



MEDIUM ESP DUCT TECHNICAL MANUAL

DC SYSTEM

220-240V/50&60Hz

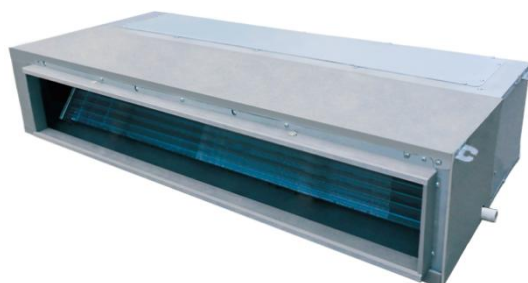
INDOOR UNITS

Revision V 2303



Model Numbers:

CC-CPAM024-1S, CC-CPAM028-1S, CC-CPAM030-1S
CC-CPAM034-1S, CC-CPAM040-1S, CC-CPAM050-1S



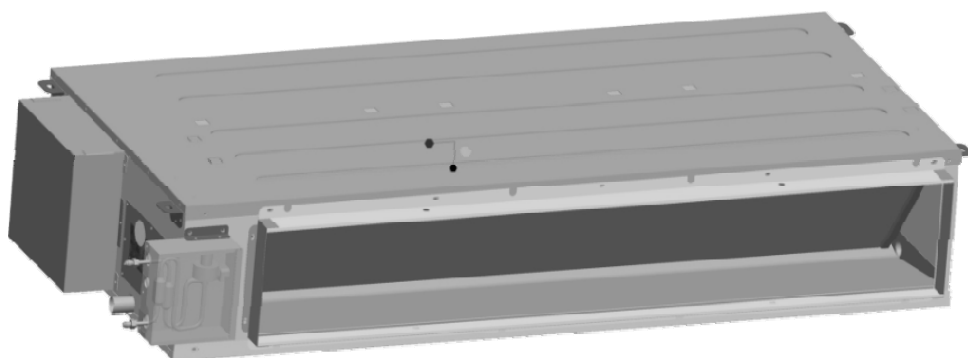
WARNING

- 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-CPAM024-1S	CC-CPAM028-1S	CC-CPAM030-1S
Power supply			220-240V/1N/50Hz	220-240V/1N/50Hz	220-240V/1N/50Hz
Capacity	Cooling	kW	7.1	8	9
	Heating	kW	8	9	10
Rated input		kW	0.15	0.15	0.26
Fan motor	Model		DR-310-90F-8	DR-310-90F-8	DR-310-75F-8 + DR-310-150F-8
	Type		DC	DC	DC
	Brand		Panasonic	Panasonic	Panasonic
	Speed	r/min	1100/1000/900	1100/1000/900	1270/1200/1130 1240/1140/1040
	ESP	Pa	70	70	70
Indoor coil	Number of rows		3	3	3
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube diameter and type	mm	Ø7.94, Innergroove Tube	Ø7.94, Innergroove Tube	Ø7.94, Innergroove Tube
Air flow (High speed)		m³/h	1220	1220	2000
Sound pressure level		dB(A)	36~41	36~41	40~44
Body	Dimension (W×H×D)	mm	1209×260×680	1209×260×680	1445×260×680
	Packing (W×H×D)	mm	1255×325×720	1255×325×720	1490×325×720
	Net/Gross weight	kg	31/36	31/36	43/48
Refrigerant type			R410A	R410A	R410A
Throttle type			EXV	EXV	EXV
Design pressure		MPa	4.2	4.2	4.2
Liquid pipe / Gas pipe		mm	Ø9.53/ Ø15.9	Ø9.53/ Ø15.9	Ø9.53/ Ø15.9
Connecting wire	Power wire	mm²	2.5*2+2.5(L≤20m)	2.5*2+2.5(L≤20m)	2.5*2+2.5(L≤20m)
			4*2+2.5(20m< L≤50m)	4*2+2.5(20m< L≤50m)	4*2+2.5(20m< L≤50m)
	Signal wire	mm²	0.75*2 shield	0.75*2 shield	0.75*2 shield
Drainage water pipe (Outer diameter)		mm	Ø25	Ø25	Ø25
Controller	Standard		Remote controller	Remote controller	Remote controller
	Optional		Wired controller	Wired controller	Wired controller

Notes:

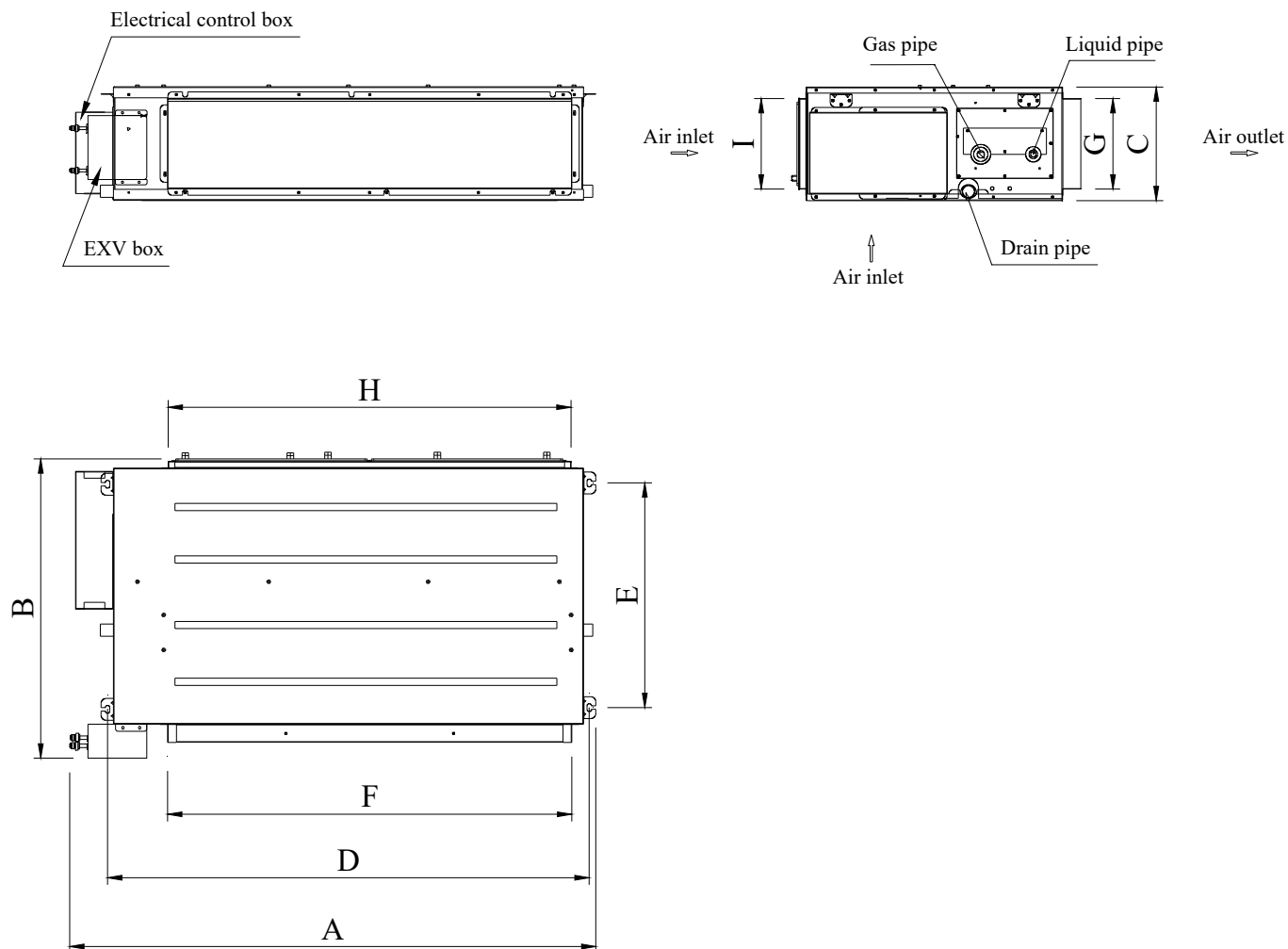
- Nominal cooling capacities are based on the following conditions.
 - Outdoor temperature: 35°C DB
 - Return air temperature: 27°C DB, 19°C WB
 - Equivalent piping length: 8m in horizontal
- Nominal heating capacities are based on the following condition.
 - Outdoor temperature: 7°C DB, 6°C WB
 - Return air temperature: 20°C DB
 - Equivalent piping length: 8m in horizontal
- 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.
- The above data may be changed without notice for future improvement on quality and performance.

