

Vakuum-Lösungen

Applikations-  
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Service



LEYBOLD VACUUM

GA 05.280/1



## **TURBO.POWER 300**

Netzgerät für Turbo-Molekularpumpen  
TURBOVAC

Power Supply for TURBOVAC  
Turbomolecular Pumps

Kat.-Nr. / Part No.  
800100V0002

**Gebrauchsanleitung**

**Operating Instructions**

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# 1 Description

The TURBO.POWER 300 is a power supply unit for powering the frequency converter TURBO.DRIVE S with 24 VDC.

In connection with the TURBO.DRIVE S the following turbo-molecular pumps may be operated:

TW 70H

TW 250S

TW 220/150, TW 220/150/15

TW 300, TW 300H

The mains input is protected by two fuses.

## 1.1 Ordering Information

**TURBO.POWER 300** 800100V0002

- Supplies the TURBO.DRIVE S with 24 V DC
- Plug & play
- Bench top unit or for cabinet mounting

### 24V DC power cable

(TURBO.DRIVE S – TURBO.POWER 300)

1 m	800094V0100
3 m	800094V0300
5 m	800094V0500
10 m	800094V1000
20 m	800094V2000

### Mains cord for TURBO.POWER 300, 3 m long

with EURO plug	800102V0002
with US plug 6-15 P	800102V1002

**Hat rail adaptor** (mounting aid for TURBO.POWER 300)

800110V0003

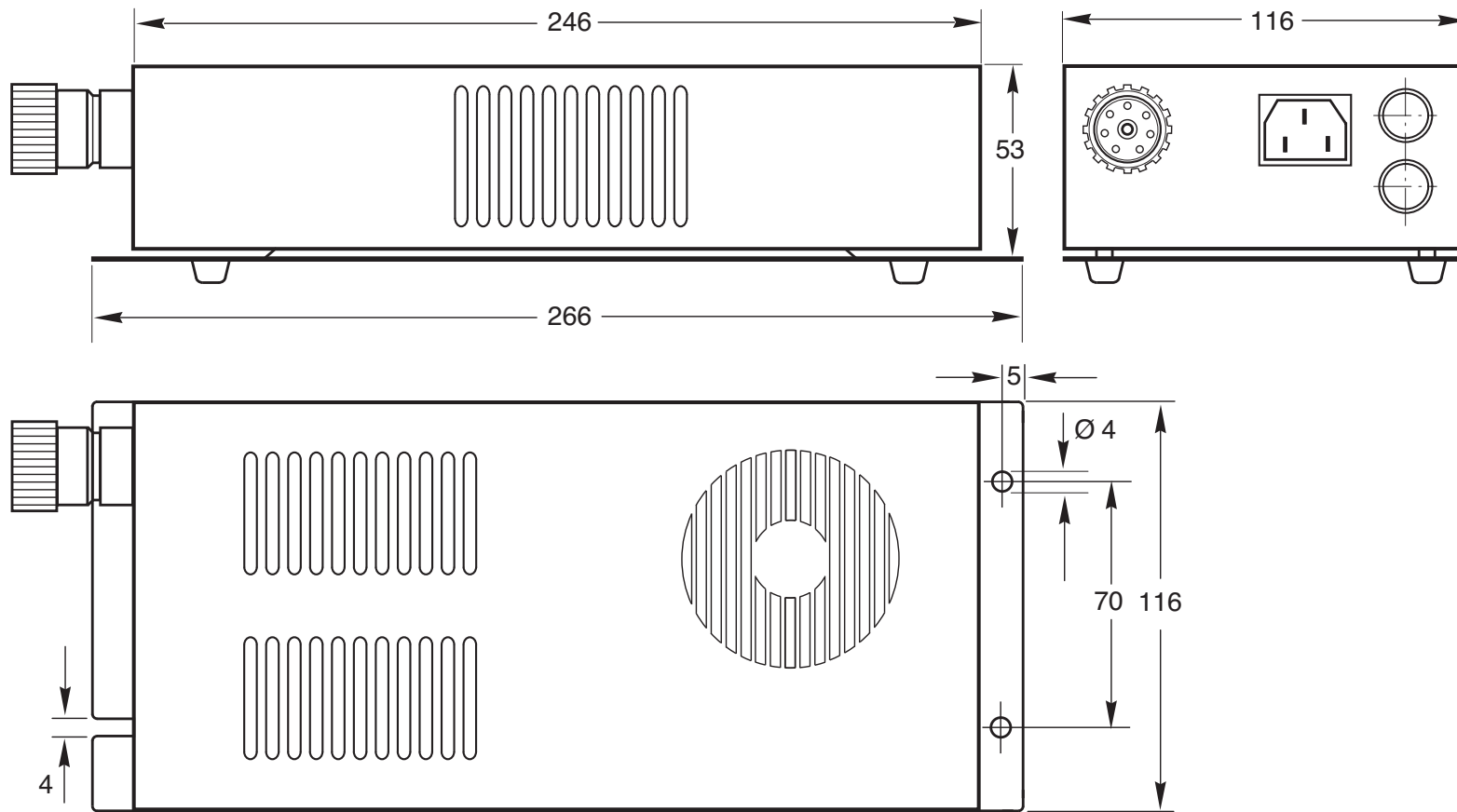


Fig. 1 Dimensional drawing for TURBO.POWER 300; dimensions in mm

## 1.2 Technical Data

### Input

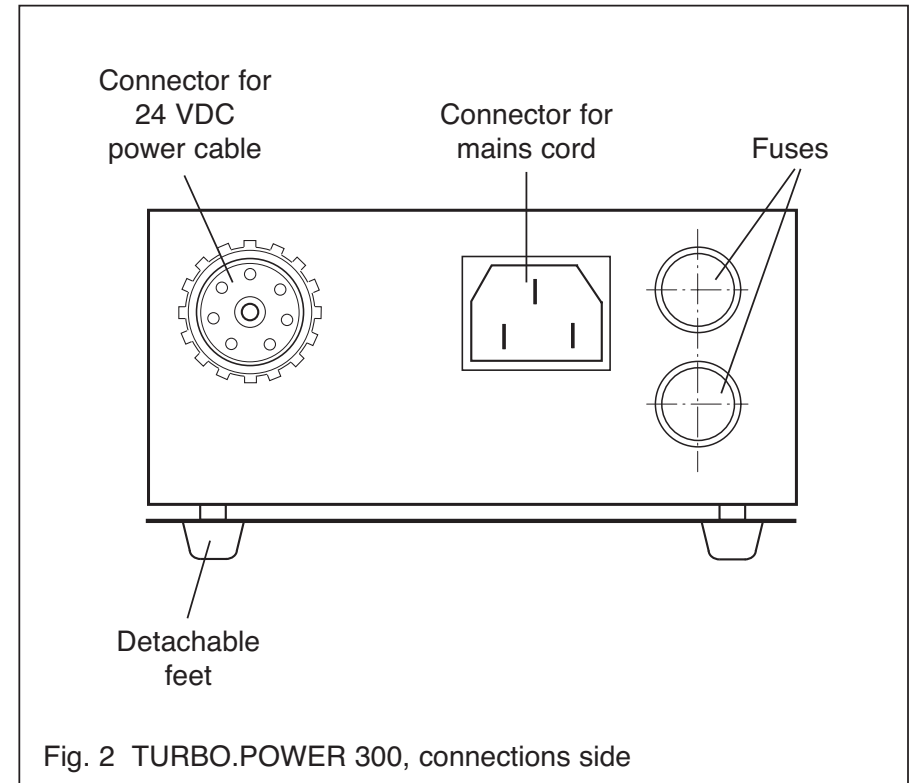
Mains voltage	85 – 264 V AC, 47 – 63 Hz
Max. power consumption	300 VA
Efficiency	86%
Leakage current	< 3.5 mA /250 V AC
AC fusing	Type 5 x 20 mm, glass 250 V/ 4 A, slow-blow

### Output

Nominal DC output voltage	24 DC $\pm$ 5%
Max. DC current	8.4 A
Max. rated power output	200 W

### Other data

Weight	1.5 kg
System of protection (EN 60529)	IP30
Ambient temperature during operation	0 – 40 °C
in storage	-20 – +70 °C
Humidity class	F, non-condensing
Cooling	built-in fan
Resistance to interference	EN 61000-6-2: Industry
Interference sourcing	EN 50081-1: Household



Max. operating altitude	1000 m above sea level (for greater altitudes please consult us first)
Max. magnetic field	15 mT
Max. radioactive radiation	10 <sup>5</sup> rad (10 <sup>3</sup> Gy)

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## 2 Installation / Connection

### Caution

Connect and disconnect the cables only while the pump is at standstill and with the mains power switched off. Plugging cables in or out with the mains power present or while the pump is still running can severely damage the frequency converter.

The TURBO.POWER 300 can be set up on the benchtop. After having unscrewed the feet, the unit may be installed in electrical cabinets, for example. It can be mounted using either the grooves and bores at the short sides in the bottom panel or with the aid of an adaptor the unit can be affixed to hat rails. Attach the hat rail adaptor to the bottom panel using screws. You may order the hat rail adaptor from Leybold.

### Caution

When mounting the TURBO.POWER 300 **do not make use of the holes for the feet.**

The TURBO.POWER 300 is equipped with a fan. The cooling air enters from the top and exits the housing at the side. Maintain a clearance of at least 3 cm at the top and at the sides.

Connect and affix the connecting cable between frequency converter and TURBO. POWER 300.

The TURBO.POWER 300 is not equipped with a mains switch. As soon as the mains cord has been connected, the unit will power up.

## 3 Operation

### Warning



The turbomolecular pump must only be operated if installed in compliance with the information provided in the Operating Instructions for the turbomolecular pump and the frequency converter.

Connect the mains cord. The mains power circuit must be of the earthed type.

Switch the turbomolecular pump on and off (see Operating Instructions for the frequency converter and the turbomolecular pump).

## 4 Troubleshooting

Symptom	Likely cause	Remedy
After having applied the mains power the frequency converter does not receive any power.	AC fuse blown. Cables not properly connected.	Replace fuse. Check the



## ***Declaration of Conformity***



We, Leybold Vakuum GmbH, herewith declare, under reference to the EMC directive 89/336/EEC, that the power supply mentioned below in its original version traded by us, is designed to comply with the applicable EC directive.

Any changes on the power supply not agreed upon with us will void this declaration.

Equipment: **TURBO.POWER 300**

Power Supply for Turbomolecular Pumps

Part No.: 800100V0002

For verification in accordance with the low-voltage directive 73/23/EEC, the following standard was applied:

**EN 60950 11/97**

For verification in accordance with the EMC directive 89/336/EEC, the following standards were applied:

**EN 50081-1 3/93**

**EN 50082-1 3/93**

**EN 61000-3-2 /00**

**EN 61000-3-3 /96**

Cologne, Jan. 16, 2002

Dr. Reinelt, Business Area Manager

Cologne, Jan. 16, 2002

Greven, Engineer



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