

Calorex Heatpumps

OUTDOOR HEAT PUMPS

The Challenge: To provide a solution to pool water heating which is reliable and economical, regardless of ambient air temperature and location.

The Certikin range of Calorex heat pumps are specifically designed for swimming pool heating. Heat pumps are recognized as the most sustainable way to economically heat swimming pool water and with a Calorex heat pump you will save on operating costs and reduce your carbon footprint. Calorex Pro-Pac heat pumps are available for both outdoor pool usage, or for indoor pools to enhance the enjoyment of your pool.

Why Calorex

Calorex are pioneers in the development of heat pumps and have proven performance and reliability for over 30 years. The products are specifically designed for use in swimming pools using the most modern technology and Calorex is approved under ISO 9001 version 2000.

Why A Heat Pump?

The heat pump is now recognised as the most environmentally friendly method of heating and considering the advantages below it is easy to see why.

- Up to 400% operating cost and carbon saving against direct electric heaters
- Up to 34% operating cost saving against fossil fuel boilers
- Up to 50% carbon saving against fossil fuel boilers



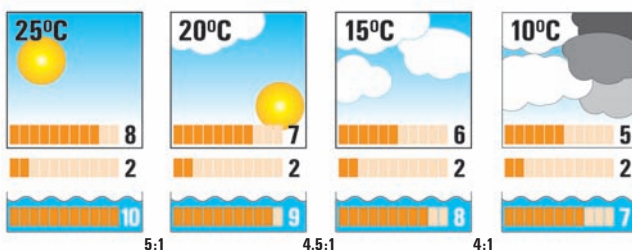
'Air Off' View

'Air On' View

Product Features

- Titanium heat exchangers
- Fully automatic
- Digital controls
- Quiet in operation
- Requires very little regular maintenance
- No fumes
- Kind to the environment
- Economical to run
- Can heat public or private pools to 35°C
- Easy to retrofit to existing swimming pool systems

Heat pumps simply use the free and natural energy in the air and transfer it efficiently to pool water heating whilst respecting the environment. By careful design a Calorex heat pump is capable of providing your pool with up to five units of absorbed heat for every one unit paid for.



Free heat from the air.

Free unit of heat from the air

Paid units of heat

Total units of heat to pool

Total heat to pool divided by energy consumed = Co-efficient of Performance (COP)

TECHNICAL SPECIFICATIONS

Input & output of Summer Season models at 20°C		Output kW	Power Consumed kW	Supply Capacity (amps)	Supply Fuse (amps)	Pool water flow rate (l/m)	Pressure drop (m head)	Noise level at 3m (dBA)	Width	Depth	Height	Unpacked Weight
SUMMER SEASON	AW629AM	9.2	2	14	20	115	1.1	50	1050	580	790	97
	AW829AM	12.5	2.5	17	25	115	1.1	51	1230	580	790	108
	PPT8AL	9.2	2	14	20	115	2.5	49	1049	593	720	93
	PPT12AL	12.5	2.5	17	25	115	2.5	50	1227	593	720	104
	PPT16AL	15.6	2.8	21	30	123	3.5	52	1377	602	720	132
	PPT22AL	22.4	4.3	31	42	123	3.5	55	1377	602	720	133
	PPT12BL	12.5	2.5	6.4	10	115	2.5	50	1227	593	720	104
	PPT16BL	15.6	2.8	8	15	123	3.5	52	1377	593	720	132
	PPT22BL	22.4	4.3	13	20	123	3.5	55	1377	593	720	133
	AW3020B	37	9.1	25	35	66	4.5	69	1700	1090	1212	393
AW7020B	56	13.4	40	50	130	3.9	68	1950	1340	1212	569	



The **29 Range** consists of two single phase models. Their compact form is aesthetically pleasing and can be placed discreetly in the pool area or sited in a plant room. They are quiet, ecologically friendly and economic to run. They come with titanium heat exchangers which are compatible with all types of water treatment. These models are elegant and simple to use. Just set the digital thermostat to ensure fully automatic operation throughout the summer season.

Input & output of Extended Season models at 10°C

EXTENDED SEASON	PPT8ALY	7.2	1.8	14	20	115	2.5	49	1049	593	720	102
	PPT12ALY	9.9	2.3	17	25	115	2.5	50	1227	593	720	111
	PPT16ALY	12.4	2.6	21	30	123	3.5	52	1377	602	720	141
	PPT22ALY	17.7	4.1	31	42	123	3.5	55	1377	602	720	142
	PPT12BLY	9.9	2.3	6.4	10	115	2.5	50	1227	593	720	111
	PPT16BLY	12.4	2.6	8	15	123	3.5	52	1377	593	720	141
	PPT22BLY	17.7	4.1	13	20	123	3.5	55	1377	593	720	142
	AW3020BY	26	8.6	25	35	66	4.5	69	1700	1090	1212	399
	AW7020BY	44	12	40	50	130	3.9	68	1950	1340	1212	584



The **Pro-Pac Range** are purpose designed for swimming pool heating and can be installed outside or in a plant room. They are highly efficient with a wound tube in tube Titanium condenser and come with a rotary or scroll compressor and water flow switch. They have a remote thermostat control option and can be fitted with a soft start should the installation require and are produced in 8kW to 22kW sizes, in both single and three phase models.



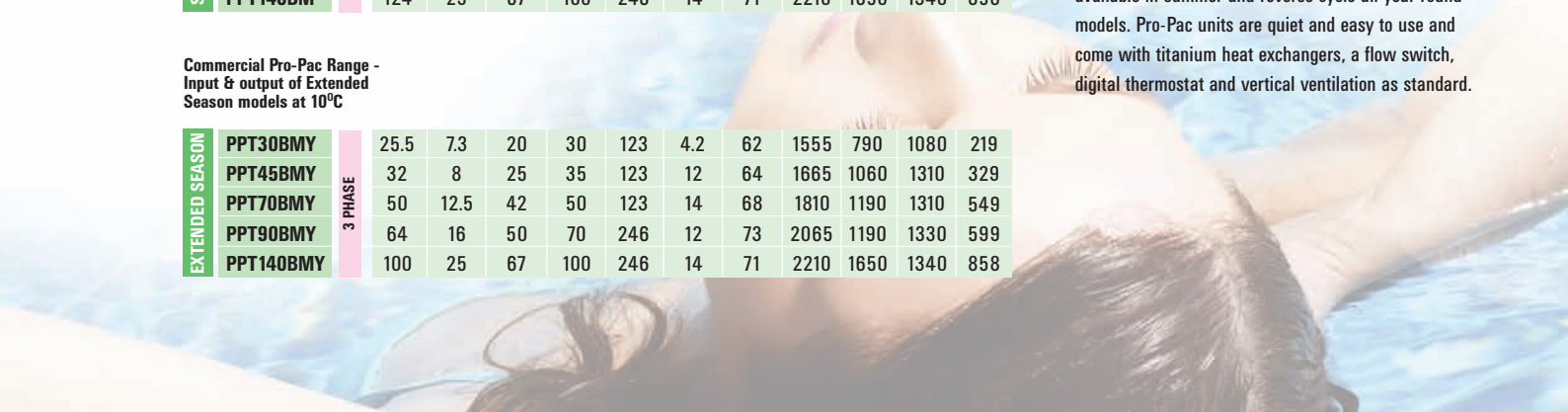
Commercial Pro-Pac Range - Input & output of Summer Season models at 20°C

SUMMER SEASON	PPT30BM	32	7.8	20	30	123	4.2	62	1555	790	1080	219
	PPT45BM	40	9.75	25	35	123	12	64	1665	1060	1310	329
	PPT70BM	62	14.4	42	50	123	14	68	1810	1190	1310	549
	PPT90BM	80	19.5	50	70	246	12	73	2065	1190	1330	599
	PPT140BM	124	29	67	100	246	14	71	2210	1650	1340	858

Commercial Pro-Pac Range - Input & output of Extended Season models at 10°C

EXTENDED SEASON	PPT30BMY	25.5	7.3	20	30	123	4.2	62	1555	790	1080	219
	PPT45BMY	32	8	25	35	123	12	64	1665	1060	1310	329
	PPT70BMY	50	12.5	42	50	123	14	68	1810	1190	1310	549
	PPT90BMY	64	16	50	70	246	12	73	2065	1190	1330	599
	PPT140BMY	100	25	67	100	246	14	71	2210	1650	1340	858

The **Pro-Pac Commercial Range** are specifically designed to satisfy the needs of larger pools or those with a high level of activity, such as the leisure industry. Strong and reliable, the Pro-Pac Commercial Range includes five models up to 120kW output and are available in summer and reverse cycle all year round models. Pro-Pac units are quiet and easy to use and come with titanium heat exchangers, a flow switch, digital thermostat and vertical ventilation as standard.



OUTDOOR HEAT PUMPS SIZING CHARTS

Note: The sizing graphs shown on this page assume the following UK conditions:

- * The entire pool is constructed in-ground
- Ground water level is below pool construction.
- Floating heat retention cover is used 20 hrs per day.
- Average depth of water @1.3metres.

