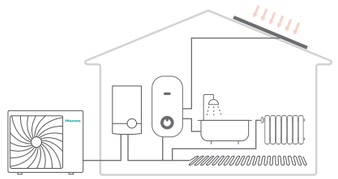
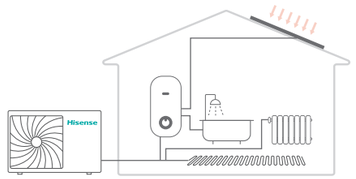
R-32 AIR TO WATER HEAT PUMP

Hi-Therma Series

Product Lineup Overview

Series	Hi-Therma	
Type	Split	Monobloc
Diagram		
Refrigerant Type	R32	R32
Line-up	4.4/6.0/8.0kW	4.4/8.0kW
Application		
Energy Label Space Heating 35℃	A+++	A+++
Energy Label Space Heating 55℃	A++	A++
Benefit	A+++ energy efficiency Stable heating under −25℃ 60℃ leaving water Two separate temp. cycles APP smart control Visual display of energy consumption Centralized control for different water cycles and individual control for rooms Suitable for different complex application scenarios	A+++ energy efficiency Stable heating under −25℃ 60℃ leaving water Two separate temp. cycles APP smart control Visual display of energy consumption Centralized control for different water cycles and individual control for rooms Suitable for different complex application scenarios Easy installation without refrigerant operation

Features Overview

High Efficiency and Excellent Performance

R32

R32 Eco-friendly refrigerant

Adopting refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP).

A+++

A+++ energy efficiency

Energy efficiency class up to A+++ in a scale from A+++ to D, with better efficiency & value for low temperature applications.

Interlock with 3rd party heat source

Can be interlocked with the solar thermal system and the boiler.

−25℃

−25℃ stable operation

Achieve stable operation even under extremely low temperature −25℃.

60℃

60℃ leaving water

Up to 60℃ leaving water can be produced by the hydro box.

75℃

75℃ domestic hot water

Max. 75℃ hot water can be generated in the water tank, achieving sterilization.

Smart grid interlock and PV enabled

The system's potential can be maximised by connecting to Smart Grid or PV.

DC

High-efficiency DC pump

It is featured with water flow monitoring, achieving variable water flow control.

High Intelligence

Smart App control

Remotely control the system anytime and anywhere.

Intuitive interface of controllers

Easy to understand and convenient to control.

Smart hint

The intuitive light strip in the hydro box shows you in real time the status of your system.

User Convenience

Two separate temp. cycles

Achieve different water temp. for the floor heating and radiators.

Max.7

7 rooms independent control

Max. 7 rooms independent control with our room thermostat and wall mounted temp. sensor.

Low noise operation

This function can be activated through the controller conveniently.

Night shift mode operation

Night shift mode can be set freely.

Centralized control and individual control

Centralized control for different water cycles and individual control for max. 7 rooms.

Screed drying

An automatic program for drying out the screed during the construction of a house.

Swimming pool heating

Available for the swimming pool and with the lowest priority of the system.

Visual display of energy consumption

Energy consumption can be accessed through the controllers.

Auxiliary heating source works separately

The auxiliary heating source (like boilers, solar thermal) can start to work when heat pump malfunctions.

Easy Installation and Maintenance

Hi-Checker

Intelligent service tool and easy to maintenance remotely.

Long

Long piping design

Long piping length enables flexible design and easy installation.

No refrigerant piping

No need to install refrigerant pipes on site.

Water pressure and water flow monitoring

The water pressure and water flow can be monitored and displayed in real-time, convenient for commission.

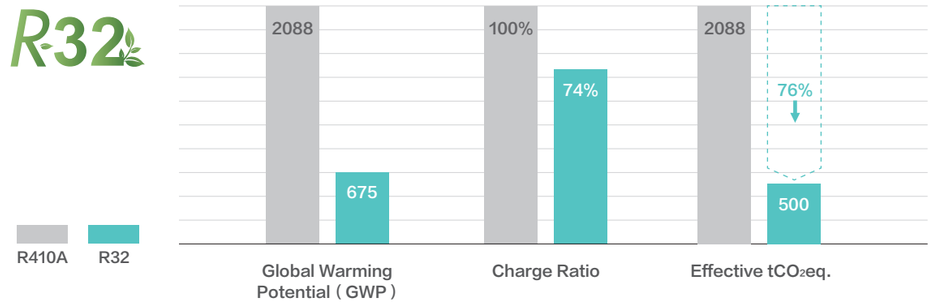
High Efficiency and Excellent Performance

Eco-friendly Refrigerant R32

R32 refrigerant contributes to meeting the F-gas regulation targets as described in EU regulation 517/2014. Hisense Hi-Therma heat pump system adopts R32 refrigerant, which is a perfect solution for attaining the new European CO_2 emission targets.

Features

- Zero Ozone Depletion Potential (ODP)
- Lower Global Warming Potential (GWP)
- Less charge amount under the same capacity
- Single component refrigerant, easy to handle and recycle



High Efficiency A+++

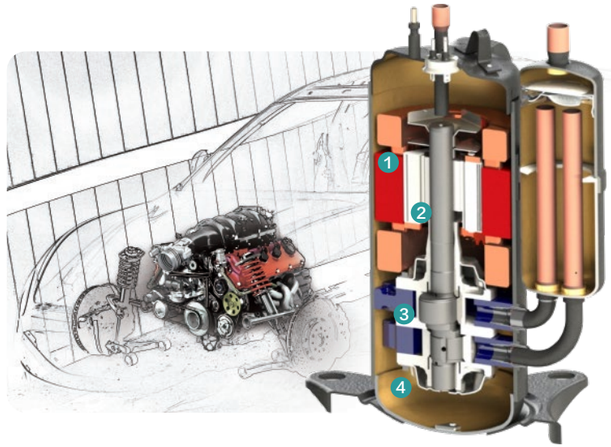
Hi-Therma offers the best and efficient solution for home heating and hot water supply. It has the top class A+++ energy classification under the low-temperature water condition, and A++ under the mid-temperature water condition, which ensures you make savings on your energy bills, reducing electricity consumption and the impact on the environment.

Energy Label

*Take AHW-060HCDS1, AHM-060HCDSAA as an example.

High-efficiency DC Inverter Compressor

A high-efficiency DC inverter twin rotary compressor is adopted. It features unique dual-pressure chamber design and symmetrical location, which can effectively reduce the vibration and noise and improve the compressor performance, especially the performance under low-frequency operation.
Moreover, the twin rotary compressor has a small lubricating oil injection volume with stable oil return, and comes with a gas-liquid separator, which makes the system more reliable.



1 High-efficiency motor
Optimize the motor design to improve compressor performance.

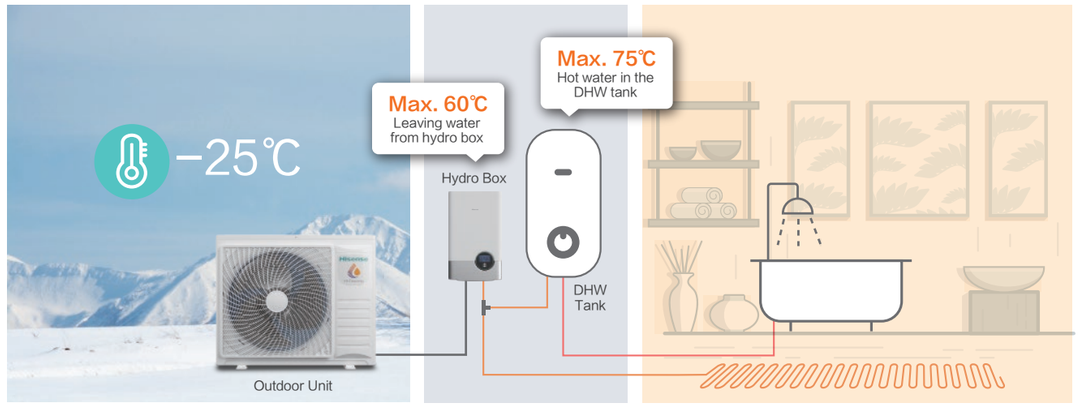
2 Optimized rotor design
Lower the center of gravity of the compressor to reduce the noise and vibration.

