# SE-ACB-80 High Power AC Antistatic Bar – 8 kV

Extended-range, high-speed static elimination for demanding industrial production lines



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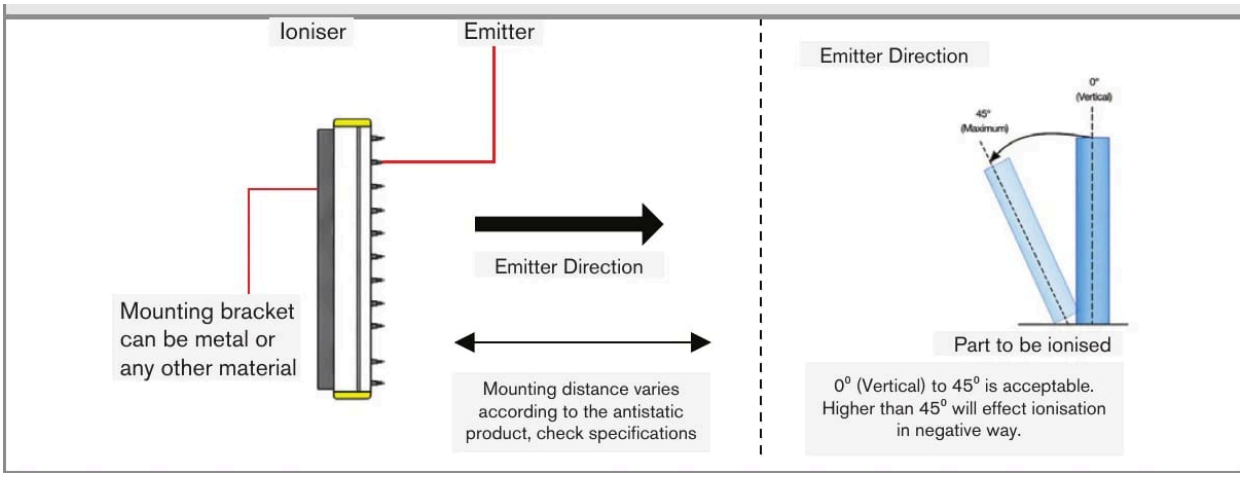
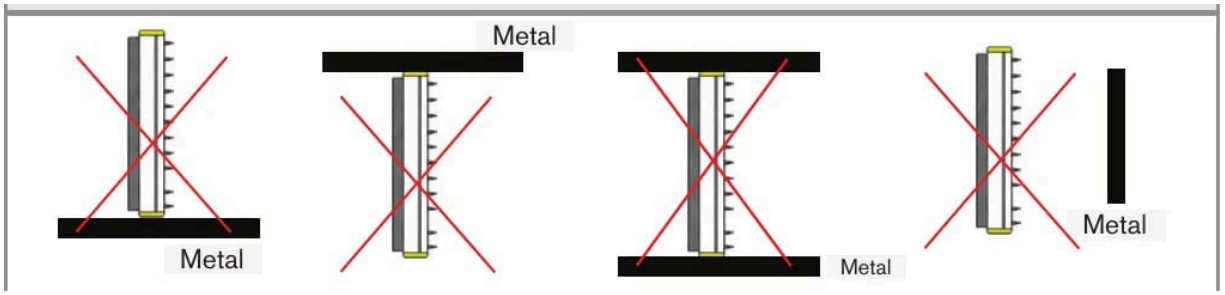
## 1 Important — mounting

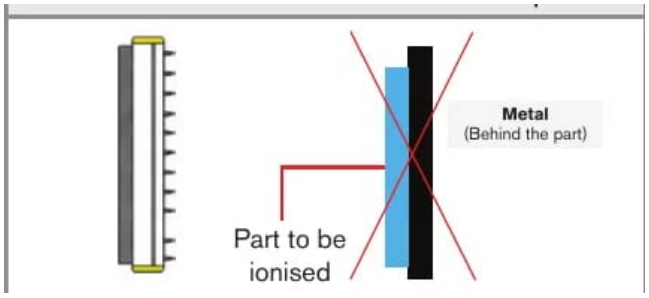
- When installing ionizers without air assist, always point the emitters towards the part. Tilted mounting of up to 45° from vertical is acceptable; a larger angle reduces ionization performance.
- Do not cover the ionizer with metal and do not attach metal close to the emitter pins.
- Never place metal behind the part to be ionized. Otherwise the static eliminator cannot neutralise the part.
- The mounting bracket can be metal or any other material.
- The mounting distance depends on the antistatic product — see the technical information.




