



**WATER COOLED PACKAGED  
TYPE AIR CONDITIONER**

[Your satisfaction is always our cherished desire!]



**AirTrojan International Co., Ltd.**

<http://www.airtrojan.com>



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



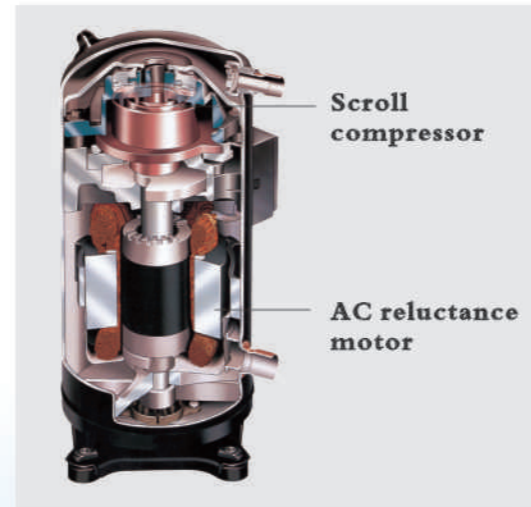
## Product Features

### Feature 1: Fully satisfy your sensing enjoyment

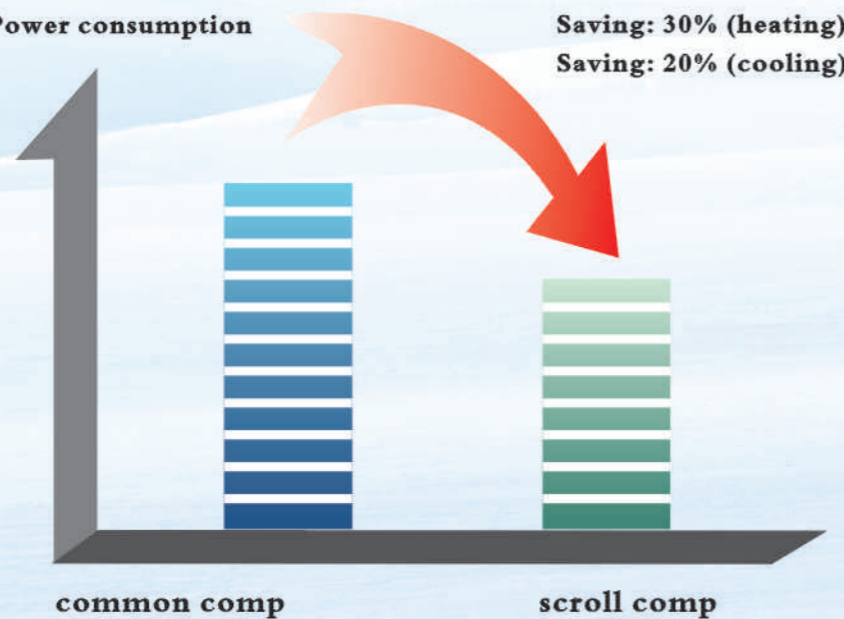
- Rounded R-angle model, exquisite, ivory-white, easy to match with the environment.
- Anti-corrosion treated case through water cleaning, acid cleaning and two-layer galvanized primer and two-layer finish coats.
- Even indoor temperature with little swing, offering you comfort anywhere at anytime.
- Forcible operation function can reach desired temperature quickly, it keeps you from sufferings of three-minute waiting.
- Quality fittings for fan and compressor, eliminating your noise annoyance.  
Oval scroll compressor is more efficient than the traditional piston compressor and has lower vibration reducing noise about 2dB (A).  
With less operation parts, it makes a better reliability.

### Feature 2: Economical

- Scroll compressor is about 20% more efficient than reciprocating compressor. When no one is inside, it will adjust the set temperature about 2°C up or down. Then you will gain 30% energy-saving in heating and 20% in cooling operation. It is suitable for staying out for a long time and during sleep. Even if you forgot to adjust, it will automatically shift to energy-saving mode.
- Long-term filter, keeps from cleaning for a long period.
- Low power consumption and high efficiency ratio.



