AUX

Heat pump monoblock

R290



Features of the R290 heat pump

High efficiency

- Surface area of the finned heat exchanger ↑17%.[1]
- Enlarged plate heat exchanger.[1]
- Surface area of the fan blades ↑10%.[1]
- Compressor displacement ↑55%.[1]

100% output power with no performance loss at -7°C.[2]
Supplies water at 80°C when the ambient temperature is -10°C.[2]

High energy efficiency

- Main components use DC control, ensuring high operating efficiency.
- At water temperatures of 35°C and 55°C, the SCOP rating reaches Class A+++.

Sealed electrical control box

- 3 mm thick aluminum housing.
- Internal fan ensuring even heat dissipation.
- Additional external cooling fins

Explosion-proof design

- Sealed (hermetic) electrical control box, isolated from any potentially leaking refrigerant.

Precise noise control

- The compressor is surrounded by sound-absorbing materials.
- Vibration-damping materials are used in the central section.
- Fan with curled edges and a large blade pitch angle reduces vortex noise.
- Unique mesh cover minimizes air resistance.
- Built-in acoustic insulation (soundproofing mats) in multiple areas of the unit.
- The outdoor unit noise level is as low as 35 dB at a distance of three meters.[3]

1. Compared with the AUX R32 heat pump heat pump.
2. Data source: AUX Performance Laboratory, 16 October 2023.
3. Data source: AUX Acoustic Laboratory, 15 March 2023.

Convenience

App control

- Supports parameter settings, energy consumption monitoring, holiday mode, etc.

Precise temperature control

- The mixing valve uses 0–10 V control, enabling accurate regulation of the water temperature supplied to the underfloor heating system.

Cascade function

- Up to 8 units can be connected in parallel, allowing a total system capacity of up to 128 kW.
- Flexible selection of the number of units for domestic hot water production, ideal for facilities with high DHW demand.

Intelligent unit runtime control

- Thanks to precise control algorithms, the system ensures balanced operating time for each unit, so that all devices run for the same amount of time.

Backup power supply and gas boiler support

- Powerful backup electric heaters up to 9 kW, with compatibility for integration with another heat source.



Convenience

Innovative controller

- With a color display.
- Featuring an elegant black design.
- With a Modbus gateway.
- Supporting 18 languages.
- With a temperature sensor.
- With a built-in Wi-Fi module.

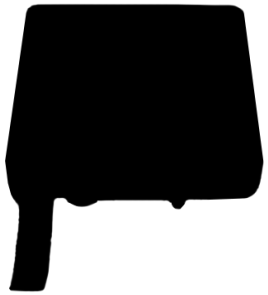
Software update

- Fast and easy software updates thanks to the built-in USB port.

Built-in Wi-Fi module

- Full control from anywhere.
- Thanks to the Wi-Fi connection, you can manage the heat pump via smartphone, tablet, or computer—whether you are at home, at work, or on vacation. All you need is internet access.
- Comfort and convenience every day. Changing the temperature, operating mode, or heating schedule can be done without approaching the controller. Everything can be set with a single click.





Specifications – Monoblock (single-phase model)

Model name			4kW	6kW
Model			ACHP-H04/4R2HA-M	ACHP-H06/4R2HA-M
Power supply		V/Ph/H	220–240 / 1 / 50	
Heating[2]	Capacity	kW	4.5	6.35
	Rated power input	kW	0.87	1.28
	COP		5.15	4.95
Heating[3]	Capacity	kW	4.6	6.4
	Rated power input	kW	1.44	2.03
	COP		3.2	3.15
Cooling[4]	Capacity	kW	4.5	6.5
	Rated power input	kW	0.82	1.27
	EER		5.5	5.1
Cooling[5]	Capacity	kW	4.7	6.8
	Rated power input	kW	1.29	2.19
	EER		3.65	3.1
Seasonal space heating efficiency[7]	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	m^3/h	4.5	
	Adapter diameter		DN25	
Sound pressure level	Monoblock unit	dB(A)	43	43
Sound power level	Monoblock unit	dB	56	57
Packaging dimensions (W x D x H)	Monoblock unit	mm	1205*555*870	
Unit dimensions (W x D x H)	Monoblock unit	mm	1130*450*740	
Net weight	Monoblock unit	kg	93	
Gross weight	Monoblock 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 ~ 25	
	Heating	°C	25 ~ 80	
	DHW (tank)	°C	30 ~ 75	
Water circuit	Pipe connections	inch	G1" BSP	
	Safety valve pressure	MPa	0.3	
	Flow switch	m^3/h	0.36	
	Expansion vessel capacity	L	5	
	Backup heater power	kW	3	
Loading quantity	40H/40/20	units	117/78/36	

