



Shenling

Green the Comfort



GD Shenling Thermal Tech Co., Ltd



No.29, Shunye East Road, Shunde, 528325, Foshan, Guangdong, China
No.8, Xinglong 10th Road, Shunde, Foshan, Guangdong, China
No.9, Huanzhenxi Road, Shunde, Foshan, Guangdong, China



+86-757-22971134



global@shenling.com



www.shenling.com
www.shenlingglobal.com



AIR SOURCE HEAT PUMP

space heating | cooling | water heating



Climate control expert
for all professional fields



\$ 595 mil.
Sales revenue



420,888 m²
Production area



4000+
Staff



30+
laboratories



1000+
Engineers



1200+
Patents



2500+
Key projects

Milestones

1988

Shenling brand created
Keep serving for industries
with unitary AC chillers products



2000

Shenling corporation founded

2002

Three Gorges Hydropower Project



2005

Strategic cooperation
with ThyssenKrupp



2003

Shenling Research Institute
established

Guangdong Provincial
Engineering Research Center

Shenling Postdoctoral
Programme established

2007

Joint-lab with Siemens
Beijing Capital International Airport



2012

New headquarter launched

ICT/IDC solution launched

National Enterprise
Technology Center

Strategic cooperation
with Huawei



2014

Production base II
launched

2016

National Technological
Invention Award



2017

China Patent Excellent
Enterprise Award

Beijing Daxing
International Airport



2021

I.P.O. in Shenzhen Stock Exchange
Production base III launched



2018

National Technology
Innovation Model
Enterprise Award

2019

National Intellectual
Property Model
Enterprise Award

2022

Zero emission building
launched

2025

Net zero emission
factory to be
launched



2023

Production base IV
(Tianjin) launched

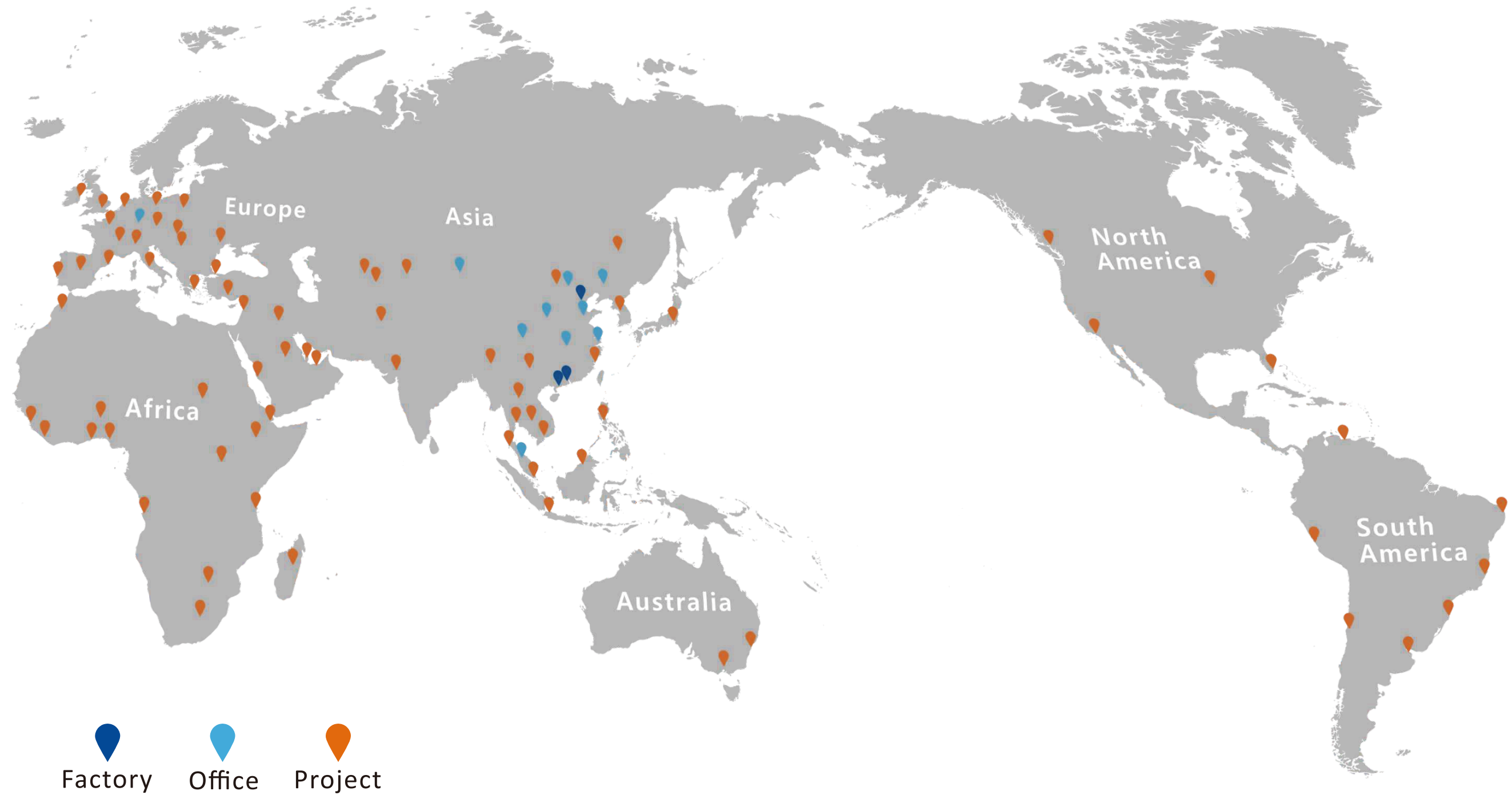
2024

Production base II
reconstructed & launched

Production base V
(Gaozhou) construction
started

Shenling Germany
(Frankfurt) launched

Global layout



Application fields

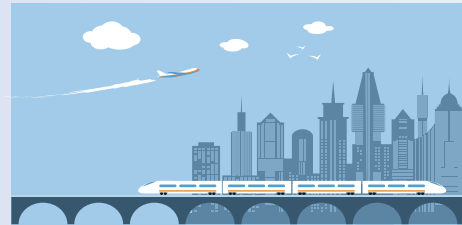


ICT/IDC fields

- Cloud data center
- Supercomputing center
- Intelligent computing center
- Communication infrastructure
- Computer technology services
- Service room
- UPS & battery room

Industrial fields

- Automobile factory
- Battery manufacturing
- Pharmaceutical
- Precision electronic instrument
- Food industry
- Cement
- Metallurgy



Specialized fields

- PV/Wind power plant
- Hydro/thermal power plant
- Power grid converter station
- Energy storage cooling
- Nuclear power plant
- Aerospace
- Railway station
- Subway station
- Airport
- Hospital
- VOCs

Commercial fields

- Shopping mall
- Hotel
- Stadium
- Library
- Theater
- Archives
- Exhibition hall
- University
- Office building



Heat pump

- Residential heating
- Commercial heating
- District heating
- Energy management system

