

HIGH VOLTAGE GENERATORS

5000-10000 W Series

From 300 V to 150 kV Output Voltage



- ▶ Compact design
- ▶ Customized V and C full scales* with no extra cost
- ▶ Total protection against arcs, overloads and short circuits
- ▶ High reliability & efficiency
- ▶ Low stored Energy
- ▶ Air cooling
- ▶ Voltage & Current Outputs continuously adjustable from 0 to full scale
- ▶ High precision regulation
- ▶ V & C Setting and Monitoring from front panel or remote
- ▶ Remote, Inhibit & Interlock functions
- ▶ Double Resonance Technology (ZVC)
- ▶ Automatic crossover
- ▶ Over Current Limitation and protection functions
- ▶ Over Temperature Protection
- ▶ 3 ½ digit displays with polarity display
- ▶ Safety switch key
- ▶ Master-slaves architecture



SR12- P- 8000
0 to +12kV, 0 to 666 mA

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 45 000 V generator based on 6 000W model. In this case, you will get an Output Voltage adjustable from 0 to 45 000 V and an Output Current from 0 to 133.3 mA



Description

Double Resonance Technology operating at high frequencies (50 kHz) offers a smooth switching to all the critical components and provides them a non-stressing behaviour.

Internal power dissipation, harmonics & ripple are significantly reduced.

Hence, our generators can intensively operate with no failure even in rugged environments.

Many of them are used at full power 24h/day, 7 days/week with no failure for many years.

Four series of power are offered from 5 000 W to 10 000 W.

Above 24KV, High Voltage subassembly is merged in a tank containing mineral oil.

With its low cost per Watt, this series is particularly well adapted in applications looking for power and performance at affordable prices.



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



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

Voltage regulation:

Load Regulation: $\pm 0.05\%$ of full voltage (for 0– 100 % load);
 $\pm 0.01\%$ available on request.
Line Regulation: $\pm 0.05\%$ of full voltage (for Main Voltage +/- 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 +/- 10 %)

Ripple + Noise: 0.1 % p-p

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

CE Certification

Stability (after one hour of 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

Recovery Time After Arc: < 1 ms

Stored Energy: 1J / kW

Air Cooling by air: Dust filter fans on front panel. Easily removable filters for cleaning.

Main Voltage : 400 VAC +/- 10 % 47 – 63 Hz 3 Phases + Earth

Inrush current: limited to full power operating current

Power factor : > 0.98

Calibration: with probes periodically approved by Authorized Measurement Laboratories



Physical description

Non- contractual photos



	5U – 19" Rack	7U-19" Rack	19" Cabinet
Dimensions	H222xW483xD480 mm or H222xW483xD600 mm	H311xW483xD600 mm	Height: from 12 to 30 HU Depth: 800 mm

Voltage	SR 5 kW Series			SR 6 kW Series			SR 8 kW Series			SR 10 kW Series		
	Current	Model	Current	Model	Current	Model	Current	Model	Current	Model		
300 V	16,67 A	SR0.3-(P/N/R)-5000	20,00 A	SR0.3-(P/N/R)-6000	26,67 A	SR0.3-(P/N/R)-8000	33,33 A	SR0.3-(P/N/R)-10000				
700 V	7,14 A	SR0.7-(P/N/R)-5000	8,57 A	SR0.7-(P/N/R)-6000	11,43 A	SR0.7-(P/N/R)-8000	14,29 A	SR0.7-(P/N/R)-10000				
1 KV	5,00 A	SR1-(P/N/R)-5000	6,00 A	SR1-(P/N/R)-6000	8,00 A	SR1-(P/N/R)-8000	10,00 A	SR1-(P/N/R)-10000				
2.5 KV	2,00 A	SR2.5-(P/N/R)-5000	2,40 A	SR2.5-(P/N/R)-6000	3,20 A	SR2.5-(P/N/R)-8000	4,00 A	SR2.5-(P/N/R)-10000				
5 KV	1,00 A	SR5-(P/N/R)-5000	1,20 A	SR5-(P/N/R)-6000	1,60 A	SR5-(P/N/R)-8000	2,00 A	SR5-(P/N/R)-10000				
10 KV	500 mA	SR10-(P/N/R)-5000	600 mA	SR10-(P/N/R)-6000	800 mA	SR10-(P/N/R)-8000	1,00 A	SR10-(P/N/R)-10000				
15 KV	333 mA	SR15-(P/N/R)-5000	400 mA	SR15-(P/N/R)-6000	533 mA	SR15-(P/N/R)-8000	667 mA	SR15-(P/N/R)-10000				
20 KV	250 mA	SR20-(P/N/R)-5000	300 mA	SR20-(P/N/R)-6000	400 mA	SR20-(P/N/R)-8000	500 mA	SR20-(P/N/R)-10000				
30 KV	167 mA	SR30-(P/N/R)-5000	200 mA	SR30-(P/N/R)-6000	267 mA	SR30-(P/N/R)-8000	333 mA	SR30-(P/N/R)-10000				
40 KV	125 mA	SR40-(P/N/R)-5000	150 mA	SR40-(P/N/R)-6000	200 mA	SR40-(P/N/R)-8000	250 mA	SR40-(P/N/R)-10000				
50 KV	100 mA	SR50-(P/N/R)-5000	120 mA	SR50-(P/N/R)-6000	160 mA	SR50-(P/N/R)-8000	200 mA	SR50-(P/N/R)-10000				
60 KV	83.3 mA	SR60-(P/N/R)-5000	100 mA	SR60-(P/N/R)-6000	133 mA	SR60-(P/N/R)-8000	167 mA	SR60-(P/N/R)-10000				
80 KV	62.5 mA	SR80-(P/N/R)-5000	75 mA	SR80-(P/N/R)-6000	100 mA	SR80-(P/N/R)-8000	125 mA	SR80-(P/N/R)-10000				
100 KV	50 mA	SR100-(P/N/R)-5000	60 mA	SR100-(P/N/R)-6000	80 mA	SR100-(P/N/R)-8000	100 mA	SR100-(P/N/R)-10000				
120 KV	40 mA	SR120-(P/N/R)-5000	50 mA	SR120-(P/N/R)-6000	66.7 mA	SR120-(P/N/R)-8000	83.3 mA	SR120-(P/N/R)-10000				
150 kV	33.3 mA	SR150-(P/N/R)-5000	40 mA	SR150-(P/N/R)-6000	53.3 mA	SR150-(P/N/R)-8000	66.7 mA	SR150-(P/N/R)-10000				

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:** 400 VAC models : 4 pins female connector

Example of reference:

