



**AIR COOLED PACKAGED TYPE AIR
CONDITIONERS**

[Your satisfaction is always our cherished desire!]



AirTrojan International Co., Ltd.

<http://www.airtrojan.com>

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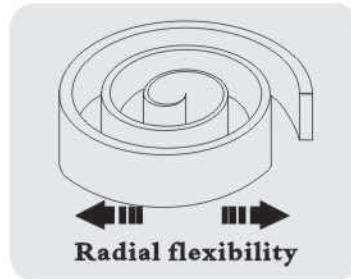
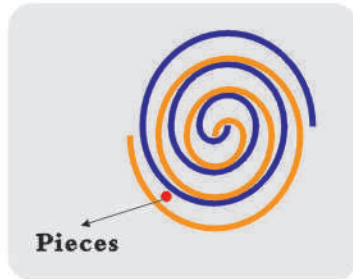
The models and specifications of equipment listed in this catalog shall be subject to change without any prior notification due to product updating.





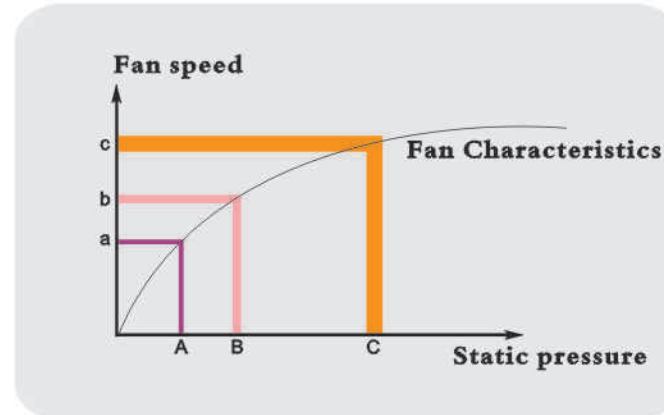
Product Features

Feature 1 Save money, save worry and reduce interference



- Scroll compressor with high reliability
The flexible scroll allows pieces and liquid to pass easily.
- Hermetic compressor with high efficiency and low noise 20% higher than reciprocating compressors in efficiency. Low noise.

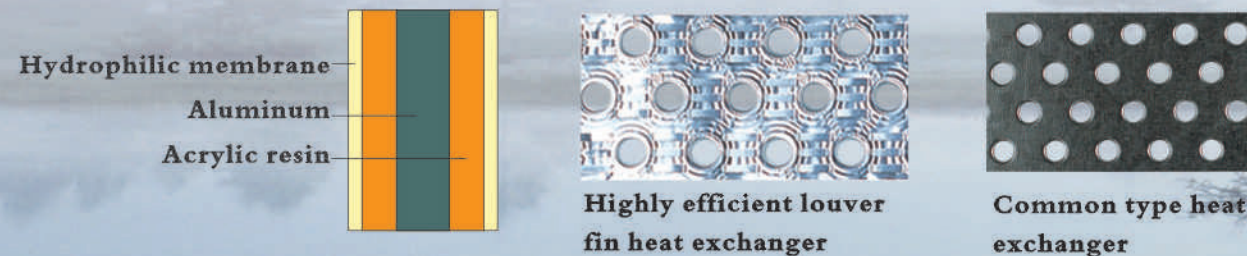
- Reliable defrost design improves running efficiency
- Indoor unit centrifugal fan is with low noise and the static pressure can be adjusted randomly.
- Adopting louver fin evaporator and condenser together to achieve high efficiency and save power.
The special treatment of outdoor heat exchanger provides 5 to 6 times protection against the corrosion of acid rain and salt. And the antirust steel plate at the machine base adds durability.



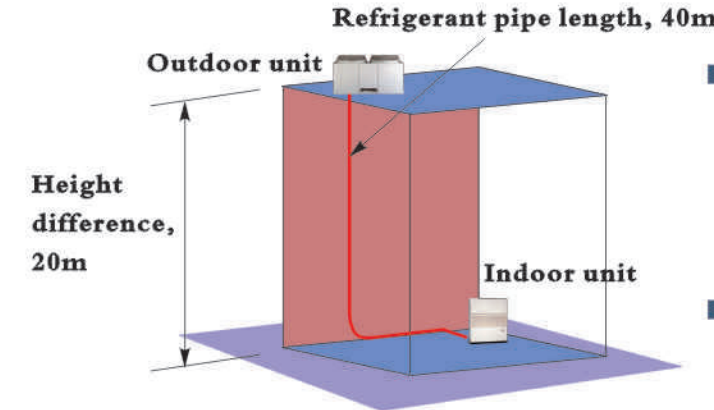
Anticorrosion improvement

	Anticorrosion grade	
	Not treated	Anticorrosion treatment
Salt corrosion	1	5-6
Acid rain	1	5-6

Section view of anticorrosion heat exchanger



Feature 2 Save time, save space and save trouble

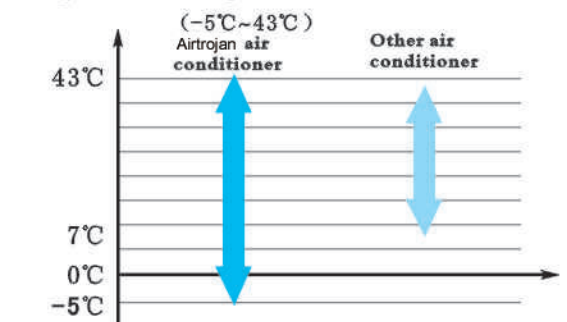


- Long piping
The refrigerant pipe can reach up to 40m in length and 20m in height difference, which reduces the limitation on the air conditioner installation by the building scale and shape.
- Simple installation design
Improve installation efficiency and shorten construction period.

Other features

- Wide operation range
The machine can run at -5°C outdoors. The heating efficiency is high.
- Space saving design
Super slim design allows the air conditioner to be placed at balcony. And it occupies less space.
- More convenient maintenance
The air conditioner can be widely used in hotels, mansions, restaurants, office buildings, supermarkets, hospitals, gymnasiums and workshops and so on.

