UNIPOWER
Powering Technology

XRC, XRS SERIES

60 to 450kV, 3 to 140kW
Industrial X-Ray Power Supplies

DESCRIPTION

UNIPOWER's High Voltage Division XRC and XRS Series power supplies combine a stable 0.05%, low-ripple high voltage power source with one or more filament supplies in one compact, well-proven package. This series offers models optimized for use in a wide variety of industrial, analytical, and medical applications.

Two key strengths of UNIPOWER's High Voltage Division X-Ray power supplies are reliability and stability. These qualities are achieved through the use of modular circuit architectures that benefit from UNIPOWER's High Voltage Division's 40 plus years of high-voltage experience.

Another contributor is the use of a proprietary solid high-dielectric encapsulation medium in most units, thus reducing weight and footprint. Finally, a deliberate "guard band" approach to the design uses components and systems with ratings that substantially exceed their typical in-service loads.

CE 2006/95/EC RoHS

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	POLARITY
XRC-100-30N-STD-L17	100kV	30mA	3kW	Negative
XRC-160-40N-STD-L17	160kV	40mA	3kW	Negative
XRC-225-30N-STD-D17	225kV	30mA	3kW	Negative
XRC-320-30C-STD-D17	±160kV	30mA	4kW	Bi-Polar
XRC-450-30C-STD-D17	±225kV	30mA	4kW	Bi-Polar

Customised versions and alternate polarities are available

FEATURES

- Highly Stable
- Compact, Lightweight Design
- Digital Microprocessor Control
- Low Stored Energy
- Superior Arc Management with Configurable Arc Handling
- Over Voltage Protection
- Optional Labview GUI

ONE-YEAR WARRANTY

SAFETY COMPLIANCE

UL 601010/ EN601010

Contact UNIPOWER to discuss your application and define the right part number for your specific application.