Model			CC-CPAM034-1S	CC-CPAM040-1S	CC-CPAM050-1S
Power supply			220-240V/1N/50Hz	220-240V/1N/50Hz	220-240V/1N/50Hz
Capacity	Cooling	kW	10	12	15
	Heating	kW	11	13	17
Rated input		kW	0.26	0.26	0.26
Fan motor	Model		DR-310-75F-8 + DR-310-150F-8	DR-310-75F-8 + DR-310-150F-8	DR-310-75F-8 + DR-310-150F-8
	Type		DC	DC	DC
	Brand		Panasonic	Panasonic	Panasonic
	Speed	r/min	1270/1200/1130	1270/1200/1130	1270/1200/1130
			1240/1140/1040	1240/1140/1040	1240/1140/1040
	ESP	Pa	70	70	70
Indoor coil	Number of rows		3	3	3
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube diameter and type	mm	Ø7.94, Innergroove Tube	Ø7.94, Innergroove Tube	Ø7.94, Innergroove Tube
Air flow (High speed)		m ³ /h	2000	2000	2000
Sound pressure level		dB(A)	40~44	40~44	40~44
Body	Dimension (W×H×D)	mm	1445×260×680	1445×260×680	1445×260×680
	Packing (W×H×D)	mm	1490×325×720	1490×325×720	1490×325×720
	Net/Gross weight	kg	43/48	43/48	43/48
Refrigerant type			R410A	R410A	R410A
Throttle type			EXV	EXV	EXV
Design pressure		MPa	4.2	4.2	4.2
Liquid pipe / Gas pipe		mm	Ø9.53/ Ø15.9	Ø9.53/ Ø15.9	Ø9.53/ Ø15.9
Connecting wire	Power wire	mm ²	2.5*2+2.5(L≤20m)	2.5*2+2.5(L≤20m)	2.5*2+2.5(L≤20m)
			4*2+2.5(20m< L≤50m)	4*2+2.5(20m< L≤50m)	4*2+2.5(20m< L≤50m)
	Signal wire	mm ²	0.75*2 shield	0.75*2 shield	0.75*2 shield
Drainage water pipe (Outer diameter)		mm	Ø25	Ø25	Ø25
Controller	Standard		Remote controller	Remote controller	Remote controller
	Optional		Wired controller	Wired controller	Wired controller

Notes:

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

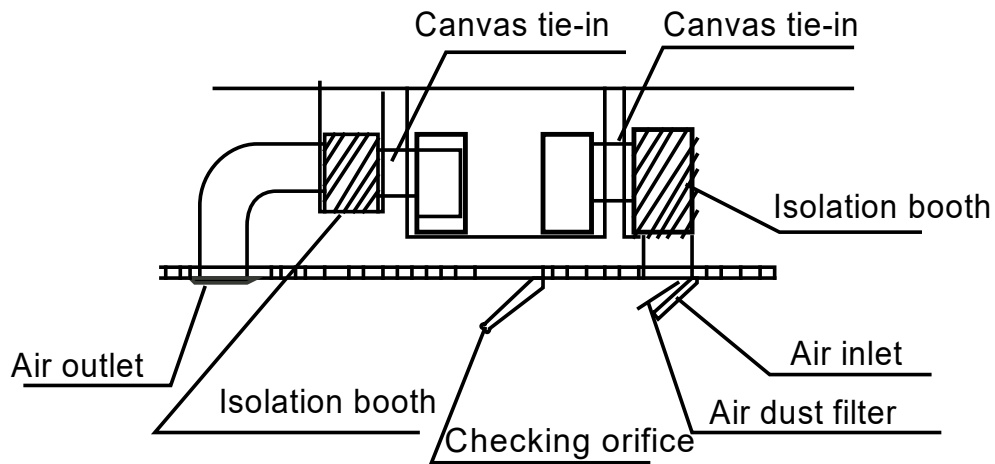
3. Dimensions



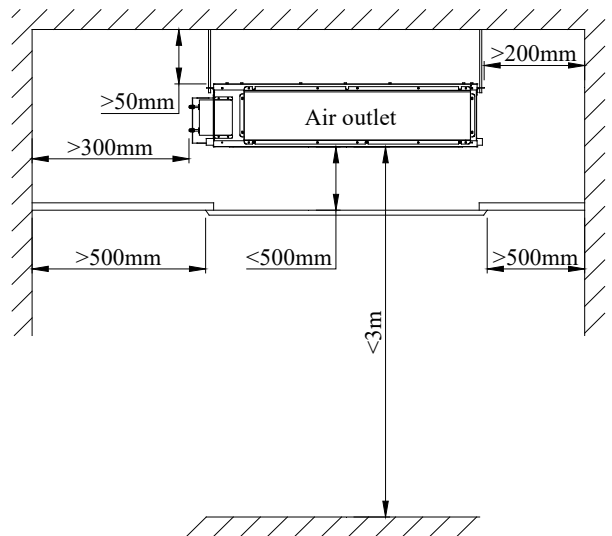
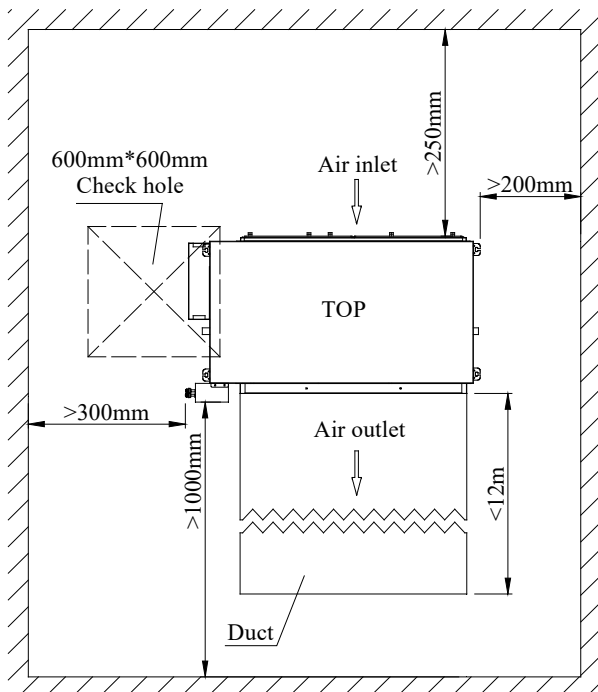
Mode	Body dimension (mm)			Installation dimension (mm)		Air outlet dimension (mm)		Air return dimension (mm)	
	A	B	C	D	E	F	G	H	I
CC-CPAM024-1S	1209	680	260	1100	515	920	197	920	207
CC-CPAM028-1S	1209	680	260	1100	515	920	197	920	207
CC-CPAM030-1S	1445	680	260	1337	515	1156	197	1156	207
CC-CPAM034-1S	1445	680	260	1337	515	1156	197	1156	207
CC-CPAM040-1S	1445	680	260	1337	515	1156	197	1156	207
CC-CPAM050-1S	1445	680	260	1337	515	1156	197	1156	207

4. Service space

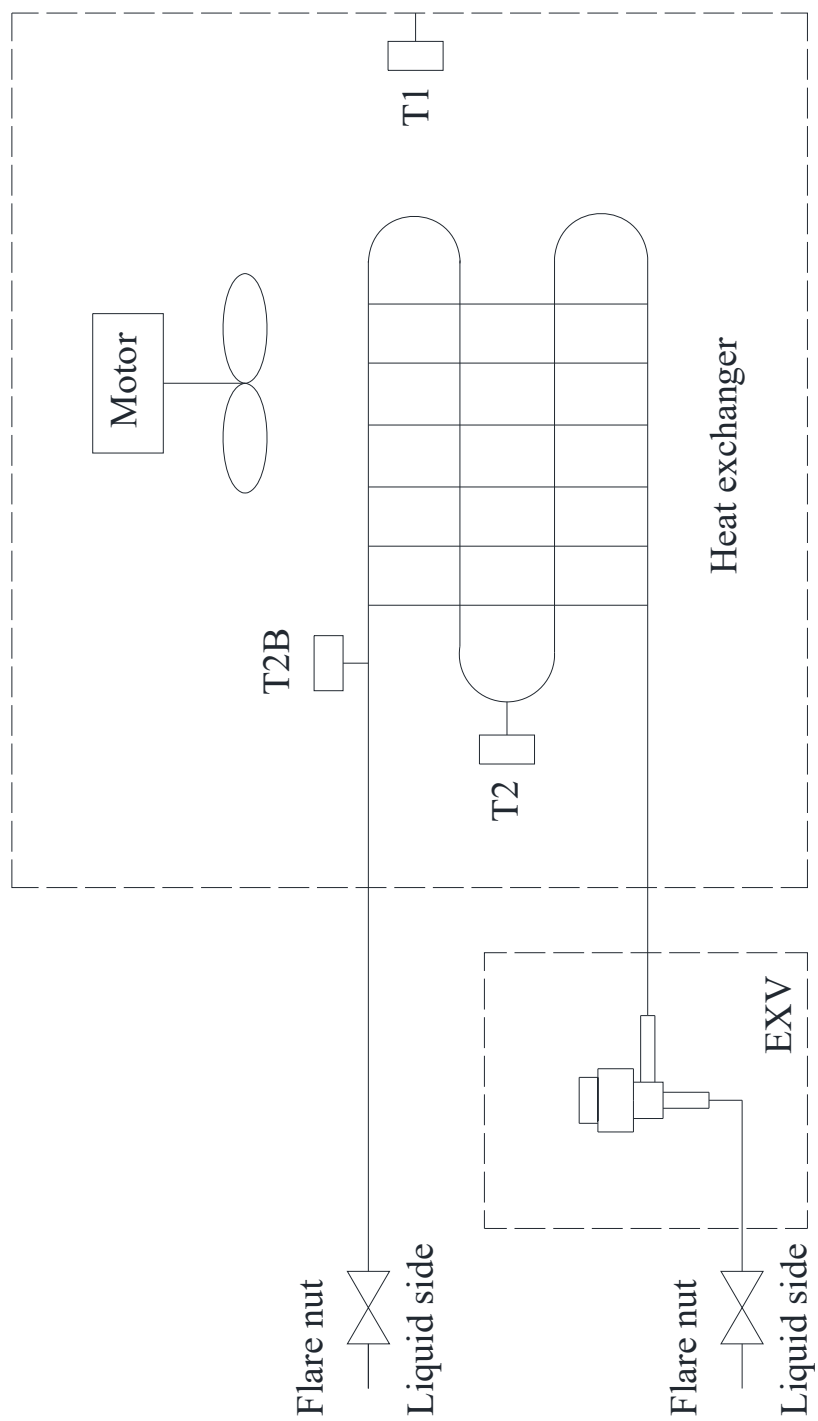
- Ensure the needed spaces for installation and maintenance.
- The ceiling is horizontal and its structure can endure the weight of the indoor unit.
- The outlet and the inlet are not impeded, and the influence of external air is the least.
- The air flow can reach throughout the room.
- The connecting pipe and drainpipe could be extracted out easily.
- There is no direct radiation from heaters.
- Below is the recommended duct installation method:



- Keep min. 600*600 space for checking and maintenance:



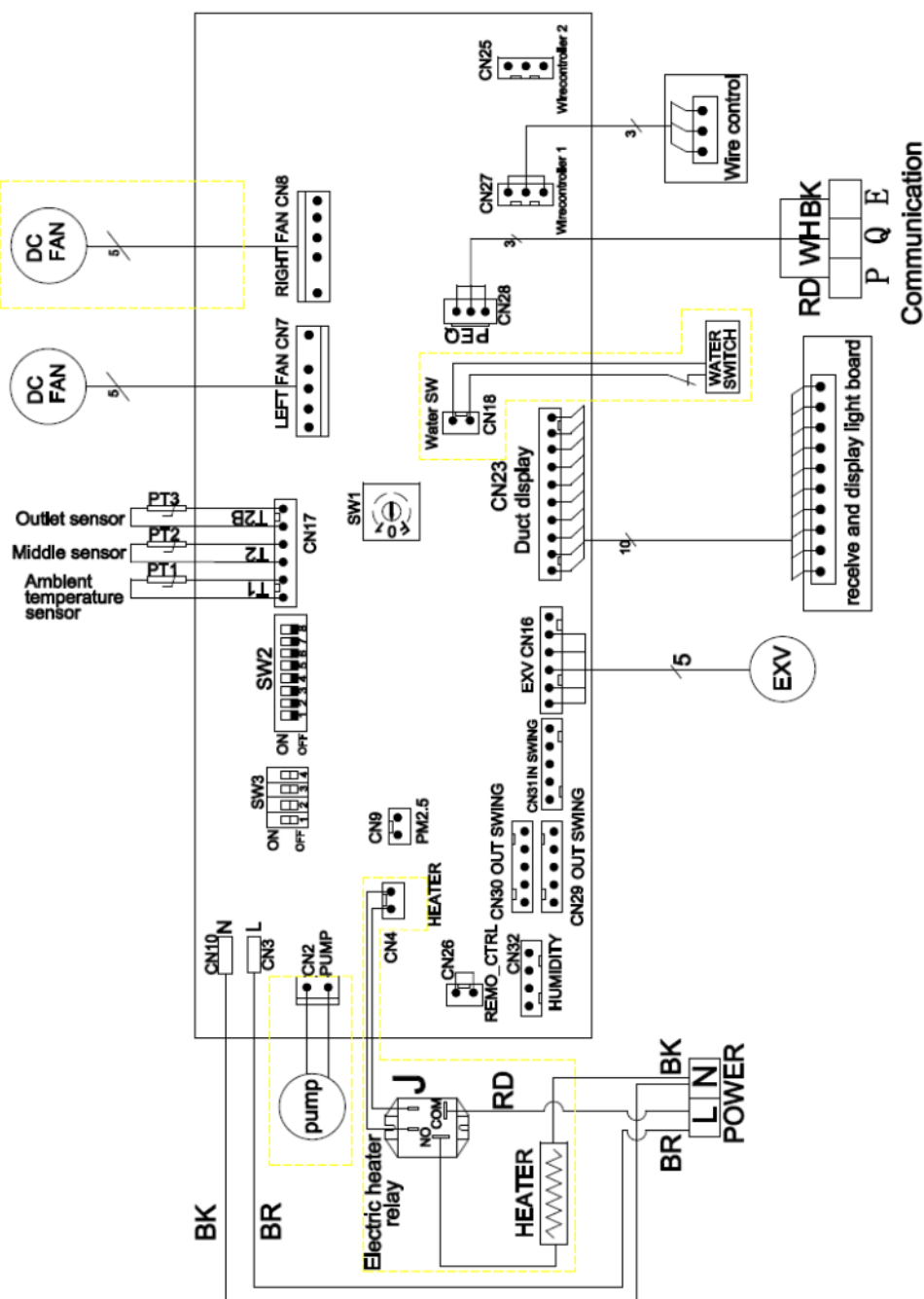
5. Piping diagram



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:*

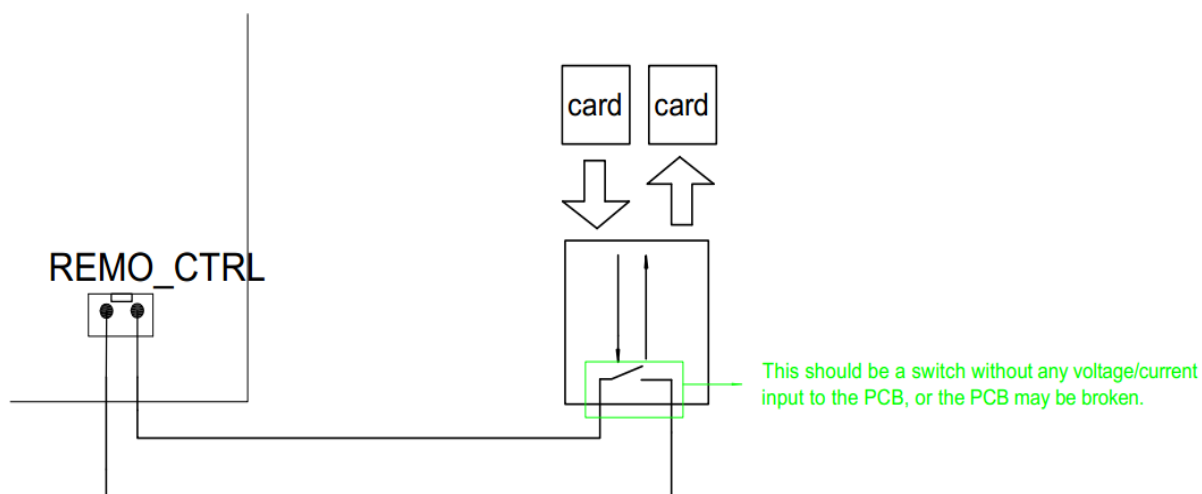
2) *T1: Room temperature sensor*

4) *T2B: Temperature sensor of heat exchanger outlet*

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

Comfortstar 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	4.0/4.5/4.6	5.1/5.6	6.0/6.3/6.6/7.1
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	9

6.2.2 SW3

Name	Switch number 1&2&3 of SW3	Switch number 4 of SW3
Function	Type selection	Indoor unit address elimination
Setting		ON DP 1 2 3 4 Automatic Addressing mode and (Factory default)

SW3 NO1,2,3		Type	ON DP ☐ ☐ ☐ ☒ 1 2 3 4 Test mode (to allow clear address)
ON	☐	Short duct unit	
OFF	☒		
ON	☐	Slim duct unit	
OFF	☒		
ON	☐	Medium ESP duct unit	
OFF	☒		
ON	☐	Floor ceiling unit	
OFF	☒		
ON	☐	Floor standing unit	
OFF	☒		
ON	☐	Reserve	
OFF	☒		
ON	☐	Reserve	
OFF	☒		

Name	Switch number 1 of SW2		
Function	Refrigeration temperature compensation temperature value select bits		
Setting	SW2 NO.1	ON ☐	3°C Factory default
		OFF ☒	
		ON ☐	1°C
		OFF ☒	

Name	Switch number 2 of SW2		
Function	Heating temperature compensation temperature value select bits		
Setting	SW2 NO.2	ON ☐	6°C Factory default
		OFF ☒	
		ON ☐	2°C
		OFF ☒	

Name	Switch number 3,4 of SW2		
Function	Anti-cold wind off the fan temperature selection bit		
Setting	SW2 NO.3&4		Temperature selection
	ON  Factory default	15°C	
	OFF  3 4		
	ON  3 4	20°C	
	OFF  3 4		
	ON  3 4	24°C	
	OFF  3 4		
	ON  3 4	26°C	
	OFF  3 4		

Name	Switch number 5 of SW2		
Function	Heating stop the fan time to choose		
Setting	SW2 NO.5	ON  Factory default	4min
		OFF  5	
		ON  5	8min
		OFF  5	

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

Name	Switch number 8 of SW2
Function	HIGH/SUPER HIGH SPEED
Setting	SW2 NO.8 ON OFF ON OFF   SUPER HIGH SPEED (Factory default) HIGH SPEED

Name	Switch number 7 of SW2
Function	reserved
Setting	ON OFF         1 2 3 4 5 6 7 8

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
7.1	10	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	8.27	5.63	8.60	5.05
	12	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	8.27	5.63	8.53	5.00
	14	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	8.20	5.58	8.45	4.96
	16	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	8.13	5.53	8.38	4.91
	18	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	8.05	5.47	8.30	4.87
	19	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	7.98	5.42	8.22	4.82
	21	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	7.91	5.37	8.15	4.78
	23	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.55	7.83	5.32	8.07	4.73
	25	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.73	5.50	7.76	5.27	7.99	4.69
	27	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.66	5.44	7.68	5.22	7.92	4.64
	29	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.58	5.39	7.61	5.17	7.84	4.60
	31	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.51	5.34	7.54	5.12	7.76	4.56
	33	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.44	5.24	7.46	5.07	7.69	4.51
	35	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.21	7.33	5.18	7.39	5.02	7.61	4.47
	37	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.19	7.22	5.08	7.31	4.92	7.46	4.38
	39	4.92	4.44	5.80	4.63	6.69	5.21	7.10	5.15	7.17	5.03	7.24	4.87	7.38	4.33
	41	4.92	4.44	5.80	4.63	6.60	5.21	7.03	5.13	7.10	4.98	7.17	4.82	7.31	4.29
	43	4.92	4.44	5.80	4.63	6.53	5.21	6.96	5.11	7.03	4.93	7.10	4.77	7.23	4.24
	46	4.92	4.44	5.69	4.54	6.32	5.21	6.89	5.09	6.96	4.87	7.03	4.72	7.17	4.20
	48	4.92	4.44	5.63	4.49	6.11	5.06	6.67	5.03	6.89	4.82	6.82	4.67	6.96	4.15
	50	4.83	4.44	5.57	4.45	5.89	5.01	6.46	4.90	6.67	4.77	6.60	4.62	6.75	4.11
8.0	10	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	9.32	6.34	9.70	5.69
	12	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	9.32	6.34	9.61	5.64
	14	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	9.24	6.28	9.52	5.59
	16	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	9.16	6.23	9.44	5.54
	18	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	9.07	6.17	9.35	5.49
	19	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	8.99	6.11	9.27	5.44
	21	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	8.91	6.06	9.18	5.38
	23	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.25	8.82	6.00	9.09	5.33
	25	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.71	6.19	8.74	5.94	9.01	5.28
	27	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.63	6.13	8.66	5.89	8.92	5.23
	29	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.55	6.08	8.57	5.83	8.83	5.18
	31	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.47	6.02	8.49	5.77	8.75	5.13
	33	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.38	5.90	8.41	5.72	8.66	5.08
	35	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.87	8.26	5.84	8.32	5.66	8.58	5.03
	37	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.84	8.14	5.73	8.24	5.55	8.41	4.93
	39	5.54	5.00	6.54	5.22	7.54	5.88	8.00	5.81	8.08	5.67	8.16	5.49	8.32	4.88
	41	5.54	5.00	6.54	5.22	7.44	5.88	7.92	5.78	8.00	5.61	8.08	5.43	8.23	4.83
	43	5.54	5.00	6.54	5.22	7.36	5.88	7.84	5.76	7.92	5.55	8.00	5.38	8.15	4.78
	46	5.54	5.00	6.41	5.12	7.12	5.88	7.76	5.73	7.84	5.49	7.92	5.32	8.08	4.73
	48	5.54	5.00	6.34	5.06	6.88	5.70	7.52	5.67	7.76	5.43	7.68	5.26	7.84	4.68
	50	5.44	5.00	6.28	5.01	6.64	5.64	7.28	5.52	7.52	5.37	7.44	5.21	7.60	4.63
9.0	10	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	10.49	7.13	10.91	6.40
	12	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	10.49	7.13	10.81	6.34
	14	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	10.39	7.07	10.71	6.28
	16	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	10.30	7.00	10.62	6.23
	18	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	10.21	6.94	10.52	6.17
	19	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	10.11	6.88	10.43	6.11
	21	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	10.02	6.81	10.33	6.06
	23	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	7.03	9.93	6.75	10.23	6.00
	25	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.80	6.97	9.83	6.69	10.13	5.94
	27	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.71	6.90	9.74	6.62	10.04	5.89
	29	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.61	6.84	9.65	6.56	9.94	5.83
	31	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.53	6.77	9.55	6.49	9.84	5.77
	33	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.43	6.64	9.46	6.43	9.75	5.72
	35	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.61	9.30	6.57	9.36	6.37	9.65	5.66
	37	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.57	9.16	6.44	9.27	6.24	9.46	5.55
	39	6.23	5.62	7.36	5.87	8.48	6.61	9.00	6.53	9.09	6.38	9.18	6.18	9.36	5.49
	41	6.23	5.62	7.36	5.87	8.37	6.61	8.91	6.51	9.00	6.31	9.09	6.11	9.26	5.44
	43	6.23	5.62	7.36	5.87	8.28	6.61	8.82	6.47	8.91	6.24	9.00	6.05	9.17	5.38
	46	6.23	5.62	7.21	5.76	8.01	6.61	8.73	6.45	8.82	6.18	8.91	5.98	9.09	5.32
	48	6.23	5.62	7.14	5.70	7.74	6.41	8.46	6.38	8.73	6.11	8.64	5.92	8.82	5.27
	50	6.12	5.62	7.06	5.64	7.47	6.35	8.19	6.21	8.46	6.05	8.37	5.86	8.55	5.21

