AquaCal
SWIMMING POOL/SPA HEAT PUMPS

AquaCal® is the largest heat pump manufacturer for pools and spas in the world. Since 1981, it has been our sincere belief that providing you with quality products and standing behind those products is our only path to success. We are the leader in our industry and have more pool and spa heat pumps installed than any of our competitors. We are committed to quality. Every unit is 100% tested before it leaves the factory. We have used our experience in the industry to provide you with products that represent today's leading heat pump technology.

With our state-of-the-art Research and Development facility, and our fully-staffed Engineering department, we can assure you that our products will perform as designed - Guaranteed! We will continue to provide you with the best performing, highest-quality products for many years to come. With our unbeatable warranty that you receive with your AquaCal® heat pump, you are assured the best quality heat pump money can buy. This is just one way of expressing, to our valued customer, the commitment to excellence at Team AquaCal®.

MADE IN USA

TropiCal
SWIMMING POOL /SPA HEAT PUMPS

Quality heat pumps designed to fit any budget. These units provide optimum heat output in a small footprint. Available in 50 Hz & 60 Hz, up to 132,000 BTUs (38.7 kW). Suitable for residential applications.

HEATWAVE SuperQuiet

Top-of-the-line units that come packed with features to accommodate any application. The IceBreaker® units can operate even in low temperatures and will cool the water efficiently on the hottest days. These heat pumps are built to last, for all climates. Available in 50 Hz & 60 Hz, up to 143,000 BTUs (41.9 kW). Suitable for all applications.

TropiCool
WATER CHILLER

Water chiller designed to lower the temperature of a swimming pool for a refreshing and enjoyable experience throughout the summer. It gives consistent performance, while other cooling systems struggle to keep up in humid climates. Available in 50 Hz & 60 Hz. Suitable for residential applications.

GBB
GREAT BIG BOPPER

High performance air-source heating and cooling. Up to 527,000 BTUs (154.4 kW) in a single unit, this range is ideal for large scale projects where space is limited. Available in 50 Hz & 60 Hz. Designed and built to order.

WATER SOURCE

These geothermal heat pumps transfer free heat from nearby wells, lakes or canals to the swimming pool. It is safe, efficient and gentle on the environment. Available in 50 Hz & 60 Hz. Units with hard copper plumbing available for high pressure installations.

How A
HEAT PUMP ?
Works

Heat is transferred from the air to the swimming pool

1 Warm air is drawn over the evaporator coil by the fan, transferring heat to the COLD refrigerant liquid passing through it

2 Warm refrigerant gas passes through the compressor and becomes HOT refrigerant gas

3 HOT refrigerant gas transfers heat to the pool water as it passes through the heat exchanger

4 The now COLD refrigerant liquid passes back to the evaporator coil to collect more heat

Cool Air Out

Warm Air In

Cool Water In

Warm Water Out
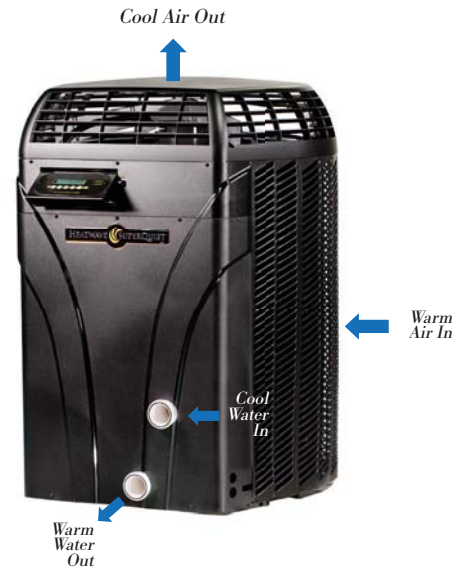
AQUACAL®

Why Choose ?
AquaCal®

- Corrosion-proof cabinet
- International support by HornerXpress® Worldwide
- Energy efficient
- Dual thermostats
- Offset plumbing
- Manufacturing since 1981
- SuperQuiet operation with HeatWave SuperQuiet® series
- Patented ThermoLink® titanium heat exchanger
- Design & engineering expertise

- Habillage finition anti-rouille
- Assistance internationale par HornerXpress® Worldwide
- Econome en énergie
- Double thermostat
- Plomberie décalée
- Fabriquant depuis 1981
- Fonctionnement très silencieux avec les séries HeatWave SuperQuiet®
- Echangeur Titanium ThermoLink® breveté
- Expertise en Conception & ingénierie

- Gabinete a prueba de corrosión
- Soporte internacional por HornerXpress® Worldwide
- Ahorrador de energía
- Doble termostato
- Plomería compensada
- Fabricando desde 1981
- Funcionamiento silencioso con la serie HeatWave SuperQuiet®
- Patentado termocambiador de titanio ThermoLink®
- Dominio en diseño e ingeniería

Heat Pump Sizing & Operating Cost

	U.S. Units		Metric Units
Pool width		ft	m
X Pool length		ft	m
= Surface area		ft²	m²
X Average depth		ft	m
= Volume		ft³	m³
X U.S. Gallons per cubic foot/Liters per cubic meter	7.5		1000
= Volume		gal	liter
X Pounds of water per gallon	8.3		
= Weight		lb	kg*
X Universal factor required to raise 1lb of water by 1º F	1		
OR			
X Universal factor required to raise 1 kilo (=liter) of water by 1º C			4.18
= BTUs/Kilojoules required to raise 1 lb/kilo of water by 1 degree		BTU	kJ
X Temperature rise desired		ºF	ºC
= Energy required to accomplish temperature rise		BTU	kJ
X Heat loss (0.5 no blanket, 0.3 Aqua Blanket**, 0.2 blanket)			
= Daily heat loss in BTUs/Kilojoules		BTU	kJ
X Wind factor***			
= Daily energy needed to maintain desired temperature		BTU	kJ
			kW****
÷ Heat pump output		BTU	kW
= Daily runtime (should be < 12 hours per day)		hour	hour
X Heat pump input		kW	kW
= Daily kilowatts used to heat pool			
X Cost per kilowatt hour			
= Daily operating expense			
X Days per month		30	30
= Estimated monthly expense to heat pool			

To calculate electronically, go to www.aquacal.com

*1 Kilogram = 1 Liter
** This applies to all liquid blanket products
*** Wind factor - Unblanketed pool only

MPH	KPH	Multiplier
0 - 3.5	0 - 5.5	1
3.6 - 5	5.6 - 8	1.25

****Divide kJ number by 3,600 to obtain kW