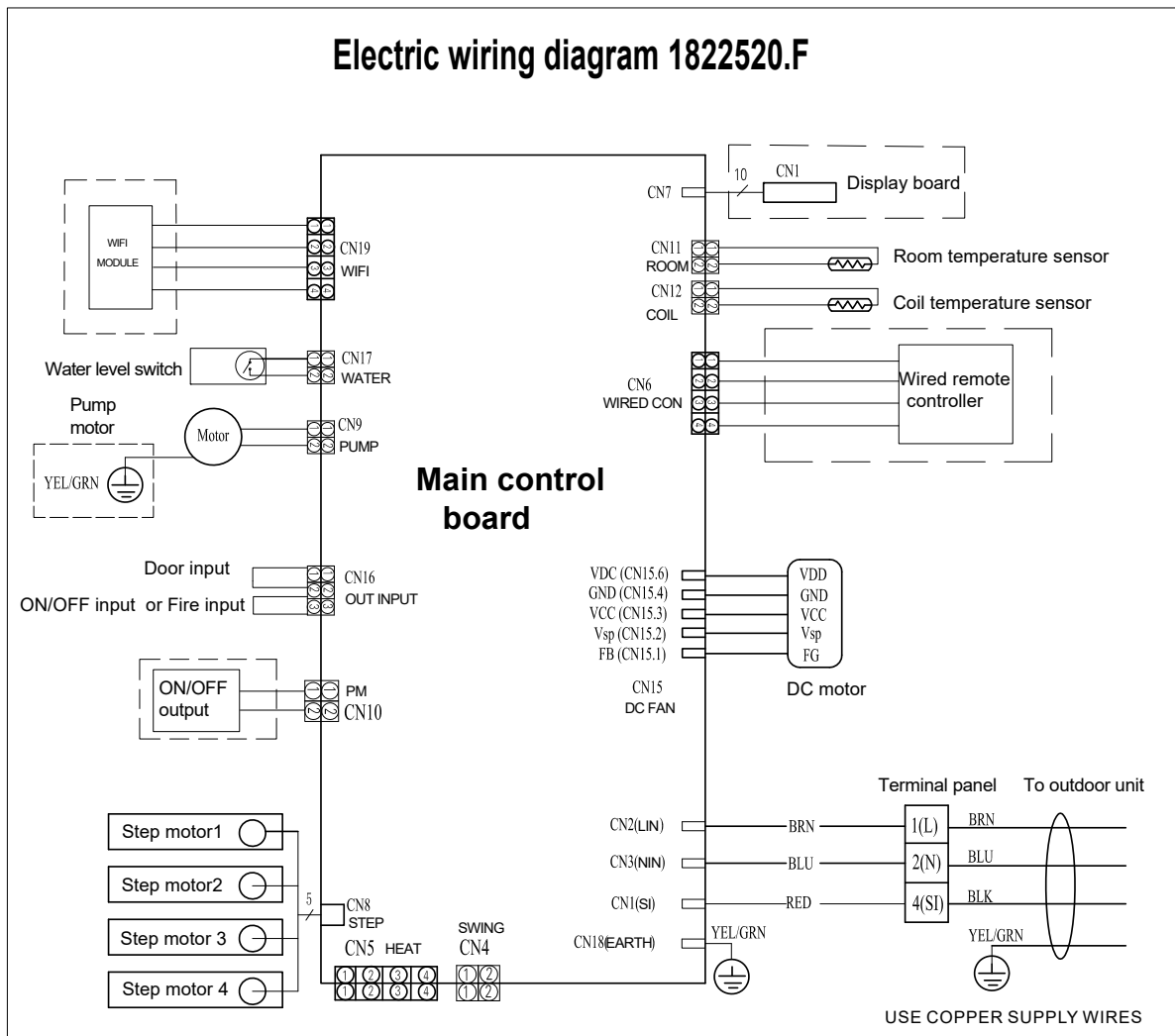
Dashed parts are not available in some models.
For details, see the table below.

	Indoor units model	Step motor	Pump motor	WIFI module	Display board	Wired remote controller	ON/OFF output
Ducted	3.5~6.5HP					●	●

●--available part

11. WIRING DIAGRAM

Cassette type



Remark:

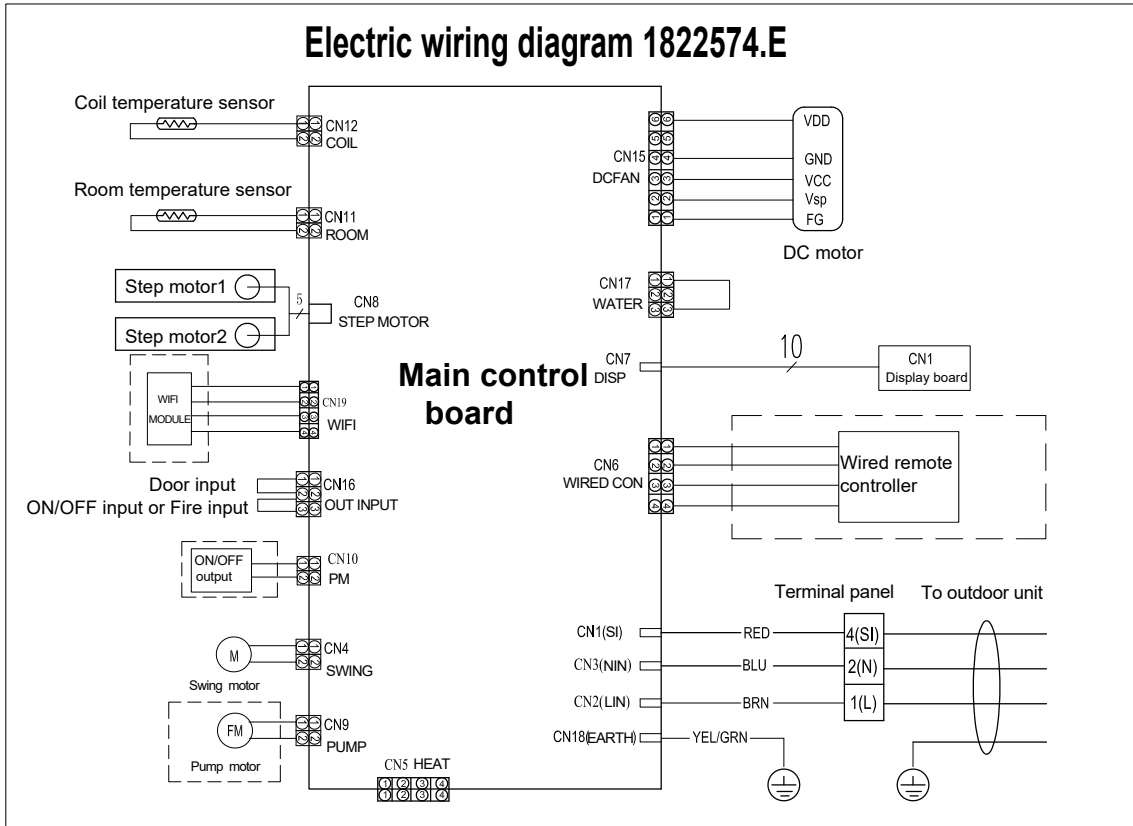
Dashed parts are not available in some models.
For details, see the table below.

	Indoor units model	Step motor	Pump motor	WiFi module	Display board	Wired remote controller	ON/OFF output
Cassette	3.0/3.5/4.0/5.0/6.0/6.5HP	●	●		●		●

●--available part

11. WIRING DIAGRAM

Floor ceiling type (3.0/3.5/4.0HP)



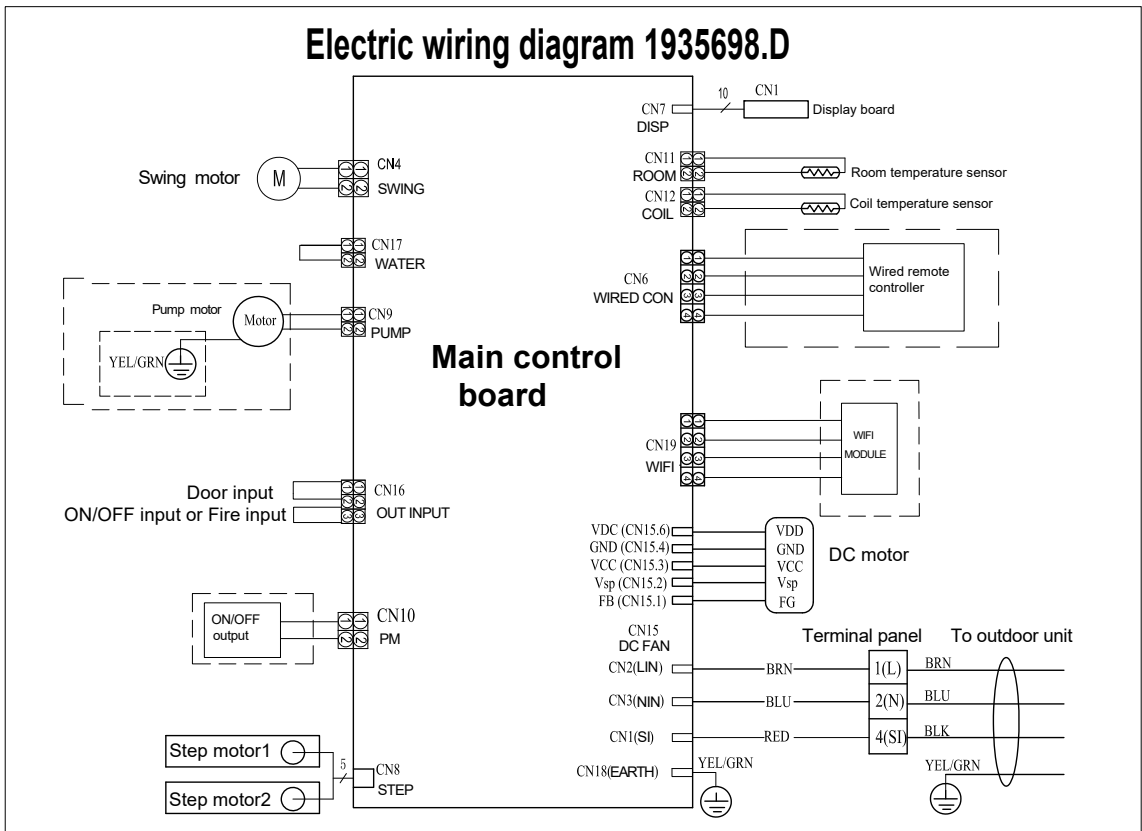
Remark:
Dashed parts are not available in some models.
For details, see the table below.

	Indoor units model	Step motor	Pump motor	WiFi module	Display board	Wired remote controller	ON/OFF output
Floor Ceiling	3.0/3.5/4.0HP	●			●		●

●--available part

11. WIRING DIAGRAM

Floor ceiling type (5.0/6.0/6.5HP)



Remark:
Dashed parts are not available in some models.
For details, see the table below.

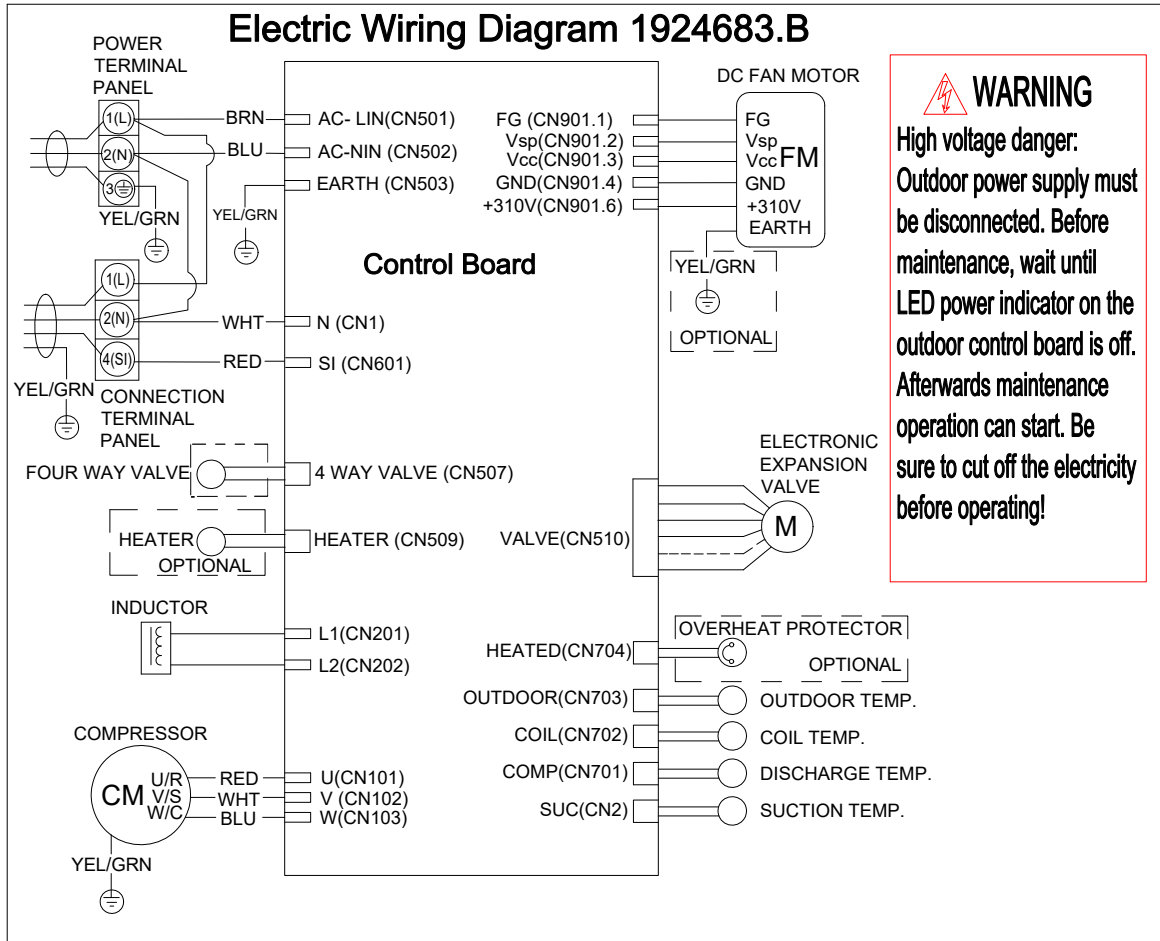
	Indoor units model	Step motor	Pump motor	WiFi module	Display board	Wired remote controller	ON/OFF output
Floor ceiling	5.0/6.0/6.5HP	●			●		●

●--available part

11. WIRING DIAGRAM

Outdoor unit

3.0/3.5HP



WARNING
 High voltage danger:
 Outdoor power supply must be disconnected. Before maintenance, wait until LED power indicator on the outdoor control board is off. Afterwards maintenance operation can start. Be sure to cut off the electricity before operating!