Climate control expert for all professional fields





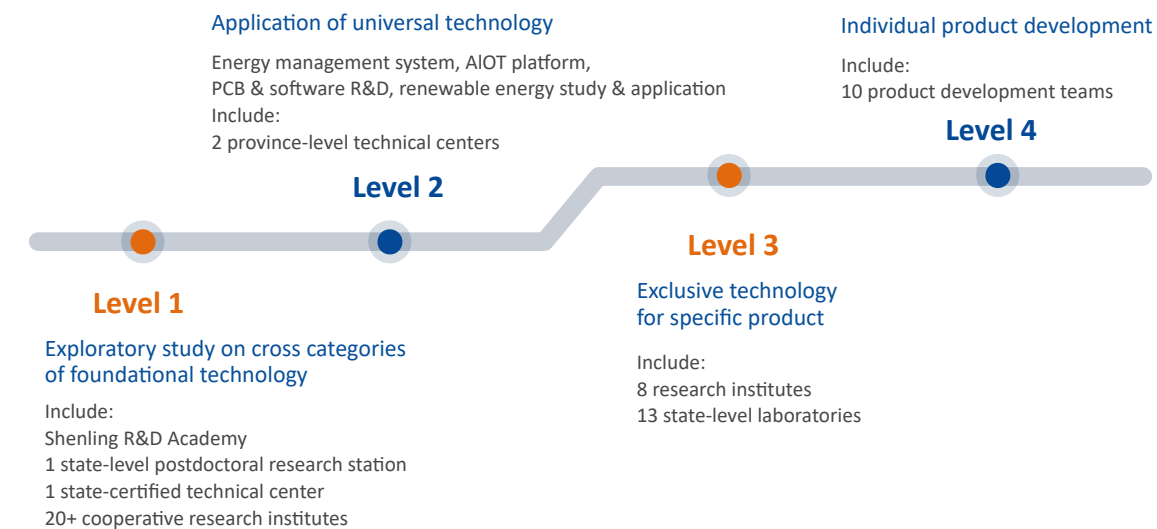
Know How, Know Why

With robust technical strength of research and innovation as well as application experience, Shenling drafted over 30 standards of professional and special air conditioning, and joined in compilation of almost all national and industry standards related to industrial and commercial central air-conditioning products, acting as a technical benchmark to promote standardized development and advocate low carbon and environmental protection.

National Standards drafted by Shenling

No.	Standard No.	Name
1	GB/T 19411-2003	Dehumidifier
2	GB/T19569-2004	Air conditioning unit for clean operating room
3	GB19576-2004	Energy efficiency limits and energy efficiency grades of unit AC
4	GB19577-2004	Chiller energy efficiency limit value and energy efficiency grade
5	JB/T 10538-2005	Explosion-proof dehumidifier and air conditioner
6	GB/T20109-2006	Full fresh air dehumidifier
7	GB/T 20108-2006	Low temperature unit air conditioner
8	GB/T 20738-2006	Rooftop air conditioning unit
9	GB/T18430.1-2007	Vapor compression cycle cooling (heat pump) unit
10	GB/T 21363-2008	Volumetric refrigeration compression condensing unit
11	GB/T 19413-2010	Unit AC for computer and data processing rooms
12	MH/T6109-2014	Aircrafe pre-conditioned air
...	...	...

Shenling innovation system



01

Ultra-high energy efficiency

- Flow field optimization & heattransfer enhancement
- Free cooling technology
- Variable flow control technology
- Comprehensive utilization technology of natural cold and heat sources
- Condensation heat recovery technology

03

Smart control

- High precision temperature and humidity control
- Multi-mode automatic conversion technology
- Remote monitoring technology

04

Extreme environment application

- 65°C high temperature refrigeration
- -40°C ultra-low temperature refrigeration

05

Explosion proof & anti-corrosion

- Class C5 anti-corrosion design
- Class II B explosion-proof design
- Salt spray environment design of offshore platform

06

Shock resistance

- Collision avoidance
- Anti-seismic(Protection) technology

6 Core Technology Systems

02

VOCs treatment technology

- -80°C ultra-low temperature cascade refrigeration
- Oil and gas chemical process treatment
- Safety technology of stainless steel pressure vessel
- Multistage condensation+adsorption+thermal oxidation technology

Certificate & honor



ESG

Environmental
Social
Governance



As a company, we recognise that our activities have an effect on the world we live in. For this reason, we have adopted a sustainable approach, focusing on three key areas in our activities: **environment, society and governance.**



NZE 1.0

Zero emission building

Shenling Production Base III, launched in may 2022



Green power generated
7,302,900 kW·h



Co₂ emission reduced
2,966 tons



Energy saved
611,700 kW·h



Energy cost saved
€144,828

*The above data represents annual benefits



► LEED Platinum Certification

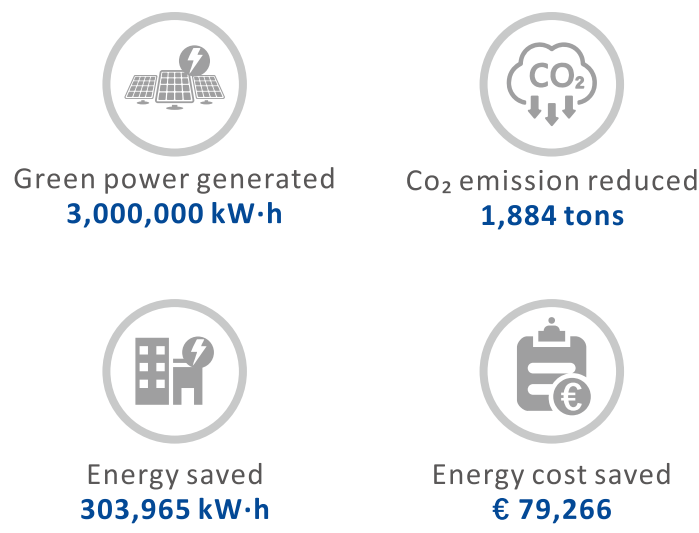


► Zero emission building authentication (Design+Operation)

NZE 2.0

Zero emission factory

Shenling Production Base II, launched in may 2025



*The above data represents annual benefits





Production system

Shenling has leading technology and excellent management team, first-class production facilities, and IOT management system, which build up a solid foundation for Shenling's reputation in HVAC field. Currently, Shenling has **over 420,888 m²** research and manufacturing bases with modern equipments. The total production capacity exceeds **1 billion USD**, which can meet the customers' demand with short lead time and good craftsmanship.



Quality management system



Environmental management system



Occupational health & safety management system



Hazardous substance process management system



Certificated Measurement Assurance System



TÜV SÜD Explosion Safety Inspection Attestation for R290 production line

5 production bases



Glances in the workshop



Shenling testing center

Shenling has 3 testing centers to cover diversified product test items, including ETS Testing Center, HQ Testing Center and PBIII Testing Center, all built with the concept of digitalization by leading institutes, institutes and equipped with top brand instruments and meters.



ETS Testing Center

Intertek, SGS & TUV SÜD certified laboratories. All the laboratories were designed and constructed by top testing institutes, and can meet the testing requirements of EU and China standards, and the anti-explosion demand of combustible refrigerant e.g. R290. The testing ambient temperature range: -40°C~60°C, testing capacity range: 2kW~50kW.



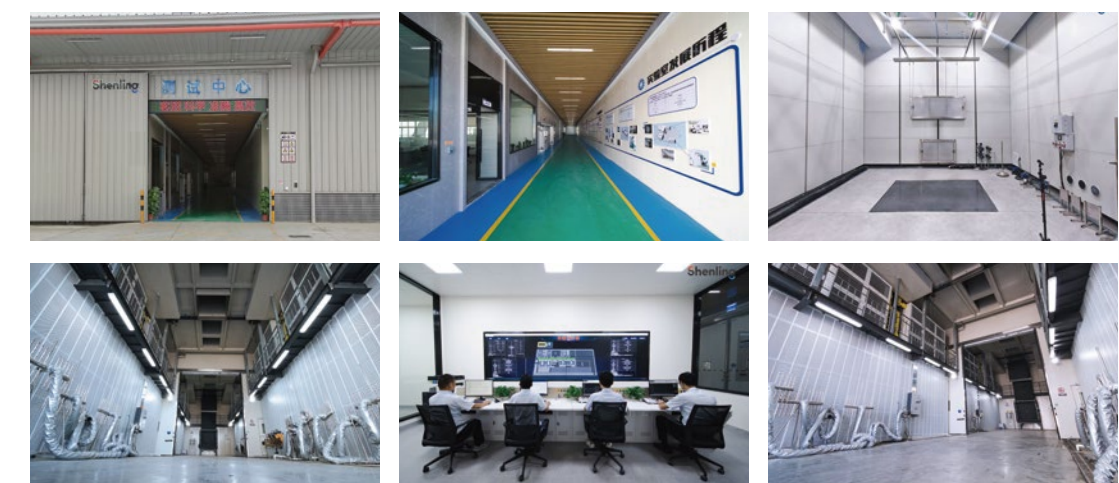
HQ Testing Center

In total 8 labs, incl. enthalpy difference lab, water-cooled heat pump platform, air leakage rate testing device and transportation simulation tester with simulated test working condition -40-60°C, test capacity range 2-1800kW, air volume range 250~120000m³/h and 4 tons max load of transportation test.



