

High Voltage Generators LPR Series 6 kW to 32 kW+ Output voltage from 1 kV to 60 Kvdc & +

Description

Double resonance technology operating at high frequency (40 kHz) improves reliability by a smooth switching of critical components

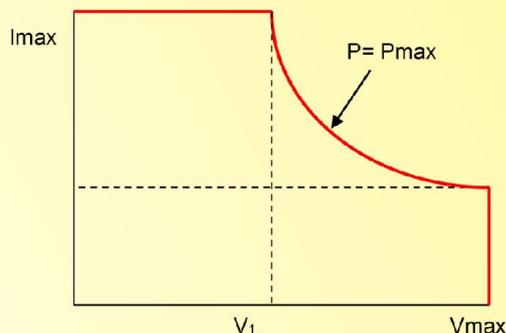
In addition, internal power dissipation, harmonics & ripples are significantly reduced.

Hence, our generators can intensively operate with no failure even in rugged environments. Many of them are used at full power 24 hours per day, 7days per week.

Higher powers can be reached with Master / Slave architecture or with a Control Unit.

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

Large Power Range (LPR) power supplies have a larger operating area compared with standard power supplies with the same power. They can be used in applications where High Current is required at Low Voltage and Lower current for High Voltage.



Main information

- Compact & industrial design
- High reliability & efficiency
- High precision regulation
- Low stored energy
- Low cost per Watt

- Total protection against arcs, overloads, short circuits & over temperature
- Voltage & current outputs continuously adjustable from 0 to 100%
- Voltage & current setting & monitoring from front panel or remote interface
- Customized voltage & current* with no extra cost
- Automatic regulation crossover
- Over current limitation
- Remote, inhibit & interlock functions
- 3 ½ digit display with polarity display
- Safety switch key
- Air cooling with high reliability fans
- Fans regulations
- Up to 160 kW with Master / Slave architecture

- Double resonance technology (ZVC)
- 2 years warranty

*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 kV generator based on 60 kW model. In this case, you will get an output voltage adjustable from 0 to 45 kV and an output current from 0 to 1.33 A.



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 external 0 to 10 V

Voltage regulation*

Load Regulation: ± 0.05 % of full voltage (for 0 – 100% load)
 ± 0.01 % available on request

Line Regulation: ± 0.05 % of full load (for Mains 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 load (for Mains Voltage ± 10 %)

Ripple + Noise :

0.1 % RMS of full voltage

0.2

Settling time: 100 ms typical, 10 ms available on request

Protections

Against short circuit & HV arc to ground

Shutdown on Over temperature, & open interlock

Stored energy: 1 J/ kW

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: > 92 % full load

Air Cooling by fans :

Dust filter fans on front panel

Easily removable filters for cleaning

Mains Voltage

400 VAC $\pm 10\%$ 47 – 63 Hz 3 Phases + Earth

Power Factor: ≥ 0.98

Inrush current: limited to full power operating current

Calibration: with probes periodically approved by Authorized Measurement Laboratories

CE Certification

(*) For fixed polarity

Options

- ✓ Other voltage and current values available with no extra cost
- ✓ Reversibility and floating outputs
- ✓ Non instrumented front panel
- ✓ Power regulation
- ✓ Arc detection and counting
- ✓ RS232, GPIB, Ethernet and Profibus interfaces
- ✓ Optic fiber transmission kit with RS232
- ✓ LABVIEW run time RS232 or GPIB or Ethernet
- ✓ Relay interface 24V DC
- ✓ Insulated Remote interface
- ✓ Emergency stop switch
- ✓ Industrial dust filters
- ✓ Multichannel control unit : up to 6 generators
- ✓ Safety signs and devices alerting to hazard
- ✓ Adaptation Customer to remote interface
- ✓ 10ms settling time
- ✓ Zero floating
- ✓ Adjustable rise time
- ✓ Tropicalization
- ✓ Specific AC or DC mains power inputs
- ✓ OEM Design on request
- ✓ Remote front panel

Any special requests can be considered

Possible restrictions when multiple options (please contact our sales department for more details)

Output Voltage and Output Current

Both Voltage Output and Current Output are continuously adjustable from 0 to 100 % (full scale)

Stability (after one hour warm-up)

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



LPR Series range



	12 kW - 2.5kV
	5U – 19" Rack
Dimensions	H222xW483xD600 mm
Description	From 0V to 1000V I= 12A From 1000V to 2500V P= 12000W
Reference	LPR 1kV~2.5kV-X-12kW

HV connectors and cables available

All our generators are delivered with:

HV output:
HV connector and 3 meters HV cable

Mains input:
400 VAC models: 4 terminal block connector



7U- 19 " Rack H 311X W483 X D 600mm



	96 kW - 5kV
	19" Cabinet
Dimensions	HXXXxWXXXxD800 mm
Description	From 0V to 3800V I= 25.3A From 3800V to 5000V P= 96000W
Reference	LPR 3.8kV~5kV-X-96kW

Higher Voltages or Higher Power: [Contact Us](#)

Distribution:



Schulz-Electronic GmbH
 Dr.-Rudolf-Eberle-Straße 2
 D-76534 Baden-Baden
 Fon + 49.7223.9636.0
 Fax + 49.7223.9636.90
 vertrieb@schulz-electronic.de
 www.schulz-electronic.de