3 Flat mechanism design
Improve the volumetric efficiency and the total performance.

4 Screw interactive fastening
Improve fastening effect and reduce deformation of the core.

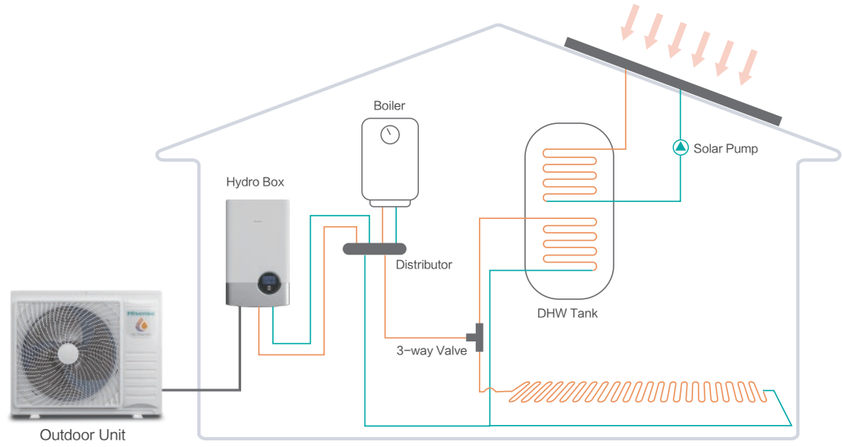
Wide Operation Range

Stable operation is guaranteed, even with outdoor temperatures as low as −25℃, effectively satisfying the heating demand in extremely cold areas. It can generate up to 60℃ leaving water from the hydro box. Besides, the operation range of DHW is extended to 40℃, and the water inside the water tank can achieve max. 75℃, enabling effective sterilization.



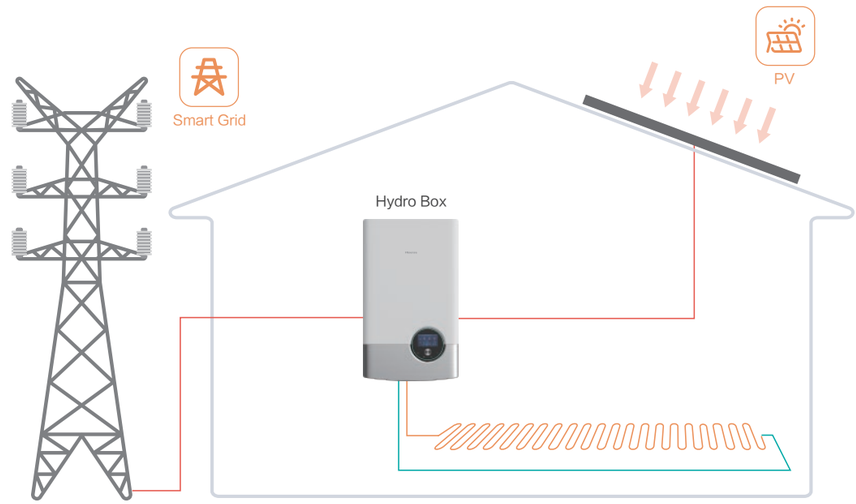
Interlock with 3rd Party Heat Source

Hi-Therma system can interlock with the 3rd party heat source, like the solar thermal and the boiler, to heat up the DHW tank. Thanks to the interlock design, both the user experience and energy efficiency can be optimized.

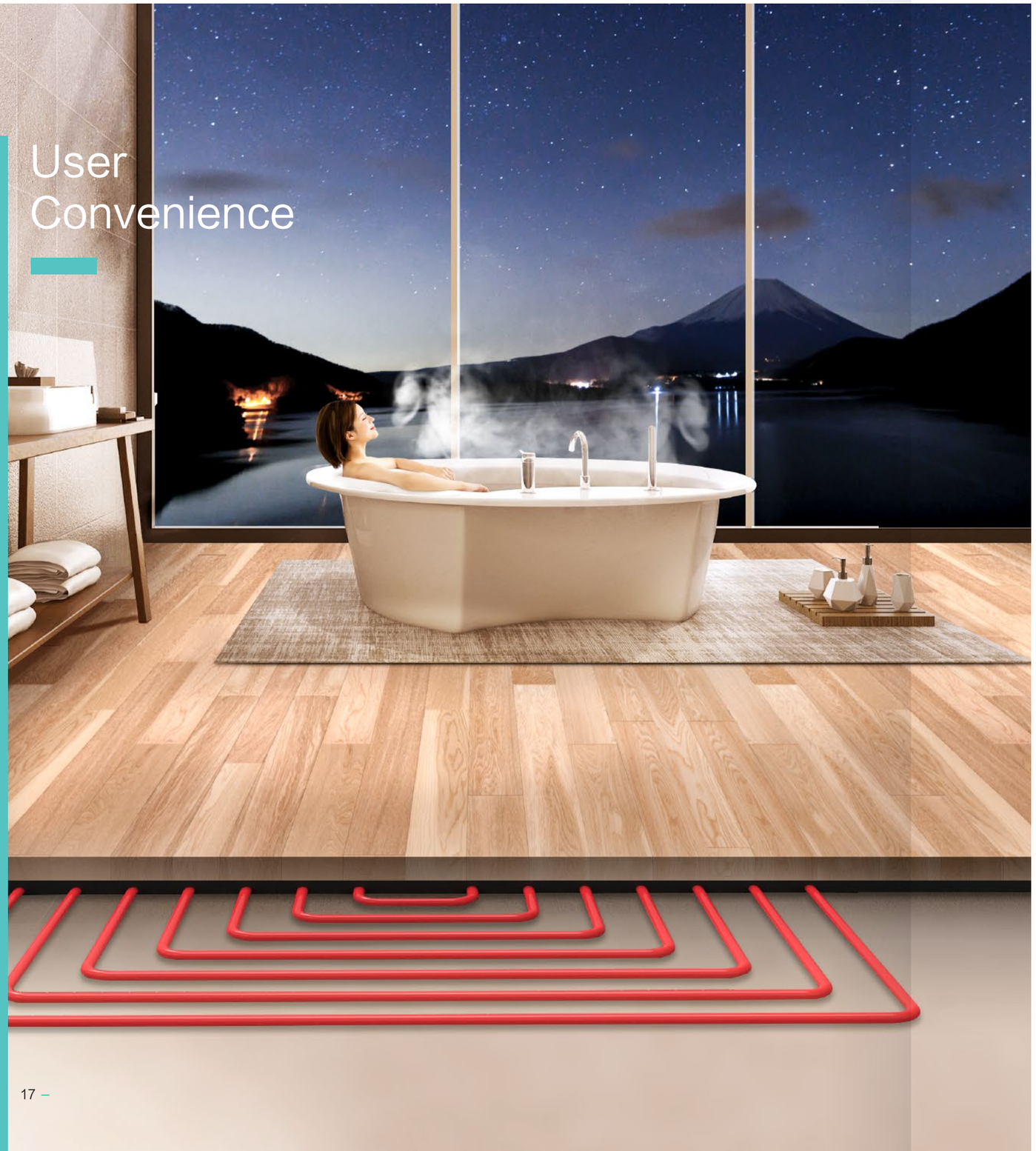


Smart Grid Interlock and PV Enabled

Hi-Therma system can be integrated into the smart grid, to achieve a low-cost operation required to meet carbon reduction targets. Also, the system can be integrated to the Photovoltaic(PV), saving energy through renewable sources.
The system's potential can be maximised by connecting to Smart Grid or Photovoltaic(PV).

