GB

HAUG®

Operating instructions

Discharging power pack EN SL SLC MT

Ident number: 01.7909.055 (100 V), 01.7909.005 (115 V), 01.7908.005 (230 V)

Keep for future use!

Static Line

Table of contents

1 Operator instructions

Before installation and commissioning read these operating instruction in full. Always observe the safety instructions.
These operating instruction is a part of the product; make sure you retain them for later use or subsequent owners.

The discharging power pack is maintenance free and operationally safe when used as intended.

The term “high voltage” is abbreviated HV in these operating instructions (e.g. HV terminal).

The illustrations in this document are a simplified representation of the product. They render only the technical facts and provide support for the text. Departures from the actual product may be noticeable. However, these deviations neither reduce the proper function nor mitigate the specifications of the product.

1.1 Symbols used in operating instructions

⚠ WARNING

Always observe this safety instruction to avoid critical or fatal injuries.

NOTICE

Always observe this safety instruction to avoid damage to property.

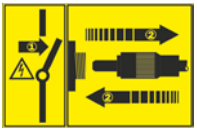
NOTE:
Important notes and additional information.

Never dispose of with household garbage.

Caution, danger spot warning!

1.2 Symbols on the discharging power pack

WARNING!
High voltage



ATTENTION!
Only plug in/unplug the ionizing unit at the HV terminal when the discharging power pack is switched off.

2 Safety

Only the persons authorized by the operator may carry out tasks on the discharging power pack.

The installer must be a trained and qualified electrician and read the operating instructions in full.
The operator must read the operating instructions in full.

When working on the discharging power pack, switch off the voltage supply and secure against inadvertent switching on.

Hazards caused by manipulated or faulty discharging power pack
Unauthorized modifications, moisture or damage to the discharging power pack may result in electric shocks or fire hazards due to sparking.

- For reasons of safety, never open or modify the discharging power pack.
- In the event of visible damage or suspected electrical defects, take the discharging power pack out of operation immediately and secure against inadvertent reuse.
- Protect the discharging power pack from moisture.
- Never carry out any unauthorized repairs to the discharging power pack.
- Always switch off the discharging power pack after use.
- Do not keep any inflammable materials in the vicinity of the discharging power pack or its components.

Damage to device and risk of fire
Short circuits can occur as a result of soiling in the high-voltage (HV) connection point. This can lead to faults with the discharging power pack and cause a fire.

- The high-voltage connections and plugs must be clean, dry and free of grease.
- Use blind plugs to protect the unused HV connection points against environmental influences. Ensure that the blind plugs are clean, dry and free of grease.

2.1 Intended use

WARNING

Risk of explosion!

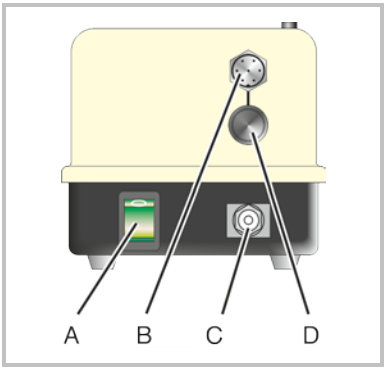
The discharging power pack may generate sparks which ignite gases, dust or similar substances.

- Never install or use the discharging power pack in areas with potentially explosive atmospheres.

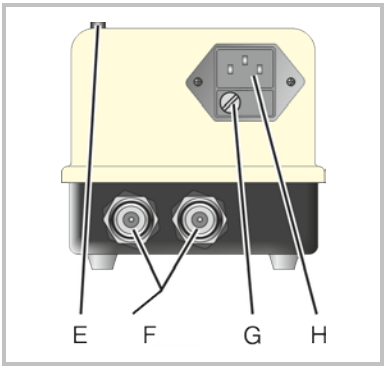
The discharging power pack is intended exclusively for the supply of alternating high voltage to HAUG ionizing units with X-2000 connector. In combination with an ionizing unit, electrostatic charges are neutralized in a production process.
Always observe the installation and operating conditions indicated in these operating instructions.
Warranty only covers products, accessories or spare parts of HAUG GmbH & Co. KG.

3 Product overview

A Power switch (is lit green if the discharging power pack is switched on)
B Signal socket
C Earth connection point (terminal)
D Jumper plug



E Indicator light
F 2 x HV connection
G Fuse holder with fuse (Replacing fuse, refer page 15)
H ICE power connection



4 Install

⚠ WARNING

Risk of explosion!

The discharging power pack may generate sparks which ignite gases, dust or similar substances.

- Never install or use the discharging power pack in areas with potentially explosive atmospheres.

⚠ WARNING

Electric shock hazard!

An electric shock hazard results from a faulty connection of the discharging power pack to the power supply.

- The discharging power pack must only be installed by a trained and qualified electrician.

NOTICE

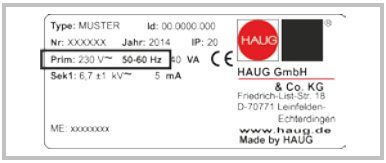
Damage to equipment!

Continuous overloading of the discharging power pack may result in failures.

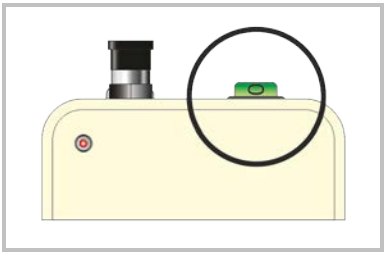
- Never exceed the permissible connected length.
- Never install the discharging power pack on a surface generating or radiating heat.
- Never install at a location subject to direct solar irradiation.

1. Check the model plate of the discharging power pack against the ordering data. In the event of damage to the discharging power pack, contact HAUG GmbH & Co. KG.

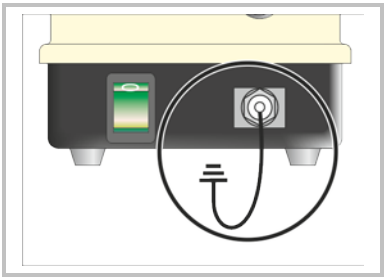
2. Before connecting, make sure that the correct supply voltage is available for the discharging power pack.
   - The model plate attached to the housing indicates the voltage.
   - If the supply voltage is incorrect, the discharging power pack may be damaged.



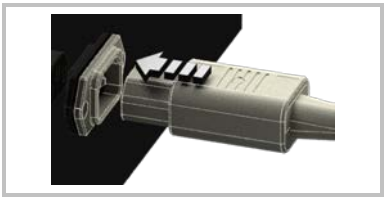
3. Place the discharging power pack at the desired place of use.
   - The position of the discharging power pack has does not affect its function.
   - Make sure that the discharging power pack is switched off.



4. The ground socket of the discharging power pack must be connected to ground potential in line with applicable standards.
   - Grounding cables of at least 1.5 mm^2 must be used.



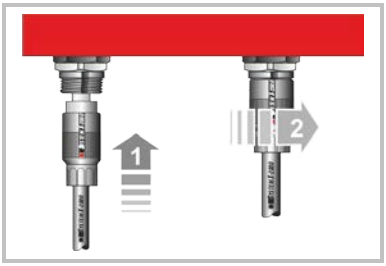
5. Connect the discharging power pack to the supply voltage. Always use the supplied IEC power cord with its integrated ground wire.
   - Plug in the IEC power cord into the cold device connection of the discharging power pack.
   - Plug in the mains plug only to a socket with functioning ground conductor.



NOTICE Contact and separation spark-overs!
When the ionizing unit is plugged in or unplugged while the discharging power pack is switched on, spark-overs will occur at the HV connection. This may result in defects in the discharging power pack.

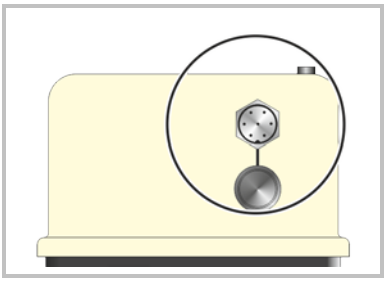
- Switch off discharging power pack before plugging in/unplugging ionizing unit.

