

## 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 (only for 10-16kW)

# AIR TO WATER HEAT PUMP

Hi-Therma



# Hisense

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HCAC-LL-ATWESP202304

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reddot winner 2022



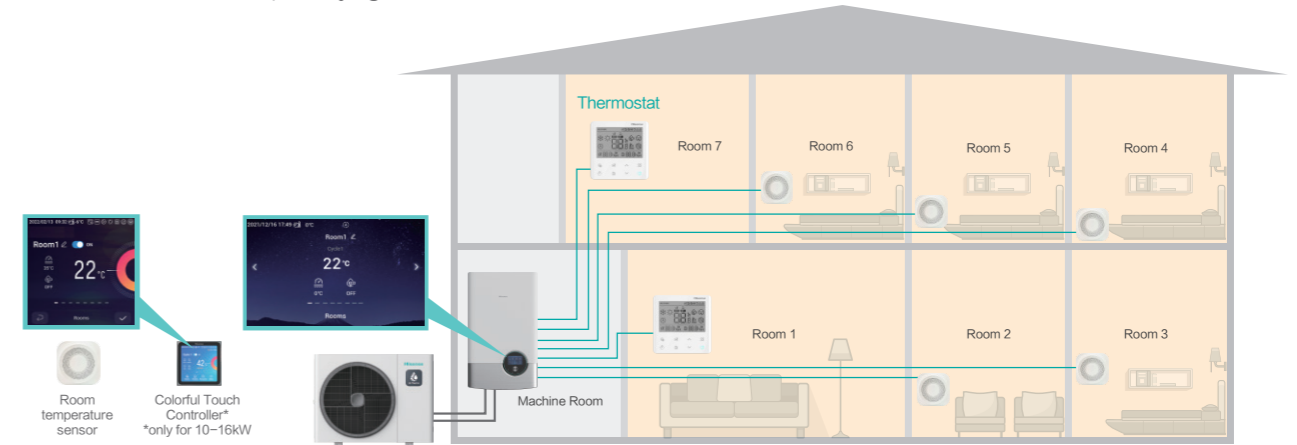
reddot winner 2022

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.



## Up to 7 Rooms with Independent Temperature Control

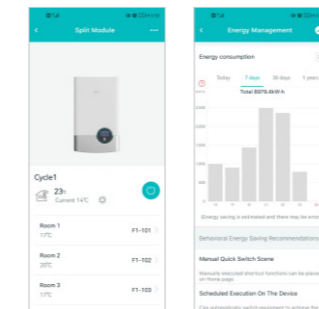
In one Hi-Therma system, the temperature of up to 7 rooms can be independently controlled through installing temperature sensors or room-thermostats in the rooms, satisfying the diverse needs of users.



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

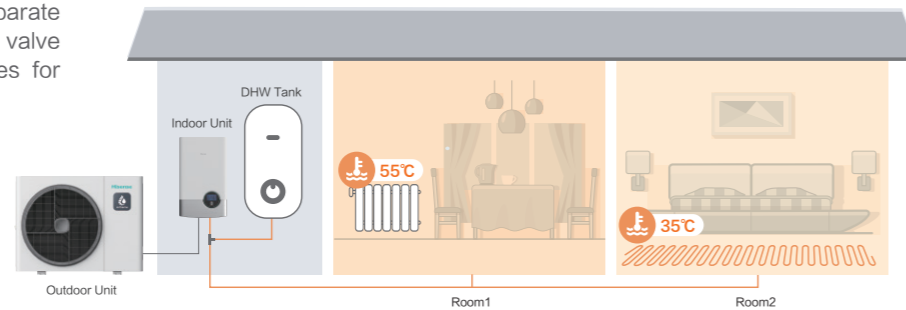
## Smart App Control

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



## 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.



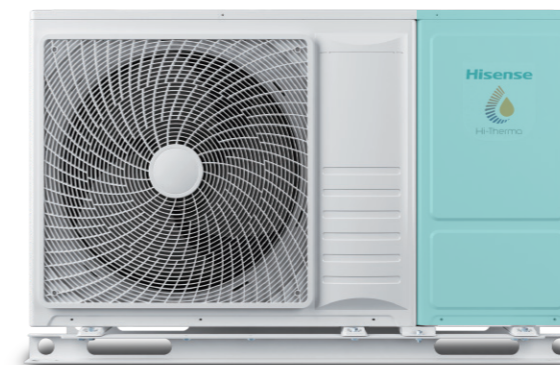
## High Efficiency A+++

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.

