



AIR TO WATER


COMMERCIAL HEAT PUMP



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HEAT PUMP (CHILLER) PRODUCT FAMILY

Commercial DC Inverter EVI air to water heat pumps

	Model: HW075B <ul style="list-style-type: none"> ◆ Heating capacity: 75kW ◆ Cooling capacity: 65kW ◆ Stepless capacity output ◆ DC Inverter EVI technology ◆ Modular control 	Model: HW150B <ul style="list-style-type: none"> ◆ Heating capacity: 150kW ◆ Cooling capacity: 130kW ◆ Stepless capacity output ◆ DC Inverter EVI technology ◆ Modular control
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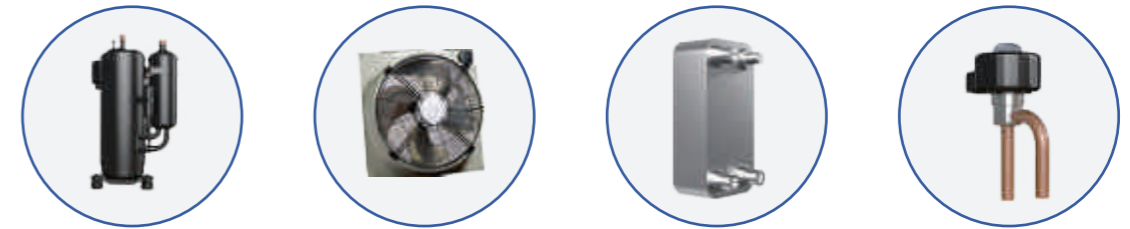
Commercial EVI air to water heat pumps

	Model: HW085A <ul style="list-style-type: none"> ◆ Heating capacity: 85kW ◆ Cooling capacity: 65kW ◆ EVI technology ◆ Modular control 	Model: HW152A <ul style="list-style-type: none"> ◆ Heating capacity: 152kW ◆ Cooling capacity: 108kW ◆ EVI technology ◆ Modular control 	Model: HW168A <ul style="list-style-type: none"> ◆ Heating capacity: 168kW ◆ Cooling capacity: 134kW ◆ EVI technology ◆ Modular control
		Model: HW038A <ul style="list-style-type: none"> ◆ Heating capacity: 38kW ◆ Cooling capacity: 27kW ◆ Liquid injection technology ◆ Modular control 	

Commercial integrated air to water heat pump

	Model: HW152-608C <ul style="list-style-type: none"> ◆ Heating capacity: 152-608kW ◆ Cooling capacity: 134-536kW ◆ EVI technology ◆ Modular control ◆ Integrated design
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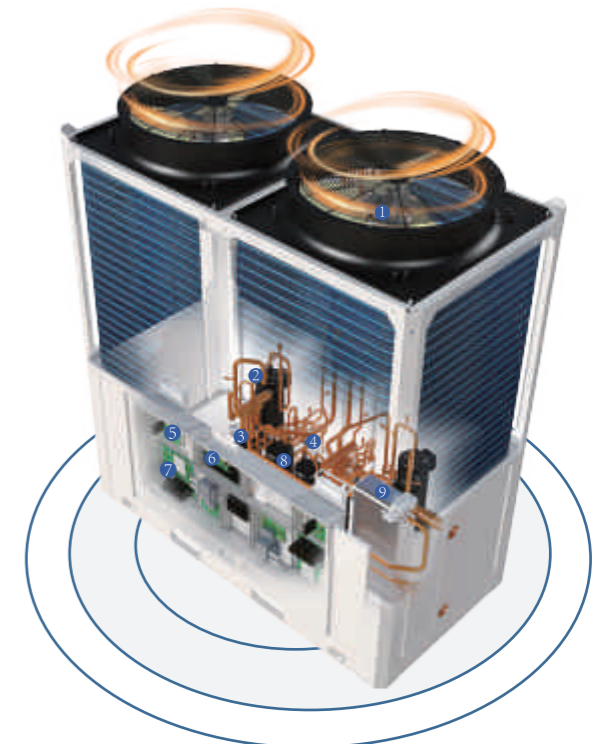
COMMERCIAL DC INVERTER AIR TO WATER HEAT PUMP



- ◆ DC Inverter EVI compressor, ensures stable running and enhanced heating capacity in harsh conditions.
- ◆ DC Inverter fan motor, for higher efficiency and less noise.
- ◆ High efficiency BPHE, offers smaller size with higher performance.
- ◆ EEV with smart control, enables precise flow control for a better performance.