Remark:

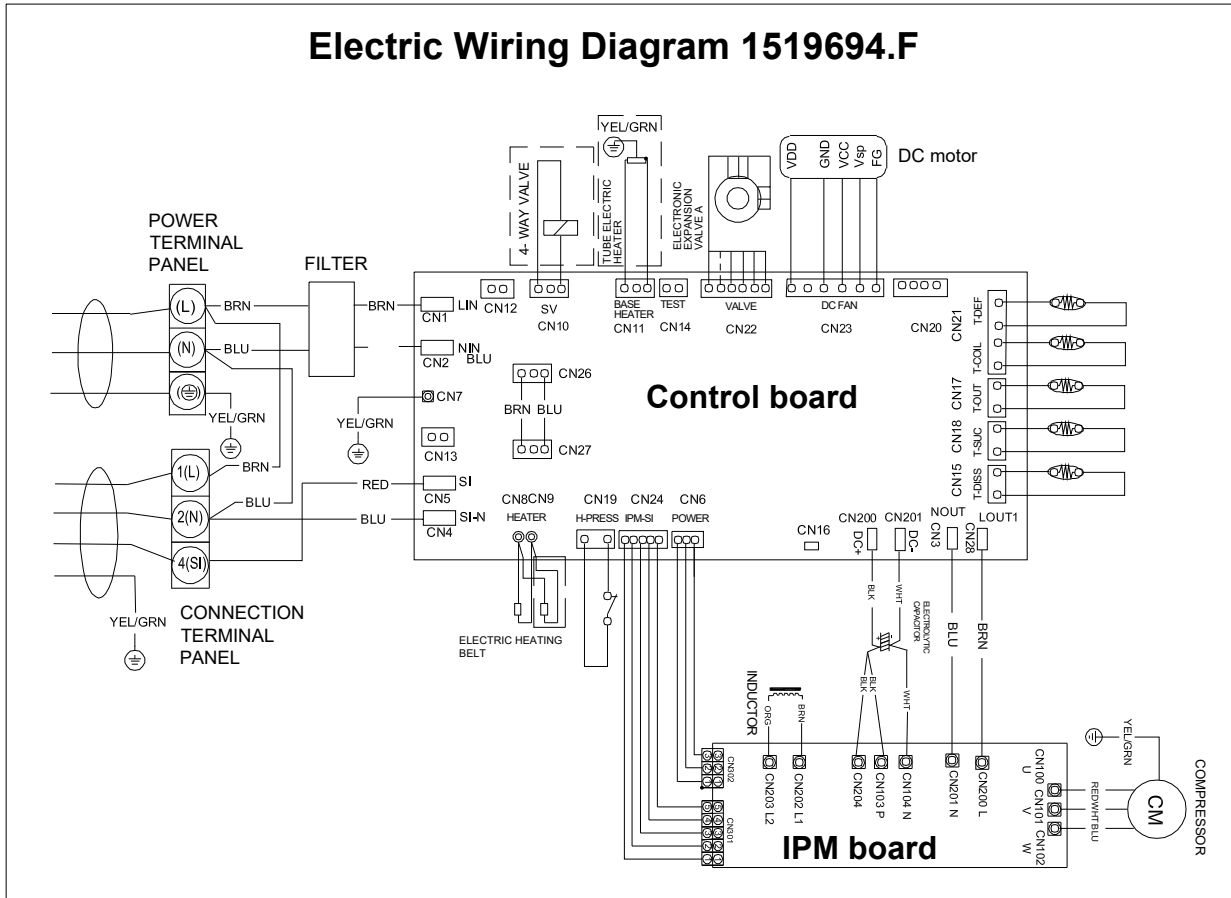
Dashed parts are not available in some models. For details, see the table below.

Outdoor units model	Heater	Overheat protector	4-way valve	YEL/GRN
3.0/3.5HP	●		●	

●--available part

11. WIRING DIAGRAM

4.0HP



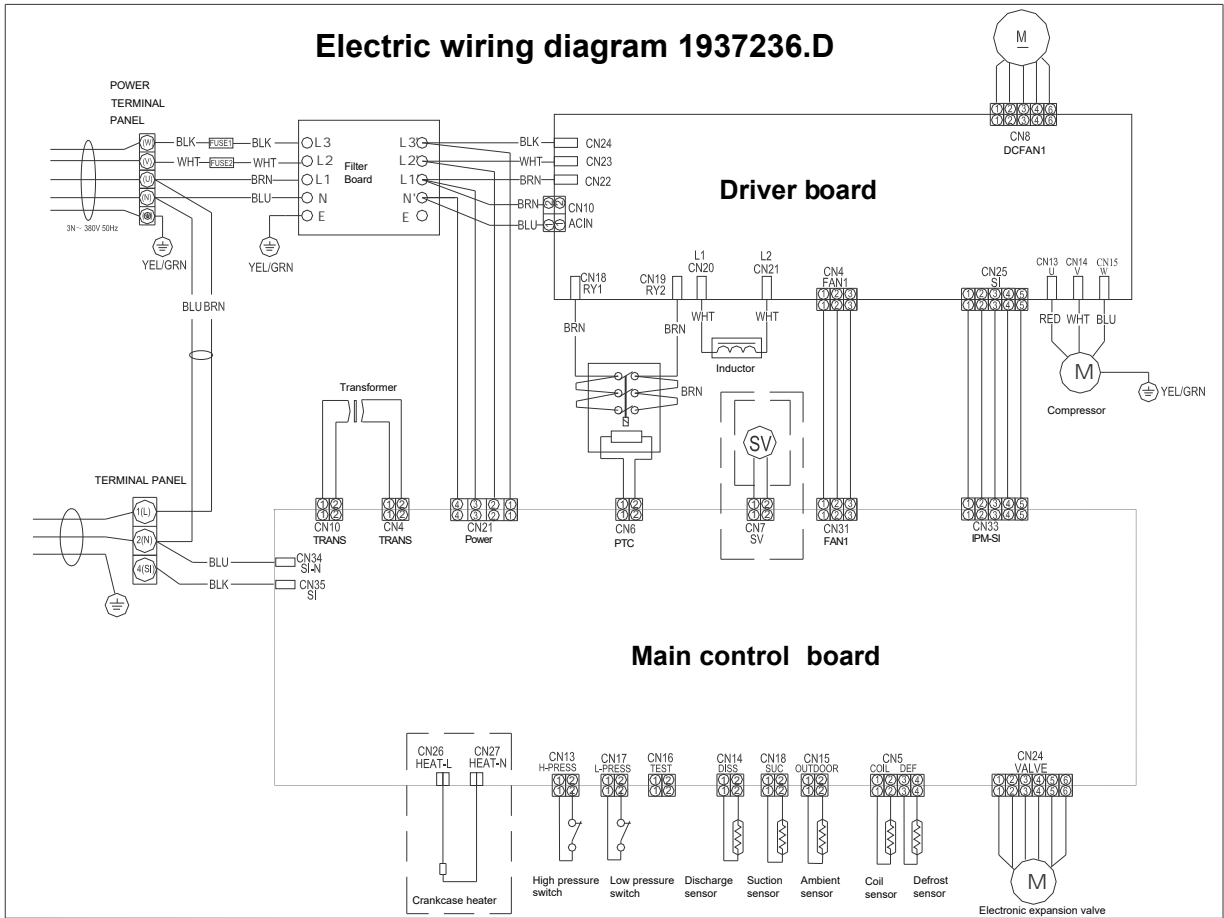
Remark:
Dashed parts are not available in some models.
For details, see the table below.

Outdoor units model	Base heater	4-way valve
4.0HP		●

●--available part

11. WIRING DIAGRAM

5.0HP (Three phase)



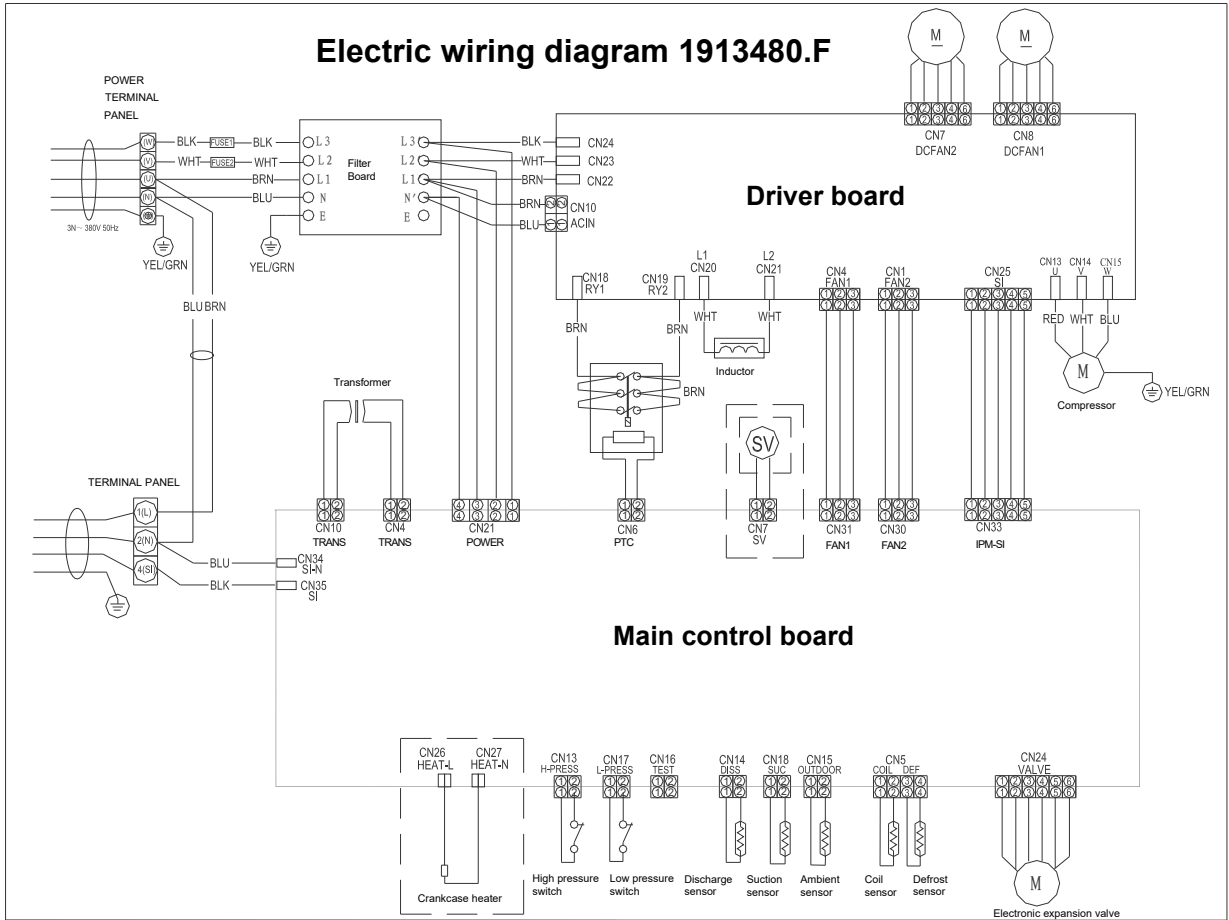
Remark:
Dashed parts are not available in some models.
For details, see the table below.

Outdoor units model	Crankcase heater
5.0HP	●

●--available part

11. WIRING DIAGRAM

6.0/6.5HP (Three phase)



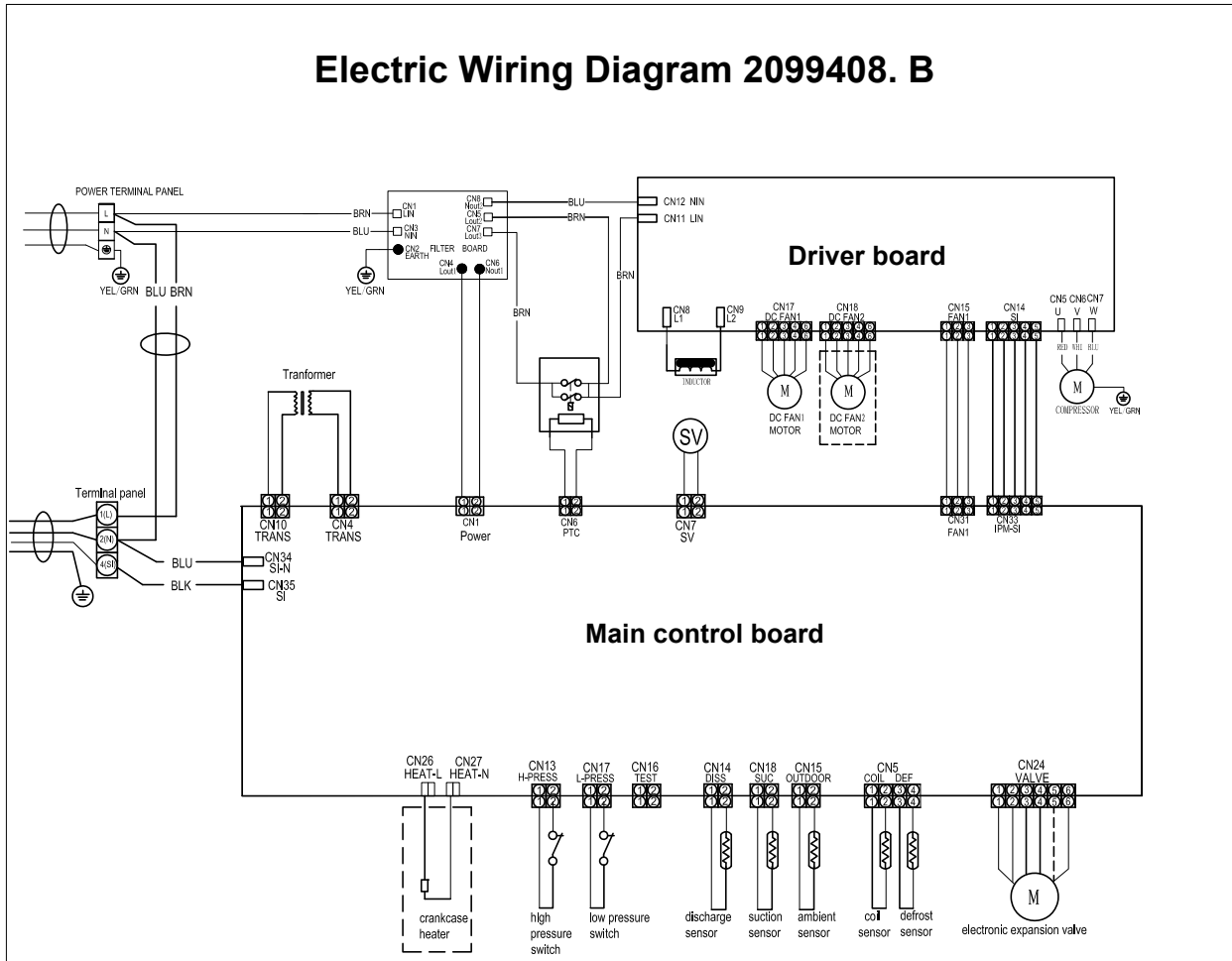
Remark:
Dashed parts are not available in some models.
For details, see the table below.

Outdoor units model	Crankcase heater
6.0/6.5HP	●

●--available part

11. WIRING DIAGRAM

5.0 HP (Single phase)



Remark:

Dashed parts are not available in some models.
For details, see the table below.

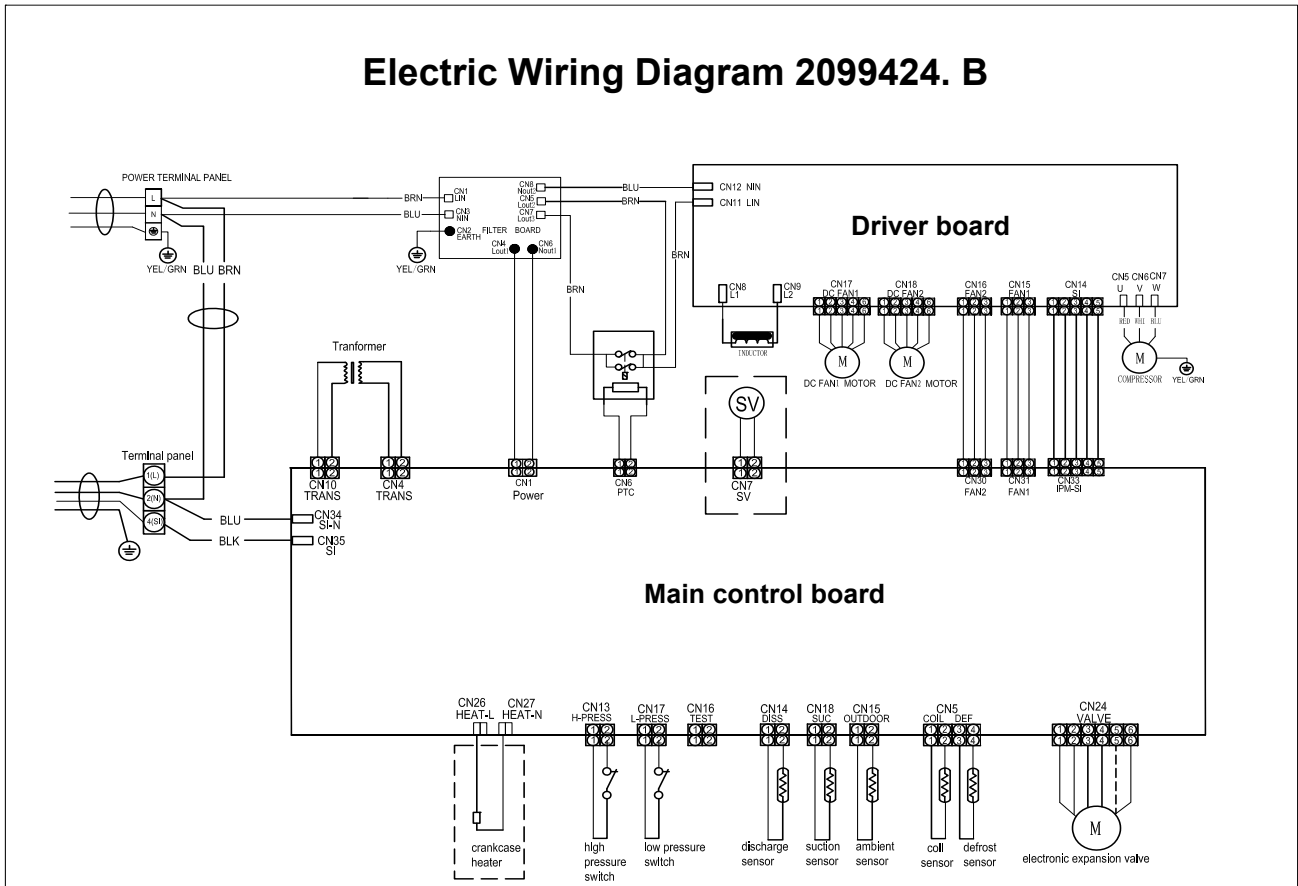
Outdoor unit model	DC FAN2 MOTOR	Crankcase heater
42K		●

●--available part

11. WIRING DIAGRAM

6.0 HP (Single phase)

Electric Wiring Diagram 2099424. B



Remark:

Dashed parts are not available in some models.

For details, see the table below.

Outdoor unit model	SV (4-way valve)	Crankcase heater
48K	●	●

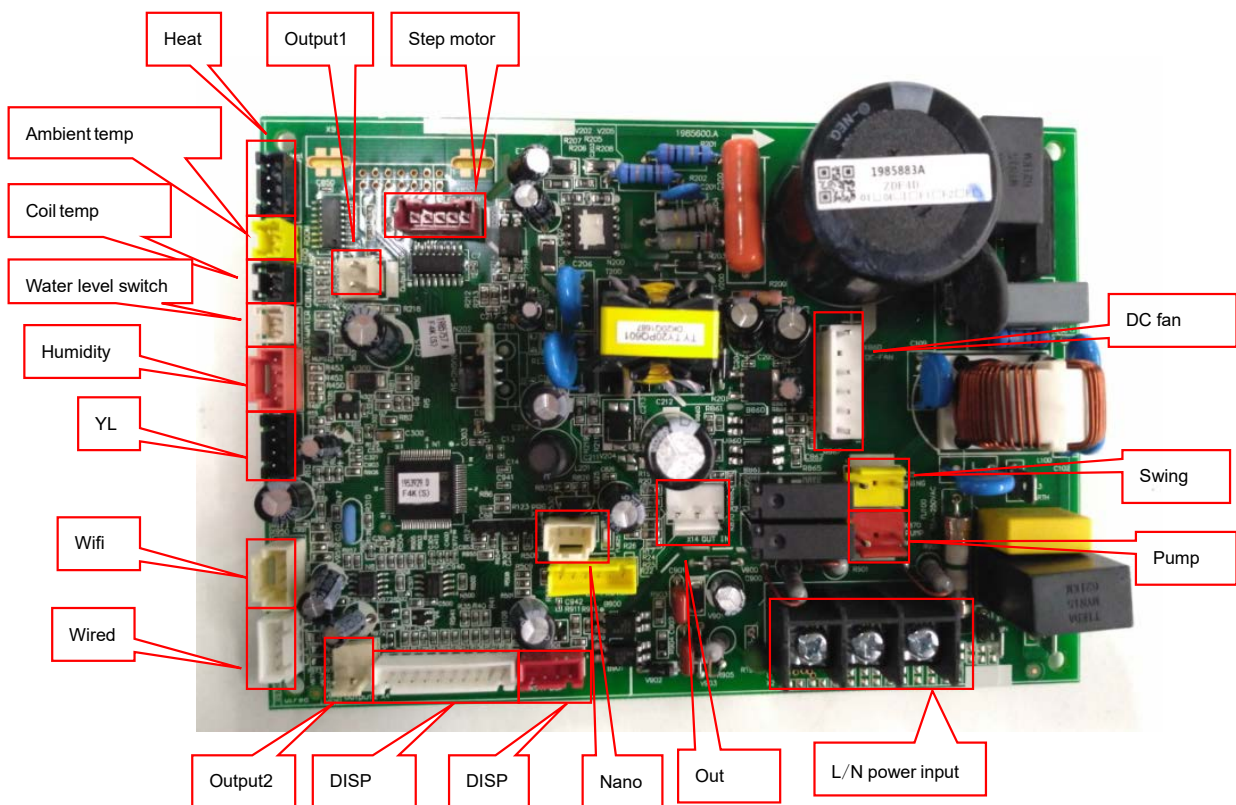
●--available part

11. WIRING DIAGRAM

11.2 Control Board Picture

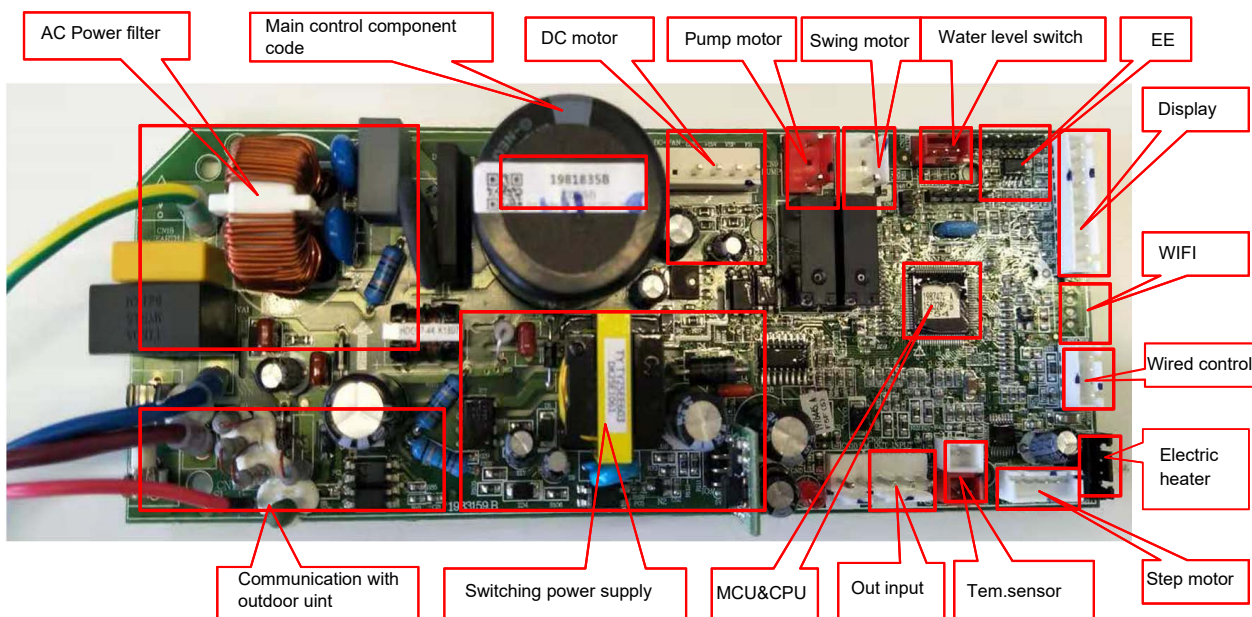
Indoor unit

3.0HP (Ducted)



3.0~6.5HP (Cassette/Floor ceiling type)

3.5~6.5HP (Ducted type)

