Accessories

Accessories	Model	Function	Compatibility
Water temperature sensor	HTS-E1000A1	Water temperature sensor for pipeline, tank and hydraulic components.	Hi-Therma Series
3-way valve	HESE-3W25A	Valve to divert different water flow for different operation	Hi-Therma Series
Hi-Mit II adapter	HCCS-H64H2C1M#01	Hi-Mit II smart APP solution.	Hi-Therma Series
Thermal tank	HDHWT-200L30HE HDHWT-300L30HE	DHW Tank	Hi-Therma Series
Indoor ambient temperature sensor	HCT-S01E	Wall mounted room temperature sensor, with communication to heat pump system.	Hi-Therma Series
Wired remote controller	HSXE-VC04	Room thermostat for room temperature control, with communication to heat pump system.	Hi-Therma Series
Second outdoor ambient temperature sensor	HC-T-01M	Detect Outdoor ambient temperature with the second sensor	Hi-Therma Series
Electronic anode	HOPT-EAT01	Protect the inner tank of the water heater, enhance its corrosion resistance, and prolong its service life.	Hi-Therma Integra
Colorful touch controller	HSXM-FE01	Touch controller for room temperature control and mode adjustment with communication to heat pump system.	Hi-Therma Integra & Split
Auxiliary electric heater	DRE-300WG DRE-600WG DRE-S600WG	Auxiliary electric heating for use in emergency situations when the heat pump malfunctions	Hi-Therma Monobloc

ISO14001 ISO9001 ISO81001

HCAC-LL-ATWBCR202312

VMTEC

AIR TO WATER HEAT PUMP

Hi-Therma

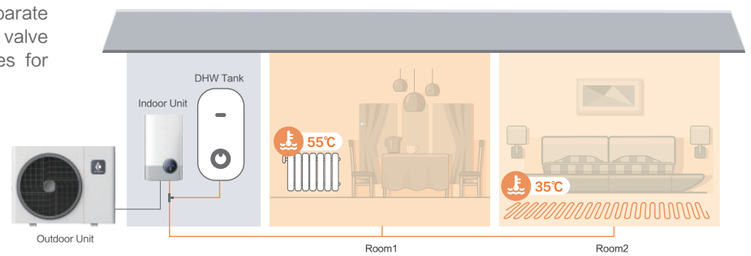




The Hi-Therma Series offers a stylish heating and cooling solution that was awarded the 2022 Reddot Award for its minimalist yet sophisticated design. It has clean lines and a classic white and gray color scheme that complements any home decor style, achieving the perfect fusion of form and function.

Two Separate Temperature Cycles

Two temperature zones through the separate heating cycles is possible with the mixing valve kit, enabling different water temperatures for underfloor heating and the radiator.



High Efficiency A+++

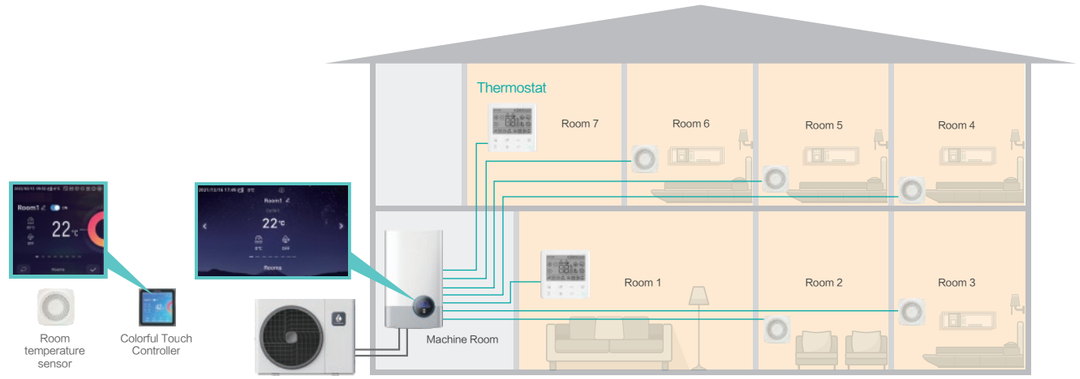
Hi-Therma offers the best and efficient solution for home heating and hot water supply. It has the top class A+++ energy classification under the low-temperature water condition, and A++ under the mid-temperature water condition, which ensures you make savings on your energy bills, reducing electricity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



Energy Label

Up to 7 Rooms with Independent Temperature Control

In one Hi-Therma system, the temperature of up to 7 rooms can be independently controlled through installing temperature sensors or room-thermostats in the rooms, satisfying the diverse needs of users.

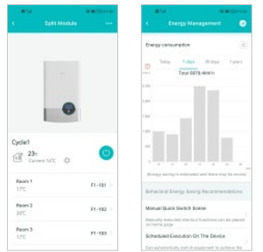


Note: In one Hi-Therma system, up to 2 room thermostats and max. 6 wall mounted temp. sensors can be connected.

Smart App Control

Through the smart app, users can access the Hi-Therma system easily to control the room temperature at anytime and anywhere.