Operation range





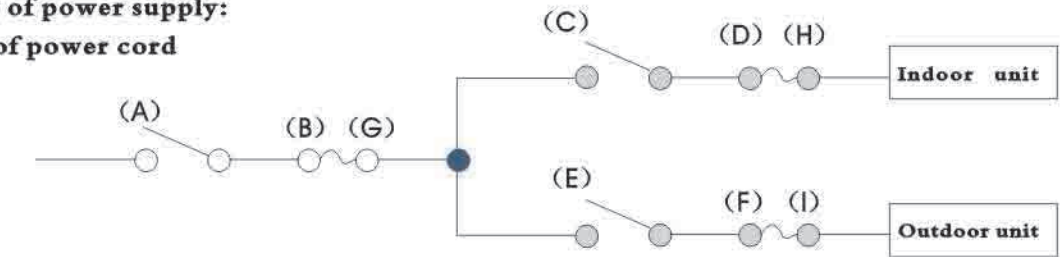
Product Specifications

Model	F28TCF/R(L)/F28WT1F	F28TDF/R(L)/F28WT1F	F43TDF/R(L)/F43WT1F	F54TDF/R(L)/F54WT1F	F80TDF/R(L)/F80WT1F			
Cooling capacity	27.1		42.2	53.1	79.1			
Power consumption	10.1		17	21.4	31.8			
Starting current	141		189	216	317			
Running current	19.2		31.3	39.3	57.5			
E.E.R.	2.68		2.48	2.48	2.49			
Heating capacity	28	28	42.5	57.5	80			
Power consumption	11.0	11.0	13.5	20	25.8			
Starting current	58.4	58.4	100	132	185			
Running current	19.4	18.37	25.3	37.7	48.5			
C.O.P.	2.55		3.15	2.88	3.1			
Refrigerant pipe	(15.88/28.6) x 1		(15.88/28.6) x 2		(19.05/32) x 2			
Outdoor Unit	RF28WT1F	LF28WT1F	RF43WT1F	LF43WT1F	RF54WT1F	LF54WT1F	RF80WT1F	LF80WT1F
Power supply	φ-V-Hz 3-380-50							
Power consumption	10.4	9.4	10.4	9.43	10.9	14.4	16.3	17.7
Running current	19	18	19	18	20.4	26.4	30.7	33.6
Compressor output	7.5 x 1		5.7 x 2		7.5 x 2		11.2 x 2	
Refrigerating oil	PVE				POV			
Oil volume	2.66 x 1		2.66 x 2		3.6 x 2			
Fan motor output	0.52		0.42 x 2		0.52 x 2		1.1 x 2	
Refrigerant control	R410A				Capillary			
Refrigerant charge volume	4.7 x 1		5.8 x 2		6.0 x 2		9.0 x 2	
Protection devices	HP/LP switch, over current relay, compressor internal protector, over-voltage/low-voltage/lack-phase/reverse-phase protector, overload thermal relay							
Crankcase heater	70 x 1	70 x 2	70 x 2	70 x 2	70 x 2	70 x 2	70 x 2	70 x 2
Air flow rate	9000		9000 x 2		9900 x 2		16000 x 2	
Width(packaged)	1150(1250)		1850(1970)		1850(1970)			
Depth(packaged)	478(588)		920(1051)		920(1051)			
Height(packaged)	1750(1920)		1106(1280)		1190(1364)		1736(1928)	
Net(Gross) weight	209(220)	199(210)	209(220)	199(210)	306(366)	296(356)	387(447)	380(440)
Indoor Unit	F28TCF	F28TDF	F43TDF	F54TDF	F80TDF			
Type	Free blow		Duct type					
Power supply	φ-V-Hz 3-380-50							
Power consumption	0.7		2.6	3.7	5.5			
Running current	0.89		4.91	7.03	9.95			
Fan motor output	0.39	0.68	2.2	4	5.5			
Refrigerant control	R410A				Capillary			
Control method	Microcomputer							
External static pressure	0	78	98	147				
Air flow rate	5000	4500	9000	11000	15000			
Width(packaged)	1178(1292)		1549(1643)		1735(1859)		1900(2080)	
Depth(packaged)	485(598)		630(753)		920(1034)			
Height(packaged)	1900(2092)	1620(1812)	1875(2042)	2040(2065)				
Net(Gross) weight	143(153)	128(134)	230(280)	273(333)	400(480)			

- Cooling capacity is measured under T1 ISO conditions.
Indoor : 27°C DB, 19°C WB; outdoor: 35°C DB, 24°C WB and the refrigerant pipe length is 7.5m.
- Heating capacity is measured under T1 ISO conditions.
Indoor : 21°C DB, 15°C WB; outdoor: 7°C DB, 6°C WB and the refrigerant pipe length is 7.5m.
- Under heating mode, the minimum ambient temperature is -5°C.
- The specifications above are subject to modify without notice.

Specialized Electric wiring

- Electrical boxes are equipped both in indoor unit and outdoor unit. Its inner wiring is well connected and checked before shipment.
- The field installation is completed only by connecting the connecting wires of indoor unit and outdoor unit.
- Connect the power cord of the outdoor/indoor unit, namely three-phase powers are provided separately.
- All electric wires shall not be bound with refrigerating pipes.
- Connect ground wire.
- Wiring method of power supply:
- Specifications of power cord