PB III Testing Center

In total 10 labs, incl. enthalpy difference lab, air cleanliness lab, water-cooled heat pump platform, semi-anechoic lab, rotary dehumidifier lab, air volume testing device and high static pressure air leakage rate testing device, with simulated test working condition -30-60°C, test capacity range 6kW~1500RT and air volume range 1500-240000m³/h.





One-stop solution

Heating, cooling and DHW in one system

ThermaX provides one-stop solution for space heating, cooling and sanitary hot water for households, through integrating underfloor heating, FCUs, radiators and water tanks.

ThermaX offers a versatile year-round solution, through linking with solar panels, gas boilers and other heat sources, allowing user to create a hybrid and tailored system.

Meanwhile, ThermaX is compatible with your smart home system.





ThermaX

Full-DC Inverter Air Source Heat Pump

Mono series(26/30kW)

Mono series(R32)



	Capacity(kW)	4	6	8	10	12	14	16	26	30
Mono	220-240V/1N/50Hz	✓	✓	✓	✓	✓	✓	✓		
	380-415V/3N/50Hz					✓	✓	✓	✓	✓

Split series(R32)



	Capacity(kW)	4	6	8	10	12	14	16
Split	220-240V/1N/50Hz	✓	✓	✓	✓	✓	✓	✓
	380-415V/3N/50Hz					✓	✓	✓



•Aesthetic industrial design

Easy to integrate with the architectures
Lower noise
Optimisation of air duct
Reduction of screw

•Mould shaped shell and structure

Higher processing precision;
Higher reliability and consistency;
Higher production efficiency and guaranteed delivery date

•Single fan & compact design

Smaller floor area
Higher installation freedom
Larger container loading quantity

Overview

Energy class: **A+++**

R32 refrigerant

Space heating+cooling+DHW

Min operation ambient temp. **-25°C**

R32 max leaving water temp. **63°C**

Full colour LCD display controller

Wi-Fi smart control

Smart grid

Disinfection

Power consumption counting

DC Inverter



Space heating



DHW mode



Cooling mode



Space heating & DHW mode



Cooling & DHW Mode



Auto mode



Ultra-silence

ThermaX produces as low as 35dB(A) sound pressure level at 3 meters.



32dB(A)
The noise of falling leaves



35dB(A)
Noise from sleep

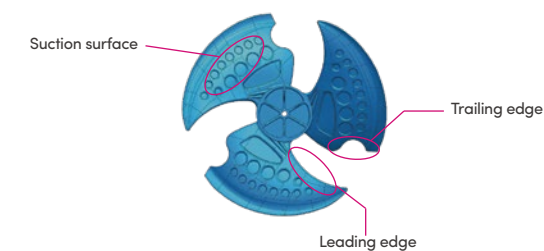


46dB(A)
Noise in the library



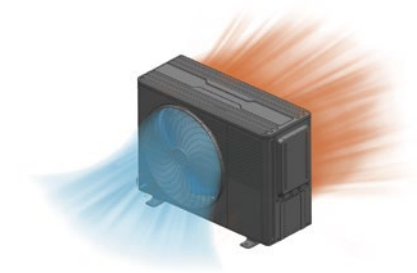
Biomimetic fan design

- Concave design of suction
- Thickening design of leading
- Notch design of trailing edge

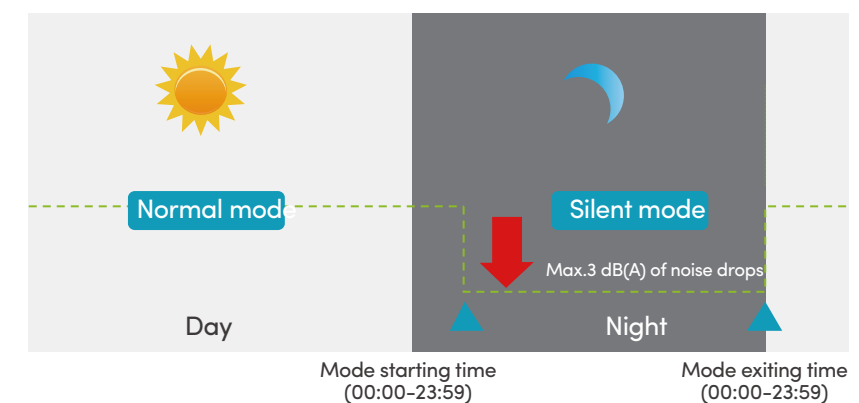


ODU sound proof design

- Full set of plate and plastic
- Simulation at different
- 3 layers of sound insulation

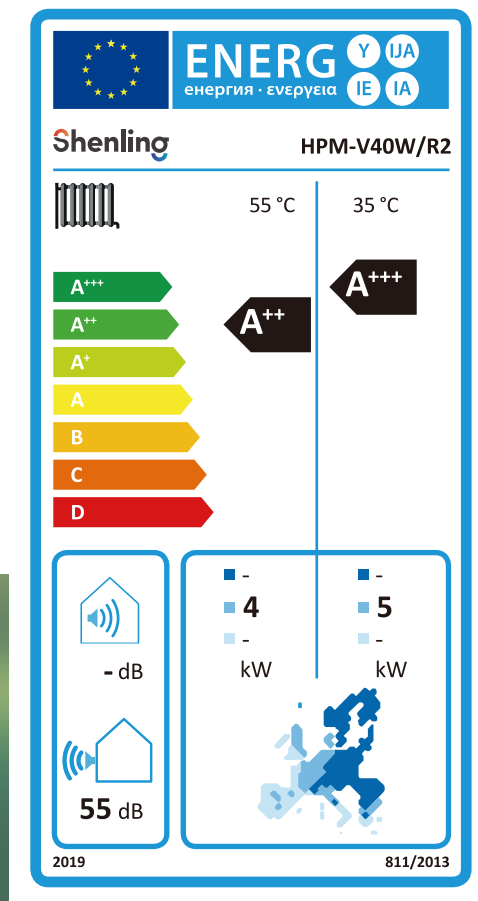


Silence mode



3dB(A) noise decrease
By entering night silent mode and
defining mode starting and exiting
times as desired.

