

PHNXX

HeatGreen

Inverter Commercial Heat Pump for Heating/Cooling + DHW Hot Water

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GLOBAL Energy Crisis

Disruptions to the global energy market are putting people worldwide under enormous pressure. Rising energy prices are accelerating the cost-of-living crisis and sustaining the vicious cycle of constrained household budgets; increasing food and energy poverty; and increasing social unrest.

This nightmare is now becoming a painful reality dramatically raising energy prices and forcing many people to resort to renewable energy solutions.

GLOBAL Warming

Global warming is the long-term warming of the planet's overall temperature. Though this warming trend has been going on for a long time, its pace has significantly increased in the last hundred years due to the burning of fossil fuels. So far, mankind has paid a huge price for global warming and will continue to do so.

The solution is obvious, human need to reduce the amount of CO₂ to get the balance back, so nature can freely inhale and exhale again; however, getting to the solution is not so easy.

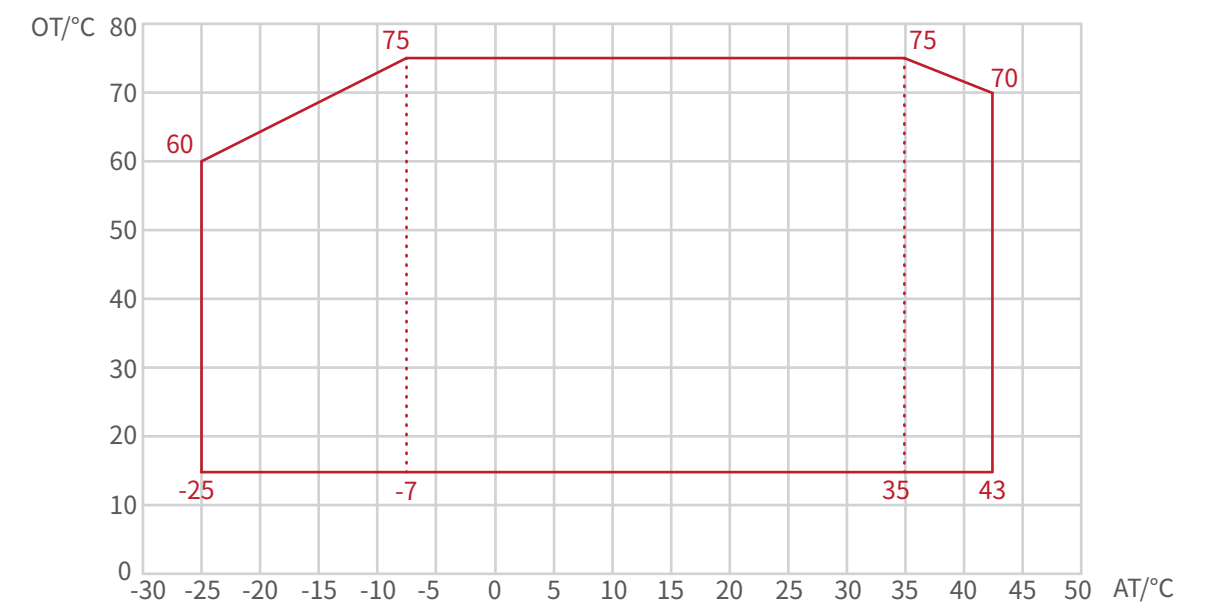


R290 Refrigerant

PHNIX has always been committed to the concept of green environmental protection, and actively shoulders the responsibility of energy conservation and environmental protection. With both low carbon emissions and low GWP, R290 is recognized as the most potential refrigerant in the industry, and its application is conducive to achieving the goal of global carbon neutrality.

Operation Range

Running safely and reliably all year round, HeatGreen Series perfectly combines eco-friendly R290 natural refrigerant and inverter heating technology to ensure optimal performance from -25°C to 43°C. It's worth mentioning that the unit can operate efficiently at -25°C, maintaining high COP, reliable stability, and strong heating capacity for 60°C hot water. More significantly, the maximum outlet water temp can be up to 75°C without electric heating to guarantee protection against legionella. With wide operating range, HeatGreen is different from traditional installations. It can connect to solar water heating systems, various gas boiler water heating systems and electric water heating systems.





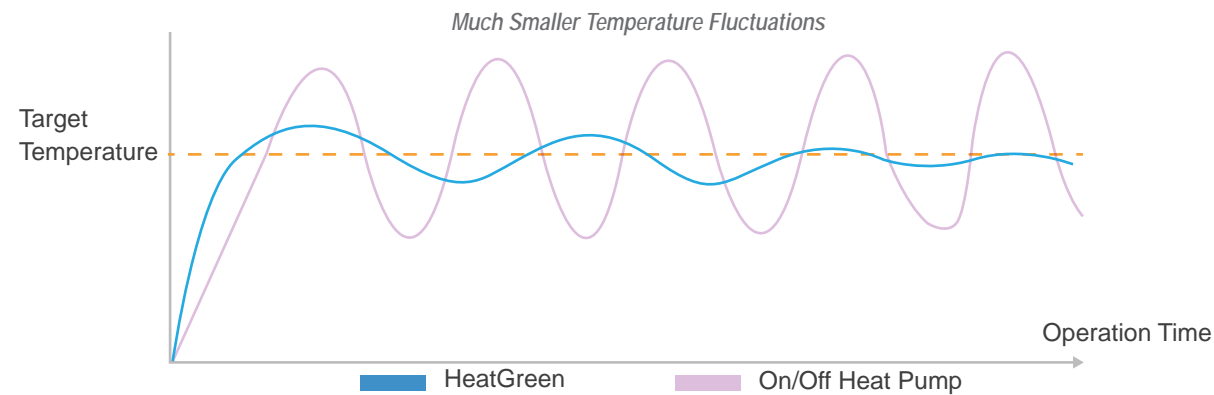
Full DC Inverter Technology

In order to meet the market requirement, PHNIX has made many breakthroughs in core technologies. With the full inverter technology, the units become more energy-efficient, thus saving users' energy bills. Also, when the heat pump is powered on, the current will start from 0A and go up slowly to the rated current without affecting the house electricity system.



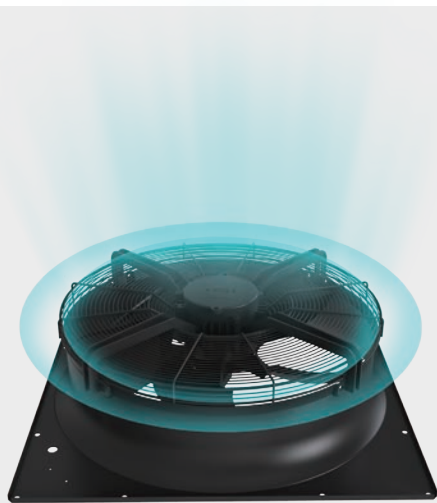
**DC INVERTER
COMPRESSOR**

DC inverter compressor is dedicated for heating & hot water.



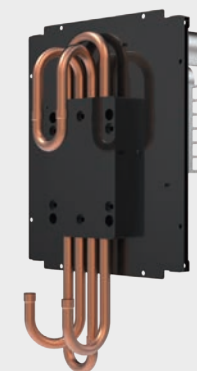
**DC INVERTER
FAN MOTOR**

Dedicated speed module enhances COP and heating performance.



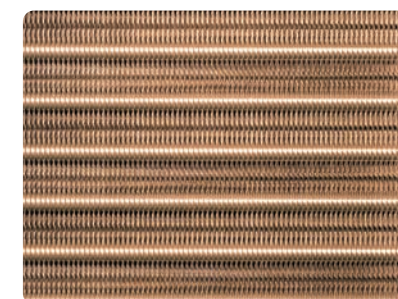
Better by Design

As one of the leading heat pump manufacturers, PHNIX always adheres to forefront manufacturing technology and the most advanced spare parts to fit our machines.



REFRIGERANT COOLING BOARD

Refrigerant cooling inverter heat dissipation technology, strong cooling below 55 °C



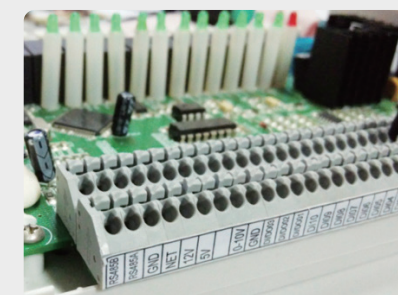
FINNED HEAT EXCHANGER

The capacity of the copper-aluminum fin heat exchanger is increased by 25%.



TUBE IN SHELL HEAT EXCHANGER

Water inside the tube, fluorine outside the tube, counter-current heat exchanger.