6. Connect the ionizing unit to the HV terminal of the discharging power pack.
   - Insert the ionizing unit's HV plug in the HV terminal of the discharging power pack and press the HV cable until it reaches the stop.
   - Screw the screw cap onto the HV terminal and tighten by hand.



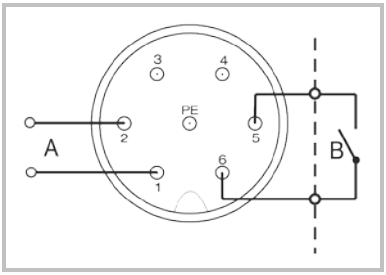
NOTE:
Protect unused HV terminals against the ingress of environmental substances using the blind plugs. The blind plugs must be clean, dry and all grease must be removed.

7. If necessary, connect the signal line to the signal socket.
   - The discharging power pack can be cycled via the signal socket.



Configuration of the signal socket:

A External control voltage
or
B External clock switch



Pin 1	External control voltage (square wave signal, 1 kHz, 10 V, positive)
Pin 2	0 V
Pin 3	not used
Pin 4	not used
Pin 5	Clock switch connection
Pin 6	Clock switch connection
PE	Shield Ground/signal ground

NOTE:
The discharging power pack only supplies voltage if the signal line is connected or the jumper plug is screwed on.
In order to avoid a malfunction while the signal line is connected, only one time-relay control unit may be connected. Either connect the external control voltage or the external clock switch.

8. The discharging power pack is ready for operation.

5 Operate

Preconditions:
The discharging power pack and the ionizing unit are connected and installed as specified in the operator instructions.

5.1 Normal operation

There is no signal line connected to the signal socket. The jumper plug must be connected to the signalling socket.

1. Use the power switch to turn on the discharging power pack.
   - To verify this, the power switch is illuminated.
   - The HV is switched on.
2. The indicator light is lit.
3. The discharging power pack is running.
4. If the operation fails, the indicator light turns off.
   - In order to correct the malfunction, proceed with troubleshooting the error. Refer page 14.

5.2 Cyclic operation

The signal line K6 is connected to the K6 signal socket of the discharging power pack.

1. Use the power switch to turn on the discharging power pack.
   - To verify this, the power switch is illuminated.
2. Use the signal line to switch on the HV.
   - Close the external clock switch.

   or
   - Trigger via the control voltage.
3. When the HV is switched on, the indicator light illuminates.
4. The discharging power pack is running.
5. If the operation fails, the indicator light turns off.
   - In order to correct the malfunction, proceed with troubleshooting the error. Refer page 14.

6 Troubleshooting

⚠ WARNING

Electric shock hazard!
The discharging power pack is operated electrically and generates a high electric voltage. In the event of any faults, there is a risk of an electric shock.

- Faults may only be eliminated by a trained and qualified electrician.

NOTE:
If the error cannot be removed in this way, return the discharging power pack and ionizing unit for checking to HAUG GmbH & Co. KG (the address is provided on the back of the envelope).

Fault	Cause	Troubleshooting
Mains switch does not illuminate.	Mains failure	Check mains fuse
	Defective fuse in discharging power pack.	Check fuse in discharging power pack.
Ionisation not available	No HV	Check connections in discharging power pack.
	Electrically conductive deposits on ionizing unit.	Clean ionizing unit
	Discharging power pack is damaged.	Shut the discharging power pack down immediately and secure against switching on.
Signalling lamp does not illuminate during operation.	The ionizing system has a fault.	Perform work steps according to the following flow chart. Refer page 16.

6.1 Replacing fuse

NOTICE

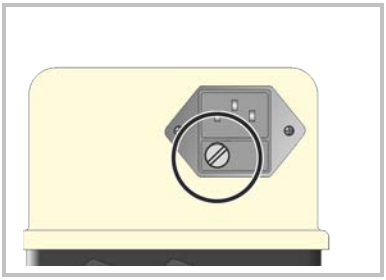
Damage to equipment!

An incorrect fuse in the discharging power pack may cause a defect. This may result in a cable fire.

- Only use fuses of the specified type.
- Never use repaired fuses.
- Never bridge the fuse.

