

heating & cooling Swimming Pools

لتسخين وتبريد أحواض السباحة



كالوركس

calorex

Specialist designers and manufacturers of pool comfort control systems

Calorex have successfully developed a range of outdoor pool heat pumps designed for use in areas of the world where ambient temperatures can fluctuate between 10°C and 50°C. Now with over 20 years experience in heating/cooling and with hundreds of units in operation, Calorex will reliably heat your pool during low ambient temperatures and cool it when it's too hot. Calorex lets you enjoy your pool all year round!

تجمعت شركة كالوركس Calorex بتطوير مجموعة من مضخات تسخين أحواض السباحة القائمة في الهواء الطلق والمصممة للإستخدام في مناطق العالم التي تتقلب فيها درجة الحرارة المحيطة بين 10 درجة مئوية و 50 درجة مئوية. وحيث أحرزت شركة كالوركس Calorex ما يزيد على ١٢ سنة من الخبرة في ميدان التسخين/التبريد الى جانب وجود مئات من وحداتها قيد العمل فإنها مستقوم بتمسخين أحوض السباحة الخاص بك بطريقة موثوقة خلال درجات الحرارة المحيطة الواطئة وتبريده خلال فترات للحرارة المحيطة العالية. وبهذا تتيح لك كالوركس Calorex التمتع بحوض سباحتك الخاص على مدار السنة!

Calorex for heating and

Only the best is good enough for the toughest jobs!

For a swim to be refreshing and invigorating the pool water must be the right temperature for the swimmer. This is not easy to achieve where seasonal weather is constantly influencing the pool.

Winter Heating An unheated pool will lose temperature in the winter as air temperatures fall and solar heating effect on the water is low. A Calorex heat pump extracts heat from the atmosphere and concentrates it to heat pool water - since the heat in the air is free, the only energy paid for is the electrical power to operate the compressor and fan. Even at winter air temperatures of 15°C, the Calorex will produce 4 kW of heat for every 1 kW of power absorbed. A heater of 400% efficiency compared to a standard electrical heater or boiler of less than 100% efficiency - your investment is very soon recovered and your costs are the lowest available!

Summer Cooling High summer temperatures - up to 50°C - and long hours of intense sunshine add heat to pool water. When the pool temperature rises to 35°C + the refreshing effect of a swim is minimal since the water temperature is similar to the body temperature. The pool needs to be below 32°C to remain refreshing. Calorex provides this cooling in the same unit as the high efficiency heater! Cooling, by heat pump, also offers high efficiency.

Quality of Operation The heat pump system required to heat and cool, with automatic changeover and efficient operation in widely differing air temperature and humidities, is not an easy one to design. You cannot simply convert an air conditioner and expect it to operate in these conditions. A Calorex heat/cool unit is purpose designed for the job and has proven its pedigree in over 20 years of actual operation.



The Dana Club family pool, where Calorex heater/coolers are maintaining an all year round constant pool temperature



Our product is our reputation. And both are the best.

Why choose Calorex?

We developed the first heat/cool unit for swimming pools and in doing so set the standard for proven performance and reliability.

We have hundreds of units in operation throughout the Gulf States, the oldest installed over 20 years ago (1981). Our machines are designed for operation in air temperatures of up to 50°C and as low as -15°C (option), ensuring full heating and cooling to your pool when you need it.

Calorex heat/cool units change from heating to cooling automatically - you have no adjustments to make! Just set the thermostat!

The same Calorex unit which so efficiently controls the temperature of your pool is also giving you maximum economy of operation. Our advanced heat pump technology ensures that you are paying only a fraction of the cost of heating your pool as compared to a standard electric heater - and high efficiencies apply to cooling too!

cooling swimming pools

Calorex units are made from corrosion resistant materials which have proven their quality in tough conditions.

Calorex water heat exchangers are manufactured from a high grade cupro-nickel alloy ideal for surfaces in contact with swimming pool water, including salt water pools.

Calorex offers choice of installation - outside with horizontal or vertical airflow - inside with ducted airflow from a weather shelter, plant room or cellar. Fan power options are also available.

Calorex units are quiet. In fact, much quieter than equivalent capacity air conditioners, which usually have axial flow fans.

Internal components on Calorex units are well protected from the rain and solar glare. Fan motors are tropically rated.

Calorex controls are simple. For a unit to operate successfully in harsh weather conditions with power fluctuations and irregular maintenance it is important that the Calorex unit has its own simple built in controls suitable for the job. Calorex has proven its choice over years of operation and makes a reliable and easy to service product!

Calorex circuitry is purpose built for use with pools, not a converted air conditioning system. The refrigeration system incorporates large capacity accumulator and receiver for long term reliability in the varied temperatures and humidities encountered. This system has proven reliable over more than 20 years of operation in arduous conditions.

Calorex pioneered the use in heat pumps of delay timers to eliminate short cycling of compressors in the event of a poor electricity supply or faulty installation. The components currently used are protected against voltage surge and can be adjusted for time delay period.

Calorex units are fitted with high pressure and low pressure switches which operate at abnormal internal pressures to maximise compressor life. They are also fitted with a thermal expansion valve to ensure maximum flexibility of performance.

Calorex units combine a great British engineering tradition with modern international awareness.

SPECIFICATION
HEATER/CHILLERS- HIGH TEMPERATURE

CALOREX H/C	DATA					
MODEL:	units	AW1222BHC	AW3034BHC	AW7034BHC	AW3034EHC	AW7034EHC
DUTY						
⊗ Air On 20°C, 55%RH						
Heat Output To Water (@ 24°C)	Heating kW	15	40	63	40	63
Electrical Input	kW	3	8.2	12.8	8.2	12.8
⊗ Air On 40°C, 85%RH						
Cooling To Water (@ 24°C)	Cooling kW	10	25	45	25	45
Electrical Input	kW	3.3	9.2	15.7	9.2	15.7
ELECTRICAL DATA						
Electrical Supply Spec' 3 Phase	v/ph/Hz	400v/-3N/50Hz			220v/-3N/60Hz	
Minimum Supply Capacity 3 Phase	amps	11	21	36	35	60
Maximum Supply Fuse 3 Phase	amps	16	35	60	50	90
Max Starting Current STD (LRA)	amps	58	126	126	205	282
AIR DATA						
Nominal Air Flow	m3/hr	3000	9000	13000	9000	13000
Fan External Resistance	mmWG	2	4	4	4	4
WATER DATA						
Water Flow +10%	l/min	33	83	110	83	110
Pressure Drop (Water)	m hd	3.9	2.5	4.5	2.5	4.5
Water Connections	inches	¾ BSPM	1½ BSPM			
Condensate Water Connections	inches	¾ domestic waste	1½ BSPM			
GENERAL DATA						
Gas Type		R22	R134A			
Sound Pressure Level @3m	dB A	65	70	73	70	73
DIMENSION DATA						
Width (unpacked)	mm	820	1700	1950	1700	1950
Depth (unpacked)	mm	705	1090	1340	1090	1340
Height (unpacked)	mm	807	1212	1212	1212	1212
Weight (unpacked)	kg	157	386	610	386	610



calorex®

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