7.2 Heating

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

Capacity (kW)	Outdoor temperature (°C)		Indoor temperature (°C DB)					
			16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
7.1	-20	-19.8	4.48	4.48	4.48	4.48	4.48	4.48
	-19	-18.8	4.80	4.80	4.80	4.80	4.80	4.80
	-17	-16.7	5.04	5.04	5.04	5.04	5.04	5.04
	-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
8	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
	-20	-19.8	5.04	5.04	5.04	5.04	5.04	5.04
	-19	-18.8	5.40	5.40	5.40	5.40	5.40	5.40
	-17	-16.7	5.67	5.67	5.67	5.67	5.67	5.67
	-15	-14.7	5.85	5.85	5.85	5.85	5.85	5.85
	-13	-12.6	6.03	6.03	6.03	6.03	6.03	6.03
	-11	-10.5	6.30	6.30	6.30	6.30	6.30	6.30
	-10	-9.5	6.57	6.57	6.57	6.57	6.57	6.57
	-9.1	-8.5	6.75	6.75	6.75	6.75	6.75	6.75
	-7.6	-7	6.84	6.84	6.84	6.84	6.84	6.84
	-5.6	-5	7.11	7.11	7.11	7.11	7.11	7.11
	-3.7	-3	7.47	7.47	7.47	7.47	7.47	7.47
	-0.7	0	8.01	8.01	8.01	8.01	8.01	7.56
	2.2	3	8.46	8.46	8.46	8.46	8.28	7.56
9	4.1	5	8.73	8.73	8.73	8.73	8.28	7.56
	6	7	9.00	9.00	9.00	8.73	8.28	7.56
	7.9	9	9.27	9.27	9.00	8.73	8.28	7.56
	9.8	11	9.54	9.54	9.00	8.73	8.28	7.56
	11.8	13	9.90	9.72	9.00	8.73	8.28	7.56
	13.7	15	10.17	9.72	9.00	8.73	8.28	7.56
	-20	-19.8	5.60	5.04	5.60	5.60	5.60	5.60
	-19	-18.8	6.00	5.40	6.00	6.00	6.00	6.00
	-17	-16.7	6.30	6.30	6.30	6.30	6.30	6.30
	-15	-14.7	6.50	6.50	6.50	6.50	6.50	6.50
	-13	-12.6	6.70	6.70	6.70	6.70	6.70	6.70
	-11	-10.5	7.00	7.00	7.00	7.00	7.00	7.00
	-10	-9.5	7.30	7.30	7.30	7.30	7.30	7.30
	-9.1	-8.5	7.50	7.50	7.50	7.50	7.50	7.50
	-7.6	-7	7.60	7.60	7.60	7.60	7.60	7.60
	-5.6	-5	7.90	7.90	7.90	7.90	7.90	7.90
	-3.7	-3	8.30	8.30	8.30	8.30	8.30	8.30
	-0.7	0	8.90	8.90	8.90	8.90	8.90	8.40
	2.2	3	9.40	9.40	9.40	9.40	9.20	8.40
	4.1	5	9.70	9.70	9.70	9.70	9.20	8.40
	6	7	10.00	10.00	10.00	9.70	9.20	8.40
	7.9	9	10.30	10.30	10.00	9.70	9.20	8.40
	9.8	11	10.60	10.60	10.00	9.70	9.20	8.40
	11.8	13	11.00	10.80	10.00	9.70	9.20	8.40
	13.7	15	11.30	10.80	10.00	9.70	9.20	8.40

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

Capacity (kW)	Outdoor temperature (°C)		Indoor temperature (°C DB)					
			16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
10	-20	-19.8	6.22	5.60	6.22	6.22	6.22	6.22
	-19	-18.8	6.67	6.00	6.67	6.67	6.67	6.67
	-17	-16.7	7.00	7.00	7.00	7.00	7.00	7.00
	-15	-14.7	7.22	7.22	7.22	7.22	7.22	7.22
	-13	-12.6	7.44	7.44	7.44	7.44	7.44	7.44
	-11	-10.5	7.78	7.78	7.78	7.78	7.78	7.78
	-10	-9.5	8.11	8.11	8.11	8.11	8.11	8.11
	-9.1	-8.5	8.33	8.33	8.33	8.33	8.33	8.33
	-7.6	-7	8.44	8.44	8.44	8.44	8.44	8.44
	-5.6	-5	8.78	8.78	8.78	8.78	8.78	8.78
	-3.7	-3	9.22	9.22	9.22	9.22	9.22	9.22
	-0.7	0	9.89	9.89	9.89	9.89	9.89	9.33
	2.2	3	10.44	10.44	10.44	10.44	10.22	9.33
	4.1	5	10.78	10.78	10.78	10.78	10.22	9.33
	6	7	11.00	11.00	11.00	10.78	10.22	9.33
	7.9	9	11.44	11.44	11.00	10.78	10.22	9.33
12	-20	-19.8	7.50	7.50	7.50	7.50	7.50	7.50
	-19	-18.8	8.04	8.04	8.04	8.04	8.04	8.04
	-17	-16.7	8.44	8.44	8.44	8.44	8.44	8.44
	-15	-14.7	8.71	8.71	8.71	8.71	8.71	8.71
	-13	-12.6	8.98	8.98	8.98	8.98	8.98	8.98
	-11	-10.5	9.38	9.38	9.38	9.38	9.38	9.38
	-10	-9.5	9.78	9.78	9.78	9.78	9.78	9.78
	-9.1	-8.5	10.05	10.05	10.05	10.05	10.05	10.05
	-7.6	-7	10.18	10.18	10.18	10.18	10.18	10.18
	-5.6	-5	10.59	10.59	10.59	10.59	10.59	10.59
	-3.7	-3	11.12	11.12	11.12	11.12	11.12	11.12
	-0.7	0	11.93	11.93	11.93	11.93	11.93	11.25
	2.2	3	12.59	12.59	12.59	12.59	12.32	11.25
	4.1	5	13.00	13.00	13.00	13.00	12.32	11.25
	6	7	13.39	13.39	13.39	13.00	12.32	11.25
	7.9	9	13.80	13.80	13.39	13.00	12.32	11.25
15	-20	-19.8	9.30	9.30	9.30	9.30	9.30	9.30
	-19	-18.8	9.96	9.96	9.96	9.96	9.96	9.96
	-17	-16.7	10.47	10.47	10.47	10.47	10.47	10.47
	-15	-14.7	10.80	10.80	10.80	10.80	10.80	10.80
	-13	-12.6	11.14	11.14	11.14	11.14	11.14	11.14
	-11	-10.5	11.68	11.68	11.68	11.68	11.68	11.68
	-10	-9.5	12.11	12.11	12.11	12.11	12.11	12.11
	-9.1	-8.5	12.43	12.43	12.43	12.43	12.43	12.43
	-7.6	-7	12.64	12.64	12.64	12.64	12.64	12.64
	-5.6	-5	13.18	13.18	13.18	13.18	13.18	13.18
	-3.7	-3	13.82	13.82	13.82	13.82	13.82	13.82
	-0.7	0	14.79	14.79	14.79	14.79	14.79	13.93
	2.2	3	15.64	15.64	15.64	15.64	15.32	13.93
	4.1	5	16.37	16.37	16.37	16.37	15.32	13.93
	6	7	17.00	17.00	17.00	16.37	15.32	13.93
	7.9	9	17.14	17.14	17.00	16.37	15.32	13.93
	9.8	11	17.57	17.57	17.00	16.37	15.32	13.93
	11.8	13	18.32	17.89	17.00	16.37	15.32	13.93
	13.7	15	18.75	17.89	17.00	16.37	15.32	13.93