1. Power consumption



### Application for

Hotels, apartments, restaurants, office buildings, malls and supermarkets, hospitals and factories







## Product Specifications

Type	Model	Free-blow type				Ducted type						
		L25TCB	L35TC	L25TDB	L35TD	L50TDB	L60TD	L80TDC	L105TD	L120TDC	L140TDB	
Cooling capacity	kW	26.4	35.2	26.4	35.2	52.8	67.4	85.1	104.1	119.4	139.1	
Heating capacity (optional, electric heater)	kW	13.5				26.4	28.8	36	36(48)			
Air flow	m <sup>3</sup> /h	4000	5400	4000	4800	7800	9000	13600	16200	19800	21600	
External static pressure	Standard	Pa	0	78.4	98							147
	Optional	Pa	-				0-300(plenum)			100-350		100-400
Power supply	φ-V-Hz	3-380-50										
E.E.R	w/w	3.8	3.86	3.6	3.64	3.46	3.50	3.26	3.29	3.26	3.26	
Power consumption	kW	6.87	8.39	7.25	8.89	13.9	17.46	24.3	31.6	36.6	42.7	
Running current	A	12.4	15.6	13.4	16.5	26.1	31.2	43.4	54.6	66.2	76.3	
Compressor	Type	Scroll compressor										
	Starting method	IR										
	Output	kW	3.0 x 2	4.66 x 2	3.0 x 2	4.66 x 2	4.66 x 3	4.12 x 4	9.0 x 2	4.12 x 6	10.1 x 3	6.0 x 6
	Refrigerant oil	L	White oil	Suniso 4GSOD-K	White oil	Suniso 4GSOD-K	SAY56T	Mineral	SAY56T	160P Mineral	Mineral	
Oil volume	L	1.36 x 2	1.5 x 2	1.36 x 2	1.5 x 2	1.5 x 3	1.7 x 4	4.0 x 2	1.7 x 6	3.25 x 3	1.7 x 6	
Refrigerant		R-22										
Refrigerant Charge Volume	kg	2.0 x 2	1.9 x 2	2.0 x 2	1.9 x 2	1.9 x 3	3.2 x 2	4.3 x 2	2.8 x 3	6.1 x 3	4.5 x 3	
Refrigerant control		Capillary										
Operation control		Micro-computer										
Indoor temp. adjustment device		Thermostat										
Fan	Type	Double suction sirocco fan										
	Quantity		2				1		2		7.5	
	Fan motor output	kW	0.25	0.68		2.2		4		5.5		
Drive		Direct drive				Belt drive						
Evaporator		Lower type aluminum fin/copper tube evaporator										
Row/fin per inch		4/12				4/13.4		4/12				
Condenser	Type	Shell and tube type										
	Water flow	m <sup>3</sup> /h	5.5	7.5	5.5	7.5	11.2	13.5	15.9	21.5	26.7	31.1
	Head loss	kPa	22				25		28.4		29.4	
	Water inlet pipe diameter	inch/mm	1 1/2" / DN40				2" / DN50		2 1/2" / DN65		2 1/2" / DN65	
	Water outlet pipe diameter	inch/mm	1 1/2" / DN40				2" / DN50		2 1/4" / DN32		1 1/4" / DN32	
Condenser drain		1" / DN25				1" / DN25		1 1/4" / DN32		1 1/4" / DN32		
Mechanic chamber drain		1" / DN25				1" / DN25		1 1/4" / DN32		1 1/4" / DN32		
Air filter		Nylon air filter				Nylon air filter		Nylon air filter		Nylon air filter		
Fresh air in	Height	mm	1900/2092		1620/1812		1875/2042		1900/2080		1880/2080	
	Width	mm	1178/1292		1549/1673		1735/1859		2040/2065		1900/2065	
	Depth	mm	485/598		630/753		890/1034		970/1034		1084/1148	
Net weight / gross weight	kg	250/268	277/295	228/243	255/270	470/493	550/575	690/723	767/800	750/883	979/1014	
Protection devices	Compressor	Built-in temperature protection and overload thermal relay										
	Fan motor	Built-in temperature protection				Overload thermal relay		Overload thermal relay				
	Phase sequence protection	Three-phase power monitor										
	High pressure switch	Mpa(G)	2.2									
	Low pressure switch	Mpa(G)	0.12									
Fusible plug		Yes										
Control loop		5A fuse										

