

Variheat System

**dehumidification, heat recovery and
ventilation system designed for all
indoor pools**

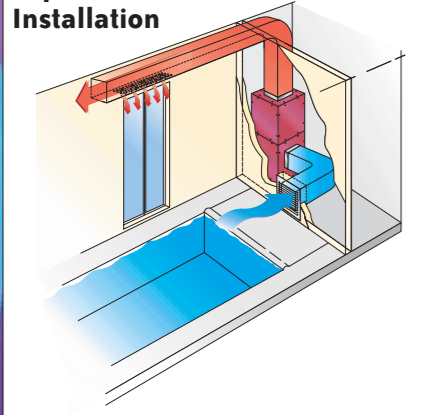


calorex

Specialist designers and manufacturers of pool comfort control systems

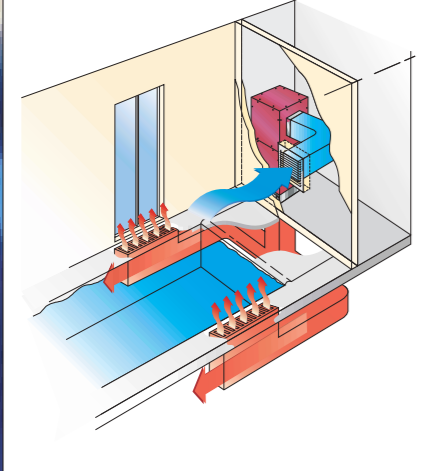
Environmental Control

Top Outlet Installation

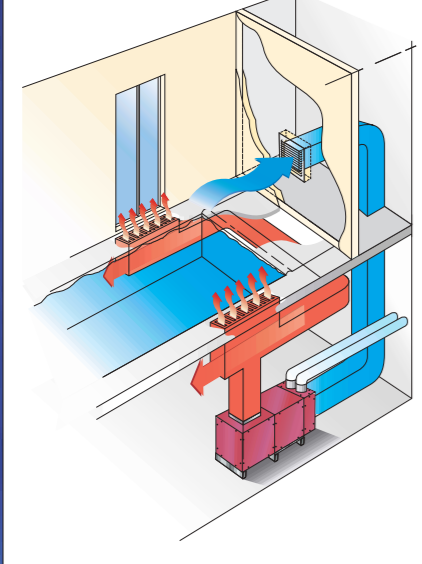


An indoor pool is such fun to own and use when you know that the comfort and economy of the pool environment are under the safe control of Calorex. While you swim, the innovative Variheat takes care of heating, humidity control, ventilation and energy recovery.

Bottom Outlet Installation



Basement Installation



Calorex Variheat-The perfect partner for your indoor pool

Why Calorex

Calorex is the Worlds leading manufacturer of swimming pool heat pumps and is renowned for its innovation, range and quality of product - a proud claim, backed by over twenty years of design, manufacture and operational experience with thousands of units operating in over 30 countries worldwide.

The brains of your pool environment

Variheat controls the operation of the boiler and combines it with a highly efficient heat pump dehumidifier to provide air and water heating, humidity control, ventilation and energy recovery.

Humidity control

In contrast to most buildings, indoor swimming pools constantly evaporate large volumes of moisture into the space around them. Unless this moisture is removed, humidity will rise creating an uncomfortable environment and structural/fabric damage. Totally self controlling, the Variheat will remove this moisture and recover energy from it which is then re-used to assist water and air heating. By utilising this method, a heat cycle is created and energy costs are kept to a minimum.

Pool Water and Air Heating

A majority of the heating needs are provided by heat recovery from the dehumidification process. Heat losses that cannot be recovered are replaced

using inbuilt heat exchangers which are connected to a hot water supply from a boiler. Control is fully automatic once customer preferences have been set up. A time clock permits reduction of pool air temperature to reduce heating cost when the pool cover is in place – Variheat can operate as low as +10C to allow real energy savings.

Ventilation

Variheat silently circulates heated air throughout the pool hall to ensure an even temperature and control of humidity/ condensation. For additional comfort and control of airborne chemicals a fresh air option



locate on the Variheat or at a convenient position near it. When the pool cover is in place, energy saving from air temperature reduction can be achieved automatically by the control link to the pool cover system.

