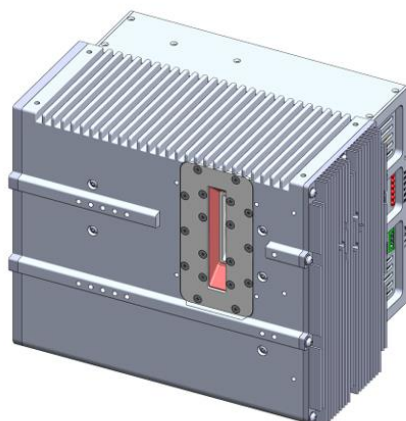


INDUSTRIAL X-RAY SOURCE

1.HVC802A0 X-Ray Source



Introduction:

The HVC802A0 X-Ray Source is an exceptionally compact, portable, and reliable line of high voltage X-ray generators. Using in allowable operating ambient temperature, it is capable to self-heat dissipate up to 100W continuous with no additional cooling. The X-ray generator integrates the high voltage inverter, filament supply, X-ray tube and X-ray housing into one unit. The High Voltage X-ray Unit is an 80kV/100W, High Frequency, self-cooled, self-protected & self-contained X-ray generator. It consists of an X-ray tank, and a control box. The Generator is controlled, programmed and monitored via a standard RS232 interface.

Features:

1. Integrated design with high electrical integration and a compact appearance
2. Capable of continuous, uninterrupted operation for extended periods
3. High stability
4. Can be installed in any orientation
5. Standard digital interface, easy to use

Application:

Food testing, industrial non-destructive testing, dangerous goods testing and other fields, mostly used for simple X-ray machines or mobile X-ray testing equipment

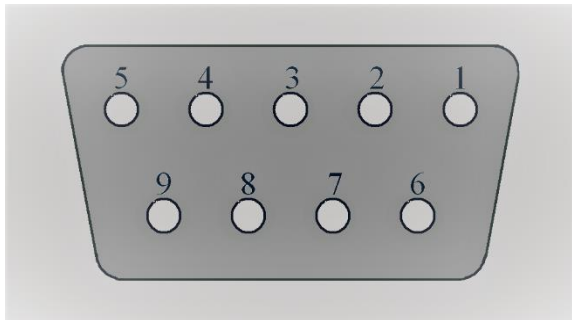
Specification:

Item	Specification
Input voltage	230VAC $\pm$ 10%, 50/60Hz, 1.2Amps

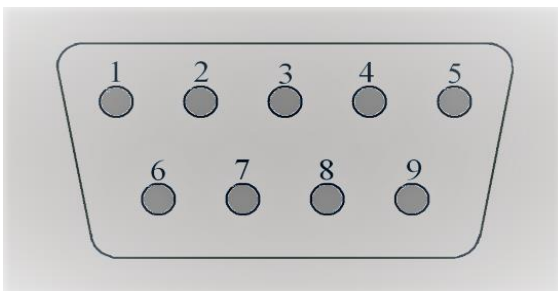
Output power of X ray tube	Max continuous output power 100W (80kV/1.25mA,40kv/2.5mA)
Output voltage	Rated output voltage: Continuously adjustable voltage range 20kV---80kV
	Output voltage ripple: $\pm 0.5\%$ (peak to peak)
	Output voltage accuracy: $\pm 1\%$ of voltage setting value
	line regulation: $\pm 0.1\%$
	load regulation: $\pm 0.1\%$
Tube current	Rated tube current: Continuously adjustable current range 0.2mA-2.5mA
	Tube current accuracy: $\pm 1\%$ mA of current setting value
	line regulation: $\pm 0.5\%$
	load regulation: $\pm 0.5\%$
kV Rise Time at maximum power:	The kV rise time is <0.4 Sec from 10% to 90% of the output voltage.
Filament power supply:	input voltage: 24VDC
	filament voltage: 2.0 to 3Vac
	Filament current: 3.0 to 3.5 Amps RMS
	preheating time: 3sec
Tube feature	Tube type: fixed anode, glass envelope, tungsten target
	focus: 0.8mm
	inherent filtration: 0.8mm Be, 0.7mm Al
	radiation angle: $80^{\circ} \times 16^{\circ}$ fan beam
	target angle: 25°
Cooling	transformer oil, natural air cooling
Working temperatures	$-10^{\circ}\text{C} \text{---} 40^{\circ}\text{C}$
Storing temperature	$-20^{\circ}\text{C} \text{---} 60^{\circ}\text{C}$
System temperature protection	$60^{\circ}\text{C} \pm 3^{\circ}\text{C}$ of Oil temperature:
Humidness	98%, Non-condensation
Weight	23kg
Installation direction	Installation in any direction
Radiation angle	$16^{\circ} \times 80^{\circ}$
X-ray leakage	Less than 0.5mR/hr at 5cm from the surface of the HVC802A0.

JB1/AC~(AC Input Power Connector)


Pin	Signal	Parameter
1	L	live wire
2	N	Neutral line
3	G	PE

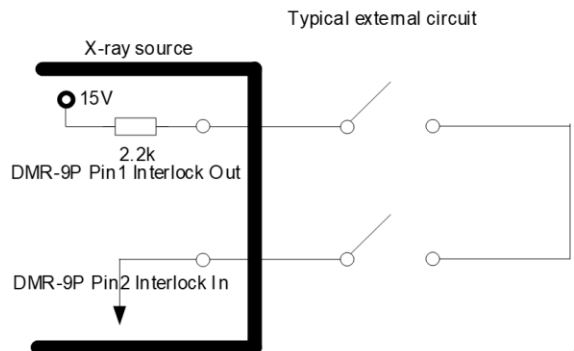
JB2/COM (DMR-9S interface definitions)


Pin	Signal	Parameter
1.4.6.7.8.9	N/C	No connect
2	TXD	Data transmit
3	RXD	Data receive
5	GND	Signal Gnd

JB3/Interlock,(DMR-9P interface definitions)


Pin	Signal	Parameter
3/4/5/6/7/8/9	N/C	No connect
1	Interlock Out	
2	Interlock In	

Short connect pin1 and pin2 make X ray source normal operation. Typical connection :


Led indicator

ID	Color	Meaning
XrayOn	Yellow	indicate X ray on
ARC	Red	Arcing in oil tank
OT	Red	Over temperature
EP_Err	Red	Tube voltage error
IP_Err	Red	Tube current error
Power	Green	Power on

Tank size

HVC802A0

Unit: mm

