



MEGALIX Cat

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Features and benefits

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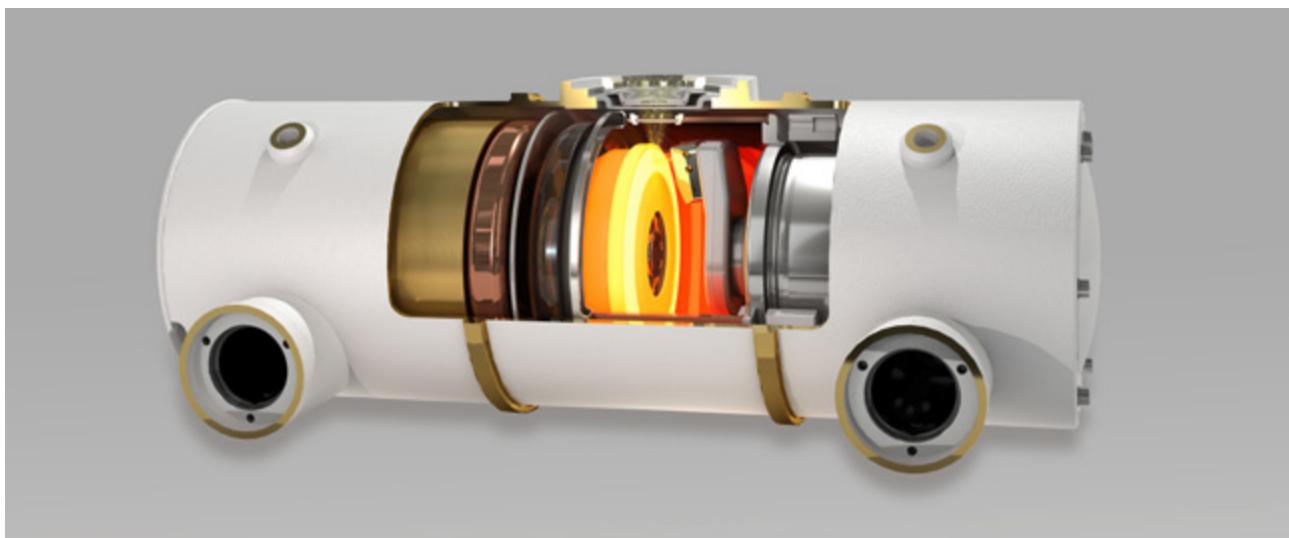
MEGALIX Cat

Two-focus & Three-focus Types

The MEGALIX Cat X-ray tube assembly is typically used for high-power diagnostic techniques, especially angiography. It is suitable for direct and indirect radiography and pulsed cine mode in connection with generators working with pulsed high-voltage control.

The rotating-anode X-ray tube comprises metal center section technology with two or three superimposed focal spots, a 120 mm graphite compound anode and an almost noiseless liquid-metal lubricated spiral groove bearing.

- 3 MHU anode heat storage capacity for efficient X-ray examinations
- Liquid-metal spiral groove bearing for efficient heat transfer from the anode and almost noiseless operation
- Available with 2 or 3 focal spots
- Focal spots of IEC 0.4 and IEC 0.8 (2F) and IEC 0.3, IEC 0.6 and IEC 1.0 (3F) allow excellent image quality
- High power for all focal spots
- Grid functionality for some types
- High long-term dose yield
- Excellent quality and reliability



