



- Mains to Cooler/Chiller, XRV Generator and XRV Touch Screen Controller
- Integrates all Necessary Safety Mechanisms to X-Ray System Environment to Meet International Standards
- X-Ray On, Pre-Warn and Safety Circuit Lamps
- Monitors Tube Cooling and Door Interlocks
- Rack and Wall Mount Versions Available
- Fail Safe Interlock Option Available

Spellman's optional XRV I/O box is the ideal accessory for integrating Spellman's XRV X-Ray generators to a system environment. The XRV can now easily be packaged with industry standard metal ceramic X-Ray tubes, coolers and chillers while meeting all necessary safety and interlock requirements. The XRV I/O box is capable of accommodating a number of control interface options and can be installed in rack or wall configurations to best suit the integrators system placement requirements.

TYPICAL APPLICATIONS

Power distribution for system components

SPECIFICATIONS

Input Voltage:

180-264Vac, 50/60Hz

Operating Temperature:

0°C to +50°C

Storage Temperature:

-20°C to +80°C

Humidity:

0% to 95% relative humidity, non-condensing

Cooling:

Convection

Dimensions:

19.0"W X 5.21"H X 18.00"D
(482.6mm X 132.33mm X 330.2mm)

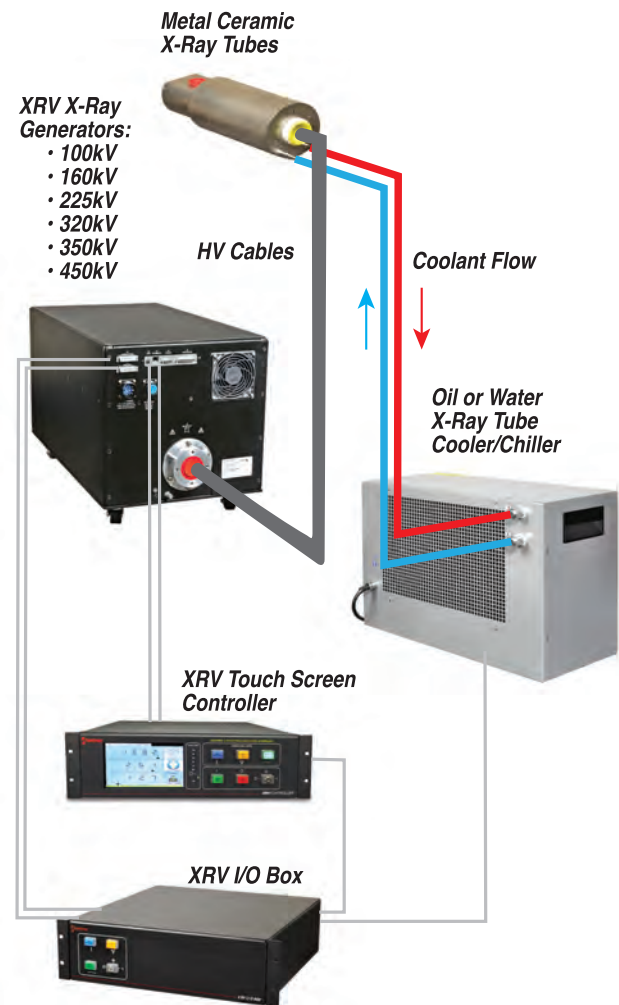
Weight:

30lbs (11.19kg)

Regulatory Approvals:

Compliant to EEC EMC Directive. Compliant to EEC Low Voltage Directive. RoHS Compliant

TYPICAL SYSTEM SET UP



See detailed schematic page 3

XRV I/O BOX SELECTION TABLE

MODEL NUMBER	DESCRIPTION
XRV-9-1	Rack mount without XRV controller
XRV-9-2	Rack mount with XRV controller
XRV-9-3	Wall mount without XRV controller
XRV-9-4	Wall mount with XRV controller
XRV-9-5	Rack mount without XRV controller with optional safety relay for interlocks
XRV-9-6	Rack mount with XRV controller with optional safety relay for interlocks

TB6-LOW VOLTAGE / DOOR INTERLOCKS

PIN	SIGNAL	PARAMETERS
1	Door INTLK	Dry contacts, $\leq 24Vdc$
2	Door INTLK	Dry contacts, $\leq 24Vdc$

TB7-XRV I/O MAINS TO CDRH* SAFETY INTERLOCK

PIN	SIGNAL	PARAMETERS
1	Power INTLK Line 1 OUT	180 - 264Vac
2	Line 1 IN	180 - 264Vac
3	Power INTLK Line 2 OUT	Neutral or 180 - 264Vac (3 phase source)
4	Line 2 IN	Neutral or 180 - 264Vac (3 phase source)
5	GND	Ground

*CDRH (Center for Devices and Radiological Health) Safety Interlock Switch meets FDA 21 CFR 1020.40 requirements.

This switch has both low voltage interlock and power interlocks for the XRV mains.