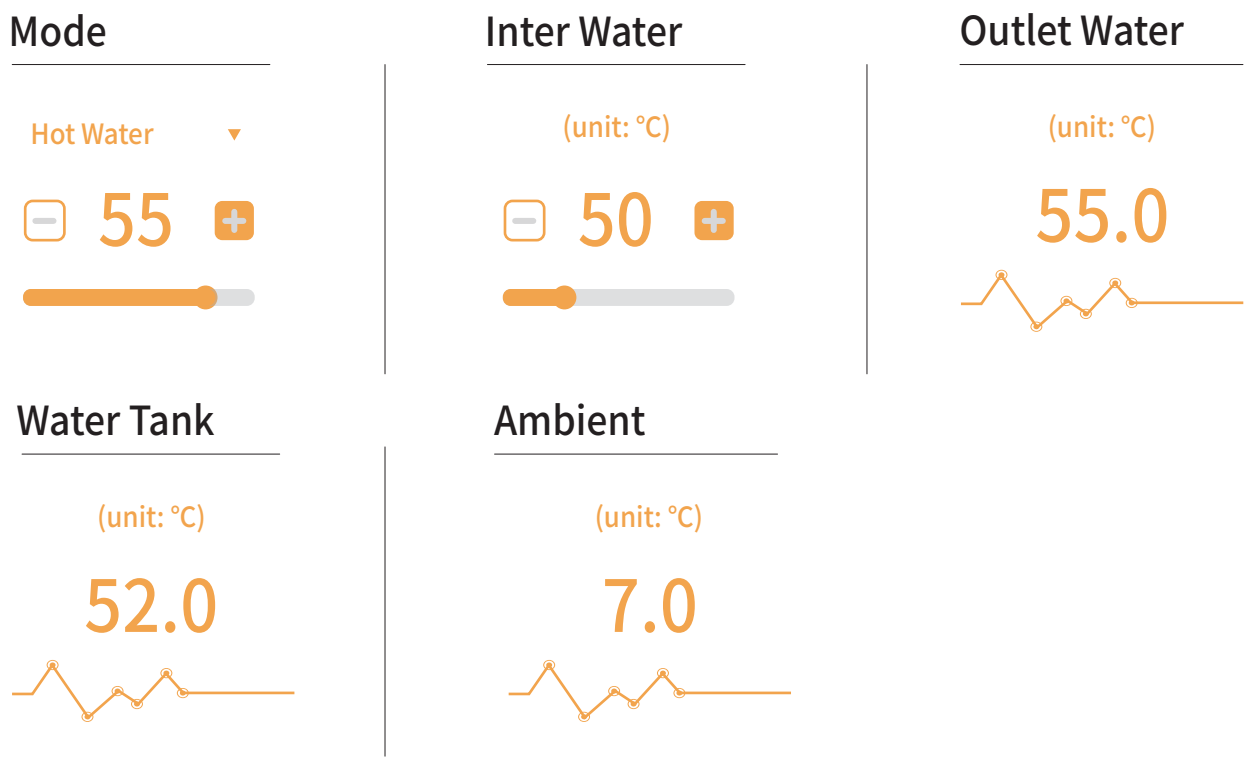


RS485 CENTRALIZED CONTROL

HeatMaster Series is highlighted with central control system as a RS485 serial port is designed for communications in every unit.

4G-DTU Technology

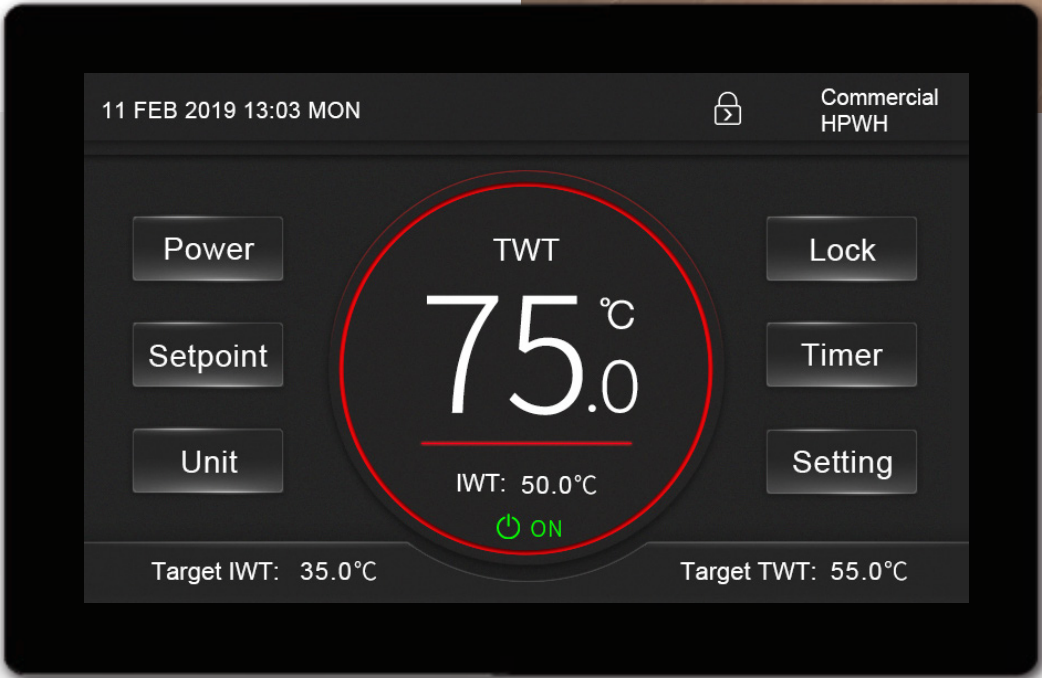
Fitted with a plug-and-play 4G DTU module, the heat pump can communicate with the webplatform via the cloud server. Project managers and technicians can monitor and manage the heat pump at all times. PHNIX's DTU cloud server is located in Europe, ensuring the security and stability of data transmission.



