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# **Features and benefits**

### Siemens Healthineers RAY 14

This compact X-ray tube assembly was developed for use in radiography and fluoroscopy systems.

The integrated high quality tube with glass design has two superimposed focal spots and a reinforced 74 mm anode.

Based on many years of experience in X-ray tube manufacturing, the RAY 14 was designed to meet the demand for low total cost of ownership.

- High power on both focal spots
- Compact tube housing
- High long-term dose yield

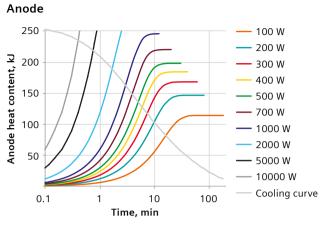


- Excellent quality and reliability
- Available with 1- and 3-phase stator

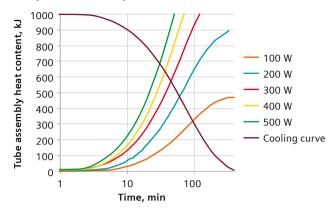
## **Technical data**

150 kV		IEC 60613 (2010)
110 kV		
0.6	1.2	IEC 60336 (2005)
34 kW	80 kW	IEC 60613 (1989) (at 130 W average anode input power)
34 kW	80 kW	IEC 60613 (2010)
5.4 A ≈10 V	5.5 A ≈ 15 V	AC < 50 kHz
12°		
260 kJ = 350	kHU	IEC 60613 (1989)
150/180 Hz		
1.0 MJ = 1.35	MHU	IEC 60613 (1989)
275 W/450 W	I	IEC 60613 (2010) (at ambient temperature < 25 °C)
≤0.8 mGy/h		IEC 60601-1-3 (2008)
2.5 mm Al/75	5 kV	IEC 60522 (2003), IEC 60601-1-3 (2008)
≈ 18 kg		
	110 kV 0.6 34 kW 34 kW 5.4 A ≈ 10 V 12° 260 kJ = 350 150/180 Hz 1.0 MJ = 1.35 275 W/450 W ≤ 0.8 mGy/h 2.5 mm Al/75	110 kV         0.6       1.2         34 kW       80 kW         34 kW       80 kW         34 kW       80 kW         5.4 A       5.5 A $\approx 10 V$ $\approx 15 V$ 12°       260 kJ = 350 kHU         150/180 Hz       1.0 MJ = 1.35 MHU         275 W/450 W $\leq 0.8 \text{ mGy/h}$ 2.5 mm Al/75 kV $\leq 0.8 \text{ mGy/h}$

## **Heating and cooling curves**



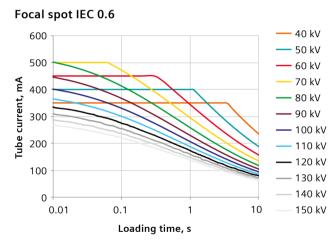
X-ray tube assembly (without fan)



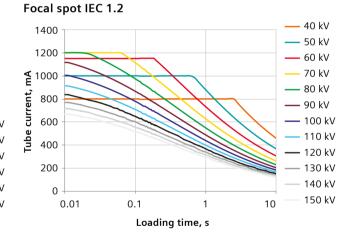
According to IEC 60613 (1989)

According to IEC 60613 (1989)

### **Rating charts**



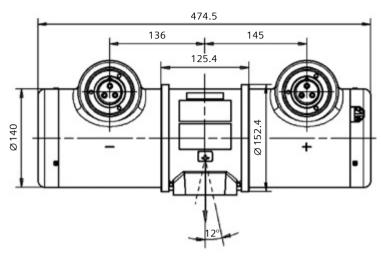
According to IEC 60613 (1989) Anode drive 180 Hz Thermal anode reference power 300 W



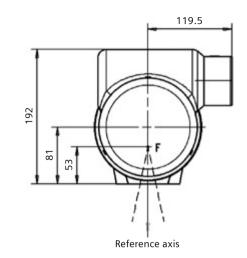
According to IEC 60613 (1989) Anode drive 180 Hz Thermal anode reference power 300 W

# Dimensions

### Front view



Side view



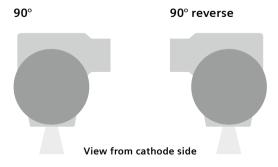
Trunnion rings, high-voltage cables, stator cables with shielding and safety switch cables are optionally available.

F = Focus position Dimensions are given in mm.

### **Types and material numbers**

	1-phase drive, without collimator flange	3-phase drive, without collimator flange	
Housing	RAY-14S_1	RAY-14S_3	
90° MatNo.	7037141	7037000	
Housing	RAY-14_1	RAY-14_3	
90° reverse MatNo.	7037133	7035483	

### Horn angles



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