



COMPACT 4-WAY CASSETTE TECHNICAL MANUAL

AC SYSTEM

220-240V/60Hz

INDOOR UNITS

Revision V 2303



Model Numbers:

CC-TCAC007-1S, CC-TCAC009-1S, CC-TCAC012-1S, CC-TCAC016-1S



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.

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1. External appearance



2. Specifications

Model			CC-TCAC007-1S	CC-TCAC009-1S	CC-TCAC012-1S	CC-TCAC016-1S
Power supply			220-240V/1PH/50Hz	220-240V/1PH/50Hz	220-240V/1PH/50Hz	220-240V/1PH/50Hz
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.5	3.2	4	5
Power Input		kW	0.038	0.038	0.04	0.04
Fan motor	Model		YDK-15Q-6P3	YDK-15Q-6P3	YDK-16Q-6P3	YDK-16Q-6P3
	Type		AC	AC	AC	AC
	Speed (Hi/Med/Low)	r/min	590/460/360	590/460/360	640/540/440	640/540/440
Indoor coil	Number of rows		2	2	2	2
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube diameter and type	mm	Ø7, Innergroove Tube	Ø7, Innergroove Tube	Ø7, Innergroove Tube	Ø7, Innergroove Tube
Air flow (H/M/L)		m ³ /h	447/338/258	447/338/258	515/412/324	515/412/324
Sound power level		dB(A)	22~34	22~34	27~38	27~38
Body	Dimension (W×H×D)	mm	653×267×585	653×267×585	653×267×585	653×267×585
	Packing (W×H×D)	mm	745×375×675	745×375×675	745×375×675	745×375×675
	Net/Gross weight	kg	17.5/23	17.5/23	17.5/23	17.5/23
Panel	Dimension (W×H×D)	mm	650×30×650	650×30×650	650×30×650	650×30×650
	Packing (W×H×D)	mm	750×95×750	750×95×750	750×95×750	750×95×750
	Net/Gross weight	kg	2.7/4.0	2.7/4.0	2.7/4.0	2.7/4.0
Refrigerant type			R410A	R410A	R410A	R410A
Throttle type			Electrical expansion valve	Electrical expansion valve	Electrical expansion valve	Electrical expansion valve
Design pressure		MPa	4.5	4.5	4.5	4.5
Liquid pipe / Gas pipe		mm	Ø6.35/ Ø9.53	Ø6.35/ Ø9.53	Ø6.35/ Ø12.7	Ø6.35/ Ø12.7
Connecting wire	Power wire	AWG	2.5*2+2.5(L≤20m)	2.5*2+2.5(L≤20m)	2.5*2+2.5(L≤20m)	2.5*2+2.5(L≤20m)
	Signal wire	AWG	0.75*2 shield	0.75*2 shield	0.75*2 shield	0.75*2 shield
Drainage water pipe (outer diameter)		mm	Ø25	Ø25	Ø25	Ø25
Controller	Standard		Remote controller	Remote controller	Remote controller	Remote controller
	Optional		Wired controller	Wired controller	Wired controller	Wired controller
Setting Temperature Range		°C	16~32	16~32	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

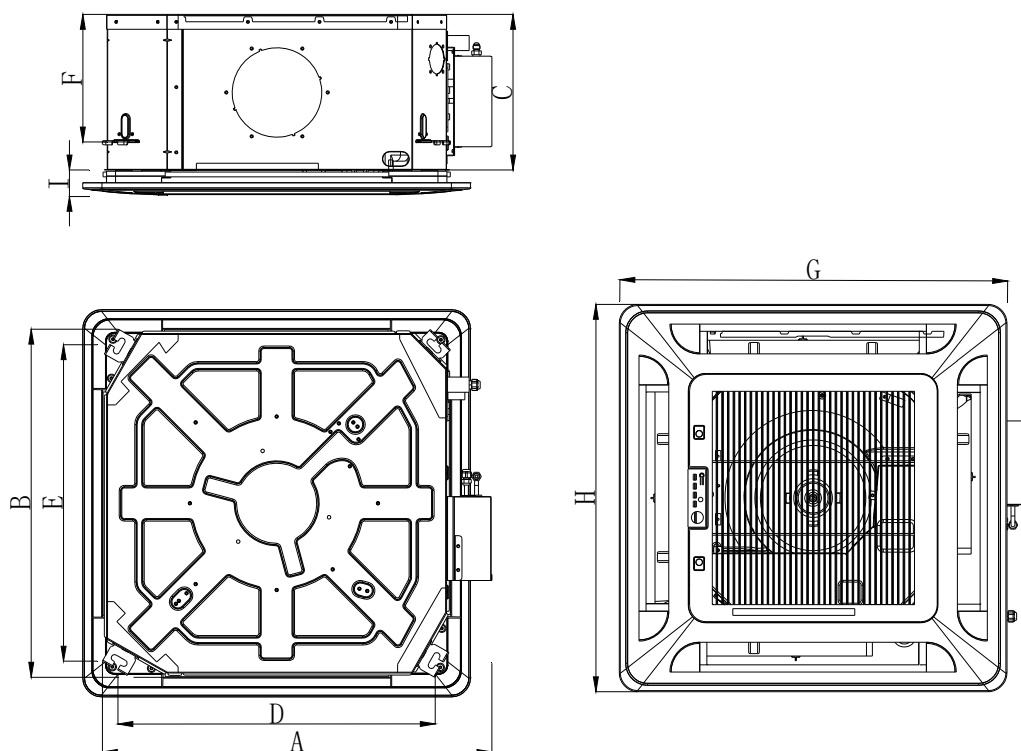
2) Nominal heating capacities are based on the following condition.

