



FLOOR STANDING TECHNICAL MANUAL

DC SYSTEM

220-240V/50&60Hz

INDOOR UNITS

Revision V 2303



Model Numbers:

CC-FTA030-1S, CC-FTA036-1S, CC-FTA048-1S, CC-FTA060-1S



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-FTA030-1S	CC-FTA036-1S
Power supply			220-240V/1N/50Hz	220-240V/1N/50Hz
Capacity	Cooling	kW	8	10
	Heating	kW	8.8	11
Max. Power Input		W	90	100
Max. Current		A	0.8	0.9
Fan motor	Model		DR-310-170-8	DR-310-170-8
	Type		DC	DC
	Brand		OCEAN	OCEAN
	Capacitor	μF	-	-
	Speed (Hi/Med/Low)	r/min	490/450/400	500/460/400
Indoor coil	Number of rows		3	3
	Fin type		Hydrophilic	Hydrophilic
	Tube diameter and type	mm	Φ7	Φ7
Air flow (High speed)		m ³ /h	1350	1400
Sound pressure level		dB(A)	46/44/41	47/45/41
Body	Dimension (W×H×D)	mm	549×1853×419	549×1853×419
	Packing (W×H×D)	mm	645× 1960×510	645× 1960×510
	Net/Gross weight	kg	52/62	52/62
Refrigerant type			R410A	R410A
Throttle type			EXV	EXV
Design pressure		MPa	4.5	4.5
Liquid pipe / Gas pipe		mm	9.52/15.88	9.52/15.88
Connecting wire	Power wire	mm ²	2.5*2+2.5(below20m) 4*2.5+2.5(below50m)	2.5*2+2.5(below20m) 4*2.5+2.5(below50m)
	Signal wire	mm ²	0.75*2 (2-core shielded wire)	0.75*2 (2-core shielded wire)
Drainage water pipe		mm	20	20
Controller	Standard		Remote controller	Remote controller
	Optional		Wired controller	Wired controller
Operation temp		°C	16~32	16~32

Notes:

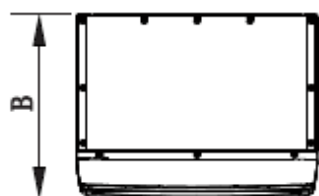
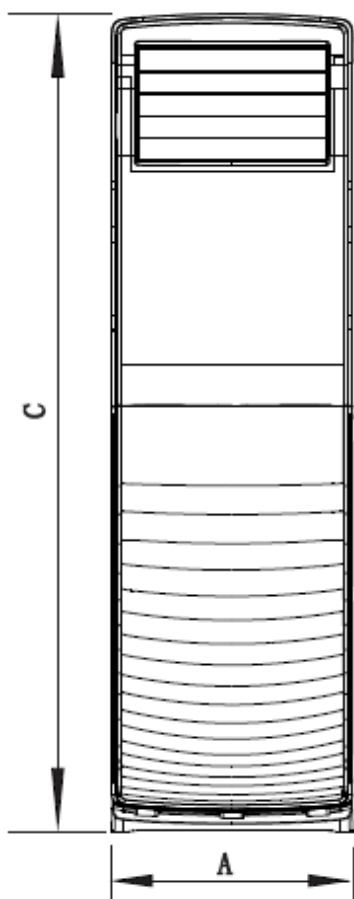
- Nominal cooling capacities are based on the following conditions.
 - Outdoor temperature: 35°C DB
 - Return air temperature: 27°C DB, 19°C WB
- Nominal heating capacities are based on the following condition.
 - Outdoor temperature: 7°C DB, 6°C WB
 - Return air temperature: 20°C DB
- The above data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

Model			CC-FTA048-1S	CC-FTA060-1S
Power supply			220-240V/1N/50Hz	220-240V/1N/50Hz
Capacity	Cooling	kW	14	16
	Heating	kW	15	17
Max. Power Input		W	120	120
Max. Current		A	1	1
Fan motor	Model		DR-310-170-8	DR-310-170-8
	Type		DC	DC
	Brand		OCEAN	OCEAN
	Capacitor	μF	-	-
	Speed (Hi/Med/Low)	r/min	490/450/400	490/450/400
Indoor coil	Number of rows		3	3
	Fin type		Hydrophilic	Hydrophilic
	Tube diameter and type	mm	Φ7	Φ7
Air flow (High speed)		m ³ /h	1700	1700
Sound pressure level		dB(A)	49/47/44	49/47/44
Body	Dimension (W×H×D)	mm	645×1920×406	645×1920×406
	Packing (W×H×D)	mm	740×2080×540	740×2080×540
	Net/Gross weight	kg	56.5/68.5	56.5/68.5
Refrigerant type			R410A	R410A
Throttle type			EXV	EXV
Design pressure		MPa	4.5	4.5
Liquid pipe / Gas pipe		mm	9.52/15.88	9.52/15.88
Connecting wire	Power wire	mm ²	2.5*2+2.5(below20m) 4*2.5+2.5(below50m)	2.5*2+2.5(below20m) 4*2.5+2.5(below50m)
	Signal wire	mm ²	0.75*2 (2-core shielded wire)	0.75*2 (2-core shielded wire)
Drainage water pipe		mm	20	20
Controller	Standard		Remote controller	Remote controller
	Optional		Wired controller	Wired controller
Operation temp		°C	16~32	16~32

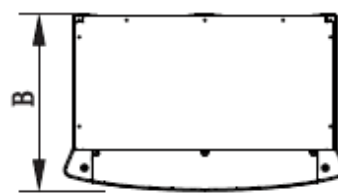
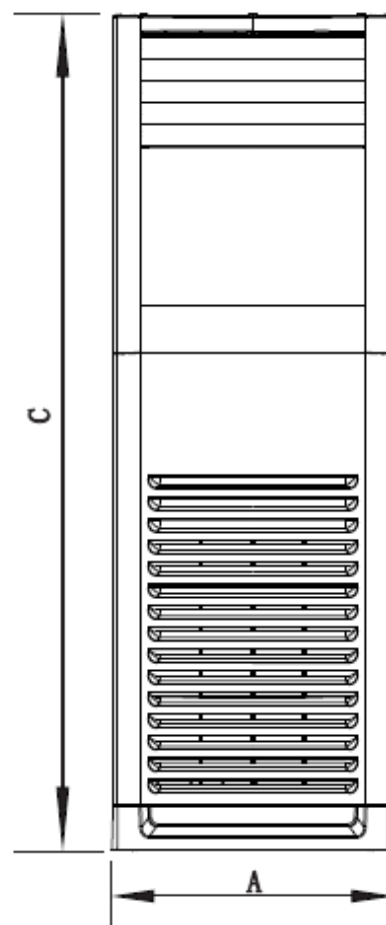
Notes:

- 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.