High energy- efficiency



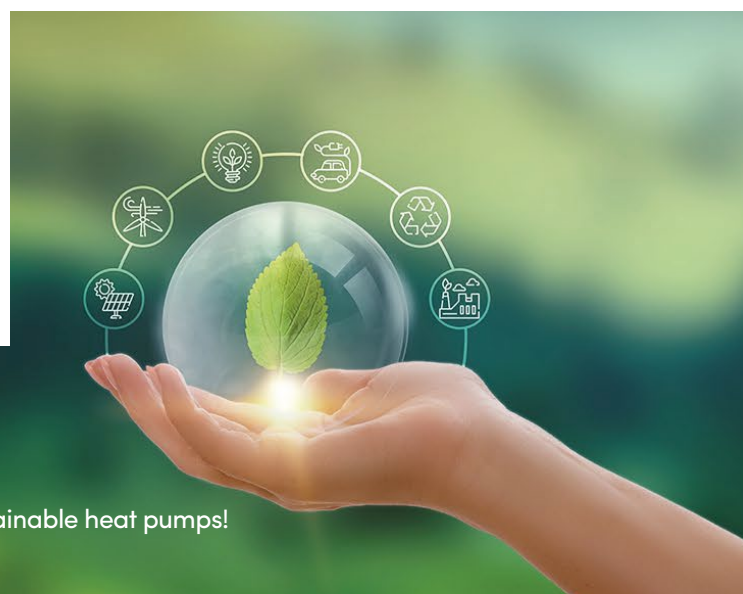
ErP Directive

Seasonal space heating energy efficiency

η_s . average up to **A+++** at 35°C

η_s . average up to **A++** at 55°C

It represents the highest level of ThermaX product. Please refer to the product for specific grade of different models.



Embrace the green revolution with sustainable heat pumps!



• DC compressor



• Plate heat exchanger



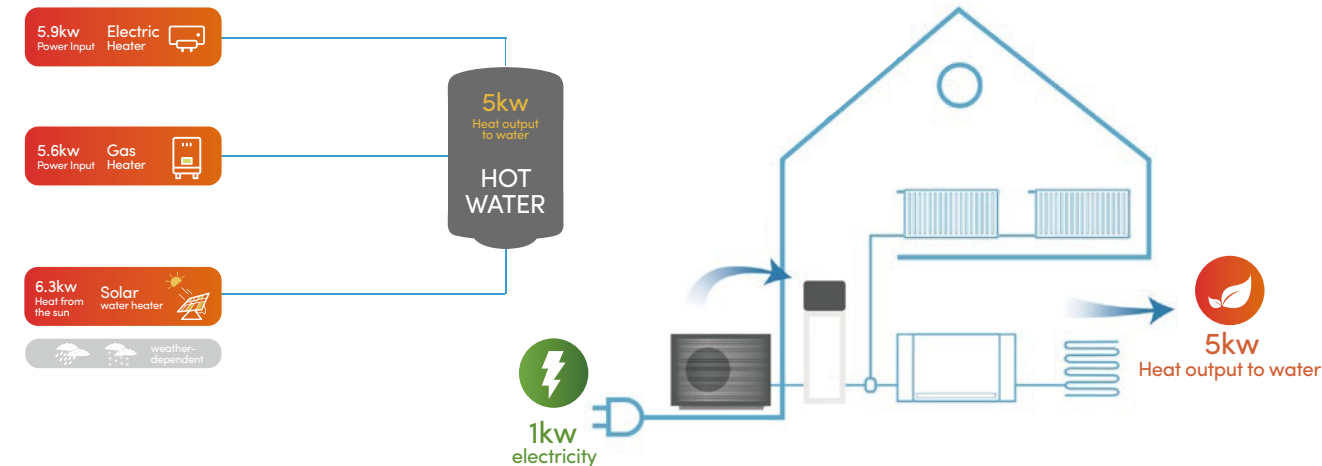
• Electronic expansion valve



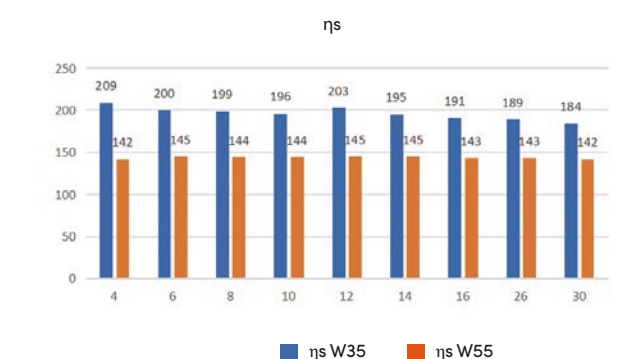
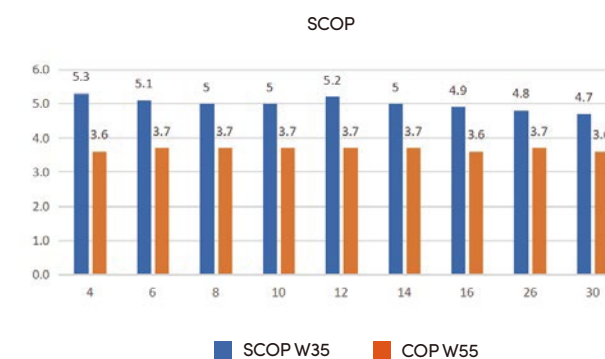
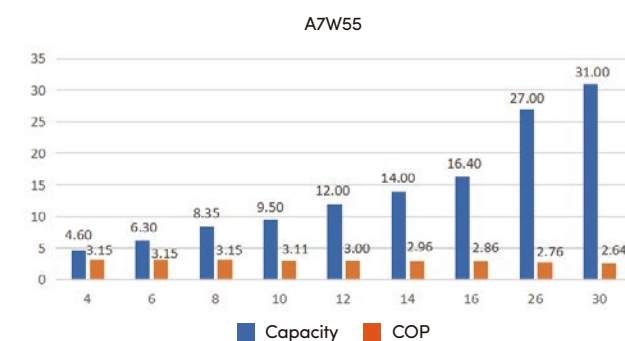
• DC inverter circulation pump



• DC Inverter fan motor



Specification-R32



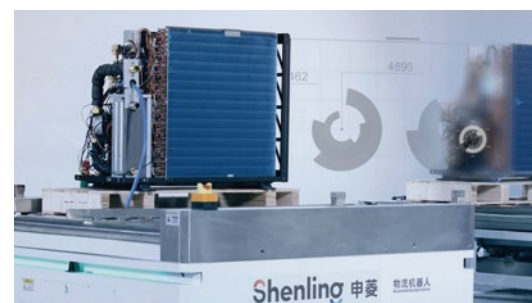
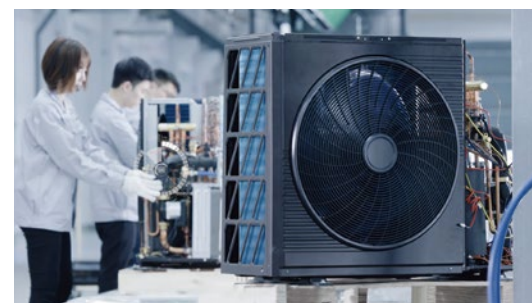
Stable & reliable

Widely recognized



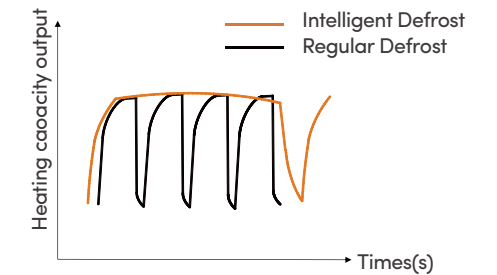
R290 production line
EXPLOSION SAFETY INSPECTION ATTESTATION

Certified by



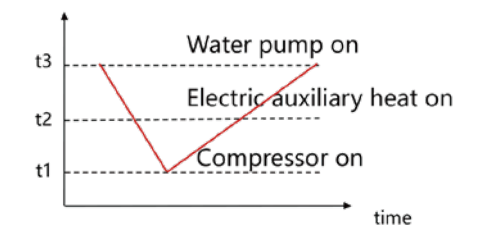
Intelligent defrosting

ThermaX uses smart defrosting technology to figure out the exact defrosting time and start intelligent defrosting according to the real frosting condition, which reduces energy consumption under low temp. environment and prevents defrosting errors.

