

High Capacity Water Chillers

Many instruments such as electron microscopes Mass Spectrometers, X-ray Equipment Lasers, Sputtering Systems and Diffusion Pumps require a constant supply of cooled water for which a water chiller is recommended. The "TAE" range of refrigerated chillers gives cooling capacities from 2 - 6kW using efficient hermetically sealed compressors and air cooled condensers and are manufactured to meet the high environmental standards of the *Montreal Protocol*. Most electron microscopes will be adequately cooled by the 2.5 kW model but larger TEMs may require the 3kW model. Larger capacity models can be used to cool several pieces of equipment at one time

Requiring minimal floor space, the TAE evo range are stand alone, self contained chillers including air cooled refrigeration circuit, liquid pump, storage tank, control gear and (optional) heater. They are designed for 24 hour operation and so incorporate a wide range of safety interlocks to protect both the chiller and the cooled equipment.



TAE evo M05/M10

Standard Features

Optional Features

Environmentally friendly refrigerant	Close temperature control $\pm 0.1^{\circ}\text{C}$
Ultra low refrigerant charge and running costs	Remote control panel
Non-ferrous components	Automatic tank top-up
Insulated stainless steel integral water tank	Water filter
Fully welded stainless steel plate heat exchanger	De-ionising cartridge
Low tank level alarm	Electric heater
Low water flow alarm	Outdoor frost protection
Evaporator anti-freeze control system	Stainless steel cabinet
High pressure water pump	Auto pressure regulation system
Water flow regulation control	Link up to serial line for tele-maintenance control
Ergo cabinet suitable for internal or external location	Nickel brazed evaporator
Clear microprocessor control and function display	
Connections for BMS system interface or remote alarm	
Manufactured to ISO9000 standards	



TAE evo M015 to 31

Please ask for a free assessment and quotation for your application.

TAE evo Compact Chiller Range

Model	M05	M10	M015	M020	M031
Catalogue no.	C300/5	C300/6	C300/9	C300/15	C300/20
Capacity kW*	2.5	2.52	3.1	5.18	6.21
Max/Min flow rate (M ³ /hr)	0.43/1.2	7.23	8.89	14.87	17.8
Running current (amps)	7	0.962	1.145	1.649	2.022
Electrical supply volts/phase/Herz**	230/1/50	230/1/50	230/1/50	230/1/50	
Pump flow rate in litres/minute	6	8	9	15	18
Available pump pressure in bar	3.75	3.35	3.2	2.8	2.4
Condenser fans	1	1	1	1	1
Length in mm	350	680	680	900	900
Width in mm	575	500	500	700	700
Height in mm	800	750	750	800	800
Weight in Kgs	106	75	120	170	185
Water connections BSP	½"	½"	½"	¾"	¾"

*Cooling capacity based on 15°C liquid leaving temperature, 32°C ambient and does not include heat output from pump
 **60Hz selections available on request.
 Other pump options available to suit application

Compact Laboratory Chillers Air Cooled Bench Top Range



Features

These liquid chillers are equipped with efficient high ambient compressors and air-cooled condensers giving low running costs. The units are designed and manufactured to meet the high environmental standards set by the Montreal Protocol. Low noise/vibration levels means they can be located on or under a bench. Electronic temperature control with digital display. Low level alarm.

Refrigeration Circuit

R404A Refrigerant with low refrigerant charge, High pressure switches, Refrigerant sight glass, Internally equalised thermostatic expansion valve, High capacity refrigerant drier, High and low side service connections, Close temperature control +/- 0.3°C

Compressor

Reciprocating hermetically sealed compressor with a refrigerant cooled motor. The compressor is direct on line starting with internal overheating protection and external current monitoring equipment.

Evaporator

Compact Plate with Stainless Steel Plate and Copper Braze Plate Evaporator, for high thermal efficiency.

Condenser

Condenser tubes of oval construction. Very compact construction for maximum capacity/volume ratio. The secondary fluid pump is pump is non-ferrous, self-priming and has a vertical suction, which is self-venting.

Technical Specifications

MODEL	LC600	LC900	LC1500	LC2000	LC2500	LC3500
Capacity Watts*	600	900	1500	2000	2500	3500
Required Flow Rate (litres/min)	1.7	2.6	4.3	5.7	7.2	8.6
System Absorbed Power kW***	0.34	0.42	0.63	0.74	1.03	1.33
Electricity Supply**	220-240/50/-1	220-240/50/-1	220-240/50/-1	220-240/50/-1	220-240/50/-1	220-240/50/-1
Tank Capacity (litres)	1.5	1.5	1.5	1.5	1.5	1.5
Available Pump Pressure (bar)	1.6	1.6	1.5	1.5	1.3	1.1
Depth (mm)	550	550	550	550	550	550
Width (mm)	570	570	570	570	570	570
Height (mm)	315	315	315	400	400	400
Weight (Kg)	26	28	30	32	35	40
Designed Running Current (Amps) ***	3	3.5	5	5	6	7.5
Water Connections (Hose Tail)	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

* Cooling capacity based 15°C liquid leaving temperature, 30° ambient and does not include heat input from pump

** 60Hz selections available on request

*** Figures based on standard water pump

Other pump options available to suit application

Please call for quotation