



MULTI-FUNCTIONAL ROOFTOP AIR CONDITIONING UNIT

ABOUT US

Tent is located in Nantong city, Jiangsu province, which is engaged in the research, production and sales of fresh air conditioner, rooftop air conditioner, floor standing air conditioner, air-cooled modules, purification air conditioners and so on. Tent possesses two production bases in Nantong Jiangsu and Hengshui Hebei, with total 80,000 square meters production area.

The rooftop air conditioner has obtained many industry-leading technology certifications, such as first-class energy efficiency certification, CRAA certification, energy saving certification, CCC certification and so on. We always adhered to the guiding principles of leading technology, reliable quality, efficient service and customer satisfaction, which make Tent rapidly develop into the top brand of rooftop air conditioner in the Chinese market. In 2022, the sales revenue is 350 million yuan.

In addition, a modern factory building of 25,000 square meters will be completed soon.



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Product Presentation

Equipment Introduction

Tent multi-functional rooftop air conditioner is an air-cooled air conditioning equipment integrating heating and cooling, which is the leading product of Tent. The rooftop air conditioner concentrates the fresh air and return air, and all the components of the refrigeration system are in a box, and the processed air is directly sent into the room through the air duct, so it is also called direct expansion AHU.

Tent's multifunctional rooftop unit not only has basic cooling and heating functions, but also selects reheating, humidification, exhaust fan, heat recovery and return air ventilation and other functional options according to demand. According to the actual placement needs of the site, the integral or split placement form can be selected.

Tent rooftop unit has the characteristics of high stability, low noise, strong adaptability, convenient maintenance, compact structure, stable operation, complete product specifications, convenient layout, etc., which can not only be widely used in stadium lecture halls, convention and exhibition centers, theaters, shopping malls, railway stations, airports and other comfortable air conditioning places, but also can be applied to machinery, aerospace, medicine, electricity, chemical and other technological air conditioning places.

With a professional cloud service platform, equipment failure, after-sales personnel do not have to go to the site first, can analyze the cause of the fault in the background, actively contact users, prepare parts, and improve maintenance efficiency.

- The design and manufacture of this series of air handling units is standard: GB/T20738-2006 rooftop air conditioning unit.
- This series of products adheres to the design concept of "high efficiency, energy saving, environmental protection and green".

Product Feature

Wide Range of Applications

This series of products have new air type, ordinary return air type, heat pump type, cold and warm type, constant temperature and humidity type (can be customized) and other varieties. Constant temperature and humidity type unit can be applied to places with high temperature and humidity requirements, heat pump, cooling and heating type unit can be applied to places with comfort requirements, especially heat pump type units can be used for dual purposes, greatly saving heating operation costs.

Direct Expansion High Efficiency, Energy Saving and Low Consumption

The unit adopts a direct expansion high-efficiency circulation system with direct heat exchange between refrigerant and air, and there is no intermediate link of indirect heat exchange of chilled water system, which reduces the loss of energy utilization of the entire air conditioning system and increases 10%~15% compared with the chilled water air conditioning system. In addition, each unit has multi-stage capacity regulation, automatic load increase and decrease to adapt to the load change on the user's use side, and the unit can run with fresh air in the transition season, saving energy and low consumption, and reducing operating costs.

Save Investment and Easy Installation

The integral multi-functional roof machine can be installed on the roof or outdoor space, without the need for a machine room, saving building space and saving installation costs. The unit has no chilled water system, which saves the investment in auxiliary equipment such as cooling towers, pumps, pipelines, etc., and reduces the project cost. When the user equipment is installed, only a small number of control wires and power lines and air supply and return air pipes need to be connected to put the unit into operation, saving construction time and costs.

Quiet Operation, Ultra-low Noise

The unit adopts low-noise fully enclosed flexible scroll compressor, equipped with low-noise axial fan, and other moving parts of the unit have taken complete seismic isolation measures to ensure stable and reliable operation, low noise and small vibration. The unit is installed outdoors, and there are no moving parts such as fans in the air conditioning system, so the indoor air supply is more quiet.

Protection Function

Compressor frequent start protection, compressor minimum running time protection, filter detection, high voltage protection, low voltage protection, compressor current overload protection, fan current overload protection, power supply protection (phase loss, reverse phase, overvoltage, undervoltage, phase balance), compressor exhaust temperature too high protection.

Green Air, Quality Assurance

The efficient air filtration and adjustable fresh air device of the unit, equipped with multi-functional air treatment, can easily realize the functions of air purification, cooling, dehumidification, heating, humidification, fresh air volume adjustment and so on.

Unique Structure, Special for Outdoor Use

Integrated unit design, compact structure, well-designed unit frame, simple and lightweight, elegant appearance, large operating space, the unit can be transported conventionally without over-width or over-height. The whole process of automatic spraying line of the structural parts of the unit and spraying, aluminum alloy frame, high-pressure foamed color steel insulation panel and special outdoor unique rainproof structure design ensure the anti-corrosion, anti-rust and no risk of rain leakage for outdoor use of the unit.

Rooftop Packaged Air Conditioning Unit
Parameter Table

TYR250R~500R

Model		TYR250R	TYR300R	TYR400R	TYR500R
Power supply		3N-380V-50Hz			
Cooling capacity 1*	kw	25.5	31.5	40.3	51.5
Heating capacity 2*	kw	26.1	32.0	40.4	52.2
Cooling power input	kw	9.8	11.8	15.2	20.4
Compressor		Hermetic scroll			
Color		Ivory			
Noise	dB(A)	61	62	62	63
Supply Fan	Type	Centrifugal type			
	Air flow	m³/h	5400	6480	8280
	Static pressure	Pa	220	220	250
Condensate pipe	mm	DN25	DN25	DN25	DN25
Air filter		G4			
Safety device		Compressor and the protective device of fan motor, high voltage switch, low voltage switch, power protection, overcurrent relay (compressor and supply fan)			
Protection grade		IP55			
Standard attachment		Manual and warranty			
Refrigerant	Type	R410A			
	Control Mode	Electronic expansion valve (EEV)			
Length	mm	1600	1600	1800	2400
Width	mm	1500	1500	1700	2000
Height	mm	1400	1400	1500	1700
Unit weight		520	528	580	830

Note

1. The rated cooling capacity is based on the following conditions: outdoor temperature 35 °C DB, 28 °C WB, indoor temperature 27 °C DB, 19 °C WB;

2. The rated heating capacity is based on the following conditions: outdoor temperature 7 °C DB, 6 °C WB, indoor temperature 20 °C DB;

3. If the performance parameters are inconsistent with the nameplate, the nameplate shall prevail;

4. Design improvements are subject to change without notice.

Rooftop Packaged Air Conditioning Unit
Parameter Table

TYR600R~1050R

Model		TYR600R	TYR800R	TYR900R	TYR1050R	
Power supply		3N-380V-50Hz				
Cooling capacity 1*	kw	62.3	80.2	92.0	105.5	
Heating capacity 2*	kw	63.0	81.1	93.0	109.0	
Cooling power input	kw	24.3	30.5	35.8	41.6	
Compressor		Hermetic scroll				
Color		Ivory				
Noise	dB(A)	64	66	68	68	
Supply Fan	Type		Centrifugal type			
	Air flow	m³/h	12960	17100	19800	23000
	Static pressure	Pa	270	300	300	300
Condensate pipe	mm	DN25	DN25	DN25	DN25	
Air filter		G4				
Safety device		Compressor and the protective device of fan motor,high voltage switch,low voltage switch,power protection,overcurrent relay(compressor and supply fan)				
Protection grade		IP55				
Standard attachment		Manual and warranty				
Refrigerant	Type		R410A			
	Control Mode		Electronic expansion valve(EEV)			
Length	mm	2400	2700	2700	2900	
Width	mm	2000	2150	2150	2300	
Height	mm	1700	1800	1800	1900	
Unit weight		850	1160	1160	1680	

Note

1. The rated cooling capacity is based on the following conditions: outdoor temperature 35 ℃ DB, 28 ℃ WB, indoor temperature 27 ℃ DB, 19 ℃ WB;
2. The rated heating capacity is based on the following conditions: outdoor temperature 7 ℃ DB, 6 ℃ WB, indoor temperature 20 ℃ DB;
3. If the performance parameters are inconsistent with the nameplate, the nameplate shall prevail;
4. Design improvements are subject to change without notice.

Rooftop Packaged Air Conditioning Unit
Parameter Table

TYR1250R~1860R

Model		TYR1250R	TYR1500R	TYR1750R	TYR1860R	
Power supply		3N-380V-50Hz				
Cooling capacity 1*	kw	125.0	150.0	175.0	186.0	
Heating capacity 2*	kw	126.3	152.0	180.0	190.0	
Cooling power input	kw	47.4	55.4	66.2	68.8	
Compressor		Hermetic scroll				
Color		Ivory				
Noise	dB(A)	68	73	73	75	
Supply Fan	Type		Centrifugal type			
	Air flow	m³/h	25200	26500	32400	35300
	Static pressure	Pa	320	320	350	400
Condensate pipe		mm	DN32	DN32	DN32	DN32
Air filter		G4				
Safety device		Compressor and the protective device of fan motor,high voltage switch,low voltage switch,power protection,overcurrent relay(compressor and supply fan)				
Protection grade		IP55				
Standard attachment		Manual and warranty				
Refrigerant	Type		R410A			
	Control Mode		Electronic expansion valve(EEV)			
Length		mm	4800	5300	5300	5300
Width		mm	2300	2300	2300	2300
Height		mm	1900	2100	2100	2100
Unit weight			2000	2120	2320	2520

Note

1. The rated cooling capacity is based on the following conditions: outdoor temperature 35 ℃ DB, 28 ℃ WB, indoor temperature 27 ℃ DB, 19 ℃ WB;
2. The rated heating capacity is based on the following conditions: outdoor temperature 7 ℃ DB, 6 ℃ WB, indoor temperature 20 ℃ DB;
3. If the performance parameters are inconsistent with the nameplate, the nameplate shall prevail;
4. Design improvements are subject to change without notice.

Rooftop Packaged Air Conditioning Unit
Parameter Table

TYR2050R~2750R

Model			TYR2050R	TYR2250R	TYR2400R	TYR2750R
Power supply			3N-380V-50Hz			
Cooling capacity 1*		kw	205.0	225.0	240.0	275.0
Heating capacity 2*		kw	208.0	229.0	243.0	277.0
Cooling power input		kw	76.5	83.9	92.0	105.0
Compressor			Hermetic scroll			
Color			Ivory			
Noise		dB(A)	76	76	76	77
Supply Fan	Type		Centrifugal type			
	Air flow	m³/h	39000	42800	45500	53000
	Static pressure	Pa	400	500	500	500
Condensate pipe		mm	DN40	DN40	DN40	DN40
Air filter			G4			
Safety device			Compressor and the protective device of fan motor,high voltage switch,low voltage switch,power protection,overcurrent relay(compressor and supply fan)			
Protection grade			IP55			
Standard attachment			Manual and warranty			
Refrigerant	Type		R410A			
	Control Mode		Electronic expansion valve(EEV)			
Length		mm	7000	7000	7000	7474
Width		mm	2500	2500	2500	2540
Height		mm	2302	2302	2302	2667
Unit weight			2820	3010	3200	3700

Note

1. The rated cooling capacity is based on the following conditions: outdoor temperature 35 ℃ DB, 28 ℃ WB, indoor temperature 27 ℃ DB, 19 ℃ WB;
2. The rated heating capacity is based on the following conditions: outdoor temperature 7 ℃ DB, 6 ℃ WB, indoor temperature 20 ℃ DB;
3. If the performance parameters are inconsistent with the nameplate, the nameplate shall prevail;
4. Design improvements are subject to change without notice.

Rooftop Packaged Air Conditioning Unit
Parameter Table

TYR3000R~4000R

Model			TYR3000R	TYR3600R	TYR4000R
Power supply			3N-380V-50Hz		
Cooling capacity 1*	kw		300.0	360.0	400.0
Heating capacity 2*	kw		306.0	362.0	408.0
Cooling power input	kw		115.3	137.9	152.1
Compressor			Hermetic scroll		
Color			Ivory		
Noise	dB(A)		77	78	78
Supply Fan	Type		Centrifugal type		
	Air flow	m³/h	56900	68400	75800
	Static pressure	Pa	600	700	700
Condensate pipe	mm		DN40	DN40	DN40
Air filter			G4		
Safety device			Compressor and the protective device of fan motor,high voltage switch,low voltage switch,power protection,overcurrent relay(compressor and supply fan)		
Protection grade			IP55		
Standard attachment			Manual and warranty		
Refrigerant	Type		R410A		
	Control Mode		Electronic expansion valve(EEV)		
Length	mm		7474	8929	8929
Width	mm		2540	3607	3607
Height	mm		2667	2667	2667
Unit weight			4000	4450	4700

Note

1. The rated cooling capacity is based on the following conditions: outdoor temperature 35 ℃ DB, 28 ℃ WB, indoor temperature 27 ℃ DB, 19 ℃ WB;
2. The rated heating capacity is based on the following conditions: outdoor temperature 7 ℃ DB, 6 ℃ WB, indoor temperature 20 ℃ DB;
3. If the performance parameters are inconsistent with the nameplate, the nameplate shall prevail;
4. Design improvements are subject to change without notice.

Rooftop Packaged Air Conditioning Unit
Parameter Table [Constant temperature and humidity] TYR100R-H~500R-H

Model		TYR100R-H	TYR150R-H	TYR250R-H	TYR300R-H	TYR400R-H	TYR500R-H
Power supply		3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz
Cooling capacity 1*	kw	10.5	15.3	26.5	30.3	39.1	53
Heating capacity (electrothermal)	kw	4	7	12	14	18	24
Cooling power input 2*	Kw	4.3	5.7	10.3	12	15.8	21.3
Power input	kw	10.5	16.5	26	30	39.8	51.3
Max operation current	A	25.43	39.74	65.73	74.46	100.98	128.98
Suggested power line diameter	mm	2.5	6.0	16.0	25.0	35.0	50.0
compressor	Type	Hermetic scroll					
	Power consumption	kw	3.09	4.50	7.79	8.91	11.50
Color		White					
Humidifier	Type 3*	Electrode					
	Humidification	kg/h	3	5	5	5	8
	Power	KW	2.25	3.75	3.75	3.75	6
Supply Fan	Type	Centrifugal type					
	Air flow	m³/h	2100	3200	5400	6480	8280
	Static pressure	Pa	150	150	220	220	250
	Power consumption	KW	0.55	0.55	1.5	2.2	4
Condensate pipe		mm	DN25	DN25	DN25	DN25	DN25
Condensing Fan	Type	Axial					
	Quantity	Pcs	1	1	2	2	2
	Power	KW	0.65	0.65	0.65	0.86	1.3
Air filter		G4					
Safety device		Compressor and the protective device of fan motor,high voltage switch,low voltage switch,power protection,overcurrent relay(compressor and supply fan),fuse					
Standard attachment		Manual and warranty					
Refrigerant	Type	R410A					
	Control Mode	Electronic expansion valve(EEV)					
Noise		54	55	64	65	66	68
Unit weight	kg	350	380	422	530	580	890

Note

- Rated cooling working conditions:OA:DB=35℃,WB=28℃;RA:DB=27℃,WB=19℃.
- The cooling power consumption is the power consumed during the cooling operation of the unit, excluding electric heating and humidification power.
- The power distribution is the power required for the unit power distribution, which is the sum of electric heat, compressor power consumption, humidification power consumption, power consumption of air supply fan, and condensing fan.
- Dry steam humidification steam pressure is 0.2MPa.
- The heating and humidification methods of the constant temperature and humidity type unit can choose other types of heating and humidification methods according to the needs.
- Please consult our technical personnel for the overall dimensions of the constant temperature and humidity type unit.

Rooftop Packaged Air Conditioning Unit
Parameter Table [Constant temperature and humidity] TYR600R-H~1500R-H

Model		TYR600R-H	TYR800R-H	TYR900R-H	TYR1050R-H	TYR1250R-H	TYR1500R-H
Power supply		3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz	3N-380V-50Hz
Cooling capacity 1*	kw	63	78	92	107	123	148
Heating capacity (electrothermal)	kw	28	35	41	48	55	67
Cooling power input 2*	Kw	25.8	32.6	37.1	45	50.6	58.9
Power input	kw	61.8	80.6	91.1	118	150.6	170.9
Max operation current	A	152.54	211.34	240.02	297.71	370.07	425.88
Suggested power line diameter	mm	50.0	70.0	70.0	95.0	150.0	150.0
compressor	Type	Hermetic scroll					
	Power consumption	kw	18.53	22.94	27.06	31.47	43.53
Color		White					
Humidifier	Type 3*	Electrode					
	Humidification	kg/h	8	13	13	25	45
	Power	KW	6	11.25	11.25	18.75	33.75
Supply Fan	Type	Centrifugal type					
	Air flow	m³/h	12960	17100	19800	23000	25200
	Static pressure	Pa	270	300	300	300	320
	Power consumption	KW	5.5	7.5	7.5	11	11
Condensate pipe		mm	DN25	DN25	DN25	DN25	DN25
Condensing Fan	Type	Axial					
	Quantity	Pcs	2	4	4	4	4
	Power	KW	1.72	2.2	2.5	2.5	3.44
Air filter		G4					
Safety device		Compressor and the protective device of fan motor,high voltage switch,low voltage switch,power protection,overcurrent relay(compressor and supply fan),fuse					
Standard attachment		Manual and warranty					
Refrigerant	Type	R410A					
	Control Mode	Electronic expansion valve(EEV)					
Noise		68	69	72	74	76	76
Unit weight	kg	930	1240	1380	1920	2980	2920

Note

- Rated cooling working conditions:OA:DB=35℃,WB=28℃;RA:DB=27℃,WB=19℃.
- The cooling power consumption is the power consumed during the cooling operation of the unit, excluding electric heating and humidification power.
- The power distribution is the power required for the unit power distribution, which is the sum of electric heat, compressor power consumption, humidification power consumption, power consumption of air supply fan, and condensing fan.
- Dry steam humidification steam pressure is 0.2MPa.
- The heating and humidification methods of the constant temperature and humidity type unit can choose other types of heating and humidification methods according to the needs.
- Please consult our technical personnel for the overall dimensions of the constant temperature and humidity type unit.

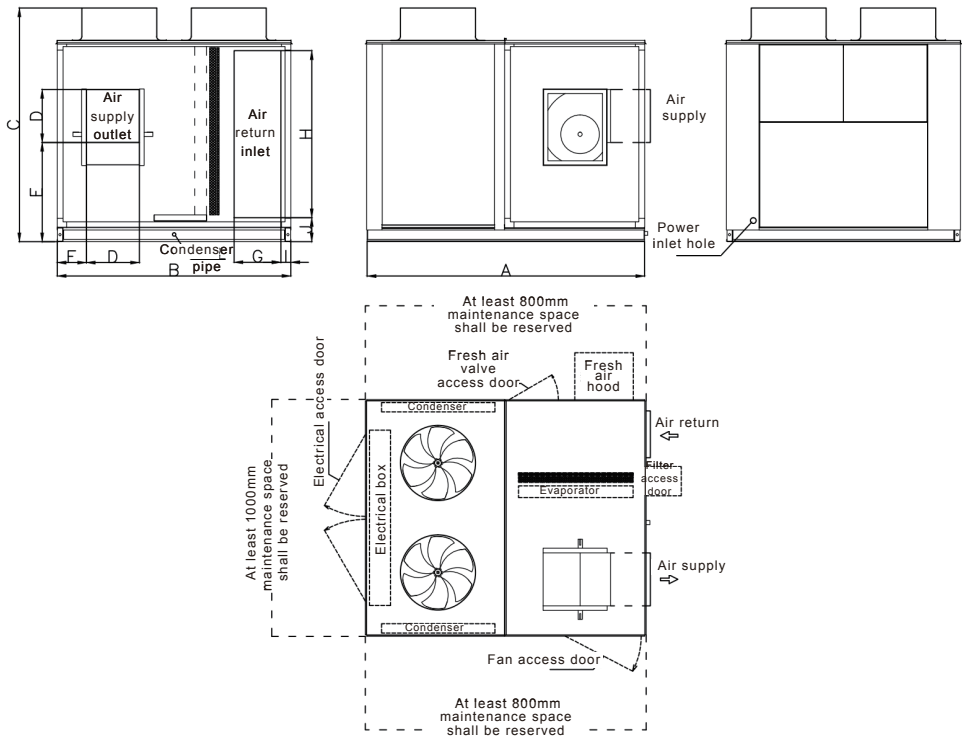
Rooftop Packaged Air Conditioning Unit
Parameter Table [Constant temperature and humidity] TYR1750R-H~3600R-H

Model		TYR1750R-H	TYR1860R-H	TYR2400R-H	TYR2750R-H	TYR3000R-H	TYR3600R-H	
Power supply		3N-380V-50Hz						
Cooling capacity 1*	kw	178	186	240	275	300	360	
Heating capacity (electrothermal)	kw	80	84	108	124	135	162	
Cooling power input 2*	kw	71.8	74.7	99.2	110.4	125.7	161.2	
Power input	kw	151.8	158.7	207.2	234.4	260.7	323.2	
Max operation current	A	413.46	428.16	601.95	692.92	927.49	1074.77	
Suggested power line diameter	mm	150.0	150.0	240.0	150*2	150*2	240*2	
compressor	Type	Hermetic scroll						
	Power consumption	kw	52.35	54.71	70.59	80.88	88.24	105.88
Color		White						
Humidifier	Type 3*	Steam						
	Humidification	kg/h	60	80	90	100	100	110
	Power	KW	0	0	0	0	0	0
Supply Fan	Type	Centrifugal type						
	Air flow	m³/h	32400	35300	45500	53000	56900	68400
	Static pressure	Pa	350	400	500	500	600	700
	Power consumption	KW	15	15	22	22	30	45
Condensate pipe		mm	DN40	DN40	DN40	DN40	DN40	DN40
Condensing Fan	Type	Axial						
	Quantity	Pcs	4	4	6	6	12	12
	Power	KW	4.4	5	6.6	7.5	7.5	10.3
Air filter		G4						
Safety device		Compressor and the protective device of fan motor,high voltage switch,low voltage switch,power protection,overcurrent relay(compressor and supply fan),fuse						
Standard attachment		Manual and warranty						
Refrigerant	Type	R410A						
	Control Mode	Electronic expansion valve(EEV)						
Noise		77	79	79	80	81	83	
Unit weight	kg	2692	2900	3700	4100	4300	4650	

Note

- Rated cooling working conditions:OA:DB=35℃,WB=28℃;RA:DB=27℃,WB=19℃.
- The cooling power consumption is the power consumed during the cooling operation of the unit, excluding electric heating and humidification power.
- The power distribution is the power required for the unit power distribution, which is the sum of electric heat, compressor power consumption, humidification power consumption, power consumption of air supply fan, and condensing fan.
- Dry steam humidification steam pressure is 0.2MPa.
- The heating and humidification methods of the constant temperature and humidity type unit can choose other types of heating and humidification methods according to the needs.
- Please consult our technical personnel for the overall dimensions of the constant temperature and humidity type unit.

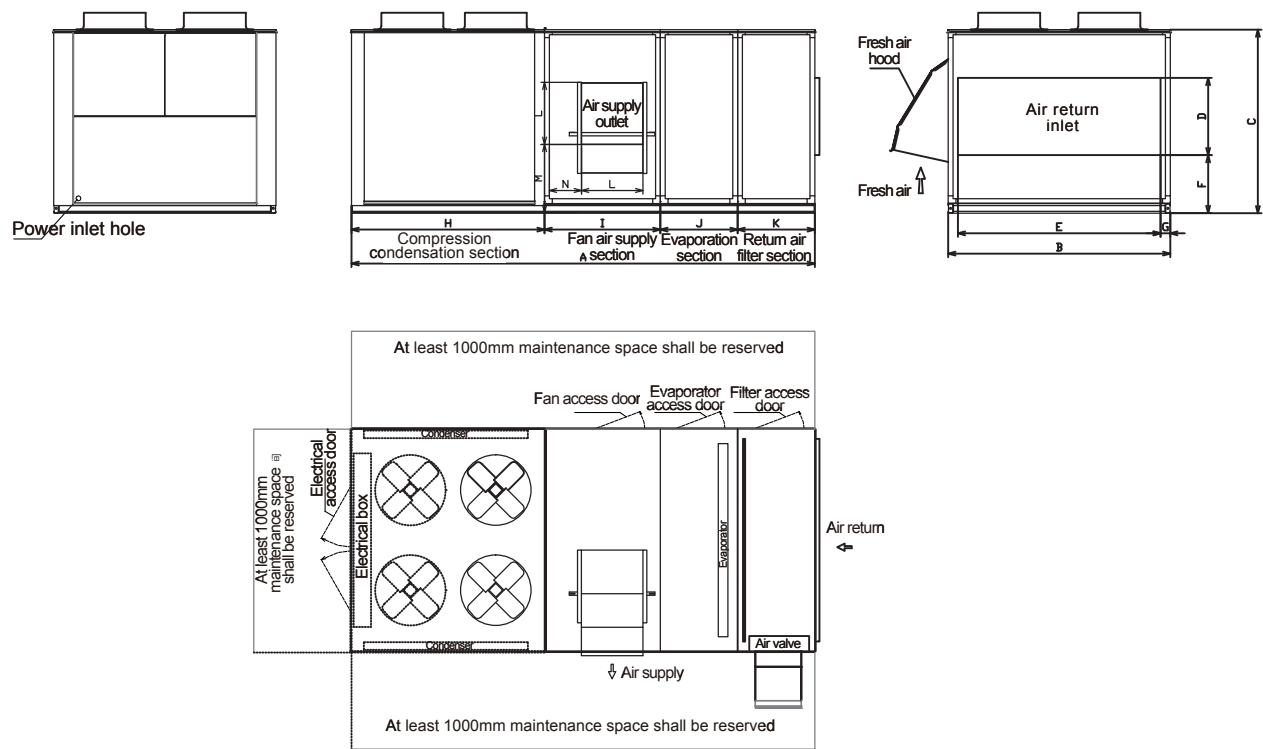
Unit Dimensional Drawing TYR250R-1050R



Model	A	B	C	D	E	F	G	H	I	J
TYR250R	1600	1500	1400	361	600	200	300	1228	86	206
TYR300R	1600	1500	1400	361	600	200	300	1228	86	206
TYR400R	1800	1700	1500	453	850	250	400	1428	86	206
TYR500R	2400	2000	1700	453	850	250	400	1428	86	206
TYR600R	2400	2000	1700	453	850	250	400	1428	86	206
TYR800R	2700	2150	1800	569	800	345	450	1628	86	206
TYR900R	2700	2150	1800	569	800	345	450	1628	86	206
TYR1050R	2900	2300	1900	569	800	345	450	1628	86	206

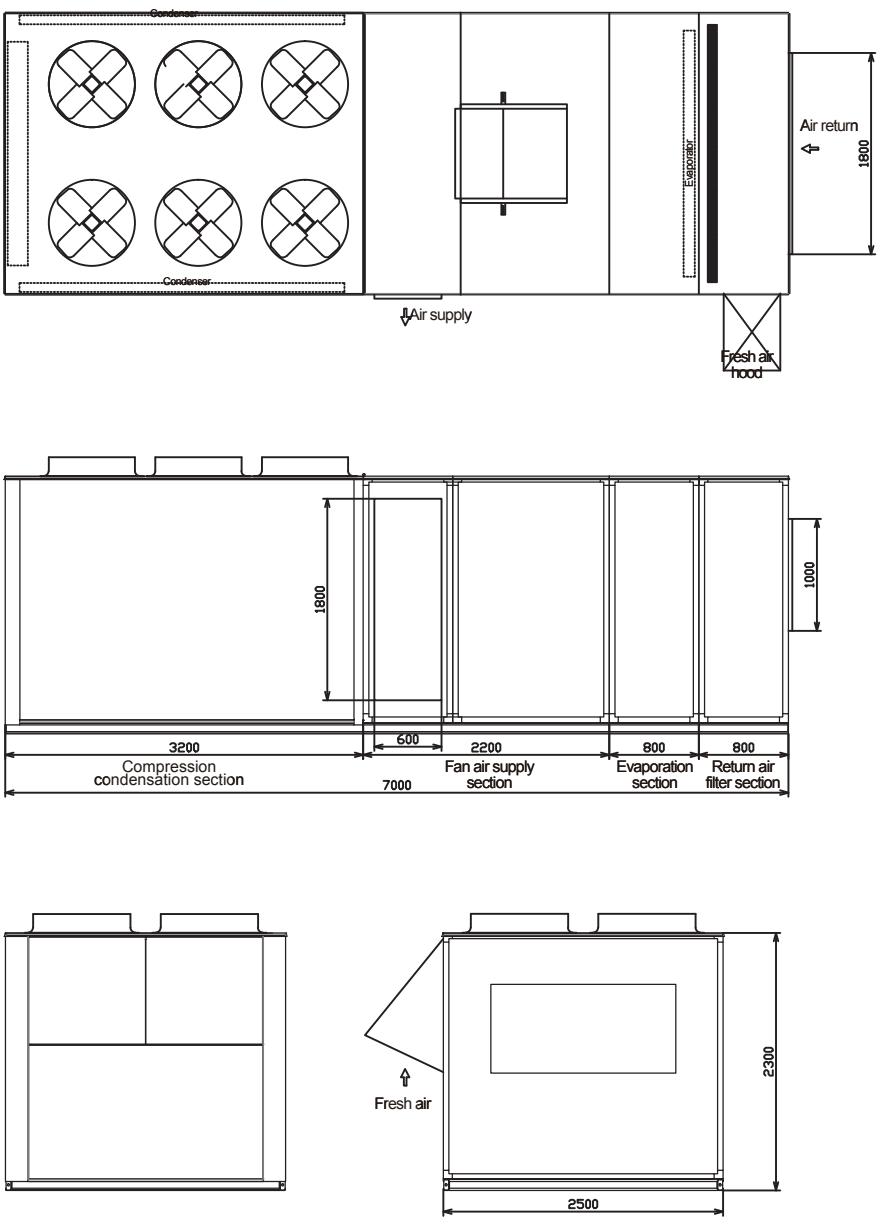
Unit Dimensional Drawing | TYR1250R~1860R

Air cooled series(standard type) --side air supply and side air return



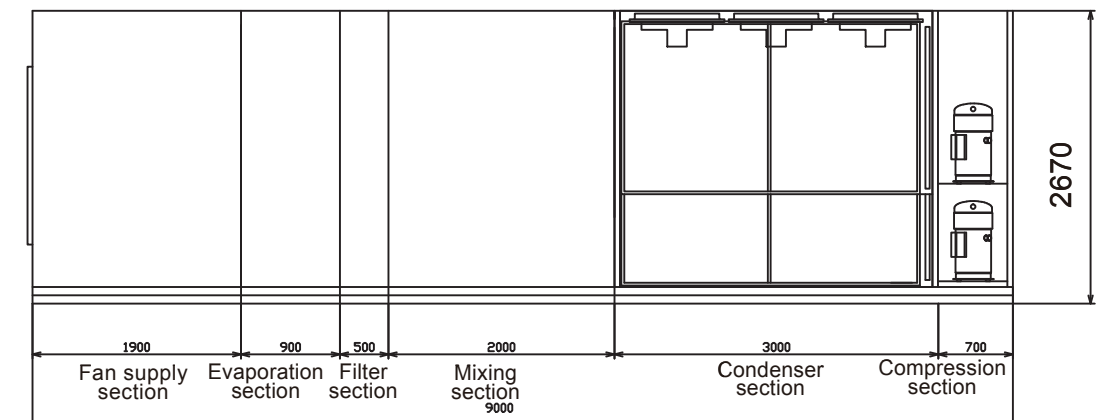
Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
TYR1250R	4800	2300	1900	600	2100	900	86	2000	1200	800	800	638	730	381
TYR1500R	5300	2300	2100	800	2100	900	86	2300	1400	800	800	801	700	415
TYR1750R	5300	2300	2100	800	2100	900	86	2300	1400	800	800	801	700	415
TYR1860R	5300	2300	2100	800	2100	900	86	2300	1400	800	800	801	700	415

Unit Dimensional Drawing | TYR2050R~2400R

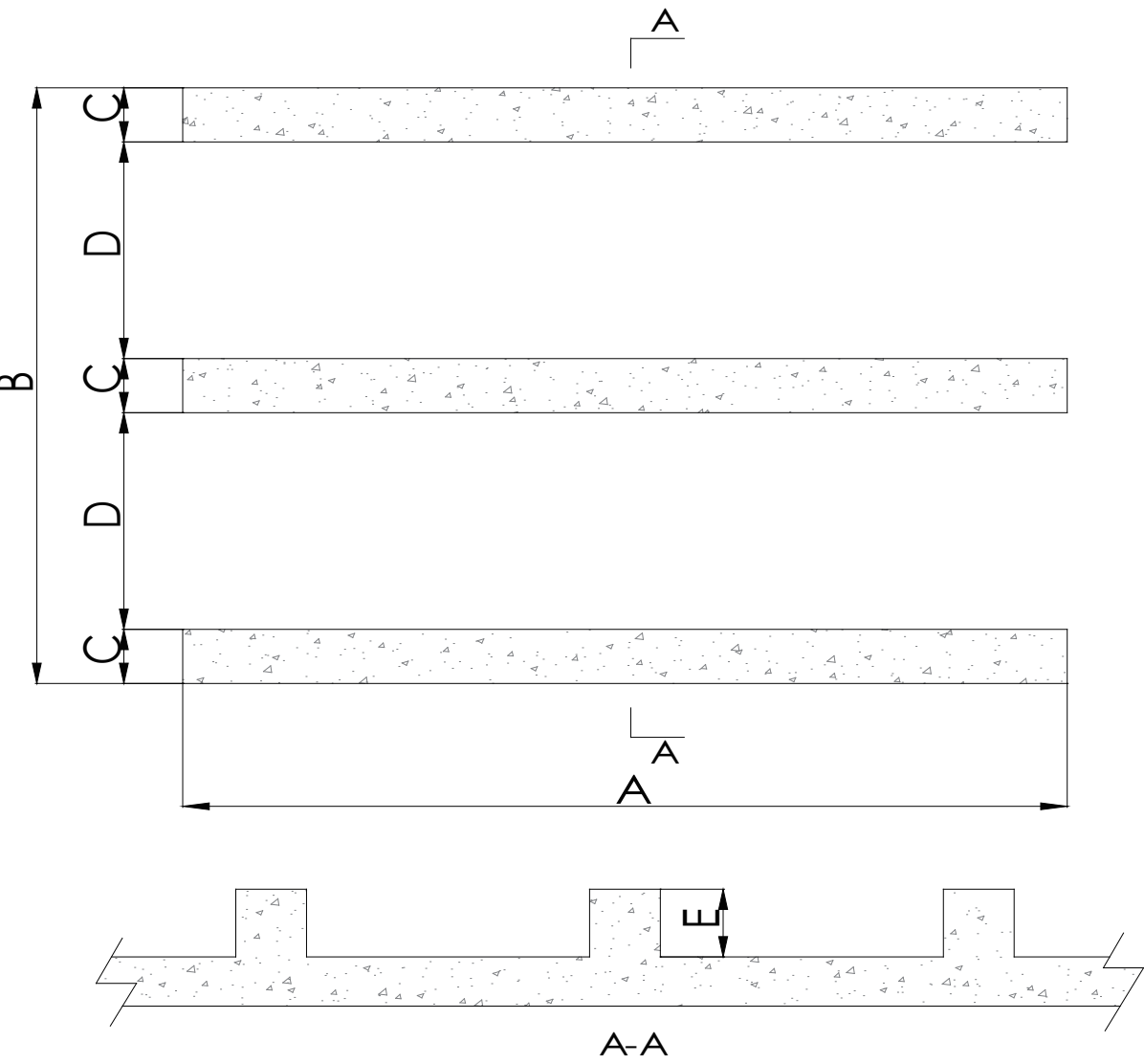


TENT CENTRAL AIR-CONDITIONING

TENT CENTRAL AIR-CONDITIONING



The Unit Base Diamentions | TYR250R~4000R



Model	A	B	C	D	E
TYR250R	1800	1800	300	450	250
TYR300R	1800	1800	300	450	250
TYR400R	2000	2000	300	550	250
TYR500R	2600	2300	300	700	250
TYR600R	2600	2300	300	700	250
TYR800R	2900	2400	300	750	250
TYR900R	2900	2400	300	750	250
TYR1050R	3100	2600	300	850	250
TYR1250R	5000	2600	300	850	250
TYR1500R	5500	2600	300	850	250
TYR1750R	5500	2600	300	850	250
TYR1860R	5500	2600	300	850	250
TYR2050R	1800	2700	300	900	300
TYR2250R	1800	2700	300	900	300
TYR2400R	2000	2700	300	900	300
TYR2750R	2600	2700	300	900	300
TYR3000R	7800	2700	300	900	300
TYR3600R	9500	3739	325	1382	300
TYR4000R	9500	3739	325	1382	300

Basic Description

1. The unit foundation is concrete;
2. The unit must not be placed on the foundation until the concrete reaches the specified strength;
3. The foundation surface shall be leveled with a level gauge, and the foundation size must be checked and checked before installation.

Split Rooftop Air Conditioning Unit
Parameter Table

TYR250R-B~600R-B

Indoor Model			TYR250R-B	TYR300R-B	TYR400R-B	TYR500R-B	TYR600R-B
Power supply			3N-380V-50Hz				
Supply Fan	Type		Centrifugal type				
	Air flow	m³/h	5400	6480	8280	10800	12960
	Motor Power	kW	1.5	2.2	2.2	3	4
	External residual pressure	Pa	220	220	250	250	270
Condensate pipe		mm	DN25	DN25	DN25	DN25	DN25
Max operation current		A	3.75	5.5	7.5	10.0	13.75
Suggested power line diameter		mm	1	1	1.5	1.5	2.5
Noise		dB (A)	61	62	62	64	65
Unit weight		kg	400	580	670	800	850
Outdoor Model			TWR250R	TWR300R	TWR400R	TWR250R*2	TWR300R*2
Power supply			3N-380V-50Hz				
Cooling capacity		kW	27.0	31.9	42.0	55.0	65.0
Heating capacity		kW	26.5	31.0	41.0	51.0	64.0
Condenser fan	Air flow	m³/h	12000	12000	16000	12000*2	12000*2
	Power consumption	kW	0.75	0.75	0.5*2	0.75*2	0.75*2
Compressor	Type		Hermetic scroll				
	Refrigerant		R410A				
Refrigerant pipe	Gas pipe	mm	Φ22.2	Φ22.2	Φ28.6	Φ22.2*2	Φ22.2*2
	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.88	Φ12.7*2	Φ12.7*2
Noise		dB (A)	63	64	64	65	66
Power consumption		kW	8.85	9.85	12.9	8.85*2	9.85*2
Max operation current		A	23	27.8	36	23*2	27.8*2
Suggested power line diameter		mm	4	6	6	4*2	6*2
Unit weight		kg	240	242	288	240*2	242*2

Note

1. Rated cooling working condition: OA:DB=35℃, WB=28℃; RA:DB=27℃,WB=19℃.
2. Rated heating working condition: OA:DB=7℃,WB=6℃; RA:DB=20℃,WB=15℃.
3. In addition to using heat pump for heating, the unit can also choose electric heating, hot water heating and steam heating.
4. If you need to add other function options, please consult our technical personnel.

Split Rooftop Air Conditioning Unit
Parameter Table

TYR800R-B~1600R-B

Indoor Model			TYR800R-B	TYR900R-B	TYR1050R-B	TYR1250R-B	TYR1600R-B
Power supply			3N-380V-50Hz				
Supply Fan	Type		Centrifugal type				
	Air flow	m³/h	17100	19800	23000	25200	30300
	Motor Power	kW	5.5	7.5	7.5	11.0	11.0
	External residual pressure	Pa	300	300	300	320	350
Condensate pipe		mm	DN32	DN32	DN32	DN32	DN32
Max operation current		A	18.75	18.75	27.5	27.5	27.5
Suggested power line diameter		mm	4	4	6	6	6
Noise		dB (A)	67	67	68	68	72
Unit weight		kg	950	980	1030	1080	1200
Outdoor Model			TWR400R*2	TWR460R*2	TWR250R*4	TWR300R*4	TWR400R*4
Power supply			3N-380V-50Hz				
Cooling capacity		kW	86	96.1	115	135	162
Heating capacity		kW	86	95	112	132	163
Condenser fan	Air flow	m³/h	16000*2	16000*2	12000*4	12000*4	16000*4
	Power consumption	kW	0.5*4	0.5*4	0.75*4	0.75*4	0.5*8
Compressor	Type		Hermetic scroll				
	Refrigerant		R410A				
Refrigerant pipe	Gas pipe	mm	Φ28.6*2	Φ28.6*2	Φ22.2*4	Φ22.2*4	Φ28.6*4
	Liquid pipe	mm	Φ15.88*2	Φ15.88*2	Φ12.7*4	Φ12.7*4	Φ15.88*4
Noise		dB (A)	67	68	69	70	73
Power consumption		kW	12.9*2	14.7*2	8.85*4	9.85*4	12.9*4
Max operation current		A	36*2	42*2	23*4	27.8*4	36*4
Suggested power line diameter		mm	6*2	10*2	4*4	6*4	6*4
Unit weight		kg	288*2	355*2	240*4	242*4	288*4

Note

1. Rated cooling working condition: OA:DB=35℃, WB=28℃; RA:DB=27℃,WB=19℃.
2. Rated heating working condition: OA:DB=7℃,WB=6℃; RA:DB=20℃,WB=15℃.
3. In addition to using heat pump for heating, the unit can also choose electric heating, hot water heating and steam heating.
4. If you need to add other function options, please consult our technical personnel.

Split Rooftop Air Conditioning Unit
Parameter Table

TYR1860R-B~3700R-B

Indoor Model		TYR1860R-B	TYR2400R-B	TYR2760R-B	TYR3220R-B	TYR3700R-B
Power supply		3N-380V-50Hz				
Supply fan	Type		Centrifugal type			
	Air flow	m³/h	35300	45500	47000	52000
	Motor Power	kW	15	18.5	30	30
	External residual pressure	Pa	400	500	800	800
Condensate pipe		mm	DN32	DN40	DN40	DN40
Max operation current		A	37.5	46.25	55	75
Suggested power line diameter		mm	10	10	16	25
Noise		dB (A)	73	75	77	80
Unit weight		kg	1250	1450	2100	2400
Outdoor Model		TWR460R*4	TWR400R*6	TWR460R*6	TWR400R*8	TWR460R*8
Power supply		3N-380V-50Hz				
Cooling capacity		kW	192	245	281	335
Heating capacity		kW	191	243	280	332
Condenser fan	Air flow	m³/h	16000*4	16000*6	16000*6	16000*8
	Power consumption	kW	0.5*8	0.5*12	0.5*12	0.5*16
Compressor	Type		Hermetic scroll			
	Refrigerant		R410A			
Refrigerant pipe	Gas pipe	mm	Φ28.6*4	Φ28.6*6	Φ28.6*6	Φ28.6*8
	Liquid pipe	mm	Φ15.88*4	Φ15.88*6	Φ15.88*6	Φ15.88*8
Noise		dB (A)	74	75	75	75
Power consumption		kW	14.7*4	12.9*6	13.1*6	12.5*8
Max operation current		A	42*4	36*6	42*6	36*8
Suggested power line diameter		mm	10*4	6*6	10*6	6*8
Unit weight		kg	355*4	288*6	355*6	288*8

Note

- Rated cooling working condition: OA:DB=35℃, WB=28℃; RA:DB=27℃,WB=19℃.
- Dry steam humidification steam pressure is 0.2MPa.
- If you need to add other function options, please consult our technical personnel.
- In addition to using heat pump for heating, the unit can also choose electric heating, hot water heating and steam heating.

Split Rooftop Air Conditioning Unit
Parameter Table [Constant temperature and humidity]

TYR250R-B-H~600R-B-H

Indoor Model		TYR250R-B-H	TYR300R-B-H	TYR400R-B-H	TYR500R-B-H	TYR600R-B-H
Power supply		3N-380V-50Hz				
Supply Fan	Type		Centrifugal type			
	Air flow	m³/h	5400	6480	8280	10800
	Motor Power	kW	1.5	2.2	3	4
	External residual pressure	Pa	220	220	250	250
compressor	Type		Hermetic scroll			
	Refrigerant		R410A			
Humidification	Type		Electrode type			
	Humidification capacity	kg/h	4	8	8	8
Heater(electrothermal)		kW	16	18	23	32
Internal power consumption		kW	21.25	26.20	32.00	42.00
Max operation current		A	48.43	59.72	72.93	95.73
Suggested power line diameter		mm	16	16	25	35
Noise		dB (A)	63	64	65	67
Unit weight		kg	420	600	695	835
Outdoor Model		TWR250R	TWR300R	TWR400R	TWR250R*2	TWR300R*2
Power supply		3N-380V-50Hz				
Cooling capacity		kW	26.5	30.3	39.1	53
Heating capacity (electrothermal)		kW	12	14	18	24
Condenser fan	Air flow	m³/h	12000	12000	16000	12000*2
	Power consumption	kW	0.75	0.75	0.5*2	0.75*2
Refrigerant pipe	Gas pipe	mm	Φ22.2	Φ22.2	Φ28.6	Φ22.2*2
	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.88	Φ12.7*2
Noise		dB (A)	63	64	64	65
Power consumption		kW	9.26	11.1	14.1	9.26*2
Max operation current		A	23	27.8	36	23*2
Suggested power line diameter		mm	4	6	6	4*2
Unit weight		kg	240	242	288	240*2

Note

- Rated cooling working condition: OA:DB=35℃, WB=28℃; RA:DB=27℃,WB=19℃.
- If you need to add other function options, please consult our technical personnel.

Split Rooftop Air Conditioning Unit
Parameter Table [Constant temperature and humidity] TYR800R-B-H~1600R-B-H

Indoor Model			TYR800R-B-H	TYR900R-B-H	TYR1050R-B-H	TYR1250R-B-H	TYR1600R-B-H
Power supply			3N-380V-50Hz				
Supply fan	Type		Centrifugal type				
	Air flow	m³/h	17100	19800	23000	25200	30300
	Motor Power	kW	7.5	7.5	11	11	11
	External residual pressure	Pa	300	300	300	320	350
Humidification	Type		Electrode type				Steam type
	Humidification capacity	kg/h	13	13	25	45	60
Heater(electrothermal)		kw	47	55	64	74	96
Internal power consumption		kw	65.75	73.75	93.75	118.75	107.00
Max operation current		A	149.86	168.09	213.68	270.66	243.87
Suggested power line diameter		mm	50	70	95	120	95
Noise		dB (A)	69	70	70	71	73
Unit weight		kg	996	1030	1130	1180	1320
Outdoor Model			TWR400R*2	TWR460R*2	TWR250R*4	TWR300R*4	TWR400R*4
Power supply			3N-380V-50Hz				
Cooling capacity		kW	78	92	107	123	160
Heating capacity (electrothermal)		kW	35	41	48	55	72
Condenser fan	Air flow	m³/h	16000*2	16000*2	12000*4	12000*4	16000*4
	Power consumption	kW	0.5*4	0.5*4	0.75*4	0.75*4	0.5*8
Compressor	Type		Hermetic scroll				
	Refrigerant		R410A				
Refrigerant pipe	Gas pipe	mm	Φ28.6*2	Φ28.6*2	Φ22.2*4	Φ22.2*4	Φ28.6*4
	Liquid pipe	mm	Φ15.88*2	Φ15.88*2	Φ12.7*4	Φ12.7*4	Φ15.88*4
Noise		dB (A)	67	68	69	70	73
Power consumption		kW	14.1*2	17*2	9.26*4	11.1*4	14.1*4
Max operation current		A	36*2	42*2	23*4	27.8*4	36*4
Suggested power line diameter		mm	6*2	10*2	4*4	6*4	6*4
Unit weight		kg	288*2	355*2	240*4	242*4	288*4

Note

1. Rated cooling working condition: OA:DB=35℃, WB=28℃; RA:DB=27℃,WB=19℃.
2. If you need to add other function options, please consult our technical personnel.

Split Rooftop Air Conditioning Unit
Parameter Table [Constant temperature and humidity] TYR1860R-B-H~3700R-B-H

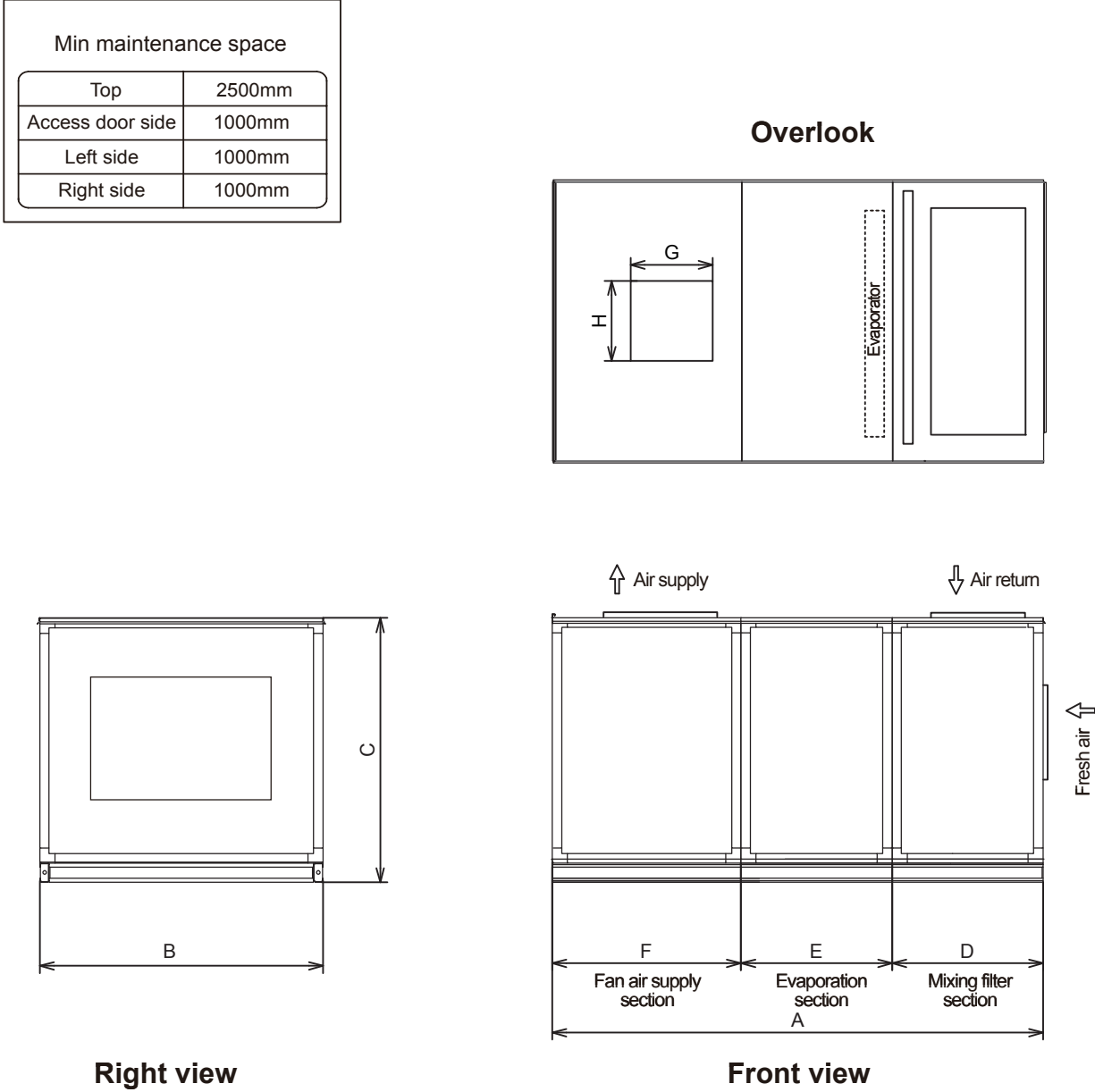
Indoor Model			TYR1860R-B-H	TYR2400R-B-H	TY2760R-B-H	TYR3220R-B-H	TYR3700R-B-H
Power supply			3N—380V—50Hz				
Supply fan	Type		Centrifugal type				
	Air flow	m³/h	35300	45500	52300	61000	69800
	Motor Power	kW	15	18.5	22	30	45
	External residual pressure	Pa	400	500	600	600	700
Humidification	Type		Steam type				
	Humidification capacity	kg/h	80	100	110	130	160
Heater(electrothermal)		kw	112	144	166	193	221
Internal power consumption		kw	127.00	162.50	188.00	223.00	266.00
Max operation current		A	289.46	370.37	428.49	508.26	606.27
Suggested power line diameter		mm	150	185	240	300	400
Noise		dB（A）	74	76	78	81	84
Unit weight		kg	1460	1560	1790	2050	2610
Outdoor Model			TWR460R*4	TWR400R*6	TWR460R*6	TWR400*8	TWR460R*8
Power supply			3N—380V—50Hz				
Cooling capacity		kW	186	240	276	322	368
Heating capacity (electrothermal)		kW	84	108	124	145	166
Condenser fan	Air flow	m³/h	16000*4	16000*6	16000*6	16000*8	16000*8
	Power consumption	kW	0.5*8	0.5*12	0.5*12	0.5*16	0.5*16
Compressor	Type		Hermetic scroll				
	Refrigerant		R410A				
Refrigerant pipe	Gas pipe	mm	Φ28.6*4	Φ28.6*6	Φ28.6*6	Φ28.6*8	Φ28.6*8
	Liquid pipe	mm	Φ15.88*4	Φ15.88*6	Φ15.88*6	Φ15.88*8	Φ15.88*8
Noise		dB（A）	74	75	76	78	78
Power consumption		kW	17*4	14.1*6	17*6	14.1*8	17*8
Max operation current		A	42*4	36*6	42*6	36*8	42*8
Suggested power line diameter		mm	10*4	6*6	10*6	6*8	10*8
Unit weight		kg	355*4	288*6	355*6	355*8	355*8

Note

1. Rated cooling working condition: OA:DB=35℃, WB=28℃; RA:DB=27℃,WB=19℃.
2. If you need to add other function options, please consult our technical personnel.
3. Dry steam humidification steam pressure is 0.2MPa.

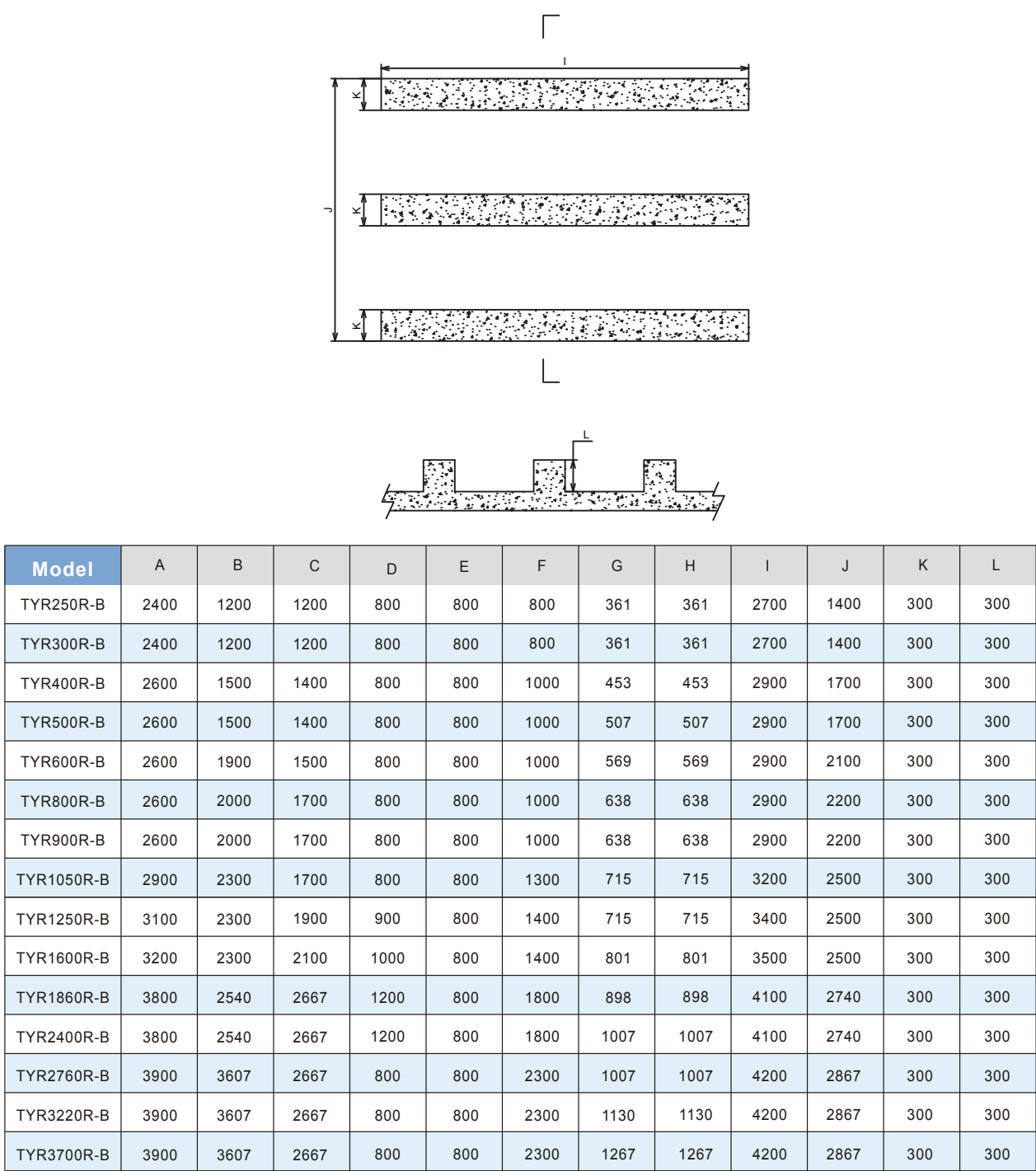
Air Handling Unit Outline Drawing

Air conditioning box series (standard type) -- upper air supply and upper air return



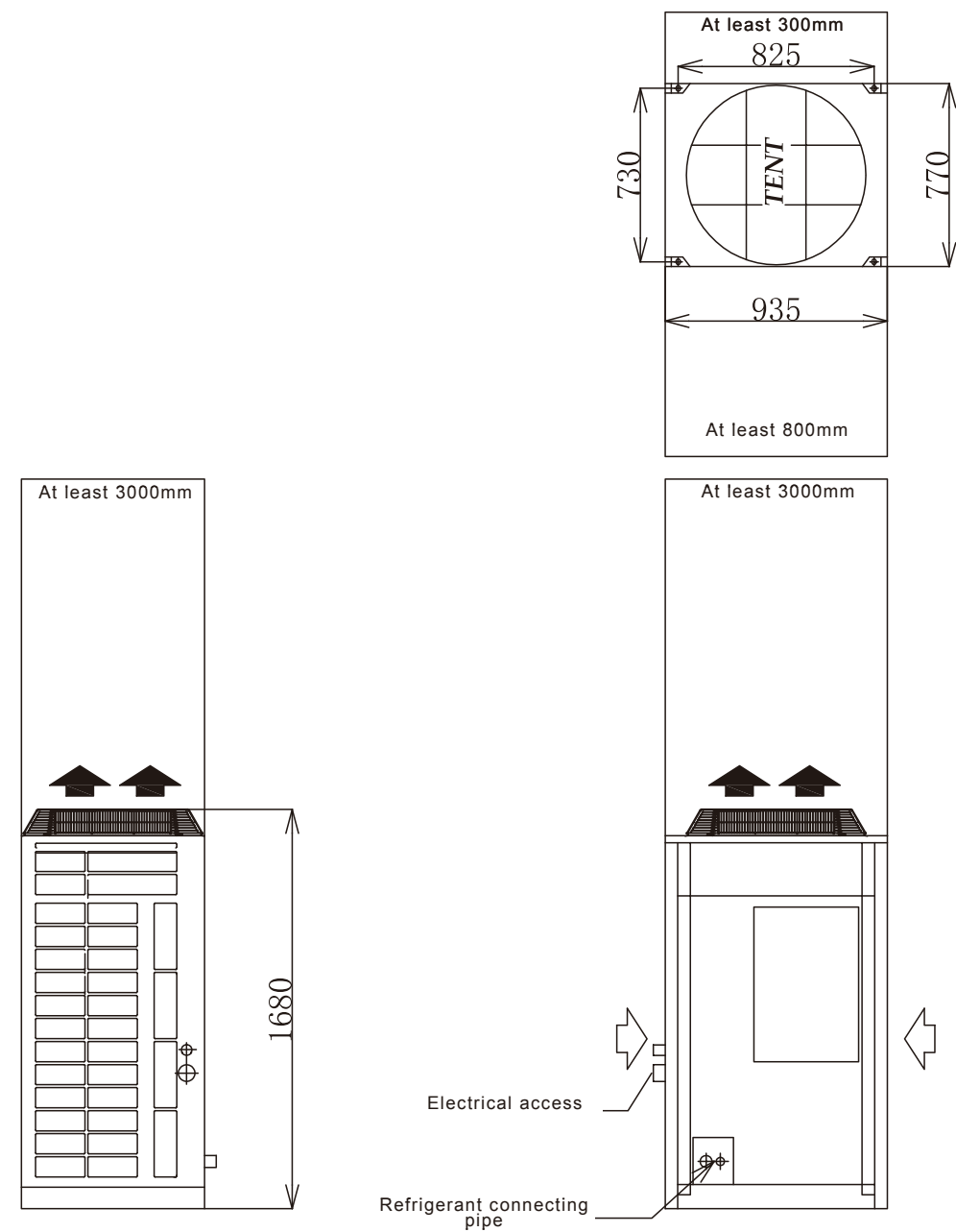
Air Handling Unit Outline Drawing

Air conditioning box series (standard type) base



Compression condensation section module outline drawing | TWF250R~TWF300R

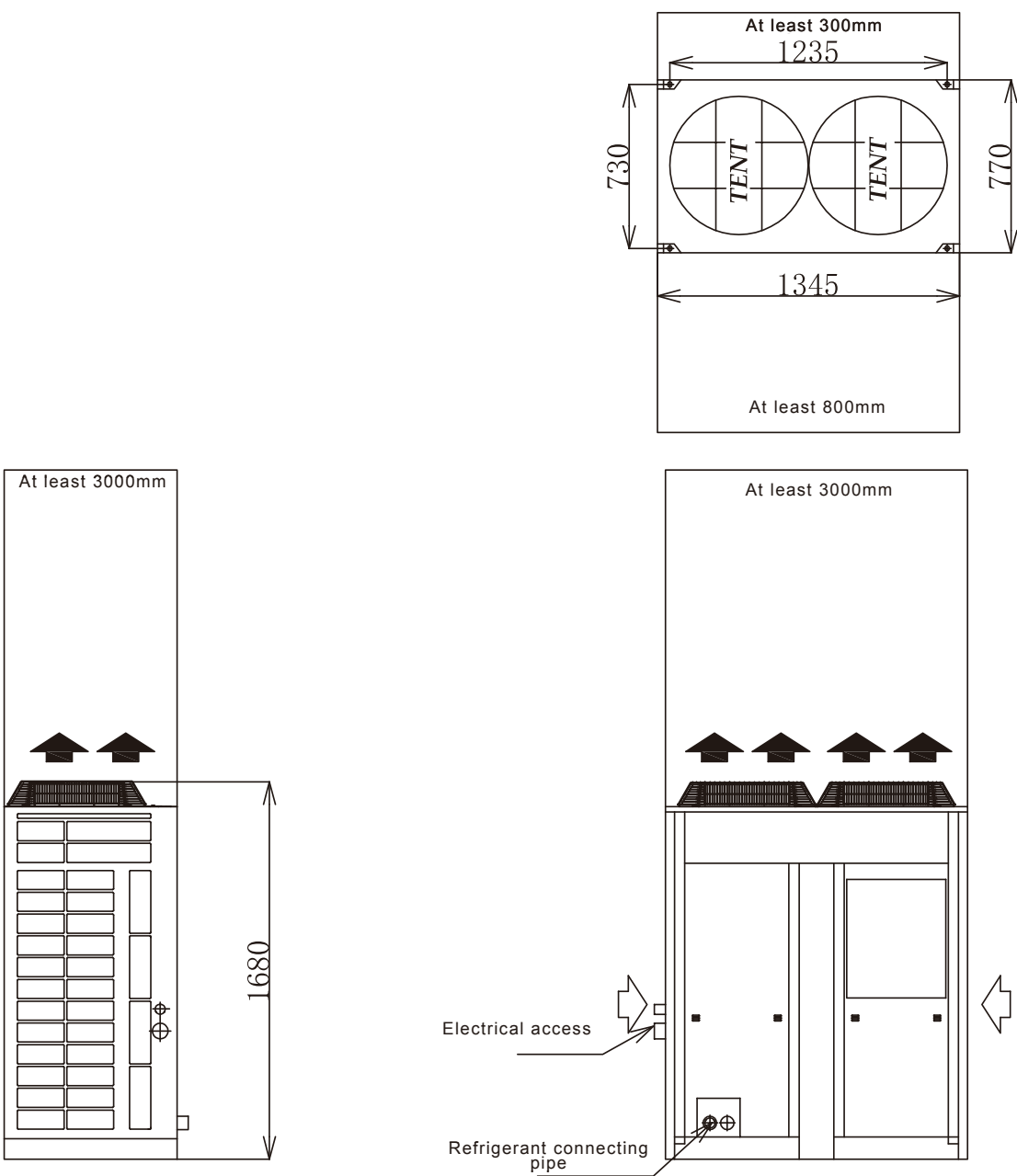
Air Conditioner External Unit



Note: The above shows the size of a single basic module, the equipment above 50kw is spliced by multiple basic modules, please splicing along the long side when splicing, and the distance between the module is not less than 200mm.

Compression condensation section module outline drawing | TWF400R~TWF460R

Air Conditioner External Unit



Note: The above shows the size of a single basic module, the equipment above 50kw is spliced by multiple basic modules, please splicing along the long side when splicing, and the distance between the module is not less than 200mm.

Variable Condition Correction Factor

When the unit operation condition is different with the standard condition,need do the correction of cooling capacity as follows

Cooling Capacity Correction Factor under Different Condition
[Normal Air Return Rooftop Air Conditioner]

Indoor Entering Air Temperature		Outdoor Entering Air Dry Bulb Temperature(℃)				
Dry bulb	Wet bulb	25	30	35	40	43
20	16	0.92	0.88	0.85	0.83	0.79
23	17	0.98	0.94	0.9	0.88	0.83
25	18	1.06	0.99	0.97	0.91	0.88
27	19	1.11	1.05	1	0.95	0.91
28	20	1.13	1.08	1.03	0.97	0.94
30	22	1.2	1.12	1.08	1.03	0.99

Heating Capacity Correction Factor under Different Condition
[Normal Air Return Rooftop Air Conditioner]

Indoor Entering Air Temperature	Outdoor Entering Air Dry/Wet Bulb Temperature(℃)				
Dry bulb	-5/-5.5	2/1	7/6	10/8.5	15/13
16	0.79	0.94	1.03	1.14	1.29
18	0.78	0.93	1.02	1.12	1.27
20	0.77	0.92	1	1.11	1.25
21	0.76	0.9	0.99	1.08	1.22
22	0.76	0.89	0.99	1.08	1.19
24	0.75	0.89	0.98	1.07	1.18

Note

Cooling capacity (heating capacity) in actual working conditions = cooling capacity (heating capacity) under standard working conditions × correction coefficient of cooling capacity (heating capacity) under actual working conditions.

Non-standard type selection reference

Product Category

	Package Unit	Split
Unit form	Full fresh air type (Normal/heat recovery type)	Full fresh air type (Normal/heat recovery type)
	Full air return type	Full air return type
	Primary air return type (normal/heat recovery type)	Primary air return type (normal/heat recovery type)
Compressor type	Rated capacity	Rated capacity
	Variable capacity	Variable capacity
Connecting pipe direction	Upper air supply and return/Side air supply and return/Underfloor air supply and return	Upper air supply and return/Side air supply and return/Underfloor air supply and return
Unit operation	Constant temperature and humidity/ Heat pump type/Single cooling type	Constant temperature and humidity/ Heat pump type/Single cooling type

Optional Configuration Table

	Package Unit	Split
Heat recovery section	Heat recovery runner	Heat recovery runner
Heating section	Electric heating/Steam heating/ Hot water heating	Electric heating/Steam heating/ Hot water heating
Humidification section	Wet film humidification/electrode humidification/dry steam humidification	Wet film humidification/electrode humidification/dry steam humidification
Control method	Centralized control and local control	Centralized control and local control
Filter level	Primary efficient/Medium efficient/ Sub-efficiency	Primary efficient/Medium efficient/ Sub-efficiency
Others	Stainless steel water pan, PLC control and so on.	Stainless steel water pan, PLC control and so on.

Note

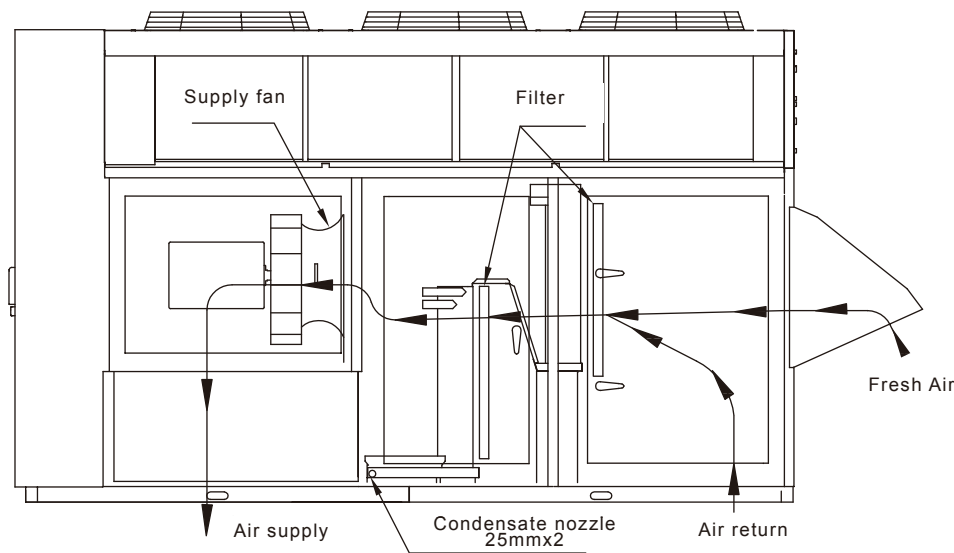
Users can choose the following common collocation forms according to the needs of the occasion, and the above functional segments can also be freely combined. For details of changes in equipment size and parameters caused by different combinations of forms, please contact our technicians.

Non-standard Type Selection Reference

Package Unit Type

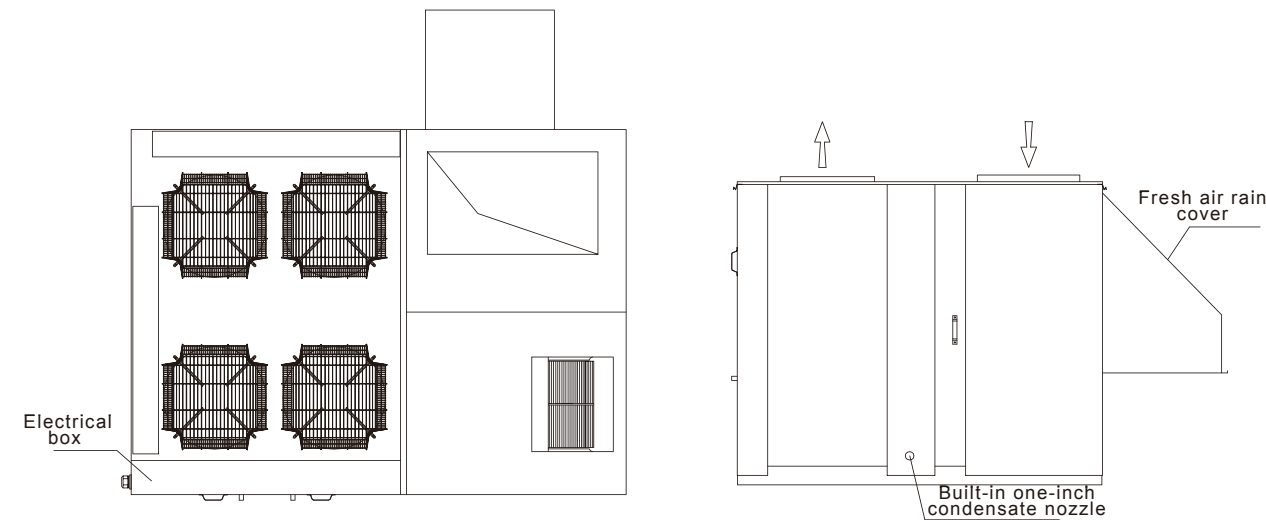
Type 1
Underfloor Air Supply and Return

The duct is connected through the bottom of air conditioner directly. When put the air conditioner on roofing, need make a hole on the roof.



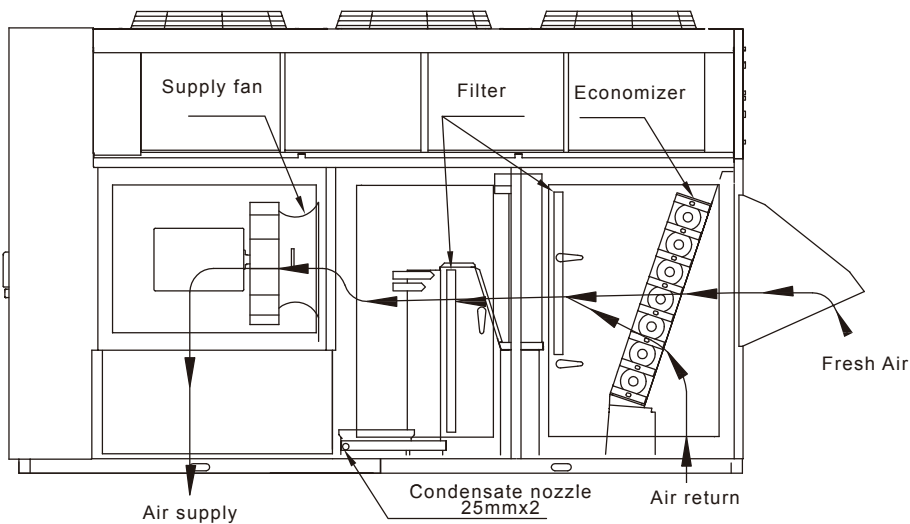
Type 2
Upper Air Supply and Return (Only for 10kW-180kW rooftop packaged air conditioner)

The duct is connected through the upper of the air conditioner. It is suitable for the air conditioner which put on the ground and small space place.



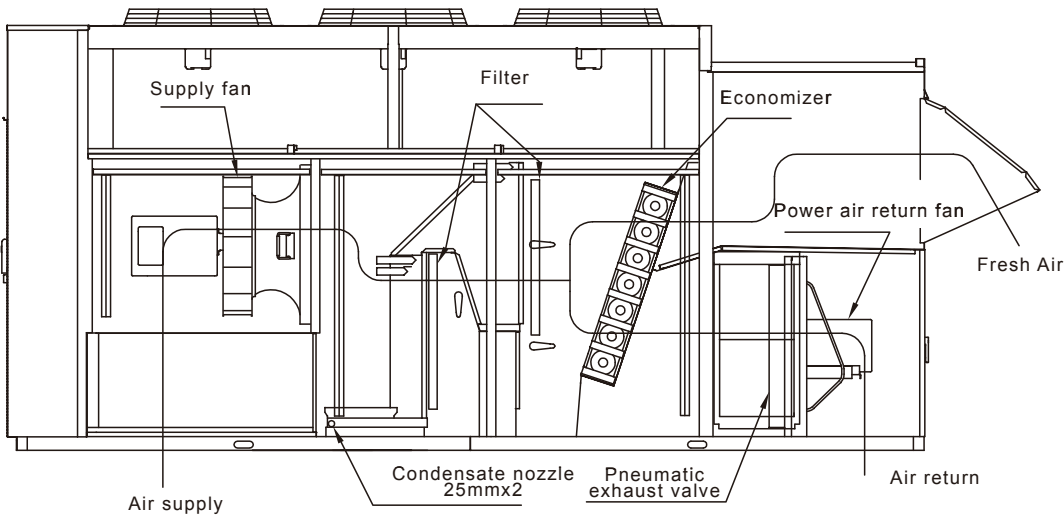
Type 3
Economizer Type (Single fan type)

The economizer is equipped in the air conditioner. Its function is adjust the proportion of the fresh air volume and return air volume. It only have one fan.



Type 4
Economizer Type (Double fan type)

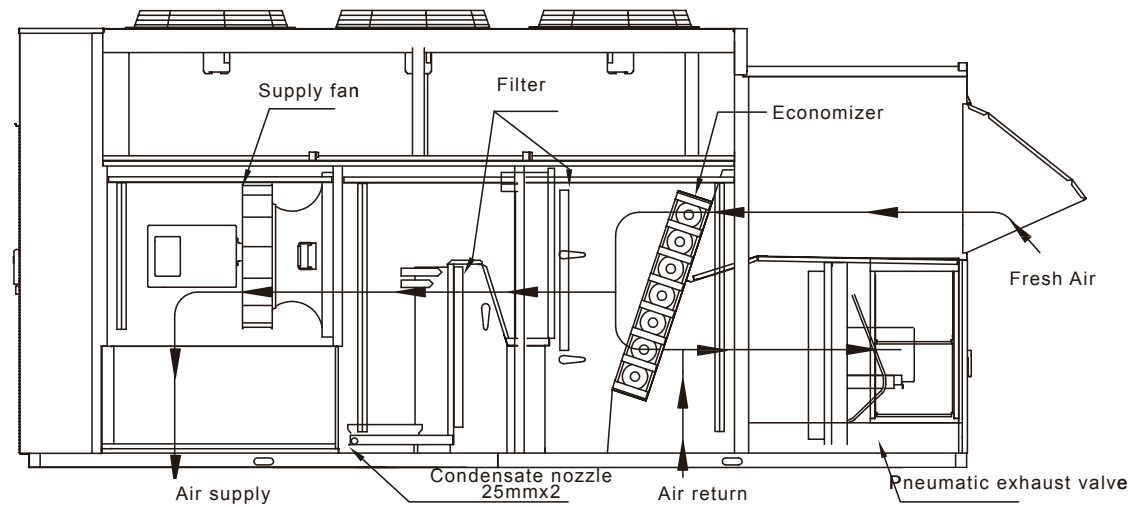
The economizer is equipped in the air conditioner. Its function is adjust the proportion of the fresh air volume and return air volume. It has two fan for air supply and air return.



Non-standard Type Selection Reference

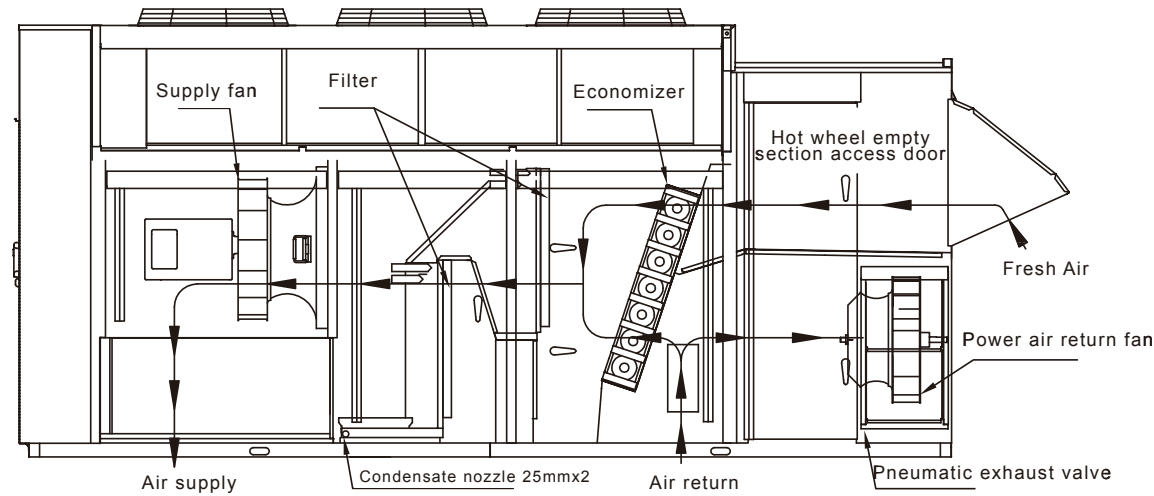
Type 5
Economizer + Power Exhaust Type

The economizer is equipped in the air conditioner. Its function is adjust the proportion of the fresh air volume and return air volume. It equip the exhaust fan. It is double fan system.



Type 6
Economizer + Heat Recovery Runner

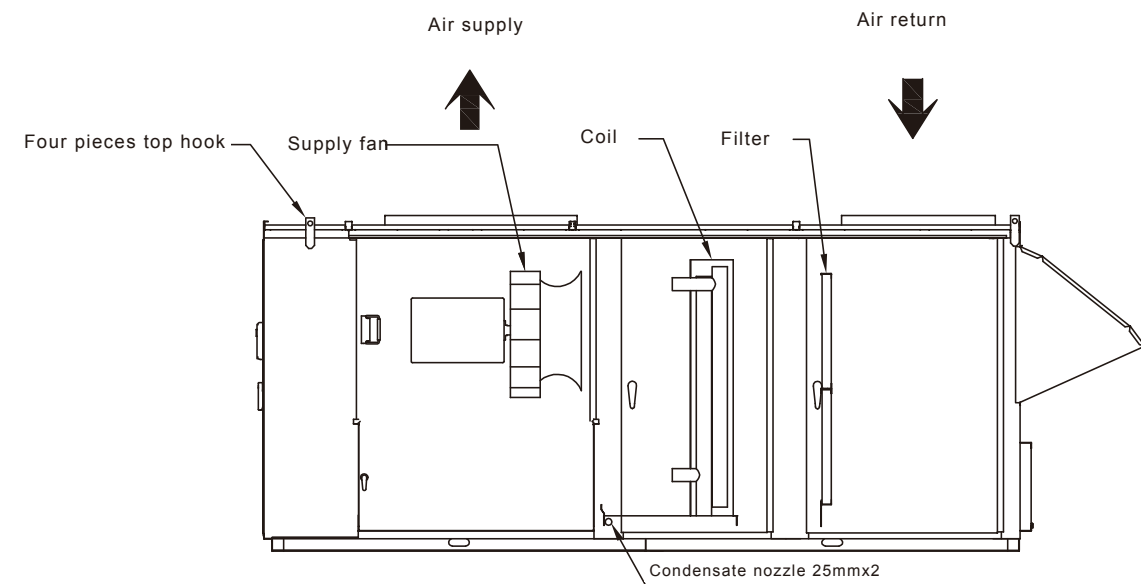
The economizer and heat recovery runner are equipped in the air conditioner. It is suitable for the places which need large fresh air. It is a double fan system.



Split Type

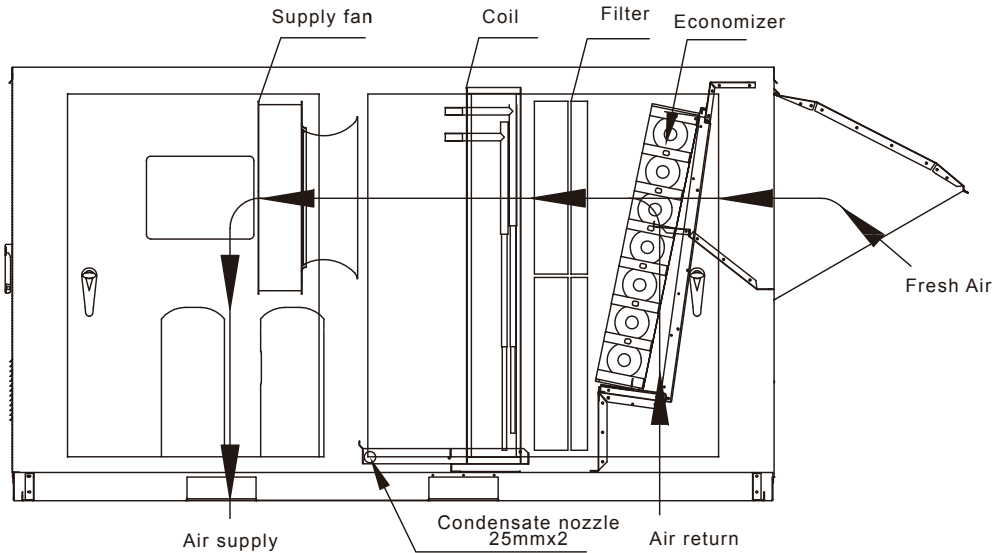
Type 1
Upper Air Supply and Upper Return

The duct is connected through the upper of the equipment. It is suitable for the limited room area.



Type 2
Economizer Type

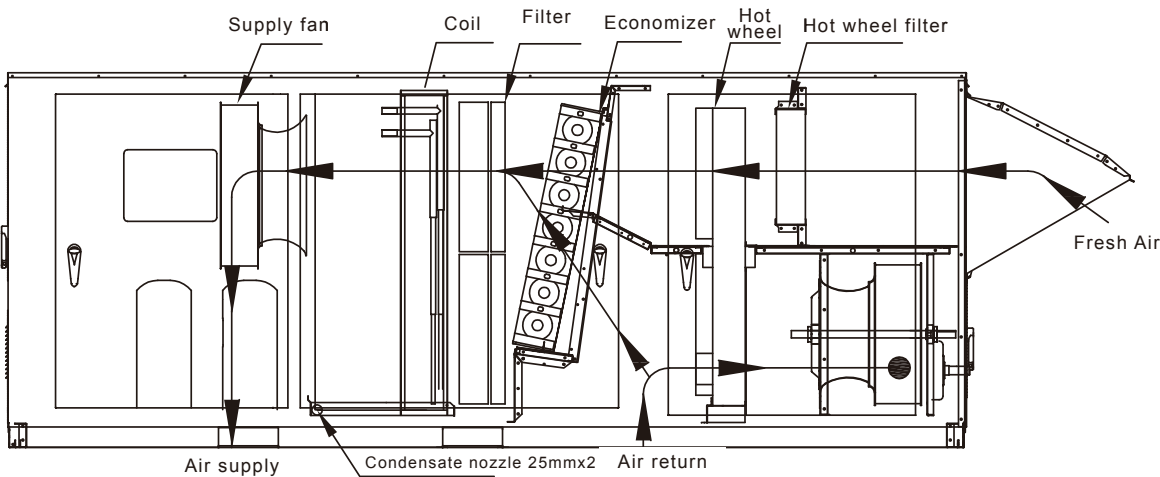
The economizer is equipped in the air conditioner. Its function is adjust the proportion of the fresh air volume and return air volume.



Non-standard Type Selection Reference

Type 3
Economizer + Exhaust Fan (Double fan type)

The economizer is equipped in the air conditioner. Its function is adjust the proportion of the fresh air volume and return air volume.It equip the exhaust fan. It is double fan system.



Instruction Instructions

The following instructions should be carefully read before the installation of the air conditioning unit to avoid unnecessary damage to the unit

General requirements

1. The unit should be kept as horizontal as possible when handling and moving, do not tilt more than 30 degrees, hoist from the bottom bracket of the unit, and the upper part of the spreader should have a support rod to avoid injury to the equipment;
2. For the unit installed on the ceiling, it should be ensured that the tensile stress of the pull bar is sufficient to bear the weight of the unit during operation;For the unit installed on the
3. The unit should not be installed in the places of corrosive gas and high humidity;
4. The installation of the unit must leave enough space for heat dissipation and convenient access for maintenance personnel;
5. When the unit is in place, a suitable vibration damping device should be installed under the unit; The roof, machine room or floor where the unit is installed should have sufficient strength and levelness to support the unit. Incorrect installation can cause additional noise and vibration;
6. The unit is shipped as a whole, the refrigerant has been flushed, and there is no need for secondary filling on site;
7. The power supply wiring must comply with local regulations, the voltage fluctuation shall not exceed 10% of the rated voltage, the imbalance between the phases of the three-phase power supply shall be within 2%, and the power line shall be wired separately and shall not be shared with other lines;
8. The weight of air ducts and water pipes connected to the unit cannot be borne by the unit;
9. The cabinet of the air conditioning unit should be reliably grounded;10.Lightning protection shall be considered for outdoor placement type according to the height of the actual installation position of the unit.

Trap Installation

The evaporator of the air treatment section of the unit is under negative pressure, in order to ensure the smooth discharge of condensate, the condensate pipe needs to be set up with a village water pipe.The height difference of the water seal can refer to the schematic diagram of the water seal, and the condensate pipe should be kept unblocked to ensure that the drainage slope is > 0.005,and the water storage bend is made as follows: the pipe should be kept unblocked to ensure that the drainage slope is > 0.005, and the water storage bend is made as follows:

