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Alphacool ES Chiller 1000

Alphacool article number: 13070

Quick Info

The Alphacool ES Chiller 1000 is a compressor cooling system with a maximum cooling capacity of 1000 watts, making it the perfect choice for cooling servers and workstation systems. Equipped with an integrated pump, the chiller takes on the task of circulating and cooling the coolant. Ensuring that the desired temperature is maintained.

- Compressor cooling system for up to 1000 watts
- Pump with 10m head
- Flow rate and temperature alarm
- Stationary device with carrying handle

Scope of delivery

1x ES Chiller 1000
1x 1.5m power cable (Euro plug)
1x 1.5m power cable (UK standard)
1x Chiller Alarm Adapter

Technical data

Dimensions (L x W x H)	440 x 260 x 390 mm
Net Weight	16kg
Voltage	220V
Frequency	50 Hz
Current	0.4-2.68A
Compressor Power	0.44/0.46 kW
Refrigeration Capacity	0.89/1.08 kW
Refrigerant	R1234YF
Refrigerant Charge	280g
Precision	+/-0.3°C
Reducer	Capillary
Pump Power	0.03 kW
Reservoir Capacity	2 l
Inlet / Outlet	G1/4 Inner threads
max. Lift	10m
max. Flow	10 l/min
Protection	Over current protection for compressor, flow alarm, over temperature alarm
IP rating	IP44
Recommended operating temperature (in degrees Celsius)	5°C ~ 40°C
Recommended storage temperature (in degrees Celsius)	0°C ~ 40°C
Color	black

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Manual	13070_Alphacool_ES_Chiller_1000_Manual.pdf
Product pictures	13070_Alphacool_ES_Chiller_1000_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_13070.pdf

Packaging dimensions per unit

L x W x H	540 x 380 x 500 mm
Weight	19000 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197130707
Customs code	84195080900

Article text

The Alphacool ES Chiller 1000 is a compressor cooling system with a maximum cooling capacity of 1000 watts, making it the perfect choice for cooling servers and workstation systems. Equipped with an integrated pump, the chiller takes on the task of circulating and cooling the coolant. Ensuring that the desired temperature is maintained.

All in One

The ES Chiller is equipped with a display that can be used to configure various settings, including temperature control in precise 0.3°C increments. The G1/4" connections are compatible with common connections for water cooling systems. A built-in reservoir holds a capacity of 2 liters. Thanks to the integrated pump, with a maximum delivery head of up to 10m, the chiller can be integrated directly into the cooling loop. An extra pump is not necessary. For the sake of additional protection, the chiller is equipped with overvoltage protection for the compressor and has an alarm that warns if the flow rate is too low or the temperature is too high.

The ES Chiller 1000 is a stationary appliance with a carrying handle for easy transportation.

Performance calcuation

Water outlet temperature (Fw)								
C°	8	10	15	20	25	30	35	40
factor	0,69	0,77	1	1,22	1,44	1,64	1,82	2
Ambient temperature (Fa)								
C°	15	20	25	32	35	40	45	50
factor	1,26	1,2	1,11	1	0,95	0,87	0,8	0,72
Percentage of glycol in coolant (Fg)								
%	0	10	15	20	25	30	35	40
factor	1	0,96	0,95	0,94	0,93	0,91	0,9	0,88

Formular: 1,08kW * Fw * Fa * Fg

Example: A chiller delivers 1.08kW cooling capacity. Water outlet temperature (Fw) is 30 C°, Ambient temperature (Fa) is 40 C° and Percentage of glycol (Fg) is 30 %.

Calculation: 1,08kW * 1,64 * 0,87 * 0,91 = 1,4kW