Note:
1. Applicable EU standards and regulations: EN14511; EN14825; EN50564; EN12102; (EU) No. 811/2013; (EU) No. 813/2013; OJ 2014/C 207/02:2014.
2. Outdoor air temperature 7°C (dry bulb), 85% relative humidity; EWT 30°C, LWT 35°C.
3. Outdoor air temperature 7°C (dry bulb), 85% relative humidity; EWT 47°C, LWT 55°C.
4. Outdoor air temperature 35°C (dry bulb); EWT 23°C, LWT 18°C.
5. Outdoor air temperature 35°C (dry bulb); EWT 12°C, LWT 7°C.
6. Seasonal space heating energy efficiency class tested under average climate conditions.
7. Test standard: EN12102-1.
8. The sound pressure level is the maximum value measured under the two conditions specified in points 2 and 5.

Remarks:
1. Data sourced from the AUX laboratory. Results may vary depending on test conditions. AUX reserves the right to interpret the data.
2. All specifications are subject to change by the manufacturer without prior notice.

Specifications – Monoblock (three-phase model)

Model name			8kW	10kW	12kW	14kW	16kW
Model			ACHP-H08/5R2HA-M	ACHP-H10/5R2HA-M	ACHP-H12/5R2HA-M	ACHP-H14/5R2HA-M	ACHP-H16/5R2HA-M
Power supply		V/Ph/H	380–415 / 3 / 50				
Heating[2]	Capacity	kW	8.4	10.0	12	14	15.1
	Rated power input	kW	1.68	2.08	2.45	2.92	3.21
	COP		5.0	4.8	4.9	4.8	4.7
Heating[3]	Capacity	kW	7.8	9.5	12	14	15.1
	Rated power input	kW	2.36	2.92	3.69	4.38	4.79
	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	1.61	2.11	2.67	3.89	4.10
	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	2.17	2.74	3.8	4.38	5.09
	EER		3.45	3.25	3.05	2.9	2.75
Seasonal space heating efficiency[7]	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	m^3/h	4.5				
	Adapter diameter		DN25				
Sound pressure level	Monoblock unit	dB(A)	44	44	45	46	47
Sound power level	Monoblock unit	dB	57	57	57	57	58
Packaging dimensions (W x D x H)	Monoblock unit	mm	1355*545*1210				
Unit dimensions (W x D x H)	Monoblock unit	mm	1280*450*1040				
Net weight	Monoblock unit	kg	140		156		
Gross weight	Monoblock unit	kg	154		167		
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	G1" BSP				
	Safety valve pressure	MPa	0.3				
	Flow switch	m^3/h	0.6				
	Expansion vessel capacity	L	5				
	Backup heater power	kW	9				
Loading quantity	40H/40/20	units	68/33/16				

Note:
1. Applicable EU standards and regulations: EN14511; EN14825; EN50564; EN12102; (EU) No. 811/2013; (EU) No. 813/2013; OJ 2014/C 207/02:2014.
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All AUX heat pumps are covered by a 3-year warranty

- For 3 years, you are protected against unexpected repair costs, while we ensure the reliable operation of your unit.
- It is an investment in comfort, savings, and trouble-free use for years to come.

Are you considering buying a

heat pump

for your house or apartment?

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