Technical data 2F

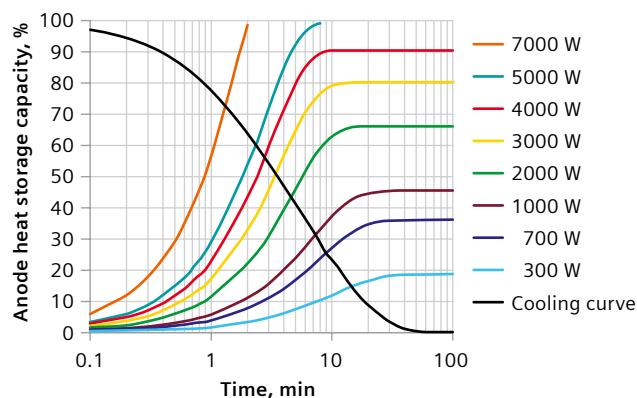
Nominal X-ray tube voltage	125 kV		IEC 60613:2010
Nominal focal spot value	0.4	0.8	IEC 60336:2020+C1:2022
Nominal anode input power (at 300 W average anode input power)	35 kW	80 kW	
Nominal anode input power (for the equivalent anode input power of 0 W)	42 kW	112 kW	
Nominal radiographic anode input power	35 kW	80 kW	IEC 60613:2010
Filament heating	maximum current maximum voltage	5.1 A ≈ 7.5 V	~/AC, < 50 kHz
Anode angle	8.5°		
Anode heat storage capacity	3.0 MHU		
Anode drive frequencies for exposure	130–160 Hz		
Heat storage capacity of assembly	4.86 MHU		
Continuous anode input power	10 min: 4000 W 20 min: 3000 W >30 min: 2500 W		IEC 60613:2010
Leakage radiation (at 125 kV, 1 m distance)	<0.35 mGy/h (2000 W)		
IEC 60601-1-3:2021 (Ed.2.2)	<0.44 mGy/h (2500 W)		
Permanent filtration of the X-ray tube assembly	1.5 mm Al		IEC 60522-1:2020, IEC 60601-1-3:2021 (at 75 kV)
X-ray tube assembly weight			
Models 121/122/125 GW	≈ 36 kg		
Model 123 GW	≈ 47 kg		

Technical data 3F

Nominal X-ray tube voltage	125 kV			IEC 60613:2010
Nominal focal spot value	0.3	0.6	1.0	
Nominal anode input power (at 300 W average anode input power)	15 kW	40 kW	80 kW	
Nominal anode input power (for the equivalent anode input power of 0 W)	18 kW	52 kW	100 kW	
Nominal radiographic anode input power	15 kW	40 kW	80 kW	IEC 60613:2010
Filament heating				~/AC, < 50 kHz
maximum current	5.3 A	5.1 A	4.9 A	
maximum voltage	≈ 6.5 V	≈ 11.3 V	≈ 17.3 V	
Anode angle	12.5°			
Anode heat storage capacity	3.0 MHU			
Anode drive frequencies for exposure	130–160 Hz			
Heat storage capacity of assembly	4.86 MHU			
Continuous anode input power	10 min: 4000 W 20 min: 3000 W >30 min: 2500 W			IEC 60613:2010
Leakage radiation (at 125 kV, 1 m distance)	<0.35 mGy/h (2000 W) <0.44 mGy/h (2500 W)			
IEC 60601-1-3:2021 (Ed.2.2)				
Permanent filtration of the X-ray tube assembly	1.5 mm Al			IEC 60522-1:2020, IEC 60601-1-3:2021 (at 75 kV)
X-ray tube assembly weight				
Models 121/122/125 GW	≈ 36 kg			
Model 123 GW	≈ 47 kg			