- 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.

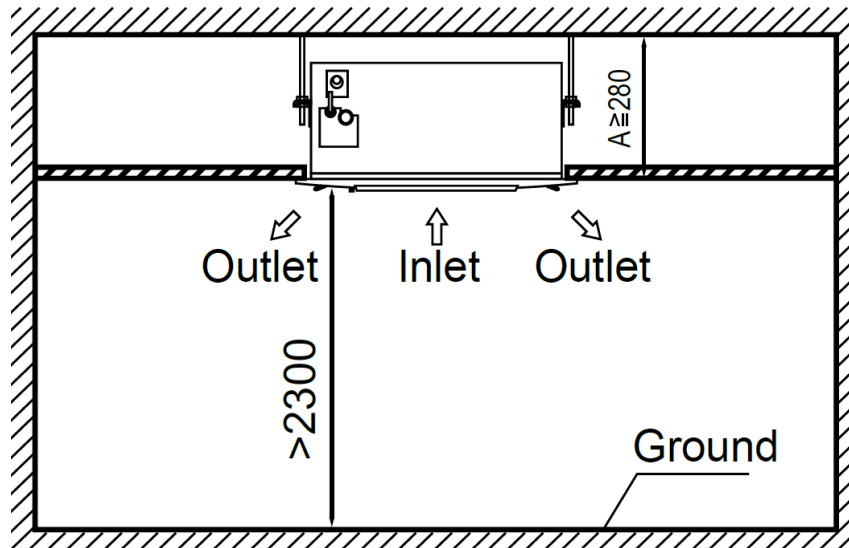
3. Dimensions



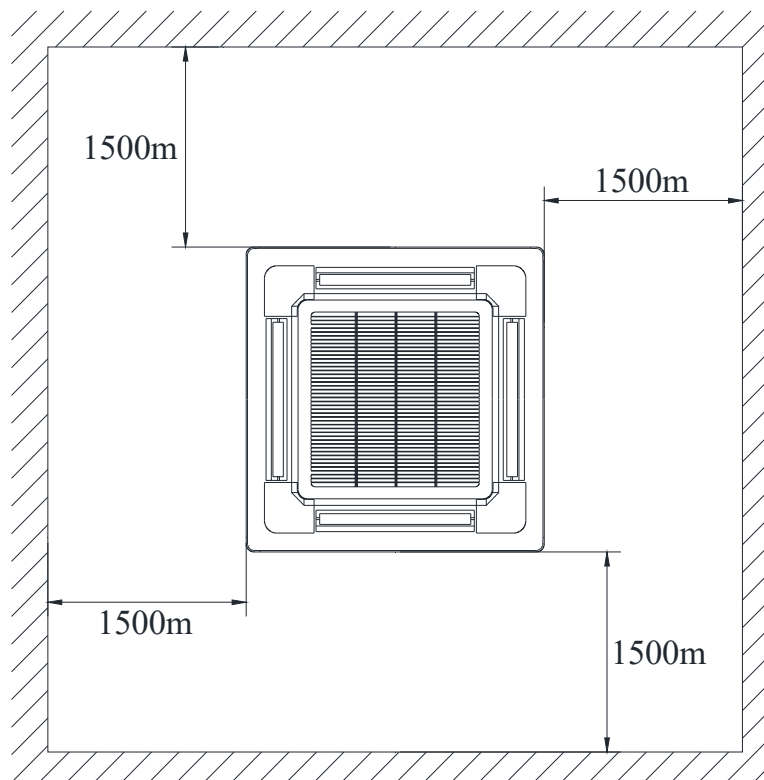
Model	Body dimension (mm)			Installation dimension (mm)			Panel dimension (mm)		
	A	B	C	D	E	F	G	H	I
CC-TCAC007-1S	653	585	267	528	528	212	650	650	30
CC-TCAC009-1S	653	585	267	528	528	212	650	650	30
CC-TCAC012-1S	653	585	267	528	528	212	650	650	30
CC-TCAC016-1S	653	585	267	528	528	212	650	650	30