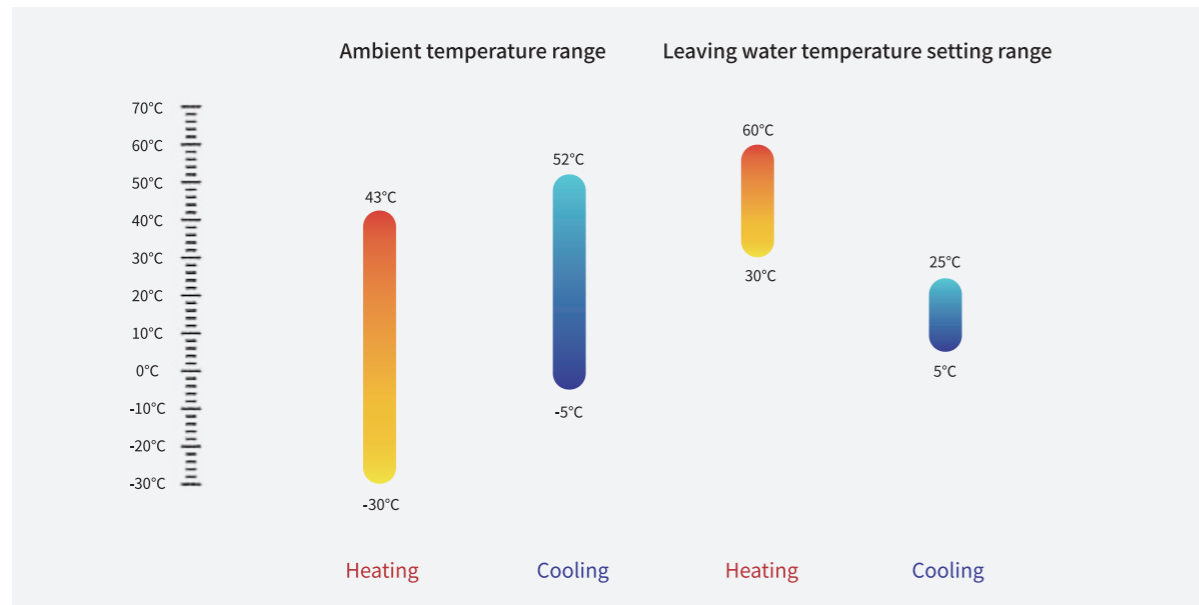
Product details ▶

- 1 DC Inverter fan motor
- 2 DC Inverter compressor
- 3 Accumulator
- 4 Economizer
- 5 Fan motor inverter
- 6 PCB main controller
- 7 Compressor inverter
- 8 Liquid receiver
- 9 BPHE



FEATURES

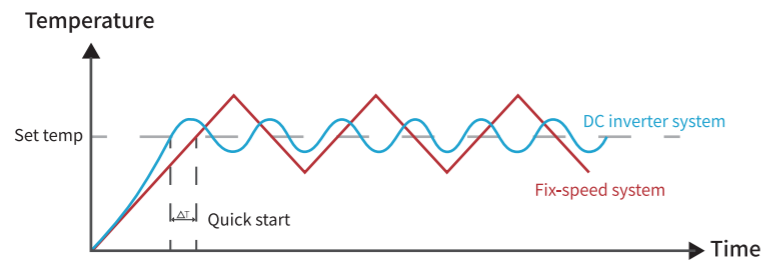
Wide operation range



DC Inverter EVI technology

◆ Stable water temperature improves comfort and efficiency

DC Inverter compressor adjusts its speed according to the difference of setting temperature and actual temperature automatically, thus makes the actual water temperature waves slightly around set temperature.



◆ Quick response

By increasing frequency of compressor, inverter system can get a higher heating capacity, and reach setting temperature, in less time compared with fix-speed system.

◆ Avoiding frequent start/stop

Inverter system automatically match the setting temperature by adjusting speed of compressor, that means compressor's start/stop cycles will decrease obviously.

◆ Quiet operation

Most of the time, the speed of compressors remain in a middle or lower level since the required capacity is low than the peak capacity, it contribute to the quiet operation and energy saving.

SPECIFICATIONS

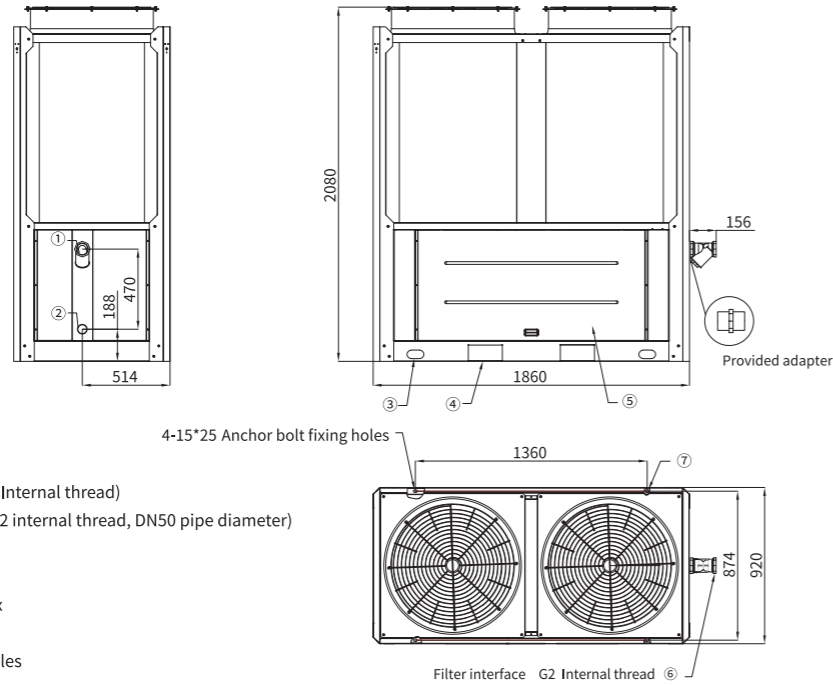
Model		HW075B	HW150B
Power supply		V/Ph/H 380-415/3/50	
Heating ¹	Capacity	kW 80	160
	Rated input	kW 19.6	39.3
	COP	kW/kW 4.08	4.07
Heating ²	Capacity	kW 75	150
	Rated input	kW 23	46
	COP	kW/kW 3.26	3.26
SCOP-Average climate, low temperature		kW/kW 4.19	4.18
Energy class		A++	
Cooling ³	Capacity	kW 65	130
	Rated input	kW 14.9	29.9
	EER	kW/kW 4.36	4.35
Cooling ⁴	Capacity	kW 65	130
	Rated input	kW 23.8	47.7
	EER	kW/kW 2.73	2.72
Sound pressure Level ⁵		dB(A) 65	68
Refrigerant		type R410A	
Compressor		type DC Inverter EVI twin rotary	
		Quantity 2	4
Water side heat exchanger		type BPHE	
Fan		type DC Inverter Axial Fan	
		Quantity 2	
Net dimension (W×H×D)		mm 1860*2080*920	2170*2290*1200
Net weight		kg 500	960
Water piping connection		size Rc 2	Rc 2 1/2
Nominal water flow		m ³ /h 11.2	22.4
Water pressure drop		kPa 60	60
Ambient temperature range	Cooling	°C -5~52	
	Heating	°C -30~43	
LWT setting range	Cooling	°C 5~25	
	Heating	°C 30~60	

Notes:

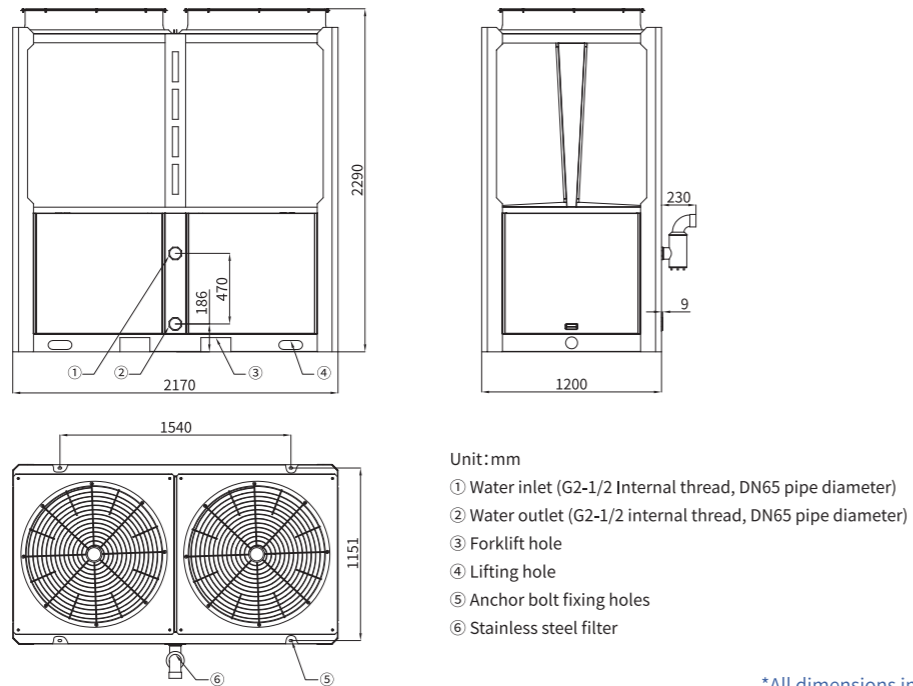
1. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 30°C, Water outlet 35°C.
2. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 40°C, Water outlet 45°C.
3. Outdoor air temperature 35°C DB; Water inlet 23°C, Water outlet 18°C.
4. Outdoor air temperature 35°C DB; Water inlet 12°C, Water outlet 7°C.
5. Testing distance: 1m.

DIMENSION

HW075B ▶



HW075B ▶

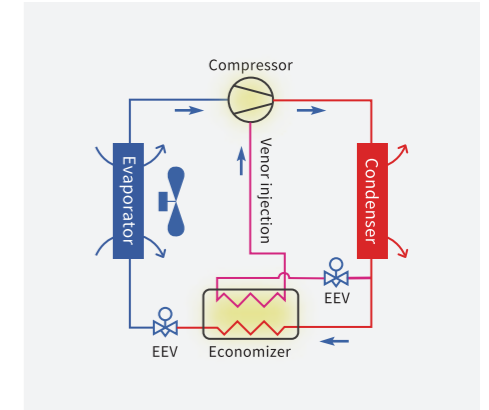


*All dimensions in mm.

COMMERCIAL EVI AIR TO WATER HEAT PUMP

EVI technology

EVI means enhanced vapor injection, in harsh conditions (low ambient temperature and high outlet water temperature), this technology can improve heating capacity and saving energy, in the meantime, it can decrease discharge temperature of compressor and make sure the stable operation.



Modular Control

Modular control can allow one wired controller to control up to 16 units, and the units are standby for each other, running alternately, improving the stability of the system and prolonging the service life of the units. When a unit fails, it will not affect the operation of other units.



SPECIFICATIONS

Model		HW038A	HW085A	
Power supply		V/Ph/H 380-415/3/50		
Heating ¹	Capacity	kW	40	90
	Rated input	kW	10.1	23
	COP	kW/kW	3.96	3.91
Heating ²	Capacity	kW	38	85
	Rated input	kW	11.3	25.7
	COP	kW/kW	3.36	3.31
Cooling ³	Capacity	kW	35	84
	Rated input	kW	12	25
	EER	kW/kW	2.92	3.36
Cooling ⁴	Capacity	kW	27	65
	Rated input	kW	11.1	23.2
	EER	kW/kW	2.43	2.8
Sound pressure Level ⁵		dB(A)	63	65
Refrigerant		type	R410A	
Compressor	type	Scroll	EVI Scroll	
	Quantity	1	2	
Water side heat exchanger		type	Shell and tube	
Fan	type	Axial Fan		
	Quantity	2		
Net dimension (W×H×D)		mm	960*1550*960	1920*2030*960
Net weight		kg	275	660
Water piping connection		size	Rc 1-1/2	Victaulic 2"
Nominal water flow		m ³ /h	6.5	14.6
Water pressure drop		kPa	45	50
Ambient temperature range	Cooling	°C	-5~52	
	Heating	°C	-25~35	-30~35
LWT setting range	Cooling	°C	5~25	
	Heating	°C	30~60	

Notes:

1. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 30°C, Water outlet 35°C.
2. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 40°C, Water outlet 45°C.
3. Outdoor air temperature 35°C DB; Water inlet 23°C, Water outlet 18°C.
4. Outdoor air temperature 35°C DB; Water inlet 12°C, Water outlet 7°C.
5. Testing distance: 1m.

SPECIFICATIONS

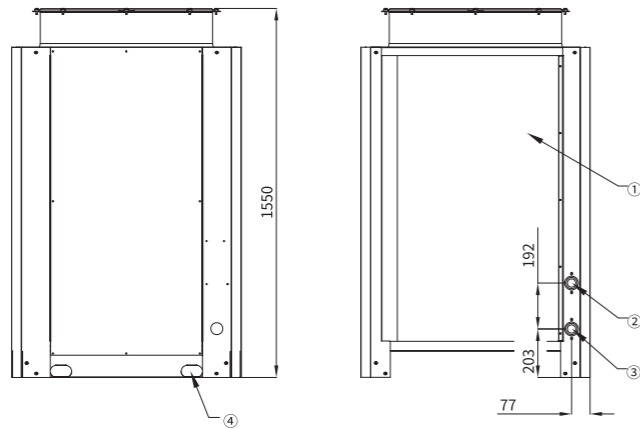
Model		HW152A	HW168A	HW300A	
Power supply		V/Ph/H 380-415/3/50			
Heating ¹	Capacity	kW	161	178	318
	Rated input	kW	41.8	46.6	84.8
	COP	kW/kW	3.85	3.82	3.75
Heating ²	Capacity	kW	152	168	300
	Rated input	kW	46.6	51.9	94.3
	COP	kW/kW	3.26	3.24	3.18
Cooling ³	Capacity	kW	140	174	338
	Rated input	kW	46.1	50.3	97.2
	EER	kW/kW	3.04	3.46	3.48
Cooling ⁴	Capacity	kW	108	134	260
	Rated input	kW	42.7	46.4	89.6
	EER	kW/kW	2.53	2.89	2.9
Sound pressure Level ⁵		dB(A)	70	71	73
Refrigerant		type	R410A		
Compressor	type	EVI Scroll			
	Quantity	4	4	4	
Water side heat exchanger		type	Shell and tube		
Fan	type	Axial Fan			
	Quantity	2		4	
Net dimension (W×H×D)		mm	2170*2140*1200	2170*2310*1200	2730*2410*2090
Net weight		kg	950	1090	2040
Water piping connection		size	Flange 2-1/2"	Flange 2-1/2"	Flange 4"
Nominal water flow		m ³ /h	26.1	28.9	51.6
Water pressure drop		kPa	50	50	55
Ambient temperature range	Cooling	°C	15~48		
	Heating	°C	-25~35	-30~35	-30~43
LWT setting range	Cooling	°C	5~20		
	Heating	°C	30~60		

Notes:

1. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 30°C, Water outlet 35°C.
2. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 40°C, Water outlet 45°C.
3. Outdoor air temperature 35°C DB; Water inlet 23°C, Water outlet 18°C.
4. Outdoor air temperature 35°C DB; Water inlet 12°C, Water outlet 7°C.
5. Testing distance: 1m.

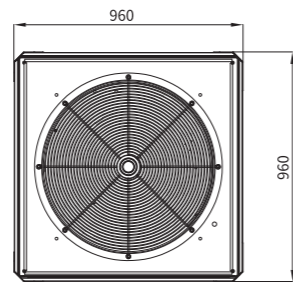
DIMENSION

HW038A ▶

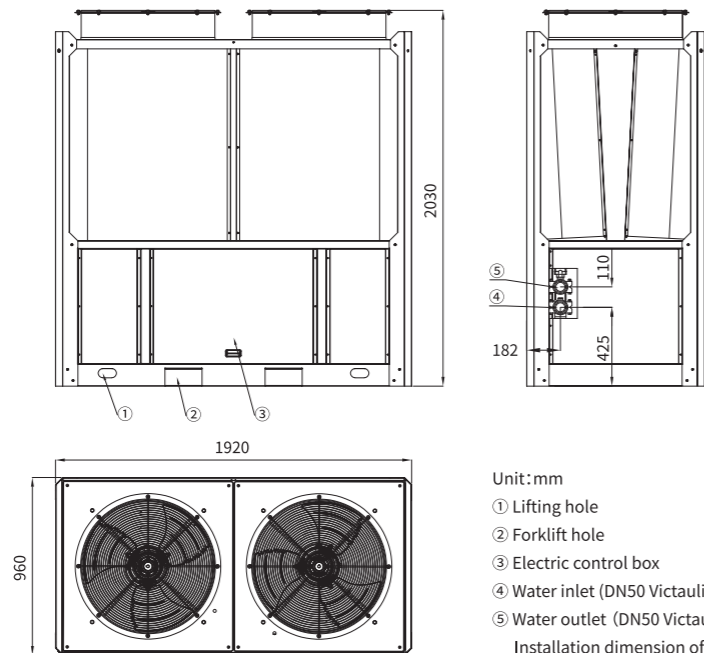


Unit: mm

- ① Electric control box
 - ② Water outlet (DN40 internal thread)
 - ③ Water inlet (DN40 internal thread)
 - ④ Lifting hole
- (Installation dimension of unit footing: 832*540)



HW085A ▶

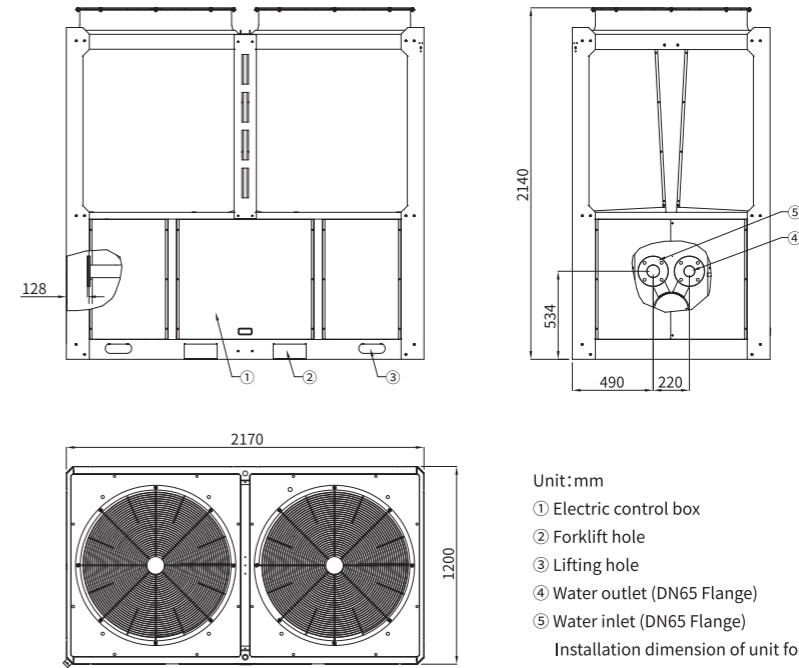


Unit: mm

- ① Lifting hole
 - ② Forklift hole
 - ③ Electric control box
 - ④ Water inlet (DN50 Victaulic)
 - ⑤ Water outlet (DN50 Victaulic)
- Installation dimension of unit footing: 1360*916

DIMENSION

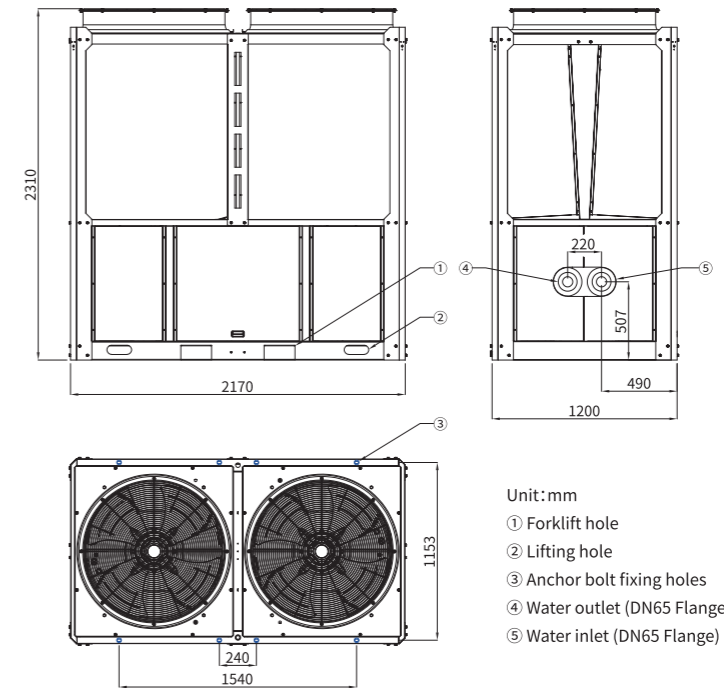
HW152A ▶



Unit: mm

- ① Electric control box
 - ② Forklift hole
 - ③ Lifting hole
 - ④ Water outlet (DN65 Flange)
 - ⑤ Water inlet (DN65 Flange)
- Installation dimension of unit footing: 1540*1151

HW168A ▶

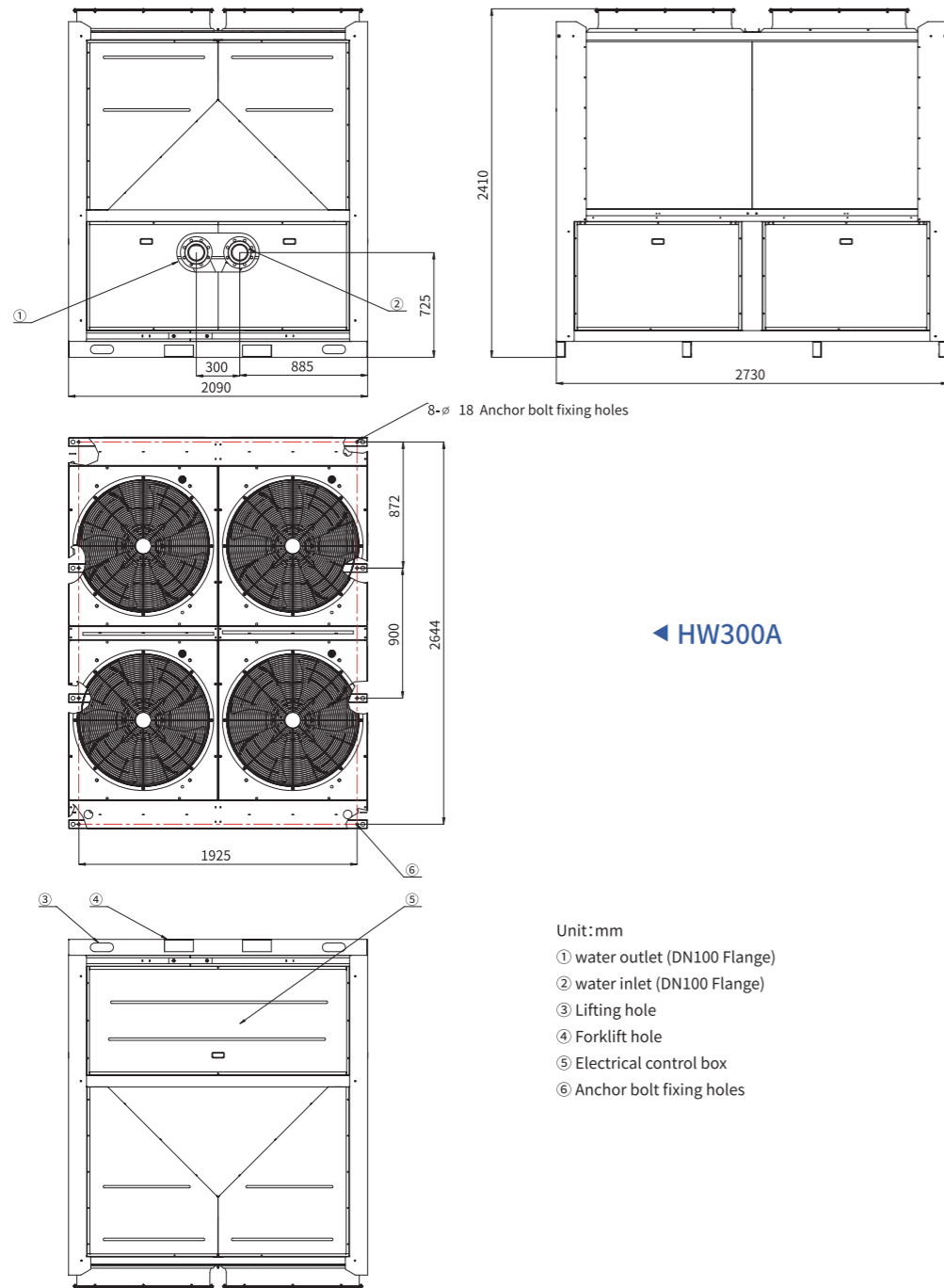


Unit: mm

- ① Forklift hole
- ② Lifting hole
- ③ Anchor bolt fixing holes
- ④ Water outlet (DN65 Flange)
- ⑤ Water inlet (DN65 Flange)

*All dimensions in mm.

