SE-BLC-F-75-C Compact Antistatic Blower – Pulsed DC

Maintenance-free pulsed DC ionizing blower — no compressed air, no high-voltage power unit, automatic pin cleaning



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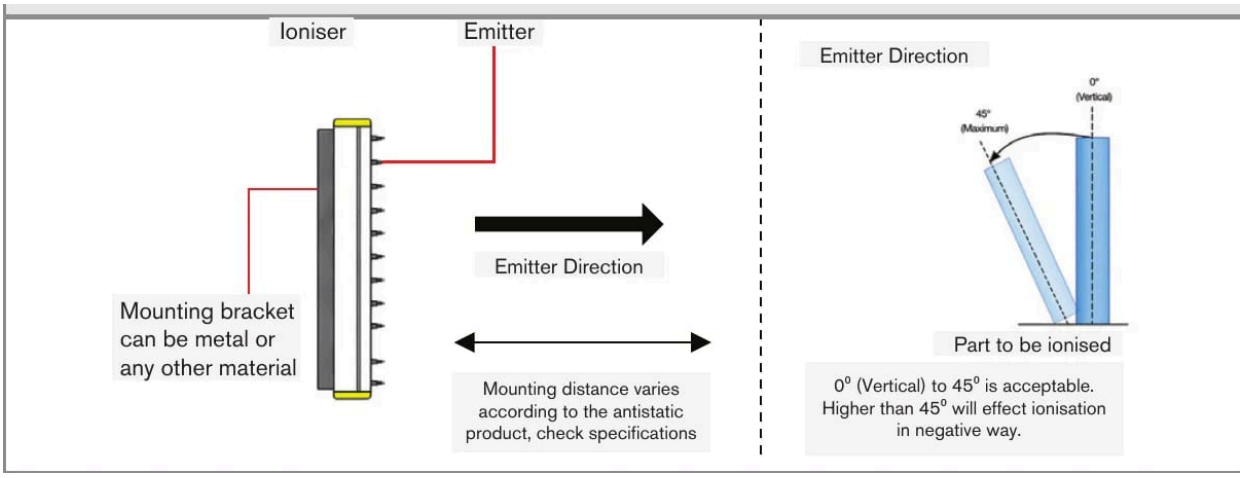
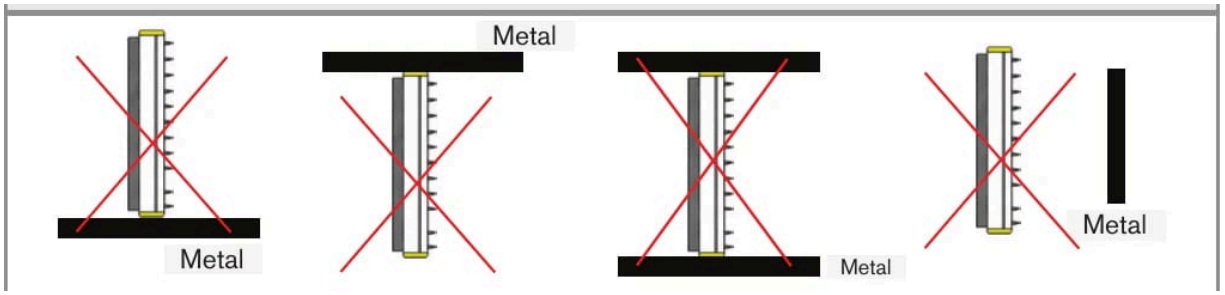
1 Important — mounting

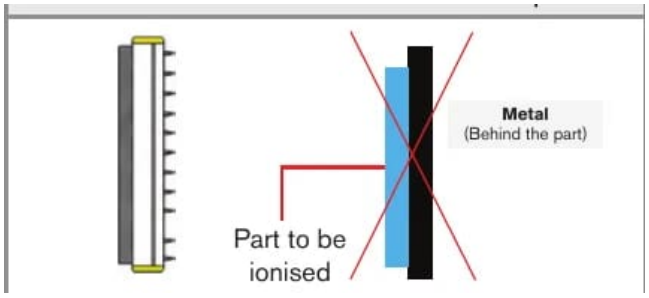
- When installing ionizers without air assist, always point the emitters towards the part. Tilted mounting of up to 45° from vertical is acceptable; a larger angle reduces ionization performance.
- Do not cover the ionizer with metal and do not attach metal close to the emitter pins.
- Never place metal 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-BLC series compact antistatic blower is designed for use in industrial areas. It neutralises charged plastic, glass, fabric and other non-conductive parts. The airflow from the ionizer carries negative and positive ions to the part, which ionize it and eliminate static electricity, which causes quality and safety problems.

