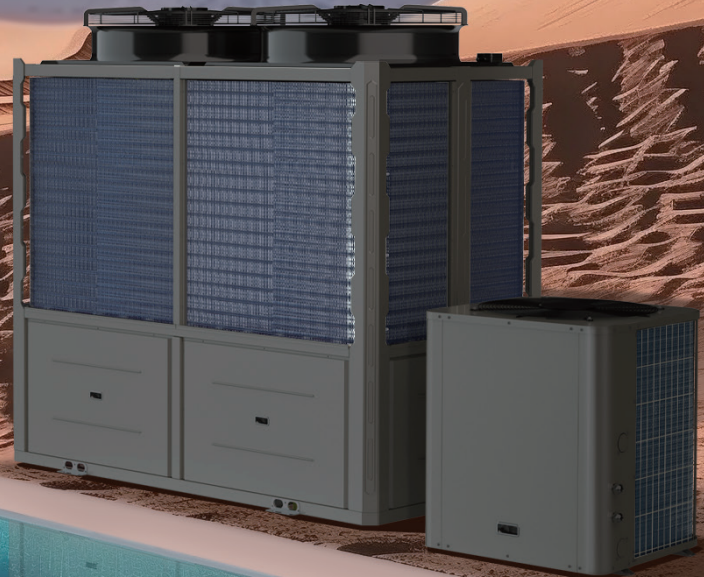


FLUIDRA

ASTRALPOOL 

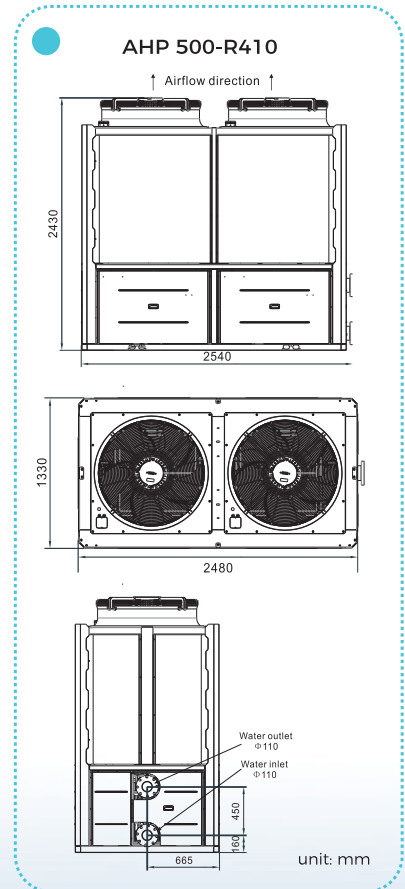
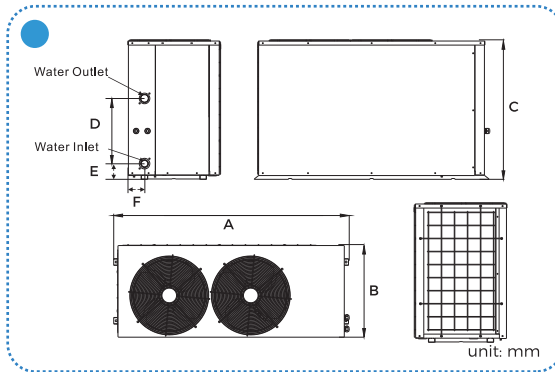
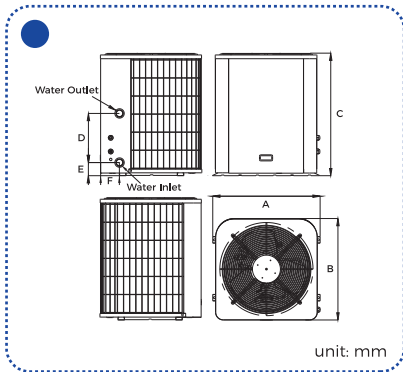
# AHP series pool heat pump

