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Calorex Inverter Heat Pumps

Side and top outlet heat pumps for swimming pools

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Calorex Inverter Heat Pumps

Inverter Technology

Inverter technology allows the speed of the heat pump to reduce whenever the pool needs less than the full output, matching heat output to exactly the heat required. This not only gives lower running costs, but reduces sound levels to a 'whisper' and eliminates the massive inrush currents associated with on/off heat pumps.

Features

- Higher COP's than traditional on/off heat pumps
- F-Gas compliant, using the Low Global Warming Potential (GWP) R32 refrigerant
- Increased range of power ratings from 8 to 25kW
- 9 -11 dB(A) sound reduction than an on/off heat pump, with 'Whisper Mode'
- Wi-Fi connectivity for remote control (I-PAC range only)
- Compact size with a small footprint which is compliant with permitted development rights
- Increased operating range
- Multifunction operation can be set to: heat only, heat/cool and cool only functions
- Aluminium alloy on I-PAC range and ABS on V-PAC range
- 5-year manufacturer's warranty (on-site parts and labour)
- Designed by Dantherm in the UK for the UK climate

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.

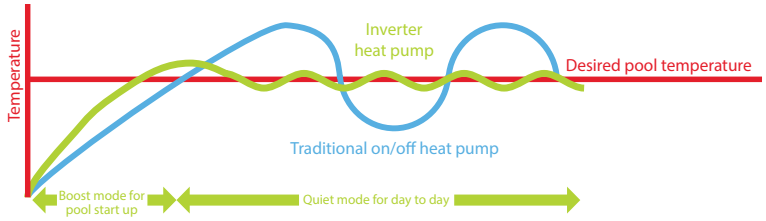
Optional extras available

- Remote control panel kit
- Winter protection cover

Side Outlet – I-PAC (X-range) Technical Data

SPECIFICATIONS	UNITS	IPT 8ALX	IPT 12ALX	IPT 16ALX	IPT 22ALX
Rated Fuse / MCB type C	A	16	16	25	25
Air temperature range	°C	-5-43	-5-43	-5-43	-5-43
Water temperature range	°C	12-40	12-40	12-40	12-40
PERFORMANCE – AIR 27°C 80% RH, WATER 27°C					
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
PERFORMANCE – AIR 15°C 70% RH, WATER 26°C					
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
PERFORMANCE – AIR 35°C 80% RH, WATER 28°C					
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	m^3/h	3.0-5.0	4.0-6.0	7.0-10.0	10.0-12.0
Water connection	inches or mm	11/2" or 50mm	11/2" or 50mm	11/2" or 50mm	11/2" 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)	39.6-31.5	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 x748	1084 x 429 x 948
Net weight	kg	47	49	68	90

Temperature control chart



Side Outlet – I-PAC+ (Y-range) Technical Data

SPECIFICATIONS	UNITS	IPT 12ALY	IPT 16ALY	IPT 22ALY	IPT 22BLY	IPT 28BLY
Rated Fuse / MCB type C	A	20	25	25	10	16
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
PERFORMANCE – AIR 27°C 80% RH, WATER 27°C						
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	15.0-6.5	14.8-6.0
Average COP at 50% speed		10.6	10.3	10.3	10.3	10.2
PERFORMANCE – AIR 15°C 70% RH, WATER 26°C						
Heating capacity	kW	10.5	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
PERFORMANCE – AIR 35°C 80% RH, WATER 28°C						
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	m^3/h	5.0-7.0	8.0-10.0	10.0-12.0	10.0-12.0	12.0-18.0
Water connection	inches or mm	11/2" or 50mm	11/2" or 50mm	11/2" or 50mm	11/2" or 50mm	11/2" 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

Top Outlet – V-PAC (X-range) Technical Data

SPECIFICATIONS	UNITS	VPT 12ALX	VPT 16ALX	VPT 22ALX
Rated Fuse / MCB type C	A	16	20	32
Air temperature range	°C	-5-43	-5-43	-5-43
Water temperature range	°C	8-40	8-40	8-40
PERFORMANCE – AIR 27°C 80% RH, WATER 27°C				
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
PERFORMANCE – AIR 15°C 70% RH, WATER 26°C				
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
PERFORMANCE – AIR 35°C 80% RH, WATER 28°C				
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	m^3/h	4.97	6.5	8.98
Water connection	inches or mm	11/2" or 50mm	11/2" or 50mm	11/2" 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

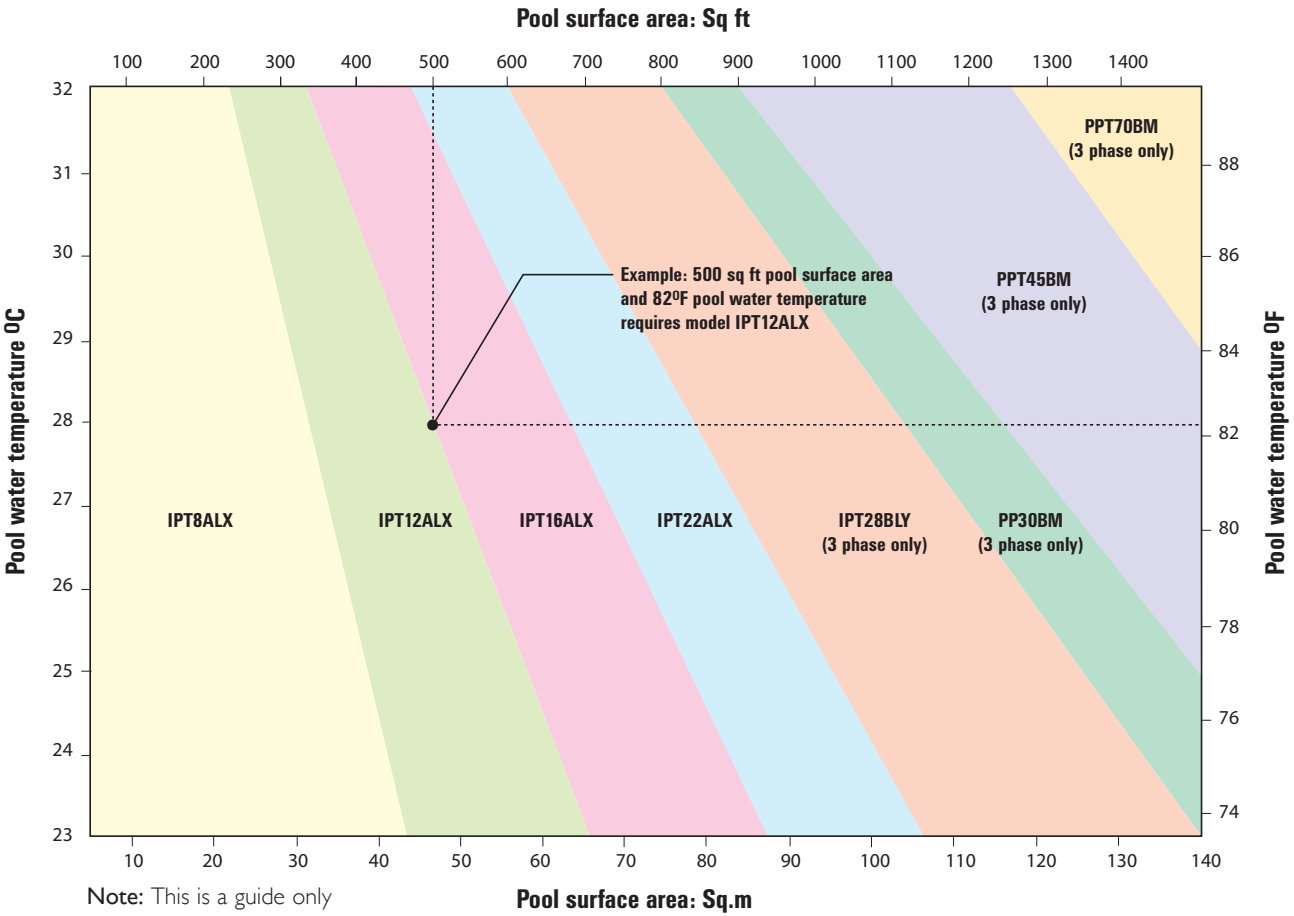
New refrigerant gas

With the introduction of the new F-Gas regulations in Europe, the Calorex inverter heat pump uses the low Global Warming Potential (GWP) refrigerant R32.

This refrigerant:

- Has a low GWP (675)
- Zero ozone depleting potential (ODP)
- Compliant with 2025 F-Gas phase down requirements
- Requires less refrigerant volume per kW
- Is easier to reuse and recycle

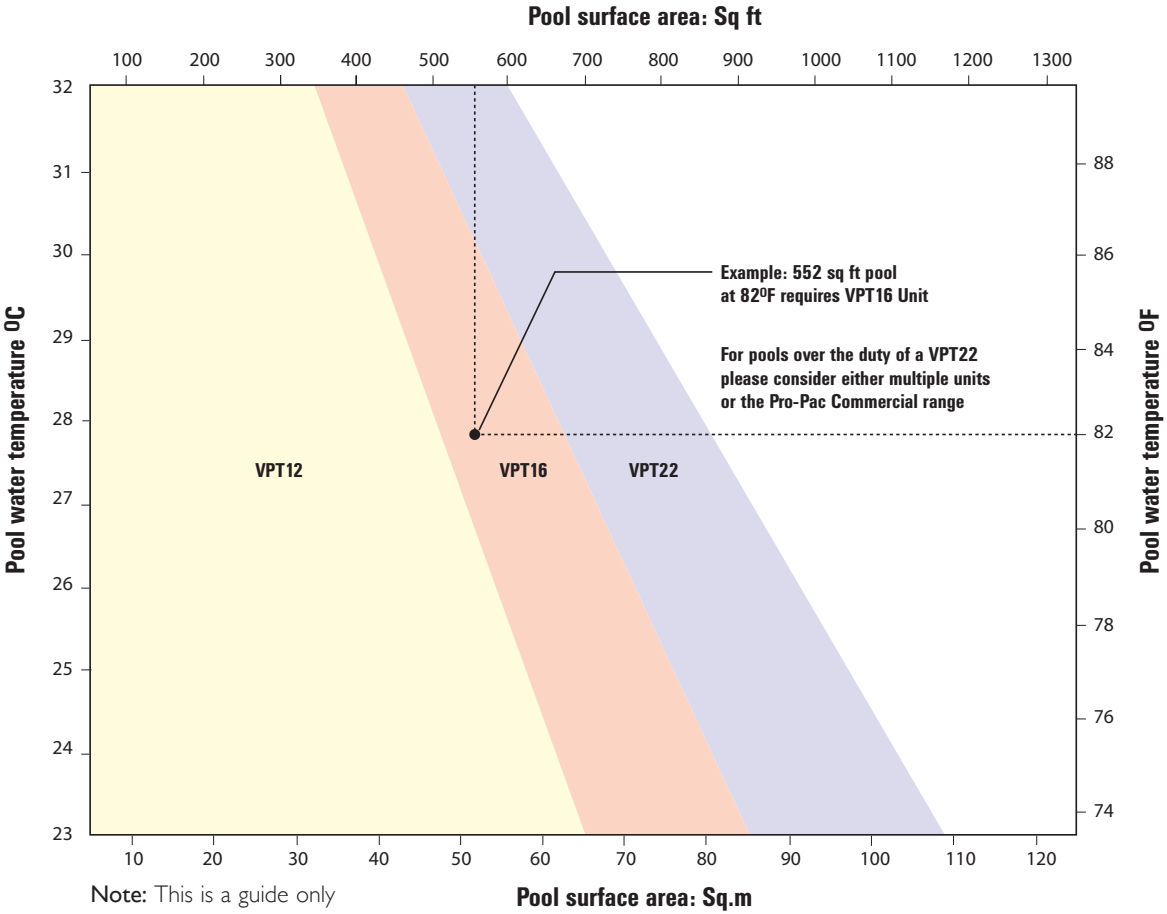
Example Domestic Pool Sizing Graphs for Side Outlet I-PAC (X-range)



Note: This is a guide only

May - September Season (approx 22-24 weeks)

Example Domestic Pool Sizing Graphs for Top Outlet V-PAC (X-range)



Note: This is a guide only

May - September Season (approx 22-24 weeks)

For domestic pools

Note: The sizing graphs shown on these pages are for guidance only and assume the following UK conditions:

- Domestic pool (domestic usage).
- The entire pool is constructed in-ground.
- Ground water level is below pool construction.
- Insulated heat retention cover is used at least 20 hours per day.
- The Average depth of water is 1.3m.
- Sheltered location.
- Heat pump is operating (running) 24/7.

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

For sizing of equipment *outside* of these design parameters, please consult The H&V Division.

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Contact your Certikin stockist for prices and availability.

This literature is intended as a guide.
The company reserves the right to change the specifications without notice.