3. Dimensions



8~10kW

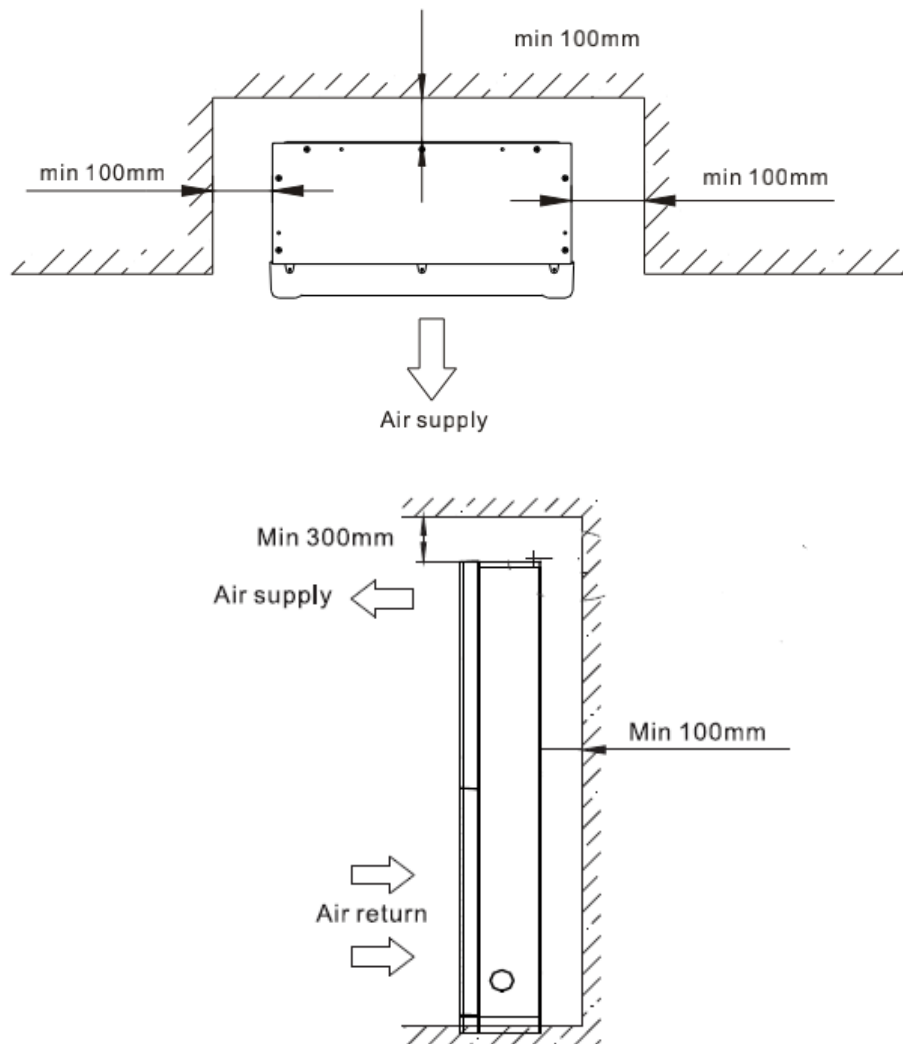


14~16kW

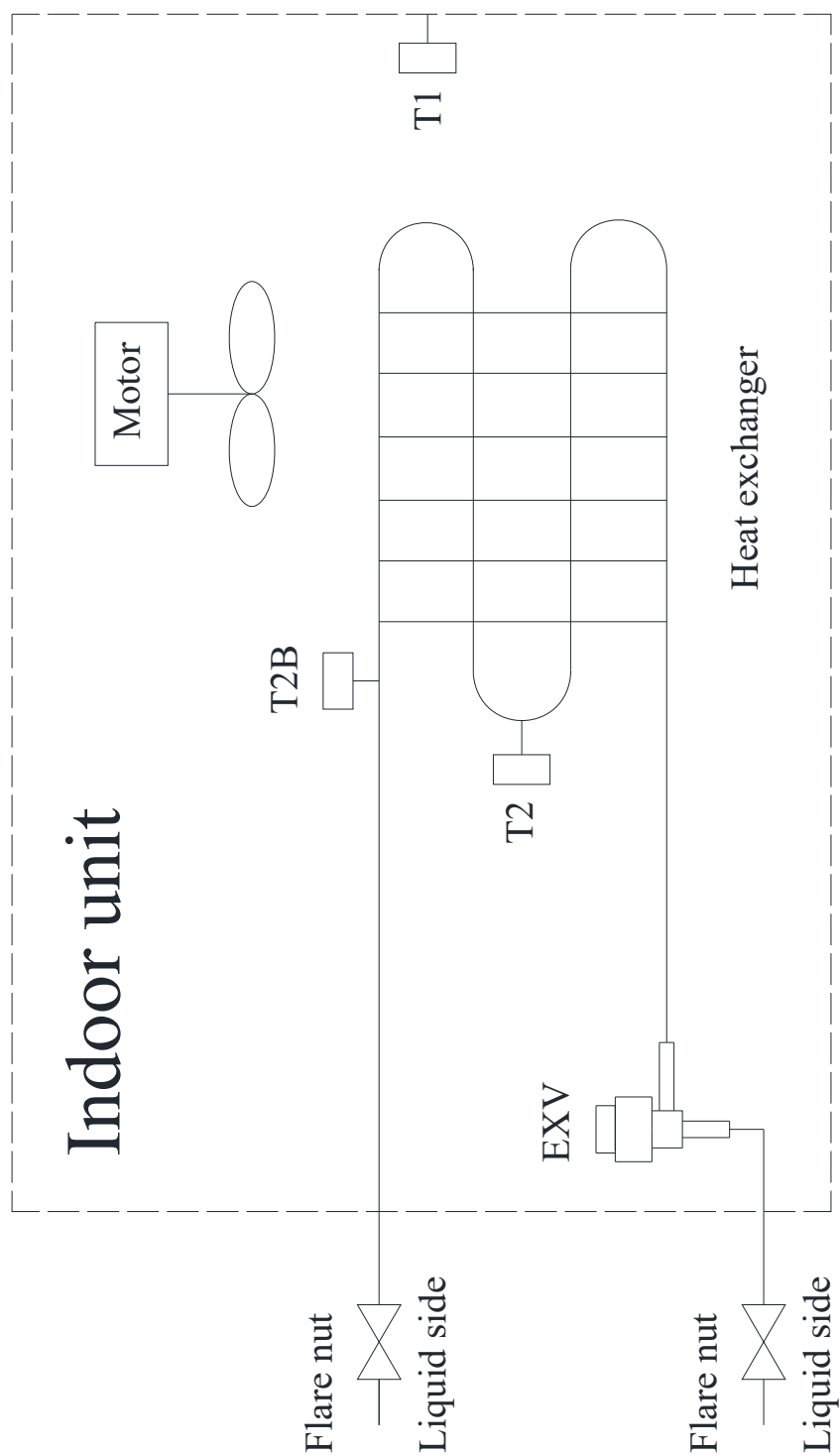
Model	Body dimension (mm)		
	A	B	C
CC-FTA030-1S	549	419	1853
CC-FTA036-1S	549	419	1853
CC-FTA048-1S	648	406	1922
CC-FTA060-1S	648	406	1922

4. Service space

- There is enough room for installation and maintenance.
- 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.



