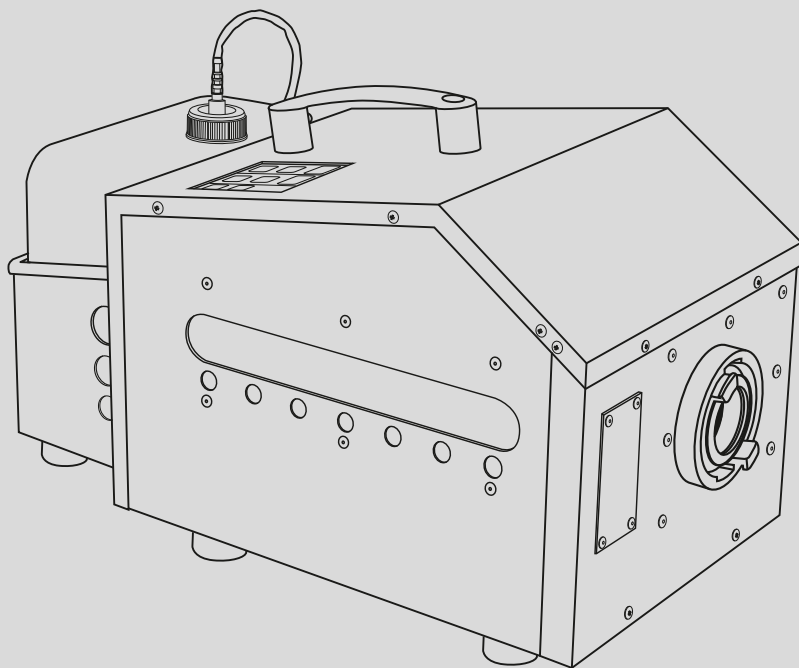


# Nebel- und Rauchsimulator

Typ fog-smoker / 2004301 / 2004303

## » BEDIENUNGSANLEITUNG




# **smoke unit**

## fog-smoker 2f

Typ 230 V / 2004301

Typ 120 V / 2004303

 **Before introduction read operating instructions and security tips and follow!**

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## 1. DEFINITION

- ⚠ Warning** If a dangerous situation calls. If it is not avoided, death or the heaviest injuries are the result.
- ⚠ Attention** If a dangerous situation calls. If it is not avoided, light or slight injuries or damages to property can be the result. Also points to improper application.

## 2. RANGE OF DELIVERY

### 2.1 Standard Accessories

- 7 m fogging hose (plastic DN 50) with 1 Storz-C coupling
- Telescopic guiding rod (maximum length 6 m) with quick coupling
- 5 litres fogging fluid in container

### 2.2. Optional accessories

- Rugged transport case for the fog-smoker 2F (order number: 2004302)
- 5 litres fogging fluid container (order number: 2004309)
- 10m remote control (order number: 2004307)

## 3. SAFETY NOTES

### 3.1. General Notes

**⚠ Warning** **The following points are absolutely to be considered:**

- Fog may activate smoke detectors!
- Do not swallow fogging fluid and keep it away from children!
- Never open a unit that is connected to the mains and never leave it unattended.