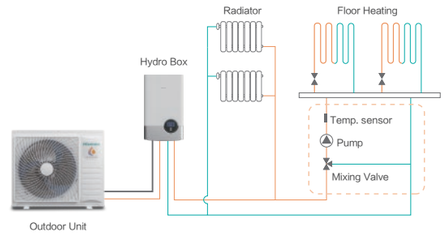


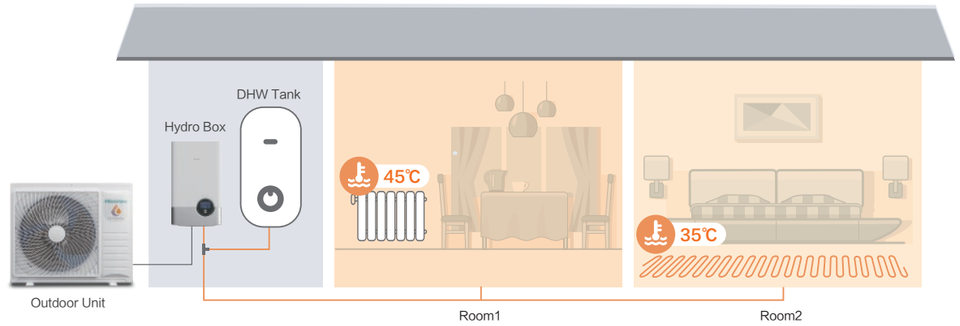
User Convenience



Two Seperate Temperature Cycles

Two seperate temperature cycles control is available thanks to the seperate heating cycles with mixing valve kit.





Low Noise Operation

Low Noise Mode

The air to water heat pump system can work in low-noise operation mode for optimal user comfort, which can be achieved just by one touch in the controller or through the setting of input/output. Max.8 dB(A) can be reduced during this mode.

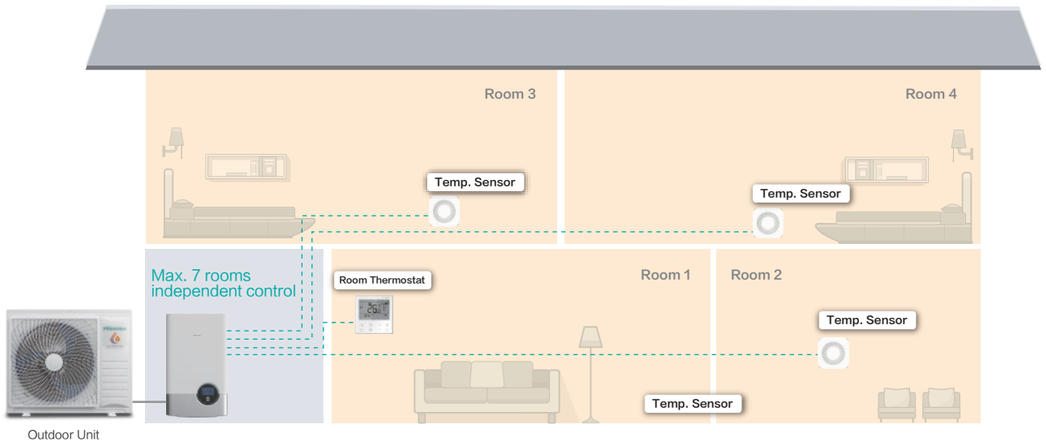
Night Shift Mode

Under the night shift mode, the operation period can be set according to users' demand freely. The sound pressure level can be reduced to 35dB(A)*.
All these settings can be achieved in the controller or through the setting of input/output.

*Take the unit AHW-044HCDS1 as an example.

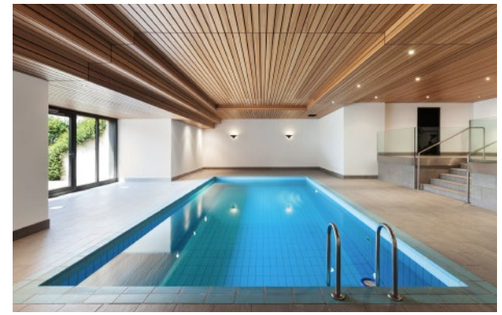
Up to 7 Independent Room Temperature Control

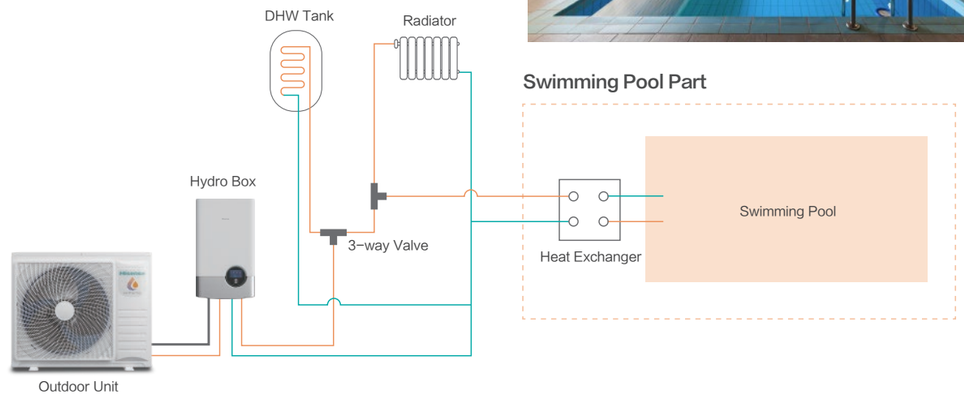
One system can realize independent temperature control of up to 7 rooms at the same time. Users can flexibly set the temperature of each room, which is more convenient and can also meet the diverse needs of customers.



Swimming Pool Heating

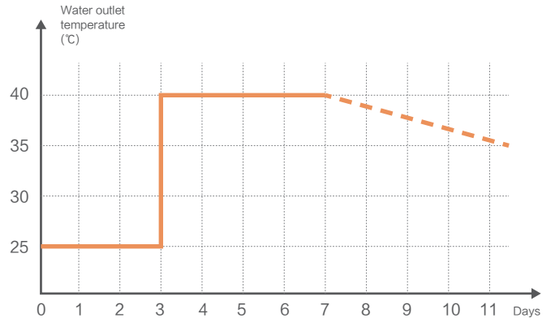
Hi-Therma heat pump system can also achieve heating swimming pools. When the swimming pool operation is activated, the hot water will go into the swimming pool heat exchanger, allowing to heat the swimming pool water temperature to a comfortable water temperature between 24 and 33℃.

