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Note: Document originally drafted in the English language.  
Note : Document à l'origine rédigé dans l'anglais.  
Anmerkung: Dokument ursprünglich gezeichnet in der englischen Sprache.  
Nota: Documento elaborado originalmente en la lengua inglesa.

<b>Product Description</b>	<b>Description du Produit</b>	<b>Produktbeschreibung</b>	<b>Descripcion del Producto</b>
<p>The MCS-2093 is a 8.0" (203 mm) 140 kV, 1.0 MJ (1.4 MHU) maximum anode heat content, rotating anode insert. This insert is specifically designed for CT Scanners. The insert features a 13° tungsten-rhenium facing on molybdenum target and is available with the following nominal focal spots:</p>	<p>Le tube MCS-2093 est une tube à anode tournante de plateau 203 mm, (8,0 pouces), 140 kV, d'une capacité thermique de 1,0 MJ (1,4 MUC). Il est spécialement conçu pour une utilisation avec les scanners CT. Le pente de l'anode en molybdène traitée, tungstène, rhénium est de 13°. La dimension des foyers est de:</p>	<p>Die MCS-2093 ist eine 200 mm (7.8") Doppelfokus Drehanoden-Röntgenröhre, mit einer Anoden Wärmespeicherkapazität von 1.0 MJ (1.4 MHU) und einer maximale Spannungsfestigkeit von 140 kV. Die Röntgenröhre wurde für den Einsatz von CT scanners entwickelt. Der Wolfram-Rhenium-Molybdän Anodenteller besitzt einen Winkel von 13°. Folgende Brennfleck ist lieferbar:</p>	<p>El MCS-2093 es un tubo de ánodo giratorio de 203 mm (8.0"), 140 kV, 1.0 MJ (1.4 MHU), la cual es el máximo almacenaje termal del anodo, es diseñado específicamente para uso en CT scanners. El blanco emisor es una combinación de tungsteno, renio y molibdeno con un rayo central de 13 grados. Disponible con las siguientes de marcas focales:</p>
<p>0.7mm x 1.6mm 1.5mm x 1.6mm FWHM</p>	<p>0.7mm x 1.6mm 1.5mm x 1.6mm FWHM</p>	<p>0.7mm x 1.6mm 1.5mm x 1.6mm FWHM</p>	<p>0.7mm x 1.6mm 1.5mm x 1.6mm FWHM</p>
<p>The MCS-2093 models have grid control capability.</p>	<p>Les modeles MCS-2093 ont une fonction de commande de grille.</p>	<p>Modell MCS-2093 ist mit Gittersteuerung funktion ausgelattet.</p>	<p>El modelo MCS-2093 tiene capacidad para de rejillas controlar los electrones</p>
<p><b>Loading Factor for Pinhole focal:</b> Small - 120 kV, 100 mA Large - 120 kV, 300 mA</p>	<p><b>Facteur de charge pour Pinhole foyer:</b> Petit - 120 kV, 100 mA Grand - 120 kV, 300 mA</p>	<p><b>Ladefaktor für Pinhole fokale:</b> Klein - 120 kV, 100 mA Gross - 120 kV, 300 mA</p>	<p><b>Carga Electrica Para la Pinhole Focal:</b> Pequeño - 120 kV, 100 mA Grande - 120 kV, 300 mA</p>
<p><b>Maximum Anode Cooling Rate:</b> 3,600 W (5,040 HU/sec)</p>	<p><b>Toux maximum de refroidissement de l'anode:</b> 3,600 W (5,040 UC/sec)</p>	<p><b>Nennleistung der Anode:</b> 3,600 W (5,040 HU/sek)</p>	<p><b>Medida Maxima del Enfriamiento del Anodo:</b> 3,600 W (5,040 HU/seg)</p>
<p><b>Maximum continuous anode heat dissipation:</b> 2,600 W (3,640 HU/sec)</p>	<p><b>Description calorifique maximim de l'anode (en continu):</b> 2,600 W (3,640 UC/sec)</p>	<p><b>Maximale kontinuierliche Wärmeableitung des Anodentellers:</b> 2,600 W (3,640 HU/sek)</p>	<p><b>Maxima disipación termal continuo del Anodo:</b> 2,600 W (3,640 HU/seg)</p>
<p><b>Nominal CT Anode Input Power:</b> Small - 60 kW IEC 60613:2010 Large - 72 kW IEC 60613:2010</p>	<p><b>Puissance d'entrée nominale CT Anode:</b> Petit - 60 kW CEI 60613:2010 Grand - 72 kW CEI 60613:2010</p>	<p><b>CT Anoden Eingangs-Nennleistung:</b> Klein - 60 kW IEC 60613:2010 Gross - 72 kW IEC 60613:2010</p>	<p><b>Potencia nominal de entrada CT del ánodo:</b> Pequeño - 60 kW IEC 60613:2010 Grande - 72 kW IEC 60613:2010</p>
<p><b>Nominal CT Scan Power Index:</b> Small - 41.5 kW IEC 60613:2010 Large - 45.6 kW IEC 60613:2010</p>	<p><b>Indice de puissance nominale CT Scan:</b> Petit - 41.5 kW CEI 60613:2010 Grand - 45.6 kW CEI 60613:2010</p>	<p><b>CT Scan Nennleistungsindex:</b> Klein - 41.5 kW IEC 60613:2010 Gross - 45.6 kW IEC 60613:2010</p>	<p><b>Índice de potencia nominal exposiciones CT:</b> Pequeño - 41.5 kW IEC 60613:2010 Grande - 45.6 kW IEC 60613:2010</p>
<p><b>Reference Axis:</b> Perpendicular to port face.</p>	<p><b>Référence axe:</b> Perpendiculaire à la face de sortie.</p>	<p><b>Referenz Achsen:</b> Senkrecht zum Strahlenaustrittsfenster</p>	<p><b>Referencia de axes:</b> Perpendicular a la abertura facial.</p>
<p>This insert is intended for use in Varex Imaging B-693H housing.</p>	<p>Ce tube est essentiellement destiné à être employé dans les gaines Varex Imaging des séries B-693H.</p>	<p>Die Röntgenröhre ist für den Einbau in die Varex Imaging Strahlerhaube B-693H vorgesehen.</p>	<p>Este tubo es diseñado, para uso en los encajes Varex Imaging de la serie B-639H.</p>
<p>The MCS-2093 utilizes one fluid: a) Dielectric oil in the insert, housing and heat exchanger.</p>	<p>Le MCS-2093 utilise un fluide: a) L'huile diélectrique dans le tube, le gaine et l'échangeur de chaleur.</p>	<p>Das MCS-2093 verwendet eine Flüssigkeiten: a) Dielektrisches Öl im Einsatz, Gehäuse und Wärmeaustauscher.</p>	<p>El MCS-2093 utiliza un líquido: a) El aceite de dieléctrico n el tubo, la encaje y el radiador.</p>

0.7 x 1.6 FWHM Focal Spot 13°  
 0,7 x 1,6 FWHM Dimension Focale 13°  
 0.7 x 1.6 FWHM Brennfleck 13°  
 0.7 x 1.6 FWHM Marca Focale 13°



MCS-2093 Rating Table: Small Spot, DF=50%, Frequency=50Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	38.1	38.1	38.1	38.1	38.1	38.1	38.1	1
0.25	38.1	38.1	38.1	38.1	38.1	38.1	38.1	2
0.5	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
2	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	38.1	3
0.5	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
2	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	38.1	4
0.5	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
2	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	37.4	6
0.5	38.1	38.1	38.1	38.1	38.1	38.1	37.4	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	37.5	
1	38.1	38.1	38.1	38.1	38.1	38.1	37.6	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	37.7	
2	38.1	38.1	38.1	38.1	38.1	38.1	37.8	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	29.9	10
0.5	38.1	38.1	38.1	38.1	38.1	38.1	30.1	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	30.2	
1	38.1	38.1	38.1	38.1	38.1	38.1	30.4	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	30.8	
2	38.1	38.1	38.1	38.1	38.1	38.1	30.9	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	20.9	15
0.5	38.1	38.1	38.1	38.1	38.1	38.1	21	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	21.2	
1	38.1	38.1	38.1	38.1	38.1	38.1	21.3	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	21.8	
2	38.1	38.1	38.1	38.1	38.1	38.1	21.9	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	16.3	20
0.5	38.1	38.1	38.1	38.1	38.1	38.1	16.5	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	16.7	
1	38.1	38.1	38.1	38.1	38.1	38.1	16.8	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	17.3	
2	38.1	38.1	38.1	38.1	38.1	38.1	17.5	

1.5 x 1.6 FWHM Focal Spot 13°  
 1,5 x 1,6 FWHM Dimension Focale 13°  
 1.5 x 1.6 FWHM Brennfleck 13°  
 1.5 x 1.6 FWHM Marca Focale 13°