Commercial Swimming Pool Heat Pump



Designed for Middle East Working Condition

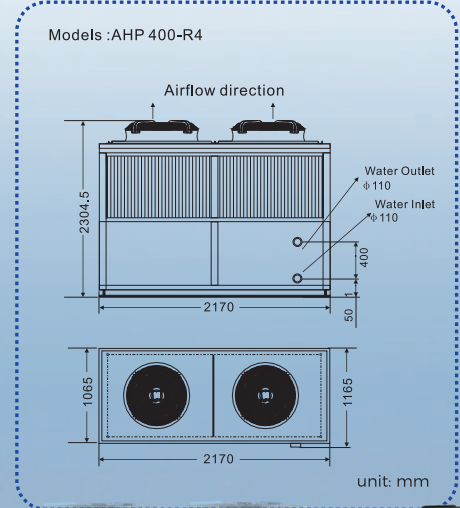
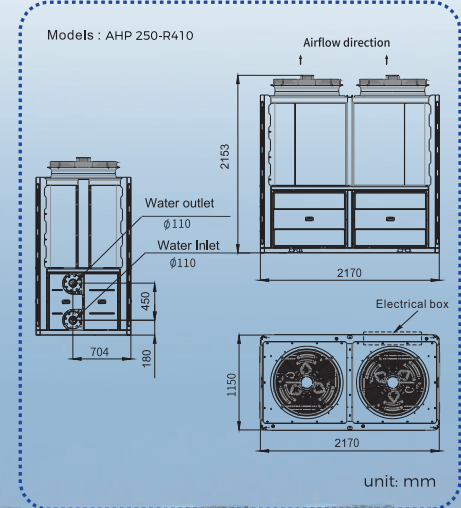
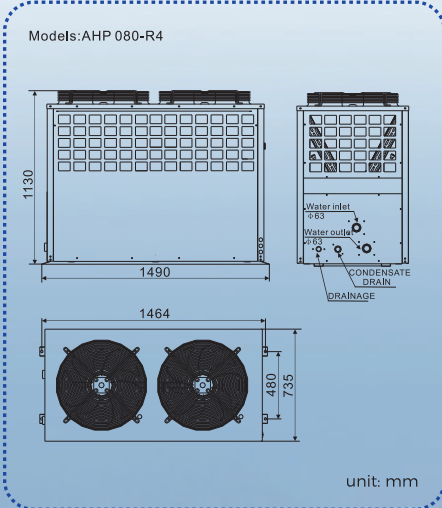
## Product Dimension



| MODEL        | A   | B   | C   | D   | E  | F   | water inlet/outlet |
|--------------|-----|-----|-----|-----|----|-----|--------------------|
| AHP 030-R410 | 743 | 700 | 830 | 340 | 91 | 131 | Ø50/Ø50            |
| AHP 050-R410 | 763 | 722 | 830 | 350 | 91 | 128 | Ø50/Ø50            |

| MODEL        | A    | B    | C    | D   | E   | F   | water inlet/outlet |
|--------------|------|------|------|-----|-----|-----|--------------------|
| AHP 060-R410 | 1440 | 560  | 850  | 400 | 96  | 99  | Ø50/Ø50            |
| AHP 100-R410 | 1448 | 750  | 1280 | 440 | 106 | 124 | Ø50/Ø50            |
| AHP 130-R410 | 1448 | 750  | 1280 | 440 | 106 | 124 | Ø50/Ø50            |
| AHP 200-R410 | 2149 | 761  | 1300 | 375 | 106 | 191 | Ø63/Ø63            |
| AHP 500-R410 | 2480 | 1330 | 2430 | 450 | 160 | 665 | Ø110/Ø110          |

| MODEL        | A    | B    | C      | D   | E   | F   | water inlet/outlet |
|--------------|------|------|--------|-----|-----|-----|--------------------|
| AHP 080-R4   | 1464 | 735  | 1130   | /   | /   | /   | Ø63/Ø63            |
| AHP 250-R410 | 2170 | 1150 | 2153   | 450 | 180 | 704 | Ø110/Ø110          |
| AHP 400-R4   | 2170 | 1065 | 2304.5 | 400 | 100 | /   | Ø110/Ø110          |

