



## ALTA750 ALTA750D X-RAY TUBE

### PRODUCT DESCRIPTION

The ALTA750/ALTA750D is an X-Ray tube specifically designed for use with CT Scanners. This tube is intended for reload in the Varex B-605 H housing and used with the Varex HE-1256 Rev 1 or Rev 2 Heat Exchanger.

### INTENDED USE



The ALTA750/ALTA750D is intended to be used in an X-Ray Tube housing assembly. The assembly is designed to emit ionizing radiation and is intended to be used as a component of a CT system which is used for diagnostic and interventional X-Ray applications on a stationary system.

### INCLUDED INFORMATION AND SPECIFICATIONS


- Tube Specifications
- Housing Assembly Specifications
- Volumetric / Helical Scan Ratings
- Cathode Emission Characteristics
- Housing Diagram
- Housing Wiring
- Disposal Information

Originally written in English.

## TUBE SPECIFICATIONS

Nominal X-ray Tube Voltage	K V	150
Anode Diameter	mm	200
Anode Material		ReW-TZM-C
Anode Angle	Degrees	7
Nominal Focal Spot – Small  IEC 60336	IEC 60336	0.9 x 0.8
Nominal Focal Spot – Large  IEC 60336	IEC 60336	1.6 x 1.4
Anode heat content (Maximum)	MJ	5.4
Nominal Anode Input Power - Large	kW	72
Nominal Anode Input Power - Small	kW	42
Anode Heat Dissipation (Maximum)	W	12,000
Maximum Filament Current - Large	A	5
Maximum Filament Voltage - Large	V	14.4
Maximum Filament Current - Small	A	4.8
Maximum Filament Voltage - Small	V	12.3


## HOUSING ASSEMBLY SPECIFICATIONS (FROM VAREX DATA SHEET)


Maximum Heat Content	MJ	3.6
Maximum Continuous Heat Dissipation	kW	4.0
Maximum Housing Temperature	Degrees C	78
Permanent Filtration  IEC 60601-1-3	mm AL	1.0
Temperature Limits for Transport and Storage	Degrees C	-20 to 75
Temperature Limits for Operation	Degrees C	5 to 40
Weight of Assembly	kg	68.5
Leakage Radiation	mGy@150 kV, 20 mA	0.57


## ADDITIONAL HOUSING ASSEMBLY SPECIFICATIONS


Humidity limits for transport and storage : 10% to 95% RH
Pressure limits for transport and storage: 70 to 106 kPa
Humidity limits for normal operation: 40 to 80% RH
Pressure limits for normal operation: 70 to 106 kPa
Degree of protection against ingress of water is IPX0
Mode of Operation: Intermittent
Device Classification: U.S FDA = Class 1, EU = Class IIb
Device Safety Classification per IEC 60601-1: Class 1

