



SEJIN ELECTRONICS, CO.

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# ***HIGH VOLTAGE GENERATOR***

MODEL:1200 p



SEJIN  
***Specification***



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## Introduction of HIGH VOLTAGE GENERATOR

This generator, operated by direct current power, adopts P.W.M SWITCHING system with high frequency of 40~ 80kHz and is very efficient. It has a circuit designed in such a way to be able to control static electricity. One of its characteristics is that you can monitor its working condition immediately by checking whether its voltage and current are normal as displayed on the monitor.

## Specifications

- Sources of electricity :  
AC 220V  $\pm 10\%$  , 1 $\Phi$  50Hz-60Hz or  
AC 110V  $\pm 10\%$  , 1 $\Phi$  50Hz-60Hz.  
(It's not free voltage but your option.)
- Power : 250VA ( 0 – 12Kv)
- Output Voltage :  
DC 12KV (Positive Adjustable) 0 – 20mA
- Output current : 20mA (Adjustable)
- Line Regulation :  $\pm 10\%$  , If input change, 0.01%.
- Load Regulation : 0.01% (When full Loaded)
- Ripple : 0.01% (When full Load & Maximum)
- Efficiency : 85%
- Over Voltage & Current Protection :

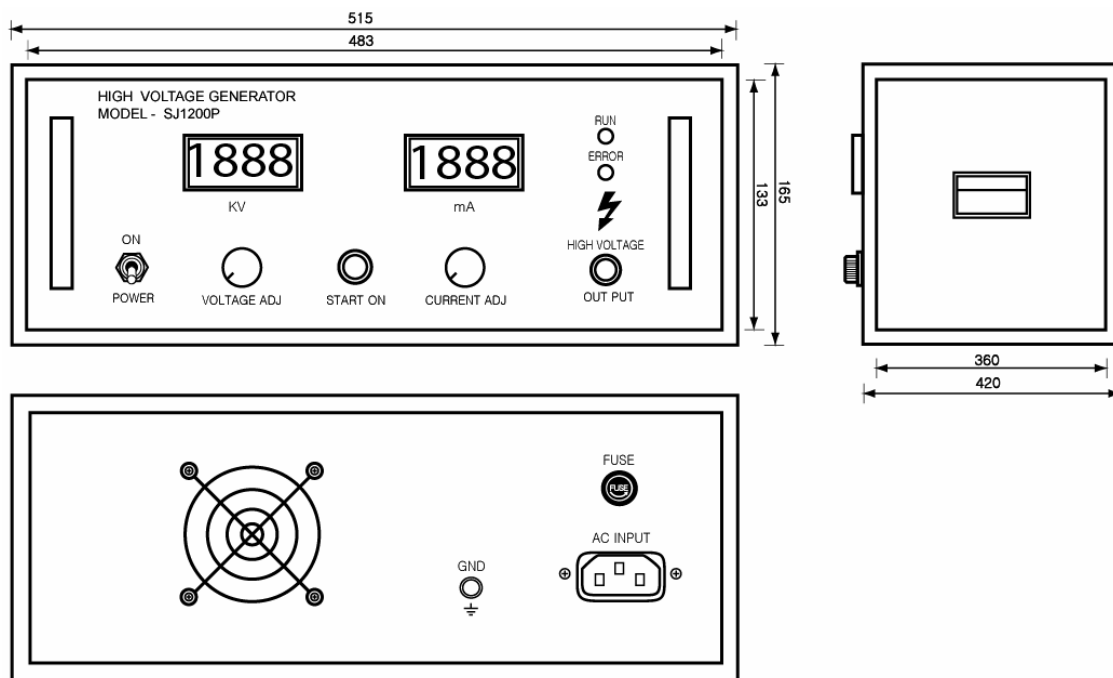
If the voltage value is greater than 12KV, it is working.

If the current value is greater than 20mA, it is working.

■ Dimension : H165x W515 x D420 (mm)

■ Weight : 7.5Kg

■ Outward drawing :

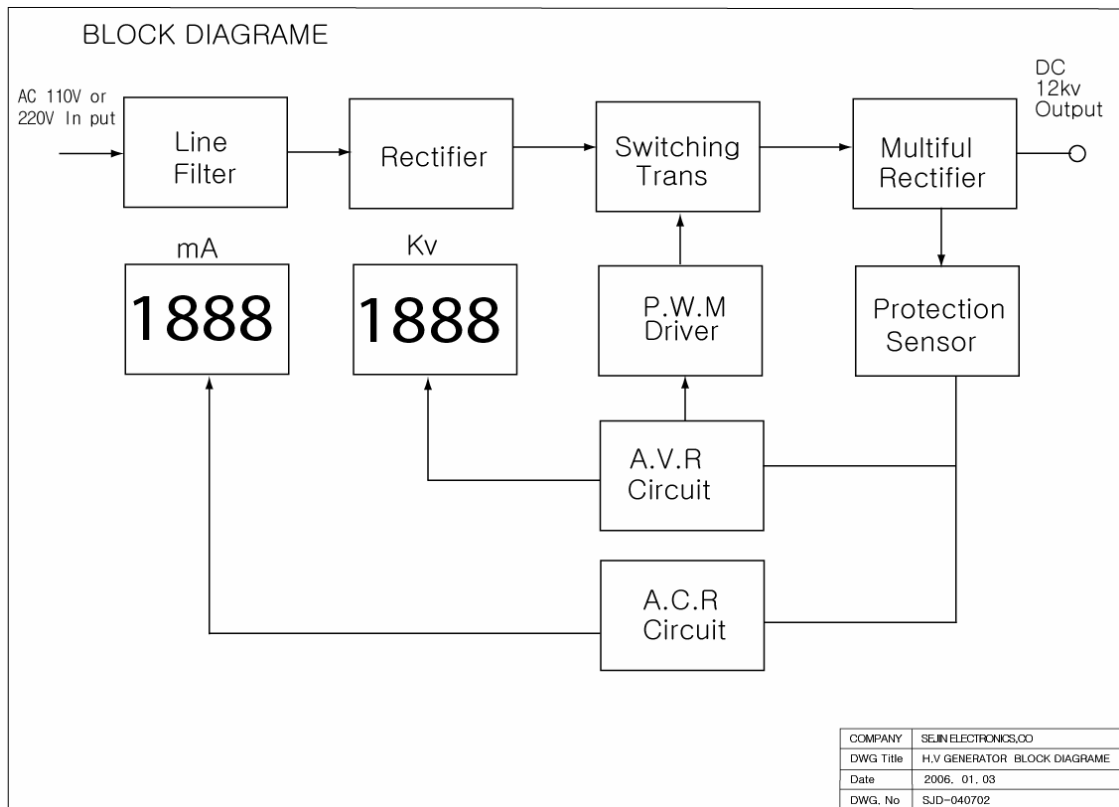


## Feature

- Being output variant, it can be conveniently used to your needs (application)
- Safe use due to built-in protection circuit.
- Convenient use due to low output current.
- With remote control function added, you can monitor operating conditions (Power on, Run, Error) of the equipment.
- Output terminal changeable to customer needs.
- Convenient readout due to incorporated digital display.
- Standard stand-alone rack makes it easy to install.



Function Diagram

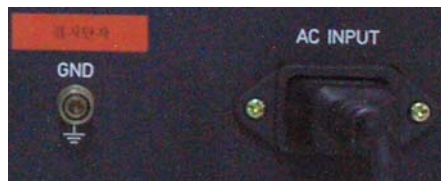


## Installation



**Caution** : Before operating the unit.

- Confirm the exact connection by the high voltage generator wiring drawing.
- Confirm the connection between a High Voltage Generator and an Earth.
  - Terminal : AC 220V 50Hz-60Hz or AC 110V 50Hz-60Hz
  - Terminal : Ground terminal (GND)



- Confirm the connection of high voltage terminal (H.V Cable) in High Voltage Generator.
- Confirm the connection between a terminal and electric line

## REMARK

- Location recommended for installation :
  - Area not much humid
  - Area not exposed direct ray of light
  - Area well-ventilated

On the flat area or on the steel rack

(Our product is designed to be put on standard stand-alone rack)



## ■ Grounding

Though usually Grade No. 1 grounding (below  $10\Omega$ ) is recommended, metal tap water pipe can be used

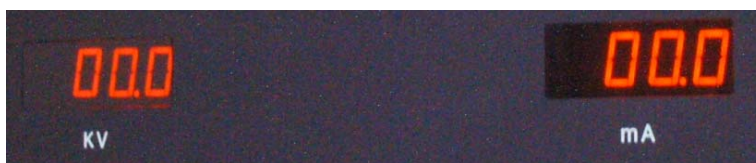
## Operation

### ■ Local Operation

- Before turning Power SW on, turn counter-clockwise VOLTAGE-ADJ and CURRENT-ADJ in front panel and set at “0”.



