

Alphacool ES Chiller 1000 110-120V / 60hz

Alphacool article number: 5100102



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 US Version
1x 1.5m power cable (US plug)
1x Chiller Alarm Adapter

Technical data

Dimensions (L x W x H)	440 x 260 x 390 mm
Net Weight	16 kg
Voltage	110-120 V
Frequency	60 Hz
Current	0.4-2.68 A
Compressor Power	0.44/0.46 kW
Refrigeration Capacity	0.89/1.08 kW
Refrigerant	R1234YF
Refrigerant Charge	280 g
Precision	±0.3 °C
Reducer	Capillary
Pump Power	0.03 kW
Reservoir Capacity	2 L
Inlet / Outlet	G 1/4 Inner threads
max. Lift	10 m
max. Flow	10 L/min
Protection	Over current protection for compressor, flow alarm, over temperature alarm
IP rating	IP44
Recommended operating temperature (in °C)	5 °C to 40 °C
Recommended storage temperature (in °C)	0 °C to 40 °C
Color	black

Download links

Manual	5100102_Alphacool_ES_Chiller_1000_110-120V_-_60hz_Manual.pdf
Product pictures	5100102_Alphacool_ES_Chiller_1000_110-120V_-_60hz_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_5100102.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	4070201001027
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 calculation

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: $1.08 \text{ kW} * Fw * Fa * Fg$

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: $1.08 \text{ kW} * 1.64 * 0.87 * 0.91 = 1.4 \text{ kW}$