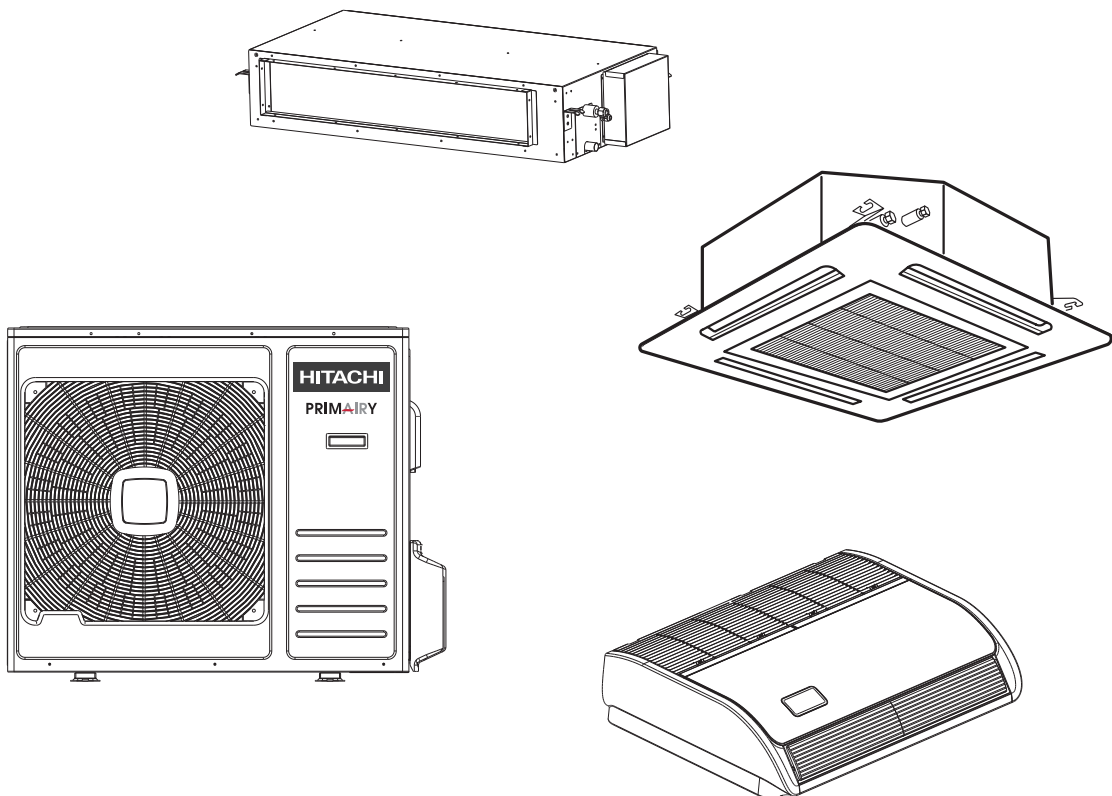


### HITACHI SPLIT AIR CONDITIONERS



## **Models**

### < Indoor Units >

#### **Ducted**

Heat pump type

RPIL-1.0UNE1NH  
RPIL-1.5UNE1NH  
RPIL-2.0UNE1NH  
RPIM-3.0UNE1NH  
RPIH-4.0UNE1NH  
RPIH-5.0UNE1NH  
RPIH-6.0UNE1NH  
RPIH-6.5UNE1NH

Cooling only type

RPIL-1.0TNE1NH  
RPIL-1.5TNE1NH  
RPIL-2.0TNE1NH  
RPIM-3.0TNE1NH  
RPIH-4.0TNE1NH  
RPIH-5.0TNE1NH  
RPIH-6.0TNE1NH  
RPIH-6.5TNE1NH

#### **Cassette**

Heat pump type

RCI-1.5UNE1NH  
RCI-2.0UNE1NH  
RCI-3.0UNE1NH  
RCI-4.0UNE1NH  
RCI-5.0UNE1NH  
RCI-6.0UNE1NH  
RCI-6.5UNE1NH

Cooling only type

RCI-1.5TNE1NH  
RCI-2.0TNE1NH  
RCI-3.0TNE1NH  
RCI-4.0TNE1NH  
RCI-5.0TNE1NH  
RCI-6.0TNE1NH  
RCI-6.5TNE1NH

#### **Floor ceiling**

Heat pump type

RPFC-2.0UNE1NH  
RPFC-3.0UNE1NH  
RPFC-4.0UNE1NH  
RPFC-5.0UNE1NH  
RPFC-6.0UNE1NH  
RPFC-6.5UNE1NH

Cooling only type

RPFC-2.0TNE1NH  
RPFC-3.0TNE1NH  
RPFC-4.0TNE1NH  
RPFC-5.0TNE1NH  
RPFC-6.0TNE1NH  
RPFC-6.5TNE1NH

### < Outdoor Units >

Heat pump type

RAS-1.0UNESNH1  
RAS-1.5UNESNH1  
RAS-2.0UNESNH1  
RAS-3.0UNESNH1  
RAS-4.0UNESNH1  
RAS-5.0UNESMH1  
RAS-6.0UNESMH1  
RAS-6.5UNESMH1

Cooling type

RAS-1.0TNESNH1  
RAS-1.5TNESNH1  
RAS-2.0TNESNH1  
RAS-3.0TNESNH1  
RAS-4.0TNESNH1  
RAS-5.0TNESMH1  
RAS-6.0TNESMH1  
RAS-6.5TNESMH1

#### ●NOTE:

Heating function is not available for cooling only models.

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# 1. GENERAL

## 1. General

### 1.1 Features

#### Ducted Air Conditioner



#### Features

➤ **Save Installation Space**

The indoor unit can be installed inside the ceiling conveniently.

➤ **Optional Static Pressure**

Optional ESP, a variety of optional installation methods.

➤ **High Efficiency and Environment Friendly New Refrigerant-R410A**

R410A can protect the environment and do not harm to the ozone layer.

➤ **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 enable the airflow to be quiet and smooth with minimum noise.

➤ **Meeting Various Installation Requirements**

The back-air-inlet type is usually to be adopted according to the actual installation space. The unit is also installed with down-air-inlet type and the noise will increase about 5-6dB.

➤ **Auto re-start from Power Break**

When the power supply is recovered after power break, all preset are still effective and the air-conditioner will run according to the previous setting.

➤ **Fault Self-diagnose Function**

When there is something wrong with the air-conditioner , the micro computer could diagnose the faults, which can be read from the display and is convenient for maintenance.



## 1. GENERAL

### Cassette Type Air Conditioner



#### Features

➤ **Save Installation Space**

The indoor unit can be installed inside the ceiling conveniently.

➤ **High Efficiency and Environment Friendly New Refrigerant-R410A**

R410A can protect the environment and do not harm to the ozone layer.

➤ **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 enable the airflow to be quiet and smooth with minimum noise.

➤ **Auto re-start from Power Break**

When the power supply is recovered after power break, all preset are still effective and the air-conditioner will run according to the previous setting.

➤ **Fault Self-diagnose Function**

When there is something wrong with the air-conditioner, the micro computer could diagnose the faults, which can be read from the display and is convenient for maintenance.

## 1. GENERAL

### Floor Ceiling Air Conditioner



#### Features

➤ **Save Installation Space**

The indoor unit's thickness is only 230mm, 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 method.

➤ **High Efficiency and Environment Friendly**

New Refrigerant-R410A

R410A can protect the environment and do not harm to the ozone layer.

➤ **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 enable the airflow to be quiet and smooth with minimum noise.

➤ **Various Refrigerant Pipe Connect 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 preset are still effective and the air-conditioner will run according to the previous setting.

➤ **Fault Self-diagnose Function**

When there is something wrong with the air-conditioner, the micro computer could diagnose the faults, which can be read from the display and is convenient for maintenance.

# 1. GENERAL

## 1.2 Product lineup

Type \ Model (HP)	1.0	1.5	2.0	3.0	4.0	5.0	6.0	6.5
Ducted	●	●	●	●	●	●	●	●
Cassette		●	●	●	●	●	●	●
Floor Ceiling			●	●	●	●	●	●

● --- available model

## 1. GENERAL

### 1.3 Unit installation

1:1 system is the only combination compatible.

(1 indoor unit only can be connected with 1 outdoor unit.)

### 1.4 Working range

#### Power Supply

Working Voltage	176V ~ 264V(1.0~4.0HP),342V ~ 438V(5.0~6.5HP)
Voltage Imbalance	Within a 3% deviation from each voltage at the main terminal of outdoor unit
Starting Voltage	Higher than 85% of the Rated Voltage

#### Operating temperature range

This air conditioner has been designed for the following outdoor operating temperatures.

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

#### Storage condition:



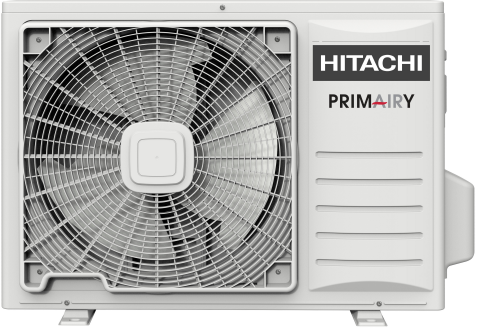
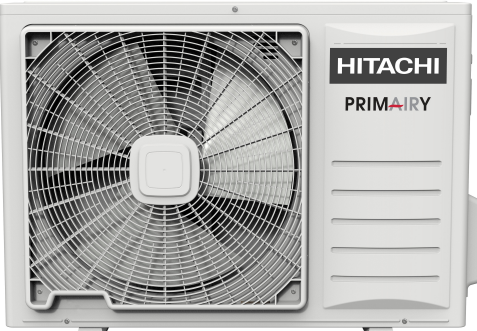
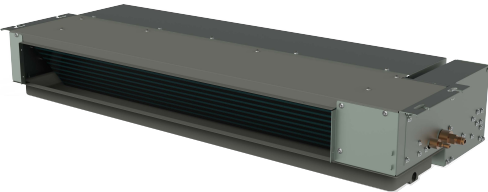

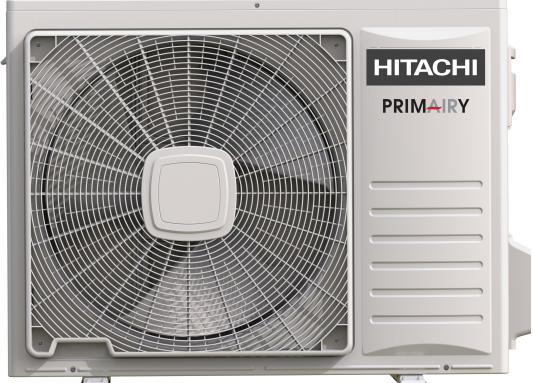
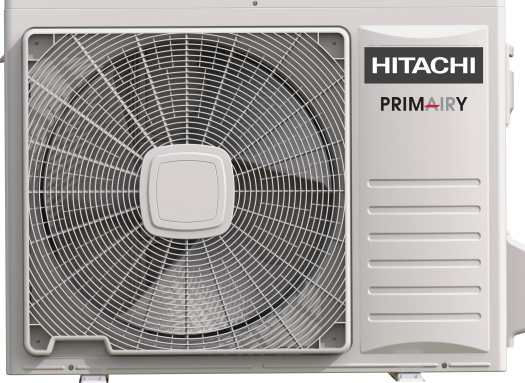
Temperature -20~65°C

Humidity 30%~80%



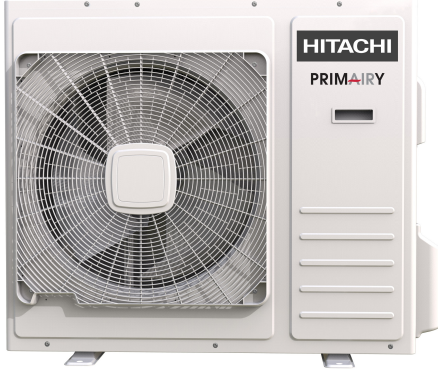


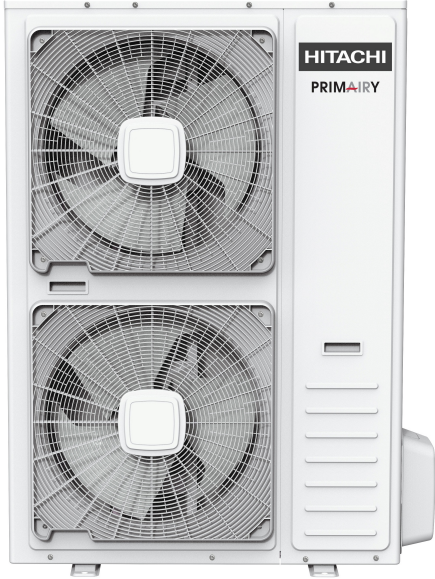
# 1. GENERAL

## 1.5 Product picture

Ducted

Model (Capacity)	1.0HP	1.5HP
Indoor Unit		
Outdoor Unit		
Model (Capacity)	2.0HP	3.0HP
Indoor Unit		
Outdoor Unit		



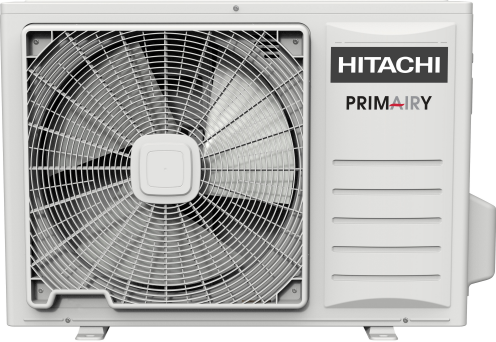
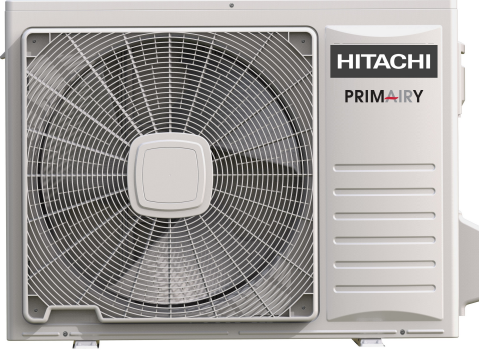


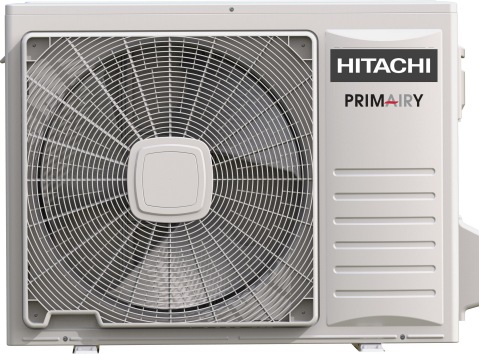
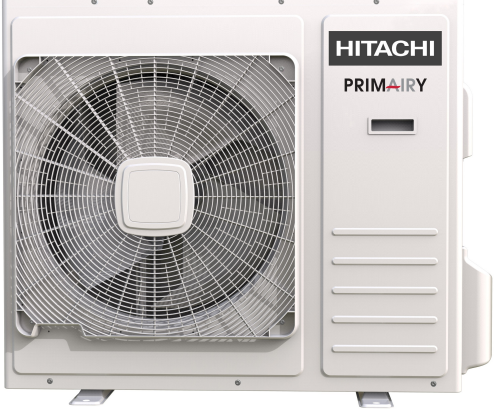
# 1. GENERAL

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




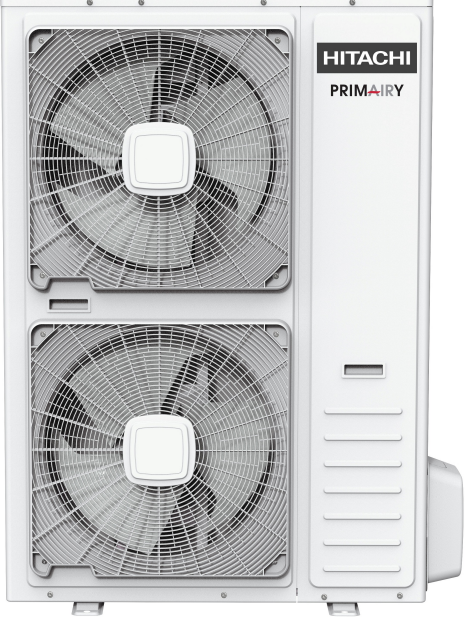


# 1. GENERAL

## Cassette

Model (Capacity)	1.5HP	2.0HP
Indoor Unit		
Outdoor Unit		
Model (Capacity)	3.0HP	4.0HP
Indoor Unit		
Outdoor Unit		



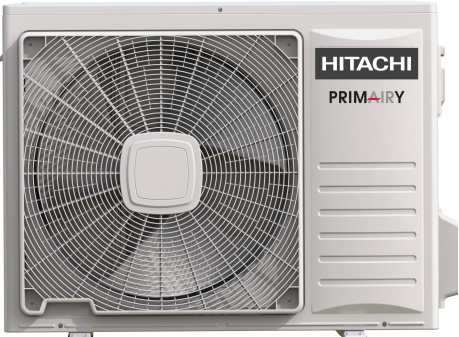
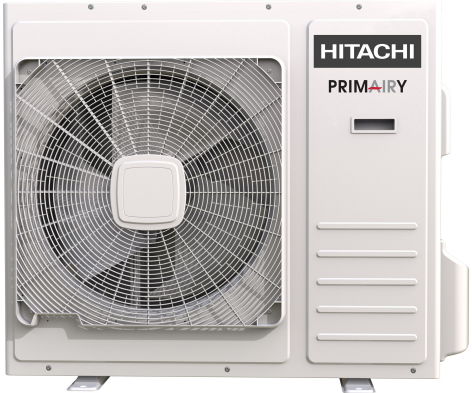



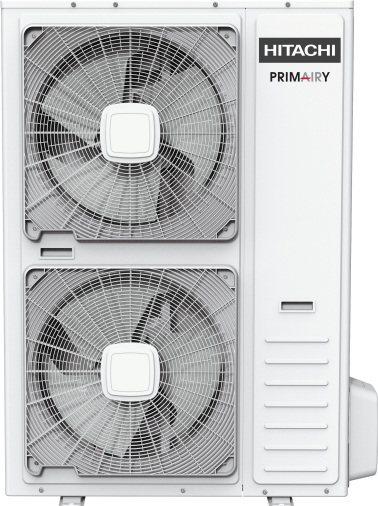
# 1. GENERAL

Model (Capacity)	5.0HP	6.0/6.5HP
Indoor Unit	 A square-shaped, white indoor ceiling-mounted air conditioning unit with a central grille and four directional louvers.	 A square-shaped, white indoor ceiling-mounted air conditioning unit, similar in design to the 5.0HP model but slightly larger.
Outdoor Unit	 A white outdoor condenser unit for the 5.0HP model, featuring a large circular fan grille on the left and the 'HITACHI PRIMARY' logo on the right.	 A white outdoor condenser unit for the 6.0/6.5HP model, featuring two large circular fan grilles stacked vertically on the left and the 'HITACHI PRIMARY' logo on the right.



**1. GENERAL**

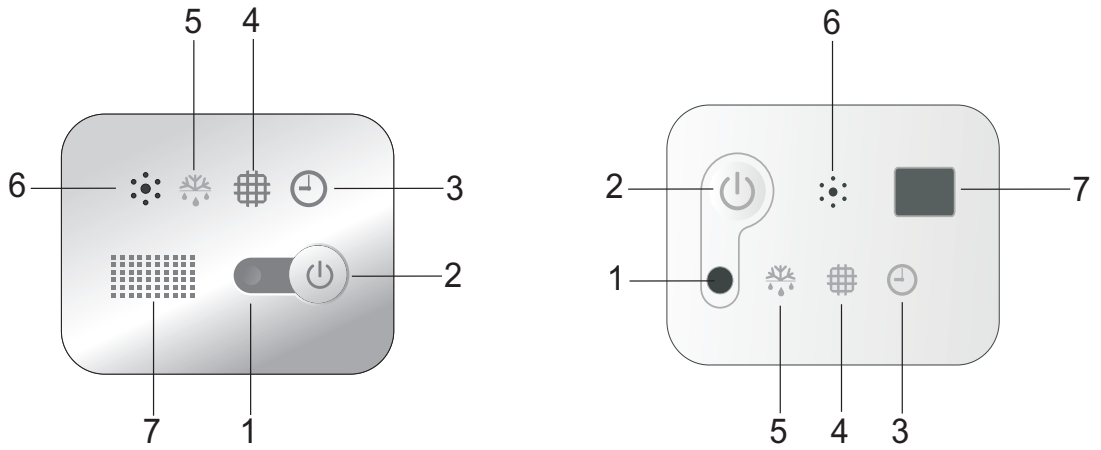
**Floor Ceiling**

Model (Capacity)	2.0/3.0HP	4.0HP
Indoor Unit		
Outdoor Unit		
Model (Capacity)	5.0HP	6.0/6.5HP
Indoor Unit		
Outdoor Unit		

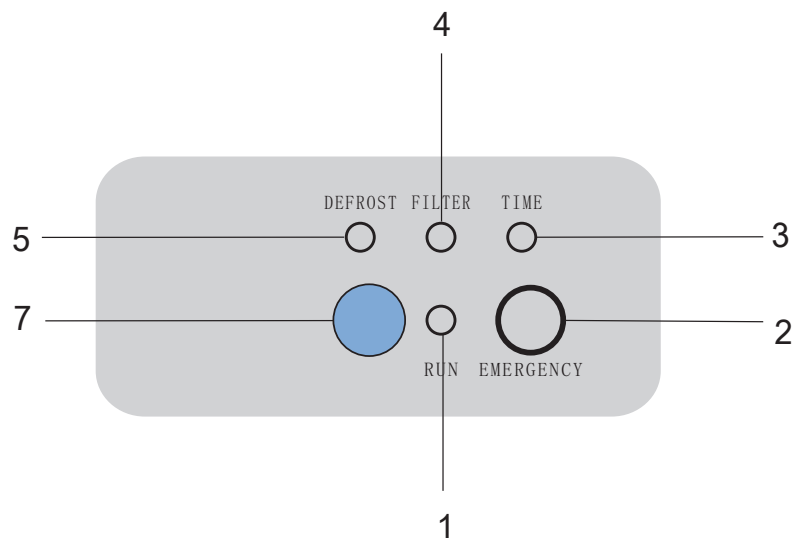
# 1. GENERAL

Display panel

Cassette Type



Floor Ceiling type



## 1. GENERAL

### Description

- 1 Run indicator (Red)  
It lights on during operation. It lights off during SLEEP mode.
- 2 Emergency switch  
The filter clean indicator will be off when the switch is pressed. The unit will stop operation if pressing the button. When the unit is off, it will start auto operation if pressing the button, if pressing for more than 5s, the unit will operate in cooling mode.
- 3 Timer indicator (Green)  
It lights on when timer is in use. It lights off when timer finishes.
- 4 Filter clean (Yellow)  
It lights on when the filter should be cleaned.
- 5 Defrost indicator (Green)  
It lights on during defrosting. It lights off when defrosting is finished.
- 6 Buzzer  
It beeps when the signal from remote controller is received.
- 7 Infrared receiver  
Receives signal from the remote controller.

- ☑ • *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.*
- \* *It can be set or canceled by professional after-sale staff.*

## 2. SPECIFICATIONS

### 2. Specifications

#### 2.1 Ducted

##### Heat pump type

Hitachi IDU			RPIL-1.0UNE1NH	RPIL-1.5UNE1NH	RPIL-2.0UNE1NH	RPIM-3.0UNE1NH	RPIH-4.0UNE1NH	RPIH-5.0UNE1NH	RPIH-6.0UNE1NH	RPIH-6.5UNE1NH
Hitachi ODU			RAS-1.0UNESNH1	RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
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	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
Max. input consumption	W		1140	1800	2460	4100	5100	6400	7000	7800
Max. input current	A		7.8	8.1	11.1	18.1	22.5	11.6	12.0	13.1
Average	Pdesignc	kW	2.610	3.520	5.280	6.800	10.100	12.026	13.480	15.760
	SEER	W/W	5.89	6.33	5.84	6.17	6.23	5.71	6.08	5.99
	Energy Efficiency Class		A+	A++	A+	A++	A++	A+	A+	A+
	Pdesignh	kW	2.200	3.520	4.800	5.680	8.650	9.930	12.400	11.120
	SCOP	W/W	3.74	3.81	3.95	3.85	3.80	3.77	3.78	3.68
	Energy Efficiency Class		A	A	A	A	A	A	A	A
	Tbiv	°C	-7	-7	-7	-7	-7	-7	-7	-7
Tol	°C	-15	-15	-15	-15	-15	-15	-15	-15	-15
Cooling	Capacity	Btu/h	8905	12010	18015	23202	34461	41033	45994	53773
	Capacity	kW	2.610	3.520	5.280	6.800	10.100	12.026	13.480	15.760
	Capacity range	kW	1.420~3.400	1.720~3.850	1.400~6.000	2.700~7.850	2.930~12.000	3.300~13.200	3.200~16.000	4.980~18.000
	Input	W	777	1009	1620	2230	3311	4295	4464	6062
	Current	A	3.6	4.4	7.6	9.7	16.5	7.4	7.5	10
	EER	W/W	3.36	3.49	3.26	3.05	3.05	2.80	3.02	2.60
Heating	Capacity	Btu/h	8858	12386	20308	27100	39067	47768	58000	63000
	Capacity	kW	2.596	3.630	5.952	7.943	11.450	14.000	16.999	18.464
	Capacity range	kW	1.270~3.600	1.770~4.220	1.700~6.800	2.770~8.700	3.320~13.000	3.000~14.600	3.400~18.500	5.200~20.500
	Input	W	683	950	1751	2296	3400	4100	4970	5716

## 2. SPECIFICATIONS

Hitachi IDU			RPIL-1.0UNE1NH	RPIL-1.5UNE1NH	RPIL-2.0UNE1NH	RPIM-3.0UNE1NH	RPIH-4.0UNE1NH	RPIH-5.0UNE1NH	RPIH-6.0UNE1NH	RPIH-6.5UNE1NH
Hitachi ODU			RAS-1.0UNESNH1	RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Heating	Current	A	3.0	4.2	7.9	10.5	15.2	7.5	7.7	9.0
	COP	W/W	3.80	3.82	3.40	3.46	3.38	3.41	3.42	3.23
Indoor fan motor	Model		SIC-68CVL-F140-1	SIC-68CVL-F140-1	YSK110-40-4-A	SIC-70CW-F195-1	SIC-101CW-F1250-4	SIC-101CW-F1250-4	SIC-101CW-F1250-4	SIC-101CW-F1250-4
	Power supply	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
	Qty		1	1	1	1	1	1	1	1
	Input	W	40	40	40	95	250	250	250	250
	Capacitor	uF	/	/	2	/	/	/	/	/
	Speed(Hi/Med/Lo)	r/min	770/640/540	880/740/610	1130/950/850	890/790/690	800/700/600	910/810/710	1100/1000/900	1100/1000/900
Indoor coil	Number of rows		3	3	3	3	3	3	3	3
	Tube pitch(a)*row itch(b)	mm	21x13.6	21x13.6	21x13.6	21x13.6	21x18.19	21x18.19	21x18.19	21x18.19
	Fin spacing	mm	1.6	1.6	1.6	1.6	1.4	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 dia.and type	mm	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube
	Coil (LxHxW)	mm	768x189x40.8	515x252x40.11	1038x189x40.8	700x294x40.8	1100x378x54.57	1100x378x54.57	1100x378x54.6	1100x378x54.6
	Number of circuits		4	4	4	4	9	9	9	9
Indoor air flow Rated(Hi/Med/Lo)	m³/h	500/400/320	575/484/400	900/840/730	1100/976/852	1450/1250/1050	1750/1500/1300	2400/2200/1900	2400/2200/1900	
Indoor air flow Rated(Hi/Med/Lo)	CFM	294/235/188	338/285/235	529/494/429	647/574/501	853/735/618	1029/882/765	1294/1206/1118	1415/1300/1124	
ESP	Rated (test)	Pa	25	25	25	25	37	50	50	50
	Range	Pa	0~50	0~50	10/30	0~80	0~120	0~120	0~120	0~120
Indoor noise level (Hi/Med/Lo)	dB(A)	32/28/25	36/34/29	43/41/38	44/41/38	46/42/39	51/47/44	55/52/50	56/53/50	
Indoor noise level (Sound power)	dB(A)	46	50	57	58	62	67	70	72	
Indoor unit	Dimension (WxHxD)	mm	900x190x447	900x190x447	1170x190x447	900x270x720	1300x350x800	1300x350x800	1300x350x800	1300x350x800
	Packing(WxHxD)	mm	1070x236x580	1070x236x580	1340x236x580	1170x340x870	1550x410x940	1550x410x940	1550x410x940	1550x410x940
	Net/Gross weight	kg	19/23.5	19/23.5	24/29	32/37	51/60	51/60	51/60	51/60
Drainage water pipe diameter	mm	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	
Controller		Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	
Operation temperature	°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	16~30	

## 2. SPECIFICATIONS

Hitachi IDU			RPIL-1.0UNE1NH	RPIL-1.5UNE1NH	RPIL-2.0UNE1NH	RPIM-3.0UNE1NH	RPIH-4.0UNE1NH	RPIH-5.0UNE1NH	RPIH-6.0UNE1NH	RPIH-6.5UNE1NH
Hitachi ODU			RAS-1.0UNESNH1	RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Qty'per 20' /40' /40'HQ (Indoor unit)		Set	200/440/484	200/440/484	160/340/374	84/182/182	35/75/90	35/75/90	35/75/90	35/75/90
Compressor	Model		ASD088SKNA8JT	ASN108D43UFZA	ATM150D23UFZ	ATF235D43UMT	ATF310D43UMT	ATF310D43UMT	ATH356SDPC9FQ	LNB42FSAMC
	Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
	Type		ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Brand		Highly	GMCC	GMCC	GMCC	GMCC	GMCC	Highly	MITSUBISHI
	Capacity	Btu/h	8549	11123	15427	24361	32380	32380	34470	47699
	Input	W	575	810	1165	1940	2600	2600	3155	4270
	Rated current(RLA)	A	2.95	5.70	8.10	8.90	5.10	5.10	13.20	12.00
	Refrigerant oil	ml	α68HES-H/320	ESTER OIL VG74/370	ESTEL OIL VG74/500	POE VG74/670	PQE VG74/1000	PQE VG74/1000	α 68HES-H or equivalent /1650	FV50S or PVE/1400
Outdoor fan motor	Model		SIC-52FV-F130-3	ZWA138D08A	SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F8121-1	SIC-81FW-F1138-1	YDK65-6-9061 & YDK65-6-9024	YDK65-6-9061 & YDK65-6-9024
	Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
	Qty		1	1	1	1	1	1	2	2
	Input	W	30	30	61	61	121	138	121	121
	Capacitor	μF	NA	NA	NA	NA	NA	NA	NA	NA
	Speed (Hi)	r/min	820	880	840	880	830	850	810	810
Outdoor coil	Number of rows		1.5	2	2	2	2	2	2	2
	Tube pitch(a)* row pitch(b)	mm	21x18.19	21x18.19	21x21.65	21x18.19	21x21.65	21x21.65	21x21.65	21x21.65
	Fin spacing	mm	1.3	1.4	1.4	1.4	1.3	1.6	1.4	1.4
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ7,innergroove tube	Φ7,innergroove tube	Φ7.94, innergroove tube	Φ7.94, innergroove tube	Φ7.94,innergroove tube	Φ7.94,innergroove tube
	Coil (LxHxW)	mm	761x504x36.38	840x546x36.38	962x630x43.3	900x630x43.3	970x798x43.5	970x1008x43.5	970x1344x43	970x1344x43
	Number of circuits		4	4	7	4	5	6	12	12
Outdoor noise level (Sound pressure) Hi	dB(A)	52	48	53	53	55	58	53	58	
Outdoor noise level (Sound power)	dB(A)	65	62	65	68	70	74	69	73	
Throttle type		EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	
Outdoor unit	Dimension(WxHxD)	mm	730x536x260	810x585x280	860x670x310	860x670x310	950x840x340	950x1050x340	950x1386x340	950x1386x340
	Packing(WxHxD)	mm	860x600x400	940x640x420	990x730x450	990x730x450	1110x910x460	1110x1200x460	1110x1527x460	1110x1527x460

## 2. SPECIFICATIONS

Hitachi IDU			RPIL-1.0UNE1NH	RPIL-1.5UNE1NH	RPIL-2.0UNE1NH	RPIM-3.0UNE1NH	RPIH-4.0UNE1NH	RPIH-5.0UNE1NH	RPIH-6.0UNE1NH	RPIH-6.5UNE1NH
Hitachi ODU			RAS-1.0UNESNH1	RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Outdoor unit	Net/Gross weight	kg	31/34	34/38.5	45/49	51/57	70/80	85/95	113/125	117/129
Refrigerant type/Quantity	Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Charged volume	kg	0.83	1.05	1.3	1.7	2.8	3.2	3.78	3.95
Design pressure	(Hi/Lo)	MPa	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ6.35/Φ9.52 (1/4'/3/8')	Φ6.35/Φ9.52 (1/4'/3/8')	Φ6.35/Φ12.7 (1/4'/1/2')	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')
	Max. pipe length	m	25	25	30	50	50	50	50	50
	Max. difference in level	m	10	15	15	30	30	30	30	30
Annual consumption(Cooling)	energy	kWh/a	157	195	316	386	567	761	800	943
Annual consumption(Heating)	energy	kWh/a	824	1295	1678	2065	3174	3674	4586	4205
Ambient temperature	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
Qty'per 20' /40' /40'HQ (Outdoor unit)	Set		102/213/292	102/204/272	90/186/186	90/186/186	52/106/106	26/53/106	26/53/53	26/53/53

## 2. SPECIFICATIONS

### Cooling only type

Indoor model		RPIL-1.0TNE1NH	RPIL-1.5TNE1NH	RPIL-2.0TNE1NH	RPIM-3.0TNE1NH	RPIH-4.0TNE1NH	RPIH-5.0TNE1NH	RPIH-6.0TNE1NH	RPIH-6.5TNE1NH	
Outdoor model		RAS-1.0TNESNH1	RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1	
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	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50	
Max. input consumption	W	1140	1800	2460	4100	5100	6400	7000	7800	
Max. input current	A	7.8	8.1	11.1	18.1	22.5	11.6	12.0	13.1	
Average	Pdesignc	kW	2.610	3.520	5.280	6.800	10.100	12.026	13.480	15.760
	SEER	W/W	6.15	6.45	6.11	6.17	6.23	5.71	6.08	5.99
	Energy Efficiency Class		A+	A++	A+	A++	A++	A+	A+	A+
	Tbiv	°C	-7	-7	-7	-7	-7	-7	-7	-7
	Tol	°C	-15	-15	-15	-15	-15	-15	-15	-15
Cooling	Capacity	Btu/h	9180	12000	18225	23202	34461	41033	45994	53773
	Capacity	kW	2.691	3.517	5.340	6.800	10.100	12.026	13.480	15.760
	Input	W	780	999	1653	2230	3311	4295	4464	6062
	Current	A	3.6	4.4	7.6	9.7	16.5	7.4	7.5	10
	EER	W/W	3.45	3.52	3.23	3.05	3.05	2.80	3.02	2.60
Indoor fan motor	Model		SIC-68CVL-F140-1	SIC-68CVL-F140-1	YSK110-40-4-A	SIC-70CW-F195-1	SIC-101CW-F1250-4	SIC-101CW-F1250-4	SIC-101CW-F1250-4	SIC-101CW-F1250-4
	Qty		1	1	1	1	1	1	1	1
	Input	W	40	40	40	95	250	250	250	250



## 2. SPECIFICATIONS

Indoor model			RPIL-1.0TNE1NH	RPIL-1.5TNE1NH	RPIL-2.0TNE1NH	RPIM-3.0TNE1NH	RPIH-4.0TNE1NH	RPIH-5.0TNE1NH	RPIH-6.0TNE1NH	RPIH-6.5TNE1NH
Outdoor model			RAS-1.0TNESNH1	RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
· Indoor fan · motor	Capacitor	uF	/	/	2	/	/	/	/	/
	Speed (Hi/Med/Lo)	r/min	770/640/540	880/740/610	1130/950/850	890/790/690	800/700/600	910/810/710	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	21x13.6	21x13.6	21x13.6	21x13.6	21x18.19	21x18.19	21x1819	21x1819
	Fin spacing	mm	1.6	1.6	1.6	1.6	1.4	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 dia.and type	mm	Φ7.0, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube
	Coil (LxHxW)	mm	768x189x40.8	515x252x40.11	1038x189x40.8	700x294x40.8	1100x378x54.57	1100x378x54.57	1100x378x54.6	1100x378x54.6
	Number of circuits		4	4	4	4	9	9	9	9
Indoor air flow Rated(Hi/Med/Lo)		m <sup>3</sup> /h	500/400/320	575/484/400	900/840/730	1100/976/852	1450/1250/1050	1750/1500/1300	2400/2200/1900	2400/2200/1900
Indoor air flow Rated(Hi/Med/Lo)		CFM	294/235/188	338/285/235	529/494/429	647/574/501	853/735/618	1029/882/765	1294/1206/1118	1415/1300/1124
ESP	Rated	Pa	25	25	25	25	37	50	50	50
	Range	Pa	0~50	0~50	10/30	0~80	0~120	0~120	0~120	0~120
Indoor noise level (Hi/Med/Lo)		dB(A)	32/28/25	36/34/29	43/41/38	44/41/38	46/42/39	51/47/44	55/52/50	56/53/50

## 2. SPECIFICATIONS

Indoor model			RPIL-1.0TNE1NH	RPIL-1.5TNE1NH	RPIL-2.0TNE1NH	RPIM-3.0TNE1NH	RPIH-4.0TNE1NH	RPIH-5.0TNE1NH	RPIH-6.0TNE1NH	RPIH-6.5TNE1NH
Outdoor model			RAS-1.0TNESNH1	RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Indoor noise level (Sound power)		dB(A)	46	50	57	58	62	67	70	72
Indoor unit	Dimension (WxHxD)	mm	900x190x447	900x190x447	1170x190x447	900x270x720	1300x350x800	1300x350x800	1300x350x800	1300x350x800
	Packing (WxHxD)	mm	1070x236x580	1070x236x580	1340x236x580	1170x340x870	1550x410x940	1550x410x940	1550x410x940	1550x410x940
	Net/Gross weight	kg	19/23.5	19/23.5	24/29	32/37	51/60	51/60	51/60	51/60
Drainage water pipe diameter		mm	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32	ODΦ32
Controller			Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	Wired controller
Operation temperature		°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30	16~30
Qty/per 20' /40' /40'HQ (Indoor unit)		Set	200/440/484	200/440/484	160/340/374	84/182/182	35/75/90	35/75/90	35/75/90	35/75/90
Compressor	Model		ASD088SKNA8JT	ASN108D43UFZA	ATM150D23UFZ	ATF235D43UMT	ATF310D43UMT	ATF310D43UMT	ATH356SDPC9FQ	LNB42FSAMC
	Type		ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Brand		Highly	GMCC	GMCC	GMCC	GMCC	GMCC	Highly	MITSUBISHI
	Capacity	Btu/h	8549	11123	15427	24361	32380	32380	34470	47699
	Input	W	575	810	1165	1940	2600	2600	3155	4270
	Rated current(RLA)	A	2.95	5.70	8.10	8.90	5.10	5.10	13.20	12.00
	Refrigerant oil	ml	ø68HES-H/320	ESTER OIL VG74/370	ESTEL OIL VG74/500	POE VG74/670	PQE VG74/1000	PQE VG74/1000	ø68HES-H or equivalent /1650	FV50S or PVE/1400
Outdoor fan motor	Model		SIC-52FV-F130-3	ZWA138D08A	SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F8121-1	SIC-81FW-F1138-1	YDK65-6-9061 & YDK65-6-9024	YDK65-6-9061 & YDK65-6-9024

## 2. SPECIFICATIONS

Indoor model			RPIL-1.0TNE1NH	RPIL-1.5TNE1NH	RPIL-2.0TNE1NH	RPIM-3.0TNE1NH	RPIH-4.0TNE1NH	RPIH-5.0TNE1NH	RPIH-6.0TNE1NH	RPIH-6.5TNE1NH
Outdoor model			RAS-1.0TNESNH1	RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Outdoor fan motor	Qty		1	1	1	1	1	1	2	2
	Input	W	30	30	61	61	121	138	121	121
	Capacitor	μF	NA	NA	NA	NA	NA	NA	NA	NA
	Speed (Hi)	r/min	820	880	840	880	830	850	810	810
Outdoor coil	Number of rows		1.5	2	2	2	2	2	2	2
	Tube pitch(a)* row pitch(b)	mm	21x18.19	21x18.19	21x21.65	21x18.19	21x21.65	21x21.65	21x21.65	21x21.65
	Fin spacing	mm	1.3	1.4	1.4	1.4	1.3	1.6	1.4	1.4
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ7,innergroove tube	Φ7,innergroove tube	Φ7.94, innergroove tube	Φ7.94, innergroove tube	Φ7.94,innergroove tube	Φ7.94,innergroove tube
	Coil (LxHxW)	mm	761x504x36.38	840x546x36.38	962x630x43.3	900x630x43.3	970x798x43.5	970x1008x43.5	970x1344x43	970x1344x43
	Number of circuits		4	4	7	4	5	6	12	12
Outdoor noise level (Sound pressure) Hi	dB(A)	52	48	53	53	55	58	53	58	
Outdoor noise level (Sound power)	dB(A)	65	62	65	68	70	74	69	73	
Throttle type		EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	
Outdoor unit	Dimension (WxHxD)	mm	730x536x260	810x585x280	860x670x310	860x670x310	950x840x340	950x1050x340	950x1386x340	950x1386x340

## 2. SPECIFICATIONS

Indoor model			RPIL-1.0TNE1NH	RPIL-1.5TNE1NH	RPIL-2.0TNE1NH	RPIM-3.0TNE1NH	RPIH-4.0TNE1NH	RPIH-5.0TNE1NH	RPIH-6.0TNE1NH	RPIH-6.5TNE1NH
Outdoor model			RAS-1.0TNESNH1	RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Outdoor unit	Packing (WxHxD)	mm	860x600x400	940x640x420	990x730x450	990x730x450	1110x910x460	1110x1200x460	1110x1527x460	1110x1527x460
	Net/Gross weight	kg	31/34	34/38.5	45/49	51/57	70/80	85/95	113/125	117/129
Refrigerant type/Quantity	Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Charged volume	kg	0.83	1.05	1.3	1.7	2.8	3.2	3.78	3.95
Design pressure	(Hi/Lo)	MPa	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60	4.15/1.60
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ 6.35/Φ9.52(1/4'/3/8')	Φ6.35/Φ9.52(1/4'/3/8')	Φ6.35/Φ12.7(1/4'/1/2')	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')
	Max. pipe length	m	25	25	30	50	50	50	50	50
	Max. difference in level	m	10	15	15	30	30	30	30	30
Annual energy consumption(Cooling)		kWh/a	157	195	316	386	567	761	800	943
Ambient temperature	Cooling	°C	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48
Qty'per 20' /40' /40'HQ (Outdoor unit)		Set	102/213/292	102/204/272	90/186/186	90/186/186	52/106/106	26/53/106	26/53/53	26/53/53

## 2. SPECIFICATIONS

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 4 points, the points are 1 meter in front of the four sides of the unit surface and height =  $1/2(\text{unit height} + 1)$  meter 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.