TB1, TB2, TB3-MAIN AC INPUT POWER—

PIN	SIGNAL	PARAMETERS
TB1-1	Line 1	180 - 264Vac
TB2-1	Line 2	Neutral or 180 - 264Vac (3 phase source)
TB3-1	GND	Ground

TB4- COOLER / CHILLER—MAINS AC OUTPUT

PIN	SIGNAL	PARAMETERS
1	Line 1	180 - 264Vac
2	Line 2	180 - 264Vac or Neutral
3	GND	Ground

TB8-XRV AUX AC OUTPUT—TO XRV JB1

PIN	SIGNAL	PARAMETERS
A	Line 1	180 - 264Vac
B	Line 2	Neutral or 180 - 264Vac (3 phase source)
C	GND	Ground

TB5-COOLER / CHILLER INTERLOCKS

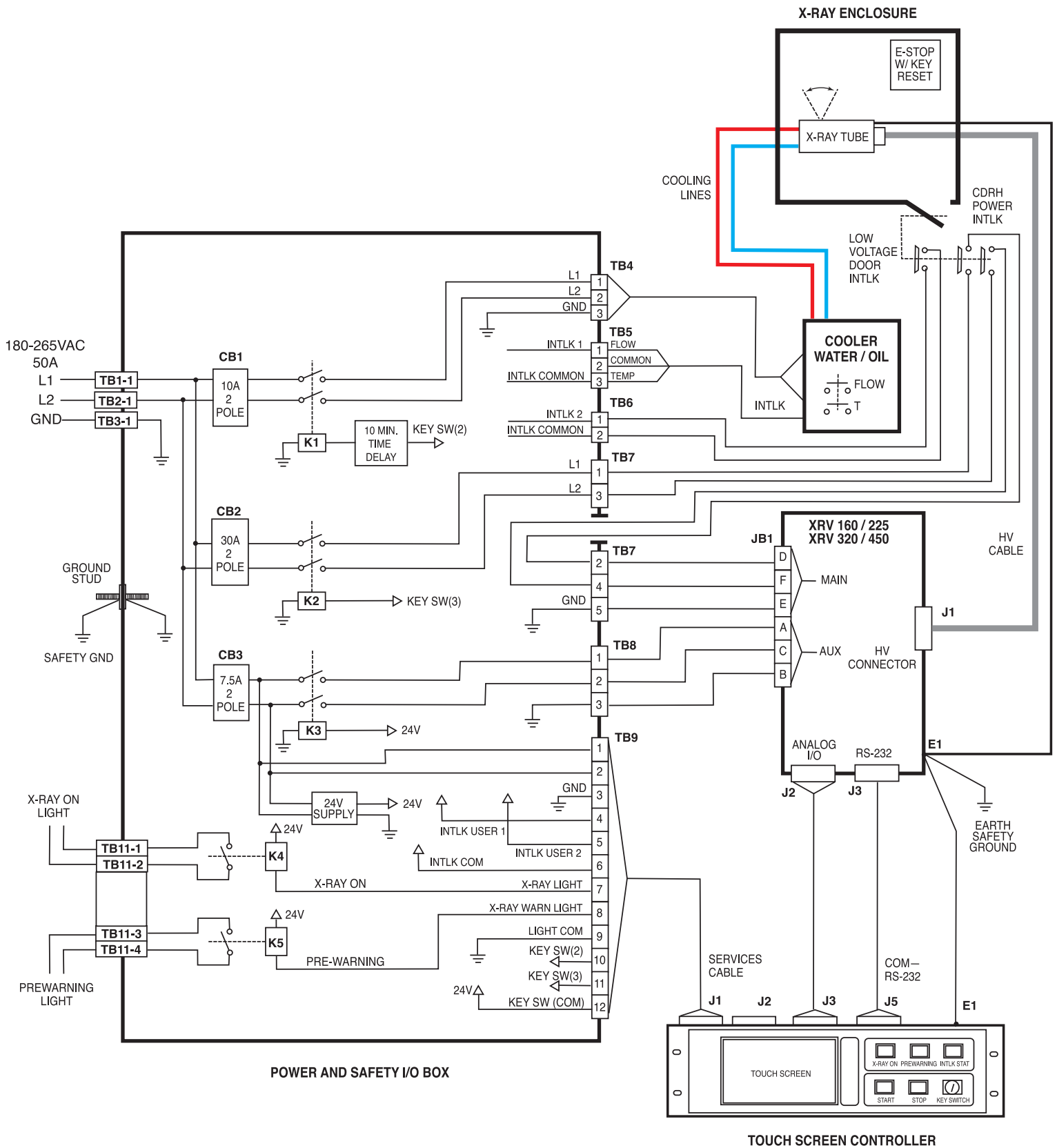
PIN	SIGNAL	PARAMETERS
1	Flow INTLK	Dry contacts, $\leq 24Vdc$
2	Common	Dry contacts, $\leq 24Vdc$
3	Temp INTLK	Dry contacts, $\leq 24Vdc$

TB9-XRV I/O TO XRV CONTROLLER INTERFACE

PIN	SIGNAL	PARAMETERS
1	Line 1	180 - 264Vac
2	Line 2	Neutral or 180 - 264Vac
3	GND	Ground
4	INTLK 1	Dry contacts, $\leq 24Vdc$
5	INTLK 2	Dry contacts, $\leq 24Vdc$
6	INTLK Common	Common for INTLK 1, 2
7	X-Ray ON Light	Dry contacts, $\leq 24Vdc$
8	Pre-Warn Light	Dry contacts, $\leq 24Vdc$
9	Light Common	Light common
10	Key Switch 2	Dry contacts, $\leq 24Vdc$
11	Key Switch 3	Dry contacts, $\leq 24Vdc$
12	Key Switch Common	Key common

TB11-X-RAY ON / PRE-WARN LIGHTS

PIN	SIGNAL	PARAMETERS
1	X-Ray ON Light	180 - 264Vac, 5 amp
2	X-Ray ON Light	180 - 264Vac, 5 amp
3	Pre-Warn Light	180 - 264Vac, 5 amp
4	Pre-Warn Light	180 - 264Vac, 5 amp



DIMENSIONS: in.[mm]