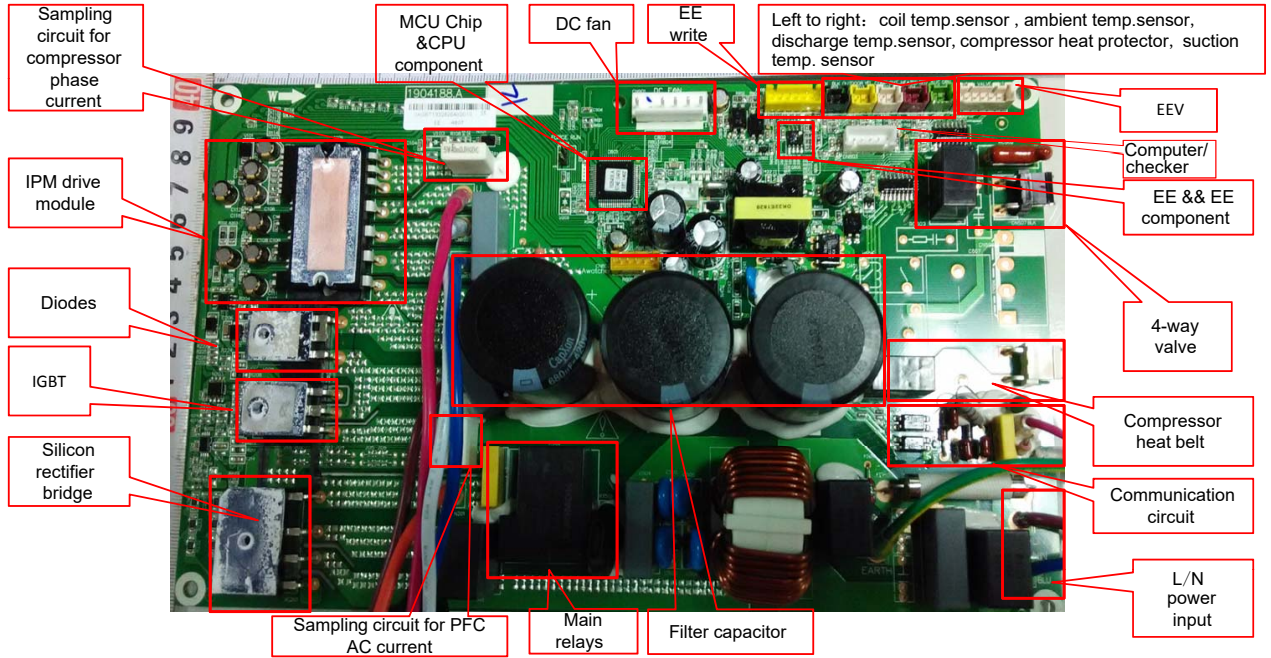


11. WIRING DIAGRAM

Outdoor unit

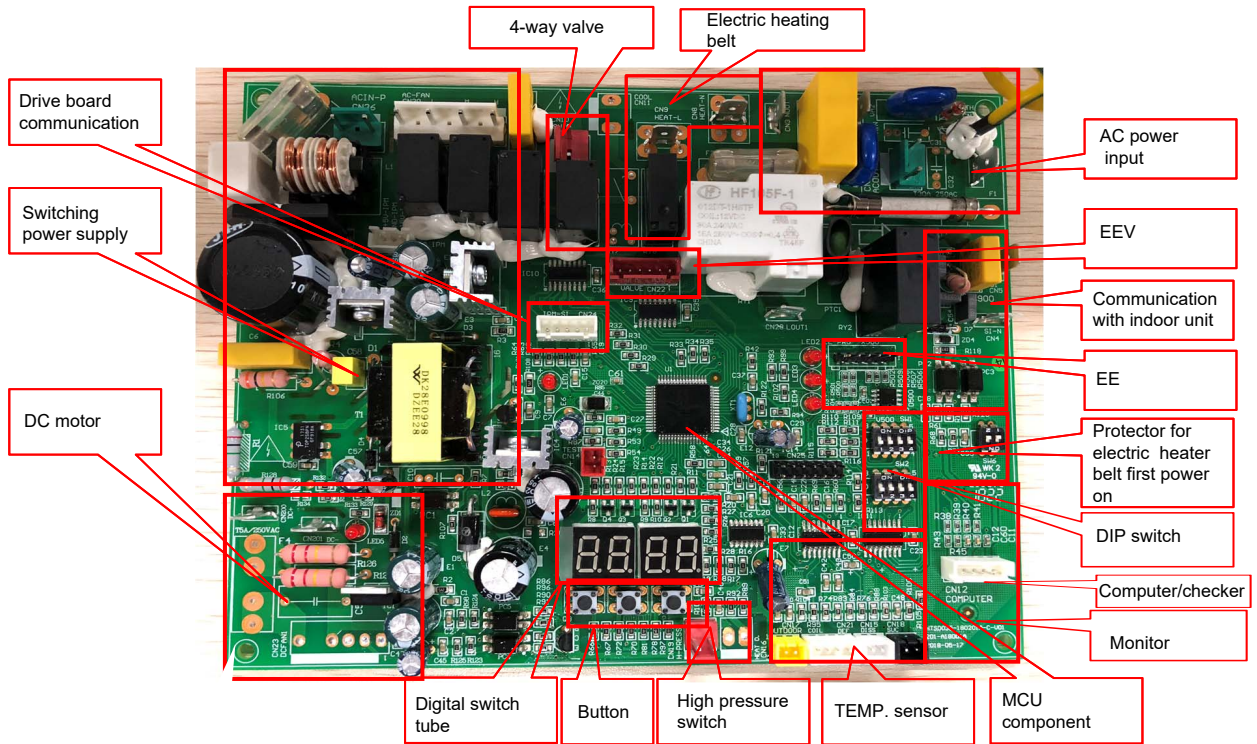
3.0/3.5HP

Control board

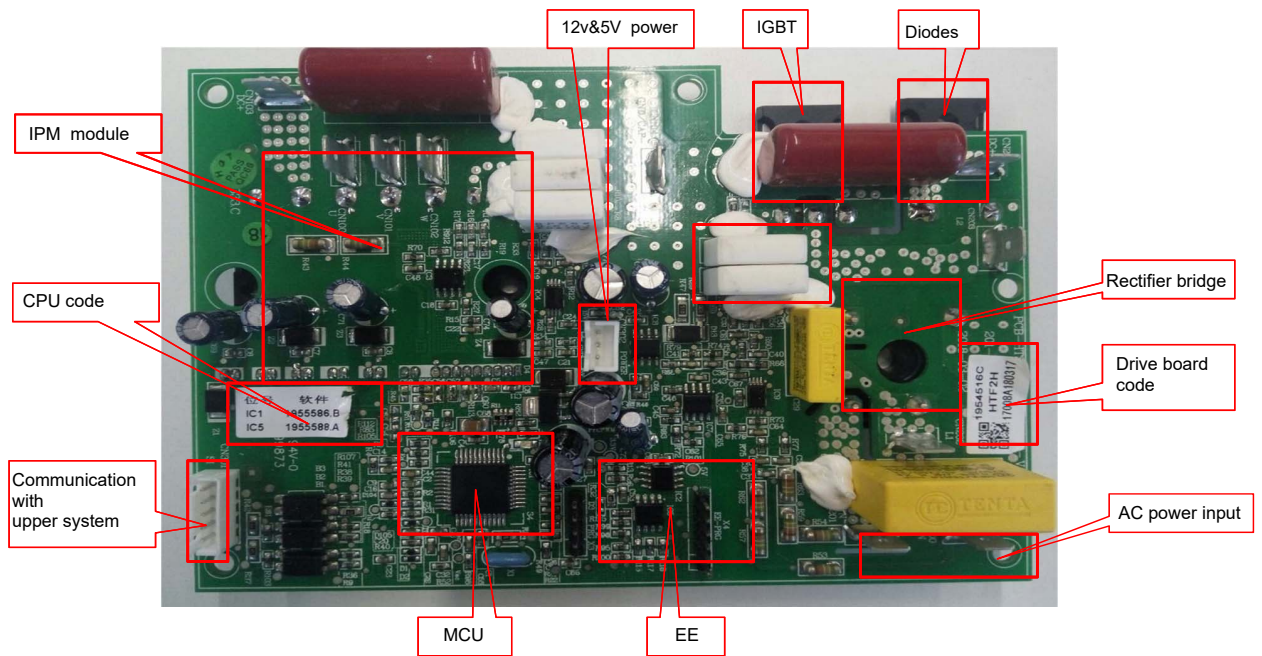


11. WIRING DIAGRAM

4.0HP
Main control board

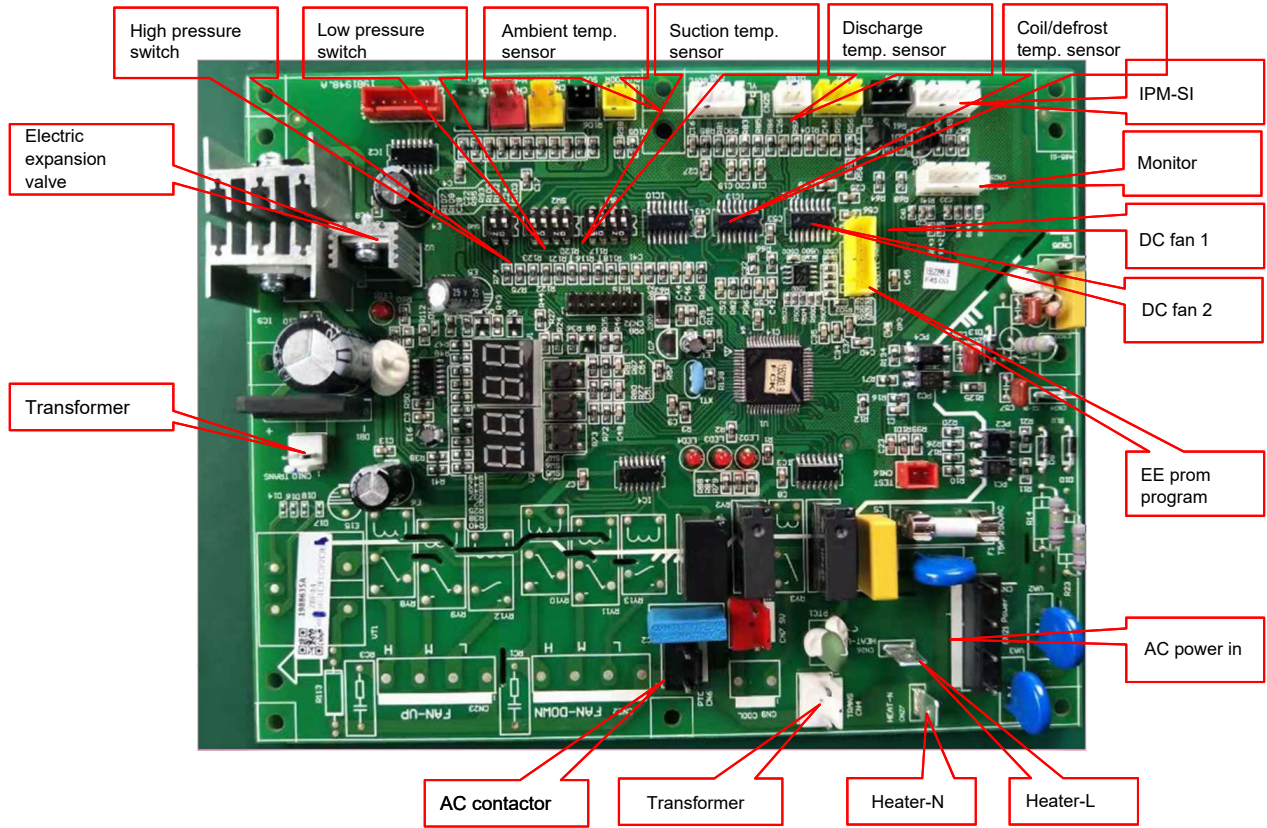


Drive board



11. WIRING DIAGRAM

5.0/6.0/6.5HP
Main control board

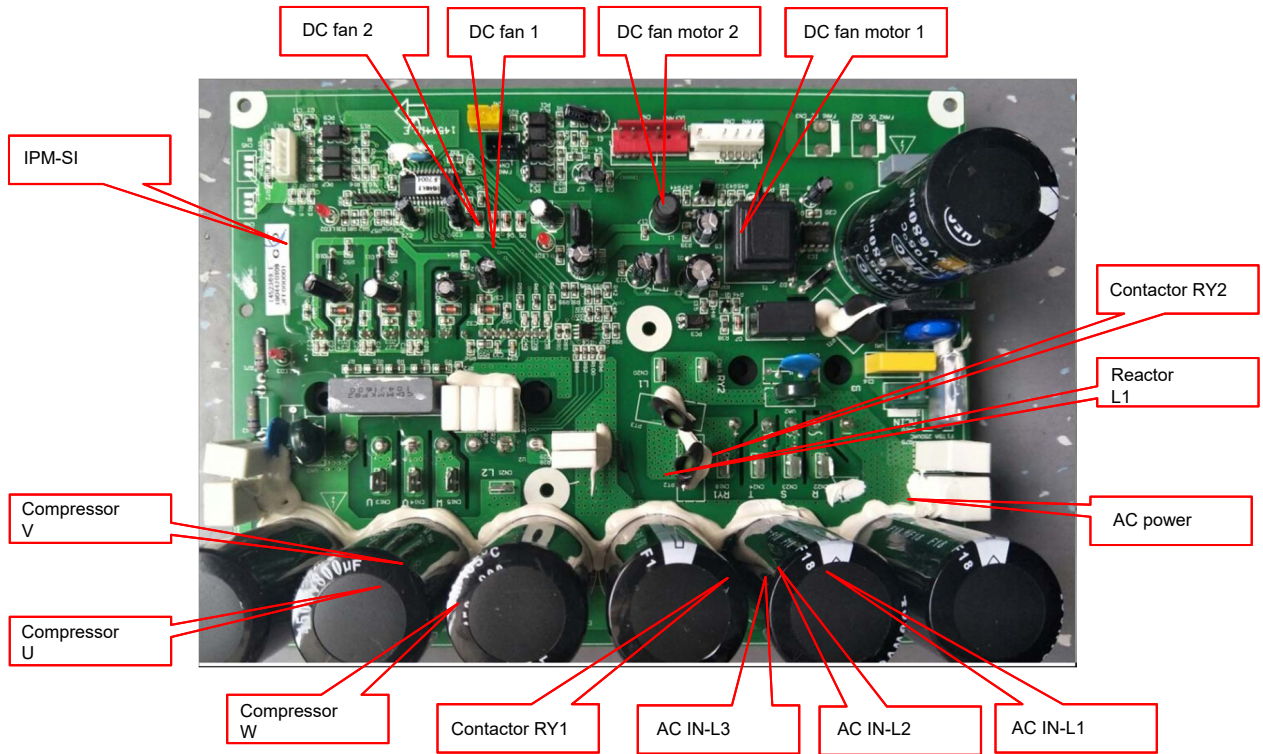


Filter board



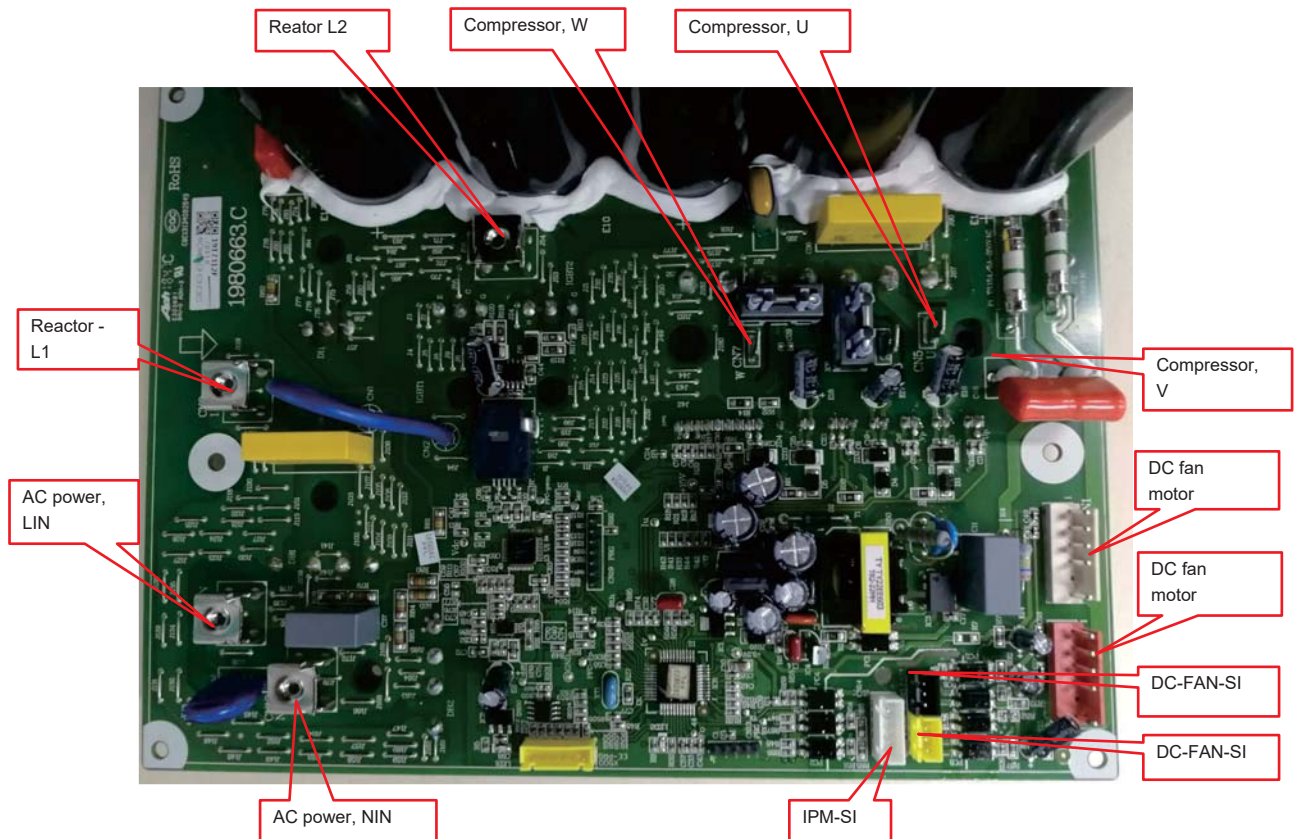
11. WIRING DIAGRAM

5.0/6.0/6.5 HP (Three phase)
Drive board



5.0/6.0 HP (single phase)

Drive board



11. WIRING DIAGRAM

11.3 Common Wiring

Recommended wire size

Model	Power Supply	ELB		Power Source Cable Size	Transmission Cable Size
		Nominal Current (A)	Nominal Sensitive Current (mA)	EN 60335-1*1	EN 60335-1*1
RAS-3.0UFESNH1	220-240V ~, 50Hz	25	30	3×2.5mm ²	4×1.5mm ²
RAS-3.5UFESNH1	220-240V ~, 50Hz	25	30	3×2.5mm ²	4×1.5mm ²
RAS-4.0UFESNH1	220-240V ~, 50Hz	40	30	3×4.0mm ²	4×1.5mm ²
RAS-5.0UFESNH1	220-240V ~, 50Hz	50	30	3×6.0mm ²	4×1.5mm ²
RAS-6.0UFESNH1	220-240V ~, 50Hz	50	30	3×6.0mm ²	4×1.5mm ²
RAS-5.0UFESMH1	380-415V 3N ~, 50Hz	32	30	5×2.5mm ²	4×1.5mm ²
RAS-6.0UFESMH1	380-415V 3N ~, 50Hz	32	30	5×2.5mm ²	4×1.5mm ²
RAS-6.5UFESNH1	380-415V 3N ~, 50Hz	32	30	5×2.5mm ²	4×1.5mm ²

Max. Running Current (A): REFER TO NAMEPLATE

- Use an ELB (Electric Leakage Breaker).
- Do not operate the system until all the check points have been cleared.
 - (A) Check to ensure that the insulation resistance is more than 2 Mega Ohm, by measuring the resistance between ground and the terminal of the electrical parts. If not, do not operate the system until the electrical leakage is found and repaired.
 - (B) Check to ensure that the stop valves of the outdoor unit are fully opened and then start the system.
- Pay attention to the following items while the system is running.
Do not touch any of the parts by hand at the discharge gas side, since the compressor chamber and the pipes at the discharge side are heated higher than 90°C.

NOTE:

- (1) Follow local codes and regulations when selecting field wires, and all the above are the minimum wire size.
- (2) Use the wires which are not lighter than the ordinary polychloroprene sheathed flexible cord. (Cord designation H07RN-F).
- (3) The wire sizes marked with *1 in the above table are selected at the maximum current of the unit according to the European Standard, EN60335-1.
- (4) When transmission cable length is more than 15 meters, a larger wire size should be selected.
- (5) Install main switch and ELB for each system separately. Select the high response type ELB that is acted within 0.1 second. For recommended capacity, see outdoor machine switch capacity.
- (6) In the case that power cables are connected in series, add each unit the maximum current and select wires below.

Selection According to EN60335-1

Current i(A)	Wire Size(mm ²)
i≤6	0.75
6<i≤10	1
10<i≤16	1.5
16<i≤25	2.5
25<i≤32	4
32<i≤40	6
40<i≤63	10
63<i	*

* In the case that current exceeds 63A, do not connect cables in series.

12. FIELD SETTING

12.1 Outdoor Unit DIP Switch

DIP Switch Setting of Outdoor Unit (4.0~6.5HP)

Turn off all power sources before setting. Without turning off, the switches settings are not refreshed and might be invalid. Mark of "■" indicates the position of DIP switches.

Setting is required

SW2-1

Refrigerant Piping Length Setting

SW2-4

Refrigerant Collection

Setting is required

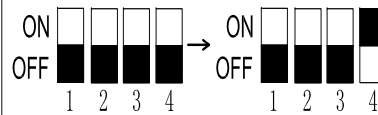
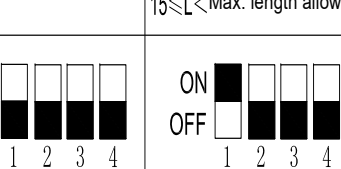
Actual Piping Length L(m)

$L < 15$

$15 \leq L < \text{Max. length allowed}$

Setting before
shipment

ON
OFF

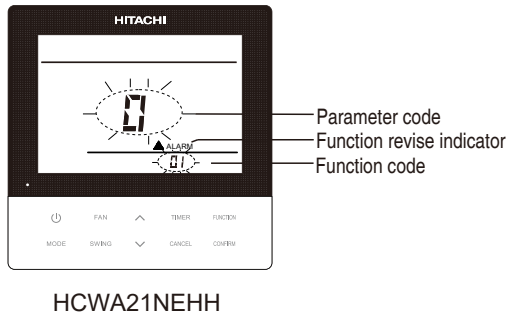


After setting refrigerant piping length DIP switch, cooling/heating performance can be improved.

12. FIELD SETTING

12.2 ESP Setting (Ducted Type only)

The static pressure can be freely adjusted by using specific wired remote controller.



Model	The Range of Static Pressure	Function Code Set
3.0HP	0-40Pa	0-40, function code value equals static pressure value, more than 40 is 40 Pa, [default: 0 (25Pa)]
3.5/4.0HP	0-120Pa	0-120, function code value equals static pressure value, more than 120 is 120 Pa, [default: 0 (37Pa)]
5.0/6.0/6.5HP	0-120Pa	0-120, function code value equals static pressure value, more than 120 is 120 Pa, [default: 0 (50Pa)]

Static Pressure Setting (HCWA21NEHH):

- 1 Press and hold both "FUNCTION" and "MODE" buttons for 3 seconds, symbol "▲ ALARM" and parameter code starts blinking at the same time.
- 2 Press "^ / v" button to adjust parameter number until "17" is displayed, and press "CONFIRM" button to enter system parameter adaption state, symbol "▲ ALARM" stops blinking.
- 3 Select desired parameter code 10 by pressing "^ / v" button, and press "CONFIRM" button to confirm.
- 4 Select desired function code to rewrite the parameter values by pressing "^ / v" button, and press "CONFIRM" button to confirm.
- 5 Press "POWER" button to quit.