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

3. The values given in the table for noise level reflect the levels in anechoic chamber.

## 2. SPECIFICATIONS

### 2.2 Cassette

#### Heat pump type

Hitachi IDU			RCI-1.5UNE1NH	RCI-2.0UNE1NH	RCI-3.0UNE1NH	RCI-4.0UNE1NH	RCI-5.0UNE1NH	RCI-6.0UNE1NH	RCI-6.5UNE1NH
Hitachi ODU			RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
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
Power supply (Outdoor)	V/Ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
Max. input consumption	W		1800	2710	4100	5150	6400	6300	7800
Max. input current	A		8.1	12.3	18.1	22.5	11.6	11.0	13.1
Average	Pdesignc	kW	3.520	5.100	7.070	10.300	12.068	13.400	14.500
	SEER	W/W	6.61	6.11	6.46	6.13	5.72	6.01	5.87
	Energy Efficiency Class		A++	A+	A++	A++	A+	A+	A+
	Pdesignh	kW	3.520	4.800	5.680	9.600	10.000	13.500	11.000
	SCOP	W/W	4.25	4.01	4.08	3.90	3.80	3.87	3.80
	Energy Efficiency Class		A+	A	A+	A	A	A	A
	Tbiv	°C	-7	-7	-7	-7	-7	-7	-7
Tol	°C	-15	-15	-15	-15	-15	-15	-15	
Cooling	Capacity	Btu/h	12454	18088	24123	35144	41176	45721	49474
	Capacity	kW	3.650	5.301	7.070	10.300	12.068	13.400	14.500
	Capacity range	kW	1.720~3.850	1.780~5.650	2.700~7.850	2.930~12.000	3.300~13.200	3.400~16.200	4.980~18.000
	Input	W	1000	1710	2209	3433	4190	4621	5492
	Current	A	4.4	7.6	9.7	16.5	7.2	7.4	9.7
	EER	W/W	3.65	3.10	3.20	3.00	2.88	2.90	2.64
Heating	Capacity	Btu/h	12949	21100	28000	39238	47768	56100	60000
	Capacity	kW	3.795	6.184	8.206	11.500	14.000	16.442	17.585
	Capacity range	kW	1.770~4.220	1.720~7.310	2.770~8.800	3.320~13.000	3.000~14.600	3.300~18.000	5.000~21.000
	Input	W	956	1897	2372	3605	3900	4850	5709
	Current	A	4.2	8.3	10.5	16	7.3	7.4	9.1
	COP	W/W	3.97	3.26	3.46	3.19	3.59	3.39	3.08
Indoor fan motor	Model		ARW8901QH	YDK95-28-4-B(HS21)	ARW5901QH	EHDS50AQH	SIC-72FW-D8124-28	SIC-72FW-D8124-2B	SIC-72FW-D8124-2B
	Power supply	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
	Qty		1	1	1	1	1	1	1
	Input	W	30	28	35	80	124	124	124

## 2. SPECIFICATIONS

Hitachi IDU			RCI-1.5UNE1NH	RCI-2.0UNE1NH	RCI-3.0UNE1NH	RCI-4.0UNE1NH	RCI-5.0UNE1NH	RCI-6.0UNE1NH	RCI-6.5UNE1NH
Hitachi ODU			RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Indoor fan motor	Capacitor	uF	/	2	/	/	/	/	/
	Speed(Hi/Med/Lo)	r/min	700/590/520	980/840/720	450/390/270	600/480/390	630/600/570	700/540/460	700/540/460
Indoor coil	Number of rows		2	2	2	3	3	3	3
	Tube pitch(a)*row pitch(b)	mm	21x13.6	21x13.6	21x13.6	21x13.6	21x13.6	21 13.6	21 13.6
	Fin spacing	mm	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
	Tube outside dia.and type	mm	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube
	Coil (LxHxW)	mm	1248x210x27.2	1248x210x27.2	1870 189 27.2	1940x189x40.8	1940x252x40.8	1940x252x40.8	1940x252x40.8
	Number of circuits		3	3	4	6	6	6	6
Indoor air flow Rated(Hi/Med/Lo)		m <sup>3</sup> /h	575/484/400	820/730/620	1100/976/852	1600/1300/1000	1850/1700/1550	2000/1900/1700	2000/1900/1700
Indoor air flow Rated(Hi/Med/Lo)		CFM	338/285/235	482/429/365	647/574/501	941/765/588	1088/1000/912	1180/1120/1000	1180/1120/1000
ESP	Rated	Pa	NA	NA	NA	NA	NA	NA	NA
	Range	Pa	NA	NA	NA	NA	NA	NA	NA
Indoor noise level (Hi/Med/Lo)		dB(A)	39/37/36	45/41/39	41/38/36	45/40/37	46/43/41	50/48/46	47/45/43
Indoor noise level (sound power)		dB(A)	54	59	57	61	62	64	62
Indoor unit	Dimension (WxHxD)	mm	650x270x570	650x270x570	840 248 840	840 248 840	840 298 840	840x298x840	840x298x840
	Packing(WxHxD)	mm	770x310x750	770x310x750	996 370 956	996x370x956	996x420x956	996x420x956	996x420x956
	Net/Gross weight	kg	19/24	21 /26	25/34	27/36	32/41	32/41	32/41
Panel	Dimension (WxHxD)	mm	650x30x650	650x30x650	950x37x950	950x37x950	950x37x950	950x37x950	950x37x950
	Packing(WxHxD)	mm	730x130x730	730x130x730	990x115x1010	1025x120x1015	1025x120x1015	1025x120x1015	1025x120x1015
	Net/Gross weight	kg	2.4/ 5	2.4/ 5	6.5/9.5	6.5/9.5	6.5/9.5	6.5/9.5	6.5/9.5
Drainage water pipe diameter		mm	ID 21	ID 21	ID 32	ID 32	ID 32	ID 32	ID 32
Refrigerant piping	Liquid side/ Gas side	mm	6.35/ 9.52(1/4/3/8')	6.35/ 12.7(1/4'/1/2')	9.52/ 15.88(3/8'/5/8')	9.52/ 19.05(3/8'/3/4')	9.52/ 19.05(3/8'/3/4')	9.52/ 19.05(3/8'/3/4')	9.52/ 19.05(3/8'/3/4')
Controller			Remote control	Remote control	Remote control	Remote control	Remote control	Remote control	Remote control
Operation temperature		℃	16~30	16~30	16~30	16~30	16~30	16~30	16~30
Qty'per 20' /40' /40'HQ (Indoor unit)		Set	147/315/384	147/315/384	72/144/168	60/120/144	60/120/144	60/120/144	60/120/144
Compressor	Model		ASN108D43UFZA	ATM150D23UFZ	ATF235D43UMT	ATF310D43UMT	ATF310D43UMT	ATH356SDPC9FL	LNB42FSAMC
	Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
	Type		ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY

## 2. SPECIFICATIONS

Hitachi IDU			RCI-1.5UNE1NH	RCI-2.0UNE1NH	RCI-3.0UNE1NH	RCI-4.0UNE1NH	RCI-5.0UNE1NH	RCI-6.0UNE1NH	RCI-6.5UNE1NH
Hitachi ODU			RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Compressor	Brand		GMCC	GMCC	GMCC	GMCC	GMCC	Highly	MITSUBISHI
	Capacity	Btu/h	11123	15427	24361	32380	32380	34470	47699
	Input	W	810	1165	1940	2600	2600	3155	4270
	Rated current(RLA)	A	5.7	8.1	8.9	5.1	5.1	13.2	12
	Refrigerant oil	ml	ESTER OIL VG74/370	ESTEL OILVVG74/500	POE VG74/670	PQE VG74/1000	PQE VG74/1000	68HES-H or equivalent /1650	FV50S or PVE/1400
Outdoor fan motor	Model		ZWA138D08A	SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F8121-1	SIC-81FW-F1138-1	YDK65-6-9061&YDK65-6-9024	YDK65-6-9061&YDK65-6-9024
	Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
	Qty		1	1	1	1	1	2	2
	Input	W	30	61	61	121	138	121	121
	Capacitor	μF	/	/	/	/	/	/	/
	Speed (Hi)	r/min	880	840	880	830	850	810	810
Outdoor coil	Number of rows		2	2	2	2	2	2	2
	Tube pitch(a)* row pitch(b)	mm	21x18.19	21x21.65	21x18.19	21x21.65	21x21.65	21x21.65	21x21.65
	Fin spacing	mm	1.4	1.4	1.4	1.3	1.6	1.4	1.4
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia. and type	mm	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7.94, innergroove tube	Φ7.94, innergroove tube	7.94, innergroove tube	7.94, innergroove tube
	Coil (LxHxW)	mm	840x546x36.38	962x630x43.3	900x630x43.3	970x798x43.5	970x1008x43.5	970x1344x43	970x1344x43
	Number of circuits		2	7	4	5	6	6	6
Outdoor noise level (Sound pressure) Hi	dB(A)	48	53	53	55	58	53	58	
Outdoor noise level (Sound power)	dB(A)	62	65	68	70	74	69	73	
Throttle type			EEV	EEV	EEV	EEV	EEV	EEV	EEV
Outdoor unit	Dimension(WxHxD)	mm	810x585x280	860x670x310	860x670x310	950x840x340	950x1050x340	950x1386x340	950x1386x340
	Packing(WxHxD)	mm	940x640x420	990x730x450	990x730x450	1110x910x460	1110x1200x460	1110x1527x460	1110x1527x460
	Net/Gross weight	kg	34/38.5	45/49	51/57	70/80	85/95	113/125	117/129
Refrigerant type/Quantity	Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Charged volume	kg	1.05	1.30	1.70	2.80	3.20	3.78	3.95
Design pressure	MPa		4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6



## 2. SPECIFICATIONS

Hitachi IDU			RCI-1.5UNE1NH	RCI-2.0UNE1NH	RCI-3.0UNE1NH	RCI-4.0UNE1NH	RCI-5.0UNE1NH	RCI-6.0UNE1NH	RCI-6.5UNE1NH
Hitachi ODU			RAS-1.5UNESNH1	RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Refrigerant piping	Liquid side/ Gas side	mm(inch)	6.35/ 9.52(1/4'/3/8')	6.35/ 12.7(1/4'/1/2')	9.52/ 15.88(3/8'/5/8')	9.52/ 19.05(3/8'/3/4')	9.52/ 19.05(3/8'/3/4')	9.52/ 19.05(3/8'/3/4')	9.52/ 19.05(3/8'/3/4')
	Max. pipe length	m	25	30	50	50	50	50	50
	Max. difference in level	m	15	15	30	30	30	30	30
Annual energy consumption(Cooling)		kWh/a	185	303	383	588	757	806	883
Annual energy consumption(Heating)		kWh/a	1190	1785	1927	3450	3675	4877	4037
Ambient temperature	Cooling	°C	-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
Qty'per 20' /40' /40'HQ (Outdoor unit)		Set	102/204/272	90/186/186	90/186/186	52/106/106	26/53/106	26/53/53	26/53/53

## 2. SPECIFICATIONS

### Cooling only type

Indoor model		RCI-1.5TNE1NH	RCI-2.0TNE1NH	RCI-3.0TNE1NH	RCI-4.0TNE1NH	RCI-5.0TNE1NH	RCI-6.0TNE1NH	RCI-6.5TNE1NH	
Outdoor model		RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1	
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	
Power supply (Outdoor)	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50	
Max. input consumption	W	1800	2710	4100	5150	6400	6300	7800	
Max. input current	A	8.1	12.3	18.1	22.5	11.6	11.0	13.1	
Average	Pdesignc	kW	3.520	5.100	7.070	10.300	12.068	13.400	14.500
	SEER	W/W	6.61	6.11	6.46	6.13	5.72	6.01	5.87
	Energy Efficiency Class		A++	A+	A++	A++	A+	A+	A+
	Tbiv	°C	-7	-7	-7	-7	-7	-7	-7
	Tol	°C	-15	-15	-15	-15	-15	-15	-15
Cooling	Capacity	Btu/h	12310	18088	24123	35144	41176	45721	49474
	Capacity	kW	3.608	5.301	7.070	10.300	12.068	13.400	14.500
	Input	W	988	1710	2209	3433	4190	4621	5492
	Current	A	4.4	7.6	9.7	16.5	7.2	7.4	9.7
	EER	W/W	3.65	3.10	3.20	3.00	2.88	2.90	2.64
Indoor fan motor	Model		ARW8901QH	YDK95-28-4-B(HS21)	ARW5901QH	EHDS50AQH	SIC-72FW-D8124-28	SIC-72FW-D8124-2B	SIC-72FW-D8124-2B
	Qty		1	1	1	1	1	1	1
	Input	W	30	28	35	80	124	124	124
	Capacitor	uF	/	2	/	/	/	/	/
	Speed(Hi/Med/Lo)	r/min	700/590/520	980/840/720	450/390/270	600/480/390	630/600/570	700/540/460	700/540/460

## 2. SPECIFICATIONS

Indoor model		RCI-1.5TNE1NH	RCI-2.0TNE1NH	RCI-3.0TNE1NH	RCI-4.0TNE1NH	RCI-5.0TNE1NH	RCI-6.0TNE1NH	RCI-6.5TNE1NH	
Outdoor model		RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1	
Indoor coil	Number of rows		2	2	2	3	3	3	
	Tube pitch(a)* row pitch(b)	mm	21x13.6	21x13.6	21x13.6	21x13.6	21x13.6	21x136	21x136
	Fin spacing	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Fin type		Hydrophilic luminium	Hydrophilic luminium	Hydrophilic luminium	Hydrophilic aluminium	Hydrophilic luminium	Hydrophilic luminium	Hydrophilic luminium
	Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ7,innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7.0,innergroove tube	Φ7.0, innergroove tube
	Coil (LxHxW)	mm	1248x210x27.2	1248x210x27.2	1870x189x27.2	1940x189x40.8	1940x252x40.8	1940x252x40.8	1940x252x40.8
	Number of circuits		3	3	4	6	6	6	6
Indoor air flow Rated(Hi/Med/Lo)		m <sup>3</sup> /h	575/484/400	820/730/620	1100/976/852	1600/1300/1000	1850/1700/1550	2000/1900/1700	2000/1900/1700
Indoor air flow Rated(Hi/Med/Lo)		CFM	338/285/235	482/429/365	647/574/501	941/765/588	1088/1000/912	1180/1120/1000	1180/1120/1000
ESP	Rated	Pa	NA	NA	NA	NA	NA	NA	NA
	Range	Pa	NA	NA	NA	NA	NA	NA	NA
Indoor noise level (Hi/Med/Lo)		dB(A)	39/37/36	45/41/39	41/38/36	45/40/37	46/43/41	50/48/46	47/45/43
Indoor noise level (sound power)		dB(A)	52	59	57	61	62	64	62
Indoor unit	Dimension (WxHxD)	mm	650x270x570	650x270x570	840x248x840	840x248x840	840x298x840	840x298x840	840x298x840
	Packing(WxHxD)	mm	770x310x750	770x310x750	996x370x956	996x370x956	996x420x956	996x420x956	996x420x956
	Net/Gross weight	kg	19/24	21 /26	25/34	27/36	32/41	32/41	32/41
Panel	Dimension (WxHxD)	mm	650x30x650	650x30x650	950x37x950	950x37x950	950x37x950	950x37x950	950x37x950
	Packing(WxHxD)	mm	730x130x730	730x130x730	990x115x1010	1025x120x1015	1025x120x1015	1025x120x1015	1025x120x1015
	Net/Gross weight	kg	2.4/ 5	2.4/ 5	6.5/9.5	6.5/9.5	6.5/9.5	6.5/9.5	6.5/9.5
Drainage water pipe diameter		mm	IDΦ21	IDΦ21	IDΦ32	IDΦ32	IDΦ32	IDΦ32	IDΦ32

## 2. SPECIFICATIONS

Indoor model			RCI-1.5TNE1NH	RCI-2.0TNE1NH	RCI-3.0TNE1NH	RCI-4.0TNE1NH	RCI-5.0TNE1NH	RCI-6.0TNE1NH	RCI-6.5TNE1NH
Outdoor model			RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/Φ9.52(1/4'/3/8')	Φ6.35/Φ12.7(1/4'/1/2')	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')
	Controller		Remote control	Remote control	Remote control	Remote control	Remote control	Remote control	Remote control
Operation temperature		°C	16~30	16~30	16~30	16~30	16~30	16~30	16~30
Qty'per 20' /40' /40'HQ (Indoor unit)		Set	147/315/384	147/315/384	72/144/168	60/120/144	60/120/144	60/120/144	60/120/144
Compressor	Model		ASN108D43UFZA	ATM150D23UFZ	ATF235D43UMT	ATF310D43UMT	ATF310D43UMT	ATH356SDPC9FL	LNB42FSAMC
	Type		ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Brand		GMCC	GMCC	GMCC	GMCC	GMCC	Highly	MITSUBISHI
	Capacity	Btu/h	11123	15427	24361	32380	32380	34470	47699
	Input	W	810	1165	1940	2600	2600	3155	4270
	Rated current(RLA)	A	5.7	8.1	8.9	5.1	5.1	13.2	12
	Refrigerant oil	ml	ESTER OIL VG74/370	ESTEL OILVVG74/500	POE VG74/670	PQE VG74/1000	PQE VG74/1000	α68HES-H or equivalent /1650	FV50S or PVE/1400
Outdoor fan motor	Model		ZWA138D08A	SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F8121-1	SIC-81FW-F1138-1	YDK65-6-9061& YDK65-6-9024	YDK65-6-9061& YDK65-6-9024
	Qty		1	1	1	1	1	2	2
	Input	W	30	61	61	121	138	121	121
	Capacitor	μF	/	/	/	/	/	/	/
	Speed (Hi)	r/min	880	840	880	830	850	810	810
Outdoor coil	Number of rows		2	2	2	2	2	2	2
	Tube pitch(a)* row pitch(b)	mm	21x18.19	21x21.65	21x18.19	21x21.65	21x21.65	21x21.65	21x21.65
	Fin spacing	mm	1.4	1.4	1.4	1.3	1.6	1.4	1.4
	Fin type		Hydrophilic luminium	Hydrophilic luminium	Hydrophilic luminium	Hydrophilic aluminium	Hydrophilic luminium	Hydrophilic luminium	Hydrophilic luminium

## 2. SPECIFICATIONS

Indoor model			RCI-1.5TNE1NH	RCI-2.0TNE1NH	RCI-3.0TNE1NH	RCI-4.0TNE1NH	RCI-5.0TNE1NH	RCI-6.0TNE1NH	RCI-6.5TNE1NH
Outdoor model			RAS-1.5TNESNH1	RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Outdoor coil	Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ7,innergroove tube	Φ7.94, innergroove tube	Φ7.94, innergroove tube	Φ7.94,innergroove tube	Φ7.94,innergroove tube
	Coil (LxHxW)	mm	840x546x36.38	962x630x43.3	900x630x43.3	970x798x43.5	970x1008x43.5	970×1344×43	970×1344×43
	Number of circuits		2	7	4	5	6	6	6
Outdoor noise level (Sound pressure) Hi		dB(A)	48	53	53	55	58	53	58
Outdoor noise level (Sound power)		dB(A)	62	65	68	70	74	69	73
Throttle type			EEV	EEV	EEV	EEV	EEV	EEV	EEV
Outdoor unit	Dimension(WxHxD)	mm	810×585×280	860×670×310	860×670×310	950×840×340	950×1050×340	950x1386x340	950x1386x340
	Packing(WxHxD)	mm	940×640×420	990×730×450	990×730×450	1110×910×460	1110×1200×460	1110x1527x460	1110x1527x460
	Net/Gross weight	kg	34/38.5	45/49	51/57	70/80	85/95	113/125	117/129
Refrigerant type/Quantity	Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Charged volume	kg	1.05	1.30	1.70	2.80	3.20	3.78	3.95
Design pressure		MPa	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ 6.35/Φ9.52(1/4'/3/8')	Φ 6.35/Φ12.7(1/4'/1/2')	Φ9.52/Φ15.88(3/8'/5/8')	Φ9.52/Φ19.05(3/8'/3/4')	Φ 9.52/Φ19.05(3/8'/3/4')	Φ 9.52/Φ19.05(3/8'/3/4')	Φ 9.52/Φ19.05(3/8'/3/4')
	Max. pipe length	m	25	30	50	50	50	50	50
	Max. difference in level	m	15	15	30	30	30	30	30
Annual energy consumption(Cooling)		kWh/a	185	303	383	588	757	806	883
Ambient temperature	Cooling	°C	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48
Qty'per 20' /40' /40'HQ (Outdoor unit)		Set	102/204/272	90/186/186	90/186/186	52/106/106	26/53/106	26/53/53	26/53/53

## 2. SPECIFICATIONS

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 4 points, the points are 1 meter in front of the four sides of the unit surface and height =  $1/2(\text{unit height} + 1)$  meter 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.

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

3. The values given in the table for noise level reflect the levels in anechoic chamber.

## 2. SPECIFICATIONS

### 2.3 Floor Ceiling

#### Heat pump type

Hitachi IDU		RPFC-2.0UNE1NH	RPFC-3.0UNE1NH	RPFC-4.0UNE1NH	RPFC-5.0UNE1NH	RPFC-6.0UNE1NH	RPFC-6.5UNE1NH	
Hitachi ODU		RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1	
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	
Power supply (Outdoor)	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50	
Max. input consumption	W	2600	4100	5100	6400	6300	8200	
Max. input current	A	11	18	22.5	11.6	11	13.5	
Average	Pdesignc	kW	5.200	6.750	10.230	12.050	12.868	14.420
	SEER	W/W	6.80	5.79	6.07	5.41	5.99	5.90
	Energy Efficiency Class		A++	A+	A+	A	A+	A+
	Pdesignh	kW	4.800	5.630	8.465	10.500	12.000	12.300
	SCOP	W/W	4.10	3.92	3.97	3.79	3.80	3.80
	Energy Efficiency Class		A+	A	A	A	A	A
	Tbiv	°C	-7	-7	-7	-7	-7	-7
Tol	°C	-15	-15	-15	-15	-15	-15	
Cooling	Capacity	Btu/h	17870	23031	34905	41115	43906	49201
	Capacity	kW	5.237	6.750	10.230	12.050	12.868	14.420
	Capacity range	kW	1.510~5.500	2.700~7.850	2.800~11.000	3.300~13.200	3.100~16.100	4.980~18.000
	Input	W	1652	2163	3680	4866	4247	5381
	Current	A	7.6	9.7	17.6	8.3	8.2	10.1
	EER	W/W	3.17	3.12	2.78	2.48	3.03	2.68
Heating	Capacity	Btu/h	20900	28000	38385	47768	55000	60000
	Capacity	kW	6.125	8.206	11.250	14.000	16.120	17.585
	Capacity range	kW	1.690~6.240	2.770~9.200	3.320~12.000	3.000~14.600	3.300~18.000	5.200~21.000
	Input	W	1885	2393	3750	4502	5150	6395
	Current	A	8.2	10.5	16.3	8.2	8.2	9.3
	COP	W/W	3.25	3.43	3.00	3.11	3.13	2.75
Indoor fan motor	Model		SIC-70CW-F1100-6	SIC-70CW-F1100-6	SIC-70CW-F1140-3	SIC-101CW-F1181-2	SIC-101CW-F1181-1	SIC-101CW-F1181-1
	Power supply	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
	Qty		1	1	1	1	1	1
	Input	W	100	100	140	181	181	181
	Capacitor	uF	NA	NA	NA	NA	NA	NA
	Speed(Hi/Med/Lo)	r/min	800/700/610	1280/1100/920	1220/1160/1080	1200/1100/1000	1250/1000/800	1250/1100/950

## 2. SPECIFICATIONS

Hitachi IDU		RPFC-2.0UNE1NH	RPFC-3.0UNE1NH	RPFC-4.0UNE1NH	RPFC-5.0UNE1NH	RPFC-6.0UNE1NH	RPFC-6.5UNE1NH
Hitachi ODU		RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Indoor coil	Number of rows	2	3	3	3	3	3.5
	Tube pitch(a)* row pitch(b)	mm 21x13.6	21x13.6	21x13.6	21x13.6	21 13.6	21 13.6
	Fin spacing	mm 1.4	1.5	1.5	1.5	1.5	1.5
	Fin type	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7.0, innergroove tube	Φ7.0, innergroove tube
	Coil (LxHxW)	mm 691x336x27.2	660x336x40.8	930x336x40.8	1200x336x40.8	1200x336x40.8	1200x336x54.4
	Number of circuits	4	3	7	7	7	7
Indoor air flow Rated(Hi/Med/Lo)	m <sup>3</sup> /h	800/690/590	1100/950/800	1700/1500/1300	2000/1800/1600	2000/1600/1200	2000/1700/1500
Indoor air flow Rated(Hi/Med/Lo)	CFM	470/400/340	650/570/500	1000/882/765	1176/1059/941	1180/940/710	1180/1000/880
ESP	Rated	Pa NA	NA	NA	NA	NA	NA
	Range	Pa NA	NA	NA	NA	NA	NA
Indoor noise level (Sound pressure)	dB(A)	43/39/36	48/46/42	50/49/48	50/48/45	51/45/41	51/46/43
Indoor noise level (Sound power)	dB(A)	57	63	64	66	67	66
Indoor unit	Dimension (WxHxD)	mm 990x230x680	990x230x680	1285x230x680	1580x230x680	1580x230x680	1580x230x680
	Packing(WxHxD)	mm 1100x350x820	1100x350x820	1400x350x820	1690x350x820	1690x350x820	1690x350x820
	Net/Gross weight	kg 29/34	30/35	37/44	48/56	48/56	50/58
Drainage water pipe diameter	mm	OD 25	OD 25	OD 25	OD 25	OD 25	OD 25
Controller		Remote control	Remote control	Remote control	Remote control	Remote control	Remote control
Operation temperature	℃	16~30	16~30	16~30	16~30	16~30	16~30
Qty'per 20' /40' /40'HQ (Indoor unit)	Set	84/168/196	84/168/196	42/84/98	42/84/98	42/84/98	42/84/98
Compressor	Model	ATM150D23UFZ	ATF235D43UMT	ATF310D43UMT	ATF310D43UMT	ATH356SDPC9FL	LNB42FSAMC
	Power supply	V/Ph/Hz 220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
	Type	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Brand	GMCC	GMCC	GMCC	GMCC	Hitachi	MITSUBISHI
	Capacity	Btu/h 15427	24361	32380	32380	34470	47699
	Input	W 1165	1940	2600	2600	3155	4270
	Rated current(RLA)	A 8.1	8.9	5.1	5.1	13.2	12.0
Refrigerant oil	ml	ESTEL OIL VG74/500	POE VG74/670	PQE VG74/1000	PQE VG74/1000	68HES-H or equivalent 1650	FV50S or PVE/1400
Outdoor fan motor	Model	SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F8121-1	SIC-81FW-F1138-1	YDK65-6-9061& YDK65-6-9024	YDK65-6-9061& YDK65-6-9024
	Power supply	V/Ph/Hz 220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50



## 2. SPECIFICATIONS

Hitachi IDU			RPFC-2.0UNE1NH	RPFC-3.0UNE1NH	RPFC-4.0UNE1NH	RPFC-5.0UNE1NH	RPFC-6.0UNE1NH	RPFC-6.5UNE1NH
Hitachi ODU			RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Outdoor fan motor	Old Model		NA	NA	NA	NA	NA	NA
	Qty		1	1	1	1	2	2
	Input	W	61	61	121	138	121	121
	Capacitor	μF	NA	NA	NA	NA	NA	NA
	Speed (Hi)	r/min	840	880	830	850	810	810
Outdoor coil	Number of rows		2	2	2	2	2	2
	Tube pitch(a)* row pitch(b)	mm	21x21.65	21x18.19	21x21.65	21x21.65	21 21.65	21 21.65
	Fin spacing	mm	1.4	1.4	1.3	1.6	1.5	1.4
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ7.94, innergroove tube	Φ7.94, innergroove tube	7.94,innergroove tube	7.94,innergroove tube
	Coil (LxHxW)	mm	962x630x43.3	900x630x43.3	970x798x43.5	970x1008x43.5	970x1344x43	970x1344x43
	Number of circuits		7	4	5	6	6	8
Outdoor noise level (Sound pressure) Hi		dB(A)	53	53	54	58	53	58
Outdoor noise level (Sound power)		dB(A)	65	68	70	74	69	73
Throttle type			EEV	EEV	EEV	EEV	EEV	EEV
Outdoor unit	Dimension(WxHxD)	mm	860x670x310	860x670x310	950x840x340	950x1050x340	950x1386x340	950x1386x340
	Packing(WxHxD)	mm	990x730x450	990x730x450	1110x910x460	1110x1200x460	1110x1527x460	1110x1527x460
	Net/Gross weight	kg	45/49	51/57	70/80	85/95	113/125	117/129
Refrigerant type/Quantity	Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Charged volume	kg	1.3	1.70	2.80	3.20	3.78	3.95
Design pressure		MPa	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6
Refrigerant piping	Liquid side/ Gas side	mm(inch)	6.35/ 12.7(1/4'1/2')	9.52/ 15.88(3/8'5/8')	9.52/ 19.05(3/8'3/4')	9.52/ 19.05(3/8'3/4')	9.52/ 19.05(3/8'3/4')	9.52/ 19.05(3/8'3/4')
	Max. pipe length	m	30	50	50	50	50	50
	Max. difference in level	m	15	30	30	30	30	30
Annual energy consumption(Cooling)		kWh/a	267	426	589	803	772	876
Annual energy consumption(Heating)		kWh/a	1647	2001	2984	3868	4399	4509
Ambient temperature	Cooling	℃	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48
	Heating	℃	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24

## 2. SPECIFICATIONS

Hitachi IDU		RPFC-2.0UNE1NH	RPFC-3.0UNE1NH	RPFC-4.0UNE1NH	RPFC-5.0UNE1NH	RPFC-6.0UNE1NH	RPFC-6.5UNE1NH
Hitachi ODU		RAS-2.0UNESNH1	RAS-3.0UNESNH1	RAS-4.0UNESNH1	RAS-5.0UNESMH1	RAS-6.0UNESMH1	RAS-6.5UNESMH1
Qty' per 20' /40' /40'HQ (Outdoor unit)	Set	90/186/186	90/186/186	52/106/106	26/53/106	26/53/53	26/53/53

## 2. SPECIFICATIONS

### Cooling only type

Indoor model			RPFC-2.0TNE1NH	RPFC-3.0TNE1NH	RPFC-4.0TNE1NH	RPFC-5.0TNE1NH	RPFC-6.0TNE1NH	RPFC-6.5TNE1NH
Outdoor model			RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
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
Power supply (Outdoor)	V/Ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
Max. input consumption	W		2600	4100	5100	6400	6300	8200
Max. input current	A		11	18	22.5	11.6	11	13.5
Average	Pdesignc	kW	5.200	6.750	10.230	12.050	12.868	14.420
	SEER	W/W	6.80	5.79	6.07	5.41	5.99	5.90
	Energy Efficiency Class		A++	A+	A+	A	A+	A+
	Tbiv	°C	-7	-7	-7	-7	-7	-7
	Tol	°C	-15	-15	-15	-15	-15	-15
Cooling	Capacity	Btu/h	17870	23031	34905	41115	43906	49201
	Capacity	kW	5.237	6.750	10.230	12.050	12.868	14.420
	Input	W	1652	2163	3680	4866	4247	5381
	Current	A	7.6	9.7	17.6	8.3	8.2	10.1
	EER	W/W	3.17	3.12	2.78	2.48	3.03	2.68
Indoor fan motor	Model		SIC-70CW-F1100-6	SIC-70CW-F1100-6	SIC-70CW-F1140-3	SIC-101CW-F1181-2	SIC-101CW-F1181-1	SIC-101CW-F1181-1
	Qty		1	1	1	1	1	1
	Input	W	100	100	140	181	181	181
	Capacitor	uF	NA	NA	NA	NA	NA	NA
	Speed(Hi/Med/Lo)	r/min	800/700/610	1280/1100/920	1220/1160/1080	1200/1100/1000	1250/1000/800	1250/1100/950
Indoor coil	Number of rows		2	3	3	3	3	3.5

## 2. SPECIFICATIONS

Indoor model			RPFC-2.0TNE1NH	RPFC-3.0TNE1NH	RPFC-4.0TNE1NH	RPFC-5.0TNE1NH	RPFC-6.0TNE1NH	RPFC-6.5TNE1NH
Outdoor model			RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Indoor coil	Tube pitch(a)* row pitch(b)	mm	21x13.6	21x13.6	21x13.6	21x13.6	21x136	21x136
	Fin spacing	mm	1.4	1.5	1.5	1.5	1.5	1.5
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7.0,innergroove tube	Φ7.0, innergroove tube
	Coil (LxHxW)	mm	691x336x27.2	660x336x40.8	930x336x40.8	1200x336x40.8	1200x336x40.8	1200x336x54.4
	Number of circuits		4	3	7	7	7	7
Indoor air flow Rated(Hi/Med/Lo)		m <sup>3</sup> /h	800/690/590	1100/950/800	1700/1500/1300	2000/1800/1600	2000/1600/1200	2000/1700/1500
Indoor air flow Rated(Hi/Med/Lo)		CFM	470/400/340	650/570/500	1000/882/765	1176/1059/941	1180/940/710	1180/1000/880
Indoor noise level (Sound pressure)		dB(A)	43/39/36	48/46/42	50/49/48	50/48/45	51/45/41	51/46/43
Indoor noise level (Sound power)		dB(A)	57	63	64	66	67	66
Indoor unit	Dimension (WxHxD)	mm	990x230x680	990x230x680	1285x230x680	1580x230x680	1580x230x680	1580x230x680
	Packing(WxHxD)	mm	1100x350x820	1100x350x820	1400x350x820	1690x350x820	1690x350x820	1690x350x820
	Net/Gross weight	kg	29/34	30/35	37/44	48/56	48/56	50/58
Drainage water pipe diameter		mm	ODΦ25	ODΦ25	ODΦ25	ODΦ25	ODΦ25	ODΦ25
Controller			Remote control	Remote control	Remote control	Remote control	Remote control	Remote control
Operation temperature		°C	16~30	16~30	16~30	16~30	16~30	16~30
Qty'per 20' /40' /40'HQ (Indoor unit)		Set	84/168/196	84/168/196	42/84/98	42/84/98	42/84/98	42/84/98
Compressor	Model		ATM150D23UFZ	ATF235D43UMT	ATF310D43UMT	ATF310D43UMT	ATH356SDPC9FL	LNB42FSAMC
	Type		ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Brand		GMCC	GMCC	GMCC	GMCC	Hitachi	MITSUBISHI
	Capacity	Btu/h	15427	24361	32380	32380	34470	47699

## 2. SPECIFICATIONS

Indoor model			RPFC-2.0TNE1NH	RPFC-3.0TNE1NH	RPFC-4.0TNE1NH	RPFC-5.0TNE1NH	RPFC-6.0TNE1NH	RPFC-6.5TNE1NH
Outdoor model			RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Compressor	Input	W	1165	1940	2600	2600	3155	4270
	Rated current(RLA)	A	8.1	8.9	5.1	5.1	13.2	12.0
	Refrigerant oil	ml	ESTEL OIL VG74/500	POE VG74/670	PQE VG74/1000	PQE VG74/1000	α68HES-H or equivalent /1650	FV50S or PVE/1400
Outdoor fan motor	Model		SIC-61FW-F161-1	SIC-61FW-F161-1	SIC-71FW-F8121-1	SIC-81FW-F1138-1	YDK65-6-9061& YDK65-6-9024	YDK65-6-9061& YDK65-6-9024
	Qty		1	1	1	1	2	2
	Input	W	61	61	121	138	121	121
	Capacitor	μF	NA	NA	NA	NA	NA	NA
	Speed (Hi)	r/min	840	880	830	850	810	810
Outdoor coil	Number of rows		2	2	2	2	2	2
	Tube pitch(a)* row pitch(b)	mm	21x21.65	21x18.19	21x21.65	21x21.65	21x2165	21x2165
	Fin spacing	mm	1.4	1.4	1.3	1.6	1.5	1.4
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic luminium	Hydrophilic luminium
	Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ7.94,innergroove tube	Φ7.94,innergroove tube	Φ 7.94,innergroove tube	Φ7.94,innergroove tube
	Coil (LxHxW)	mm	962x630x43.3	900x630x43.3	970x798x43.5	970x1008x43.5	970x1344x43	970x1344x43
	Number of circuits		7	4	5	6	6	8
Outdoor noise level (Sound pressure) Hi								
Outdoor noise level (Sound power)								
Throttle type			EEV	EEV	EEV	EEV	EEV	EEV
Outdoor unit	Dimension(WxHxD)	mm	860x670x310	860x670x310	950x840x340	950x1050x340	950x1386x340	950x1386x340
	Packing(WxHxD)	mm	990x730x450	990x730x450	1110x910x460	1110x1200x460	1110x1527x460	1110x1527x460

## 2. SPECIFICATIONS

Indoor model			RPFC-2.0TNE1NH	RPFC-3.0TNE1NH	RPFC-4.0TNE1NH	RPFC-5.0TNE1NH	RPFC-6.0TNE1NH	RPFC-6.5TNE1NH
Outdoor model			RAS-2.0TNESNH1	RAS-3.0TNESNH1	RAS-4.0TNESNH1	RAS-5.0TNESMH1	RAS-6.0TNESMH1	RAS-6.5TNESMH1
Outdoor unit	Net/Gross weight	kg	45/49	51/57	70/80	85/95	113/125	117/129
Refrigerant type/Quantity	Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Charged volume	kg	1.3	1.70	2.80	3.20	3.78	3.95
Design pressure		MPa	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6	4.15/1.6
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ6.35/Φ12.7(1/4'/1/2')	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')
	Max. pipe length	m	30	50	50	50	50	50
	Max. difference in level	m	15	30	30	30	30	30
Annual energy consumption(Cooling)		kWh/a	267	426	589	803	772	876
Ambient temperature	Cooling	°C	-15~48	-15~48	-15~48	-15~48	-15~48	-15~48
Qty/per 20' /40' /40'HQ (Outdoor unit)		Set	90/186/186	90/186/186	52/106/106	26/53/106	26/53/53	26/53/53

### 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 4 points, the points are 1 meter in front of the four sides of the unit surface and height =1/2(unit height +1) meter from floor level, and calculate the weighted average of the noise.

Indoor unit:

Floor Ceiling : Test the noise value of the point 1.4m below the unit and 1m front the unit.

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

#### 3. The values given in the table for noise level reflect the levels in anechoic chamber.

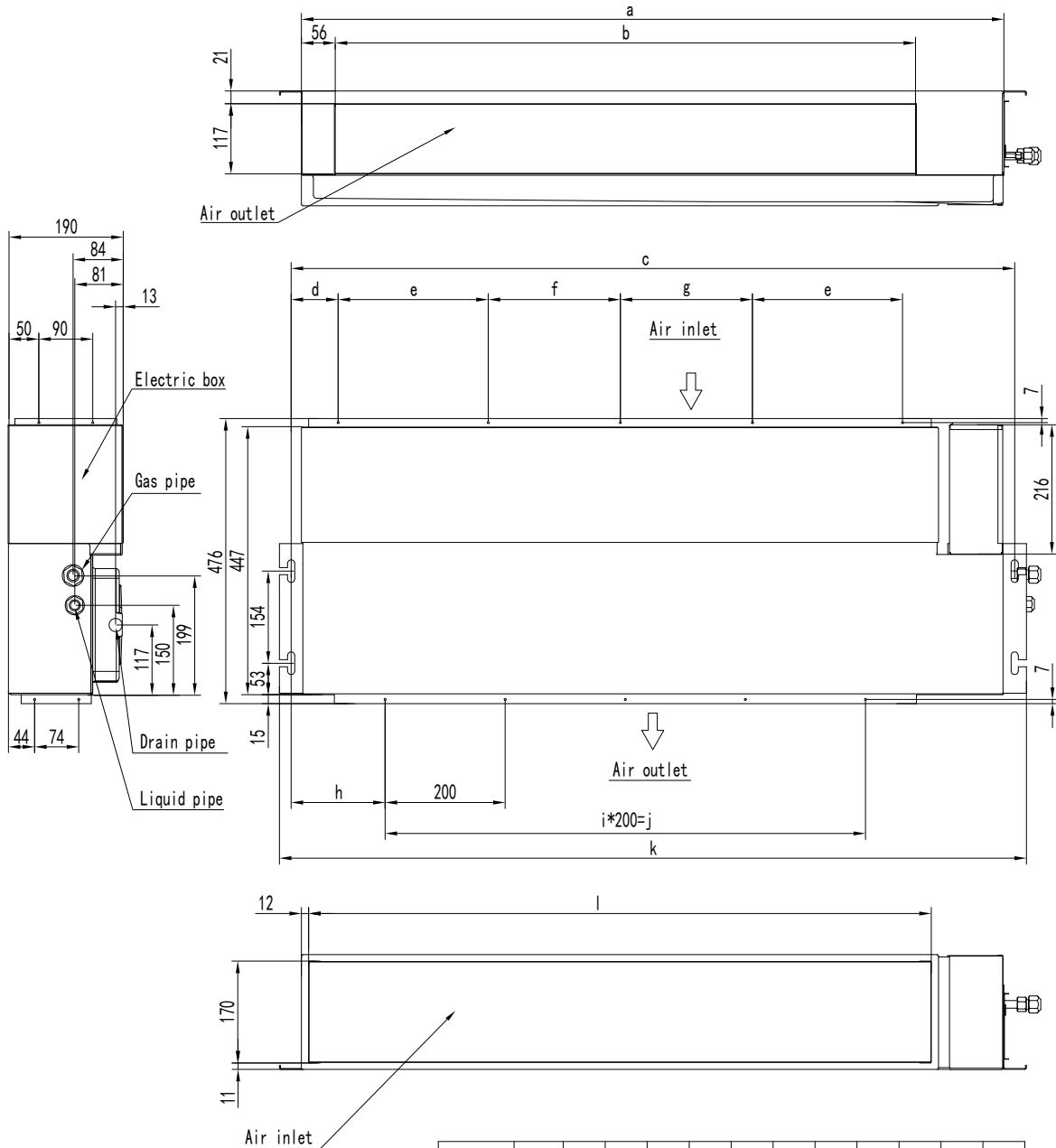
### 3. OUTLINES AND DIMENSIONS

#### 3. Outlines and dimensions

##### 3.1 Indoor units

Ducted

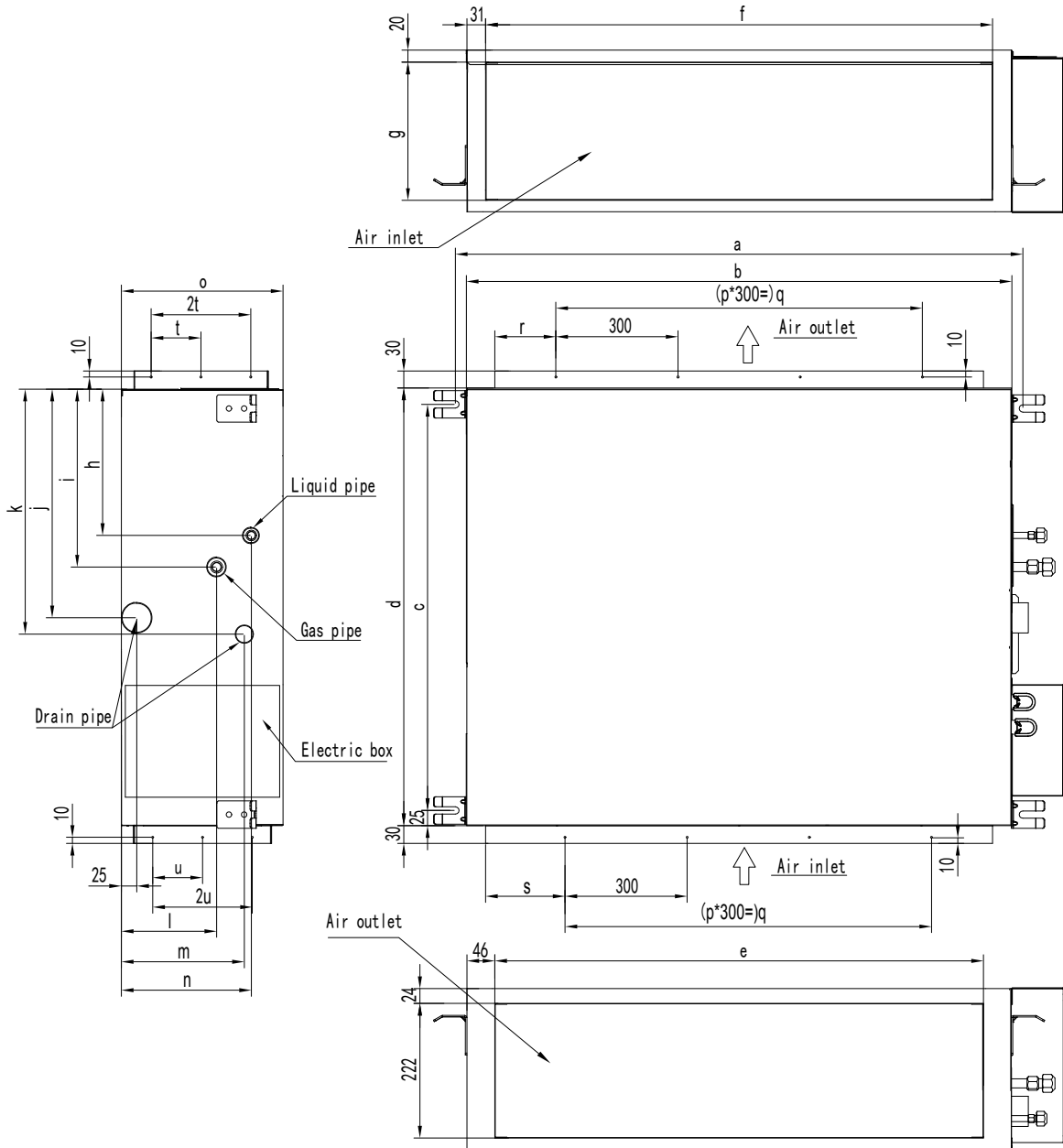
Unit: mm



Model	a	b	c	d	e	f	g	h	i	j	k	l
2.0HP	1170	971	1207	78	250	220	220	157	4	800	1246	1039
1.0/1.5HP	900	701	937	73	240	200	0	122	3	600	976	769

