

# HEAT PUMP R290



**R290**  
green & environmental protection

**-7°C**  
-7°C capacity no damping

**55°C A+++**  
High Efficiency

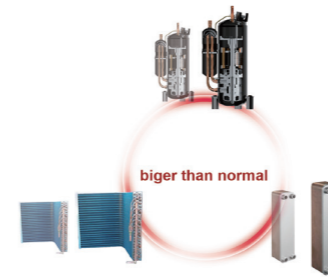
**3m 35dB**  
Low noise operation

**128kW x8**  
Combination of 8 units

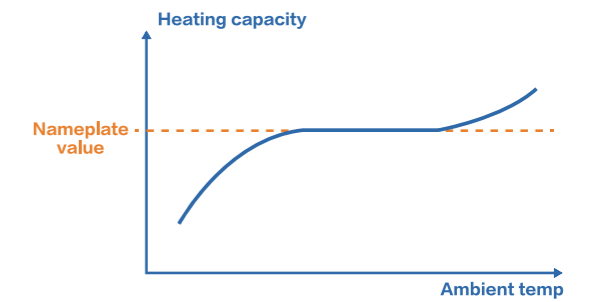
## Feature

### ► High capacity

- Finned heat exchanger area ↑30%
- Enlarged plate heat exchanger
- Fan blade area ↑20%
- Compressor displacement ↑50%

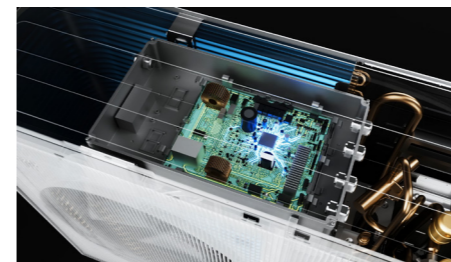


100% output with no capacity reduction at -7°C  
Supplying hot water at 80°C in an environment of -10°C

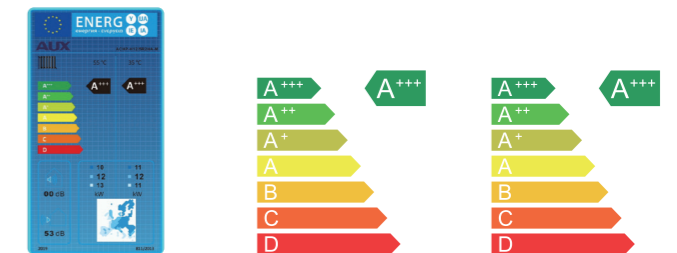


### ► High energy efficiency

Equipped with self-developed inverter system

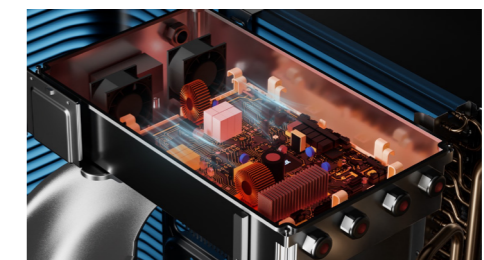
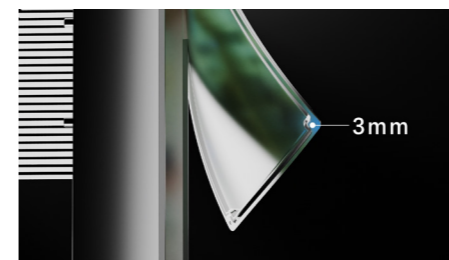


The water temperature is 35°C and 55°C, SCOP is A+++



### ► Airtight electric control box

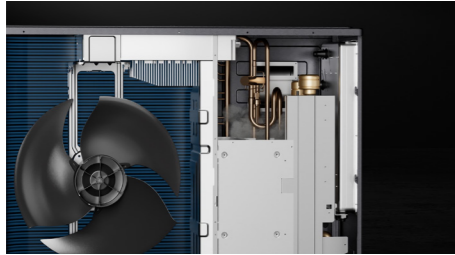
- Metal thickness up to 3mm
- Internal dual fan design for even heat dissipation
- Add external cooling fins
- Temperature rise drops by 2°C



# Feature

## ► Explosion-proof

Airtight electric control box, separated from leaked refrigerant

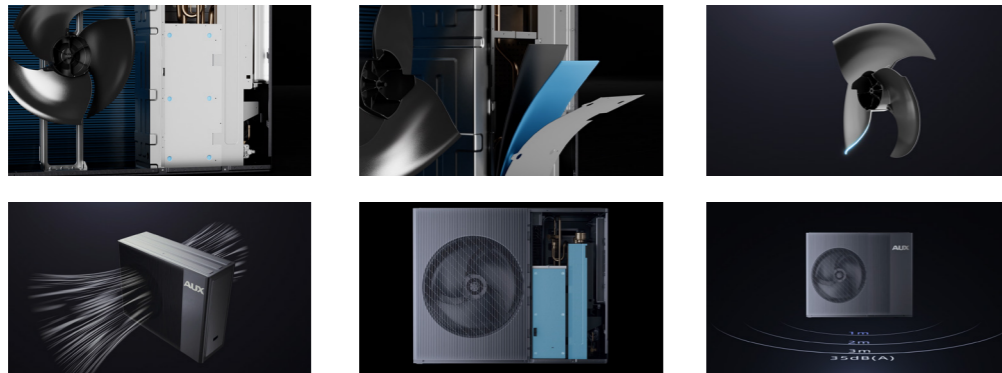


High pressure sensor



## ► Multiple noise reduction

- 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



## ► Remote control



Color screen remote controller with 18 languages

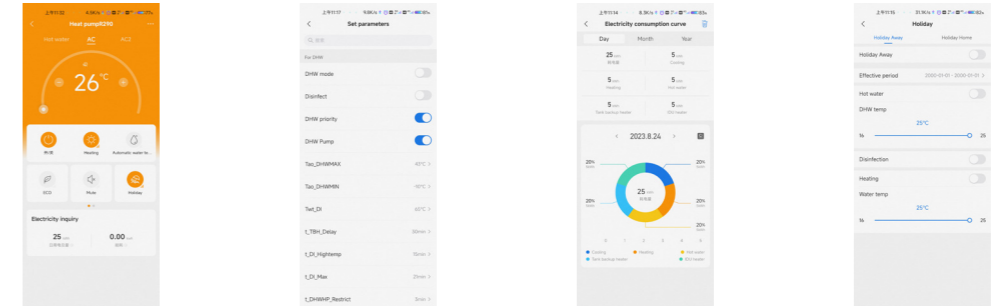


Can control 8 rooms

# Feature

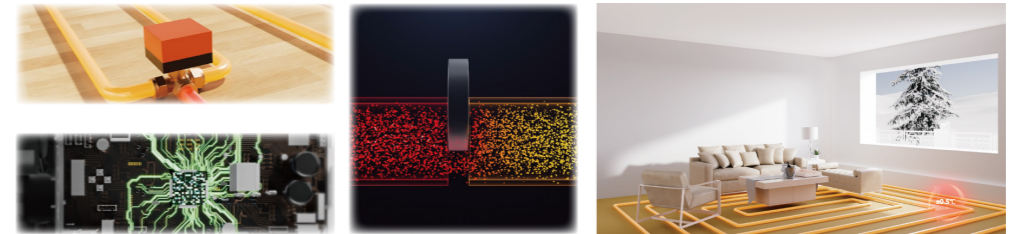
## ► APP control

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



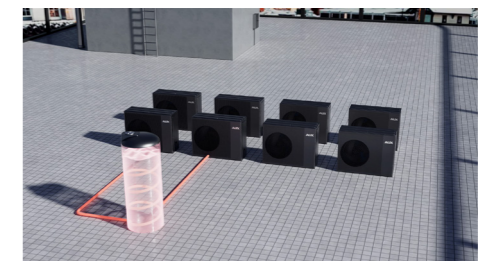
## ► Precise temperature control APP control

- Real-time control of the opening/closing of the floor heating mixing valve
- Water temperature changes within  $\pm 0.5^{\circ}\text{C}$