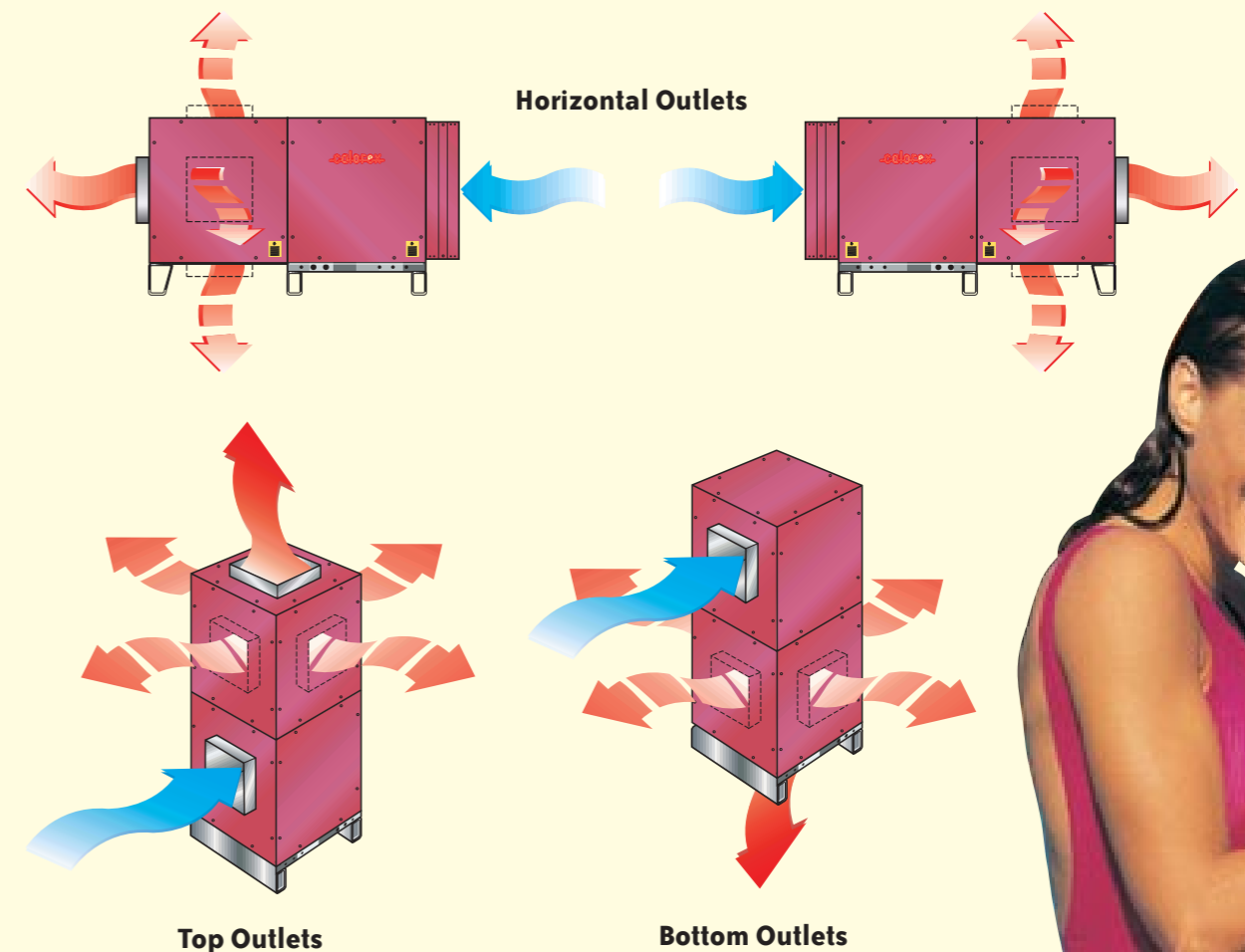
is available, having the additional advantage of creating a slight negative pressure in the pool hall to prevent migration of pool air to adjacent rooms.

Controls

Variheat is complete with easy to read and readily adjustable humidistat, thermostats and time clock together with all diagnostic and operational indicators, conveniently mounted in a compact multi-position 12volt panel which the installer can

Configuration and installation

Variheat is exceptionally compact and easy to configure to suit customer and building requirements. Up draught, down draught, horizontal airflows, 90 degree turns and left/right handing are all easily achieved from the standard Variheat, ducting requirements being minimised. Where no connection to the filtration circuit is required, Variheat can be supplied without water heat exchanger. Remote condensing units can be fitted to all models.



Our product is our reputation. It's the best.



CALOREX VARIHEAT 3 DEHUMIDIFICATION / HEAT RECOVERY / VENTILATION UNITS FOR INDOOR POOLS. MULTI CONFIGURATION WITH UP, DOWN OR HORIZONTAL AIRFLOWS. HEAT RECOVERY TO AIR / WATER OR AIR ONLY

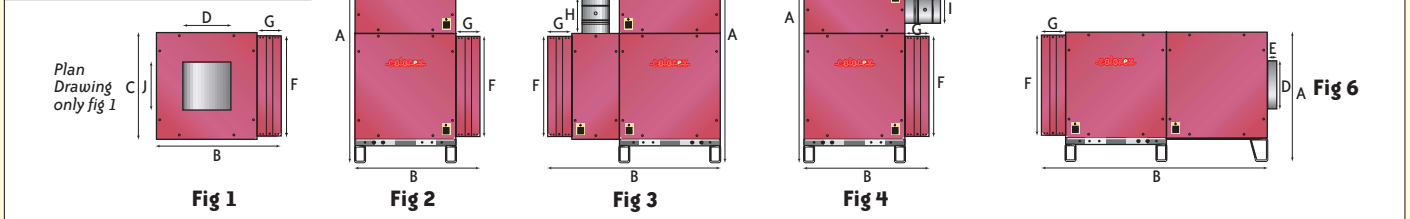
Model		AW600VH	AA600VH	AW900VH	AA900VH	AW1200VH	AA1200VH	AW1500VH	AA1500VH
DEHUMIDIFICATION									
30C 60%RH	l/hr	4.6	4.6	6.5	6.5	9	9	11	11
30C 70%RH	l/hr	5.5	5.5	7.8	7.8	10.8	10.8	13.2	13.2
AIRFLOW									
Main fan airflow	M3/hr	2000	2000	2500	2500	3500	3500	4230	4230
Fresh airflow(option)	M3/hr	150	150	200	200	250	250	300	300
HEAT TO AIR									
Net via heat pump (Mode B)	KW	5.1	5.1	7.1	7.1	10	9.8	12	12
Via LPHW @ 80C		11	11	13	13	23	23	26	26
Max available (Mode B + LPHW)		16.1	16.1	20.1	20.1	32.8	32.8	38	38
HEAT TO WATER									
Net via heat pump (Mode A)	KW	5.5	0	7.4	0	10	0	12.5	0
Via LPHW @ 80C		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									
Supply/Fuse 1 phase	AMPS								
230v 50hz		20	20	30	30	40	40	0	0
Supply/fuse 3 phase									
400v 50hz		15	15	15	15	20	20	25	25
POWER INPUT									
	kW	2.5	2.5	3.3	3.3	4.4	4.4	5.6	5.6
RECOMMENDED BOILER CAPACITY									
	kW/btu	29/100000	29/100000	44/150000	44/150000	53/180000	53/180000	66/225000	66/225000

NOTE - With Air/Air installations the boiler may also supply heat to a separate water heat exchanger.
 AW denotes heat recovery to air /water and LPHW batteries for air/water.
 AA denotes heat recovery to air and airside LPHW battery only.
 All units with X defrost - air temperature range +5C to 40C.

OPTIONS- Fresh air module.
 Electric resistance air heaters.
 Downflow duct connectors.
 Remote condensing units.

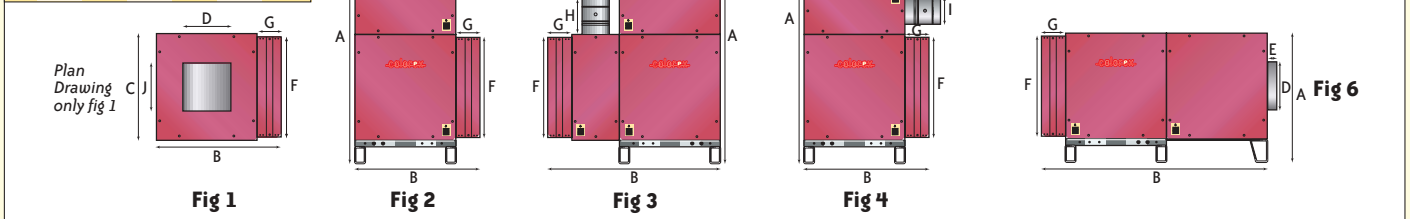
VARIHEAT 600/900 (All measurements in millimetres)

	fig 1	fig 2	fig 3	fig 4	fig 5	fig 6
A	-	1514	1514	1849	838	838
B	843	843	1178	843	1849	1514
C	698	-	-	-	-	-
D	289	289	289	289	289	289
E	-	60	60	60	60	60
F	615	660	660	660	660	660
G	160	160	160	160	160	160
H	-	-	160	160	160	-
I	-	-	149	149	149	-
J	333	-	-	-	-	-



VARIHEAT 1200/1500 (All measurements in millimetres)

	fig 1	fig 2	fig 3	fig 4	fig 5	fig 6
A	-	1718	1718	2053	940	940
B	945	945	1280	945	2053	1718
C	800	-	-	-	-	-
D	289	289	289	289	289	289
E	-	60	60	60	60	60
F	692	786	786	786	786	786
G	160	160	160	160	160	160
H	-	-	160	160	160	-
I	-	-	149	149	149	-
J	333	-	-	-	-	-



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