



# Alphacool Eheim Power 1046-12Volt Full Ceramic Bearing II (4m Pressure Head)

\$94.75

## Product Images



## Short Description

This high performance ceramic rotary pump is designed for uncompromising 24/7 operation. A variable base plate of the unit provides many mounting options for maximum flexibility. The Eheim 1046 pump is the ideal “motor” for your water cooling system: It is compact, has proven itself over many years, runs smoothly and quietly and is extremely reliable. With some modifications it is possible to gain even more performance and add more feature to this pump. Alphacool has created a converter card to implement many useful features, which will be explained in detail in the following: Alphacool' s proven

## Description

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DC/AC converter card is now updated and combined with the Eheim 1046 pump!

The latest generation of the power converter card, Alphacools converter card V.2 - 12V DC to 12V AC - Double power (redundant), converts the 12V direct current from the system power supply into 12V alternating current for different pumps. Some examples of 12V AC pumps are e.g. the Eheim 1046, 600 or 1000 models.

Alphacool would not be Alphacool, if an update would not bring some extremely interesting new features! The following list shows the new features of this power converter card:

## Features

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1 or 2 pump operation:

Two channels for pump connection are available. Each channel can handle up to 23W of power consumption. This means that with pumps consuming less than 11W of power per piece, 4 pumps, 2 per channel, can be connected!

As a rough guideline:

2 pumps per channel possible: Eheim 1046 or 600

1 pump per channel only: Eheim 1000

Providing only power to the pumps is something that the predecessors of this converter card were already able to do. The special feature of this card are the different operating modes which can be activated by placing jumpers on the card:

- Redundant: For this mode of operation two pumps are required. Normally only pump 1 will be used, but if it fails pump 2 will be activated
- Parallel: In this mode both channels are activated simultaneously
- Freq. 55: Determines the frequency of AC pumps. Standard is 50Hz, at 55Hz some pumps run more smoothly and with higher flow rates
- Freq. max.: Tests the maximum frequency of the pump and sets it as the operating frequency. This runs the pump at maximum power
- Venting: Pump is run in venting mode for de-aeration of the cooling loop. The pump will be switched On and Off repeatedly
- Development: This is a 3-Pin extension connector. An interface to the Aquastream pump is planned here.

Pump speed monitoring:

With the help of this 3-Pin connector and a cable for connection, the fan speed can be monitored by a controller.

Temperature sensors

Here the temperature sensors can be connected. Use only sensors with a resistance of 10 kOhms. Monitoring is possible e.g. with the Heatmaster 2, later also with Aquacomputer products.

Heatmaster 2:

With the help of an interface, the HM2 Bus, this power converter card can be connected to the Heatmaster. After software version 1.02 this connection will be unlocked.

Mounting

In the corners of the board openings are implemented. With the decoupling kit, Item No. 13505, the board can be mounted directly below an Eheim 1046 pump, allowing mounting without the need for additional space.

Alternatively the board can also be mounted with Alphacool' s Velcro mat, Item No. 13700, anywhere in the system.

## Specifications

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### Technical Specifications - Power Converter:

- Material: Plastic/Metall
- Colour: Mainly green
- Dimensions (L x W x H): 75 x 77 x 17mm
- Input voltage: 12V DC
- Power connection Input: 4Pin Molex
- Output voltage: 12V AC
- Power connection outside: Clamping screws (like on luster terminal:
- Hole dimensions: 63 to 67mm

### Technical Specifications - Pump:

- Flow rate: 300 l/h
- Pressure head: Up to 4m (controllable via the converter card at Freq. Max)
- Power consumption: 5 W
- Dimensions (L x W x H): 145 x 75 x 103 mm
- Ceramic shaft and ceramic bearing

The Multi-lingual mounting manual can be found [here](#) .

### Extent of delivery:

- 1x Eheim 1046-12Volt full ceramic bearing pump
- 1x Decoupling kit
- 1x Alphacool converter card V.2 - 12V DC to 12V AC - (Double Power & Redundant)
- 2x Jumper Mounting manual (GER, EN, FRA)

## Additional Information

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Brand	Alphacool
SKU	AC-15043
Weight	1.5000
Color	Black
Pump Type	Eheim
Pump Voltage	12 VDC
Vendor SKU/EAN	4250197150439