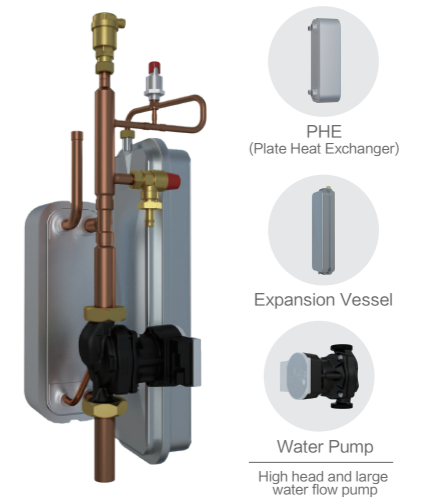


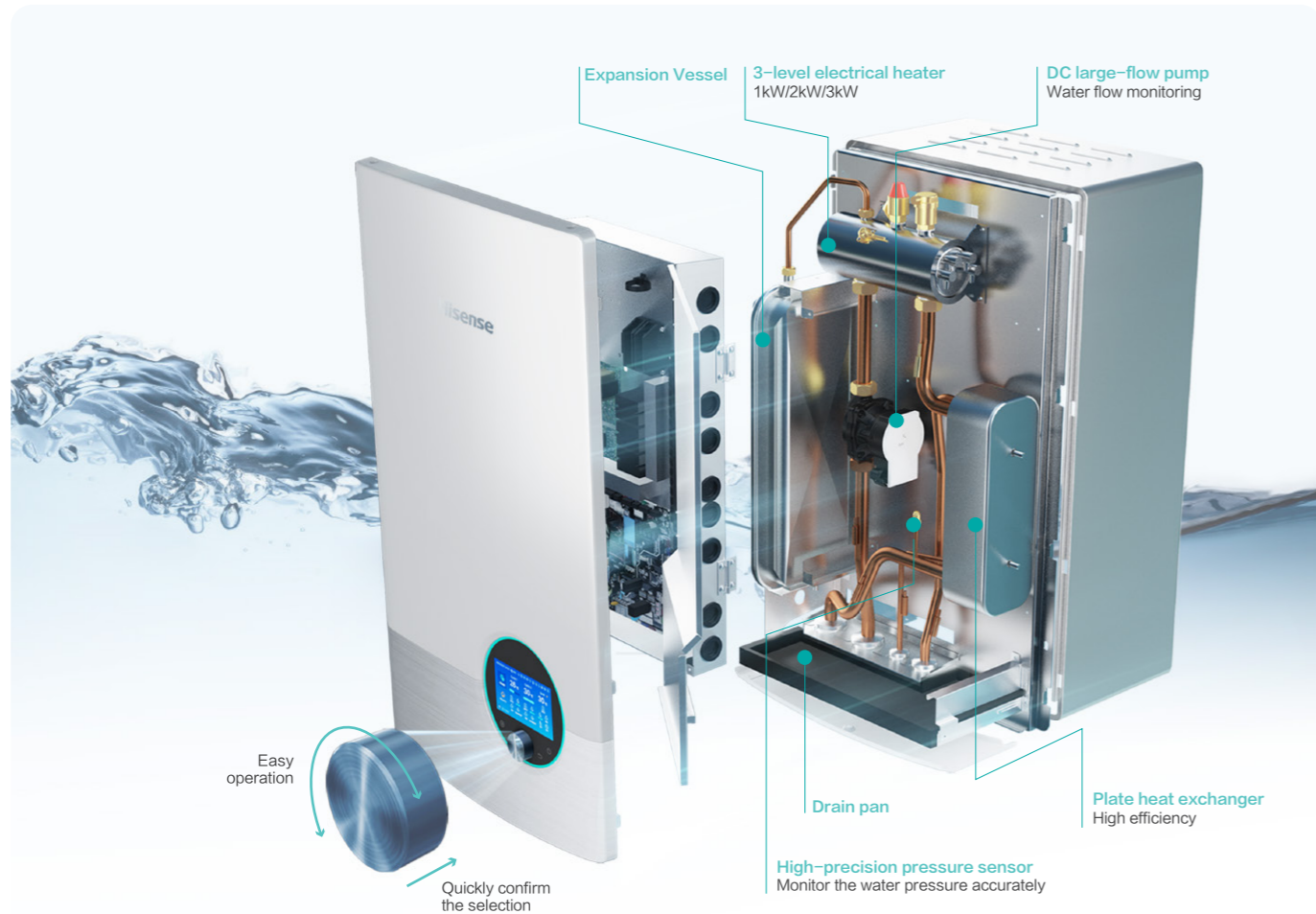
## Simplified Installation

Hi-Therma Monobloc unit featuring all-in-one design allows easy installation without additional refrigerant piping work and refrigerant charge. Only the connection of water pipes is required on site, which greatly simplifies the on-site installation work.



### Water side items included in the Monobloc





### 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.



#### HSXM-FE01

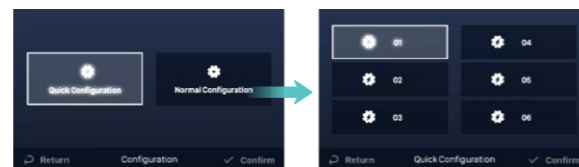
- ◆ Sleek and elegant design
- ◆ Compact, measures only 90 × 90mm
- ◆ Intuitive touch-button control

\*Note: Optional for Hi-therma Integra and Split 10-16kW.