# 3. OUTLINES AND DIMENSIONS

Unit: mm



Model	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u
3.0HP	934	900	669	720	805	835	228	242	294	378	405	156	202	214	270	2	600	102	117	82	82
4.0/5.0/ 6.0/6.5HP	1334	1300	756	800	1205	1235	308	237	312	375	400	204	186	242	350	3	900	153	168	90	140

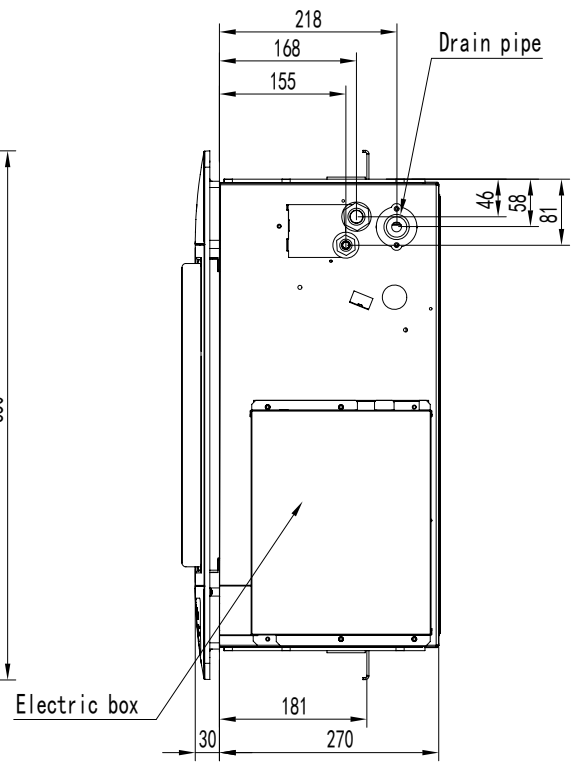
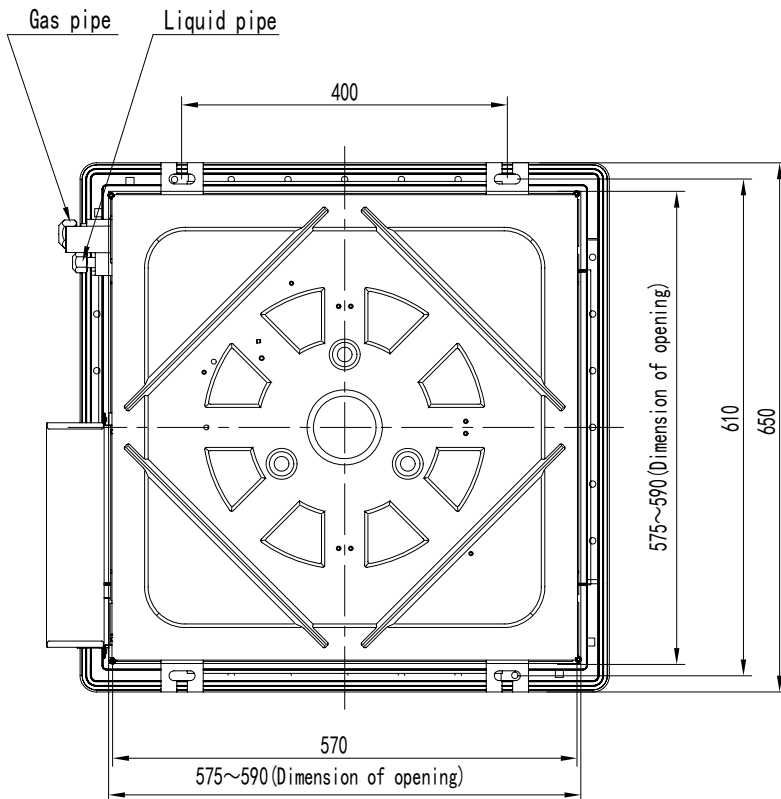
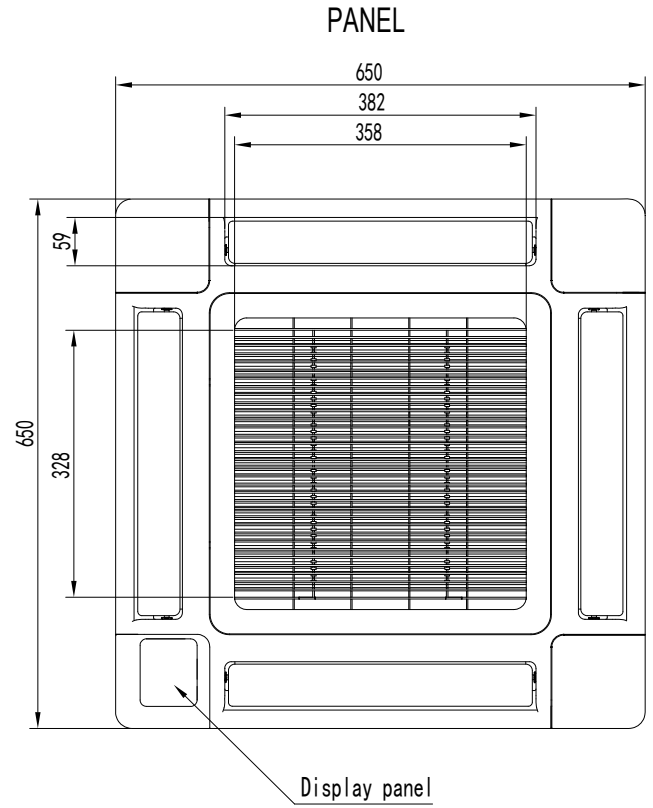
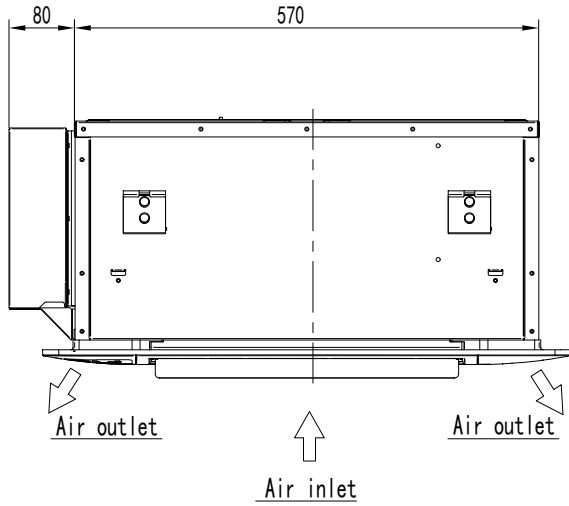


### 3. OUTLINES AND DIMENSIONS

#### Cassette

1.5/2.0HP

Unit: mm

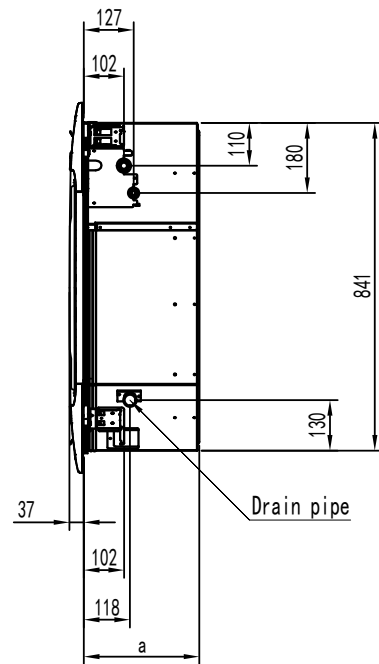
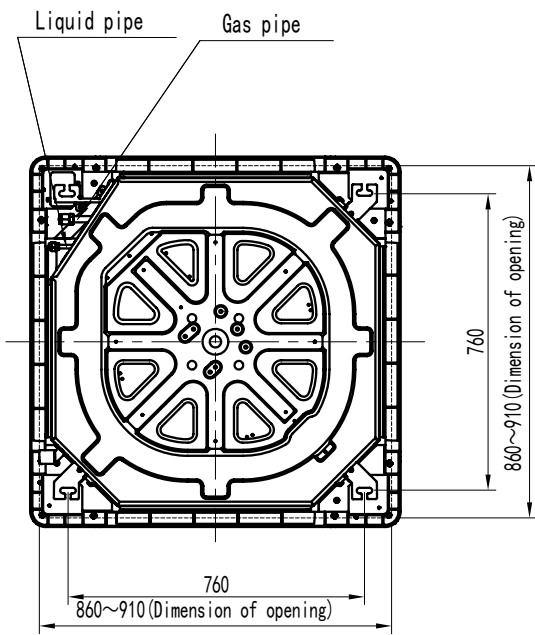
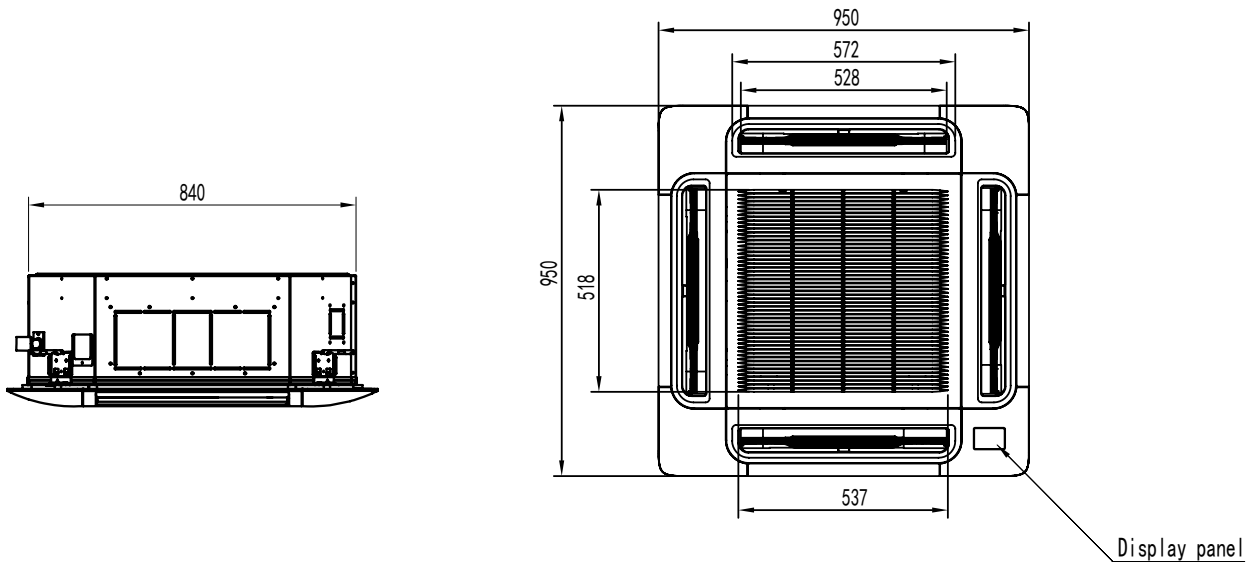


### 3. OUTLINES AND DIMENSIONS

3.0/4.0/5.0/6.0/6.5HP

Unit: mm

PANEL

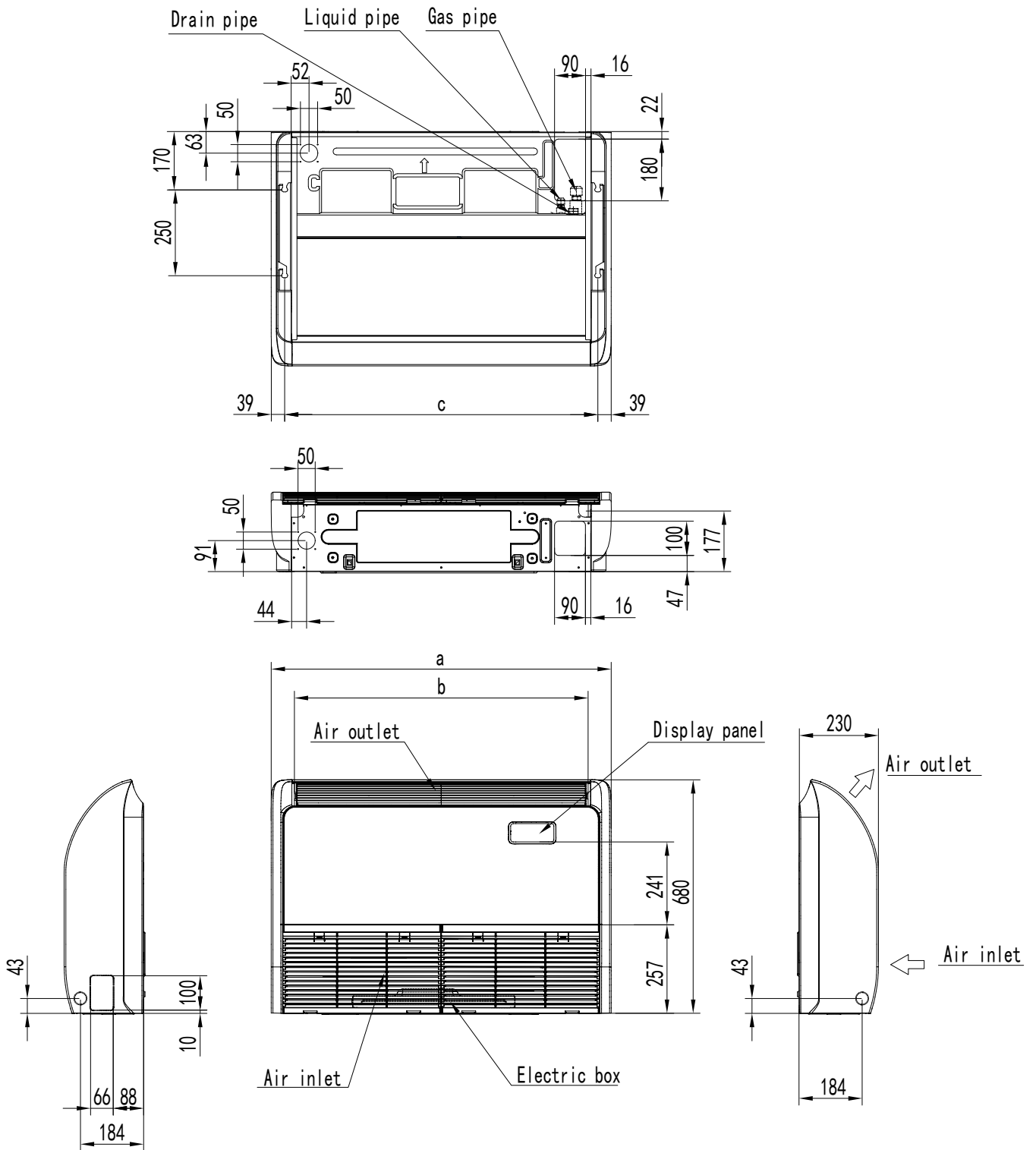


Model	a
3.0/4.0HP	248
5.0/6.0/6.5HP	298

### 3. OUTLINES AND DIMENSIONS

Floor Ceiling

Unit: mm



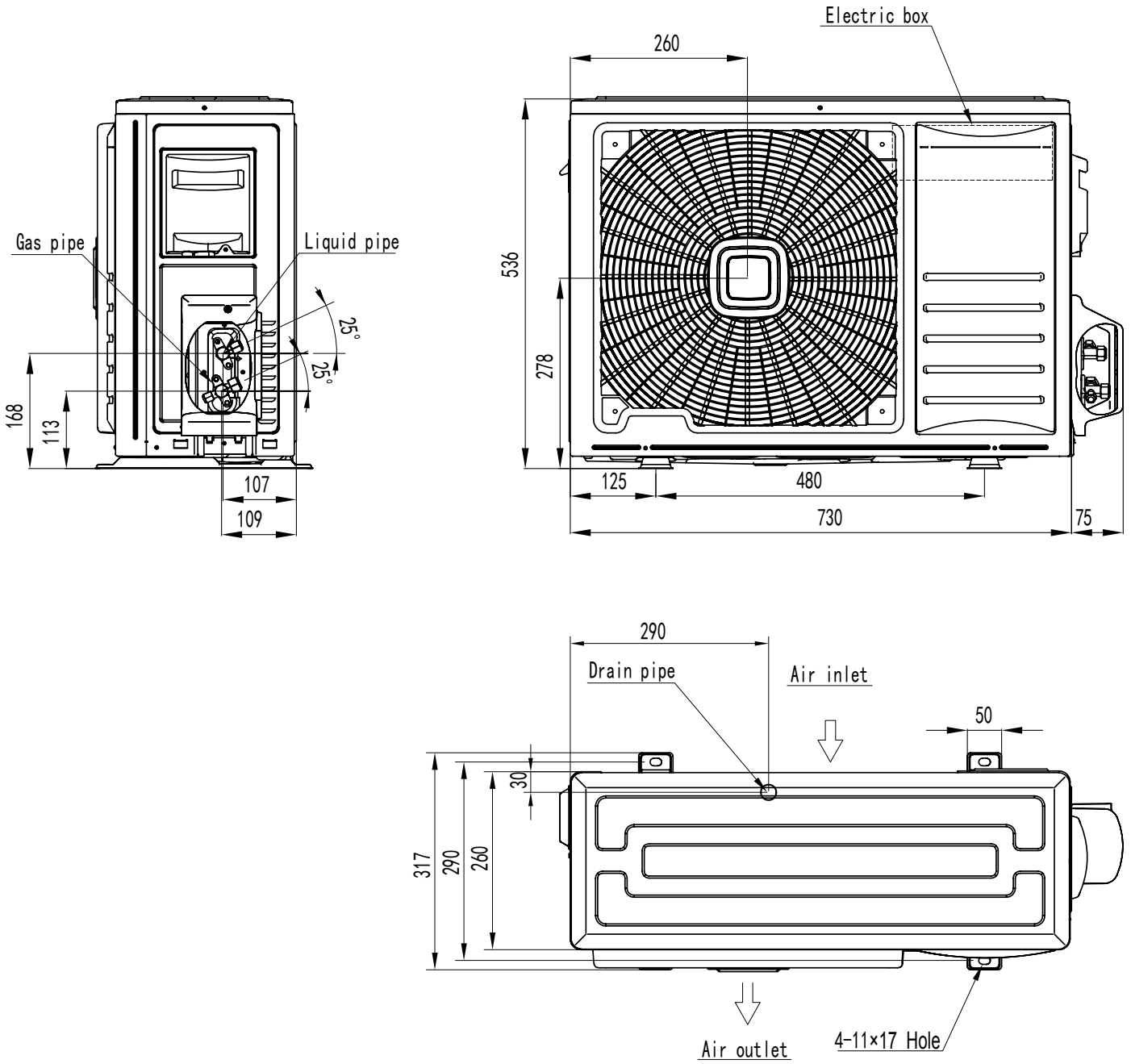
Model	a	b	c
2.0HP	990	855	912
3.0/4.0HP	1285	1150	1207
5.0/6.0/6.5HP	1580	1445	1502

### 3. OUTLINES AND DIMENSIONS

#### 3.2 Outdoor units

1.0HP

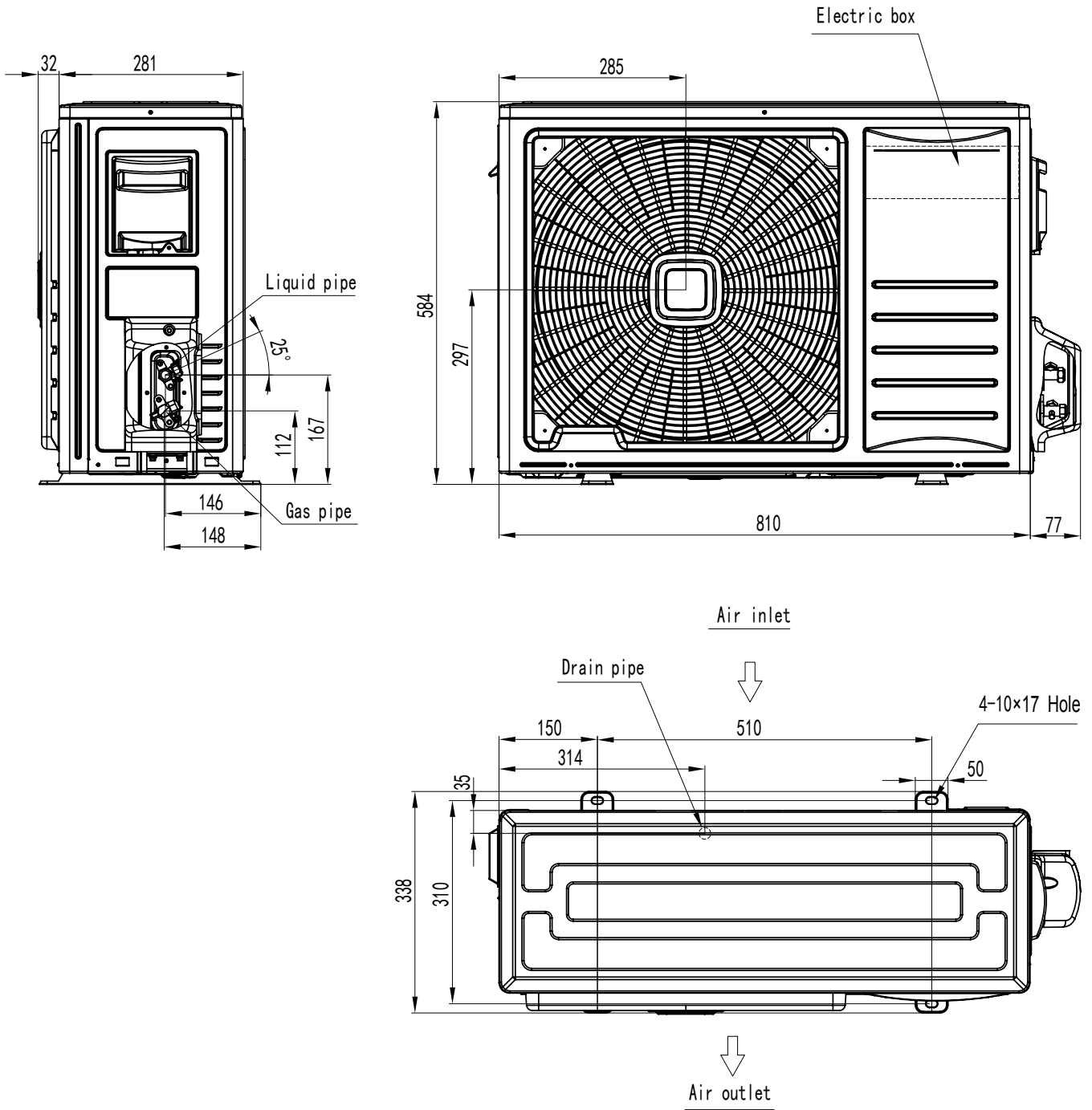
Unit: mm



### 3. OUTLINES AND DIMENSIONS

1.5 HP

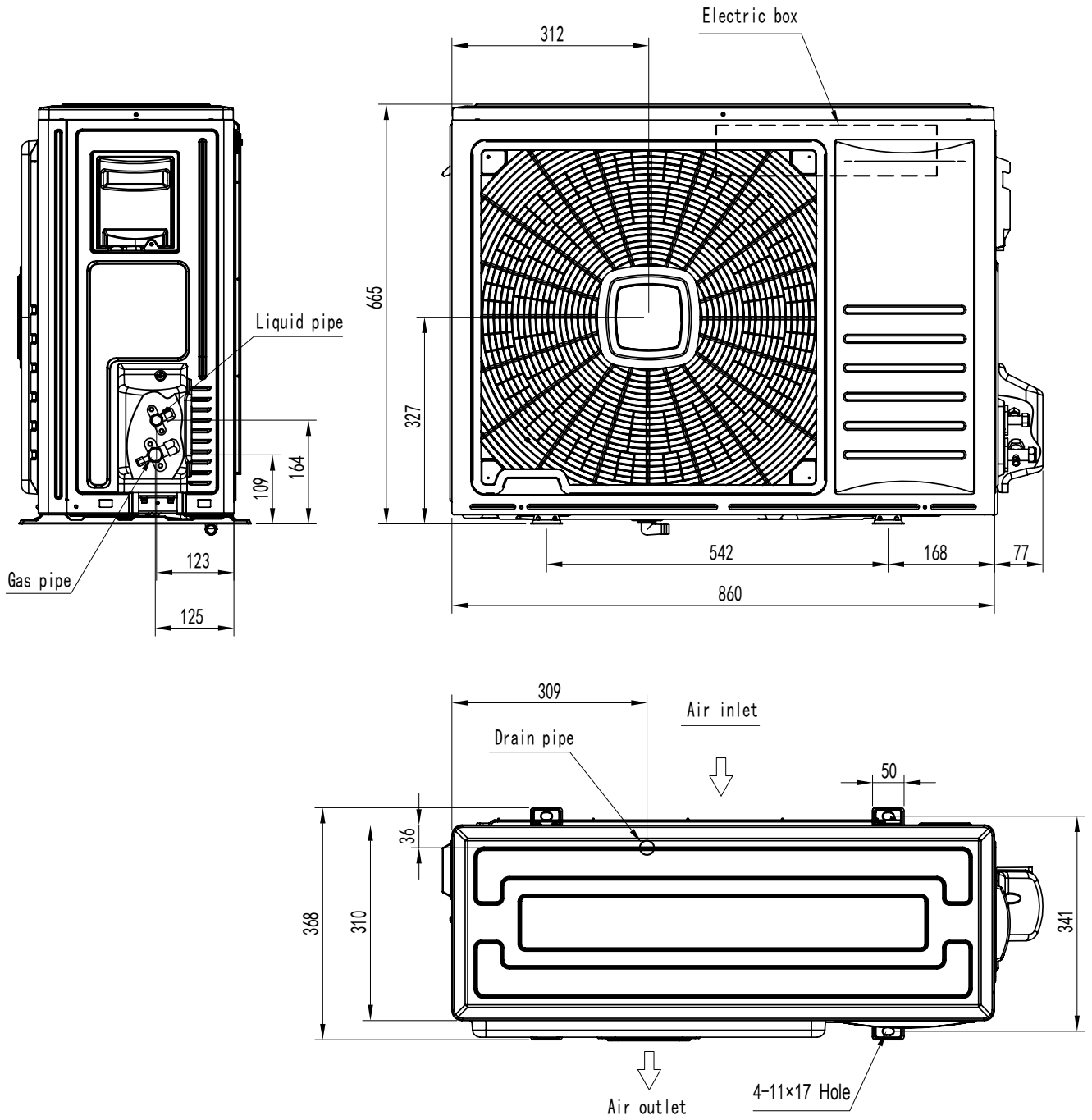
Unit: mm



### 3. OUTLINES AND DIMENSIONS

2.0/3.0HP

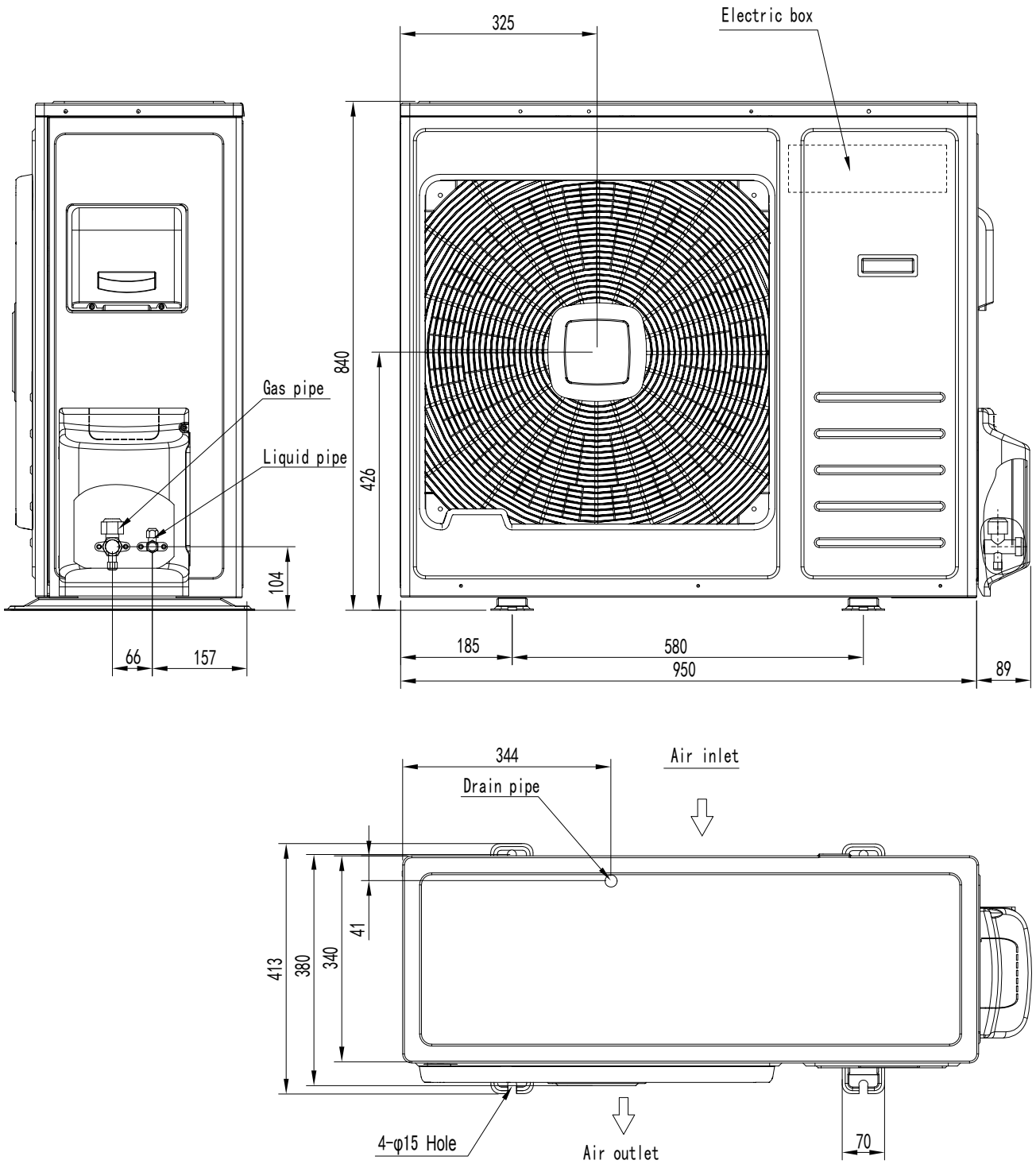
Unit: mm



### 3. OUTLINES AND DIMENSIONS

4.0HP

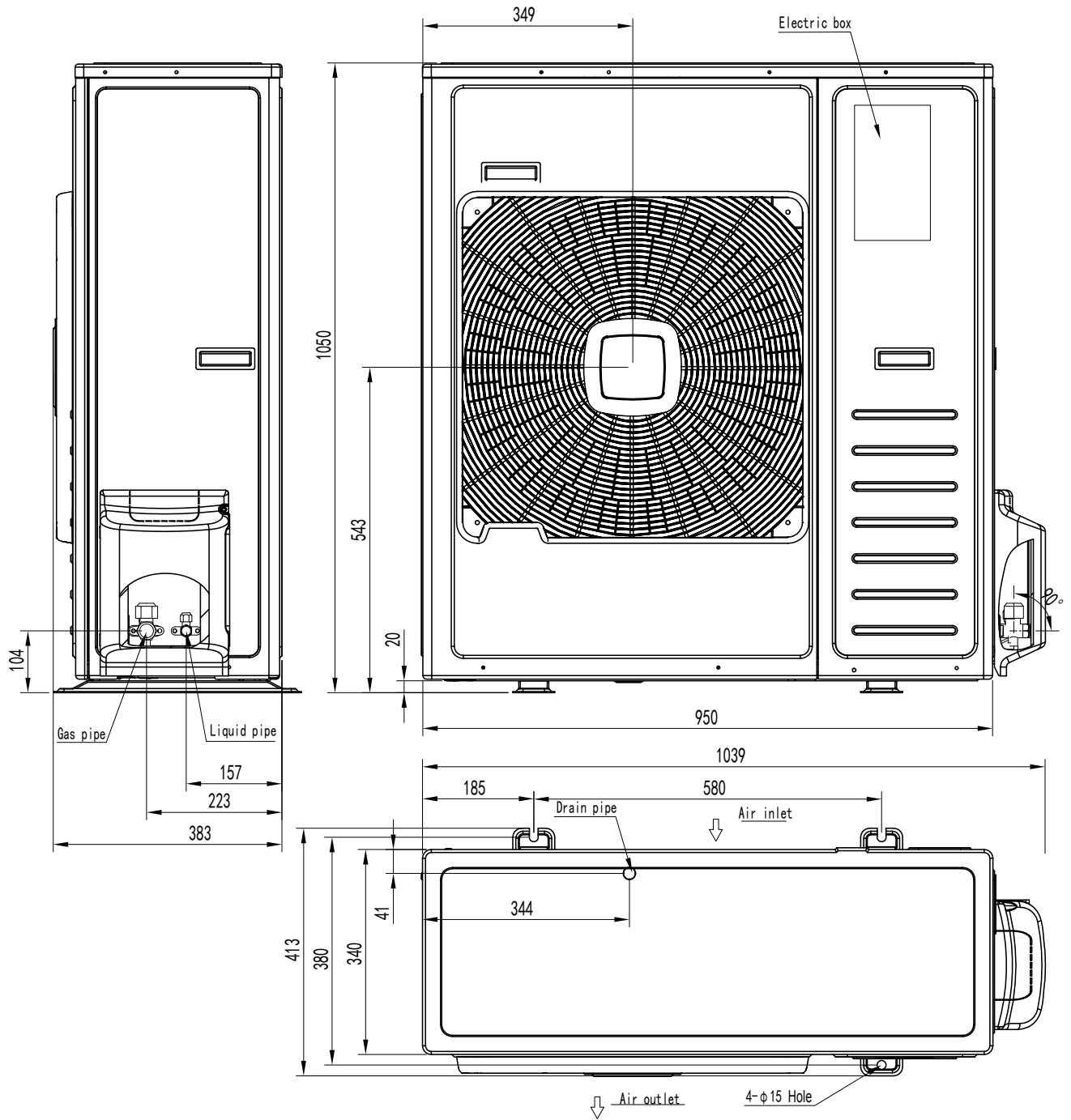
Unit: mm



### 3. OUTLINES AND DIMENSIONS

5.0HP

Unit: mm

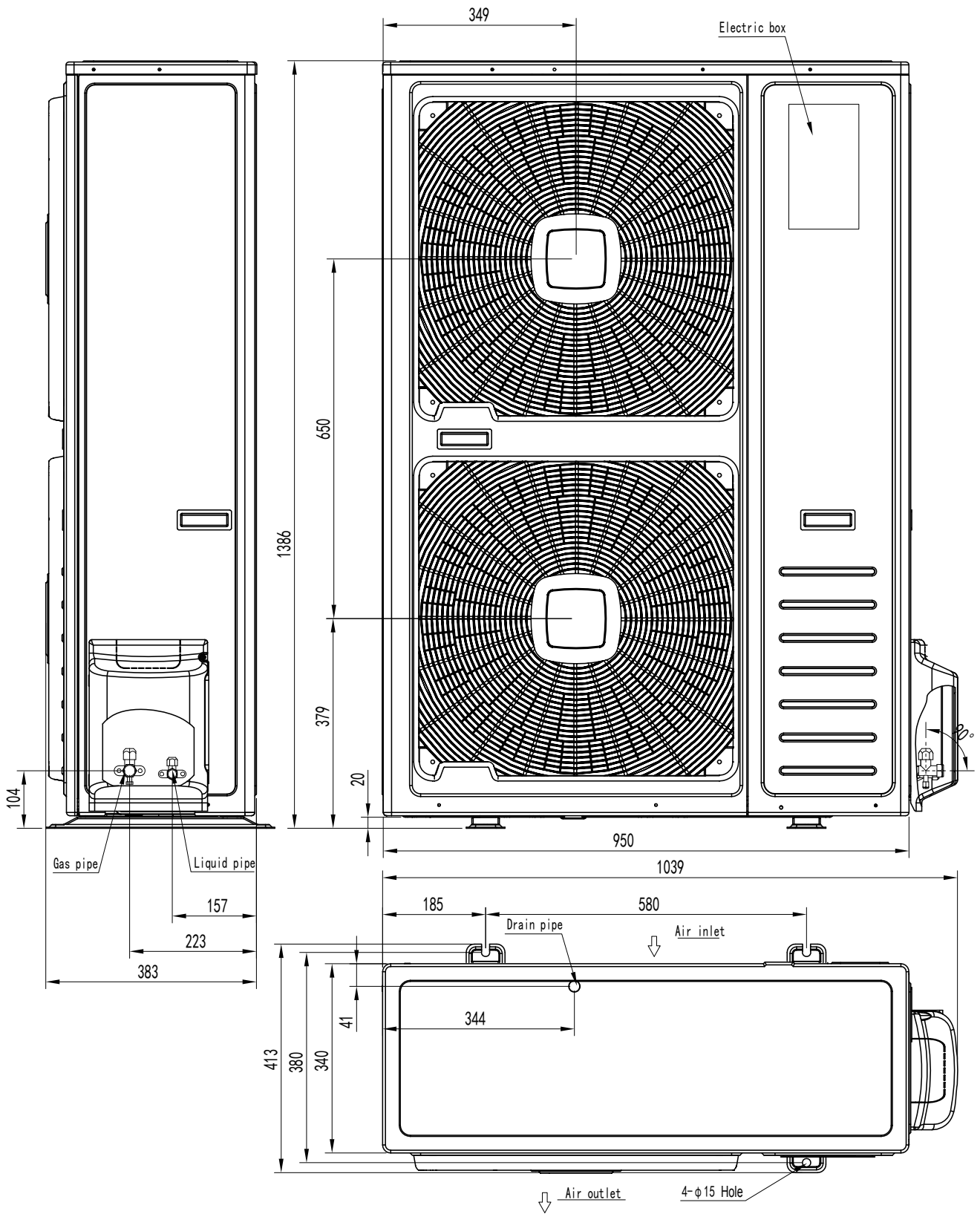




### 3. OUTLINES AND DIMENSIONS

6.0/6.5HP

Unit: mm



## 4. ELECTRICAL DATA

### 4. Electrical data

Outdoor unit	Power supply			Applicable voltage		ELB	
	Voltage(V)	PH	Frequency	Umin(V)	Umax(V)	Nominal Current(A)	Nominal Sensitive Current(mA)
1.0HP	220-240	1	50	176	264	20	30
1.5HP	220-240	1	50	176	264	20	30
2.0HP	220-240	1	50	176	264	20	30
3.0HP	220-240	1	50	176	264	32	30
4.0HP	220-240	1	50	176	264	40	30
5.0/6.0/6.5HP	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 started by an inverter, resulting in extremely low starting current.