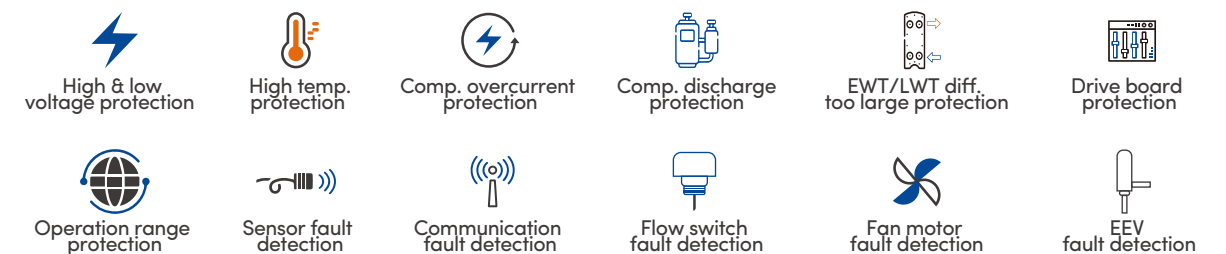


Anti-freeze protection

ThermaX adopts 3 layers of anti-freeze protections. When low ambient temp. and water temp. detected, water pump started first. When situation staying unimproved, electric booster heater will be started(if equipped). If still unimproved, heat pump will be started.



Multiple system protection



Quality parts

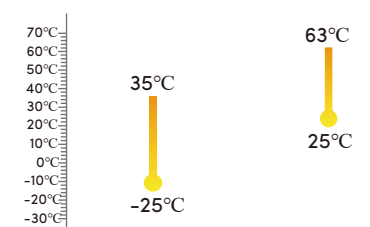


Powerful performance

Wide operation range

Space heating

- Min ambient temp. for space heating is -25°C .
- Outlet water can reach 60°C at -15°C ambient temp.
- Outlet water can reach 75°C with electric booster

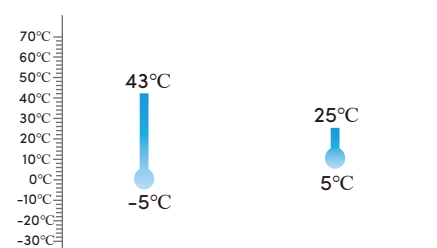


Operation range Leaving water temp.



Space cooling

- Start cooling at -5°C ambient temp.

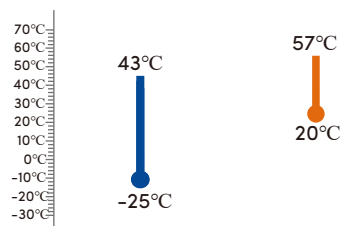


Operation range Leaving water temp.

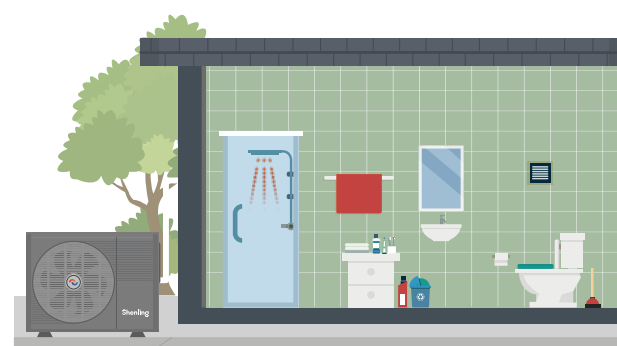


DHW

- Min ambient temp. for DHW is -25°C .
- Max DHW temp. is 57°C .
- Outlet water can reach 75°C with electric booster heater.



Operation range Leaving water temp.



Intelligent control

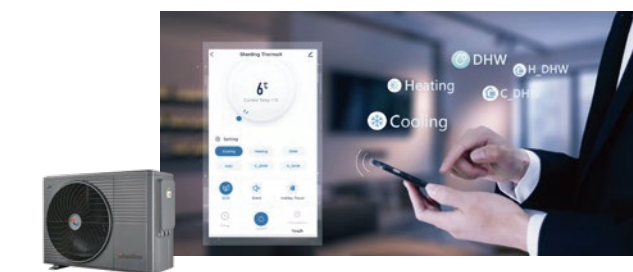
Wired controller

The wired controller offers standard Wi-Fi for remote control, easy SD card upgrades, an elegant obsidian black design, and versatile installation options.



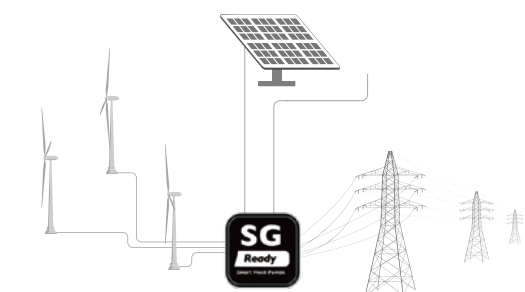
App control

Easy to read and set
Dual temperature zone control
Schedule function and weekly/daily timer
Silent mode
Holiday mode
Remote monitoring technology
Multi language control



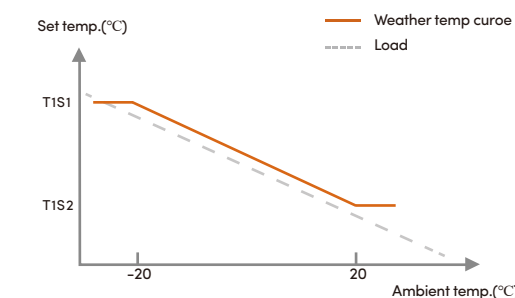
Smart grid

ThermaX heat pump system can be connected to the smart grid and adjust its operating status according to the load of the grid. When the power is sufficient, the unit operates efficiently, and when the power is insufficient, the unit is allowed to operate at low frequency.



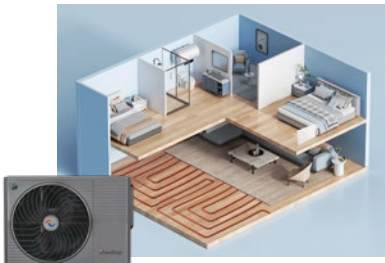
Smart weather adaptation

ThermaX will detect the outdoor ambient temperature and vary the outlet water temp. based on the set temperature auto matically, so as to realize the best way for energy saving and confort. When outdoor ambient temp. increases/decreases, the heating load will decrease/increase accordingly.



Dual temperature zone control

- Different water temperature for floor heating and radiator to realize the best comfort.
- The user needs simply make a choice by a touch on the wired controller, ThermaX will run the mode automatically.
- The user can also set his favourite temperature for each zone accordingly.
- This function includes floor heating only, radiator only, floor heating + radiator, etc.



Convenient program upgrade

Micro USB upgrade
No need to carry any other heavy equipments but only a laptop and a Micro USB cable can realize program upgrade of indoor unit and outdoor unit automatically.
Parameter setting transmission between wired controllers.



Weekly/Daily timer

Available to set different temperature for different time periods in a day or different time periods every day within a week through the wired controller. The unit operate according to the mode and temperature set after being started.

Daily	8: 00-12: 00	12: 00-16: 00	16: 00-20: 00	20: 00-24: 00	24: 00-8: 00	
	✓		✓	✓		
Weekly	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		✓	✓			✓
						Sunday

Quick hot water outlet

Install external DHW pipe pump to the water system, under the control logic of ThermaX, the water will be heated and circulated in pipeline, so that the users don't have to wait for the cold water released and wasted, but can use hot water directly.