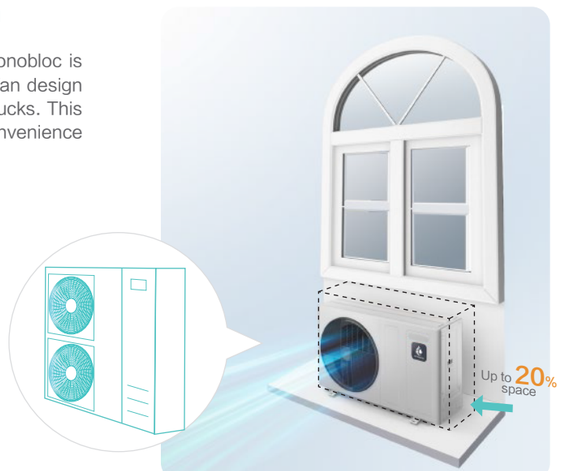


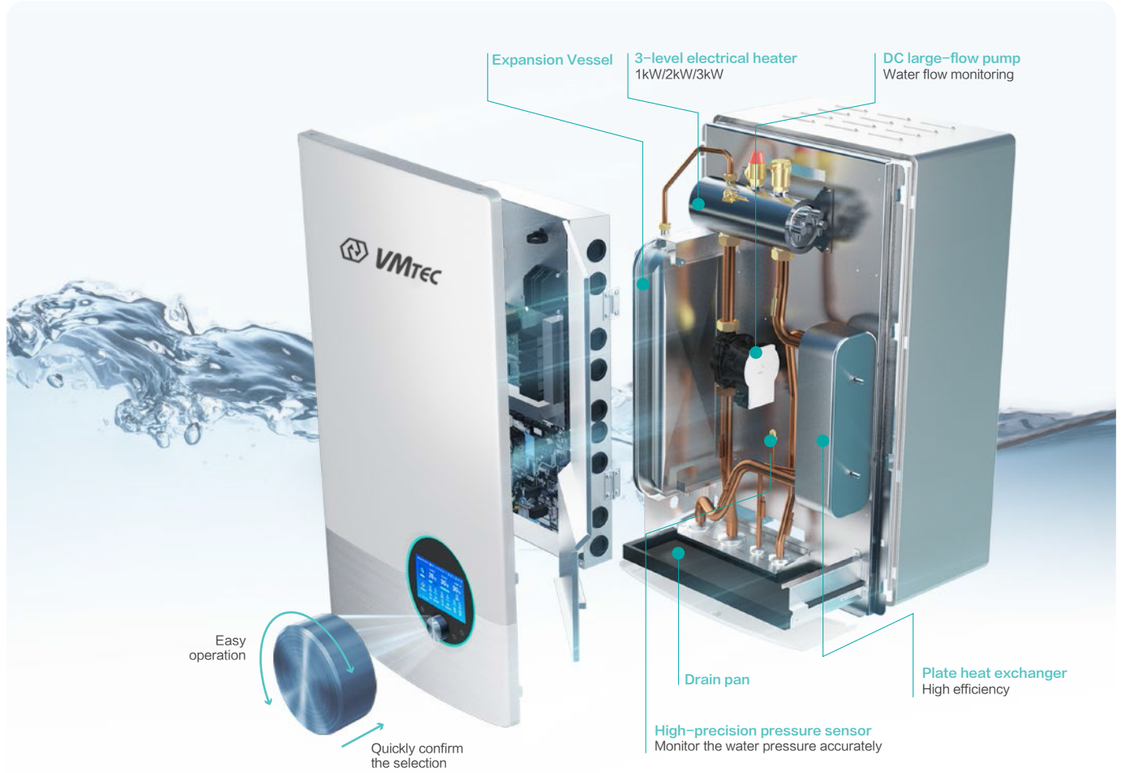
Hi-Mit II Adaptor

Compact Size and Easy Transportation

Compact and measuring only 84cm in height, the Hi-Therma Monobloc is perfect for easy placement on residential house walls. Its single fan design allows for effortless transportation in both small vans and large trucks. This unit ensures uninterrupted sunlight through windows and offers convenience and efficiency.







Colorful Touch Controller

Access and customize your device's important settings with ease through the colorful touch controller, enabling precise temperature and mode adjustments with just a few taps.

*Note: Standard for Monobloc and optional for split



HSXM-FE01

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

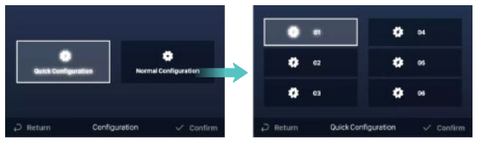
Sliding Interface

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

One-click Configuration

Configure your device with ease using the new "One-click Configuration" feature that allows for quick setup in just 3 simple steps, with the ability to preset up to 6 scenarios for ultimate convenience and simplicity. *

*Note: Only supports pre-stored maximum of 6 scenarios.



Stylish Controller in Indoor Unit

Excellent human-computer interaction experience

The indoor unit 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.



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.

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.

Plate Heat Efficiency and Anti-Freeze

Hi-therma Integra is equipped with advanced major components including a high-efficiency plate heat exchanger, DC large-flow pump, 3-level electric heater, and large volume water tank, ensuring the in-house installation is easy and free of water freezing issues.



Premium Stainless Steel Water Tank

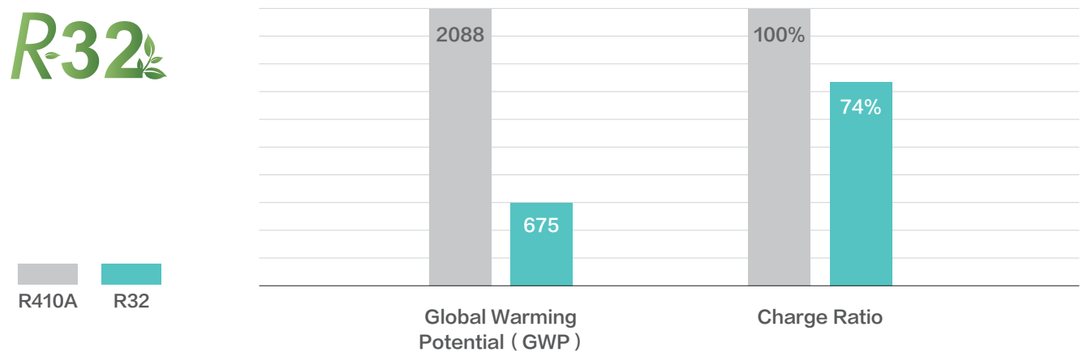
Featuring a DUPLEX 2205 material that delivers high-quality water with minimal maintenance costs, the water tank also comes standard with electric heating and sterilization functions that can be controlled separately.
For areas with poor water quality, the optional electronic anode provides an extra layer of protection for enhancing corrosion resistance and extending the tank's lifespan.

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 CO2 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



Save Space

Integration of the water tank and control components together can save you up to 30% space in your home or facility, giving you more opportunities and possibilities to use your space for other things.

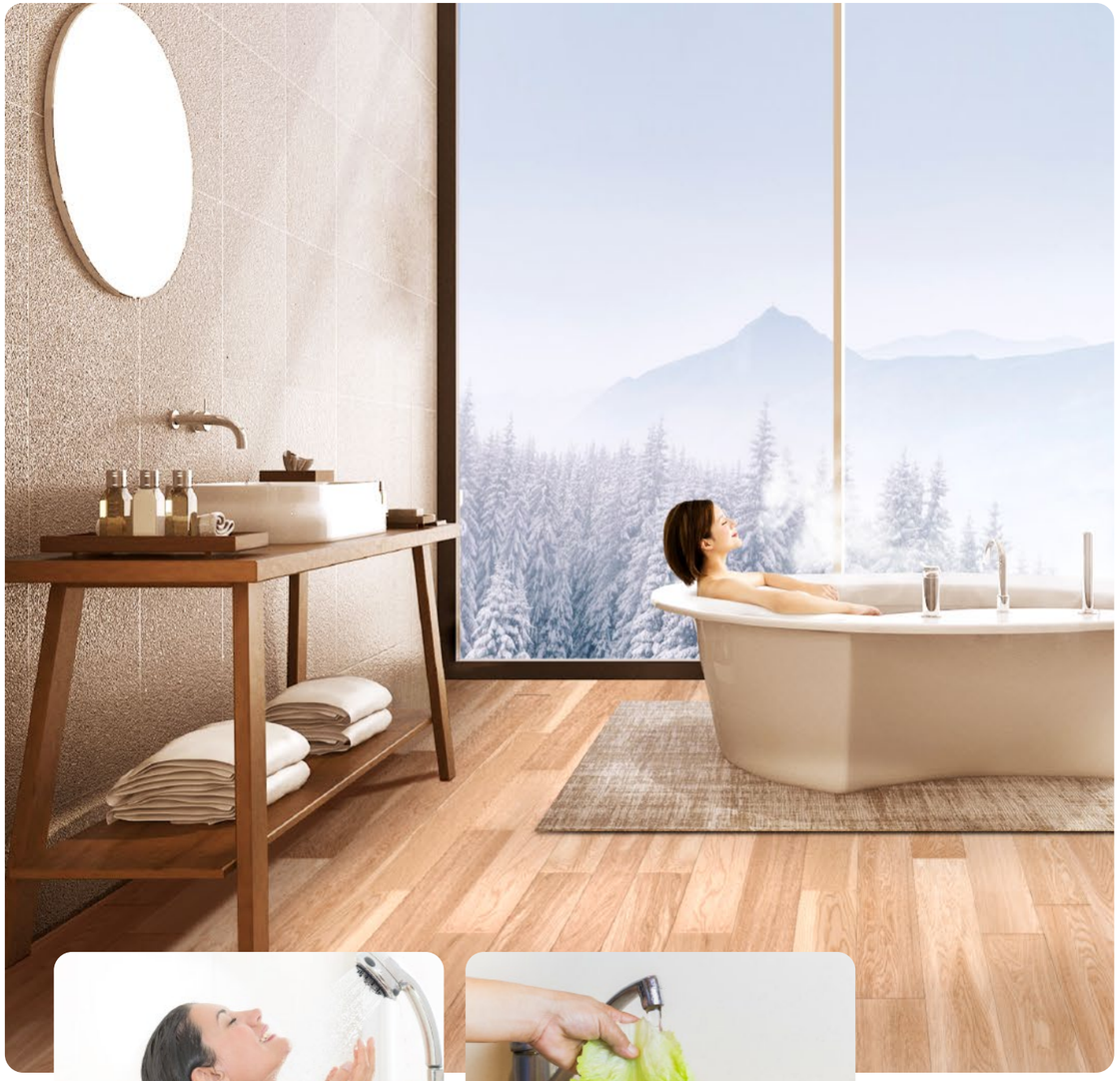


Note: *Compared to Hi-Therma Split + 230L DHW Tank.

Easy Transportation

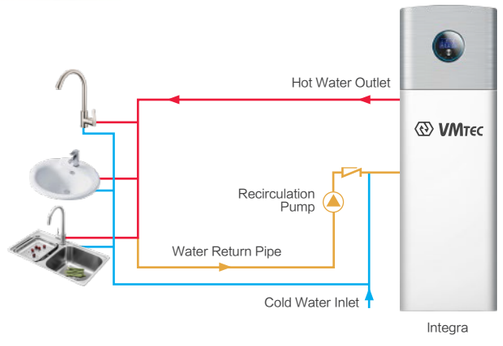
Especially designed with a one-piece-fits-all size, transporting or moving it with any cart or trolley becomes easy and convenient. Place it wherever you like without a hassle.





Zero Cold Water

With a circulating pump equipped in pipeline, Integra can cycle cold water into the heater, creating a constant flow of heat within the pipeline, for continuous hot water. No buffer time required. Your entire house or facility will always have set-temperature hot water for instant use.



Integra

High Efficiency and Excellent Performance

- R32 Eco-friendly refrigerant
- A+++ energy efficiency
- Interlock with 3rd party heat source
- -25℃ stable operation
- 75℃ domestic hot water
- Max 65℃ outlet water temperature
- Smart grid interlock and PV enabled
- High-efficiency DC pump

User Convenience

- Reddot award design
- Two separate temp. cycles
- Up to 7 rooms with independent temp. control
- Low noise operation
- Night shift mode operation
- Centralized control and individual control
- Screed drying
- Swimming pool heating
- Visual display of energy consumption

High Intelligence

- Smart App control
- Intuitive interface of controllers
- Smart hint

Easy Installation and Maintenance

- Hi-Checker
- Water pressure and water flow monitoring
- Long piping design

Product Lineup Overview

	Series	Max Temp. of Outlet Water	Power Supply	Capacity
Hi-Therma	R32 Split	60℃	AC1Φ, 220~240V/50Hz	4.4 kW
				6.0 kW
				8.0 kW
	R32 Split	65℃	AC1Φ, 220~240V/50Hz (AC 3Φ, 380~415V/50Hz)	10.0 kW
				12.0 kW
				14.0 kW
				16.0 kW
	R32 Monobloc	60℃	AC1Φ, 220~240V/50Hz	4.4 kW
				8.0 kW
	R32 Monobloc	65℃	AC1Φ, 220~240V/50Hz (AC 3Φ, 380~415V/50Hz)	10.0 kW
				12.0 kW
				14.0 kW
				16.0 kW
	R32 Integra	60℃	AC1Φ, 220~240V/50Hz	4.4 kW
				6.0 kW
				8.0 kW
	R32 Integra	65℃	AC1Φ, 220~240V/50Hz (AC 3Φ, 380~415V/50Hz)	10.0 kW
				12.0 kW
				14.0 kW
				16.0 kW

Split

Specification (4~8kW)