## 5. CAPACITIES AND SELECTION DATA

### 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.

#### Ducted

1.0HP

#### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	2.4	2.3	2.2	2.1	1.9	1.8
16	22	2.6	2.5	2.4	2.3	2.1	2.0
18	25	2.7	2.6	2.6	2.5	2.4	2.3
19	27	2.9	2.8	2.7	2.7	2.6	2.5
19.5	27	3.0	2.9	2.8	2.7	2.6	2.6
22	30	3.4	3.2	3.1	3.0	2.9	2.7
24	32	3.7	3.6	3.4	3.4	3.2	2.9

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

#### HEATING CAPACITY(kW)

INDOOR TEMPERATURE	OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	-15	-10	-5	0	6	10	15
16	1.6	1.8	2.1	2.4	2.7	2.8	2.9
18	1.6	1.8	2.1	2.4	2.7	2.7	2.8
20	1.5	1.7	2.0	2.3	2.7	2.7	2.8
21	1.5	1.7	2.0	2.3	2.7	2.7	2.8
22	1.5	1.6	2.0	2.2	2.7	2.7	2.8
24	1.5	1.6	1.9	2.2	2.7	2.7	2.8
26	1.5	1.6	1.9	2.2	2.6	2.7	2.7

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

1.5HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	3.1	3.0	2.8	2.7	2.5	2.4
16	22	3.4	3.2	3.2	3.0	2.7	2.6
18	25	3.5	3.4	3.4	3.2	3.1	3.0
19	27	3.8	3.7	3.6	3.5	3.4	3.3
19.5	27	3.9	3.7	3.7	3.6	3.4	3.4
22	30	4.4	4.2	4.0	3.9	3.7	3.5
24	32	4.8	4.6	4.5	4.4	4.2	3.8

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	(°C DB)	-15	-10	-5	0	6	10	15
16	20	2.2	2.5	2.9	3.3	3.8	3.8	3.9
18	22	2.2	2.5	2.9	3.3	3.7	3.8	3.8
20	24	2.1	2.4	2.8	3.1	3.7	3.8	3.8
21	25	2.1	2.4	2.8	3.1	3.7	3.8	3.8
22	27	2.0	2.2	2.8	3.0	3.7	3.8	3.8
24	30	2.0	2.2	2.7	3.0	3.7	3.8	3.8
26	32	2.0	2.2	2.7	3.0	3.6	3.7	3.8

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

2.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	4.7	4.6	4.3	4.2	3.8	3.6
16	22	5.1	4.9	4.8	4.5	4.2	4.0
18	25	5.3	5.1	5.2	4.9	4.7	4.5
19	27	5.8	5.6	5.4	5.3	5.1	5.0
19.5	27	5.9	5.7	5.6	5.4	5.2	5.1
22	30	6.7	6.3	6.1	5.9	5.7	5.3
24	32	7.3	7.0	6.8	6.7	6.3	5.8

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE (°C WB)	OUTDOOR TEMPERATURE(°C DB)						
	-15	-10	-5	0	6	10	15
16	3.6	4.0	4.7	5.4	6.1	6.2	6.4
18	3.6	4.0	4.7	5.4	6.0	6.1	6.2
20	3.4	3.8	4.5	5.1	6.0	6.1	6.2
21	3.4	3.8	4.5	5.1	6.0	6.1	6.2
22	3.3	3.6	4.5	4.9	6.0	6.1	6.2
24	3.3	3.6	4.3	4.9	6.0	6.1	6.2
26	3.3	3.6	4.3	4.9	5.8	6.0	6.1

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

3.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	6.0	5.8	5.4	5.3	4.9	4.6
16	22	6.5	6.3	6.1	5.7	5.3	5.0
18	25	6.8	6.5	6.7	6.3	6.0	5.7
19	27	7.3	7.1	6.9	6.8	6.5	6.4
19.5	27	7.5	7.2	7.1	6.9	6.7	6.5
22	30	8.6	8.0	7.8	7.5	7.2	6.8
24	32	9.2	9.0	8.7	8.6	8.0	7.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE (°C WB)	OUTDOOR TEMPERATURE(°C DB)						
	-15	-10	-5	0	6	10	15
16	3.7	4.1	4.8	5.5	6.2	6.3	6.5
18	3.7	4.1	4.8	5.5	6.1	6.2	6.3
20	3.5	3.9	4.6	5.2	6.1	6.2	6.3
21	3.5	3.9	4.6	5.2	6.1	6.2	6.3
22	3.3	3.7	4.6	5.0	6.1	6.2	6.3
24	3.3	3.7	4.4	5.0	6.1	6.2	6.3
26	3.3	3.7	4.4	5.0	5.9	6.1	6.2

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

4.0HP

### COOLING CAPACITY(kW)

Indoor inlet temperature (°C)		Outdoor temperature (°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14.0	20	10.2	10	9.8	9.5	9.0	8.0
16.0	22	10.6	10.5	10	10	9.4	8.4
18.0	25	11	10.8	10.6	10.2	9.8	8.8
19.0	27	11.5	11.2	10.8	10.1	10	9.0
19.5	27	11.6	11.4	11	10.7	10.2	9.4
22.0	30	11.8	11.6	11.2	10.9	10.6	9.8
24.0	32	12	11.8	11.4	11.2	10.8	10.1

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

Indoor inlet	Outdoor temperature (°C DB)						
(°C DB)	-15.0	-10.0	-5.0	0.0	6.0	10.0	15.0
16.0	6.2	7.6	8.3	9.8	11.8	12.6	13
18.0	6.0	7.4	8.2	9.5	11.7	12.3	12.8
20.0	6.0	7.4	8.0	9.3	11.3	12	12.6
21.0	6.0	7.3	8.0	9.3	11.5	12	12.6
22.0	6.0	7.3	8.0	9.3	11.5	12	12.6
24.0	6.0	7.0	8.0	9.1	11.4	11.8	12.2
26.0	5.8	7.0	7.8	8.9	11	11.6	12

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

5.0HP

### COOLING CAPACITY(kW)

Indoor inlet temperature (°C)		Outdoor temperature (°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14.0	20	12.0	11.6	11.2	11.0	10.6	9.5
16.0	22	12.2	11.8	11.7	11.6	11.3	10.5
18.0	25	12.4	12.2	12	11.9	11.5	11
19.0	27	12.5	12.3	12.1	12.03	11.3	10.8
19.5	27	13.0	12.6	12.5	12.3	11.5	11
22.0	30	13.2	12.9	12.6	12.5	12	11.5
24.0	32	13.3	13.2	13	12.8	12.5	12

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

### HEATING CAPACITY(kW)

Indoor inlet	Outdoor temperature (°C DB)						
(°C DB)	-15.0	-10.0	-5.0	0.0	6.0	10.0	15.0
16.0	8.8	9.0	10.5	11.9	13.8	14.2	14.6
18.0	8.7	8.8	10.2	11.9	13.8	14.2	14.6
20.0	8.5	8.7	10	11.8	13.8	14.2	14.6
21.0	8.4	8.7	10	11.8	13.6	14	14.2
22.0	8.4	8.7	10	11.8	13.5	13.8	14
24.0	8.3	8.5	9.6	11.4	13	13.5	13.7
26.0	8.3	8.5	9.6	11.2	12.6	13	13.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

6.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	11.9	11.6	10.8	10.5	9.7	9.2
16	22	12.9	12.4	12.1	11.3	10.5	10.0
18	25	13.5	12.9	13.2	12.4	11.9	11.3
19	27	14.6	14.0	13.7	13.5	12.9	12.7
19.5	27	14.8	14.3	14.0	13.7	13.2	12.9
22	30	17.0	15.9	15.4	14.8	14.3	13.5
24	32	18.3	17.8	17.3	17.0	15.9	14.6

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE	OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	-15	-10	-5	0	6	10	15
16	10.3	11.4	13.4	15.3	17.3	17.6	18.1
18	10.3	11.4	13.4	15.3	17.0	17.3	17.6
20	9.8	10.9	12.8	14.5	17.0	17.3	17.6
21	9.8	10.9	12.8	14.5	17.0	17.3	17.6
22	9.2	10.3	12.8	13.9	17.0	17.3	17.6
24	9.2	10.3	12.3	13.9	17.0	17.3	17.6
26	9.2	10.3	12.3	13.9	16.4	17.0	17.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

6.5HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	13.9	13.6	12.6	12.3	11.3	10.7
16	22	15.1	14.5	14.2	13.2	12.3	11.7
18	25	15.8	15.1	15.4	14.5	13.9	13.2
19	27	17.0	16.4	16.1	15.8	15.1	14.8
19.5	27	17.3	16.7	16.4	16.1	15.4	15.1
22	30	19.9	18.6	18.0	17.3	16.7	15.8
24	32	21.4	20.8	20.2	19.9	18.6	17.0

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE	OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	-15	-10	-5	0	6	10	15
16	11.2	12.4	14.5	16.6	18.8	19.1	19.7
18	11.2	12.4	14.5	16.6	18.5	18.8	19.1
20	10.6	11.8	13.9	15.7	18.5	18.8	19.1
21	10.6	11.8	13.9	15.7	18.5	18.8	19.1
22	10.0	11.2	13.9	15.1	18.5	18.8	19.1
24	10.0	11.2	13.3	15.1	18.5	18.8	19.1
26	10.0	11.2	13.3	15.1	17.9	18.5	18.8

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### Cassette

1.5HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	3.2	3.1	2.9	2.8	2.6	2.5
16	22	3.5	3.3	3.2	3.0	2.8	2.7
18	25	3.6	3.5	3.5	3.3	3.2	3.0
19	27	3.9	3.8	3.7	3.6	3.5	3.4
19.5	27	4.0	3.8	3.8	3.7	3.5	3.5
22	30	4.5	4.3	4.1	4.0	3.8	3.6
24	32	4.9	4.8	4.6	4.5	4.3	3.9

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)



## 5. CAPACITIES AND SELECTION DATA

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE (°C WB)	OUTDOOR TEMPERATURE(°C DB)						
	-15	-10	-5	0	6	10	15
16	2.3	2.6	3.0	3.4	3.9	3.9	4.1
18	2.3	2.6	3.0	3.4	3.8	3.9	3.9
20	2.2	2.4	2.9	3.2	3.8	3.9	3.9
21	2.2	2.4	2.9	3.2	3.8	3.9	3.9
22	2.1	2.3	2.9	3.1	3.8	3.9	3.9
24	2.1	2.3	2.7	3.1	3.8	3.9	3.9
26	2.1	2.3	2.7	3.1	3.7	3.8	3.9

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

2.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	4.7	4.6	4.2	4.1	3.8	3.6
16	22	5.1	4.9	4.8	4.5	4.1	3.9
18	25	5.3	5.1	5.2	4.9	4.7	4.5
19	27	5.7	5.5	5.4	5.3	5.1	5.0
19.5	27	5.8	5.6	5.5	5.4	5.2	5.1
22	30	6.7	6.3	6.0	5.8	5.6	5.3
24	32	7.2	7.0	6.8	6.7	6.3	5.7

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE (°C WB)	OUTDOOR TEMPERATURE(°C DB)						
	-15	-10	-5	0	6	10	15
16	3.8	4.2	4.9	5.6	6.3	6.4	6.6
18	3.8	4.2	4.9	5.6	6.2	6.3	6.4
20	3.5	4.0	4.7	5.3	6.2	6.3	6.4
21	3.5	4.0	4.7	5.3	6.2	6.3	6.4
22	3.3	3.8	4.7	5.1	6.2	6.3	6.4
24	3.3	3.8	4.5	5.1	6.2	6.3	6.4
26	3.3	3.8	4.5	5.1	6.0	6.2	6.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

3.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	6.2	6.1	5.7	5.5	5.1	4.8
16	22	6.8	6.5	6.4	5.9	5.5	5.2
18	25	7.1	6.8	6.9	6.5	6.2	5.9
19	27	7.6	7.4	7.2	7.1	6.8	6.6
19.5	27	7.8	7.5	7.4	7.2	6.9	6.8
22	30	8.9	8.3	8.1	7.8	7.5	7.1
24	32	9.6	9.3	9.0	8.9	8.3	7.6

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE	OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	-15	-10	-5	0	6	10	15
16	5.0	5.5	6.5	7.4	8.3	8.5	8.7
18	5.0	5.5	6.5	7.4	8.2	8.3	8.5
20	4.7	5.2	6.2	7.0	8.2	8.3	8.5
21	4.7	5.2	6.2	7.0	8.2	8.3	8.5
22	4.4	5.0	6.2	6.7	8.2	8.3	8.5
24	4.4	5.0	5.9	6.7	8.2	8.3	8.5
26	4.4	5.0	5.9	6.7	7.9	8.2	8.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

4.0HP

### COOLING CAPACITY(kW)

Indoor inlet temperature (°C)		Outdoor temperature (°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14.0	20	10.2	10	9.8	9.5	9.0	8.0
16.0	22	10.6	10.5	10	10	9.4	8.4
18.0	25	11	10.8	10.6	10.2	9.8	8.8
19.0	27	11.5	11.2	10.8	10.3	10	9.0
19.5	27	11.6	11.4	11	10.7	10.2	9.4
22.0	30	11.8	11.6	11.2	10.9	10.6	9.8
24.0	32	12	11.8	11.4	11.2	10.8	10.1

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

### HEATING CAPACITY(kW)

Indoor inlet	Outdoor temperature (°C DB)						
(°C DB)	-15.0	-10.0	-5.0	0.0	6.0	10.0	15.0
16.0	6.2	7.6	8.3	9.8	11.8	12.6	13
18.0	6.0	7.4	8.2	9.5	11.7	12.3	12.8
20.0	6.0	7.4	8.0	9.3	11.4	12	12.6
21.0	6.0	7.3	8.0	9.3	11.5	12	12.6
22.0	6.0	7.3	8.0	9.3	11.5	12	12.6
24.0	6.0	7.0	8.0	9.1	11.4	11.8	12.2
26.0	5.8	7.0	7.8	8.9	11	11.6	12

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

5.0HP

### COOLING CAPACITY(kW)

Indoor inlet temperature (°C)		Outdoor temperature (°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14.0	20	12.0	11.6	11.2	11.0	10.6	9.5
16.0	22	12.2	11.8	11.7	11.6	11.3	10.5
18.0	25	12.4	12.2	12	11.9	11.5	11
19.0	27	12.5	12.3	12.1	12.068	11.3	10.8
19.5	27	13.0	12.6	12.5	12.3	11.5	11
22.0	30	13.2	12.9	12.6	12.5	12	11.5
24.0	32	13.3	13.2	13	12.8	12.5	12

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

Indoor inlet	Outdoor temperature (°C DB)						
(°C DB)	-15.0	-10.0	-5.0	0.0	6.0	10.0	15.0
16.0	8.8	9.0	10.5	11.9	13.8	14.2	14.6
18.0	8.7	8.8	10.2	11.9	13.8	14.2	14.6
20.0	8.5	8.7	10	11.8	13.8	14.2	14.6
21.0	8.4	8.7	10	11.8	13.6	14	14.2
22.0	8.4	8.7	10	11.8	13.5	13.8	14
24.0	8.3	8.5	9.6	11.4	13	13.5	13.7
26.0	8.3	8.5	9.6	11.2	12.6	13	13.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

6.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	11.8	11.5	10.7	10.5	9.6	9.1
16	22	12.9	12.3	12.1	11.3	10.5	9.9
18	25	13.4	12.9	13.1	12.3	11.8	11.3
19	27	14.5	13.9	13.7	13.4	12.9	12.6
19.5	27	14.7	14.2	13.9	13.7	13.1	12.9
22	30	16.9	15.8	15.3	14.7	14.2	13.4
24	32	18.2	17.7	17.2	16.9	15.8	14.5

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE	OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	-15	-10	-5	0	6	10	15
16	10.0	11.1	12.9	14.8	16.7	17.0	17.5
18	10.0	11.1	12.9	14.8	16.4	16.7	17.0
20	9.4	10.5	12.4	14.0	16.4	16.7	17.0
21	9.4	10.5	12.4	14.0	16.4	16.7	17.0
22	8.9	10.0	12.4	13.5	16.4	16.7	17.0
24	8.9	10.0	11.9	13.5	16.4	16.7	17.0
26	8.9	10.0	11.9	13.5	15.9	16.4	16.7

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

6.5HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	12.8	12.5	11.6	11.3	10.4	9.9
16	22	13.9	13.3	13.1	12.2	11.3	10.7
18	25	14.5	13.9	14.2	13.3	12.8	12.2
19	27	15.7	15.1	14.8	14.5	13.9	13.6
19.5	27	16.0	15.4	15.1	14.8	14.2	13.9
22	30	18.3	17.1	16.5	16.0	15.4	14.5
24	32	19.7	19.1	18.6	18.3	17.1	15.7

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE (°C WB)	OUTDOOR TEMPERATURE(°C DB)						
	-15	-10	-5	0	6	10	15
16	10.7	11.8	13.8	15.9	17.9	18.2	18.7
18	10.7	11.8	13.8	15.9	17.6	17.9	18.2
20	10.1	11.2	13.3	15.0	17.6	17.9	18.2
21	10.1	11.2	13.3	15.0	17.6	17.9	18.2
22	9.5	10.7	13.3	14.4	17.6	17.9	18.2
24	9.5	10.7	12.7	14.4	17.6	17.9	18.2
26	9.5	10.7	12.7	14.4	17.0	17.6	17.9

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### Floor Ceiling

2.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	4.6	4.5	4.2	4.1	3.8	3.6
16	22	5.0	4.8	4.7	4.4	4.1	3.9
18	25	5.2	5.0	5.1	4.8	4.6	4.4
19	27	5.7	5.4	5.3	5.2	5.0	4.9
19.5	27	5.8	5.6	5.4	5.3	5.1	5.0
22	30	6.6	6.2	6.0	5.8	5.6	5.2
24	32	7.1	6.9	6.7	6.6	6.2	5.7

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE (°C WB)	OUTDOOR TEMPERATURE(°C DB)						
	-15	-10	-5	0	6	10	15
16	3.7	4.1	4.8	5.5	6.2	6.3	6.5
18	3.7	4.1	4.8	5.5	6.1	6.2	6.3
20	3.5	3.9	4.6	5.2	6.1	6.2	6.3
21	3.5	3.9	4.6	5.2	6.1	6.2	6.3
22	3.3	3.7	4.6	5.0	6.1	6.2	6.3
24	3.3	3.7	4.4	5.0	6.1	6.2	6.3
26	3.3	3.7	4.4	5.0	5.9	6.1	6.2

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

3.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	5.9	5.8	5.4	5.3	4.9	4.6
16	22	6.5	6.2	6.1	5.7	5.3	5.0
18	25	6.8	6.5	6.6	6.2	5.9	5.7
19	27	7.3	7.0	6.9	6.8	6.5	6.3
19.5	27	7.4	7.2	7.0	6.9	6.6	6.5
22	30	8.5	8.0	7.7	7.4	7.2	6.8
24	32	9.2	8.9	8.6	8.5	8.0	7.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE	OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	-15	-10	-5	0	6	10	15
16	5.0	5.5	6.5	7.4	8.3	8.5	8.7
18	5.0	5.5	6.5	7.4	8.2	8.3	8.5
20	4.7	5.2	6.2	7.0	8.2	8.3	8.5
21	4.7	5.2	6.2	7.0	8.2	8.3	8.5
22	4.4	5.0	6.2	6.7	8.2	8.3	8.5
24	4.4	5.0	5.9	6.7	8.2	8.3	8.5
26	4.4	5.0	5.9	6.7	7.9	8.2	8.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

4.0HP

### COOLING CAPACITY(kW)

Indoor inlet temperature (°C)		Outdoor temperature (°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14.0	20	10.2	10	9.8	9.5	9.0	8.0
16.0	22	10.6	10.5	10	10	9.4	8.4
18.0	25	11	10.8	10.6	10.2	9.8	8.8
19.0	27	11.5	11.2	10.23	10.5	10	9.0
19.5	27	11.6	11.4	11	10.7	10.2	9.4
22.0	30	11.8	11.6	11.2	10.9	10.6	9.8
24.0	32	12	11.8	11.4	11.2	10.8	10.1

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

### HEATING CAPACITY(kW)

Indoor inlet	Outdoor temperature (°C DB)						
(°C DB)	-15.0	-10.0	-5.0	0.0	6.0	10.0	15.0
16.0	6.2	7.6	8.3	9.8	11.8	12.6	13
18.0	6.0	7.4	8.2	9.5	11.7	12.3	12.8
20.0	6.0	7.4	8.0	9.3	11.2	12	12.6
21.0	6.0	7.3	8.0	9.3	11.5	12	12.6
22.0	6.0	7.3	8.0	9.3	11.5	12	12.6
24.0	6.0	7.0	8.0	9.1	11.4	11.8	12.2
26.0	5.8	7.0	7.8	8.9	11	11.6	12

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

5.0HP

### COOLING CAPACITY(kW)

Indoor inlet temperature (°C)		Outdoor temperature (°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14.0	20	12.0	11.6	11.2	11.0	10.6	9.5
16.0	22	12.2	11.8	11.7	11.6	11.3	10.5
18.0	25	12.4	12.2	12	11.9	11.5	11
19.0	27	12.5	12.3	12.1	12.05	11.3	10.8
19.5	27	13.0	12.6	12.5	12.3	11.5	11
22.0	30	13.2	12.9	12.6	12.5	12	11.5
24.0	32	13.3	13.2	13	12.8	12.5	12

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

Indoor inlet	Outdoor temperature (°C DB)						
(°C DB)	-15.0	-10.0	-5.0	0.0	6.0	10.0	15.0
16.0	8.8	9.0	10.5	11.9	13.8	14.2	14.6
18.0	8.7	8.8	10.2	11.9	13.8	14.2	14.6
20.0	8.5	8.7	10	11.8	13.8	14.2	14.6
21.0	8.4	8.7	10	11.8	13.6	14	14.2
22.0	8.4	8.7	10	11.8	13.5	13.8	14
24.0	8.3	8.5	9.6	11.4	13	13.5	13.7
26.0	8.3	8.5	9.6	11.2	12.6	13	13.3

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 5. CAPACITIES AND SELECTION DATA

6.0HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	11.3	11.1	10.3	10.0	9.3	8.8
16	22	12.4	11.8	11.6	10.8	10.0	9.5
18	25	12.9	12.4	12.6	11.8	11.3	10.8
19	27	13.9	13.4	13.1	12.9	12.4	12.1
19.5	27	14.2	13.6	13.4	13.1	12.6	12.4
22	30	16.2	15.2	14.7	14.2	13.6	12.9
24	32	17.5	17.0	16.5	16.2	15.2	13.9

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

### HEATING CAPACITY(kW)

INDOOR TEMPERATURE	OUTDOOR TEMPERATURE(°C DB)						
(°C WB)	-15	-10	-5	0	6	10	15
16	9.8	10.8	12.7	14.5	16.4	16.6	17.2
18	9.8	10.8	12.7	14.5	16.1	16.4	16.6
20	9.2	10.3	12.2	13.7	16.1	16.4	16.6
21	9.2	10.3	12.2	13.7	16.1	16.4	16.6
22	8.7	9.8	12.2	13.2	16.1	16.4	16.6
24	8.7	9.8	11.6	13.2	16.1	16.4	16.6
26	8.7	9.8	11.6	13.2	15.6	16.1	16.4

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

6.5HP

### COOLING CAPACITY(kW)

INDOOR TEMPERATURE		OUTDOOR TEMPERATURE(°C DB)					
(°C WB)	(°C DB)	20	25	32	35	40	45
14	20	12.7	12.4	11.5	11.2	10.4	9.8
16	22	13.8	13.3	13.0	12.1	11.2	10.7
18	25	14.4	13.8	14.1	13.3	12.7	12.1
19	27	15.6	15.0	14.7	14.4	13.8	13.6
19.5	27	15.9	15.3	15.0	14.7	14.1	13.8
22	30	18.2	17.0	16.4	15.9	15.3	14.4
24	32	19.6	19.0	18.5	18.2	17.0	15.6

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)



## 5. CAPACITIES AND SELECTION DATA

### HEATING CAPACITY(kW)

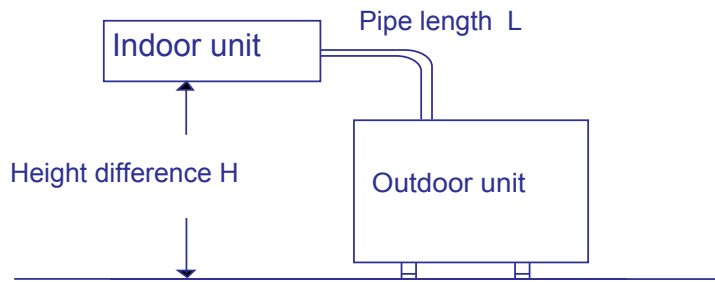
INDOOR TEMPERATURE (°C WB)	OUTDOOR TEMPERATURE(°C DB)						
	-15	-10	-5	0	6	10	15
16	10.7	11.8	13.8	15.9	17.9	18.2	18.7
18	10.7	11.8	13.8	15.9	17.6	17.9	18.2
20	10.1	11.2	13.3	15.0	17.6	17.9	18.2
21	10.1	11.2	13.3	15.0	17.6	17.9	18.2
22	9.5	10.7	13.3	14.4	17.6	17.9	18.2
24	9.5	10.7	12.7	14.4	17.6	17.9	18.2
26	9.5	10.7	12.7	14.4	17.0	17.6	17.9

(°C DB) : Dry Bulb Temperature (°C)

(°C WB) :Wet Bulb Temperature (°C)

## 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 between outdoor and indoor units in meters (H).

**H:**

Height between indoor unit and outdoor unit (m).

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

**Cooling :**

Model \ EL	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
1.0HP	1.0	0.99	0.99	0.98	0.98	—	—	—	—	—
1.5HP	1.0	0.98	0.96	0.95	0.94	0.93	—	—	—	—
2.0HP	1.0	0.98	0.97	0.96	0.95	0.95	—	—	—	—
3.0HP	1.0	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.92
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
6.0HP	1.0	0.98	0.96	0.94	0.92	0.89	0.86	0.83	0.79	0.75
6.5HP	1.0	0.98	0.96	0.94	0.92	0.89	0.86	0.83	0.79	0.75

## 5. CAPACITIES AND SELECTION DATA

### Heating:

Model \ EL	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
1.0HP	1.0	0.99	0.99	0.98	0.98	—	—	—	—	—
1.5HP	1.0	0.99	0.97	0.95	0.93	0.92	—	—	—	—
2.0HP	1.0	0.99	0.97	0.95	0.93	0.92	—	—	—	—
3.0HP	1.0	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
4.0HP	1.0	0.94	0.91	0.88	0.85	0.82	0.79	0.76	0.73	0.70
5.0HP	1.0	0.94	0.91	0.88	0.85	0.82	0.79	0.76	0.73	0.70
6.0HP	1.0	0.99	0.98	0.97	0.95	0.93	0.90	0.87	0.84	0.80
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

*In order to ensure correct unit selection, consider the farthest indoor unit.*

### NOTE

1. Data above is assuming a height difference between indoor and outdoor of 0m.
2. Be sure to minimize length of connection pipes in order to optimize performance. In the case that 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

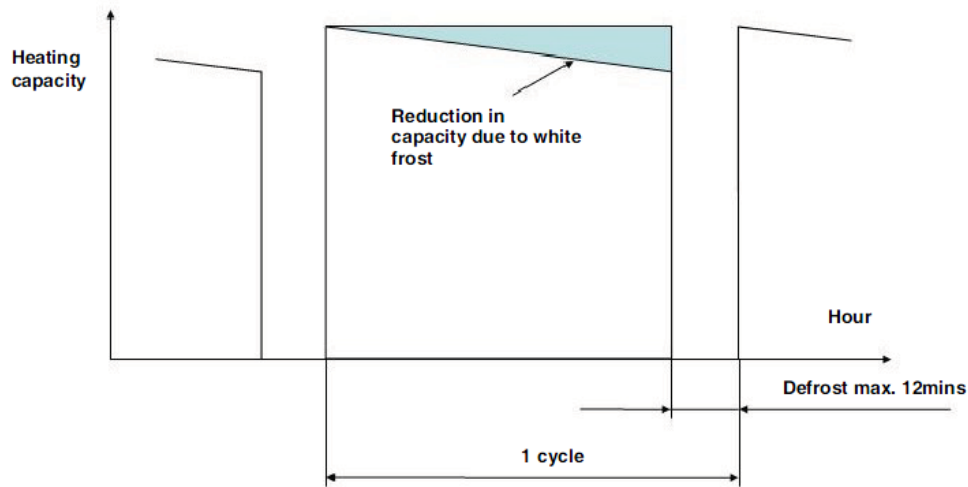
### 5.3 Correction factors according to defrosting operation

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



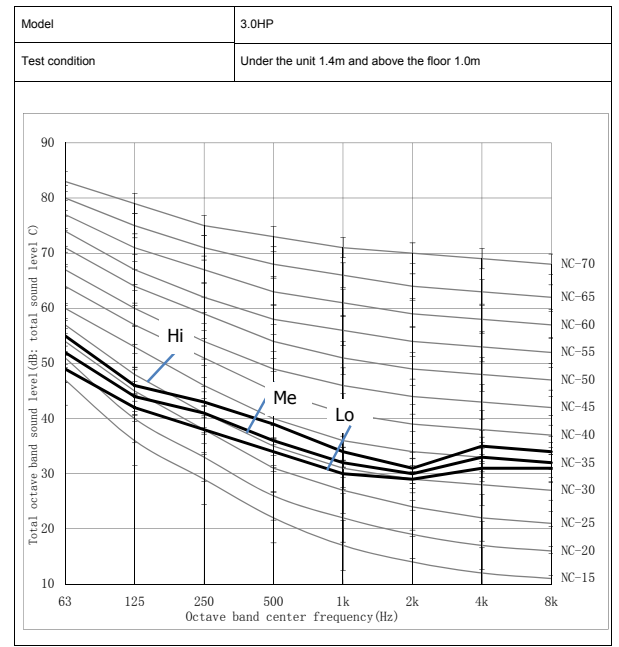
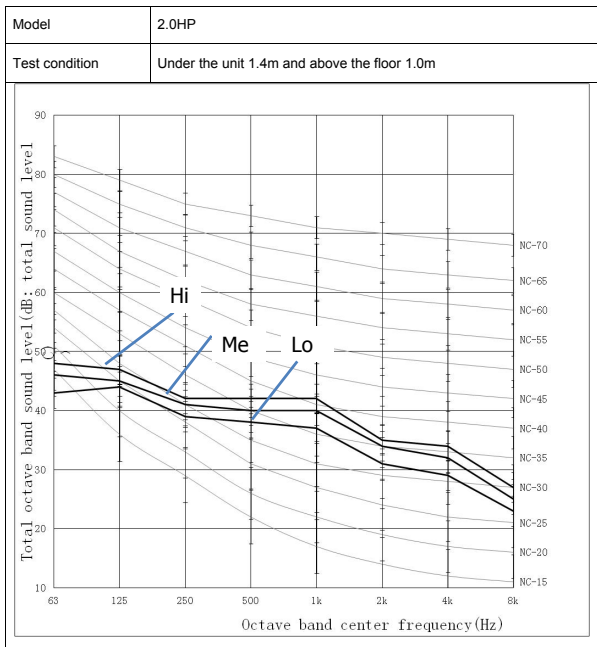
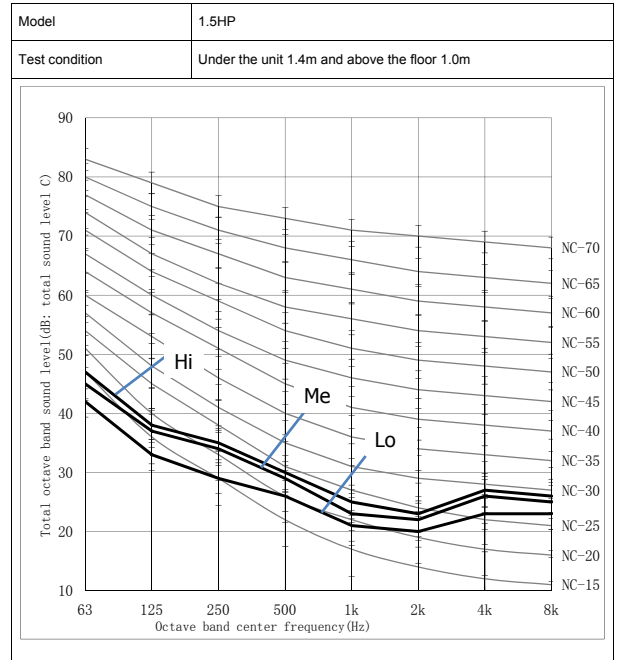
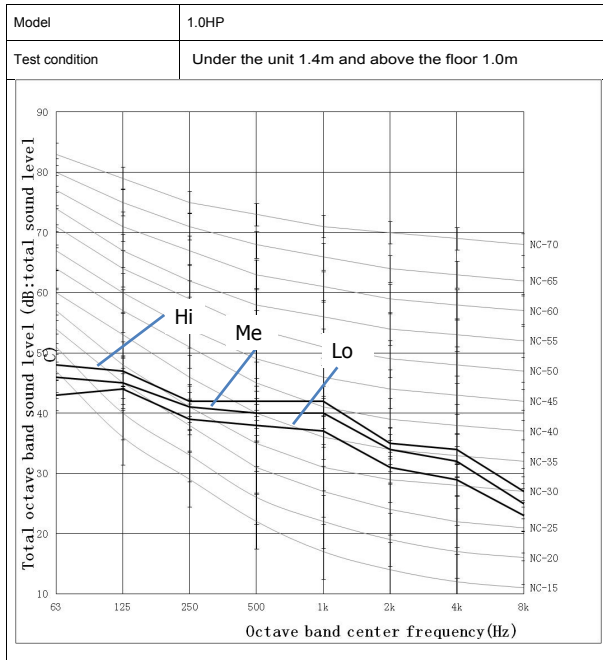
**NOTE:**

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

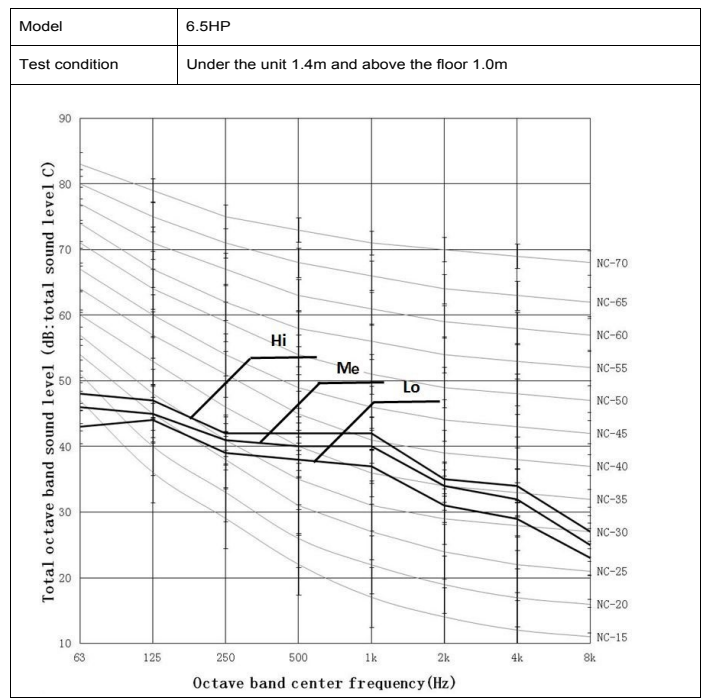
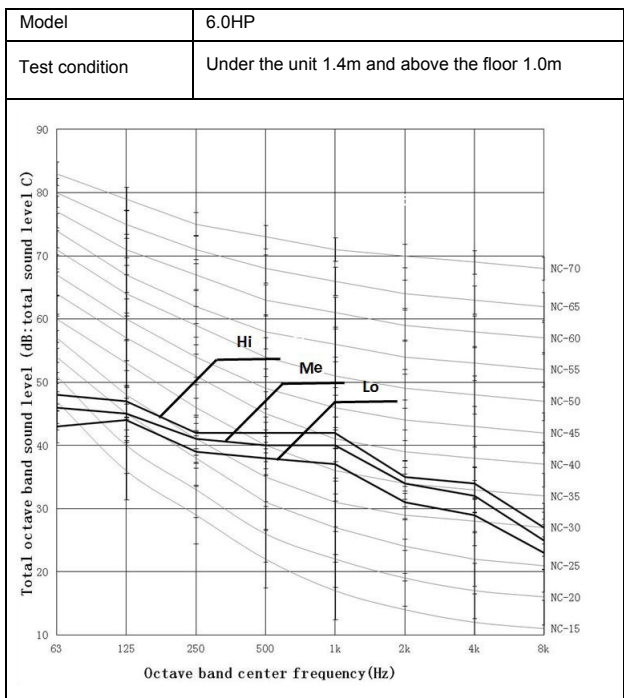
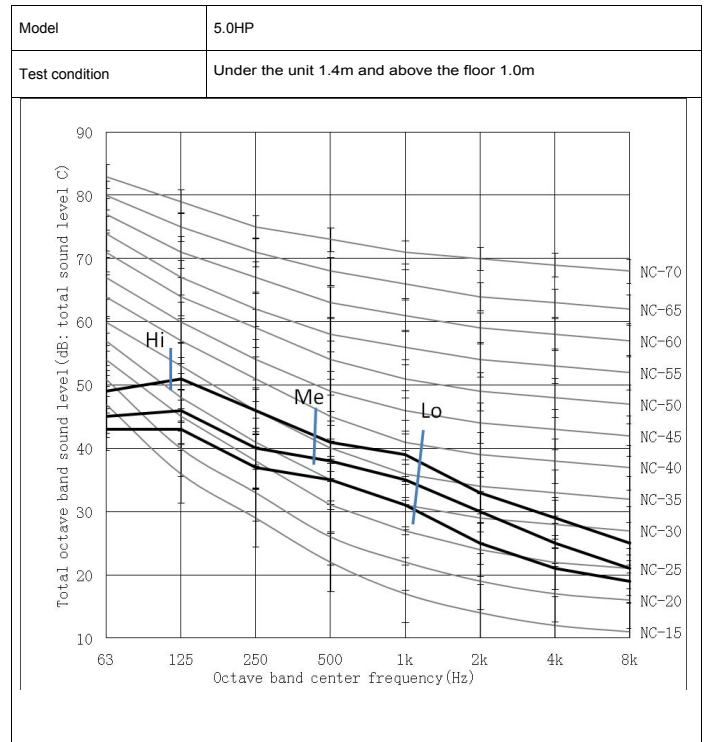
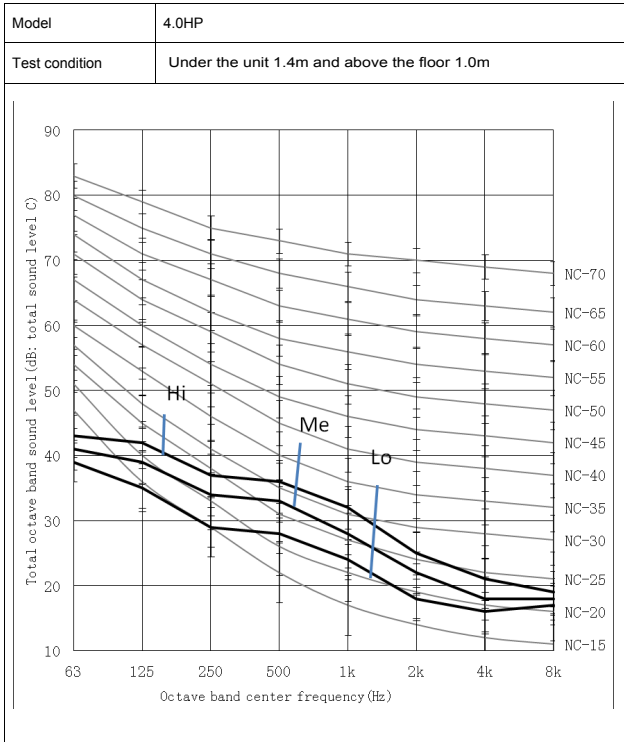
# 6. SOUND PRESSURE DATA

## 6. Sound pressure data

### Ducted

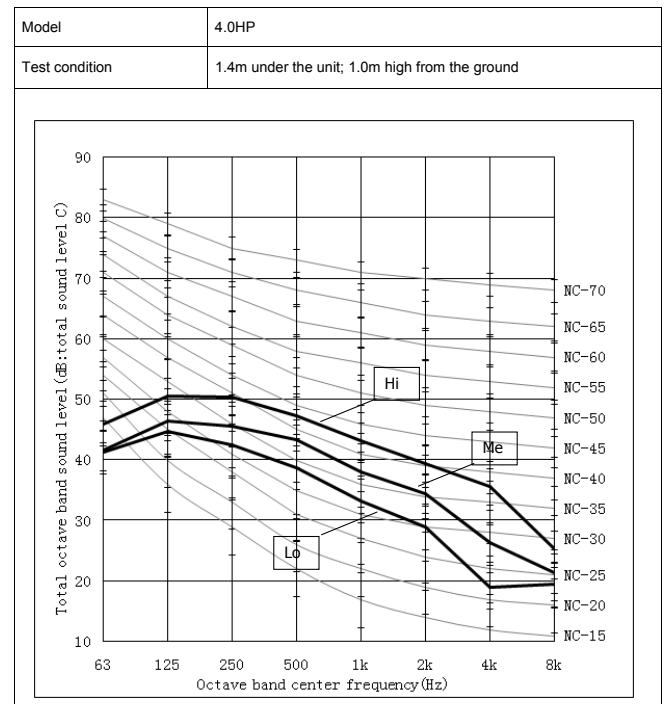
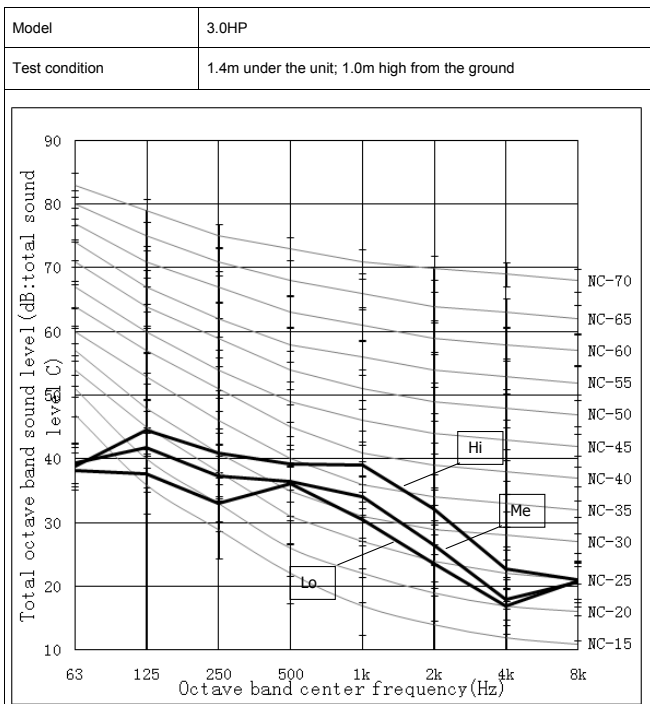
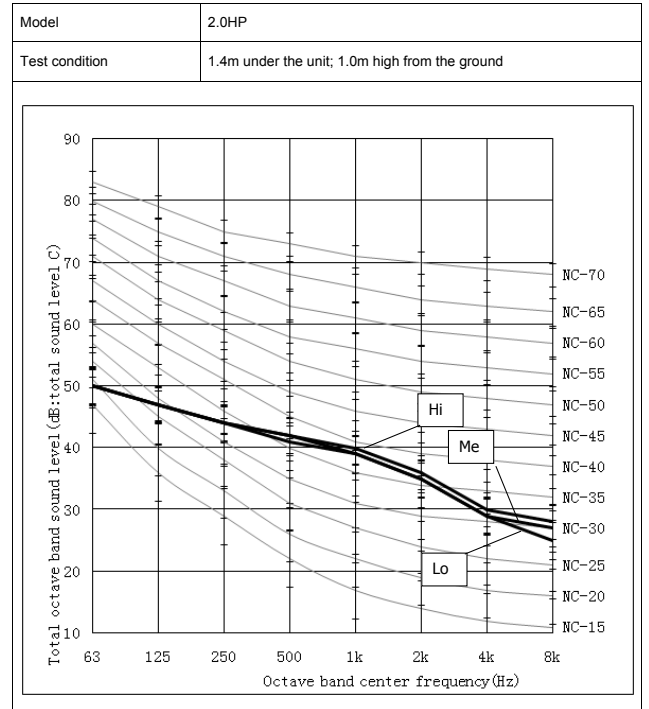
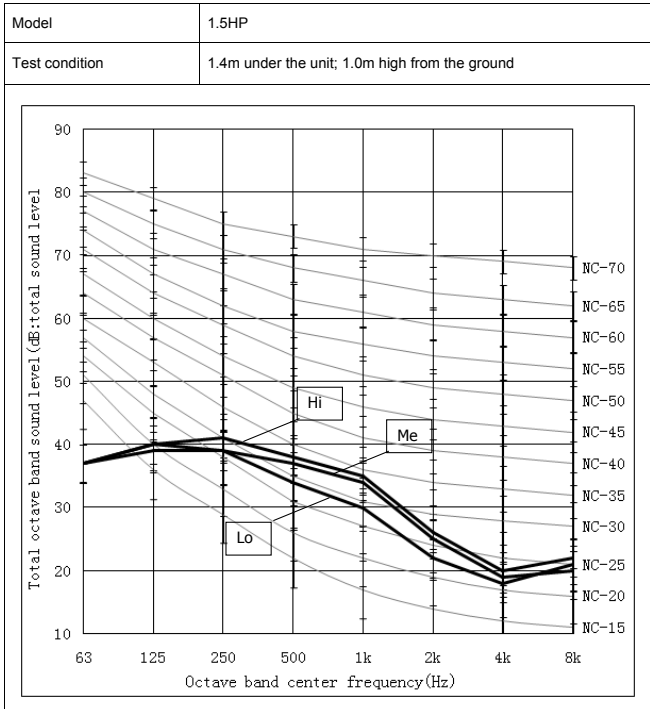


# 6. SOUND PRESSURE DATA



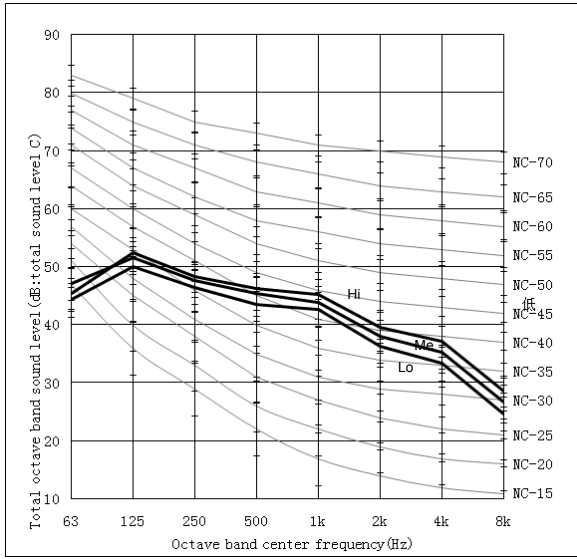
# 6. SOUND PRESSURE DATA

## Cassette

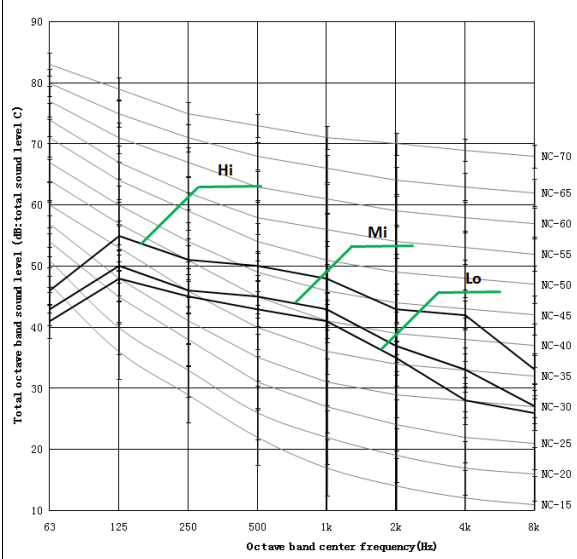


# 6. SOUND PRESSURE DATA

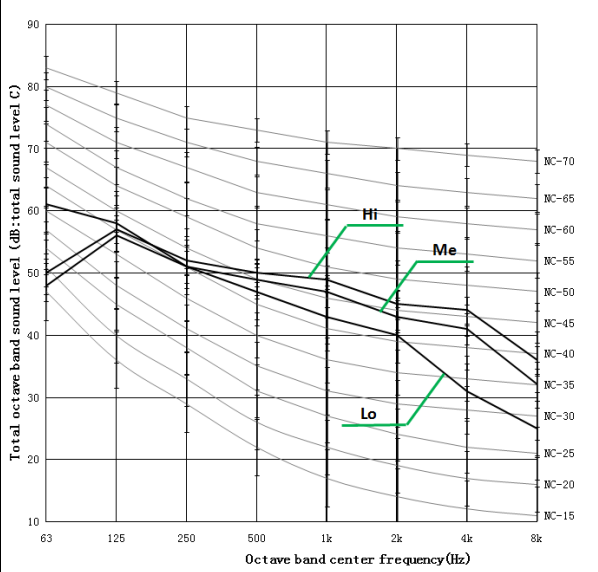
Model	5.0HP
Test condition	1.4m under the unit; 1.0m high from the ground



