ComfortStar®
Orbitseries™

1-WAY CASSETTE INDOOR UNIT TECHNICAL MANUAL

AC SYSTEM

220-240V/60Hz

INDOOR UNITS

Revision V 2303

AHRI CERTIFIED®
www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI

c UL us LISTED

Model Numbers:

CC-KPAA007-1S, CC-KPAA009-1S, CC-KPAA012-1S, CC-KPAA016-1S, CC-KPAA020-1S, CC-KPAA024-1S

WARNING

- Installation MUST conform with local building codes or, in the absence of local codes, with the National Electrical Code NFPA70/ANSI C1-1993 or current edition and Canadian Electrical Code Part1 CSA C.22.1.
- The information contained in the manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments
- Installation or repairs made by unqualified persons can result in hazards to you and others.
- Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

Content

1. External appearance

2. Specifications

Model			CC-KPAA007-1S	CC-KPAA009-1S
Power supply			220-240V/1PH/50Hz	220-240V/1PH/50Hz
Capacity	Cooling	kW	2.2	2.8
	Heating	kW	2.5	3.2
Power input		kW	0.05	0.05
Fan motor	Model		YSK100-27F-4P3	YSK100-27F-4P3
	Type		AC	AC
	Brand		xinjun	xinjun
	Capacitor	μF	2	2
	Speed	r/min	1240/930/640/560	1240/930/640/560
Indoor coil	Number of rows		3	3
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube diameter and type	mm	Ø7,Innergroove Tube	Ø7,Innergroove Tube
Air flow		m^3/h	520	520
Sound pressure level		dB(A)	30～36	30～36
Body	Dimension (W×H×D)	mm	985x513x250	985x513x250
	Packing (W×H×D)	mm	1150×645×275	1150×645×275
	Net/Gross weight	kg	24/28	24/28
Panel	Dimension (W×H×D)	mm	1070×520x50	1070×520x50
	Packing (W×H×D)	mm	1090×540×65	1090×540×65
	Net/Gross weight	kg	3.6/5	3.6/5
Refrigerant type			R410A	R410A
Throttle type			Electrical expansion valve	Electrical expansion valve
Design pressure		MPa	4.5	4.5
Liquid pipe / Gas pipe		mm	Ø6.35/ Ø9.53	Ø6.35/ Ø9.53
Connecting wire	Power wire	mm2	2.5*2+2.5(L≤20m) 4*2+2.5(20<L≤50m)	2.5*2+2.5(L≤20m) 4*2+2.5(20<L≤50m)
	Signal wire	mm2	0.75	0.75
Drainage water pipe (Outer diameter)		mm	Ø25	Ø25
Controller	Standard		Remote controller	Remote controller
	Optional		Wired controller	Wired controller
Operation temp		˚C	16~32	16~32

Notes:

1) Nominal cooling capacities are based on the following conditions.

- *Outdoor temperature: 35°C DB*
- *Return air temperature: 27°C DB, 19°C WB*
- *Equivalent piping length: 8m in horizontal*

2) Nominal heating capacities are based on the following condition.

- *Outdoor temperature: 7°C DB, 6°C WB*

- *Return air temperature: 20°C DB*
- *Equivalent piping length: 8m in horizontal*

3) Sound pressure level: Semi-anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.4 m.

4) The above data may be changed without notice for future improvement on quality and performance.

Model			**CC-KPAA012-1S**	**CC-KPAA016-1S**
Power supply			220-240V/1PH/50Hz	220-240V/1PH/50Hz
Capacity	Cooling	kW	3.6	4.5
	Heating	kW	4.0	5.0
Power Input		kW	0.05	0.07
Fan motor	Model		YSK100-27F-4P3	YSK-23-4
	Type		AC	AC
	Brand		xinjun	xinjun
	Capacitor	μF	2	1.8
	Speed	r/min	1240/930/640/560	880/820/730/660
Indoor coil	Number of rows		3	3
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube diameter and type	mm	Ø7,Innergroove Tube	Ø7,Innergroove Tube
Air flow		m^3/h	520	610
Sound pressure level		dB(A)	30~36	36-41
Body	Dimension (W×H×D)	mm	985x513x250	1295x553x290
	Packing (W×H×D)	mm	1150×645×275	1460×680×305
	Net/Gross weight	kg	24/28	35.5/40
Panel	Dimension (W×H×D)	mm	1070×520x50	1380x560x50
	Packing (W×H×D)	mm	1090×540×65	1405×575×70
	Net/Gross weight	kg	3.6/5	5/7
Refrigerant type			R410A	R410A
Throttle type			Electrical expansion valve	Electrical expansion valve
Design pressure		MPa	4.5	4.5
Liquid pipe / Gas pipe		mm	Ø6.35/ Ø12.7	Ø9.53/ Ø12.7
Connecting wire	Power wire	mm2	2.5*2+2.5(L≤20m) 4*2+2.5(20<L≤50m)	2.5*2+2.5(L≤20m) 4*2+2.5(20<L≤50m)
	Signal wire	mm2	0.75	0.75
Drainage water pipe (Outer diameter)		mm	Ø25	Ø25
Controller	Standard		Remote controller	Remote controller
	Optional		Wired controller	Wired controller
Operation temp		˚C	16~32	16~32

Notes:

1) Nominal cooling capacities are based on the following conditions.

- *Outdoor temperature: 35°C DB*
- *Return air temperature: 27°C DB, 19°C WB*

- *Equivalent piping length: 8m in horizontal*

2) *Nominal heating capacities are based on the following condition.*
   - *Outdoor temperature: 7°C DB, 6°C WB*
   - *Return air temperature: 20°C DB*
   - *Equivalent piping length: 8m in horizontal*

3) *Sound pressure level: Semi-anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.4 m.*

4) *The above data may be changed without notice for future improvement on quality and performance.*

Model			**CC-KPAA020-1S**	**CC-KPAA024-1S**
Power supply			220-240V/1PH/50Hz	220-240V/1PH/50Hz
Capacity	Cooling	kW	5.6	7.1
	Heating	kW	6.3	8
Power Input		kW	0.07	0.11
Fan motor	Model		YSK-23-4	YSK110-68F-4P3
	Type		AC	AC
	Brand		xinjun	xinjun/kangbao
	Capacitor	μF	1.8	3.5
	Speed	r/min	880/820/730/660	1370/1180/920/800
Indoor coil	Number of rows		3	3
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube diameter and type	mm	Ø7,Innergroove Tube	Ø7,Innergroove Tube
Air flow		m^3/h	750	950
Sound pressure level		dB(A)	35-42	38-46
Body	Dimension (W×H×D)	mm	1295x553x290	1295x553x290
	Packing (W×H×D)	mm	1460×680×305	1460×680×305
	Net/Gross weight	kg	35.5/40	35.5/40
Panel	Dimension (W×H×D)	mm	1380x560x50	1380x560x50
	Packing (W×H×D)	mm	1405×575×70	1405×575×70
	Net/Gross weight	kg	5/7	5/7
Refrigerant type			R410A	R410A
Throttle type			Electrical expansion valve	Electrical expansion valve
Design pressure		MPa	4.5	4.5
Liquid pipe / Gas pipe		mm	Ø6.35/ Ø12.7	Ø9.53/ Ø15.88
Connecting wire	Power wire	mm2	2.5*2+2.5(L≤20m) 4*2+2.5(20<L≤50m)	2.5*2+2.5(L≤20m) 4*2+2.5(20<L≤50m)
	Signal wire	mm2	0.75	0.75
Drainage water pipe (Outer diameter)		mm	Ø25	Ø25
Controller	Standard		Remote controller	Remote controller
	Optional		Wired controller	Wired controller
Operation temp		˚C	16~32	16~32

Notes:

5) Nominal cooling capacities are based on the following conditions.

- *Outdoor temperature: 35°C DB*
- *Return air temperature: 27°C DB, 19°C WB*
- *Equivalent piping length: 8m in horizontal*

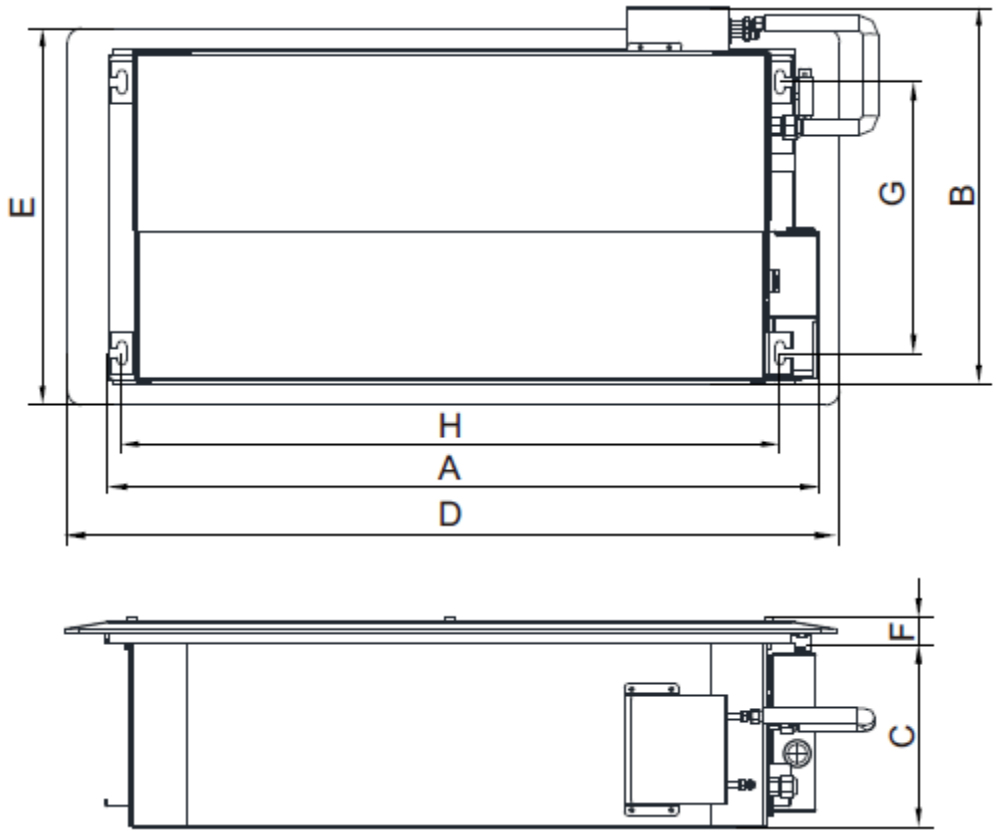
6) Nominal heating capacities are based on the following condition.

- *Outdoor temperature: 7°C DB, 6°C WB*
- *Return air temperature: 20°C DB*
- *Equivalent piping length: 8m in horizontal*

7) Sound pressure level: Semi-anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.4 m.

8) The above data may be changed without notice for future improvement on quality and performance.

