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“ ONE UNIT FOR ALL SEASON ”

PAC **POOLTEMPER**<sup>®</sup>

Swimming Pool Heat Pump



ISO 9001 RoHS



CB

CE

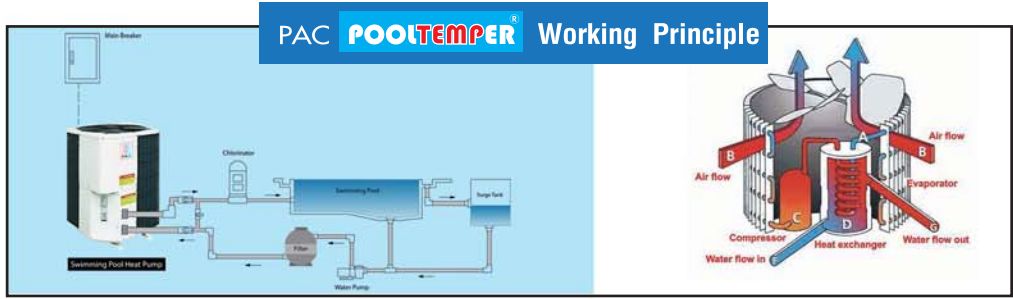


PAC **POOLTEMPER**<sup>®</sup>

- Energy Saving Environment Friendly ●
- Specially Designed For Swimming Pool ●
- Heating And Cooling In One Unit ●
- Suitable for both chlorine or salted water ●
- Titanium Coil Heat Exchanger With Fully Resistance ●

# Working Principle

PAC **POOLTEMPER** The mission of swimming pool heat pump is to absorb the heat from natural air and then put it into pool water, or transit the energy of pool water to air; That is the way it heats up or cools down the pool water. Driven by electricity, the compressor compresses the Freon into gas with high temperature and high pressure; then the gas goes into the condenser (tube and fins heat exchanger), becoming liquid with low temperature and low pressure by heat exchange with outdoor air; Through expansion valve, the liquid refrigerant goes into the evaporator accordingly and the pool water is cooled down. The reverse comes true when heating



PAC **POOLTEMPER** Swimming Pool Heat Pump is the most cost effective method available for heating pools and spa. It proved to be up to 400% more efficient than gas heater and nearly 600% more effective than electric heater. Below features shows why PAC heat pump is of the highest quality and efficiency and why its design can provide years of trouble-free operation.

## PAC **POOLTEMPER** QUALIFICATION

### A new Coil Titanium Heat Exchanger in PVC tube

Double Coil Titanium Heat Exchanger with full resistance against corrosion-proof to pool water, no influence to water quality, ensure longest operation life. Suitable for both chlorine or salted water



### Intelligent controller.

Electronic Digital Controller maintains water temperature within 1°C of set point. Controller also permits user to predefine different Pool and Spa water temperature set points. LCD and LED controller for option. Offer more choices. The controller could be equipped either on the unit, or on the wall as wired controller

### Corrosion-Proof Cabinet

Galvanized steel case with powder coating, while chassis treated with epoxy plus powder coating; ensure high corrosion-proof ability. Stainless steel case for option.

### Heat and cool capacity

Heating and cooling are both available. Automatically switch to cooling or heating mode according to your water temperature set. Keep a stable and comfortable pool

### Environment friendly

Environment friendly refrigerant R407c and R410a are available for all models. High quality components according to RoHS directive produce little pollution to environment

### Easy installation and manipulation

Monobloc design and compact piping system makes it easy to transport, install and maintain. KISS easy control panel design, easy manipulation

### Safe operation

Products have all requested certifications such as CE, UL, etc. System protection with high/low gas pressure protection, overload protection, flow switch, phase order protection, voltage protection, over heated protection etc. Automatic defrosting program, considers the real frost condition, extends the swimming season longer than any other heat pump

**Domestic Series**



This series of heat pump considered to be the American style. It looks neat, simple and powerful. This series are specially designed for the swimming pool. R410a refrigerant is standard refrigerant for the pool series; it makes a real environment friendly machine. Base on this design, the compressor was sealed in the cabinet, which decrease a lot of noise from compressor. The whole unit considered to be super low operating noise, ensure a quiet space for you to enjoy your pool time. In Addition, The U shape condenser occupied less space and creates a space for the gas system, so that the unit could be done smaller. Easy installation, available to be put in the corner of your garden