041-K021

HP					2.0	2.5	3.0
Model		Outdoor Unit			AHW-044HCDS1	AHW-060HCDS1	AHW-080HCDS1
Power Supply						AC 1Φ, 220~240V/50Hz	
Nominal Heating Operation*1	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
Nominal Cooling Operation*1	OAT (DB) 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
Seasonal Performance*2	Water Outlet 35℃	SCOP		–	5.00	4.93	4.92
		Seasonal Heating Efficiency (ηs)		%	197	194	194
		Energy Rating		–	A+++	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.23	3.33	3.42
		Seasonal Heating Efficiency (ηs)		%	126	130	134
		Energy Rating		–	A++	A++	A++
	Water Outlet 18℃	SEER		–	8.87	8.73	8.54
		Seasonal Cooling Efficiency (ηs)		%	352	346	339
	Water Outlet 7℃	SEER		–	5.75	5.85	5.73
		Seasonal Cooling Efficiency (ηs)		%	227	231	226
Sound Pressure*3	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
Recommended Fuse				A	16	16	16
Outer Dimensions	Height × Width × Depth			mm	750 × 900 × 340		
Packing Dimensions	Height × Width × Depth			mm	807 × 1022 × 445		
Weight(Net/Gross)				kg	48.5/52.5	48.5/52.5	49.0/53.5
Refrigerant System	Compressor	Type		—	Rotary		
	Refrigerant Charge	Type		—	R32		
		Before Shipment		kg	0.98	0.98	1.05
	Piping	Gas Pipe		mm(in.)	Φ12.7(1/2)	Φ12.7(1/2)	Φ15.88(5/8)
		Liquid Pipe		mm	Φ6.35(1/4)	Φ6.35(1/4)	Φ6.35(1/4)
	Min. Piping Length			m	4		
	Max. Chargeless Piping Length			m	8		
	Max. Piping Length			m	40	40	45
	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		
		Tank Water Temperature		℃	30~55(75*4)		
	Cooling	Outdoor Ambient Temperature		℃ (DB)	5~46		
		Outlet Water Temperature		℃	5~22		
Indoor Unit					AHM-044HCDSAA	AHM-060HCDSAA	AHM-080HCDSAA
Power Supply	—				AC 1Φ, 220~240V/50Hz		
Water Flow Rate	IWT: 30℃ / OWT: 35℃ ΔT: 5℃			m^3/h	1.21	1.53	1.90
	IWT: 47℃ / OWT: 55℃ ΔT: 8℃			m^3/h	0.65	0.81	0.97
Min. Water Flow Rate				m^3/h	0.50	0.60	0.60
DC Water Pump	Net Lift Pressure			m	6.2	4.7	3.2
	Max. Lift Pressure			m	7.6		
	Max. Water Flow Rate			m^3/h	3.5		
	Energy Efficiency Class			–	A		
	Speed			–	Inverter		
	Max. Power Input			W	50		
Water Electric Heater (3 Steps)				kW	1/2/3		
Shut-off Valve with Filter	Material			–	Brass		
	Diameter			in.	G1		
	Mesh Filter			–	50		
	Type Filter			–	Self-cleaning (with back flush)		
Safety Valve				bar	3		
Shut-off Valve				–	2 pcs Supplied		
Sound Pressure				dB(A)	28	28	28
Sound Power				dB(A)	42	42	42
Recommended Fuse				A	20(40*5)		
Outer Dimensions(with connections)	Height × Width × Depth			mm	890 × 520 × 320		
Packing Dimensions	Height × Width × Depth			mm	419 × 1160 × 650		
Weight(Net/Gross)				kg	41.5/48.5	41.5/48.5	42.5/49.5
Refrigerating Installation	Connection Type			–	Flare Nut Connection		
	Gas Pipe			mm(in.)	Φ12.7(1/2)	Φ12.7(1/2)	Φ15.88(5/8)
	Liquid Pipe			mm(in.)	Φ6.35(1/4)	Φ6.35(1/4)	Φ6.35(1/4)
Water Installation	Connection type			–	Screwed Connection		
	Shutdown valves			in.	G1"~ G1"(female)		
	Inlet pipe diameter			in.	G1"(male)		
	Outlet pipe diameter			in.	G1"(male)		

NOTES:
*1: Heating/Cooling nominal performances at full load conditions according to EN 14511. Pipe length 7.5 m; height difference ODU/IDU 0 m; heating performance are integrated (included defrost cycles).
*2: According to EN14825. Climate Zone AVERAGE. Energy efficiency scale from A +++ to D.
*3: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.
*4:When there is an DHW electric heater mounted in the DHW tank ,the setting temperature can reach 75℃.
*5: The value is the data when electric heater is working.
OAT: Outdoor ambient temperature; IWT: Inlet water temperature; OWT: Outlet water temperature

Specification (10~16kW)




