

High-voltage Power Supplies

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	SAT-30 Digital setting enabled up to 5mA in 1μA increments

Safety device meeting Product Liability standards

ELIMINOSTAT SAT Series

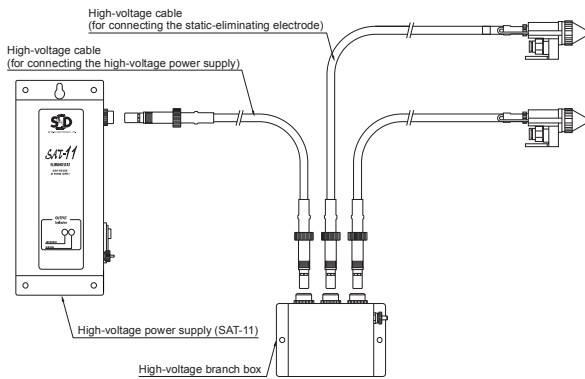
A safety device detects an abnormal leak electric current and stops a high pressure power supply

Powered-up and Abnormal Alarm Output

ELIMINOSTAT SAT-11

SAT Series

Static Eliminator Connection Example



SAT-11



Please use the following calculation formulae to configure your system.

SAT-11/AT-10	$[\text{Total electrode length}] + [\text{Total cable length}] \leq 8\text{m}$
SAT-20/SAT-30	$[\text{Total electrode length}] \leq 10\text{m} + [\text{Total cable length}] \leq 12\text{m}$

* 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.

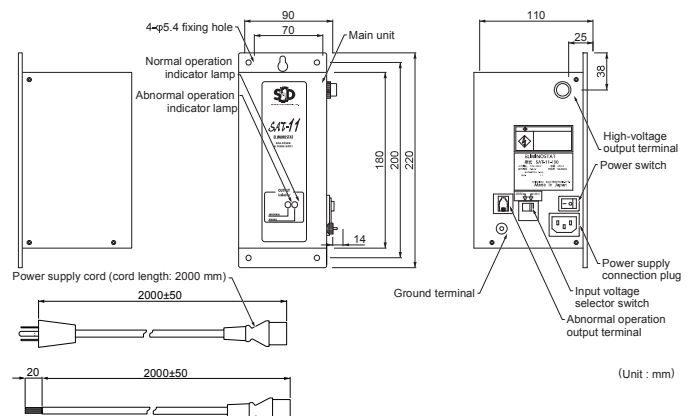
Main Features

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.