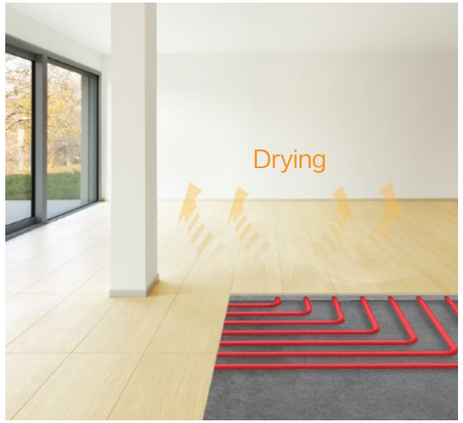




Screed Drying Function

Hi-Therma air to water heat pump unit has an automatic program for drying out the screed during the construction of a house with the floor heating underfloor. The screed drying process lasts for 7 days. In the first three days, the system operates with the outlet water temperature of 25 ℃, and in the next four days, the system operates with the presetting maximum outlet water temperature.





High Intelligence

All along, Hisense has demonstrated our core quintessence to the world: Advanced technology, innovative ideas and the pursuit of excellent user experience. Hisense's brand genes——Genuine, Gentle Generous, have always interpreted all our products and promote us to create a better brand experience.
Relying on the Beauty, Symmetry, Unity design style, Hisense integrates elements of individuality and balance in various places such as product shape, outline and trademark. Changes and upgrades can be seen everywhere, whether it is the position of buttons, the layout of display screen or the composition of components.

- Innovative streamlined appearance, exquisite, beautiful, and high integration.
- High-contrast high-definition color interface, bringing more intuitive and rich visual experience.
- Multiple control functions, bringing excellent human-computer interaction experience.

Premium design combines refinement and simplicity

We believe aesthetics should be combined with performance, from pattern to radian coordination, to embody the aesthetic meaning of " Square and Circle " in product design, and to deduce the balance of product appearance and the consistency of pleasure.

Energy consumption management

The energy consumption can be display intuitively in the controllers for precise energy management.

Powerful three-level management system

All the heat sources, water cycles and individual rooms can be controlled through one controller.

Stylish Controller in Hydro Box

Excellent human–computer interaction experience

The hydro box has a built–in large colorful screen wired controller, which can be easily operated through the knob and the buttons, and all water cycles and rooms can be configured separately. The main interface can intuitively displays the settings of each water cycles and the current water temperature in real time. The LED light strip around the wire controller can intuitively indicate the current operating mode.

Light strip

The intuitive light strip shows you in real time the status of your system.

Blue: cooling mode or defrost mode.
Yellow: heating mode.
Orange: domestic hot water mode.
Red: malfunction

Quick access

Quick access to frequent settings, including six items – lock, DHW boost, holiday, quiet mode, auto heat, night–shift mode. All these functions can be activated according to users' need.

Fluency of knob operation

All the operations can be accessed through the knob smoothly.

High–resolution colorful screen

The HD colorful screen delivers stunning and clear visual reference, enabling excellent user experience.

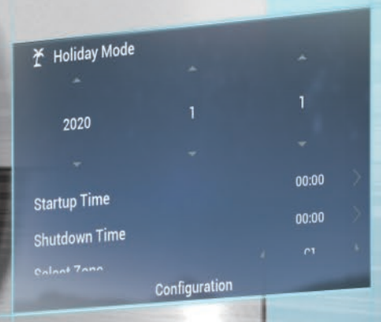
Proper interface zones

There are four functional zones, Cycle 1, Cycle 2, DHW, SWP. Each zone has intuitive parameter display, easy to check and set.

Easy operation

Just rotate the knob to quickly go through all the functions, no need to click other buttons, convenient and fluently.

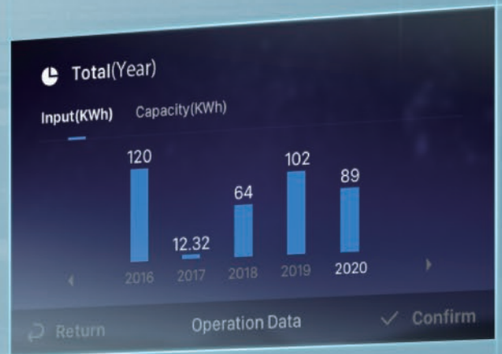
Quickly confirm the selection



ECO setting

Holiday mode setting

Individual room setting



Energy consumption display

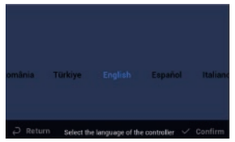
Energy data can be viewed easily, including annual energy data, monthly energy data, daily energy data, which will help users to do effective energy management.

General Features

- Installation Wizard with easy setting for all site configuration
- Support 10 languages(EN, DE,FR, PL, etc.)
- Direct visualization of energy consumption and running capacity
- Centralized control for different water cycles and individual control for rooms
- Alarm code and advanced parameter display, convenient for maintenance
- Weekly Timer and Holiday mode support.
- ECO/ Quiet/ Night shift mode fit for different user needs.

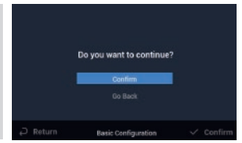
Installation Wizard–Quick to configure

When commissioning for the first time, the installation wizard will appear, and the users can make a smooth step–by–step configuration.



1 step

2 step



Completed

Colorful Touch Controller

Standard for Monobloc and optional for split

Sliding Interface

By sliding the screen left and right, quick switching between different interfaces can be realized.

HSXM-FE01

- Sleek and elegant design
- Compact, measures only 90 × 90mm
- Intuitive touch-button control

General Features

- Installation Wizard with easy setting for all site configuration
- Support 10 languages(EN, DE,FR, PL, etc.)
- Direct visualization of energy consumption and running capacity
- Centralized control for different water cycles and individual control for rooms
- Alarm code and advanced parameter display, convenient for maintenance
- Weekly Timer and Holiday Mode support.
- ECO/ Quiet/ Night shift mode fit for different user needs.
- Suitable for a variety of installation methods, either exposed or concealed
- Physical button at the bottom for easy on/off and reset

Sliding Adjusting

The temperature can be adjusted smoothly and quickly by sliding the semicircle, especially for large temperature ranges adjustment.

There is a physical button at the bottom, easy on/off and reset, and don't affect the aesthetics due to its hidden design.

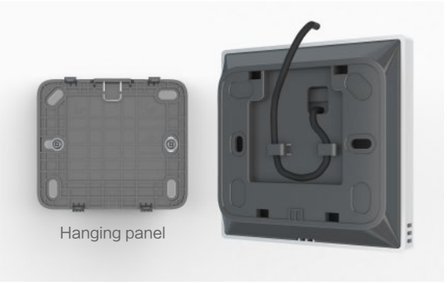
Physical Button

Themes Setting

There are three themes in total, Day, Night and Auto, which can apply to different scenarios at different time, delivering a comfortable and balanced interface display.

Easy Installation

During the excelsior product design, we give full consider-ation to the convenience of installation. Thanks to the hang-ing panel, it's very convenient to install and disassemble. Besides, there is a built-in slot, flexible for wires routing.



Hanging panel

Room Thermostat

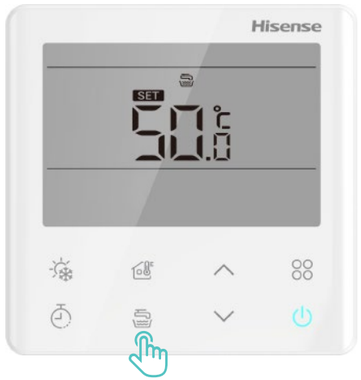
It can not only set the rooms' temperature, but also accurately link with hydro box, to feedback the room's load change in real time, ensuring comfortable indoor temperature and high-efficiency operation.