011-1W0633
011-1W0634

Outdoor Unit	Power Supply	AC 1Φ, 220~240V/50Hz		—	AHW-100HCDS1	AHW-120HCDS1	AHW-140HCDS1	AHW-160HCDS1
		AC 3Φ, 380~415V/50Hz		—	AHW-100HEDS1	AHW-120HEDS1	AHW-140HEDS1	AHW-160HEDS1
Nominal Heating Operation*1	OAT (DB/WB) 7/6℃	IWT/OWT 30 / 35℃	Capacity (Nom./Max.)	kW	10.0/12.5	12.0/14.5	14.0/16.0	16.0/18.0
			COP (Nom.)	–	5.10	4.95	4.80	4.60
		IWT/OWT 47 / 55℃	Capacity (Nom./Max.)	kW	9.0/11.0	11.2/13.0	13.0/15.0	15.0/17.0
			COP (Nom.)	–	3.10	3.05	3.05	2.95
	OAT (DB/WB) −7 / −8℃	IWT/OWT 30 / 35℃	Capacity (Nom./Max.)	kW	9.5/9.5	10.8/10.8	13.5/13.5	14.0/14.0
			COP (Nom.)	–	3.10	3.00	2.85	2.80
		IWT/OWT 47 / 55℃	Capacity (Nom./Max.)	kW	8.0/8.0	8.5/8.5	10.0/10.0	11.0/11.0
			COP (Nom.)	–	2.15	2.10	2.05	2.00
Nominal Cooling Operation*1	OAT (DB) 35℃	IWT/OWT 12 / 7℃	Capacity (Nom.)	kW	8.5	10.0	11.0	13.0
			EER (Nom.)	–	3.00	2.85	2.85	2.70
		IWT/OWT 23 / 18℃	Capacity (Nom.)	kW	9.0	11.0	14.0	15.5
			EER (Nom.)	–	4.50	4.10	4.20	3.90
Seasonal Performance*2	Water Outlet 35℃	SCOP		–	4.83	4.76	4.61	4.49
		Seasonal Heating Efficiency (ηs)		%	190.0	187.0	181.0	177.0
		Energy Rating		–	A+++	A+++	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.58	3.46	3.29	3.28
		Seasonal Heating Efficiency (ηs)		%	140.0	135.0	129.0	128.0
		Energy Rating		–	A++	A++	A++	A++
Sound Pressure*3	Normal Mode			dB(A)	48	49	51	53
	Low Noise Mode			dB(A)	43	46	46	48
	Night Shift Mode			dB(A)	42	42	44	44
Sound Power	Normal Mode			dB(A)	62	64	66	67
Fan	Condenser Fan Quantity			—	1	1	1	1
	Air Flow Rate			m^3/h	3900	3900	4200	4200
Outer Dimensions	Height × Width × Depth			mm	840 × 1100 × 390			
Packing Dimensions	Height × Width × Depth			mm	1000 × 1185 × 530			
Weight(Net/Gross)				kg	77.0 /92.0	77.0 /92.0	90.5 /105.5	90.5 /105.5
Refrigerant System	Compressor	Type		—	Rotary			
	Refrigerant Charge	Type		—	R32			
		Before Shipment		kg	1.8	1.8	2.7	2.7
	Piping	Gas Pipe		mm(in.)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
		Liquid Pipe		mm(in.)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)
	Min. Piping Length			m	4			
	Max. Chargeless Piping Length			m	15			
	Max. Piping Length			m	50			
	Height Difference between ODU and IDU	ODU is Higher		m	30	30	30	30
		IDU is Higher		m	20	20	20	20
Operation Range	Heating	Outdoor Ambient Temperature		℃ (DB)	−25~35			
		Outlet Water Temperature		℃	20~65			
	DHW	Outdoor Ambient Temperature		℃ (DB)	−25~43			
		Tank Water Temperature		℃	30~60 (75*4)			
	Cooling	Outdoor Ambient Temperature		℃ (DB)	5~46			
		Outlet Water Temperature		℃	5~22			
Indoor Unit	Power Supply	AC 1Φ, 220~240V/50Hz,		—	AHM-100HCDSAA	AHM-120HCDSAA	AHM-140HCDSAA	AHM-160HCDSAA
		AC 3Φ, 380~415V/50Hz		—	AHM-100HEDSAA	AHM-120HEDSAA	AHM-140HEDSAA	AHM-160HEDSAA
Water Flow Rate	IWT: 30℃ / OWT: 35℃ ΔT: 5℃			m^3/h	1.72	2.06	2.41	2.75
Min. Water Flow Rate				m^3/h	0.8	0.9	1.1	1.2
DC Water Pump	Max. Lift Pressure			m	12			
	Max. Water Flow Rate			m^3/h	5.6			
	Type			–	Inverter			
	Max. Power Input			W	180			
Water Electric Heater (3 Steps)				kW	2/4/6			
Shut-off Valve with Filter	Diameter			in.	G1			
	Mesh Filter			–	50			
Safety Valve				bar	3			
Shut-off Valve				–	2 pcs Supplied			
Sound Pressure				dB(A)	29	29	29	29
Sound Power				dB(A)	44	44	44	44
Outer Dimensions(with connections)	Height × Width × Depth			mm	890 × 520 × 320			
Packing Dimensions	Height × Width × Depth			mm	420 × 1160 × 650			
Weight(Net/Gross)				kg	47/53.5	47/53.5	49.5/56.5	49.5/56.5
Refrigerating Installation	Connection Type			–	Flare Nut			
	Gas Pipe			mm(in.)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
	Liquid Pipe			mm(in.)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)
Water Installation	Connection type			–	Screwed Connection			
	Shutdown valves			in.	G1"~ G1"(femal)			
	Inlet pipe diameter			in.	G1"(male)			
	Outlet pipe diameter			in.	G1"(male)			

NOTES:
*1: Heating/Cooling nominal performances at full load conditions according to EN 14511. Pipe length 7.5 m; height difference ODU/IDU 0 m; heating performance are integrated (included defrost cycles).
*2: According to EN14825. Climate Zone AVERAGE. Energy efficiency scale from A +++ to D.
*3: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.
*4: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

Monobloc

Specification (4~8kW)



041-K021

Model					AHZ-044HCDS1	AHZ-080HCDS1
Power Supply					220-240V ~50Hz	
Heating Operation*1	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*1	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
Seasonal Performance*2	Water Outlet 35℃	SCOP		–	5.17	5.00
		Seasonal Heating Efficiency (η s)		%	204	197
		Energy Rating		–	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.47	3.50
		Seasonal Heating Efficiency (η s)		%	136	137
		Energy Rating		–	A++	A++
Sound Pressure*3	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	Height × Width × Depth			mm	815 × 1270 × 340	815 × 1270 × 340
Packing Dimensions	Height × Width × Depth			mm	890 × 1400 × 440	890 × 1400 × 440
Net Weight				kg	88	88
Gross Weight				kg	104	105
Refrigerant System	Compressor	Type		—	Rotary	
	Refrigerant 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	
		Tank Water Temperature		℃	30~55(75*4)	
	Cooling	Outdoor Ambient Temperature		℃ (DB)	5~46	
		Outlet Water Temperature		℃	5~22	
Nominal Water Flow	IWT: 30℃ / OWT: 35℃ ΔT: 5℃			m^3/h	0.77	1.38
Min. Water Flow Rate				m^3/h	0.50	0.60
DC Water Pump	Max. Lift Pressure			m	9	
	Max. Water Flow Rate			m^3/h	4.5	
	Speed			–	Inverter	
	Max. Power Input			W	87	
Water Electric Heater				kW	External (Optional)	
Safety Valve				bar	3	
Shut-off Valve				–	2 pcs Supplied	
Water Installation	Connection Type			–	Screwed Connection	
	Shutdown Valves			in.	G 1" - G 1" (female)	
	Inlet Pipe Diameter			in.	G 1" (female)	
	Outlet Pipe Diameter			in.	G 1" (female)	

NOTES:
*1: Heating/Cooling nominal performances at full load conditions according to EN 14511.
Pipe length 7.5 m; height difference ODU/IDU 0 m; heating performance are integrated (included defrost cycles).
*2: According to EN14825. Climate Zone AVERAGE. Energy efficiency scale from A +++ to D.
*3: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.
*4: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

Specification (10~16kW)



