

SV 150/40/80C-100

X-ray Tube Assembly

Data Sheet

Description

This compact X-ray tube assembly was developed for use in radiography and fluoroscopy systems. It allows for excellent image quality at high patient throughput.

Based on many years of experience in X-ray tube manufacturing, the SV 150/40/80C-100 was designed to meet the demand for low total cost of ownership.

Features and customer benefits

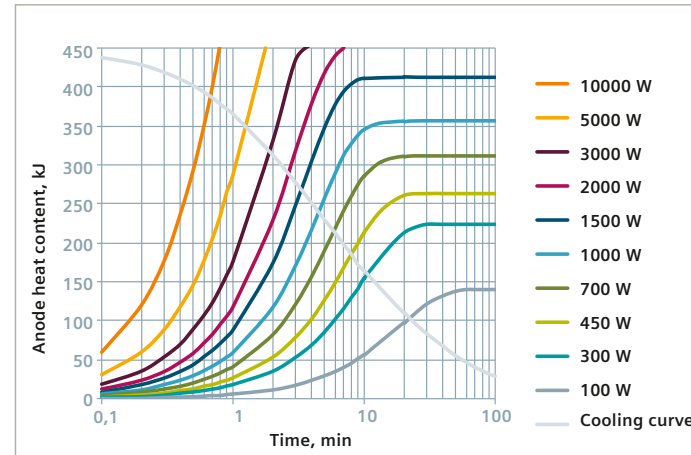
- 600 kWh anode heat storage capacity for efficient X-ray examinations
- Focal spots of IEC 0.6 and IEC 1.0 allow excellent image quality
- High power on both focal spot
- Available with 1- and 3- phase stator
- High long-term dose yield
- Excellent quality and reliability

Technical Data				
Nominal voltage		150 kV		IEC 60613 (2010)
Nominal voltage Fluoroscopy		110 kV		
Nominal focal spot values		0.6	1.0	IEC 60336
Nominal anode input power (150 Hz / 180 Hz)		40 kW	80 kW	IEC 60613 (1989) (at 300 W average anode input power)
Nominal radiographic anode input power		47 kW	85 kW	IEC 60613 (2010)
Filament Heating				AC < 20 kHz
	maximum current	5.1 A	5.1 A	
	maximum voltage	≈ 11.9 V	≈ 18.7 V	
Anode Angle		16°		
Anode heat storage capacity		450 kJ = 600 kWh		IEC 60613 (1989)
Anode drive frequencies for				
	exposure fluoro	150 / 180 Hz (50 ± 5) Hz		
Heat storage capacity of assembly		1.800 MJ = 2.430 MHU		IEC 60613
Nominal continuous input power (without / with fan)		300 W / 450 W		IEC 60613 (2010) (at ambient temperature < 25 °C)
Radiation Leakage		≤ 0.8 mGy/h		IEC 60601-1-3 (at 150 kV, 450 W, 1 m distance)
Inherent filtration		permanent filtration: 1.5 mm Al / 75 kV additional filtration: 2 x 0.5 mm (= 1 mm) Al		IEC 60522, IEC 60601-1-3 (at 75 kV)
Weight		≈ 26 kg		

SV 150/40/80C-100 X-ray Tube Assembly

Heating and cooling curves

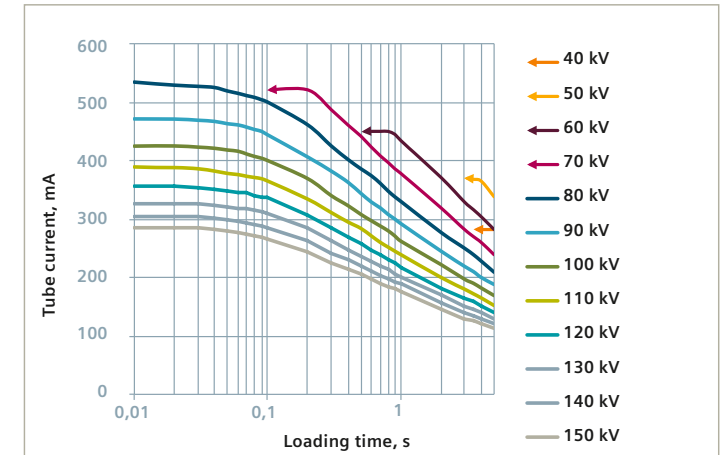
Anode



According to IEC 60613 (1989)