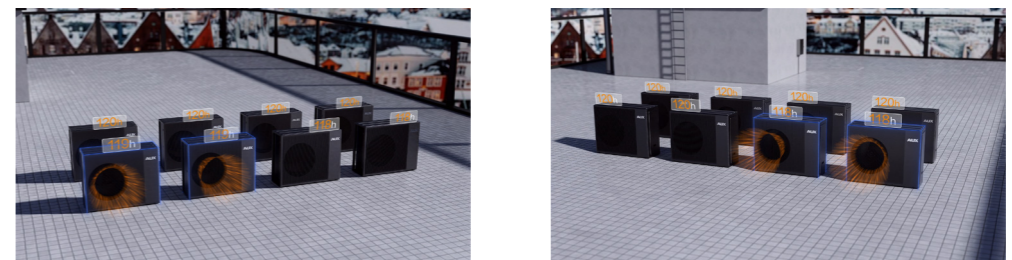
## ► Parallel connection of multiple machines

- 8 units work simultaneously
- Maximum capacity 128kW



## ► Module rotation

Ensure that the running time of each outdoor unit is even



# Feature

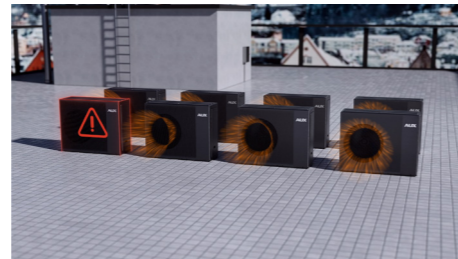
## ► Convenience

The side panel can be opened directly



## ► Remote control

If one outdoor unit fails,  
the other outdoor units can operate normally



Query faulty outdoor machine information and modify parameters through the remote monitoring system



## ► Program update

The remote controller supports USB program refresh



## ► Gas&solar

Can be connected to backup power and solar panels  
Can be connected to water tanks, floor heating, radiators, fan coils, etc



# Specification-Monoblock

Model name			4kW	6kW	8kW
Model			ACHP-H04/4R2HA-M	ACHP-H06/4R2HA-M	ACHP-H08/4R2HA-M
Power supply		V/Ph/H	220-240/1/50		
Heating2	Capacity	kW	4.5	6.2	8.4
	Rated input	kW	0.87	1.27	1.68
	COP		5.15	4.9	5
Heating3	Capacity	kW	4.6	6.2	7.8
	Rated input	kW	1.44	2.00	2.44
	COP		3.2	3.10	3.2
Cooling4	Capacity	kW	4.5	6.5	8.3
	Rated input	kW	0.82	1.27	1.61
	EER		5.5	5.1	5.15
Cooling5	Capacity	kW	4.7	6.8	7.5
	Rated input	kW	1.29	2.19	2.17
	EER		3.65	3.1	3.45
Seasonal space heating energy efficiency class <sup>7</sup>	LWT at 35°C		A+++	A+++	A+++
	LWT at 55°C		A+++	A+++	A+++
sound pressure level	Monobloc Unit	dB(A)	42	45	51
Sound power level	Monobloc Unit	dB	55	58	63
Packed dimensions (W×D×H)	Monobloc Unit	mm	1205*545*860	1205*545*860	1350*545*1210
Body dimensions (W×D×H)	Monobloc Unit	mm	1130*420*710	1130*420*710	1280*420*1040
Operating temperature range	Cooling	°C	-5 ~43		
	Heating	°C	-25~ 35		
	DHW(tank)	°C	-25~43		
Setting water temperature range	Cooling	°C	5~25		
	Heating	°C	25~80		
	DHW(tank)	°C	30~75		
Water circuit	Piping connections	inch	G1"BSP		
	Safety valve set pressure	MPa	0.3		
	Flow switch	m³/h	0.36		0.6
	Expansion tank Volume	L	5		
	Capacity of the back-up heater	kW	3		
Stuffing Quantity	40H/40/20	Unit	120/78/36	120/78/36	68/33/16

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.

# Specification-Monoblock

Model name			10kW	12kW	14kW	16kW
Model			ACHP-H10/4R2HA-M	ACHP-H12/4R2HA-M	ACHP-H14/4R2HA-M	ACHP-H16/4R2HA-M
Power supply		V/Ph/H	220-240/1/50			
Heating2	Capacity	kW	10	12	14	15.1
	Rated input	kW	2.13	2.50	3.11	3.36
	COP			4.7	4.8	4.5
Heating3	Capacity	kW	9.5	12	14	15.1
	Rated input	kW	3.11	3.87	4.67	5.21
	COP			3.05	3.1	3
Cooling4	Capacity	kW	10	12	14	16
	Rated input	kW	2.11	2.67	3.89	4.10
	EER			4.75	4.5	3.6
Cooling5	Capacity	kW	8.9	11.5	12.7	14
	Rated input	kW	2.74	3.8	4.38	5.09
	EER			3.25	3.05	2.9
Seasonal space heating energy efficiency class <sup>7</sup>	LWT at 35°C		A+++	A+++	A+++	A+++
	LWT at 55°C		A+++	A+++	A+++	A+++
sound pressure level	Monobloc Unit	dB(A)	51	53	53	53
Sound power level	Monobloc Unit	dB	63	65	65	65
Packed dimensions (W×D×H)	Monobloc Unit	mm	1350*545*1210			
Body dimensions (W×D×H)	Monobloc Unit	mm	1280*420*1040			
Operating temperature range	Cooling	°C	-5 ~43			
	Heating	°C	-25~ 35			
	DHW(tank)	°C	-25~43			
Setting water temperature range	Cooling	°C	5~25			
	Heating	°C	25~80			
	DHW(tank)	°C	30~75			
Water circuit	Piping connections	inch	G1"BSP			
	Safety valve set pressure	MPa	0.3			
	Flow switch	m³/h	0.6			
	Expansion tank Volume	L	5			
	Capacity of the back-up heater	kW	3			
Stuffing Quantity	40H/40/20	Unit	92/86/42	92/86/42	66/66/32	66/66/32

Note:  
 1.Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 813:2013; (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.

# Specification-Monoblock

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				
Heating2	Capacity	kW	8.4	10	12	14	15.1
	Rated input	kW	1.68	2.13	2.50	3.11	3.36
	COP			5	4.7	4.8	4.5
Heating3	Capacity	kW	7.8	9.5	12	14	15.1
	Rated input	kW	2.44	3.11	3.87	4.67	5.21
	COP			3.2	3.05	3.1	3
Cooling4	Capacity	kW	8.3	10	12	14	16
	Rated input	kW	1.61	2.11	2.67	3.89	4.10
	EER			5.15	4.75	4.5	3.6
Cooling5	Capacity	kW	7.5	8.9	11.5	12.7	14
	Rated input	kW	2.17	2.74	3.8	4.38	5.09
	EER			3.45	3.25	3.05	2.9
Seasonal space heating energy efficiency class <sup>7</sup>	LWT at 35°C		A+++	A+++	A+++	A+++	A+++
	LWT at 55°C		A+++	A+++	A+++	A+++	A+++
sound pressure level	Monobloc Unit	dB(A)	51	51	53	53	53
Sound power level	Monobloc Unit	dB	63	63	65	65	65
Packed dimensions (W×D×H)	Monobloc Unit	mm	1350*545*1210				
Body dimensions (W×D×H)	Monobloc Unit	mm	1280*420*1040				
Operating temperature range	Cooling	°C	-5 ~43				
	Heating	°C	-25~ 35				
	DHW(tank)	°C	-25~43				
Setting water temperature range	Cooling	°C	5~25				
	Heating	°C	25~80				
	DHW(tank)	°C	30~75				
Water circuit	Piping connections	inch	G1"BSP				
	Safety valve set pressure	MPa	0.3				
	Flow switch	m³/h	0.6				
	Expansion tank Volume	L	5				
	Capacity of the back-up heater	kW	9				
Stuffing Quantity	40H/40/20	Unit	68/33/16				

Note:  
 1.Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 813:2013; (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.