3. Dimensions

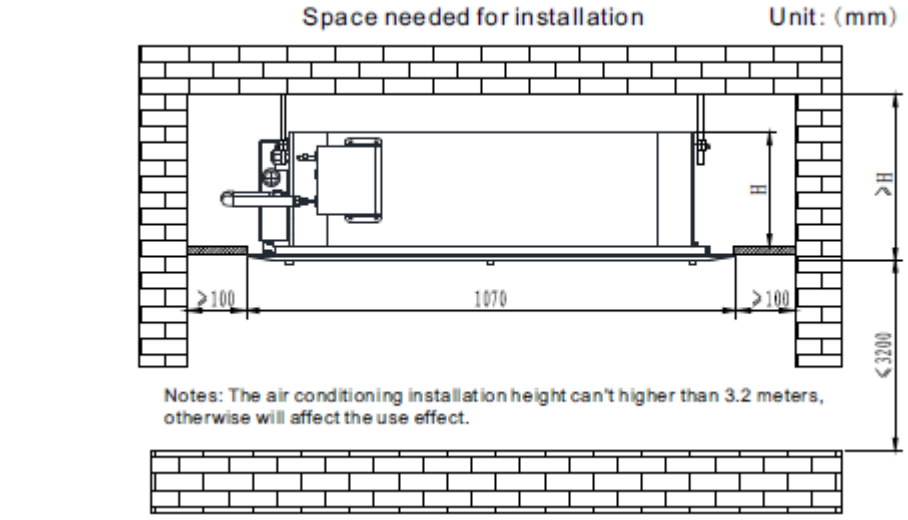


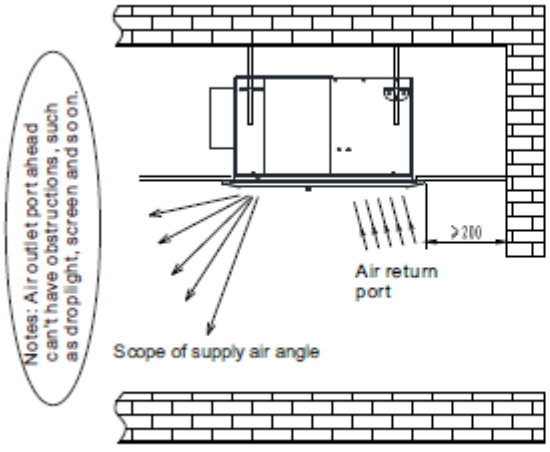
Unit: mm

Size code / Model of indoor unit	Body size			Panel size			Installing size	
	A	B	C	D	E	F	G	H
2. 2kW～3. 6kW	985	513	250	1070	520	50	374	912
4.5kW～7. 1kW	1295	553	290	1380	560	50	412	1222

4. Service space

- Provide enough space for installation and maintenance..
- The ceiling is horizontal and the building construction can support indoor unit.
- Ventilation is accessible and the site suffers from the minimal impact of extraneous air.
- Air stream can spread to everywhere of the room.
- Connecting pipe and drainpipe are easy to be extracted.
- No direct radiation of heat.
- If the temperature and humidity of the ceiling exceeds respectively 30℃and RH80%, please
- stick insulating material on the body of the air conditioner. Please use glass wool or expanded
- polyethylene etc., which is more than 10 mm thick. (If it is more than 10 mm, please collect it in the opening of the ceiling
- The appliance must be installed 2,5m above floor.
- The operating temperature for the unit are 23~32° C(Indoor).





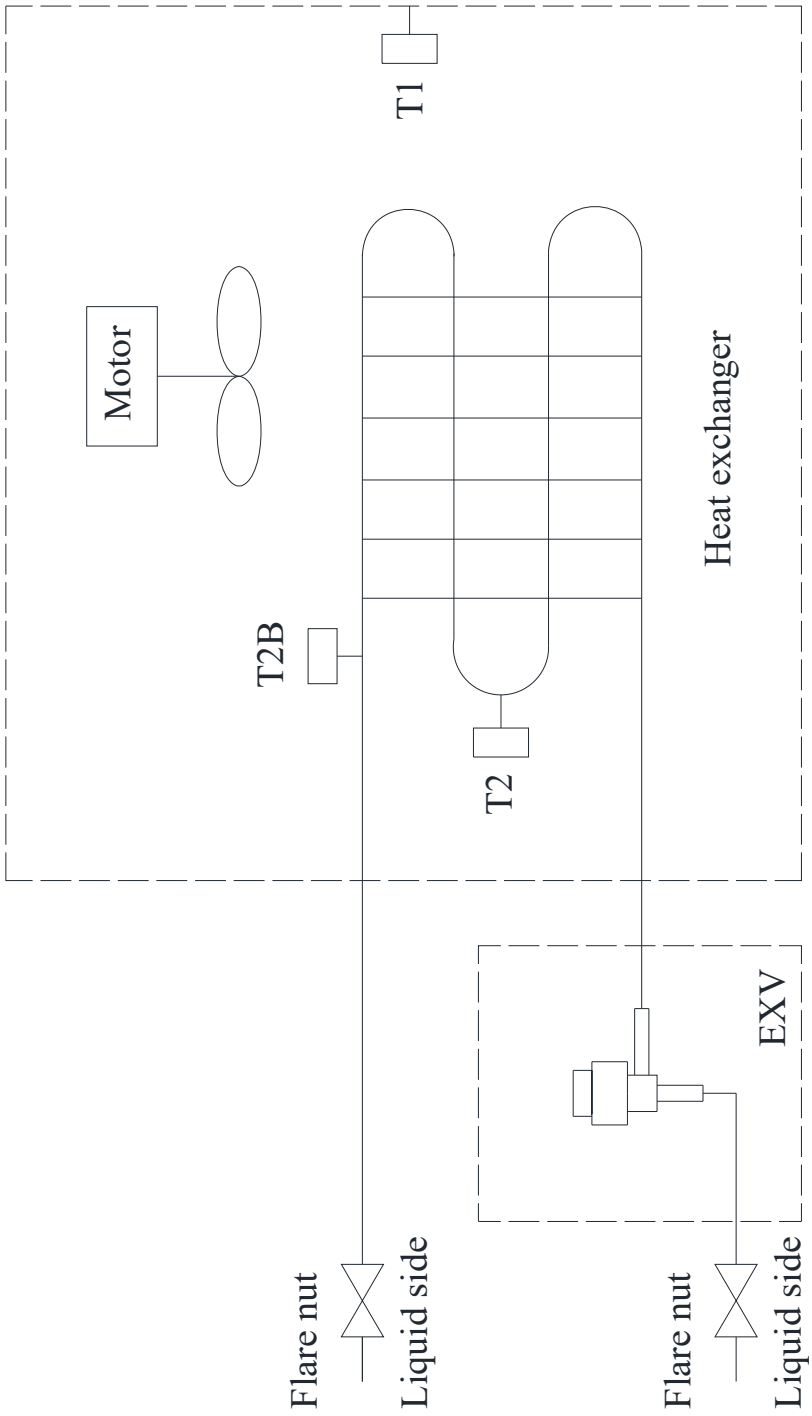
Model	Tape sizes (H)
2. 2kW～3. 6kW	250
4.5kW～7.1kW	290

Notes: Actual sizes are subject to real products.

Note:

Air outlet port ahead can't have obstructions, such as drop light, screen and so on.