**Standard unit composition**

**Warranty : 1 years for all parts and 5 years for the compressors**

- Base frame and external panels made of ABS Plastic or galvanized powder coated steel. Compact structure, easy demountable for access
- Titanium coil heat exchanger with fully resistance against corrosion, ensures a working life 15 years.
- High efficiency compressor with R410a refrigerant
- Flow switch for water flow protection
- Intelligent controller and adjustment by quick mind microprocessor
- New lattice LCD display wire controller, with touch screen display
- Air exchanger (fins-coil) with hydrophilic coating
- Automatic defrosting function included. (With reverse cycle valve inside)
- General testing and operational test carried out for every unit before packing in the factory

**Commercial Series**

Commercial series is designed for commercial pool. Such as Hotel pools, Competition pools, Water park pools, etc. This series normally equipped with bigger and more powerful compressor, larger heating capacity output to meet big heat consumption. The unit also available to be used as a module, together with other modules to make a bigger system to get even large heating capacity output



**Standard unit composition**

**Warranty : 1 years for all parts and 5 years for the compressors**

- Base frame and external panels made of ABS Plastic or galvanized powder coated steel. Compact structure, easy demountable for access
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- High efficiency compressor with R410a refrigerant
- Flow switch for water flow protection
- Intelligent controller and adjustment by quick mind microprocessor
- New lattice LCD display wired controller, with touch screen display
- Air exchanger (fins-coil) with hydrophilic coating
- Automatic defrosting function included. (With reverse cycle valve inside)
- General testing and operational test carried out for every unit before packing in the factory
- Modular design available for compose to bigger system to meet any size of big heating capacity requirements

**Optional**

- Stainless steel cabinet or Plastic cabinet for option.
- Internet control system make you heat pump available for tele-maintenance- Wireless controller for option.

MODEL		PPT-040HP	PPT-060SVP	PPT-100SVS	PPT-200SVS	PPT-250SVS
*Heating Capacity	kW	17.8	25	45	90	105
	BTU/h	60,000	85,000	153,000	307,000	358,000
COP		5.08	5.00	5.00	5.14	4.60
Cooling capacity	kW	10.5	15.5	30	58	78
	BTU/h	35,800	52,800	102,000	197,000	266,000
Power Input	kW	3.5	5	9.5	17.5	22.8
Running Current	A	15.9	8.3	16	31.2	47.8
Power Supply	V/Ph/Hz	220/1/50	380/3/50	380/3/50	380/3/50	380/3/50
Compressor	Number	1	1	2	3	4
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll
Heat exchanger	Type	Titanium Coil in PVC				
Refrigerant	Type	R410a				
Fan	Number	1	1	2	3	2
Fan Power Input	W	120	200	200×2	200×3	550x2
Fan Rotate Speed	RPM	850	830	850	850	870
Fan direction	Type	horizontal	vertical	vertical	vertical	vertical
Noise	dB(A)	56	58	61	63	62
Water Connection	mm	50	50	63	63	110
Water Flow Volume	m <sup>3</sup> /h	6	9	15	28	35
Water Pressure Drop	kPa	10	12	15	16	16
Casing Material	Type	ABS Plastic*		Powder Coated Galvanize Steel*		
Dimension (L/W/H)	mm	1120/470/850	700/660/880	1450/750/1080	2150/765/1330	2000/900/2080
Net Weight	kg	95	118	250	370	665

Testing Condition :

Heating : Outdoor air temp : DB/WB 24°c /19 °c , inlet water temp :27°c

Cooling : Outdoor air temp : DB/WB 35°c /24 °c , inlet water temp :27°c

Remark : \* Stainless Steel case available for an option

Heating : Outdoor air temp : 10-30°c, Inlet water temp : 10-30°c, Max outlet water temp 40°c, Water temperature control between 25-35°c

Cooling : Outdoor air temp : 30-40°c, Inlet water temp : 25-35°c, Min outlet water temp 10°c, Water temperature control between 15-25°c

Cooling : Aimb temp : 30-40c, Inlet water temp : 25-35c Max outlet water temp 10c water temperature control between 15-25c

Specification are subjected to changed without prior notice



## References

Cheraim Spa Village Phuket • Metadee Resort Phuket • Anantara Resort&Spa Golden Triangle Chiang Rai  
 Four Seasons Resort Chiang Mai • InterContinental Hua Hin Resort • Dr. Surakiart Sathirathai • The Unico  
 Sandara Hotel • Pool Shop Co.,Ltd. • Khun Paiboon Damrongchaitham • Khun Wimon Chearavanont •  
 Khun Prasert Foongmaitre • Khun Yupin Chaikrai • Khun Kingkeaw • Limpisuk



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