011-1W0661/0662

Model					100(3.5HP)	120(4.0HP)	140(5.0HP)	160(6.0HP)	100(3.5HP)	120(4.0HP)	140(5.0HP)	160(6.0HP)
Unit Type					AHZ-100HCDS1	AHZ-120HCDS1	AHZ-140HCDS1	AHZ-160HCDS1	AHZ-100HEDS1	AHZ-120HEDS1	AHZ-140HEDS1	AHZ-160HEDS1
Power Supply					1N, 220-240V, 50Hz				3N, 380-415V, 50Hz			
	OAT (DB/WB)	IWT / OWT	–	Unit	Parameters							
Nominal Heating Operation*1	7 / 6℃	30 / 35℃	Capacity (Min./Nom./Max.)	kW	3.3/10.0/12.5	3.8/12.0/14.5	4.32/14.0/16.0	4.86/16.0/18.0	3.3/10.0/12.5	3.8/12.0/14.5	4.32/14.0/16.0	4.86/16.0/18.0
			COP (Nom.)	–	5.10	4.95	4.80	4.60	5.10	4.95	4.80	4.60
		47 / 55℃	Capacity (Nom./Max.)	kW	9.0/11.1	11.2/13.1	13.0/15.0	15.0/17.0	9.0/11.1	11.2/13.1	13.0/15.0	15.0/17.0
			COP (Nom.)	–	3.10	3.05	3.05	2.95	3.10	3.05	3.05	2.95
	−7 / −8℃	30 / 35℃	Capacity (Nom./Max.)	kW	9.5/9.5	10.8/10.8	13.5/13.5	14.0/14.0	9.5/9.5	10.8/10.8	13.5/13.5	14.0/14.0
			COP (Nom.)	–	3.10	3.00	2.85	2.80	3.10	3.00	2.85	2.80
		47 / 55℃	Capacity (Nom./Max.)	kW	8.0/8.0	8.5/8.5	10.0/10.0	11.0/11.0	8.0/8.0	8.5/8.5	10.0/10.0	11.0/11.0
			COP (Nom.)	–	2.20	2.15	2.10	2.00	2.20	2.15	2.10	2.00
Nominal Cooling Operation*1	35 / −−℃	12 / 7℃	Nominal Capacity	kW	8.5	10	11	13	8.5	10	11	13
			EER	–	3.15	3.00	2.90	2.85	3.15	3.00	2.90	2.85
		23 / 18℃	Nominal Capacity	kW	9	11	14	15.5	9	11	14	15.5
			EER	–	4.50	4.10	4.20	3.90	4.50	4.10	4.20	3.90
Seasonal Performance*2	Water Outlet 35℃	SCOP		–	4.9	4.87	4.59	4.47	4.9	4.87	4.59	4.47
		Seasonal Heating Efficiency (η s)		%	193	192	181	176	193	192	181	176
		Energy Rating		–	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.62	3.47	3.37	3.35	3.62	3.47	3.37	3.35
		Seasonal Heating Efficiency (η s)		%	142	136	132	131	142	136	132	131
		Energy Rating		–	A++	A++	A++	A++	A++	A++	A++	A++
Sound Pressure*3	Normal Mode (Heating/Cooling)			dB(A)	47/47	49/49	51/51	53/53	47/47	49/49	51/51	53/53
	Low Noise Mode (Heating/Cooling)			dB(A)	44/44	46/46	47/47	49/49	44/44	46/46	47/47	49/49
	Night shift Mode ((Heating/Cooling)			dB(A)	44/44	45/45	45/45	45/45	44/44	45/45	45/45	45/45
Sound Power	Normal Mode (Heating/Cooling)			dB(A)	62/62	64/64	66/66	67/67	62/62	64/64	66/66	67/67
Fan	Condenser Fan Quantity			–	1	1	1	1	1	1	1	1
	Air Flow Rate			m^3/h	3900	3900	4200	4200	3900	3900	4200	4200
Outer Dimensions	Height × Width × Depth			mm	840 × 1376 × 390				840 × 1376 × 390			
Packing Dimensions	Height × Width × Depth			mm	995 × 1460 × 530				995 × 1460 × 530			
Net Weight				kg	108		123		110.5		125	
Gross Weight				kg	127		142		129		144	
Refrigerant System	Compressor	Type		–	Rotary							
	Refrigeration Oil	Type		–	FW68S	FW68S	FW68S	FW68S	FW68S	FW68S	FW68S	FW68S
		Charge		L	0.87	0.87	1.25	1.25	0.87	0.87	1.25	1.25
	Refrigeration Charge	Type		–	R32							
		Before Shipment		kg	1.5	1.5	2.0	2.0	1.5	1.5	2.0	2.0
Operation Range	Heating	Outdoor Ambient Temperature		℃ (DB)	−25~35							
		Outlet Water Temperature		℃	20~65							
	DHW	Outdoor Ambient Temperature		℃ (DB)	−25~43							
		Tank water temperature		℃	30~60(75*2)							
	Cooling	Outdoor Ambient Temperature		℃ (DB)	5~46							
		Outlet Water Temperature		℃	5~22							
Water Flow Rate	IWT: 30℃ / OWT: 35℃ ΔT: 5℃			m^3/h	1.72	2.06	2.41	2.75	1.72	2.06	2.41	2.75
DC Water Pump	Max. Lift Pressure			m	12.5							
	Max. Water Flow Rate			m^3/h	4							
	Type			–	Inverter							
	Max. Power Input			W	180							
Safety valve				–	Yes (3 bar)							
Shut-off valve				in.	1", DN25							
Water Installation	Connection type			–	Screwed connection							
	Shutdown valves			mm (in.)	G 1" (female) - G 1" (female)							
	Inlet pipe diameter			mm (in.)	G 1" (male)							
	Outlet pipe diameter			mm (in.)	G 1" (male)							

NOTES:
*1: Heating/Cooling nominal performances at full load conditions according to EN 14511.
Pipe length 7.5 m; height difference ODU/IDU 0 m; heating performance are integrated (included defrost cycles).
*2: According to EN14825. Climate Zone AVERAGE. Energy efficiency scale from A +++ to D.
*3: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.
*4: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

Integra

Specification (4~8kW)

