

High-voltage Power Supplies

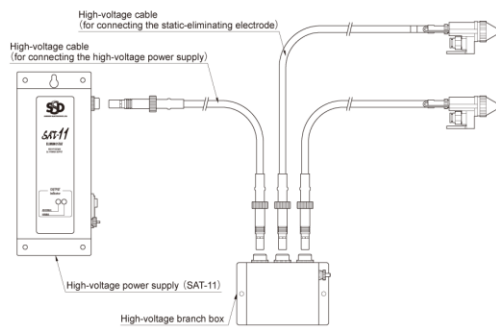
ELIMINOSTAT SAT Series

ELIMINOSTAT SAT Series

Safety device meeting Product Liability standards

A safety device detects an abnormal leak electric current and stops a high pressure power supply

SAT Series Static Eliminator Connection Example



Please use the following calculation formulae to configure your system.

SAT-11, AT-10	[Total electrode length] + [Total cable length] ≤ 8m
SAT-20, SAT-30	[Total electrode length] ≤ 10m + [Total cable length] ≤ 12m

* The length of the branch box is calculated as 1m, and the length of the AP-5, AG-5, and FAPS-GP electrodes as 0.5 m.

* Please make sure the limited length of cable and bar before using. Because when over-length using will cause alarm of SAT series.

Main Features

The ELIMINOSTAT SAT Series comprises a static-eliminating electrode, a high-voltage power supply, high voltage cables and a high-voltage branch box for connecting the system units.

The SAT Series static eliminators are provided with a safety device that meets standards proscribed under the Product Liability Law.

This safety device incorporated in the SAT Series high-voltage power supplies is an over-current protector that cuts off the high-voltage power supply when an abnormal current is detected in the electrode or in the high-voltage cables.

- The SAT Series static eliminators use the AC corona discharge method to provide a stable static elimination performance and a good balance between the positive and negative ions.
- The high-voltage power supplies incorporate a safety device that meets standards proscribed under the Product Liability Law to maintain high reliability (a safety device is not provided with the AT-10).
- The safety device uses an extremely high-precision method that detects an over-current in the secondary high-voltage transformer circuit. If an abnormal current leakage is detected in the static-eliminating electrode or a high-voltage cable, the safety device cuts off the high-voltage power supply and displays an alarm.
- Shielded cables are used for the high-voltage cables to reduce the generation of noise.
- The SAT Series high-voltage power supplies can be combined with any of the bar, point, or air electrodes offered.

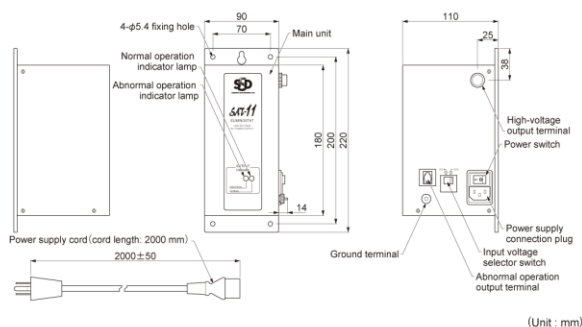
ELIMINOSTAT SAT-11



- Powered-up and
- Abnormal Alarm Output



Dimensional Diagrams

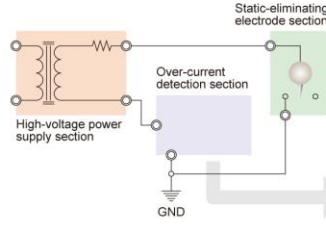


Model	SAT-11
Input power supply	110~120VAC or 220~240VAC (switch-selectable)
Current consumption	25 VA
HV power supply used	Commercial frequency alternating current power supply (wire wound high-voltage power supply)
Output voltage	7.0 kVAC
Allowable output current	2.5 mA
Operating Environment	0 to 40°C
Main unit dimensions	90×220×110 mm (W×H×D)
Weight	3200 g
Alarm functions	Buzzer and LED indication when a high-voltage abnormality or shutdown occurs
Allowable length for connecting electrodes/wiring	8 meters in total
Accessories	Power supply cord (100 VAC 3P-plug) (cord length: 2000 mm)

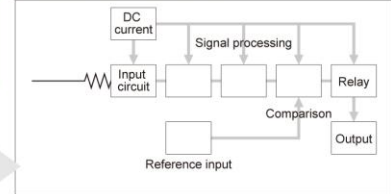
Configuration of the Safety Device

- The over-current detection section is a device that detects an over-current by measuring the current returned to the secondary ground terminal on the high-voltage transformer and comparing it with the reference input value.
- When it detects an abnormal leakage current on the static-eliminating electrode or a high-voltage cable, the safety device stops the high-voltage power supply and displays an alarm.

Model	Current setting for abnormality detection
SAT-11	Upper limit 2.5 mA constant
SAT-20	3 settings: 2, 3.5, or 5 mA
SAT-30	Digital setting enabled up to 0.5 mA in 1 μA increments



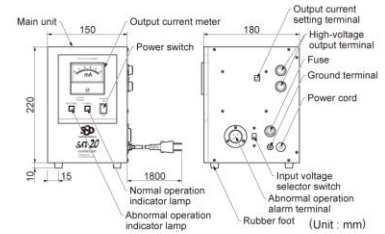
Over-current detection section



ELIMINOSTAT SAT-20



Model	SAT-20
Input power supply	110~120VAC or 220~240VAC (switch-selectable)
Current consumption	Volume: 40 VA
HV power supply used	Commercial frequency alternating current power supply (wire wound high-voltage power supply)
Output voltage	7.0 kVAC
Allowable output current	Maximum 5.0 mA (2 mA, 3.5 mA, 5 mA switch-selectable settings)
Operating Environment	0 to 40°C
Main unit dimensions	150×230×180 mm (W×H×D)
Weight	6000 g
Alarm functions	Buzzer and LED indication when a high-voltage abnormality or shutdown occurs
Allowable length for connecting electrodes/wiring	Electrode length: 10 m; cable length: 12 m
Accessories	Metallic connector for alarm output; protective bushing for high-voltage output; 3-pin adapter



ELIMINOSTAT SAT-30



Model	SAT-30
Input power supply	110~120VAC or 220~240VAC (switch-selectable)
Current consumption	Volume: 40 VA
HV power supply used	Commercial frequency alternating current power supply (wire wound high-voltage power supply)
Output voltage	7.0 kVAC
Allowable output current	Maximum 5.0 mA (upper and lower limits settable in 1 μA units)
Operating Environment	0 to 40°C
Main unit dimensions	150×230×180 mm (W×H×D)
Weight	6000 g
Alarm functions	Buzzer and LED indication when a high-voltage abnormality or shutdown occurs
Allowable length for connecting electrodes/wiring	Electrode length: 10 m; cable length: 12 m
Accessories	Metallic connector for alarm output; protective bushing for high-voltage output; 3-pin adapter