5. Piping diagram

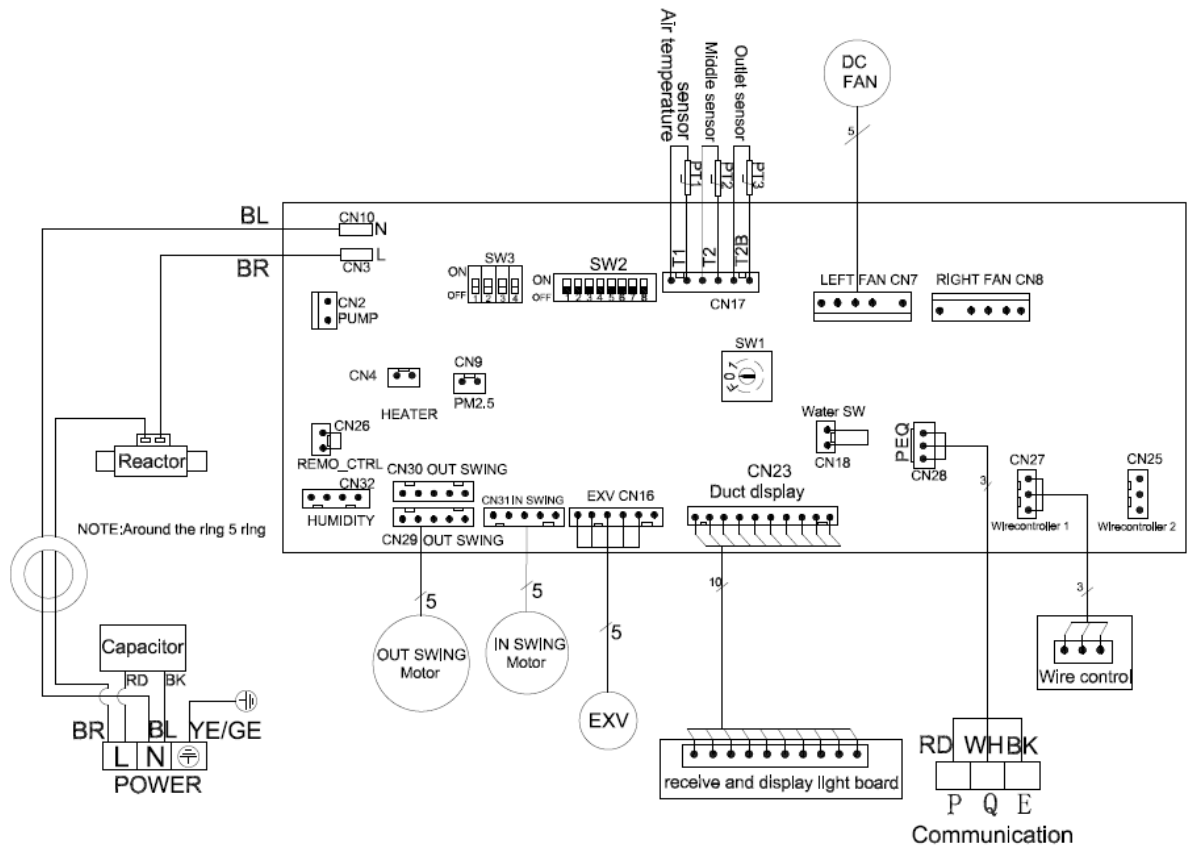


Notes:

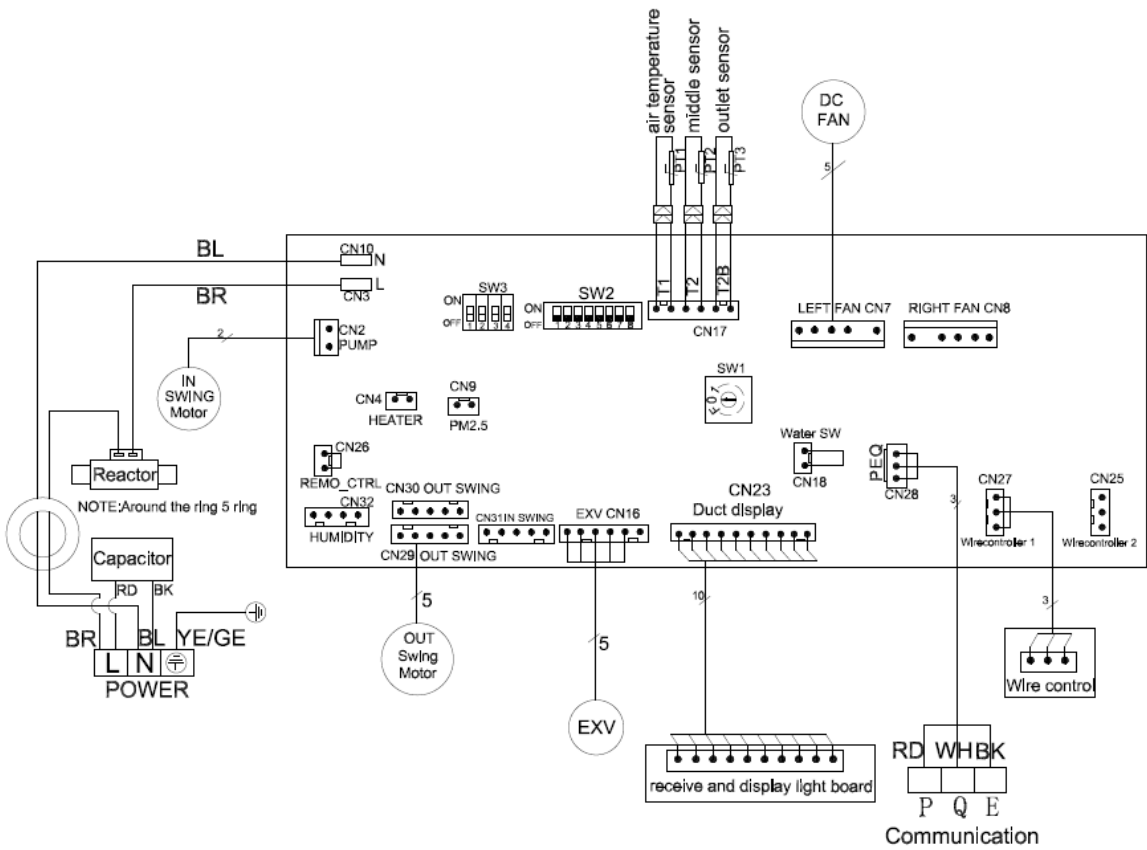
- 1) T1: Room temperature sensor
- 2) T2: Temperature sensor of middle heat exchanger
- 3) T2B: Temperature sensor of heat exchanger outlet
- 4) EXV: Electrical expansion valve

6. Wiring diagram

6.1 8kW and 10kW

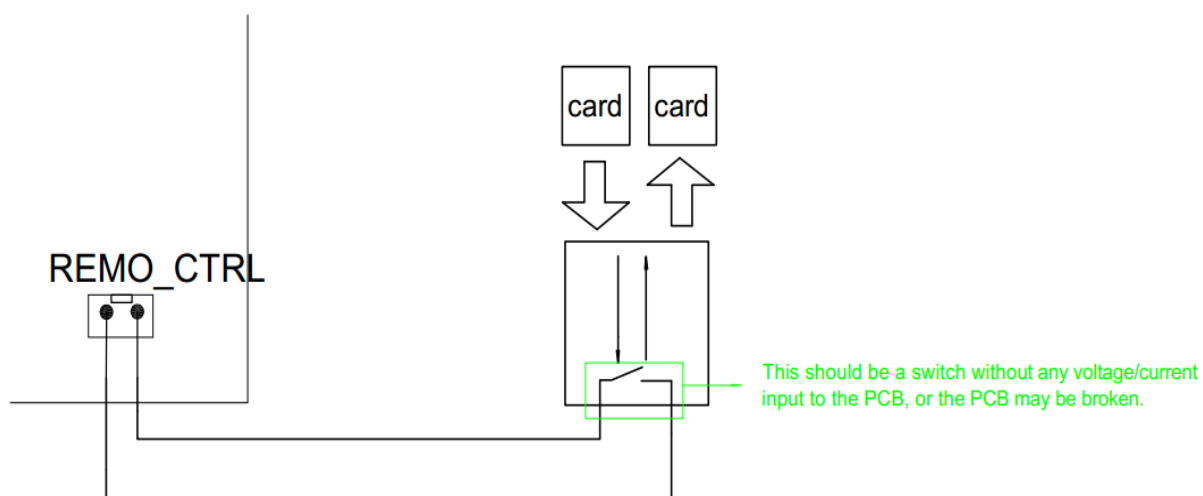


14kW and 16kW



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	5.0/5.1/5.6	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	A

6.2.2 SW3

Type selection		
SW3 NO1,2,3	Type	
ON ☐ 1 ☐ 2 ☐ 3 OFF ☐ 1 ☐ 2 ☐ 3	Short duct unit	
ON ☐ 1 ☐ 2 ☐ 3 OFF ☐ 1 ☐ 2 ☐ 3	Slim duct unit	
ON ☐ 1 ☐ 2 ☐ 3 OFF ☐ 1 ☐ 2 ☐ 3	Medium ESP duct unit	
ON ☐ 1 ☐ 2 ☐ 3 OFF ☐ 1 ☐ 2 ☐ 3	Floor ceiling unit	
ON ☐ 1 ☐ 2 ☐ 3 OFF ☐ 1 ☐ 2 ☐ 3	Floor standing unit	

Mode Select bits		
SW3 NO.4	ON ☐ 4 OFF ☐ 4	Automatic Address-sing mode and (Factory default)
	ON ☐ 4 OFF ☐ 4	Test mode (to allow clear address)

6.2.3 SW2

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

Name	Switch number 2 of SW2								
Function	Heating temperature compensation temperature value select bits								
Setting	<table border="1"> <tr> <td rowspan="2">SW2 NO.2</td><td>ON ☒</td><td>6°C</td><td rowspan="2">Factory default</td></tr> <tr> <td>OFF ☐</td><td>2°C</td></tr> </table>			SW2 NO.2	ON ☒	6°C	Factory default	OFF ☐	2°C
SW2 NO.2	ON ☒	6°C	Factory default						
	OFF ☐	2°C							

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 ☒ OFF ☐ 3 4	Factory default	15°C
	ON ☒ OFF ☐ 3 4		20°C
	ON ☒ OFF ☐ 3 4		24°C
	ON ☒ OFF ☐ 3 4		26°C

Name	Switch number 5 of SW2								
Function	Heating stop the fan time to choose								
Setting	<table border="1"> <tr> <td rowspan="2">SW2 NO.5</td><td>ON ☒</td><td>4min</td><td rowspan="2">Factory default</td></tr> <tr> <td>OFF ☐</td><td>8min</td></tr> </table>			SW2 NO.5	ON ☒	4min	Factory default	OFF ☐	8min
SW2 NO.5	ON ☒	4min	Factory default						
	OFF ☐	8min							

Name	Switch number 6of SW2		
Function	According to the contract custom ppower lost memory functions		
Setting	SW2 NO.6 ON OFF 6 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 	Silent mode (Factory default)
		OFF 	Standard mode

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	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
8.0	10	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	9.32	6.27	9.70	5.62
	12	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	9.32	6.27	9.61	5.57
	14	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	9.24	6.21	9.52	5.52
	16	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	9.16	6.16	9.44	5.47
	18	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	9.07	6.10	9.35	5.42
	19	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	8.99	6.04	9.27	5.37
	21	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	8.91	5.99	9.18	5.31
	23	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.18	8.82	5.93	9.09	5.26
	25	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.71	6.12	8.74	5.87	9.01	5.21
	27	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.63	6.06	8.66	5.82	8.92	5.16
	29	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.55	6.01	8.57	5.76	8.83	5.11
	31	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.47	5.95	8.49	5.70	8.75	5.06
	33	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.38	5.83	8.41	5.65	8.66	5.01
	35	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.80	8.26	5.77	8.32	5.59	8.58	4.96
	37	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.77	8.14	5.66	8.24	5.48	8.41	4.86
	39	5.54	5.00	6.54	5.22	7.54	5.81	8.00	5.74	8.08	5.60	8.16	5.42	8.32	4.81
	41	5.54	5.00	6.54	5.22	7.44	5.81	7.92	5.71	8.00	5.54	8.08	5.36	8.23	4.76
	43	5.54	5.00	6.54	5.22	7.36	5.81	7.84	5.69	7.92	5.48	8.00	5.31	8.15	4.71
	46	5.54	5.00	6.41	5.12	7.12	5.81	7.76	5.66	7.84	5.42	7.92	5.25	8.08	4.66
	48	5.54	5.00	6.34	5.06	6.88	5.63	7.52	5.60	7.76	5.36	7.68	5.19	7.84	4.61
	50	5.44	5.00	6.28	5.01	6.64	5.57	7.28	5.45	7.52	5.30	7.44	5.14	7.60	4.56
10	10	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.65	7.92	12.12	7.11
	12	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.65	7.92	12.01	7.05
	14	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.55	7.85	11.90	6.98
	16	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.44	7.78	11.80	6.92
	18	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.34	7.71	11.69	6.86
	19	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.24	7.64	11.58	6.79
	21	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.13	7.57	11.47	6.73
	23	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.03	7.50	11.37	6.67
	25	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.74	10.92	7.43	11.26	6.61
	27	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.79	7.67	10.82	7.36	11.15	6.54
	29	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.68	7.59	10.72	7.29	11.04	6.48
	31	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.58	7.52	10.62	7.22	10.94	6.42
	33	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.48	7.38	10.51	7.15	10.83	6.35
	35	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.33	7.30	10.40	7.07	10.72	6.29
	37	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.30	10.17	7.16	10.30	6.93	10.51	6.16
	39	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.26	10.10	7.08	10.20	6.86	10.40	6.10
	41	6.92	6.25	8.17	6.53	9.30	7.34	9.90	7.23	10.00	7.01	10.10	6.79	10.29	6.04
	43	6.92	6.25	8.17	6.53	9.20	7.34	9.80	7.19	9.90	6.94	10.00	6.72	10.19	5.98
	46	6.92	6.25	8.01	6.39	8.90	7.34	9.70	7.16	9.80	6.86	9.90	6.65	10.10	5.91
	48	6.92	6.25	7.93	6.33	8.60	7.12	9.40	7.09	9.70	6.79	9.60	6.58	9.80	5.85
	50	6.92	6.25	8.17	6.53	9.42	7.34	10.00	7.34	10.89	7.81	11.65	7.92	12.12	7.11