Emitter direction and permissible tilt (0° – 45°)




Do not cover the ionizer with metal or attach metal close to the emitter pins




Never put metal behind the part to be ionized

## 2 Intended use

The SE-ACB-80 AC antistatic bar is designed for use in industrial areas. It neutralises and cleans charged plastic, glass, fabric and other non-conductive parts. Negative and positive ions produced by the stainless steel emitter pins ionize the part and eliminate static electricity, which causes quality and safety problems.

Mount the bar at an effective working distance of 25 – 250 mm from the surface to be neutralised. Connect it to an SE-PAC-80-2-C or SE-PAC-80-4-C power unit.

## 3 Operating limits

The system must be operated within the limits specified in the technical data and in accordance with the technical specifications and installation instructions.

The system must be used in such a way that no persons are endangered and no machines or other material goods are damaged in the event of a malfunction or total failure of the system. Take additional precautions for safety and damage prevention in safety-related applications.

## 4 Technical information

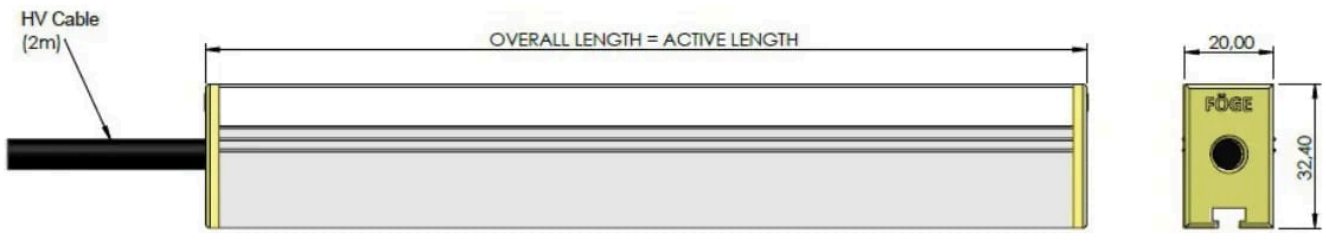
| | |
|---|---|
| **Product code** | SE-ACB-80-xxxx (length in mm, e.g. SE-ACB-80-0300 = 300 mm) |
| **Compatible power unit** | SE-PAC-80-2-C (2 outputs) · SE-PAC-80-4-C (4 outputs) |
| **Ionization type** | High voltage AC — shockless |
| **Ionization voltage** | 8 kV |
| **Ionization range** | 25 – 250 mm * |
| **Max. line speed** | 700 m/min |
| **Ordering length** | 100 – 4500 mm |
| **Pin current (safety)** | < 50 µA (shockless — safe for operators) |
| **Emitter pin material** | Stainless steel (long service life) |
| **Polarity** | Alternating AC |
| **Operating temperature** | Max. 60 °C |
| **Max. humidity** | 70 % rH, non-condensing |
| **Protection class** | IP66 — fully sealed |
| **Standard cable** | C2 — 2 m HFFR-protected flex cable with HV connector |
| **Optional cable** | SE-CAB-AC-1 — non-standard cable lengths in 1 m steps, within the 12 m total length per power unit |
| **Housing** | Washable, rugged industrial-grade body |
| **EMC compliance** | 2014/30/EU — EMC Directive |
| **Electrical safety** | 2014/35/EU — Low Voltage Directive |
| **Bars per power unit** | Up to 4 bars per SE-PAC-80 power unit |

* Ionization range measured at standard conditions (20 °C, 50 % rH). Effective range may vary with ambient humidity, temperature and line speed.

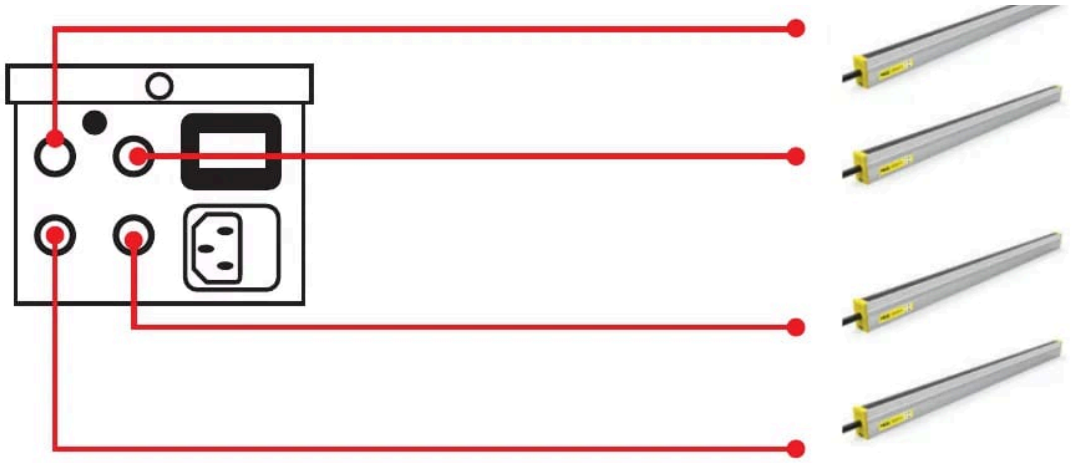
## 5 Dimensions and installation

Operating the system requires knowledge of the assembly instructions. The signal words used are explained in the section Safety.

- The total length of all devices and cables connected to one SE-PAC power unit must not exceed 12 m. Subtract the length of the antistatic bars from the total length.
- If the permissible total length is exceeded, the power unit may not function properly, may be damaged, or may interrupt the power supply to prevent further damage.
- SE-CAB-AC-1: non-standard cable lengths are available in 1 m steps within the 12 m total length.



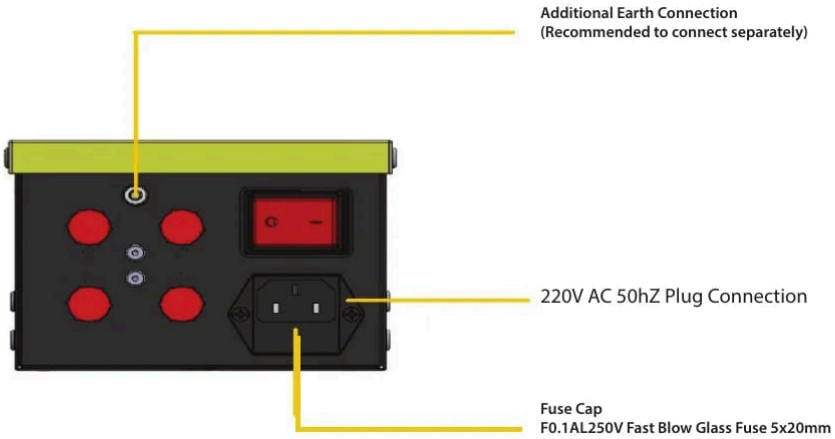

Dimensions



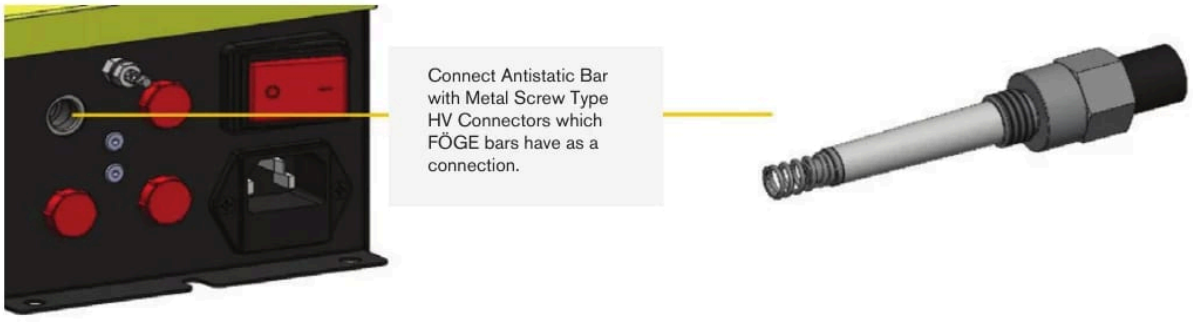
Connection of up to four devices to one SE-PAC power unit (total length of devices and cables within the permitted limit)