HSXE-VC04

- Sleek and elegant design
- Compact, measures only 86 × 86mm
- Intuitive touch-button control

General Features

- Compact body and stylish appearance
- Convenient room temp. & DHW setting
- Flat backboard, easy-to-install
- ECO/DHW boost/Timer(0.5-24h)



One-button Switch to DHW Setting

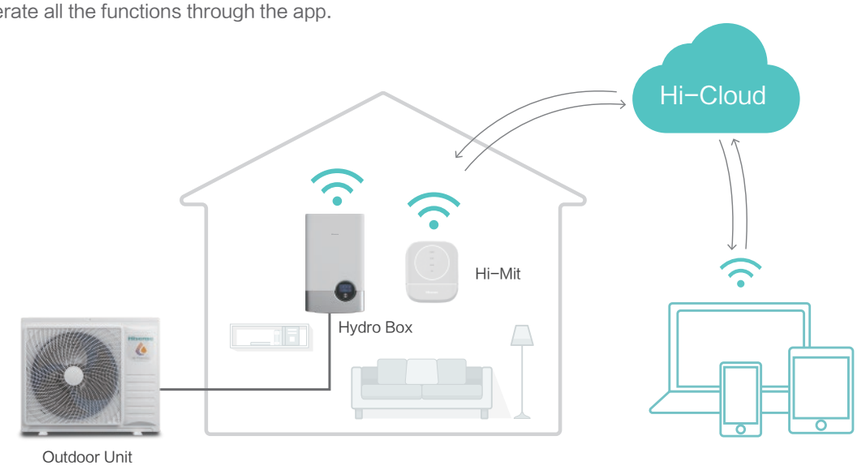
Users can switch to the domestic hot water mode setting with one touch to realize the control of the water system, which is very convenient, no need to do the setting in other controllers.

Smart APP Control

Hisense Smart APP control is for those who live their life on the go and who want to manage their heating system at anytime and anywhere.

How it works

After connecting the Hi-Mit adapter to the internet by wireless or wired LAN, the users can control the Hi-Therma system just using a phone anytime and anywhere, achieving operate all the functions through the app.



- Stylish appearance
- Compact body
- Supporting OTA update

Simple and convenient operation

- On/Off
- The temp. setting of rooms, domestic hot water and water cycles
- Energy management
- 14 languages available
- Online repair report
- Multiple scenes setting

Available on the App Store

Download today Google Play

Specifications

Model	Power Supply	Max. Current	Power Input	Dimension	Net Weight
HCCS-H64H2C1M#01	DC 12V	1A	2.4W	91×117×31mm	0.14kg

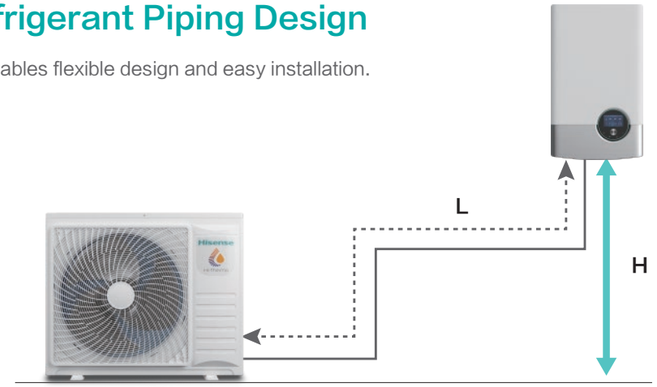
Energy management

Hi-Mit provides intelligent energy management, which supporting daily, weekly and monthly electricity data viewing, and energy saving mode setting accordingly. It greatly facilitates the energy management.

Easy Installation and Maintenance

Flexible Refrigerant Piping Design

Long piping length enables flexible design and easy installation.



Max. piping length L: 45(50*1)m Max. height difference H：20/30*2m

*1 When the piping length is 50m, the ambient temperature of the outdoor unit shall be ⩾10℃， and the refrigerant charge of the unit shall be less than the max. refrigerant charge allowed by the unit.
*2 When the outdoor unit is higher than the hydro box, the max. height difference is 30m, otherwise is 20m.

Convenient Maintenance for the Hydro Box

The position of the components in hydro box has been fully optimized, and the electrical box can be rotated 88°, which facilitates the maintenance of the parts behind the electrical box, and greatly simplifies the maintenance. Besides, there is a hook on the outer sheet metal of the electrical box, and the controller can be conveniently hung during on-site maintenance.

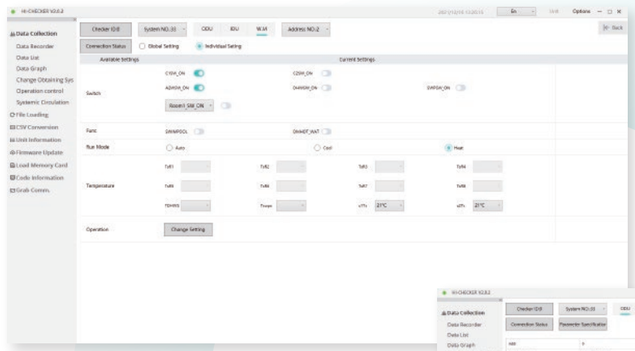
Hi-Checker

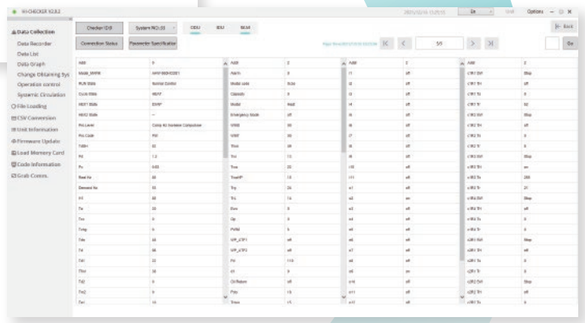
Intelligent service tool, improve your service

Hi-Checker is a plug and play service tool, with which service engineers can access the system and monitor operation status or data, very convenient for system communication and maintenance.
Besides, it features cloud-based management, easy to access operation status remotely.

Small and Portable Body | Remote Access | Black Box Function | Powerful Chats | OTA Update

Different water cycles in multiple rooms control





Up to 130 parameters of the water system can be displayed intuitively.

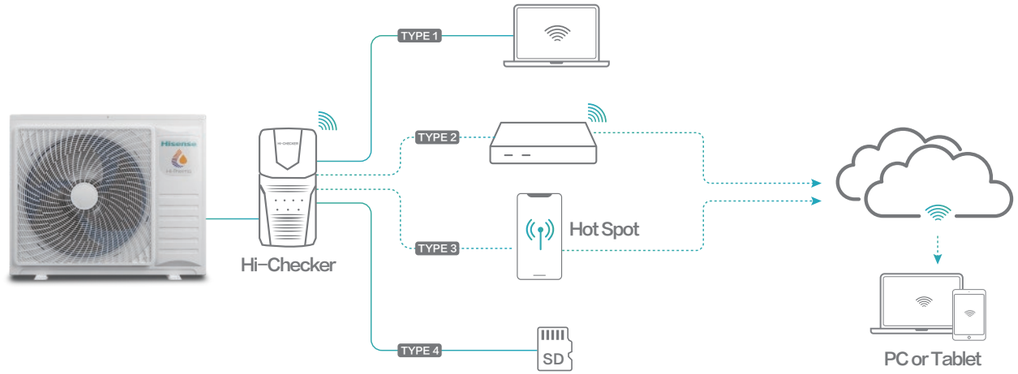
Easy to use

- Compact size which allows high portability and space saving.
- Capable to slot in a 32G memory card for data collection and storage. Also the memory card and card reader are standard with Hi-Checker.
- Multiple choices of power supply types. It can be powered by the standard adapter (DC 5V), computers or power banks.
- Support OTA update, ensuring the software is always up to date.