CENTRALIZED CONTROL

The RS485 serial port is designed for communications in every unit.

- ✓ Daily Management
- ✓ After-Sales Management
- ✓ Premium Service



5-inch Color Display

- ✓ Duty Cycling
- ✓ Water Temp Curve
- ✓ One-key Setting
- ✓ One Plus Four
- ✓ Temp Timer
- ✓ Fault Display

Applications



PHNIX

Sample Project



Specification



HeatGreen		PASRW080SB-BP	PASRW150S-BP	PASRW300S-BP
Heating Condition - Ambient Temp. (DB/WB): 20/15°C, Water Temp. (In/Out): 15/55°C				
Heating Capacity Range	kW	30	60	120
Heating Power Input Range	kW	6.40	12.90	25.80
COP	W/W	4.68	4.65	4.65
Hot Water Capacity Range	kW	8.20-35.00	16.36-70.00	32.70-140.00
Max.Hot Water Capacity	L/h	750	1500	3000
Heating Condition - Ambient Temp. (DB/WB): 7/6°C, Water Temp. (In/Out): 30/35°C				
Heating Capacity Range	kW	8.00-26.00	13.63-50.00	27.27-100.00
Heating Power Input Range	kW	1.60-7.70	4.36-16.00	8.72-32.00
COP	W/W	3.29-4.79	3.12-4.62	3.12-4.62
Heating Condition - Ambient Temp. (DB/WB): -15/°C, Water Temp. (In/Out): 50/55°C				
Heating Capacity Range	kW	3.54-13.00	7.09-26.00	14.18-52.00
Heating Power Input Range	kW	4.80-9.60	5.18-19.00	10.36-38.00
COP	W/W	1.35-1.85	1.36-1.86	1.36-1.86
Cooling Condition - Ambient Temp. (DB/WB): 35°C/24°C, Water Temp. (In/Out): 12/7°C				
Heating Capacity Range	kW	3.95-14.50	7.63-28.00	15.27-56.00
Heating Power Input Range	kW	1.96-7.28	3.91-14.35	7.82-28.70
COP	W/W	1.99-3.49	1.95-3.45	1.95-3.45
ERP Level (35°C)	/	A+++		
ERP Level (55°C)	/	A+++		
ERP SCOP (65°C)	/	2.80	2.80	2.80
Max. Power Input	kW	9.70	20.00	40.00
Max. Current Input	A	13	25	50
Power Supply	V/Ph/Hz	380-415V/~50-60Hz		
Refrigerant	/	R290		
Noise	dB(A)	56	60	65
Operating Ambient Temperature	°C	-25~43		
Max. Outlet Water Temperature	°C	75		
Fan Motor Quantity	/	2	1	2
Fan Motor Type	/	DC		
Water Connection	inch	G1"	G2"	DN65
Water Presussure (Max)	kPa	65	80	100
Refrigerant/Proper Input	g	1300	1250*2	1250*4
CO2	/	0.0039	0.0075	0.0150
Rated Water Flow	m3/h	6	12	24
Rated Water Pressure Drop	kpa	65	80	100
Circulation Pump Water Head	m	12.50	24.00	24.00
Net Weight	kg	202	490	733
Gross Weight	kg	223	560	833
Unit Dimension (L/H/W)	mm	1350×540×1330	1195×980×1900	2170×1150×2130
Ship Dimension (L/H/W)	mm	1370×560×1350	1215×1000×1920	2190×1170×2150

The data above is for reference only. For more specific data, please refer to the nameplate on the unit.