Model	6.0HP
Test condition	1.4m under the unit; 1.0m high from the ground



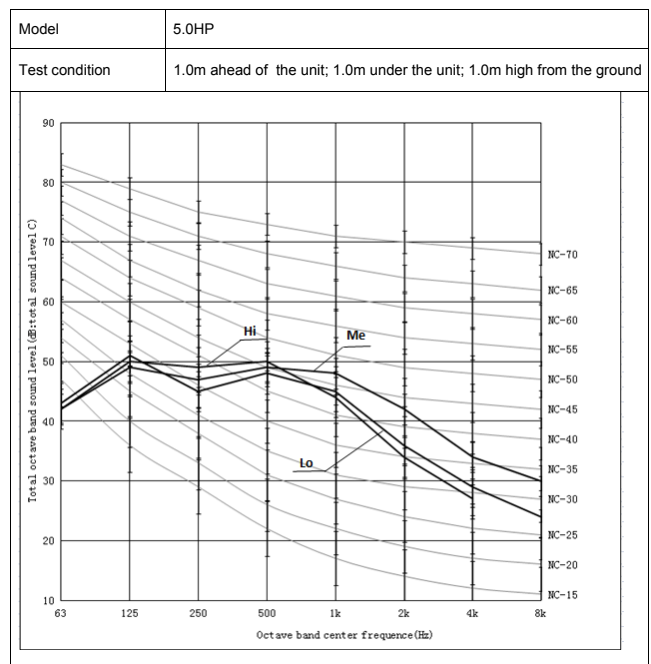
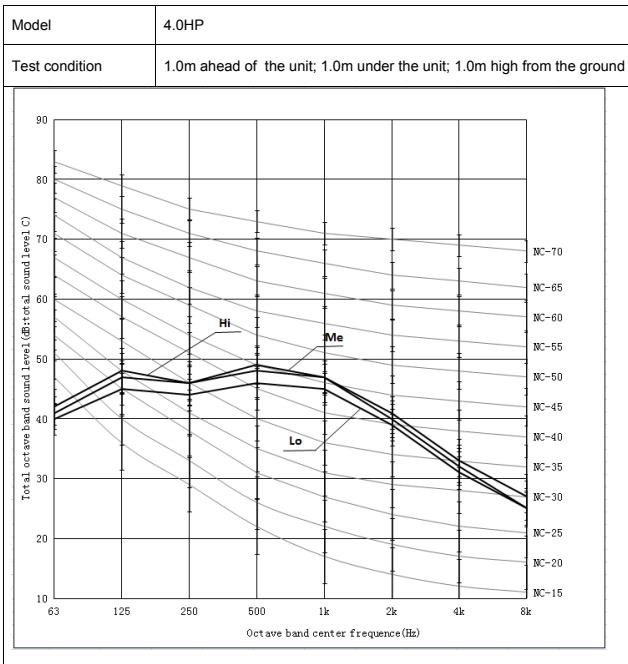
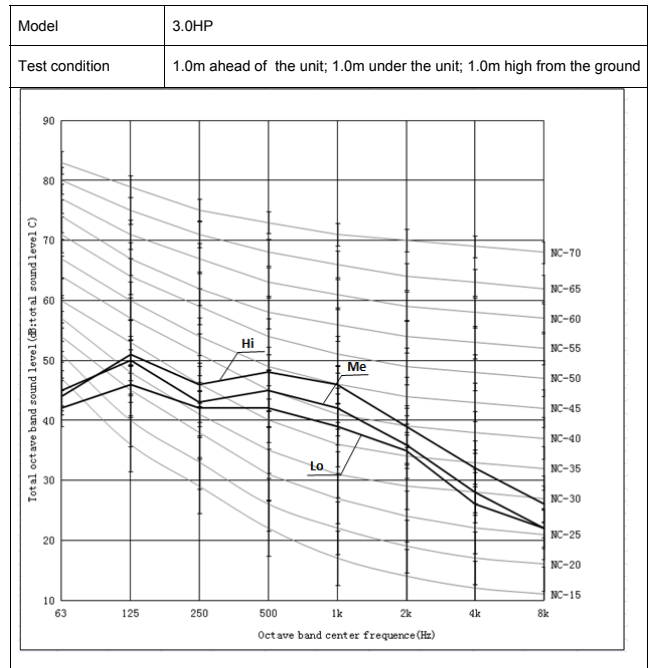
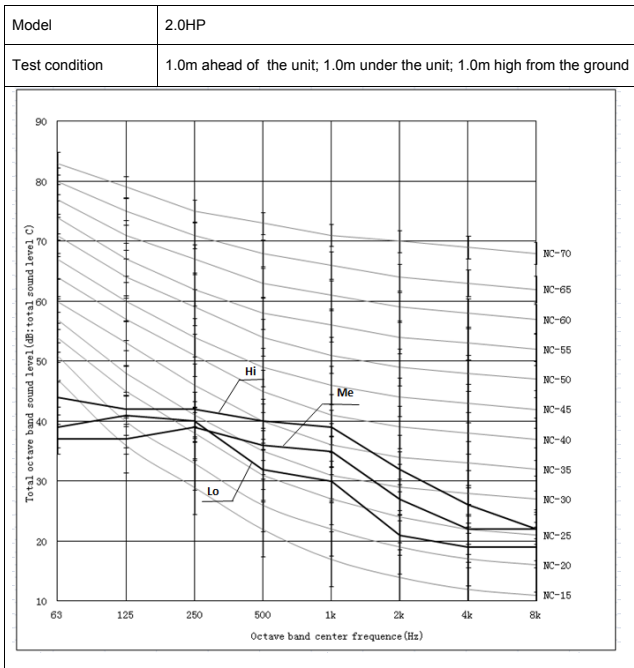
Model	6.5HP
Test condition	1.4m under the unit; 1.0m high from the ground





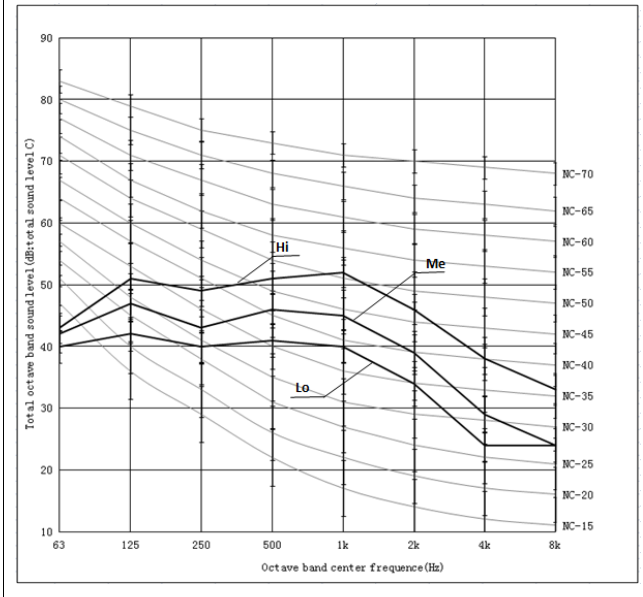
# 6. SOUND PRESSURE DATA

## Floor Ceiling

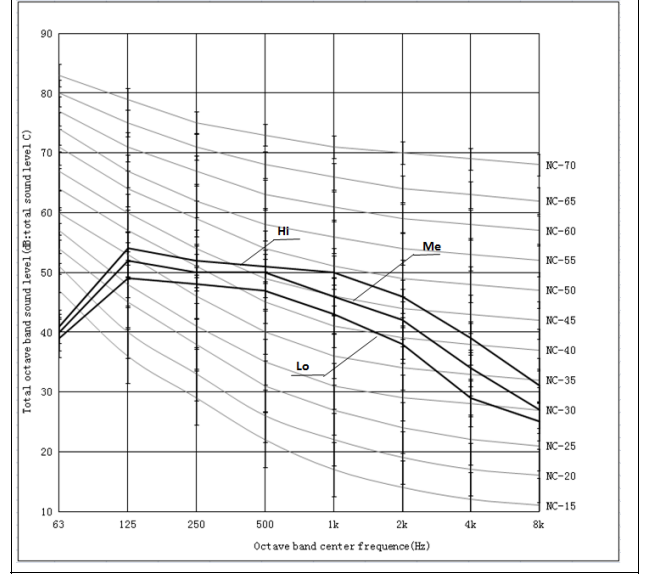


# 6. SOUND PRESSURE DATA

Model	6.0HP
Test condition	1.0m ahead of the unit; 1.0m under the unit; 1.0m high from the ground

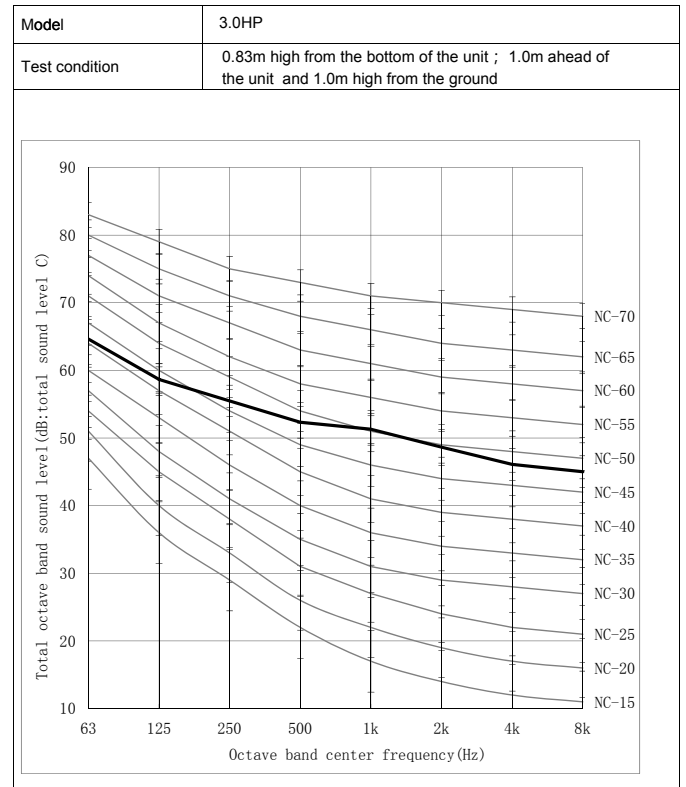
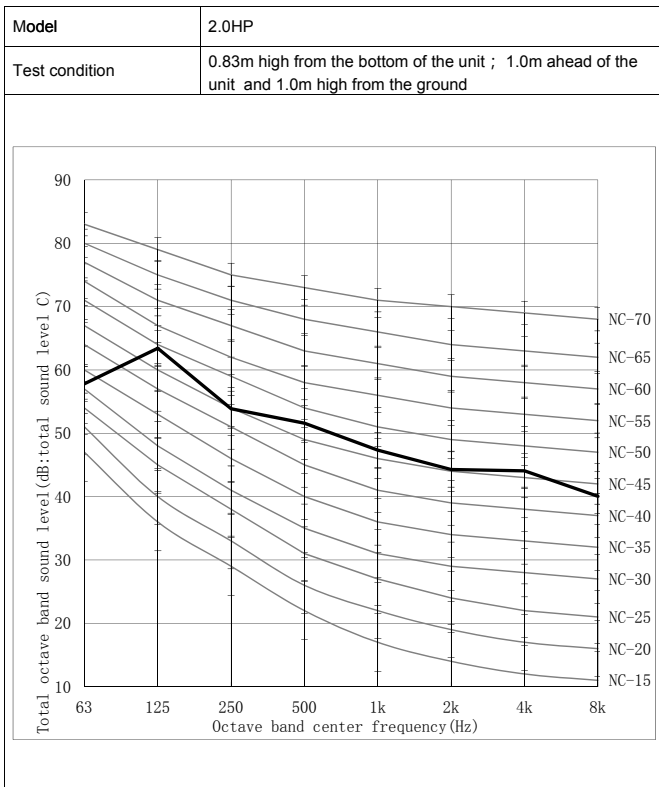
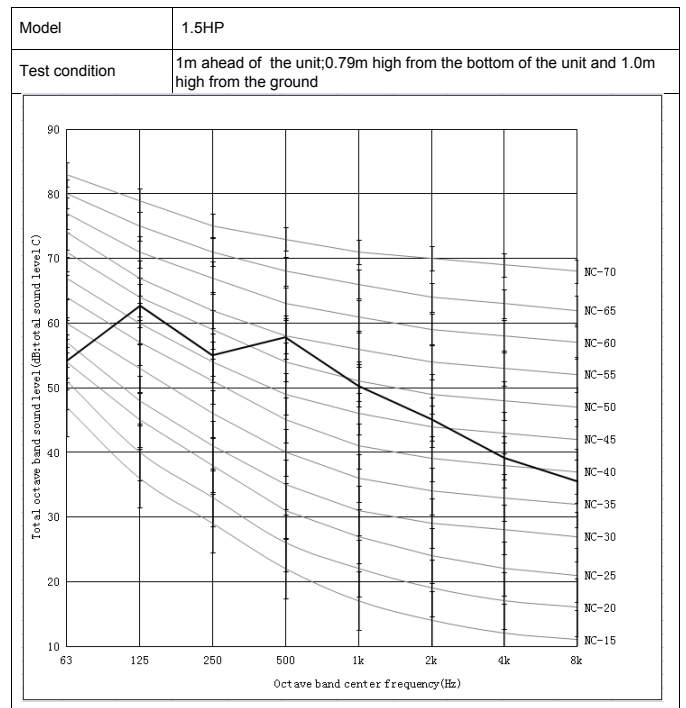
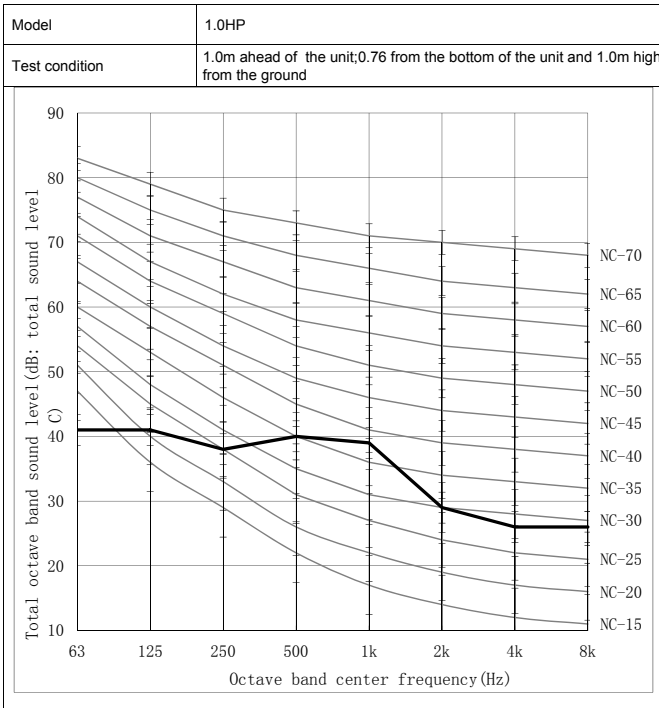


Model	6.5HP
Test condition	1.0m ahead of the unit; 1.0m under the unit; 1.0m high from the ground

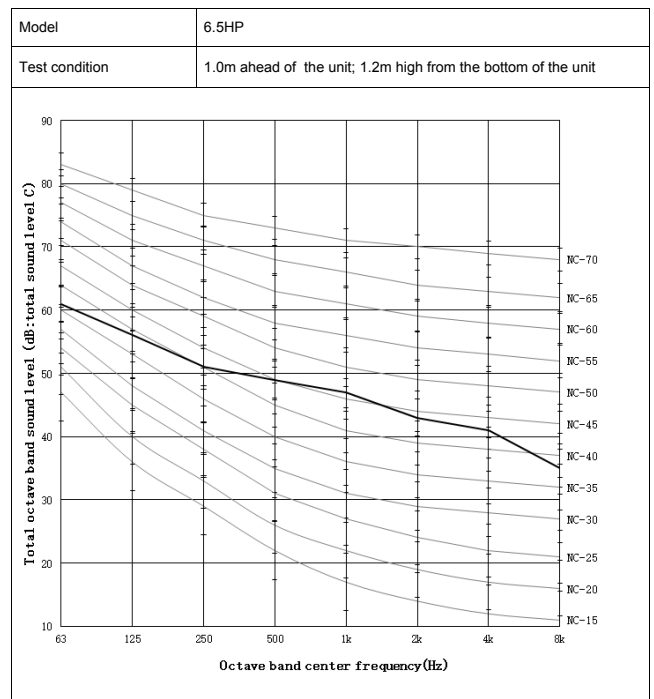
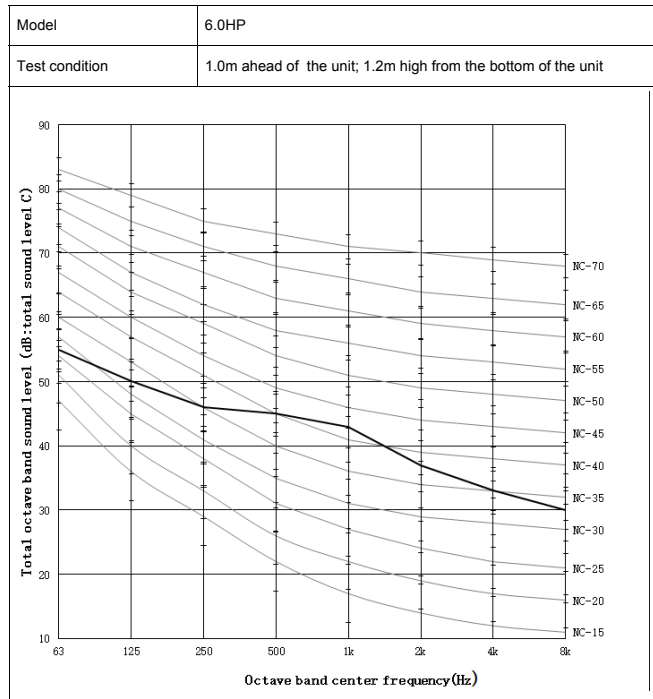
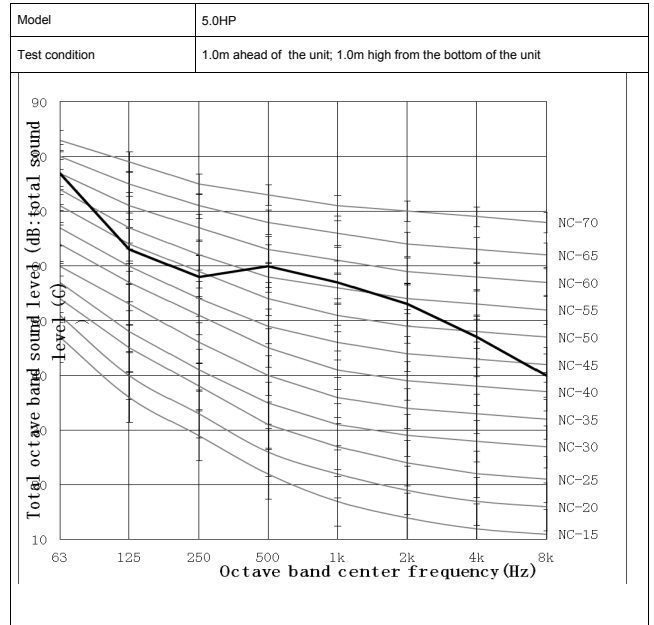
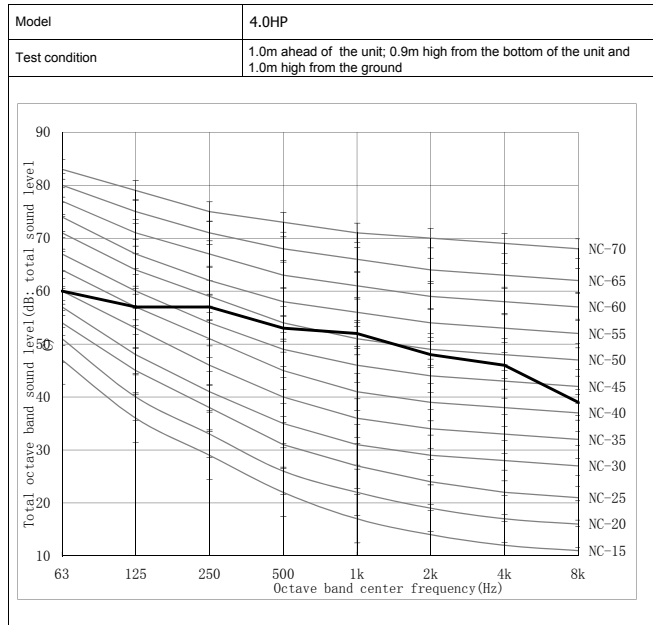


# 6. SOUND PRESSURE DATA

## Outdoor unit



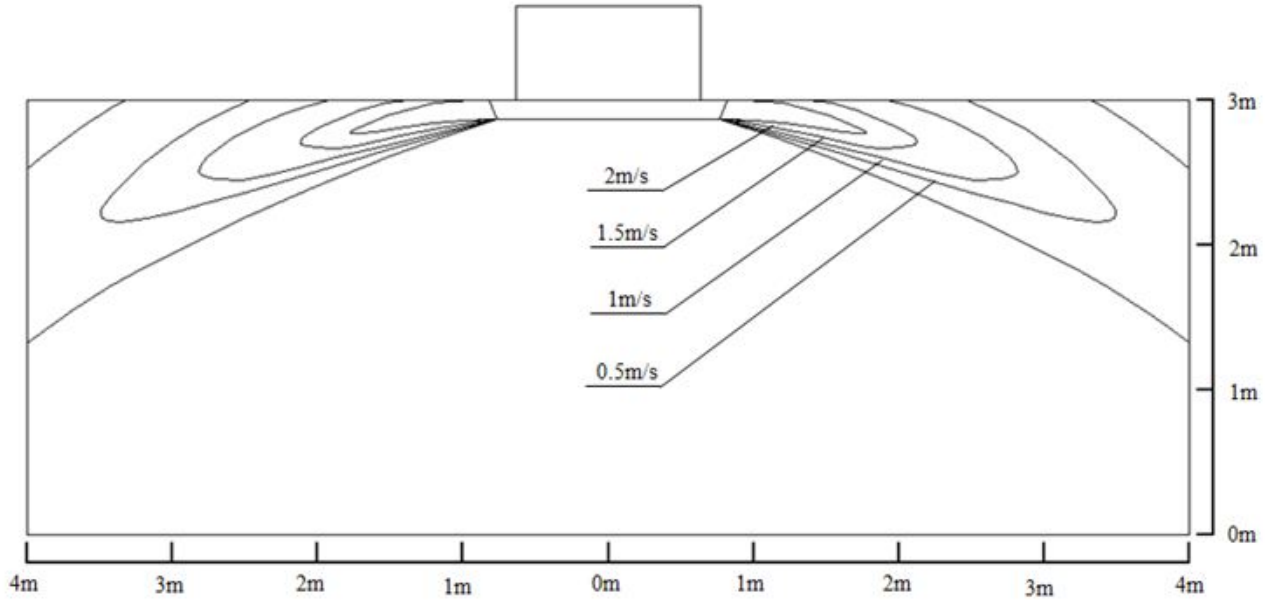
# 6. SOUND PRESSURE DATA



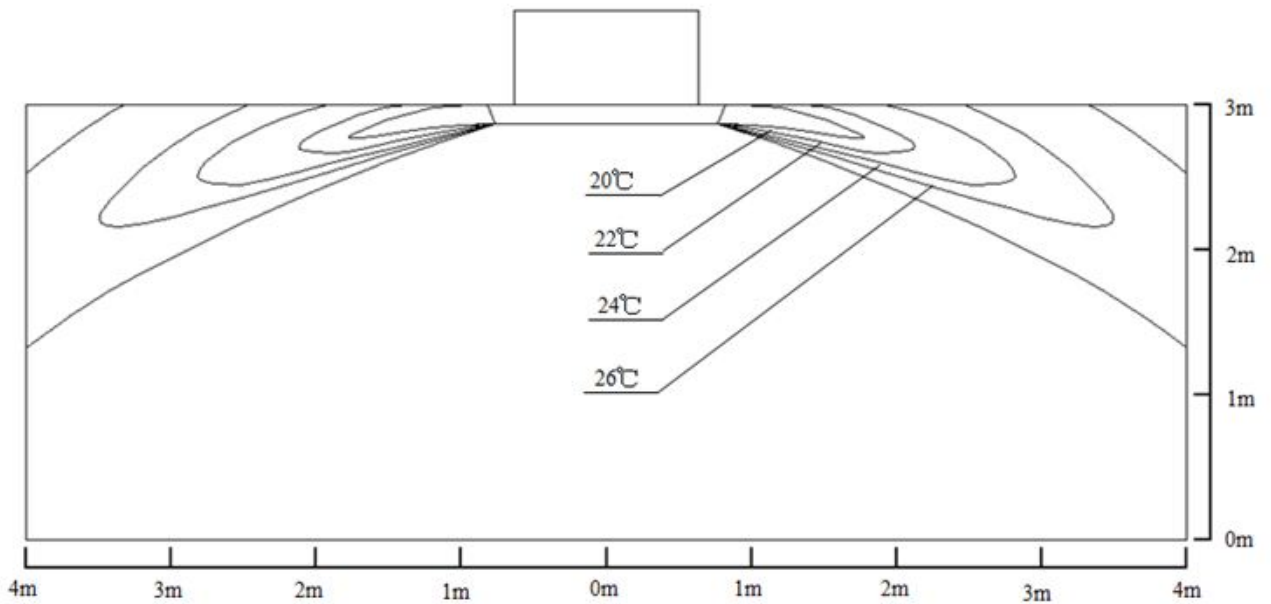
## 7. AIR FLOW DISTRIBUTION

### 7. Air flow distribution (cassette type)

#### Cooling-Velocity

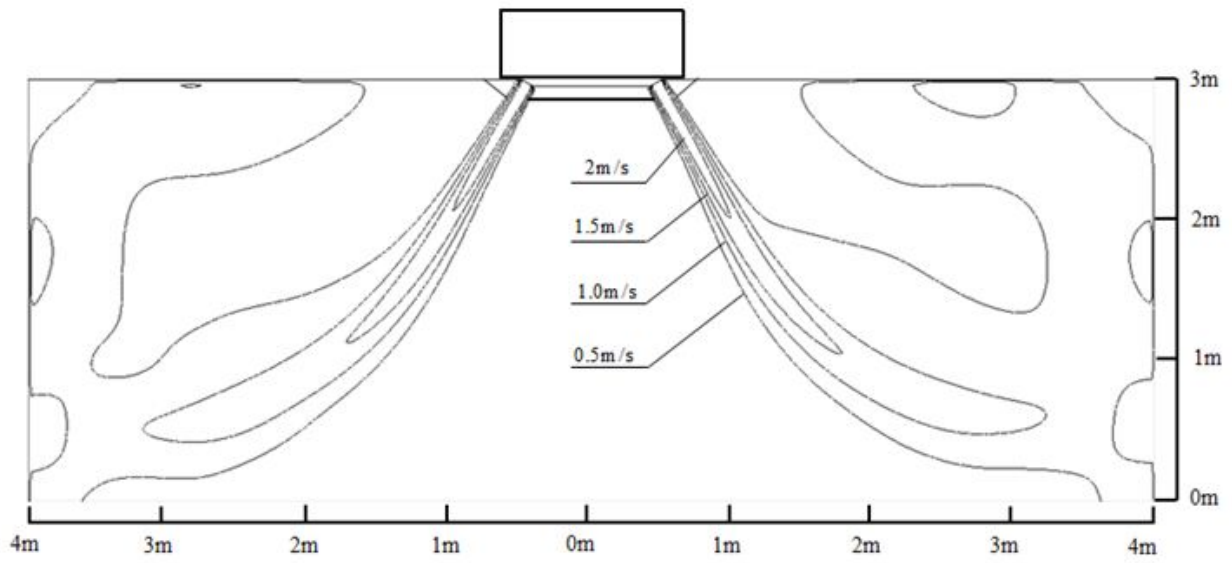


#### Cooling-Temperature

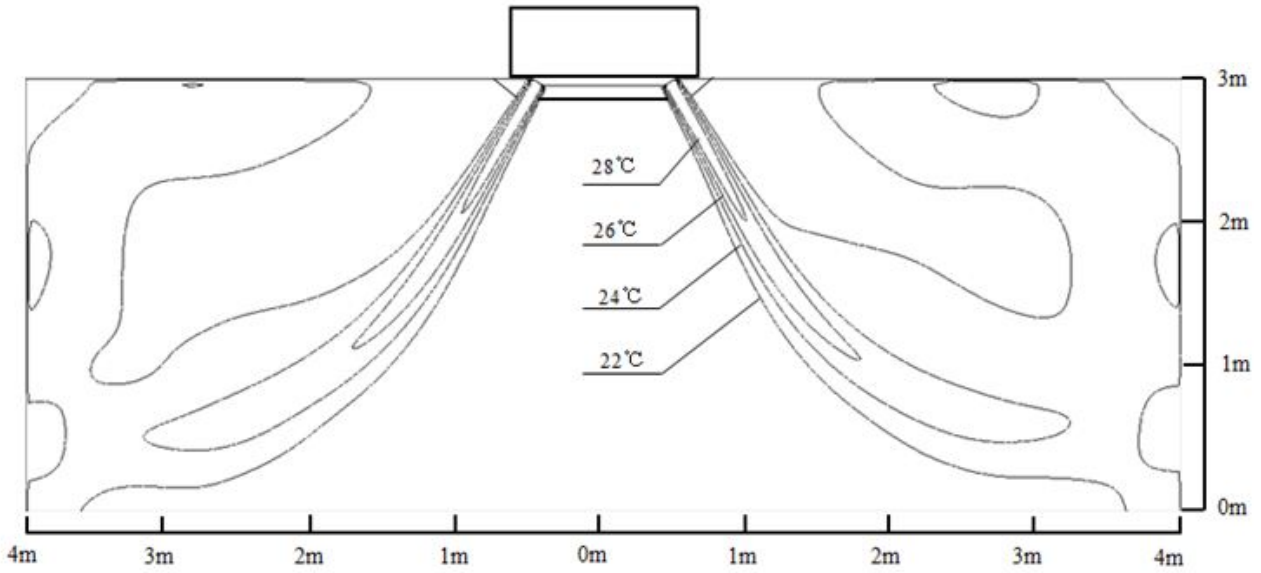


## 7. AIR FLOW DISTRIBUTION

Heating-Velocity



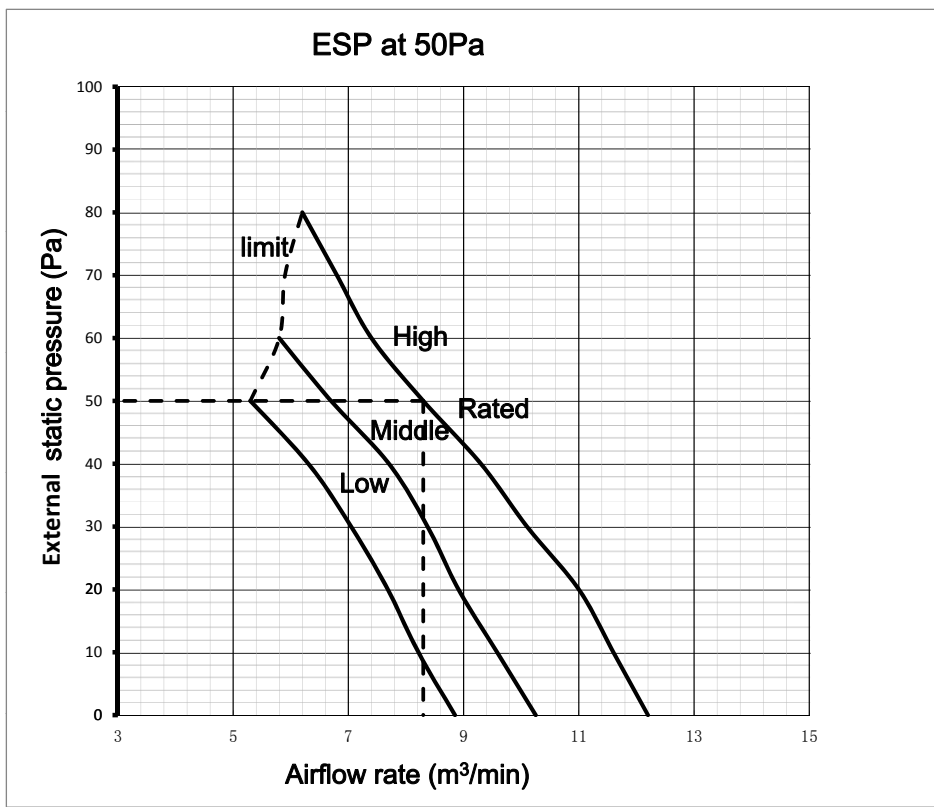
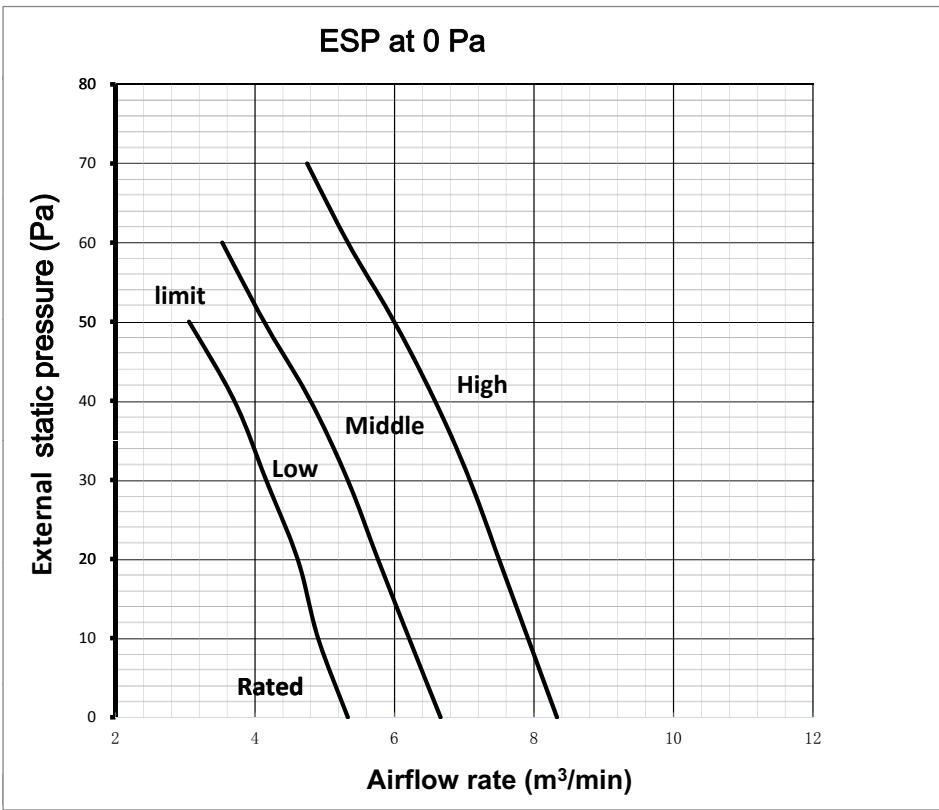
Heating-Temperature



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

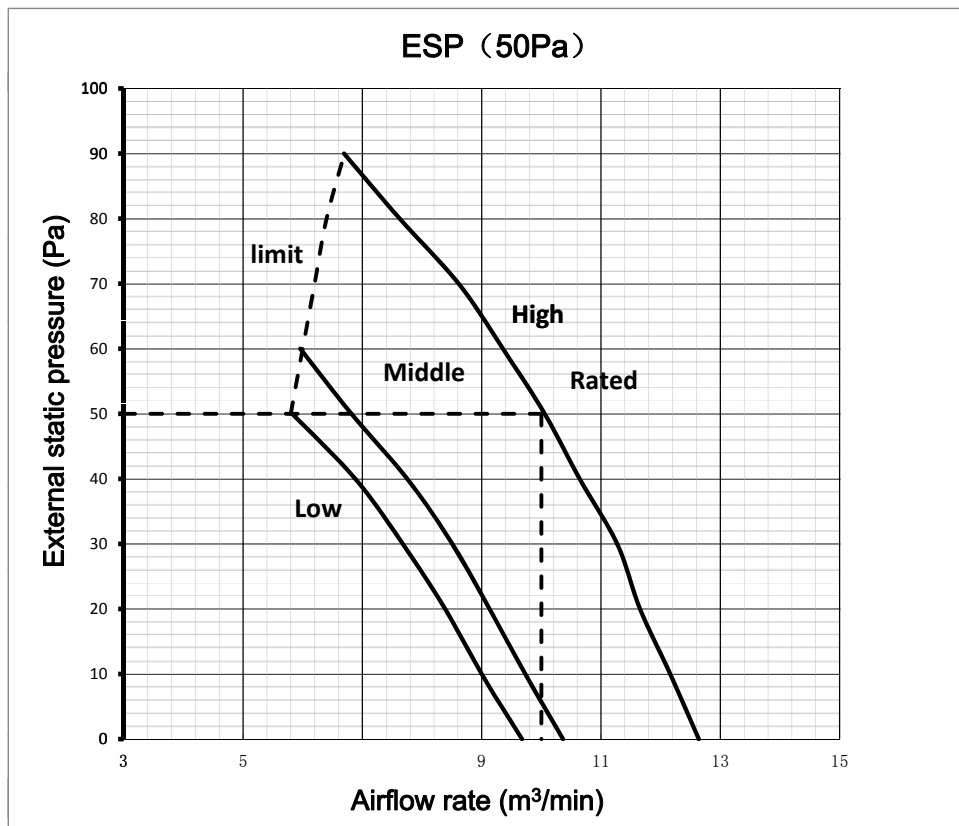
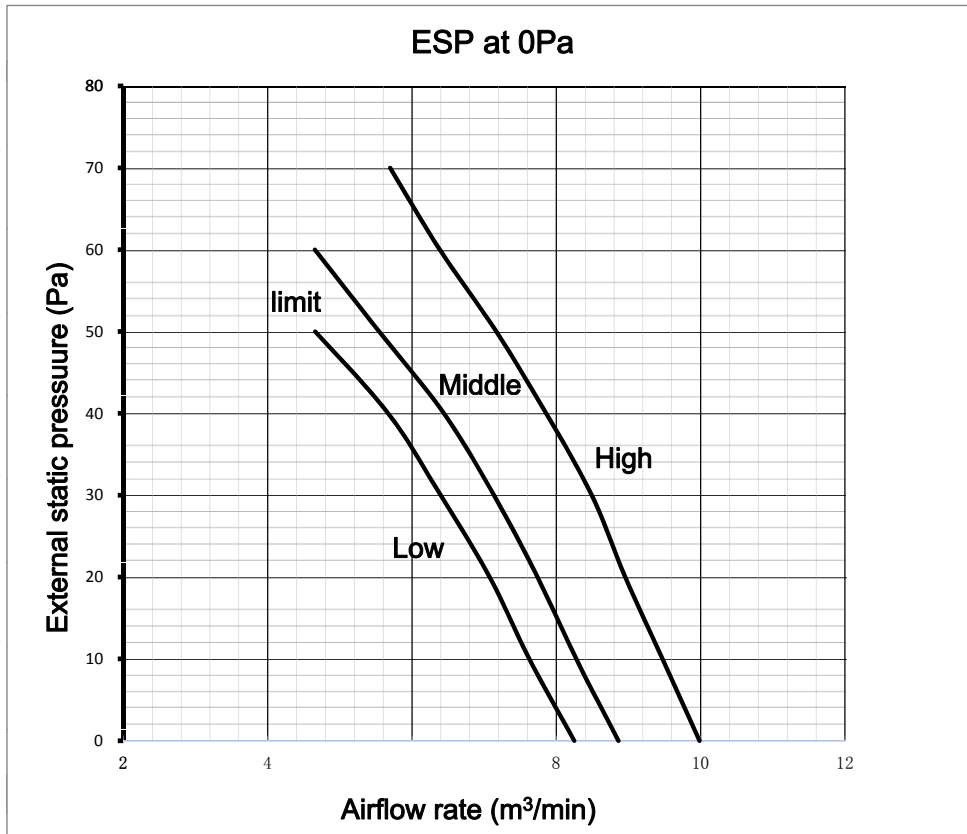
### 8. ESP (External static pressure) chart (Ducted type)

1.0HP



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

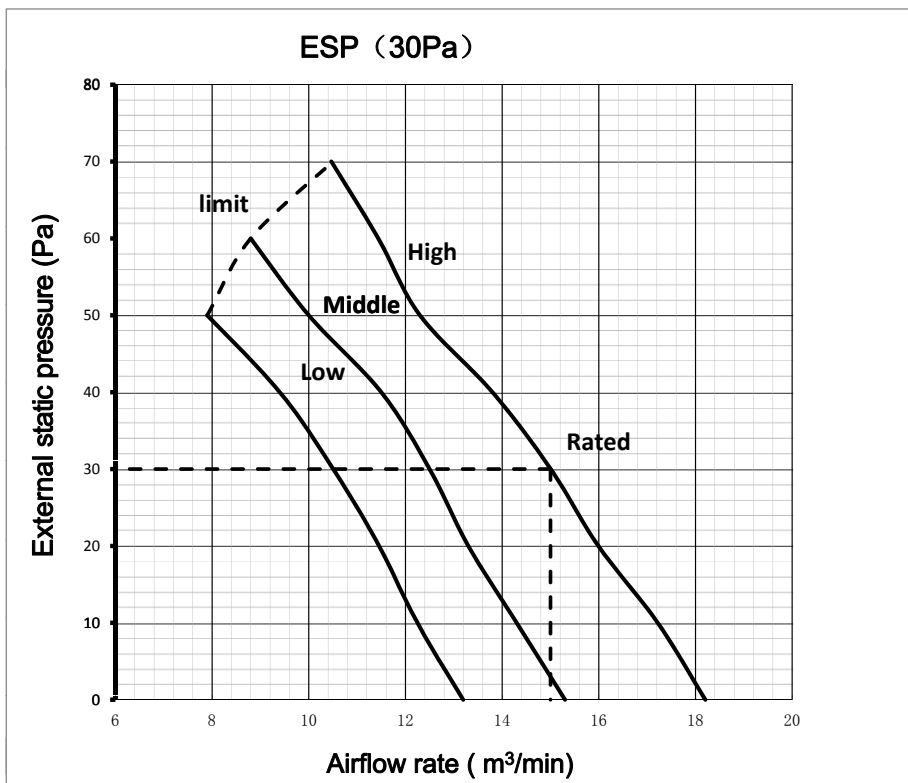
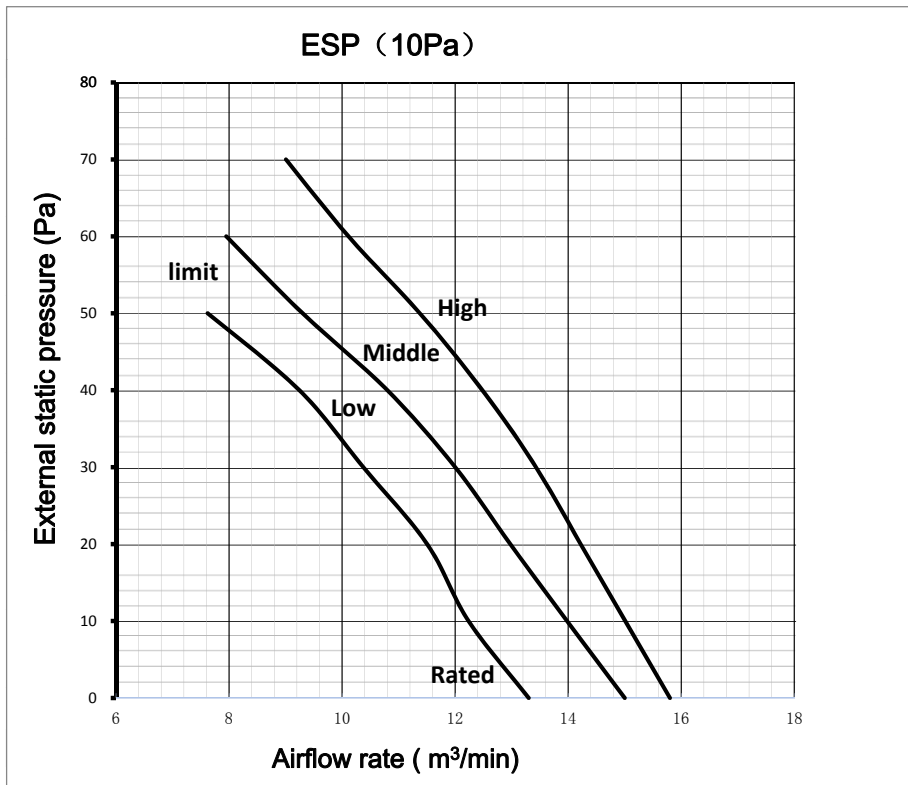
1.5HP