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
14	10	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	16.32	11.15	16.97	10.01
	12	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	16.32	11.15	16.82	9.92
	14	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	16.17	11.05	16.67	9.84
	16	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	16.02	10.95	16.52	9.75
	18	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	15.88	10.86	16.37	9.66
	19	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	15.73	10.76	16.22	9.57
	21	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	15.59	10.66	16.06	9.48
	23	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	11.00	15.44	10.56	15.91	9.40
	25	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.24	10.90	15.29	10.46	15.76	9.31
	27	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	15.10	10.79	15.15	10.36	15.61	9.22
	29	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	14.96	10.69	15.01	10.26	15.46	9.13
	31	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	14.82	10.59	14.86	10.16	15.31	9.04
	33	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	14.67	10.39	14.71	10.06	15.16	8.95
	35	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.34	14.46	10.28	14.57	9.96	15.01	8.87
	37	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.29	14.24	10.08	14.42	9.77	14.71	8.69
	39	9.69	8.75	11.44	9.14	13.19	10.34	14.00	10.22	14.14	9.98	14.28	9.67	14.56	8.60
	41	9.69	8.75	11.44	9.14	13.02	10.34	13.86	10.18	14.00	9.87	14.14	9.57	14.41	8.51
	43	9.69	8.75	11.44	9.14	12.88	10.34	13.72	10.13	13.86	9.77	14.00	9.47	14.26	8.43
	46	9.69	8.75	11.22	8.95	12.46	10.34	13.58	10.09	13.72	9.67	13.86	9.37	14.14	8.34
	48	9.69	8.75	11.10	8.86	12.04	10.03	13.16	9.99	13.58	9.57	13.44	9.27	13.72	8.25
	50	9.52	8.75	10.99	8.77	11.62	9.93	12.74	9.72	13.16	9.47	13.02	9.17	13.30	8.16
16	10	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	18.65	12.75	19.39	11.44
	12	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	18.65	12.75	19.22	11.34
	14	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	18.48	12.63	19.05	11.24
	16	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	18.31	12.52	18.88	11.14
	18	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	18.15	12.41	18.70	11.04
	19	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	17.98	12.29	18.53	10.94
	21	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	17.82	12.18	18.36	10.84
	23	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.57	17.64	12.07	18.18	10.74
	25	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.42	12.45	17.48	11.95	18.01	10.64
	27	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.26	12.34	17.31	11.84	17.84	10.54
	29	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	17.09	12.22	17.15	11.73	17.67	10.44
	31	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	16.93	12.10	16.98	11.61	17.50	10.33
	33	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	16.77	11.87	16.81	11.50	17.33	10.23
	35	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.81	16.53	11.75	16.65	11.39	17.16	10.13
	37	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.76	16.28	11.52	16.48	11.16	16.81	9.93
	39	11.08	10.00	13.08	10.44	15.08	11.82	16.00	11.69	16.16	11.40	16.32	11.05	16.64	9.83
	41	11.08	10.00	13.08	10.44	14.88	11.82	15.84	11.64	16.00	11.29	16.16	10.93	16.47	9.73
	43	11.08	10.00	13.08	10.44	14.72	11.82	15.68	11.58	15.84	11.17	16.00	10.82	16.30	9.63
	46	11.08	10.00	12.82	10.23	14.24	11.82	15.52	11.53	15.68	11.05	15.84	10.71	16.16	9.53
	48	11.08	10.00	12.69	10.13	13.76	11.47	15.04	11.42	15.52	10.93	15.36	10.60	15.68	9.43
	50	10.88	10.00	12.56	10.02	13.28	11.35	14.56	11.11	15.04	10.82	14.88	10.48	15.20	9.33

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
8.0	-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
	4.1	5	8.62	8.62	8.62	8.62	8.28	7.56
	6	7	9.00	9.00	8.80	8.73	8.28	7.56
	7.9	9	9.27	9.27	8.80	8.73	8.28	7.56
	9.8	11	9.54	9.54	8.80	8.73	8.28	7.56
10	11.8	13	9.90	9.72	8.80	8.73	8.28	7.56
	13.7	15	10.17	9.72	8.80	8.73	8.28	7.56
	-20	-19.8	6.16	6.16	6.16	6.16	6.16	6.16
	-19	-18.8	6.60	6.60	6.60	6.60	6.60	6.60
	-17	-16.7	6.93	6.93	6.93	6.93	6.93	6.93
	-15	-14.7	7.15	7.15	7.15	7.15	7.15	7.15
	-13	-12.6	7.37	7.37	7.37	7.37	7.37	7.37
	-11	-10.5	7.70	7.70	7.70	7.70	7.70	7.70
	-10	-9.5	8.03	8.03	8.03	8.03	8.03	8.03
	-9.1	-8.5	8.25	8.25	8.25	8.25	8.25	8.25
	-7.6	-7	8.36	8.36	8.36	8.36	8.36	8.36
	-5.6	-5	8.69	8.69	8.69	8.69	8.69	8.69
	-3.7	-3	9.13	9.13	9.13	9.13	9.13	9.13
	-0.7	0	9.79	9.79	9.79	9.79	9.79	9.24
	2.2	3	10.34	10.34	10.34	10.34	10.12	9.24
	4.1	5	10.67	10.67	10.67	10.67	10.12	9.24
	6	7	11.00	11.00	11.00	10.67	10.12	9.24
	7.9	9	11.33	11.33	11.00	10.67	10.12	9.24
	9.8	11	11.66	11.66	11.00	10.67	10.12	9.24
	11.8	13	12.10	11.88	11.00	10.67	10.12	9.24
	13.7	15	12.43	11.88	11.00	10.67	10.12	9.24

