



## HEAT PUMPS CATALOGUE



AUD











### **ABOUT AUX BRAND** A NEW QUALITY LEVEL

The AUX Group, present on global markets for 36 years, is considered one of the leading manufacturers in the following sectors: real estate, finance, electronics and smart household appliances. It has advanced, fully automated production facilities, research and development centres, and highly qualified staff. HVAC systems are major branch of the group's business, and the continuous and dynamic growth of sales volume has placed the AUX brand among the top three brands in the Chinese air conditioning industry. The AUX group pays a lot of attention to sustainable development, with focus on renewable resources preserving quality lifestyle of present and future generations. In laboratories, patented technologies are constantly being developed, optimised, and new ecological, energy-efficient and reliable solutions are introduced. The concept of sustainable development goes hand in hand with caring for human health and improving the quality of the air we breathe.

**36 YEARS** OF EXPERIENCE

180 COUNTRIES









### ABOUT AUX BRAND PRODUCTS

#### **ROOM AIR CONDITIONERS**

AUX room air conditioners line includes 8 unique wall-mounted models. All units feature sophisticated styling and the widest range of features in their range.

#### **COMMERCIAL AIR CONDITIONERS**

AUX air conditioning systems are the perfect solution for commercial buildings. Wall-mounted, cassette, duct, and floor/ceiling units allow designing complete and discrete air conditioning systems in every room.

#### **MULTI AIR CONDITIONERS**

The AUX brand offers multi-split air-conditioning solutions, which are becoming more and more popular in Poland. Multi-split is ideal for homes, apartments, shops, small hotels, and commercial facilities.

#### **ARV SYSTEMS**

ARV6 is the latest generation system from AUX. Highly technologically advanced devices are an ideal solution for commercial, office, hotel, and residential buildings (ARV6 Mini).

#### **HEAT PUMPS**

Air-to-water heat pumps are a novelty that is a direct response to the changing needs of the market. The AUX group has designed intelligent and reliable devices that provide energy-saving and complete home heating systems.

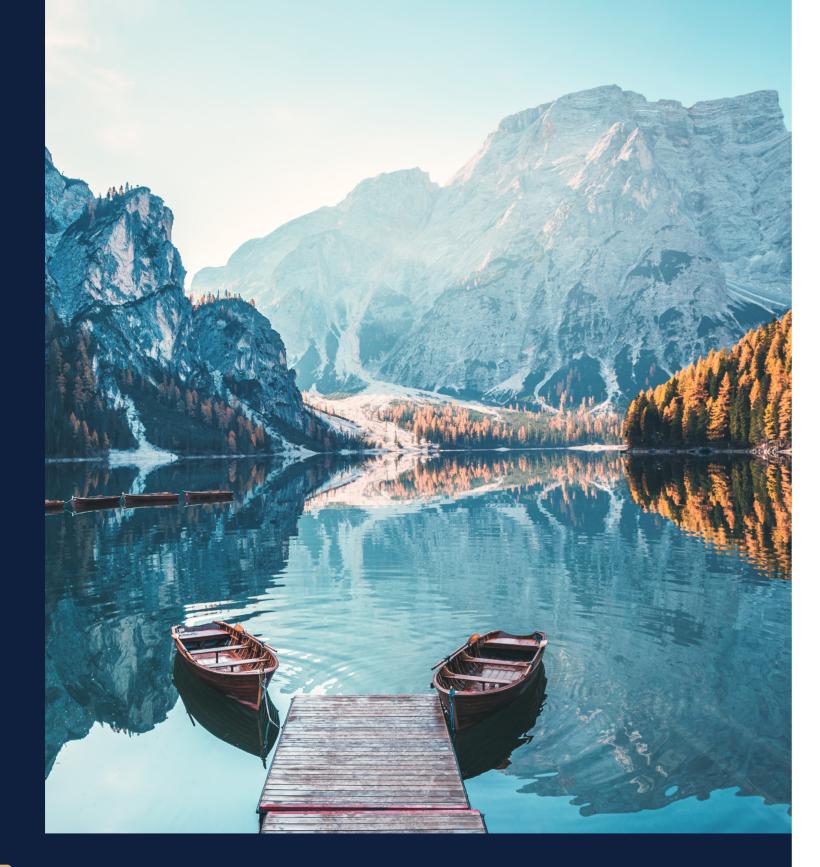


5 RESEARCH AND DEVELOPMENT CENTRES

**30** THOUSAND EMPLOYEES

AUX

AUX is an expert in providing energy saving solutions "