8 Electrical characteristics

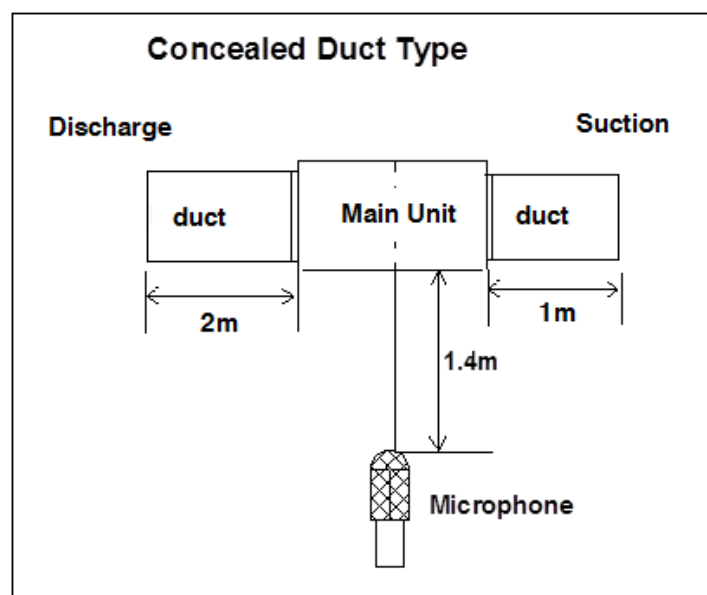
Model	Indoor unit				MFC	Power cable			Signal cable
	Hz	Voltage	Minimum	Maximum		L ≤ 20m	L ≤ 50m	Grounded	
CC-CPAM024-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-CPAM028-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-CPAM030-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-CPAM034-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-CPAM040-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-CPAM050-1S	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) Output: Fan motor rated power Output (W)
- 6) FLC: Full Load Current (A)

9 Sound pressure 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)

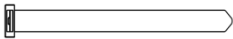
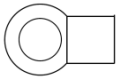
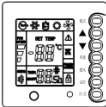
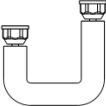
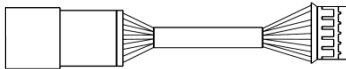
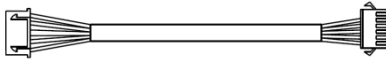
Model	Sound pressure level (dB(A))		
	High speed	Medium speed	Low speed
CC-CPAM024-1S	41	39	36
CC-CPAM028-1S	41	39	36
CC-CPAM030-1S	43	40	38
CC-CPAM034-1S	44	42	40
CC-CPAM040-1S	44	42	40
CC-CPAM050-1S	44	42	40

Notes:

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

10 Accessories

10.1 Standard accessories.

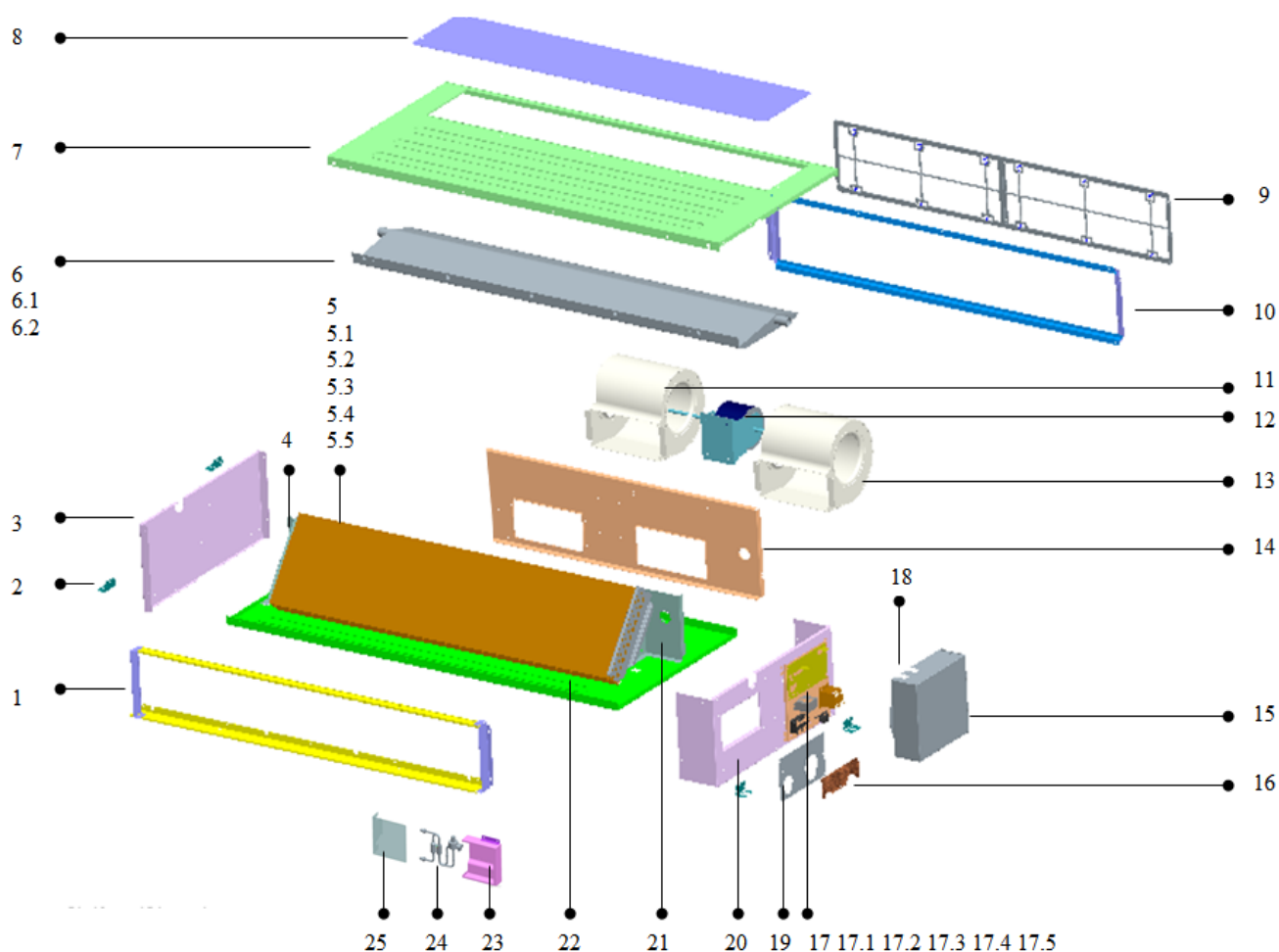
Item	Quantity	Shape	Usage
Installation manual for indoor unit	1	/	Must deliver to customer
Insulation sheath	2		Thermal insulation for the jointing part of piping
Strapping tapes	6		Bind up the wires and pipes
Round shape insulation termination points	6		For wiring
U shape insulation termination points	3		For wiring
Wired controller	1		For controlling indoor unit
EXV connection pipe	1		Connecting with EXV box and indoor unit liquid pipe
Wired controller connection wire group	1		For connecting wired controller to indoor PCB
Wired controller connection wire group	1		For connecting wired controller to indoor PCB
Bag	3		For bagging accessories