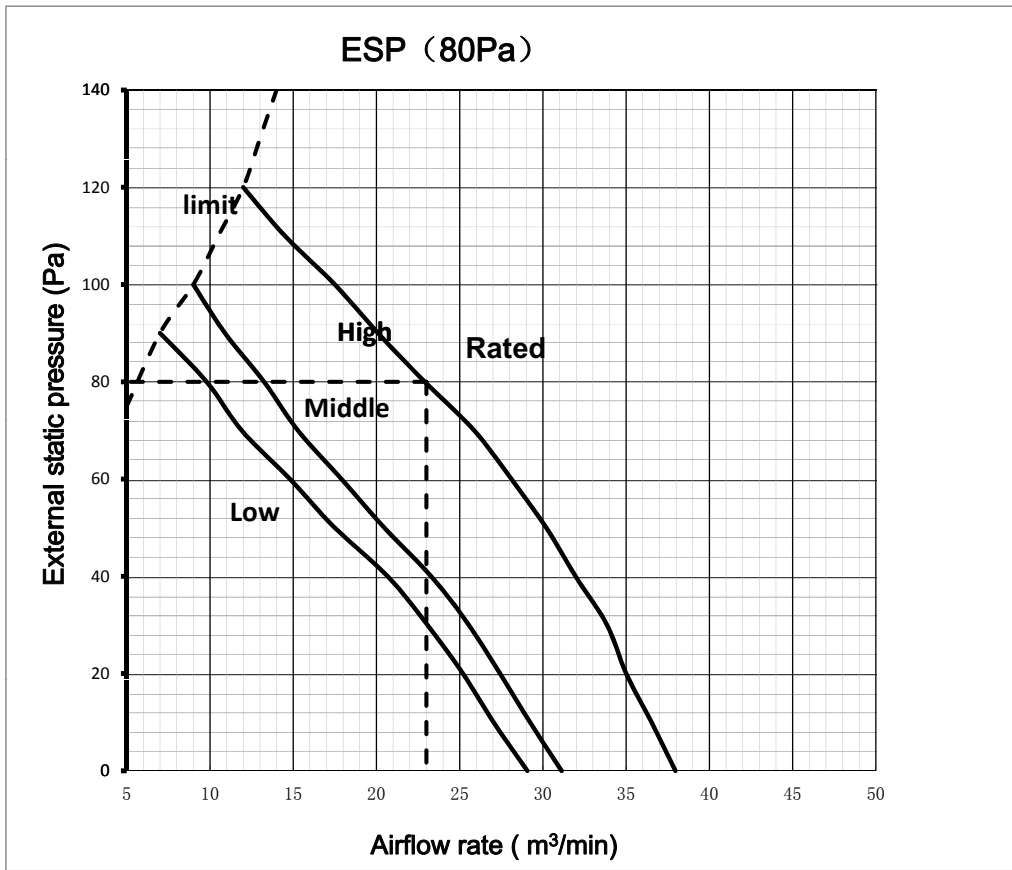
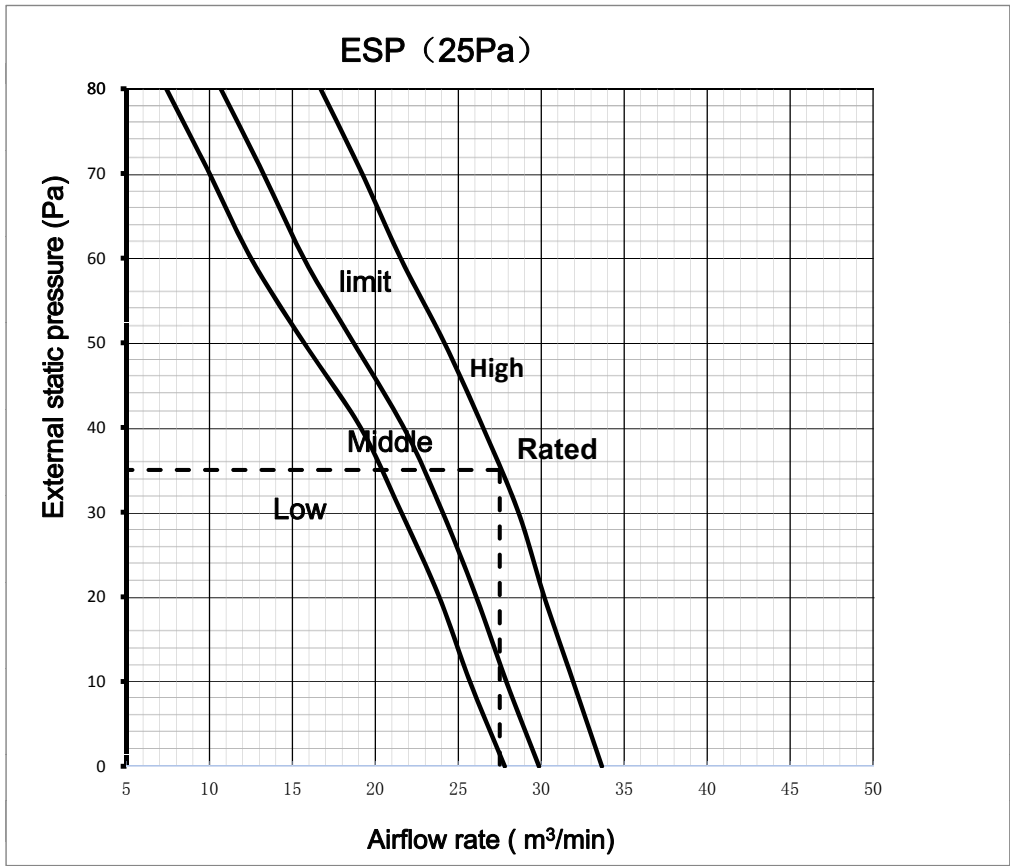
# 8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

2.0HP



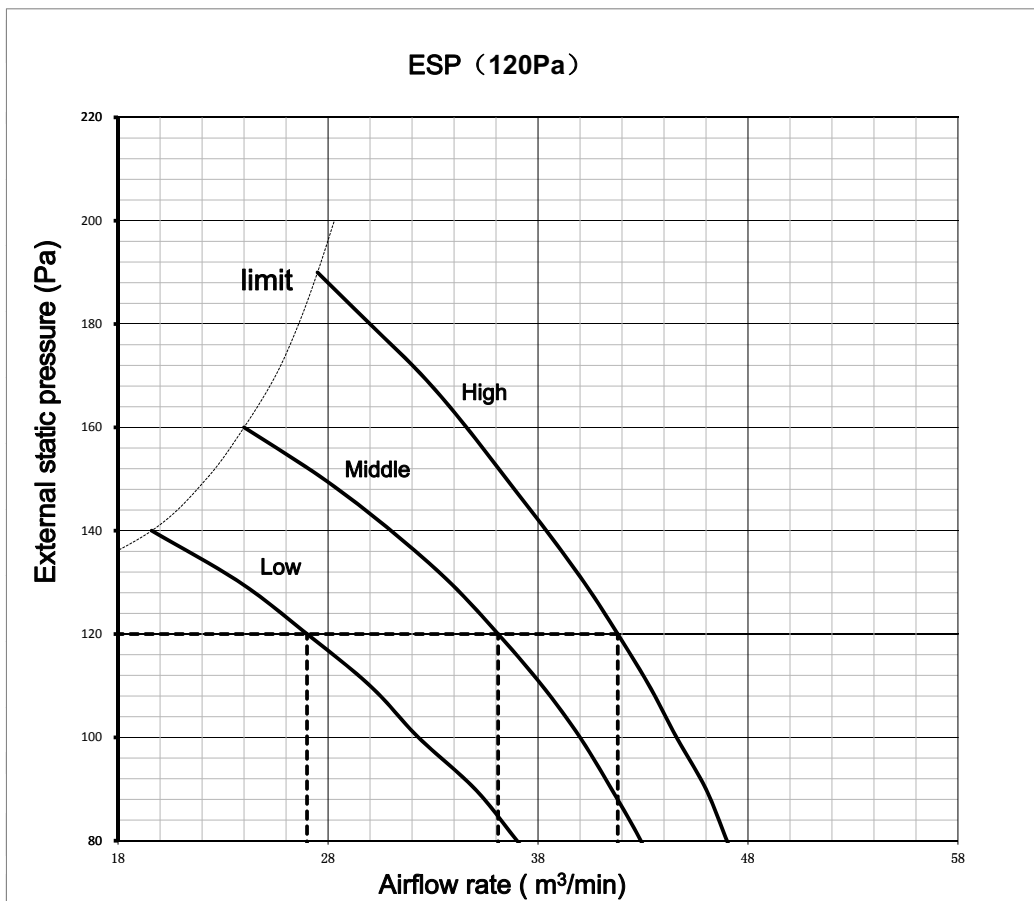
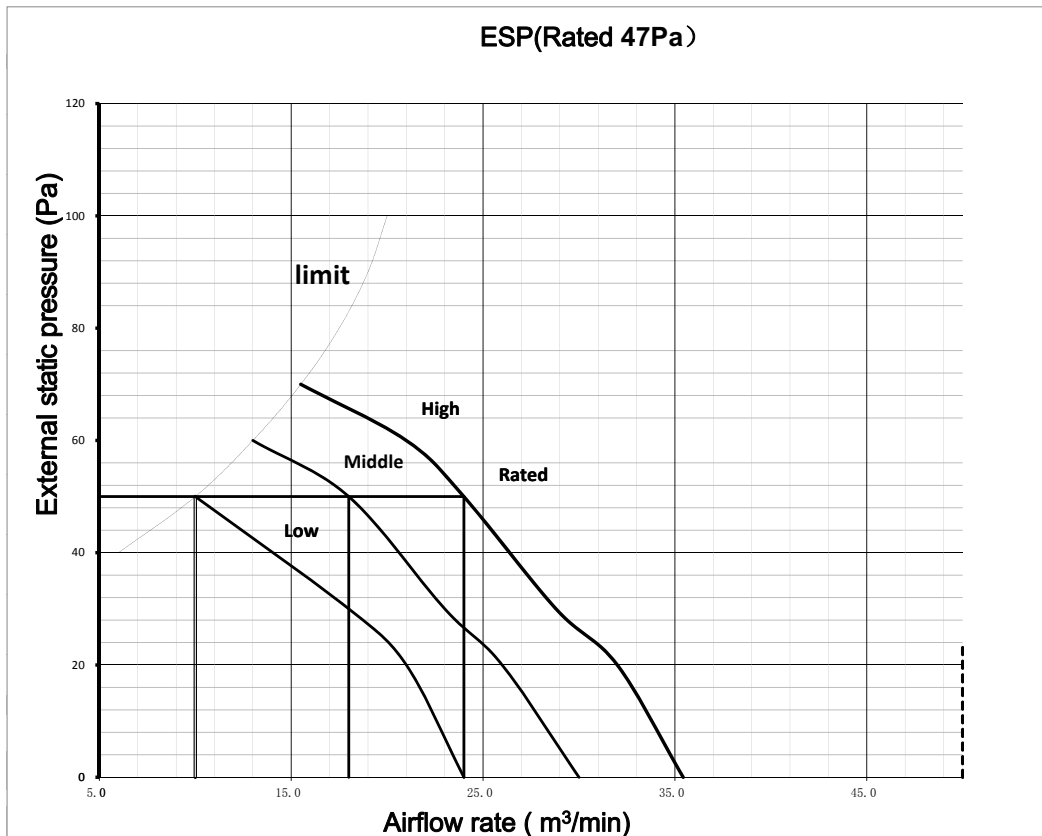
## 8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

3.0HP



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

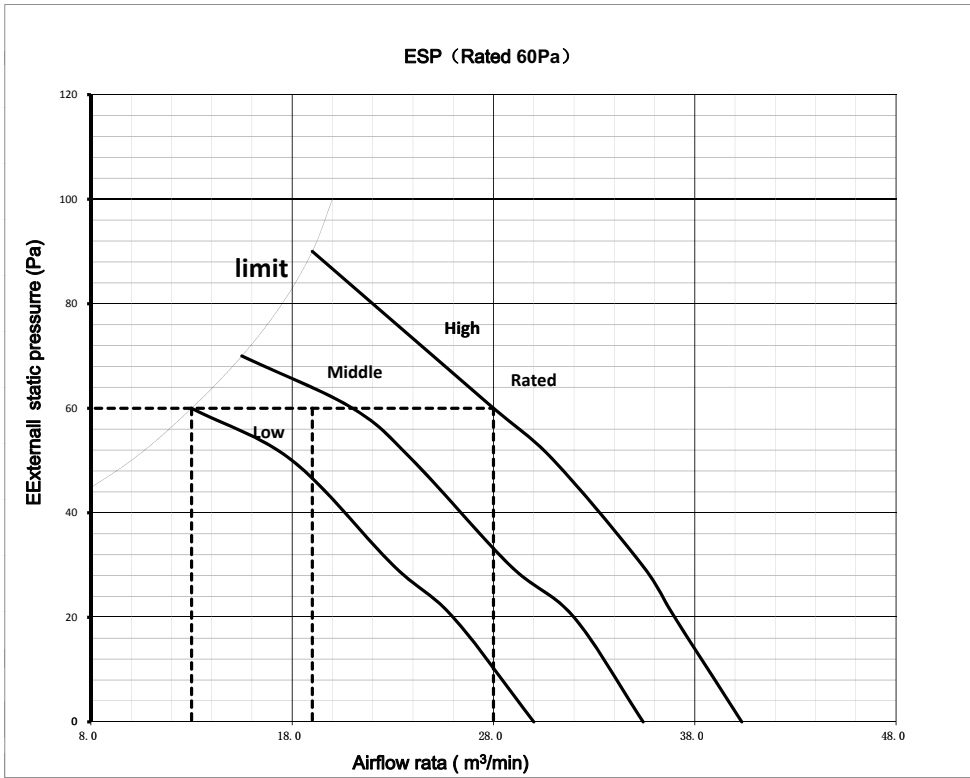
4.0HP



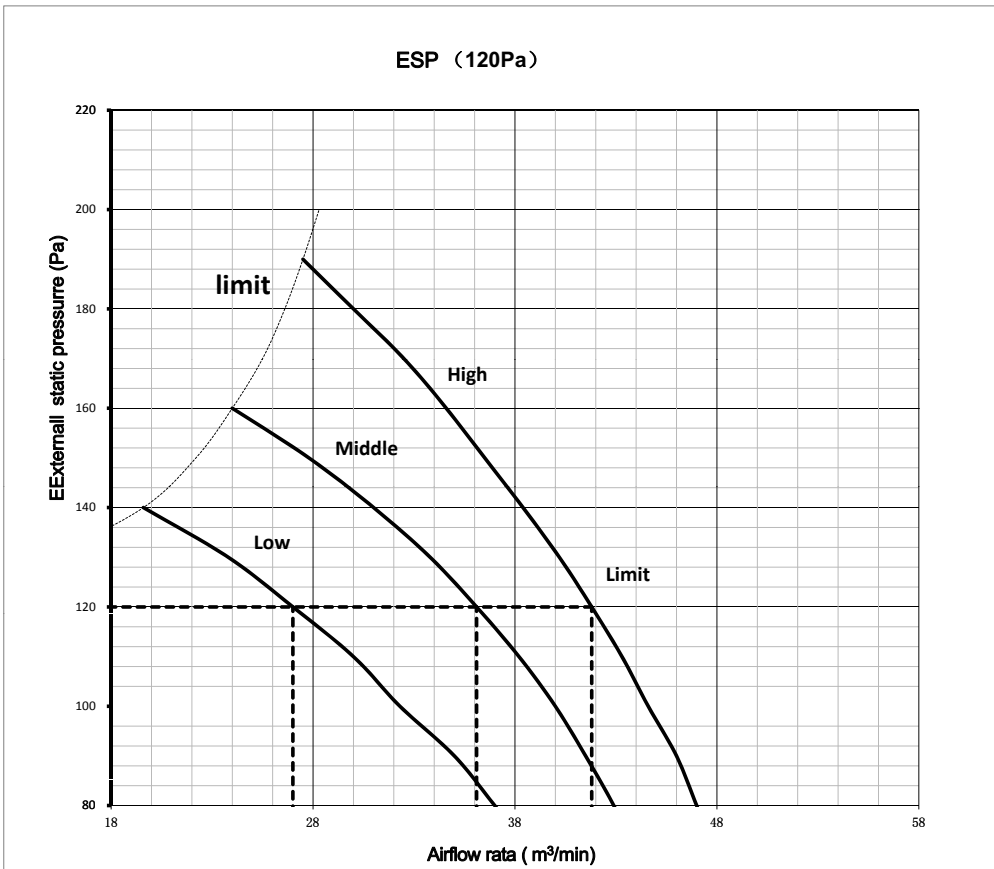
# 8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

5.0HP

ESP at rated 60Pa



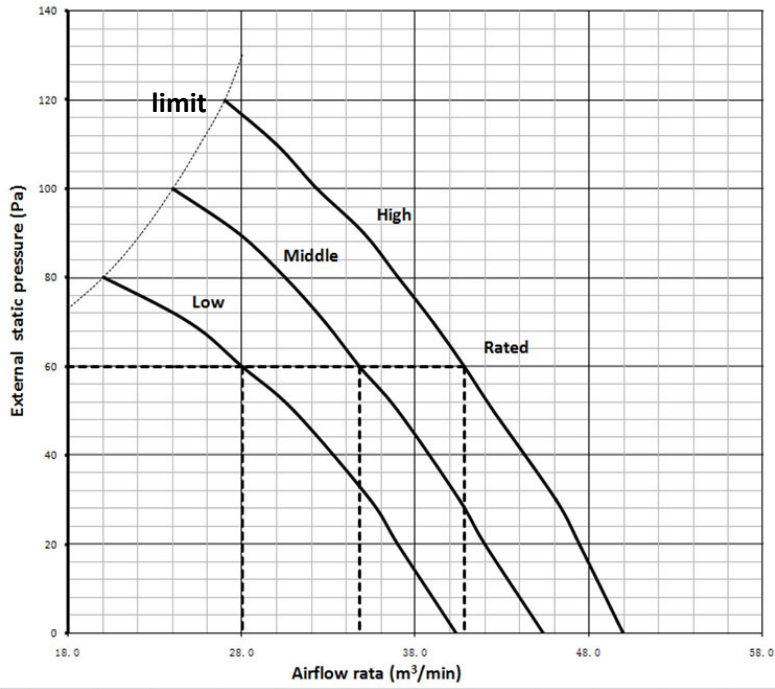
ESP at 120Pa



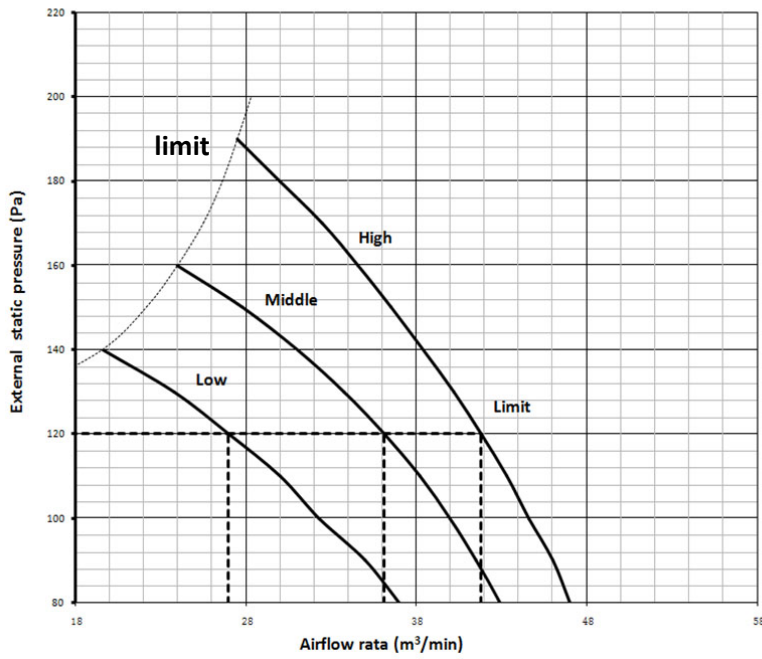
# 8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

6.0HP

ESP at rated 60Pa



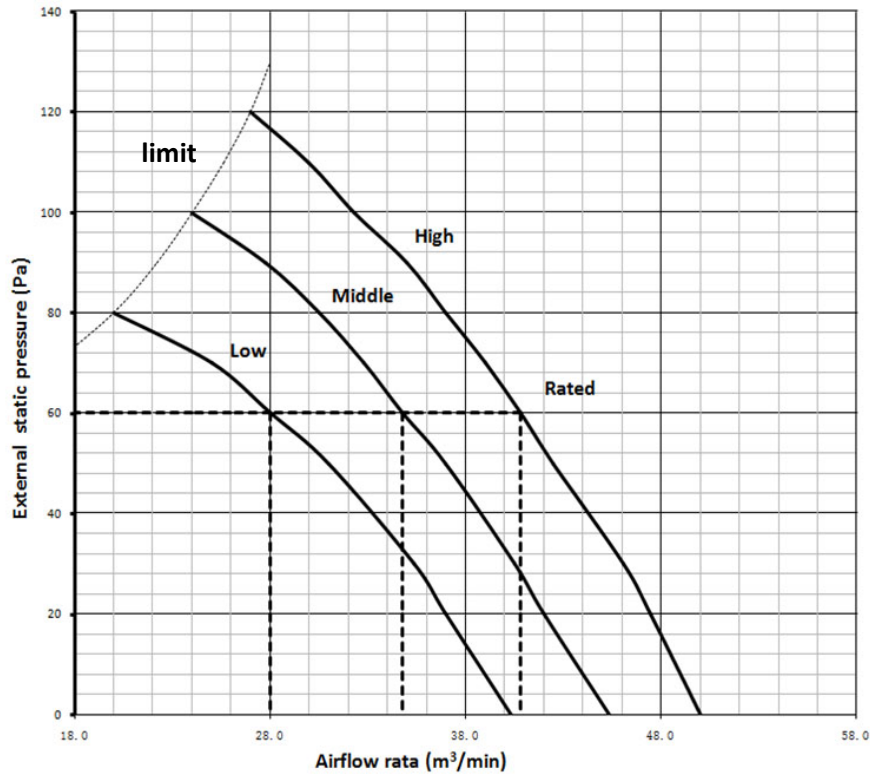
ESP at 120Pa



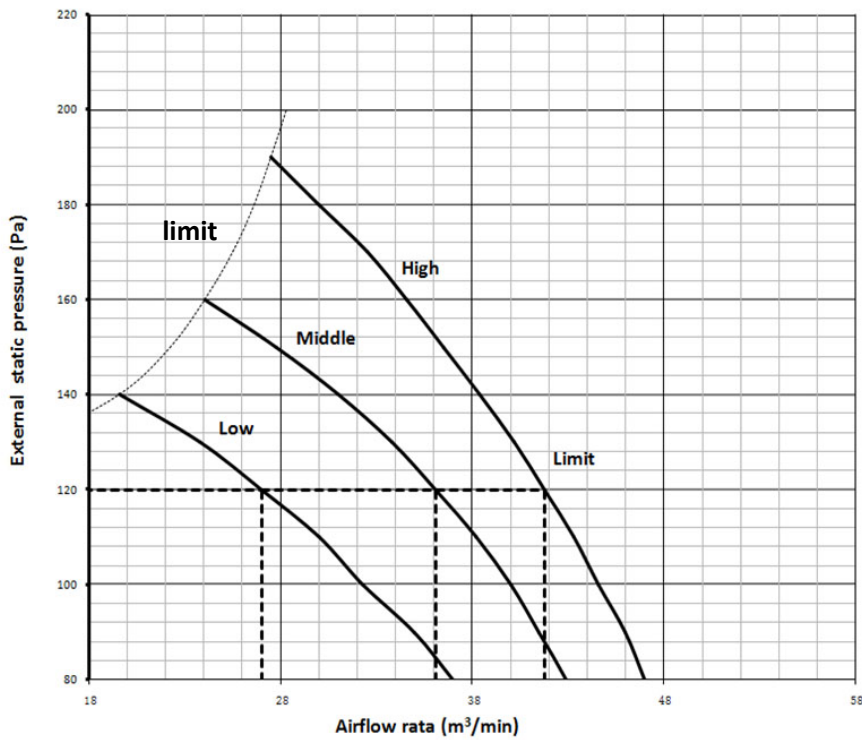
# 8. ESP (EXTERNAL STATIC PRESSURE) CHART (DUCTED TYPE)

6.5HP

ESP at rated 60Pa



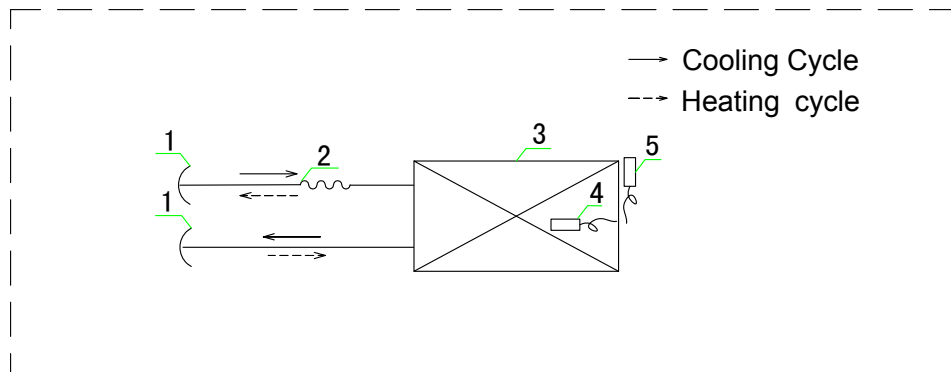
ESP at 120Pa



## 9. REFRIGERANT CYCLE

### 9. Refrigerant cycle

Indoor Unit



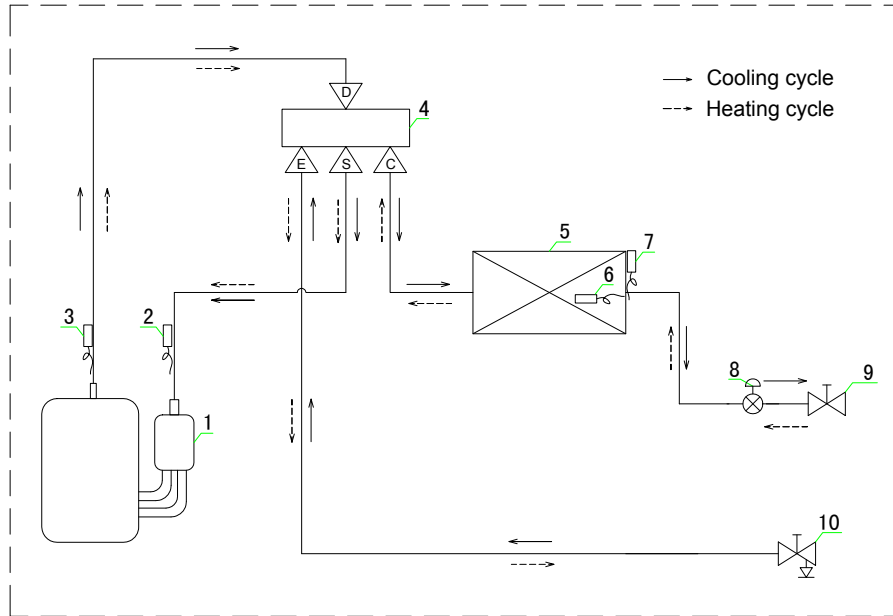
List of component names

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

## 9. REFRIGERANT CYCLE

### Outdoor Unit

1.0/1.5/2.0/3.0HP



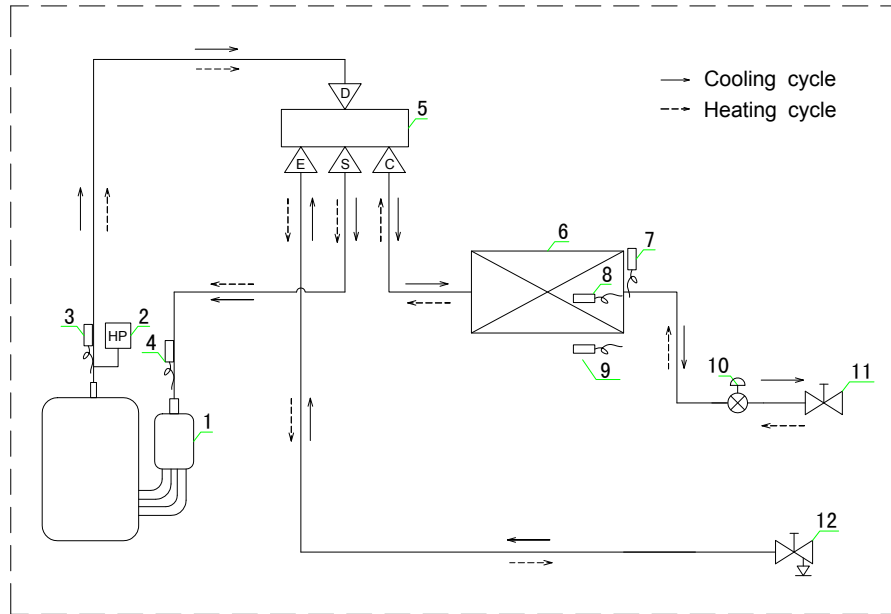
#### List of component names

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



# 9. REFRIGERANT CYCLE

4.0HP

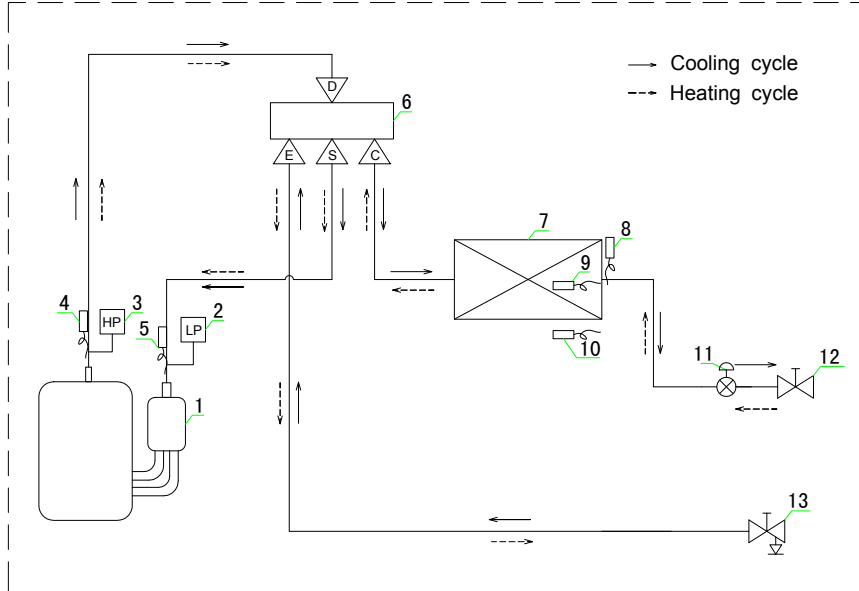


List of component names

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

# 9. REFRIGERANT CYCLE

5.0HP

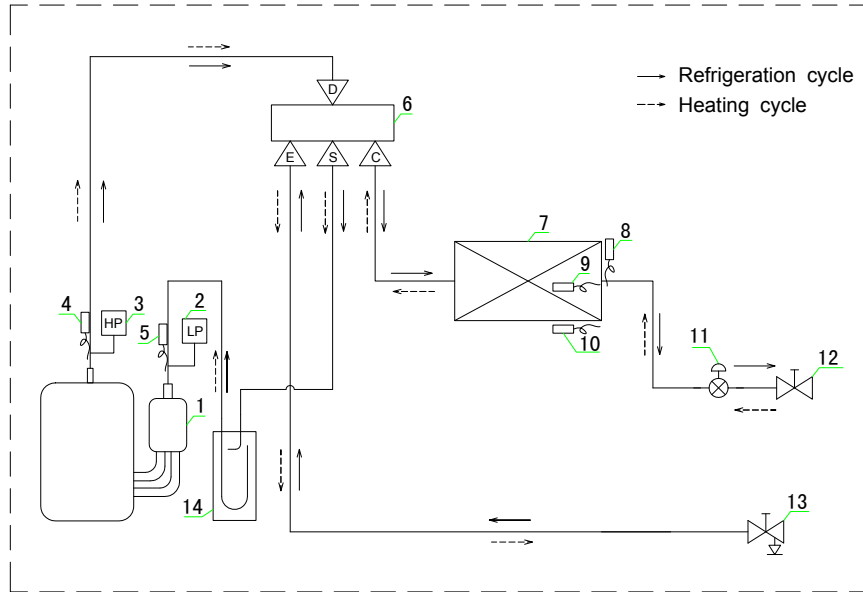


List of component names

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

# 9. REFRIGERANT CYCLE

6.0/6.5HP



List of component names

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

## 10. FRESH AIR INTAKE FUNCTION

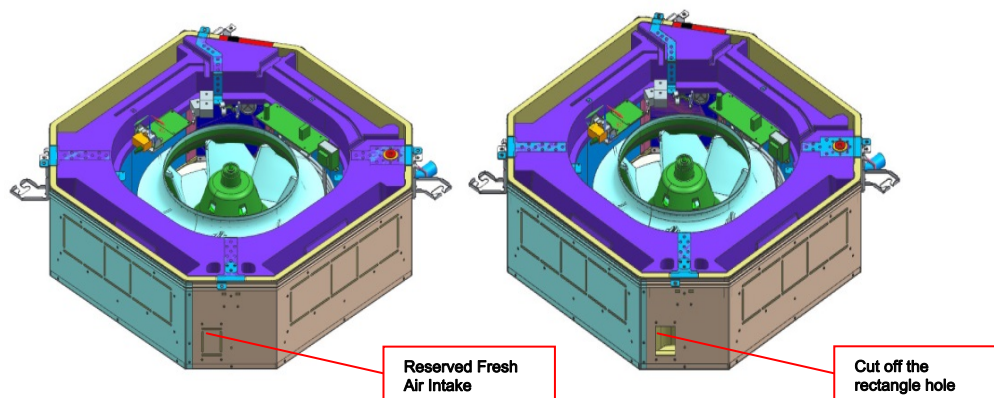
### 10. Fresh air intake function

#### Cassette (3.0/4.0/5.0/6.0/6.5HP)

It is possible to inhale fresh air to indoor unit from the reserved fresh air intake, the size of the fresh air intake is  $75 \times 53$  (mm) .

Please follow the steps below when need.

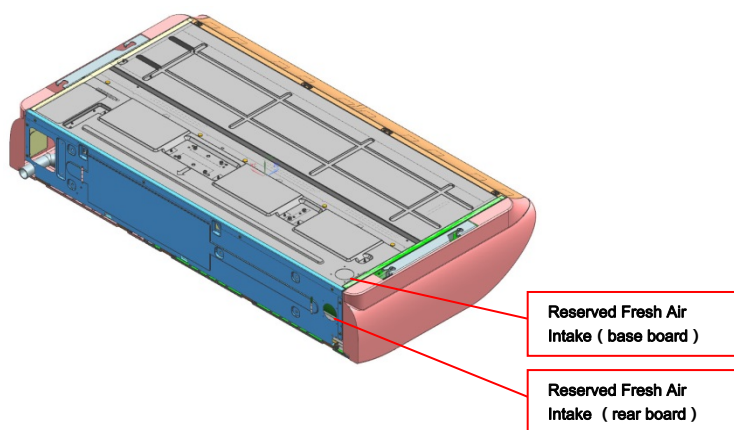
- 1) Cut off the reserved metal rectangular hole on the base board .
- 2) Cut off the foam material on the a rectangular hole , and the final hole size is  $75 \times 53$  (mm) .
- 3) Connect air duct with the fresh air intake.



#### Floor Ceiling

All of the floor ceiling indoor units are provided with fresh air function. It is possible to inhale fresh air to indoor unit from the reserved fresh air intake, the size of the fresh air intake is  $\Phi 50$  (mm) . Please follow the steps below when need.

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



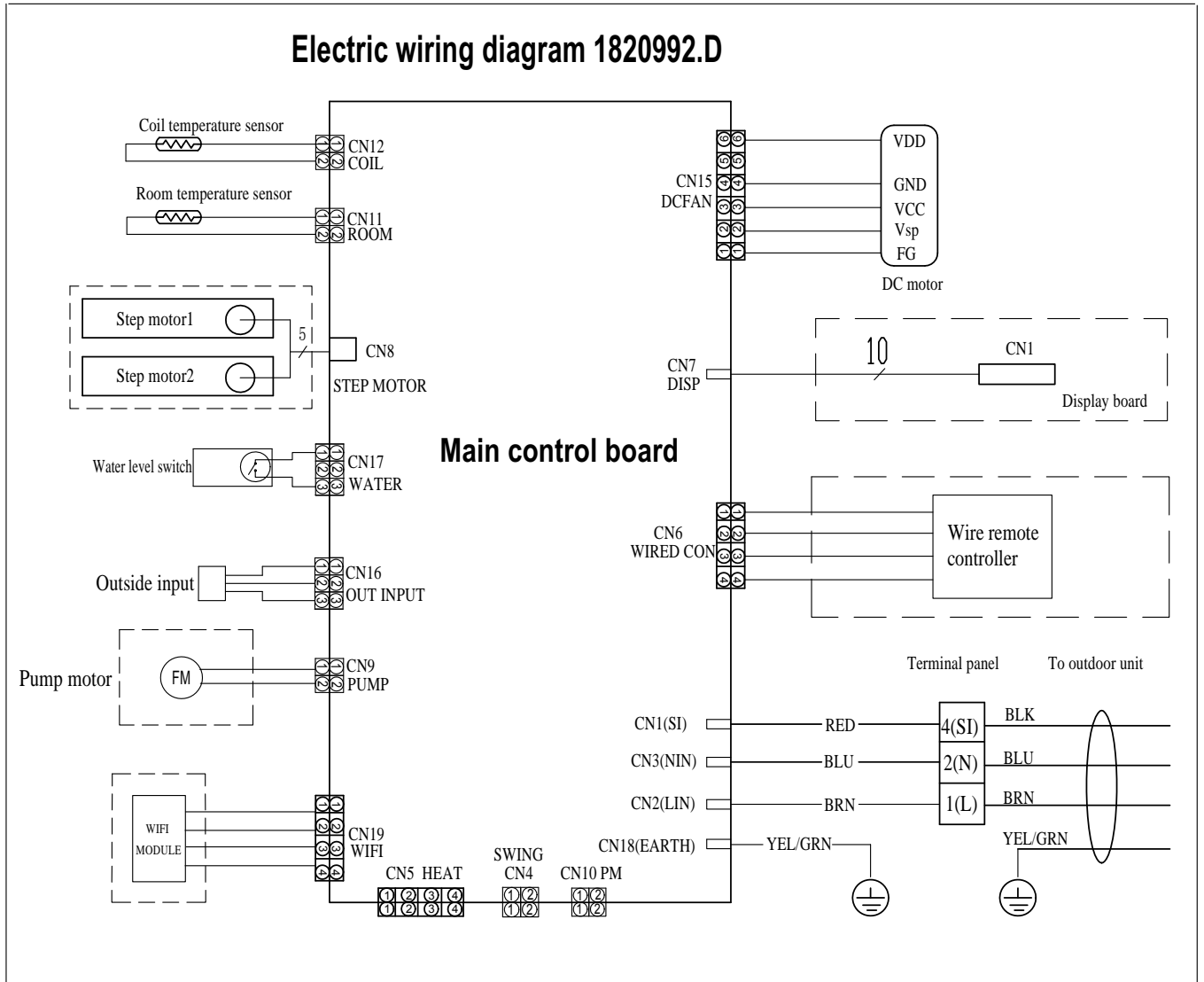
# 11. WIRING DIAGRAM

## 11. Wiring diagram

### 11.1 Electrical wiring diagrams

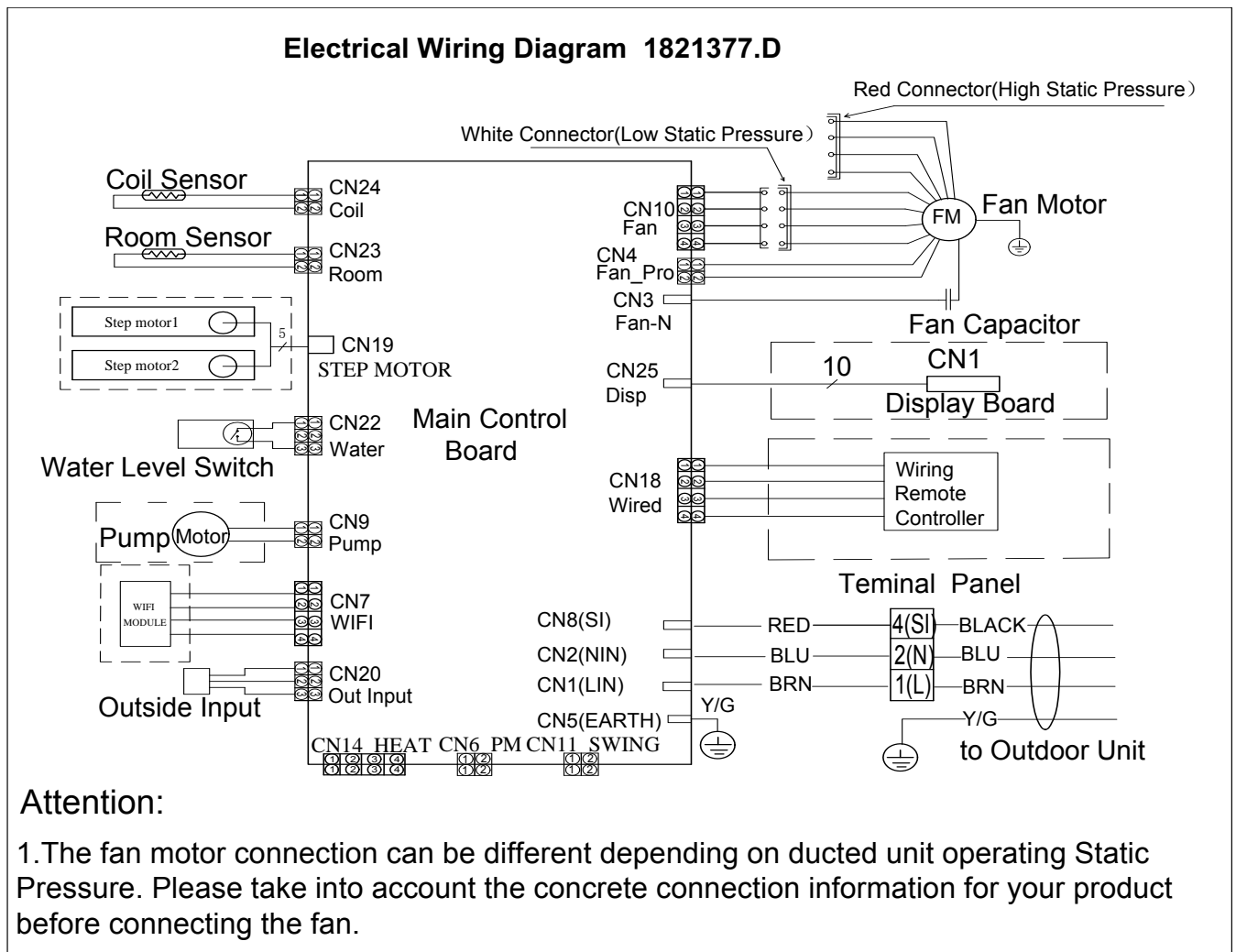
#### Indoor Unit

Ducted type(1.0/1.5/3.0/4.0/5.0/6.0/6.5HP)



