

# HIGH VOLTAGE GENERATORS

## 300-3000W Series

From 300 V to 200 kV Output Voltage



- ▶ Voltage & Current Outputs continuously adjustable from 0 to full scale
- ▶ Customized V and C full scales\* with no extra cost
- ▶ Total protection against arcs, overloads and short circuits
- ▶ Over temperature protection
- ▶ Compact design
- ▶ Double Resonance Technology (ZVC)
- ▶ V & C Setting and Monitoring from front panel or remote
- ▶ Automatic crossover
- ▶ Over Current Limitation and protection functions
- ▶ Remote, Inhibit & Interlock functions
- ▶ 3 ½ digit displays with polarity display
- ▶ Safety switch key



**SR100-P-600**  
0 to +100 kV, 600 W  
*Non contractual photo*

\*You can choose your own full scales ( $V_{max}$  and  $I_{max}$ ) even if these values are not available in standard. For example, you can get a 3750 V generator based on 1500 W model. In this case, Output Voltage will be adjustable from 0 to 3750 V and Output Current from 0 to 400 mA.

### Options

- Other Voltage and Current values available with no extracost\*
- Reversibility and Floating outputs
- 4 ½ digit display
- Non instrumented version
- Power regulation
- Arc Detection and counting
- RS232, GPIB and PROFIBUS interfaces
- Optic fibre transmission
- LABVIEW driver
- Relay interface
- Customer Remote Adaptation
- Single or multichannel control unit
- Safety signs and devices alerting to hazard
- 10 ms Settling time
- Zero floating
- Insulated REMOTE interface
- Adjustable Raising Time
- Tropicalization
- Transportable "all terrain" container
- Specific AC or DC main power inputs
- OEM version

*Any Special requests can be considered*

### Description

All the numerous advantages of compactness, robustness, reliability, and saving offered with the double resonance technology are already available on these models which constitute the low end range.

Five series of power are offered: 300 W, 600 W, 1200 W, 1500 W and 3000 W.

These generators are all based on a 3U height 19" rack presentation.

Using a modular design, our products integrate the latest technology components.

Above 20KV, High Voltage subassembly is wrapped in resin.



# Electrical Specifications

## Output Voltage and Output Current:

Both Voltage Output and Current Output are continuously adjustable from 0 to 100 % (full scale)  
**In local mode:** by using 10 turns potentiometers resolution 0.05%  
**In remote mode:** by an external 0 to 10 V

## Voltage regulation:

**Load Regulation:**  $\pm 0.05\%$  of full voltage (for 0–100 % load)  
 $\pm 0.01\%$  available on request.

**Line Regulation:**  $\pm 0.05\%$  (for Main Voltage  $\pm 10\%$ );  
 $\pm 0.01\%$  available on request.

## Current regulation:

**Load Regulation:**  $\pm 0.05\%$  of full current (for 0 – 100 % load)  
**Line Regulation:**  $\pm 0.05\%$  of full current (for Main Voltage  $\pm 10\%$ )

**Ripple + Noise:** **0.1 % p-p** for 3 phase models  
**0.1% RMS** for single phase models

**Settling Time:** **100 ms typical**, 10 ms available on request

**Stored Energy:** **1J / kW**

**Recovery Time After Arc:** **< 1 ms**

## Stability (after one hour warm-up):

**0.01 % / hour, 0.03 % / 8 hours** of operating with constant load and ambient temperature.

## Temperature Coefficient: 100 ppm/°C

**Operating Temperature: from 0 to 40°C**

**Efficiency: > 90 % full load**

**Air Cooling**

## Mains Voltage:

**230 VAC  $\pm 10\%$**  47 – 63 Hz + Earth up to 1200 W  
 PFC 110 V to 365 V

**400 VAC  $\pm 10\%$**  47 – 63 Hz 3 Phases + Earth from 1500 W

**Inrush current:** limited to full power operating current

**Power factor: > 0.98**

**Calibration:** with probes periodically approved by Authorized Measurement Laboratories

**CE Marking**



# Physical description



Non contractual photos

19" Rack	3U - 480 mm	3U - 600 mm	5U - 600 mm
Dimensions	H 133 x W483 x D480 mm	H 133 x W483 x D600 mm	H 222 x W 483x D600 mm