The AUX Group, as one of the leading manufacturers of advanced air conditioning and heat pump systems, approaches sustainable development very seriously. Caring for the environment is one of the major aspects of sustainable development. The policy of the AUX brand is based on the idea of careful exploitation of natural resources, so that both present and future generations can live in prosperity. Teams of qualified engineers working at AUX R&D centres around the world invent energy-saving, intelligent and ecological tech solutions, which are used in production processes to support the concept of sustainable development and provide high-quality and clean air.





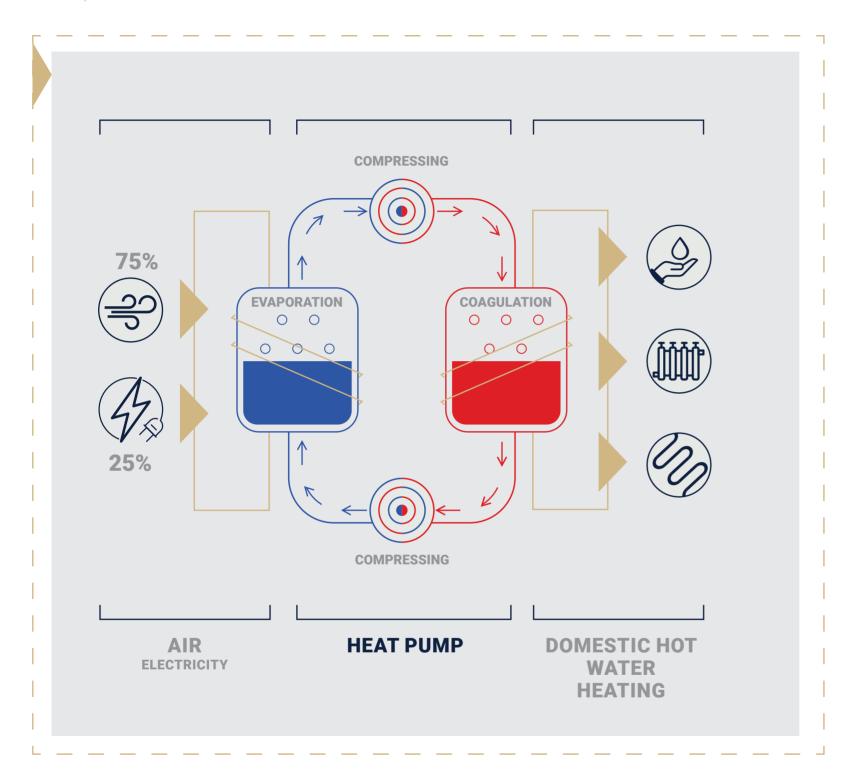
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AUX cares about the quality of the air you breathe

## **SUSTAINABLE** DEVELOPMENT

# CARING FOR A BETTER TOMORROW





**ENERGY** 

A heat pump uses as much as 75% of free energy available from the air, the remaining 25% comes from electricity. It means that the device collects heat that is present in the air and transfers it to the building consuming a small amount of electricity. The energy efficiency of a heat pump is determined by the coefficient of performance (COP), which determines the ratio of the amount of heat supplied to the amount of electricity consumed. The higher the COP, the greater the energy efficiency. The higher the energy efficiency indicator, the higher the efficiency and consequently - the savings. A heat pump is one of the most economical and environmentally friendly heating systems.

In AUX heat pumps 75% of free energy comes from the environment



# FROM NATURE

### The most important factors defining heat pump efficiency

### **HOW DOES** A HEAT PUMP WORK?

The vast majority of air-to-water heat pumps are classified as renewable energy sources and are currently considered the most efficient heating solution. An air-to-water heat pump is a device that uses heat accumulated in the air for heating or cooling space and domestic hot water system. Against all appearances, the way a heat pump works is not complicated and it uses a well-known mechanism that can be found in refrigerators for example. The most important parts of a heat pump are the compressor, expansion valve, condenser, and evaporator. The whole process is possible thanks to the physical properties of the refrigerant. Refrigerant is a liquid that circulates in the closed loop system. It boils at low pressure and low temperature and this way it absorbs heat from the environment. Then pressure and temperature are increased in the system by a compressor and the refrigerant changes into gas, next it moves to a condenser and releases heat to the system. Afterwards, liquid refrigerant passes through the expansion valve where the pressure and temperature drop and the process starts again. If a heat pump provides cooling, the process is reversed refrigerant absorbs heat from the water and removes it outside.





## THE HIGHER SCOP AND SEER, THE LOWER ELECTRICITY BILLS

### COP

#### Coefficient of Performance

Coefficient of performance, which determines the ratio of the amount of thermal energy supplied to the heat pump to the amount of energy consumed by it. If the COP of a heat pump is 5, it means that the device consumes 1kW of electricity to provide 5kW of heat.



#### Seasonal Coefficient of Performance

Seasonal coefficient of performance allows you to calculate the amount of electricity consumed by a device during the year or heating season. It allows calculating easily the cost of heating a building with a heat pump.

#### EER Energy Efficiency Ratio

Coefficient of performance determines the ratio of the amount of cooling energy supplied to a heat pump to the amount of energy consumed by it. If the EER for of heat pump is 5. it means that the device consumes 1kW of electricity to provide 5kW of cooling.



Seasonal Energy Efficiency Ratio

Coefficient of performance determines the ratio of the amount of cooling energy supplied to a heat pump to the amount of energy consumed by it. If the EER form of a heat pump is 5, it means that the device consumes 1kW of electricity to provide 5kW of cooling.



### HEAT PUMP WORKS WITH **HEAT RECEIVERS**

Air-to-water heat pumps work with the following heat receivers: fan coil units, radiators, or floor heating systems. However, the use of low-temperature heat receivers works best in terms of efficiency. Radiant heating is characterized by large surface and as a consequence, there is no need for high temperature in the system contrary to compact heat sources.



### WHY CHOOSE AUX HEAT PUMP?



Maintenance-free There is no need to clean, start a fire, or constant monitoring of the unit



#### **Complete heating system** It heats, cools the building and supplies domestic hot water



Versatile use Dedicated to newly built and additionally insulated buildings



**Safety** No risk of fire, explosion or carbon monoxide poisoning



**Easy and quick assembly** The approximate installation time carried out by an experienced company is 1 to 3 days



Peace and quiet The quiet operation guarantees high comfort



**Savings** Free energy obtained from the air and the possibility of connecting to a photovoltaic system





#### Ecology

Heat pumps do not emit harmful substances into the environment



#### Aesthetics

No need to install radiators which often affect the aesthetics of the interior



### Long lifespan

It is estimated that the average lifespan of a heat pump is 20 years

### **FEATURES AND FUNCTIONS** OF AUX HEAT PUMP

60°C

60°C

AUTO

Water

temperature

auto-adaptation

\☆

Safety

Con la

Surface

heating

Fast

Domestic

Hot Water

Q
<b>R32</b>

R32 refrigerant

Sterilisation

at 65°C

SG

Ready





DC

INVERTER

ECO

mode

Certificates

Energy efficiency A+++

A

\*\*\*



Holiday mode





Wi-Fi module











,and ceiling heating systems





AUX develops and implements innovative technologies



Quiet

operation

Maintenance-free



Quick installation





costs



AUX

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## Domestic hot water up to 60°C



Provides domestic hot water reaching a temperature up to 60°C.



