Physical dimensions

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

Fig 1

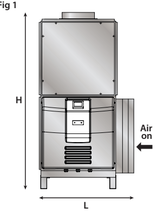


Fig 2

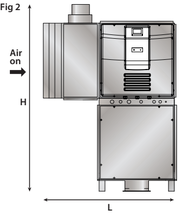


Fig 3

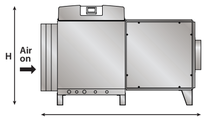


Fig 4

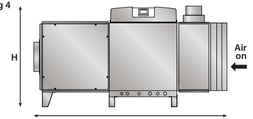


Fig 5

VARIHEAT 600/900 (mm)

	Fig 1	Fig 2	Fig 3	Fig 4	Fig 5
H	1574	1530	980	1028	-
L	842	1180	1574	1929	-
D	-	-	-	-	698
C	-	-	-	-	839

VARIHEAT 1200/1500 (mm)

	Fig 1	Fig 2	Fig 3	Fig 4	Fig 5
H	1778	1734	1095	1130	-
L	942	1295	1778	2133	-
D	-	-	-	-	800
C	-	-	-	-	955

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
Fresh air module 2 spigots
225mm diameter each

Notes

1. Five 'Air-Off' outlet options are available per Variheat. The outlet can be positioned on any external face of the fan cube.
2. Bottom outlet versions, for 'air-off' to underfloor ductwork, are supplied complete with bridging sleeve and floor fixing flange.
3. Plumbing connections, where applicable, are available on either side of the Variheat.
4. Any of the Variheat units in this range of equipment can be supplied with or without a fresh air cooling module.
5. The pair of ventilation spigots can be positioned on the top of the fresh air cooling module, or on either of the two vertical sides.

Service & back up

For service calls, Dantherm offer a rapid response with trained engineers readily available to attend ensuring that your pool hall heating and environment control are always running at the peak of their efficiency.

Certikin
FLUIDRA

www.certikin.co.uk

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.

Image kindly supplied by New Dawn Pools

Variheat Series 3
Air Handling Equipment
With touch screen PLC controls

Certikin
FLUIDRA

Variheat Series 3 Air Handling Equipment

A dehumidification and ventilation system with dynamic energy recovery to swimming pool water and air

The challenge

Pool hall air contains moisture which when left unchallenged can lead to mould and possible structural damage.

Why dehumidify?

There are many important factors to consider when planning and designing an indoor swimming pool. These include safeguarding the building structure from dangerous condensation and optimising the internal environment for the safety and comfort of bathers.

As a result of evaporation from the pool surface, uncomfortable warm humid air containing vast amounts of valuable heat tied up in the moisture (latent energy) is released into the pool hall. In contrast to most types of building, this moisture must be removed to protect the building from destructive moisture damage. The challenge is to do this in the most economical and environmentally friendly way.

The solution

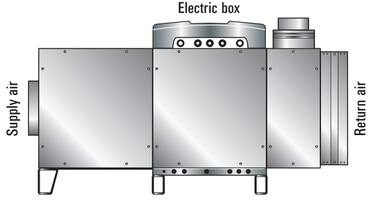
Calorex Variheat units are purpose built environmental control units for indoor swimming pools.

A Calorex Variheat unit is different from most types of dehumidifiers as it removes moisture using an integral heat pump which will also recover the latent energy which is used to assist the air and water heating. By utilising this method, a heat cycle is created and energy costs are kept to a minimum.

Typically, for every unit of power a Variheat consumes whilst dehumidifying, it will convert three times this amount into usable heat. The potential energy savings are huge. In fact, compared to more traditional types of heating and ventilation methods, running cost savings over 50% are achievable while corresponding CO_2 emissions can dramatically reduce by up to 70%.

Commissioning of Variheats from Dantherm included

Applicable to sales from 1st March 2021



Our products

Dantherm are a leading manufacturer of swimming pool environmental control systems that provide dehumidification, heat recovery and ventilation solutions based around heat pump technology. Calorex Variheats provide the complete answer to humidity control, water/air control and real time fresh air requirements.

Modular design for flexibility

The modular design concept allows maximum flexibility. With inlets and outlets wherever you need them, there is never a problem fitting them into the tightest of plant rooms. Horizontal units to fit spaces with no head room, vertical units to minimise floor space with top, side or bottom outlets; there are literally thousands of configurations making easy work of even the most complex plant spaces.

State of the art fans

Variheat's powerful variable speed fans are at the cutting edge of fan technology. The exhaust fan is arranged to operate only when the fresh air cooling module demands it. This is automatically adjusted so that exactly the right air flow is introduced, regardless of the resistance of the ductwork. Likewise, the main heating and dehumidification fan recirculates the optimum air flow, automatically. This ensures that the power consumption is minimised and never moves more air than is absolutely necessary to heat, cool and dehumidify the pool hall. The variable speed fans are quiet in operation, and prevent the booming noise that is prevalent in systems moving too much air.

PLC touch screen control

All Variheats include a touch-screen PLC control as standard.

This feature is a significant control upgrade and includes internet connection capability to PC, smart-phone or selected Building Management System (BMS) that provides:

- Remote monitoring and set point controls
- Intuitive central control and monitoring of water, air and humidity set points
- Air temperature set back controls
- Comprehensive diagnostic information
- Stored performance history data

Technical Data

SPECIFICATIONS	VSD600A/C VSD600B/C	VSD600A/S VSD600B/S	VSD900A/C VSD900B/C	VSD900A/S VSD900B/S	VSD1200A/C VSD1200B/C	VSD1200A/S VSD1200B/S	VSD1500B/C	VSD1500B/S
DEHUMIDIFICATION								
30°C 60% RH - l/hr	4.6	4.6	6.5	6.5	8.5	8.5	10.5	10.5
AIRFLOW								
Main fan airflow - M^3/hr	2000	2000	2500	2500	3500	3500	4300	4300
Fresh air module - M^3/hr	900	900	900	900	900	900	900	900
HEAT TO AIR (KW)								
Energy recovery from heat pump (Mode B)	5.1	5.1	7.1	7.1	10	10	14	14
Via lphw @ 82°C	11	11	13.5	13.5	24	24	28	28
Max available (Mode B + LPHW)	14	14	18.6	18.6	30	30	36	36
HEAT TO WATER (KW)								
Energy recovery from heat pump (Mode A)	5.5	0	7.4	0	10	0	12.5	0
Via LPHW @ 82°C	18	0	30	0	30	0	40	0
Max available (Mode A + LPHW)	23.5	0	37.4	0	40	0	52.5	0
ELECTRICAL DATA (AMPS)								
Supply / Fuse 1 Phase 240v / 50hz	20	20	25	25	40	40	-	-
Supply / Fuse 3 Phase 415v / 50hz	10	10	16	16	20	20	25	25
Total power consumed (kW)	2.1	2.1	2.8	2.8	3.6	3.6	5.1	5.1
Recommended boiler capacity (kW)	29	11	44	13.5	54	24	68	28