



PAC Heat Pump Series

*Heat Pump Water Heater
Heatralized / Compact*



ENERGY FRIENDLY
COMFORT

www.pac.co.th/heatpump

HEATRALIZED⁺
HIGH TEMP HEAT PUMP

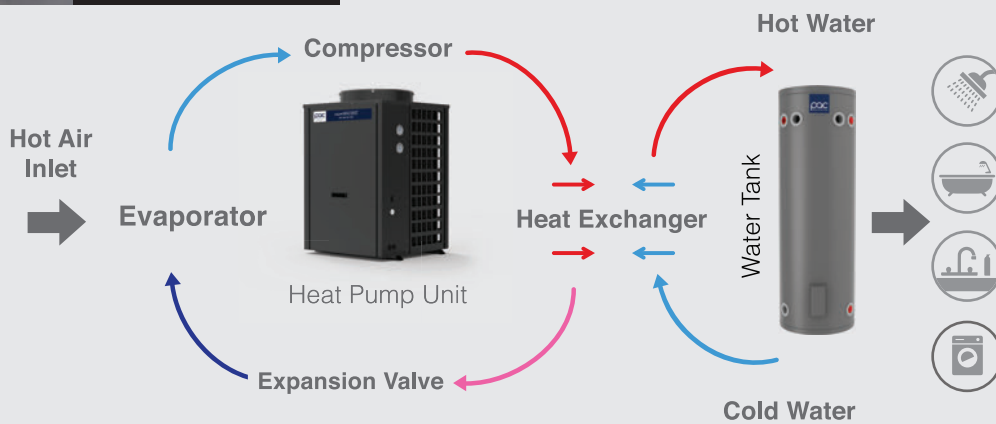
PAC Heat Pump Water Heater



PAC Heatralized Performance / Compact

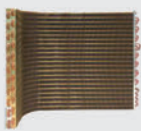
PAC Heatralized Performance / Compact are Heat pump water heater designed for produce hot water with high flow rate. Heat pump utilize the heat in the air and refrigerant vapor compression technology enables to intensify this heat, which is used to produce hot water, results in energy savings and use 4 times less electricity than conventional electric water heaters.

PAC Heat Pump Water Heater Working principle



PAC Hot Water Heat pump absorbs heat in the air by evaporator coil changing refrigerant status from liquid to vapor then the refrigerant vapor will be compressed by compressor to rise-up pressure and temperature and send to heat exchanger to transfer the heat to water system for reaching hot water temperature at 60 °C and store in water tank. Then the refrigerant will change status to low temperature liquid then change to low pressure liquid after pass expansion valve and return to evaporator to absorb heat from the air again.

Product Features



Golden Fin-Tube Evaporator

- High heat exchange efficiency
- Hydrophilic and strong anti-corrosion
- Electrophoresis is optional for areas near sea



Scroll Compressor

- Copeland or Panasonic world famous brand
- Strong anti-liquid shock ability, stable and durable
- Refrigerant R410A optional R417A, R407C or R134A



Touch Type Intelligent Controller

Humanized interface for adjust parameter and error code.



High Efficiency Tube In Shell Heat Exchanger

- Inner cooper tube, outer steel shell
- Whole tube without welding bug and run stable
- Smooth water flow and no easy to scale
- Compact size for whole machine design



Fan Motor and Fan Blade

- Axial fan motor, large air volume with extreme low noise
- ABS fan blade with glass fiber, toughness, strong, durable
- Larger model with outer rotor axial type, aluminum fan blade



Sanhua Electric Expansion Valve

- Sanhua group is bigger and high quality
- Much more accurate and intelligent than thermal type
- Long life and few after-sales problem

PAC Heatralized Performance series

Air to Water Heat pump for high temperature hot water application which has high hot water recovery rate, resist all operating environments even in corrosion environment such as on the Island, beside beach. High efficiency for continuous long time operating with superior standards. PAC Heatralized Performance series is designed for sanitary hot water of bathroom, kitchen etc. or offering centralized heating (radiator/floor heating) in houses, or commercial building, for example, hotel, school, hospital, hair salon, etc.

