



calorex®



## INVERTER HEAT PUMPS

Side and top outlet heat pumps for domestic and commercial swimming pools



# CALOREX HEAT PUMPS

## INVERTER TECHNOLOGY

Inverter technology allows for efficient control of the pool temperature, and the I-PAC/V-PAC only uses what energy is needed when it is required. High efficiency with modulating step-less inverter compressor giving an average COP of 10.3 (I-PAC+), 9.7 (I-PAC) and 10.7 (V-PAC).



I-PAC

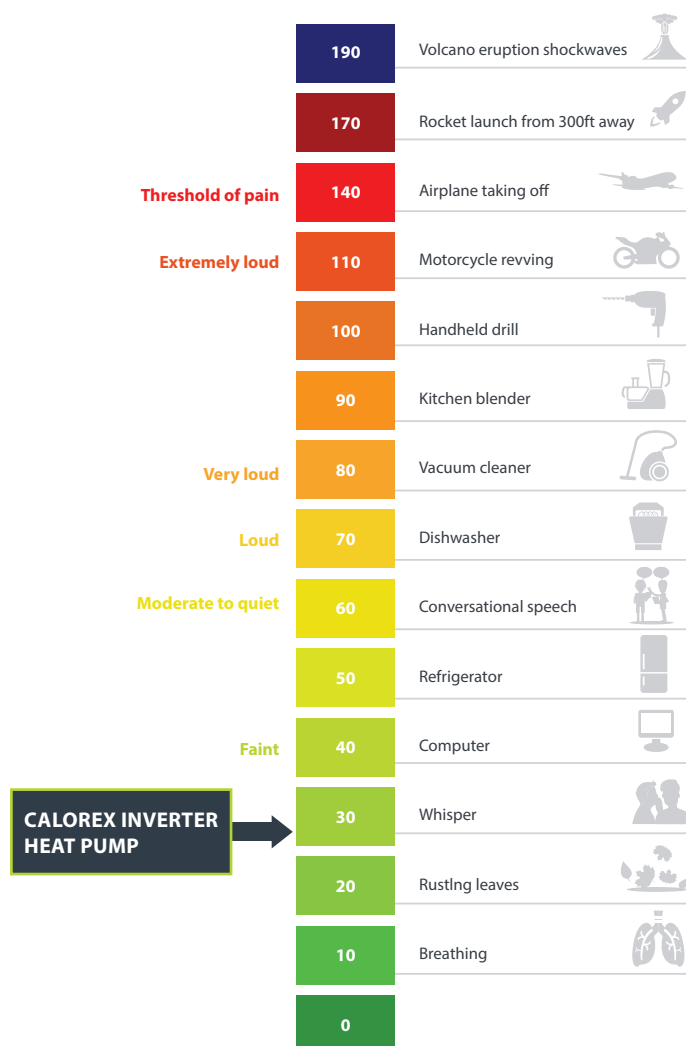
### Features

- Average COP 9.7 = +2 x more efficient than on/off heat pumps
- Eco-friendly refrigerant R32 = 675 GWP, (Global Warming Potential)
- Inverter heat pump
- Increased range of power ratings from 8 to 25kW
- 9-11 dB(A) sound reduction than on/off heat pump, with 'Whisper Mode'
- 27% to 46% reduction in size of dimensional footprint
- Increased operating range
- Multifunction operation functions can be set to heating, heat/cool (I-PAC only) and cooling
- Soft start-up
- Aluminium alloy on I-PAC, ABS on V-PAC
- Built-in Wi-Fi module on I-PAC range
- Designed by Calorex in the UK

### Options

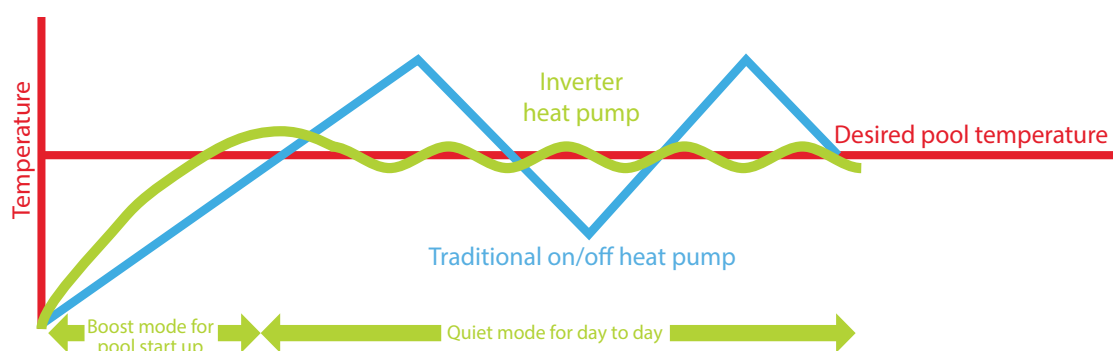
- Remote LED control kit (I-PAC only)
- Winter protection cover

### Where our heat pump sits on the decibel scale



Two modes, Whisper and Boost. Boost mode for quick start up heating. Whisper mode for super quiet day to day running.

### Temperature control chart







## New refrigerant gas

With the introduction F-Gas regulations in Europe, our new heat pump will use the low Global Warming Potential (GWP) refrigerant R32.

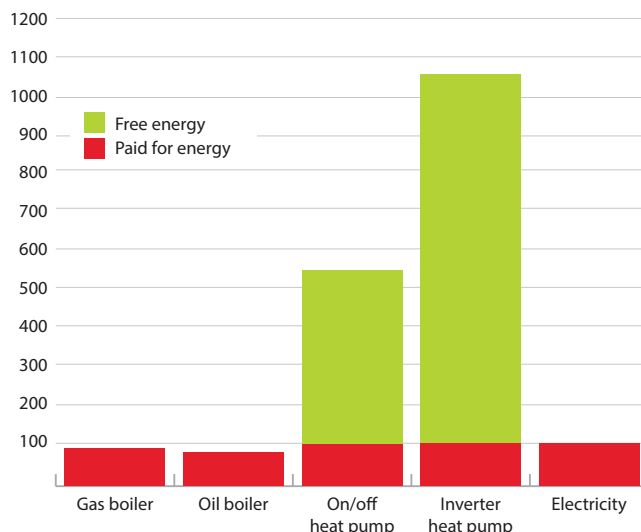
This refrigerant:

- Has a low GWP (675)
- Zero ozone depleting potential (ODP)
- Is F-Gas phase down compliant
- Requires less refrigerant volume per kW
- Is easier to reuse and recycle



**V-PAC**

## Heating method efficiency chart



Great value, and environmentally conscious heating option, with energy consumption half that of a traditional on/off heat pump, and 1/10 of that for gas or electric pool heating.

## Applications

- Outdoor pools
- Private pools
- Spa pools
- Above ground pools
- Wellness centres
- Therapy pools



## V-PAC datasheet

Specifications	Units	VPT 12ALX	VPT 16ALX	VPT 22ALX
Air temperature range	°C	-5-43	-5-43	-5-43
Water temperature range	°C	8-40	8-40	8-40
<b>Performance – air 27°C 80% RH, Water 27°C</b>				
Heating capacity	kW	14.11	18.5	24.4
COP range		18.5-6.28	18.5-6.03	13.5-5.14
Average COP at 50% speed		10.7	10.8	8.8
<b>Performance – air 15°C 70% RH, Water 26°C</b>				
Heating capacity	kW	10.64	13.61	17.8
COP range		8.5-5.11	8.4-5.02	6.2-4.14
Average COP at 50% speed		6.5	6.4	4.7
<b>Performance – air 35°C 80% RH, Water 28°C</b>				
Cooling capacity	kW	6.23	6.7	10.3
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50
Rated input power	kW	0.20-2.24	0.23-3.06	0.75-4.75
Rated input current	A	1.21-8.9	1.23-12.0	3.45-19.6
Maximum input current	A	12.5	15.5	24.5
Water flow	m³/h	4.97	6.5	8.98
Water connection	mm²	1½" or 50mm	1½" or 50mm	1½" or 50mm
Compressor		Inverter	Inverter	Inverter
Condenser		Titanium	Titanium	Titanium
R32 gas weight	g	800	800	1700
Sound level @ 10m	dB(A)	<29	<30	<30
Sound level @ 1m	dB(A)	<47	<48	<48
Product size (w x d x h)	mm	650 x 650 x 835	650 x 650 x 835	745 x 752 x 967
Net Weight	kg	70	80	95

## I-PAC datasheet

Specifications	Units	IPT 8ALX	IPT 12ALX	IPT 16ALX	IPT 22ALX
Air temperature range	°C	-5-43	-5-43	-5-43	-5-43
Water temperature range	°C	12-40	12-40	12-40	12-40
<b>Performance – air 27°C 80% RH, Water 27°C</b>					
Heating capacity	kW	9.5	13.0	20.0	25.0
COP range		13.2-5.4	13.5-5.6	13.5-5.7	13.8-5.8
Average COP at 50% speed		8.9	9.7	9.3	9.6
<b>Performance – air 15°C 70% RH, Water 26°C</b>					
Heating capacity	kW	7.0	9.5	13.5	17.0
COP range		6.9-4.2	7.0-4.0	7.0-4.2	7.2-4.0
Average COP at 50% speed		6.3	6.1	6.3	6.4
<b>Performance – air 35°C 80% RH, Water 28°C</b>					
Cooling capacity	kW	3.9	5.2	7.4	9.4
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50	230/1ph/50
Rated input power	kW	0.3-1.79	0.40-2.38	0.57-3.21	0.69-4.25
Rated input current	A	1.38-7.58	1.82-10.80	2.60-14.61	3.16-19.32
Maximum input current	A	9.5	12.5	19.5	20.0
Water flow	m³/h	3.0-5.0	4.0-6.0	7.0-10.0	10.0-12.0
Water connection	mm²	1½" or 50mm	1½" or 50mm	1½" or 50mm	1½" or 50mm
Compressor		Inverter	Inverter	Inverter	Inverter
Condenser		Titanium	Titanium	Titanium	Titanium
R32 gas weight	g	600	900	1100	2000
Sound level @ 10m	dB(A)	19.6-31.5	21.9-32.0	24.3-36.1	24.9-36.7
Sound level @ 1m	dB(A)	39.6-51.5	41.9-52.0	44.3-56.1	44.9-56.7
Product size (w x d x h)	mm	864 x 359 x 648	864 x 359 x 648	954 x 359 x 748	1084 x 429 x 948
Net Weight	kg	47	49	68	90

## I-PAC+ datasheet

Specifications	Units	IPT 12ALY	IPT 16ALY	IPT 22ALY	IPT 22BLY	IPT 28BLY
Air temperature range	°C	-10-43	-10-43	-10-43	-10-43	-10-43
Water temperature range	°C	12-40	12-40	12-40	12-40	12-40
<b>Performance – air 27°C 80% RH, Water 27°C</b>						
Heating capacity	kW	15.0	21.0	27.5	27.5	36.0
COP range		15.0-6.6	14.8-6.4	15.0-6.5	15.0-6.8	14.8-6.0
Average COP at 50% speed		10.6	10.3	10.3	10.3	10.2
<b>Performance – air 15°C 70% RH, Water 26°C</b>						
Heating capacity	kW	11.5	14.5	18.0	18.0	23.9
COP range		7.7-4.6	7.1-4.6	7.5-4.6	7.5-4.6	7.5-4.6
Average COP at 50% speed		6.4	6.3	6.3	6.3	6.3
<b>Performance – air 35°C 80% RH, Water 28°C</b>						
Cooling capacity	kW	6.7	9.5	11.9	11.9	16.0
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50	400/3ph/50	400/3ph/50
Rated input power	kW	0.27-2.28	0.41-3.15	0.48-3.91	0.48-3.91	0.64-5.20
Rated input current	A	1.17-9.91	1.78-13.69	2.08-17.00	0.69-5.66	0.92-7.53
Maximum input current	A	13.5	17.0	20.0	7.0	9.5
Water flow	m³/h	5.0-7.0	8.0-10.0	10.0-12.0	10.0-12.0	12.0-18.0
Water connection	mm²	1½" or 50mm	1½" or 50mm	1½" or 50mm	1½" or 50mm	1½" or 50mm
Compressor		Inverter	Inverter	Inverter	Inverter	Inverter
Condenser		Titanium	Titanium	Titanium	Titanium	Titanium
R32 gas weight	g	900	1200	2000	2000	2700
Sound level @ 10m	dB(A)	20.8-24.5	20.4-33.7	23.0-34.4	23.0-34.4	22.1-34.2
Sound level @ 1m	dB(A)	40.8-54.5	40.4-53.7	43.0-54.4	43.0-54.4	42.1-54.2
Product size (w x d x h)	mm	954 x 359 x 648	954 x 429 x 755	1084 x 429 x 948	1084 x 429 x 948	1154 x 539 x 948
Net Weight	kg	52	68	90	93	120