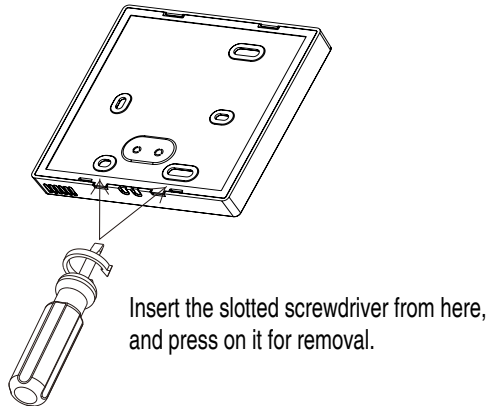
If you still have any trouble, please contact local service center of our company for further information.

12. FIELD SETTING

12.3 Indoor Unit Parameter Revision

1) Connecting wired controller with the indoor unit

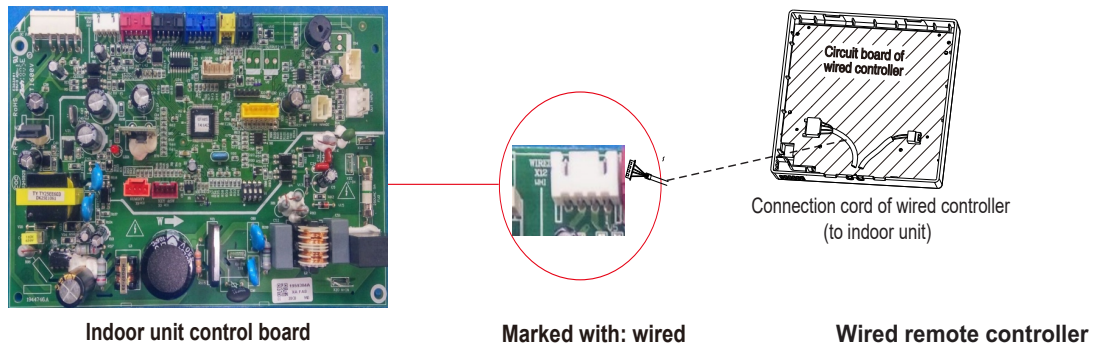
Step 1: Remove the lower cover of the wired controller



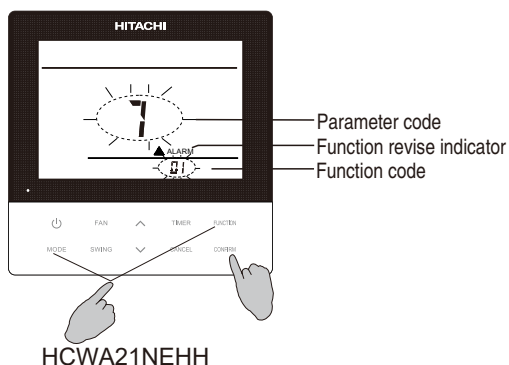
NOTE:

Control board of the remote controller is placed on upper cover. Please protect it from being scratched during removal and installation!

Step 2: Connect the wired controller with the indoor unit



2) Changing system parameter



Operation: (HCWA21NEHH)

- 1 Press and hold both “FUNCTION” and “MODE” buttons for 3 seconds, symbol “▲ALARM” and parameter code starts blinking at the same time.
- 2 Press “^ / v” button to adjust parameter number until “17” is displayed, and press “CONFIRM” button to enter system parameter adaption state, symbol “▲ALARM” stops blinking.
- 3 Select desired parameter code following the table below by pressing “^ / v” button, and press “CONFIRM” button to confirm.
- 4 Select desired function code to rewrite the parameter values by pressing “^ / v” button, and press “CONFIRM” button to confirm.
- 5 Press “POWER” button to quit.

12. FIELD SETTING

PARAMETER CODE	PARAMETER DESCRIPTION	PARAMETER VALUE&REPRESENTATION		NOTE
		DATA TYPE	REPRESENTATION (FUNCTION CODE)	
1	Self Recovery of Power Break	Integer	0: Cancel Self Recovery of Power Break function; 1: Self Recovery of Power Break; others: invalid	
2	Temperature Type	Integer	0: Centigrade Temperature; 1: Fahrenheit Temperature; others: invalid	
3	Temperature Display Type	Integer	0: Default display set temperature; 1: Default display room temperature; others: invalid	
4	Ratio of ambient temperature sensed by indoor temperature sensor(cooling mode)	Integer	0~10valid, more than 10 default is10 0: 0%; 1: 10%; ...; 10: 100%	0-entirely use temperature sensed by wired remote controller; 10-entirely use temperature sensed by indoor unit
5	Filter Clean Indication	Integer	0: Cancel Filter Clean prompt function; 1: Set Filter Clean prompt function; others: invalid	
6	Filter Clean Time Set	Integer	0~32, more than 32 default is 32*1000h	
7	Installation Height Compensation	Integer	0~10m, more than 10m default is 10. =0,1,2 :no fan speed compensation; =3: increase fan speed; =4~10: increase more fan speed.	
8	Cooling Temperature Compensation (indoor unit temperature sensor)	Integer	0 : 0°C ; 1 : -0.5°C ; 2 : -1°C ; 3 : -1.5°C ; 4 : -2°C ; 5 : -2.5°C ; 6 : -3°C ; 7 : -3.5°C ; 8 : -4°C ; 9 : -4.5°C ; 10 : -5°C.(the wired controller displays integer with the symbol)	
9	Heating Temperature Compensation (indoor unit temperature sensor)	Integer	0 : 0°C ; 1 : -0.5°C ; 2 : -1°C ; 3 : -1.5°C ; 4 : -2°C ; 5 : -2.5°C ; 6 : -3°C ; 7 : -3.5°C ; 8 : -4°C ; 9 : -4.5°C ; 10 : -5°C. (the wired controller displays integer with the symbol)	
10	Static Pressure Set	Integer	1~240, function code=static pressure more than the limit static pressure default the limit static pressure, Default is 0 (default static pressure, related to models)	Duct type (DC motor)
12	Ratio of temperature sensed by indoor temperature sensor(Heating mode)	Integer	0~10valid, more than 10 default is10 0: 0%; 1: 10%; ...; 10: 100%	0-entirely use temperature sensed by wired remote controller; 10-entirely use temperature sensed by indoor unit
13	Temperature Adjustment-Cooling	Character	-10~10°C (Single Character with symbol)	Temperature displayed on wired controller
14	Temperature Adjustment-Heating	Character	-10~10°C (Single Character with symbol)	Temperature displayed on wired controller
25	Access control, fire protection, ON/OFF function set	Integer	=0, Access control, fire protection functions are all invalid; =1, Access control function is valid; =2, fire protection function is valid; =3, Access control, fire protection are all valid; =4, ON/OFF function is valid.	

12. FIELD SETTING

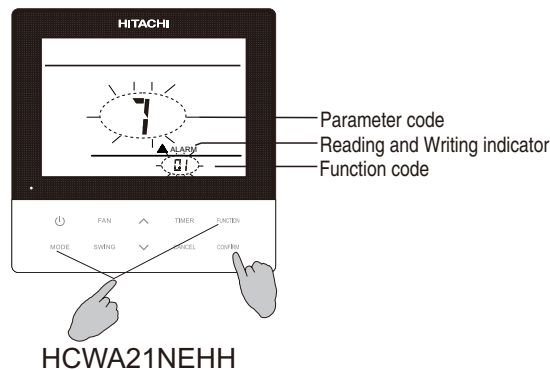
12.4 Running Parameter Query

Running parameter can be referred to by 7 segment display or specified wired remote controller.

Query by wired remote controller

Operation:

1. Connect wired remote controller with indoor unit (same method with Indoor unit parameter revision)
2. Change the system parameter



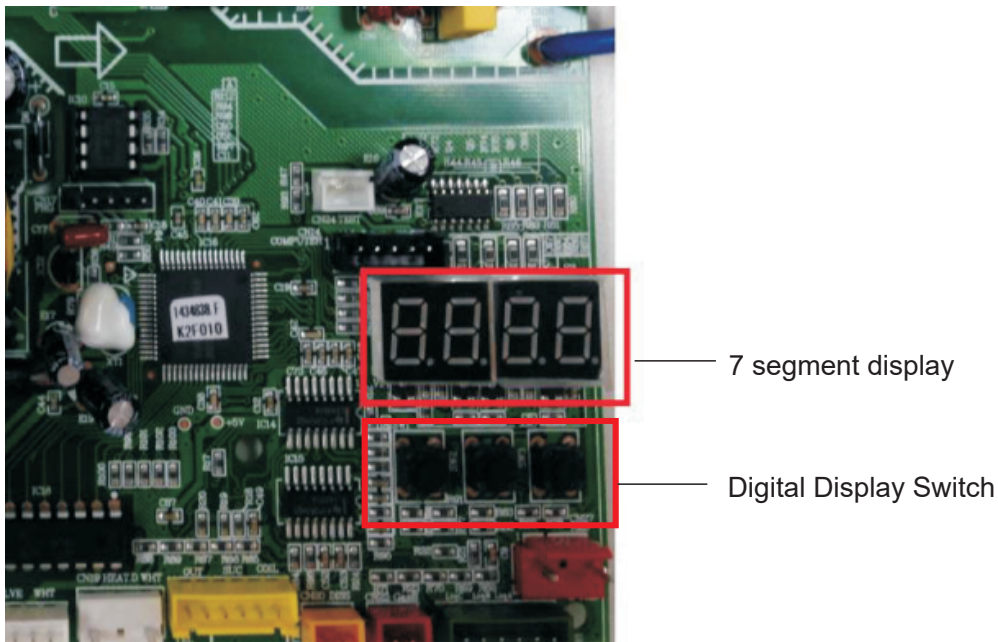
Operation: (HCWA21NEHH)

- 1 Press and hold both “FUNCTION” and “MODE” buttons for 3 seconds, symbol “▲ALARM” and parameter code starts blinking at the same time.
- 2 Press “^ / v” button to select parameter number as you need, and parameter value will be displayed on the LCD.

Parameter Code	Parameter Description
06	Indoor unit air inlet temperature
07	Indoor unit coil sensor temperature
08	Outdoor unit ambient sensor temperature
09	Discharge temperature
10	Suction temperature
11	Outdoor coil temperature
12	Discharge pressure
13	Suction pressure
14	Outdoor EEV opening
15	AC current input
16	AC voltage
24	Error code
25	Drive error code
26	Indoor unit air outlet temperature
28	Compressor current
29	Indoor unit room temperature
30	Indoor unit coil inlet temperature
31	Indoor unit coil outlet temperature
32	Outdoor unit condenser inlet temperature
33	Outdoor unit condenser outlet temperature
43	Outdoor unit defrost temperature
57	Outdoor fan 1 speed
58	Outdoor fan 2 speed
60	Indoor fan speed

12. FIELD SETTING

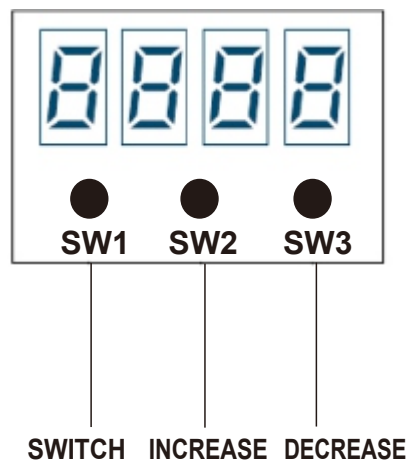
Query by 7 segment display



DC-Inverter outdoor control board

7 segment display Introduction

It can be used to check outdoor running parameters.



There are 3 buttons on the digital display board :

- 1) SWITCH button : Indoor parameters and outdoor parameters can be selected in turn by pressing it.
"P."-outdoor unit parameter , "H."-indoor unit parameter ;
- 2) INCREASE button : Each time it is pressed, the number rises by 1,hold down it, the number will be rapidly increased;
- 3) DECREASE button : Each time it is pressed, the number lowers by 1,hold down it, the number will be rapidly decreased.
- 4) The parameters will be displayed after 3s when the checking numbers are selected.

12. FIELD SETTING

Parameters can be checked in the following table below.

Parameter code	Descriptions
0	Protection Code or Fault code
P.1	Target Frequency
P.2	Driving Frequency
P.4	Outdoor EEV Opening
P.5	Outdoor EEV Target Opening
P.6	Upper DC Motor Revolving Speed
P.8	AC Input Voltage
P.9	Current
P.10	Modular Temperature
P.11	Capacity Needed
P.12	Modular Fault
P.20	Outdoor Ambient Temperature
P.21	Outdoor Coil Temperature
P.22	Outdoor Defrost Temperature
P.23	Suction Temperature
P.24	Discharge Temperature
H.1	Indoor Unit Fault
H.2	Indoor Ambient Temperature
H.3	Indoor Coil Temperature
H.4	Indoor Setting Temperature

12. FIELD SETTING

12.5 Setting for Access Control and Fire Protection Functions with External Input Contact

12.5.1 Factory settings

Access Control and Fire Protection functions are both activated by default on new products. In order to activate or deactivate these functions, use the wired remote controller connected to the indoor unit. Refer to the "Site Setting" chapter in the Technical Catalogue related to this product range to get details about the setting procedure.

12.5.2 Introducing Access Control and Fire Protection functions.

Thanks to these functions, a remote control of the indoor unit from a dry contact is possible. The typical uses of these functions are the following:

- Access control: control of the air conditioning unit in hotel rooms, interconnection with the room key card switch, or in office buildings, interconnection with the window opening contact. For these applications, the purpose of the control function is to block the operation of the air conditioning units when the room is not occupied or when the windows of the office are open.
- Fire protection: interconnection with the fire detection system of any building, to immediately stop the air conditioning units when the fire alarm is triggered.

12.5.3 Function setting

A) Hardware connection

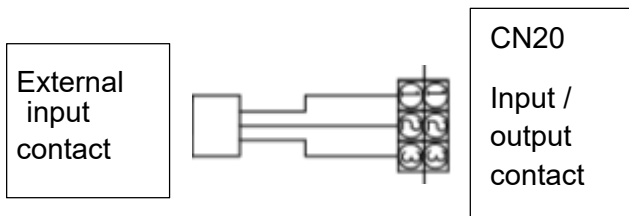


Figure 1: electric wiring diagram

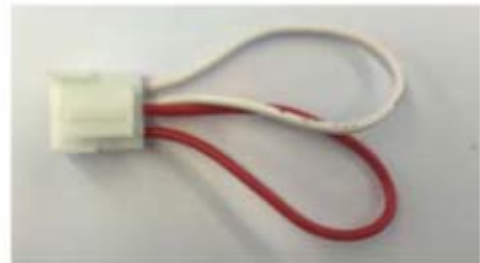


Figure 2: connector with short-circuited wirings



Figure 3 main control board

The input / output terminals on the indoor unit main PCB (see table 1) are designed to be short-circuited by default. From factory, terminals 1-2 and 2-3 are short-circuited using the dedicated connector (figure 2) plugged on the related terminals of the main PCB (X14 or CN16, see figure 3).

12. FIELD SETTING

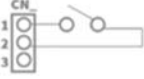

Input contact	Series	Model names	Connector ref on main PCB	Electric diagram	Possible function(s)
Input 1 - Red wire	PRIMARY R32	RPIL-3.0UFE1NH	X14 pins 1&2		Access Control (System parameter 25 set to 1 or 3)
		All other models	CN16 pins 1&2		
Input 2 - White wire	PRIMARY R32	RPIL-3.0UFE1NH	X14 pins 2&3		Fire Protection (System parameter 25 set to 2 or 3) OR External ON/OFF (System parameter 25 set to 4)
		All other models	CN16 pins 2&3		

Table 1: Inputs at IDU main board

Use of Access Control function:

Cut off the red wire of the connector (figure 2) and connect the related terminals to the Access Control switch of the installation (room key card switch or window opening control switch for example). The connection wire shall be 22AWG type. Logic control of the Access Control function:

- Normal conditions: control switch is closed, normal operation of the indoor unit is allowed
- Access Control triggered: control switch is open, indoor unit is set OFF, remote controller is blocked.

