



## High Voltage Generators for Electron Beam welding

### Integrated models

6 kW to 120 kW



60 kV, 15 kW model  
Non-contractual photo



### Main information

- Compact & industrial design
- Low stored energy: 1J/kW
- Adjustment of times process :
  - raising time when starting
  - stop time after an arc
  - raising time after an arc
- Accurate metrology adjustment :
  - output voltage calibration
  - output current calibration
  - parallel & serial compensation
- Serial resistance for output voltage
- Flashless mode available
- Total protection against arcs, overloads & short circuits
- Low Electromagnetic Interference (EMI)
- Low ripple + noise
- Double resonance converter using IGBT
- 2 years warranty

### Description

With more than 10 years of experience in design and production of **electron beam welding**, TECHNIX offers a complete range of sources dedicated for this application.

Based on double-resonance technology, these power supplies offer many advantages in terms of performance, flexibility, reliability and price.

Integrated models are offered for customers who are looking for a plug and play configuration. All the models include an oil tank.

In standard 45 kV, and 60kV are available. Other Voltages can be considered. Power range from 6 kW to 120 kW.

#### Example of reference : SR 60-N-6 EBW

Mode : SR model (generator)  
Voltage : Adjustable from 0 to 60 kV  
Polarity : Negative polarity  
Power : 6 kW power  
Electron Beam Welding



## Electrical specifications

**Mains Voltage:** 3 x 400V  $\pm 10\%$  50 – 60 Hz + Earth

**Polarity:** Negative (earth reference)

**Voltage regulation:**

**Load Regulation:** better than 0.1 % (for 10 – 100 % load)

**Line Regulation:** better than 0.05 % (for Mains Voltage  $\pm 10\%$ )

**Current regulation :**

**Load Regulation:** better than 0.05 % (for 10 – 100 % load)

**Line Regulation:** better than 0.05 % (for Mains Voltage  $\pm 10\%$ )

**Ripple + Noise:** Less than 0.1% RMS

**Stability (after one hour warm-up)**

0.1 % / hour, 0.03 % / 8 hours of operating with constant load and ambient temperature

**Temperature Coefficient:** 200 ppm/°C

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

**Stocking temperature :** from -20°C to 40°C

**CE Certification**

## Physical description and performances

	Adjustable output voltage	Adjustable output current	Efficiency	Stored energy	Size	Weight
<b>6 kW</b>	0 to 60 kV	0 to 110 mA	> 90%	< 6 J	7U 19" rack – 600 mm depth	70 kg
<b>15 kW</b>	0 to 60 kV	0 to 260 mA	> 90%	< 15 J	12U 19" cabinet – 800 mm depth	150 kg
<b>20 kW</b>	0 to 60 kV	0 to 340 mA	> 92 %	< 20 J	12U 19" cabinet – 800 mm depth	160 kg
<b>40 kW</b>	0 to 60 kV	0 to 680 mA	> 92 %	< 40 J	24U 19" cabinet – 800 mm depth	300 kg
<b>60 kW</b>	0 to 60 kV	0 to 1.05 A	> 92 %	< 60 J	36U 19" cabinet – 800 mm depth	380 kg
<b>80 kW</b>	0 to 60 kV	0 to 1.34 A	> 92 %	< 80 J	42U 19" cabinet – 800 mm depth	500 kg