### Inverter technology



Inverter technology allows smooth control of efficiency without lowering the capability of the device



### Energy efficiency A+++

A +++ energy efficiency is a guarantee of energy saving





## Sterilisation at 65°C



High sterilization temperature provides 99% effectiveness in eliminating legionella bacteria that are able to multiply in hot water tanks when water is not used for a long time

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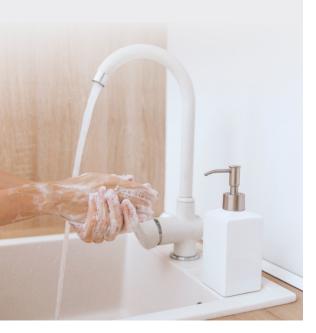
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## Water temperature auto-adaptation



The heat pump defines and sets the optimum water temperature for the highest comfort





ECO mode saves up to 50% of energy



### Quiet operation

Quiet operation of the outdoor unit with the noise level below 45dB and the indoor unit below 31dB





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The holiday mode protects the device against possible damage caused by low temperature, i.e. frost







Heat pumps marked with SG Ready label are equipped with control system that allows to connect a single heat pump into a smart grid









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### **Emission-free**

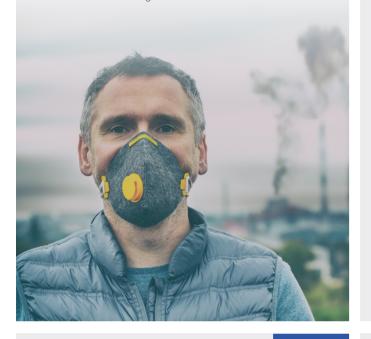
A heat pump does not emit any pollutants into the environment which makes it an ecological alternative to traditional heating methods



### Maintenance-free



A heat pump is almost a maintenance-free system so it saves a lot of time



### **Quick installation**

Installation of an air-source heat pump is relatively quick and easy. It usually takes 2 to 3 days