Use of Fire Protection function:

Cut off the white wire of the connector (figure 2) and connect the related terminals to the Fire Protection switch of the installation. The connection wire shall be 22AWG type. Logic control of the Fire Protection function:

- Normal conditions: control switch is closed, normal operation of the indoor unit is allowed
- Fire Protection triggered: control switch is open, indoor unit is set OFF, remote controller is blocked.

B) Timing sequence description

Access Control function:

- When the contact is opened (key card remove, window opened), the air conditioning unit is stopped once the contact has been opened for 30 seconds. Once indoor unit is stopped, the operations from the remote controllers (wired or wireless) are prohibited: indoor unit will not follow any command sent from the wired or the wireless controller. The status of the indoor unit on the wired controller will be "OFF" status.

12. FIELD SETTING

- When contact is closed again (key card inserted again or window closed), **the air conditioning unit operation is released, and the previous operation status and settings are restored:**
 - o If the air conditioning unit is OFF when the contact is opened, the unit will remain in OFF status when the contact is closed again.
 - o If the air conditioning unit is ON when the contact is opened, the unit will be automatically restarted with the same settings when the contact is closed again.

Fire Protection function:

- When the contact is opened (fire protection triggered), the air conditioning unit is stopped once the contact has been opened for 3 seconds. This is done to avoid keeping the air conditioning unit blowing air when a fire has been detected. Once indoor unit is stopped, the operations from the remote controllers (wired or wireless) are prohibited: indoor unit will not follow any command sent from the wired or the wireless controller. The status of the indoor unit on the wired controller will be "OFF" status. When contact is closed again (fire protection released or not triggered), the air conditioning unit operation is released and set to OFF status. The user may restart the unit from the wired or wireless controller if necessary.

Priority between Access Control and Fire Protection:

Both functions can be used on a single indoor unit and operated independently. The operation of the indoor unit will remain OFF and blocked if one of the contacts remains open.

12.6 Instructions to use an external input contact for ON/OFF operation

1) Function setting

The factory default settings related to the external input contact functions are the following:

- Access Control and Fire Protection functions: activated
- ON/OFF function: deactivated.

In case the ON/OFF function is required on site, it is necessary to activate this external control function from the wired controller, using the "System Parameter" menu (check parameter 25). Refer to the chapter 12.3 "Indoor Unit Parameter Revision" for details.

Note: Activating the external ON/OFF function by the system parameter 25 will automatically deactivate the Access Control and Fire Protection functions.

2) Description of the external ON/OFF control

The external ON/OFF function can be used to control the air conditioning system from a 3rd party controller or any BMS using a dry contact.

Caution: the ON/OFF commands submitted through the external input contact have priority over the ON/OFF commands sent by the individual controller of the indoor unit (wired or wireless controller).

12. FIELD SETTING

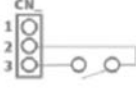
Therefore:

- Once an ON order has been submitted through the external input contact, the air conditioning system cannot be stopped from its individual controller (wired or wireless controller)
- Once an OFF order has been submitted through the external input contact, the air conditioning system cannot be started from its individual controller (wired or wireless controller)

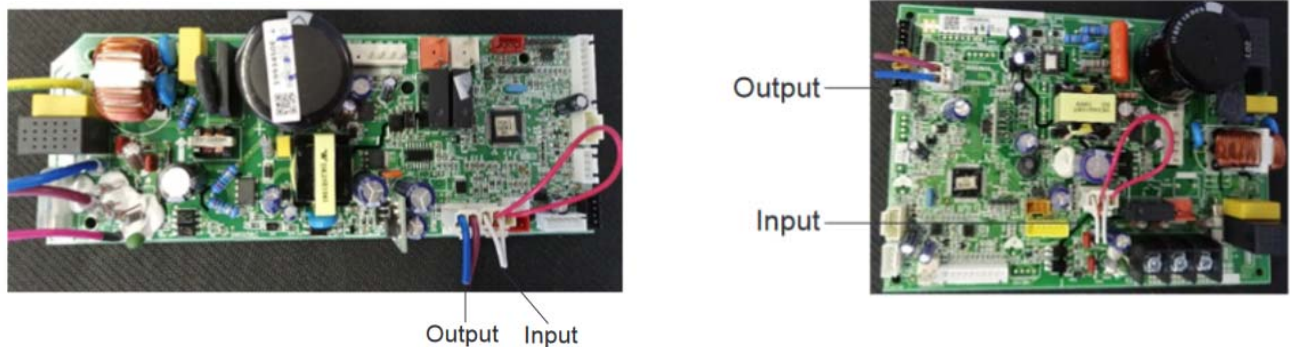
The other settings like temperature set point, fan speed, can still be set from the individual controller of the indoor unit. Only the ON/OFF commands are affected by these limitations.

3) Electric connections to the indoor unit PCB

The ON/OFF operation can be realized using the external input contact 2 available on the indoor unit main PCB (white cable on the connector plugged on the input contact). Depending on the indoor unit model, the reference of the input connector on the main PCB may change. Refer to the table below for details:

Input contact	Series	Model names	Connector ref on main PCB	Electric diagram	Possible function(s)
Input 2 - White wire	PRIMARY R32	RPIL-3.0UFE1NH	X14 pins 2&3		External ON/OFF (System parameter 25 set to 4)
		All other models	CN16 pins 2&3		

Examples of indoor unit main PCB with the position of the external input and output contacts + input connector with red and white wires:



Use of the external ON/OFF control function:

Cut off the white wire of the connector (see pictures above) and connect the related terminals to the external ON/OFF control switch of the installation. The control logic of the external ON/OFF function is as follows:

- External contact closed: ON order
- External contact open: OFF order

Note: other settings like temperature set point, fan speed, louver position shall be set using the individual controller of the indoor unit (wired or wireless controller).

12. FIELD SETTING

Combined use of the external input and output contacts:

It is possible to associate the external ON/OFF command with the external alarm output signal to control the air conditioning system from an external controller.

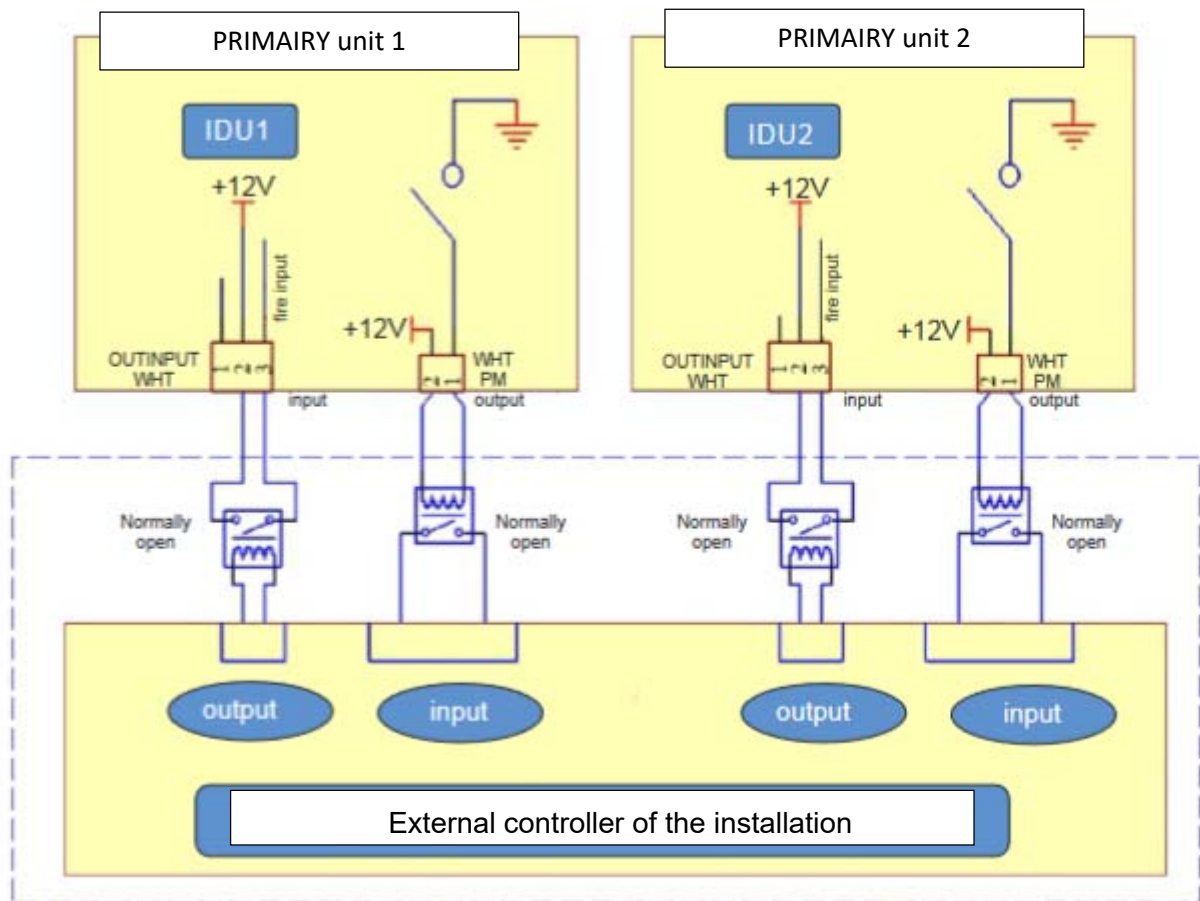
The output contact is managing a 12VDC output contact related to the alarm status of the indoor unit:

- Blue wire: positive terminal
- Brown wire: negative terminal

Control logic of the output contact:

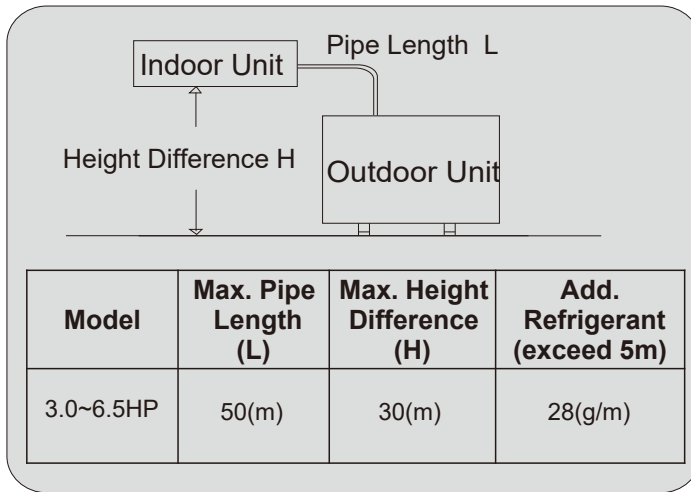
- Indoor unit has no alarm: no output tension (0 VDC)
- Indoor unit has an alarm: +12 VDC output tension.

Example of external control of 2 PRIMARY system from one external controller, with external ON/OFF operation + alarm feedback:



13. PIPING WORK AND REFRIGERANT CHARGE

13.1 MAX.Length Allowed

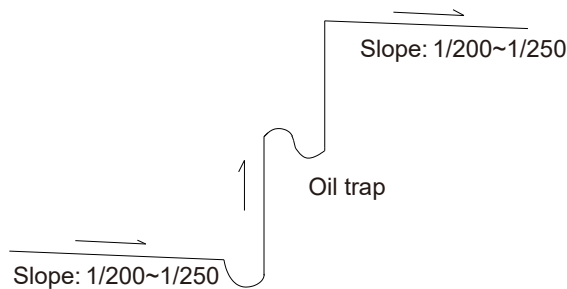


Additional refrigerant charge

The unit has been filled with refrigerant, but if the pipe exceeds 5m, additional refrigerant (R32) charge is required. Additional refrigerant charge = $(L-5) \times 28g/m$

13.2 Oil Trap

When the indoor unit is lower than outdoor unit and height difference is larger than 5m, set an oil trap every 5m (height difference) on suction piping.



NOTE:

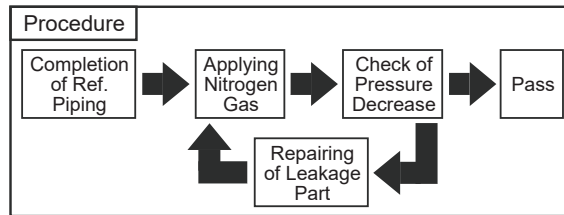
- 1) To avoid storing too much oil in the oil trap, the oil trap should be as short as possible.
- 2) The horizontal piping should slope down along the refrigerant flow direction, to bring the oil back to compressor, the slope is about 1/200 to 1/250.
- 3) In order to ensure cooling/heating performance better, the refrigerant piping should be as short and straight as possible.

13. PIPING WORK AND REFRIGERANT CHARGE

13.3 Air Tight Test

Do use nitrogen when performing air-tight test.

Connect the gauge manifold using charging hoses with a nitrogen cylinder to the check joints of the liquid line and the gas line stop valves. Perform the air-tight test. Don't open the gas line stop valves. Apply nitrogen gas pressure of 4.3MPa. Check for any gas leakage at the flare nut connections, or brazed parts by gas leak detector or foaming agent. It is OK if gas pressure does not decrease. After the air tight test, release nitrogen gas.



Air tight procedure

13.4 Additional Refrigerant Charge

Although refrigerant has been charged into this unit, additional refrigerant charge is required according to the piping length.

- The additional refrigerant precharge quantity should be determined and charged into the system according to the following procedure.
- Record the additional refrigerant quantity in order to facilitate maintenance and servicing activities.

Refrigerant charge before shipment (W0 (kg))

W0 is the outdoor unit refrigerant charge before shipment;

Xg is additional refrigerant outdoor unit needed to charge according to piping length during installation.

Model	Refrigerant Precharged before Shipment(W0(g))	Total Refrigerant Pipe Length	
		0m~5m	Longer than 5m
3.0HP	1400	0g	$Xg = 28g / m \times (\text{Total pipe length}(m) - 5)$
3.5HP	1450	0g	
4.0HP	2000	0g	
5.0HP	2500	0g	
6.0HP	3000	0g	
6.5HP	3400	0g	

14. INSTALLATION TOOLS AND INSTALLATION FLOW CHART

14.1 Necessary Tools and Instrument List for Installation

No.	Tool	No.	Tool	No.	Tool	No.	Tool
1	Handsaw	6	Copper Pipe Bender	11	Spanner	16	Leveler
2	Phillips Screwdriver	7	Manual Water Pump	12	Charging Cylinder	17	Clamper for Solderless Terminals
3	Vacuum Pump	8	Pipe Cutter	13	Gauge Manifold	18	Hoist (for Indoor Unit)
4	Refrigerant Gas Hose	9	Brazing Kit	14	Cutter for Wires	19	Ammeter
5	Megohmmeter	10	Hexagon Wrench	15	Gas Leak Detector	20	Voltage Meter

Use specified tools and measuring instruments only for the new refrigerant.

