Toroidal transformer 230/24V

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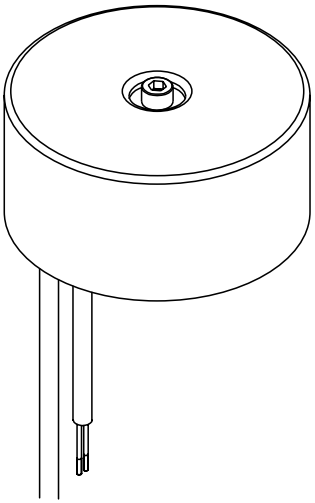

Installation and operating instructions

9000-606-85/30

DÜRR DENTAL

2017/05SE

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Important information

1. General information

1.1 Evaluation of conformity

The product was subject to a conformity acceptance process under the European Union guidelines covering this type of device and conforms with the essential requirements of these regulations.

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1.2 General notes

- These Installation and Operating Instructions form an integral part of the unit. They must be kept close to the unit at all times for the operator. Careful observance of these Installation and Operating Instructions is a prerequisite for use of the unit for the intended purpose and for its correct operation; new personnel must be properly trained and instructed in its use. These Installation and Operating Instructions must be handed over to any subsequent owner or operator of this unit.
- Operator safety and trouble-free operation of the unit can only be ensured if original equipment parts are used. Only those accessories specified in the installation and operating instructions or authorised by Dürr Dental for this purpose may be used. If other accessories are used with this unit, Dürr Dental cannot provide any guarantees pertaining to its safe operation or function. No liability will be accepted for resulting damages.
- Dürr Dental will only be held responsible for devices in terms of their safety, reliability and correct functioning, if the installation, readjustments, changes or modifications, upgrades and repairs have been carried out by Dürr Dental or an agency authorised by Dürr Dental and if the device is used in accordance with the installation and operating instructions.
- The Installation and Operating Instructions correspond to the particular model of the unit and the state of technology at the time when it was first placed on the market. All circuits, processes, names, software and devices quoted are protected under industrial property rights.
- The translation of these Installation and Operating Instructions has been carried out in good faith. However, we accept no liability arising from an incorrect translation. The German version of the Installation and Operating Instructions, which is included, always takes priority.
- Any reprinting of the installation and operating instructions, in whole or in part, is only permitted with written approval from Dürr Dental.
- Retain the packaging for possible return of the product to the manufacturers. Only the original packaging provides the best possible protection during transport of the unit.
  Should the product need to be returned to the manufacturer during the guarantee period, Dürr Dental accepts no responsibility for any damage that occurs during transport as a result of the use of defective packaging.
  Ensure that the packaging is kept out of the reach of children.

1.3 Disposing of the unit

- EU directive 2002/96/EC - WEEE (Waste Electric and Electronic Equipment) from 27 January 2003 and its current application in national law clearly states that dental products are covered by the above-mentioned directive and, as such, are covered by special waste disposal requirements within the European Economic Area.
- Please address any questions regarding the correct waste disposal procedures for this product to Dürr Dental or your dental supplier who will be pleased to assist.

1.4 Notes on the medical product

- This product is a technical medical device and, as such, may only be operated by such persons who, as a result of training or experience, can be confidently expected to operate it correctly.
- Do not use a multi-socket outlet for power supply.

1.5 Systems, connection with other devices

Take care when connecting units together or to parts of other systems as there is always an element of risk (e.g. due to leakage currents).
Additional devices connected with electrical medical devices must be proven to conform with their corresponding IEC or ISO standards. All configurations must continue to comply with the standard requirements for medical systems (see IEC 60601-1-1 or section 16 of the 3. edition of IEC 60601-1 respectively).
Whoever connects additional devices to medical electrical devices automatically becomes the system configurator and is responsible for ensuring that the system corresponds with the standard requirements for systems. Local laws take priority over the requirements outlined above.

A copy of the system manufacturer's declaration in accordance with Article 12 of Directive 93/42/EEC can be found in our download section at www.duerr-dental.com (document no. 9000-461-264).

1.6 Proper intended usage

The toroidal transformer is intended for the power supply of a Dürr separator (CAS 1, CA 1, CS 1).
The toroidal transformer is suitable for installation in treatment units in dental surgeries or dental clinics.

1.7 Improper usage

Any other usage or usage beyond this scope is deemed to be improper. The manufacturer accepts no liability for damages resulting from improper usage. In these cases the user/operator will bear the sole risk.

This device must NOT be used in operating theatres.

2. Safety

2.1 General safety notes

This device has been designed and constructed by Dürr Dental in such a way as to rule out hazards given intended use. Nevertheless, we feel it is our duty to mention the following safety measures in order to eliminate any possible remaining dangers.

- When operating the device, observe all local rules and regulations.
  Converting or modifying the device in any way is strictly prohibited. Dürr Dental offers no guarantees and accepts no liability for units that have been converted or modified. In the interests of trouble-free and safe operation, the owner and operator are responsible for ensuring compliance with these regulations and definitions.
- Installation must be carried out by a qualified expert.
- Before every use, the operator must check that the device is functionally safe and in good working order.
- The operator must be familiar with the operation of the device.
- This product is not designed for operation in an areas with an explosive or combustible environment. Explosive atmospheres can form in areas where flammable anaesthetic materials, skin cleansers, oxygen and skin disinfectants are present.

2.2 Notes on electrical safety

- Before connecting the device, always check that the values stated on the device for the supply voltage and mains frequency match those of the mains power supply.
- All devices and supply lines must be checked for signs of damage before commissioning. Damaged supply lines and connections must be replaced immediately.
- When working on or with the device, always observe the applicable electrical safety procedures.

3. Warnings and symbols

The following terminology and symbols are used in these Installation and Operating Instructions to denote particularly important information:

Restrictions and regulations concerning the prevention of personal injury or extensive damage.

Special information relating to efficient and cost-effective use of the device or other information.

Warning – risk of dangerous electric voltages

De-energise the device (e.g. unplug it from mains)

Order number

Serial number

Safety transformer

**Please observe the operating instructions.

Date of manufacture

Dispose of the device in accordance with EU guideline (2002/96/EC-WEE)

4. Scope of delivery

230/24V toroidal transformer with
mains fuse and fixing material . . . 7117-505-00E

4.1 Consumables

Fuse T4,0AH. 9000-115-14
Fuse T2,0AH. 9000-115-08

5. Technical data

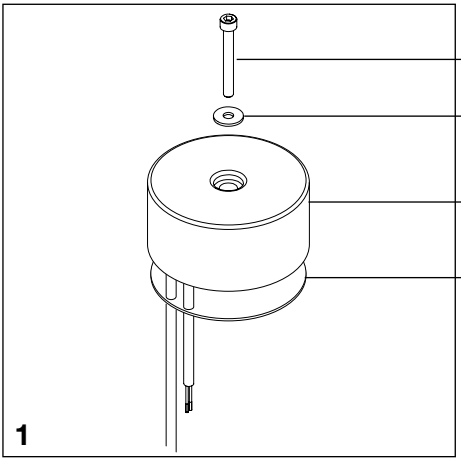
Voltage		
Primary	V	230
Secondary	V	24
Frequency	Hz	50 - 60
Rated power	VA	100
Fuses		
Primary		T 2,0AH
Secondary		T 4,0AH
Coil protector	°C	115
Type of protection transformer housing		IP 44
Protection class		II
Over-voltage category		II
Dimensions	mm (±2)	Ø95 x 45

Ambient conditions during storage and transport

Temperature	°C	-10 to +60
Relative humidity	%	< 95

Ambient conditions during operation

Temperature	°C	+10 to +40
Relative humidity	%	< 70



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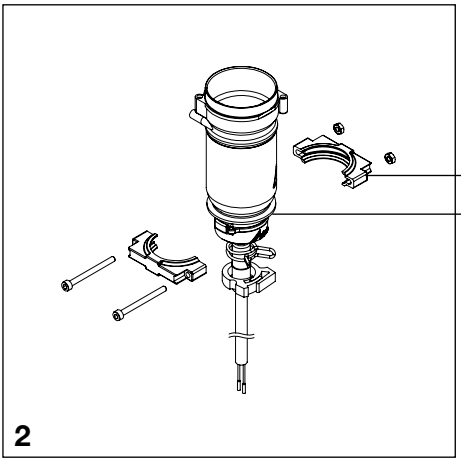

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Installation

Installation must be carried out by a qualified expert.

6. Installation

6.1 Fastening the transformer

- Fasten the transformer (1) with rubber disc (2) in a suitable position in the treatment unit using a screw (3) and a flat washer (4).