5. Piping diagram



Notes:

1) T1: Room temperature sensor

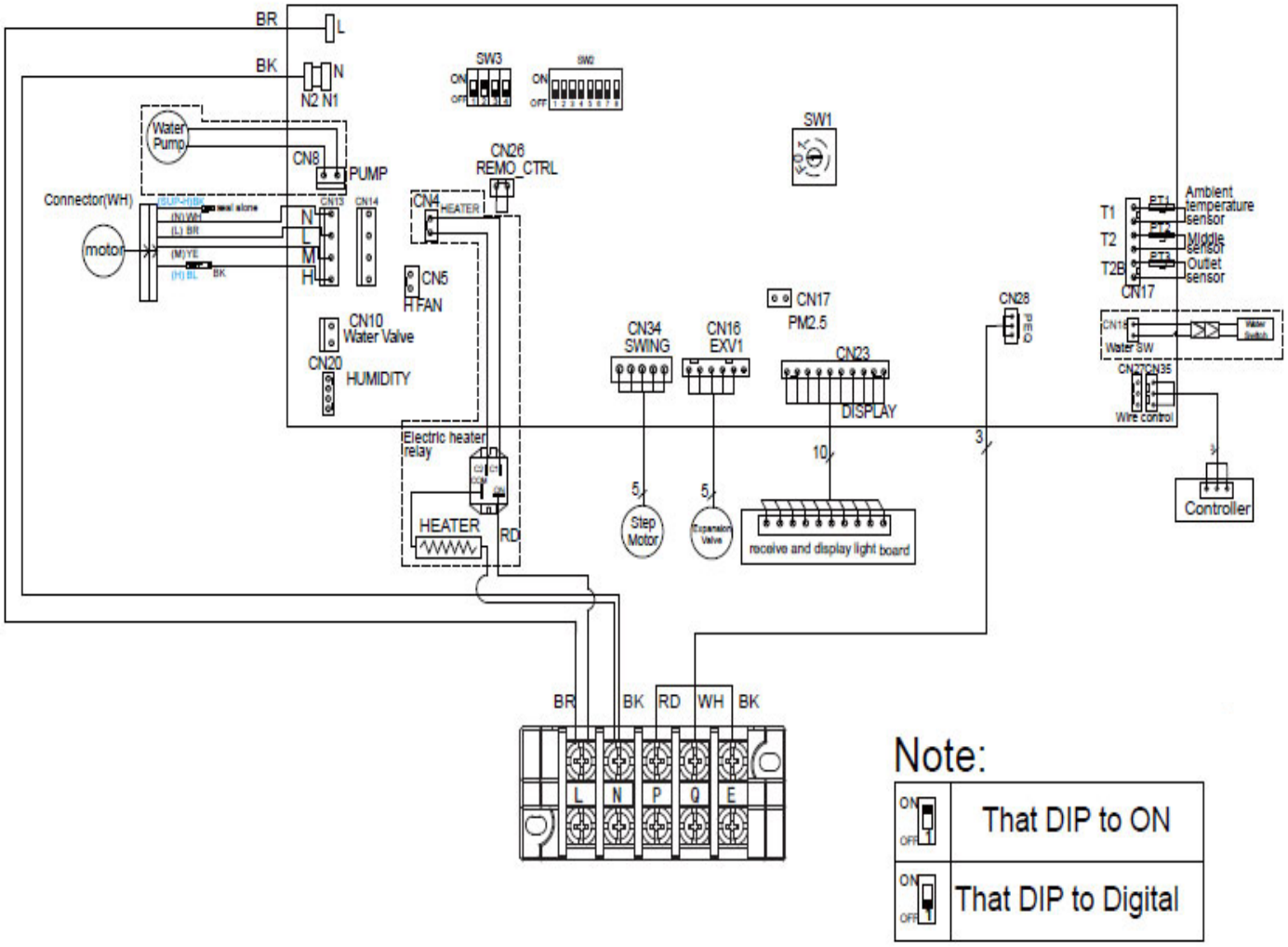
2) T2: Temperature sensor of middle heat exchanger

3) T2B: Temperature sensor of heat exchanger outlet

4) EXV: Electrical expansion valve

6. Wiring diagram

6.1 Wiring diagram



Notes:

1) Color code:

- *RD: Red*
- *OR: Orange*
- *BK: Black:*
- *BR: Brown*
- *WH: White*

2) T1: Room temperature sensor

3) T2: Temperature sensor of middle heat exchanger

4) T2B: Temperature sensor of heat exchanger outlet

5) EXV: Electrical expansion valve

6.2 Dial switches

6.2.1 SW1:Capacity switch.

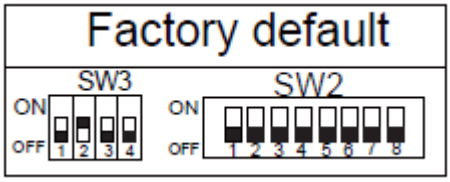
Different number in the switch indicates different capacity. It is set in factory; leave it as default setting,

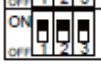
HP	0.8	1	1.2	1.7	2	2.5	3	3.2	4	5	6
Power	18/22	25/26/28	32/35/36	40/45/46	50/51/56	60/63/66/71	80	88/90	100/110/112	120/125/140	150/160
Dial code	0	1	2	3	4	5	6	7	8	9	A

Remarks:

1. Fan motor's factory default setting is high speed, the connection wire is black to blue.
2. If unit have 2 motors, then both motors factory default settings are super high speed.
3. Relay and relative connection wires of electrical heater need installing only for the units with electrical heater.
4. on-site installation can be selected according to the length of the return air box and noise changed to high windshield.

6.2.2 SW3



Type selection	
SW3 NO1,2,3	Type
	Normal duct unit
	Fresh air processor
	One-way cassette
	Two-way cassette
	HRV
	10HP floor standing unit
	Reserve

Mode Select bits		
SW3 NO.4		Automatic Addres sing mode and （Factory default）
		Test mode (to allow clear address)

6.2.3 SW2

Refrigeration temperature compensation temperature valueselect bits			
SW2 NO.1		3℃	Factory default
		1℃	

Heating temperature compensation temperature value select bits			
SW2 NO.2		6℃	Factory default
		2℃	

Anti-cold wind off the fan temperature selection bit		
SW2 NO.3&4		Temperature selection
	Factory default	15℃
		20℃
		24℃
		26℃

Heating stop the fan time to chooset			
SW2 NO.5		4min	Factory default
		8min	

7 Capacity tables

7.1 Cooling

TC: Total Capacity **SC**: Sensible Capacity **WB**: Wet-bulb Temperature **DB**: Dry-bulb Temperature