#### 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.

## High Efficiency A+++<sup>\*1</sup> A+<sup>\*2</sup>

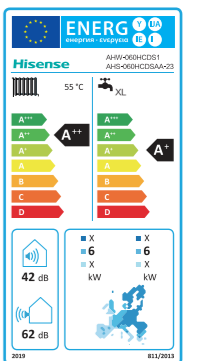
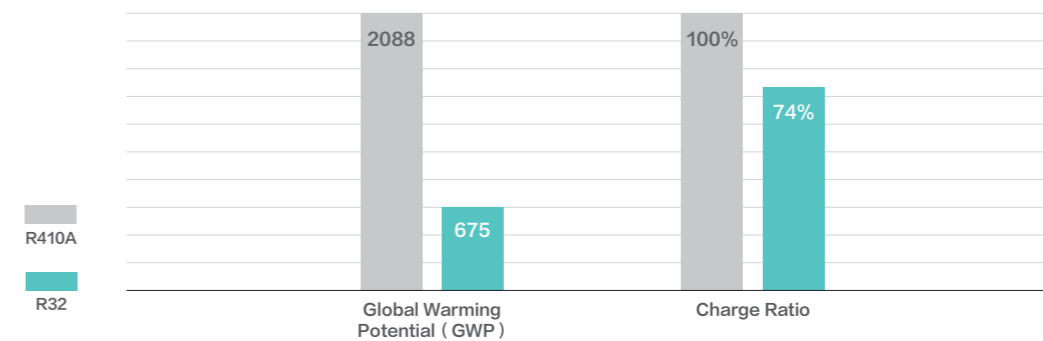
### Eco-Friendly Refrigerant R32

The R32 Refrigerant meets the F-gas regulation standards described in EU regulation 517/2014. The Hisense Hi-Therma heat pump system adopts and fully utilizes the R32 Refrigerant, which is a good solution for achieving the new European CO<sub>2</sub> 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

R-32



Notes: 1.\*1 SCOP up to 5.00 (Average climate / Low temp. application) : A+++ , SCOP up to 3.42 (Average climate / Mid temp. application) : A++  
\*2 DHW Efficiency  $\eta = 135\%$ , profile XL: A+  
2. Followed by (EU) No 811/2013, (EU) No 813/2013, (EU) No 814/2013

## Save Space

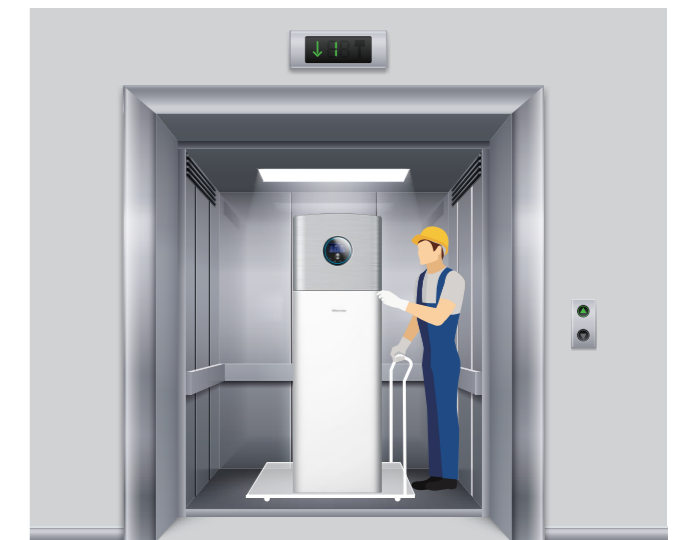
Integration of the water tank and control components together can save you up to 30% space in your home or facility, giving you more opportunities and possibilities to use your space for other things.



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

## Easy Transportation

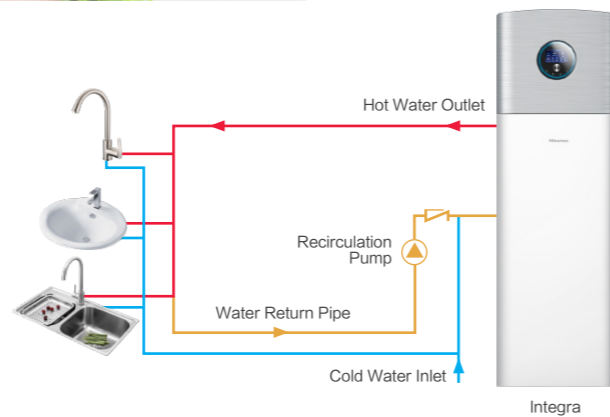
Especially designed with a one-piece-fits-all size, transporting or moving it with any cart or trolley becomes easy and convenient. Place it wherever you like without a hassle.





### 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.



#### High Efficiency and Excellent Performance

- R32 Eco-friendly refrigerant
- A+++ energy efficiency
- Interlock with 3rd party heat source
- 25°C stable operation
- 75°C domestic hot water
- Max 65°C 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
R32  Split	60°C	AC1φ, 220-240V/50Hz	4.4 kW
			6.0 kW
			8.0 kW
R32  Split	65°C	AC1φ, 220-240V/50Hz (AC 3φ, 380-415V/50Hz)	10.0 kW
			12.0 kW
			14.0 kW
			16.0 kW
			18.0 kW
R32  Monobloc	60°C	AC1φ, 220-240V/50Hz	4.4 kW
			8.0 kW
R32  Monobloc	65°C	AC1φ, 220-240V/50Hz (AC 3φ, 380-415V/50Hz)	10.0 kW
			12.0 kW
			14.0 kW
			16.0 kW
			18.0 kW
R32  Integra	60°C	AC1φ, 220-240V/50Hz	4.4 kW
			8.0 kW
R32  Integra	65°C	AC1φ, 220-240V/50Hz (AC 3φ, 380-415V/50Hz)	10.0 kW
			12.0 kW
			14.0 kW
			16.0 kW

Specification

Split (4~8kW)