4. Service space

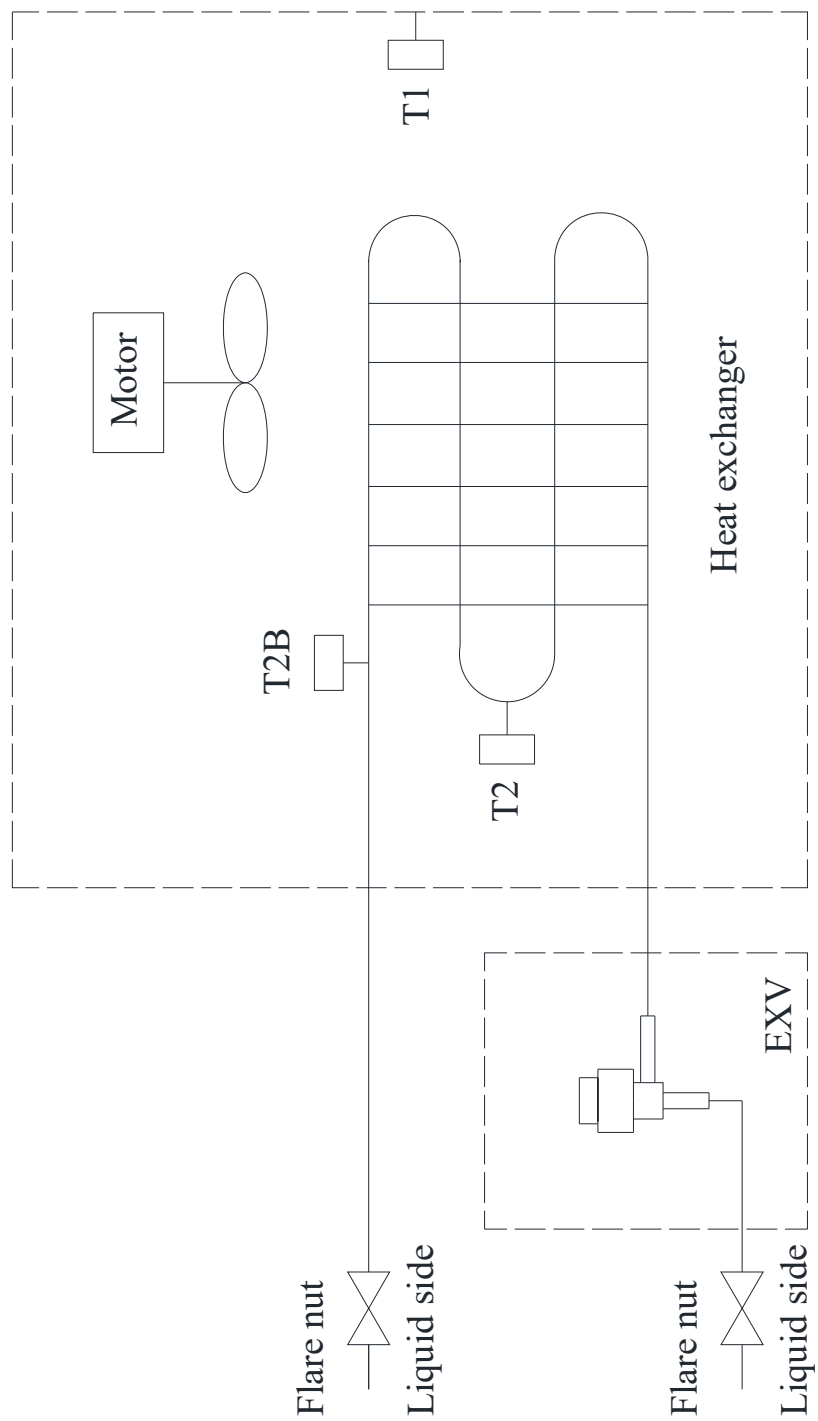
- There is enough room for installation and maintenance.
- The ceiling is horizontal, and its structure can endure the weight of the indoor unit.
- The outlet and the inlet are not impeded, and the influence of external air is the least.
- The air flow can reach throughout the room.
- The connecting pipe and drainpipe could be extracted out easily.
- There is no direct radiation from heaters.
- Keep more than 2.3m distance between the panel and ground of the room.



- Keep at least 1m to the wall of each side.



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

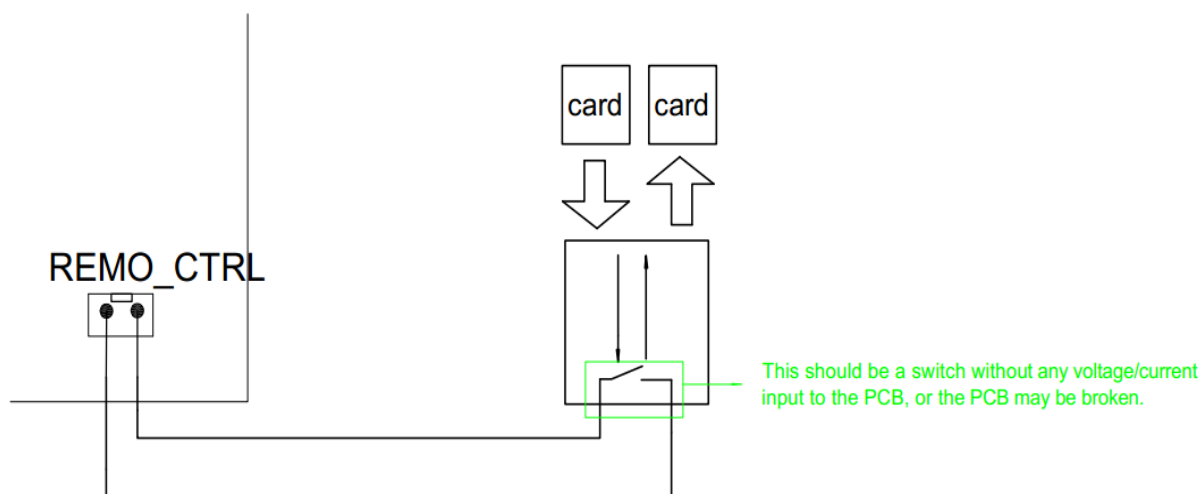
6.1 Wiring diagram



- 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) *Electrical heater is optional, please contact to Comfortstar's technician for the detail.*

Comfortstar's VRF indoor unit connect with card key

Connect the remote control terminal on the indoor PCB to the hotel card module.



