

# X-RAY SOURCE

# 300 kV OPEN TYPE MICROFOCUS X-RAY SOURCE L12721

## FEATURES

- High power: 300 kV
- No high voltage cable connection required
- Easy to replace cathode
- Easy operation
- High stability



## SPECIFICATIONS

Parameter		Description / Value
Maximum tube voltage <sup>①</sup>		308 kV
X-ray tube voltage setting range		20 kV to 300 kV
X-ray tube current setting range	at 20 kV to 230 kV	0 $\mu$ A to 1000 $\mu$ A
	at 231 kV to 300 kV	0 $\mu$ A to 500 $\mu$ A
Cathode material		Tungsten
Minimum resolution		4 $\mu$ m <sup>②</sup>
Maximum target power		Approx. 200 W
Target type		Reflection type
X-ray beam angle		40 degrees to 60 degrees
Target material		Tungsten
X-ray output window material / Thickness		Aluminum / 0.5 mm
Focus to object distance (FOD)		4.6 mm $\pm$ 0.4 mm
Protection		External short-circuit method (Normally closed)
Interlock 1 / Interlock 2		DC24 V / DC12 V
Input voltage (AC)	X-ray control unit	100 V to 240 V (50 Hz / 60 Hz) <sup>③</sup>
	Power supply for turbo pump controller	100 V to 240 V (50 Hz / 60 Hz) <sup>③</sup>
	Power supply for vacuum pump	100 V to 240 V (50 Hz / 60 Hz) <sup>③</sup>
Power consumption (Max.)	X-ray control unit	700 VA
	Turbo pump set	300 VA
Rated output		Continuous operation
Weight	X-ray tube unit / X-ray control unit	Approx. 111 kg / Approx. 11 kg
	Power supply for turbo pump controller	Approx. 1 kg
	Vacuum pump (diaphragm pump)	Approx. 4.3 kg
Operating ambient temperature	X-ray tube unit / X-ray control unit	+15 $^{\circ}$ C to +35 $^{\circ}$ C
Storage temperature	X-ray tube unit / X-ray control unit	+5 $^{\circ}$ C to +50 $^{\circ}$ C
Operating and storage humidity	X-ray tube unit / X-ray control unit	20 % to 85 % (No condensation)

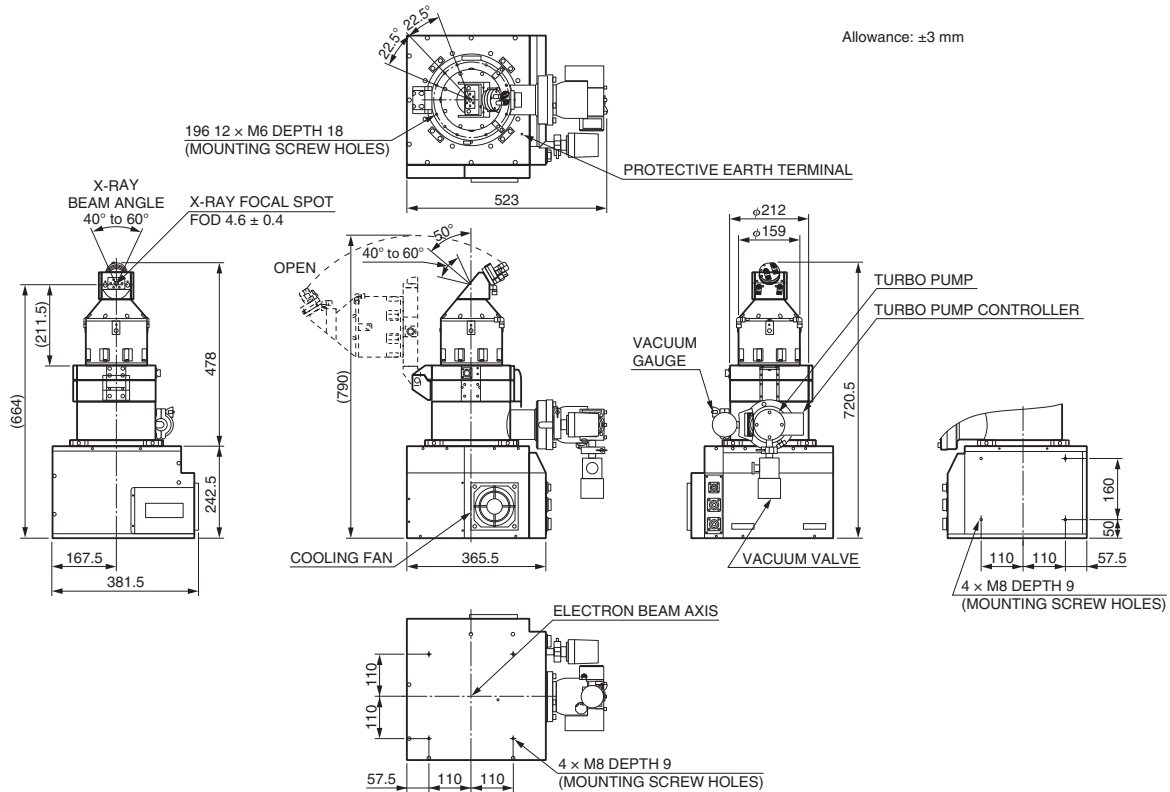
NOTE: <sup>①</sup>Maximum tube voltage during the warm-up period.

<sup>②</sup>X-ray chart use

<sup>③</sup>Auto switching

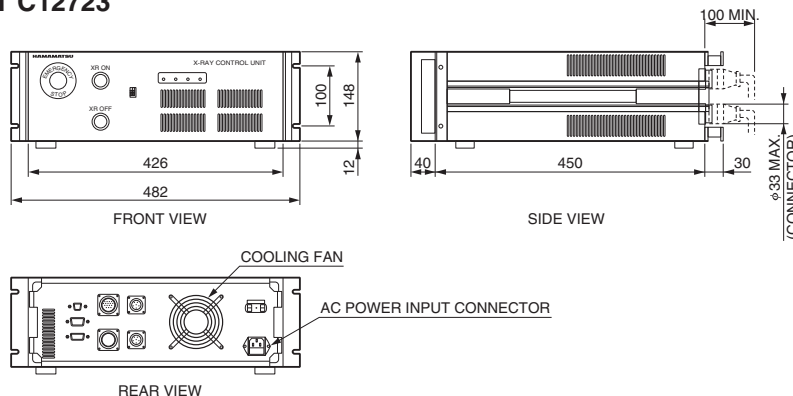
# DIMENSIONAL OUTLINES (Unit: mm)

## ● X-RAY TUBE UNIT L12722



TXPRA0039EA

## ● X-RAY CONTROL UNIT C12723



TXPRA0040EA

### System configuration of L12721 X-ray tube unit (L12722) + X-ray control unit (C12723) + turbo pumps + accessories

#### ⚠ PRECAUTIONS TO USE

- This microfocus X-ray source generates X-rays harmful to the human body. Use sufficient caution when handling the equipment to avoid direct or inadvertent exposure to X-rays.
- Install the X-ray source or the X-ray tube unit in an X-ray shielded cabinet or room equipped with safety interlock functions to prevent accidental exposure to X-rays.

#### OPERATIONAL CAUTION

- This microfocus X-ray source generates X-rays and must therefore be used only under the supervision of qualified personnel.
- This microfocus X-ray source shall be used in compliance with health and safety regulations enforced in order to prevent health hazards problems due to ionizing radiation.

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