Capacity (kW)	Outdoor temperature (˚C DB)	Indoor temperature (˚C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.7	1.7	3.0	1.7
	12.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.7	1.7	2.9	1.6
	14.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.7	1.7	2.9	1.6
	16.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.7	1.7	2.9	1.6
	18.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.7	1.7	2.9	1.6
	20.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.7	1.7	2.8	1.5
	21.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.7	1.7	2.8	1.5
	23.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.6	1.6	2.8	1.5
	25.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.6	1.6	2.7	1.5
	27.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.6	1.6	2.7	1.5
	29.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.5	1.5	2.6	1.5
	31.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.5	1.5	2.6	1.5
	33.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.5	1.5	2.5	1.5
	35.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.4	1.5	2.5	1.5
	37.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.4	1.7	2.4	1.5	2.4	1.5
	39.0	1.6	1.4	1.9	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.5	2.4	1.5
2.8	10.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.2	3.8	2.2
	12.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.2	3.7	2.1
	14.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.2	3.7	2.1
	16.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.2	3.6	2.1
	18.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.2	3.6	2.1
	20.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.2	3.5	2.1
	21.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.2	3.5	2.1
	23.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.4	2.1	3.5	2.1
	25.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.3	2.1	3.4	2.0
	27.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.3	2.1	3.4	2.0
	29.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.2	2.0	3.3	1.9
	31.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.2	2.0	3.3	1.9
	33.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.1	2.1	3.2	2.0	3.2	1.9
	35.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.0	2.0	3.1	2.0	3.2	1.9
	37.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.0	2.0	3.1	2.0	3.1	1.8
	39.0	2.0	1.7	2.4	1.9	2.6	2.1	2.8	2.1	3.0	2.0	3.1	2.0	3.1	1.8

Capacity (kW)	Outdoor temperature	Indoor temperature (˚C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
3.6	10.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.4	2.6	4.8	2.7
	12.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.4	2.6	4.8	2.7
	14.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.4	2.6	4.7	2.6
	16.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.4	2.6	4.6	2.6
	18.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.4	2.6	4.6	2.6
	20.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.4	2.6	4.5	2.5
	21.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.4	2.6	4.5	2.5
	23.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.2	2.5	4.4	2.4
	25.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.2	2.5	4.4	2.4
	27.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.1	2.4	4.3	2.4
	29.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.1	2.4	4.3	2.4
	31.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.1	2.4	4.3	2.4
	33.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.1	2.4	4.3	2.3
	35.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.9	2.6	4.1	2.4	4.2	2.3
	37.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.8	2.5	4.0	2.3	4.2	2.2
	39.0	2.6	2.1	3.0	2.3	3.4	2.5	3.6	2.6	3.8	2.5	4.0	2.3	4.1	2.2
4.5	10.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	6.0	3.5
	12.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	6.0	3.5
	14.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	5.9	3.4
	16.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	5.7	3.4
	18.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	5.8	3.4
	20.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	5.8	3.3
	21.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	5.7	3.3
	23.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.4	3.4	5.6	3.2
	25.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.3	3.2	5.5	3.2
	27.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.2	3.2	5.3	3.2
	29.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.2	3.2	5.3	3.2
	31.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.1	3.1	5.2	3.1
	33.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	5.0	3.1	5.2	3.0
	35.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	4.9	3.1	5.1	3.0
	37.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.9	3.2	4.9	3.1	5.0	3.0
	39.0	3.2	2.6	3.8	2.8	4.2	3.1	4.5	3.2	4.7	3.1	4.8	3.1	4.9	2.9

Capacity (kW)	Outdoor temperature	Indoor temperature (˚C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
5.6	10.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.53	4.41	6.79	3.95
	12.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.53	4.41	6.73	3.92
	14.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.47	4.37	6.67	3.88
	16.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.41	4.33	6.61	3.85
	18.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.35	4.29	6.55	3.81
	20.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.29	4.25	6.49	3.77
	21.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.24	4.21	6.42	3.74
	23.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.35	6.18	4.17	6.36	3.70
	25.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.10	4.30	6.12	4.13	6.30	3.67
	27.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	6.04	4.26	6.06	4.09	6.24	3.63
	29.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	5.98	4.22	6.00	4.05	6.18	3.60
	31.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	5.93	4.18	5.94	4.01	6.12	3.56
	33.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	5.87	4.10	5.88	3.97	6.06	3.53
	35.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.08	5.78	4.06	5.83	3.93	6.00	3.49
	37.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.06	5.70	3.98	5.77	3.85	5.88	3.42
	39.0	3.88	3.50	4.58	3.65	5.28	4.08	5.60	4.04	5.66	3.94	5.71	3.81	5.82	3.39
7.1	10.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	8.27	5.56	8.60	4.98
	12.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	8.27	5.56	8.53	4.93
	14.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	8.20	5.51	8.45	4.89
	16.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	8.13	5.46	8.38	4.84
	18.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	8.05	5.40	8.30	4.80
	20.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	7.98	5.35	8.22	4.75
	21.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	7.91	5.30	8.15	4.71
	23.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.48	7.83	5.25	8.07	4.66
	25.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.73	5.43	7.76	5.20	7.99	4.62
	27.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.66	5.37	7.68	5.15	7.92	4.57
	29.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.58	5.32	7.61	5.10	7.84	4.53
	31.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.51	5.27	7.54	5.05	7.76	4.49
	33.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.44	5.17	7.46	5.00	7.69	4.44
	35.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.14	7.33	5.11	7.39	4.95	7.61	4.40
	37.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.12	7.22	5.01	7.31	4.85	7.46	4.31
	39.0	4.92	4.44	5.80	4.63	6.69	5.14	7.10	5.08	7.17	4.96	7.24	4.80	7.38	7.2