## VOLUMETRIC / HELICAL SCAN RATINGS IEC 60613

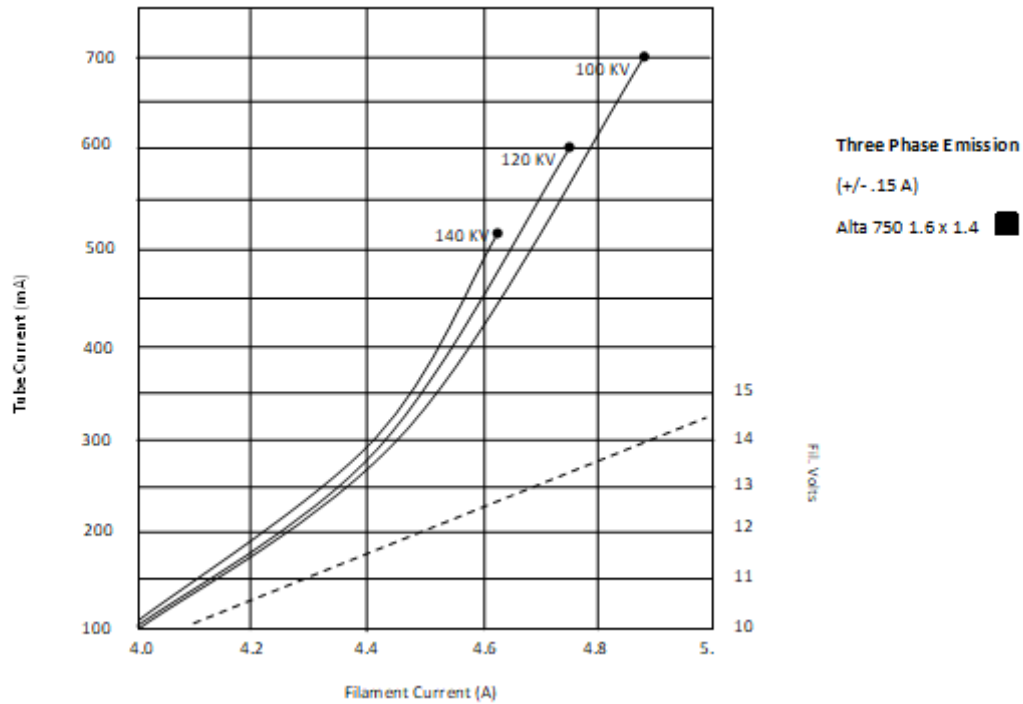
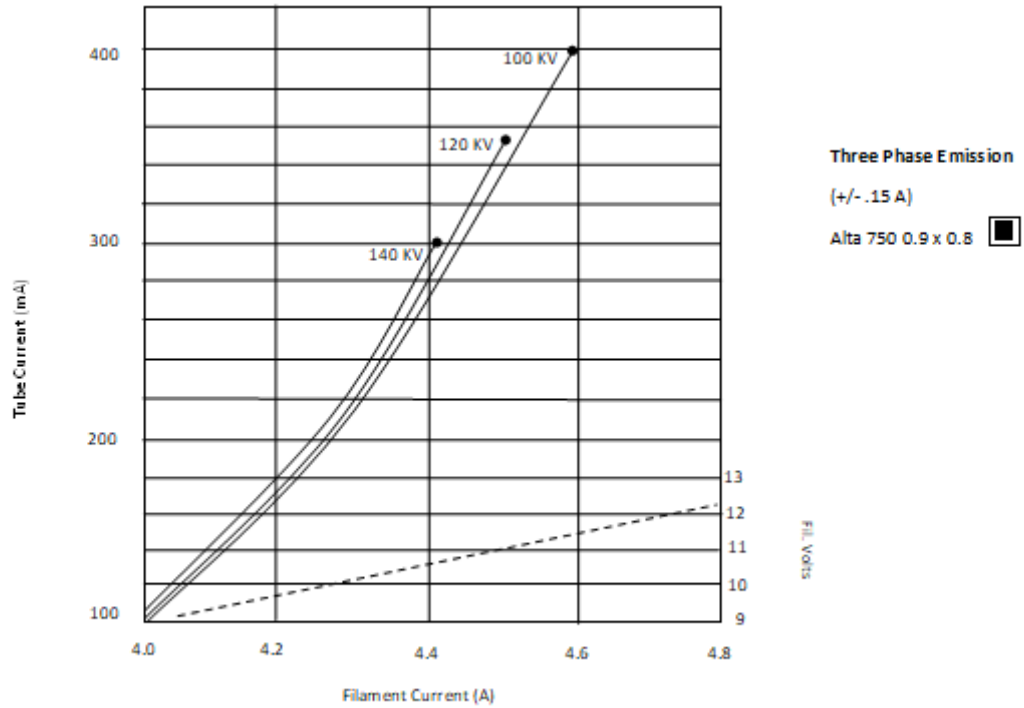
3Ø 50 Hz 	Volume Scan Time (Seconds)	MAXIMUM ALLOWED TUBE CURRENT (mA)								
		AS A FUNCTION OF THE FOLLOWING STARTING HEAT STORAGE AND TUBE VOLTAGES								
		Starting H.S. = 40%			Starting H.S. = 55%			Starting H.S. = 70%		
		100 kv	120 kv	135 kv	100 kv	120 kv	135 kv	100 kv	120 kv	135 kv
0.9 x 0.8 Focal Spot 7 Degrees	4	300	250	225	300	250	225	300	250	225
	10	300	250	225	300	250	225	300	250	225
	15	300	250	225	300	250	225	300	250	225
	20	300	250	225	300	250	225	300	250	225
	30	300	250	225	300	250	225	300	250	225
	45	300	250	225	300	250	225	300	250	225
	60	300	250	225	300	250	225	250	200	175
	75	300	250	225	300	250	225	225	175	150
	80	300	250	225	300	250	225	200	175	150
	90	300	250	225	275	225	200	200	150	150

3Ø 50 Hz 	Volume Scan Time (Seconds)	MAXIMUM ALLOWED TUBE CURRENT (mA)								
		AS A FUNCTION OF THE FOLLOWING STARTING HEAT STORAGE AND TUBE VOLTAGES								
		Starting H.S. = 40%			Starting H.S. = 55%			Starting H.S. = 70%		
		100 kv	120 kv	135 kv	100 kv	120 kv	135 kv	100 kv	120 kv	135 kv
1.6 x 1.4 Focal Spot 7 Degrees	4	670	560	500	670	560	500	670	560	500
	10	670	560	500	670	560	500	670	560	490
	15	670	560	500	670	560	500	640	530	470
	20	670	560	500	670	560	500	610	510	450
	30	600	500	440	600	500	440	440	360	320
	45	540	450	400	480	400	350	320	270	240
	60	450	370	330	380	310	280	260	220	190
	75	410	340	300	310	260	230	230	190	170
	80	380	320	280	300	250	220	220	180	160
	90	350	290	260	270	230	200	200	170	150

