



Global quality standard, Worldwide partnership



TONGYI Heat Pump

Residential Split Heat Pump Water Heater

R410a

75°C
highest temperature

Multi-protections

Water Cooling



Guangdong Tongyi Heat Pump Science and Technology Co., Ltd
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The contents are for reference only, may contain errors, and subject to change without prior notice.
Please refer to the name plates and the manuals of the products for updated information. TY202304



WE KNOW MORE ABOUT OUR CUSTOMERS' NEEDS

20+

LEADING THE INDUSTRY FOR
MORE THAN 20 YEARS

100+

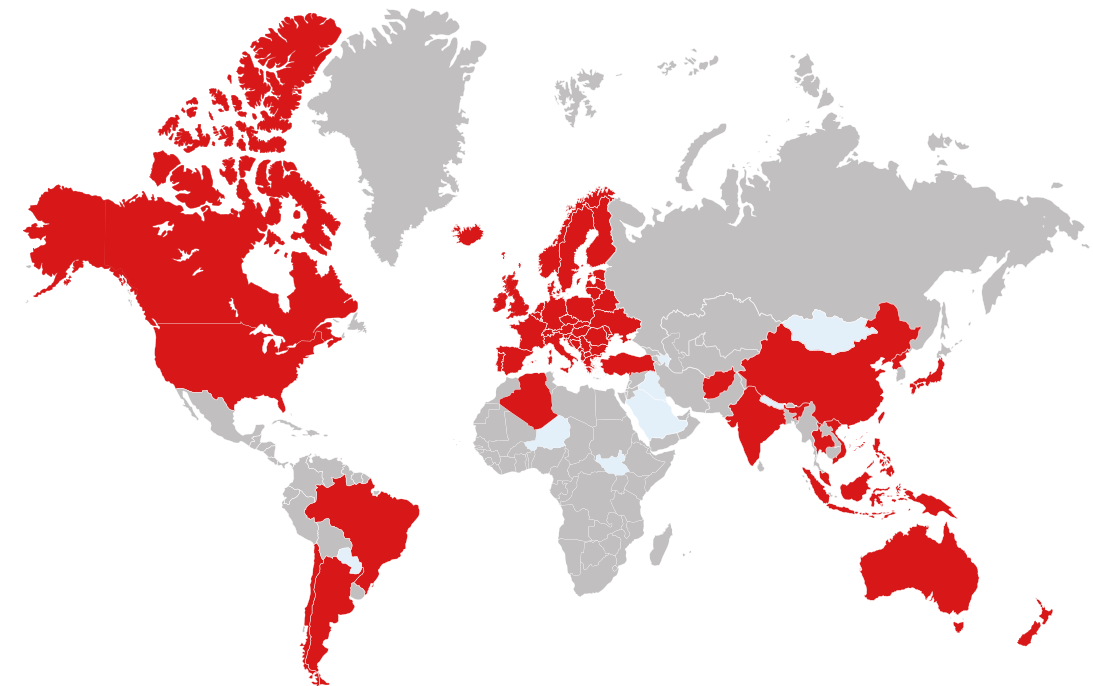
MORE THAN 100 LEADING
TECHNOLOGIES

1000000+

USERS EXCEED ONE MILLION

ROOTED IN THE INDUSTRY FOR MORE THAN 20 YEARS,
SERVING MORE THAN 1 MILLION FAMILIES

FOR MORE THAN 20 YEARS, WE HAVE BEEN SPECIALIZED
IN DEVELOPING HEAT PUMP TECHNOLOGY TO PROVIDE
MORE SUITABLE SOLUTIONS TO USERS' NEEDS



Established in 1999, Guangdong Tongyi Heat Pump Science and Technology Corp. is one of the first and most professional heat pump manufacturers in China. Tongyi is committed to being a reliable partner, establishing the highest quality standards to ensure product and safety. Tongyi products are always at the forefront of energy efficiency.

For over 20 years of development, Tongyi has gained a high reputation in quality and reliability. Tongyi has one of the most stringent control mechanisms in place for its manufacturing processes and product quality. It has successfully obtained most of the world well known certificates, including CE, EMC, RoHS, LVD, EMD, RED, ERP, IEC, ETL, SASO, CCC, ETC for its products and ISO9001, ISO14001, ISO45001 approvals for the production management.

We value your feedback. We continuously strive to meet the highest standards to satisfy our client's demands. Through rigorous monitoring and relentless after-sales service, customer feedback is collected and swiftly incorporated into our products. Tongyi is always looking to simplify processes putting customers in the center to improve our units and after-sales service.

Guangdong Tongyi Heat Pump Science and Technology Co., Ltd

1999
Established and launched products in this year.

2000
Successfully developed high efficiency heat pump air conditioner.

2001
ISO 9001 certified for the first time.

2002
Products are CE CB certified and exported to Europe.

2003
Honored the title of Trusted Quality Products Enterprise.

2004
Promote air source heat pump water heater in domestic market.

2005
Denominated the name of "Air Source Heat Pump Water Heater" in Chinese "Kong Qi Neng" Water Heater in China, and recognized by the industry.

2006
Start to provide heat pump training course twice per year for the industry.

2007
Joined in the National Standard of Heat Pump Water Heater Drafting Committee.

2008
Recognized as high-tech enterprises by the government.

2009
Inverter Heat Pump for Radiant heating and cooling supplied in Japan market.

2010
Obtained deflector-type heat dissipation device patent and triple-function heat pump patent.

2011
Successfully developed wrap-around aluminum microchannel heat exchanger and introduced the technology to production.

2012
Qualified for the rebate program of Energy-saving Products launched by the government.

2013
Launched clean production plan.

2014
Awarded Excellent quality brand enterprise.

2015
New series of DC inverter heat pump made great success in both domestic and overseas market.

2016
Participated in Beijing coal-to-electricity project, replace coal boiler with TONGYI heat pump for suburb house heating.

2017
Established Tongyi Air Source Heat Pump Research Institute.

2018
Launched new DC EVI heat pump for domestic house heating and cooling in MCE Milan.

2019
Served the hot water project of Daxing international airport (Asian top airport)

2020
Launched new DC EVI heat pump for commercial heating and cooling.

2021
Moved to new headquarters in Guangzhou.



China Certificate for Energy Conservation Product



ISO45001:2007 Occupational Health and Safety Management



ISO14000:2004 Environmental Management System Certification Certificate



ISO9001:2008 Certificate of Quality Management System



Drafting enterprise for National Standard of Heat Pump Water Heater



ETL

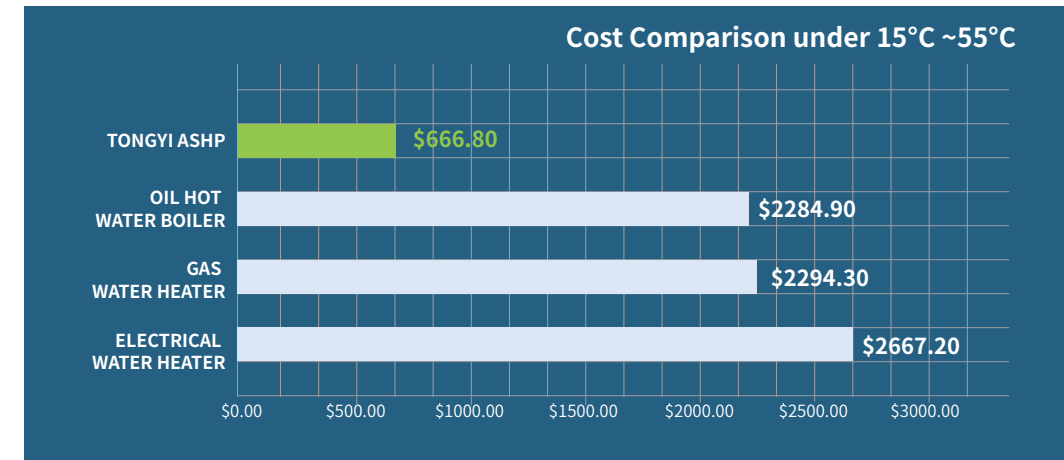
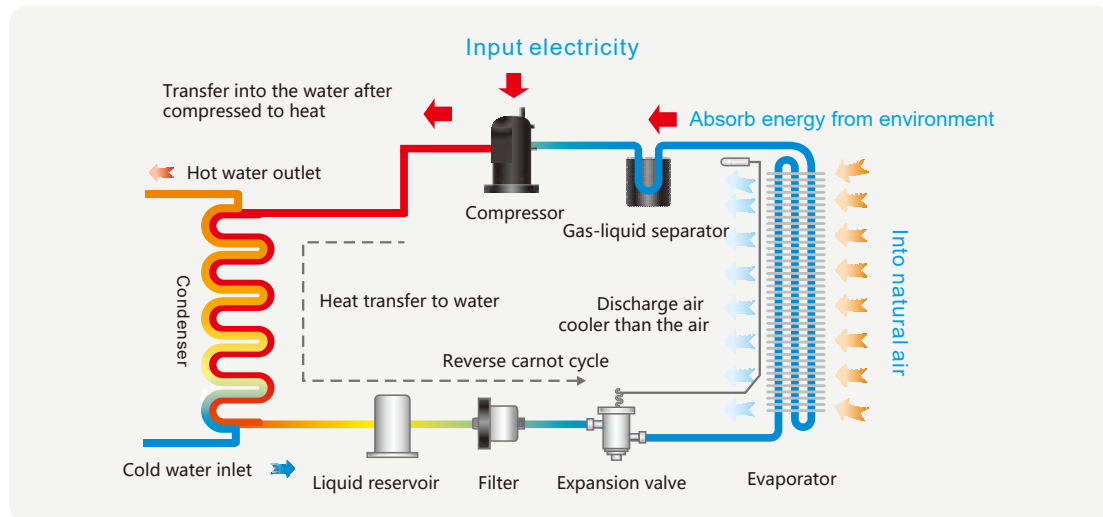


CE



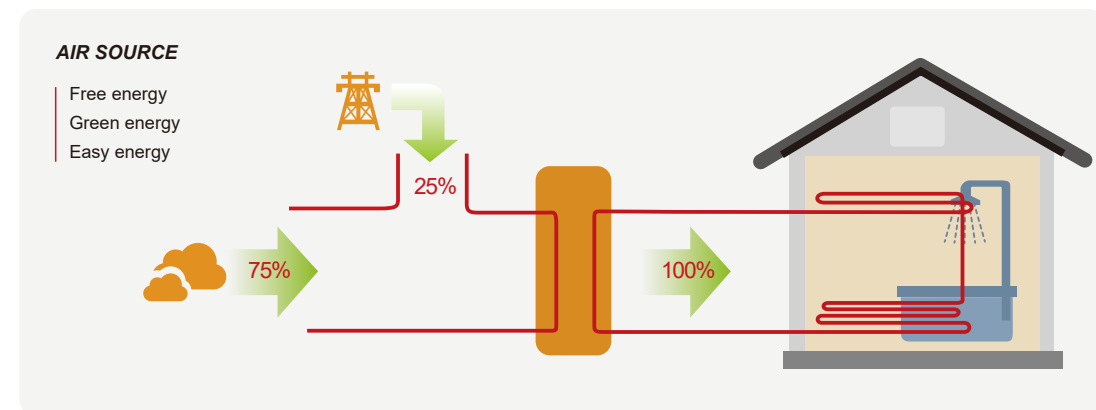
CB CE

- ISO45001:2007 Occupational Health and Safety Management System Certification Certificate
- ISO14000:2004 Environmental Management System Certification Certificate
- ISO9001:2008 Certificate of Quality Management System
- Enterprise supported by The National Innovation Fund



ENERGY EFFICIENT APPLICATION

TONGYI Heat Pump offers the best solution for home heating and hot water supply with TY's inverter technology. It is 4 times more energy efficient than boiler system by absorbing energy from the outdoor environment.



ASHP VS other heating methods

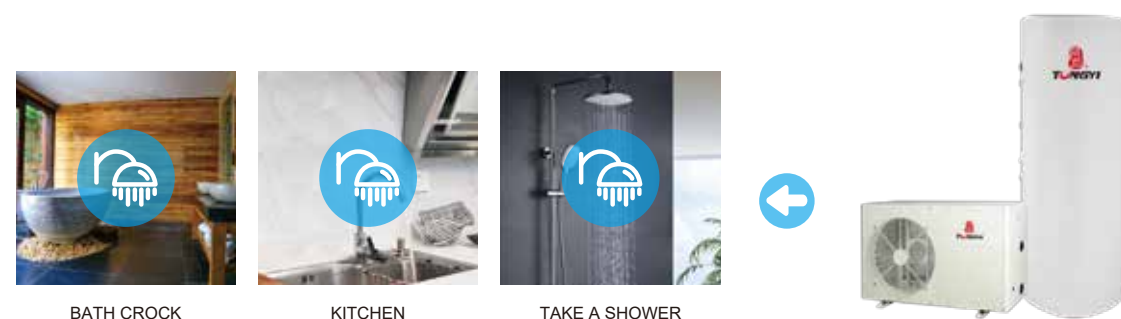
Heating Methods	Tongyi ASHP	Oil/Gas hot water boiler	Electrical water heater
Type of energy consumption	Electricity	Oil/Gas	Electricity
Safety Risk	Low	High	Middle
Environmental impact	Non-pollution	Heavily polluted	Non-pollution
Estimated product lifetime	10-12 Years	5-8 Years	5-8 years
Installation site	NO limits	Special room	Special room
floor space	Small	Large	Middle
Safety performance	Safe and reliable	Flammable, explosive goods	Heating pipe aging, leakage
Noise Level	Low	High	Low
Failure Detection Way	Automatic	2-3 technician	1 electrician
Labor costs	Without specific person	2-3 people labor	1 people labor
Other cost	No	Annual examine and approve cost	Annual examine cost

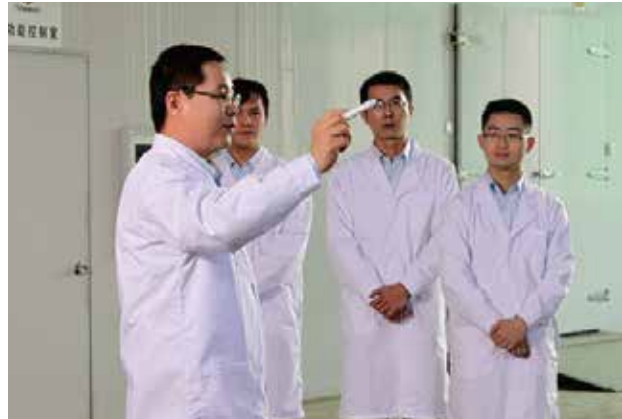
Under same condition, Daily hot water demand 1000L, Heating water from 15°C to 55°C, comparison for running cost

The specific heat of water (Kcal/Kg.°C)				1
heat value(Kcal)=specific heat of water (kcal/(kg.°C)) × daily water requirement(kg) × water temp difference(°C)				40000
Heating Methods	Tongyi heat pump	Electrical water heater	liquid gas water heater	Oil water heater
Fuel	Electricity	Electricity	Liquid gas	Gas
Combustion value	860	860	8667	8700
Unit	Kcal/h	Kcal/h	Kcal/(m3.h)	Kcal/(Kg.h)
Efficiency(%)	380	95	80	75
Demand for energy	12.2	49	5.8	5.2
Unit	Degree	Degree	m³	Kg
Fuel price (\$)	0.15	0.15	1.09	1.20
Amount fuel cost (\$)	1.82	7.32	6.28	6.25
Running cost (\$/Year)	666.8	2667.2	2294.3	2284.9

Notes: The price on the form as per market price at the time, the energy consumption of other types of heat source as per national standard of energy efficiency, specific data might be a gap. Please refer to the local condition.

VARIOUS APPLICATION





Master of Core Technology

TONGYI is one of the first and most professional heat pump manufacturers in China. We are in cooperation with 3 top universities in China on various HVAC research topics.



Professional Design Procedure

From the beginning of product development, a wide range of details are taken into account: easy installation, user friendliness, cutting-edge design, high functionality, full-scale tests, and the use of more than 56 different technologies. Always aiming to provide our customers with highest standard products.



Professional R&D Team

Cooperating with several top universities in China, Tongyi attracts young talents every year and has established a government-recognized R&D Center with a team of highly-qualified engineers.

Parts & Components Inspection

We monitor our entire supply chain for all the main parts and accessories strictly. 100% of the parts and components undergo rigorous incoming inspection at our factory.



Process Control

In our production line we strictly control all processes. From the first step until the units are packed and ready to ship. Through relentless monitoring, we record all processes and developments to ensure the products are reliable and in conformity with product-specifications.

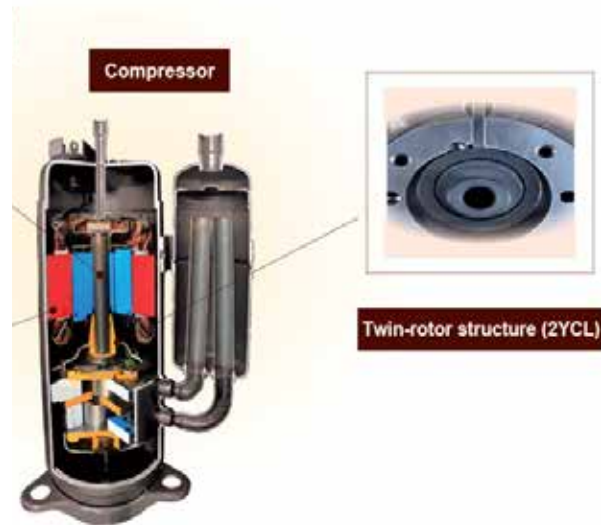


Finished-Product Inspection

We implement 100% inspection on the finished products before shipping. We implement an additional double sample inspection for all units shipped to the overseas market.



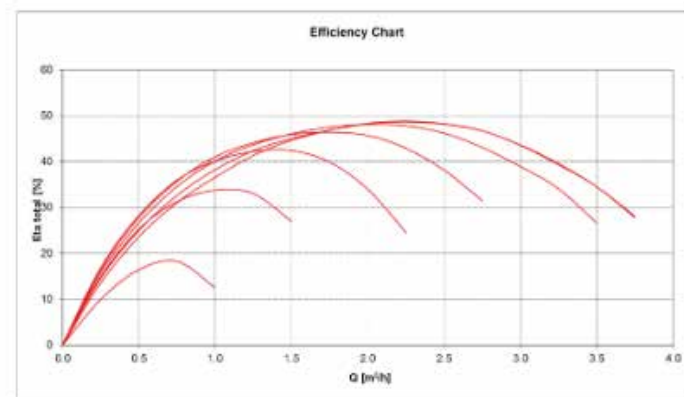
Twin-rotary Compressor



The world famous twin-rotary compressor is running quietly and powerfully, and proved to be more stable with a long lifetime span.

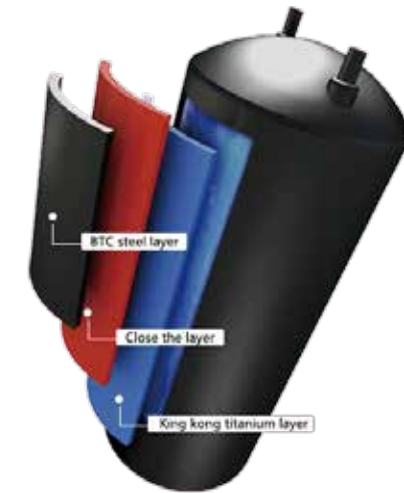
Built-in pump

In addition, the running noise of the water pump is extremely low, and the built-in water pump greatly reduces the installation difficulty of the system.



Enamel Water Tank

The enamel is brushed inside the water tank which is of high resistance and of great pressure bearing, because the enamel makes the welding line of the stainless panel separate with the water. That prolongs the working life for the unit.



Max. 75 °C Outlet Water Temperature

Higher outlet water temp. up to 75°C. Could satisfy most demands for residential sanitary hot water.



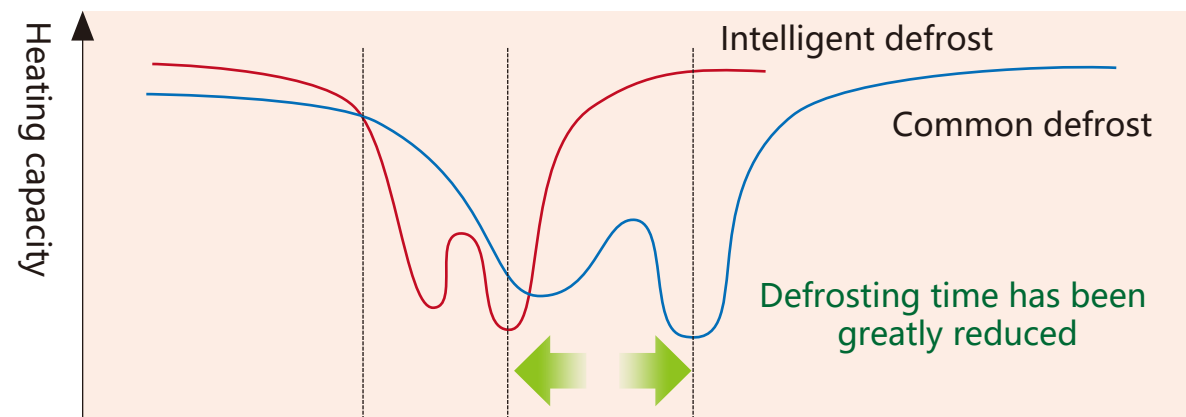
Water Cooling

Outlet water temperature can be set from 25°C to 40°C. To cool down your sanitary water temperature in summer time!

Product Features

Smart defrost, winter heating worry-free

The system can accurately judge the timing and time of defrosting according to the defrosting data such as unit running time, compressor suction and exhaust pressure and outdoor environmental temperature, and shorten the defrosting time to 3~5 minutes, so as to achieve defrosting and frost-free heating and ensure the optimal heating capacity of the unit.

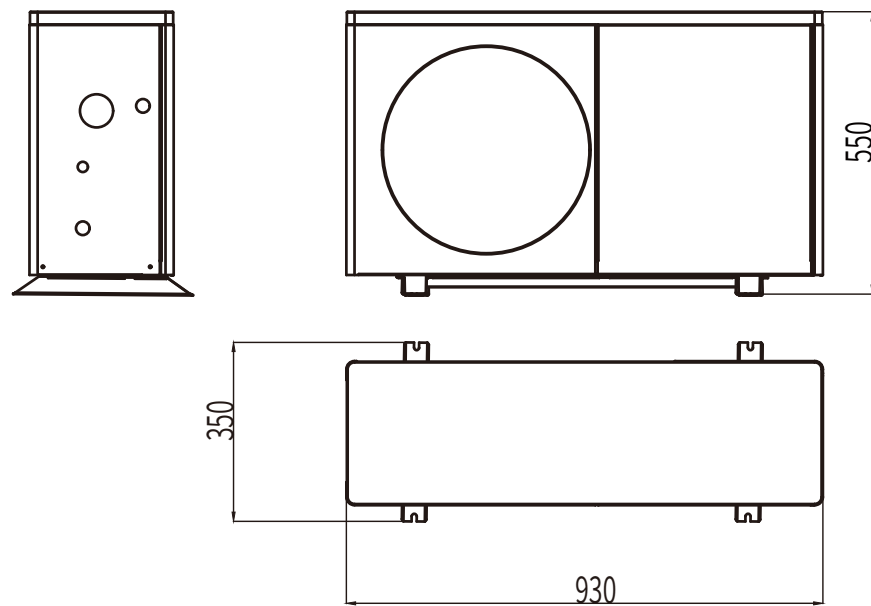


Multi-protections

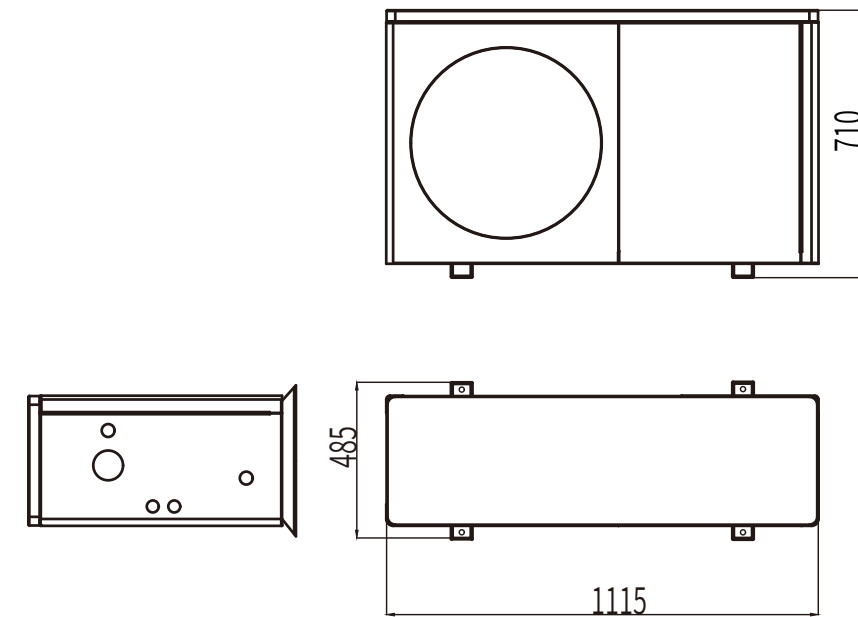
The system runs safely, steadily and reliably thanks to our full protection: high temperature protection, compressor overload & overheat protection, power phase sequence & over/under voltage protection, etc.



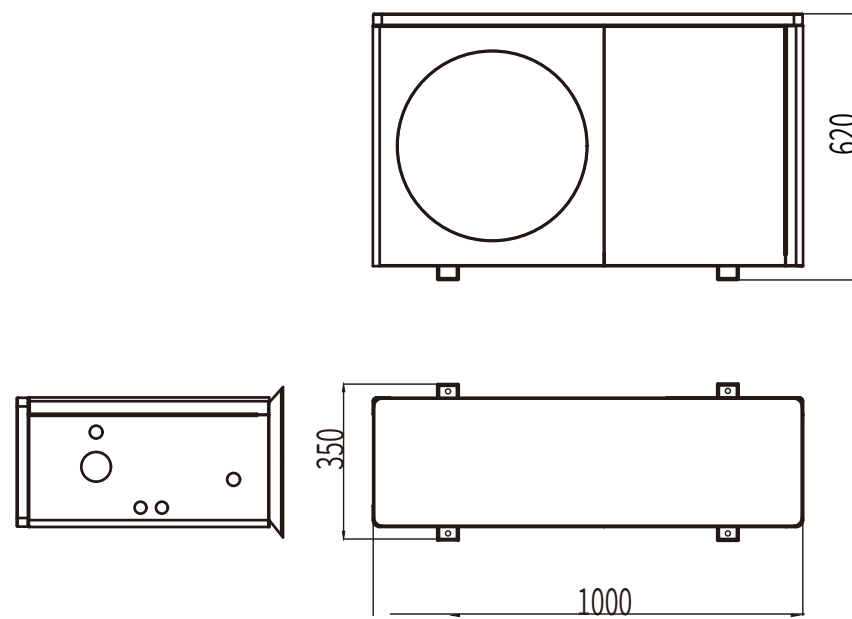
Model		HPS-WHT-200	HPS-WHT-300	HPS-WHT-400	HPS-WHT-500
Type		Split type	Split type	Split type	Split type
Rated heating capacity	kW	3.6	5.4	8.7	12
Rated input power	kW	0.86	1.30	2.08	2.88
COP		4.21	4.15	4.18	4.16
Running current	A	3.9	5.9	9.5	13.1
Operating ambient temp.	°C	-15~43°C	-15~43°C	-15~43°C	-15~43°C
Max outlet water temp.	°C	60	60	60	60
Power supply	V/Ph/Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz
Running vottage	V	198V~242V	198V~242V	198V~242V	198V~242V
Noise	dBA	48	50	54	55
Water tank volume	L	200	300	400	500
Compressor		GMCC	GMCC	GMCC	GMCC
In-built circulation pump		Wilo	Wilo	Wilo	Wilo
Max water pressure	MPa	0.8	0.8	0.8	0.8
Heating element	kW	3.0 KW	3.0 KW	4.0 KW	4.0 KW
Defrosting		Auto	Auto	Auto	Auto
Refrigerant		R410a	R410a	R410a	R410a
Inner tank material		Enamel	Enamel	Enamel	Enamel
Outer tank material		Painted steel	Painted steel	Painted steel	Painted steel
Water proof		IPX4	IPX4	IPX4	IPX4
Insulation thickness	mm	50mm	50mm	50mm	50mm
Heat pump size	mm	950*350*550	1000*350*620	1000*350*620	1115*485*710
Water tank size		Φ520*1530	Φ580*1850	Φ710*1540	Φ710*1890
Heat pump N.W.	kg	42	48	55	80
Water tank N.W.	kg	60	84	105	128



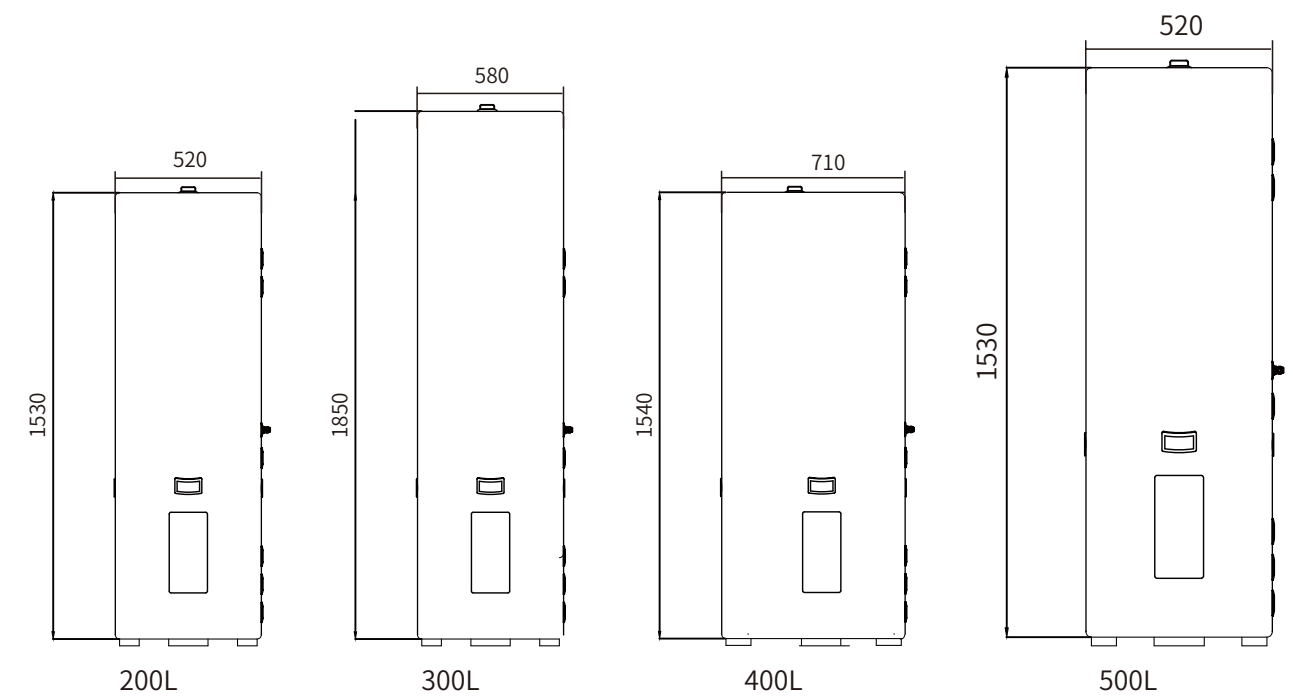
HPS-WHT-200



HPS-WHT-500



HPS-WHT-300 HPS-WHT-400



To help achieve the carbon neutral goal by the heat pump technology

From 1999 up to now, the contribution of Tongyi Heat Pump to the energy conservation and emission reduction, is equal to growing **100 million** trees for the society!

Coal Saved coal consumption more than **750,000 tons!**

Co₂ Reduced carbon dioxide emissions more than **3 billion kilograms!**

NOX Reduced Nitride emissions more than **3.2 million kilograms!**

So₂ Reduced sulfur dioxide emissions more than **12.5 million kilograms!**



Daxing International Airport project



Guizhou Astronomical Telescope Project



Bird's Nest Stadium project in Beijing



Alibaba



Shenzhen Universiade



HANGZHOU ASIA GAMES