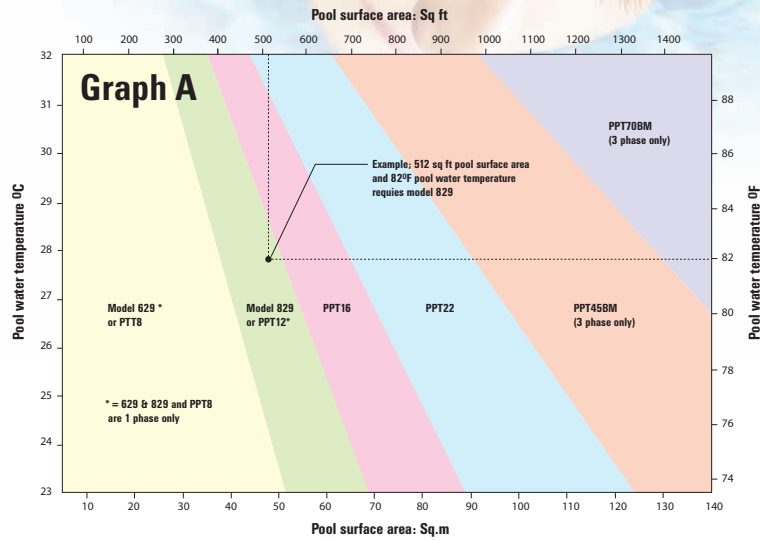
Pool surface area refers to the total water area (eg inclusive of Roman ends / protruding steps / deck-level drains).

For sizing of equipment outside of these design parameters please consult the technical design team.

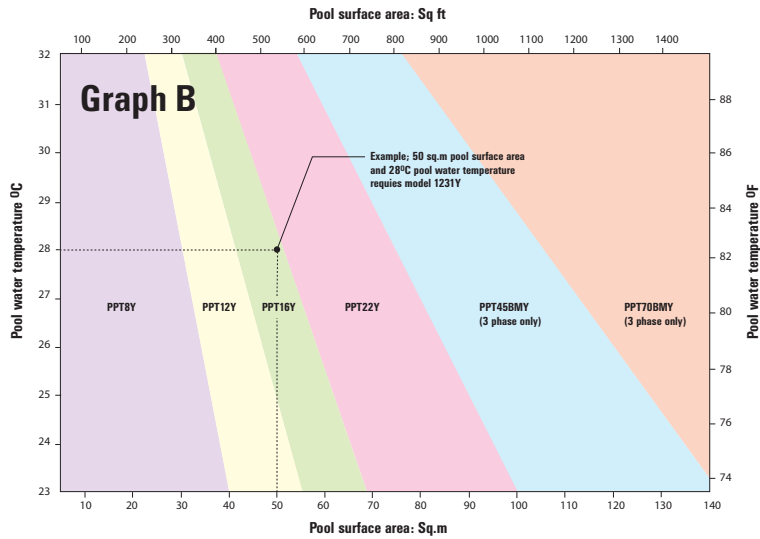
Conversion Factor
To convert from sq. ft to sq.m multiply by 0.0929.

To convert from sq.m to sq.ft divide by 0.0929.

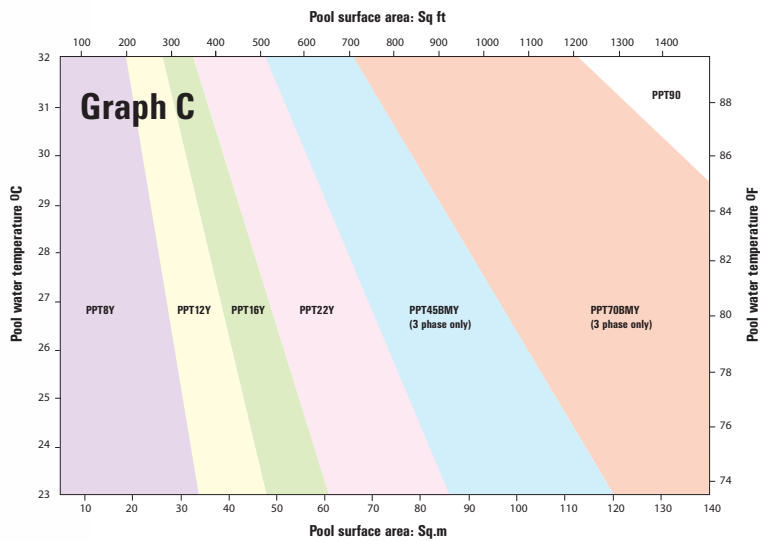
- Roman End surface areas:
- 6' = 1.31 sq.m
 - 8' = 2.33 sq.m
 - 10' = 3.65 sq.m
 - 12' = 5.25 sq.m



May - September Season
(approx 22-24 weeks)



April - October Season
(approx 30-32 weeks)



March - November Season
(approx 38-40 weeks)