Easy to access

4 ways to access the operation data

- Conventional connection type. The simplest and reliable way by just connecting the Hi-Checker to your computer directly through USB.
- Internet connection type. Be connected to a stable Wi-Fi signal to achieve operation data and status monitoring anytime and anywhere.
- Hotspot connection type. Be connected to a temporary hotspot signal from the smartphone, allowing the Hi-Checker to remotely monitor the operation data when there is no stable Wi-Fi signal on site.
- SD card storage type. Hi-Checker equipped with SD card can be connected to the air conditioning system all the time, so that all the operation data can be stored in the card for later analysis.



Specifications

Model	Size (L × W × H) mm	Net Weight (g)	Power Suppy
HCCS-H64H2C2M	138 × 68 × 28	130	5V ⎓ 500mA

Split

Hi-Therma Split unit is an air to water heat pump system that indoor unit and outdoor unit are separated. The indoor unit including plate heat exchanger, expansion tank,water pump ect. is located in the room, which can aviod water freezing problems.

High Efficiency and Excellent Performance

User Convenience

High Intelligence

Easy Installation and Maintenance

Outdoor Unit

Hydro Box

Hydro Box

Hydro Box

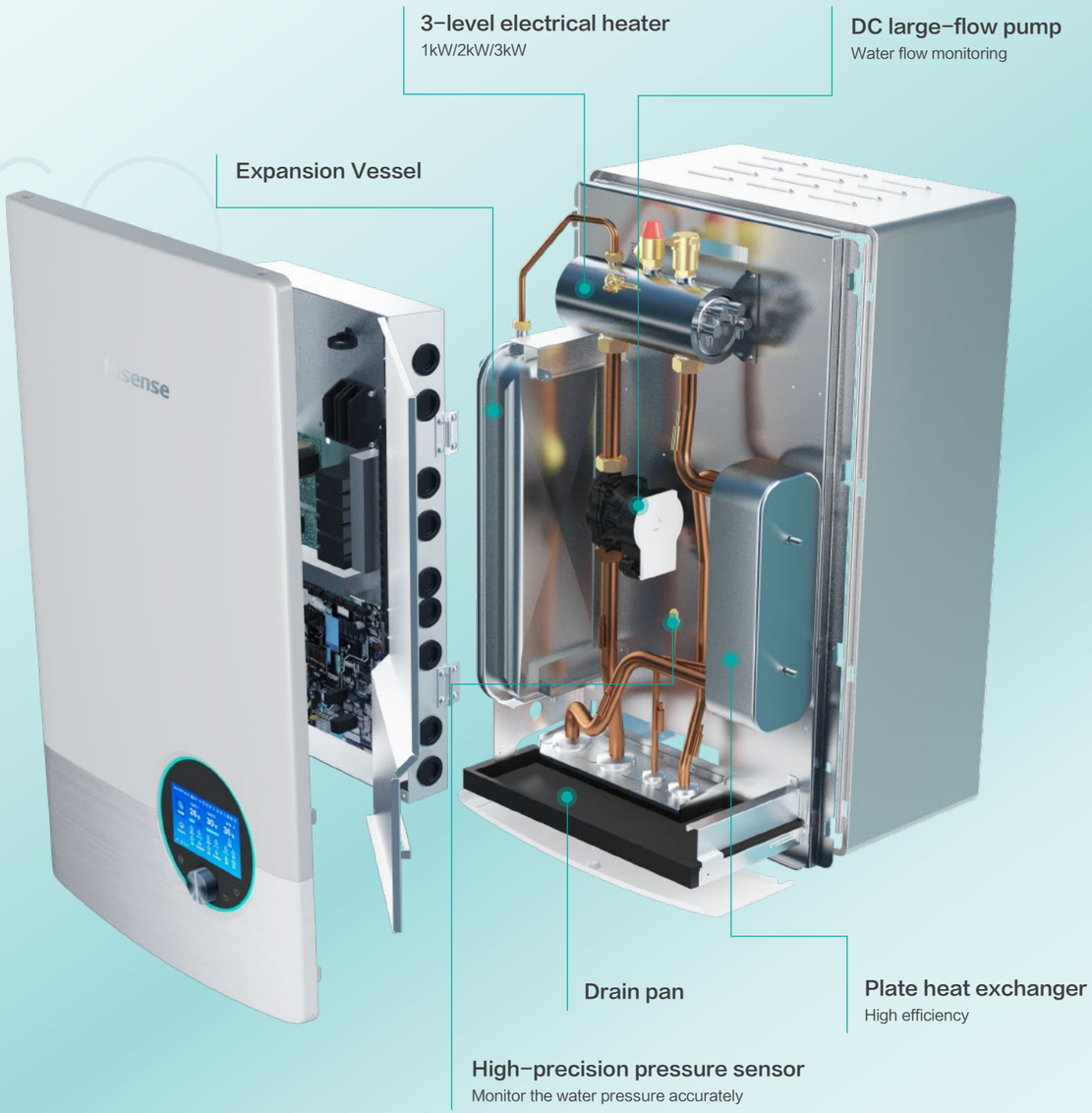
Stylish appearance

Compact design

Integrated panel

Intuitive control interface

Easy to hang to the wall



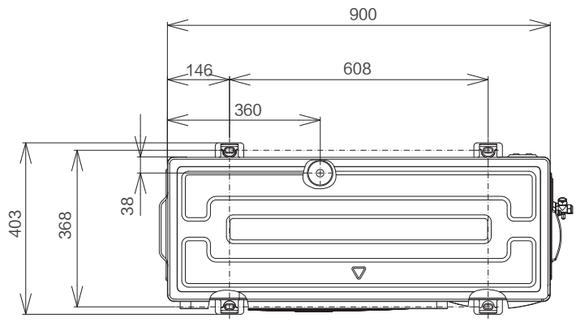
Outdoor Unit Specification

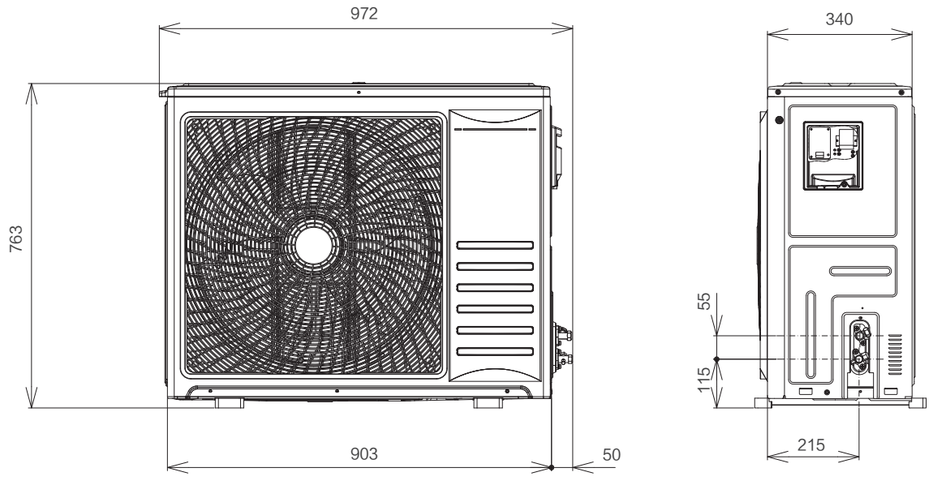
Model					AHW-044HCDS1	AHW-060HCDS1	AHW-080HCDS1
Power Supply					AC 1Φ，220~240V/50Hz		
Heating Operation	OAT (DB/WB) 7/6℃	IWT/OWT 30/35℃	Capacity(Min./Nom./Max.)	kW	1.85 / 4.40 /7.00	1.95 / 6.00 /8.90	2.10/ 8.00 / 11.0
			COP (Nom.)	–	5.10	5.00	4.90
		IWT/OWT 47/55℃	Capacity (Nom./Max.)	kW	4.40 / 6.00	6.00 / 7.50	8.00 / 9.00
			COP (Nom.)	–	3.00	3.05	2.80
	OAT (DB/WB) −7/−8℃	IWT/OWT 30/35℃	Capacity (Nom./Max.)	kW	4.40 / 5.00	5.30 /5.90	5.80 /7.30
			COP (Nom.)	–	3.26	3.16	3.14
		IWT/OWT 47/55℃	Capacity (Nom./Max.)	kW	4.00 / 4.20	4.70 / 5.10	5.00 / 6.40
			COP (Nom.)	–	1.97	2.04	1.94
Cooling Operation	OAT (DB/WB) 35/−℃	IWT/OWT 12/7℃	Nominal Capacity	kW	4.40	5.00	6.00
			EER	–	3.90	3.70	3.60
		IWT/OWT 23/18℃	Nominal Capacity	kW	5.60	6.00	7.00
			EER	–	5.60	5.60	5.10
Space Heating	Water Outlet 35℃	SCOP		–	5.00	4.93	4.92