◇: Interchangeability is available with R410A

●: Only for Refrigerant R32

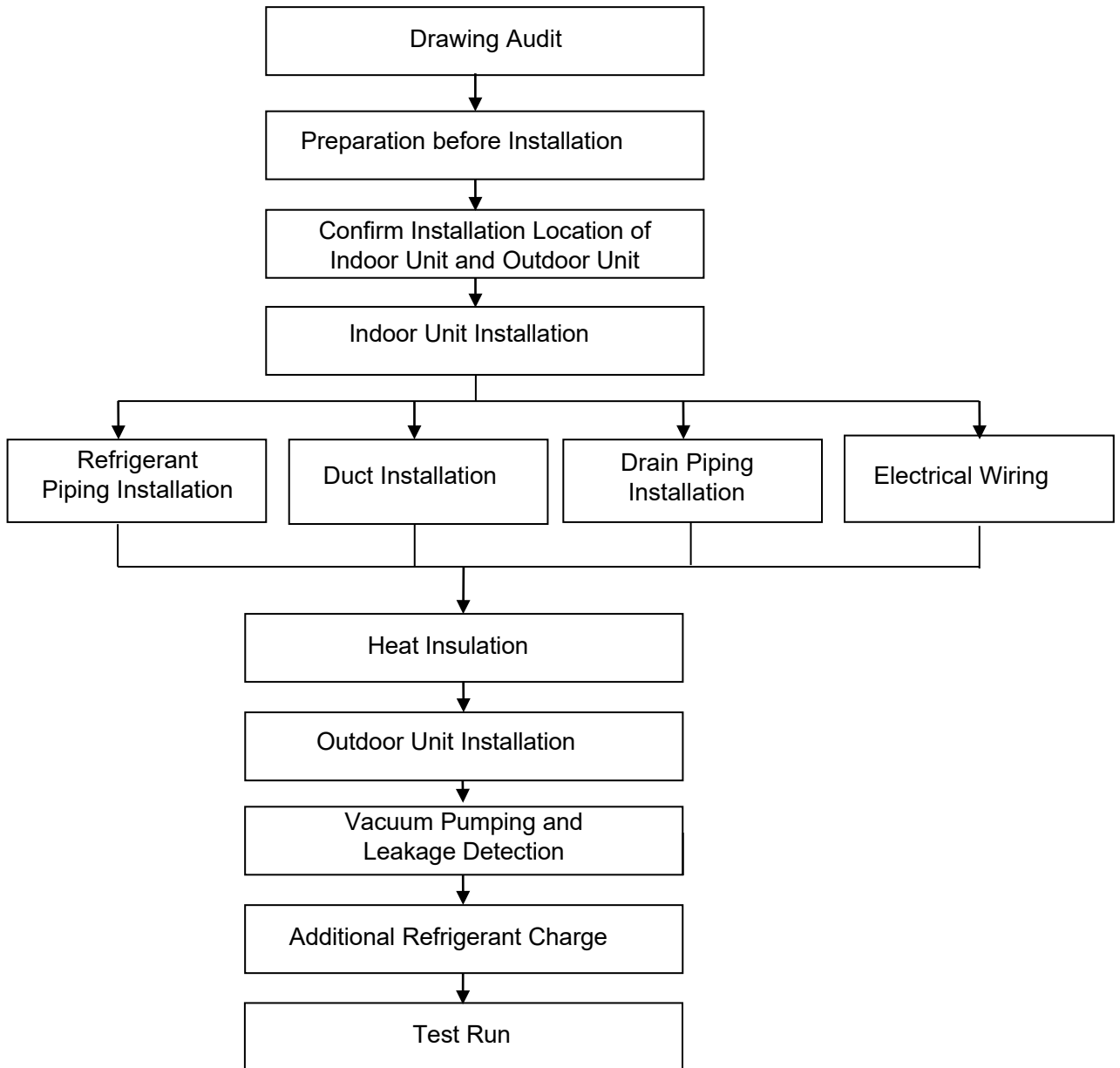
×: Prohibited

◆: Only for Refrigerant R22

Measuring Instrument and Tool for R410A		R32	R22	Reason of Non-Interchangeability and Attention (*: Strictly Required)	Use
Refrigerant Pipe	Pipe Cutter Chamfering Reamer	◇	◇	-	Cutting Pipe Removing Burrs
	Flaring Tool	◇	◇	* The flaring tools for R32 are applicable to R22/R410A. * If using flaring tube, make dimension of tube larger for R410A. * In case of material 1/2H, flaring is not available.	Flaring for Tubes
	Pipe Bender	◇	◇	* In case of material 1/2H, bending is not available. Use elbow for bend and braze.	Bending
	Expanding Tool	◇	◇	* In case of material 1/2H, expanding of tube is not available. Use socket for connecting tube.	Expanding Tubes
	Torque Wrench	◇	×	* For ϕ 1/2, ϕ 5/8, spanner size is up 2mm.	Connection of Flare Nut
		◇	◇	* For ϕ 1/4, ϕ 3/8, ϕ 3/4, spanner size is the same.	
	Brazing Tool	◇	◇	* Perform correct brazing work.	Brazing for Tubes
	Nitrogen Gas	◇	◇	* Strict Control against Contamin (Blow nitrogen during brazing.)	Prevention from Oxidation during
Lubrication Oil (for Flare Surface)	●	◆	* Use a synthetic oil which is equivalent to the oil used in the refrigeration cycle. * Synthetic oil absorbs moisture quickly.	Applying Oil to the Flared Surface	
Vacuum Drying & Refrigerant Charge	Refrigerant Cylinder	×	×	* Check refrigerant cylinder color. * Liquid refrigerant charging is required regarding zeotropic refrigerant. * Use the weight scale.	Refrigerant Charging
	Vacuum Pump	◇	◇	* The current ones are applicable. However, it is required to mount a vacuum pump adapter which can prevent from reverse flow when a vacuum pump stops, resulting in no reverse oil flow.	Vacuum Pumping
	Adapter for Vacuum Pump	◇	◆		
	Manifold Valve	◇	◆	* No interchangeability is available due to higher pressures when compared with R22. * Do not use current ones to the different refrigerant. If used, mineral oil will flow into the cycle and cause sludges, resulting in clogging or compressor failure.	Vacuum Pumping, Vacuum Holding, Refrigerant Charging and Check of Pressures
	Charging Hose	◇	×	* Connection diameter is different; R32/R410A: UNF1/2, R22: UNF7/16.	
	Weight Scale	◇	◇		Measuring Instrument for Refrigerant Charging
	Refrigerant Gas Leakage Detector	×	×	* The current gas leakage detector (R22) is not applicable due to different detecting method.	Gas Leakage Check

14. INSTALLATION TOOLS AND INSTALLATION FLOW CHART

14.2 Installation Flow Chart



NOTE: This flow is only for reference; for details, see installation manual section.

15. CONTROL MODE

15.1 Indoor Unit Mode Control

1. Main General Technical Parameters

- (1) Remote receiver distance: 8 m.
- (2) Remote receiver angle: Less than 80 degrees.
- (3) Temperature control accuracy: $\pm 1^{\circ}\text{C}$.
- (4) Time error: Less than 1%.

2. Functions of the Control Function

2.1 Emergency Switch

Pressing the emergency button can restart or stop the machine, which can start up according to the automatic mode of operation.

Press this button to turn ON the unit, the machine will run in auto mode, and press it again to turn it off.

When the machine is OFF, press and hold the emergency switch for 5 seconds, with 3 beeps, the indoor unit would turn to emergency running. In such situation, the machine would be forced to turn to cooling operation with high speed, the flaps sweep and the machine's operation is irrelevant with room temperatures.

If a remote signal has been received during the emergency run, the machine will operate upon the command of such a remote signal.

2.2 Operator-machine Communication

Air conditioning and remote controller is provided with a temperature sensor. The remote controller on the temperature sensor detects the default settings of room temperature at room temperature. If the indoor control unit has not received remote control signal for a long time, it will automatically switch to the air conditioner body temperature sensor.

2.3 Timer Function

(1) Timer ON

When set to start at a time by the remote controller, the air conditioner starts in the timer on condition. When the set time is up, the air conditioner will start up and operates in the preset conditions after receiving a signal from the remote controller. If the air conditioner has not received a signal from the remote controller when the set time is up, it will automatically start and operate in the preset conditions.

(2) Timer OFF

When set to stop at a set time by the remote controller, the air conditioner will start in the timer off condition. When the set time is up, the air conditioner will be off after receiving a signal from the remote controller. If the air conditioner has not received a signal from the remote controller when the set time is up, it will get off automatically.

(3) Neither the turning on nor turning off operation will cancel the timer function.

15. CONTROL MODE

2.4 Sleep

- (1) In the heating, cooling or dehumidifying mode, press the "Sleep" button on the remote controller to start or cancel the sleep function in turn, and at the same time the sleep icon on the display screen will be on or off accordingly.
- (2) In the heating mode, the set temperature will decrease automatically after the sleep function is started.
- (3) In the cooling mode, the set temperature will rise automatically after the sleep function is started.
- (4) By default, the setting is to cancel the sleep function. Turning off the unit will also cancel the sleep function.

2.5 Highly Efficient Run Function (only for Some Remote Controller)

In Cooling, Dehumidification, Fan mode, press the "HIGH POWER " to enter the refrigeration mode, set the temperature automatically adjusting to the lowest temperature; the Fan operates with powerful speed; frequency is high frequency operation.

In heating mode, press the "HIGH POWER" to enter the refrigeration mode, set the temperature automatically to adjust to the highest temperature; the Fan speed is powerful speed; frequency is high frequency operation.

Mute function (only for some remote controller)

In the indoor unit operation mode, you may turn on or turn off mute function with mute key. The air conditioner will run with mute fan speed in mute mode.

2.6 Cooling Wind Prevention Mode

In the heating-run, to prevent the indoor fan from blowing cold air, the indoor fan will stop or run slowly until the coil is warm.

2.7 Blowing Waste Heating and Waste Cooling Function

In the heating mode, when the air conditioner is turned off, the indoor heat exchanger temperature is still higher, so the air conditioner will continue to run the waste heat operation. In Cooling and dehumidification mode, after the compressor stops, indoor unit will continue to set the speed of operation for a period of time.

2.8 Dehumidifying Method:

If remote control setting is in dehumidifying mode, indoor unit is forced to run at low speed (high power key or a strong bond also maintains a low wind speed), and the outdoor unit runs according to the refrigeration mode operation.

2.9 Auto Re-start from Power Break

When the power supply is recovered after a break, all presets are still effective and the air conditioner can run according to the previous setting.

How to set/cancel:

It can be set /cancelled with wired remote controller.

For details, see internal control parameter adjustment.

15. CONTROL MODE

2.10 Fault Code

The fault code can be shown by LED lamps or will display on the wired controller.

2.11 Filter Cleaning

FC will light up when air filter is clogged with dust.

How to set/cancel: It can be set /cancelled with wired remote controller.

For details, see internal control parameter adjustment.

15. CONTROL MODE

15.2 Outdoor Unit Mode Control

Control Function

1. Cooling Anti-freeze Protection

The indoor coil sensor functions as real time temperature detector of evaporator. It prevents the indoor unit evaporator temperature becoming too low. If the indoor coil temperature is too low, the compressor will automatically start protection mode.

2. Overload Protection

To prevent system overload caused by excessive pressure, the machine will implement real-time detection when outdoor coil temperature is too high during cooling mode or indoor coil temperature is too high during heating mode.

3. Exhaust Temperature Protection

To prevent deterioration due to high exhaust temperature of compressor, the machine will realize the real-time detection of the exhaust gas temperature. If the temperature is too high, the compressor provides automatic protection.

4. Oil-return Control

When the compressor runs at low frequencies for a long time, control system will start the oil-return mechanism. The oil in the system returns to the compressor.

5. Operation Mode

Air conditioning mode is the operation mode set by users through remote controller, four modes are available: cooling, heating, dehumidification, and fan mode.

6. Four-way Valve Control

Four-way valve of the outdoor unit shuts down when cooling and defrosting but starts when heating. During the heating process, the four-way valve stops working for a period of time after the compressor is disconnected.

7. Start-up Protection

To prevent compressor from restarting frequently when the system pressure has not been completely balanced, it cannot be restarted within 3 minutes.

8. Pressure Protection

When the pressure increases to a preset value, the pressure switch will automatically protect the compressor. The compressor will stop and report the fault code protection.

16. SENSOR PARAMETER

16. Sensor Parameter

1. THE PARAMETER OF OUTDOOR COMPRESSOR DISCHARGE TEMPERATURE SENSOR:

($R_0=187.25K\pm 6.3\%$; $R_{100}=3.77K\pm 2.5K$; $B0/100=3979K\pm 1\%$)

T [°C]	Rmin [KΩ]	Rnom [KΩ]	Rmax [KΩ]	DR(MIN)%	DR(MAX)%
-30	908.2603	985.5274	1065.1210	-7.84	7.47
-29	855.3955	927.6043	1001.9150	-7.78	7.42
-28	805.9244	873.4324	924.8368	-7.73	5.56
-27	759.6097	822.7471	887.5944	-7.67	7.31
-26	716.2320	775.3041	835.9165	-7.62	7.25
-25	675.5881	730.8775	787.5529	-7.56	7.20
-24	637.4902	689.2583	742.2720	-7.51	7.14
-23	601.7645	650.2533	699.8601	-7.46	7.09
-22	568.2499	613.6835	660.1191	-7.40	7.03
-21	536.7970	579.3832	622.8658	-7.35	6.98
-20	507.2676	547.1989	587.9307	-7.30	6.93
-19	497.5332	516.9882	555.1565	-3.76	6.88
-18	453.4748	488.6192	524.3977	-7.19	6.82
-17	428.9819	461.9693	495.5191	-7.14	6.77
-16	405.9517	436.9251	486.3954	-7.09	10.17
-15	384.2888	413.3808	442.9105	-7.04	6.67
-14	363.9047	391.2386	418.9563	-6.99	6.62
-13	344.7169	370.4072	396.4325	-6.94	6.56
-12	326.6497	350.8019	375.2461	-6.88	6.51
-11	309.6286	332.3441	355.3104	-6.83	6.46
-10	293.5903	314.9620	336.5448	-6.79	6.41
-9	278.4719	298.5822	318.3744	-6.74	6.22
-8	264.2156	283.1464	302.2294	-6.69	6.31
-7	250.7678	268.5936	286.5448	-6.64	6.26
-6	238.0783	254.8686	271.7603	-6.59	6.22
-5	226.1003	241.9200	257.8193	-6.54	6.17
-4	214.7903	229.6997	244.6593	-6.49	6.11
-3	204.1073	218.1630	232.2612	-6.44	6.07
-2	194.0135	207.2681	220.5495	-6.39	6.02
-1	184.4732	196.9759	209.4913	-6.35	5.97
0	175.4533	187.2500	199.0468	-6.30	5.93
1	166.8952	178.0255	189.1529	-6.25	5.88
2	158.8023	169.3067	179.8058	-6.20	5.84
3	151.1467	161.0633	170.9724	-6.16	5.80
4	143.9026	153.2667	162.6216	-6.11	5.75
5	137.0455	145.8905	154.7246	-6.06	5.71
6	130.5528	138.9097	147.2544	-6.02	5.67
7	124.4033	132.3011	140.1856	-5.97	5.62
8	118.5769	126.0429	133.4946	-5.92	5.58
9	113.0550	120.1146	127.1591	-5.88	5.54
10	107.8202	114.4973	121.1586	-5.83	5.50
11	102.8560	109.1728	115.4734	-5.79	5.46
12	98.1470	104.1246	110.0855	-5.74	5.41
13	93.6787	99.3367	104.9778	-5.70	5.37
14	89.4378	94.7946	100.1342	-5.65	5.33
15	85.4114	90.4842	95.5398	-5.61	5.29
16	81.5875	86.3926	91.1805	-5.56	5.25
17	77.9551	82.5076	87.0430	-5.52	5.21
18	74.5034	78.8177	83.1150	-5.47	5.17