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
14	-20	-19.8	8.68	8.68	8.68	8.68	8.68	8.68
	-19	-18.8	9.30	9.30	9.30	9.30	9.30	9.30
	-17	-16.7	9.77	9.77	9.77	9.77	9.77	9.77
	-15	-14.7	10.08	10.08	10.08	10.08	10.08	10.08
	-13	-12.6	10.40	10.40	10.40	10.40	10.40	10.40
	-11	-10.5	10.90	10.90	10.90	10.90	10.90	10.90
	-10	-9.5	11.30	11.30	11.30	11.30	11.30	11.30
	-9.1	-8.5	11.60	11.60	11.60	11.60	11.60	11.60
	-7.6	-7	11.80	11.80	11.80	11.80	11.80	11.80
	-5.6	-5	12.30	12.30	12.30	12.30	12.30	12.30
	-3.7	-3	12.90	12.90	12.90	12.90	12.90	12.90
	-0.7	0	13.80	13.80	13.80	13.80	13.80	13.00
	2.2	3	14.60	14.60	14.60	14.60	14.30	13.00
	4.1	5	15.00	15.00	15.00	15.00	14.30	13.00
	6	7	15.50	15.50	15.00	15.00	14.30	13.00
	7.9	9	16.00	16.00	15.50	15.00	14.30	13.00
	9.8	11	16.40	16.40	15.50	15.00	14.30	13.00
	11.8	13	17.10	16.70	15.50	15.00	14.30	13.00
	13.7	15	17.50	16.70	15.50	15.00	14.30	13.00
16	-20	-19.8	10.08	10.08	10.08	10.08	10.08	10.08
	-19	-18.8	10.80	10.80	10.80	10.80	10.80	10.80
	-17	-16.7	11.43	11.43	11.43	11.43	11.43	11.43
	-15	-14.7	11.70	11.70	11.70	11.70	11.70	11.70
	-13	-12.6	12.42	12.42	12.42	12.42	12.42	12.42
	-11	-10.5	12.60	12.78	12.78	12.78	12.78	12.78
	-10	-9.5	13.14	13.14	13.14	13.14	13.14	13.14
	-9.1	-8.5	13.50	13.50	13.50	13.50	13.50	13.50
	-7.6	-7	13.68	13.68	13.68	13.68	13.68	13.68
	-5.6	-5	14.22	14.22	14.22	14.22	14.22	14.22
	-3.7	-3	14.94	14.94	14.94	14.94	14.94	14.94
	-0.7	0	16.02	16.02	16.02	16.02	16.02	15.12
	2.2	3	16.92	16.92	16.92	16.92	16.56	15.12
	4.1	5	17.00	17.00	17.00	17.00	16.56	15.12
	6	7	17.00	17.00	17.00	17.00	16.56	15.12
	7.9	9	17.54	17.54	17.00	17.00	16.56	15.12
	9.8	11	18.08	17.78	17.00	17.00	16.56	15.12
	11.8	13	18.80	18.04	17.00	17.00	16.56	15.12
	13.7	15	19.34	18.44	17.00	17.00	16.56	15.12

8 Electrical characteristics

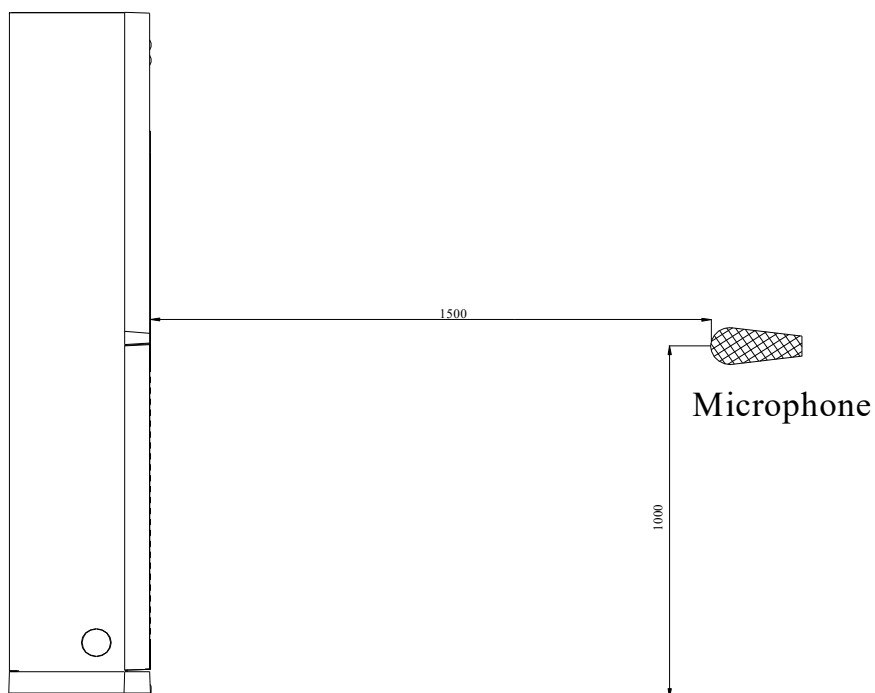
Model	Indoor unit				MFC	Power cable			Signal cable
	Hz	Voltage	Minimum	Maximum		L ≤ 20m	L ≤ 50m	Grounded	
CC-FTA030-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-FTA036-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-FTA048-1S	50Hz	220-240V	198	264	15	2*2.5mm ²	2*4.0mm ²	2.5mm ²	2*0.75 mm ²
CC-FTA060-1S	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 1.5m in front of the unit at a height of 1m

9.2 Test data (Sound pressure level)

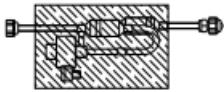
Model	Sound pressure level (dB(A))		
	High speed	Medium speed	Low speed
CC-FTA030-1S	46	44	41
CC-FTA036-1S	47	45	41
CC-FTA048-1S	49	47	44
CC-FTA060-1S	49	47	44

Notes:

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

10 Accessories

10.1 Standard accessories.

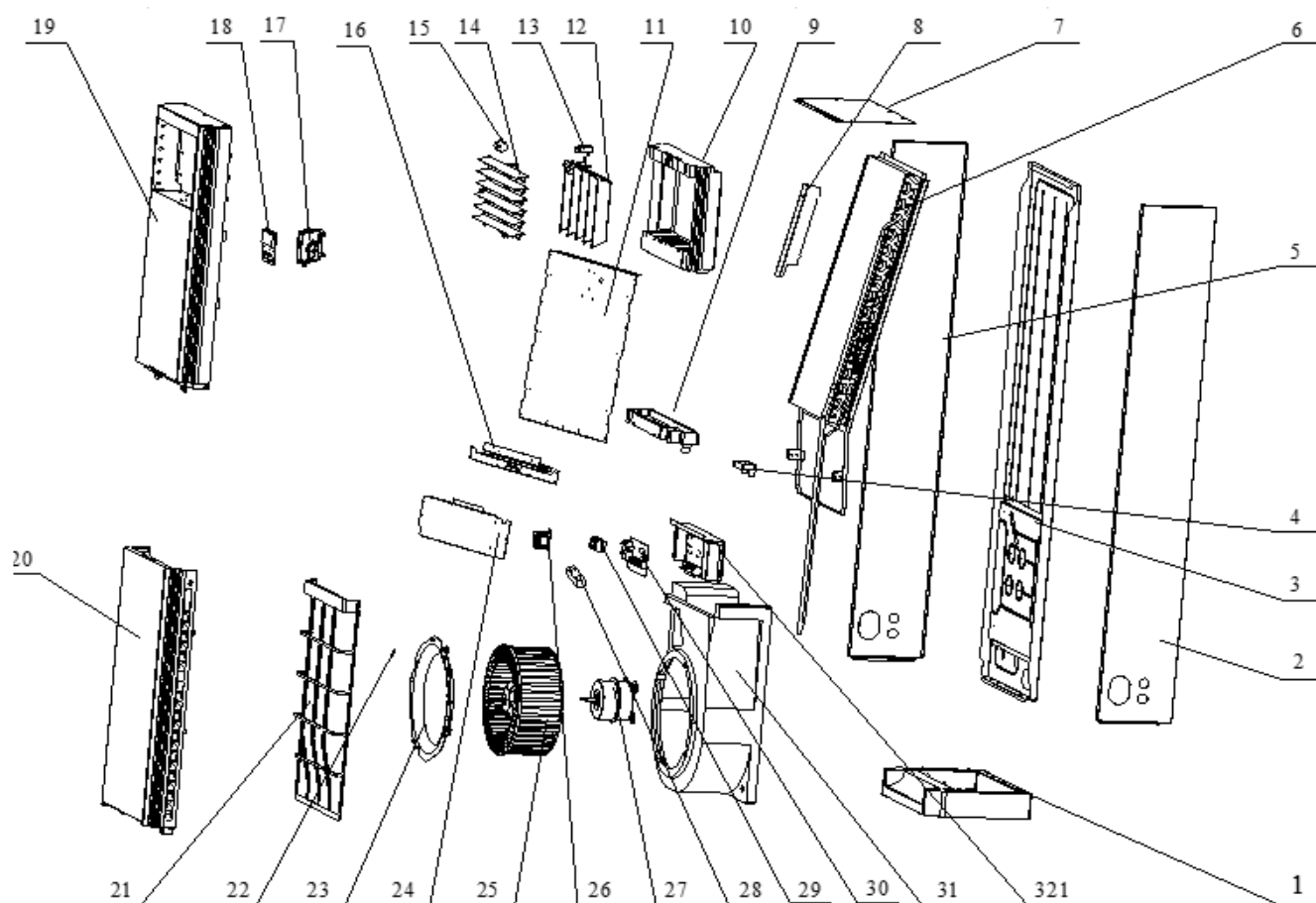
Item	Quantity	Shape	Usage
Installation manual for indoor unit	1	/	Must deliver to customer
Insulation sheath	2		Thermal insulation for the jointing part of piping
U shape insulation termination points	3		For wiring
Remote controller	1		For controlling indoor unit
Batteries	2		Power to remote controller
Ribbon	6		Bind up cables and connecting pipes
Dome Insulated tip	6		Used to connect wires
Drain Pipe	1		Used to drain water
EXV component	1		/
Bag	4		For bagging accessories

10.2 Local buy accessories.

Item	Specification
Liquid side copper pipe	Ø9.53mm*0.75mm
Gas side copper pipe	Ø15.88mm*1.0mm
Drainage pipe	PVC
Pipe insulation	Thickness $\geq 10\text{mm}$
Power cables	2*2.5 mm ² (When total cable length is $\leq 20\text{m}$) 2*4.0 mm ² (When total cable length is $\leq 50\text{m}$)
Grounded cable	2.5 mm ²
Signal cables	2*0.75 mm ² (AVP, RVP, RVVP)