## 6 Electrical connection (SE-PAC power unit)

- Connect the device to the SE-PAC power unit with its metal screw-type HV connector.
- Power unit supply: 220 V AC, 50 Hz plug connection.
- Fuse cap: F0.1AL250V fast-blow glass fuse, 5 × 20 mm.
- An additional earth connection is recommended; connect it separately.

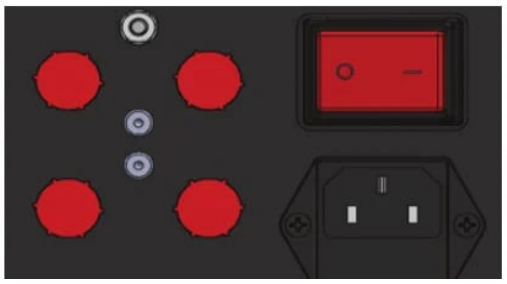



SE-PAC power unit: earth connection, mains plug and fuse




Connect the device with its metal screw-type HV connector

## 7 Display and controls (SE-PAC power unit)



SE-PAC: ON/OFF switch

| Element | Function |
|---|---|
| **ON/OFF switch** | Switches the power unit on and off. |
| **ON/OFF light** | Shows whether the power unit is switched on. |

## 8 Faults

- Do not open the product in any of the cases below or in any other case.
- If the switch is on but the ON/OFF light is off, replace the fuse in the power unit: F0.1AL250V fast-blow glass fuse, 5 × 20 mm.

## 9 Warnings

- Connect the power supply and the display/output device according to the safety regulations for electrical equipment.
- The supply voltage must not exceed the specified limits.
- Avoid shocks and impacts to the device.
- Protect the cable against damage.

Possible consequences of non-observance: risk of injury by electric shock; damage to or destruction of the device.

## 10 Maintenance

Due to the ionization process, airborne particles stick to the emitter pins and carbonise. This reduces ionization performance. All AC and DC ionizing bars must be checked and cleaned regularly with the FÖGE Antistatic Products Maintenance Kit (cleaning fluid and brushes).

The cleaning interval depends on the process and the environment.

**⚠ Switch the device OFF before cleaning and do not switch it ON again until it is dry.**

1. Clean the static control device with the FÖGE cleaning brush.
2. Attach a spray head to the bottle containing the cleaning fluid.
3. Moisten a cloth with cleaning fluid and wipe the static control device, taking care around the emitters.
4. Repeat brushing and cleaning until the static control device is clean.
5. Carefully polish the pins with a dry cloth.

## 11 Safety

Operating the system requires knowledge of the assembly instructions. The following signal words are used in these instructions:

| Signal word | Meaning |
|---|---|
| **WARNING** | Indicates a hazardous situation which, if not avoided, could result in death or serious injury. |
| **NOTICE** | Indicates a situation that may result in property damage if not avoided. |
| **ELECTRIC SHOCK** | Indicates a risk of electric shock if the instructions are not followed. |

## 12 Liability for material defects

All components of the device have been checked and tested for functionality at the production facility. If defects occur despite our careful quality control, FÖGE or your dealer must be notified immediately.

The liability for material defects is 12 months from delivery. Within this period, defective parts, except wearing parts, are repaired or replaced free of charge if the device is returned to FÖGE with shipping costs prepaid. Damage caused by improper handling, the use of force, or repairs or modifications by third parties is not covered. Repairs are carried out exclusively by FÖGE.

Further claims cannot be made. Claims arising from the purchase contract remain unaffected. In particular, FÖGE shall not be liable for any consequential, special, indirect or incidental damage. In the interest of further development, FÖGE reserves the right to make design changes without notice.

## 13 Decommissioning and disposal

Disconnect the power supply and the output cable from the device.

Incorrect disposal may harm the environment. Dispose of the device, its components and accessories, and the packaging materials in compliance with the waste treatment and disposal regulations applicable in the country and region of use.