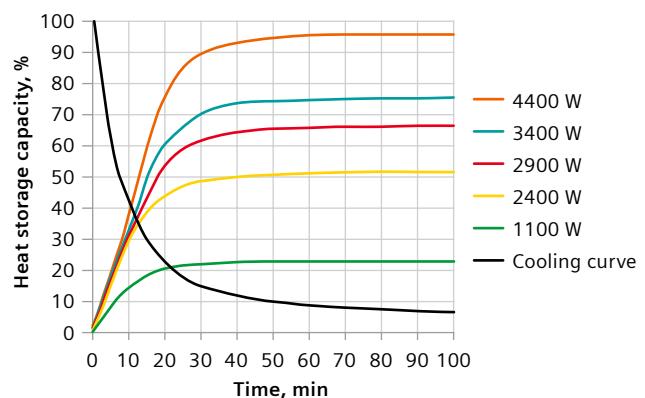
Heating and cooling curves

Anode



According to IEC 60613:2010

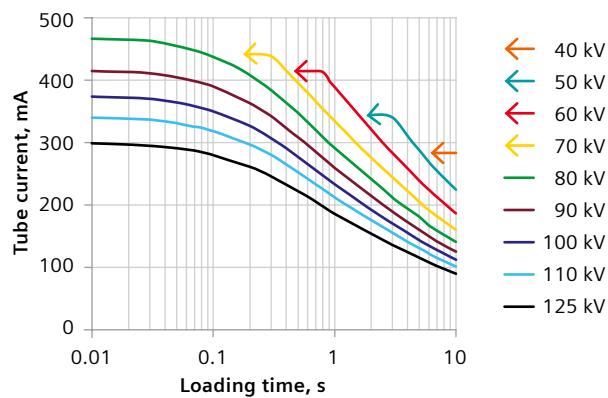
X-ray tube assembly



According to IEC 60613:2010

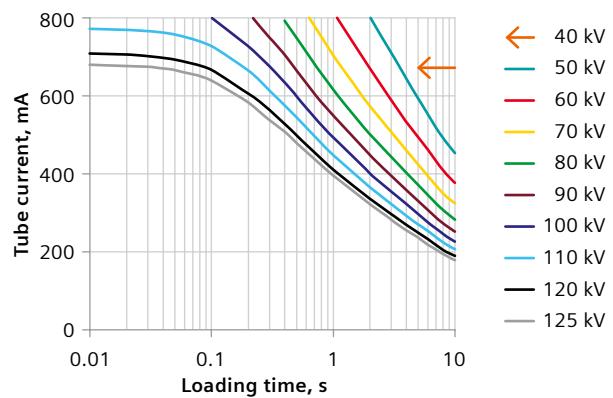
Single load rating charts 2F

Small focus 0.4



According to IEC 60613:2010

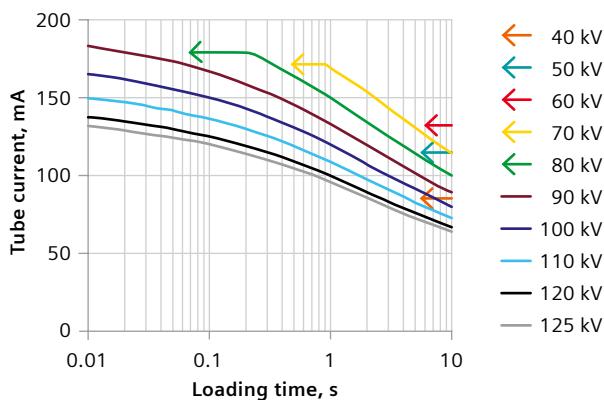
Large focus 0.8



According to IEC 60613:2010

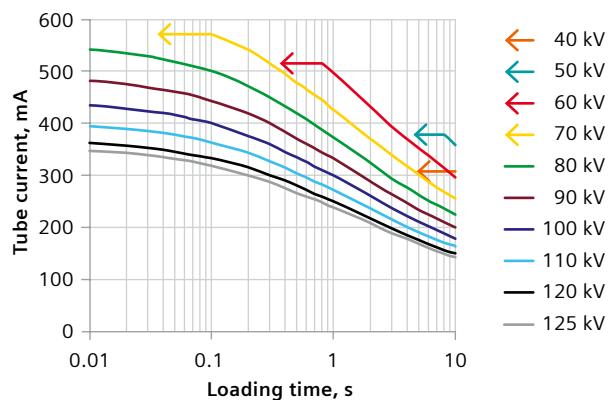
Single load rating charts 3F

Micro focus 0.3



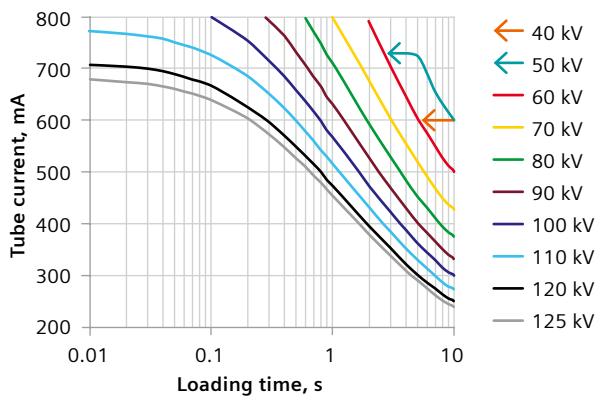
According to IEC 60613:2010