Power consumption counting

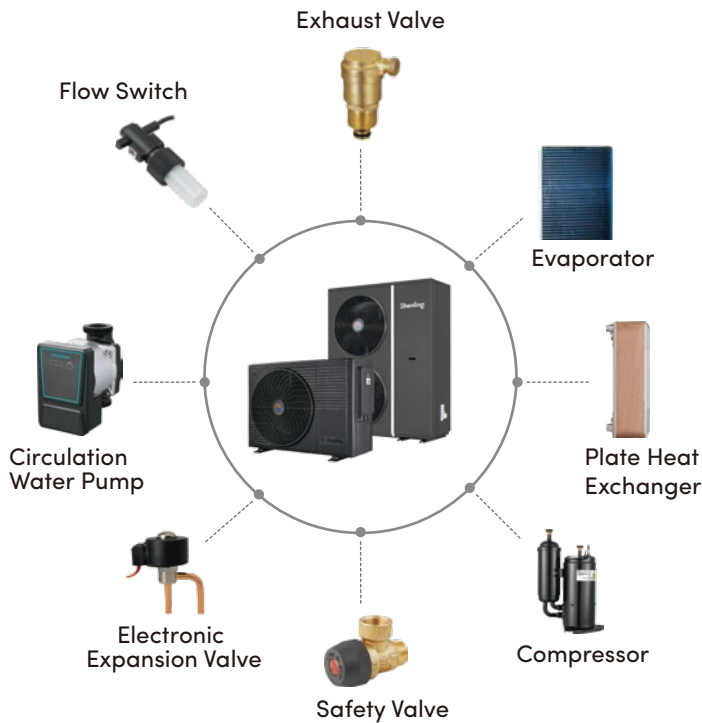
- ThermaX has preserved a statistical counting function for the power consumption of the unit itself.
- The user needs only connect an electricity meter to read and collect the statistics.
- This function may have difference with the other measurement and is for reference only.



Easy installation

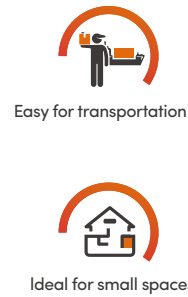
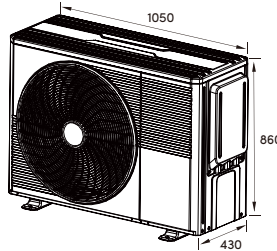
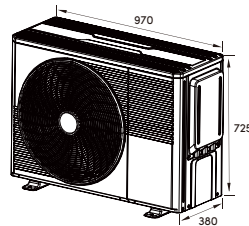
Key components built-in

ThermaX has built-in most of the key components of the refrigerant circuit and water circuit, by which the installers can take an easy way during the installation.



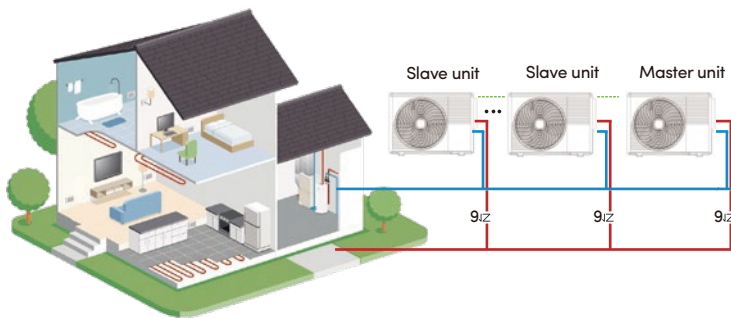
Compact design

Thanks for the completely new structure platform, ThermaX has realized compact design of the whole series, which will be much easier for transportation and ideal for small spaces.



Cascade installation

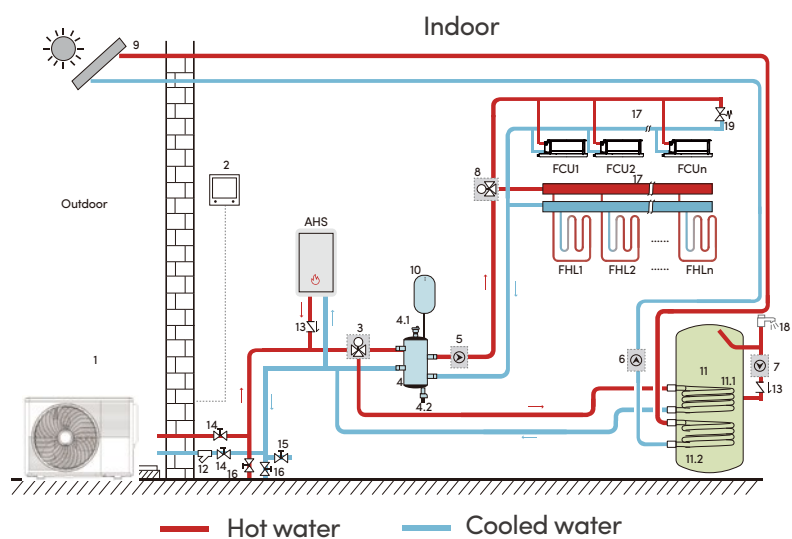
The design of modular combination is for capacity extension in certain case when large cooling/heating capacity is required. In modular combination, one controller can control up to 8 units in group.



Typical application

Single temperature zone

Domestic hot water+auxiliary heat source

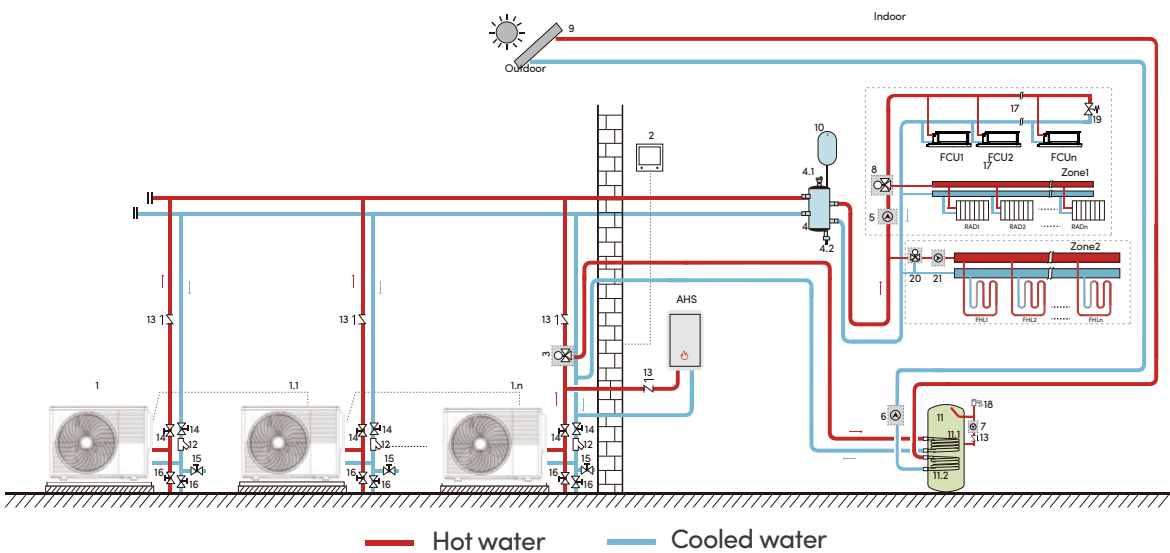


No.	Definition	Remark
1	ThermaX heat pump	
2	User interface	Assessory
3	SV1: DHW switch valve (3-way)	Field supply
4	Buffer tank	Field supply
4.1	Automatic air purge valve	
4.2	Drainage valve	
5	P_C1: Circulation pump	Field supply
6	P_C3: Circulation pump for solar panel	Field supply
7	P_C4: Circulation pump for DHW	Field supply
8	SV3: Heating/cooling switch valve (3-way)	Field supply
9	Solar panel	Field supply
10	Expansion vessel	Field supply
11	Domestic hot water tank	Field supply
11.1	Coil 1: heat exchanger for heat pump	
11.2	Coil 2: heat exchanger for solar thermal	
12	Y-shape filter	Assessory
13	Check valve	Field supply
14	Shut-off valve	Field supply
15	Water filling valve	Field supply
16	Drainage valve	Field supply
17	Water collector/distributor	Field supply
18	Hot water tap	Field supply
19	Bypass valve	Field supply
AHS	Auxiliary heat source	Field supply
FHL	Floor heating loop	Field supply
FCU	Fan coil unit	Field supply

Note: Auxiliary heat source and domestic hot water shall be installed according to the actual use requirements.

