

Compact 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 "IC" range of refrigerated chillers give 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 2kW 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 IC Compact 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.



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	



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

IC Compact Chiller

Model	IC5	IC6	IC9	IC15	IC20
Catalogue no.	C300/5	C300/6	C300/9	C300/15	C300/20
Capacity kW*	1.97	2.52	3.1	5.18	6.21
Required flow rate in litres/minute	5.65	7.23	8.89	14.87	17.8
System absorbed power in kW	0.935	0.962	1.145	1.649	2.022
Electrical supply volts/phase/Herz**	240/1/50	240/1/50	240/1/50	240/1/50	415/3/50
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	680	680	680	900	900
Width in mm	500	500	500	700	700
Height in mm	750	750	750	800	800
Weight in Kgs	67	75	120	170	185
Designed running current	6.55	6.75	7.23	10.56	8.19
Water connections BSP	1/2"	1/2"	1/2"	3/4"	3/4"

*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



High Capacity Chillers

Air Cooled Refrigerated Chillers 8 -

Features as for Compact IC Units

Model	IC26	IC28	IC30	IC40	IC50	IC60	IC80	IC100	IC120	IC140
Catalogue no.	C300/26	C300/28	C300/30	C300/40	C300/50	C300/60	C300/80	C300/100	C300/120	C300/140
Capacity kW*	8.35	10.7	11.94	15.57	17.49	21.89	26.7	34.79	38.93	43.85
Flow rate in litres/minute	23.97	30.71	34.27	44.69	50.21	62.84	76.65	99.87	111.76	125.88
System absorbed power kW	2.403	3.221	3.259	4.326	4.896	6.375	7.078	9.119	10.471	12.081
Electrical supply volts/phase/Herz**	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50
Tank capacity in litres	60	120	120	120	120	120	260	260	260	260
Standard water pump flow rate in litres/minute	24	31	35	45	50	63	77	101	112	126
Available pump pressure in bar	1.20	3.10	3.0	2.95	2.8	2.7	3.25	3.0	2.9	2.7
Category A water pump flow rate in litres/minute	24	31	35	45	50	63	77	101	112	126
Available pump pressure in bar	4.05	3.82	3.7	3.7	3.75	3.55	3.8	3.8	3.6	3.45
Category B water pump flow rate in litres/minute	24	31	35	45	50	63	77	101	112	126
Available pump pressure in bar	5.0	4.65	4.5	4.2	4.5	4.25	4.65	4.45	4.25	4/0
Condenser fans	1	1	1	2	2	2	2	3	3	3
Length in mm	1450	1450	1450	1450	1450	1450	2150	2150	2150	2150
Width in mm	760	760	760	760	760	760	840	840	840	840
Height in mm	1300	1300	1300	1300	1300	1300	1600	1600	1600	1600
Weight in Kgs	210	225	250	279	310	325	398	452	531	562
Designed running current	10.5	11.59	11.9	12.8	14.5	15.1	16.7	18.9	26.58	28.6
							1¼"	1½"	1½"	1½"

*Cooling capacity based on 15°C liquid leaving temperature, 32°C ambient and does not include heat output from pump

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