STATICO

Product Information for Model No. S3002 Ionizing Blower

Description

The desktop ionizing blower produces an airflow that is rich in positive and negative ions. Directing the airflow on an object that has a static electricity charge will neutralize the charge. S3002 is a portable ionized air blower. It uses a small fan to produce airflow. The volume of airflow is controlled by a variable speed control, which provides a wide range of airflow setting. The high voltage AC is applied to a circular arrangement of tungsten steel ion emitter points, which results in an intense alternating electric field at the tip of the emitter points. It is this electric field that creates alternating polarity ions in the airflow. To assure that the unit is working properly, the high voltage AC is monitored by an ionization indicator lamp.

S3002 features a patented balancing circuit. Also features a patented built-in emitter point clear. Using the point clear takes only seconds. Cleaning the emitter points on a weekly basis prevents the build-up of airborne debris all electrical ionizers are prone to. This keeps your blower working in top form for the life of the unit. The desktop ionizing blower was designed for use with sensitive electronic components, where electrostatic discharge is a problem. The desk-top ionizing blower can also be used where static electricity causes problems such as: attraction of dirt to product, misalignment of small parts due to electrostatic “jumping” and undesirable adhesion of plastic films due to electrostatic charge.

System Features

- Small, lightweight, and portable
- Rapidly neutralizes static charges
- Variable speed fan with wide range of air flow
- Inherently balanced ion output
- Ionization indicator lamp

Specifications

Voltage	220V/50Hz, 110V/60Hz
Current	Draw Max.0.25 Amp (fan high, light on)
	Min 0.12 Amp (fan low, light off)
Air Volume Output	Fan Speed Flow
	Low 45 CFM
	High 110 CFM
Air Flow characteristics	30cm×30cm Area Coverage
Operating Temperature	32°F (0°C) –To- 122°F (50°C)
Enclosure	Aluminum
Finish	Powder Coat
	Size(190mmL×95mmW×260mmH)
Ion Balance (offset voltage)	0V+/- 10V

Ion Output (Discharge Time)

Distance from ionizer	Left 300mm	Center line	Right 300mm
300mm		1.3sec	
600mm	3.2sec	2.5sec	3.3sec
900mm	6.4sec	4.6sec	6.5sec

1. Distance measured in mm, decay time measured in seconds.
2. Test data available using ME 268A Charge Plate Analyzer.
3. Test figures are subject to the variation in the atmospheric conditions.
4. Discharge times are in seconds from 1000 volts to 100 volts.

Maintenance

1. Emitter Cleaning
To clean ion emitter points: simply rotate point cleaner knob located at center of each outlet clockwise to the stop (approximately one turn) and release. The spring-loaded point cleaning brush will return to its home position.

2. Air Inlet and Outlet Cleaning
The air inlet grilles on the top of the unit and ionized air outlets should remain clean to prevent restriction of airflow. They can be cleaned with a soft brush or vacuum.

3. Ion Output Check
Use a Charged Plate Monitor to test the unit for ion output and discharge times. If a Charged Plate Monitor is not available, alternatively a Periodical Verification System (S2001PVSK); or (S2001) can be used.
Ion output may be checked using the following procedures.
Take a piece of plastic and rub it with cloth until a static charge can be read with the static meter.
Turn on the S3002 unit and set fan speed to high.
Hold the plastic 1-foot away from center of ionized air outlet for five seconds.
Remove plastic from ionized air stream and measure static charge. The plastic should be neutralized.
If no instrumentation is available, ion output may be verified with the following procedure.
Tear-off about a 300mm length of Scotch brand (or equivalent) transparent tape.
Approach non-adhesive side of tape with your free hand and note the electrostatic attraction of tape to your hand.
Pass tape through the ionized air stream approximately 1 foot from unit and again approach non-adhesive side of tape with your free hand. If the tape has been neutralized, it shall not be attracted by your hand.

4. Ion Balance Check
Use a Charged Plate Monitor to test unit for ion balance of +/- 10v.
Do not try to determine ion balance by holding an Electrostatic Fieldmeter without charge plate in the ionized air stream as this will result in a meaningless reading. Alternatively S2001PVSK or S2002 can be used.

Caution

Electrical Shock Hazard

Do not insert objects through intake or outlet grille.
Do not try to verify operation of unit by drawing a spark from an ion emitter point. The design of the balancing circuit makes the “spark test” inconclusive. Sustained grounding of ion emitters may damage balancing circuit.