### 3.2. Considerations to operate the fog-smoker 2F

**⚠ Attention** **The following points are absolutely to be considered:**

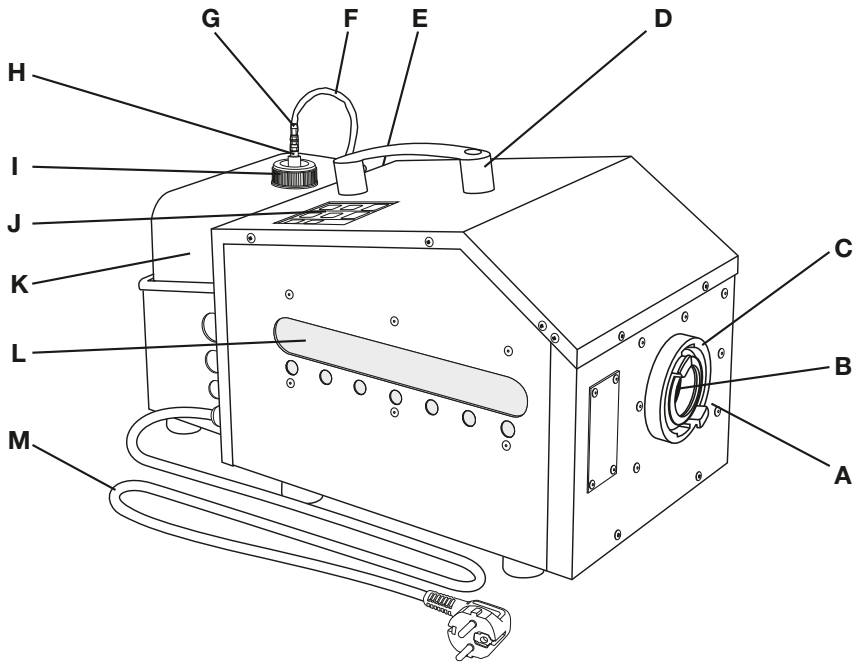
- The unit must be placed upon a surface which is not inflammable, incombustible and insensitive to heat.
- The installation location must provide sufficient space and a hard surface.
- Keep a minimum distance of 1 metre to inflammable and heat-sensitive objects.
- Glycols are alcohols and burn with a light blue, almost invisible flame. Never fog ignition sources, e.g. open fire!
- Very hot steam is discharged from the fog nozzle – risk of injury!
- Never touch the fog nozzle during operation!
- Very hot fluid droplets may exit from the fog nozzle during operation. Keep a minimum safety distance of 3 metres!

### 3.3. Considerations to operate it with emergency power sets

**⚠ Attention** the following points are absolutely to be noticed:

- Use emergency power sets of a nominal capacity of 2.5 kVa (230 V) / 2.2 kVa (120 V) or more and check for correct operation first.
- Prior to connection of the smoke unit let the emergency power set achieve the operating temperature without load (depending on the unit approx. 1–2 min).
- Only this guarantees an undisturbed operation of the smoke unit.

## 4. UNIT VIEW AND DESCRIPTION



**A - condensate drain plug**

**B - fogging nozzle**

**C - Storz-C coupling**

**D - handle**

**E - remote control connector**

**F - fluid hose**

**G - plug-in grommet**

**H - self-sealing-coupling**

**I - tank cap**

**J - display/Keypad**

**K - container (5 Liter)**

**L - filter mat**

**M - mains plug**

## 5. FOGGING FLUID

### 5.1. General

**⚠ Attention** **The following points are absolutely to be noticed:**

- Use only manufacturer approved fogging fluid "Drain-Fog" and "Fire-Drill"!
- The use of third party fluids will void the warranty on parts which come directly in contact with the fluid.
- Do not swallow fogging fluid and keep it away from children!

### 5.2. Replacing the container

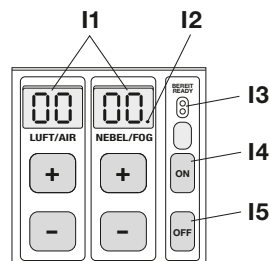
- Push back the locking sleeve (G) and remove the plug-in grommet (F).
- Remove the empty container (J) from its bracket.
- Remove the container cap (H) from the empty container and place it onto the full container.
- Place the full container in its bracket.
- Snap the plug-in grommet into the hose coupling again.

## 6. OPERATING THE FOG-SMOKER 2F

### 6.1. Choosing the location

The location of the smoke unit must:

- be free of vibrations,
- be not inflammable,
- be sufficiently supplied with fresh air,
- have an ambient temperature between 5°C and 45°C (41°F to 113°F)
- and a relative humidity of max. 80%.