MCS-2093 Rating Table: Large Spot, DF=50%, Frequency=50Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	51.5	51.5	51.5	51.5	51.5	51.5	51.5	1
0.25	51.5	51.5	51.5	51.5	51.5	51.5	51.5	2
0.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
1	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
2	51.5	51.5	51.5	51.5	51.5	51.5	51.5	3
0.25	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
0.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
1	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	51.5	4
2	51.5	51.5	51.5	51.5	51.5	51.5	51.5	
0.25	51.5	51.5	51.5	51.5	51.5	51.5	50.1	
0.5	51.5	51.5	51.5	51.5	51.5	51.5	50.2	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	50.3	
1	51.5	51.5	51.5	51.5	51.5	51.5	50.3	6
1.75	51.5	51.5	51.5	51.5	51.5	51.5	50.5	
2	51.5	51.5	51.5	51.5	51.5	51.5	50.6	
0.25	51.5	51.5	51.5	51.5	51.5	51.5	45.5	
0.5	51.5	51.5	51.5	51.5	51.5	51.5	45.6	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	45.7	10
1	51.5	51.5	51.5	51.5	51.5	51.5	45.8	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	46	
2	51.5	51.5	51.5	51.5	51.5	51.5	46.1	
0.25	51.5	51.5	51.5	51.5	51.5	51.5	29.9	
0.5	51.5	51.5	51.5	51.5	51.5	51.5	30.1	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	30.2	
1	51.5	51.5	51.5	51.5	51.5	51.5	30.4	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	30.8	
2	51.5	51.5	51.5	51.5	51.5	51.5	30.9	20
0.25	51.5	51.5	51.5	51.5	51.5	51.3	20.9	
0.5	51.5	51.5	51.5	51.5	51.5	51.5	21	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	21.2	
1	51.5	51.5	51.5	51.5	51.5	51.5	21.3	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	21.8	20
2	51.5	51.5	51.5	51.5	51.5	51.5	21.9	
0.25	51.5	51.5	51.5	51.5	51.5	48.2	16.3	
0.5	51.5	51.5	51.5	51.5	51.5	48.6	16.5	
0.75	51.5	51.5	51.5	51.5	51.5	49	16.7	
1	51.5	51.5	51.5	51.5	51.5	49.3	16.8	20
1.75	51.5	51.5	51.5	51.5	51.5	50.1	17.3	
2	51.5	51.5	51.5	51.5	51.5	50.3	17.5	

0.7 x 1.6 FWHM Focal Spot 13°   
 0,7 x 1,6 FWHM Dimension Focale 13°  
 0.7 x 1.6 FWHM Brennfleck 13°  
 0.7 x 1.6 FWHM Marca Focale 13°

MCS-2093 Rating Table: Small Spot, DF=50%, Frequency=130Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	60	60	60	60	60	60	60	1
0.25	60	60	60	60	60	60	60	2
0.5	60	60	60	60	60	60	60	
0.75	60	60	60	60	60	60	60	
1	60	60	60	60	60	60	60	
1.75	60	60	60	60	60	60	60	
2	60	60	60	60	60	60	60	
0.25	60	60	60	60	60	60	59.5	3
0.5	60	60	60	60	60	60	59.6	
0.75	60	60	60	60	60	60	59.7	
1	60	60	60	60	60	60	59.7	
1.75	60	60	60	60	60	60	59.9	
2	60	60	60	60	60	60	60	
0.25	60	60	60	60	60	60	55.9	4
0.5	60	60	60	60	60	60	56	
0.75	60	60	60	60	60	60	56.1	
1	60	60	60	60	60	60	56.2	
1.75	60	60	60	60	60	60	56.4	
2	60	60	60	60	60	60	56.5	
0.25	60	60	60	60	60	60	48.1	6
0.5	60	60	60	60	60	60	48.2	
0.75	60	60	60	60	60	60	48.4	
1	60	60	60	60	60	60	48.5	
1.75	60	60	60	60	60	60	48.9	
2	60	60	60	60	60	60	49	
0.25	60	60	60	60	60	60	29.9	10
0.5	60	60	60	60	60	60	30.1	
0.75	60	60	60	60	60	60	30.2	
1	60	60	60	60	60	60	30.3	
1.75	60	60	60	60	60	60	30.8	
2	60	60	60	60	60	60	30.9	
0.25	60	60	60	60	60	57.4	20.9	15
0.5	60	60	60	60	60	57.9	21	
0.75	60	60	60	60	60	58.4	21.2	
1	60	60	60	60	60	58.7	21.3	
1.75	60	60	60	60	60	59.5	21.8	
2	60	60	60	60	60	59.7	21.9	
0.25	60	60	60	60	60	53.5	16.3	20
0.5	60	60	60	60	60	54.1	16.5	
0.75	60	60	60	60	60	54.6	16.7	
1	60	60	60	60	60	55	16.8	
1.75	60	60	60	60	60	55.9	17.3	
2	60	60	60	60	60	56.2	17.5	

1.5 x 1.6 FWHM Focal Spot 13°  
 1,5 x 1,6 FWHM Dimension Focale 13°  
 1.5 x 1.6 FWHM Brennfleck 13°  
 1.5 x 1.6 FWHM Marca Focale 13°

MCS-2093 Rating Table: Large Spot, DF=50%, Frequency=130Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	72	72	72	72	72	72	72	1
0.25	72	72	72	72	72	72	72	2
0.5	72	72	72	72	72	72	72	
0.75	72	72	72	72	72	72	72	
1	72	72	72	72	72	72	72	
1.75	72	72	72	72	72	72	72	
2	72	72	72	72	72	72	72	
0.25	72	72	72	72	72	72	72	3
0.5	72	72	72	72	72	72	72	
0.75	72	72	72	72	72	72	72	
1	72	72	72	72	72	72	72	
1.75	72	72	72	72	72	72	72	
2	72	72	72	72	72	72	72	
0.25	72	72	72	72	72	72	67	4
0.5	72	72	72	72	72	72	67.1	
0.75	72	72	72	72	72	72	67.2	
1	72	72	72	72	72	72	67.4	
1.75	72	72	72	72	72	72	67.7	
2	72	72	72	72	72	72	67.8	
0.25	72	72	72	72	72	72	48.1	6
0.5	72	72	72	72	72	72	48.2	
0.75	72	72	72	72	72	72	48.4	
1	72	72	72	72	72	72	48.5	
1.75	72	72	72	72	72	72	48.9	
2	72	72	72	72	72	72	49	
0.25	72	72	72	72	72	72	29.9	10
0.5	72	72	72	72	72	72	30.1	
0.75	72	72	72	72	72	72	30.2	
1	72	72	72	72	72	72	30.3	
1.75	72	72	72	72	72	72	30.8	
2	72	72	72	72	72	72	30.9	
0.25	72	72	72	72	72	69.1	20.9	15
0.5	72	72	72	72	72	69.9	21	
0.75	72	72	72	72	72	70.5	21.2	
1	72	72	72	72	72	71	21.3	
1.75	72	72	72	72	72	72	21.8	
2	72	72	72	72	72	72	21.9	
0.25	72	72	72	72	72	57.7	16.3	20
0.5	72	72	72	72	72	58.3	16.5	
0.75	72	72	72	72	72	58.9	16.7	
1	72	72	72	72	72	59.5	16.8	
1.75	72	72	72	72	72	61.3	17.3	
2	72	72	72	72	72	61.9	17.5	

0.7 x 1.6 FWHM Focal Spot 13°   
 0,7 x 1,6 FWHM Dimension Focale 13°  
 0.7 x 1.6 FWHM Brennfleck 13°  
 0.7 x 1.6 FWHM Marca Focale 13°

MCS-2093 Rating Table: Small Spot, DF=100%, Frequency=50Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	38.1	38.1	38.1	38.1	38.1	38.1	38.1	1
0.25	38.1	38.1	38.1	38.1	38.1	38.1	37.4	2
0.5	38.1	38.1	38.1	38.1	38.1	38.1	37.4	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	37.5	
1	38.1	38.1	38.1	38.1	38.1	38.1	37.5	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	37.6	
2	38.1	38.1	38.1	38.1	38.1	38.1	37.6	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	34.4	3
0.5	38.1	38.1	38.1	38.1	38.1	38.1	34.5	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	34.5	
1	38.1	38.1	38.1	38.1	38.1	38.1	34.6	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	34.7	
2	38.1	38.1	38.1	38.1	38.1	38.1	34.7	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	32.1	4
0.5	38.1	38.1	38.1	38.1	38.1	38.1	32.1	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	32.2	
1	38.1	38.1	38.1	38.1	38.1	38.1	32.2	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	32.4	
2	38.1	38.1	38.1	38.1	38.1	38.1	32.4	
0.25	38.1	38.1	38.1	38.1	38.1	38.1	24	6
0.5	38.1	38.1	38.1	38.1	38.1	38.1	24.1	
0.75	38.1	38.1	38.1	38.1	38.1	38.1	24.2	
1	38.1	38.1	38.1	38.1	38.1	38.1	24.2	
1.75	38.1	38.1	38.1	38.1	38.1	38.1	24.4	
2	38.1	38.1	38.1	38.1	38.1	38.1	24.5	
0.25	38.1	38.1	38.1	38.1	38.1	36.2	14.9	10
0.5	38.1	38.1	38.1	38.1	38.1	36.6	15	
0.75	38.1	38.1	38.1	38.1	38.1	36.8	15.1	
1	38.1	38.1	38.1	38.1	38.1	37	15.2	
1.75	38.1	38.1	38.1	38.1	38.1	37.5	15.4	
2	38.1	38.1	38.1	38.1	38.1	37.6	15.4	
0.25	38.1	38.1	38.1	38.1	38.1	33	10.4	15
0.5	38.1	38.1	38.1	38.1	38.1	33.4	10.5	
0.75	38.1	38.1	38.1	38.1	38.1	33.7	10.6	
1	38.1	38.1	38.1	38.1	38.1	33.9	10.6	
1.75	38.1	38.1	38.1	38.1	38.1	34.5	10.9	
2	38.1	38.1	38.1	38.1	38.1	34.6	10.9	
0.25	38.1	38.1	38.1	38.1	36.8	28.8	8.1	20
0.5	38.1	38.1	38.1	38.1	37.4	29.1	8.2	
0.75	38.1	38.1	38.1	38.1	37.9	29.4	8.3	
1	38.1	38.1	38.1	38.1	38.1	29.7	8.4	
1.75	38.1	38.1	38.1	38.1	38.1	30.6	8.6	
2	38.1	38.1	38.1	38.1	38.1	30.9	8.7	

