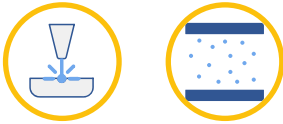


**ELECTRON BEAM UP TO 60KV**  
**POWER UP TO 80KW**



Single source power supply is dedicated to Electron Beam application. EB-K Power Supplies provides rapid rise time and advanced arc management to ensure beam continuity.

## APPLICATIONS

- Beams (Electron-Ion)
- Tubes
- Welding
- Additive manufacturing (3D printing)
- Sterilization
- Surface treatment
- PVD (Physical Vapor Deposition)

## MAIN SPECIFICATION

- Voltage: up to 60kV
- Charging Power: 6kW to 80.kW
- Polarity: Negative
- Rise-time(10-90%): <3ms
- Ripple+Noise: 0.2% RMS of max output voltage
- Remote interface: 0-10V dedicated interface

**TECHNICAL SPECIFICATIONS**

FORMAT	19" rack or 19" cabinet May include a separate HV block (option)
EFFICIENCY	> 92% at full load
MAINS INPUT	400 VAC $\pm$ 10%, 47-63 Hz 3 Phases + Earth
INPUT POWER FACTOR	$\geq$ 0.90 at full load
INRUSH CURRENT	Limited to operating current at full power
VOLTAGE LOAD REGULATION	< 0.1% (for 10–100% load)
VOLTAGE LINE REGULATION	< 0.05% (for Mains Voltage $\pm$ 10%)
CURRENT LOAD REGULATION	< 0.05% (for 10–100% load)
CURRENT LINE REGULATION	< 0.05% (for Mains Voltage $\pm$ 10%)
STABILITY (AFTER 1-HOUR WARM-UP)	0.1% / hour, 0.03 % / 8 hours of operating with constant load and ambient temperature
ACCESSORIES	3m removable coaxial HV cable, interlock terminator, safety key

**CONTROL**

REMOTE CONTROL INTERFACE	Standard: 0-10V Analogue
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## OPERATING ENVIRONMENT

OPERATING TEMPERATURE	From 0 to 40°C
STORAGE TEMPERATURE	From -20°C to 40°
TEMPERATURE COEFFICIENT	200 ppm/°C

## STANDARDS AND REGULATIONS

CE CERTIFIED AND ACCORDING	Low voltage directive: 2014/35/EU EMC directive: 2014/30/EU RoHS directive: 2011/65/EU EN 61000-6-2: 2005 + AC (2005) EN 61000-6-4: 2007 + A1 (2011) EN 61326-1: 2013 EN 61000-3-2: 2014 EN 61000-3-3: 2013 EN 61010-1: 2010 EUROLAB EMC decision n°11: issue 1 of 18 of December 2007
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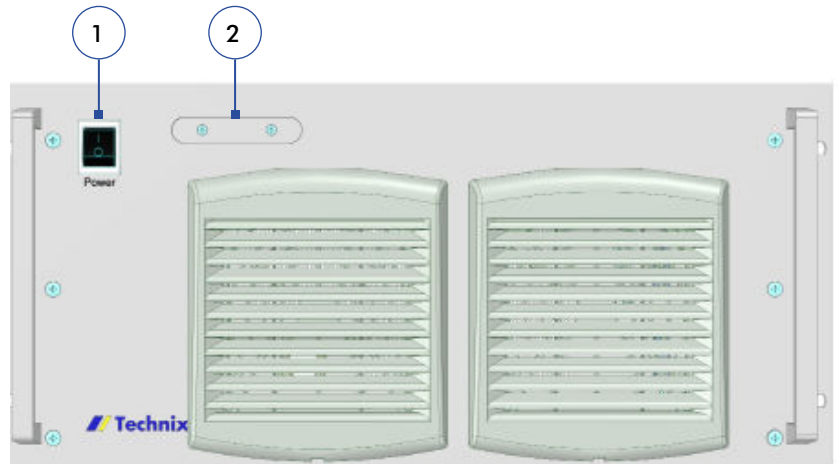
## DOCUMENTATION AND SERVICES

DOCUMENTATIONS	User manual Device test report EU declaration of conformity  RoHS2 declaration of conformity 
WARRANTY	2 years Extension on demand
ON DEMAND	Factory Acceptance Test (FAT) Detailed design report Custom tests Manufacturing process certification

### INTERFACES

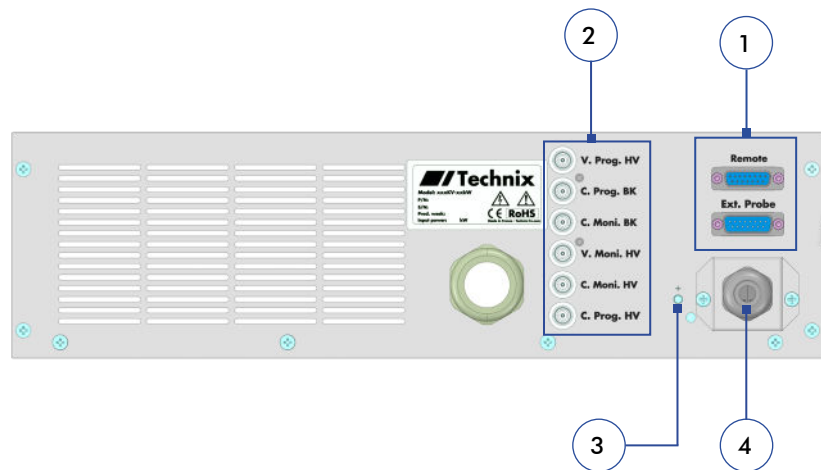
#### FRONT PANEL

1. ON / OFF
2. Arc protection settings



#### REAR PANEL

1. D-SUB
2. BNC
3. Earth bolt
4. Mains input



**0-10V ANALOG INTERFACE**

PIN	SIGNAL	SIGNAL DESCRIPTION	I/O
1-3	Fault status	Contact Closed = No Fault detected; Contact Open = Fault detected	Output
5-7	Interlock status	Internally connected. Allows the user to know if the connector is plugged	Output
9-11	HV-On control	Contact Closed by user = HV delivered Contact Opened by user = Generator stops to deliver HV	Input
4-12-13-15	0V reference	0V ground reference	Output
2-4	Inhibit control	Contact Open = Inhibit active ( the generator does not produce HV ) ; Contact Closed = inhibit inactive	Input
6	Arc monitor	When electric arc is detected, the open collector output goes to low level for 100 mS (Monostable)	Output
8	Arc monitor	When electric arc is detected, the open collector output goes to low level in real-time	Output
10	Not connected		
14	Output Voltage control	When Output voltage setting is reached, the open collector output goes to low level	Output

**RANGES**
**MODEL REFERENCE: EBM 30 to 60 kV - 6 to 80 kW**

VOLTAGE      POWER

OUTPUT VOLTAGE	6 kW	15 kW	20 kW	40 kW	80 kW
	Max Current				
30 kV	210 mA	510 mA	667 mA	1.43 A	2.67 A
45 kV	147 mA	367 mA	450 mA	897 mA	1.78 A
60 kV	110 mA	260 mA	340 mA	680 mA	1.34 A