Type	Model	Free-blow type				Ducted type						
		L25TCB-F	L35TC-F	L25TDB-F	L35TD-F	L50TDB-F	L60TD-F	L80TDC-F	L105TD-F	L120TDC-F	L140TDB-F	
Cooling capacity	kW	24.5	31.0	24.5	31.0	47.0	58.0	76.0	100.0	115.0	140.0	
Heating capacity (optional, electric heater)	kW	13.5				26.4	28.8	36	36(48)			
Air flow	m <sup>3</sup> /h	4500	5400	4500	4800	7800	9000	13600	16200	19800	21600	
External static pressure	Standard	Pa	0	78.4	98							147
	Optional	Pa	-				0-300(plenum)			100-350		100-400
Power supply	φ-V-Hz	3-380-50										
E.E.R	w/w	3.47	3.51	3.28	3.29	3.26	3.26	3.22	3.29	3.26	3.26	
Power consumption	kW	7.06	8.83	7.47	9.42	14.42	17.79	23.60	30.40	35.28	42.94	
Running current	A	12.62	15.79	13.35	16.84	25.77	31.80	42.19	54.33	63.06	76.76	
Compressor	Type	Scroll compressor										
	Starting method	IR										
	Output	kW	3.0 x 2	3.75 x 2	3.0 x 2	3.75 x 2	3.75 x 3	3.75 x 4	9.0 x 2	3.75 x 6	8.75 x 3	5.25 x 6
	Refrigerant oil	L	1.36 x 2	1.5 x 2	1.36 x 2	1.5 x 2	1.5 x 3	1.7 x 4	4.0 x 2	1.7 x 6	3.25 x 3	1.7 x 6
Oil volume	L	1.36 x 2	1.5 x 2	1.36 x 2	1.5 x 2	1.5 x 3	1.7 x 4	4.0 x 2	1.7 x 6	3.25 x 3	1.7 x 6	
Refrigerant		R-410A										
Refrigerant Charge Volume	kg	2.0 x 2	2.1 x 2	2.0 x 2	2.1 x 2	2.1 x 3	3.1 x 2	4.6 x 2	3.8 x 3	4.0 x 3	4.5 x 3	
Refrigerant control		Capillary										
Operation control		Micro-computer										
Indoor temp. adjustment device		Thermostat										
Fan	Type	Double suction sirocco fan										
	Quantity		2				1		2		7.5	
	Fan motor output	kW	0.25	0.68		2.2		3.75		5.5		
Drive		Direct drive				Belt drive						
Evaporator		Lower type aluminum fin/copper tube evaporator										
Row/fin per inch		3/12	4/12	3/12	4/12	4/13.4	3/12	4/12				
Condenser	Type	Shell and tube type										
	Water flow	m <sup>3</sup> /h	5.25	6.64	5.25	6.64	10.07	12.43	16.29	21.43	24.64	30
	Head loss	kPa	22.0				25		29.4		40	
	Water inlet pipe diameter	inch/mm	1 1/2" / DN40				2" / DN50		2 1/2" / DN65		2 1/2" / DN65	
	Water outlet pipe diameter	inch/mm	1 1/2" / DN40				2" / DN50		2 1/4" / DN32		1 1/4" / DN32	
Condenser drain		1" / DN25				1" / DN25		1 1/4" / DN32		1 1/4" / DN32		
Mechanic chamber drain		1" / DN25				1" / DN25		1 1/4" / DN32		1 1/4" / DN32		
Air filter		Nylon air filter				Nylon air filter		Nylon air filter		Nylon air filter		
Fresh air intake	Height	mm	1900/2092		1620/1812		1875/2042		1880/2080		1910/2065	
	Width	mm	1178/1292		1549/1673		1735/1859		2040/2065		1900/2065	
	Depth	mm	485/598		630/753		890/1034		970/1034		1084/1148	
Net weight / gross weight	kg	268/278	275/285	253/263	256/266	445/462	514/533	662/695	759/802	797/825	899/929	
Protection devices	Compressor	Built-in temperature protection and overload thermal relay										
	Fan motor	Built-in temperature protection				Over current relay		Over current relay				
	Phase sequence protection	Three-phase power monitor										
	High pressure switch	Mpa(G)	3.2									
	Low pressure switch	Mpa(G)	0.22									
Fusible plug		Yes										
Control loop		5A fuse										

1. The cooling capacity is measured when the return air temperature is at 27°C DB and 19°C WB while the cooling water inlet temperature is at 30°C and outlet is at 35°C.  
 2. (For the optional components) the heating capacity of hot water coil is measured when the inlet hot water is 60°C.  
 3. These specifications are subject to change without prior notice.

## Products List

**Plenum Ducted type can be modified into free-blow type with plenum**

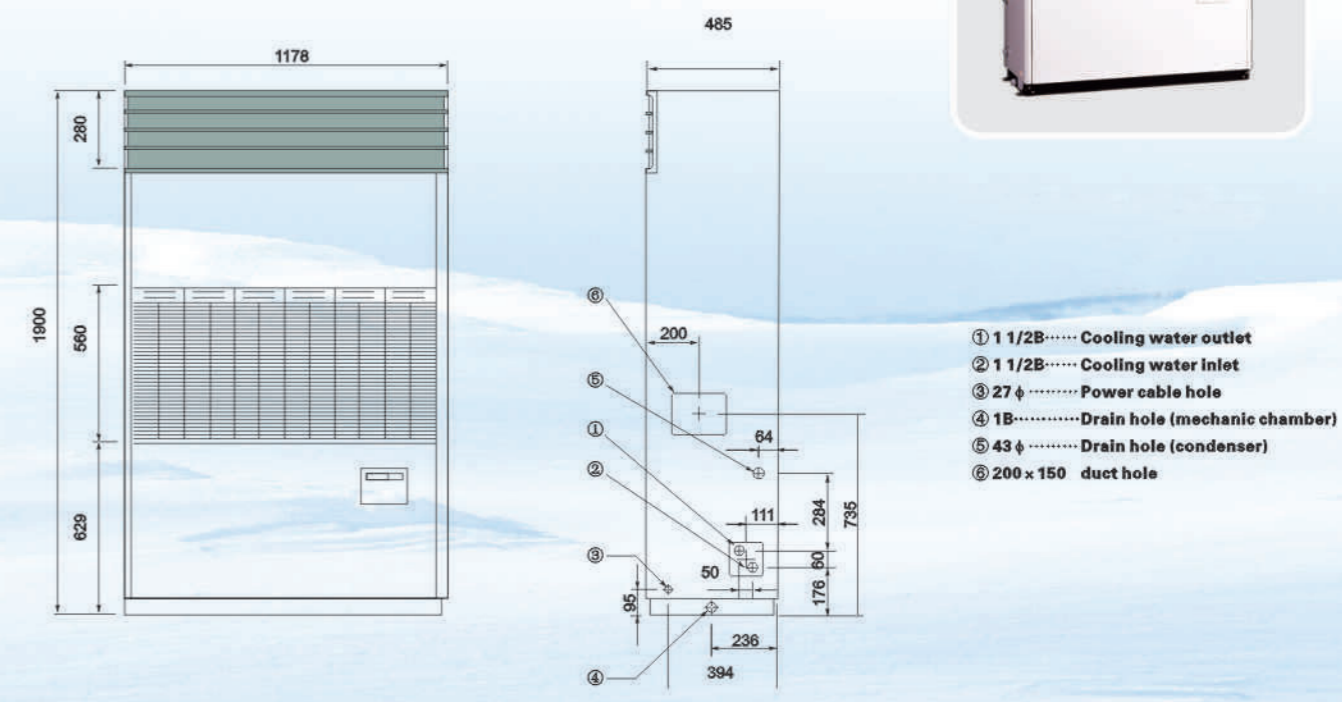
AirTrojan launched its 15HP and 20HP plenum in June 2002, so ducted type air conditioners can be modified into free-blow type.

### Specifications

Model	Application	Weight before/after packing	Dimensions before packing (mm)	Dimensions after packing (mm)
PZPW15-I	L50TD	24/26kg	H302 x W1549 x D630	H387 x W1629 x D695
PZPW20-I	L60TDB	33/35kg	H302 x W1735 x D630	H387 x W1815 x D695



### Free-blow type L25TCB L35TC

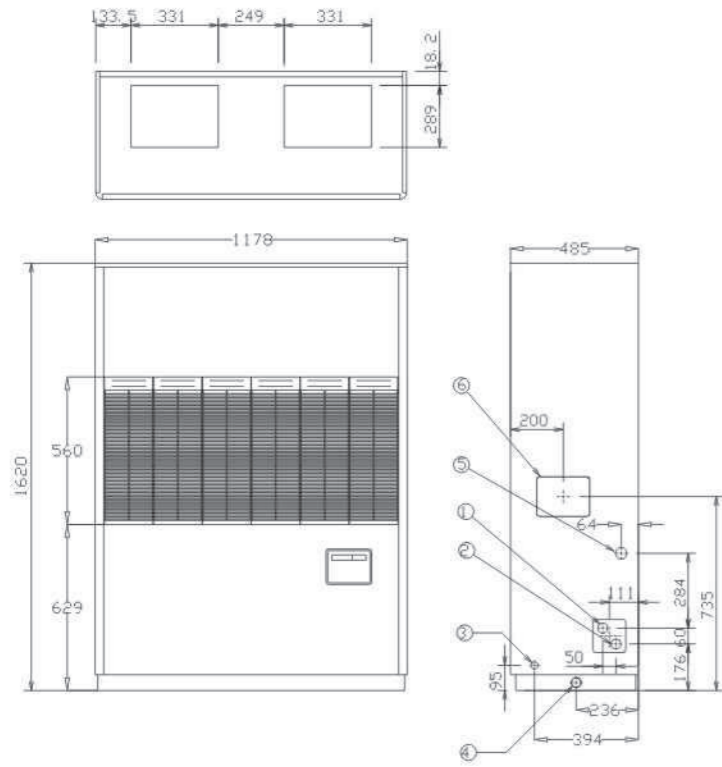






Ducted type

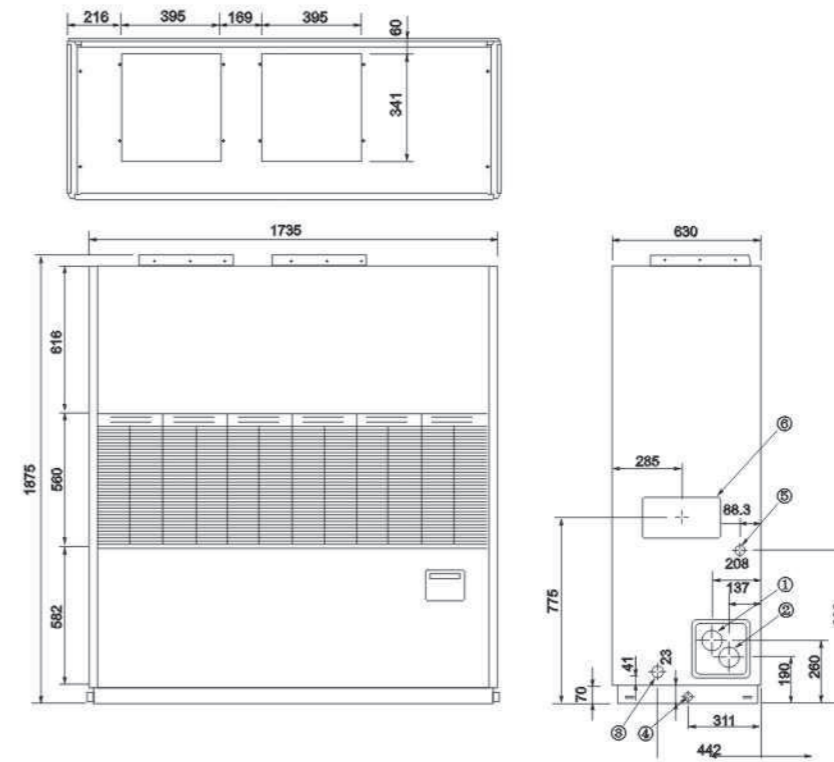
L25TDB L35TD



- ① 1 1/2"..... Cooling water outlet
- ② 1 1/2"..... Cooling water inlet
- ③ 27 φ..... Power cable hole
- ④ 1B..... Drain hole (mechanic chamber)
- ⑤ 43 φ..... Drain hole (condenser)
- ⑥ 200 x 150 duct hole