1.5 x 1.6 FWHM Focal Spot 13°  
 1,5 x 1,6 FWHM Dimension Focale 13°  
 1.5 x 1.6 FWHM Brennfleck 13°  
 1.5 x 1.6 FWHM Marca Focale 13°

MCS-2093 Rating Table: Large Spot, DF=100%, Frequency=50Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	51.5	51.5	51.5	51.5	51.5	51.5	51.4	1
0.25	51.5	51.5	51.5	51.5	51.5	51.5	45.5	2
0.5	51.5	51.5	51.5	51.5	51.5	51.5	45.5	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	45.6	
1	51.5	51.5	51.5	51.5	51.5	51.5	45.6	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	45.8	
2	51.5	51.5	51.5	51.5	51.5	51.5	45.8	
0.25	51.5	51.5	51.5	51.5	51.5	51.5	41.2	3
0.5	51.5	51.5	51.5	51.5	51.5	51.5	41.3	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	41.3	
1	51.5	51.5	51.5	51.5	51.5	51.5	41.4	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	41.6	
2	51.5	51.5	51.5	51.5	51.5	51.5	41.6	
0.25	51.5	51.5	51.5	51.5	51.5	51.5	35.4	4
0.5	51.5	51.5	51.5	51.5	51.5	51.5	35.5	
0.75	51.5	51.5	51.5	51.5	51.5	51.5	35.6	
1	51.5	51.5	51.5	51.5	51.5	51.5	35.6	
1.75	51.5	51.5	51.5	51.5	51.5	51.5	35.8	
2	51.5	51.5	51.5	51.5	51.5	51.5	35.8	
0.25	51.5	51.5	51.5	51.5	51.5	48.8	24	6
0.5	51.5	51.5	51.5	51.5	51.5	49.2	24.1	
0.75	51.5	51.5	51.5	51.5	51.5	49.5	24.2	
1	51.5	51.5	51.5	51.5	51.5	49.8	24.2	
1.75	51.5	51.5	51.5	51.5	51.5	50.4	24.4	
2	51.5	51.5	51.5	51.5	51.5	50.5	24.5	
0.25	51.5	51.5	51.5	51.5	51.2	43.8	14.9	10
0.5	51.5	51.5	51.5	51.5	51.5	44.3	15	
0.75	51.5	51.5	51.5	51.5	51.5	44.7	15.1	
1	51.5	51.5	51.5	51.5	51.5	45	15.2	
1.75	51.5	51.5	51.5	51.5	51.5	45.7	15.4	
2	51.5	51.5	51.5	51.5	51.5	45.8	15.4	
0.25	51.5	51.5	51.5	51.5	47.6	38	10.4	15
0.5	51.5	51.5	51.5	51.5	48.4	38.2	10.5	
0.75	51.5	51.5	51.5	51.5	49.1	38.5	10.6	
1	51.5	51.5	51.5	51.5	49.5	38.8	10.6	
1.75	51.5	51.5	51.5	51.5	50.3	39.7	10.9	
2	51.5	51.5	51.5	51.5	50.5	40	10.9	
0.25	51.5	51.5	50.7	49.3	44.7	28.8	8.1	20
0.5	51.5	51.5	51.5	50.3	45.5	29.1	8.2	
0.75	51.5	51.5	51.5	51.1	46.2	29.4	8.3	
1	51.5	51.5	51.5	51.4	46.6	29.7	8.4	
1.75	51.5	51.5	51.5	51.5	47.6	30.6	8.6	
2	51.5	51.5	51.5	51.5	47.8	30.9	8.7	

0.7 x 1.6 FWHM Focal Spot 13°  
 0,7 x 1,6 FWHM Dimension Focale 13°  
 0.7 x 1.6 FWHM Brennfleck 13°  
 0.7 x 1.6 FWHM Marca Focale 13°