7.2 Heating

TC: Total Capacity**WB**: Wet-bulb Temperature **DB**: Dry-bulb Temperature

Capacity (kW)	Outdoor temperature (˚C DB)		Indoor temperature (˚C WB/DB)					
			16	18	20	21	22	24
			TH	TH	TH	TH	TH	TH
	WB	DB	kW	kW	kW	kW	kW	kW
2.2	-15.0	-14.7	1.64	1.64	1.63	1.63	1.62	1.62
	-13.0	-12.6	1.74	1.74	1.73	1.73	1.72	1.72
	-11.0	-10.5	1.82	1.82	1.81	1.81	1.80	1.80
	-10.0	-9.5	1.90	1.90	1.89	1.89	1.88	1.88
	-9.1	-8.5	1.95	1.95	1.94	1.94	1.93	1.93
	-7.6	-7.0	1.98	1.98	1.97	1.97	1.96	1.96
	-5.6	-5.0	2.05	2.05	2.04	2.04	2.03	2.03
	-3.7	-3.0	2.16	2.16	2.15	2.15	2.14	2.14
	-0.7	0.0	2.31	2.31	2.30	2.30	2.29	2.16
	2.2	3.0	2.44	2.44	2.46	2.46	2.37	2.16
	4.1	5.0	2.52	2.52	2.48	2.47	2.39	2.17
	6.0	7.0	2.60	2.60	2.50	2.49	2.41	2.19
	7.9	9.0	2.68	2.68	2.51	2.50	2.42	2.21
	9.8	11.0	2.76	2.76	2.53	2.51	2.43	2.22
	11.8	13.0	2.86	2.81	2.55	2.52	2.45	2.22
	13.7	15.0	2.94	2.81	2.59	2.53	2.48	2.23
2.8	-15.0	-14.7	2.03	2.03	2.02	2.02	2.01	2.01
	-13.0	-12.6	2.15	2.15	2.14	2.14	2.13	2.13
	-11.0	-10.5	2.25	2.25	2.24	2.24	2.23	2.23
	-10.0	-9.5	2.35	2.35	2.34	2.34	2.33	2.33
	-9.1	-8.5	2.41	2.41	2.40	2.40	2.39	2.39
	-7.6	-7.0	2.44	2.44	2.43	2.43	2.42	2.42
	-5.6	-5.0	2.54	2.54	2.53	2.53	2.52	2.52
	-3.7	-3.0	2.67	2.67	2.66	2.66	2.65	2.65
	-0.7	0.0	2.86	2.86	2.85	2.85	2.84	2.68
	2.2	3.0	3.02	3.02	3.01	3.01	2.93	2.68
	4.1	5.0	3.11	3.11	3.10	3.10	2.94	2.69
	6.0	7.0	3.21	3.21	3.20	3.12	2.95	2.70
	7.9	9.0	3.31	3.31	3.22	3.15	2.96	2.71
	9.8	11.0	3.40	3.39	3.25	3.19	2.96	2.71
	11.8	13.0	3.53	3.47	3.29	3.21	2.97	2.72
	13.7	15.0	3.63	3.50	3.32	3.25	2.98	2.73

TC: Total Capacity**WB**: Wet-bulb Temperature **DB**: Dry-bulb Temperature

Capacity (kW)	Outdoor temperature (˚C DB)		Indoor temperature (℃ DB)					
			16	18	20	21	22	24
			TH	TH	TH	TH	TH	TH
	WB	DB	kW	kW	kW	kW	kW	kW
3.6	-15.0	-14.7	2.53	2.53	2.52	2.52	2.51	2.51
	-13.0	-12.6	2.69	2.69	2.68	2.68	2.67	2.67
	-11.0	-10.5	2.81	2.81	2.80	2.80	2.79	2.79
	-10.0	-9.5	2.93	2.93	2.92	2.92	2.91	2.91
	-9.1	-8.5	3.01	3.01	3.00	3.00	2.99	2.99
	-7.6	-7.0	3.05	3.05	3.04	3.04	3.03	3.03
	-5.6	-5.0	3.17	3.17	3.16	3.16	3.15	3.15
	-3.7	-3.0	3.33	3.33	3.32	3.32	3.31	3.31
	-0.7	0.0	3.57	3.57	3.56	3.56	3.55	3.35
	2.2	3.0	3.78	3.78	3.76	3.76	3.67	3.35
	4.1	5.0	3.89	3.89	3.88	3.88	3.67	3.35
	6.0	7.0	4.01	4.01	4.00	3.91	3.68	3.36
	7.9	9.0	4.13	4.12	4.03	3.93	3.70	3.37
	9.8	11.0	4.25	4.24	4.06	3.95	3.72	3.37
	11.8	13.0	4.41	4.33	4.10	3.98	3.73	3.38
	13.7	15.0	4.53	4.33	4.14	3.99	3.75	3.39
4.5	-15.0	-14.7	3.16	3.16	3.15	3.15	3.14	3.14
	-13.0	-12.6	3.36	3.36	3.35	3.35	3.34	3.34
	-11.0	-10.5	3.52	3.52	3.51	3.51	3.50	3.50
	-10.0	-9.5	3.66	3.66	3.65	3.65	3.64	3.64
	-9.1	-8.5	3.76	3.76	3.75	3.75	3.74	3.74
	-7.6	-7.0	3.81	3.81	3.80	3.80	3.79	3.79
	-5.6	-5.0	3.96	3.96	3.95	3.95	3.94	3.94
	-3.7	-3.0	4.16	4.15	4.15	4.15	4.15	4.15
	-0.7	0.0	4.46	4.46	4.45	4.45	4.45	4.19
	2.2	3.0	4.71	4.71	4.70	4.70	4.59	4.20
	4.1	5.0	4.96	4.93	4.85	4.85	4.59	4.21
	6.0	7.0	5.09	5.05	5.00	4.86	4.60	4.22
	7.9	9.0	5.16	5.14	5.03	4.89	4.62	4.23
	9.8	11.0	5.31	5.29	5.05	4.91	4.63	4.23
	11.8	13.0	5.51	5.40	5.10	4.95	4.65	4.24
	13.7	15.0	5.66	5.41	5.12	4.98	4.65	4.25