NOTE: The terminal in the hotel card module must be a switch without any voltage/current input to the PCB, otherwise the PCB will be broken.

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,

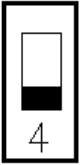
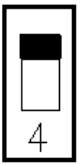


HP	0.8	1	1.2	1.7	2	2.5
Capacity (kW)	1.8/2.2	2.5/2.6/2.8	3.2/3.5/3.6	4.1/4.5/4.6	5.1/5.6	6.0/6.6/7.1
Code	0	1	2	3	4	5

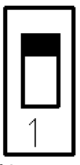
HP	3	3.2	4	5	6
Capacity (kW)	8.0	8.8/9.0	10.0/11.0/11.2	12.0/12.5/14.0	15.0/16.0
Code	6	7	8	9	A

6.2.2 SW3

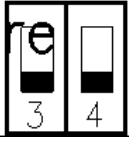
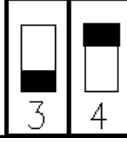
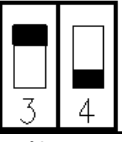
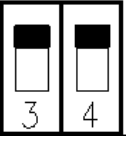
Name	Switch number 1 2 3 of SW3			
Function	Unit Type			
Setting	ON OFF 1 2 3 Big Ceiling Cassette Unit	ON OFF 1 2 3 360 Ceiling Cassette Unit	ON OFF 1 2 3 Small Ceiling Cassette Unit (Default setting)	ON OFF 1 2 3 Reserved
	ON OFF 1 2 3 Reserved	ON OFF 1 2 3 Reserved	ON OFF 1 2 3 Reserved	ON OFF 1 2 3 Reserved

Name	Switch number 4 of SW3	
Function	Automatic Addressing mode(Factory Default)	Test Mode(allow to clear address)
Setting	ON OFF 	ON OFF 

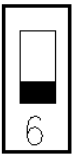
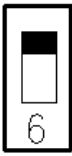
6.2.3 SW2

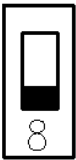
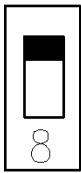
Name	Switch number 1 of SW2	
Function	Refrigerant temperature compensation temperature value select bits	
Setting	ON OFF  3°C (Factory default)	ON OFF  1°C

Name	Switch number 2 of SW2	
Function	Heating temperature compensation temperature value select bits	
Setting	ON OFF  6°C (Factory default)	ON OFF  2°C

Name	Switch number 3,4 of SW2			
Function	Anti-cold wind off the fan temperature selection bit			
Setting	ON OFF  15°C (Factory default)	ON OFF  20°C	ON OFF  24°C	ON OFF  26°C

Name	Switch number 5 of SW2	
Function	Heating stop the fan time to chooset	
Setting	ON OFF 4min(Factory default) 	ON OFF 8min 

Name	Switch number 6 of SW2	
Function	According to the contract custom power lost memory functions	
Setting	ON OFF Power-down memory (Factory default) 	ON OFF No Power-down memory 

Name	Switch number 8 of SW2	
Function	Fan Speed Choice	
Setting	ON OFF Standard Mode (Factory default) 	ON OFF Mode2 

Switch number 7 of SW2, reserved, leave it as default setting (switch dial down).