MCS-2093 Rating Table: Small Spot, DF=100%, Frequency=130Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	60	60	60	60	60	60	57.3	1
0.25	60	60	60	60	60	60	49.9	2
0.5	60	60	60	60	60	60	50	
0.75	60	60	60	60	60	60	50.1	
1	60	60	60	60	60	60	50.1	
1.75	60	60	60	60	60	60	50.3	
2	60	60	60	60	60	60	50.3	
0.25	60	60	60	60	60	60	44.8	3
0.5	60	60	60	60	60	60	44.9	
0.75	60	60	60	60	60	60	45	
1	60	60	60	60	60	60	45.1	
1.75	60	60	60	60	60	60	45.3	
2	60	60	60	60	60	60	45.3	
0.25	60	60	60	60	60	57.9	35.4	4
0.5	60	60	60	60	60	58.3	35.5	
0.75	60	60	60	60	60	58.7	35.5	
1	60	60	60	60	60	59	35.6	
1.75	60	60	60	60	60	59.6	35.7	
2	60	60	60	60	60	59.7	35.8	
0.25	60	60	60	60	60	53.9	24	6
0.5	60	60	60	60	60	54.4	24.1	
0.75	60	60	60	60	60	54.9	24.2	
1	60	60	60	60	60	55.2	24.2	
1.75	60	60	60	60	60	55.9	24.4	
2	60	60	60	60	60	56.1	24.5	
0.25	60	60	60	60	56.9	47.9	14.9	10
0.5	60	60	60	60	57.9	48.5	15	
0.75	60	60	60	60	58.6	49	15.1	
1	60	60	60	60	59	49.3	15.1	
1.75	60	60	60	60	60	50.2	15.4	
2	60	60	60	60	60	50.4	15.4	
0.25	60	60	59.2	58	52.5	37.9	10.4	15
0.5	60	60	60	59.3	53.5	38.2	10.5	
0.75	60	60	60	60	54.3	38.5	10.6	
1	60	60	60	60	54.8	38.8	10.6	
1.75	60	60	60	60	55.9	39.7	10.9	
2	60	60	60	60	56.1	39.9	10.9	
0.25	60	58.6	56.3	54.9	48.9	28.8	8.1	20
0.5	60	60	57.7	56.3	50	29.1	8.2	
0.75	60	60	58.6	57.2	50.8	29.4	8.3	
1	60	60	59.2	57.7	51.3	29.7	8.4	
1.75	60	60	60	58.9	52.5	30.6	8.6	
2	60	60	60	59.2	52.8	30.9	8.7	

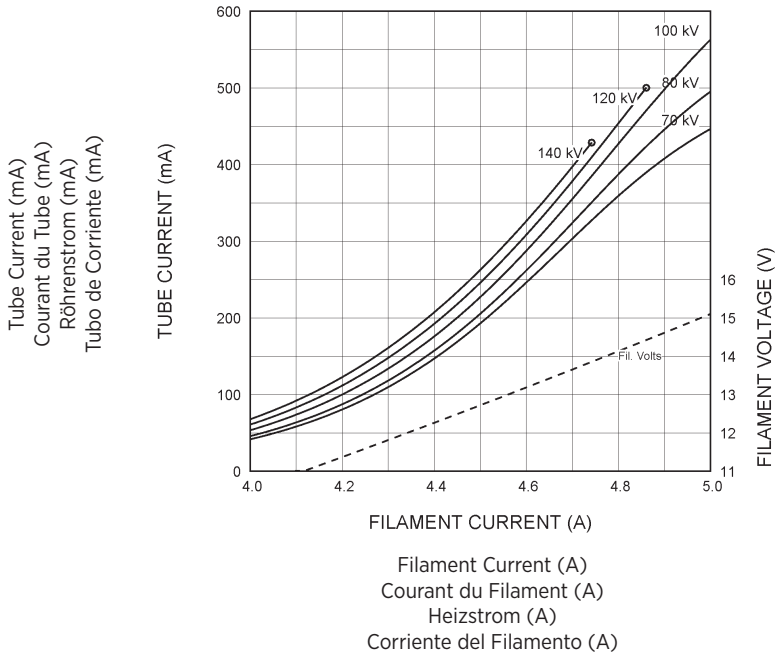


1.5 x 1.6 FWHM Focal Spot 13°  
 1,5 x 1,6 FWHM Dimension Focale 13°  
 1.5 x 1.6 FWHM Brennfleck 13°  
 1.5 x 1.6 FWHM Marca Focale 13°