Small focus 0.6



According to IEC 60613:2010

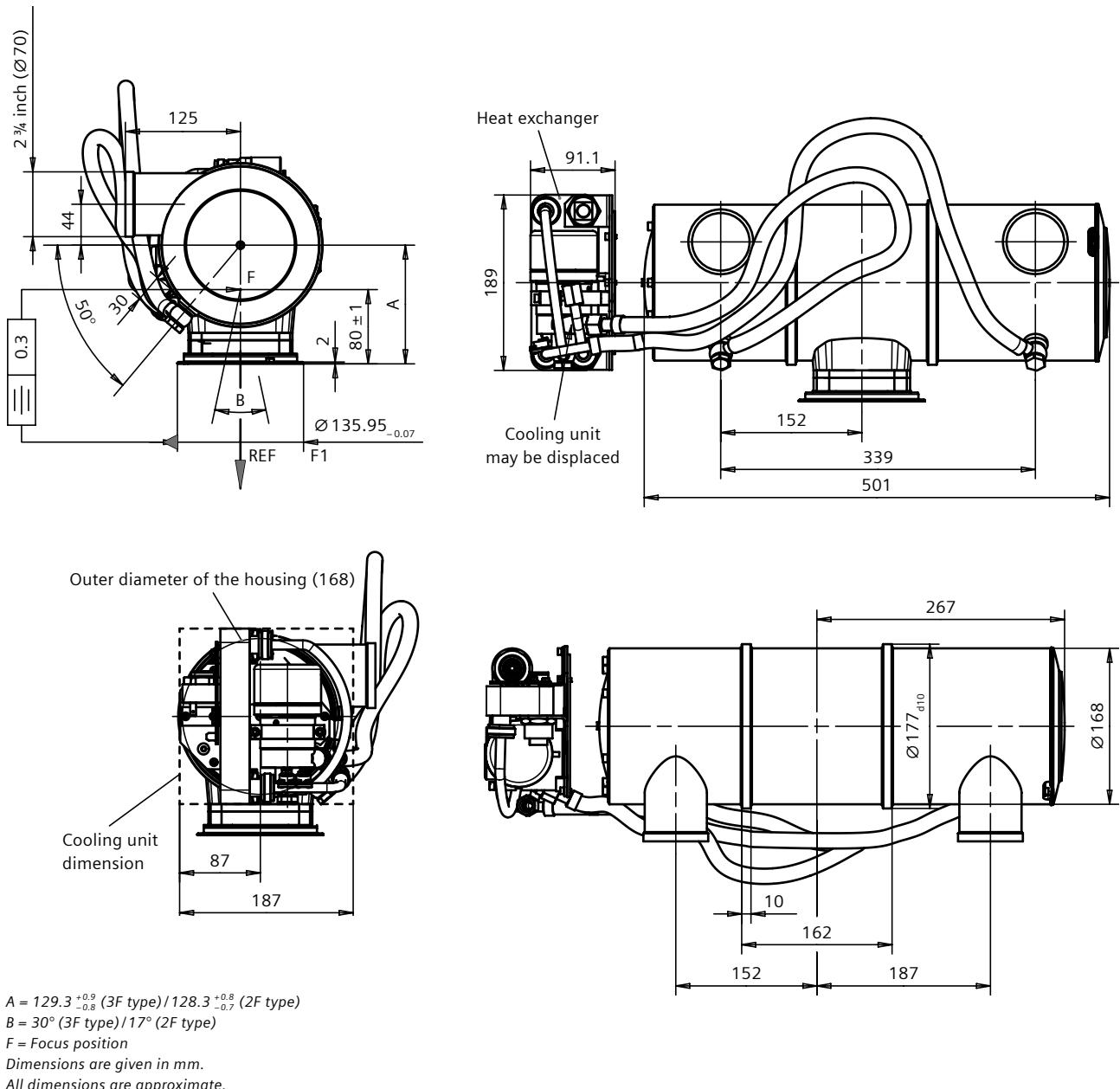
Large focus 1.0



According to IEC 60613:2010

Dimensions

In our portfolio, we have X-ray Tube Assemblies with different variably installable cooling unit.
For example the dimensional drawing of MEGALIX Cat 125/15/40/80 – 122 GW:



Types and material numbers

X-ray tube assembly model type	Mat.-No.
3F type MEGALIX Cat 125/15/40/80 – 122 GW	5765222
2F type MEGALIX Cat 125/35/80 – 125 GW (grid-controlled)	10756860

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