Model	Wire diameter	Switch capacity (A)	FUSE(B)	Switch capacity (C)	FUSE(D)	Switch capacity (E)	FUSE(F)	Wire mm2(G)	Wire mm2(H)
F28TC+RF28WT1		40A	40A	5A	5A	25A	25A	6	As shown in the right table.
F28TC+LF28WT1		40A	40A	5A	5A	25A	25A	6	
F28TD+RF28WT1		40A	40A	5A	5A	25A	25A	6	
F28TD+LF28WT1		40A	40A	5A	5A	25A	25A	6	
F43TD+RF43WT1		60A	60A	10A	10A	40A	40A	10	
F43TD+LF43WT1		60A	60A	10A	10A	40A	40A	10	
F54TD+RF54WT1		70A	70A	10A	10A	50A	45A	12	
F54TD+LF54WT1		70A	70A	10A	10A	50A	45A	12	
F80TD+RF80WT1		90A	90A	10A	10A	80A	80A	14	
F80TD+LF80WT1		90A	90A	10A	10A	80A	80A	14	

Model	Wire diameter	Indoor unit	Outdoor unit
F28TC+RF28WT1		4mm ²	6mm ²
F28TC+LF28WT1		4mm ²	6mm ²
F28TD+RF28WT1		4mm ²	6mm ²
F28TD+LF28WT1		4mm ²	6mm ²
F43TD+RF43WT1		6mm ²	10mm ²
F43TD+LF43WT1		6mm ²	10mm ²
F54TD+RF54WT1		6mm ²	12mm ²
F54TD+LF54WT1		6mm ²	12mm ²
F80TD+RF80WT1		6mm ²	14mm ²
F80TD+LF80WT1		6mm ²	14mm ²

Note: The No-Fuse breaker or Current Leak Breaker can replace the FUSE and switch combination. Do not install when power is connected.

Specification of electrical heater(Optional)

Model	PZRP13C	PZRP26C	PZRP29C	PZRP14C	PZRP28C	PZRP30C
Applicable type	F28TC/D	F43TD	F54TD	F28TE	F43TE	F54TE
Heating capacity(kW)	13.5	26.4	28.8	14	28	30
Segment	one segment type	two segment type	two segment type	one segment type	two segment type	two segment type

Specification of hot-water coil(Optional)

Model	PZRP24A	PZRP38A	PZRP54A	PZRP25A	PZRP40A	PZRP55A
Applicable type	F28TC/D	F43TD	F54TD	F28TE	F43TE	F54TE
Heating capacity(kW)	24	38	54	25	40	55

For details, see product manual.