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	
		TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW
2.2	10	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.56	1.82	2.67	1.64
	12	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.56	1.82	2.64	1.63
	14	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.54	1.81	2.62	1.62
	16	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.52	1.79	2.60	1.60
	18	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.50	1.78	2.57	1.59
	19	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.47	1.76	2.55	1.57
	21	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.45	1.75	2.52	1.56
	23	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.80	2.43	1.73	2.50	1.55
	25	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.40	1.78	2.40	1.71	2.48	1.53
	27	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.37	1.77	2.38	1.70	2.45	1.52
	29	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.35	1.75	2.36	1.68	2.43	1.51
	31	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.33	1.73	2.34	1.67	2.41	1.49
	33	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.31	1.70	2.31	1.65	2.38	1.48
	35	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.70	2.27	1.69	2.29	1.64	2.36	1.46
	37	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.69	2.24	1.65	2.27	1.61	2.31	1.44
	39	1.52	1.37	1.80	1.44	2.07	1.70	2.20	1.68	2.22	1.64	2.24	1.59	2.29	1.42
	41	1.52	1.37	1.80	1.44	2.05	1.70	2.18	1.67	2.20	1.62	2.22	1.57	2.26	1.41
	43	1.52	1.37	1.80	1.44	2.02	1.70	2.16	1.66	2.18	1.61	2.20	1.56	2.24	1.39
	46	1.52	1.37	1.76	1.41	1.96	1.70	2.13	1.66	2.16	1.59	2.18	1.54	2.22	1.38
	48	1.52	1.37	1.74	1.39	1.89	1.65	2.07	1.64	2.13	1.57	2.11	1.53	2.16	1.37
2.8	50	1.50	1.37	1.73	1.38	1.83	1.63	2.00	1.60	2.07	1.56	2.05	1.51	2.09	1.35
	10	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.26	2.30	3.39	2.07
	12	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.26	2.30	3.36	2.05
	14	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.23	2.28	3.33	2.04
	16	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.20	2.26	3.30	2.02
	18	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.18	2.24	3.27	2.00
	19	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.15	2.22	3.24	1.98
	21	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.12	2.20	3.21	1.96
	23	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.27	3.09	2.18	3.18	1.95
	25	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.05	2.25	3.06	2.16	3.15	1.93
	27	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	3.02	2.23	3.03	2.14	3.12	1.91
	29	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	2.99	2.21	3.00	2.12	3.09	1.89
	31	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	2.96	2.19	2.97	2.10	3.06	1.88
	33	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	2.93	2.15	2.94	2.08	3.03	1.86
	35	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.14	2.89	2.12	2.91	2.06	3.00	1.84
	37	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.13	2.85	2.08	2.88	2.02	2.94	1.81
	39	1.94	1.75	2.29	1.83	2.64	2.14	2.80	2.11	2.83	2.06	2.86	2.00	2.91	1.79
	41	1.94	1.75	2.29	1.83	2.60	2.14	2.77	2.10	2.80	2.04	2.83	1.98	2.88	1.77
	43	1.94	1.75	2.29	1.83	2.58	2.14	2.74	2.09	2.77	2.02	2.80	1.96	2.85	1.75
	46	1.94	1.75	2.24	1.79	2.49	2.14	2.72	2.09	2.74	2.00	2.77	1.94	2.83	1.74
3.6	48	1.94	1.75	2.22	1.77	2.41	2.07	2.63	2.07	2.72	1.98	2.69	1.92	2.74	1.72
	50	1.90	1.75	2.20	1.75	2.32	2.05	2.55	2.01	2.63	1.96	2.60	1.90	2.66	1.70
	10	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	4.20	2.93	4.36	2.64
	12	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	4.20	2.93	4.32	2.62
	14	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	4.16	2.91	4.29	2.59
	16	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	4.12	2.88	4.25	2.57
	18	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	4.08	2.86	4.21	2.55
	19	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	4.05	2.83	4.17	2.53
	21	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	4.01	2.81	4.13	2.50
	23	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.89	3.97	2.78	4.09	2.48
	25	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.92	2.87	3.93	2.75	4.05	2.46
	27	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.88	2.84	3.90	2.73	4.01	2.44
	29	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.85	2.81	3.86	2.70	3.98	2.41
	31	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.81	2.79	3.82	2.68	3.94	2.39
	33	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.77	2.74	3.78	2.65	3.90	2.37
	35	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.72	3.72	2.71	3.75	2.63	3.86	2.34
	37	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.71	3.66	2.66	3.71	2.58	3.78	2.30
	39	2.49	2.25	2.94	2.35	3.39	2.72	3.60	2.69	3.64	2.63	3.67	2.55	3.74	2.28
	41	2.49	2.25	2.94	2.35	3.35	2.72	3.56	2.68	3.60	2.60	3.64	2.52	3.71	2.25
	43	2.49	2.25	2.94	2.35	3.31	2.72	3.53	2.67	3.56	2.58	3.60	2.50	3.67	2.23
	46	2.49	2.25	2.88	2.30	3.20	2.72	3.49	2.66	3.53	2.55	3.56	2.47	3.64	2.21
	48	2.49	2.25	2.85	2.28	3.10	2.64	3.38	2.63	3.49	2.52	3.46	2.45	3.53	2.19
	50	2.45	2.25	2.83	2.26	2.99	2.62	3.28	2.56	3.38	2.50	3.35	2.42	3.42	2.16

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	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
4.5	10	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	5.24	3.57	5.45	3.20
	12	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	5.24	3.57	5.41	3.17
	14	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	5.20	3.53	5.36	3.14
	16	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	5.15	3.50	5.31	3.11
	18	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	5.10	3.47	5.26	3.09
	19	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	5.06	3.44	5.21	3.06
	21	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	5.01	3.41	5.16	3.03
	23	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.52	4.96	3.37	5.11	3.00
	25	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.90	3.48	4.92	3.34	5.07	2.97
	27	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.85	3.45	4.87	3.31	5.02	2.94
	29	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.81	3.42	4.82	3.28	4.97	2.92
	31	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.76	3.38	4.78	3.25	4.92	2.89
	33	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.72	3.32	4.73	3.22	4.87	2.86
	35	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.30	4.65	3.29	4.68	3.18	4.83	2.83
	37	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.29	4.58	3.22	4.64	3.12	4.73	2.77
	39	3.12	2.81	3.68	2.94	4.24	3.30	4.50	3.27	4.54	3.19	4.59	3.09	4.68	2.75
	41	3.12	2.81	3.68	2.94	4.19	3.30	4.46	3.25	4.50	3.15	4.54	3.06	4.63	2.72
	43	3.12	2.81	3.68	2.94	4.14	3.30	4.41	3.24	4.46	3.12	4.50	3.02	4.58	2.69
	46	3.12	2.81	3.61	2.88	4.01	3.30	4.36	3.22	4.41	3.09	4.46	2.99	4.54	2.66
	48	3.12	2.81	3.57	2.85	3.87	3.21	4.23	3.19	4.36	3.06	4.32	2.96	4.41	2.63
	50	3.06	2.81	3.53	2.82	3.74	3.17	4.09	3.11	4.23	3.02	4.19	2.93	4.28	2.60
	52	3.01	2.81	3.42	2.79	3.56	3.14	3.91	3.01	4.09	2.99	4.01	2.90	4.09	2.58