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

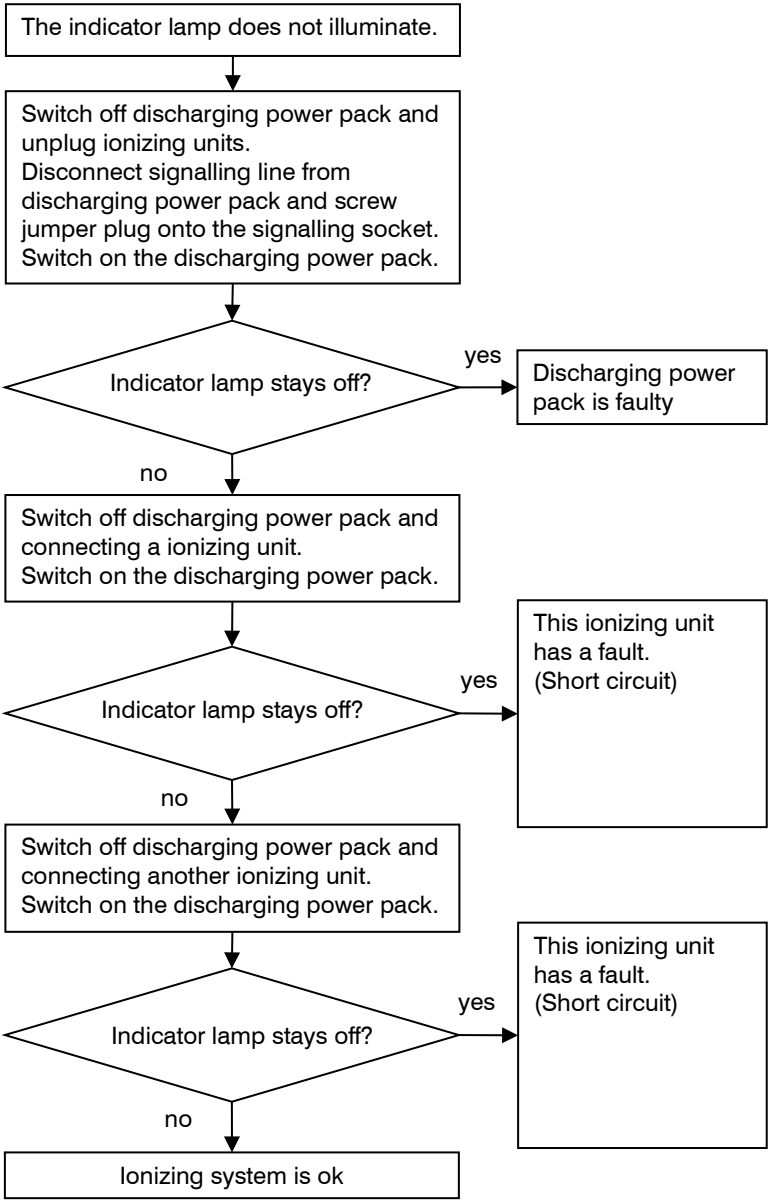
1. Disconnect discharging power pack from supply.
2. Determine and remove the cause for the blown fuse.
3. Detach the fuse holder using a screwdriver and lift out.
4. Replace fuse and reattach fuse holder.



Use the following fuse only:

- 100 V = T500 mA L250; 5 x 20 mm
- 115 V = T500 mA L250; 5 x 20 mm
- 230 V = T250 mA L250; 5 x 20 mm

6.2 Flow chart



7 Accessories/spare parts

The supplier of accessories and spare parts is the authorized local sales agent of Mettler-Toledo.