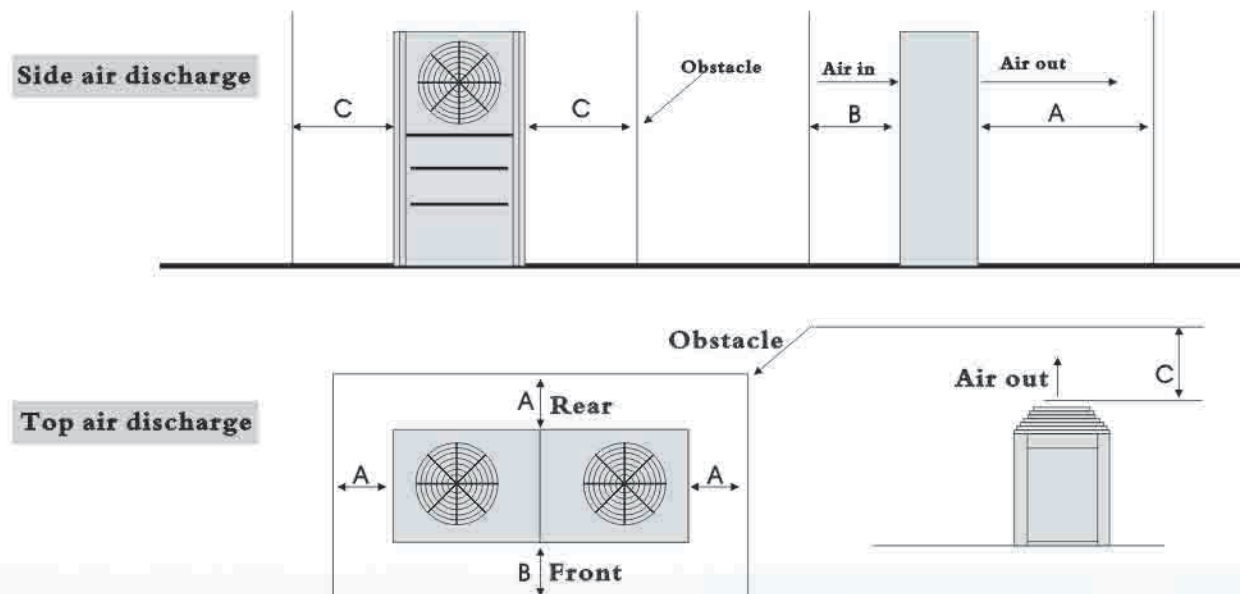


Product Installation

Select installation positions referring to figures.
Such positions are not difficult for you to make a choice.

The machine set shall have enough space for maintenance and ventilation as shown in the table below:

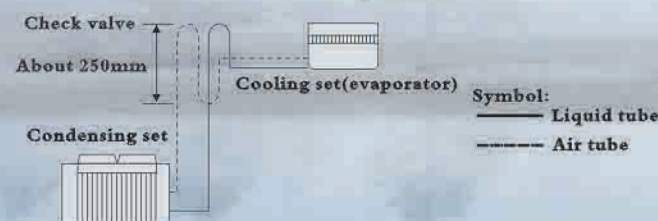
Model	A	B	C
F28TC+RF28WT1 / F28TC+LF28WT1	2500	1000	800
F28TD+RF28WT1 / F28TD+LF28WT1	2500	1000	800
F43TD+RF43WT1 / F43TD+LF43WT1	1000	1500	3500
F54TD+RF54WT1 / F54TD+LF54WT1	1000	1500	3500
F80TD+RF80WT1 / F80TD+LF80WT1	1000	1500	3500



Field piping What you have to do is really simple

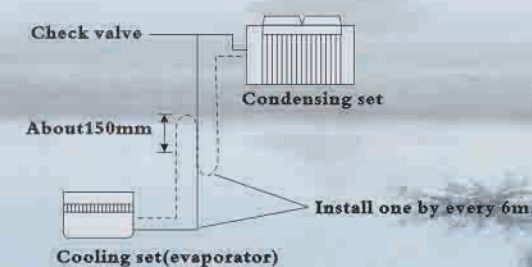
The configuration and installation of all pipes in the machine set has been completed in factory before shipment. And the refrigerant is filled at a fixed amount in the outdoor unit. For field installation, connect the connecting pipes of indoor unit and outdoor unit by referring to the figures as below.

Outdoor unit at lower position



Note: Do not connect wrongly the piping loop between indoor unit and outdoor unit for avoiding damage to machine.

Outdoor unit at higher position



Installation/Product List

Pipe specifications

Pipe	Model	F28TC+RF28WT1 F28TC+LF28WT1	F28TD+RF28WT1 F28TD+LF28WT1	F43TD+RF43WT1 F43TD+LF43WT1	F54TD+RF54WT1 F54TD+LF54WT1	F80TD+RF80WT1 F80TD+LF80WT1
φ 15.88		1	1	2	2	2
φ 19.05		/	/	/	/	2
φ 28.6		1	1	2	2	/
φ 32		/	/	/	/	2

Pipe length

Parameter	Model	Total length(m)	Height of fall(m)	Maximum bends
F28TC+RF28WT1 / F28TC+LF28WT1		Below 50	Below 20	Below 15
F28TD+RF28WT1 / F28TD+LF28WT1		Below 50	Below 20	Below 15
F43TD+RF43WT1 / F43TD+LF43WT1		Below 50	Below 20	Below 15
F54TD+RF54WT1 / F54TD+LF54WT1		Below 50	Below 20	Below 15
F80TD+RF80WT1 / F80TD+LF80WT1		Below 50	Below 20	Below 15

For good performance of machine set, pay attention to the following at installation:
Install corresponding liquid upper loop and oil receiver for system connecting pipes by referring the installation position of indoor unit and outdoor unit.

Plenum Plenum is an option for a change from ducted type to free blow type.



Specification table

Model	Applicable type	Weight(before/after packaging)	Dimensions before packaging(mm)	Dimensions after packaging(mm)
PZPW15-I	F43TD	24/26kg	H302 × W1549 × D630	H387 × W1629 × D695
PZPW20-I	F54TD	33/35kg	H302 × W1735 × D630	H387 × W1815 × D695

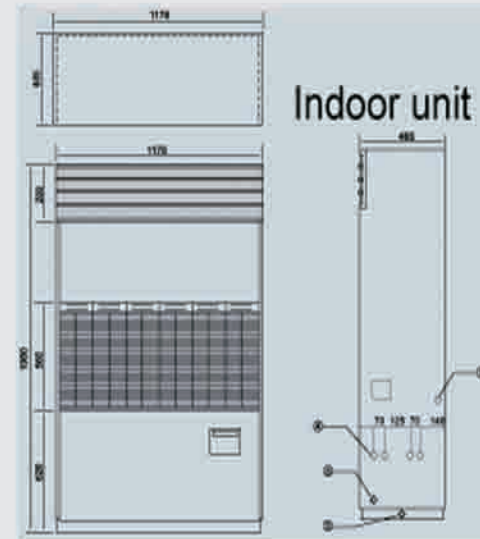


Product List

Heat pump/Cooling only

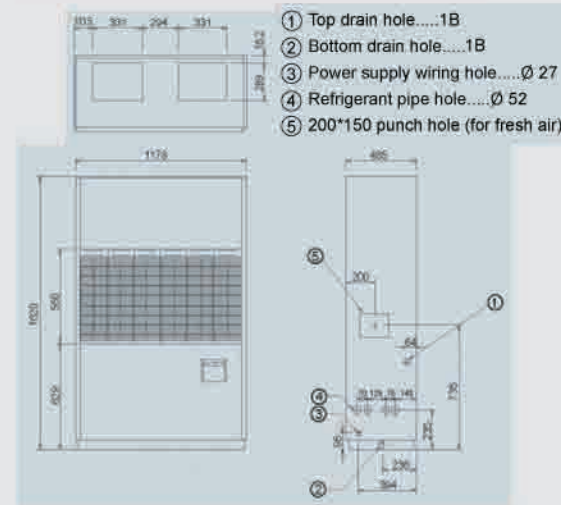
F28TC

Indoor unit



F28TD

Indoor unit



R(L)F28WT1

Outdoor unit



Heat pump model
Cooling capacity: 27.1 kw
Heating capacity: 28 kw

Coling only model
Cooling capacity: 27.1 kW

- ① Top drain hole.....1B
- ② Bottom drain hole.....1B
- ③ Power supply wiring hole..... \varnothing 27
- ④ Refrigerant pipe hole..... \varnothing 27
- ⑤ Refrigerant pipe (liquid pipe)..... \varnothing 15.88 X 2
- ⑥ Refrigerant pipe (gas pipe)..... \varnothing 28.6 X 2



Heat pump/Cooling only F43TD+RF43WT1/F43TD+LF43WT1

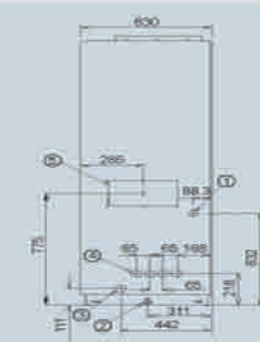
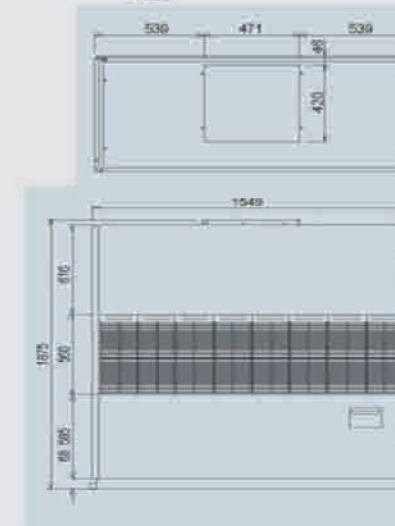
Indoor unit



Heat pump model
Cooling capacity:42.2kw
Heating capacity:42.5kw

Cooling only model
Cooling capacity: 42.2kw

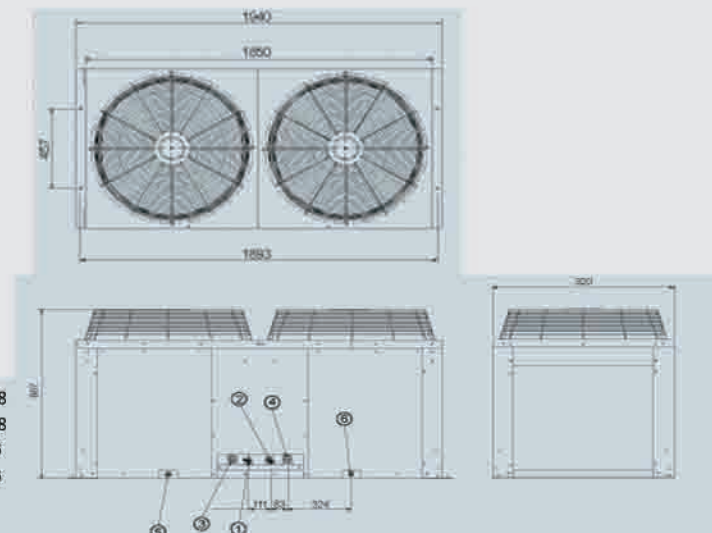
- 1)Refrigerant pipe(liquid tube) \varnothing 15.88x 2
- 2)Refrigerant pipe(air tube) \varnothing 28.6 x 2
- 3)Hex bolt(for hanging) M16



Outdoor unit



- ① Refrigerant pipe (liquid pipe)..... \varnothing 15.88
- ② Refrigerant pipe (liquid pipe)..... \varnothing 15.88
- ③ Refrigerant pipe (gas pipe)..... \varnothing 28.6
- ④ Refrigerant pipe (gas pipe)..... \varnothing 28.6
- ⑤ Hex nuts.....M16
- ⑥ Hex nuts.....M16





Heat pump/Cooling only F54TD+RF54WT1/F54TD+LF54WT1

Indoor unit

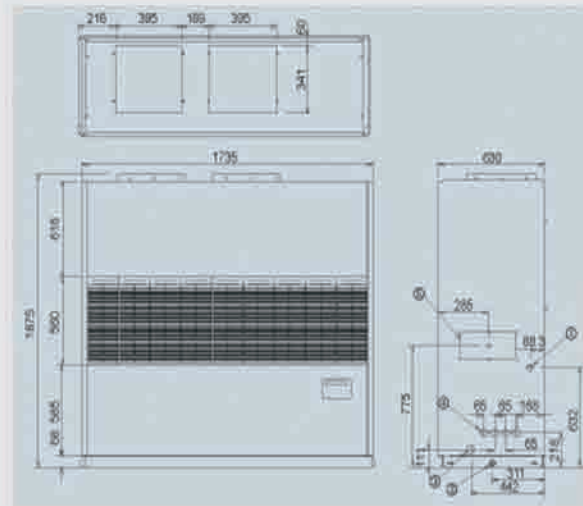


Heat pump model

Cooling capacity: 53.1kw
Heating capacity: 57.5kw

Cooling only model

Cooling capacity: 53.1kw
1)Refrigerant pipe(liquid tube) ϕ 15.88 x 2
2)Refrigerant pipe(air tube) ϕ 28.6 x 2



Indoor unit

- ① Top drain hole.....1B
- ② Bottom drain hole.....1B
- ③ Power supply wiring hole..... ϕ 52
- ④ Refrigerant pipe hole..... ϕ 52
- ⑤ 330*170 punch hole (for fresh air)