Voltage	SR 300W Series		SR 600W Series		SR 1200W Series		SR 1500W Series		SR 3000W Series	
	mA	Model	mA	Model	mA	Model	mA	Model	A	Model
300 V	Not Available		Not Available		Not Available		5000	SR0.3-(P/N/R)-1500	10.00	SR0.3-(P/N/R)-3000
700 V	429	SR0.7-(P/N/R)-300	857	SR0.7-(P/N/R)-600	1714	SR0.7-(P/N/R)-1200	2143	SR0.7-(P/N/R)-1500	4.29	SR0.7-(P/N/R)-3000
1 kV	300	SR1-(P/N/R)-300	600	SR1-(P/N/R)-600	1200	SR1-(P/N/R)-1200	1500	SR1-(P/N/R)-1500	3.00	SR1-(P/N/R)-3000
2.5 kV	120	SR2.5-(P/N/R)-300	240	SR2.5-(P/N/R)-600	480	SR2.5-(P/N/R)-1200	600	SR2.5-(P/N/R)-1500	1.20	SR2.5-(P/N/R)-3000
5 kV	60.0	SR5-(P/N/R)-300	120	SR5-(P/N/R)-600	240	SR5-(P/N/R)-1200	300	SR5-(P/N/R)-1500	0.60	SR5-(P/N/R)-3000
10 kV	30.0	SR10-(P/N/R)-300	60.0	SR10-(P/N/R)-600	120	SR10-(P/N/R)-1200	150	SR10-(P/N/R)-1500	0.30	SR10-(P/N/R)-3000
15 kV	20.0	SR15-(P/N/R)-300	40.0	SR15-(P/N/R)-600	80.0	SR15-(P/N/R)-1200	100	SR15-(P/N/R)-1500	0.20	SR15-(P/N/R)-3000
20 kV	15.0	SR20-(P/N/R)-300	30.0	SR20-(P/N/R)-600	60.0	SR20-(P/N)-1200	75.0	SR20-(P/N)-1500	0.15	SR20-(P/N)-3000
30 kV	10.0	SR30-(P/N/R)-300	20.0	SR30-(P/N/R)-600	40.0	SR30-(P/N)-1200	50.0	SR30-(P/N)-1500	NOT AVAILABLE	
40 kV	7,50	SR40-(P/N/R)-300	15.0	SR40-(P/N/R)-600	30.0	SR40-(P/N)-1200	37,5	SR40-(P/N)-1500		
50 kV	6.00	SR50-(P/N/R)-300	12.0	SR50-(P/N/R)-600	24.0	SR50-(P/N)-1200	NOT AVAILABLE			
60 kV	5.00	SR60-(P/N)-300	10.0	SR60-(P/N)-600	20.0	SR60-(P/N)-1200				
80 kV	3,75	SR80-(P/N)-300	7,50	SR80-(P/N)-600	15.0	SR80-(P/N)-1200				
100 kV	3.00	SR100-(P/N)-300	6.00	SR100-(P/N)-600	NOT AVAILABLE					
120 kV	2,50	SR120-(P/N)-300	5.00	SR120-(P/N)-600						
150 kV	2.00	SR150-(P/N)-300	4.00	SR150-(P/N)-600						
200 kV	1,50	SR200-(P/N)-300	3.00	SR200-(P/N)-600						

**Polarity:** P – Positive, N – Negative, F – Floating outputs & R – Reversibility as options

**Higher Voltage:** Contact Us

All our power supplies are delivered with - HV Output : Connector and 3 meters cable

- Mains Input: 230 VAC models: 2 meters CE22 cable

400 VAC models: 4 pins female connector

## Example of reference:

Model	SR model	SR 15 N 300
Voltage	Adjustable Voltage from 0 to 15 kV	
Polarity	Negative polarity	
Power	300 W power	