

AUX
COMMERCIAL AIR CONDITIONER

R290

AIR TO WATER HEAT PUMP



Facebook: AUX Air Conditioner Heat Pump Europe

auxcool.com

WIENKRA
Cracow: ul.Kotlasrka 34
Warsaw-Puchały: ul. Żwirowa 78
Wrocław: al. Armii Krakowej 61
Kokotów (Warehouse): Kokotów 812B

MILESTONE

STARTUP & DEVELOPMENT (1986-2022)

Start-up & development (1986-2010)

Started from scratch, developed by self-improvement, completed the existing industrial structure

1986
started business

1994
Entered the air-conditioning industry and created the brand of AUX

1989
Entered the meter industry and later created the brand of Sanxing

2000
Enter the real estate industry

2003
Entered The CAC Field

2004
Got CNAS Certification

2009
Entered the investment industry

2011
Sanxing Electrical (601567.SH) was listed in Shanghai Stock Exchange and later renamed as "Sanxing Medical"

Transformation and future (2011-present)

Took the first step in mindset changes, industrial transformation, capital transformation and strategy transformation

2012
Successively set up R&D centers in Hangzhou and Ningbo to promote the research and application of smart grid and smart home appliance technologies

2014
Established the medical group to deploy the medical and health strategy

2015
Built overseas plants in Brazil and Indonesia
Developed overseas real estate in Australia
Acquired a company in Hongkong Stock Exchange and renamed it as AUX International (02080.HK)

2016
The scale of air-conditioners jumped to the third place in the industry, and a new smart home appliance export production base was built

2018
Prepared to build smart home appliance production bases in Thailand and Zhengzhou Dedicated to making AUX Japanese R&D Center a global home appliance R&D highland

2020
Zhengzhou Intelligent Home Appliance Manufacturing Base Project started

2021
Became the official exclusive supplier of air conditioners for the 19th Asian Games Hangzhou 2022

2023
Vigorously promote the development of overseas own-brand products and establish sales companies in Malaysia, Thailand and the United States

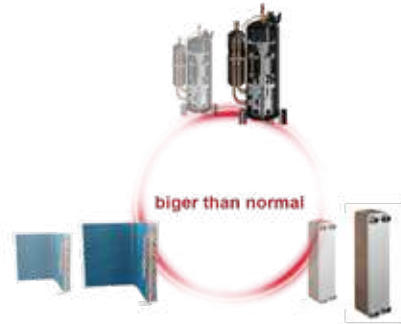


R290 Monoblock

High capacity

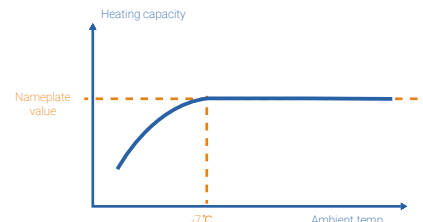
- Finned heat exchanger area ↑ 17%
- Enlarged plate heat exchanger
- Fan blade area ↑ 10%
- Compressor displacement ↑ 55%

*Compare with AUX R32 heat pump



100% output with no capacity reduction at -7°C
Supplying hot water at 80°C in an environment of -10°C

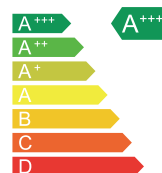
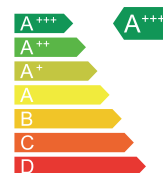
*Data Source: AUX Performance Lab, 2023.10.16



High energy efficient

Main components use DC control, high operational efficiency

The water temperature is 35°C and 55°C, SCOP is A+++



*Data Source: keymark, Patent No: 011-1W0741

Sealed electrical control box

- 3mm aluminum box
- Internal fan design for even heat dissipation
- Add external cooling fins



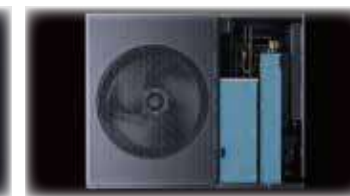
Explosion-proof

Airtight electric control box, separated from leaked refrigerant
Explosion-proof joints and parts



Harte impulskontrolle

- The compressor is wrapped with sound-absorbing materials
- With damping material in the middle
- Folded edge fan has a large angle design to reduce vortex noise
- Unique mesh cover to reduce wind resistance
- Built-in sound insulation cotton in many places
- The noise of the outdoor unit is as low as 35dB three meters away



*Data Source: AUX Noise Laboratory, 2023.03.15

Color screen
remote controller

Color screen remote controller
with 18 languages

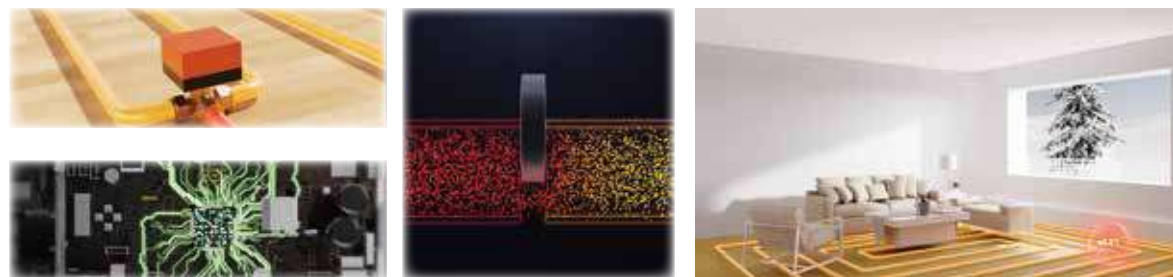
APP control

Support parameter setting, power consumption query, holiday mode, etc



Precise temperature control

- The mixing valve adopts 0-10V control to accurately control the inlet water temperature of the underfloor heating system
- Room temperature changes within $\pm 0.5^{\circ}\text{C}$



Cascade function

- Up to 8 units can be connected in parallel, the capacity can up to 128kW
- Can freely choose the number of domestic hot water units, suitable for scenarios with large domestic hot water consumption



Intelligent control the running time of each units

By accurately calculating the program, ensure that the running time of each machine is the same



Remote control

Sitting in the office, remotely monitoring the units operation status and modifying operation parameters



Convenience

The side panel can be opened directly



Program update

The wired controller built-in USB port, which can be used to upgrade program



Backup power & Gas boiler

- Can be connected to the backup power to maintain normal operation of the units after the power grid is cut off
- Can be connected with a gas boiler. When the units capacity is insufficient, turn on the gas boiler as an auxiliary heat source



Specification-Monoblock

Model name			4kW	6kW
Model			ACHP-H04AF02HA-M	ACHP-H06AF02HA-M
Heating ¹	Power supply	V/Ph/Hz	220-240/1/50	
	Capacity	kW	4.5	6.35
	Rated power input	kW	0.87	1.28
Heating ²	COP		5.15	4.95
	Capacity	kW	4.6	6.4
	Rated power input	kW	1.44	2.03
Cooling ³	COP		3.2	3.15
	Capacity	kW	4.5	6.5
	Rated power input	kW	0.82	1.27
Cooling ⁴	EER		5.5	5.1
	Capacity	kW	4.7	6.8
	Rated power input	kW	1.29	2.19
Seasonal space heating energy efficiency ⁵	EER		3.65	3.1
	LWT 35°C		A+++	A+++
	LWT 55°C		A+++	A+++
SCOP ⁶	LWT 35°C		4.96	4.96
	LWT 55°C		3.90	3.90
Water pump	Head	m	9	
	Maximum flow rate	m³/h	4.5	
	Adaptor diameter		DN25	
Sound pressure level	Monobloc unit	dB(A)	43	43
Sound power level	Monobloc unit	dB	56	57
Packaging dimensions (W×D×H)	Monobloc unit	mm	1205*555*870	
Unit dimensions (W×D×H)	Monobloc unit	mm	1130*450*740	
Net weight	Monobloc unit	kg	93	
Gross weight	Monobloc unit	kg	104	
Operating temperature range	Cooling	°C	-5 ~ 43	
	Heating	°C	-25 ~ 35	
	DHW (tank)	°C	-25 ~ 43	
Water temperature setting range	Cooling	°C	5 ~ 26	
	Heating	°C	25 ~ 80	
	DHW (tank)	°C	30 ~ 75	
Water circuit	Pipe connections	in.	G1" BSP	
	Safety valve pressure	MPa	0.3	
	Flow switch	m³/h	0.36	
	Expansion vessel capacity	L	5	
	Backup heater capacity	kW	3	
Loading quantity	40H/40'20'	pcs	111/118/56	

Note:

1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811:2013; (EU) No 813:2013; OJ 2014/C 207/02:2014.

2. Outdoor air temperature 7°C DB, 85% R.H.; EWT 30°C, LWT 35°C.

3. Outdoor air temperature 7°C DB, 85% R.H.; EWT 47°C, LWT 55°C.

4. Outdoor air temperature 35°C DB; EWT 23°C, LWT 18°C.

5. Outdoor air temperature 35°C DB; EWT 12°C, LWT 7°C.

6. Seasonal space heating energy efficiency class tested in average climate conditions.

7. Test standard: EN12102-1

8. Sound pressure level is the maximum value tested under the two conditions of Notes2 and Notes5.

Remarks:

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Specification-Monoblock

Model name			8kW	10kW	12kW	14kW	16kW
Model			ACHP-H08/SP2HA-M	ACHP-H10/SP2HA-M	ACHP-H12/SP2HA-M	ACHP-H14/SP2HA-M	ACHP-H16/SP2HA-M
Power supply			380~415/3/50				
Heating ²	Capacity	KW	8.4	10.0	12	14	16.1
	Rated power input	KW	168	208	245	292	321
	COP		5.0	4.8	4.9	4.8	4.7
Heating ³	Capacity	KW	7.8	9.5	12	14	16.1
	Rated power input	KW	236	292	369	438	479
	COP		3.3	3.25	3.25	3.2	3.15
Cooling ⁴	Capacity	KW	8.3	10.0	12	14	16
	Rated power input	KW	161	211	267	389	430
	EER		5.15	4.75	4.5	3.6	3.9
Cooling ⁵	Capacity	KW	7.5	8.9	11.5	12.7	14
	Rated power input	KW	277	274	38	438	509
	EER		345	325	305	2.9	2.75
Seasonal space heating energy efficiency ⁶	LWT 35°C		A+++	A+++	A+++	A+++	A+++
	LWT 55°C		A+++	A+++	A+++	A+++	A+++
SCOP ⁶	LWT 35°C		5.15	5.15	4.73	4.73	4.78
	LWT 55°C		3.88	3.93	3.83	3.83	3.83
Water pump	Head	m	9				
	Maximum flow rate	m³/h	4.5				
	Adapter diameter		DN25				
Sound pressure level	Monobloc unit	dB(A)	44	44	45	46	47
Sound power level	Monobloc unit	dB	57	57	57	57	58
Packaging dimensions (W×D×H)	Monobloc unit	mm	1365*545*1210				
Unit dimensions (W×D×H)	Monobloc unit	mm	1280*450*1040				
Net weight	Monobloc unit	kg	140				
Gross weight	Monobloc unit	kg	154				
Operating temperature range	Cooling	°C	-5 ~ 43				
	Heating	°C	-25 ~ 35				
	DHW (tank)	°C	-25 ~ 43				
Water temperature setting range	Cooling	°C	5 ~ 25				
	Heating	°C	25 ~ 80				
	DHW (tank)	°C	30 ~ 75				
Water circuit	Pipe connections	inch	GT BSP				
	Safety valve pressure	MPa	0.3				
	Flow switch	m³/h	0.6				
	Expansion vessel capacity	L	6				
	Backup heater capacity	KW	9				
Loading quantity	40k/40/20	pcs	68/33/16				

Note:

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2. Outdoor air temperature 7℃ DB, 85% R.H.; EWT 30℃, LWT 35℃.

3. Outdoor air temperature 7℃ DB, 85% R.H.; EWT 47℃, LWT 55℃.

4. Outdoor air temperature 35℃ DB; EWT 23℃, LWT 18℃.

5. Outdoor air temperature 35℃ DB; EWT 12℃, LWT 7℃.

6. Seasonal space heating energy efficiency class tested in average climate conditions.

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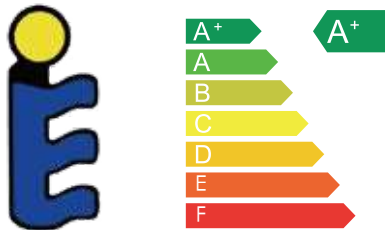
R290 All In One Split

New appearance

Family style appearance, beautiful and generous, High product identification

High energy efficiency

Big compressor, big condensor, big plate heat exchanger, the SCOP can achieve A+++ at 35℃ and 55℃, and the ACS can reach A+

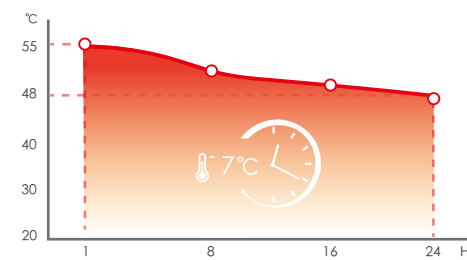
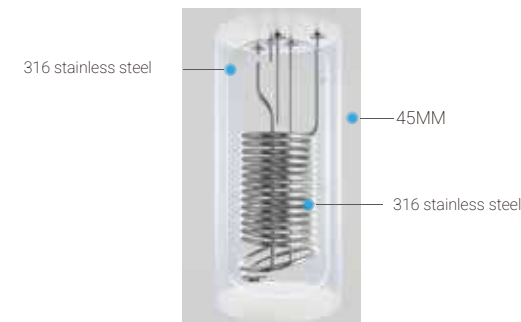


Durable and long-lasting

The water tank liner and heat exchange coil are made of 316 stainless steel

Good heat preservation effect

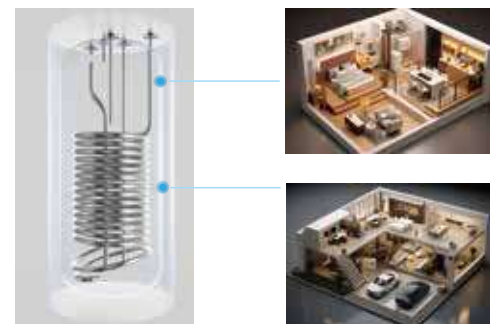
More than 45mm insulation layer, When the water temperature is 55 °C, it only drops by 7 °C within 24 hours



*Data Source: AUX Noise Laboratory, 29/07/24

Double temp sensor location

The water tank is equipped with two temperature sensor interfaces, Users can make their own choices based on water consumption



Accurate data monitoring

Build in the water flow sensor, more accurate display of capability and energy efficiency



Safety operation

- Build in water and gas separator and automatic exhaust valve on the outdoor unit, this can prevent refrigerant entering into the room
- Indoor unit installation with manual exhaust valve, When installing, combining indoor and outdoor units can accelerate the exhaust speed

Low noise operation

The outdoor unit uses an independent compressor chamber, large angle fan blades, paste soundproof cotton, It can reach 3m 35dB

Low noise variable frequency water pump used in the indoor unit, operating noise as low as 30dB of 1m

*Data Source: AUX Noise Laboratory, 29/07/24



Build in 3-way valve

Build in 3-way valve, separate connection of domestic hot water and heating/cooling pipe, more convenient of installation



Energy consumption display is more detailed

The power consumption of outdoor units, water pumps, electric heater, and water tank electric heater is displayed separately, Convenient for users to manage energy consumption



Multifunctional wired controller

- The WIFI module, MODBUS module and temp sensor is build in wired controller, more convenience for installation

The USB port is build in wired controller, users can use this to

- upgrade program and copy and write parameters, more convenience for installation and after service



Remote upgrade

Can use APP and remote management platform to upgrade the program and use remote management platform to monitor operating status and set operating parameters, more convenience for after service



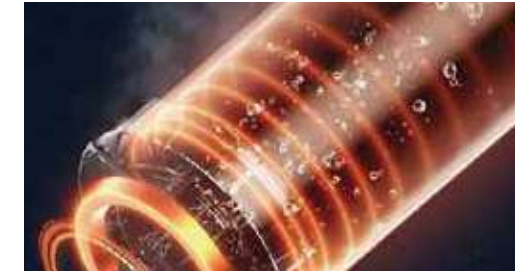
Full seriese

- The water tank has 190L , Can meet the needs of 2-6 households
- Single-phase and three-phase units with 3kW or 9kW electric heater

Powerful mode

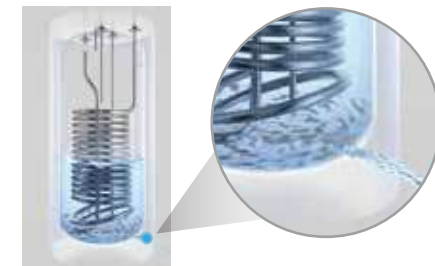
Using powerful mode, heating/cooling capacity increases by more than 30%, fast heating/cooling

*Data Source: AUX Laboratory, 2024.04



Easy to clean

- The water tank reserved magnesium rod connect port, users can choose whether to use it or not, if use it, the anti-corrosion effect is more better
- Reserve a drainage outlet at the bottom of the water tank, users are easier to clean and empty



Easy to installation

The indoor unit size is 600*600, cover an area is small and the height is only 1800mm, Can be installed in cupboard, has no impact on indoor aesthetics

No maintenance space needs to be reserved on the side

All installation and maintenance are completed on the front side, No need to reserve installation and maintenance space on the side



All In One Split

Model name			6kW	8kW	10kW
Outdoor unit model			AC-H06A/P25A(HA)	AC-H08A/P25A(HA)	AC-H10A/P25A(HA)
Indoor unit model			ACHA-H4P25B9	ACHA-H4P25A9	
Power supply		V/Hz/Phi	220-240V/50		
Heating ¹	Capacity	kW	6.35	8.1	9.8
	Rated power input	kW	1.35	1.62	2.04
	COP		4.7	5.0	4.8
Heating ²	Capacity	kW	6.29	7.8	9.4
	Rated power input	kW	1.62	2.30	2.89
	COP		3.89	3.3	3.25
Cooling ³	Capacity	kW	6.2	8.1	9.8
	Rated power input	kW	2.05	1.57	2.05
	EER		3.03	5.15	4.57
Cooling ⁴	Capacity	kW	5.75	7.4	8.8
	Rated power input	kW	1.6	2.14	2.71
	EER		3.58	3.45	3.25
Seasonal space heating energy efficiency ⁵	LWT 35°C		A+++	A+++	A+++
	LWT 55°C		A+++	A+++	A+++
	LWT 55°C		A+++	A+++	A+++
SCOP ⁶	LWT 35°C		4.85	5.1	5.1
	LWT 55°C		3.83	3.85	3.85
	LWT 55°C		3.83	3.85	3.85
DHW energy efficiency	Water heating energy efficiency class		A+	A+	A+
	COP _{DHW}		2.95	2.95	2.95
	Flow and head profile		L	L	L
Water pump	Available head	m	9	9	9
	Maximum flow rate	(m³/h)		4.5	
	Adapter diameter			DN25	
Refrigerant R32	Factory charge	kg	0.55	0.85	1.35
Sound pressure level	Outdoor unit	dB(A)	44	44	44
	Indoor unit	dB(A)		31	
Sound power level	Outdoor unit	dB	53	57	57
	Indoor unit	dB	41	43	43
Package dimensions (W×D×H)	Outdoor unit	mm	1205*555*870	1355*545*1210	
	Indoor unit	mm	700*682*1945	700*682*1835	
Unit dimensions (W×D×H)	Outdoor unit	mm	1130*420*770	1280*420*1040	
	Indoor unit	mm	600*600*795	600*600*720	
Operating temperature range	Chloride	°C		-5 ~ 43	
	Copper/white	°C		-25 ~ 35	
	CWU (rodent)	°C		-25 ~ 43	
Water temperature setting range	Cooling	°C		5 ~ 25	
	Heating	°C		25 ~ 80	
	DHW (tank)	°C		30 ~ 75	
Water circuit	Pipe connections	in		G1" BSP	
	DHW pipe connections	in		G3/4" BSP	
	Safety valve pressure	MPa		0.3	
Water circuit	Flow switch	m³/h		0.6	
	Expansion vessel capacity	L		8	
	Backup heater capacity	kW		3	
Loading quantity	Water side	Type	typ. płytowy		
	401 (40/20)	Outdoor unit (pcs)	88/11/16		
		Indoor unit (pcs)	51/5/24		

Note:
1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811:2013; (EU) No 813:2013; OJ 2014/C 207/02:2014.
2. Outdoor air temperature 7°C DB, 85% R.H.; EWT 30°C, LWT 35°C.
3. Outdoor air temperature 7°C DB, 85% R.H.; EWT 47°C, LWT 55°C.
4. Outdoor air temperature 35°C DB; EWT 23°C, LWT 18°C.
5. Outdoor air temperature 35°C DB; EWT 12°C, LWT 7°C.
6. Seasonal space heating energy efficiency class tested in average climate conditions.
7. Test standard: EN12102-1
8. Sound pressure level is the maximum value tested under the two conditions of Notes2 and Notes5.

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All In One Split

Model name			12kW	14kW	16kW
Outdoor unit model			AC-H12SP25A(HA)	AC-H14SP25A(HA)	AC-H16SP25A(HA)
Indoor unit model			ACHA-H4P25B9		
Power supply			380-415/3/50		
Heating ¹	Capacity	kW	11.6	13.6	15.1
	Rated power input	kW	2.37	2.83	3.21
	COP		4.9	4.8	4.7
Heating ²	Capacity	kW	11.5	14	14.8
	Rated power input	kW	3.54	4.38	4.70
	COP		3.25	3.2	3.15
Cooling ³	Capacity	kW	11.6	13.6	15.8
	Rated power input	kW	2.58	3.78	4.05
	EER		4.5	3.6	3.9
Cooling ⁴	Capacity	kW	11.1	12.5	14
	Rated power input	kW	3.6	4.31	5.09
	EER		3.05	2.9	2.75
Seasonal space heating energy efficiency ⁵	LWT 35°C		A+++	A+++	A+++
	LWT 55°C		A+++	A+++	A+++
	LWT 55°C		A+++	A+++	A+++
SCOP ⁶	LWT 35°C		4.71	4.71	4.75
	LWT 55°C		3.825	3.825	3.825
	LWT 55°C		3.825	3.825	3.825
DHW energy efficiency	Water heating energy efficiency class		A+	A+	A+
	COP _{DHW}		2.88	2.88	2.88
	Flow and head profile		L	L	L
Water pump	Available head	m	9	9	9
	Maximum flow rate	m³/h		4.5	
	Adapter diameter			DN25	
Refrigerant R32	Factory charge	kg	1.35	1.35	1.35
Sound pressure level	Outdoor unit	dB(A)	45	46	47
	Indoor unit	dB(A)		31	
Sound power level	Outdoor unit	dB	58	59	60
	Indoor unit	dB		43	
Package dimensions (W×D×H)	Outdoor unit	mm	1355*545*1210		
	Indoor unit	mm	700*682*1835		
Unit dimensions (W×D×H)	Outdoor unit	mm	1280*420*1040		
	Indoor unit	mm	600*600*720		
Operating temperature range	Chloride	°C		-5 ~ 43	
	Copper/White	°C		-25 ~ 35	
	CWU (rodent)	°C		-25 ~ 43	
Water temperature setting range	Cooling	°C		5 ~ 25	
	Heating	°C		25 ~ 80	
	DHW (tank)	°C		30 ~ 75	
Water circuit	Pipe connections	in		G1" BSP	
	DHW pipe connections	in		G3/4" BSP	
	Safety valve pressure	MPa		0.3	
	Flow switch	m³/h		0.6	
	Expansion vessel capacity	L		8	
	Backup heater capacity	kW		3	
	Water side	Type		typ. płytowy	
Loading quantity	401 (40/20)	Outdoor unit (pcs)		68/13/16	
		Indoor unit (pcs)		51/5/24	

Note:
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