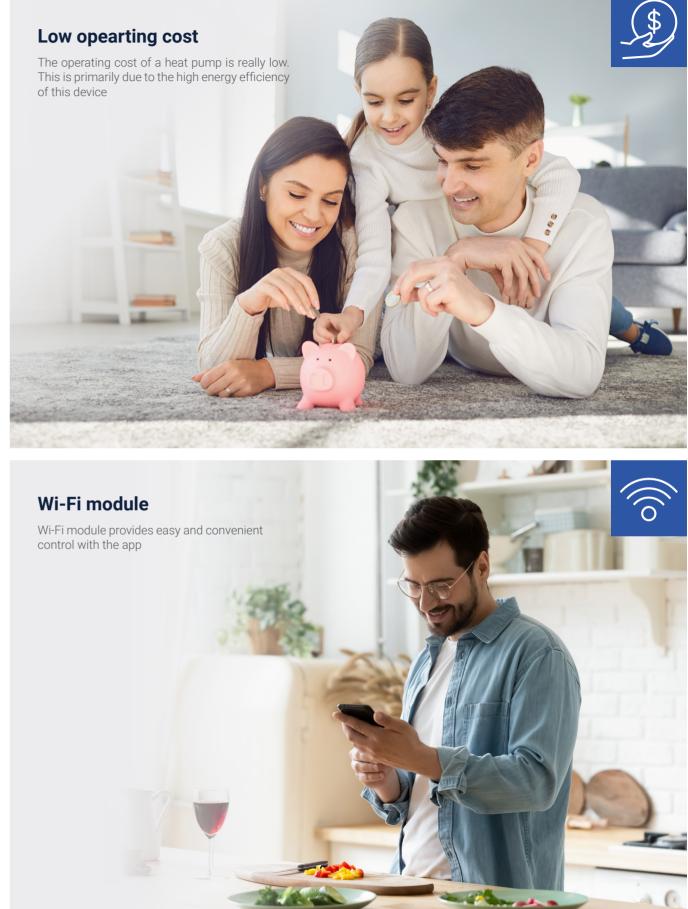


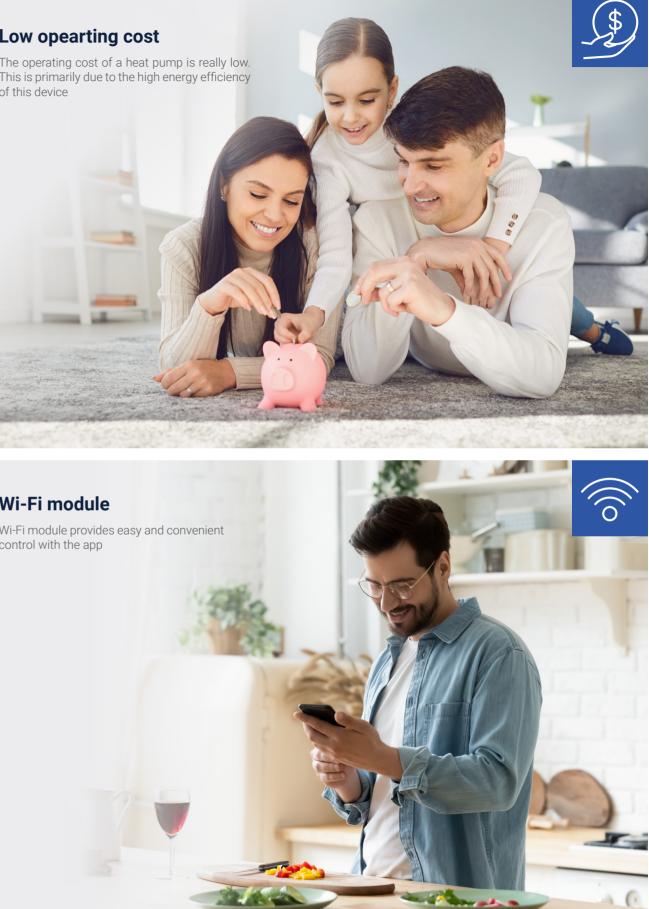
### Versatile use



Heat pump works with various heat receivers (floor heating, radiators, fan coil units) and it can operate in combined systems with other heat sources such as gas furnaces or electric heaters







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### **FINANCING** MOJE CIEPŁO

Financing under the Moje Ciepło scheme includes subsidies for the purchase and installation of a heat pump in single-family buildings. The funding is within the range from 7 to 21 thousand PLN and to cover up to 30% of eligible investment costs, and up to 45% in the case of holders of the Large Family Card. The Moje Ciepło scheme is an initiative aimed at encouraging to invest in renewable energy sources, specifically in the development of heating using zeroemission heat sources in single-family houses. The National Fund for Environmental Protection and Water Management states that the Moje Warm scheme will operate until 2026.

The budget of the Moje Ciepło scheme, supplied by the Modernization Fund, exceeds 600 million PLN.

The Moje Ciepło scheme is addressed to consumers, who are owners or co-owners of new, single-family residential buildings.

The Moje Ciepło scheme supports the purchase and installation of a heat pump in new homes and is complementary to the Czyste Powietrze scheme, which provides financial support for additionally insulated buildings.





### What does "New home" mean

within "Moje Ciepło" scheme

A new home is one that meets one of the following conditions:

- notice of completion of construction submitted not earlier than January 1, 2021
- notification was not submitted on the date of submission of the grant application on the completion of the construction of a single-family residential building, or an application for a decision on the occupancy permit in accordance with the provisions of the Act of 7 July 1994 Construction Law has not been submitted.

### How to

AUX

receive funding?

- A heat pump must be purchased and installed in a new home.
- The device must be purchased between the 1st of January, 2021 and to 31st of January, 2026
- A device with a higher energy standard must be purchased The value of the annual indicator for non-renewable primary energy (EP) for heating, ventilation and domestic hot water may be in the first year of operation, i.e. 2022, not more than 63 kWh/(m2year). In subsequent years, the requirement for the EP indicator will be no more than 55kW





Czyste Powietrze scheme - a nationwide program of financial support for the replacement of heat sources. The scheme for owners and co-owners of single-family houses offering a subsidy for replacement of the heat source and related works improving of insulation. The aim of the scheme is to improve air quality and reduce greenhouse gas emissions by replacing heat sources and improving the energy efficiency of single-family residential buildings.