Capacity (kW)	Outdoor temperature (˚C DB)		Indoor temperature (℃ DB)					
			16	18	20	21	22	24
			TH	TH	TH	TH	TH	TH
	WB	DB	kW	kW	kW	kW	kW	kW
5.6	-15	-14.7	4.10	4.10	4.10	4.10	4.10	4.10
	-13	-12.6	4.22	4.22	4.22	4.22	4.22	4.22
	-11	-10.5	4.41	4.41	4.41	4.41	4.41	4.41
	-10	-9.5	4.60	4.60	4.60	4.60	4.60	4.60
	-9.1	-8.5	4.73	4.73	4.73	4.73	4.73	4.73
	-7.6	-7	4.79	4.79	4.79	4.79	4.79	4.79
	-5.6	-5	4.98	4.98	4.98	4.98	4.98	4.98
	-3.7	-3	5.23	5.23	5.23	5.23	5.23	5.23
	-0.7	0	5.61	5.61	5.61	5.61	5.61	5.29
	2.2	3	5.92	5.92	5.92	5.92	5.80	5.29
	4.1	5	6.11	6.11	6.11	6.11	5.80	5.29
	6	7	6.30	6.30	6.30	6.11	5.80	5.29
	7.9	9	6.49	6.49	6.30	6.11	5.80	5.29
	9.8	11	6.68	6.68	6.30	6.11	5.80	5.29
	11.8	13	6.93	6.80	6.30	6.11	5.80	5.29
	13.7	15	7.12	6.80	6.30	6.11	5.80	5.29
7.1	-15	-14.7	5.20	5.20	5.20	5.20	5.20	5.20
	-13	-12.6	5.36	5.36	5.36	5.36	5.36	5.36
	-11	-10.5	5.60	5.60	5.60	5.60	5.60	5.60
	-10	-9.5	5.84	5.84	5.84	5.84	5.84	5.84
	-9.1	-8.5	6.00	6.00	6.00	6.00	6.00	6.00
	-7.6	-7	6.08	6.08	6.08	6.08	6.08	6.08
	-5.6	-5	6.32	6.32	6.32	6.32	6.32	6.32
	-3.7	-3	6.64	6.64	6.64	6.64	6.64	6.64
	-0.7	0	7.12	7.12	7.12	7.12	7.12	6.72
	2.2	3	7.52	7.52	7.52	7.52	7.36	6.72
	4.1	5	7.76	7.76	7.76	7.76	7.36	6.72
	6	7	8.00	8.00	8.00	7.76	7.36	6.72
	7.9	9	8.24	8.24	8.00	7.76	7.36	6.72
	9.8	11	8.48	8.48	8.00	7.76	7.36	6.72
	11.8	13	8.80	8.64	8.00	7.76	7.36	6.72
	13.7	15	9.04	8.64	8.00	7.76	7.36	6.72

8 Electrical characteristics

Model	Indoor unit				MFC	Power cable			Signal cable
	Hz	Voltage	Minimum	Maximum		L ≤ 20m	L ≤ 50m	Grounded	
CC-KPAA007-1S	50Hz	220-240V	198	264	15	2*2.5mm^2	2*4.0mm^2	2.5mm^2	2*0.75 mm^2
CC-KPAA009-1S	50Hz	220-240V	198	264	15	2*2.5mm^2	2*4.0mm^2	2.5mm^2	2*0.75 mm^2
CC-KPAA012-1S	50Hz	220-240V	198	264	15	2*2.5mm^2	2*4.0mm^2	2.5mm^2	2*0.75 mm^2
CC-KPAA016-1S	50Hz	220-240V	198	264	15	2*2.5mm^2	2*4.0mm^2	2.5mm^2	2*0.75 mm^2
CC-KPAA020-1S	50Hz	220-240V	198	264	15	2*2.5mm^2	2*4.0mm^2	2.5mm^2	2*0.75 mm^2
CC-KPAA024-1S	50Hz	220-240V	198	264	15	2*2.5mm^2	2*4.0mm^2	2.5mm^2	2*0.75 mm^2

Notes:

1) Minimum: Permitted minimum operating voltage, lower than this value may damage the system

2) Maximum: Permitted maximum operating voltage, higher than this value may damage the system

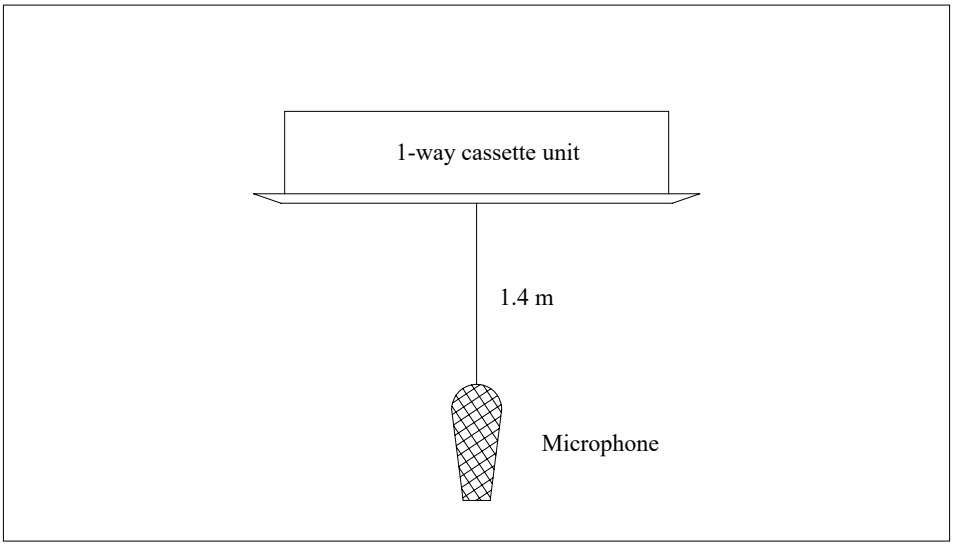
3) MC: Minimum Current (A)

4) MFC: Maximum Fuse Current (A)

5) L: Total length of cable (m)

9 Sound levels

Test condition

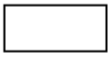
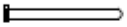
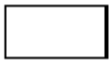


Notes:

Semi-anechoic chamber conversion value, measured at a point 1m in front of the unit at a height of 1.4m