Article	Order number
Point electrode	11107765
Optional second electrode	11107762
U-Electrode universal	11107764
U-Electrode small	11140161
Ionizing kit Quantos System	11141829
Mains cable (country-specific)	On request
Blind plug for HV terminals	On request

8 Technical data

8.1 Characteristics and specification

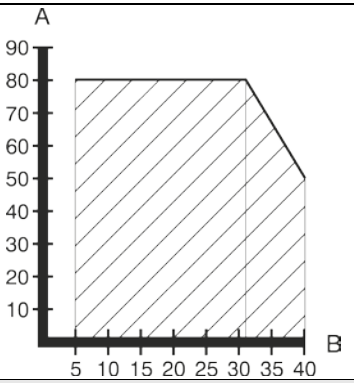
Reference temperature 23 °C

HV terminals	2
High-voltage	6.7 ±1 kV~
Short-circuit current	$I_k \leq 5$ mA
Cannot be used in pulsed mode	

8.2 Supply voltage

Unit type	**Rated value**	**Frequency range**	**Power consumption**
01.7909.055	100 V~ ±10 %	50 - 60 Hz	P_{max} = 40 VA
01.7909.005	115 V~ ±10 %	50 - 60 Hz	P_{max} = 40 VA
01.7908.005	230 V~ ±10 %	50 - 60 Hz	P_{max} = 40 VA

8.3 Ambient conditions

Never use in areas with potentially explosive atmospheres.	
Must only be used indoors.	
Height above mean seal level	to 2000 m
Temperature:	
Rated application range	+5 to +45°C
Limit range for storage and transport	-15 to +60°C
Relative humidity:	
Rated application range A = %RF B = °C	
Air pressure:	
Rated application range	810 hPa to 1074 hPa
Vibrations:	
Limit range for storage and transport	max. 1.5 g (10 to 55 Hz), 1 h
Shock	max. 15 g in each direction

8.4 Housing

Protection type	IP 20
Protection class	I
Overvoltage category	II
Pollution severity	2
Mains connection	About IEC power cord
Dimensions:	
Height	170 mm
Width	110 mm
Depth	100 mm
Weight:	3.5 kg

9 Taking out of operation

WARNING

Electric shock hazard!
The discharging power pack is operated electrically and generates a high electric voltage. Improper decommissioning may result in electric shock.

- Decommissioning may only be carried out by a trained and qualified electrician.

1. Disconnect discharging power pack from supply.
2. Disconnect the mains line from the voltage supply.
3. Disconnect the ionizing unit from the HV terminal.
4. Disconnect the signalling line from the discharging power pack.
5. Remove the discharging power pack from the production process.

9.1 Storing

Always store our products in a dry and cool place.

9.2 Disposing

Never dispose of electrical appliances together with household garbage.
Always collect separately and dispose of in an environmentally responsible way. Always observe national and regional waste disposal regulations for the disposal of electrical appliances.

If proper disposal of our products is not possible, returning the units to us may be an option. We dispose of our products in an environmentally responsible way. The address is provided on the back of the envelope.

Ionisationssysteme

DIN EN ISO 9001

EU-Konformitätserklärung

EU-Declaration of Conformity
UE Déclaration de conformité

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Die Firma, The company, La société

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erklärt in alleiniger Verantwortung, dass das elektrische Betriebsmittel
declares hereby in sole responsibility, that the electrical product
déclare de sa seule responsabilité, que le produit électrique

EN SL SLC (MT) 230V 01.7908.005, 30038086
EN SL SLC (MT) 115V 01.7909.005, 30038087
EN SL SLC (MT) 100V 01.7909.055, 30038088

in Verbindung mit den Serien der Ionisationsgeräte
with the series of the ionizing devices
avec les séries des appareils d'ionisation

OPI V4a/Peek	**03.8515.200, 30074282**
OPI XP Set	**23.8513.100, 11107750**
EI PRX U Set	**23.8091.100, 11107755**
EI PRX U small Set	**23.8091.110, 11140160**
I-Elektrode Set	**23.8092.200, 11141830**
Antistatikset U-Elektrode	**03.8001.108, 99453780**
Antistatikset U-Elektrode klein	**03.8001.109, 99453784**

mit den folgenden Richtlinien übereinstimmt:
is in conformity with the following directives:
est conforme aux directives suivants:

Niederspannungsrichtlinie Low voltage directive Directive sur les basses tensions	**2014/35/EU**	**EN 61010-1:2010**
EMV Richtlinie Electromagnetic compatibility Compatibilité électromagnétique	**2014/30/EU**	**EN 61000-6-2:2005** **EN 61000-6-4:2007+A1:2011**

Leinfelden-Echterdingen, 16.1.2019

i.V.

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