Czyste Powietrze scheme is addressed to owners or co-owners of singlefamily residential or separate buildings in single-family residential buildings with a separate land and mortgage register.

Applications for funding can be submitted online or at the office. For more information, please visit: www.czystepowietrze.gov.pl



Twój wybór!





(grant with pre-financing)	
PLN (grant with pre-financing)	

### **TECHNICAL** SPECIFICATIONS



Model name		ACH	P-H04/4R3HA	ACHP-H06/4R3H	A ACHP-H08/4R3HA
Outdoor unit		ACHP	-H04/4R3HA-O	ACHP-H06/4R3HA	A-O ACHP-H08/4R3HA-O
Indoor unit		ACHP	P-H04/4R3HA-I	ACHP-H06/4R3H	A-I ACHP-H08/5R3HA-I
	Capacity k	N	4,3	6,25	8,4
Heating (A7/W35) (1)	Power k consumption	N	0,83	1,3	1,62
	СОР		5,2	5	5,2
	Capacity k	N	4,36	6,4	8,3
Heating (A7/W55) (2)	Power k consumption	N	1,47	2,13	2,60
	СОР		2,96	3	3,19
	Capacity k	N	4,5	6,6	8,45
Cooling (A35/W18) (3)	Power k consumption	N	0,81	1,35	1,67
	EER		5,56	4,9	5,06
	Capacity k	N	4,75	7,05	7,45
Cooling (A35/W7) (4)	Power consumption k	N	1,40	2,35	2,20
	EER		3,4	3	3,39
Seasonal Energy	LWT 35°C		A+++	A+++	A+++
Efficiency Class: Heating (6)	LWT 55°C		A++	A++	A++
500D (6)	LWT 35°C		4,86	4,96	5,22
SCOP (6)	LWT 55°C		3,32	3,53	3,37
Power	Outdoor unit V	/ <b>~/Hz</b> 22	20-240/1/50	220-240/1/50	220-240/1/50
	Indoor unit V	/ <b>~/Hz</b> 22	20-240/1/50	220-240/1/50	380-415/3/50
Maximum Circuit Breaker	А		18	18	19

ACHP-H10/4R3HA	ACHP-H12/5R3HA	ACHP-H14/5R3HA	ACHP-H16/5R3HA
ACHP-H10/4R3HA-0	ACHP-H12/5R3HA-0	ACHP-H14/5R3HA-0	ACHP-H16/5R3HA-O
ACHP-H10/5R3HA-I	ACHP-H12/5R3HA-I	ACHP-H14/5R3HA-I	ACHP-H16/5R3HA-I
10	12,2	14,5	16,1
2	2,44	3,08	3,57
5	5	4,71	4,51
10	12	14	16,1
3,23	3,86	4,67	5,53
3,1	3,11	3	2,91
10	12	13,6	15
2,08	3	3,78	4,41
4,8	4	3,6	3,4
8,3	11,7	12,8	14
2,52	4,3	5,00	5,7
3,3	2,75	2,56	2,46
A+++	A+++	A+++	A+++
A++	A++	A++	A++
5,2	4,82	4,71	4,63
3,5	3,46	3,48	3,43
220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
19	14	14	14

A NEW QUALITY LEVEL



Model name			ACHP-H04/4R3HA	ACHP-H06/4R3HA	ACHP-H08/4R3HA
Outdoor unit			ACHP-H04/4R3HA-0	ACHP-H06/4R3HA-0	ACHP-H08/4R3HA-0
Indoor unit			ACHP-H04/4R3HA-I	ACHP-H06/4R3HA-I	ACHP-H08/5R3HA-I
Compressor	Туре	-	Double rotary DC inverter	Double rotary DC inverter	Double rotary DC inverte
	Motor type	-	Brushless DC motor	Brushless DC motor	Brushless DC motor
Outdoor unit fan	Number of fans	-	1	1	1
Regrigerant type (R32)	Quantity	kg	1,10	1,10	1,45
Expansion valve type		-	Electronic	Electronic	Electronic
	Liquid / gas pipe diameter	mm	Φ9.52/15.9	Ф9.52/15.9	Ф9.52/15.9
Cooling system	Piping length min/max	m	2/30	2/30	2/30
Height difference in the system	Outdoor unit above/below	m	20	20	20
Sound pressure level	Outdoor unit	dB	43	44	45
(1m)	Indoor unit	dB	28	28	29
Net dimensions	Outdoor unit	mm	350×700×900	350×700×900	395×805×970
(LxHxW)	Indoor unit	mm	420×790×270	420×790×270	420×790×270
Packaging	Outdoor unit	mm	430×770×1020	430×770×1020	495×895×1105
dimensions (LxHxW)	Indoor unit	mm	515×985×355	515×985×355	515×985×355
	Outdoor unit	kg	51/55	51/55	65/69
Net/gross weight	Indoor unit	kg	38/43	38/44	39/45
	Cooling	°C	10 ~ 48	10 ~ 48	10 ~ 48
Operation range at ambienttemperatures	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35
-	DHW	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43
	Cooling	°C	5 ~ 25	5~25	5~25
Water temperature range	Heating	°C	25 ~ 65	25~65	25 ~ 65
-	DHW	°C	30 ~ 60	30 ~ 60	30~60

ACHP-H10/4R3HA	ACHP-H12/5R3HA	ACHP-H14/5R3HA	ACHP-H16/5R3HA	
ACHP-H10/4R3HA-O	ACHP-H12/5R3HA-O	ACHP-H14/5R3HA-0	ACHP-H16/5R3HA-O	
ACHP-H10/5R3HA-I	ACHP-H12/5R3HA-I	ACHP-H14/5R3HA-I	ACHP-H16/5R3HA-I	
Double rotary DC inverter				
Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor	
1	1	1	1	
1,45	1,84	1,84	1,84	
Electronic	Electronic	Electronic	Electronic	
Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9	
2/30	2/30	2/30	2/30	
20	20	20	20	
48	49	50	54	
29	31	31	31	
395×805×970	420×860×990	420×860×990	420×860×990	
420×790×270	420×790×270	420×790×270	420×790×270	
495×895×1105	530×880×1085	530×880×1085	530×880×1085	
515×985×355	515×985×355	515×985×355	515×985×355	
65/69	88/94	88/94	88/94	
39/45	39/45	39/45	39/45	
10 ~ 48	10 ~ 48	10 ~ 48	10 ~ 48	
-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	
-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43	
5~25	5 ~ 25	5~25	5~25	
25 ~ 65	25 ~ 65	25 ~ 65	25~65	
30 ~ 60	30 ~ 60	30 ~ 60	30 ~ 60	

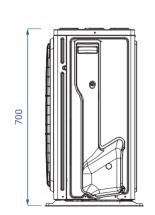
Model name				ACHP-H04/4R3HA	ACHP-H06/4R3HA	ACHP-H08/4R3HA
Outdoor unit		ACHP-H04/4R3HA-0	ACHP-H06/4R3HA-0	ACHP-H08/4R3HA-O		
Indoor unit		ACHP-H04/4R3HA-I	ACHP-H06/4R3HA-I	ACHP-H08/5R3HA-I		
Water connection inch		R1"	R1"	R1⁼		
rculation	Safety valve setting MPa		0,3	0,3	0,3	
	Minimum water flow m³/h		0,36	0,36	0,36	
	Expansion	Capacity	L	8	8	8
	vessel	Max water pressure	MPa	0,3	0,3	0,3
3	Water exchange type -		Flat plate	Flat plate	Flat plate	
Electric flow-through heater kW Water pump head height m		rough heater	kW	3	3	9
		m	9,5	9,5	9,5	