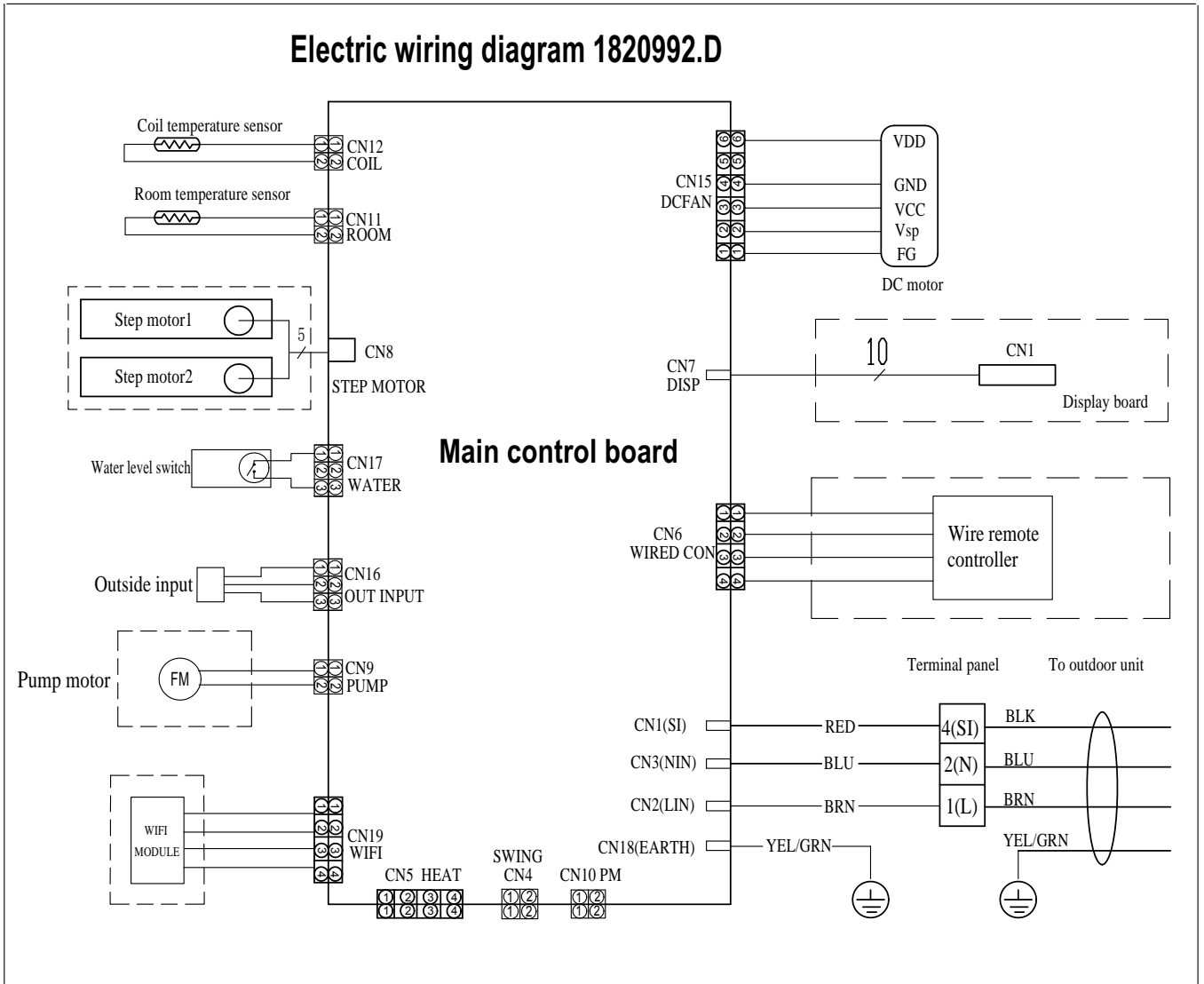
# 11. WIRING DIAGRAM

Ducted type(2.0HP)



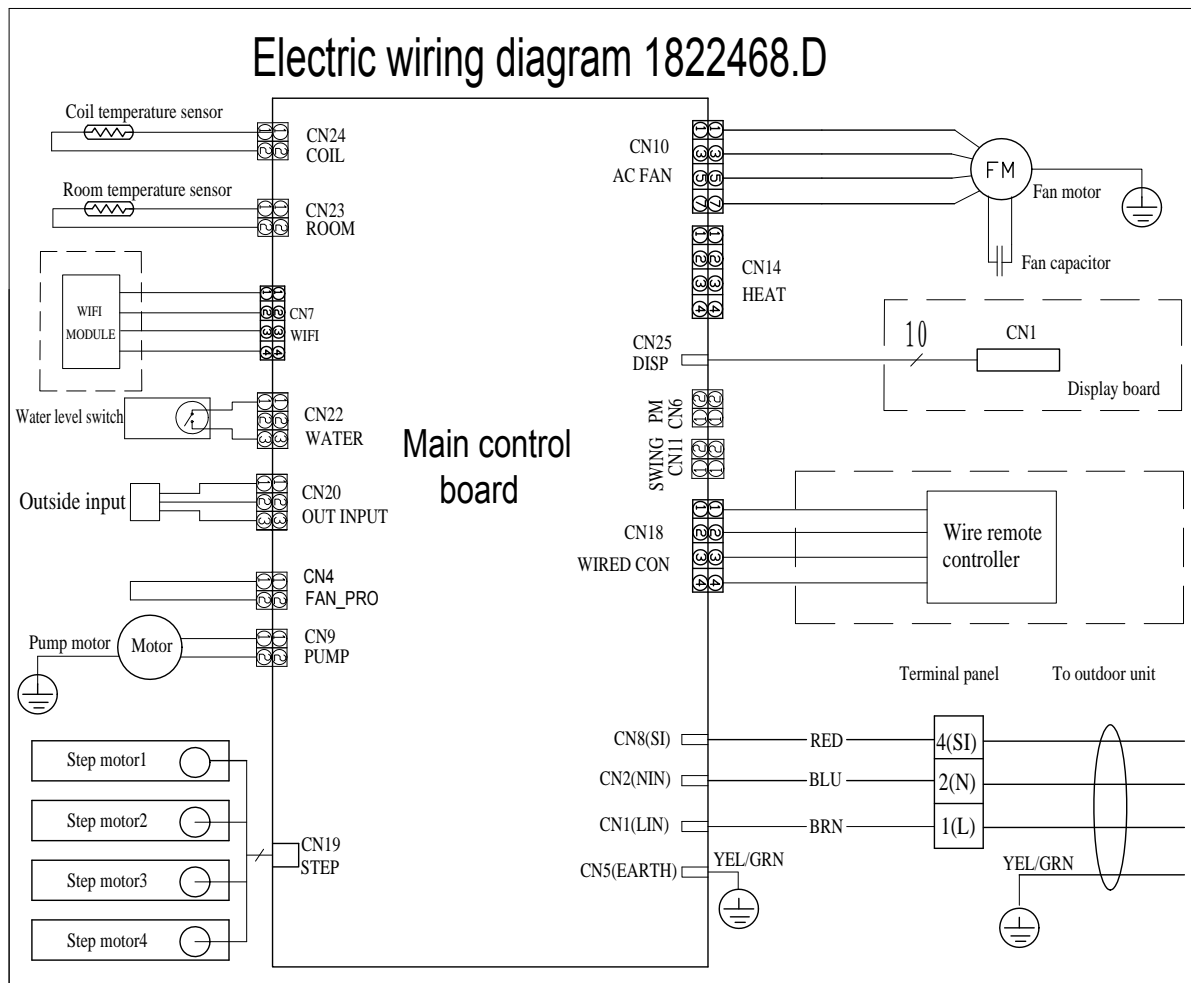
# 11. WIRING DIAGRAM

Cassette type(1.0/3.0/4.0/5.0/6.0/6.5HP)



# 11. WIRING DIAGRAM

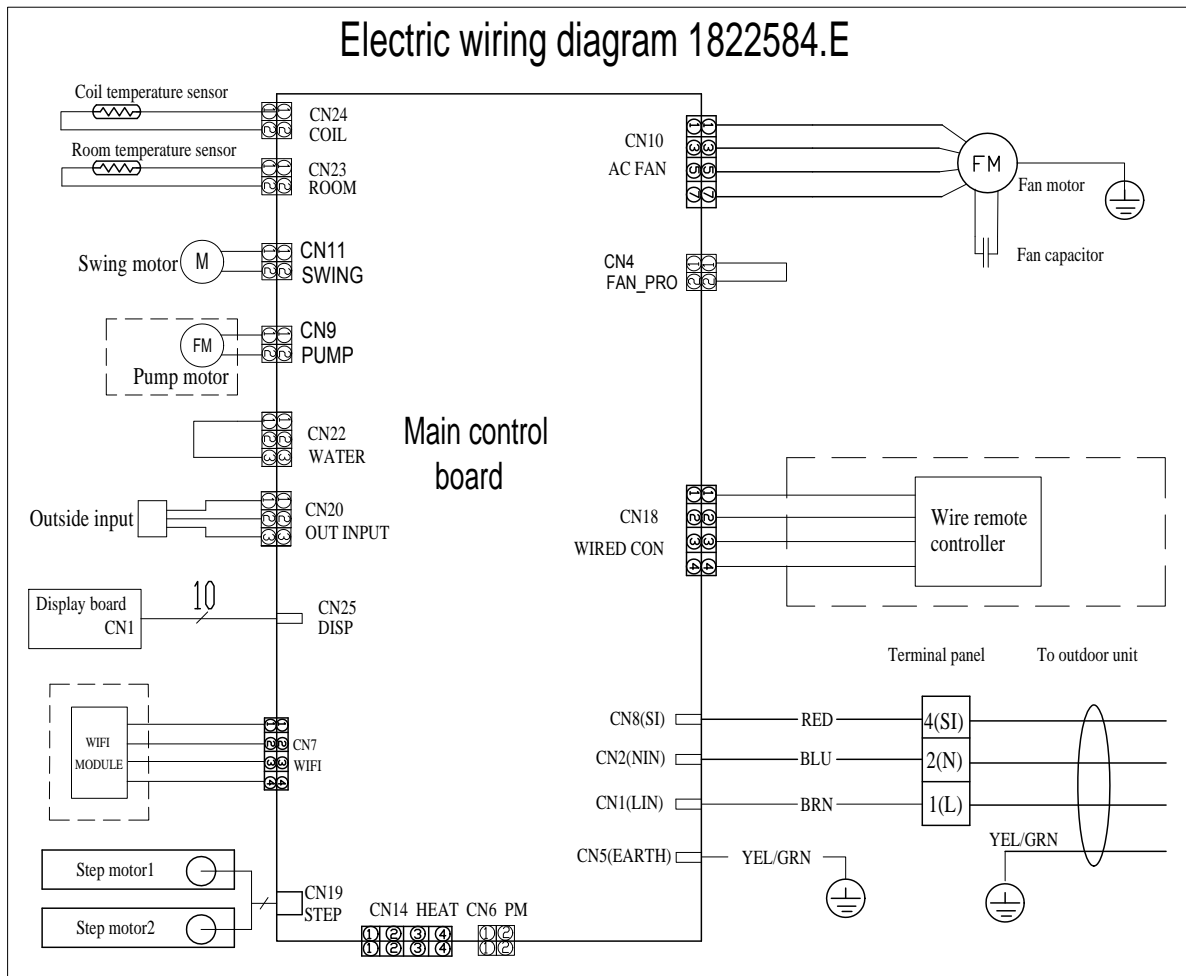
Cassette type(2.0HP)





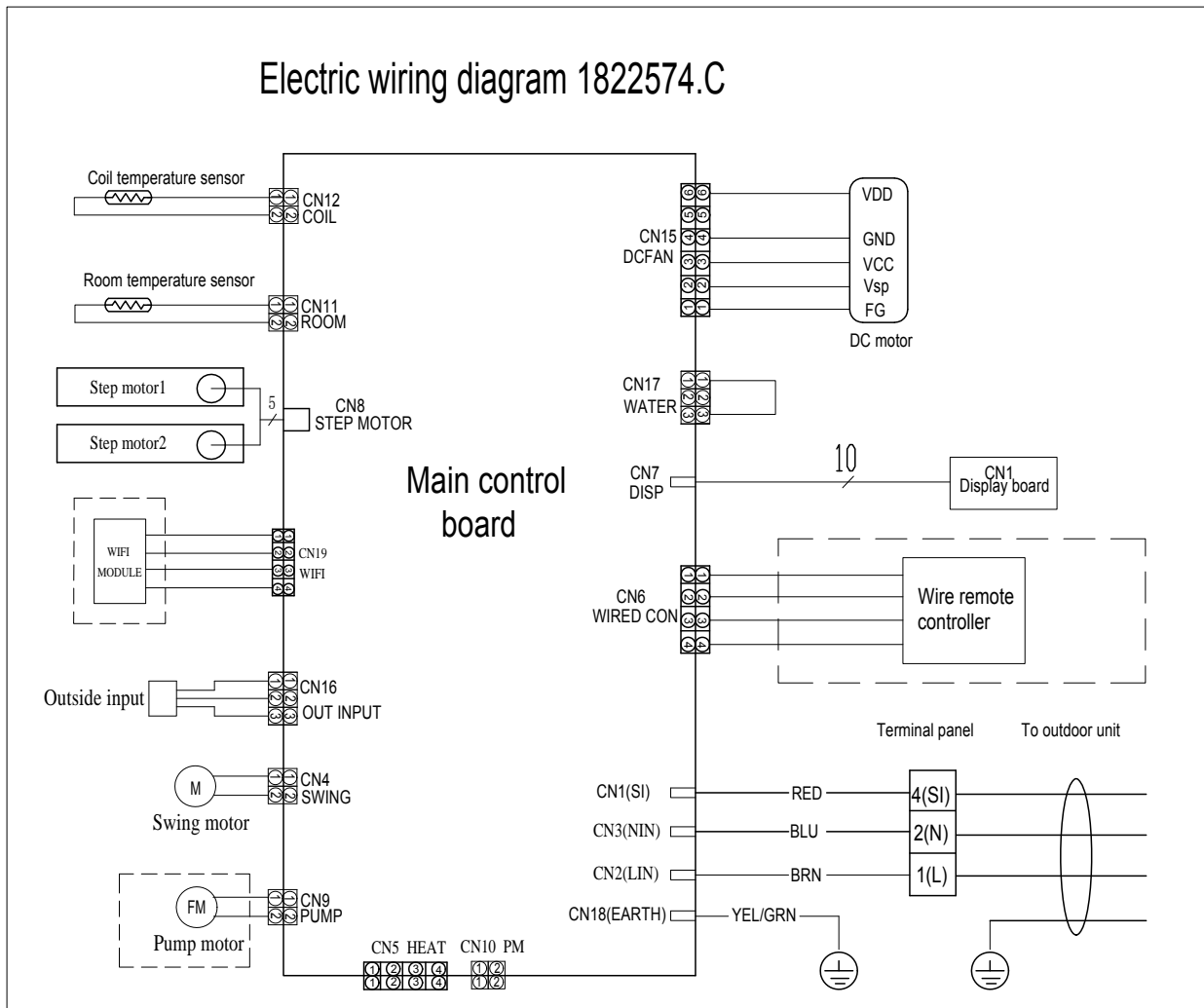
# 11. WIRING DIAGRAM

Floor Ceiling type(2.0/3.0/4.0HP)



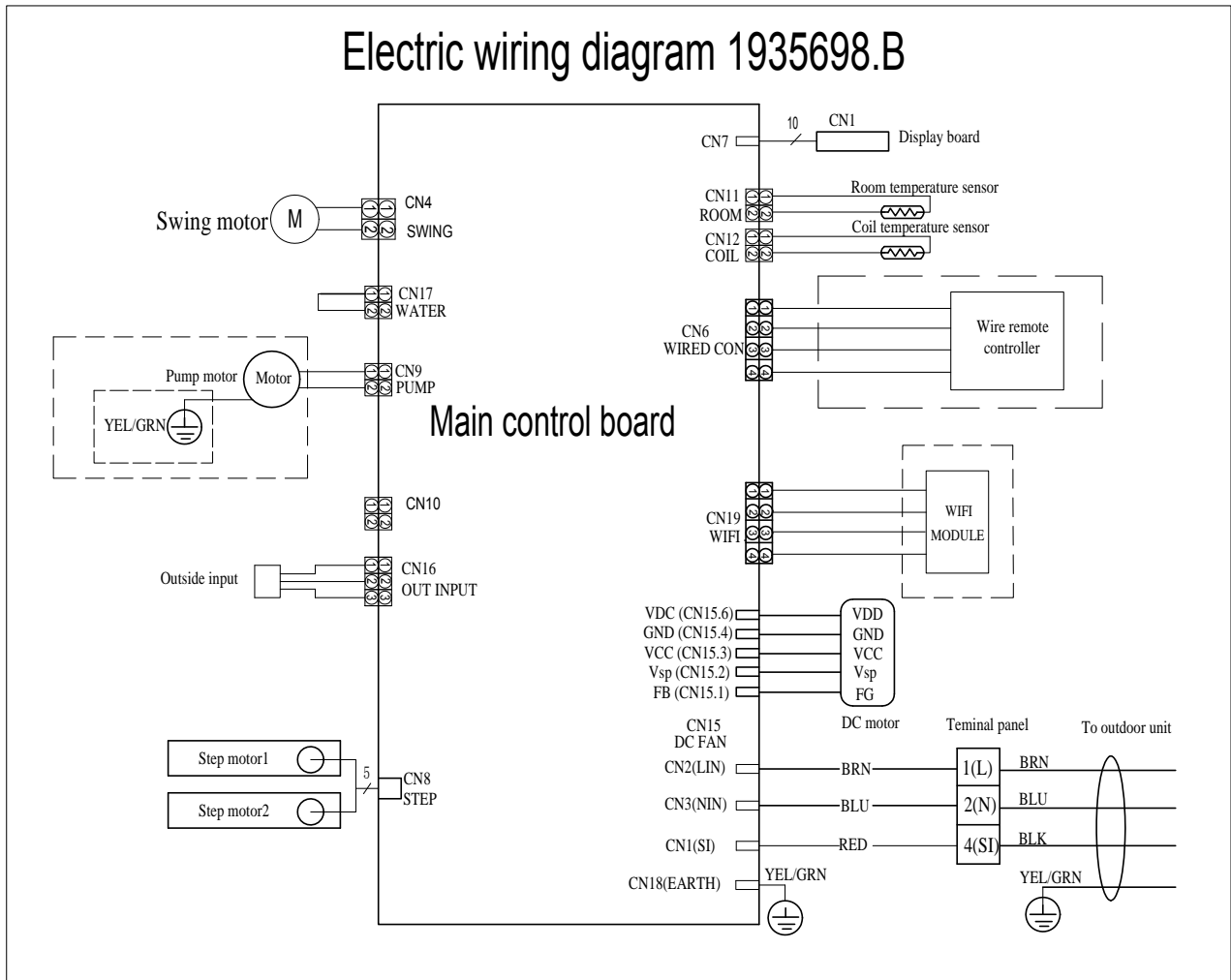
# 11. WIRING DIAGRAM

Floor Ceiling type(5.0HP)



# 11. WIRING DIAGRAM

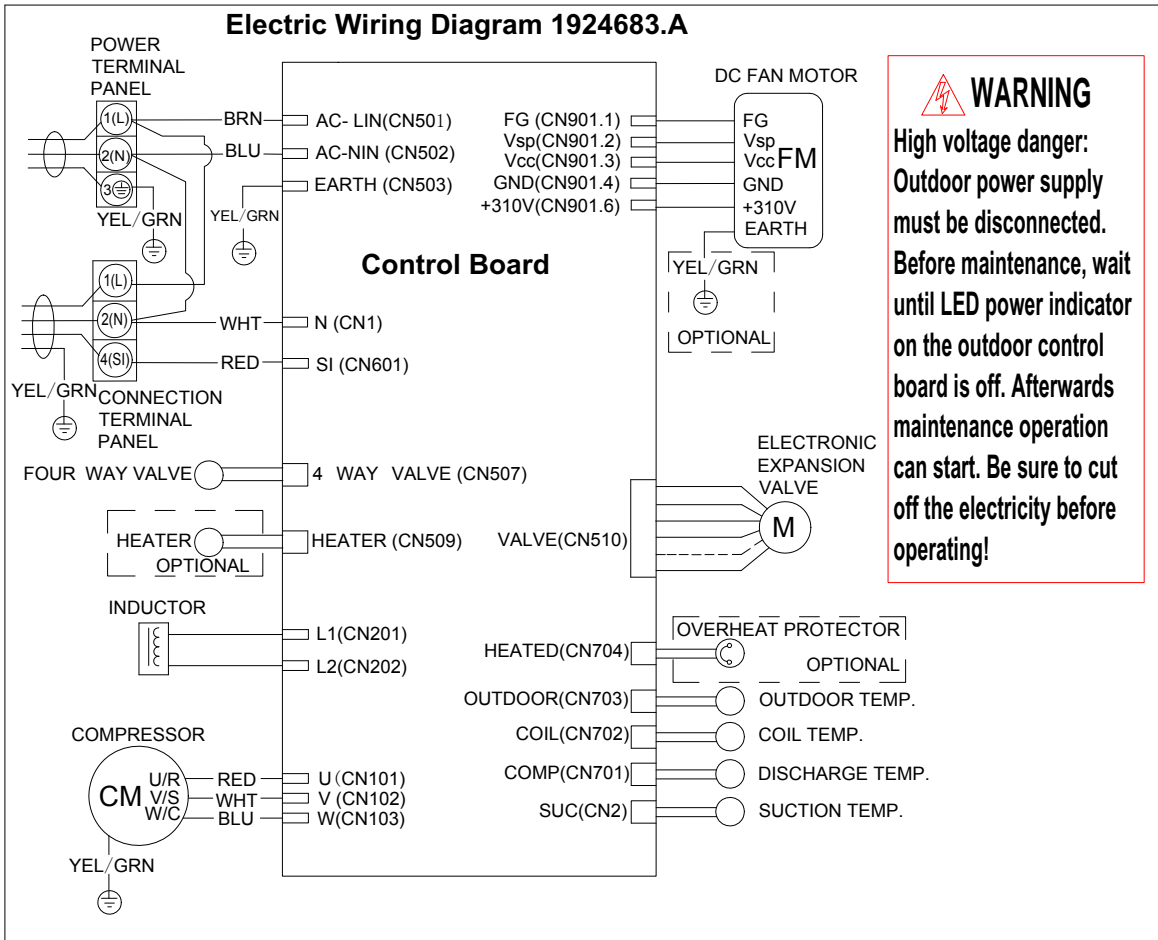
Floor Ceiling type(5.0/6.0HP)



# 11. WIRING DIAGRAM

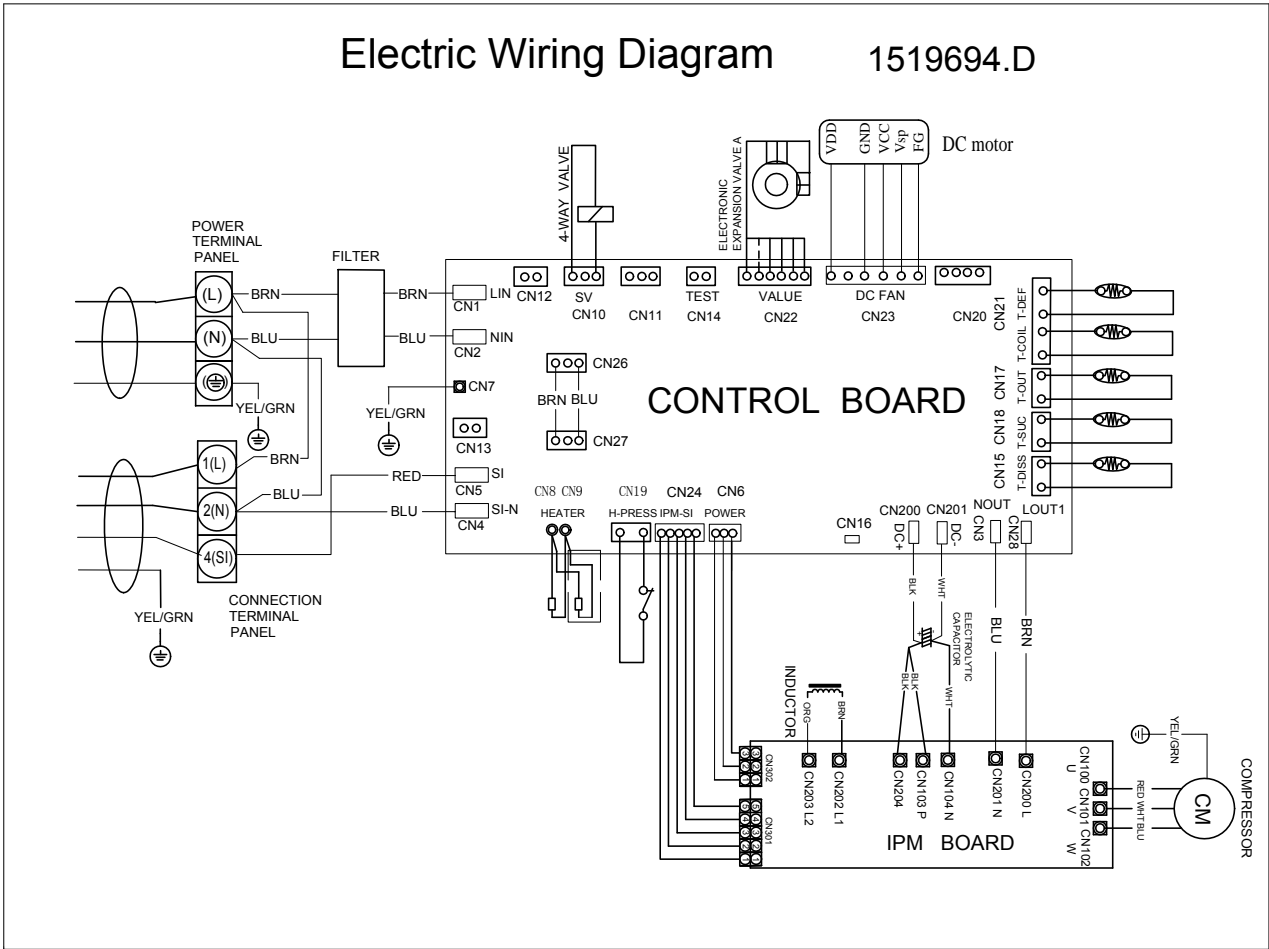
## Outdoor Unit

1.0/1.5/2.0/3.0HP



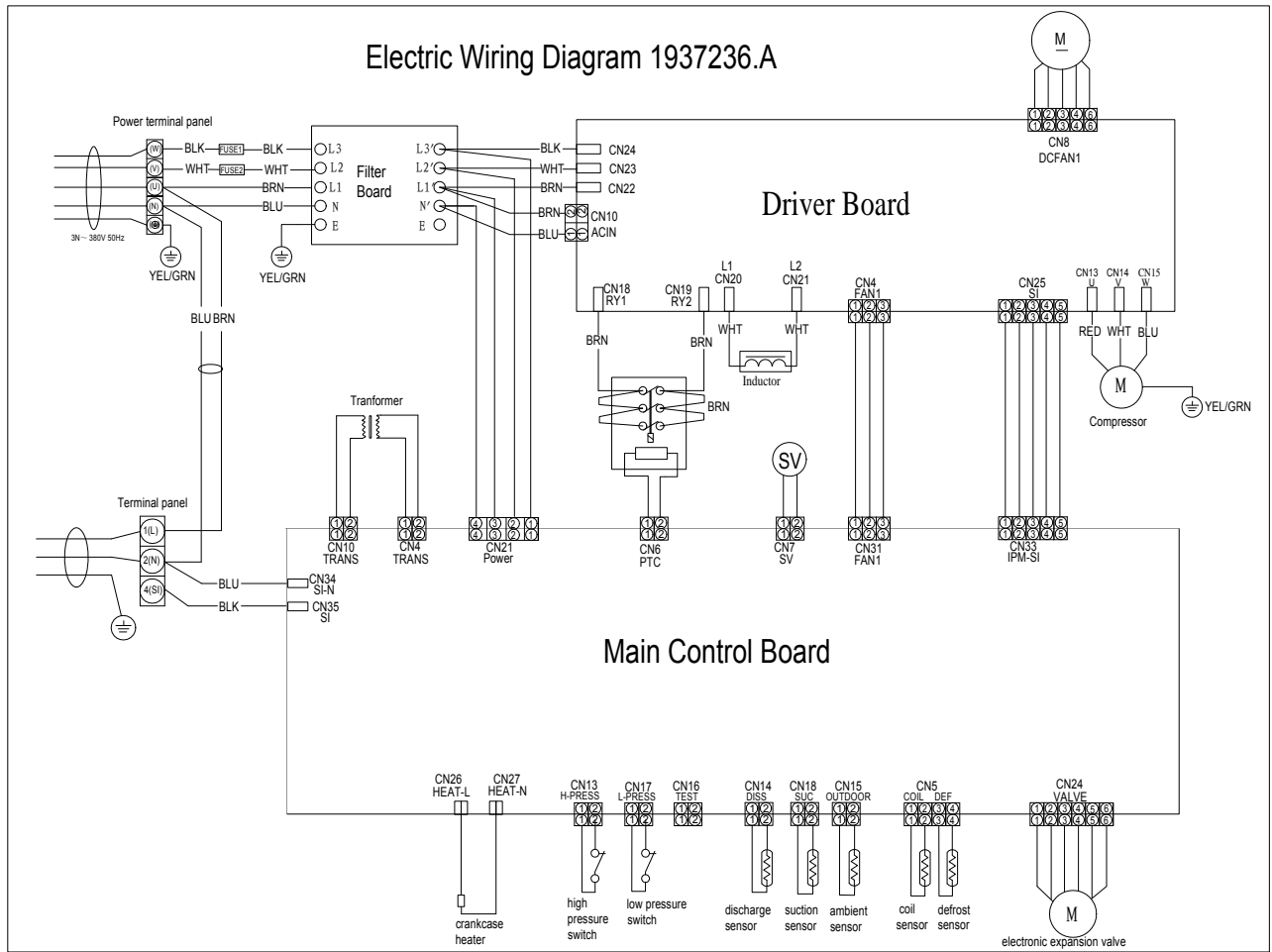
# 11. WIRING DIAGRAM

4.0HP



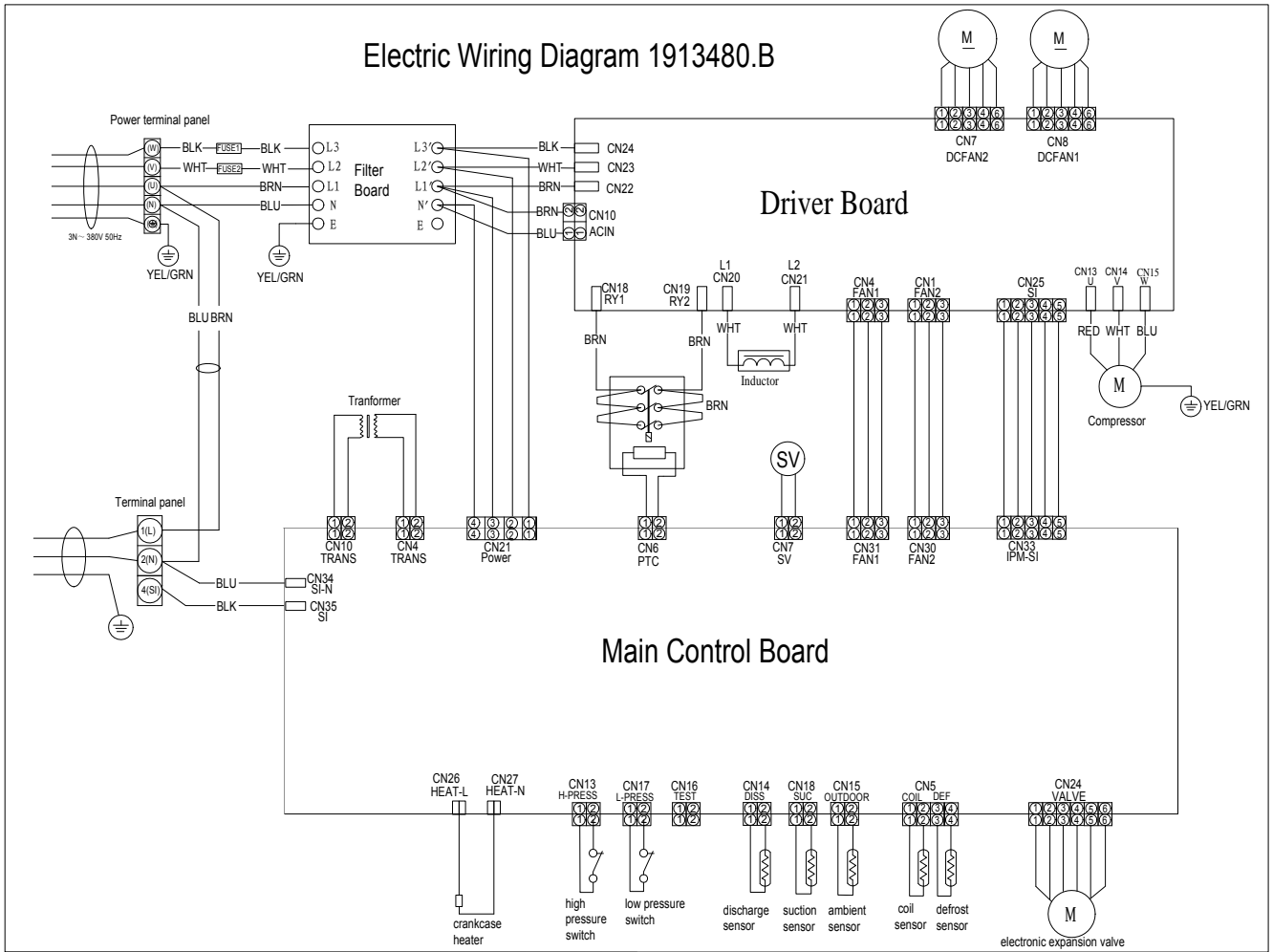
# 11. WIRING DIAGRAM

5.0HP



# 11. WIRING DIAGRAM

6.0/6.5HP

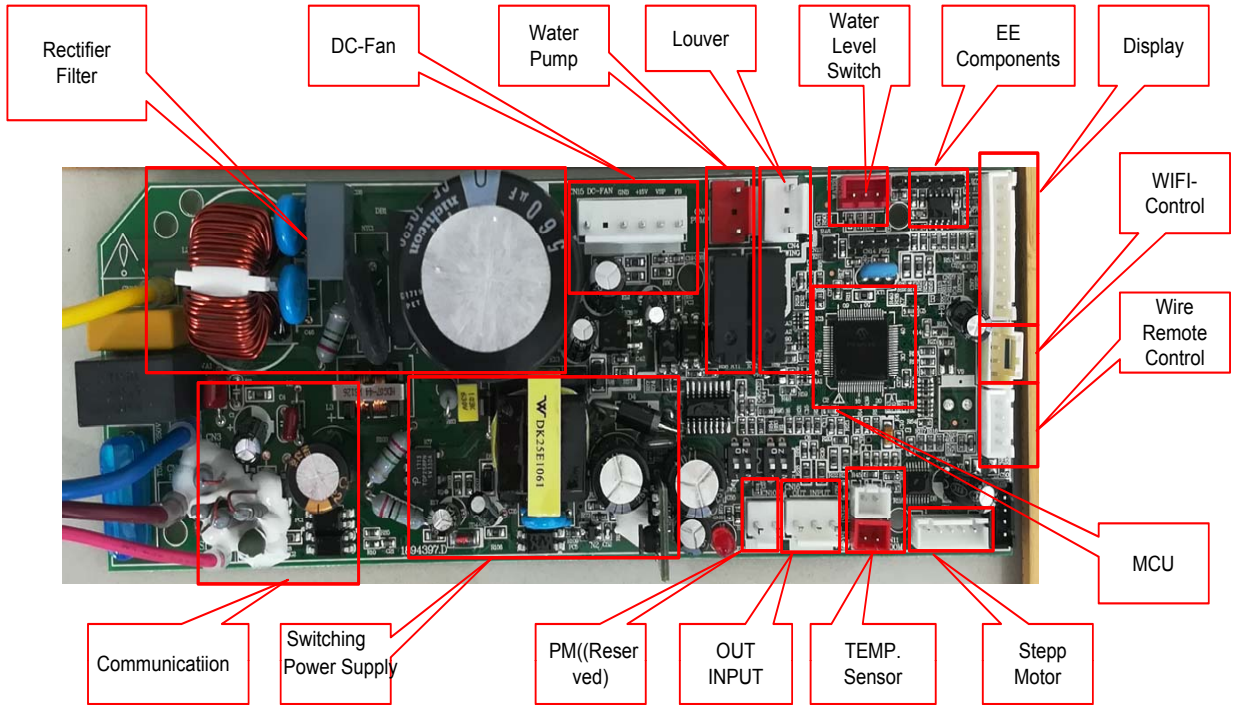


# 11. WIRING DIAGRAM

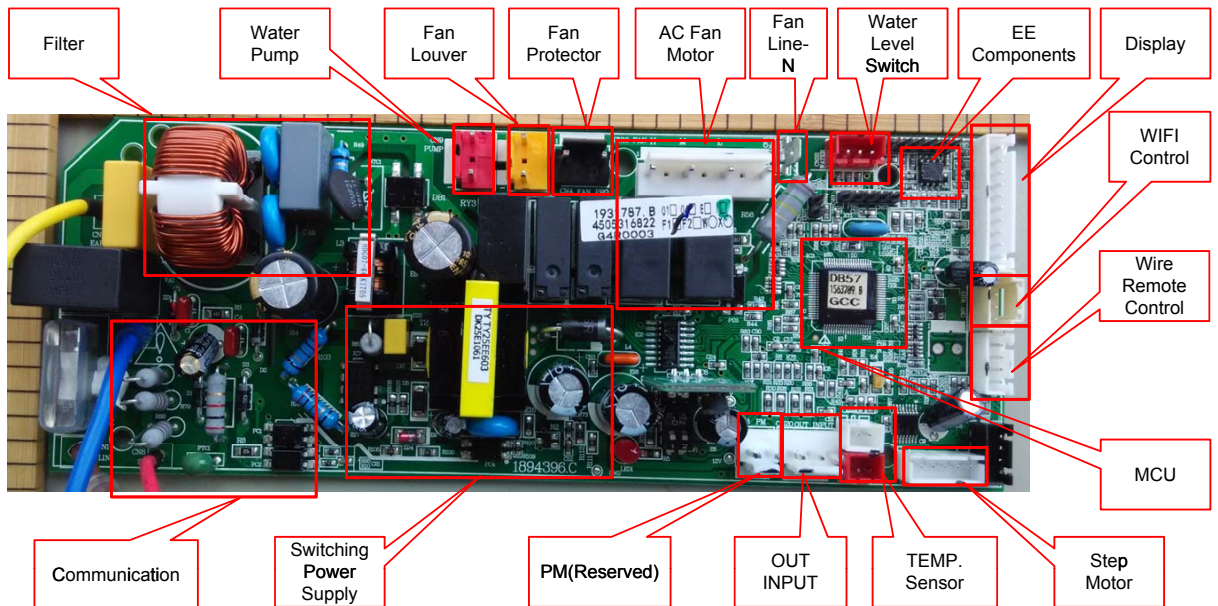
## 11.2 Control Board Picture

Indoor unit

1.0/1.5/3.0HP (Ducted/Cassette/Floor Ceiling)



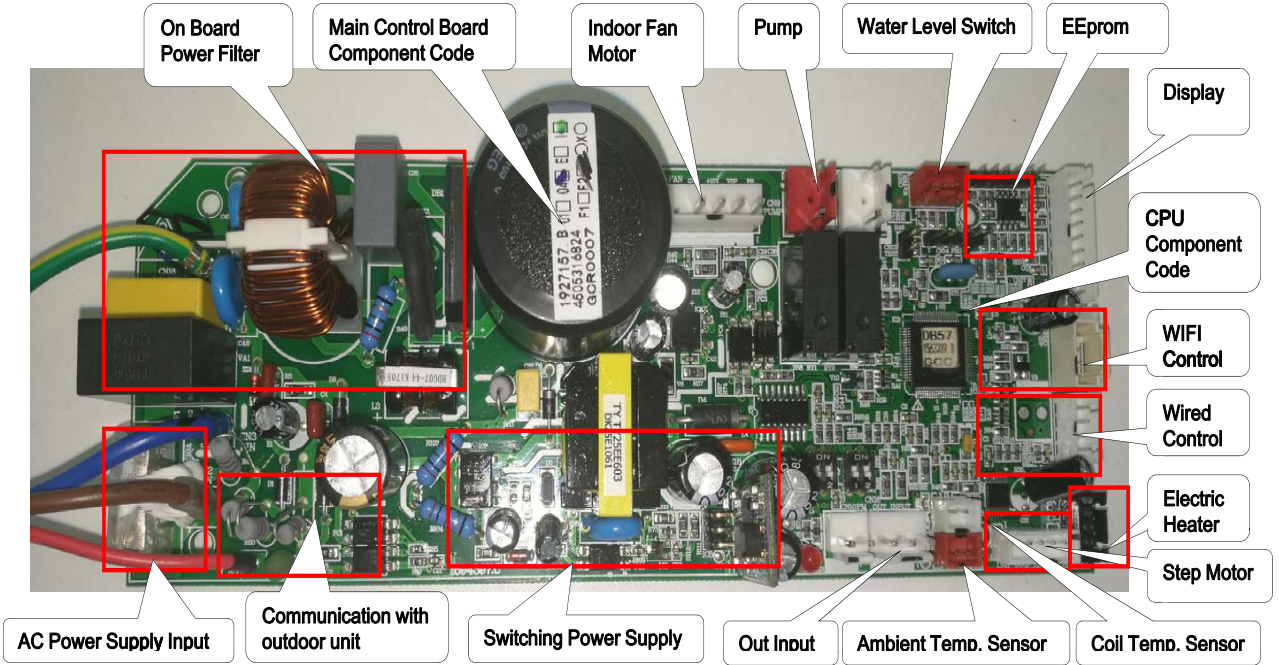
2.0HP (Ducted/Cassette)





# 11. WIRING DIAGRAM

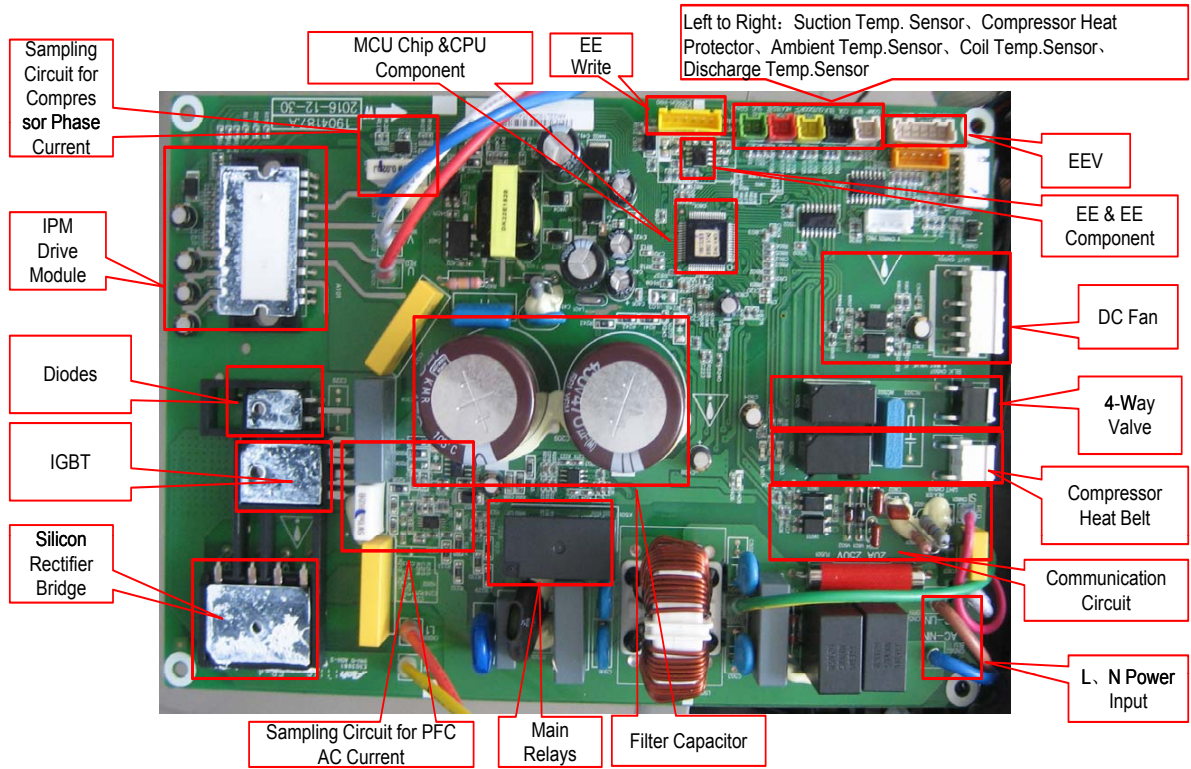
2.0HP (Floor Ceiling) & 3.0/4.0/5.0/6.0/6.5HP