		Seasonal Space Heating Efficiency(ηs)		%	197	194	194
		Energy Rating		–	A+++	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.23	3.33	3.42
		Seasonal Space Heating Efficiency(ηs)		%	126	130	134
		Energy Rating		–	A++	A++	A++
Sound Pressure*1	Normal Mode (Heating/Cooling)			dB(A)	47/47	48/47	50/47
	Low Noise Mode (Heating/Cooling)			dB(A)	39/39	42/42	43/43
	Night Shift Mode (Heating/Cooling)			dB(A)	35/35	38/38	39/39
Sound Power	Normal Mode (Heating/Cooling)			dB(A)	61/61	62/61	64/61
Fan	Condenser Fan Quantity			—	1	1	1
	Air Flow Rate			m^3/h	2700	2700	2700
Max. Running Current				A	9.8	12	16.8
Recommended Fuse				A	16	16	20
Outer Dimensions	H × W × D			mm	750 × 900 × 340	750 × 900 × 340	750 × 900 × 340
Packing Dimensions	H × W × D			mm	807 × 1022 × 445	807 × 1022 × 445	807 × 1022 × 445
Net Weight				kg	49.5	49.5	50.5
Gross Weight				kg	53.5	53.5	54.5
Refrigerating Installation	Refrigeration Charge	Type		—	R32		
		Before Shipment		kg	1.23	1.23	1.26
	Piping	Gas Pipe		mm	Φ12.7	Φ12.7	Φ15.88
				in.	1/2	1/2	5/8
		Liquid Pipe*2		mm	Φ6.35 (Φ9.53)	Φ6.35 (Φ9.53)	Φ6.35 (Φ9.53)
				in.	1/4 (3/8)	1/4 (3/8)	1/4 (3/8)
	Min. Piping Length			m	3		
	Max. Chargeless Piping Length			m	10		
	Max. Piping Length			m	40	40	45 (50*3)
	Height difference between ODU and IDU	ODU is Higher		m	30	30	30
		IDU is Higher		m	20	20	20
Operation Range	Heating	Outdoor Ambient Temperature		℃(DB)	−25~35		
		Outlet Water Temperature		℃	15~60		
	DHW	Outdoor Ambient Temperature		℃(DB)	−25~40℃		
		Outlet Water Temperature		℃	30~55(75*4)		
	Cooling	Outdoor Ambient Temperature		℃(DB)	5~46		
		Tank Water Temperature		℃	5~22		

Note:
*1:The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene.
*2:The refrigerant gas and liquid piping size are different between outdoor and indoor unit, so refrigerant pipe adapters are required. Please refer to the installation manual for detailed information.
*3:The ambient temperature of the outdoor unit shall be ≥10℃, and the refrigerant charge of the unit shall be less than the maximum refrigerant charge allowed by the unit.
*4:When there is an DHW electric heater mounted in the DHW tank ,the setting temperature can reach 75℃.
The nominal heating and cooling capacities are based on the EN 14511 standard: Piping length 7.5 meters; Piping lift 0 meters.
OAT: Outdoor ambient temperature; IWT: Inlet water temperature; OWT: Outlet water temperature.