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-BLC-F-75-C

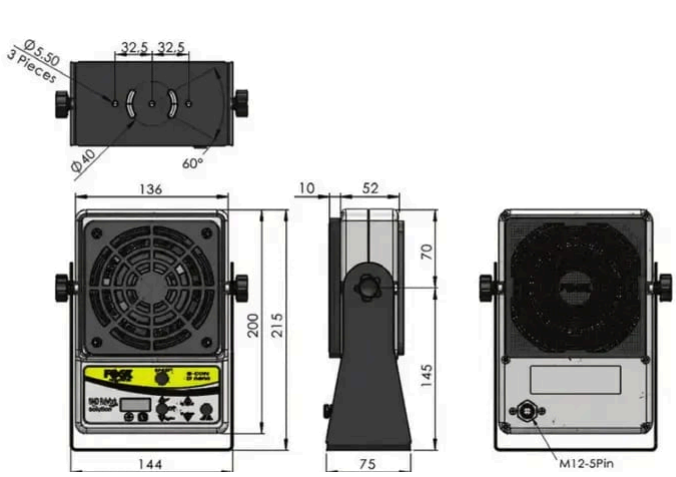
Ionization type	Pulsed DC — shockless
Pin current (safety)	< 250 µA
Operating voltage	24 V DC (21 – 28 V) via M12 connector · 0.4 A · max. 9 W
Power supply (optional)	SE-PSU-24-C-M12 (220 V AC to 24 V DC) · not included
Connector	M12, 5-pin (cable not included)
Fan speed control	Front panel buttons — step-adjustable fan speed
Fan type	Adjustable, double ball bearing — long lifetime, lightweight
Pin cleaning	Integrated automatic cleaning brush — maintenance-free
Filter	Replaceable foam filter, 10 PPI (optional) · protects fan and ionizing system
Ionization range	Up to 500 mm *
Decay time	1 kV → 100 V in < 7 s at 500 mm
LED indicators	Power · ionization · fault
Noise level	< 60 dB(A) at 30 cm (typical: 38 dB)
Emitter pin material	Tungsten — extremely long lifetime
Polarity	Alternating pulsed DC (balanced ion output)
Mounting	Adjustable 2-way mounting bracket
Operating temperature	0 – 50 °C
Max. humidity	70 % rH
Housing	Industrial-grade, impact-resistant
EMC compliance	2014/30/EU — EMC Directive
Electrical safety	2014/35/EU — Low Voltage Directive

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

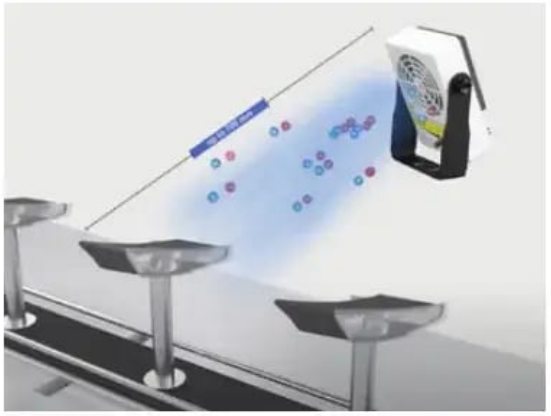
5 Dimensions and installation

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

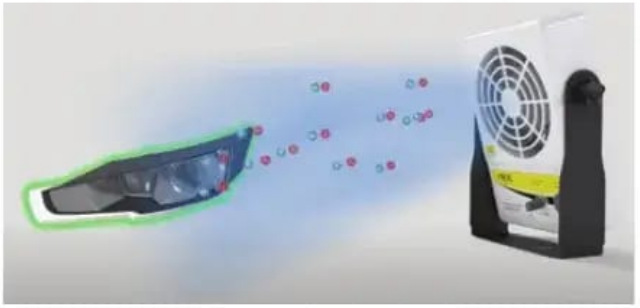
Direct the airflow towards the charged parts. Use the adjustable 2-way mounting bracket to set the angle.



Dimensions



Air blow direction towards the charged parts



Air blow direction towards the charged parts

6 Electrical connection — M12

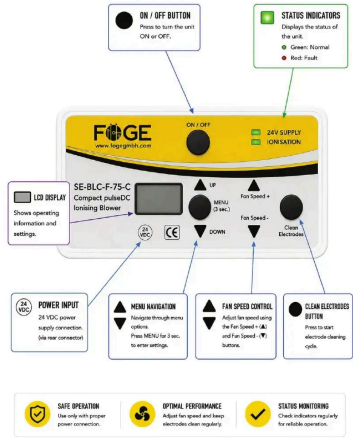
- Supply: 24 V DC (21 – 28 V) via the M12 5-pin connector, 0.4 A, max. 9 W.
- Use a 4-pin M12 cable for the electrical connection. The device connector has 5 pins; the centre pin is reserved for factory programming and is not used by the 4-pin cable.
- Use the SE-PSU-24-C-M12 power supply (220 V AC to 24 V DC, sold separately) and a 4-pin M12 connection cable (sold separately).

Pin	Function
1	+24 V DC supply
2	Fault output
3	GND
4	Remote control

7 Display, controls and faults

Fan speed is adjusted with the front panel buttons; the display shows the fan speed level and the ionization balance.

Indicator	Meaning / action
24 V supply LED off	24 V DC power supply missing — check cable, connector or power supply.
24 V supply LED on	Power supply OK.
Ionization LED on	Ionization OK.
Ionization LED off	Checking the device condition at start, or ionization is off because of the fan or the HV power unit.
Fan fault	The fan is not working. Make a visual check: if a part is stuck in the fan, cut off the power and remove it. Otherwise contact FÖGE.
Ionization fault	The ionization power unit is not working. Make a visual check: if a part is stuck in the fan, cut off the power and remove it. Otherwise contact FÖGE.



Control panel functions

8 Automatic electrode cleaning

The SE-BLC-F-75-C has an integrated brush that continuously sweeps the tungsten emitter pins during operation, removing dust automatically. The optional replaceable 10 PPI foam filter protects the fan and the ionizing chamber in dusty environments; replace it when it is visibly contaminated.



Automatic electrode cleaning

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.