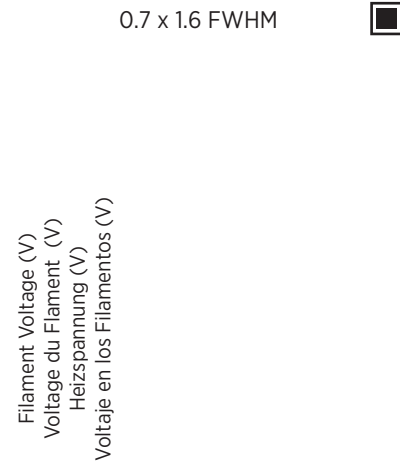
MCS-2093 Rating Table: Large Spot, DF=100%, Frequency=130Hz, Starting H.S = 40%								
Delay between scans [s]	Peak Power Ratings [kW] as a function of Scan Times [s]							Number of Scans in Series
	0.18	0.25	0.3	0.33	0.5	1	4	
--	72	72	72	72	72	72	68.9	1
0.25	72	72	72	72	72	72	58.6	2
0.5	72	72	72	72	72	72	58.7	
0.75	72	72	72	72	72	72	58.8	
1	72	72	72	72	72	72	58.8	
1.75	72	72	72	72	72	72	59	
2	72	72	72	72	72	72	59.1	
0.25	72	72	72	72	72	72	46.8	3
0.5	72	72	72	72	72	72	46.9	
0.75	72	72	72	72	72	72	46.9	
1	72	72	72	72	72	72	46.9	
1.75	72	72	72	72	72	72	47.1	
2	72	72	72	72	72	72	47.1	
0.25	72	72	72	72	72	69.8	35.4	4
0.5	72	72	72	72	72	70.5	35.5	
0.75	72	72	72	72	72	71	35.5	
1	72	72	72	72	72	71.4	35.6	
1.75	72	72	72	72	72	72	35.7	
2	72	72	72	72	72	72	35.8	
0.25	72	72	72	72	72	64.1	24	6
0.5	72	72	72	72	72	64.9	24.1	
0.75	72	72	72	72	72	65.4	24.2	
1	72	72	72	72	72	65.9	24.2	
1.75	72	72	72	72	72	66.9	24.4	
2	72	72	72	72	72	67.2	24.5	
0.25	72	72	72	72	68.3	55.8	14.9	10
0.5	72	72	72	72	69.8	56.4	15	
0.75	72	72	72	72	70.8	56.7	15.1	
1	72	72	72	72	71.5	57	15.1	
1.75	72	72	72	72	72	57.8	15.4	
2	72	72	72	72	72	58.1	15.4	
0.25	72	72	71.7	69.9	62.1	37.9	10.4	15
0.5	72	72	72	71.9	63.6	38.2	10.5	
0.75	72	72	72	72	64.6	38.5	10.6	
1	72	72	72	72	65.4	38.8	10.6	
1.75	72	72	72	72	66.9	39.7	10.9	
2	72	72	72	72	67.3	39.9	10.9	
0.25	72	70.8	67.5	65.6	56.5	28.8	8.1	20
0.5	72	72	69.5	67.5	57	29.1	8.2	
0.75	72	72	70.8	68.7	57.6	29.4	8.3	
1	72	72	71.7	69.6	58.2	29.7	8.4	
1.75	72	72	72	71.3	60	30.6	8.6	
2	72	72	72	71.7	60.6	30.9	8.7	

3 Ø III

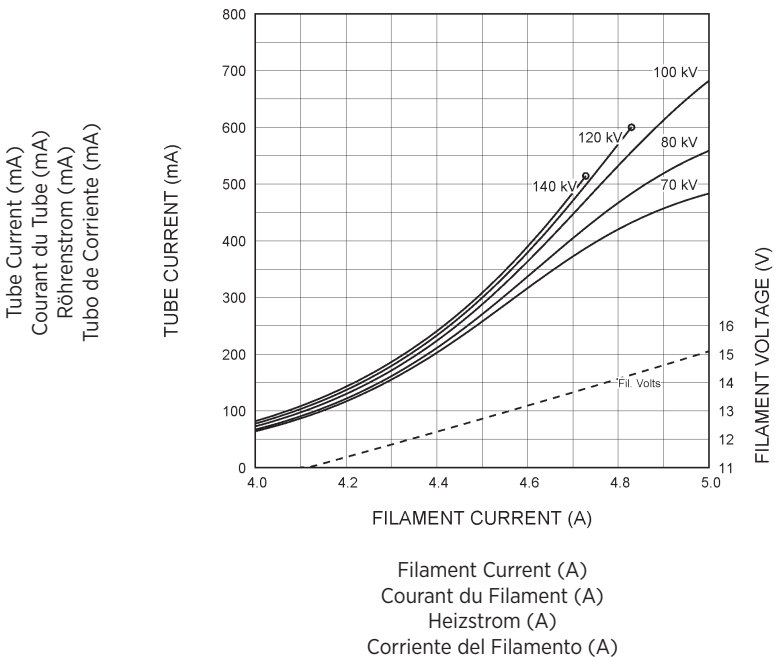
THREE PHASE EMISSION (+.15A)  
 MCS-2093 SMALL



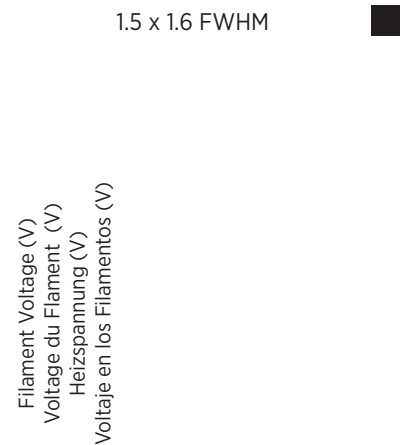
THREE PHASE EMISSION (± .15 A)  
 0.7 x 1.6 FWHM