10 Accessories

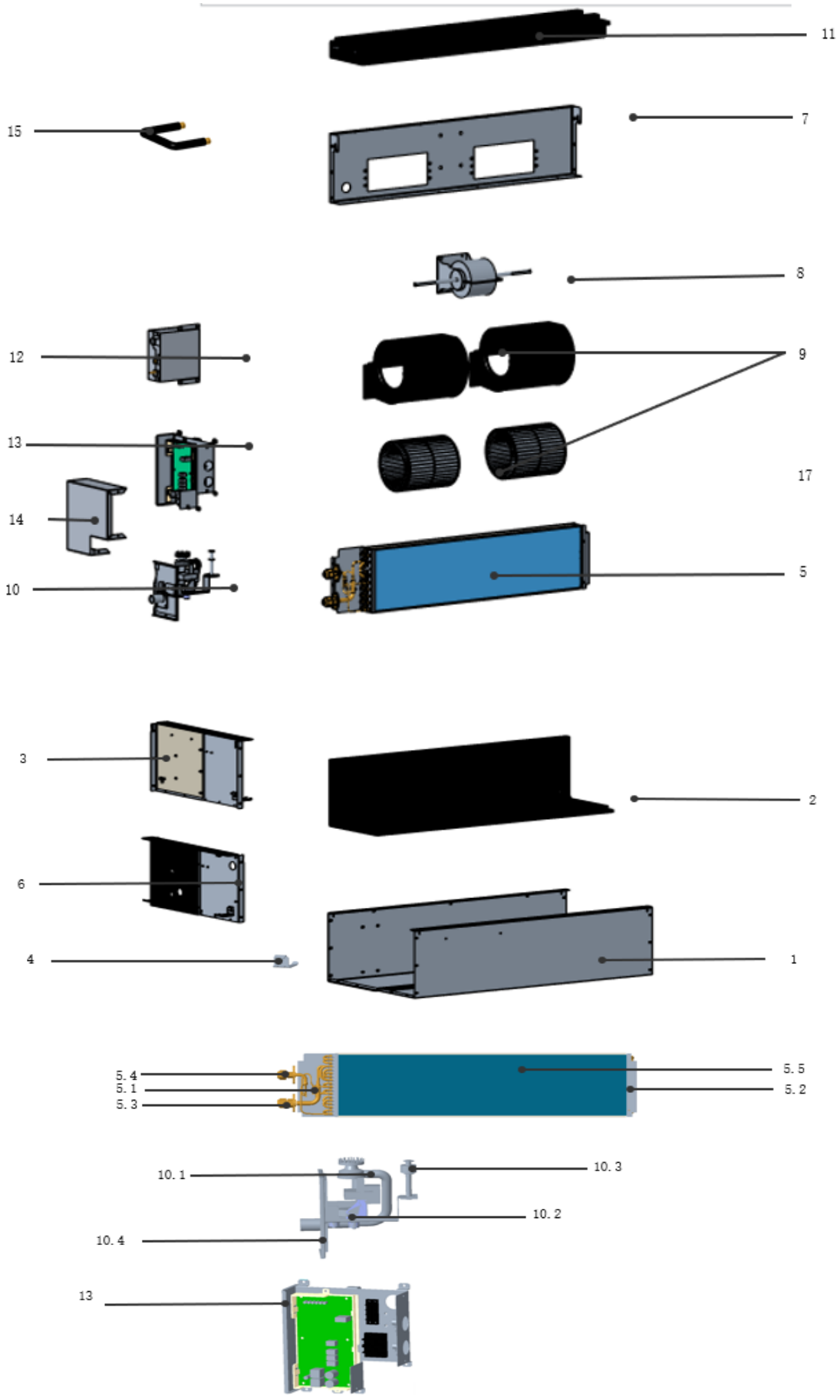
10.1 Standard accessories.

Name of accessories	Numbers	Shape	Application
Installation Instruction for indoor unit	1	The manual	(Please be sure to hand it to user.)
Insulating tube	2		To encase single joints of high and low pressure pipes.
Large-sized heat insulating mattress	1		Heat insulation
Ribbon	10		Bind up cables and connecting pipes.
Dome insulated tip	6		Used to connect wires
U-type insulated tip	3		Used to connect wires
Remote controller	1		Control A/C
Battery	2		Supply power to remote controller
Connecting pipe of electronic expansion valve	1		Connect electronic expansion valve and liquid side of indoor unit (Different models may have different sizes and calibers. Please install according to the real products.)
Hoop	2		Used to fasten drainpipe
Blank valve bag	4		Used to contain accessories.

10.2 Local buy accessories.

Cooper pipe	Type	2. 2kW~2.8kW	3.6kW~5. 6kW	7. 1kW
	Liquid pipe (mm)	Φ6.35×0.8		Φ9.52×0.8
	Gas pipe (mm)	Φ9.52×0.8	Φ12.7×0.8	Φ15.88×1.0
PVC drainpipe	For the indoor unit drainpipe. The length is decided according to the actual need.			
Insulation bushing	Assort inner diameter respectively with relevant copper pipe and hard polyethylene plastic pipe. The thickness is usually 10 mm (above). It should be appropriately thickened in closed and wet areas.			

11. Exploded view



No.	Part Name	Quantity
1	(RoHS) Front wall panel pasting components (wind on one side)	1
2	(RoHS) Rear cover foam (wind on one side)	1
3	(RoHS) Left side panel sticking components (wind on one side)	2
4	(RoHS) hook	4
5	(RoHS) Evaporator parts (wind on one side)	1
5.1	(RoHS) Evaporator fixing plate 1 (wind from one side)	1
5.2	(RoHS) Evaporator fixing plate 2 (wind from one side)	1
5.3	(RoHS) Flute tube assembly	1
5.4	(RoHS) Capillary assembly	1
5.5	(RoHS) Evaporator assembly (wind on one side)	1
6	(RoHS) Right side panel patch component (wind on one side)	1
7	(RoHS) Fan fixing plate sticking component (wind from one side)	1
8	(RoHS) Single-phase asynchronous motor (YSK100-27F-4P3)	1
9	(RoHS) Wind wheel volute	2
10	(RoHS) Water pump parts (wind on one side)	1
10.1	(RoHS) Drainage takeover	1
10.2	(RoHS) Water pump components	1
10.3	(RoHS) Water level switch	1
10.4	(RoHS) Water pump bracket assembly (wind from one side)	1
11	(RoHS) Drain pan parts (wind on one side)	1
12	(RoHS) Electronic expansion valve box parts	1
13	oHS) Indoor electric control box assembly (embedded multi-connectic	1
13.1	(RoHS) Indoor main control board assembly (duct machine)	1
13.2	(RoHS) Electric control box body (wind on one side)	1
13.3	Electric control board plastic base	1
13.4	(RoHS) terminal block	1
14	(RoHS) Electric control box cover (wind on one side)	1
15	Connecting pipe assembly	1