Cascade system

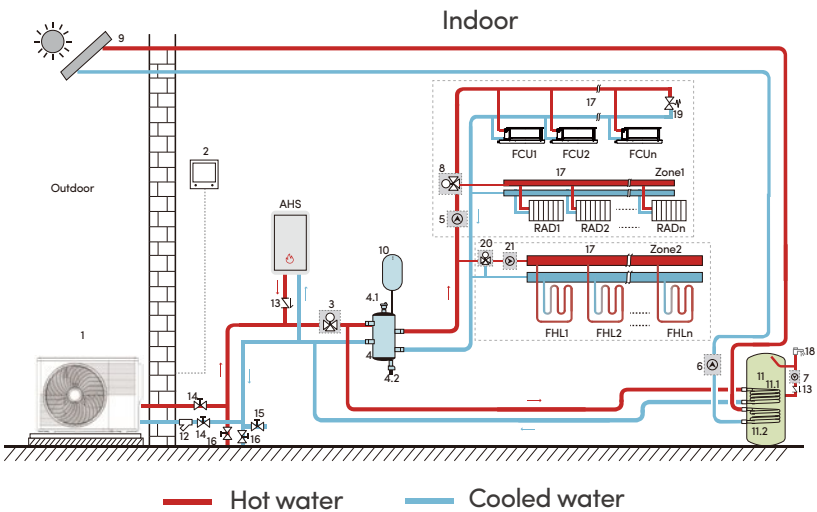
Dual temperature zone+domestic hot water+auxiliary heat source



Note: Auxiliary heat source and domestic hot water shall be installed according to the actual use requirements.

Double temperature zone

Domestic hot water+auxiliary heat source



No.	Definition	Remark
1	ThermaX heat pump	
2	User interface	Assessory
3	SV1: DHW switch valve (3-way)	Field supply
4	Buffer tank	Field supply
4.1	Automatic air purge valve	
4.2	Drainage valve	
5	P_C1: Circulation pump for zone1	Field supply
6	P_C3: Circulation pump for solar panel	Field supply
7	P_C4: Circulation pump for DHW	Field supply
8	SV3: Heating/cooling switch valve (3-way)	Field supply
9	Solar panel	Field supply
10	Expansion vessel	Field supply
11	Domestic hot water tank	Field supply
11.1	Coil 1: heat exchanger for heat pump	
11.2	Coil 2: heat exchanger for solar thermal	
12	Y-shape filter	Assessory
13	Check valve	Field supply
14	Shut-off valve	Field supply
15	Water filling valve	Field supply
16	Drainage valve	Field supply
17	Water collector/distributor	Field supply
18	Hot water tap	Field supply
19	Bypass valve	Field supply
20	SV2: Mixing valve (floating-point)	Field supply
21	P_C2: Circulation pump for zone2	Field supply
AHS	Auxiliary heat source	Field supply
FHL	Floor heating loop	Field supply
FCU	Fan coil unit	Field supply
RAD	Radiator	Field supply

Note: Auxiliary heat source and domestic hot water shall be installed according to the actual use requirements.

No.	Definition	Remark	No.	Definition	Remark
1/1.1/1.n	ThermaX heat pump		12	Y-shape filter	Assessory
2	User interface	Assessory	13	Check valve	Field supply
3	SV1: DHW switch valve (3-way)	Field supply	14	Shut-off valve	Field supply
4	Buffer tank	Field supply	15	Water filling valve	Field supply
4.1	Automatic air purge valve		16	Drainage valve	Field supply
4.2	Drainage valve		17	Water collector/distributor	Field supply
5	P_C1: Circulation pump for zone1	Field supply	18	Hot water tap	Field supply
6	P_C3: Circulation pump for solar panel	Field supply	19	Bypass valve	Field supply
7	P_C4: Circulation pump for DHW	Field supply	20	SV2: Mixing valve (floating-point)	Field supply
8	SV3: Heating/cooling switch valve (3-way)	Field supply	21	P_C2: Circulation pump for zone2	Field supply
9	Solar panel	Field supply	AHS	Auxiliary heat source	Field supply
10	Expansion vessel	Field supply	FHL	Floor heating loop	Field supply
11	Domestic hot water tank	Field supply	FCU	Fan coil unit	Field supply
11.1	Coil 1: heat exchanger for heat pump		RAD	Radiator	Field supply
11.2	Coil 2: heat exchanger for solar thermal				

Specification-R32

Mono series								
Outdoor unit Model		HPM-	V40W/R2	V60W/R2	V80W/R2	V100W/R2	V120W/R2	V140W/R2
Power Supply		V/Ph/Hz	220-240/1/50					
Heating ¹	Capacity	kW	4.40	6.45	8.40	10.00	12.20	14.20
	Rated Input	kW	0.85	1.29	1.68	2.11	2.49	3.02
	COP	/	5.15	5.00	5.00	4.74	4.90	4.70
Heating ²	Capacity	kW	4.60	6.65	8.55	10.20	12.40	14.60
	Rated Input	kW	1.18	1.73	2.23	2.76	3.35	4.00
	COP	/	3.90	3.85	3.83	3.70	3.70	3.65
Heating ³	Capacity	kW	4.60	6.30	8.35	9.50	12.00	14.00
	Rated Input	kW	1.46	2.00	2.65	3.05	4.00	4.73
	COP	/	3.15	3.15	3.15	3.11	3.00	2.96
Cooling ⁴	Capacity	kW	4.60	6.50	8.40	10.00	12.20	14.00
	Rated Input	kW	0.85	1.25	1.79	2.35	2.65	3.22
	EER	/	5.40	5.20	4.70	4.25	4.60	4.35
Cooling ⁵	Capacity	kW	4.70	5.60	7.50	9.00	11.80	13.40
	Rated Input	kW	1.36	1.70	2.36	3.05	3.81	4.62
	EER	/	3.45	3.30	3.18	2.95	3.10	2.90
Seasonal space heating energy efficiency class ⁶	Outlet water temp. at 35℃	/	A+++					
	Outlet water temp. at 55℃	/	A++					
Refrigerant	Type(GWP)	/	R32(675)					
	Charged volume	kg	1.15		1.25		1.78	
Outdoor unit Sound pressure Level ⁷ (1m)		dB(A)	46	49	51	52	54	55
Outdoor unit Sound power Level ⁷		dB	60	63	65	66	68	69
Net weight/Gross weight		kg	72/86		76/90		110/126	
Net dimension(W×D×H)		mm	1000*450*725				1080*520*857	
Packaged dimension(W×D×H)		mm	1110*475*870				1180*560*1005	
Container loading quantity(40HQ)		/	150				82	
Water inlet/outlet pipe size		mm	R1"				R1-1/4"	
Ambient temp. range	Heating	℃	-25 ~ 35					
	Cooling	℃	-5 ~ 43					
	Domestic hot water	℃	-25 ~ 43					
Outlet water temp. setting range	Heating	℃	25 ~ 63					
	Cooling	℃	5 ~ 25					
	Domestic hot water	℃	20 ~ 57					