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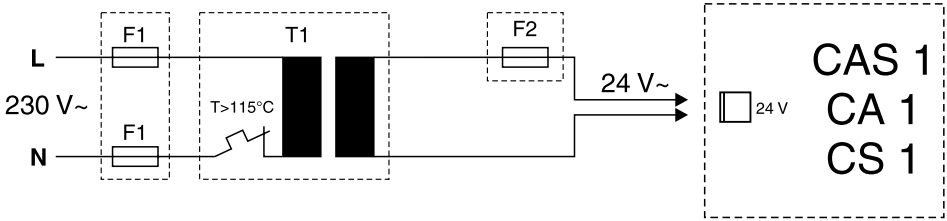
6.2 Fastening the fuse housing

- Apply two drill holes at a suitable position in the treatment unit for the DürrConnect bracket (6)
- Apply the DürrConnect bracket to the fuse holder (7).
- Screw the fuse holder in the treatment unit.



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7. Electrical connections

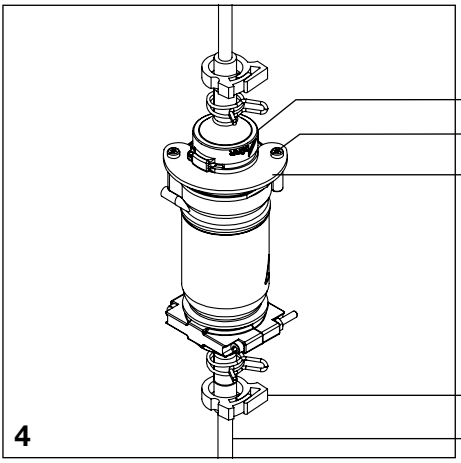
Before commissioning and first start-up, check the mains voltage against the voltage indicated on the model identification plate.

The electrical connection must be made via the main power switch on the treatment unit or the main surgery power supply switch (≥3 mm contact opening width).

The supply lines to the device must be installed without mechanical tension.

- Connect the 230 V power supply to the connection terminals in the treatment unit intended for the purpose.
- Connect the 24 V output to terminal X1 of CAS 1, CA 1 or CS 1.

F1 Fuse primary side T 2,0 AH
T1 Transformer
F2 Fuse safety extra-low voltage T 4,0 AH



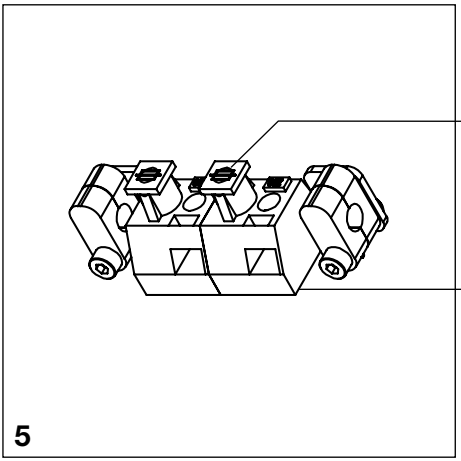
8. Replace the fuse

De-energise the device (e.g. unplug it from mains)

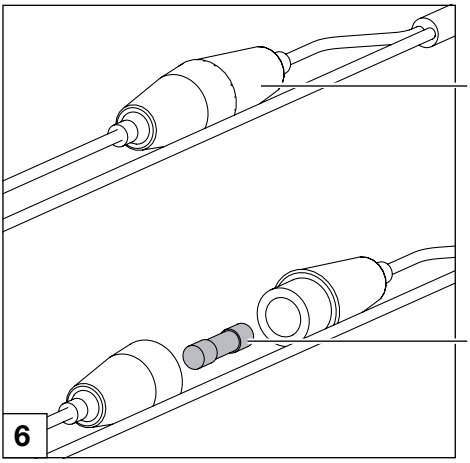
Any repairs which exceed routine maintenance may only be carried out by suitably qualified personnel or by one of our service technicians.

8.1 Primary fuses

- Remove the screws (8)
- Remove the cover plate (9)
- Open the terminal (10)
- Remove the cover (11) carefully, sliding in the connection line (12) carefully.



- Slide out the fuse (13) from the fuse holder (14) and open the plastic housing.
- Replace the fuse.



8.2 Secondary fuse

- Turn the fuse housing (15) to open it.
- Replace the fuse (16).

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9. Commissioning and repair

- Turn on the unit power switch or the main surgery switch.
- Check the function and connection of the devices.
- Perform a safety check for medical devices in accordance with national regulations and document the results accordingly, e.g. using the technicians report.

DÜRR DENTAL SE
Höpfigheimer Str. 17
74321 Bietigheim-Bissingen
Germany
Tel.: +49 7142 705-0
www.duerrdental.com
info@duerrdental.com

DÜRR DENTAL