

# Heating & Ventilation



169-192  
H & V



# Certikin's New Budget Range Heat Pump

This heat pump is designed and manufactured in collaboration with Calorex & the Dantherm Group. The Dantherm HPP heat pump is easy to install and is an affordable option for pool water heating.

There are 4 models available; HPP6, HPP8, HPP12 and HPP15, with a 5th model available later in the year.

## Features

- Quiet operation
- Aesthetically pleasing design with an attractive graphite grey ABS cabinet
- Scroll or Rotary compressor (dependent upon product size)
- Titanium heat exchanger
- Reverse cycle defrost, enabling operation down to 3°C air temp
- Water temperature range 15°C to 40°C
- "smart" pool pump control
- Condensate drain connection
- Supplied with 1.5" + 50mm socket unions for the water connections

This unit comes with a 3 year warranty.

- 1 year on site parts and labour
- 2 further years warranty - parts only

For accurate application and sizing, please call the H & V department on 01993 777200.

**NEW**



## Certikin's Budget Range Heat Pump

		Price
V	HPP6 Dantherm 6kW heat pump	£1325.00
V	HPP8 Dantherm 8kW heat pump	£1560.00
V	HPP12 Dantherm 12kW heat pump	£1915.00
V	HPP15 Dantherm 15kW heat pump	£2950.00

## Accessories - Het Pump Winter Cover

		Price
V	WDCHPP1 Winter cover to suit HPP6 & HPP8	£85.00
V	WDCHPP2 Winter cover to suit HPP12 & HPP15	£85.00

		HPP6	HPP8	HPP12	HPP15
Ambient air 20°C, 60%RH	Power output kW	6.1	8.2	12.1	15.3
Water 27°C heating	Power input kW	1.3	1.5	2.2	3.0
	COP	4.9	5.4	5.6	5.1
Ambient air 15°C, 70%RH	Power output kW	5.2	7.7	10.1	13.5
Water 26°C heating	Power input kW	1.15	1.74	2.17	3.3
	COP	4.5	4.4	4.7	4.1
Power Supply		220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz
Max power input	kW	2.33	2.71	3.83	5.94
Max current	A	10.59	12.32	17.41	27
Max Fuse	A	16	16	25	40
Operating Range					
Minimum air temperature	°C	3	3	3	3
Maximum air temperature	°C	40	40	40	40
Water temperature range	°C	15-40	15-40	15-40	15-40
Refrigerant		RA410A	RA410A	RA410A	RA410A
Min/Max Pressure		1.5/4.15Mpa	1.5/4.15Mpa	1.5/4.15Mpa	1.5/4.15Mpa
Noise at 1m (dB(A))		<46	<47	<48	<48
Noise at 10m (dB(A))		<28	<29	<30	<30
Fan quantity		1	1	1	1
Air flow volume (m3/h)		2000	2000	3800	3800
Package dimensions (wxdxh) mm		960 x 408 x 793	960 x 408 x 793	1150 x 408 x 843	1150 x 408 x 843
Unit dimensions (wxdxh) mm		933 x 401 x 657	933 x 401 x 657	1125 x 470 x 707	1125 x 470 x 707
Net weight kg		50kg	59kg	71kg	96kg
Gross weight kg		68	75	92	118
Protection class		IPX4	IPX4	IPX4	IPX4



Extra carriage charge applies to the units on this page

# Calorex 'X' Range Heat Pumps. Suitable May-Sept & April-Oct



Calorex Pro-Pac Range Heat Pumps  
- Extended Season - Single Phase

		Price
F	PPT8ALX Pro-Pac 8 - Extended Season - 1Ø	£2750.00
F	PPT12ALX Pro-Pac 12 - Extended Season - 1Ø	£3195.00
F	PPT16ALX Pro-Pac 16 - Extended Season - 1Ø	£3950.00
F	PPT16ALXS Pro-Pac 16 - Extended Season - 1Ø C/W soft start	£4385.00
F	PPT22ALX Pro-Pac 22 - Extended Season - 1Ø	£4650.00
F	PPT22ALXS Pro-Pac 22 - Extended Season - 1Ø C/W soft start	£5150.00

Calorex Pro-Pac Range Heat Pumps  
- Extended Season - Three Phase

		Price
F	PPT12BLX Pro-Pac 12 - Extended Season - 3Ø	£3655.00
F	PPT16BLX Pro-Pac 16 - Extended Season - 3Ø	£4175.00
F	PPT22BLX Pro-Pac 22 - Extended Season - 3Ø	£4800.00
F	PPT22BLXS Pro-Pac 22 - Extended Season - 3Ø C/W Soft start	£5280.00

Accessories - Heat Pump Winter Covers

		Price
F	WDCPPHP1 Winter cover for PPT8, PPT12 & PPT16 range	£94.00
F	WDCPPHP2 Winter cover for PPT22 range	£94.00



Delivery is free of charge to invoice address only via routine delivery (UK mainland only). Site delivery is charged at half pallet rate.

	Pro-Pac 8X	Pro-Pac 12X	Pro-Pac 16X	Pro-Pac 22X
<b>Electric Data</b>				
Recommended supply fuse (Amps - MBC type C) 1PH / 3PH	20 / 10	25 / 10	30 / 15	42 / 20
<b>Compressor Data</b> (fitted with a 6 min start delay timer)				
Nominal Power Consumed - kWh	1.6	2.35	2.6	3.8
LRA - amps - 1PH / 3PH	62 / 32	62 / 30	103 / 48	136 / 48
Min supply capacity (FLA) 1ph / 3ph	14 / 6	17 / 6.4	19.8 / 8	31 / 13
Soft Start - amps per phase	28 / 14	28 / 14	34 / 17	36 / 25
<b>Water Data</b>				
Pool water flow rate - L/min	75	75	125	167
Pool water connections - female	1.5" or 50mm	1.5" or 50mm	1.5" or 50mm	1.5" or 50mm
Condensate drain connection - inches	0.75"	0.75"	0.75"	0.75"
<b>General Data</b>				
Compressor	Rotary	Rotary	Scroll	Scroll
Condenser	Titanium	Titanium	Titanium	Titanium
Sound Level dB(A) @ 10m / @ 3m	42 / 49	43 / 50	45 / 52	48 / 55
<b>Dimensions</b>				
Width / Depth / Height - mm	1264/594/725	1264/594/725	1264/600/725	1264/600/904
Weight - kg (unpacked)	91	96	113	119
<b>Refrigerant Gas Charge (R407c) - kg</b>	1.9	2.5	5.0	6.0

Information correct at time of compilation.

All cabinet volumes are less than 0.6m<sup>3</sup> and comply with permitted development requirements.

The built-in energy management controls, allow the pool filtration pump to be operated on a time clock. The Pro-Pac will override the time clock if heating is needed outside the timer settings.

Calorex heat pumps are all fitted with a Titanium heat exchanger - compatible with all types of water treatment.

## Why Calorex ?

- Specially designed for swimming pools to provide maximum efficiency and reliability.
- Suitable for pools to 35°C.
- A Calorex heat pump can provide your pool with up to 5.5 units of heat for every one unit paid for.

## Calorex Pro-Pac 'X' Range Extended Season Heat Pump

The 'X' Range incorporates a hot gas defrost. The 'X' Range will operate to a lower ambient temperature, making for a longer heating season at a very competitive price.

It is strongly recommended that checks are made in relation to starting amps and load requirements for these machines.



Winter cover available for  
ALL Pro-Pac heaters



Please contact us if you  
require a Calculator.

# Calorex Y Range Heat Pumps. Suitable for March - Nov & All Year Round



All cabinet volumes are less than 0.6m<sup>3</sup> and comply with permitted development requirements.

The built-in energy management controls, allow the pool filtration pump to be operated on a time clock. The Pro-Pac will override the time clock if heating is needed outside the timer settings.

It is strongly recommended that checks are made in relation to starting amps and load requirements for these machines.

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. May 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.



Winter cover available for ALL Pro-Pac heaters



Please contact us if you require a Calculator.



**3 Years**  
parts & labour warranty  
(UK & Ireland Only)  
**10 Years**  
anti-corrosion warranty  
on the casing

## Calorex Pro-Pac Heat Pumps - All Year Round - 1 Phase

		Price
F	PPT8ALYN Pro-Pac 8 - All Year Round 1Ø	£4020.00
F	PPT12ALYN Pro-Pac 12 - All Year Round 1Ø	£4785.00
F	PPT16ALYN Pro-Pac 16 - All Year Round 1Ø	£5860.00
F	PPT16ALYSN Pro-Pac 16 - All Year Round 1Ø - C/W soft start	£6410.00
F	PPT22ALYN Pro-Pac 22 - All Year Round 1Ø	£6695.00
F	PPT22ALYSN Pro-Pac 22 - All Year Round 1Ø - C/W soft start	£7260.00

## Calorex Pro-Pac Heat Pumps -All Year Round - 3 Phase

		Price
F	PPT12BLYN Pro-Pac 12 - All Year Round 3Ø	£4880.00
F	PPT16BLYN Pro-Pac 16 - All Year Round 3Ø	£6015.00
F	PPT22BLYN Pro-Pac 22 - All Year Round 3Ø	£6705.00

## Accessories - Heat Pump Winter Covers

		Price
F	WDCPPHP1 Winter cover for PPT8, PPT12 & PPT16 range	£94.00
F	WDCPPHP2 Winter cover for PPT22 range	£94.00



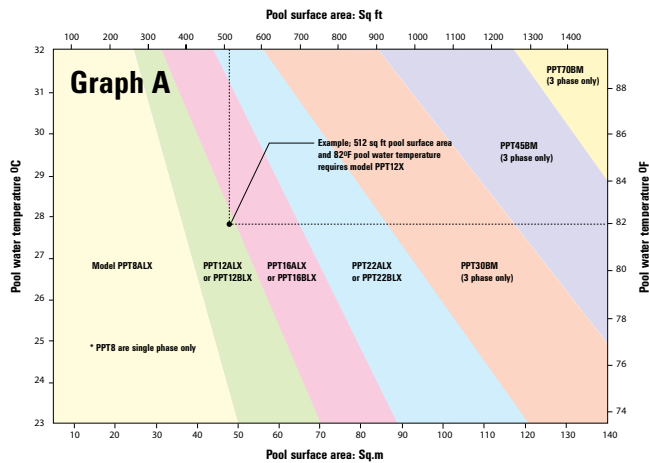
Delivery is free of charge to invoice address only via routine delivery (UK mainland only). Site delivery is charged at half pallet rate.

	Pro-Pac 8X	Pro-Pac 12X	Pro-Pac 16X	Pro-Pac 22X
<b>Electric Data</b>				
Recommended supply fuse (Amps - MBC type C) 1PH / 3PH	20 / 10	25 / 10	30 / 15	42 / 20
<b>Compressor Data</b> (fitted with a 6 min start delay timer)				
Nominal Power Consumed - kWh	1.6	2.35	2.6	3.8
LRA - amps - 1PH / 3PH	62 / 32	62 / 30	103 / 48	136 / 48
Min supply capacity (FLA) 1ph / 3ph	14 / 6	17 / 6.4	19.8 / 8	31 / 13
Soft Start - amps per phase	28 / 14	28 / 14	34 / 17	36 / 25
<b>Water Data</b>				
Pool water flow rate - L/min	75	75	125	167
Pool water connections - female	1.5" or 50mm	1.5" or 50mm	1.5" or 50mm	1.5" or 50mm
Condensate drain connection - inches	0.75"	0.75"	0.75"	0.75"
<b>General Data</b>				
Compressor	Rotary	Rotary	Scroll	Scroll
Condenser	Titanium	Titanium	Titanium	Titanium
Sound Level dB(A) @ 10m / @ 3m	42 / 49	43 / 50	45 / 52	48 / 55
<b>Dimensions</b>				
Width / Depth / Height - mm	1264/594/725	1264/594/725	1264/600/725	1264/600/904
Weight - kg (unpacked)	91	96	113	119
<b>Refrigerant Gas Charge (R407c) - kg</b>	1.9	2.5	5.0	6.0

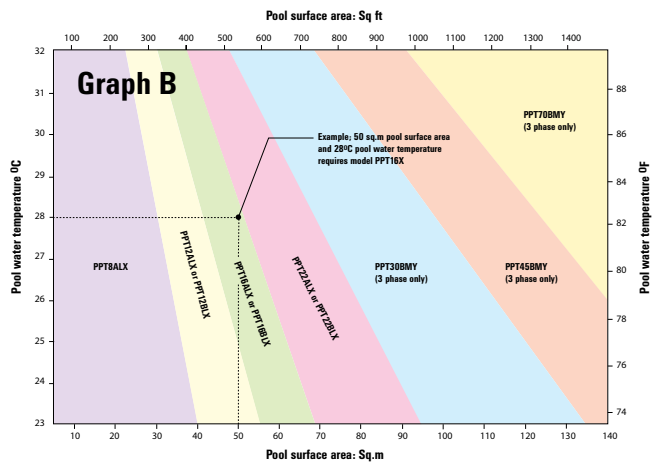
Information correct at time of compilation.



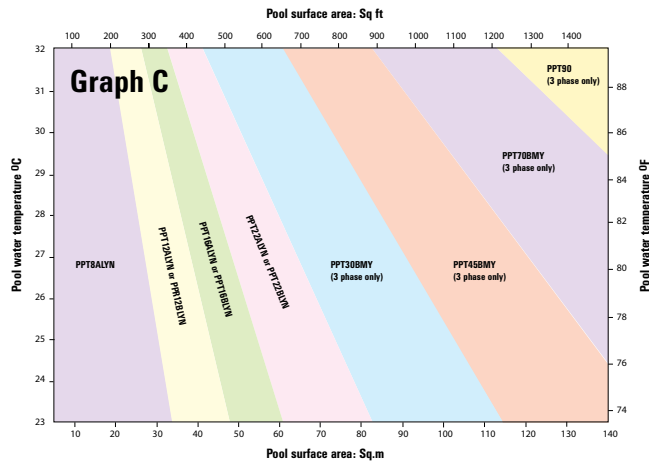
# Domestic Pool Sizing Graphs



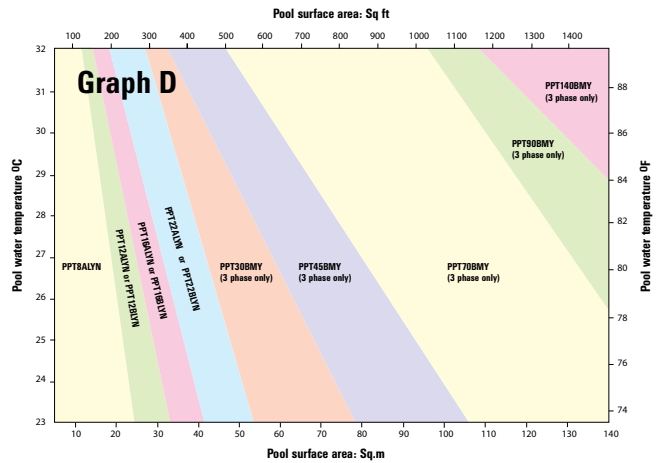
May - September Season  
(approx 22-24 weeks)



April - October Season  
(approx 30-32 weeks)



March - November Season  
(approx 38-40 weeks)



All Year Round

## For Domestic Pools

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
- Insulated heat retention cover is used 20 hrs per day
- Average depth of water @1.3metres
- Sheltered location

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

# Calorex Commercial Heat Pumps (3 Phase Only)

For Bespoke Sizing, Please Contact  
Certikin H & V Department



Model 30



Model 140

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 contain owl super quiet fans and are easy to use and come with titanium heat exchangers, a flow switch, digital thermostat and vertical ventilation as standard.

## Calorex Pro-Pac Commercial Heat Pumps - Summer Season - 3 Phase

		Price
F	<b>PPT30BM</b> Pro-Pac model 30 - 3Ø	<b>£9530.00</b>
F	<b>PPT45BM</b> Pro-Pac model 45 - 3Ø	<b>£11,950.00</b>
F	<b>PPT70BM</b> Pro-Pac model 70 - 3Ø	<b>£17,600.00</b>
F	<b>PPT90BM</b> Pro-Pac model 90 - 3Ø	<b>£23,500.00</b>
F	<b>PPT140BM</b> Pro-Pac model 140 - 3Ø	<b>£34,725.00</b>

## Calorex Pro-Pac Commercial Heat Pumps - Extended Season - All Year Round - 3 Phase

		Price
F	<b>PPT30BMY</b> Pro-Pac model 30Y - 3Ø	<b>£10,950.00</b>
F	<b>PPT45BMY</b> Pro-Pac model 45Y - 3Ø	<b>£13,175.00</b>
F	<b>PPT70BMY</b> Pro-Pac model 70Y - 3Ø	<b>£19,550.00</b>
F	<b>PPT90BMY</b> Pro-Pac model 90Y - 3Ø	<b>£25,995.00</b>
F	<b>PPT140BMY</b> Pro-Pac model 140Y - 3Ø	<b>£38,450.00</b>

An ideal way to reduce running costs on indoor pools.

It is strongly recommended that checks are made in relation to starting amps and load requirements for these machines.

For sizing of equipment contact the H & V technical team on 01993 778855.

Warranty is 1 year parts and labour on-site



Extra carriage charge applies to  
the units on this page

	Pro-Pac 30 & 30Y	Pro-Pac 45 & 45Y	Pro-Pac 70 & 70Y	Pro-Pac 90 & 90Y	P/Pac 140 & 140Y
<b>Electric Data</b>					
Recommended supply fuse (Amps - MBC type C) 3PH	30	35	50	70	100
<b>Compressor Data</b> (fitted with a 6 min start delay timer)					
LRA - amps - 3PH	80	96	174	96	174
Soft Start - starting amps per phase	31	33	40	33	40
<b>Water Data</b>					
Pool water flow rate - L/min	123	246	500	492	1000
Pool water connections - female BSPM	1.5"	2"	3"	3"	4"
<b>General Data</b>					
Compressor	1 x Scroll	1 x Scroll	1 x Scroll	2 x Scroll	2 x Scroll
Condenser	Titanium	Titanium	Titanium	Titanium	Titanium
Sound Level dB(A) @ 10m / @ 3m	55 / 62	57 / 64	61 / 68	66 / 73	64 / 71
<b>Dimensions</b>					
Width / Depth / Height - mm	1555/790/1080	1665/1060/1310	1840/1190/1310	2065/1190/1330	2210/1650/1340
Weight - kg - Standard Models	219	329	417	465	858
Weight - kg - Y Models (unpacked)	233	346	472	633	872
<b>Refrigerant Gas Charge (R407c) - kg - Standard</b>	5.5	14	18.0	14 x 2	15 x 2
<b>Refrigerant Gas Charge (R407c) - kg - Y Models</b>	6.2	13.5	17.2	14 x 2	15 x 2

Information correct at time of compilation.

# CDP Dehumidifier

## CDP Dehumidifiers

Certikin is pleased to introduce a new range of dehumidifiers, designed and developed by Dantherm.

Focusing on quality, functionality and efficiency, the CDP dehumidifier is an exclusive design that blends well with any indoor pool interior.

Available 'in wall' or 'through the wall' versions, with option for floor standing too.

## Advantages

- Light and compact units
- Quiet
- Very low power consumption
- High dehumidification capacity
- Built-in electronic hygrostat and thermostat
- BMS communication (Modbus)
- USB gate for PC tool
- Control signal for additional exhaust fan
- Optional wireless remote control
- Optional heating coils and electric heating coils

All CDP dehumidifiers are subject to a 2 year manufacturer's warranty.

## Dantherm Wall Mounted Dehumidifiers (Non-Ducted)

		Price
<b>G CDP40</b>	CDP40 Dehumidifier - Wall mounted	<b>£2295.00</b>
<b>G CDP50</b>	CDP50 Dehumidifier - Wall mounted	<b>£3225.00</b>
<b>G CDP70</b>	CDP70 Dehumidifier - Wall mounted	<b>£4195.00</b>

## Dantherm Through The Wall Dehumidifiers For Mounting On Opposite Side Of Pool Hall Wall (Non-Ducted)

		Price
<b>G CDP40T</b>	CDP40 Dehumidifier - Through Wall CDP40T/DUCT & Duct Kit To Suit CPD40T	<b>£2545.00</b>
<b>G CDP50T</b>	CDP50 Dehumidifier - Through Wall CDP50T/DUCT & Duct Kit To Suit CPD50T	<b>£3500.00</b>
<b>G CDP70T</b>	CDP70 Dehumidifier - Through Wall CDP70T/DUCT & Duct Kit To Suit CPD70T	<b>£4520.00</b>

Through the wall units consist of 2 part numbers (unit + through wall duct kit). Please ensure both parts are ordered. The price shown is total for both parts.

Wall Duct Kits comprise of inlet and outlet section, grills, inlet filter and extensions.

## Air Heating Options (LPHW)

		Price
<b>G CDP/LPHW40</b>	Water Heating Coil 2.6kW (LPHW)	<b>£170.00</b>
<b>G CDP/LPHW50</b>	Water Heating Coil 4.2kW (LPHW)	<b>£205.00</b>
<b>G CDP/LPHW70</b>	Water Heating Coil 6.2kW (LPHW)	<b>£275.00</b>

## Air Heating Options (Electric)

		Price
<b>G CDP/ELECTRIC40</b>	Electric Heating Coil 2kW	<b>£315.00</b>
<b>G CDP/ELECTRIC50</b>	Electric Heating Coil 3.5kW	<b>£365.00</b>
<b>G CDP/ELECTRIC70</b>	Electric Heating Coil 5kW	<b>£420.00</b>

## Accessories

		Price
<b>G CDPFLOOR</b>	Floor Mounting Kit To Suit CDP40, CDP50 and CDP70	<b>£195.00</b>
<b>G CDP/VALVE</b>	CDP Dehumidifier On/Off Control Valve	<b>£210.00</b>
<b>G CDP/RCU</b>	CDP Dehumidifier Remote Control	<b>£199.50</b>

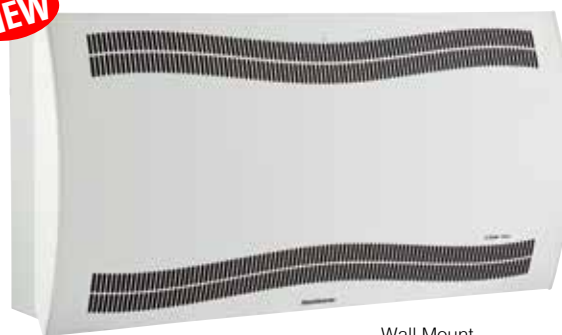
Note: When ordering LPHW version, select heating coil PLUS valve VDP/VALVE.

**NEW**



Through Wall

**NEW**



Wall Mount

**NEW**



Remote Control



Extra carriage charge applies to the units on this page

# Vaporex Air To Air Recovery Dehumidifiers

Ideal For The Replacement Market



## Dehumidifiers + Defrost Mode - For Wall Mounting (Non Ducted)

		Price
<b>G DH33AX</b>	Vaporex 34 Dehumidifier + Defrost	<b>£1930.00</b>
<b>G DH55AX</b>	Vaporex 55 Dehumidifier + Defrost	<b>£2795.00</b>

## Dehumidifiers + LPHW - For Wall Mounting (Non Ducted)

		Price
<b>G DH33AX/L</b>	Vaporex 33 Dehumidifier + Defrost + 3kW (LPHW) Heating *	<b>£2100.00</b>
<b>G DH55AX/L</b>	Vaporex 55 Dehumidifier + Defrost + 5kW (LPHW) Heating *	<b>£3025.00</b>

## Dehumidifiers + Electric Resistance Heating - For Wall Mounting (Non Ducted)

		Price
<b>G DH30AXP</b>	Vaporex 30 + Defrost + 2kW Electric Heating	<b>£2525.00</b>
<b>G DH50AXP</b>	Vaporex 50 + Defrost + 4kW Electric Heating	<b>£3685.00</b>

## Through Wall Dehumidifiers For Mounting Internally On Opposite Side Of Pool Hall Wall - C/W duct sleeve and grille kit for wall upto 150mm thick

		Price
<b>G DH33AX/T</b>	Vaporex 33 + Defrost Through Wall Adapted †	<b>£2575.00</b>
<b>G DH33AX/TL</b>	Vaporex 33 + Defrost + 3kW (LPHW) Through Wall Adapted	<b>£2700.00</b>
<b>G DH30AXP/T</b>	Vaporex 30 + Defrost + 2kW Electric Through Wall Adapted	<b>£3200.00</b>
<b>G DH55AX/T</b>	Vaporex 55 + Defrost Through Wall Adapted	<b>£3200.00</b>
<b>G DH55AX/TL</b>	Vaporex 55 + Defrost + 5kW (LPHW) Through Wall Adapted	<b>£3400.00</b>
<b>G DH50AXP/T</b>	Vaporex 50 + Defrost + 4kW Electric Through Wall Adapted	<b>£3975.00</b>

Note - LPHW = Low Pressure Hot Water.  
Requires water supply at 80°C for outputs stated.

**All Vaporex units are subject to two years parts and labour warranty in accordance with the manufacturers conditions. UK and Ireland.**

**\* Airstat to be connected to motorised valve  
(valve and transformer supplied by others if in zone 2).**

## Vaporex 34 Dehumidifiers - Available While Stocks Last

		Price
<b>G DH34A</b>	Vaporex 34 Dehumidifier Only	<b>£1835.00</b>
<b>G DH34AX</b>	Vaporex 34 Dehumidifier + Defrost	<b>£1895.00</b>
<b>G DH34A/L</b>	Vaporex 34 Dehumidifier + 3kW LPHW Heating	<b>£1990.00</b>
<b>G DH34AX/L</b>	Vaporex 34 Dehumidifier + 3kW Defrost + LPHW Heating	<b>£2265.00</b>
<b>G DH34COVERW</b>	Vaporex 34 White Fascia Cover	<b>£150.00</b>

**All Vaporex units now come with defrost built in as standard  
(models 30 / 33 / 50 and 55 ref)**



**Delivery is free of charge to invoice address only  
via routine delivery (UK mainland only).  
Site delivery is charged at half pallet rate.**



# Roldeck – when only the best will do!



The Roldeck automatic pool cover is the ultimate in slatted pool covers. Available for both commercial and domestic, indoor and outdoor pools, they are individually manufactured specifically for your pool requirements. Roldecks are durable, have a very attractive aesthetic appearance and can help to control evaporation and heat loss. The Roldeck is available in a variety of coloured slats including Polycarbonate, Foam filled as well as the traditional PVC slats. The slats allow the rain water to pass through the cover, so there is no need for a pump to remove the water that would collect on the top. The Roldeck is powered by a 24V motor and has a touch screen lockable key switch for remote operation. Many installation options available including cave, below pool floor and deck mount.

***Certikin & Roldeck over 30 years successful collaboration***



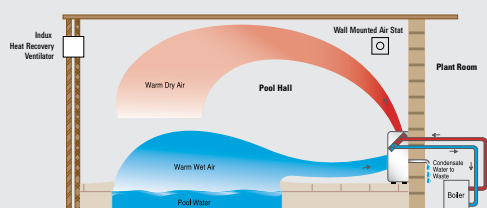
# Monitair - Powerful Heat Recovery Dehumidifiers For Floor Mounting



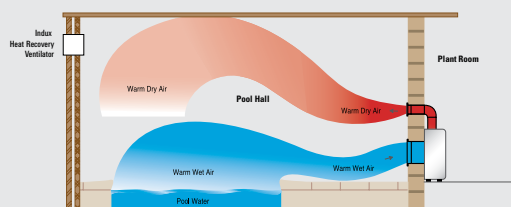
## Monitair Dehumidifiers

1. Models with LPHW heater coils are fitted with integral 3 port zone valves. Independent Air thermostats are included with these units.
2. All through-the-wall models are supplied with duct and grille kit.
3. All Monitairs are subject to two years parts and labour warranty in accordance with the manufacturers conditions. UK & Ireland.
4. The 3 phase models (3Ø) are generally non-stock items and are built to order.

## Schematic Illustrations



Standard Model Shown With Air Heating Facility



Through-The-Wall Model



## Standard Model - Dehumidifier Only

		Price
<b>G DH75AX</b>	Monitair 75 Dehumidifier + Defrost - 1 phase	<b>£4135.00</b>
<b>G DH110AX</b>	Monitair 110 Dehumidifier + Defrost - 1 phase	<b>£4775.00</b>
<b>G DH110BX</b>	Monitair 110 Dehumidifier + Defrost - 3 phase	<b>£4860.00</b>

## Dehumidifier + Integral Heater Coil Requiring Low Pressure Hot Water (LPHW)

		Price
<b>G DH75AX/L</b>	Monitair 75 + Defrost + (LPHW) Air Heating - 1 phase *	<b>£4780.00</b>
<b>G DH110AX/L</b>	Monitair 110 + Defrost + (LPHW) Air Heating - 1 phase *	<b>£5425.00</b>
<b>G DH110BX/L</b>	Monitair 110 + Defrost + (LPHW) Air Heating - 3 phase *	<b>£5450.00</b>

## Through The Wall Models - For Floor Mounting Internally on the opposite side of the pool hall wall (eg plant room)

		Price
<b>G DH75AX/T</b>	Monitair 75 Dehumidifier + Defrost: Through Wall Adapted - single phase	<b>£4430.00</b>
<b>G DH110AX/T</b>	Monitair 110 Dehumidifier + Defrost: Through Wall Adapted - single phase	<b>£5085.00</b>
<b>G DH110BX/T</b>	Monitair 110 Dehumidifier + Defrost: Through Wall Adapted - three phase	<b>£5175.00</b>
<b>G DH75AX/TL</b>	Monitair 75 Dehumidifier + Defrost + (LPHW) Air Heating: Through Wall Adapted - single phase *	<b>£5115.00</b>
<b>G DH110AX/TL</b>	Monitair 110 Dehumidifier + Defrost + (LPHW) Air Heating: Through Wall Adapted - single phase *	<b>£5725.00</b>
<b>G DH110BX/TL</b>	Monitair 110 Dehumidifier + Defrost + (LPHW) Air Heating: Through Wall Adapted - three phase *	<b>£5825.00</b>

Note: \* = includes 1 x separate air stat

LPHW Heating Outputs are: Model 75 & 110 = 8.9kW

Note: Low pressure hot water units require water supply at 80°C for outputs stated.



Extra carriage charge applies to the units on this page at half pallet rate.

# Indux Heat Recovery Ventilation

## Ideal For Use With Vaporex & Monitairs

**For provision of both ventilation and extraction of pool hall air. Up to 70% heat recovery, pre warmed fresh air. No cross contamination**

### Through The Wall Units

		Price
<b>G AM3050</b>	Indux 1 - self contained unit	<b>£1435.00</b>
<b>G AM3000</b>	Indux E300 - self contained unit	<b>£770.00</b>

### Semi Remote Units - For Siting In Wall: C/W 2 x Spigots (requires ducting and grilles)

		Price
<b>G AM3054</b>	Indux 4 Semi Remote Unit: Including Fans - 300mm diameter spigots	<b>£1375.00</b>
<b>G AM3005</b>	Indux E300 RW6 Semi Remote: Including Fans - 150mm diameter spigots	<b>£725.00</b>

### Fully Remote Unit - For Internal Mounting C/W 4 x Spigots (requires ducting and grilles)

		Price
<b>G AM3007</b>	Indux E300R6 Fully Remote: Including Fans - 150mm diameter spigots	<b>£885.00</b>

### Indux Accessories & Controls

		Price
<b>G AM3040</b>	Indux E300 & E300RW6 replacement fan	<b>£150.00</b>
<b>G AM3046</b>	E300 extension sleeve for cavity walls wider than 325mm	<b>£85.00</b>
<b>G AM3010</b>	Speed controller for Indux E300 series	<b>£101.00</b>
<b>G AM3057</b>	Speed controller for Indux 1 & 4 series	<b>£220.00</b>



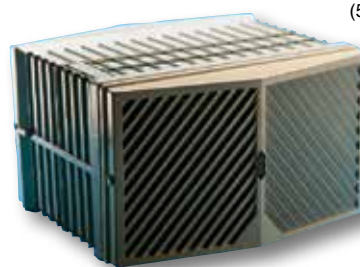
**E300RW6**  
(270mm x 370mm)



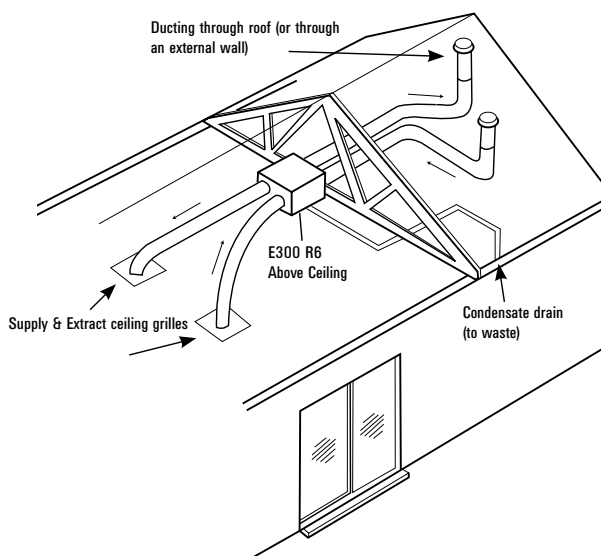
**E300R6**  
(370mm x 270mm)



**E300 Series**  
(270mm x 370mm)



**Indux 1**  
(590mm x 370mm)



# AA300 & AA500 - An Induct Style Dehumidifier Available With Pool Water Heating Option

## Features

- Heat recovery to air
- Twin speed fan
- Optional control mounting positions
- Optional integral LPHW air heating coil
- 12 V control panel
- Rotary compressor
- Non CFC refrigeration
- Night set-back facility with LPHW version units
- 1 year manufacturers warranty
- Air filter and duct flanges
- Optional pool water heat exchanger
- 100mm fresh air connection

## AA300 / AA500 Data

- |                                       |       |
|---------------------------------------|-------|
| • Electrical power consumed (kW)      | 2/2.3 |
| • Minimum supply capacity (max F.L.A) | 13    |
| • Maximum supply fuse (amps)          | 20    |



Optional control panel kit can be mounted upto 20 metres away. Panel shown for AA300AF/L

## Dimensions (mm)

Model	Width	Depth	Height	Weight kg
AA300AF	1025	730	850	111
AA500AF	1025	730	850	111
AA300AF/L	1025	730	850	116
AA500AF/L	1025	730	850	116
AA300AF/WL	1025	730	850	130
AA500AF/WL	1025	730	850	130



Extra carriage charge applies to the units on this page

Designed for swimming pool humidity and space temperature control



## Dehumidifier With Air & Water Heating AA300

		Price
<b>G</b>	<b>AA300AF/WL</b> Dehumidifier with Air & Water Heating	<b>£6535.00</b>

## Dehumidifier & Integral Heater Coil AA300

		Price
<b>G</b>	<b>AA300AF/L</b> Dehumidifier & Air Heating	<b>£5815.00</b>

## Standard Dehumidifier AA300

		Price
<b>G</b>	<b>AA300AF</b> Dehumidifier only	<b>£5195.00</b>

## Optional Extras

		Price
<b>G</b>	<b>AA300RCP</b> Optional 20m cable for remote control panel	<b>POA</b>
<b>G</b>	<b>AA300ORS</b> Optional remote sensor	<b>£360.00</b>
<b>G</b>	<b>AA300FDK</b> Flexible duct kit	<b>£415.00</b>

## Dehumidifier With Air & Water Heating AA500

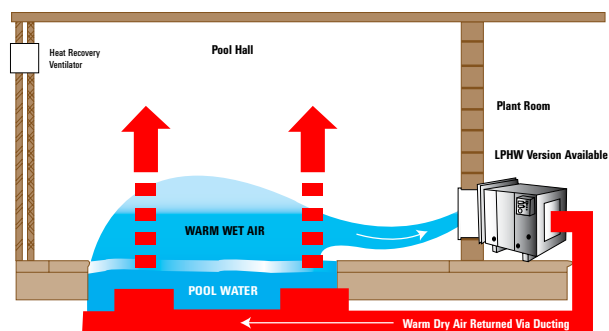
		Price
<b>G</b>	<b>AA500AF/WL</b> Dehumidifier with Air & Water Heating	<b>£7850.00</b>

## Dehumidifier & Integral Heater Coil AA500

		Price
<b>G</b>	<b>AA500AF/L</b> Dehumidifier & Air Heating	<b>£7075.00</b>

## Standard Dehumidifier AA500

		Price
<b>G</b>	<b>AA500AF</b> Dehumidifier only	<b>£6175.00</b>





# Calorex DH & Variheat Series 1-

A basic, yet high performance range of air handling units for use with distribution ductwork. All units vertically configured and normally built with the spigot on top for air off vertically.

## D H Range - High Capacity Dehumidifiers - Built To Order

		Price
<b>G DH150AXF</b>	Model DH150 Dehumidifier - single phase (1Ø)	<b>£6845.00</b>
<b>G DH150BXF</b>	Model DH150 Dehumidifier - three phase (3Ø)	<b>£6940.00</b>
<b>G DH300BYF</b>	Model DH300 Dehumidifier - three phase (3Ø)	<b>£14,345.00</b>
<b>G DH600BYF</b>	Model DH600 Dehumidifier - three phase (3Ø)	<b>£24,350.00</b>

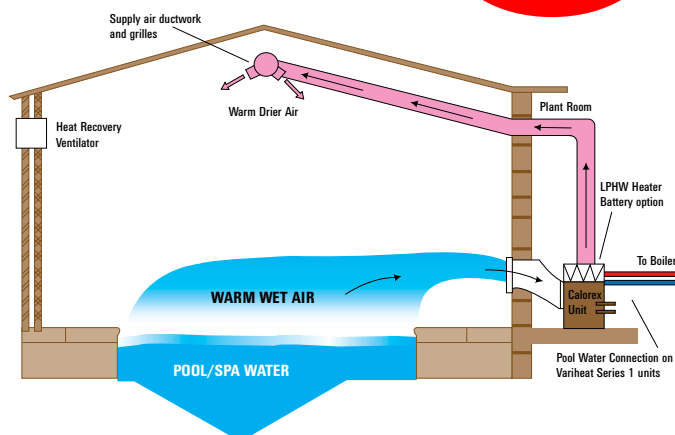
## Variheat Series 1 System - Built to Order

		Price
<b>G AW550AF</b>	Variheat 1 - model 550 - single phase (1Ø)	<b>£7495.00</b>
<b>G AW550BF</b>	Variheat 1 - model 550 - three phase (3Ø)	<b>£7660.00</b>
<b>G AW800AF</b>	Variheat 1 - model 800 - single phase (1Ø)	<b>£8540.00</b>
<b>G AW800BF</b>	Variheat 1 - model 800 - three phase (3Ø)	<b>£8665.00</b>
<b>G AW1200AF</b>	Variheat 1 - model 1200 - single phase (1Ø) C/W Soft start	<b>£12,045.00</b>
<b>G AW1200BF</b>	Variheat 1 - model 1200 - three phase (3Ø)	<b>£12,045.00</b>
<b>G AW1800BF</b>	Variheat 1 - model 1800 - three phase only (3Ø)	<b>£14,385.00</b>
<b>G AW4000BF</b>	Variheat 1 - model 4000 - three phase only (3Ø)	<b>£31,770.00</b>

## Air Inlet Spigots & LPHW Heater Batteries

		Price
<b>G LPHW580</b>	Heater battery for 550, 800 and DH150	<b>£955.00</b>
<b>G LPHW1200</b>	Heater battery for 1200 and DH300	<b>£1110.00</b>
<b>G SPA4008</b>	Air inlet spigot for 550, 800 and DH150	<b>£110.00</b>
<b>G SPA4010</b>	Air inlet spigot for 1200 and DH300	<b>£130.00</b>
<b>G SPA4009</b>	Air inlet spigot for 1400, 1800	<b>£162.00</b>
<b>G SPA4015</b>	Air inlet spigot for 4000 and DH600	<b>£235.00</b>

**Ideal for the replacement market**



## Floor Standing High Capacity Dehumidifiers

An ideal budget solution for high capacity dehumidification. These units are also available with low output fan and / or rear air outlet options. All include an integral humidistat, but no integral air heating facility.

Pool water connections are not applicable. Units incorporate a defrost facility enabling them to operate in colder conditions.

## Calorex Variheat Series 1

The Variheat series 1 provides dehumidification and has its own humidistat. Plumbing connections are also provided for recovering heat to the pool water. However, heating and controls for both air and pool water are not built into these units.

## Options To Consider

- Soft start
- Rear outlet
- Fan capacity options - please enquire
- Fitted air inlet spigot for return ductwork connection
- Heater battery to provide air heating (heater battery not available for models larger than 1200 when they are normally supplied by duct contractor)

All Variheats are factory tested and ready to run.

They may be commissioned by you or for a small charge, by a factory trained Calorex engineer. POA



Extra carriage charge applies to the units on this page



Items that are made to measure, bespoke are non-returnable items.

# Variheat 3 - Ultimate Flexibility. Purpose Built / Bespoke Design



The Variheat series 3 offers complete flexibility to suit almost every plant room and design scenario.

- Air / air systems
- Air / water systems
- Optional fresh air
- Remote controls
- 1 year manufacturers warranty
- Electric air heating
- Remote air cooling option
- Hundreds of configurations
- Includes 1.5" adaptors for pool water plumbing

Note: Prices shown for models with heating facility assume LPHW heater coils - see various options. All Variheats are factory tested and ready to run. They may be commissioned by you or for a small charge, by a factory trained Calorex engineer. POA

#### Notes:

Part codes shown are generic. Specific part numbers will be applied to official orders reflecting actual configurations. Models suffixed /S and /C list prices for heating via LPHW. Prices for models with electric air heating differ; please enquire.

**Note: Ground and air source heat pumps are ideal for supplying LPHW to Calorex air handling units. For feasibility, design and cost implications, please contact our H & V division.**

See page 192 to find out more about the Service Contracts that we offer on the Deltas and Variheats.

## Ducted Dehumidifier - Heat Recovery To Air Only (No Heating Option)

		Price
G	<b>VSD600A</b> Variheat S600 air/air dehumidifier - 1 phase	<b>£7195.00</b>
G	<b>VSD600B</b> Variheat S600 air/air dehumidifier - 3 phase	<b>£7240.00</b>
G	<b>VSD900A</b> Variheat S900 air/air dehumidifier - 1 phase	<b>£7625.00</b>
G	<b>VSD900B</b> Variheat S900 air/air dehumidifier - 3 phase	<b>£7710.00</b>
G	<b>VSD1200A</b> Variheat S1200 air/air dehumidifier - 1 phase	<b>£9265.00</b>
G	<b>VSD1200B</b> Variheat S1200 air/air dehumidifier - 3 phase	<b>£9310.00</b>
G	<b>VSD1500B</b> Variheat S1500 air/air dehumidifier - 3 phase	<b>£10,350.00</b>

## Ducted Dehumidifier - Heat Recovery To Air + Air Heating

		Price
G	<b>VSD600A/S</b> Variheat S600 dehumidifier unit + Air heating - 1ph	<b>£8325.00</b>
G	<b>VSD600B/S</b> Variheat S600 dehumidifier unit + Air heating - 3ph	<b>£8380.00</b>
G	<b>VSD900A/S</b> Variheat S900 dehumidifier unit + Air heating - 1ph	<b>£8930.00</b>
G	<b>VSD900B/S</b> Variheat S900 dehumidifier unit + Air heating - 3ph	<b>£9015.00</b>
G	<b>VSD1200A/S</b> Variheat S1200 dehumidifier unit + Air heating - 1ph	<b>£10,430.00</b>
G	<b>VSD1200B/S</b> Variheat S1200 dehumidifier unit + Air heating - 3ph	<b>£10,480.00</b>
G	<b>VSD1500B/S</b> Variheat S1500 dehumidifier unit + Air heating - 3ph	<b>£11,355.00</b>

## Ducted Dehumidifier - Heat Recovery To Air + Air & Pool Heating

		Price
G	<b>VSD600A/E</b> Variheat S600 dehum unit + Air & Water htg - 1ph	<b>£9320.00</b>
G	<b>VSD600B/E</b> Variheat S600 dehum unit + Air & Water htg - 3ph	<b>POA</b>
G	<b>VSD900A/E</b> Variheat S900 dehum unit + Air & Water htg - 1ph	<b>£10,115.00</b>
G	<b>VSD900B/E</b> Variheat S900 dehum unit + Air & Water htg - 3ph	<b>POA</b>

## Ducted Dehumidifier - Heat Recovery To Air & Water + Air & Pool Heating

		Price
G	<b>VSD600A/C</b> Variheat S600 dehum unit + Air & Water htg - 1ph	<b>£9940.00</b>
G	<b>VSD600B/C</b> Variheat S600 dehum unit + Air & Water htg - 3ph	<b>£9980.00</b>
G	<b>VSD900A/C</b> Variheat S900 dehum unit + Air & Water htg - 1ph	<b>£10,700.00</b>
G	<b>VSD900B/C</b> Variheat S900 dehum unit + Air & Water htg - 3ph	<b>£10,765.00</b>
G	<b>VSD1200A/C</b> Variheat S1200 dehum unit + Air & Water htg - 1ph	<b>£14,400.00</b>
G	<b>VSD1200B/C</b> Variheat S1200 dehum unit + Air & Water htg - 3ph	<b>£14,495.00</b>
G	<b>VSD1500B/C</b> Variheat S1500 dehum unit + Air & Water htg - 3ph	<b>£16,545.00</b>

## Various Series 3 Options

		Price
G	<b>VSD/FA</b> Integral fresh cooling air module C/W spigots	<b>£1800.00</b>
G	<b>VSD/RC</b> Separate remote condensing (air cooling) unit	<b>POA</b>
G	<b>VSD/CP</b> 10m cable for connecting remote control panel	<b>£99.75</b>
G	<b>VSD/PP</b> 12V Pool side control panel C/W 10m cable	<b>POA</b>
G	<b>AHU/BP</b> By-pass kit for Variheat / Delta	<b>£145.00</b>
G	<b>VSD/ES/6</b> Integral electric space heating - 6kW	<b>£1650.00</b>
G	<b>VSD/ES/12</b> Integral electric space heating - 12kW	<b>£2080.00</b>
G	<b>VSD/ES/18</b> Integral electric space heating - 18kW	<b>£2575.00</b>
G	<b>VSD/RS</b> Remote air sensor C/W 10 metre cable	<b>£335.00</b>
G	<b>VSD/HB/600/900</b> Upgraded air heater battery to suit Variheat 600 & 900	<b>£585.00</b>
G	<b>VSD/HB/1200/1500</b> Upgraded air heater battery to suit Variheat 1200 & 1500	<b>£670.00</b>

## Disposable Air Inlet Filters For Variheat

		Price
H	<b>FD1</b> Air filter kit for Variheat 570, 870 & Series 3 model 600/900	<b>£18.75</b>
H	<b>FD2</b> Air filter kit for Variheat 1270	<b>£22.50</b>
H	<b>FD11</b> Air filter kit for Variheat Series 3 for model 1200/1500	<b>£24.50</b>



Extra carriage charge applies to the units on this page

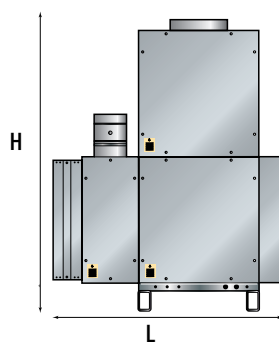
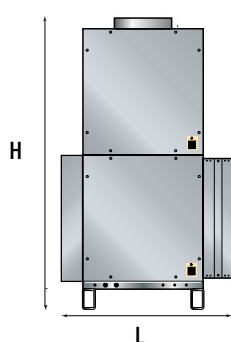


Items that are made to measure, bespoke are non-returnable items.

Specifications	Units	AA600A / AA600B	AA900A / AA900B	AA1200A / AA1200B	AA1500B
Dehumidification					
Heat pump dehumidification 30°C / 60% RH	L/h	4.6	6.5	8.5	10.5
Total at 18°C dew point (summer) - if fresh air option fitted	L/h	5.2	7.3	9.5	11.3
Total at 7°C dew point (winter) - if fresh air option fitted	L/h	6.5	9.0	11.7	13.9
Heat to air					
Heat pump heat recovery	kW	5.1	7.1	10.0	14.0
Standard LPHW at 80°C flow	kW	11.0	13.5	24.0	28.0
Upgraded LPHW at 55°C flow	kW	9.4	11.5	20.4	23.8
Total - std LPHW + heat recovery	kW	14.0	18.6	30.0	36.0
LPHW data - AA+LPHW models only					
Recommended min boiler capacity (standard LPHW at 80°C)	kW	11.0	13.5	24.0	28.0
Recommended min boiler capacity (standard LPHW at 55°C)	kW	9.4	11.5	20.4	23.8
Flow rate - standard - LPHW	L/min	10	10	22	22
Flow rate - upgraded LPHW	L/min	14	24	44	44
Electrical data					
Typical high pressure system with constant flow fan	kW	2.1	2.8	3.6	5.1
Typical low pressure system with constant flow fan	kW	1.8	2.4	3.1	4.7
Minimum supply capacity (FLA) 230V/1N/50Hz	A	17.2	22.5	29	-
Minimum supply capacity (FLA) 400V/3N/50Hz	A	11.6	13.2	17.8	12
Maximum supply fuse 230V/1N/50Hz	A	25	32	42	-
Maximum supply fuse 400V/1N/50Hz	A	16	16	25	16
Main Fan Data - Constant Flow Fans					
Design air flow (anemometer @ air on filter, wet evaporated ± 10%)	m³/h	2000	2500	3500	4300
Maximum external static pressure standard LPHW	Pa	330	220	290	350
Maximum external static pressure upgraded LPHW	Pa	320	208	178	320
Design running amps - 230V/1N fans	A	3.8	4.7	9.3	-
Design running amps - 400V/3N fans	A	-	-	-	1.4
FLA - 230V/1N fans	A	7.6	7.6	9.3	-
FLA - 400V/3N fans	A	-	-	-	4.0
Optional fresh air module					
Air flow	m³/h	0-900	0-900	0-900	0-900
Maximum external static pressure	Pa	100	100	100	100
Heat required for fresh air at - 5°C	m³/h/kW	150/1.8	200/2.3	250/2.9	300/3.5
Compressor Data					
Nominal power consumed	kW	1.5	2.0	2.5	3.4
Nominal RLA - 230V/1N/50Hz	A	8.0	12.4	16.6	-
Starting current 230V/1N/50Hz	A	55	76	100	-
Starting current 230V/1N/50Hz (with soft start)	A	26	31	34	-
Nominal RLA 400V-3N-50Hz	A	3.2	4.7	7.3	10.0
Starting current 400V/3N/50Hz	A	30	42	48	48
Starting current 400V/3N/50Hz (with soft start)	A	14	16	17	25
General Data					
Hermetic refrigeration system - gas charge (R407C)	Kg	1.8	2.0	2.9	3.0
Typical weight - unpacked	Kg	170	171	230	240

#### Physical Dimensions (see notes below)

Only basic styles shown for dimensional purposes. A vast range of configurations is available including Bottom & Side outlets. Ventilation module is optional on any model. Options are available for varying positions of vent spigots, electronic box and plumbing connections.



VARIHEAT 600/900 (mm)

	fig 1	fig 2	fig 3	fig 4
H	1574	1574	977	1028
L	986	1339	1574	1929
D	700	700	700	700

VARIHEAT 1200/1500 (mm)

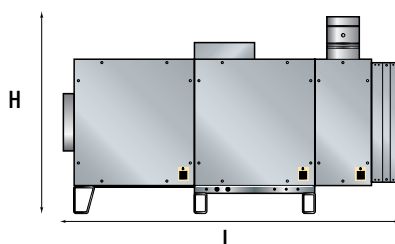
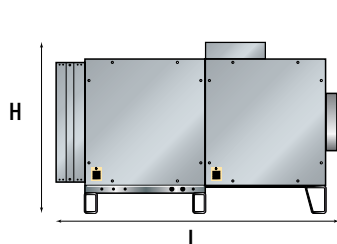
	fig 1	fig 2	fig 3	fig 4
H	1778	1778	1110	1130
L	1105	1460	1778	2133
D	800	800	800	800

For dimensions of Variheats with Electric Air Heating module, please contact the H & V Department at Certikin.

Air on spigot  
Models 600/900 =  
660 x 615mm  
Models 1200 / 1500 =  
780 x 693mm

Air off spigot  
289 x 333mm

Fresh air flow  
900m³/hr



# The Calorex Delta, Touch Screen Technology

A hybrid fresh air dehumidification system with dynamic heat pump energy recovery to swimming pool air and water.

## Delta the full package

The Ultimate environmental control system - designed specifically to take full control of the whole indoor environment and pool water heating. A unique multi-functional single unit offering immense flexibility.

The Delta is an excellent system for use with distribution ductwork, automatically controlling:

- Humidity level
- Air temperature
- Water temperature
- Ventilation

### Features & Benefits

- Dual mode heat recovery
- Twin fan system
- Ozone friendly
- Low running costs
- Compact design
- Built to suit each project
- Optional configurations
- Full service back-up
- BMS compatibility option
- 1 year manufacturers warranty from date of commission

Deltas can easily be adapted to operate with ground source and air source heat pumps. Please contact H & V for more information on 01993 777200.



See page 192 to find out more about the Service Contracts that we offer on the Deltas and Variheats.



New touch screen technology allowing the user to control the temperature and humidity levels of their pool straight from their smartphone or computer.

### Guideline Equipment Selection

Designation	Calorex Delta Models								
	1	2	4	6	8	10	12	14	16
Domestic Pool Provisional Pool Area (m <sup>2</sup> )	up to 70	70-75	75-85	85-100	100-130	130-160	160-180	180-360	360-420
Hotel / Club Pool Provisional Pool Area (m <sup>2</sup> )	up to 60	60-65	65-75	75-90	90-115	115-145	145-165	165-330	330-385
Municipal Pool Provisional Pool Area (m <sup>2</sup> )	up to 50	50-55	55-65	65-80	80-100	100-130	130-150	150-300	300-350

The figures shown in the above table are for guidance only. For accurate appraisal and equipment selection our H & V Questionnaire list design parameters required (see Page 191). For further assistance please telephone 01993 7778855.

Each Delta is an extremely energy efficient unit designed and built specifically to suit each pool project. A combination of its compact design and optional positions of ductwork spigots and access panels, establishes the Delta as the ultimate equipment in its class.

**Note:** All Deltas require a sufficient supply of electricity and low pressure boiler water. For guidance, LPHW circulation pumps needed: Delta 1-8, Grundfos UPS 25-80 (or similar) Delta 10-16, Grundfos UPS 40-120 (or similar).



Extra carriage charge applies to the units on this page



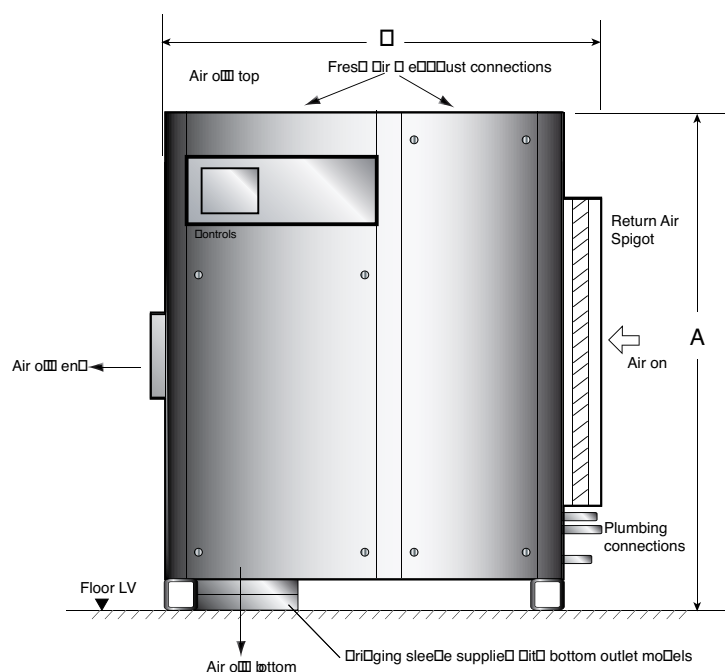
Items that are made to measure, bespoke are non-returnable items.



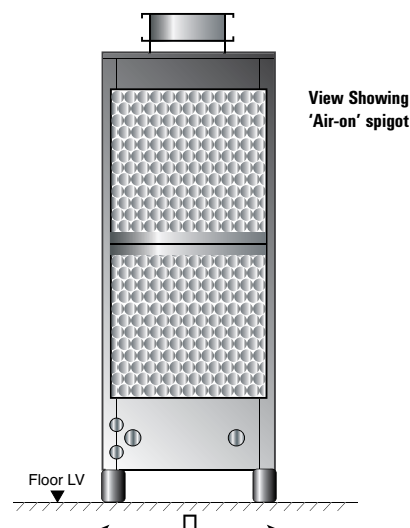
## Fundamental Design Data

Specifications	Calorex Delta Models								
	1	2	4	6	8	10	12	14	16
Air Cooling Facility	✓	✓	✓	✓	✓	✓	✓	✓	✓
Air Conditioning Facility	✗	✗	✓	✓	✓	✓	✓	✓	✓
Electrical Power Consumed (kW)	2.93	3.38	3.95	4.39	4.98	5.9	8.06	12.6	17.4
Recommended Electrical Supply (Amp) - 1 Phase	22	25	24	31	-	-	-	-	-
Recommended Electrical Supply (Amp) - 3 Phase	13	14	14	17	18.6	15	20.7	35	49
Maximum Fuse Capacity (Amp) - 1 Phase	32	35	35	45	-	-	-	-	-
Maximum Fuse Capacity (Amp) - 3 Phase	20	20	20	20	30	24	30	50	63
Recommended Boiler Capacity (kW)	30	32	35	45	50	65	70	150	150
Weight (unpacked) kg	300	310	350	360	370	410	460	954	1020

Information correct at time of compilation.



Front View Delta 1-12 - (mirror image versions available on Delta 4 and above)



View Showing 'Air-on' spigot

### Delta Dimensions (mm)

Model	A	B	C
Delta 1	1685	1690	654
Delta 2	1685	1690	654
Delta 4	1960	1780	704
Delta 6	1960	1780	704
Delta 8	1960	1780	704
Delta 10	1960	1780	854
Delta 12	1960	1780	854
Delta 14	2120	2798	1126
Delta 16	2120	2798	1126



### Disposable Air Filter Kits For Deltas

		Price
H F1/2	Air filter kit for Delta 1 or 2	£26.00
H F4	Air filter kit for Delta 4	£34.50
H F6/8	Air filter kit for Delta 6 or 8	£37.75
H F10/12	Air filter kit for Delta 10 or 12	£53.00
H F14/16	Air filter kit for Delta 14 or 16	£90.25

### Government Cash Back Scheme

The Calorex Delta 14 and 16 benefit from ECA scheme approval, this means the Delta 14 and 16 are recognised as able to provide low carbon and energy efficient environmental control.

These two units are the first and only specialist swimming pool heat pump heat recovery machines to be included in this Government Cash Back Scheme.

For additional details visit: [www.eca.gov.uk](http://www.eca.gov.uk)

# Portable Building Dryer

Highly efficient dehumidifiers suitable for a number of applications, including the building industry, pool industry, water damage and flood drying to name but a few.

During building construction, portable dryers can be used to accelerate the rate of drying wet processes such as concrete floors and plaster, not only allowing construction work to proceed more rapidly, but in a way that ensures the drying will not encourage cracking and distortion.

- Case made from shock and impact resistant plastic
- Can be cleaned by jet washing
- On board humidistat
- External humidistat socket
- Hour counter
- Large water tank with automatic shutoff when full
- Hose connection
- Tank full indicator
- Air filter
- Hot gas defrost
- Restarts automatically after a power failure
- Large wheels and handles

	Units	DHP65
Capacity (30°C/80% RH)	l/24h	56
Air flow	m <sup>3</sup> /h	500
Operating temperature	°C	3-35
Operating humidity range	%	38-99
Power consumption	W	780
Power supply	v/Hz	220-240/1ph/50
Sound level	dB(A)	53
Tank capacity	l	10.5
Product size (l x w x h)	mm	570 x 530 x 700
Weight	kg	50
Dual voltage		Included



Extra carriage charge applies to the units on this page



Portable Building Dryer

Price nett

- **DHP65DUAL** Portable Building Dryer (Dual voltage) **£1150.00 nett**



Easy to open for cleaning

# Calorex Plunge Pool Chillers & Air Source Heat Pumps (ASHP)



## Calorex Plunge Chillers

Calorex plunge pool chillers are ideal for leisure and sports club applications. Capable of chilling to 10°C these packaged chillers can be easily incorporated into a plunge pool system used for sports recovery and rehabilitation.

Warranty is 1 year - extended warranty available.



Extra carriage charge applies to the Plunge pool chillers on this page



Extended warranty available

WA634A  
Plunge pool chiller

## Plunge Pool Chillers - by Calorex

		Price
G	<b>WA634A</b> Plunge pool chiller - model 634 - 1 phase	<b>£4230.00</b>
G	<b>YH0013</b> Plunge pool chiller - model 1234 - 3 phase	<b>£7035.00</b>

**Bespoke Chiller Systems** available for both domestic and commercial applications such as Football Clubs and Leisure Centres.

**Heater/Chillers** are also available for applications such as ponds and dual use spas

## ASHP - Heat Pump Unit Only

		Price
G	<b>PP16AMY</b> Air - water (LPHW) heat pump - suitable for use with Variheat and Delta units	<b>£7450.00</b>

Optional Items: Buffer tanks, DHW cylinders and combined buffer / DHW cylinders available = POA.

Note: Ground and air source heat pumps are ideal for supplying LPHW to Calorex air handling units. For feasibility, design and cost implications, please contact us.



Air-Source Heat Pump

## Pro-Pac - High Capacity, LPHW (ASHP)

		Price
G	<b>PP30BHY</b> Air to water model 30 - 3ph (LPHW)	<b>£9900.00</b>
G	<b>PP45BHY</b> Air to water model 45 - 3ph (LPHW)	<b>£13,000.00</b>
G	<b>PP70BHY</b> Air to water model 70 - 3ph (LPHW)	<b>£18,950.00</b>
G	<b>PP90BHY</b> Air to water model 90 - 3ph (LPHW)	<b>£24,925.00</b>
G	<b>PP140BHY</b> Air to water model 140 - 3ph (LPHW)	<b>£36,700.00</b>

- Hot water heat pumps
- 3 phase
- Maximum water temperature 65°C
- Standard features including scroll compressors
- Electronic control, cupro nickel marine grade heat exchangers (WRAS approved)
- Vertical air discharge



Propac

# FX Fresh Air

A complete solution like the Calorex FX offers a wide range of benefits – delivering exceptional pool hall comfort using very little energy, having been developed especially for hotels, wellness centres and private indoor swimming pools.

## Why Calorex?

Calorex is a leading British manufacturer of swimming pool heat pumps and dehumidifiers. With nearly 40 years of design expertise, Calorex is renowned for its innovation, range and quality of products with an expert sales and service team dedicated to meeting our customer's requirements. Our presence is international with thousands of Calorex units operating in over 60 countries worldwide.

## Calorex Fresh Air FX System

The Calorex FX is an effective fresh air ventilation system that uses outdoor air to provide dehumidification using a double pass heat exchanger that delivers up to 95% heat recovery. Ensuring a comfortable, healthy indoor climate is obviously the most important job for a system like this, as this protects both the people who use the pool and the building. But operating costs are equally important, and the FX2 and 3 are extremely efficient.

## Energy saving solutions

The double pass cross-flow heat exchanger delivers up to 95% heat recovery, combined with low-energy EC fan motors to ensure the lowest possible operating costs and low cost of ownership. The built-in mixing function and optimised control strategy takes care not to add any more outdoor air than necessary to provide a comfortable indoor climate.

Free cooling is a great feature for the summer, when the FX unit can supply up to 100% fresh air into the pool area through an automatic by-pass.

## Developed to endure

The FX units have energy savings built into every detail, with all components chosen to ensure high capacity and a long service life, having been specifically designed and developed to endure the aggressive environment encountered in swimming pools. The powder coating of framework and all internal surfaces, treated coils and a cross flow heat exchanger of anodized and epoxy coated aluminium, protect the FX unit against corrosion. The choice of quality materials and durable components ensure reliable operation and long service life.

## Conveniently compact

The installation costs can be minimised with the FX2 and 3. The compact unit comes fully assembled, with built-in LPHW air heating coil and control system. The basic installation procedure is to position the unit, connect it to the duct system, power supply and plumbing system and it is ready to get to work.

The compact, integrated design ensures optimal layout in the plantroom and convenient top or side connection options enables flexible duct positioning.

**A NEW and Exciting Fresh Air system will be available in 2018. Look out for updates from the H & V team.**



## FX Fresh Air Ventilation System

		Price
- FX2	Fresh Air Ventilation System	POA
- FX2LPHW	Fresh Air Ventilation System includes Air LPHW	POA
- FXT2	Fresh Air Ventilation System includes Air and Water LPHW	POA
- FX3	Fresh Air Ventilation System	POA
- FX3LPHW	Fresh Air Ventilation System includes Air LPHW	POA
- FXT3	Fresh Air Ventilation System includes Air and Water LPHW	POA

## Benefits

- The high quality and energy efficiency ensures very low life-cycle cost
- Complete solution providing ultimate comfort
- Up to 100% outside air with free cooling in summer
- Effective double cross flow heat exchangers with up to 95% heat recovery efficiency
- Low-energy EC fan motors
- Effective corrosion resistance ensures long service life
- Ultra-compact unit with built-in after heating coil and control system
- Flexible installation with a range of connection options

Specifications	Units	FX2	FX3
Air volume	m <sup>3</sup> /hr	1000-2000	1500-3500
Outdoor air volume	%	0-100	0-100
Filter outdoor/return air	-	F7/M5	F7/M5
Dehumidification	-	-	-
Outdoor air summer**	l/h	6-14	10.0-23.0
Outdoor air winter***	l/h	12-25	18.0-42.0
Air heating 2RR LPHW*	kW	5.1-5.9	7.2-13.8
Air heating 3RR LPHW*	kW	7.5-12.1	11.3-19.6
Power supply	V/Hz	1 X 230/50	1 X 230/50
H x W x D	mm	1595 x 1750 x 780	1945 x 2250 x 890
Weight	kg	344	344

\* Air 30°C. Water flow/return 70°C/50°C

\*\* Pool air 30°C/60%/Outdoor air 28°C/45%

\*\*\* Pool air 30°C/60%/Outdoor air 7°C/100%



Extra carriage charge applies to the units on this page



Items that are made to measure, bespoke are non-returnable items.



# FX Fresh Air

## User friendly control system

All FX systems are supplied with a sophisticated control package. With automatic monitoring and control of temperature, humidity and energy consumption, you are guaranteed a balanced and comfortable indoor climate – adapted to your specific requirements.

The FX unit is supplied ready wired and with all necessary sensors and safety devices installed. All major components such as temperature sensors, damper motors, solenoid valves, motor valves etc. are connected to a terminal.

To make it as easy as possible to establish the electrical connection between the control panel and the FX unit, the unit can be delivered with pre-mounted cables.

The control system combines intuitive, hassle-free operation with extremely advanced control and programming options. The result is highly precise demand management – the secret to unprecedented low operating costs for the FX line.

A large, easy-to-read display makes it easy to check settings and current status. And a few simple buttons let you quickly and easily programme the unit to suit your own preferences. Control over every single function is at your fingertips.

The controller has a built-in communication capability, allowing it to be integrated into a Building Management System.

## Energy saving solutions

It is impossible to avoid water evaporation in swimming pool halls, however using a carefully designed ventilation solution, the relative humidity can be controlled to a comfortable level.

Ultimately, all of this results in savings in the long run and contributes to a low cost of ownership.

## Focus on cost of ownership

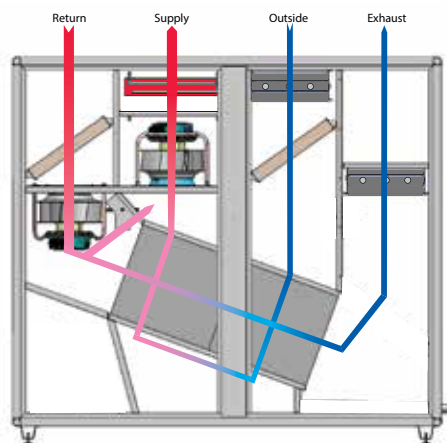
Highly efficient heat recovery and low specific fan power, combined with an optimized control strategy, contribute to cost efficient operation and significant energy savings.

Ensuring a comfortable, healthy indoor climate is obviously the most important job for a system like this, as this protects both the people who use the pool and your physical assets. But operating costs are equally important, and the FX2 and 3 are extraordinarily efficient.

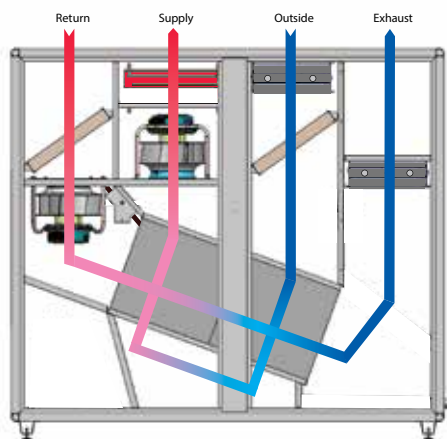


## Benefits

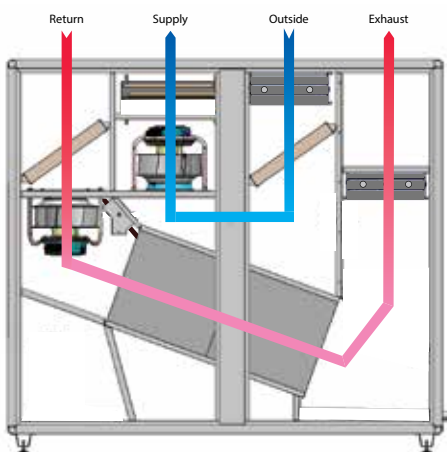
- Newly developed, effective, demand control
- Intuitive, logical operations
- Precise, intelligent control
- Easy-to-read display
- Complete logical control
- Fully factory tested system



**Daytime operation winter**  
The Calorex FX is running with partial recirculation. To reduce fan power consumption only the minimum amount of air is changed through the double heat exchanger. The rest is directly recirculated and the combined airflow is heated if necessary using the LPHW air heater. If more dehumidification is required the proportion of dry outside air will be increased automatically.



**Daytime operation summer**  
The Calorex FX is running with up to 100% outside air, pre heated in the double cross flow heat exchanger. The LPHW air heater will normally be off as the temperature is high enough after being pre-heated in the double cross flow heat exchanger. If the temperature rises further, a by-pass will open to run the unit in free cooling mode.



**Daytime summer, free cooling**

## FX with double cross flow heat exchanger

The Calorex FX is an effective fresh air ventilation system that uses outdoor air to provide dehumidification using a highly efficient double pass heat exchanger that delivers up to a 95% heat recovery. This reduces energy consumption and total operating costs, making the unit perfect for managing humidity and temperature in the pool room.

The built-in mixing function takes care not to add any more outdoor air than necessary to provide a comfortable indoor climate. Free cooling is also an option during summer, when the unit can add up to 100% outside air into the pool area through a by-pass.

This system perfectly controls the humidity and indoor temperature while keeping running costs to a minimum.

# The Calorex HRD System

- Huge Capacity Air Handling Units  
Specifically For Commercial Indoor pools



Extra carriage charge applies to the units on this page



Items that are made to measure, bespoke are non-returnable items.



A superb thermodynamic control system from Calorex. These powerful units provide huge capacities for complete control of very large indoor pool projects.

The HRD is the ideal system for use with distribution ductwork.

## The Calorex HRD System

The HRD is a unique environmental control unit designed specifically for use on larger indoor pool projects. Ideally suited to Leisure, Commercial & Municipal projects, the HRD automatically controls the whole internal environment. This comprehensive equipment is one of the most energy efficient systems built, offering heat recovery to both air and pool water. Integral controls ensure a carefully balanced environment, whatever size of pool. If you require FREE design advice, specifications or guidance, we will be happy to assist.

## Features & Benefits

- Dual mode heat recovery
- Twin fan system
- Twin compressors
- Ozone friendly
- Low running costs
- Compact design
- Built to suit each project
- Optional configurations
- Air quality monitoring
- Optional alarm signalling facility
- Full service back-up
- Commissioned FREE of charge (UK only)

## Fundamental Design Data

Designation	Calorex HRD Models			
	HD1500	HD2000	HD2500	HD3000
Air Cooling Facility	✓	✓	✓	✓
Air Conditioning Facility	✗	✗	✓	✓
Electrical Power Consumed (kW)	17	23	31	44
Recommended Electrical Supply (Amp)	35	48	75	110
Recommended Fuse Capacity (Amp)	45	88	100	160
Capacity of LPHW Air Heating Coil (kW)	70	100	150	210
Weight (unpacked) kg	1100	1400	2950	2980

**Note:** Total low pressure boiler capacity will depend upon design requirements for the project

## Approx Footprint size allow:

- 3.3m x 1.1m for HD1500 & HD2000
- 4.1m x 1.8m for HD2500 & HD3000

## Maximum Height:

- HD1500 = 2.06 metres
- HD2000 = 2.06 metres
- HD2500 = 2.48 metres
- HD3000 = 2.48 metres

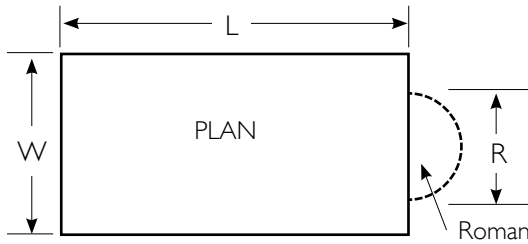
# H & V Questionnaire

**Tel: 01993 777200 Fax: 01993 778869**

From: <input type="text"/>	Tel: <input type="text"/>	Ref: <input type="text"/>
Comp: <input type="text"/>	Fax: <input type="text"/>	Date: <input type="text"/>

For a complete project appraisal please indicate any details not shown on drawings (if submitted).

## Details of swimming pool

L = <input type="text"/> (m)		Pool surface area: m <sup>2</sup> <input type="text"/>
W = <input type="text"/> (m)		Average water depth: (m) <input type="text"/>
R = <input type="text"/> (m)		Pool water temp: (°C) <input type="text"/>

Roman End (if applicable)

Drainage Construction: ☐ Standard Skimmer Type: ☐ Deck-level Drainage Type: ☐

Pool Type: Domestic: ☐ Light Comm: ☐ Hydrotherapy: ☐ Heavy Comm: ☐ Other: (specify)

Hours / day when pool is uncovered (hrs)  Hours / day when pool is used: (hrs)

## Details of other water features (Indoor pool project only)

Spa:  Fountain:  Pool side showers:

Slides/Flumes:  Waterfall:  Other:

## Pool Hall Building Details (Indoor pool project only)

Surface:	Area (m <sup>2</sup> )	U-Value (W/ m <sup>2</sup> /°C)	Building regulations and UK conditions will be assumed unless stated otherwise, as will typical temperatures and humidity  Internal Air Temperature: (°C) <input type="text"/>  Relative Humidity: (%) <input type="text"/>  Pool Hall Volume: (m <sup>3</sup> ) <input type="text"/>  Is ground water level on site High or Low: <input type="text"/>
External Walling:	<input type="text"/>	<input type="text"/>	
External Glazing:	<input type="text"/>	<input type="text"/>	
Ceiling / Roof:	<input type="text"/>	<input type="text"/>	
Internal Walling:	<input type="text"/>	<input type="text"/>	
Internal Glazing:	<input type="text"/>	<input type="text"/>	
Roof Glass:	<input type="text"/>	<input type="text"/>	

Note: If pool hall building is a translucent telescopic enclosure, please state the following dimensions:

Total Length:  (m) Average Width:  (m) Maximum Height:  (m)

Roof panels taken as twin ply, unless stated otherwise; please state:

## Details For Outdoor Pool Only (UK Conditions)

May - Sept Season <input type="checkbox"/>	Electrical supply available: single phase: <input type="checkbox"/> three phase: <input type="checkbox"/>
April - Oct Season <input type="checkbox"/>	Other fuel available: Gas <input type="checkbox"/> LPG <input type="checkbox"/> Oil <input type="checkbox"/>
Mar - Nov Season <input type="checkbox"/>	Is pool constructed in-ground or above ground: <input type="text"/>
Jan - Dec Season <input type="checkbox"/>	Is ground water level on site High or Low: <input type="text"/>

# Calorex Service Contracts

## Calorex service contracts will give you peace of mind.

Our goal provides exceptional after-sales service with our customers' needs being at the heart of our company.



### GOLD

Planned maintenance with extended warranty includes breakdown and all parts covered. F-Gas Check included.



### SILVER

Planned maintenance includes consumable parts, discount on spare parts, reduced labour charges when repairs combined with maintenance and F-Gas.



### BRONZE

Service reminders provided by us and you pay as you go.

1st year cover for new units only, planned maintenance whilst new unit under warranty and F-Gas

Applies to all Calorex Delta & Variheat models.



#### Benefits

- Discounted manufacturer approved parts supplied and fitted
- Manufacturer experienced engineers
- 12 month warranty on all parts supplied and fitted
- FREE staff training/refreshers carried out on the service visit – if required
- Service labour cost capped for the duration of your chosen contract 1-3 years
- No major outlays – payment per visit
- Fast response – call outs are prioritized over non-contract customers
- Full method statement of works prior to our visit
- Service history
- Loyalty discount on all parts after 3 years continuous servicing (applies to contracts with a minimum of two visits per year)
- Peace of mind
- End user servicing from £485 per year
- Additional Incentives for trade customers

For more information on Calorex's planned maintenance contracts, email [service@calorex.com](mailto:service@calorex.com) call +44 (0)1621 857171 or visit [calorex.com](http://calorex.com)