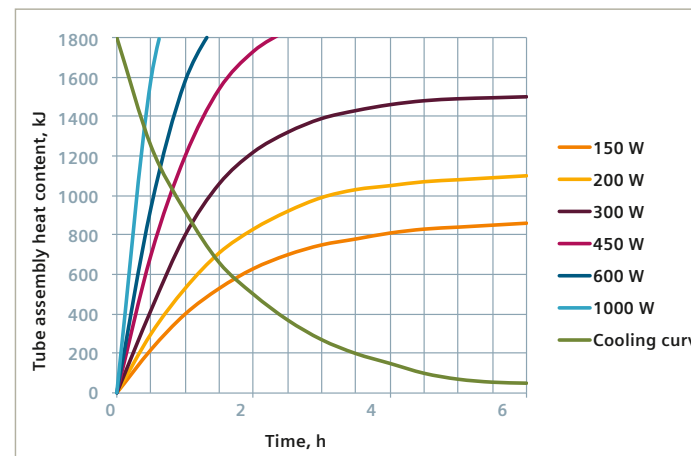
Rating charts

Focal spot IEC 0.6



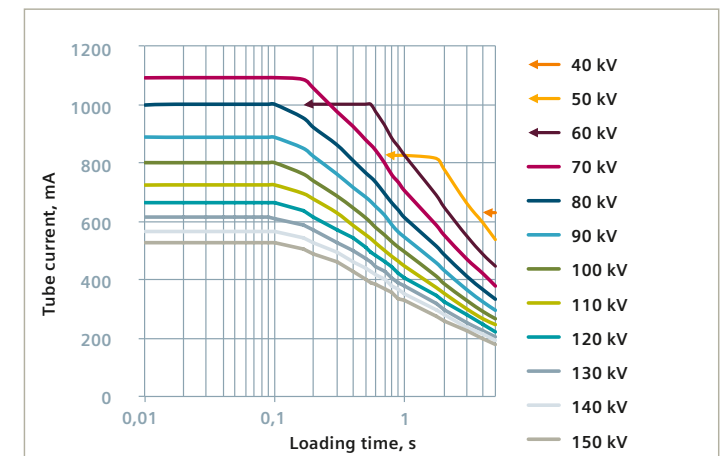
According to IEC 60613 (1989)
Anode drive 60 Hz
Thermal anode reference power 300 W

X-ray tube assembly (without fan)



According to IEC 60613 (1989)

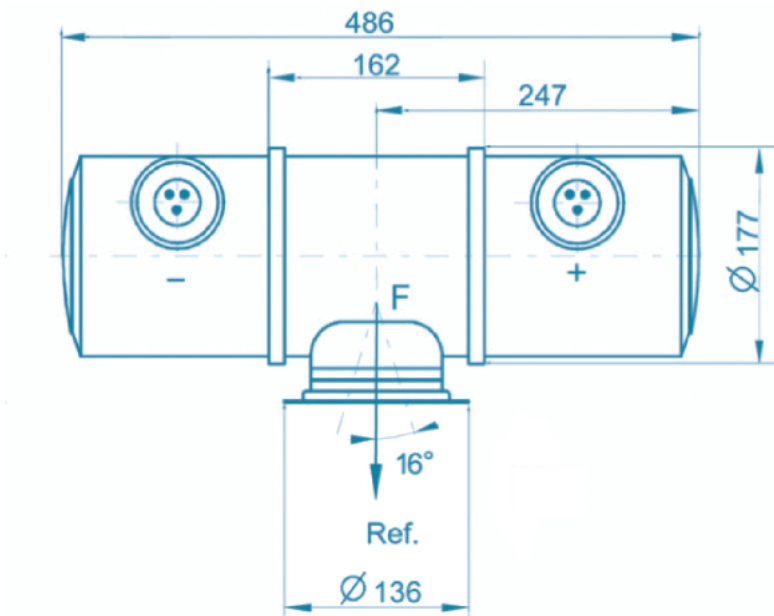
Focal spot IEC 1.0



According to IEC 60613 (1989)
Anode drive 60 Hz
Thermal anode reference power 300 W



Dimensional drawings



¹Tolerance + 2.0 / - 0.5

F = Focus position

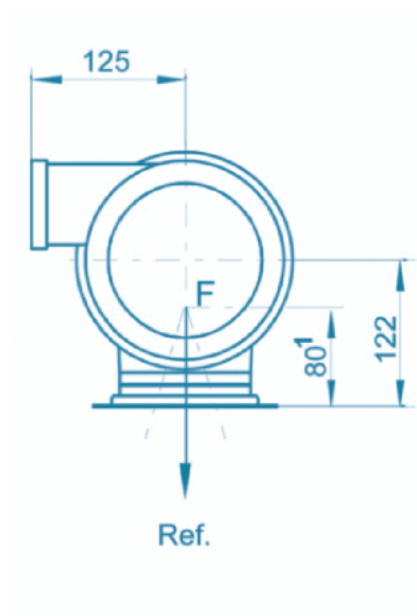
Ref. = Reference axis

Dimensions are given in mm

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

Types and material numbers

	3-phase drive	1-phase drive
Designation	SV 150/40/80 C-100	SV 150/40/80 C-100 L
Mat.-No.	4802349	4803263



F = Focus position

Ref. = Reference axis

Dimensions are given in mm

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is our nature.

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