Dimension Diagram



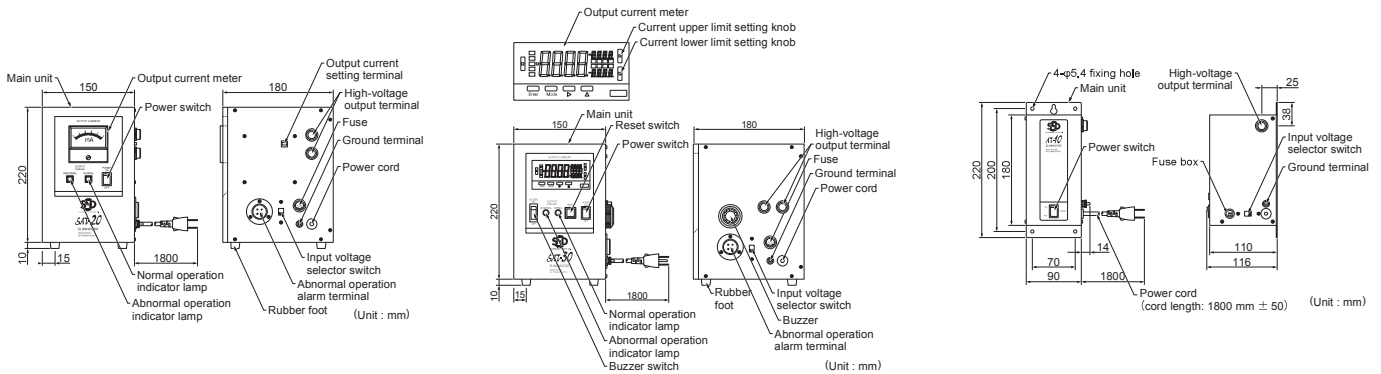
ELIMINOSTAT SAT-20

ELIMINOSTAT SAT-30

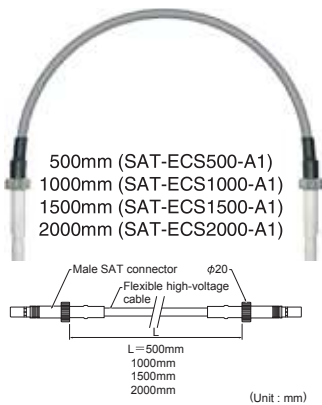
ELIMINOSTAT AT-10



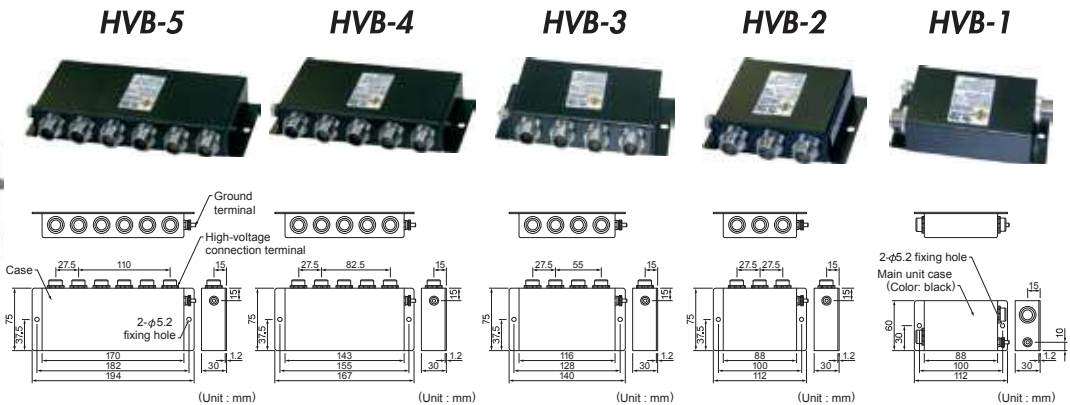
Dimension Diagram



High-voltage Cables SAT-ECS-A1



High-voltage Branch Boxes HVB



Specifications

Model	SAT-11	SAT-20	SAT-30	AT-10
Input power supply	110~120VAC or 220~240VAC (switch-selectable)			
HV power supply used	Commercial frequency alternating current power supply (wire wound high-voltage power supply)			
Allowable output current	2.5mA	Maximum 5.0mA (2mA, 3.5mA, 5mA switch-selectable settings)	Maximum 5.0mA (upper and lower limits settable in 1μA units)	2.3mA
Operating Environment	0 to 40°C			
Main unit dimensions	90×220×110mm (W×H×D)	150×230×180mm (W×H×D)	150×230×180mm (W×H×D)	90×220×110mm (W×H×D)
Weight	3600g	6000g	6000g	3800g
Alarm functions	LED indication when a high-voltage abnormality or shutdown occurs			
Allowable length for connecting electrodes/wiring	8 meters in total	Electrode length: 10m; cable length: 12m		8 meters in total
Accessories	Power supply cord (100 VAC 3P-plug) (cord length: 2000mm)	Metallic connector for alarm output; protective bushing for high-voltage output; 3-pin adapter		-

AT-10 is not provided with the safety device.

Electrodes

AC Voltage Application Method Static Eliminators

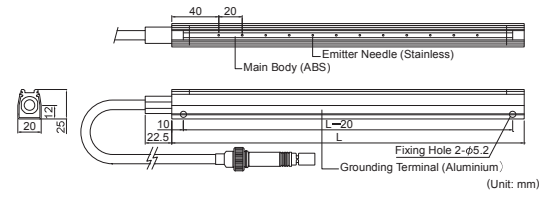
Bar electrode for small spaces

Bar Electrode **ELIMINOSTAT BJS**

(Standard cable length : 1m)



Dimension Diagram



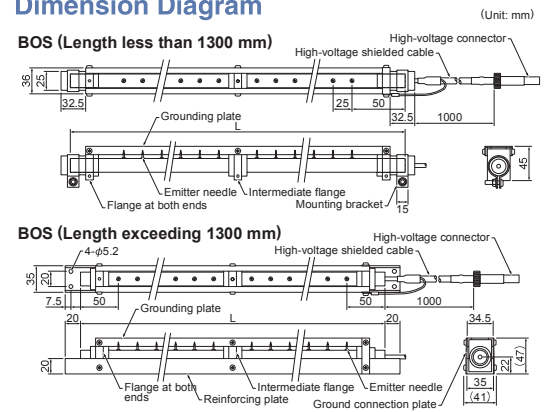
Bar electrode for long-length applications

Bar Electrode **ELIMINOSTAT BOS**

(Standard cable length : 1m)



Dimension Diagram



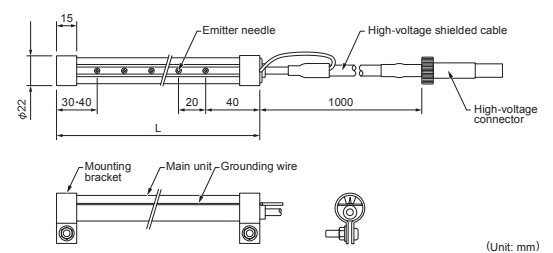
Bar electrode for small spaces

Bar Electrode **ELIMINOSTAT BICS**

(Standard cable length : 1m)



Dimension Diagram



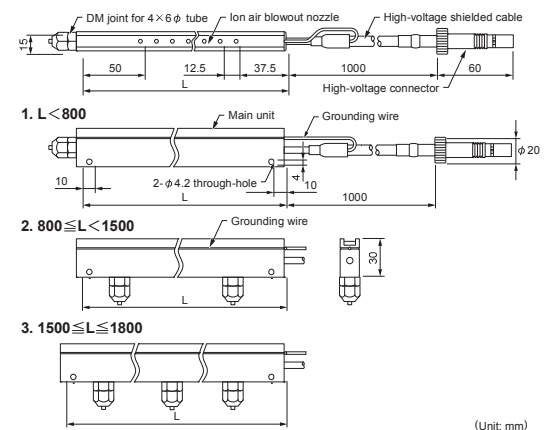
Bar electrode for small spaces

Air Electrodes **ELIMINOSTAT BUAS**

(Standard cable length : 1m)



Dimension Diagram



Electrode with flat nozzle

Air Electrodes **ELIMINOSTAT FAPS-GP**

(Standard cable length : 1m)



Dimension Diagram