7.2 Heating

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

Capacity (kW)	Outdoor temperature (°C DB)		Indoor temperature (°C DB)					
			16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.2	-20	-19.8	1.34	1.34	1.34	1.34	1.34	1.34
	-19	-18.8	1.44	1.44	1.44	1.44	1.44	1.44
	-17	-16.7	1.51	1.51	1.51	1.51	1.51	1.51
	-15	-14.7	1.56	1.56	1.56	1.56	1.56	1.56
	-13	-12.6	1.66	1.66	1.66	1.66	1.66	1.66
	-11	-10.5	1.68	1.70	1.70	1.70	1.70	1.70
	-10	-9.5	1.75	1.75	1.75	1.75	1.75	1.75
	-9.1	-8.5	1.80	1.80	1.80	1.80	1.80	1.80
	-7.6	-7	1.82	1.82	1.82	1.82	1.82	1.82
	-5.6	-5	1.90	1.90	1.90	1.90	1.90	1.90
	-3.7	-3	1.99	1.99	1.99	1.99	1.99	1.99
	-0.7	0	2.14	2.14	2.14	2.14	2.14	2.02
	2.2	3	2.26	2.26	2.26	2.26	2.21	2.02
	4.1	5	2.40	2.40	2.40	2.40	2.21	2.02
	6	7	2.50	2.50	2.50	2.40	2.21	2.02
	7.9	9	2.57	2.57	2.50	2.40	2.21	2.02
2.8	-20	-19.8	1.79	1.79	1.79	1.79	1.79	1.79
	-19	-18.8	1.92	1.92	1.92	1.92	1.92	1.92
	-17	-16.7	2.02	2.02	2.02	2.02	2.02	2.02
	-15	-14.7	2.02	2.02	2.02	2.02	2.02	2.02
	-13	-12.6	2.14	2.14	2.14	2.14	2.14	2.14
	-11	-10.5	2.24	2.24	2.24	2.24	2.24	2.24
	-10	-9.5	2.34	2.34	2.34	2.34	2.34	2.34
	-9.1	-8.5	2.40	2.40	2.40	2.40	2.40	2.40
	-7.6	-7	2.43	2.43	2.43	2.43	2.43	2.43
	-5.6	-5	2.53	2.53	2.53	2.53	2.53	2.53
	-3.7	-3	2.66	2.66	2.66	2.66	2.66	2.66
	-0.7	0	2.85	2.85	2.85	2.85	2.85	2.69
	2.2	3	3.01	3.01	3.01	3.01	2.94	2.69
	4.1	5	3.10	3.10	3.10	3.10	2.94	2.69
	6	7	3.20	3.20	3.20	3.10	2.94	2.69
	7.9	9	3.30	3.30	3.20	3.10	2.94	2.69
3.6	-20	-19.8	2.24	2.24	2.24	2.24	2.24	2.24
	-19	-18.8	2.40	2.40	2.40	2.40	2.40	2.40
	-17	-16.7	2.52	2.52	2.52	2.52	2.52	2.52
	-15	-14.7	2.60	2.60	2.60	2.60	2.60	2.60
	-13	-12.6	2.68	2.68	2.68	2.68	2.68	2.68
	-11	-10.5	2.80	2.80	2.80	2.80	2.80	2.80
	-10	-9.5	2.92	2.92	2.92	2.92	2.92	2.92
	-9.1	-8.5	3.00	3.00	3.00	3.00	3.00	3.00
	-7.6	-7	3.04	3.04	3.04	3.04	3.04	3.04
	-5.6	-5	3.16	3.16	3.16	3.16	3.16	3.16
	-3.7	-3	3.32	3.32	3.32	3.32	3.32	3.32
	-0.7	0	3.56	3.56	3.56	3.56	3.56	3.36
	2.2	3	3.76	3.76	3.76	3.76	3.68	3.36
	4.1	5	3.88	3.88	3.88	3.88	3.68	3.36
	6	7	4.00	4.00	4.00	3.88	3.68	3.36
	7.9	9	4.12	4.12	4.00	3.88	3.68	3.36
	9.8	11	4.24	4.24	4.00	3.88	3.68	3.36
	11.8	13	4.40	4.32	4.00	3.88	3.68	3.36
	13.7	15	4.52	4.32	4.00	3.88	3.68	3.36

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

Capacity (kW)	Outdoor temperature (°C DB)		Indoor temperature (°C DB)					
			16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
4.5	-20	-19.8	2.80	2.80	2.80	2.80	2.80	2.80
	-19	-18.8	3.00	3.00	3.00	3.00	3.00	3.00
	-17	-16.7	3.15	3.15	3.15	3.15	3.15	3.15
	-15	-14.7	3.25	3.25	3.25	3.25	3.25	3.25
	-13	-12.6	3.35	3.35	3.35	3.35	3.35	3.35
	-11	-10.5	3.50	3.50	3.50	3.50	3.50	3.50
	-10	-9.5	3.65	3.65	3.65	3.65	3.65	3.65
	-9.1	-8.5	3.75	3.75	3.75	3.75	3.75	3.75
	-7.6	-7	3.80	3.80	3.80	3.80	3.80	3.80
	-5.6	-5	3.95	3.95	3.95	3.95	3.95	3.95
	-3.7	-3	4.15	4.15	4.15	4.15	4.15	4.15
	-0.7	0	4.45	4.45	4.45	4.45	4.45	4.20
	2.2	3	4.70	4.70	4.70	4.70	4.60	4.20
	4.1	5	4.85	4.85	4.85	4.85	4.60	4.20
	6	7	5.00	5.00	5.00	4.85	4.60	4.20
	7.9	9	5.15	5.15	5.00	4.85	4.60	4.20
	9.8	11	5.30	5.30	5.00	4.85	4.60	4.20
	11.8	13	5.50	5.40	5.00	4.85	4.60	4.20
	13.7	15	5.65	5.40	5.00	4.85	4.60	4.20