www.unipowerco.com

NORTH AMERICA CALL: +1-954-346-2442 • EUROPE CALL: +44 (0)1903 768200

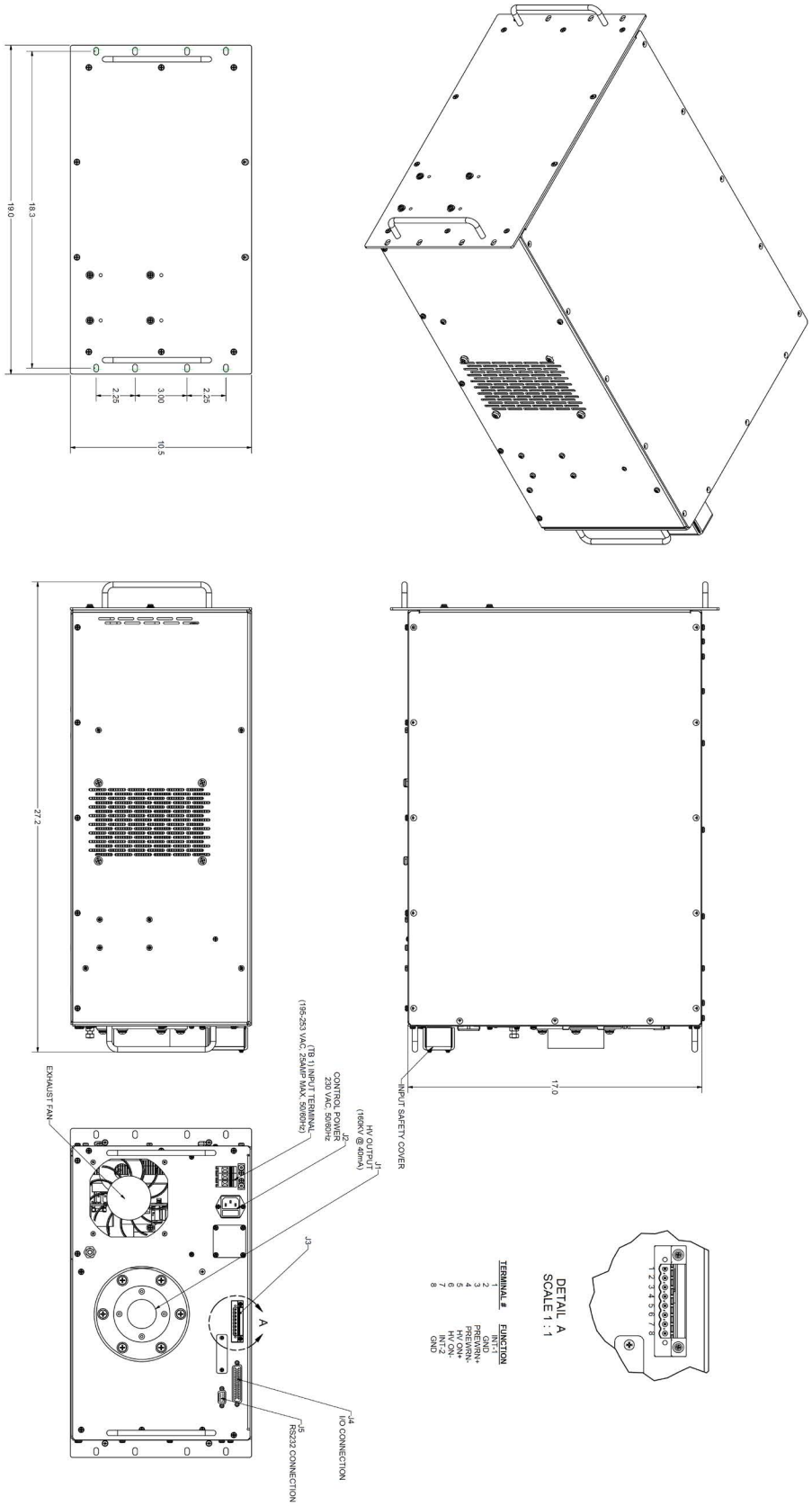
SPECIFICATIONS

Typical at Nominal Line, Full Load and 25°C Unless Otherwise Noted.

BASE MODEL	XRC-100-30N	XRC-160-40N	XRC-225-30N	XRC-320-30C	XRC-450-30C
Output (HV)					
DC Output Voltage	0-100kV	0-160kV	0-225kV	0 ±160kW	0 ± 450kV
Output Current	30mA	40mA	30mA	30mA	30mA
Max. Output Power	3kW			4kW	
Polarity	Negative			Bi-Polar	Bi-Polar
Efficiency	>85%				
Ripple/Noise (pk-pk)	<0.1%	<0.1%	<0.15%	<0.1%	<0.15%
Repeatability	0.03%				
Accuracy	0.5% of set value ±0.1kV				
Long Term Drift	0.05% over 10 hours after 30 minutes warm-up				
Temperature Drift	50ppm/°C at set value				
Line Regulation	±0.005%				
Load Regulation	±0.05%				
Voltage Ramp Up	0.1 sec to 0.3 sec for analogue interface 0.1 sec to 10 sec for RS232 interface				
Duty Cycle	100% continuous				
Output (Filament) Note: single and dual filaments available					
Output Voltage	8VDC				
Output Current	6A				
Ripple/Noise (pk-pk)	<1%				
Input					
Voltage Range	230VAC (+10/-15%)				
Phases	1				
Line Frequency	47-63Hz				
User Interface					
High Voltage Output	R-24 Cable Well			2 x R-24 Cable Well	
Remote Control	Analogue / RS232 (LabView GUI available)				
Interlock	Standard X-Ray (interlock 1 and 2, HV ON, Pre-warn ON)				
Protection	Arc (configurable), Over-Voltage, Over-Current, Over Temperature, High & Low Line, Internal Particulate Contamination (Dirt sensor)				
Mains AC Input	Main power - 3 Position Terminal Strip, Control - IEC60320 Inlet				
Mechanical / Environmental					
Dimensions w x h x d inches (mm)	19 x 10.5 x 22 (483 x 267 x 559)	19 x 10.5 x 24 (483 x 267 x 610)	19 x 17.5 x 33 (483 x 445 x 388)	19 x10.5 x 24 (483 x 267 x 559) (2 modules)	19 x 17.5 x 33 (483 x 445 x 388) (2 modules)
Weight	100lbs / 45.4kg	135lbs / 61.2kg	250lbs / 113.4kg	270lbs / 122.5kg	500lbs / 226.8kg
Operating Temp.	0°C to +40°C				
Storage Temp.	-20°C to +85°C				
Humidity	5 to 95% RH non-condensing				
MTBF	>50,000 hrs				
Safety	UL/IEC/EN61010-1				

Contact Unipower to discuss your application and define the right part number for your specific application.

TYPICAL OUTLINE (160kV)



UNIPOWER NORTH AMERICA • 3900 Coral Ridge Drive, Coral Springs, Florida 33065, USA • Tel: +1-954-346-2442 • Fax: +1-954-340-7901 • Sales-NorthAmerica@unipowerco.com
UNIPOWER EUROPE • Parkland Business Centre, Chartwell Road, Lancing, BN15 8UE, ENGLAND • Tel: +44(0)1903 768200 • Fax: +44(0)1903 764540 • Sales-Europe@unipowerco.com