System Performance



011-1W0579
011-1W0580

HP					2.0HP	2.5HP	3.0HP
Outdoor Unit Type				–	AHW-044HCDS1	AHW-060HCDS1	AHW-080HCDS1
Power Supply				–	220~240V ~50Hz		
Nominal Heating Operation*1	OAT (DB/WB)	IWT / OWT	–	Unit	Parameters		
	7 / 6℃	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
		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
	-7 / -8℃	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
		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
Nominal Cooling Operation*1	35 / -- ℃	12 / 7℃	Nominal Capacity	kW	4.40	5.00	6.00
			EER	–	3.90	3.70	3.60
		23 / 18℃	Nominal Capacity	kW	5.60	6.00	7.00
			EER	–	5.60	5.60	5.10
Seasonal Performance*2	Water Outlet 35℃	SCOP		–	5.00	4.93	4.92
		Seasonal Heating Efficiency (ηs)		%	197	194	194
		Energy Rating		–	A+++	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.23	3.33	3.42
		Seasonal Heating Efficiency (ηs)		%	126	130	134
		Energy Rating		–	A++	A++	A++
Water heating energy efficiency (ηwh)				%	135	135	135
Water heating energy class				–	A+	A+	A+
Sound Pressure*3	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
Outer Dimensions	Height × Width × Depth			mm	750 × 900 × 340		
Packing Dimensions	Height × Width × Depth			mm	807 × 1022 × 445		
Net Weight				kg	48.5	48.5	49
Gross Weight				kg	52.5	52.5	53.5
Refrigerant System	Compressor	Type		–	Rotary		
		Quantity		–	1	1	1
	Refrigeration Charge	Type		–	R32		
		Before Shipment		kg	0.98	0.98	1.05
	Gas Pipe			mm	Φ12.7	Φ12.7	Φ15.88
				in.	1/2	1/2	5/8
	Liquid Pipe			mm	Φ6.35	Φ6.35	Φ6.35
				in.	1/4	1/4	1/4
	Minimum piping length				4		
	Maximum chargeless piping length				8		
	Maximum piping length				40	40	45
	Height difference between ODU and IDU		ODU is Higher		30	30	30
			IDU is Higher		20	20	20
Working range (Heating)	Outdoor ambient temperature			℃(DB)	-25~35		
	Outlet water temperature			℃	15~60		
Working range (Cooling)	Outdoor ambient temperature			℃(DB)	5~46		
	Outlet water temperature			℃	5~22		
Working range (DHW)	Outdoor ambient temperature			℃(DB)	-25~40℃		
	Tank water temperature			℃	30~55(75)*4		

Indoor Unit Model			AHS-044HCDSAA-23	AHS-060HCDSAA-23	AHS-080HCDSAA-23
Power supply			220~240V ~50Hz		
Nominal water flow	IWT: 30℃ / OWT: 35℃ ΔT: 5℃	m^3/h	0.76	1.03	1.38
DC Water Pump	Max. Lift Pressure	m	9		
	Max. Water Flow Rate	m^3/h	4.5		
	Type	–	Inverter		
	Max. Power Input	W	95		
Water Electric Heater for heating(3 Steps)		kW	1/2/3		
Shut-off valve with filter	Material	–	Brass		
	Diameter	in.	1		
	Mesh	–	50		
	Type	–	Self-cleaning (with back flush)		
Outer Dimensions	Height × Width × Depth	mm	1885 × 590 × 625		
Packing Dimensions	Height × Width × Depth	mm	2070 × 700 × 710		
Net Weight		kg	124.5	124.5	125.0
Gross Weight		kg	145.0	145.0	145.5
Refrigerating Installation	Connection type	–	Flare nut connection		
	Liquid pipe (Piping diameter)	mm (in.)	Φ6.35 (1/4")	Φ6.35 (1/4")	Φ6.35 (1/4")
	Gas pipe (Piping diameter)	mm (in.)	Φ12.70 (1/2")	Φ12.70 (1/2")	Φ15.88 (5/8")
Space heating pipes connection	Connection type	–	Screwed Connection		
	Shut-off valves	mm (in.)	G 1"- G 1"(female)		
	Inlet pipe diameter	mm (in.)	G 1"(female)		
	Outlet pipe diameter	mm (in.)	G 1"(female)		
DHW pipes connection	Connection type	–	Screwed Connection		
	Inlet pipe diameter	mm (in.)	G 3/4"(female)		
	Outlet pipe diameter	mm (in.)	G 3/4"(female)		
DHW tank rated volume		L	230L		
Noise level (sound pressure)*1		dB(A)	26	26	26
Noise level (sound power)		dB(A)	42	42	42

NOTES:
*1: Heating/Cooling nominal performances at full load conditions according to EN 14511. Pipe length 7.5 m; height difference ODU/IDU 0 m; heating performance are integrated (included defrost cycles).
*2: According to EN14825. Climate Zone AVERAGE. Energy efficiency scale from A +++ to D.
*3: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.
*4: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

Specification (10~16kW)

