

## Power Pack EN CL

*Keep for future use!*



Types:

|       |       |             |
|-------|-------|-------------|
| EN CL | 115 V | 01.7801.120 |
| EN CL | 230 V | 01.7800.120 |

# Static Line





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# 1 Operator instructions

These operator instructions must be read completely before installation and commissioning of the power pack "EN CL". They form a part of the power pack and must be retained for later use or subsequent owners. Safety instructions must be observed and followed at all times.

The power pack is operationally safe, provided that it is operated in accordance with its intended use.

The power pack is maintenance-free.

**The following signal words are used:**



## WARNING

If ignored

- severe personal injury.
- or death may result.

## ATTENTION

If ignored

- light property damage with damage to the power pack may result.

**NOTE:** *Important notes and additional information.*

## 2 Safety

All activities must be performed only by persons authorized by the operator. These persons must be trained electrical engineers or electricians and must have read and understood the operating instructions.

Switch off the power supply before commencing work on the power pack, and secure against inadvertent switching on.

With the exception of the fuse, the power pack does not include any parts which can be repaired by the operator. For reasons of safety, unauthorized conversions and modifications of the power pack are not permitted.

Any damage to the power pack may result in the risk of electric shocks. In the event of any visible damage or suspected electrical defects, take the power pack out of operation immediately and secure against reuse.

### WARNING!

Risk of electric shock.  
High electric voltage in power pack.  
Risk of electric shock when touching live parts within power pack.



- Do not open the power pack.

### ATTENTION!

Risk of short circuit.

Wetness and moisture may result in spark-overs and leakage paths at the high-voltage socket.

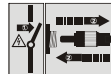
Short circuits within the power pack are the likely consequence.

- Protect the power pack from wetness and moisture.

Risk of spark-over.

When the power pack is switched on, contact or separation spark-overs may occur when the ionizing unit is plugged in or unplugged at the high-voltage socket.

This may result in damage to the power pack or defects.



- Only plug in/unplug the ionizing unit at the high-voltage socket when the power pack is switched off.

### 3 Intended use

The power pack is intended exclusively for the supply of alternating high voltage to HAUG ionizing units with bayonet coupling.

Only HAUG ionizing units with bayonet coupling must be connected to the power pack. Any warranty only extends to the units and accessories of HAUG GmbH & Co. KG.

The installation and operating conditions indicated in these Operating Instructions must be adhered to.



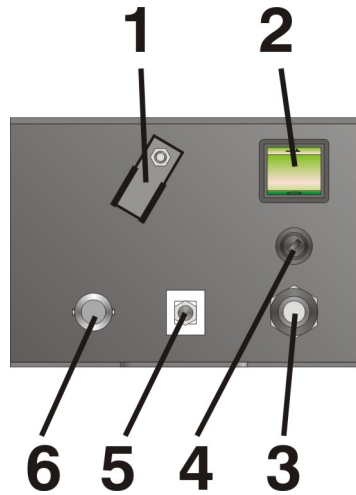
#### **WARNING**

Risk of explosion!  
Ignitable sparks may form at the power pack.

- Do not install or use the power pack in areas subject to explosion hazards.

## 4 Description of unit

- 1) Strain relief
- 2) Mains switch
- 3) Mains supply
- 4) Fuse holder with fuse
- 5) Ground connection (terminal)
- 6) High-voltage socket (bayonet connection)


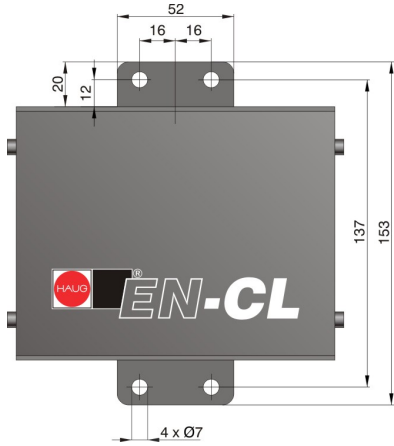


- 7) Mounting bracket



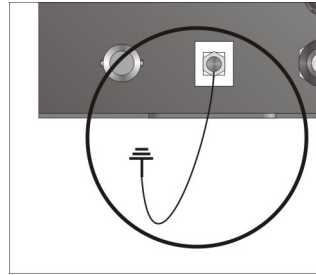
## 5 Installation

Do not place the power pack on a surface generating or radiating heat. Avoid installation location subject to direct sunlight.

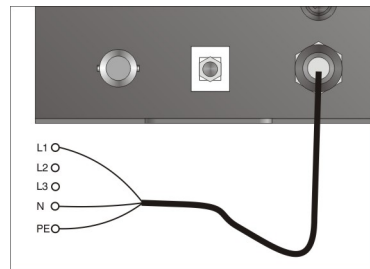
|  |  |
|--|--|
| <p>1. Before connecting, check to ensure that the power pack is suitable for the local mains voltage. The voltage is indicated on the model plate attached at the side of the power pack.</p> <ul style="list-style-type: none"> <li>• If the supply voltage is incorrect, the power pack may be damaged.</li> </ul> |  <p>The model plate contains the following information:<br/> Type: MUSTER      Id: 00.0000.000<br/> Nr: VXXXXX/XX    Jahr: 2009    IP:41<br/> Prim: 230 V~ 50-60 Hz    20 VA    CE<br/> Sek1: 7-8 kV~<br/> Fuse: 0,25 AT<br/> MUSTER<br/> HAUG GmbH &amp; CO. KG<br/> Friedrich-List-Str. 18<br/> D-70771 Leinfelden-Echterdingen<br/> www.haug.de<br/> Made by HAUG</p>  |
| <p>2. Mount the power pack at the intended location using the mounting brackets.</p> <ul style="list-style-type: none"> <li>• The operation of the power pack is not affected by the position in which it is installed.</li> </ul>   |  <p>The technical drawing shows the following dimensions:<br/> - Top mounting bracket width: 52 mm<br/> - Mounting hole spacing: 16 mm<br/> - Mounting hole diameter: 4 x Ø7 mm<br/> - Main body height: 137 mm<br/> - Total height including brackets: 153 mm<br/> - Mounting hole offset from top edge: 20 mm<br/> - Mounting hole offset from side edge: 12 mm<br/> The front of the power pack features the HAUG logo and the model designation EN-CL.</p> |
| <p>3. Ensure that the voltage supply is switched off.</p>  |  |



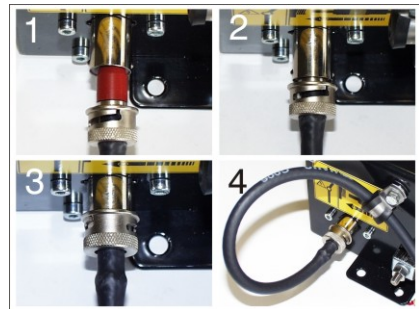
4. Connect the ground socket of the power pack with the machine ground connection.



5. Connect the power pack to the voltage supply.
6. Connect the PE conductor (green-yellow) with the protective earth of the mains.
- Connecting the PE conductor via parts of a machine body is insufficient.
  - Plus = conductor 1
  - Minus = conductor 2
  - PE = green/yellow conductor



7. Connect the ionizing unit to the high-voltage terminal.
- Plug the high-voltage connector of the ionizing unit into the high-voltage socket of the power pack and push at the high-voltage cable until the stop is reached.
  - Screw the screw cap onto the high-voltage socket and tighten by hand.
  - Secure the high-voltage cable of the ionizing unit without kinks using the strain relief.



8. The power pack is now ready for operation and can be activated by pressing the power switch.



## 6 Troubleshooting

| <b>Error</b>  | <b>Cause</b>               | <b>Measure for elimination</b>  |
|---|----------------------------|---|
| Power switch is not illuminated after switching on. | Power supply failure.      | Check power supply fuse.  |
|   | Faulty fuse in power pack. | Check fuse in power pack.   |
|   | Mains cable not connected. | Check connection of mains cable.                                      |
| No ionization.                                      | Faulty ionizing unit.      | Check operating instructions of relevant unit.                        |
|   | Power supply failure.      | Check power supply fuse.  |
|   | No high voltage.           | Check fuse in power pack.   |
|   |                            | Check connections in power pack.                                      |
|   | The power pack is damaged. | Shut the power pack down immediately and secure against switching on. |

## 6.1 Replacing fuse

### ATTENTION

Risk of faults!

An incorrect fuse in the power pack may cause a fault.

- Only use fuses of the type indicated.

The unit type and the rated voltage are indicated on the nameplate.

#### Use the following fuse only:

- EN CL 115 V:  
0,50 A slow, 5 x 20 mm.
  - EN CL 230 V:  
0,25 A slow, 5 x 20 mm.
1. Disconnect power pack from supply.
  2. Determine and remove the cause for the blown fuse.
  3. Detach the fuse holder using a screwdriver and lift out.
  4. Replace fuse and reattach fuse holder.

**NOTE:** *If this procedure does not eliminate the defect, return the power pack together with the ionizing unit to HAUG GmbH & Co. KG (for address, refer to back page).*

## 7 Technical data

### 7.1 Characteristics and specification

Reference temperature 23 °C

|                                 |                                     |
|---------------------------------|-------------------------------------|
| High-voltage terminals          | 1 bayonet high-voltage socket       |
| Connectable HAUG ionizing units | EI PRQ, EI RNQ, EI PSQ, CI Q, CI QP |
| Maximum connected length        | 5 m                                 |
| High-voltage                    | U = approx. 7 - 8 kV                |
| Short-circuit current           | $I_k \leq 3 \text{ mA}$             |
| Cannot be used in pulsed mode   |                                     |

### 7.2 Supply voltage

| Unit type   | Nominal value | Operating range | Frequency range | Power input                      |
|-------------|---------------|-----------------|-----------------|----------------------------------|
| 01.7801.120 | 115 VAC       | $\pm 10 \%$     | 50 - 60 Hz      | $P_{\text{max}} = 20 \text{ VA}$ |
| 01.7800.120 | 230 VAC       | $\pm 10 \%$     | 50 - 60 Hz      | $P_{\text{max}} = 20 \text{ VA}$ |

### 7.3 Ambient conditions

|  |                               |
|--|-------------------------------|
| Use in areas with potentially explosive atmospheres is prohibited. |                               |
| Only for inside use.   |                               |
|  |                               |
| <b>Temperature:</b>  |                               |
| Rated application range  | +5 °C to +45 °C               |
| Extreme range for storage and transport                            | -15 °C to +60 °C              |
|  |                               |
| <b>Humidity:</b>   |                               |
| Rated application range  | 20 % to 65 % RF               |
| Extreme range for storage and transport                            | 0 % to 85 % RF                |
|  |                               |
| <b>Air pressure:</b>   |                               |
| Rated application range  | 800 mbar to 1060 mbar         |
|  |                               |
| <b>Vibrations:</b>   |                               |
| Extreme range for storage and transport                            | max. 1,5 g (10 to 55 Hz), 1 h |
| Shock  | max. 15 g in each direction   |

## 7.4 Housing

|                    |                                       |
|--------------------|---------------------------------------|
| Protection type    | IP 41                                 |
| Protection class   | I                                     |
| Mains supply       | approx. 2,6 m fixed on the power pack |
|                    |                                       |
| <b>Dimensions:</b> |                                       |
| Height             | approx. 113 mm                        |
| Width              | approx. 150 mm                        |
| Depth              | approx. 102 mm                        |
|                    |                                       |
| <b>Weight:</b>     | approx. 3,5 kg                        |

## 8 Decommissioning

1. Switch off the machine and secure against unintended switching on.
2. Switch off the voltage supply to the power pack and secure against inadvertent switching on.
3. Disconnect the ionizing unit from the power pack.
4. Disconnect the power pack from the power supply and dismantle.



## 9 Disposal

Observe and maintain national and regional waste disposal regulations for the disposal of the power pack.

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**NOTES:**

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made by



## **HAUG GmbH & Co. KG**

Friedrich-List-Straße 18  
D-70771 Leinfelden-Echterdingen  
Telefon 07 11 / 94 98 - 0  
Telefax 07 11 / 94 98 - 298

**www.haug.de**  
E-Mail: [info@haug.de](mailto:info@haug.de)

## **HAUG Biel AG**

Postfach  
CH-2500 Biel/Bienne 6  
Johann-Renfer-Strasse 60  
CH-2500 Biel/ Bienne 6  
Telefon 0 32 / 3 44 96 96  
Telefax 0 32 / 3 44 96 97

**www.haug.de**  
E-Mail: [info@haug-biel.ch](mailto:info@haug-biel.ch)