Heat pump/cooling only F80TD+RF80WT1/F80TD+LF80WT1

Indoor unit



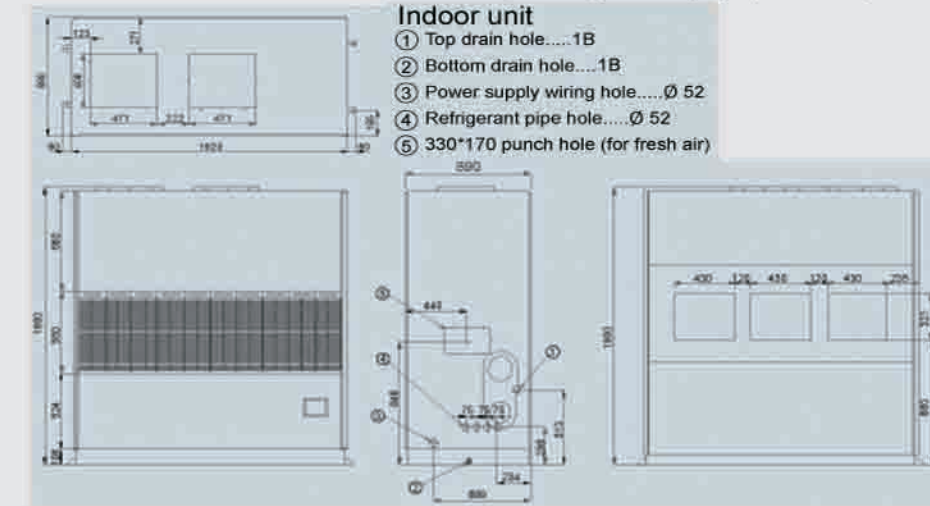
Heat pump model

Cooling capacity: 79.1kw
Heating capacity: 80kw

Cooling only model

Cooling capacity: 79.1kw

- 1)Refrigerant pipe(liquid tube) ϕ 19.05 x 2
- 2)Refrigerant pipe(air tube) ϕ 31.75 x 2



Indoor unit

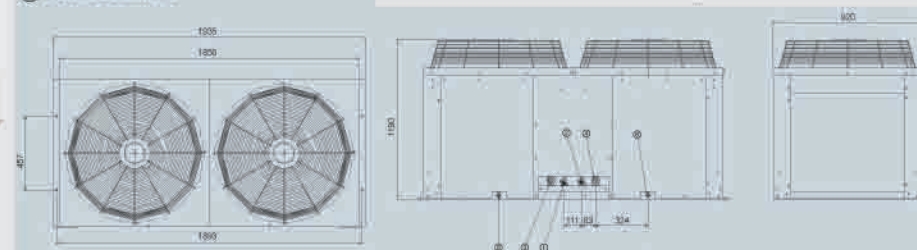
- ① Top drain hole.....1B
- ② Bottom drain hole.....1B
- ③ Power supply wiring hole..... ϕ 52
- ④ Refrigerant pipe hole..... ϕ 52
- ⑤ 330*170 punch hole (for fresh air)

Outdoor unit

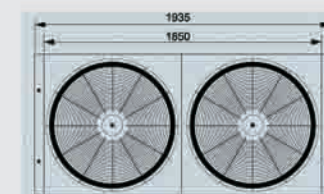


Outdoor unit

- ① Refrigerant pipe (liquid pipe)..... ϕ 15.88
- ② Refrigerant pipe (liquid pipe)..... ϕ 15.88
- ③ Refrigerant pipe (gas pipe)..... ϕ 28.6
- ④ Refrigerant pipe (gas pipe)..... ϕ 28.6
- ⑤ Hex nuts.....M16
- ⑥ Hex nuts.....M16



Outdoor unit



Outdoor unit

- ① Refrigerant pipe (liquid pipe)..... ϕ 19.05
- ② Refrigerant pipe (liquid pipe)..... ϕ 31.75
- ③ Hex nuts.....M16 X 2

