

HIGH VOLTAGE GENERATORS

15000-40000 W+ Series

From 300 V to 150 kV Output Voltage



- ▶ Low stored energy
- ▶ Low cost per Watt
- ▶ Voltage & Current Outputs continuously adjustable from 0 to full scale
- ▶ High precision regulation
- ▶ Total protection against arcs, overloads and short circuits
- ▶ Over Temperature protection
- ▶ High reliability & efficiency
- ▶ 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
- ▶ Up to 200 kW with :
Master-slaves architecture or Control-unit

**You can choose your own full scales (Vmax and Imax) even if these values are not available in standard. For example, you can get a 15 000 V generator based on 30 000W model. In this case, you will get an Output Voltage adjustable from 0 to 15 000 V and an Output current from 0 to 2 Amps*



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, 7days/week with no failure for many years.

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

Much higher powers can be reached by using a master/slaves architecture or control-unit.

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



SR10 - P- 40000
0 to +10kV, 40000 W
Non- contractual photo



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
- Insullated 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: ± 0.05% of full voltage (for 0- 100 % load);
± 0.01% available on request.

Line Regulation: ± 0.05 % of full voltage (for Main Voltage +/- 10 %);
± 0.01% available on request.

Current regulation :

Load Regulation: ± 0.05 % of full current (for 0 – 100 % load)

Line Regulation: ± 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

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 : > 92 % 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

CE Certification



Physical description



Non-contractual photos

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

Voltage	SR 15 kW Series			SR 20 kW Series		SR 30 kW Series		SR 40 kW Series	
	Current	Model		Current	Model	Current	Model	Current	Model
300 V	50.00 A	SR0.3-(P/N/R)-15000	66.67 A	SR0.3-(P/N/R)-20000	Not Available		Not Available		
700 V	21.43 A	SR0.7-(P/N/R)-15000	28.57 A	SR0.7-(P/N/R)-20000	42.86 A	SR0.7-(P/N/R)-30000	57.14 A	SR0.7-(P/N/R)-40000	
1 kV	15.00 A	SR1-(P/N/R)-15000	20.00 A	SR1-(P/N/R)-20000	30.00 A	SR1-(P/N/R)-30000	40.00 A	SR1-(P/N/R)-40000	
2.5 kV	6.00 A	SR2.5-(P/N/R)-15000	8.00 A	SR2.5-(P/N/R)-20000	12.00 A	SR2.5-(P/N/R)-30000	16.00 A	SR2.5-(P/N/R)-40000	
5 kV	3.00 A	SR5-(P/N/R)-15000	4.00 A	SR5-(P/N/R)-20000	6.00 A	SR5-(P/N/R)-30000	8.00 A	SR5-(P/N/R)-40000	
10 kV	1.50 A	SR10-(P/N/R)-15000	2.00 A	SR10-(P/N/R)-20000	3.00 A	SR10-(P/N/R)-30000	4.00 A	SR10-(P/N/R)-40000	
15 kV	1.00 A	SR15-(P/N/R)-15000	1.33 A	SR15-(P/N/R)-20000	2.00 A	SR15-(P/N/R)-30000	2.67 A	SR15-(P/N/R)-40000	
20 kV	750 mA	SR20-(P/N/R)-15000	1.00 A	SR20-(P/N/R)-20000	1.50 A	SR20-(P/N/R)-30000	2.00 A	SR20-(P/N/R)-40000	
30 kV	500 mA	SR30-(P/N/R)-15000	667 mA	SR30-(P/N/R)-20000	1.00 A	SR30-(P/N/R)-30000	1.33 A	SR30-(P/N/R)-40000	
40 kV	375 mA	SR40-(P/N/R)-15000	500 mA	SR40-(P/N/R)-20000	750 mA	SR40-(P/N/R)-30000	1.00 A	SR40-(P/N/R)-40000	
50 kV	300 mA	SR50-(P/N/R)-15000	400 mA	SR50-(P/N/R)-20000	600 mA	SR50-(P/N/R)-30000	800mA	SR50-(P/N)-40000	
60 kV	250 mA	SR60-(P/N/R)-15000	333 mA	SR60-(P/N/R)-20000	500 mA	SR60-(P/N/R)-30000	667 mA	SR60-(P/N/R)-40000	
80 kV	188 mA	SR80-(P/N/R)-15000	250 mA	SR80-(P/N/R)-20000	375 mA	SR80-(P/N/R)-30000	500 mA	SR80-(P/N/R)-40000	
100 kV	150 mA	SR100-(P/N/R)-15000	200 mA	SR100-(P/N/R)-20000	300 mA	SR100-(P/N/R)-30000	400 mA	SR100-(P/N/R)-40000	
120 kV	125 mA	SR120-(P/N)-15000	167 mA	SR120-(P/N)-20000	250 mA	SR120-(P/N)-30000	333 mA	SR120-(P/N)-40000	
150 kV	100 mA	SR150-(P/N)-15000	133 mA	SR150-(P/N)-20000	200 mA	SR150-(P/N)-30000	267mA	SR150-(P/N)-40000	

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 :