Outdoor unit Model		HPM-	V160W/R2	V120W/SR2	V140W/SR2	V160W/SR2	V260W/SR2	V300W/SR2
Power Supply		V/Ph/Hz	220-240/1/50		380-415/3/50			
Heating ¹	Capacity	kW	16.00	12.20	14.20	16.00	26.00	31.00
	Rated Input	kW	3.56	2.49	3.02	3.56	6.18	7.65
	COP	/	4.50	4.90	4.70	4.50	4.21	4.05
Heating ²	Capacity	kW	16.40	12.40	14.60	16.40	26.50	31.00
	Rated Input	kW	4.69	3.35	4.00	4.69	7.98	9.90
	COP	/	3.50	3.70	3.65	3.50	3.32	3.13
Heating ³	Capacity	kW	16.40	12.00	14.00	16.40	27.00	31.00
	Rated Input	kW	5.73	4.00	4.73	5.73	9.78	11.74
	COP	/	2.86	3.00	2.96	2.86	2.76	2.64
Cooling ⁴	Capacity	kW	15.40	12.20	14.00	15.40	26.50	29.50
	Rated Input	kW	3.67	2.65	3.22	3.67	6.24	7.47
	EER	/	4.20	4.60	4.35	4.20	4.25	3.95
Cooling ⁵	Capacity	kW	14.00	11.80	13.40	14.00	26.00	29.50
	Rated Input	kW	4.91	3.81	4.62	4.91	9.63	11.80
	EER	/	2.85	3.10	2.90	2.85	2.70	2.50
Seasonal space heating energy efficiency class ⁶	Outlet water temp. at 35°C	/	A+++					
	Outlet water temp. at 55°C	/	A++					
Refrigerant	Type(GWP)	/	R32(675)					
	Charged volume	kg	1.78				4.6	
Outdoor unit Sound pressure Level ⁷ (1m)		dB(A)	56	54	55	56	57	57
Outdoor unit Sound power Level ⁷		dB	70	68	69	70	72	72
Net weight/Gross weight		kg	110/126	119/135			205/230	
Net dimension(W×D×H)		mm	1080*520*857				1218*497*1568	
Packaged dimension(W×D×H)		mm	1180*560*1005				1330*590*1721	
Container loading quantity(40HQ)		/	82				29	
Water inlet/outlet pipe size		mm	R1-1/4"				R1-1/4"	
Ambient temp. range	Heating	°C	-25~35					
	Cooling	°C	-5~48					
	Domestic hot water	°C	-25~43					
Outlet water temp. setting range	Heating	°C	25~62					
	Cooling	°C	5~25					
	Domestic hot water	°C	20~57					

Note

- 1.Outdoor air temperature7°C DB, 6°C WB; Water inlet 30°C, Water outlet35°C;
- 2.Outdoor air temperature7°C DB, 6°C WB; Water inlet 40°C, Water outlet45°C;
- 3.Outdoor air temperature7°C DB, 6°C WB; Water inlet 47°C, Water outlet55°C;
- 4.Outdoor air temperature35°C DB; Water inlet 23°C, Water outlet18°C;
- 5.Outdoor air temperature35°C DB; Water inlet12°C, Water outlet7°C;
- 6.Seasonal space heating energy efficiency class testes in average climate general conditions.
- 7.Testing standard: EN12102-1.
- 8.Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02:2014.

Split series (outdoor unit)

Outdoor unit Model		HPS-	V40W/R2	V60W/R2	V80W/R2	V100W/R2	V120W/R2	V140W/R2	V160W/R2	V120W/SR2	V140W/SR2	V160W/SR2
Power Supply		V/Ph/Hz	220-240/1/50							380-415/3/50		
Heating ¹	Capacity	kW	4.40	6.45	8.40	10.00	12.20	14.20	16.00	12.20	14.20	16.00
	Rated Input	kW	0.88	1.33	1.73	2.17	2.54	3.09	3.64	2.54	3.09	3.64
	COP	/	5.00	4.85	4.85	4.60	4.80	4.60	4.40	4.80	4.60	4.40
Heating ²	Capacity	kW	4.60	6.65	8.55	10.20	12.40	14.60	16.40	12.40	14.60	16.40
	Rated Input	kW	1.23	1.80	2.32	2.87	3.44	4.11	4.82	3.44	4.11	4.82
	COP	/	3.75	3.70	3.68	3.55	3.60	3.55	3.40	3.60	3.55	3.40
Heating ³	Capacity	kW	4.60	6.30	8.35	9.50	12.00	14.00	16.40	12.00	14.00	16.40
	Rated Input	kW	1.53	2.10	2.78	3.22	4.07	4.83	5.75	4.07	4.83	5.75
	COP	/	3.00	3.00	3.00	2.95	2.95	2.90	2.85	2.95	2.90	2.85
Cooling ⁴	Capacity	kW	4.60	6.50	8.40	10.00	12.20	14.00	15.40	12.20	14.00	15.40
	Rated Input	kW	0.85	1.25	1.79	2.35	2.65	3.22	3.67	2.65	3.22	3.67
	EER	/	5.40	5.20	4.70	4.25	4.60	4.35	4.20	4.60	4.35	4.20
Cooling ⁵	Capacity	kW	4.70	5.60	7.50	9.00	11.80	13.40	14.00	11.80	13.40	14.00
	Rated Input	kW	1.36	1.70	2.36	3.05	3.81	4.62	4.91	3.81	4.62	4.91
	EER	/	3.45	3.30	3.18	2.95	3.10	2.90	2.85	3.10	2.90	2.85
Seasonal space heating energy efficiency class ⁶	Outlet water temp. at 35°C	/	A+++									
	Outlet water temp. at 55°C	/	A++									
Refrigerant	Type(GWP)	/	R32(675)									
	Charged volume	kg	1.35		1.58		2.05					
Outdoor unit Sound pressure Level ⁷ (1m)		dB(A)	46	49	51	52	54	55	56	54	55	56
Outdoor unit Sound power Level ⁷		dB	60	63	65	66	68	69	70	68	69	70
Net dimension(W×D×H)		mm	1040*450*725				1120*520*857					
Packaged dimension(W×D×H)		mm	1110*475*870				1180*560*1005					
Net weight/Gross weight		kg	58/70		64/76		94/108			103/117		
Connecting pipe size	Liquid	mm	6.35		9.52							
	Gas	mm	15.88		15.88							
Between indoor and outdoor unit	Hight difference	m	≤20									
	Pipe length	m	2-30									
Additional refrigerant	Additional charge per meter	g/m	20		47							
	Max. pipe length for no additional refrigerant	m	15									
Ambient temp. range	Cooling	℃	-5 ~ 43									
	Heating	℃	-25 ~ 35									
	Domestic hot water	℃	-25 ~ 43									

Split series (indoor unit)

Hydronic box model		HM-	60/DR2	100/DR2	160/DR2	160/DSR2
Power Supply		V/Ph/Hz	220-240/1/50			380-415/3/50
Indoor unit sound power Level ¹		dB	40	42	43	43
Net dimensio(W×H×D)		mm	420*790*275			
Packaged dimension(W×H×D)		mm	525*1050*360			
Net weight/Gross weight		kg	41/45	41/45	43/47	43/47
Water pump	Type	/	inverter			
	Max. pump head	m	9			
Connecting pipe size	Water side	mm	R1"			
	Liquid	mm	6.35	9.52		
	Gas	mm	15.88	15.88		
Backup electric heater ²	Optional installation		kW	3	3	9
	Capacity steps		/	1	1	3
	Power Supply	3kW	V/Ph/Hz	220-240/1/50		
		9kW		380-415/3/50		
Outlet water temp. setting range	Cooling	℃	5 ~ 25			
	Heating	℃	25 ~ 63			
	Domestic hot water	℃	20 ~ 57			

In the future

Shenling Smart Eco Energy System

