Swimspa, Spa and Small Pool Heating and Cooling Systems

How they work?…. A heat pump is a machine or device that moves heat from one location (the 'source') at a lower temperature to another location (the 'sink' or 'heat sink') at a higher temperature. They work by exploiting the physical properties of an evaporating and condensing fluid known as a refrigerant

The working fluid, in its gaseous state, is pressurised and circulated through the system by a compressor. On the discharge side of the compressor, the now hot and highly pressurised vapor is cooled in a heat exchanger, called a condenser, until it condenses into a high pressure, moderate temperature liquid. The condensed refrigerant then passes through a pressure-lowering device called an expansion valve. The low pressure, liquid refrigerant leaving the expansion device enters another heat exchanger, the evaporator, in which the fluid absorbs heat and boils.The refrigerant then returns to the compressor and the cycle is repeated.

Since the heat pump or refrigerator uses a certain amount of work to move the refrigerant, the amount of energy deposited on the hot side is greater than taken from the cold side.

What is COP?..... Coefficient of Performance is the amount of heat moved per unit of input work required. A typical electric resistance heater has a COP of 1.0. That is, one joule of electrical energy will cause a resistance heater to produce one joule of useful heat, while under ideal conditions, one joule of electrical energy when used for heating a Swimspa or Spa on a mild day of say 10 °C, a Catalina **ECO** heat pump has a COP of between 3 and 4 and up to 6.8 at 25 °C

Why Catalina **Eco** heat pumps?

- They consume a small amount of electrical energy
- Will save up to 80% on energy bills
- 3 years Full Guarantee
- Quiet operation
- Friendly on the environment
- Heats and cools
- Minimum maintenance
- Rust proof cabinet

Catalina™ Spas Ltd. Downs Farm, Gomeldon, Salisbury. SP4 6JZ
Tel + 44 (0) 1980 611555 Fax + 44 (0) 1980 611031
sales@catalinaspas.co.uk www.catalinaspas.co.uk

Catalina ECO Heatpump Specification

Catalina ECO Heatpumps will save up to 80% on energy bills. Manufactured to the highest of standards using only the best components they will give years of trouble free low cost heating

Model		CAT-HP4	CAT-HP8
Heating Capacity at air 27°C and water 27°C			
Heat Output	kW	4	8
Power Comsumption	kW	0.58	1.17
COP		6.9	6.8
Heating Capacity at air 27°C and water 40°C			
Heat Output	kW	3	6
Power Comsumption	kW	0.66	1.33
COP		4.5	4.5
Heating Capacity at air 5°C and water 40°C			
Heat Output	kW	2	4
Power Comsumption	kW	0.69	1.35
COP		2.9	2.9
Cooling Capacity at air 5°C and water 40°C			
Cool Output	kW	2.3	4.5
Power Comsumption	kW	0.76	1.5
COP		3	3
Power Supply			
Voltage	V	220-240	220-240
Frequency	HZ	50	50
Rated Current	A	3	3
Water Data			
Flow rate	LPHW	1100-2200	1100-2200
Water connections	IMP	3/4"	3/4"
Gereral Data			
Compressor		Rotary	Rotary
Air Flow		Horizontal	Horizontal
Heat Exchanger/condenser		Colbalt-Nickel	
Noise level at 10M	dB(A)	35	37
Noise level at 3M	dB(A)	45	47
Noise level at 1M	dB(A)	47	49
Waterpressure Drop	kpa	10	10
Refrigerant (R407c)	kg	0.8	1.4
Dimensions and Weights			
Net Dimensions	mm	750x295x460	936x360x560
Net Weight	kg	36	49
Packing Dimensions	mm	890x 350x555	1090x390x580
Gross Weight	kg	40	53

WARRANTY 3 Years full parts and Labour

Terms and conditions apply

Catalina Spas Ltd. Downs Farm, Gomeldon. Salisbury SP4 6JZ
Tel +44 (0) 1980 611555 Fax +44 (0) 1980 611031 sales@catalinaspas.co.uk
www.catalinaspas.co.uk