DIMENSION



◀ HW300A

Unit: mm

- ① water outlet (DN100 Flange)
- ② water inlet (DN100 Flange)
- ③ Lifting hole
- ④ Forklift hole
- ⑤ Electrical control box
- ⑥ Anchor bolt fixing holes

*All dimensions in mm.

HW-C SERIES INTEGRATED AIR TO WATER HEAT PUMP

No gap installation enables space saving

1~4 modules can be freely combined to achieve "no gap installation". Comparing to a traditional low-temperature module unit, which requires certain installation space in between, Haiwu C series commercial heat pump units reduce the installation space by about 30%, thus solving space problem for users.

Integrated design, easy installation

The traditional low-temperature air source module unit has many water pipes assembled during installation, and the complicated construction produces inconvenience to later maintenance. Adopted integrated pipeline design, Haiwu C series products reduces the amount of construction on site and provides convenience for the users for the installation. It has great advantages in cost saving and post-maintenance.



Rotational defrosting

Partially allowing operating units to enter defrost status simultaneously, which ensure maximum stability of water temperature.



Fluctuation of water temperature

SPECIFICATIONS

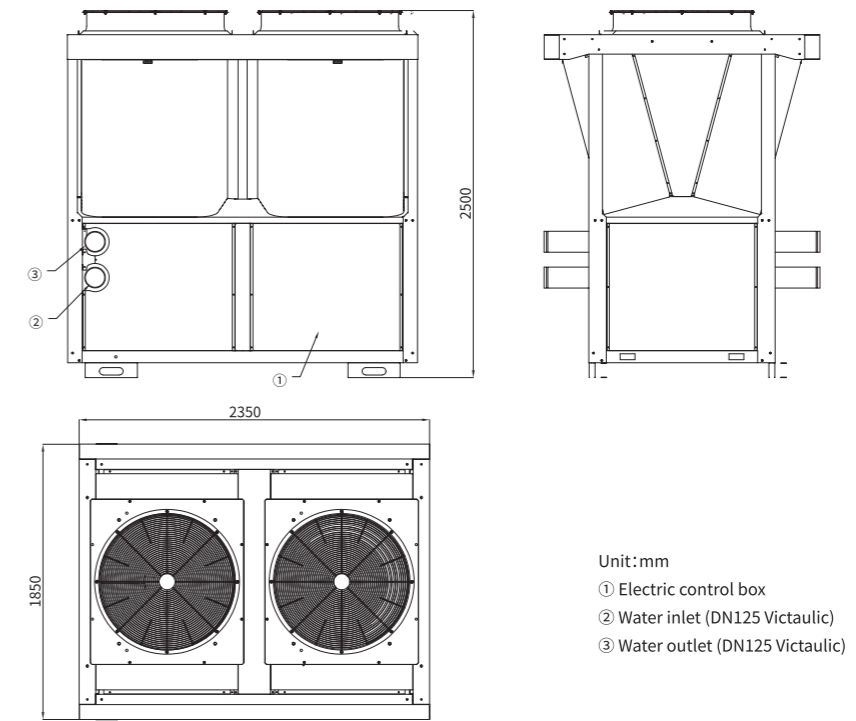
Model			HW152C	HW304C	HW456C	HW608C
Power supply		V/Ph/H	380-415/3/50			
Heating ¹	Capacity	kW	161	322	483	644
	Rated input	kW	41.4	82.8	124.2	165.6
	COP	kW/kW	3.89	3.89	3.89	3.89
Heating ²	Capacity	kW	152	304	456	608
	Rated input	kW	46	92	138	184
	COP	kW/kW	3.30	3.30	3.30	3.30
Cooling ³	Capacity	kW	174	348	522	696
	Rated input	kW	51	102	153	204
	EER	kW/kW	3.41	3.41	3.41	3.41
Cooling ⁴	Capacity	kW	134	268	402	536
	Rated input	kW	47.2	94.4	141.6	188.8
	EER	kW/kW	2.84	2.84	2.84	2.84
Sound pressure Level ⁵	dB(A)	70	71	71	72	
Refrigerant	type	R410A				
Compressor	type	EVI Scroll				
	Quantity	2	4	6	8	
Water side heat exchanger	type	Shell and tube				
Fan	type	Axial Fan				
	Quantity	2	4	6	8	
Net dimension (W×H×D)	mm	2350*2500*1850	2350*2500*3700	2350*2500*5550	2350*2500*7400	
Net weight	kg	1050	2100	3150	4200	
Water piping connection	size	Flange 5"				
Nominal water flow	m ³ /h	26.1	52.2	78.3	104.4	
Water pressure drop	kPa	60	60	60	60	
Ambient temperature range	Cooling	°C	15~48			
	Heating	°C	-30~43			
LWT setting range	Cooling	°C	5~20			
	Heating	°C	30~60			

Notes:

1. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 30°C, Water outlet 35°C.
2. Outdoor air temperature 7°C DB, 6°C WB; Water inlet 40°C, Water outlet 45°C.
3. Outdoor air temperature 35°C DB; Water inlet 23°C, Water outlet 18°C.
4. Outdoor air temperature 35°C DB; Water inlet 12°C, Water outlet 7°C.
5. Testing distance: 1m.

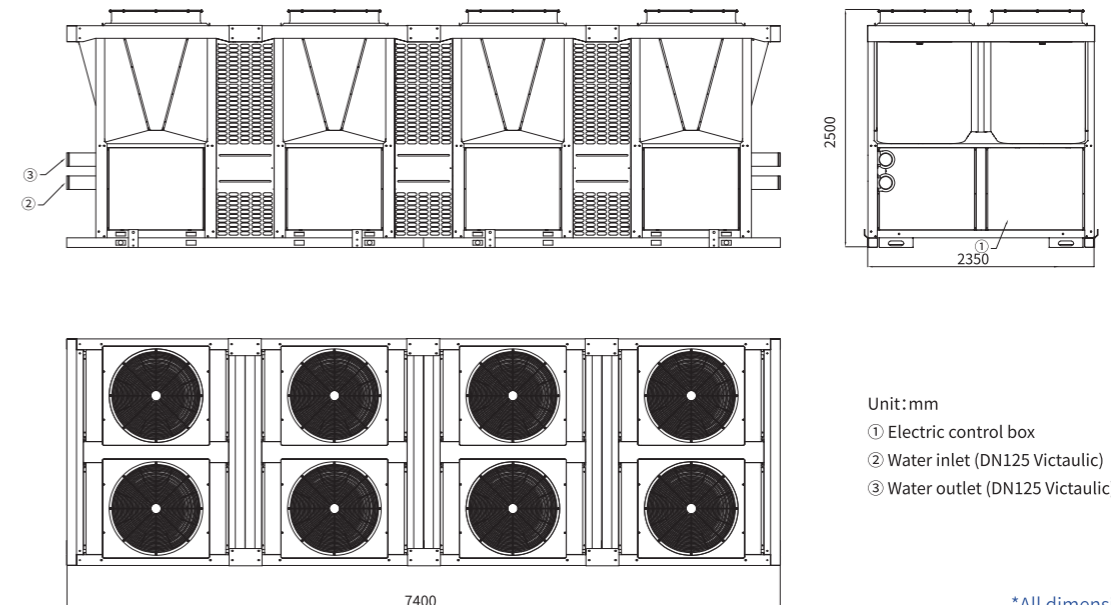
DIMENSION

HW152C ▶



- Unit: mm
 ① Electric control box
 ② Water inlet (DN125 Victaulic)
 ③ Water outlet (DN125 Victaulic)

HW608C ▶



- Unit: mm
 ① Electric control box
 ② Water inlet (DN125 Victaulic)
 ③ Water outlet (DN125 Victaulic)

*All dimensions in mm.



COMPANY PROFILE

Established in 1995, Haiwu is a professional digital and energy solution with full life cycle management provider. Haiwu 's business covers consulting design, R&D and manufacturing, marketing, mechanical and electrical general contracting, testing and certification, comprehensive maintenance, optimization and upgrading. Haiwu is an industry-leading international high-tech enterprise.

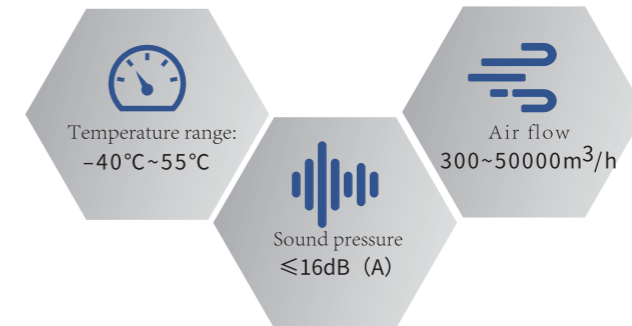
Haiwu is committed to leading new technologies in digital energy and creating a new green and intelligent environment. Products cover base station air conditioners, computer room air conditioners, electrical products, monitoring products, clean energy products, base station solutions, computer room solutions, etc., and tailor-made digital energy for customers in communications, government, energy, finance, education, medical care, transportation and other industrial applications.

Haiwu headquartered in Beijing, R&D and manufacturing base is located in Guangdong province. It has 1 consulting research institute, 8 subsidiaries, 29 branches, and more than 500 after-sales service outlets. It has more than 5,000 certified technical service engineers, providing customers with high-quality after-sales service.

ACCREDITED LABORATORY

Overview

Haiwu test center covers a total area of 20,000 square meters, which is an important base for R&D, testing and quality monitoring of the company's products and raw materials. The test center has 5 low-ambient-temperature test laboratories, 1 working-condition-noise laboratory and 1 accessories laboratory at present, which can conduct function, safety, noise and reliability tests.



NATIONAL ACCREDITED LABORATORY

No.:CNASL11799

Test center of Guangdong Haiwu Technology Co., Ltd

The most perfect accredited laboratory in the industry,
meeting GB, IEC Standard requirements of sound
laboratory management and testing system

Reports are recognized by authorities in 65 countries or regions



Products that can be tested: air-cooled chillers / water-cooled chillers, water-cooled chillers / chilled water units, fan coils, air source heat pumps / heat pump water heaters, etc.