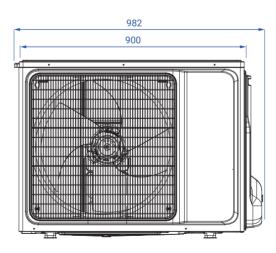
ACHP-H10/4R3HA	ACHP-H12/5R3HA	ACHP-H14/5R3HA	ACHP-H16/5R3HA
ACHP-H10/4R3HA-O	ACHP-H12/5R3HA-O	ACHP-H14/5R3HA-0	ACHP-H16/5R3HA-O
ACHP-H10/5R3HA-I	ACHP-H12/5R3HA-I	ACHP-H14/5R3HA-I	ACHP-H16/5R3HA-I
R1"	R1"	R1"	R1"
0,3	0,3	0,3	0,3
0,36	0,6	0,6	0,6
8	8	8	8
0,3	0,3	0,3	0,3
Flat plate	Flat plate	Flat plate	Flat plate
9	9 9		9
9,5	9,5	9,5	9,5

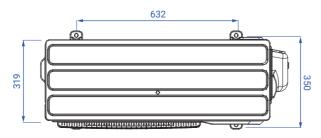
# TECHNICAL **DRAWINGS**

Outdoor unit 4 kW, 6 kW

ACHP-H04/4R3HA-0 ACHP-H06/4R3HA-0



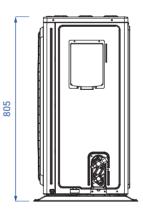


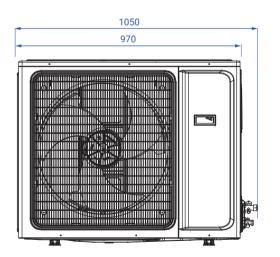


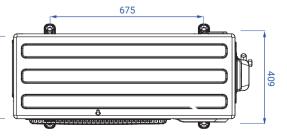
Outdoor unit 8 kW, 10 kW

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ACHP-H08/4R3HA-O ACHP-H10/4R3HA-O

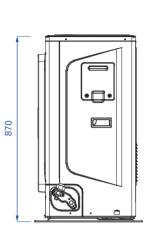




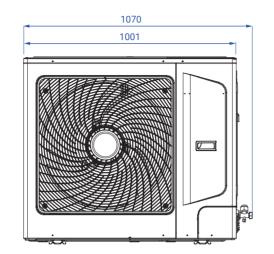


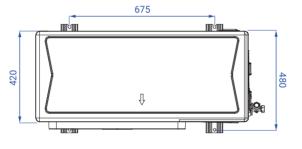
Outdoor unit 12 kW, 14 kW, 16 kW

ACHP-H12/5R3HA-O ACHP-H14/5R3HA-O ACHP-H16/5R3HA-O



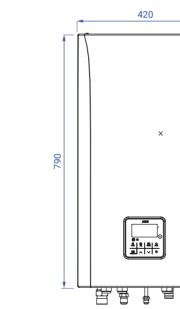
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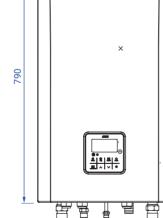


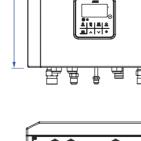


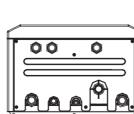


ACHP-H04/4R3HA-I ACHP-H06/4R3HA-I ACHP-H08/5R3HA-I ACHP-H10/5R3HA-I ACHP-H12/5R3HA-I ACHP-H14/5R3HA-I ACHP-H16/5R3HA-I











AUX cares

AUX



## about the environment

## YOUR TRUSTED **BUSINESS PARTNER**

We care about living conditions and well-being, which is why we offer a full range of air conditioning devices and systems dedicated to individual customers, small businesses, and large institutional customers.

We have supplied over a million air conditioners to our customers. For over 30 years we have been cooperating with world leaders in the production of air-conditioning devices. We are sure that we offer products and solutions of the highest quality and the latest technologies that meet high requirements in terms of energy efficiency, design, and ecology.



### WWW.WIENKRA.PL

We are **the exclusive** distributor of AUX brand in Poland!

See you at our branches

#### Kraków:

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Wrocław

#### Warszawa - Janki:

Val. Sokołowska 15, 05-090 Janki wienkra-waw@wienkra.pl

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WWW.AUXCOOL.COM

## WE ARE ALWAYS FOR YOU





## HEAT PUMPS



## www.auxcool.com



Exclusive distributor of AUX brand in Poland: WIENKRA Sp. z o.o.

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