### 6.2. Start

- Please follow the instructions on operation of emergency power sets under section 3.3.!
- Connect the mains plug (L) with a grounded socket (230V/50Hz).
- A dot (I2) appears at the right bottom of the keypad display (I1).
- Press the ON button (I4) to switch on the unit. The fan turbine now runs idle.
- After a heating phase of approx. 7 min the smoke unit is ready for operation. The green Ready-LEDs (I3) are on.
- You must adjust the air and fog quantities in 10 levels by pressing the + and – buttons (I1).

### 6.3. Shutting off

- Allow the unit to cool after the fogging procedure with a selected fog quantity of "0" for approx. 5 min. The forced ventilation of the unit (air quantity "0") is sufficient for that purpose.
- Press the OFF button (I5) to switch off the unit.
- Then disconnect the mains plug.

## 7. MAINTENANCE AND CARE

### 7.1. Maintenance and cleaning

- Clean or replace the blue filter mats (K) depending on their level of contamination.
- Avoid running the unit without fogging fluid. This can damage the pump.
- If there is too much condensate collected around the fog nozzle (B), remove the condensate drain plug (A) to drain the condensate.
- Use only solvent-free cleaning agents to clean the unit.

### 7.2. Storage

- Store the fog-smoker after usage in the optional transport case.
- Choose a secure and dry location for long term storage.
- Keep the smoke unit away from children!

## 8. TROUBLESHOOTING

### 8.1. Problems – possible causes

Problems	Troubleshooting
The fog-smoker doesn't produce fog.	<ol style="list-style-type: none"> <li>1. Check the power source and the correct connection.</li> <li>2. Check the fogging fluid level.</li> <li>3. Check the container connection for leakage.</li> <li>4. Check the sinter filter in the container for contamination.</li> </ol>
Loud humming during fogging.	<p><b>The pump is running without fluid. Must be avoided!</b></p> <ol style="list-style-type: none"> <li>1. Refill fogging fluid.</li> <li>2. Check the hose couplings and snap them back into place again.</li> </ol>

### 8.2. Repair Shop

For information about your local repair shops contact our

**Service-Hotline: Phone: +49 (0)34 292/654 20 or  
send us an E-mail: [service@ehle-hd.com](mailto:service@ehle-hd.com)**

## 9. TECHNICAL DATA

Technical Data	fog-smoker (230 V)	fog-smoker (120 V)	mega-smoker (400 V)
Dimensions (LxBxH)	560 x 295 x 350 mm		930 x 530 x 460mm
Weight (incl. Fluid)	21,5 kg		56,0 kg
Supply voltage	230 V (AC)	120 V (AC)	400 V (AC)
Evaporator power	1.200 W	1.200 W	6.000 W
Fan turbine power	1.200 W	1.000 W	2 x 1.200 W
Max. power consumption	2.400 W	2.200 W	9.000 W
Protection	IP44		
Air output	approx. 50 l/s		100 l/s
Fluid amount in container	5 l		10 l
Fluid consumption	with max. output: 120 ml/min		with max. output: 200 ml/min
	permanent fogging: 35 ml/min		permanent fogging: 135 ml/min
Fog performance	approx. 600 m <sup>3</sup> /min		approx. 1800 m <sup>3</sup> /min
Fogging Time	at level 10: approx. 40 s		
	Level 5 and less: Permanent fogging		
Heating Time	Approx. 7 minutes		Approx. 12 minutes

