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ASTRALPOOL

AHP series pool heat pump

Commercial Swimming Pool Heat Pump

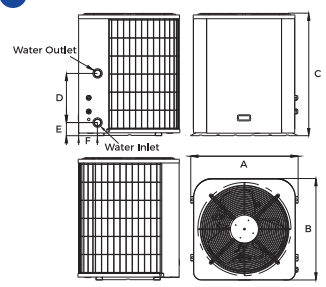


Designed for Middle East Working Condition

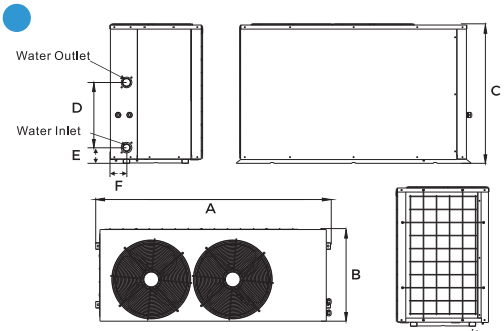
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Product Dimension



unit: mm



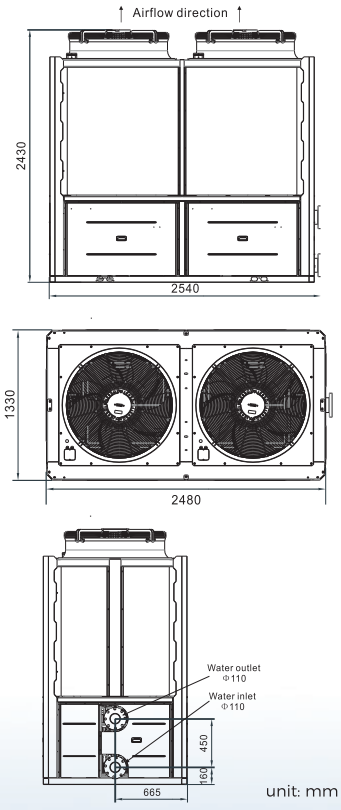
unit: mm

MODEL	A	B	C	D	E	F	water inlet/outlet
AHP 030-R410	743	700	830	340	91	131	Φ50/Φ50
AHP 050-R410	763	722	830	350	91	128	Φ50/Φ50

MODEL	A	B	C	D	E	F	water inlet/outlet
AHP 060-R410	1440	560	850	400	96	99	Φ50/Φ50
AHP 100-R410	1448	750	1280	440	106	124	Φ50/Φ50
AHP 130-R410	1448	750	1280	440	106	124	Φ50/Φ50
AHP 200-R410	2149	761	1300	375	106	191	Φ63/Φ63
AHP 500-R410	2480	1330	2430	450	160	665	Φ110/Φ110

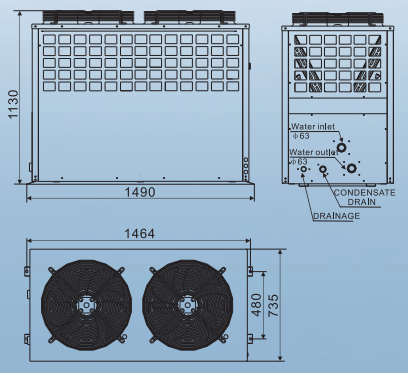
MODEL	A	B	C	D	E	F	water inlet/outlet
AHP 080-R4	1464	735	1130	/	/	/	Φ63/Φ63
AHP 250-R410	2170	1150	2153	450	180	704	Φ110/Φ110
AHP 400-R4	2170	1065	2304.5	400	100	/	Φ110/Φ110