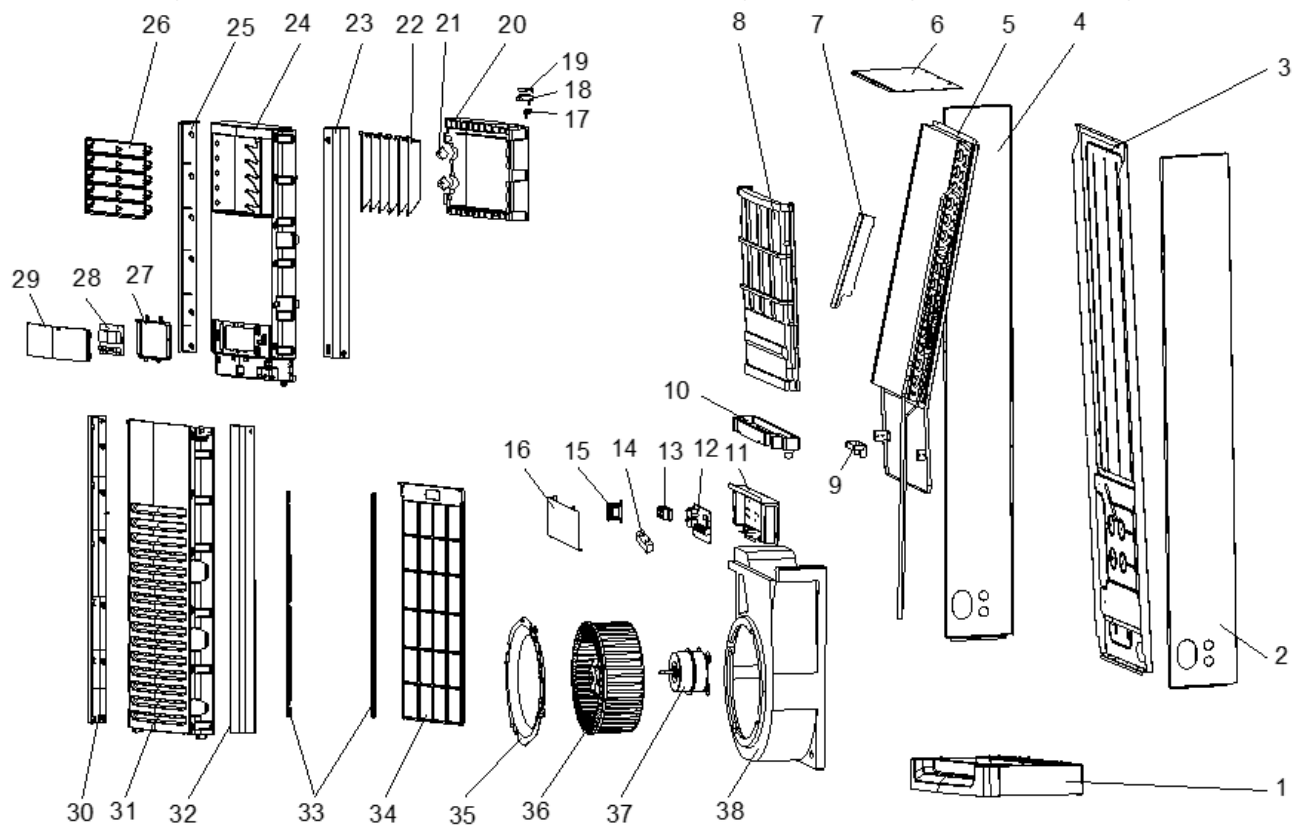
11 Exploded view

- CC-FTA030-1S,
CC-FTA036-1S



No.	Part name	Quantity	No.	Part name	Quantity
1	Inside Base	1	19	Up Panel	1
2	Right Plate	1	20	Down panel	1
3	Back Plate	1	21	Air Filter	1
4	Rubber Water Drainage	1	22	Indoor Sensor	1
5	Left Plate	1	23	Lead Flow Circle	1
6	Evaporator	1	24	Inside Electrical Box Cover	1
7	Top Plate	1	25	Centrifugal Fan	1
8	Pipe Cover	1	27	Indoor Motor	1
9	Water Drainage	1	28	Terminal (LN)	1
10	Out Blow Casing Foam	1	29	Terminal (PQE)	1
11	Heat insulation board	1	30	Main PCB	1
12	Vertical Vane	1	31	Volute Casing	1
13	Synchronization Motor	1	32	Inside Electrical Box	1
14	Horizontal Vane	1	33	Remote Controller	1
15	Vertical Vane Motor	1	34	Indoor Sensor	1
16	Middle Supporter	1	35	Drainage hose	1
17	Display PCB Box	1	36	Indoor Carton	1
18	Display PCB	1	37	EXV part	1

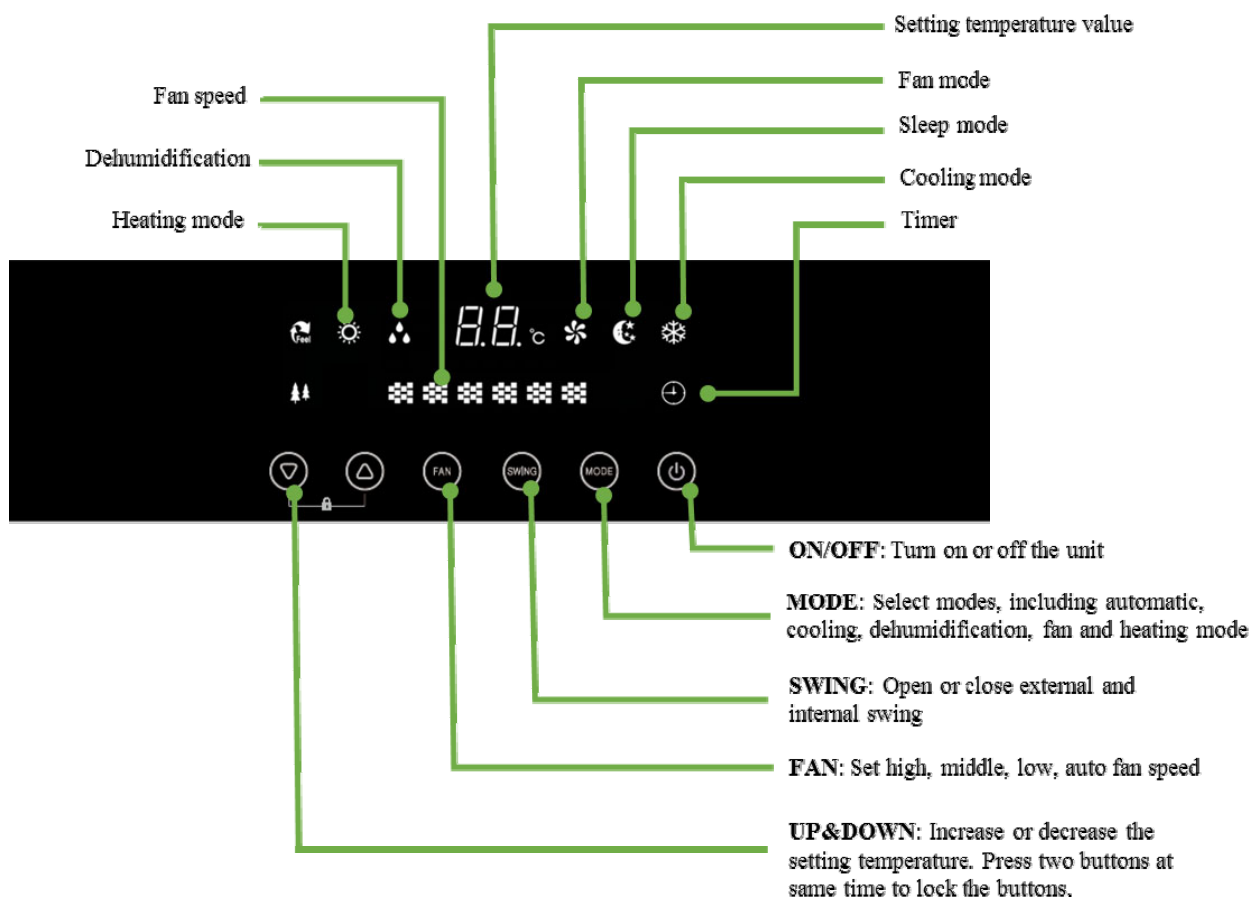
● CC-FTA048-1S, CC-FTA060-1S



No.	Part name	Quantity	No.	Part name	Quantity
1	Inside Base	1	23	Up-Left Ornamental Panel	1
2	Right Plate	1	24	Up Panel	1
3	Back Plate	1	25	Up-Right Ornamental Panel	1
4	Left Plate	1	26	Horizontal Vane	1
5	Evaporator	1	27	Display PCB Supporter	1
6	Top Plate	1	28	Display PCB	1
7	Pipe Cover	1	29	Display PCB Cover	1
8	Heat insulation board	1	30	Down-Left Ornamental Panel	1
9	Rubber Water Drainage	1	31	Down panel	1
10	Water Drainage	1	32	Down-Right Ornamental Panel	1
11	Inside Electrical Box	1	33	Air Filter Lead	1
12	Main PCB	1	34	Air Filter	1
13	Terminal (LN)	1	35	Lead Flow Circle	1
14	Capacitor	1	36	Centrifugal Fan	1
15	Reactor	1	37	Indoor Motor	1
16	Inside Electrical Box Cover	1	38	Volute Casing	1
17	Vertical Vane Connector	1	39	Room temp. Sensor	1
18	Synchronization Motor	1	40	Remote Controller	1
19	Synchronization Motor Cover	1	41	Drainage hose	1
20	Out Blow Casing Foam	1	42	Indoor Carton	1
21	Step Motor	1	43	EXV part	1
22	Vertical Vane	1	44	Up-Left Ornamental Panel	1

12 Display panel

- CC-FTA030-1S, CC-FTA036-1S



- CC-FTA048-1S, CC-FTA060-1S