8 Electrical characteristics

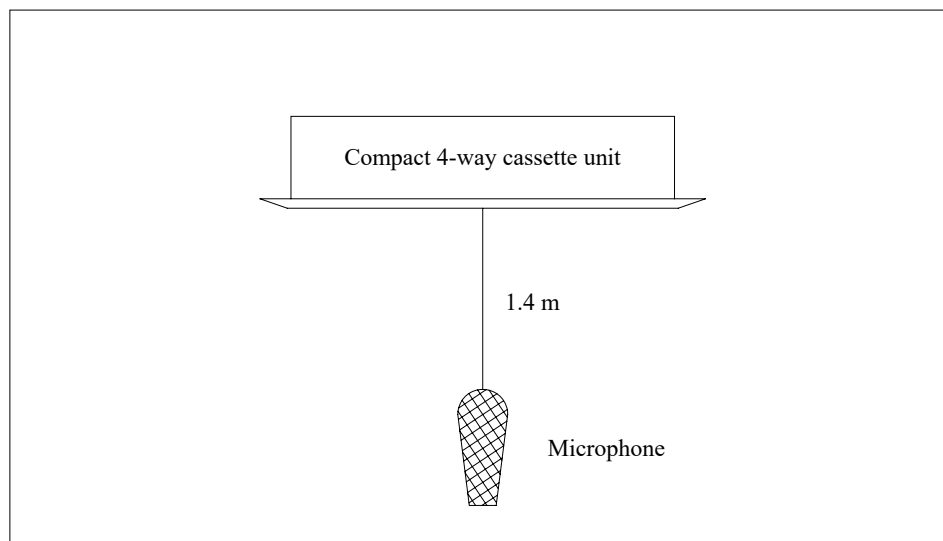
Model	Indoor unit				MFC	Power cable			Signal cable
	Hz	Voltage	Minimum	Maximum		L ≤ 20m	L ≤ 50m	Grounded	
CC-TCAC007-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-TCAC009-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-TCAC012-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-TCAC016-1S	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

9.1 Test condition



Notes:

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

9.2 Test data (Sound pressure level)

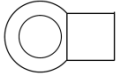
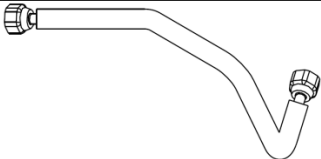
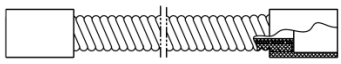
Model	Sound pressure level (dB(A))		
	High speed	Medium speed	Low speed
CC-TCAC007-1S	34	26	22
CC-TCAC009-1S	34	26	22
CC-TCAC012-1S	38	31	27
CC-TCAC016-1S	38	31	27

Notes:

During actual operation, these values are normally somewhat higher as a result of ambient conditions.