AHP 500-R410



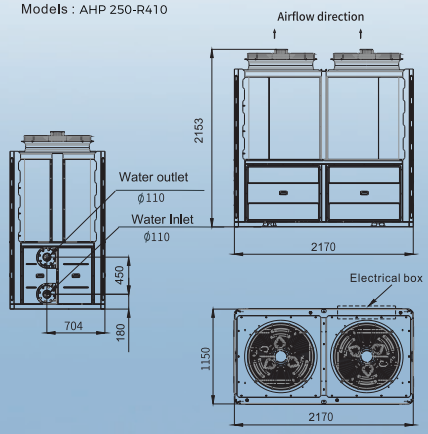
unit: mm

Models:AHP 080-R4



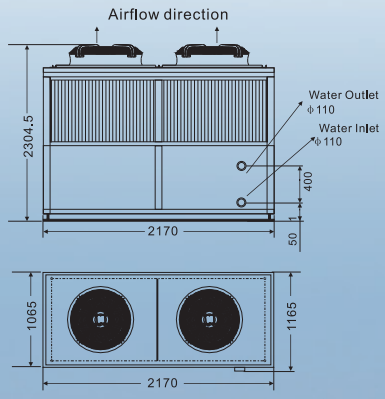
unit: mm

Models : AHP 250-R410



unit: mm

Models :AHP 400-R4



unit: mm



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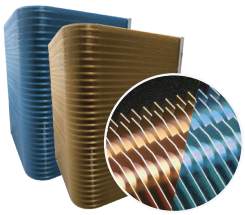
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Product features



High Efficiency Titanium Heat Exchanger

- Choose single or double-path configurations based on unit capacity for maximum heat transfer and efficiency.
- Titanium tubes undergo strict pressure and halogen leak detection tests pre-shipment, ensuring reliability and equipment longevity.



High-Efficiency Finned Heat Exchangers

- Internally threaded copper tubes with hydrophilic coated fins boost heat exchange and prevent frost buildup, enhancing heating and defrosting efficiency with reduced defrost times.
- U-shaped fins with top discharge create a 360° air flow for optimal heat exchange with minimal resistance.

Intelligent Control Systems



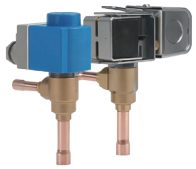
- The system unit comes standard with a WIFI-enabled module, facilitating seamless integration with the (BMS) Building Management System.The cloud-based management platform enables continuous remote monitoring and maintenance, thereby guaranteeing the stable and uninterrupted functioning of the comprehensive swimming pool system infrastructure.

Global Top Brand Compressors



- Heat pump compressor with high compression ratio for extreme temperatures. Functions reliably up to 53°C, ideal for tropical climates without shutdowns or alarms.
- Compressor with standard noise-reduction cover for zero electromagnetic interference, ensuring a peaceful and quiet operation.
- Utilizes Panasonic/Copeland compressors, guaranteeing quality and reliability.

Electronic Expansion Valves



- The electronic expansion valve automatically regulates refrigerant flow to ensure the unit operates efficiently around the clock.

Centralized Control System

- Highly scalable with interconnectivity across models, capable of paralleling up to 32 units for easy expansion to meet increasing pool heating demands.
- Smart scheduling adjusts unit operation automatically to load changes, ensuring efficiency, energy savings, and prolonged equipment life.
- Redundant design ensures continuous operation; other units maintain pool temperature during maintenance of a single unit.

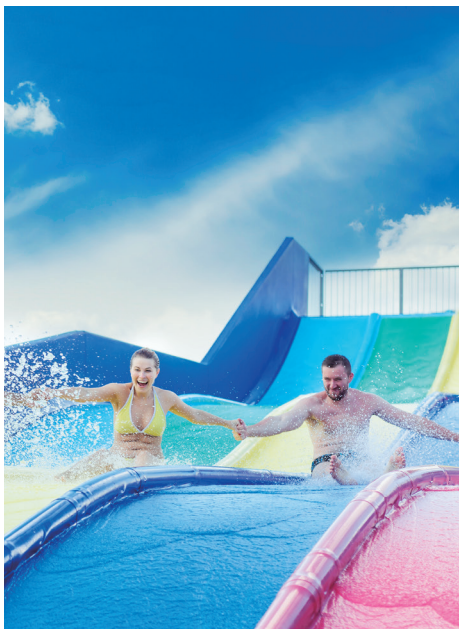


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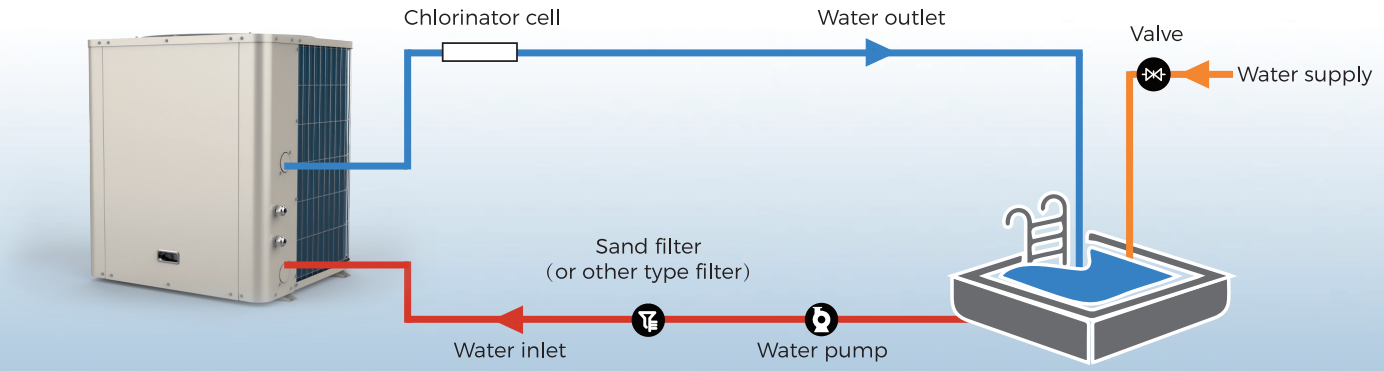
Where to use







AHP series pool heat pumps provide efficient and precise temperature control environment for Pools at hotels, water parks, aquariums, and residential installations' in luxury hotel pools, safety in water park attractions, and optimal conditions for aquatic life.



Attention:
Please follow these steps when using for the first time

1. Open valve and charge water.
2. Ensure pump and inlet pipe are water-filled.
3. Close the valve and start the unit



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Specification

Model		AHP 030-R410	AHP 050-R410	AHP 060-R410	AHP 080-R4	AHP 100-R410
Heating:Outdoor air temp:24˚C/19˚C ,Inlet water temp:26˚C						
Heating Capacity	kW	14.0	24.0	29.0	35.0	50.0
Heating Capacity	Btu	47768	81888	98948	119400	170600
Consumed power	kW	2.78	4.7	5.6	7.6	9.75
COP		5.04	5.11	5.18	4.61	5.13
Cooling: Outdoor air temp:43˚C/26˚C ,Inlet water temp:32˚C						
Cooling Capacity	KW	9.0	16.0	18.0	25.0	32.0
Cooling Capacity	BTU	30708	54592	61416	85300	109184
Consumed power	KW	2.87	4.950	5.750	8.400	9.85
EER		3.14	3.23	3.13	2.98	3.25
Power Supply		220-240V～/50Hz	380V-415V/3N～/50Hz			
Max power input	KW	3.251	6.88	7.2	10	12.13
Max current input	A	14.34	10.5	11	18	20.97
Compressor Qty		1	1	1	2	1
Compressor Type		Rotary	Scroll	Scroll	scroll	scroll
Compressor brand		Panasonic	Copeland			
Titanium Heat exchanger		PVC	PVC	PVC	Stainless steel	PVC
Fan QTY		1	1	2	2	2
Fan Power input	W	150	150	60×2	260×2	150×2
Fan speed	RPM	750	750	840	920	750
Air flow volume	m3/h	4000	4000	3000×2	4200×2	5000×2
Fan Direction		Vertical	Vertical	vertical	vertical	Vertical
Sound Pressure 1m	dB(A)	58	58	56	61	61
Water Connection	mm	50	50	50	63	50
Water Flow Volume	m3/h	3.0	5.0	6.0	8.0	13.0
Water Pressure Drop (max)	kPa	10.0	12.0	13.5	15.0	13.0
Operating air temperature	˚C	2~53˚C				
Refrigerant		R410A	R410A	R410A	R407C	R410A
Certification		CB certified				
Net Dimensions L/W/H	mm	743*700*830	763*720*830	1440*560*850	1490*735*1130	1448*750*1280
Package dimension	mm	765*735*860	820*790*990	1470x640x1030	1510*790*1305	1530x785x1435
Net/Gross Weight	KG	82/110	114/129	145/185	226/249	240/271
Qty per 20'GP/40'HQ		42/90	40/88	24/54	10/40	10/22
BMS available or not		YES				
WIFI connection available or not		YES	YES	YES	NO	YES
Function		Heating and Cooling				
Throttling device		Capillary tube				EEV