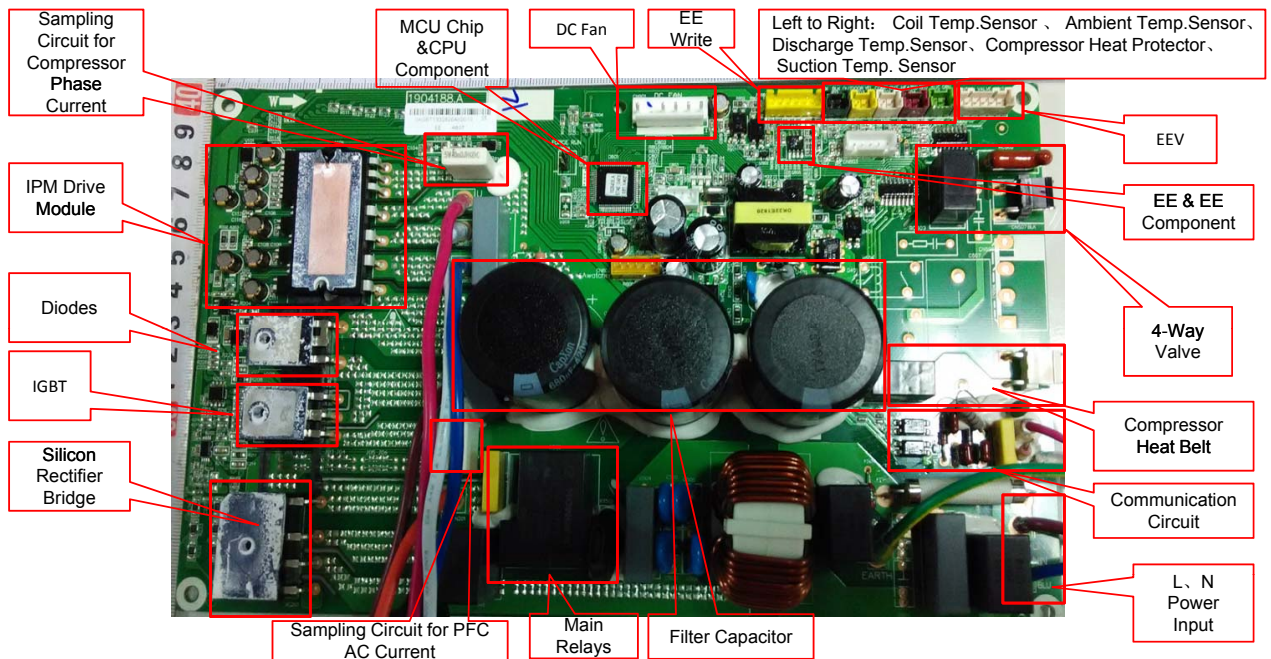
# 11. WIRING DIAGRAM

## Outdoor unit

### 1.0/1.5HP



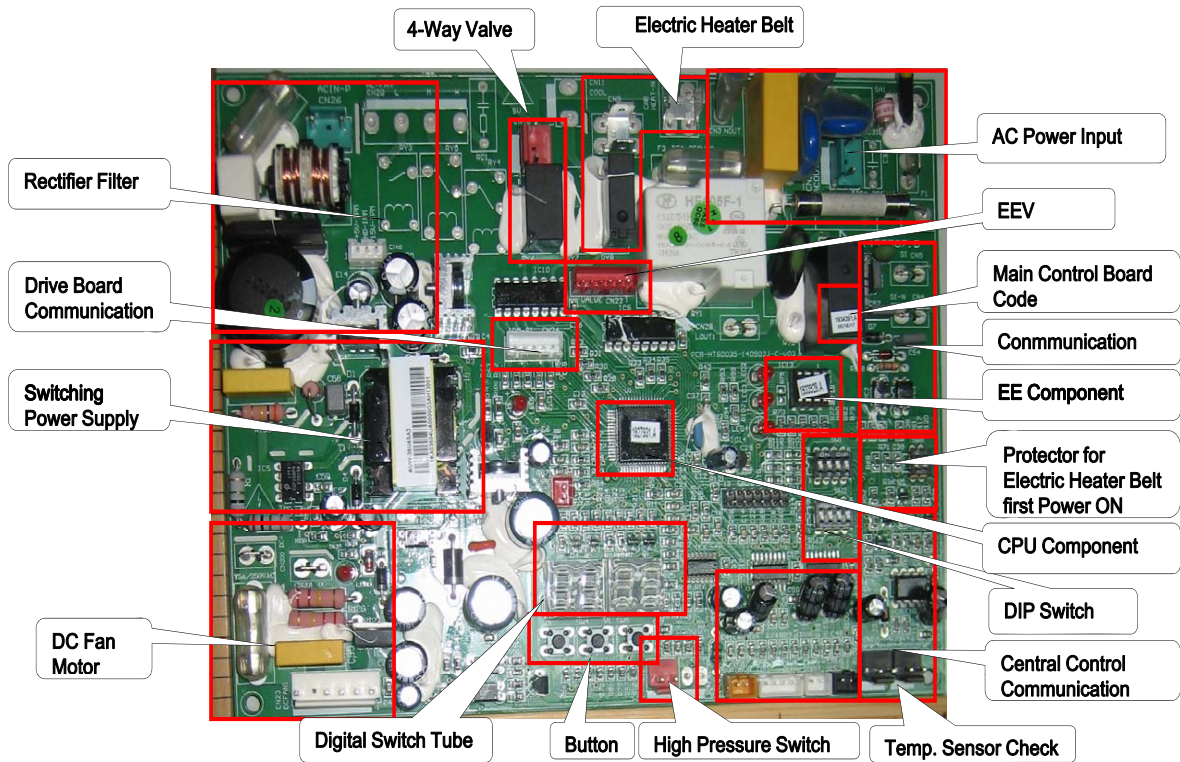
### 2.0/3.0HP



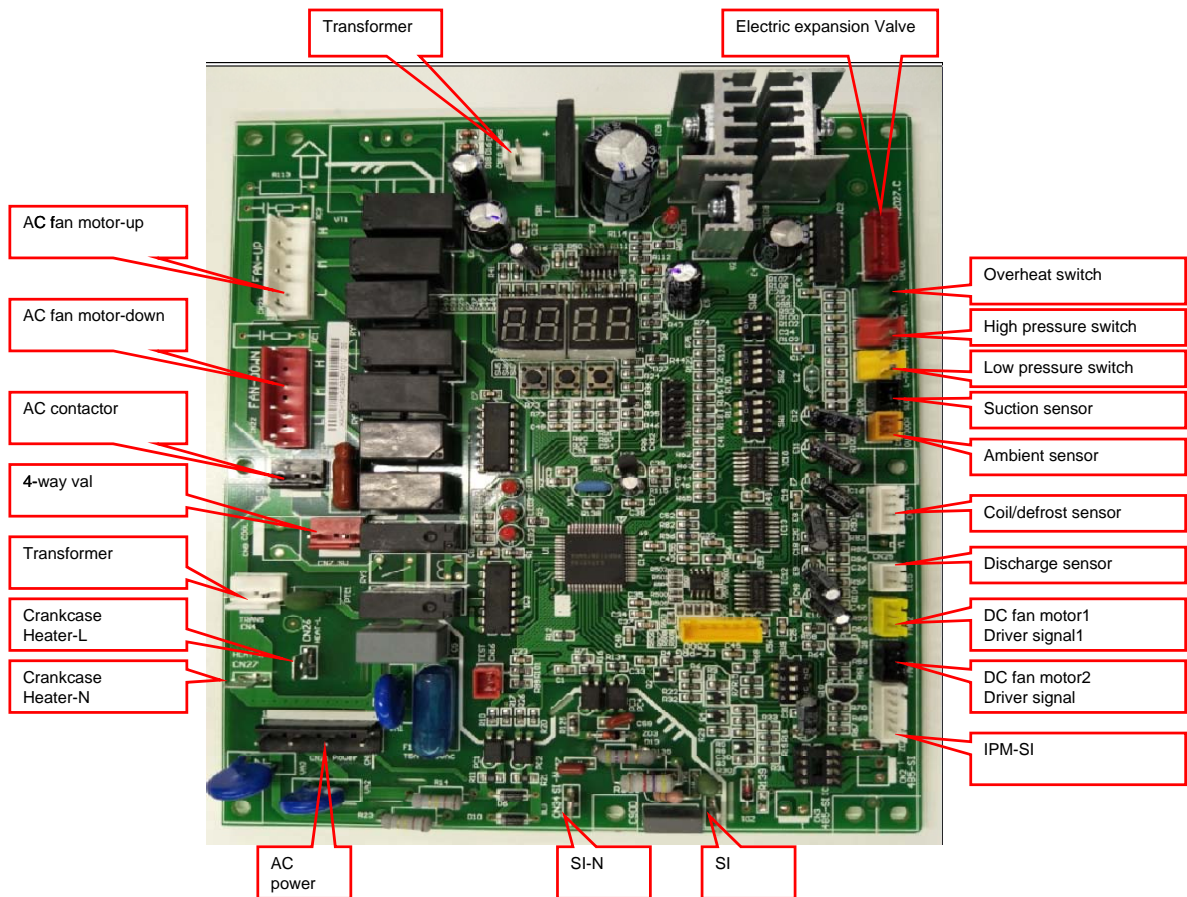


# 11. WIRING DIAGRAM

## 4.0HP (Main Control Board)

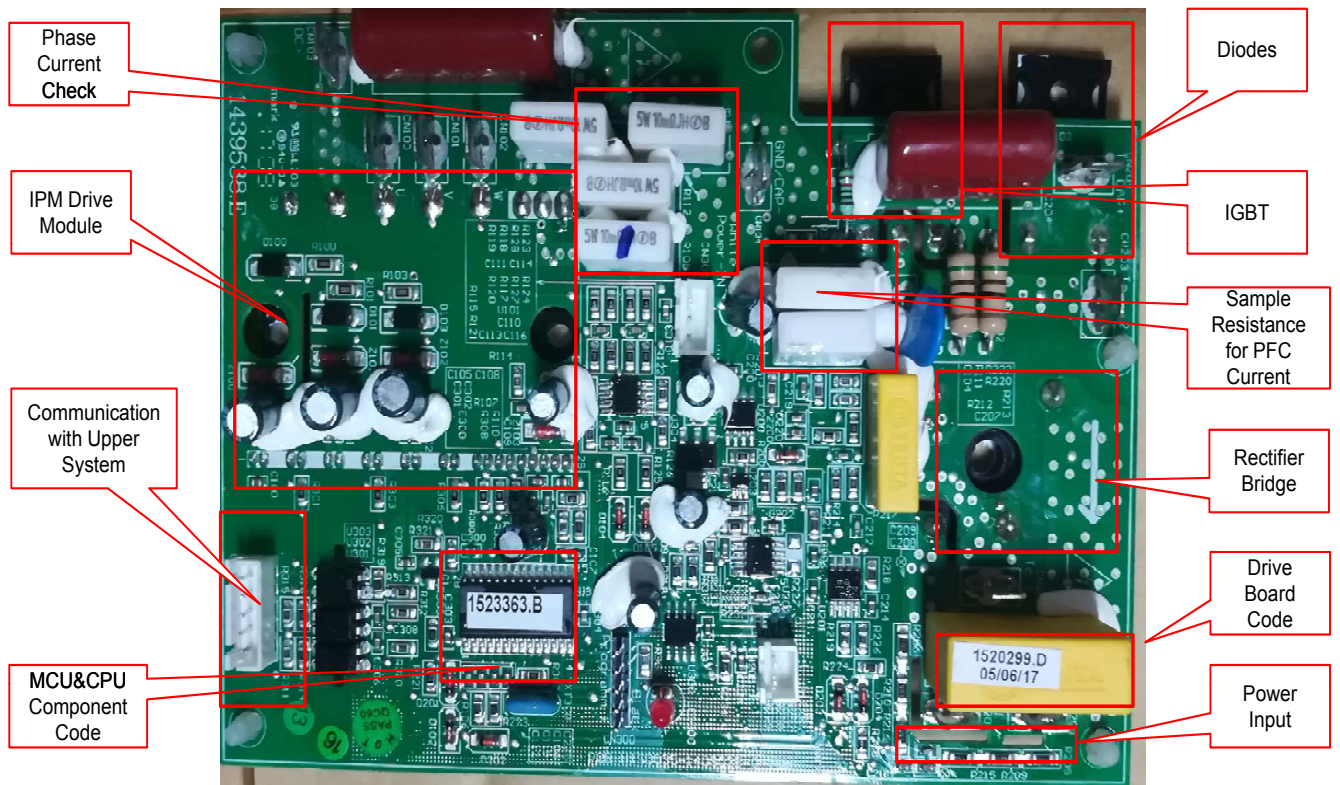


## 5.0/6.0/6.5HP (Main Control Board)

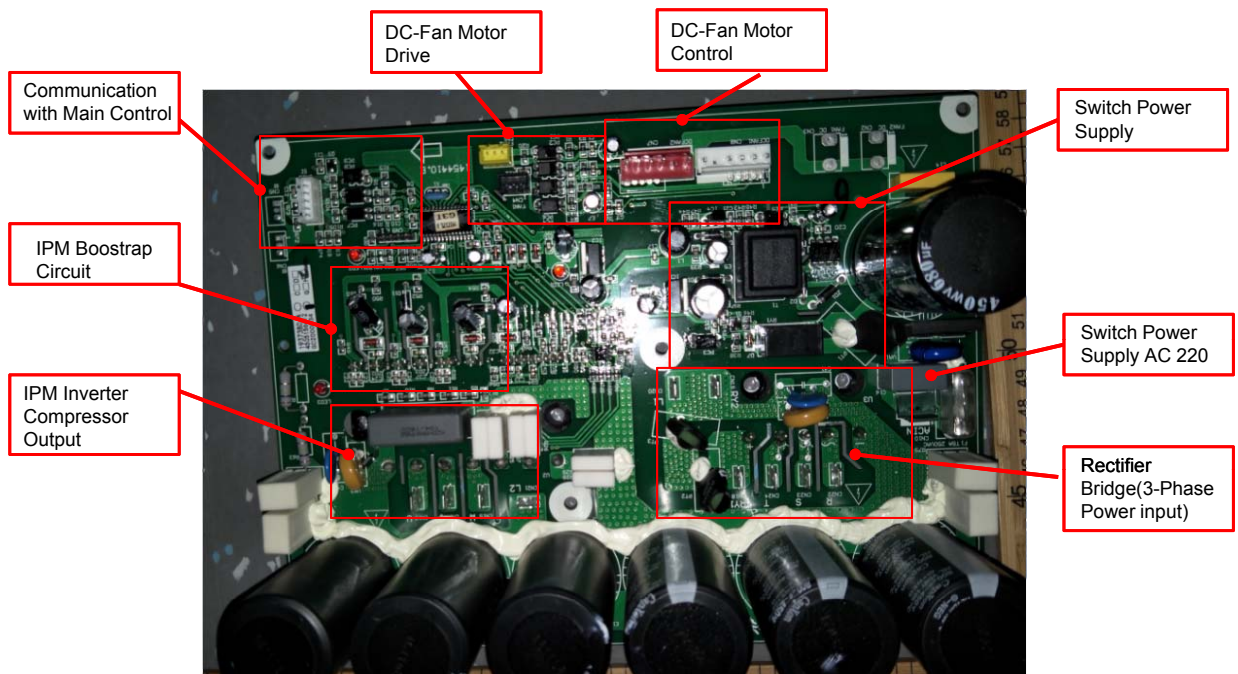


# 11. WIRING DIAGRAM

## 4.0HP (Drive board)



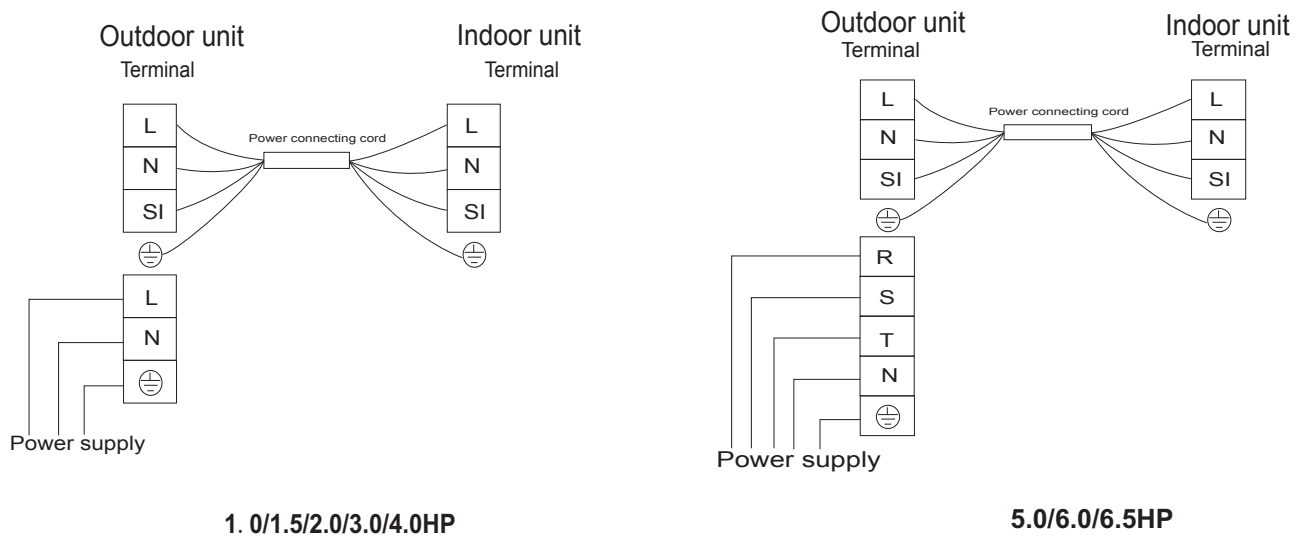
## 5.0/6.0/6.5HP (Drive board)





# 11. WIRING DIAGRAM

## 11.6 Common Wiring



### Recommend Wire Size

Model Capacity(HP)	Power Supply	ELB		Power Source Cable Size	Transmitting Cable Size
		Nominal Current(A)	Nominal Sensitive Current (mA)	EN60335-1	EN60335-1
1.0	220-240V ~,50Hz	20	30	3×1.5mm <sup>2</sup>	4×1.5mm <sup>2</sup>
1.5	220-240V ~,50Hz	20	30	3×1.5mm <sup>2</sup>	4×1.5mm <sup>2</sup>
2.0	220-240V ~,50Hz	20	30	3×2.5mm <sup>2</sup>	4×1.5mm <sup>2</sup>
3.0	220-240V ~,50Hz	32	30	3×2.5mm <sup>2</sup>	4×1.5mm <sup>2</sup>
4.0	220-240V ~,50Hz	40	30	3×4.0mm <sup>2</sup>	4×1.5mm <sup>2</sup>
5.0/6.0/6.5	380-415V 3N~,50Hz	32	30	5×2.5mm <sup>2</sup>	4×1.5mm <sup>2</sup>

**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.
  - (A) 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.

## 11. WIRING DIAGRAM

(B) DO NOT PUSH THE BUTTON OF THE MAGNETIC SWITCH(ES).

NOTES:

- 1) Follow local codes and regulations when selecting field wires.
- 2) The wire sizes marked in the table are selected at the maximum current of the unit according to the European Standard ,EN60335-1. Use wires which are not lighter than the ordinary tough rubber sheathed flexible cord (code designation H07RN-F) or ordinary polychloroprene sheathed flexible cord (code designation H07RN-F) .
- 3) Use a shielded cable for the transmitting circuit and connect it to ground .
- 4) In the case that power cables are connected in series, add each unit maximum current and select wires below.

Selection According to EN60335-1

Current i(A)	Wire Size(mm <sup>2</sup> )
$i \leq 6$	0.75
$6 < i \leq 10$	1
$10 < i \leq 16$	1.5
$16 < i \leq 25$	2.5
$25 < i \leq 32$	4
$32 < i \leq 40$	6
$40 < i \leq 63$	10
$63 < i$	*

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

## 12. FIELD SETTING

### 12. Field Setting

#### 12.1 DIP setting

##### Dip Switch Setting of Outdoor Unit

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.

SW2	Refrigerant Piping Length Setting
Setting is required	
Actual Piping Length L(m)	
$L < 15$	
$15 \leq L \leq \text{Max.Length allowed}$	
Setting before Shipment	ON OFF
	1 2 3 4
	1 2 3 4

After set refrigerant piping length dip switch , cooling/heating performance could be improved.

## 12. FIELD SETTING

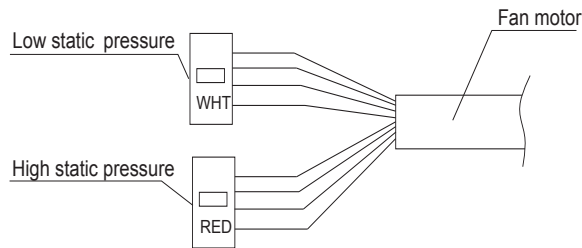
### 12.2 Static pressure setting

Setting of available of Static Pressure

The static pressure outside the indoor unit can be selected.

For AC MOTOR type:

You can change the static pressure by changing the fan motor terminal which refer to following figure.



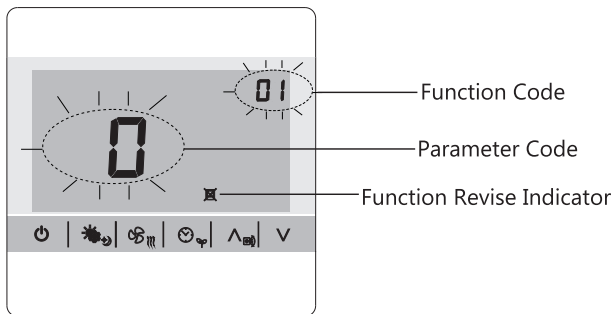
Model	Low static pressure	High static pressure
2.0HP	10Pa*	30Pa

Note \*: Default Settings is low static pressure by factory.

The noise under high static pressure is higher than low static pressure .

For DC MOTOR type:

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



HCWA21NEWH

Model Capacity (HP)	The range of static pressure	Function code set
1.0/1.5	0-50 Pa	1-50, more than 50 is 50 Pa, [default: 0 (0Pa)]
3.0	0-80 Pa	1-80, more than 80 is 80 Pa, [default: 0 (25Pa)]
4.0	0-120 Pa	1-120, more than 120 is 120 Pa, [default: 0 (47Pa)]
5.0/6.0/6.5	0-120 Pa	1-120, more than 120 is 120 Pa, [default: 0 (60Pa)]

#### Static pressure setting(HCWA21NEWH):

- 1 Hold down both “”, “” & “” buttons for 5 seconds, symbol “” and parameter code blinking at the same time.
- 2 Press “”/ “” button to adjust parameter number until display “17”, and press “” button to entering system parameter adaption state, symbol stop blinking.
- 3 Select desired parameter code 10 by pressing “”/ “” button , and press “” button to confirm.
- 4 Select desired function code to rewrite the parameter values by pressing “”/ “” button, and press “” button to confirm.
- 5 Press “” button to quit.

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



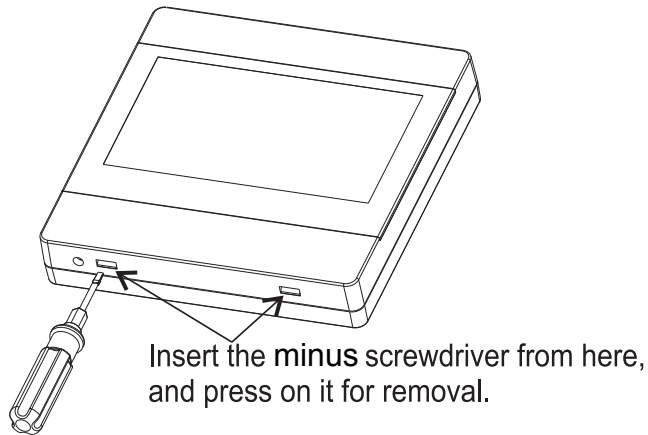
## 12. FIELD SETTING

### 12.3 Indoor unit parameter revise

Internal control parameter adjustment can be performed using wire remote controller .

#### 1.Connect wire remote controller with indoor unit

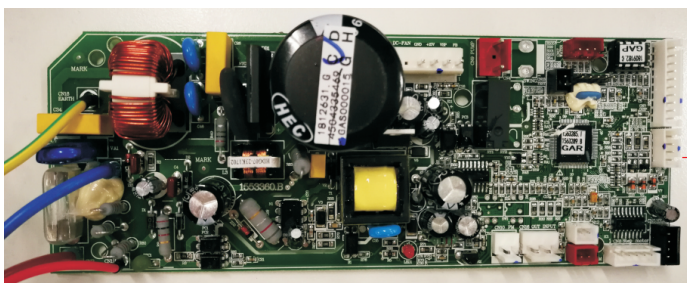
Step 1:Removing the upper cover of the wired controller



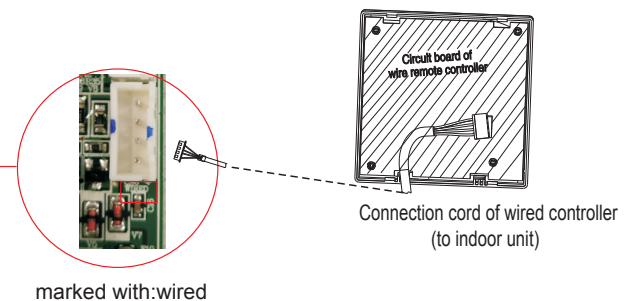
Note:

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

Step 2: Connecting wired controller with indoor unit

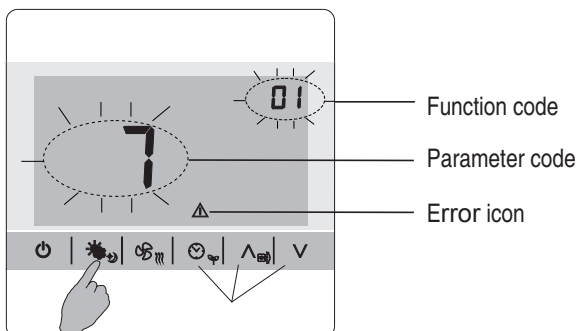


Indoor unit control board


















Wire remote controller

#### 1. Changing system parameter



## 12. FIELD SETTING

### OPERATION:

- ① Hold down both “”, “” and “” button for 5 seconds,  and parameter number symbol will be flickering simultaneously.
- ② Press “”/“” button to adjust parameter number until display “17”.  
And press “” button to enter system parameter adoption state, symbol  will stop flickering, parameter number will begin to flick.
- ③ Select desired parameter code by pressing “”/“” button following the table below, and press “” button to confirm.
- ④ Select desired function code by pressing “”/“” button, and press “” button to confirm.
- ⑤ Press “” button to quit Indoor unit parameter status revision.

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: Set Recovery of Power Break function; 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 is 10 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.	Only valid for DC motor cassette indoor unit
8	Cooling Temperature Compensation (indoor unit temperature sensor)	Integer	0: 0℃; 1: -0.5℃; 2: -1℃; 3: -1.5℃; 4: -2℃; 5: -2.5℃; 6: -3℃; 7: -3.5℃; 8: -4℃; 9: -4.5℃; 10: -5℃; (the wired controller displays integer with the symbol)	
9	Heating Temperature Compensation (indoor unit temperature sensor)	Integer	0: 0℃; 1: -0.5℃; 2: -1℃; 3: -1.5℃; 4: -2℃; 5: -2.5℃; 6: -3℃; 7: -3.5℃; 8: -4℃; 9: -4.5℃; 10: -5℃; (the wired controller displays integer with the symbol)	
10	Static Pressure Set	Integer	function code=static pressure value, the max. static pressure is different for different models.Default is 0(default static pressure related to specific models)	Ducted type(DC motor)

## 12. FIELD SETTING

PARAMETER CODE	PARAMETER DESCRIPTION	PARAMETER VALUE&REPRESENTATION		NOTE
		DATA TYPE	REPRESENTATION (FUNCTION CODE)	
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℃ (Single Character with symbol)	Temperature displayed on wired controller
14	Temperature Adjustment-Heating	Character	-10~10℃ (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 disabled; =1, Access control function is enabled; =2, fire protection function is enabled; =3, Access control, fire protection are all enabled; =4, ON/OFF function are all enabled.	

## 12. FIELD SETTING

### 12.4 Running parameter query

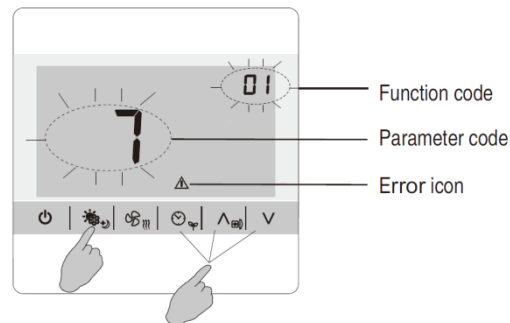
Running parameter can be referred by 7 segment display or specified wired remote controller.

#### Query by wired remote controller

Operation:

1.Connect wire remote controller with indoor unit(same method as Indoor unit parameter revise )

2.Changing system parameter



**OPERATION:**

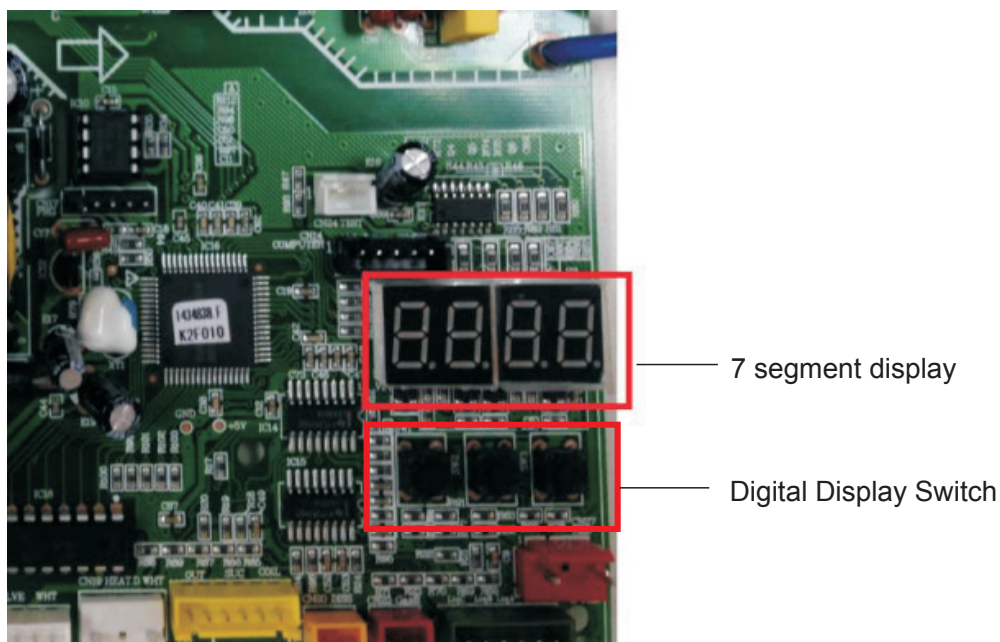
① Hold down both “”, “” and “” button for 5 seconds, symbol and parameter number blinking at the same time.

② Press “”/“” button to select parameter number as you need, 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

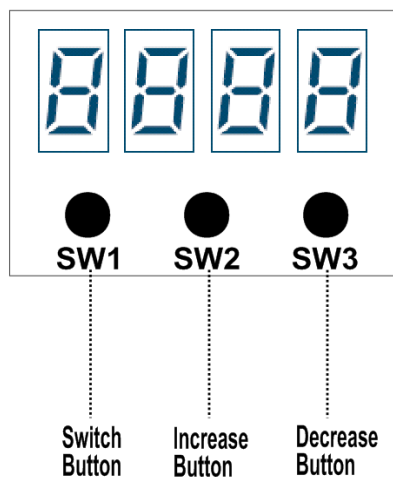
Query by 7 segment display



**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 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

increase;

## 12. FIELD SETTING

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 checked numbers are selected.

Parameters can be checked as following table below.

Parameter code	Descriptions
0	Protect 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 Fan 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 Instructions for the function setting of access control, fire protection, ON/OFF

#### 12.5.1 Factory setting

ON/OFF function is disabled as factory default while both the access control and fire protection functions are enabled.

In case of using or cancelling the access control / fire protection / (ON/OFF) function, use the wired controller to modify the parameters of indoor unit.

Note: please refer to "Indoor unit parameter revise" section in TC Manual for how to use the wired controller to modify the parameters of indoor unit.

#### 12.5.2 Function introduction

(1) Access control: control mode to control the machine startup & shutdown based on the on & off state of the access control port.

(2) Fire protection: control mode to control the machine startup & shutdown based on the on & off state of the fire protection port.

(3) ON/OFF: special control mode to achieve the control of indoor unit startup & shutdown based on the input state of the fire protection port of the indoor unit (no other way can control startup & shutdown) and output the fault status of indoor unit through OUT INPUT port.

#### 12.5.3 Function setting

##### (1) Hardware connection

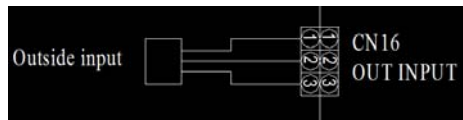


Figure 1 electrical wiring diagram



Figure 2 short wiring

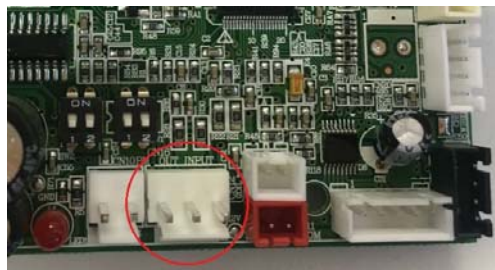


Figure 3 main control board

3 pins of the OUT INPUT CN16 socket shown in the electrical wiring diagram of Figure 1 are short circuited state under as factory default (an external short circuit plug shown as Figure 2, and the OUT INPUT CN16 socket of main control board is shown as Figure 3).

(Illustration: the socket number in circuit is subject to the actual serial number of PCB.)

- 1) When using the door lock function, the red wire should be cut and connect the door lock control switch attached to it (supplied by user), and the connecting wire should be 22AWG or above. The door lock switch is closed normal operation and open contact when the equipment must be stopped.
- 2) When using the fire protection function, the red wire should be cut and connect the fire protection lock control switch attached to it (supplied by user), and the connecting wire should be 22AWG or above. The protection control switch is closed normal operation and open contact when the equipment must be stopped.

## 12. FIELD SETTING

- 3) When using the ON/OFF function, the red wire should be cut and connect the door lock control switch attached to it (supplied by user), and the connecting wire should be 22AWG or above. In normal conditions, the unit operates normally once the switch is closed and shuts down once the switch is off.

### (2) Timing sequence description:

- Access control:

- 1) Control of entrance card disconnection: the air conditioner will be shut down after the access control signal is disconnected for 30 seconds. In this state, the indoor unit can't start. If the user performs start operation, the wired controller will not respond and displays power-off status.
- 2) Control of entrance card connection: after the closed circuit of entrance card interface, power-on restrictions are released, the wired controller maintains power-off and the startup & shutdown control is enabled.

- Fire protection

- 1) Access to fire protection: the air conditioner will be shut down and won't blow air after the access control signal is disconnected for 30 seconds. In this state, the indoor unit can't be started. If the user performs start operation, the wired controller shall not respond and displays power-off status.
- 2) Cancellation of fire protection: after the short circuit of fire protection signal, release power-on restrictions, the wired controller maintains power-off status and the startup & shutdown control is enabled.

- ON/OFF

- 1) In the situation where ON/OFF function is enabled, the port is closed and in short circuit, the indoor unit starts; the indoor unit shuts down once the port is disconnected;
- 2) Other operation information (such as mode, air speed, air door, etc.) except for startup & shutdown can be set through the wired controller, remote-controller and WIFI module, priority is given to the latest command received.
- 3) In the mode of ON/OFF function, wired controller, remote-controller, WIFI module and access control cannot control the unit startup & shutdown, neither the operation mode, timer or sleeping mode.
- 4) There will be 12V signal output when machine fault occurs.

### (3) Relative priorities of instructions

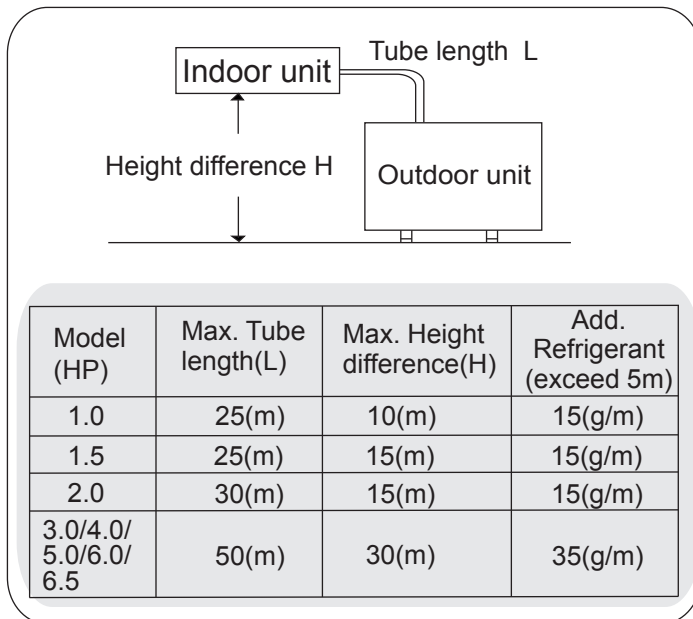
ON/OFF has the highest priority. The access control function shall be disabled when ON/OFF is enabled. Access control and fire prevention functions shall not affect each other.



## 13. PIPING WORK AND REFRIGERANT CHARGE

### 13. Piping work and refrigerant charge

#### 13.1 MAX. length allowed

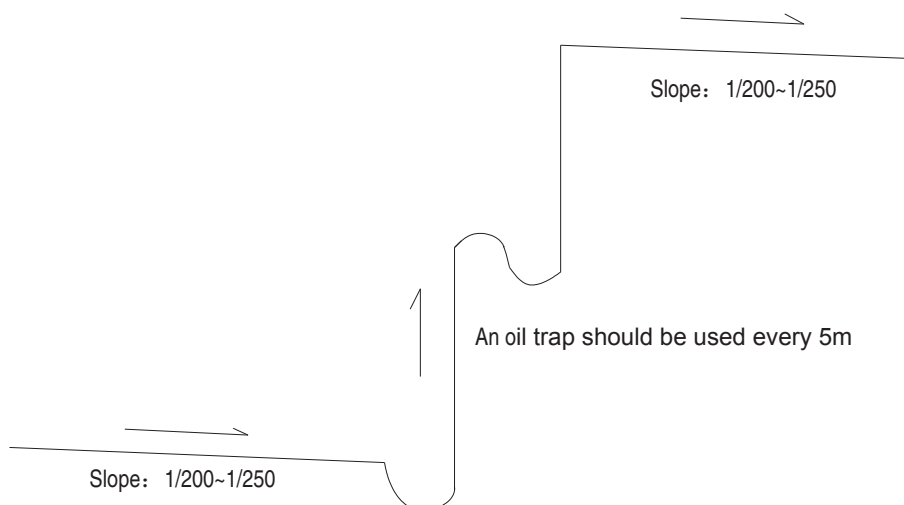


\*Do your best to reduce the pipe length. Long pipe may cause capacity decrease.

Refrigerant precharge for a piping length of 5m is charged in the outdoor unit at the factory. When the piping is longer than 5m, additional refrigerant is necessary.

#### 13.2 Oil trap

When the indoor unit is lower than outdoor unit and height is larger than 5m, an oil trap should be used for every 5m.



## 13. PIPING WORK AND REFRIGERANT CHARGE

NOTE:

1. When the indoor unit is lower than outdoor unit for more than 5m, an oil trap should be used on suction piping.

To avoid storing too much oil in the oil trap, the oil trap should be as short as possible.

2. The horizontal piping should be slope down along the refrigerant flow direction, to bring the oil back to compressor, the slope is about 1/200 to 1/250.

In order to ensure cooling/heating performance better, the refrigerant piping should be as short and straight as possible.

### 13.3 Additional refrigerant charge

Although refrigerant has been charged into this unit, additional refrigerant charge is required according to 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 ( $W_0$  (kg))

$W_0$  is the outdoor unit refrigerant charge before shipment ;

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

Model	Refrigerant precharged before shipment( $W_0$ (g))	Total refrigerant pipe length	
		0m~5m	5m~60m
1.0HP	830	0g	$X_g = 15g / m \times (\text{Total pipe length}(m) - 5)$
1.5HP	1050	0g	
2.0HP	1300	0g	
3.0HP	1700	0g	
4.0HP	2800	0g	$X_g = 35g / m \times (\text{Total pipe length}(m) - 5)$
5.0HP	3200	0g	
6.0HP	3780	0g	
6.5HP	3950	0g	

## 14. CONTROL MODE

### 14. Control mode

#### 14.1 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

###### Control function

##### 2.1 Emergency switch

Press the emergency button can realize the starting or closing Machine, starting up according to the automatic mode of operation.

- (1) Press this button to turn ON the unit, the conditioner will be run with auto mode, and press it again to turn off.
- (2) 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 station, machine would be forced to turn to cooling operation with high speed, the flaps sweeping and the air conditioner's operation is irrelevant with room temperatures.
- (3) 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 to detect the default settings of room temperature at room temperature. If the indoor control unit for long time have not received remote control signal, will automatically switch to the air conditioner body temperature sensor.

##### 2.3 Timer function

###### (1) Timer on:

When set to start in 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 turn on and operates in the

## 14. CONTROL MODE

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 in 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 turn 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 turn off automatically.

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

## 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) In default, the setting is to cancel the sleep function. Turning off the unit will also cancel the sleep function.

## 2.5 High 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 adjust to lowest temp.; the Fan speed is powerful speed; frequency of high frequency operation.

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

## 2.6 mute function (only for some remote controller)

In the indoor machine operation mode, You may turn on mute function and turn off mute function by mute key, The air conditioner will run by mute fan speed in mute mode.

## 14. CONTROL MODE

### 2.7 prevent cooling wind 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 warmth.

### 2.8 blow waste heating and waste cooling function

The heating mode, remote shutdown, such as indoor heat exchanger temperature is higher, the wind blowing out opportunities continue to run the waste heat.

Cool and dehumidification mode , after the compressor close, indoor machine will continue to set the speed of operation for a period of time.

### 2.9 Dehumidifying method:

Remote control setting dehumidifying mode, indoor machine forced to run at low speed ( high power key or a strong bond also maintain a low wind speed ) , the outdoor machine according to the refrigeration mode operation.

### 2.10 Self Recovery of Power Break

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

How to set/cancel

It can be set /cancel by wire remote controller.

Details see Internal control parameter adjustment.

### 2.11 Fault code

The fault code can be showed by LED on the indoor panel.

### 2.12 Filter clean

Filer clean led will light up when air filter is clogged with dust.

How to set/cancel

It can be set /cancel by wire remote controller.

Details see Internal control parameter adjustment.

## 14. CONTROL MODE

### 14.2 Outdoor unit mode control

Control function

#### 1. Cooling Anti-freeze Protection

To prevent indoor air conditioner evaporator temperature is too low, the indoor coil sensor for real time detection of evaporator. If the indoor coil temperature is too low, the compressor will protect.

#### 2. Overload Protection

Air can heat exchanger temperature sensor for monitoring, when the sensor when the temperature is too high, the compressor will be automatic protection

#### 3. Exhaust temperature protection

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

#### 4. Oil-return Control

When the compressor runs for a long time low frequencies, control system will start the return oil program. The system in the oil return 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, as well as fan mode.

#### 6. Four-way Valve Control

Four-way valve of the outdoor machine shuts down when cooling and defrosting but starts when heating. During the heating process, the four way valve to stop working for a period of time after compressor disconnect.

#### 7. Start-up Protection

To prevent compressor from restart frequently in the condition that system pressure has not been completely balanced, it can't be restarted within 3 minutes.

#### 8. Pressure Protection

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

## 15. SENSOR PARAMETER

### 15. Sensor parameter

THE PARAMETER OF OUTDOOR COMPRESSOR DISCHARGE TEMPERATURE SENSOR:  
( R0=187.25K±6.3% ; R100=3.77K±2.5K ; B0/100=3979K±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
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

## 15. SENSOR PARAMETER

T [ °C ]	Rmin [ KΩ ]	Rnom [ KΩ ]	Rmax [ KΩ ]	DR(MIN)%	DR(MAX)%
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
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



## 15. SENSOR PARAMETER

T [ °C ]	Rmin [ KΩ ]	Rnom [ KΩ ]	Rmax [ KΩ ]	DR(MIN)%	DR(MAX)%
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

## 15. SENSOR PARAMETER

THE PARAMETER OF THE other sensor in INDOOR AND OUTDOOR UNIT : ( R0=15K±2% ; B0/100=3450K±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

## 15. SENSOR PARAMETER

T [°C]	Rmin [ KΩ]	Rnom [ KΩ]	Rmax [ KΩ]	DR(MIN)%	DR(MAX)%
21	6.132	6.347	6.567	-3.39	3.35
22	5.894	6.109	6.330	-3.52	3.49
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

## 15. SENSOR PARAMETER

T [°C]	Rmin [ KΩ]	Rnom [ KΩ]	Rmax [ KΩ]	DR(MIN)%	DR(MAX)%
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
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.

Specifications in this document are subject to change without notice, in order that Hitachi-Johnson Controls Air Conditioning, Inc. may bring the latest innovations to their customers.

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