HP		2.0		2.5		3.0		
Model		AHW-044HCDS1		AHW-060HCDS1		AHW-080HCDS1		
Power Supply		AC 1φ, 220-240V/50Hz		AC 1φ, 220-240V/50Hz		AC 1φ, 220-240V/50Hz		
Nominal Heating Operation*1	OAT (DB/WB) 7/6°C	IWT/OWT 30 / 35°C	Capacity (Min./Nom./Max.)	1.85 / 4.40 / 7.00	1.95 / 6.00 / 8.90	2.10 / 8.00 / 11.0		
			COP (Nom./Max.)	5.10/5.00	5.00/4.64	4.90/4.31		
			Capacity	6.00	7.50	9.00		
	OAT (DB/WB) 2/1°C	IWT/OWT 30 / 35°C	Capacity	6.10	7.20	8.50		
			COP	3.93	3.34	3.38		
			Capacity	5.20	6.60	7.20		
	OAT (DB/WB) -7 / -8°C	IWT/OWT 30 / 35°C	Capacity	5.00	5.90	7.30		
			COP	2.51	2.38	2.56		
			Capacity	4.20	5.10	6.40		
Nominal Cooling Operation*1	OAT (DB) 35°C	IWT/OWT 12 / 7°C	Nominal Capacity	4.40	5.00	6.00		
			EER	3.90	3.70	3.60		
			Nominal Capacity	5.60	6.00	7.00		
	IWT/OWT 23 / 18°C		EER	5.60	5.60	5.10		
			SCOP	5.00	4.93	4.92		
			Seasonal Heating Efficiency (ηs)	197	194	194		
	Seasonal Performance*2	Water Outlet 35°C	Energy Rating	-	A+++	A+++	A+++	
			SCOP	3.23	3.33	3.42		
			Seasonal Heating Efficiency (ηs)	126	130	134		
Water Outlet 55°C		Energy Rating	-	A++	A++	A++		
		SEER	8.87	8.73	8.54			
		Seasonal Cooling Efficiency (ηs)	352	346	339			
Water Outlet 18°C		SEER	5.75	5.85	5.73			
		Seasonal Cooling Efficiency (ηs)	227	231	226			
		SEER	5.75	5.85	5.73			
Water Outlet 7°C	SEER	5.75	5.85	5.73				
	Seasonal Cooling Efficiency (ηs)	227	231	226				
	SEER	5.75	5.85	5.73				
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			
		Condenser Fan Quantity	1	1	1			
Fan	Air Flow Rate	m³/h	2700	2700	2700			
		Recommended Fuse	A	16	16	20		
Outer Dimensions	Height × Width × Depth	mm		750 × 900 × 340				
		mm		807 × 1022 × 445				
Packing Dimensions	Height × Width × Depth	mm		48.5/52.5				
		kg		48.5/52.5		49.0/53.5		
Refrigerant System	Compressor	Type	-	Rotary				
		Type	-	R32				
	Refrigerant Charge	Before Shipment	kg	0.98	0.98	1.05		
		Gas Pipe	mm(in.)	φ12.7(1/2)	φ12.7(1/2)	φ15.88(5/8)		
	Piping	Liquid Pipe	mm	φ6.35(1/4)	φ6.35(1/4)	φ6.35(1/4)		
		Min. Piping Length	m	4	4	4		
	Max. Chargeless Piping Length	Max. Piping Length	m	40	40	45		
		Height Difference between ODU and IDU	m	30	30	30		
	Operation Range	Heating	Outdoor Ambient Temperature	°C (DB)	-25~35	-25~35	-25~35	
Outlet Water Temperature			°C	15~60	15~60	15~60		
Outdoor Ambient Temperature			°C (DB)	-25~40	-25~40	-25~40		
DHW		Tank Water Temperature	°C	30~55(75*4)	30~55(75*4)	30~55(75*4)		
		Outdoor Ambient Temperature	°C (DB)	5~46	5~46	5~46		
		Outlet Water Temperature	°C	5~22	5~22	5~22		
Cooling		Outdoor Ambient Temperature	°C (DB)	5~22	5~22	5~22		
		Outdoor Ambient Temperature	°C (DB)	5~22	5~22	5~22		
		Outlet Water Temperature	°C	5~22	5~22	5~22		
Indoor Unit		AHM-044HCDSAA		AHM-060HCDSAA		AHM-080HCDSAA		
Power Supply		AC 1φ, 220-240V/50Hz		AC 1φ, 220-240V/50Hz		AC 1φ, 220-240V/50Hz		
Water Flow Rate	IWT: 30°C / OWT: 35°C ΔT: 5°C	m³/h	1.21	1.53	1.90			
		m³/h	0.65	0.81	0.97			
Min. Water Flow Rate	IWT: 47°C / OWT: 55°C ΔT: 8°C	m³/h	0.50	0.60	0.60			
		m³/h	6.2	4.7	3.2			
DC Water Pump	Net Lift Pressure	m	6.2	4.7	3.2			
		m	6.2	4.7	3.2			
	Max. Water Flow Rate	m³/h	6.2	4.7	3.2			
		m³/h	6.2	4.7	3.2			
	Energy Efficiency Class		-	A	A			
		Speed		-	Inverter			
Water Electric Heater (3 Steps)	Max. Power Input	W	50	1/23	50			
		W	50	1/23	50			
Shut-off Valve with Filter	Material		-	Brass				
		Diameter	in.	1"				
	Mesh Filter		-	50				
		Type Filter		-	Self-cleaning (with back flush)			
	Safety Valve	bar	-	3				
Shut-off Valve		-	2 pcs Supplied					
Sound Pressure	Sound Pressure	dB(A)	28	28	28			
		dB(A)	42	42	42			
Recommended Fuse	Recommended Fuse	A	20(40*5)	20(40*5)	20(40*5)			
		A	20(40*5)	20(40*5)	20(40*5)			
Outer Dimensions(with connections)	Height × Width × Depth	mm		890 × 520 × 320				
		mm		419 × 1160 × 650				
Packing Dimensions	Height × Width × Depth	mm		41.5/48.5				
		kg		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)	G1"~G1"(female)	G1"~G1"(female)		
		Inlet pipe diameter	in.	G1"(male)	G1"(male)	G1"(male)		
	Outlet pipe diameter	in.	G1"(male)	G1"(male)	G1"(male)	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°C.  
\*5: The value is the data when electric heater is working.  
OAT: Outdoor ambient temperature; IWT: Inlet water temperature; OWT: Outlet water temperature

Specification

Monobloc (4~8kW)



Model		AHZ-044HCDS1		AHZ-080HCDS1		
Power Supply		220-240V ~ 50Hz		220-240V ~ 50Hz		
Heating Operation*1	OAT (DB/WB) 7/6°C	IWT/OWT 30 / 35°C	Capacity (Min./Nom./Max.)	1.85 / 4.40 / 7.00	2.10 / 8.00 / 11.0	
			COP (Nom.)	5.10	4.90	
			Capacity (Nom./Max.)	4.40 / 6.00	8.00 / 9.00	
	OAT (DB/WB) -7 / -8°C	IWT/OWT 30 / 35°C	Capacity	6.10	7.20	8.50
			COP	3.93	3.34	3.38
			Capacity	5.20	6.60	7.20
	OAT (DB/WB) -7 / -8°C	IWT/OWT 30 / 35°C	Capacity	5.00	5.90	7.30
			COP	2.51	2.38	2.56
			Capacity	4.20	5.10	6.40
Cooling Operation*1	OAT (DB/WB) 35/~°C	IWT/OWT 12 / 7°C	Nominal Capacity	4.40	6.50	
			EER	4.00	3.35	
			Nominal Capacity	5.60	7.00	
	IWT/OWT 23 / 18°C		EER	5.60	5.10	
			SCOP	5.17	5.00	
			Seasonal Heating Efficiency (ηs)	204	197	
	Seasonal Performance*2	Water Outlet 35°C	Energy Rating	-	A+++	A+++
			SCOP	3.47	3.50	
			Seasonal Heating Efficiency (ηs)	136	137	
Water Outlet 55°C		Energy Rating	-	A++	A++	
		SEER	8.87	8.73	8.54	
		Seasonal Cooling Efficiency (ηs)	352	346	339	
Water Outlet 18°C		SEER	5.75	5.85	5.73	
		Seasonal Cooling Efficiency (ηs)	227	231	226	
		SEER	5.75	5.85	5.73	
Water Outlet 7°C	SEER	5.75	5.85	5.73		
	Seasonal Cooling Efficiency (ηs)	227	231	226		
	SEER	5.75	5.85	5.73		
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	
		Condenser Fan Quantity	1	1	1	
Fan	Air Flow Rate	m³/h	2700	2700	2700	
		Recommended Fuse	A	16	16	20
Outer Dimensions	Height × Width × Depth	mm		815 × 1270 × 340		
		mm		890 × 1400 × 440		
Packing Dimensions	Height × Width × Depth	mm		815 × 1270 × 340		
		mm		890 × 1400 × 440		
Net Weight	Net Weight	kg	88	88	88	
		kg	104	105	105	
Gross Weight	Gross Weight	kg	104	105	105	
		kg	104	105	105	
Refrigerant System	Compressor	Type	-	Rotary		
		Type	-	R32		
Refrigerant Charge	Refrigerant Charge	Before Shipment	kg	1.17	1.21	
		Before Shipment	kg	1.17	1.21	
Operation Range	Heating	Outdoor Ambient Temperature	°C (DB)	-25~35	-25~35	
		Outlet Water Temperature	°C	15~60	15~60	
	DHW	Outdoor Ambient Temperature	°C (DB)	-25~40	-25~40	
		Tank Water Temperature	°C	30~55(75*4)	30~55(75*4)	
	Cooling	Outdoor Ambient Temperature	°C (DB)	5~46	5~46	
		Outlet Water Temperature	°C	5~22	5~22	
Nominal Water Flow	IWT: 30°C / OWT: 35°C ΔT: 5°C	m³/h	0.77	1.38		
		m³/h	0.50	0.60		
DC Water Pump	Max. Lift Pressure	m	6.2	4.7	3.2	
		m	6.2	4.7	3.2	
	Max. Water Flow Rate	m³/h	6.2	4.7	3.2	
		m³/h	6.2	4.7	3.2	
	Speed		-	Inverter		
		Max. Power Input	W	87	87	
Water Electric Heater	Max. Power Input	kW	50	1/23	50	
		kW	50	1/23	50	
Safety Valve	Safety Valve	bar	-	3		
		bar	-	3		
Shut-off Valve	Shut-off Valve		-	2 pcs Supplied		
			-	2 pcs Supplied		
Water Installation	Connection Type		-	Screwed Connection		
		Shutdown Valves	in.	G 1" ~ G 1" (female)	G 1" ~ G 1" (female)	
		Inlet Pipe Diameter	in.	G 1" (female)	G 1" (female)	
		Outlet Pipe Diameter	in.	G 1" (female)	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°C.  
\*5: The value is the data when electric heater is working.  
OAT: Outdoor ambient temperature; IWT: Inlet water temperature; OWT: Outlet water temperature

## Specification

### Integra (4~8kW) System Performance



Model				AHS-044HCDSAA-23 + AHW-044HCDS1	AHS-060HCDSAA-23 + AHW-060HCDS1	AHS-080HCDSAA-23 + AHW-080HCDS1	
OAT(DB/WB)		IWT / OWT	-	Heating operation			
Heating	7/6℃	30/35℃	Capacity (Min./Nom./Max.)	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.)	4.40 / 6.00	6.00 / 7.50	8.00 / 9.00	
			COP (Nom.)	3.00	3.05	2.80	
Heating	-7/-8℃	30/35℃	Capacity (Nom./Max.)	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.)	4.00 / 4.20	4.70 / 5.10	5.00 / 6.40	
			COP (Nom.)	1.97	2.04	1.94	
Cooling	35/ -℃	12/7℃	Nominal capacity	4.40	5.00	6.00	
			EER	3.90	3.70	3.60	
		23/18℃	Nominal capacity	5.60	6.00	7.00	
			EER	5.60	5.60	5.10	
ODU sound pressure normal mode (Heating/Cooling)			dB(A)	47/47	48/47	50/47	
ODU sound power normal mode (Heating/Cooling)			dB(A)	61/61	62/61	64/61	
Water outlet 35℃	-	-	SCOP	5	4.93	4.92	
			Seasonal heating efficiency (ηs)	-	197	194	
			Energy rating	-	A+++	A+++	
			SCOP	-	3.23	3.33	
Water outlet 55℃	-	-	Seasonal heating efficiency (ηs)	-	126	134	
			Energy rating	-	A++	A++	
			DHW energy efficiency class	-	A+	A+	
			Efficiency ηDHW	-	135%	135%	
Outdoor Unit	Outer Dimensions		Height × Width × Depth	mm	750 × 900 × 340	750 × 900 × 340	750 × 900 × 340
	Packing Dimensions		Height × Width × Depth	mm	807 × 1022 × 445	807 × 1022 × 445	807 × 1022 × 445
	Net Weight			kg	48.5	48.5	49.0
	Gross Weight			kg	52.5	52.5	53.5

### Integra Specification

Model		AHS-044HCDSAA-23	AHS-060HCDSAA-23	AHS-080HCDSAA-23
Water tank volume		L	230	230
Water tank material		-	DUPEX 2205	
Power supply		-	AC 1Φ, 220-240V/50Hz	
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	124.5	124.5
Gross Weight		kg	145.0	145.5
Water flow rate		m³/h	0.76	1.03
Water pump type		-	DC Inverter	
Static pressure at nominal flow (Standard/High resistance mode)		mwc	7.0/9.0	7.0/9.0
Availabl(External) pump head (Standard/High resistance mode)		mwc	5.5/8.0	3.0/6.0
E-heater for heating		kW	1+1+1	1+1+1
Sound power level		dB(A)	42	42
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*)	
Space heating pipes connection	Inlet pipe diameter	mm (in.)	G1"(female)	
	Outlet pipe diameter	mm (in.)	G1"(female)	
DHW pipes connection	Inlet pipe diameter	mm (in.)	G3/4"(female)	
	Outlet pipe diameter	mm (in.)	G3/4"(female)	
Refrigerating connection	Connection type	-	Flare Nut Connection	
	Liquid pipe	mm (in.)	Φ6.35 (1/4")	Φ6.35 (1/4")
	Gas pipe	mm (in.)	Φ12.70 (1/2")	Φ12.70 (1/2")