Special Properties

1. U Shape Evaporator coils that increasing heating surface area for high heat transfer efficiency.
2. Evaporator coils surface with electrophoretic coating process for the best corrosion preventing cause from sea vapor or high humidity. (optional)
3. Casing and structure made from stainless steel resists all operating environments. (optional)
Hot gas bypass defrosting increase performance incase operating in cold weather and poor air ventilation.
4. Gas-Liquid Separator (Accumulator) prevents liquid return to compressor.
5. Digital control panel is easy to using. Able to install separately from the Heat pump unit.
6. Minimum ambient working temperature -10°C .
7. Modbus communication is ready to connect for automation system.
8. All Heat pump units has tested performance from laboratory and approved by TÜV SÜD follow EN 14511 Standard.
9. Working by Refrigerant R410a which friendly with atmosphere.
10. Maximum hot water working temperature 60°C .
11. Automatic malfunctions alarm system.



HOT WATER
AVAILABLE 24/7



ACCURATE
TEMP CONTROL



HOT WATER
RELIABILITY



LOW LIFECYCLE
COSTS



LOW AMBIENT
PERFORMANCE



INTELLIGENT
CONTROL



HIGH EFFICIENCY
DESIGN



SAFE OPERATION
DESIGN



PAC Heatralized Compact series

PAC Heatralized Compact series is a Heat pump water heater for the production of high temperature hot water. Durable , small, can replace the original water heat tank to save energy. Quick payback easy to install and easy to use.

PAC Heatralized compact series suitable for hotel, resort requires hot water to separate each room, villa , bungalow which demand a lot of water (bathroom with bathtub), small hotels that want to use centralized hot water for up to 20 rooms, factory , hospital suitable for replacing or pre-heating to reduce the existing of hot water tank.



Special Properties

1. Axial Fan which has low power consumption, low running noise, long usage life, high air volume flow rate.
2. Built in circulating pump.
3. Casing made from painted steel, rustproof paint.
4. Gas-Liquid Separator (Accumulator) prevents liquid return to compressor.
5. Digital control panel is easy to using. Able to install separately from the Heat pump unit.
6. Minimum ambient working temperature -10 °C.
7. All Heat pump units has tested performance from laboratory and approved by TÜV SÜD follow EN 14511 Standard.
8. Working by Refrigerant R410a which friendly with atmosphere.
9. Maximum hot water working temperature 60 °C.
10. Automatic malfunctions alarm system.



PAC Heat Pump References

PAC Heat Pump Reference

- Centra by Centara Government Complex Hotel & Convention
- Kamol Cosmetic Hospital
- Suwan Golf & Country Club
- Villa Pason Khaokho
- Centara Kata Resort Phuket
- Centara Karon Resort Phuket
- Centara Grand Beach Resort Phuket
- Centara Villas Phuket
- Centara Grand Beach Resort & Villas KRABI
- Centara Hotel Hat Yai
- Banyan Tree Phuket
- Amata Wellness Resort Phuket
- Anchanlina Hotel Phuket
- Bang Niang Beach
- Hilton Phuket Arcadia Resort & Spa
- Hyatt Regency Phuket Resort
- The Oceanic Sport Hotel Phuket
- C & N Hotel Patong Phuket
- R-Mar Hotel Resort and Spa Patong Phuket

HEATRALIZED⁺
HIGH TEMP HEAT PUMP



Performance Series



Compact Series

- Sugar Marina Resort Art Karon Beach
- Wyndham Grand Phuket Kalim Bay
- Ramada Khao Lak Resort
- Pullman Khao Lak Resort
- The Water Khao Lak by Katathani
- Aleenta – Phang Nga Resort & Spa
- Ibiza House Phi Phi
- Moonlight Exotic Bay Resort Koh Lanta
- Outrigger Koh Samui Beach Resort
- Melia Koh Samui Beach Resort
- Aonang Princeville Villa Resort
- COSI Krabi Ao Nang Beach
- AVANI Ao Nang Cliff Krabi Resort
- AVANI Koh Lanta Krabi Resort
- Sole Mio Condominium Phuket