System Performance



011-1W0663
011-1W0664

HP					100(3.5 HP)	120(4.0 HP)	140(5.0 HP)	160(6.0 HP)	100(3.5 HP)	120(4.0 HP)	140(5.0 HP)	160(6.0 HP)
Outdoor Unit Type				–	AHW-100HCDS1	AHW-120HCDS1	AHW-140HCDS1	AHW-160HCDS1	AHW-100HEDS1	AHW-120HEDS1	AHW-140HEDS1	AHW-160HEDS1
Power Supply				–	220~240V ~50Hz				380~415V 3N~50Hz			
Nominal Heating Operation*1	OAT (DB/WB)	IWT / OWT	–	Unit	Parameters							
	7 / 6℃	30 / 35℃	Capacity (Min./Nom./Max)	kW	3.25/10.00/12.50	3.77/12.00/14.50	4.32/14.00/16.00	4.86/16.00/18.00	3.25/10.00/12.50	3.77/12.00/14.50	4.32/14.00/16.00	4.86/16.00/18.00
			COP (Nom.)	–	5.10	4.95	4.80	4.60	5.10	4.95	4.80	4.60
		47 / 55℃	Capacity (Nom./Max.)	kW	9.00 / 11.00	11.20 / 13.00	13.00 / 15.00	15.00 / 17.00	9.00 / 11.00	11.20 / 13.00	13.00 / 15.00	15.00 / 17.00
			COP (Nom.)	–	3.1	3.05	3.05	2.95	3.10	3.05	3.05	2.95
	-7 / -8℃	30 / 35℃	Capacity (Nom./Max.)	kW	9.50 / 9.50	10.80 / 10.80	13.50 / 13.50	14.00 / 14.00	9.50 / 9.50	10.80 / 10.80	13.50 / 13.50	14.00 / 14.00
			COP (Nom.)	–	3.1	3	2.85	2.8	3.10	3.00	2.85	2.80
		47 / 55℃	Capacity (Nom./Max.)	kW	8.00 / 8.00	8.50 / 8.50	10.00 / 10.00	11.00 / 11.00	8.00 / 8.00	8.50 / 8.50	10.00 / 10.00	11.00 / 11.00
			COP (Nom.)	–	2.15	2.1	2.05	2	2.15	2.10	2.05	2.00
Nominal Cooling Operation*1	35 / -- ℃	12 / 7℃	Nominal Capacity	kW	8.5	10	11	13	8.5	10.0	11.0	13.0
			EER	–	3	2.85	2.85	2.7	3.00	2.85	2.85	2.70
		23 / 18℃	Nominal Capacity	kW	9	11	14	15.5	9.0	11.0	14.0	15.5
			EER	–	4.5	4.1	4.2	3.9	4.50	4.10	4.20	3.90
Seasonal Performance*2	Water Outlet 35℃	SCOP		–	4.83	4.76	4.61	4.49	4.83	4.76	4.61	4.49
		Seasonal Heating Efficiency (ηs)		%	190.0	187.0	181.0	177.0	190.0	187.0	181.0	177.0
		Energy Rating		–	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
	Water Outlet 55℃	SCOP		–	3.58	3.46	3.29	3.28	3.58	3.46	3.29	3.28
		Seasonal Heating Efficiency (ηs)		%	140.0	135.0	128.0	128.0	140.0	135.0	129.0	128.0
		Energy Rating		–	A++	A++	A++	A++	A++	A++	A++	A++
Water heating energy efficiency (ηwh)				%	126.00	126.00	124.00	124.00	124.00	124.00	117.00	117.00
Water heating energy class				–	A+	A+	A+	A+	A+	A+	A	A
Sound Pressure*3	Normal Mode			dB(A)	48	49	51	53	48	49	51	53
	Low Noise Mode (Heating)			dB(A)	43	46	46	48	43	46	46	48
	Night Shift Mode (Heating)			dB(A)	42	42	44	44	42	42	44	44
Sound Power	Normal Mode			dB(A)	62	64	66	67	62	64	66	67
Fan	Condenser Fan Quantity			–	1	1	1	1	1	1	1	1
	Air Flow Rate			m^3/h	3900	3900	4200	4200	3900	3900	4200	4200
Outer Dimensions	Height × Width × Depth			mm	840 × 1100 × 390				840 × 1100 × 390			
Packing Dimensions	Height × Width × Depth			mm	1000 × 1185 × 530				1000 × 1185 × 530			
Net Weight				kg	77.0	77.0	90.5	90.5	78.0	78.0	92.5	92.5
Gross Weight				kg	92.0	92.0	105.5	105.5	93.0	93.0	107.0	107.0
Refrigerant System	Compressor	Type		–	Rotary				Rotary			
		Quantity		–	1	1	1	1	1	1	1	1
	Refrigeration Charge	Type		–	R32				R32			
		Before Shipment		kg	1.8	1.8	2.7	2.7	1.8	1.8	2.7	2.7
	Gas Pipe			mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
				in.	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8
	Liquid Pipe			mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
				in.	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Minimum piping length				4				4			
	Maximum chargeless piping length				15				15			
	Maximum piping length				50				50			
	Height difference between ODU and IDU		ODU is Higher		30				30			
			IDU is Higher		20				20			
Working range (Heating)	Outdoor ambient temperature			℃(DB)	-25~35				-25~35			
	Outlet water temperature			℃	20~65				20~65			
Working range (Cooling)	Outdoor ambient temperature			℃(DB)	5~46				5~46			
	Outlet water temperature			℃	5~22				5~22			
Working range (DHW)	Outdoor ambient temperature			℃(DB)	-25~43				-25~43			
	Tank water temperature			℃	30~60(75)*4				30~60(75)*4			

Model			100(3.5 HP)	120(4.0 HP)	140(5.0 HP)	160(6.0 HP)	100(3.5 HP)	120(4.0 HP)	140(5.0 HP)	160(6.0 HP)
Indoor Unit Type			AHS-100 HCDSAA-23	AHS-120 HCDSAA-23	AHS-140 HCDSAA-23	AHS-160 HCDSAA-23	AHS-100 HEDSAA-23	AHS-120 HEDSAA-23	AHS-140 HEDSAA-23	AHS-160 HEDSAA-23
Main Power Supply			220~240V~50Hz				220~240V~50Hz			
AEH Power Supply			220~240V~50Hz				380~415V 3N~50Hz			
Nominal water flow	IWT: 30℃ / OWT: 35℃ ΔT: 5℃	m^3/h	1.72	2.06	2.41	2.75	1.72	2.06	2.41	2.75
DC Water Pump	Max. Lift Pressure	m	12.5				12.5			
	Max. Water Flow Rate	m^3/h	4.0				4.0			
	Type	–	Inverter				Inverter			
	Max. Power Input	W	180				180			
Water Electric Heater for heating(3 Steps)		kW	2/4/6				2/4/6			
Shut-off valve with filter	Material	–	Brass				Brass			
	Diameter	in.	1				1			
	Mesh	–	50				50			
	Type	–	Self-cleaning (with back flush)				Self-cleaning (with back flush)			
Outer Dimensions	Height × Width × Depth	mm	1885 × 595 × 625				1885 × 595 × 625			
Packing Dimensions	Height × Width × Depth	mm	2070 × 700 × 710				2070 × 700 × 710			
Net Weight		kg	126.0		128.0		126.0		128.0	
Gross Weight		kg	147.5		149.0		147.5		149.0	
Refrigerating Installation	Connection type	–	Flare nut connection							
	Liquid pipe (Piping diameter)	mm (in.)	126.0	Φ9.53 (3/8")			Φ6.35 (1/4")			
	Gas pipe (Piping diameter)	mm (in.)	147.5	Φ15.88 (5/8")			Φ15.88 (5/8")			
Space heating pipes connection	Connection type	–	Screwed connection							
	Shut-off valves	mm (in.)	G 1"(female) - G 1"(female)							
	Inlet pipe diameter	mm (in.)	G 1"(female)							
	Outlet pipe diameter	mm (in.)	G 1"(female)							
DHW pipes connection	Connection type	–	Screwed connection							
	Inlet pipe diameter	mm (in.)	G 3/4"(female)							
	Outlet pipe diameter	mm (in.)	G 3/4"(female)							
DHW tank rated volume		L	230							
Noise level (sound pressure)*1		dB(A)	26	26	26	26	26	26	26	26
Noise level (sound power)		dB(A)	42	42	42	42	42	42	42	42

NOTES:
*1: Heating/Cooling nominal performances at full load conditions according to EN 14511. Pipe length 7.5 m; height difference ODU/IDU 0 m; heating performance are integrated (included defrost cycles).
*2: According to EN14825. Climate Zone AVERAGE. Energy efficiency scale from A +++ to D.
*3: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.
*4: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