10 Accessories

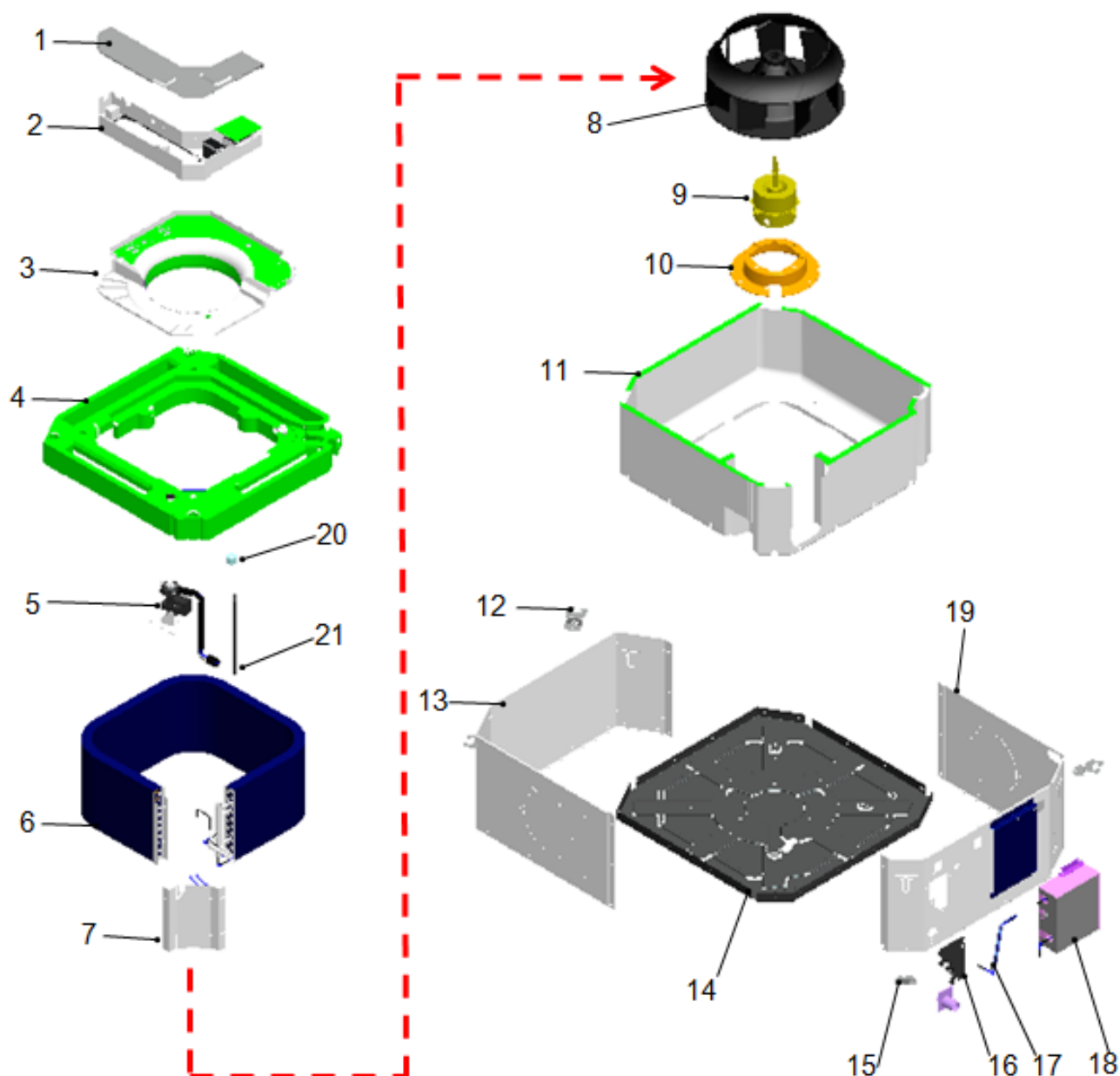
10.1 Standard accessories.

Item	Quantity	Shape	Usage
Installation manual for indoor unit	1	/	Must deliver to customer
Insulation sheath	2		Thermal insulation for the jointing part of piping
Thermal insulated material	1		Thermal insulation for the jointing part of drain pipe
Strapping tapes	5		Bind up the wires and pipes
Round shape insulation termination points	6		For wiring
U shape insulation termination points	3		For wiring
Remote controller	1		For controlling indoor unit
Batteries	2		Power to remote controller
EXV connection pipe	1		Connecting with EXV box and indoor unit liquid pipe
Nuts, gaskets	8		For hanging indoor unit
Circlips	2		For fixing drainage pipe
Drainage connection pipe	1		For connecting draining condensate water pipe to indoor unit
Bag	3		For bagging accessories

10.2 Local buy accessories.

Item	Specification	
	2.2kW~2.8kW	3.6kW~4.5kW
Liquid side copper pipe	Ø6.35mm*0.75mm	
Gas side copper pipe	Ø9.53mm*0.75mm	Ø12.7mm*0.75mm
Drainage pipe	PVC	
Pipe insulation	Thickness ≥ 10mm	
Power cables	2*2.5 mm ² (When total cable length is ≤20m) 2*4.0 mm ² (When total cable length is ≤50m)	
Grounded cable	2.5 mm ²	
Signal cables	Two-core shielded cable 2*0.75 mm ² (AVP, RVP, RVVP)	

11 Exploded view



No.	Part Name	Quantity	No.	Part Name	Quantity
1	Electrical lifted the lid	1	6.3	Evaporator bypass capillary components	1
2	Electronic components	1	7	End plate fixed plate component	1
2.1	Electric control board seats	1	8	Centrifugal wind leaf	1
2.2	Electrical box welded components	1	9	The motor	1
2.3	The temperature sensor group	1	10	The motor bracket	1
2.4	Stepper motor line	2	11	Chassis bubble component	1
2.5	Indoor motor winding connection	1	12	Lug 2	3
2.6	Terminal station	1	13	After the coaming components	1
2.7	Quad lamp plate connection	1	14	Chassis parts	1
2.8	Indoor plate component	1	14.1	Chassis external thermal insulation cotton	1
2.9	Insert the fan capacitance	1	14.2	Chassis welded components	1
3	Guide solar or lunar halo	1	14.3	Fan wire fixed plate	1
4	Bubble water pans components	1	15	Lug 1	1
5	Pump parts	1	16	Refrigerant tube support plate component	1
5.1	Drainage to take over the component	1	17	Expansion valve connecting pipe component	1
5.2	The water pump	1	18	Electronic expansion valve box parts	1
5.3	Water pump gasket 2	1	18.1	Stick cotton component	1
5.4	Water pump gasket 1	1	18.2	Cover plate stick cotton parts	1
5.5	Water pump about seat	1	18.3	Electronic expansion valve welding components	1
5.6	Water pump brace	1	19	Dash panel stick cotton component	1
6	The evaporator components	1	20	Water level switch	1
6.1	Welded components evaporator	1	21	The evaporator pressure	1
6.2	Back to the trachea components	1			