PAC Heat Pump Specification

PAC Heatralized Performance

Specification		Performance Series						
Model		PTU-CP020LR/CG	PTU-CP027LR/CG	PTU-CP030LR/CG	PTU-CP035LR/CG	PTU-CP047LR/CG	PTU-CP053LR/CG	PTU-CP072LR/CG
Heating capacity	kW	20	27	30	35	47	53	72
Rated power input	kW	2.8	5.1	5.8	6.8	9.1	10	13.8
COP		5.2	5.2	5.1	5.1	5.1	5.3	5.2
Power supply	V/Ph/Hz	380/3/50						
Max. current	Amp.	10	13	15	21	25	28.5	37.5
Refrigerant		R410A						
Compressor	Type	Scroll						
Heat exchanger	Type	Tube in Shell						
	Material	Copper						
Refriferant control valve		EEV						
Evaporator		Coated gold finned						
Fan	Qty	1				2		
	Direction	Vertical						
Circulating pump		Not included						
Casing material		Coated steel						
Required hot water flow rate	M ³ /h	3.2	4	5	6	8	9	12
Water connection	Inch	1"				1 1/2"		
Max water temp	Celsius	60						
Operation temp range		-10 - 43						
Noise	dB(A)	≤58	≤58	≤58	≤60	≤60	≤52	≤62
Net weight	Kg	120	140	165	220	270	295	495
Net Size (W/D/H)	mm.	750x690x1060	750x750x1080	750x750x1080	800x800x1250	1500x690x1090	1500x690x1350	1510x910x1550

Heating capacity testing condition : ambient temp (DB/WB) 30°C/22°C water temp (in/out) 15°C/55°C

PAC Heatralized Compact

Specification		Compact Series						
Model		PTR-CP040LY/CGP	PTR-CP056LY/CGP	PTR-CP080LY/CGP	PTR-CP120LY/CGP	PTR-CP155LR/CGP	PTR-CP210LR/CGP	PTR-CP25LR/CGP
Heating capacity	kW	4	5.6	8	12	15.5	21	25
Rated power input	kW	0.85	1.19	1.7	2.55	3.3	4.45	5.2
COP		4.7	4.7	4.7	4.7	4.7	4.7	4.8
Power supply	V/Ph/Hz	220/1/50				380/3/50		
Max. current	Amp.	7	9.5	13	19	8.6	11	12.5
Refrigerant		R410A						
Compressor	Type	Rotary			Scroll			
Heat exchanger	Type	Tube in Shell						
	Material	Copper						
Refrigerant control valve		EEV						
Evaporator		Coated gold finned						
Fan	Qty	1						
	Direction	Horizontal						
Circulating pump		Included						
Casing material		Coated steel						
Required hot water flow rate	M ³ /h	1.2	1.2	1.4	2	2.6	3.6	4.3
Water connection	Inch	3/4"			1"			
Max water temp	Celsius	60						
Operation temp range		-10 - 43						
Noise	dB(A)	≤48	≤48	≤48	≤48	≤50	≤52	≤52
Net weight	Kg	52	58	61	80	122	137	180
Net Size (W/D/H)	mm.	930x280x550	930x280x550	1010x365x615	940x410x795	1150x470x950	1000x520x1230	1300x470x1400

Heating capacity testing condition : ambient temp (DB/WB) 30°C/22°C water temp (in/out) 15°C/55°C



PAC Corporation (Thailand) Co.,Ltd.
 12/2 Vision Business Park Phase 2,
 Soi Ramintra 55/8, Ramintra Rd.,
 Tarang, Bangkhen, Bangkok 10230 Thailand
 Tel: 02-347-0447 Fax: 02-347-0448
 Email: info@pac.co.th www.pac.co.th
 ©2021 PAC All rights reserved



line: @pac.th