Dimensions

Unit: mm





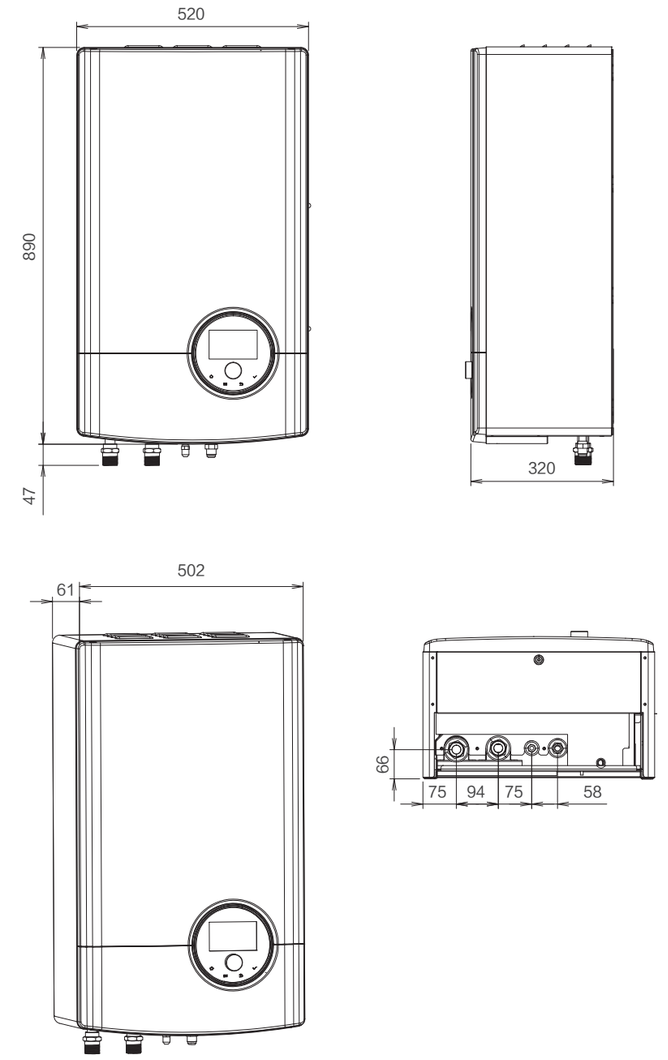
Hydro Box Specification

Model			AHM-044HCDSAA	AHM-060HCDSAA	AHM-080HCDSAA
Power Supply	—		AC 1Φ, 220~240V/50Hz		
Nominal Water Flow	IWT: 30℃ / OWT: 35℃ ΔT: 5℃	m^3/h	0.77	1.03	1.38
Min. Water Flow		m^3/h	0.50	0.60	0.60
Pump Available Pressure		kPa	62	47	32
A Class Pump	Number of speeds	—	Various speed		
	Max. Input Power	W	50	50	50
Sound Pressure		dB(A)	28	28	28
Sound Power		dB(A)	42	42	42
Max. Running Current		A	16(31*1)		
Recommended Fuse		A	20(40*1)		
Outer Dimensions with connections	Height	mm	890×520×419	890×520×419	890×520×419
Packing Dimensions	Height	mm	419×1160×650	419×1160×650	419×1160×650
Net Weight		kg	43.5	43.5	44.5
Gross Weight		kg	48.5	48.5	49.5
Refrigerating Installation	Connection Type	–	Flare nut connection		
	Gas Pipe	mm	Φ12.7	Φ12.7	Φ15.88
		in.	1/4	1/4	5/8
	Liquid Pipe*2	mm	Φ6.35 (Φ9.53)	Φ6.35 (Φ9.53)	Φ6.35 (Φ9.53)
		in.	1/4 (3/8)	1/4 (3/8)	1/4 (3/8)
Water Pipes Connection	Connection type	–	Flare nut connection		
	Shutdown valves	mm (in.)	G 1″ (male) – G 1″ (male)		
	Inlet pipe diameter	mm (in.)	G 1″ (female)		
	Outlet pipe diameter	mm (in.)	G 1″ (female)		

Note:
*1: The value with * is the data when electric heater is working.
*2:The refrigerant gas and liquid piping size are different between outdoor and indoor unit, so refrigerant pipe adapters are required.
Please refer to the installation manual for detailed information.

Dimensions

Unit: mm



Monobloc

Hi-Therma Monobloc unit is an air to water heat pump system that indoor unit and outdoor unit are combined as one module, which ensures all functions are achieved with a single outdoor unit.Therefore, there is no need for refrigerant piping work since Monobloc unit located outside is connected only to water piping. Further, hydronic components such as plate heat exchanger, expansion tank and water pump are included in the package.

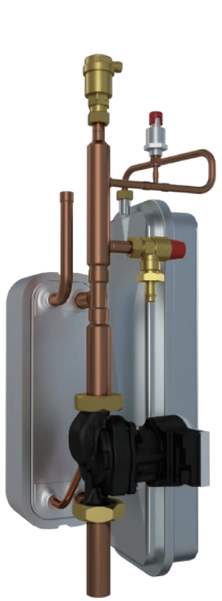
High Efficiency and Excellent Performance

User Convenience

High Intelligence

Easy Installation and Maintenance

Water side items included in the Monobloc



PHE
(Plate Heat Exchanger)

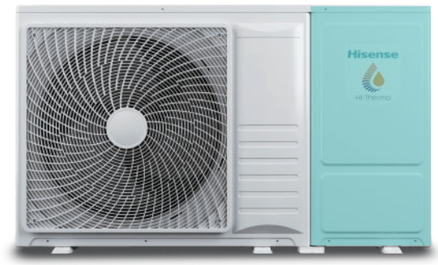
Expansion Vessel

Water Pump

High head and large water flow pump

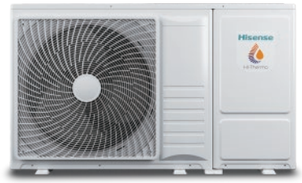
Simplified Installation

Plate heat exchanger, expansion vessel and water pump are included in the outdoor unit and no need for refrigerant handling or F-gas qualifications, which simplify installation a lot. Furthermore, it can save lots of indoors space.



Outdoor Unit Specification

041



Model					AHZ-044HCDS1	AHZ-080HCDS1
Power Supply					AC 1Φ，220~240V/50Hz	
Heating Operation	OAT (DB/WB) 7/6℃	IWT/OWT 30/35℃	Capacity(Min./Nom./Max.)	kW	1.85 / 4.40 /7.00	2.10/ 8.00 / 11.0
			COP (Nom.)	–	5.10	4.90
		IWT/OWT 47/55℃	Capacity (Nom./Max.)	kW	4.40 / 6.00	8.00 / 9.00
			COP (Nom.)	–	3.00	2.80
	OAT (DB/WB) -7/-8℃	IWT/OWT 30/35℃	Capacity (Nom./Max.)	kW	4.40 / 5.00	5.80 / 7.30
			COP (Nom.)	–	3.26	3.14
		IWT/OWT 47/55℃	Capacity (Nom./Max.)	kW	4.00 / 4.20	5.00 / 6.40
			COP (Nom.)	–	1.97	1.94
Cooling Operation	OAT (DB/WB) 35/-℃	IWT/OWT 12/7℃	Nominal Capacity	kW	4.40	6.50
			EER	–	4.00	3.35
		IWT/OWT 23/18℃	Nominal Capacity	kW	5.60	7.00
			EER	–	5.60	5.10
Space Heating	Water Outlet 35℃	SCOP		–	5.17	5.00
		Seasonal Space Heating Efficiency(ηs)		%	204	197
		Energy Rating		–	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.47	3.50
		Seasonal Space Heating Efficiency(ηs)		%	136	137
		Energy Rating		–	A++	A++
Sound Pressure*1	Normal Mode (Heating/Cooling)			dB(A)	47/47	50/47
	Low Noise Mode (Heating/Cooling)			dB(A)	40/40	43/43
	Night Shift Mode (Heating/Cooling)			dB(A)	36/36	39/39
Sound Power	Normal Mode (Heating/Cooling)			dB(A)	61/61	64/61
Fan	Condenser Fan Quantity			—	1	1
	Air Flow Rate			m^3/h	2700	2700
Max. Running Current				A	10.53	17.53
Recommended Fuse				A	16	20
Outer Dimensions	H × W × D			mm	815 × 1270 × 340	815 × 1270 × 340
Packing Dimensions	H × W × D			mm	890 × 1440 × 440	890 × 1440 × 440
Net Weight				kg	88	88
Gross Weight				kg	102	102
Refrigerating Installation	Refrigeration Charge	Type		—	R32	
		Before Shipment		kg	1.17	1.21
Operation Range	Heating	Outdoor Ambient Temperature		℃(DB)	-25~35	
		Outlet Water Temperature		℃	15~60	
	DHW	Outdoor Ambient Temperature		℃(DB)	-25~40	
		Outlet Water Temperature		℃	30~55(75*2)	
	Cooling	Outdoor Ambient Temperature		℃(DB)	5~46	
		Tank Water Temperature		℃	5~22	
Nominal Water Flow	IWT: 30℃ / OWT: 35℃ ΔT: 5℃			m^3/h	0.77	1.38
Min. Water Flow				m^3/h	0.5	0.6
Pump Available Pressure				kPa	84	74
A Class Pump	Number of Speeds			—	Various speed	
	Max. Input Power			W	87	87
Water Pipes Connection	Connection Type			–	Flare nut connection	
	Shutdown Valves			mm (in.)	G 1″ (male) – G 1″ (male)	
	Inlet Pipe Diameter			mm (in.)	G 1″ (female)	
	Outlet Pipe Diameter			mm (in.)	G 1″ (female)	

Note:
*1:The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene.
*2:When there is an DHW electric heater mounted in the DHW tank, the setting temperature can reach 75℃.
OAT: Outdoor ambient temperature; IWT: Inlet water temperature; OWT: Outlet water temperature
The nominal heating and cooling capacities are based on the EN 14511 standard: Piping length 7.5 meters; Piping lift 0 meters.
OAT: Outdoor ambient temperature; IWT: Inlet water temperature; OWT: Outlet water temperature.

Dimensions

Unit: mm