



SR-- 20 kW Series
SR-- 40 kW Series
SR-- 60 kW Series
80 Kw to 240 kW

High Voltage Power Supplies
1 KV - 160 KV

User Facilities

High frequency resonant converter
Voltage/current regulation with automatic crossover
OVP & OCP
Low ripple & noise
High stability & low temperature drift
Master-slave operation up to 12 units
Coloured cabinet with oil filled HV-container
Low cost per watts operation
Short-circuit & arc protected



SR - 15 - N - 20.000

Specifications on request

- Blank front panel
- Other voltage & current on request
- Sequences programming (electronics or computing)
- Other colour & logo on request
- Fibre optic
- Additional electronics on request
 - Isolated relay interface
 - Electric arcs detection
 - Electric arcs counting
 - ...

Applications

- Power feed equipment
- Laser cutting
- Military application
- Electron beam welding
- Klystron
- Electron accelerator

Description

This series offers low cost and innovative solution. For high power requirements, Master-Slave structure presents many advantages to achieve robust, precise & adaptive capabilities. Moreover, shifted control answers to power consumption reduction and to the EMI radiation reduction issues.

Many units are mounted into a 19" cabinet with a master electronics which controls step by step the other ones. High voltage transformers are connected in parallel, thus they generate higher current to the output.

The delivered power is up to 240 kW with a number of units up to 12. This method decreases significantly the power factor. Depending on the power and on the polarity (eg: positive, negative or floating), the HVPS can be provided with an oil container.

Electrical Specifications

- **Output voltage and current :**

From 0 to 100 % adjustable in local mode by using potentiometer

From 0 to 100 % adjustable in remote control mode by an external voltage 0 to 10 V

- **Voltage regulation :**

Load Regulation < 0.05 % (0 – 100 %)

Line Regulation < 0.05 % (Main Voltage +/- 10 %)

- **Current regulation :**

Load Regulation < 0.1 % (0 – 100 %)

Line Regulation < 0.05 % (Main Voltage +/- 10 %)

- **Ripple + Noise:** < 0.1 %

- **Setting Time:** < 300 mS typical, < 10 mS available

- **Temperature Drift:** 0.01 % RMS after 1 hr. warm -up, 0.05 % RMS after 8 hours of functioning with constant load and ambient temperature.

- **Temperature Coefficient:** < 0.01 %/°C

- **Efficiency:** > 92 % full load

- **Recovery Time After Arc:** < 10 mS

- **Main Voltage:** 400 VAC 47 – 63 Hz 3 phases + earth

Spécifications Techniques

- **Size :**

- 19" rack with 5 HU, H222 x W483 x D580 up to 15 kV.
- 19" rack with 5 HU, H222 x W483 x D580 + oil tank 7 HU - 19", H311 x W483 x D580 for higher voltages

- **Output Connector :** Appropriately rated high voltage shielded cable

- **Input connector :** 4 points Socapex model with female plug.

- **Front panel programming and control :**

- Main power general breaker
- Key switch
- 3 digit display for voltage & current setting / read-out value, with 0.2 % accuracy
- HV on push button with green led indicator
- HV off push button with red led indicator
- OCL/OCP (over-current limitation, over-current protection) push button with 2 green led indicators
- Push button for reading voltage & current setting
- Main input voltage red led indicator
- Voltage mode green led indicator, current mode green led indicator
- Default red led indicator
- Open loop red led indicator
- Local / Remote green led indicator

Available functions in Remote Control Mode

Output Voltage Prog. : adjustable 0–100 % with 0-10V

Output Current Prog. : adjustable 0-100 % with 0-10V

Voltage Monitor: 0 to 10V = 0 to 100 % output voltage

Current Monitor: 0 to 10V = 0 to 100 % output current

HV on/off Status: 0V = HV off, 15V - 1mA = HV on

Regulation Mode: 0V = Reg I, 15V – 1mA = Reg U

Local/Remote Mode: 0V = remote, open collector = local

Inhibit: activated by TTL or CMOS signal (3.3V to 18V)

HV ON: closed to earth dry-contact

HV OFF: opened to earth dry-contact

Interlock: 0V = opened, 15V – 1mA = closed

Default: 0V = Default, 15V – 1mA = normal mode

+10V Reference: + 10V – 2mA

Options

- RS232, GPIB Interfaces
- LabVIEW softwra driving
- Regulation of the power
- 4 digit display

Power Supply 50 KV – 1.2 Amp

Remote Connector

1. Local/Remote Mode
2. Inhibit
3. Current Monitor
4. Voltage Monitor
5. HV ON
6. Interlock
7. Default
8. HV OFF
9. Ground Reference
10. HV on/off Status
11. Regulation Mode
12. Output Voltage Programming
13. Ground Reference
14. +10V Reference
15. Output Current Programming