Specification

MEGALine-Chill ME		AHP 130-R410	AHP 200-R410	AHP 250-R410	AHP 400-R4	AHP 500-R410
Heating:Outdoor air temp:24˚C/19˚C ,Inlet water temp:26˚C						
Heating Capacity	kW	58.0	90.0	115	160	245.0
Heating Capacity	Btu	197896	307080	392380	550000	835940
Consumed power	kW	11.2	16	19.5	34.2	47.5
COP		5.18	5.63	5.90	4.68	5.16
Cooling: Outdoor air temp:43˚C/26˚C ,Inlet water temp:32˚C						
Cooling Capacity	KW	40.0	60.0	78	120	184.0
Cooling Capacity	BTU	136480	204720	266136	410000	627808
Consumed power	KW	10.6	16.5	21.2	41.6	49.2
EER		3.77	3.64	3.68	2.88	3.74
Power Supply		380V-415V/3N～/50Hz				
Max power input	KW	12.13	16.84	24.63	50	50.36
Max current input	A	20.97	29.36	44	89.1	91.4
Compressor Qty		1	3	2	3	4
Compressor Type		scroll	scroll	scroll	scroll	scroll
Compressor brand		Copeland				
Titanium Heat exchanger		PVC	PVC	PVC	PVC	PVC
Fan QTY		2	3	2	2	2
Fan Power input	W	150×2	150×3	750	1780×2	500×2
Fan speed	RPM	750	750	930	870	720
Air flow volume	m3/h	5000×2	5700×3	25000	20000×2	22000×2
Fan Direction		Vertical	Vertical	Vertical	Vertical	Vertical
Sound Pressure 1m	dB(A)	61	65	66	65	67
Water Connection	mm	50	63	110	110	110
Water Flow Volume	m3/h	13.0	20.0	38	35	70.0
Water Pressure Drop (max)	kPa	13.0	20.0	25	24	22
Operating air temperature	˚C	2~53˚C				
Refrigerant		R410A	R410A	R410A	R407C	R410A
Certification		CB certified				
Net Dimensions L/W/H	mm	1448*750*1280	2150*760*1310	2170*1150*2150	2170*1065*2305	2480*1330*2360
Package dimension	mm	1530x785x1435	2240*820*1430	2270*1300*2270	2210*1210*2370	2560*1480*2480
Net/Gross Weight	KG	247/271	403/474	613/673	752/790	945/1005
Qty per 20'GP/40'HQ		10/22	6/13	0/4	0/9	0/4
BMS available or not		YES				
WIFI connection available or not		YES	YES	YES	NO	YES
Function		Heating and Cooling				
Throttling device		EEV	EEV	EEV	Capillary tube	EEV

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