- With all set, after turning Power SW on, check if voltage and current meter in the front panel instruct 000.



- Push slightly two times Start/on button in the front panel Start/on.



After checking to see Run Lamp turned on, set at wanted output voltage by adjusting both VOLTAGE-ADJ and CURRENT -ADJ.



### ■ Protection (Short-Circuited Load , Overload) test

- In normal operation, in case load gets into short-circuited condition for unknown reason, output is blocked.
  - With AC power ON and Start On switch Off
  - When in a short-circuited load condition, Start On switch does not work.
  - To get back to normal condition, with back to short-circuited condition, then turn Start On switch On.
  
- In normal operation, in case it is in an overload condition for unknown reason, output is blocked.
  - In an overload condition, start On switch not working
  - To get back to normal condition, with over current, then turn Start On switch On
  
- In case short-circuited load condition occurs exceeding such times as set in Main Board (usually 3~5 times), output will not get back to normal condition, then completely blocked, then turning Error Lamp on. **(Optional specification)**
  - With AC power ON, number of Start On switch being blocked.
  - Unless AC power OFF, number of blockings remains in memory.
  
- Our product is designed in such a way that in case it gets short-circuited load condition three times in a row, it will be completely blocked. **(Optional specification)**
  - With AC power ON, number of Start On switch being blocked .
  - Unless AC power OFF, number of blocking remains in memory.



- In case it being completely blocked, turn its Main Power switch off, then after checking if load is normal, restart it.

### Maintenance

- Confirm whether a terminal connection of input AC voltage or not.
- confirm the voltage of output terminal (in measuring, use a high voltage measurement TEST PROBE)
- In measuring a high voltage, firstly measures it under no-load state, then if it's normal, measure it under load state.
- If in normal state, meter display is constantly working.
- In case output is blocked when in operation for some unknown reason or it has no output and output continues being blocked despite being re-operated with Start on/off button with Error Lamp on, then switch Main power off and separate H.V output cable from the overloaded generator.
- Back in operation with Start on/off button pushed on, after ensuring that V,I meter load is normal in front panel, then reconnect output cable and restart.
- Even when power SW is turned ON, V, mA meter is not displayed in front panel due to some technical failure,

Then, check and replace Rated Fuse.

Even when in re-operation with Fuse being replaced, V, mA meter continues not to be displayed and fuse short, prohibit further operation and contact us.

Sometimes a FUSE of PCB may break by the over shocking current of an over-load, or a low voltage. At this time, change the FUSE of a rated current

# **HIGH VOLTAGE GENERATOR LIMITED WARRANTY**



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SEJIN company warrants its high voltage generator to be free from defects in workmanship or materials, under normal use and service, for a period of One Year from the date of purchase by the original owner. If at any time during the warranty period, the product is found to be defective or malfunctions, SEJIN company will repair or replace the defective part (at its option) and provide the shop labor to repair this high voltage generator. This warranty shall not apply if it is shown by SEJIN that the defect or malfunction was caused by neglect or abuse during operation by consumer.

The repaired or replaced part or unit will be shipped by SEJIN Company to the purchaser, freight prepaid. The warranty on any repaired or replacement part shall be for a duration of time no longer than the remaining or unexpired term of the original warranty.

This warranty does not cover any other charges incurred by the purchaser.

The sole responsibility of SEJIN shall be to repair the product within the terms stated above.

SEJIN SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, EXPRESS OR IMPLIED, APPLICABLE TO THIS PRODUCT. Some states do not allow the exclusion or limitation of consequential damages, so this limitation may not apply to you. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED BEYOND THE ONE YEAR DURATION OF THIS WARRANTY.

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