## Specification

### Split (10~16kW) Preview

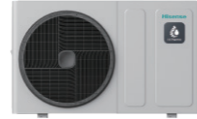


Outdoor Unit	Power Supply	AC 1Φ, 220-240V/50Hz	—	AHW-100HCDS1	AHW-120HCDS1	AHW-140HCDS1	AHW-160HCDS1		
		AC 3Φ, 380-415V/50Hz	—	AHW-100HCDS1	AHW-120HCDS1	AHW-140HCDS1	AHW-160HCDS1		
Nominal Heating Operation*1	OAT (DB/WB) 7/6℃	IWT/OWT 30 / 35℃	Capacity	kW	10	12	14	16	
			COP	-	5.10	4.95	4.80	4.60	
		IWT/OWT 47 / 55℃	Capacity	kW	10.0	12.0	14.0	15.5	
			COP	-	3.10	3.05	3.05	2.95	
	OAT (DB/WB) -7 / -8℃	IWT/OWT 30 / 35℃	Capacity	kW	9.50	10.80	13.50	14.00	
			COP	-	3.10	3.00	2.85	2.80	
		IWT/OWT 47 / 55℃	Capacity	kW	8.0	8.5	10.0	11.0	
			COP	-	2.15	2.10	2.05	2.00	
Nominal Cooling Operation*1	OAT (DB) 35℃	IWT/OWT 12 / 7℃	Capacity (Nom./Max.)	kW	8.5 / 9.9	10.0 / 11.5	11.0 / 13.0	13.0 / 14.0	
			EER (Nom.)	-	3.00	2.85	2.85	2.70	
		IWT/OWT 23 / 18℃	Capacity (Nom./Max.)	kW	9.0 / 10.8	11.0 / 13.0	14.0 / 14.8	15.5 / 16.0	
			EER (Nom.)	-	4.5	4.1	4.2	3.9	
		Seasonal Performance*2	Water Outlet 35℃	SCOP	-	4.8	4.7	4.6	4.5
				Seasonal Heating Efficiency (ηs)	%	188	185	180	177
Water Outlet 55℃	-	Energy Rating	-	A+++	A+++	A+++	A+++		
		SCOP	-	3.4	3.35	3.3	3.3		
Sound Pressure*3	-	-	Seasonal Heating Efficiency (ηs)	%	133	130	128	127	
			Energy Rating	-	A++	A++	A++	A++	
Sound Power	-	-	Normal Mode	dB(A)	47	50	50	54	
			Low Noise Mode	dB(A)	43	46	46	48	
			Night Shift Mode	dB(A)	42	42	44	44	
Fan	-	-	Normal Mode	dB(A)	61	64	64	67	
			Condenser Fan Quantity	-	1	1	1	1	
Outer Dimensions	-	-	Air Flow Rate	m³/h	5200	5200	4700	4700	
			Height × Width × Depth	mm	840 × 1100 × 390				
Packing Dimensions	-	-	Height × Width × Depth	mm	1000 × 1185 × 532				
			Weight(Net/Gross)	kg	73.5/88.0	73.5/88.0	91.5/105.5	91.5/105.5	
Refrigerant System	Compressor	-	Type	-	Rotary				
			Type	-	R32				
	Refrigerant Charge	-	-	Before Shipment	kg	1.8	1.8	2.7	2.7
				Gas Pipe	mm(in.)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
	Piping	-	-	Liquid Pipe	mm	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-100HCDSAA	AHM-120HCDSAA	AHM-140HCDSAA	AHM-160HCDSAA		
Water Flow Rate	-	-	IWT: 30℃ / OWT: 35℃ ΔT: 5℃	m³/h	1.72	2.06	2.40	2.76	
			IWT: 47℃ / OWT: 55℃ ΔT: 8℃	m³/h	1.07	1.29	1.50	1.71	
			Min. Water Flow Rate	m³/h	0.8	0.9	1.1	1.2	
DC Water Pump	-	-	Max. Lift Pressure	m	12				
			Max. Water Flow Rate	m³/h	5.6				
			Speed	-	Inverter				
			Max. Power Input	W	180				
Shut-off Valve with Filter	-	-	Water Electric Heater (3 Steps)	kW	2/4/6				
			Diameter	in.	G1"				
Safety Valve	-	-	Mesh Filter	-	50				
			Shut-off Valve	-	3				
Sound Pressure	-	-	Shut-off Valve	-	2 pcs Supplied				
			Sound Pressure	dB(A)	30	30	30	30	
Sound Power	-	-	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	419 × 1160 × 650				
			Weight(Net/Gross)	kg	47/52	47/52	49/54	49/54	
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

## Specification

### Monobloc (10~16kW) Preview



Model	Power Supply	AC 1 φ, 220-240V/50Hz	—	AHZ-100HCDS1	AHZ-120HCDS1	AHZ-140HCDS1	AHZ-160HCDS1	
		AC 3 φ, 380-415V/50Hz	—	AHZ-100HEDS1	AHZ-120HEDS1	AHZ-140HEDS1	AHZ-160HEDS1	
OAT (DB/WB)		IWT / OWT	—	Unit				
Heating Operation*1	7/6°C	30 / 35 °C	Capacity (Nom)	kW	10	12	14	16
			COP (Nom.)	—	5.1	4.95	4.8	4.6
		47 / 55 °C	Capacity (Nom)	kW	10	12	14	15.5
			COP (Nom.)	—	3.1	3.05	3.05	2.95
	-7 / -8°C	30 / 35 °C	Capacity (Nom)	kW	9.50	10.80	13.50	14.00
			COP (Nom.)	—	3.10	3.00	2.85	2.80
		47 / 55 °C	Capacity (Nom)	kW	8	8.5	10	11
			COP (Nom.)	—	2.15	2.1	2.05	2
Cooling Operation*1	35°C	12 / 7 °C	Capacity (Nom)	kW	8.5	10	11	13
			EER	—	3	2.85	2.85	2.7
		23 / 18 °C	Capacity (Nom)	kW	9	11	14	15.5
			EER	—	4.5	4.1	4.2	3.9
Water outlet 35°C	SCOP		—	4.8	4.7	4.6	4.5	
	Seasonal heating efficiency ( η s)		%	188	185	180	177	
	Energy rating		—	A+++	A+++	A+++	A+++	
Water outlet 55°C	SCOP		—	3.4	3.35	3.3	3.3	
	Seasonal heating efficiency ( η s)		%	133	130	128	127	
	Energy rating		—	A++	A++	A++	A++	
Working range (Space Heating)	Outdoor ambient temperature		°C (DB)	-25~35				
	Outlet water temperature		°C	20~65				
Working range (Space Cooling)	Outdoor ambient temperature		°C (DB)	5~46				
	Outlet water temperature		°C	5~22				
Working range (DHW)	Outdoor ambient temperature		°C (DB)	-25~43				
	Tank water temperature		°C	30~60(75*4)				
Sound pressure level			dB(A)	47	50	50	54	
Sound power level			dB(A)	61	63	64	67	
Sound pressure level (low noise mode)			dB(A)	43	46	46	48	
Sound pressure level (night shift mode)			dB(A)	42	42	44	44	
Outer Dimensions	Height		mm	840	840	840	840	
	Width		mm	1376	1376	1376	1376	
	Depth		mm	390	390	390	390	
Space heating pipes connection	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°C.