10.2 Local buy accessories.

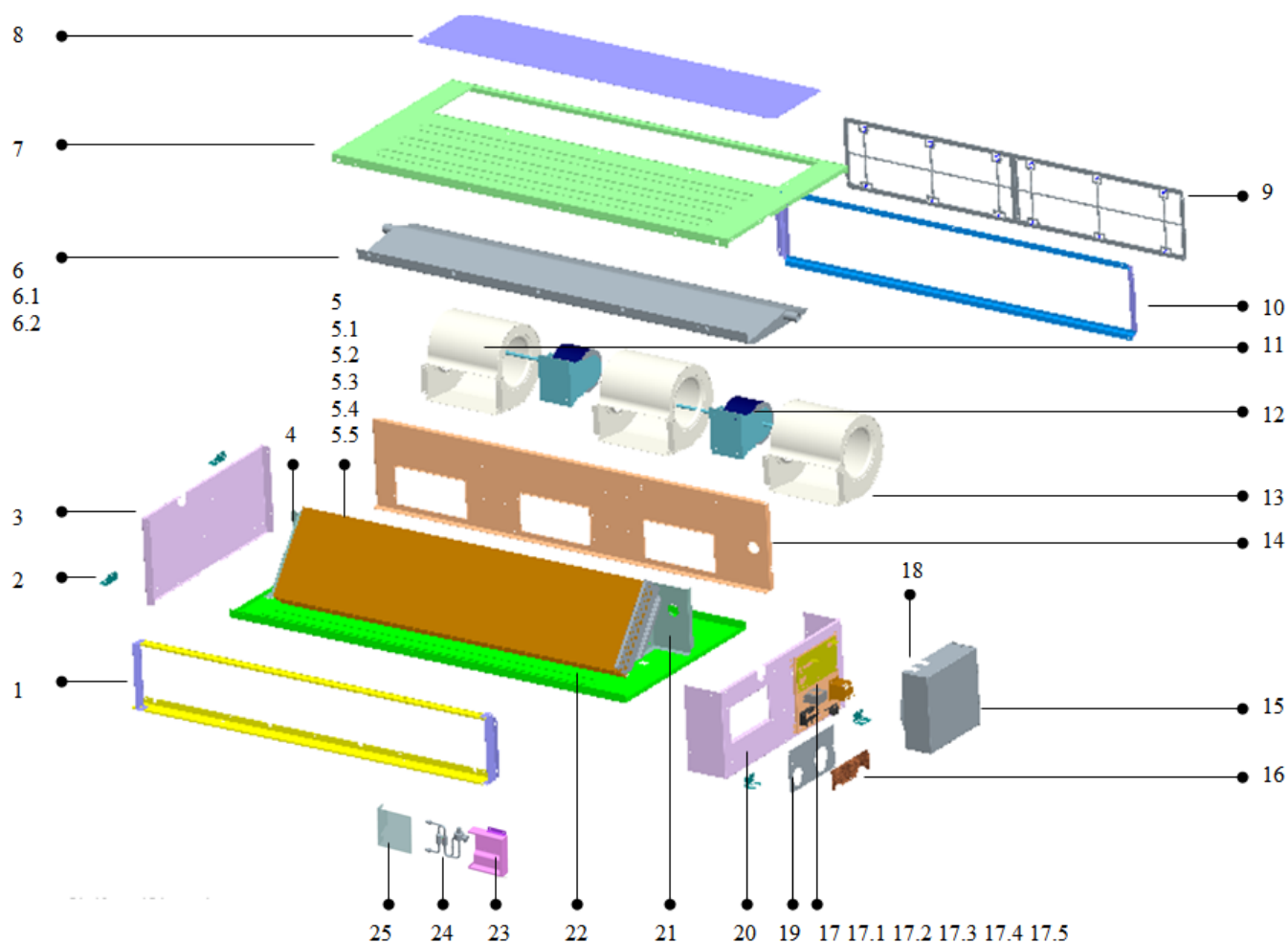
Item	Specification	
	7.1kW~8.0kW	9.0kW~15.0kW
Liquid side copper pipe	Ø9.53mm*0.75mm	
Gas side copper pipe	Ø15.9mm*1.0mm	Ø15.9mm*1.0mm
Drainage pipe	PVC	
Pipe insulation	Thickness ≥ 10mm	
Power cables	2*2.5 mm ² (When total cable length is ≤20m) 2*4.0 mm ² (When total cable length is ≤50m)	
Grounded cable	2.5 mm ²	
Signal cables	2*0.75 mm ² (AVP, RVP, RVVP)	

11 Exploded view

CC-CPAM024-1S, CC-CPAM028-1S



No.	Part name	Quantity	No.	Part name	Quantity
1	Air outlet assy	1	13	Right scroll case	1
2	Hanger	4	14	Fixing board assy for fan	1
3	Left side board	1	15	E- parts box cover	1
4	Left connecting panel for evaporator	1	16	Small cover	1
5	Evaporator components	1	17	Electronic control components	1
5.1	Transition	6	17.1	Electronic control board of indoor unit	1
5.2	Current dividing assy	1	17.2	Temp sensor	1
5.3	Collecting pipe assy	1	17.3	Transformer	1
5.4	Evaporator assy	1	17.4	Terminal	1
5.5	Installation tube for probe	1	17.5	Groove clamp 7	2
6	Water pan assy	1	18	E- parts box base	1
6.1	Discharge pipe assy	2	19	Big cover	1
6.2	Rubber cover for water outlet joint	2	20	Right side board	1
7	Lower panel	1	21	Right connecting panel for evaporator	1
8	Air return baffle	1	22	Upper panel	1
9	Air filter	2	23	Welding assy for large expansion valve	1
10	Air return assy	1	24	EXV box welding assy	1
11	Left scroll case	1	25	Large expansion valve cover	1
12	Indoor motor	1			



No.	Part name	Quantity	No.	Part name	Quantity
1	Air outlet assy	1	13	Right scroll case	2
2	Hanger	4	14	Fixing board assy for fan	1
3	Left side board	1	15	E- parts box cover	1
4	Left connecting panel for evaporator	1	16	Small cover	1
5	Evaporator components	1	17	Electronic control components	1
5.1	Transition	6	17.1	Electronic control board of indoor unit	1
5.2	Current dividing assy	1	17.2	Temp sensor	1
5.3	Collecting pipe assy	1	17.3	Transformer	1
5.4	Evaporator assy	1	17.4	Terminal	1
5.5	Installation tube for probe	1	17.5	Groove clamp 7	2
6	Water pan assy	1	18	E- parts box base	1
6.1	Discharge pipe assy	2	19	Big cover	1
6.2	Rubber cover for water outlet joint	2	20	Right side board	1
7	Lower panel	1	21	Right connecting panel for evaporator	1
8	Air return baffle	1	22	Upper panel	1
9	Air filter	2	23	Welding assy for large expansion valve	1
10	Air return assy	1	24	EXV box welding assy	1
11	Left scroll case	1	25	Large expansion valve cover	1
12	Indoor motor	2			