16. SENSOR PARAMETER

T [°C]	Rmin [KΩ]	Rnom [KΩ]	Rmax [KΩ]	DR(MIN)%	DR(MAX)%
19	71.2227	75.3122	79.3848	-5.43	5.13
20	68.1036	71.9808	75.8414	-5.39	5.09
21	65.1373	68.8141	72.4746	-5.34	5.05
22	62.3155	65.8032	69.2746	-5.30	5.01
23	59.6306	62.9395	66.2324	-5.26	4.97
24	57.0752	60.2152	63.3395	-5.21	4.93
25	54.6424	57.6227	60.5877	-5.17	4.89
26	52.3258	55.1551	57.9695	-5.13	4.85
27	50.1192	52.8058	55.4778	-5.09	4.82
28	48.0168	50.5684	53.1058	-5.05	4.78
29	46.0133	48.4371	50.8472	-5.00	4.74
30	44.1034	46.4046	48.6960	-4.96	4.71
31	42.2825	44.4711	46.6466	-4.92	4.66
32	40.5458	42.6261	44.6937	-4.88	4.63
33	38.8891	40.8668	42.8323	-4.84	4.59
34	37.3084	39.1890	41.0576	-4.80	4.55
35	35.7998	37.5883	39.3653	-4.76	4.51
36	34.3596	36.0609	37.7511	-4.72	4.48
37	32.9844	34.6030	36.2109	-4.68	4.44
38	31.6710	33.2113	34.7412	-4.64	4.40
39	30.4164	31.8823	33.3383	-4.60	4.37
40	29.2176	30.6130	31.9988	-4.56	4.33
41	28.0718	29.4004	30.7197	-4.52	4.29
42	26.9765	28.2417	29.4979	-4.48	4.26
43	25.9293	27.1342	28.3306	-4.44	4.22
44	24.9277	26.0755	27.2150	-4.40	4.19
45	23.9697	25.0632	26.1488	-4.36	4.15
46	23.0530	24.0950	25.1293	-4.32	4.12
47	22.1757	23.1688	24.1545	-4.29	4.08
48	21.3360	22.2826	23.2221	-4.25	4.05
49	20.5321	21.4345	22.3301	-4.21	4.01
50	19.7623	20.6226	21.4766	-4.17	3.98
51	19.0261	19.8468	20.6612	-4.14	3.94
52	18.3211	19.1040	19.8808	-4.10	3.91
53	17.6458	18.3926	19.1338	-4.06	3.87
54	16.9986	17.7113	18.4185	-4.02	3.84
55	16.3784	17.0537	17.7335	-3.96	3.83
56	15.7839	16.4332	17.0774	-3.95	3.77
57	15.2139	15.8338	16.4488	-3.92	3.74
58	14.6673	15.2592	15.8464	-3.88	3.71
59	14.1430	14.7083	15.2690	-3.84	3.67
60	13.6400	14.1799	14.7154	-3.81	3.64
61	13.1573	13.6730	14.1846	-3.77	3.61
62	12.6941	13.1868	13.6756	-3.74	3.57
63	12.2494	12.7202	13.1872	-3.70	3.54
64	11.8224	12.2723	12.7186	-3.67	3.51
65	11.4124	11.8424	12.2690	-3.63	3.48
66	11.0185	11.4295	11.8373	-3.60	3.45
67	10.6401	11.0331	11.4230	-3.56	3.41
68	10.2765	10.6522	11.0251	-3.53	3.38
69	9.9271	10.2863	10.6429	-3.49	3.35
70	9.5912	9.9348	10.2756	-3.46	3.32
71	9.2682	9.5968	9.9231	-3.42	3.29
72	8.9576	9.2720	9.5841	-3.39	3.26
73	8.6589	8.9597	9.2583	-3.36	3.23
74	8.3716	8.6594	8.9451	-3.32	3.19

16. SENSOR PARAMETER

T [°C]	Rmin [KΩ]	Rnom [KΩ]	Rmax [KΩ]	DR(MIN)%	DR(MAX)%
75	8.0951	8.3705	8.6440	-3.29	3.16
76	7.8290	8.0926	8.3544	-3.26	3.13
77	7.5730	7.8252	8.0758	-3.22	3.10
78	7.3264	7.5679	7.8078	-3.19	3.07
79	7.0891	7.3202	7.5499	-3.16	3.04
80	6.8605	7.0818	7.3018	-3.12	3.01
81	6.6403	6.8522	7.0629	-3.09	2.98
82	6.4282	6.6311	6.8329	-3.06	2.95
83	6.2239	6.4182	6.6115	-3.03	2.92
84	6.0269	6.2131	6.3982	-3.00	2.89
85	5.8371	6.0154	6.1928	-2.96	2.86
86	5.6542	5.8249	5.9949	-2.93	2.84
87	5.4777	5.6413	5.8042	-2.90	2.81
88	5.3076	5.4644	5.6205	-2.87	2.78
89	5.1435	5.2937	5.4433	-2.84	2.75
90	4.9853	5.1292	5.2726	-2.81	2.72
91	4.8326	4.9705	5.1079	-2.77	2.69
92	4.6852	4.8174	4.9492	-2.74	2.66
93	4.5430	4.6697	4.7960	-2.71	2.63
94	4.4058	4.5272	4.6483	-2.68	2.61
95	4.2733	4.3896	4.5058	-2.65	2.58
96	4.1453	4.2568	4.3683	-2.62	2.55
97	4.0218	4.1287	4.2355	-2.59	2.52
98	3.9024	4.0049	4.1074	-2.56	2.50
99	3.7872	3.8854	3.9837	-2.53	2.47
100	3.6758	3.7700	3.8643	-2.50	2.44
101	3.5661	3.6585	3.7512	-2.53	2.47
102	3.4601	3.5509	3.6419	-2.56	2.50
103	3.3577	3.4468	3.5362	-2.59	2.53
104	3.2588	3.3463	3.4341	-2.61	2.56
105	3.1632	3.2491	3.3353	-2.64	2.58
106	3.0708	3.1551	3.2398	-2.67	2.61
107	2.9816	3.0643	3.1475	-2.70	2.64
108	2.8953	2.9765	3.0582	-2.73	2.67
109	2.8118	2.8915	2.9717	-2.76	2.70
110	2.7311	2.8093	2.8881	-2.78	2.73
111	2.6531	2.7299	2.8072	-2.81	2.75
112	2.5776	2.6530	2.7289	-2.84	2.78
113	2.5046	2.5785	2.6531	-2.87	2.81
114	2.4340	2.5065	2.5798	-2.89	2.84
115	2.3656	2.4368	2.5087	-2.92	2.87
116	2.2995	2.3693	2.4400	-2.95	2.90
117	2.2354	2.3040	2.3733	-2.98	2.92
118	2.1734	2.2407	2.3088	-3.00	2.95
119	2.1134	2.1795	2.2463	-3.03	2.97
120	2.0553	2.1201	2.1858	-3.06	3.01
121	1.9991	2.0626	2.1271	-3.08	3.03
122	1.9446	2.0070	2.0702	-3.11	3.05
123	1.8918	1.9530	2.0151	-3.13	3.08
124	1.8406	1.9007	1.9617	-3.16	3.11
125	1.7911	1.8500	1.9099	-3.18	3.14
126	1.7430	1.8009	1.8597	-3.22	3.16
127	1.6965	1.7533	1.8110	-3.24	3.19
128	1.6514	1.7071	1.7638	-3.26	3.21
129	1.6076	1.6623	1.7180	-3.29	3.24
130	1.5652	1.6189	1.6736	-3.32	3.27

16. SENSOR PARAMETER

2. THE PARAMETER OF THE OTHER SENSOR IN INDOOR AND OUTDOOR UNIT:

($R_0=15K\pm 2\%$; $B0/100=3450K\pm 2\%$)

T [°C]	Rmin [KΩ]	Rnom [KΩ]	Rmax [KΩ]	DR(MIN)%	DR(MAX)%
-30	60.78	64.77	68.99	-6.16	6.12
-29	57.75	61.36	65.16	-5.88	5.83
-28	54.89	58.15	61.58	-5.61	5.57
-27	52.19	55.14	58.23	-5.35	5.31
-26	49.63	52.30	55.08	-5.11	5.05
-25	47.21	49.62	52.13	-4.86	4.81
-24	44.92	47.10	49.37	-4.63	4.60
-23	42.76	44.73	46.78	-4.40	4.38
-22	40.71	42.49	44.34	-4.19	4.17
-21	38.77	40.38	42.05	-3.99	3.97
-20	36.93	38.39	39.90	-3.80	3.78
-19	35.18	36.51	37.87	-3.64	3.59
-18	33.53	34.74	35.97	-3.48	3.42
-17	31.96	33.06	34.17	-3.33	3.25
-16	30.48	31.47	32.49	-3.15	3.14
-15	29.07	29.97	30.89	-3.00	2.98
-14	27.73	28.56	29.39	-2.91	2.82
-13	26.46	27.22	27.98	-2.79	2.72
-12	25.26	25.95	26.64	-2.66	2.59
-11	24.11	24.75	25.38	-2.59	2.48
-10	23.03	23.61	24.19	-2.46	2.40
-9	21.99	22.53	23.06	-2.40	2.30
-8	21.01	21.51	22.00	-2.32	2.23
-7	20.08	20.54	20.99	-2.24	2.14
-6	19.19	19.62	20.04	-2.19	2.10
-5	18.35	18.74	19.14	-2.08	2.09
-4	17.55	17.92	18.29	-2.06	2.02
-3	16.78	17.13	17.48	-2.04	2.00
-2	16.06	16.38	16.71	-1.95	1.97
-1	15.36	15.67	15.98	-1.98	1.94
0	14.70	15.00	15.29	-2.00	1.90
1	14.08	14.36	14.64	-1.95	1.91
2	13.48	13.75	14.02	-1.96	1.93
3	12.91	13.17	13.43	-1.97	1.94
4	12.36	12.62	12.87	-2.06	1.94
5	11.85	12.09	12.34	-1.99	2.03
6	11.35	11.59	11.83	-2.07	2.03
7	10.88	11.11	11.35	-2.07	2.11
8	10.43	10.66	10.89	-2.16	2.11
9	9.999	10.230	10.450	-2.26	2.11
10	9.590	9.816	10.040	-2.30	2.23
11	9.199	9.422	9.647	-2.37	2.33
12	8.826	9.047	9.269	-2.44	2.40
13	8.470	8.689	8.910	-2.52	2.48
14	8.129	8.347	8.567	-2.61	2.57
15	7.804	8.021	8.240	-2.71	2.66
16	7.493	7.709	7.928	-2.80	2.76
17	7.196	7.412	7.630	-2.91	2.86
18	6.912	7.127	7.346	-3.02	2.98
19	6.640	6.855	7.074	-3.14	3.10
20	6.381	6.595	6.815	-3.24	3.23
21	6.132	6.347	6.567	-3.39	3.35
22	5.894	6.109	6.330	-3.52	3.49

16. SENSOR PARAMETER

T [°C]	Rmin [KΩ]	Rnom [KΩ]	Rmax [KΩ]	DR(MIN)%	DR(MAX)%
23	5.667	5.882	6.103	-3.66	3.62
24	5.449	5.664	5.886	-3.80	3.77
25	5.240	5.456	5.678	-3.96	3.91
26	5.048	5.260	5.478	-4.03	3.98
27	4.864	5.072	5.286	-4.10	4.05
28	4.687	4.891	5.101	-4.17	4.12
29	4.517	4.717	4.924	-4.24	4.20
30	4.355	4.550	4.753	-4.29	4.27
31	4.198	4.390	4.589	-4.37	4.34
32	4.048	4.236	4.431	-4.44	4.40
33	3.904	4.089	4.280	-4.52	4.46
34	3.766	3.946	4.134	-4.56	4.55
35	3.663	3.810	3.994	-3.86	4.61
36	3.506	3.679	3.859	-4.70	4.66
37	3.383	3.552	3.729	-4.76	4.75
38	3.265	3.431	3.604	-4.84	4.80
39	3.152	3.314	3.484	-4.89	4.88
40	3.043	3.202	3.368	-4.97	4.93
41	2.938	3.094	3.257	-5.04	5.00
42	2.838	2.990	3.149	-5.08	5.05
43	2.741	2.890	3.046	-5.16	5.12
44	2.648	2.793	2.946	-5.19	5.19
45	2.558	2.701	2.850	-5.29	5.23
46	2.472	2.611	2.758	-5.32	5.33
47	2.389	2.525	2.669	-5.39	5.40
48	2.309	2.443	2.583	-5.49	5.42
49	2.232	2.363	2.500	-5.54	5.48
50	2.158	2.286	2.421	-5.60	5.58
51	2.087	2.212	2.344	-5.65	5.63
52	2.018	2.140	2.269	-5.70	5.69
53	1.952	2.072	2.198	-5.79	5.73
54	1.888	2.005	2.129	-5.84	5.82
55	1.827	1.941	2.062	-5.87	5.87
56	1.767	1.880	1.998	-6.01	5.91
57	1.710	1.820	1.936	-6.04	5.99
58	1.655	1.763	1.876	-6.13	6.02
59	1.602	1.707	1.818	-6.15	6.11
60	1.551	1.654	1.762	-6.23	6.13
61	1.502	1.602	1.709	-6.24	6.26
62	1.452	1.553	1.657	-6.50	6.28
63	1.409	1.505	1.606	-6.38	6.29
64	1.364	1.458	1.558	-6.45	6.42
65	1.322	1.413	1.511	-6.44	6.49
66	1.280	1.370	1.466	-6.57	6.55
67	1.241	1.328	1.422	-6.55	6.61
68	1.202	1.288	1.379	-6.68	6.60
69	1.165	1.249	1.339	-6.73	6.72
70	1.129	1.211	1.299	-6.77	6.77
71	1.095	1.175	1.261	-6.81	6.82
72	1.061	1.140	1.224	-6.93	6.86
73	1.029	1.106	1.188	-6.96	6.90
74	0.9977	1.073	1.153	-7.02	6.94
75	0.9676	1.041	1.120	-7.05	7.05
76	0.9385	1.011	1.088	-7.17	7.08
77	0.9104	0.9810	1.056	-7.20	7.10
78	0.8833	0.9523	1.026	-7.25	7.18

16. SENSOR PARAMETER

T [°C]	Rmin [KΩ]	Rnom [KΩ]	Rmax [KΩ]	DR(MIN)%	DR(MAX)%
79	0.8570	0.9246	0.9971	-7.31	7.27
80	0.8316	0.8977	0.9687	-7.36	7.33
81	0.8071	0.8717	0.9412	-7.41	7.38
82	0.7834	0.8466	0.9146	-7.47	7.43
83	0.7604	0.8223	0.8888	-7.53	7.48
84	0.7382	0.7987	0.8639	-7.57	7.55
85	0.7167	0.7759	0.8397	-7.63	7.60
86	0.6958	0.7537	0.8161	-7.68	7.65
87	0.6755	0.7322	0.7933	-7.74	7.70
88	0.6560	0.7114	0.7712	-7.79	7.75
89	0.6371	0.6913	0.7498	-7.84	7.80
90	0.6188	0.6718	0.7291	-7.89	7.86
91	0.6011	0.6530	0.7051	-7.95	7.39
92	0.5840	0.6348	0.6897	-8.00	7.96
93	0.5674	0.6171	0.6709	-8.05	8.02
94	0.5514	0.6000	0.6527	-8.10	8.07
95	0.5359	0.5835	0.6350	-8.16	8.11
96	0.5209	0.5675	0.6179	-8.21	8.16
97	0.5064	0.5519	0.6014	-8.24	8.23
98	0.4923	0.5369	0.5853	-8.31	8.27
99	0.4787	0.5224	0.5698	-8.37	8.32
100	0.4655	0.5083	0.5547	-8.42	8.36
101	0.4528	0.4946	0.5401	-8.45	8.42
102	0.4404	0.4814	0.5259	-8.52	8.46
103	0.4284	0.4685	0.5121	-8.56	8.51
104	0.4168	0.4561	0.4988	-8.62	8.56
105	0.4056	0.4440	0.4859	-8.65	8.62
106	0.3947	0.4323	0.4733	-8.70	8.66
107	0.3841	0.4210	0.4611	-8.76	8.70
108	0.3739	0.4100	0.4493	-8.80	8.75
109	0.3640	0.3993	0.4379	-8.84	8.81
110	0.3544	0.3890	0.4267	-8.89	8.84
111	0.3450	0.3789	0.4159	-8.95	8.90
112	0.3360	0.3692	0.4055	-8.99	8.95
113	0.3272	0.3597	0.3953	-9.04	9.01
114	0.3187	0.3505	0.3854	-9.07	9.06
115	0.3104	0.3416	0.3758	-9.13	9.10
116	0.3024	0.3330	0.3665	-9.19	9.14
117	0.2947	0.3246	0.3574	-9.21	9.18
118	0.2871	0.3164	0.3468	-9.26	8.77
119	0.2798	0.3085	0.3401	-9.30	9.29
120	0.2727	0.3008	0.33	-9.34	9.34



Correct Disposal of this product

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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