## 10. QUITE SAFE EXPLANATION ABOUT THE FLUID

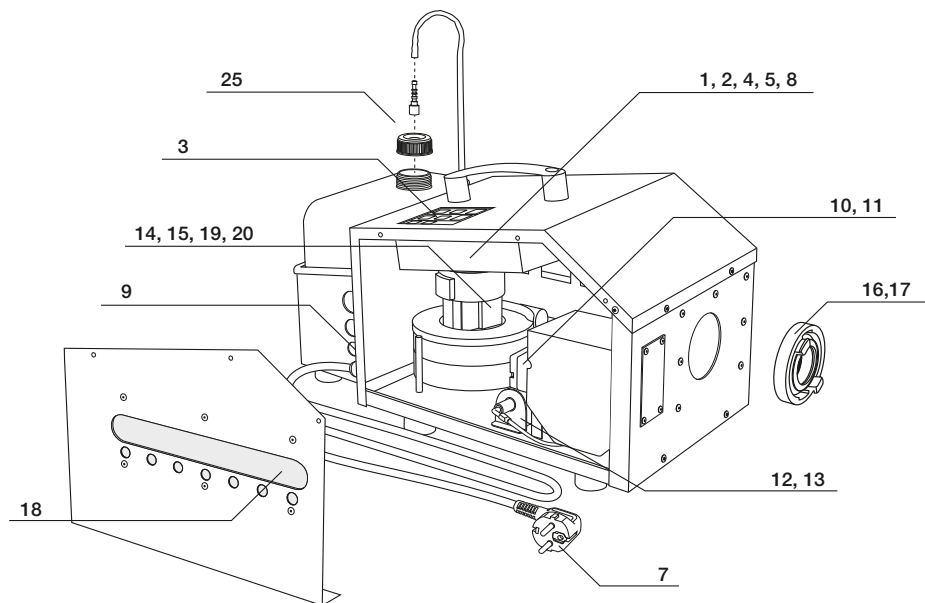
This is to certify that our fog fluids Drain-Fog and Fire-Drill are not a hazardous substances within the meaning of § 3/3a the Chemicals Act of 16.09.1980, as amended on 14.03.1990, text version of the Federal Gazette 1/1990, page 522. (The Page 1219 amending the Annex 1 of 05.06.1991, BGBl 1, is incorporated.)

The main components are in the list of substances in the Annex VI of the Ordinance on Hazardous Substances not listed (as of 26.08.1986, BGBl 1, Page 1470, as amended by the third amending the Hazardous Substances Ordinance of 05.06.1991, BGBl 1, page 1218).

She was assigned no MAK value after IRGS 900 of the Hazardous Materials (ACGIH TLV 1991). When used properly, no damages to health have to worry about.

The fluid is not flammable in the sense of the Hazardous Substances Regulation Part 4, Chapter 4.1. the product is water soluble and biodegradable.

See also the EG-Safety-Datasheets for Drain-Fog and Fire-Drill.



position	description	partnumbers		
		quantity	230 V - version	120 V - version
1	Control panel PCB1	1	02 015 011	02 015 021
2	Pcb power PCB2	1	02 015 012	02 015 002
3	Key foil	1	02 015 004	
4	Connector 8-pin green Phönix RM5	1	02 015 001	
5	Connector 2-pin green	1	02 015 003	
6	Overvoltage suppressor BTA 16/600 Triac 25A	1	02 015 030	
7	Power cord 3x1 H07RN 3 m	1	02 015 014	02 015 026
8	KOKA ribbon cable fog smoker	1	02 015 044	
9	Fuseholder IP67	1	02 015 013	02 015 022
10	Heat exchanger	1	02 015 019	02 015 035
11	Temperature sensor heater	1	02 015 023	
12	Heater non-return valve	1	02 015 018	
13	Pump complete fog smoker	1	02 015 047	02 015 034
14	Vacuum cleaner motor	1	02 015 015	02 015 033
15	Hose 51 mm, length 0,4 m	1	02 015 016	
16	Storz coupling C fog smoker	1	02 015 048	
17	Silicone-hose red 5x2mm for nozzle	1	02 015 046	
18	Air filter 300x80x30 fog Smoker	2	02 015 031	
19	Carbon brush	1	02 015 020	
20	Fog smoker hose d51mm, 15mm	1	02 015 052	
21	PE bend 90° DN50 mm	1	02 015 039	
22	PP hose with 1x muffle 50x150 mm	1	02 015 038	
23	Tool clip 51-80 telescope bar	1	02 015 008	
24	Plug-in sleeve to telescope bar fog smoker	1	02 015 007	
25	Tank cap kit - with vent valve, fluid hose and self-sealing-coupling	1	02 015 005	