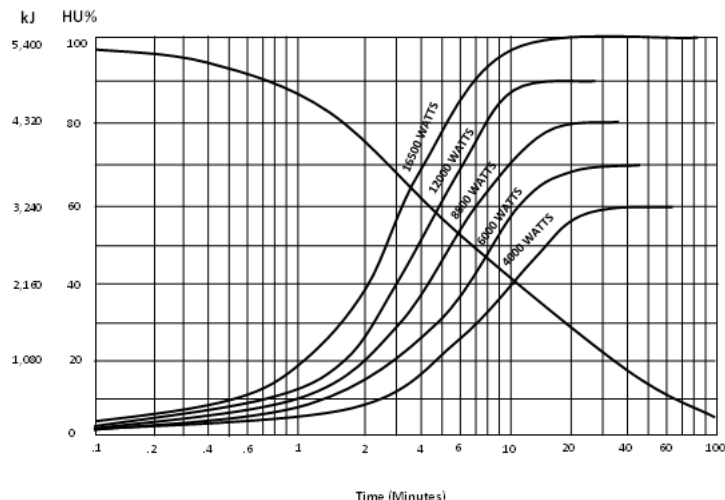
3Ø 100 Hz 	Volume Scan Time (Seconds)	MAXIMUM ALLOWED TUBE CURRENT (mA)								
		AS A FUNCTION OF THE FOLLOWING STARTING HEAT STORAGE AND TUBE VOLTAGES								
		Starting H.S. = 40%			Starting H.S. = 55%			Starting H.S. = 70%		
		100 kv	120 kv	135 kv	100 kv	120 kv	135 kv	100 kv	120 kv	135 kv
0.9 x 0.8 Focal Spot 7 Degrees	4	425	350	300	425	350	300	425	350	300
	10	425	350	300	425	350	300	425	350	300
	15	425	350	300	425	350	300	425	350	300
	20	425	350	300	425	350	300	425	350	300
	30	425	350	300	425	350	300	400	325	300
	45	425	350	300	425	350	300	300	250	225
	60	425	350	300	375	300	275	250	200	175
	75	400	325	300	300	250	225	225	175	150
	80	375	300	275	300	250	225	200	175	150
	90	350	275	250	275	225	200	200	150	150

3Ø 100 Hz 	Volume Scan Time (Seconds)	MAXIMUM ALLOWED TUBE CURRENT (mA)								
		AS A FUNCTION OF THE FOLLOWING STARTING HEAT STORAGE AND TUBE VOLTAGES								
		Starting H.S. = 40%			Starting H.S. = 55%			Starting H.S. = 70%		
		100 kv	120 kv	135 kv	100 kv	120 kv	135 kv	100 kv	120 kv	135 kv
1.6 x 1.4 Focal Spot 7 Degrees	4	720	600	530	720	600	530	720	600	530
	10	720	600	530	720	600	530	720	600	530
	15	720	600	530	720	600	530	720	600	530
	20	720	600	530	720	600	530	610	510	450
	30	600	500	440	600	500	440	440	360	320
	45	540	450	400	480	400	350	320	270	240
	60	450	370	330	380	310	280	260	220	190
	75	410	340	300	310	260	230	230	190	170
	80	380	320	280	300	250	220	220	180	160
	90	350	290	260	270	230	200	200	170	150

## CATHODE EMISSION CHARACTERISTICS IEC 60613



## ANODE HEATING AND COOLING CURVES IEC 60613



**HOUSING DIAGRAM**      *Refer to Varex B 605 H*

**HOUSING WIRING**      *Refer to Varex B 605 H*

## DISPOSAL INFORMATION

Take back, proper disposal and recovery of Medical Devices takes place in accordance with European WEEE directive and the requirements of national legislation.

The X-Ray Tube contains Beryllium and a cooling fluid. The X-Ray Tube housing assembly contains lead for radiation shielding and mineral oil. The x-ray Tube and X-Ray tube assembly must not be disposed in domestic or industrial waste; they must be disposed in accordance with local regulation.

The Tube and housing assembly may be returned to Richardson Healthcare for proper disposal.

Richardson Healthcare strives to be environmentally conscious. Select materials and components are recycled. Controls are in place to assure that all product meet specifications and safety requirements.

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