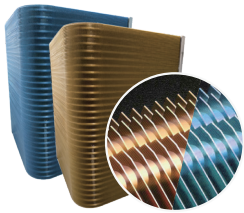


## Product features



### 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.

## Centralized Control System

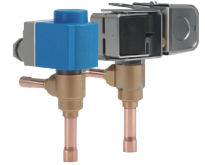
- Highly scalable with interconnectivity across models, capable of paralleling up to 32 units for easy expansion to meet increasing pool heating demands.
- Smart scheduling adjusts unit operation automatically to load changes, ensuring efficiency, energy savings, and prolonged equipment life.
- Redundant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

### 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.

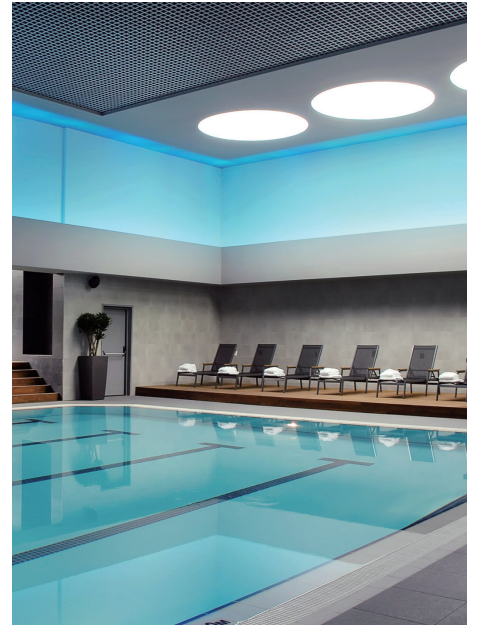
### Electronic Expansion Valves



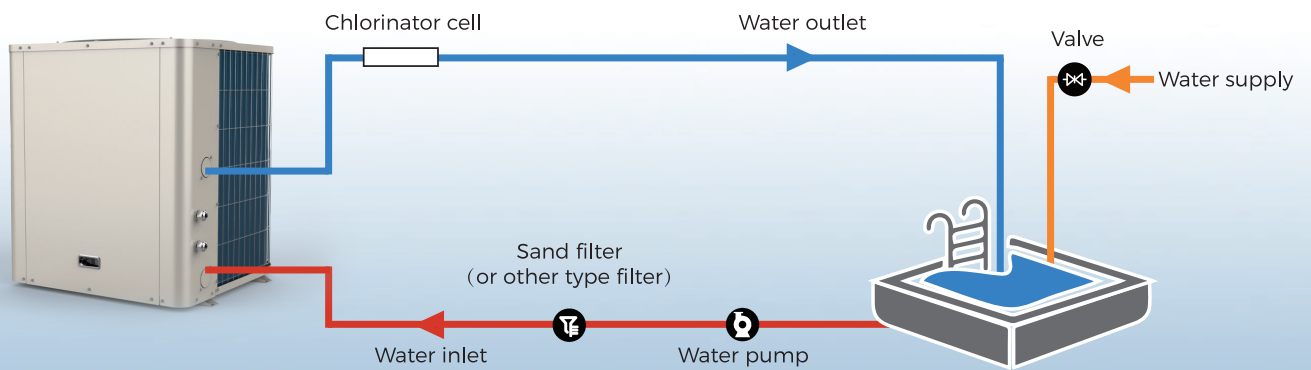
- The electronic expansion valve automatically regulates refrigerant flow to ensure the unit operates efficiently around the clock.



## 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



## 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   | m <sup>3</sup> /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   | m <sup>3</sup> /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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