Ducted type

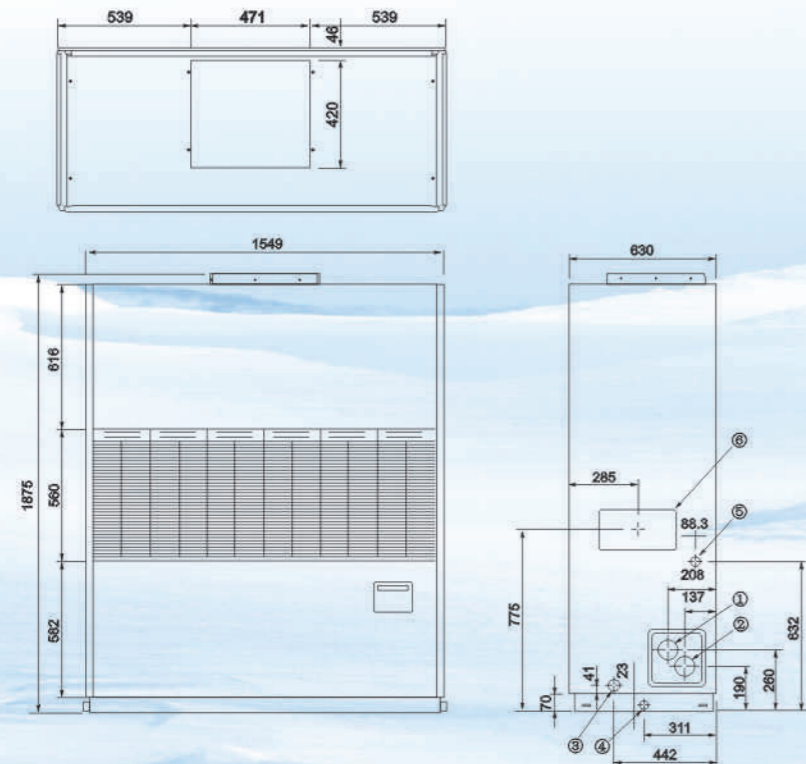
L60TDB



- ① 2B..... Cooling water outlet
- ② 2B..... Cooling water inlet
- ③ 52 φ..... Power cable hole
- ④ 1B..... Drain hole (mechanic chamber)
- ⑤ 43 φ..... Drain hole (condenser)
- ⑥ 330 x 170 duct hole

Ducted type

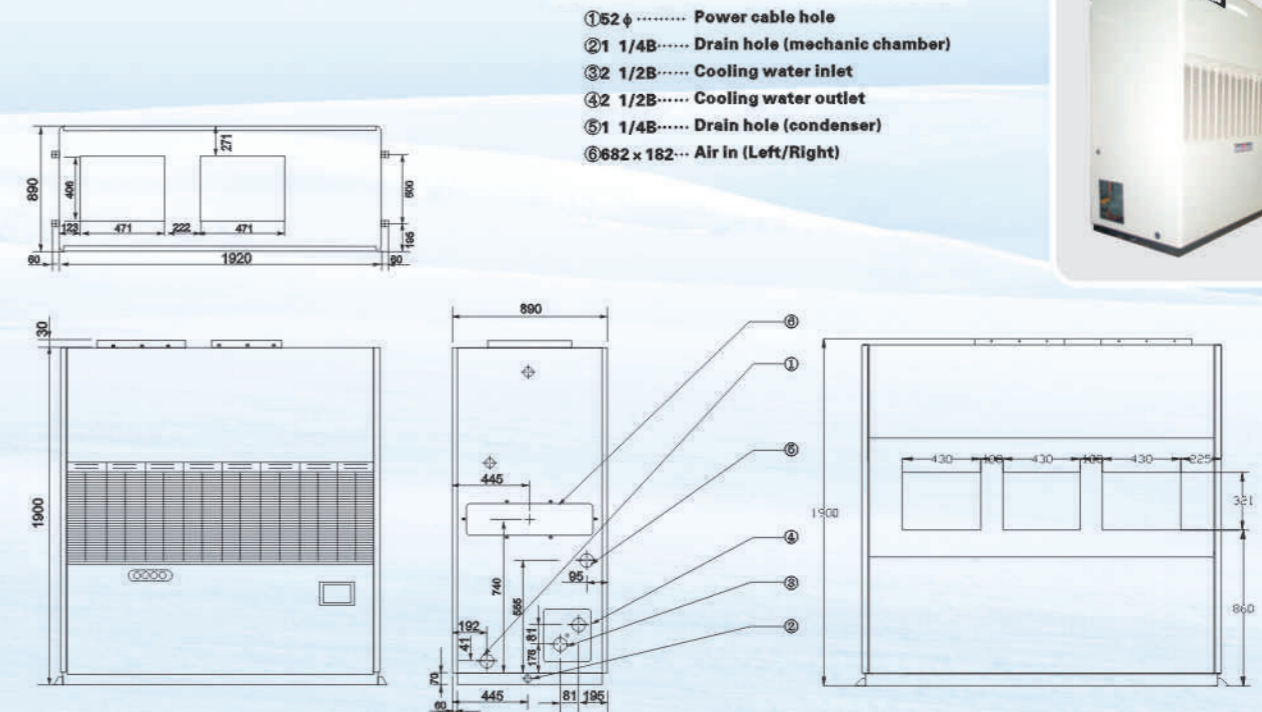
L50TD



- ① 2B..... Cooling water outlet
- ② 2B..... Cooling water inlet
- ③ 52 φ..... Power cable hole
- ④ 1B..... Drain hole (mechanic chamber)
- ⑤ 43 φ..... Drain hole (condenser)
- ⑥ 330 x 170 duct hole

Ducted type

L80TDC



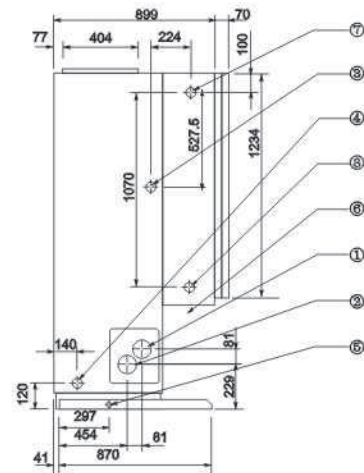
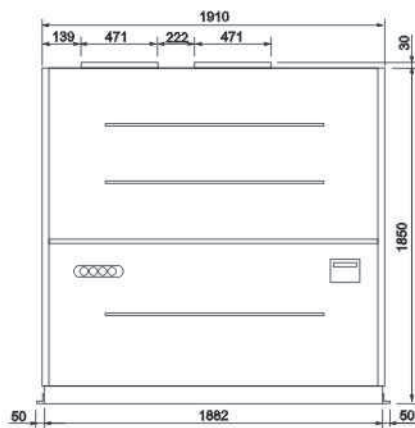
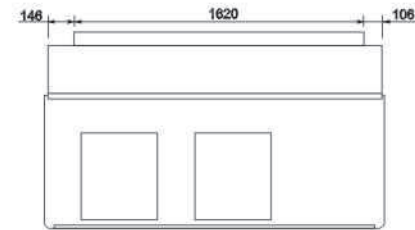
- ① 52 φ..... Power cable hole
- ② 1 1/4B..... Drain hole (mechanic chamber)
- ③ 2 1/2B..... Cooling water inlet
- ④ 2 1/2B..... Cooling water outlet
- ⑤ 1 1/4B..... Drain hole (condenser)
- ⑥ 682 x 182... Air in (Left/Right)





Ducted type

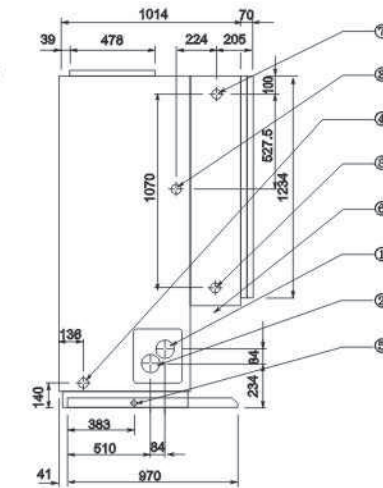
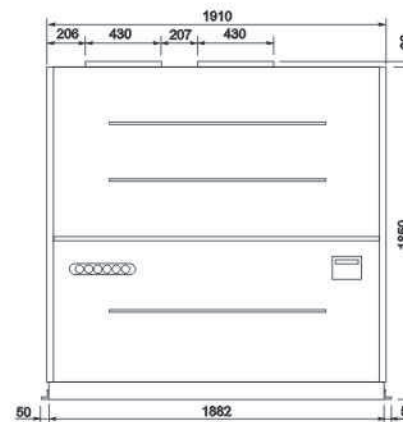
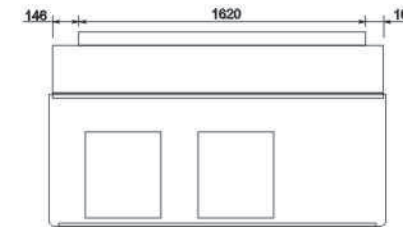
L105TD



- ① 2 1/2B..... Cooling water outlet
- ② 2 1/2B..... Cooling water inlet
- ③ 75 φ ..... Wiring hole for electric heater
- ④ 52 φ ..... Power cable hole
- ⑤ 1 1/4B..... Drain hole (mechanic chamber)
- ⑥ 1 1/4B..... Drain hole (condenser)
- ⑦ 75 φ ..... Warm water inlet, steam outlet
- ⑧ 75 φ ..... Warm water outlet, steam inlet

Ducted type

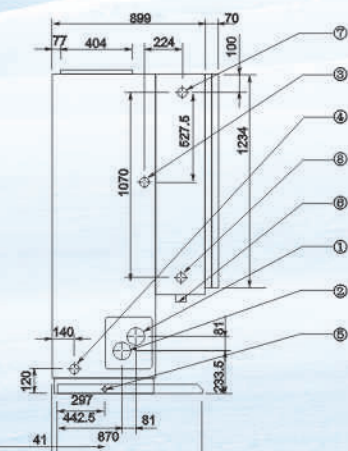
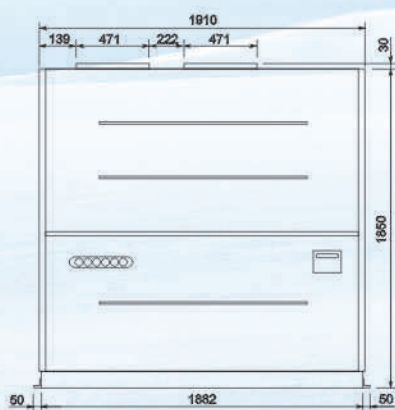
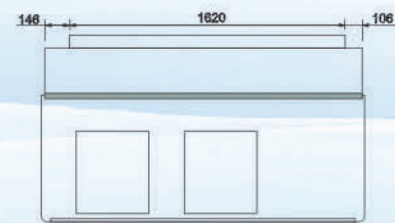
L140TD



- ① 2 1/2B..... Cooling water outlet
- ② 2 1/2B..... Cooling water inlet
- ③ 75 φ ..... Wiring hole for electric heater
- ④ 52 φ ..... Power cable hole
- ⑤ 1 1/4B..... Drain hole (mechanic chamber)
- ⑥ 1 1/4B..... Drain hole (condenser)
- ⑦ 75 φ ..... Warm water inlet, steam outlet
- ⑧ 75 φ ..... Warm water outlet, steam inlet

Ducted type

L120TDB



- ① 2 1/2B..... Cooling water outlet
- ② 2 1/2B..... Cooling water inlet
- ③ 75 φ ..... Wiring hole for electric heater
- ④ 52 φ ..... Power cable hole
- ⑤ 1 1/4B..... Drain hole (mechanic chamber)
- ⑥ 1 1/4B..... Drain hole (condenser)
- ⑦ 75 φ ..... Warm water inlet, steam outlet
- ⑧ 75 φ ..... Warm water outlet, steam inlet

Select installation positions according to the drawings It's easy for you.

