Alphacool ES 120 mm 1000 - 4000rpm Two Ball Bearing PWM

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The ES 120 mm High Speed Enterprise 120 mm fan offers a high air flow and a very high static pressure. This makes it an ideal partner for server racks and workstations.

Alphacool ES 120 mm 1000 - 4000rpm PWM

- High speed fan with 1000 to 4000rpm
- High static pressure with 12,67 mm H2O
- High airflow with 203,88 m³/h
- Soft start
- 0% PWM = 0rpm
- Double ball bearing
- Auto Power OFF

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Scope of delivery

1 x ES 120 mm fan

Data fan

L x W x H	120 x 120 x 25 mm
Speed	1000 - 4000rpm
Bearing	Two ball bearing
Connection	4-Pin PWM
Cable length	30 cm
Operation voltage	7 - 14V
Start voltage min.	7V
Power consumption	0,53 - 0,67A (6,36 - 8,04W)
Static pressure	12,67 H2O
Max. air flow	203,88 m^3/h
Noise	49,5 dB(A)
MTBF	70.000h

Safety Features

Automatic Shutdown	Automatic switch-off if the fan is blocked
Automatic restarting	Restart attempt after 2-6 seconds if blocked
Damage due to blocking	It is guaranteed that the fan will not be damaged if it is blocked for up to 72 hours

Download links

Product pics	https://www.alphacool.com/download/1020154_ES_120mm_fan_pics.zip

Packaging dimensions 1 unit

L x B x H	12,5 x 13 x 3 cm
Weight	220g

Other data

Certificates	CE, FC, RoHS
EAN	4250197248174
Customs code	84145915000

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Article text

The Alphacool ES fans have been specially developed for use in servers and workstations and, unlike usual, do not offer a 2 or 3 -pin DC power connection, but a 4-pin PWM control.

PWM control
Instead of the usual 2 cables or the 3-pin connector Alphacool now also uses a 4-pin PWM connector for enterprise fans, which is supported by more and more server mainboards. Via the 4-pin PWM connector, the fan always receives full voltage and is controlled by pulse width modulation. This allows the fan to be controlled over a much wider speed range. A considerable amount of energy can be saved whilst controlling the fans in server racks and with 0% PWM control, the fans can even be stopped completely. The fan also offers a soft start, which increases the service life of the fan and reduces the risk of injury. At speeds of several thousand revolutions per minute, no parts of the body should get between the fan blades.

Double ball bearings
Unlike classic plain bearing, Alphacool ES fans have a double ball bearing for increased service life under full load. Double ball bearings are generally regarded as the highest quality bearings in terms of durability and quality. This also ensures a high level of running smoothness in terms of minimal vibration.

Protection circuits
All Alphacool Enterprise fans have multiple protection circuits. If the fans are blocked, they automatically try to restart at reduced speed after a few seconds. Thanks to the soft start, including the emergency start function, the fan can be blocked for up to 72 hours without suffering damage. In case of wrong polarity when connecting the fan, a burn-out of the electronics for at least 5 seconds is impossible. If the fan is connected incorrectly for a short time, this is no problem.

The Alphacool ES fans for servers and workstations offer an extremely high air flow and an extremely high static pressure. They are therefore ideal for use on radiators or as particularly powerful case fans.

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