OAT: Outdoor ambient temperature; IWT: Inlet water temperature; OWT: Outlet water temperature

## Specification

### Integra (10~16kW) Preview System Performance



Model		AHS-100HCDSAA-23 + AHW-100HCDS1	AHS-120HCDSAA-23 + AHW-120HCDS1	AHS-140HCDSAA-23 + AHW-140HCDS1	AHS-160HCDSAA-23 + AHW-160HCDS1			
Power supply		AC 1 φ, 220-240V/50Hz						
Model		AHS-100HEDSAA-23 + AHW-100HEDS1	AHS-120HEDSAA-23 + AHW-120HEDS1	AHS-140HEDSAA-23 + AHW-140HEDS1	AHS-160HEDSAA-23 + AHW-160HEDS1			
Power supply		AC 3 φ, 380-415V/50Hz						
OAT (DB/WB)		IWT / OWT	—	Unit				
Heating	7/6°C	30/35°C	Capacity(Nom)	kW	10	12	14	16
			COP(Nom.)	—	5.1	4.95	4.8	4.6
		47/55°C	Capacity(Nom)	kW	10	12	14	15.5
			COP(Nom.)	—	3.1	3.05	3.05	2.95
	-7/-8°C	30/35°C	Capacity(Nom)	kW	9.50	10.80	13.50	14.00
			COP(Nom.)	—	3.10	3.00	2.85	2.80
		47/55°C	Capacity(Nom)	kW	8	8.5	10	11
			COP(Nom.)	—	2.15	2.1	2.05	2
Cooling	35/-°C	12/7°C	Capacity(Nom.)	kW	8.5	10	11	13
			EER	—	3	2.85	2.85	2.7
		23/18°C	Capacity(Nom.)	kW	9	11	14	15.5
			EER	—	4.5	4.1	4.2	3.9
Water outlet 35°C	SCOP		—	4.8	4.7	4.6	4.5	
	Seasonal heating efficiency ( η s)		%	188	185	180	177	
	Energy rating		—	A+++	A+++	A+++	A+++	
Water outlet 55°C	SCOP		—	3.4	3.35	3.3	3.3	
	Seasonal heating efficiency ( η s)		%	133	130	128	127	
	Energy rating		—	A++	A++	A++	A++	
DHW energy efficiency class			Load profile L	—	A+	A+	A+	
SCOP DHW			Load profile L	—	-3.0	-3.0	-2.9	
Outdoor Unit Outer Dimensions		Height × Width × Depth	mm	840 × 1100 × 390	840 × 1100 × 390	840 × 1100 × 390	840 × 1100 × 390	

### Integra Specification

Model		AHS-100HCDSAA-23	AHS-120HCDSAA-23	AHS-140HCDSAA-23	AHS-160HCDSAA-23
Power supply		AC 1 φ, 220-240V/50Hz			
Model		AHS-100HEDSAA-23	AHS-120HEDSAA-23	AHS-140HEDSAA-23	AHS-160HEDSAA-23
Power supply		AC 3 φ, 380-415V/50Hz			
Water TANK Volume		L	230	230	230
Water Tank material		—	DUPLEX 2205	DUPLEX 2205	DUPLEX 2205
Dimensions		Height × Width × Depth	mm	1885 × 590 × 625	1885 × 590 × 625
E-heater for heating		kw	2+2+2	2+2+2	2+2+2
Sound power level		dB(A)	42	42	42
Working range (Heating)	Outdoor ambient temperature		°C (DB)	-25~35	
	Outlet water temperature		°C	20~65	
Working range (Cooling)	Outdoor ambient temperature		°C (DB)	5~46	
	Outlet water temperature		°C	5~22	
Working range (DHW)	Outdoor ambient temperature		°C (DB)	-25~43	
	Tank water temperature		°C	30~60(75*)	
Space heating pipes connection	Inlet pipe diameter		in.	G 1" (female)	
	Outlet pipe diameter		in.	G 1" (female)	
DHW pipes connection	Inlet pipe diameter		in.	G 3/4" (female)	
	Outlet pipe diameter		in.	G 3/4" (female)	
Refrigerating connection	Connection Type		—	Flare Nut Connection	Flare Nut Connection
	Liquid Pipe		mm (in.)	15.88 (5/8)	15.88 (5/8)
	Gas pipe		mm (in.)	9.53 (3/8)	9.53 (3/8)