THREE PHASE EMISSION (+.15A)  
 MCS-2093 LARGE



THREE PHASE EMISSION (± .15 A)  
 1.5 x 1.6 FWHM



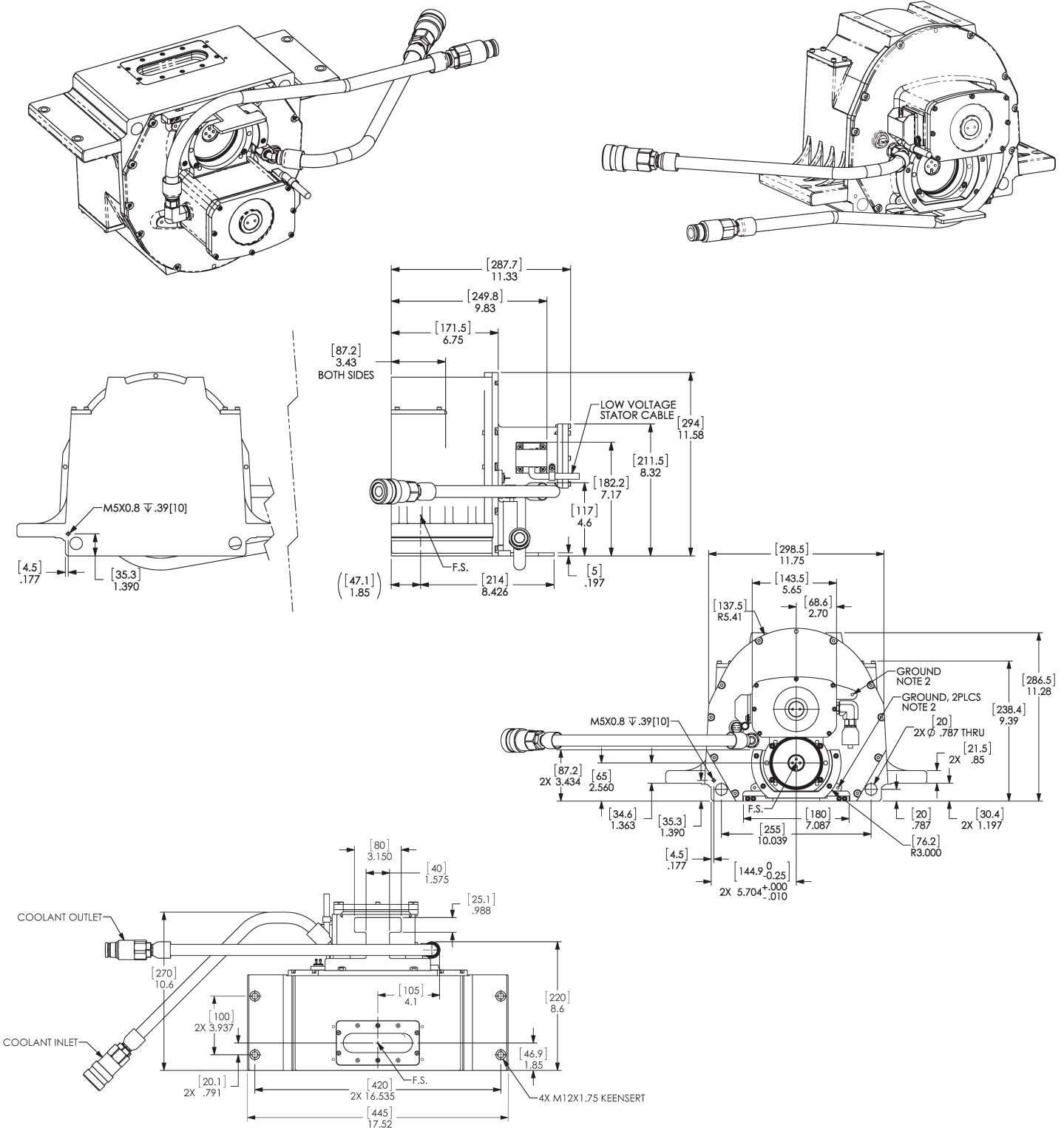
Maximum Peak Voltage	140 kV
Anode to Ground	0 kV
Cathode to Ground	140 kV
Maximum X-ray Tube Assembly Heat Content	1.0 MJ (1.4 MHU)
Nominal Continuous Input Power	2.0 kW (2.8 kHU/sec) IEC 60613:2010
Maximum Housing Temperature	80°C
Focal Point Position (Central Ray) Within 1mm (X, Y Direction from the center of radiation port.)	
X-Ray Tube Assembly	
Permanent filtration	1.1 mm Al @ 140 kV IEC 60522
Loading Factors for Leakage Radiation	140 kV, 14 mA
High Voltage Cable	Special
Ambient Air Temperature Limits for Operation	5°C to 40°C
Temperature Limits for Storage and Transport	-20°C to +75°C
Humidity	+10% to +90%
Atmospheric Pressure Range	70 kPa to 106 kPa
Weight - Housing	46.22 ±0.25 kg (101.9 ±0.55 lbs)
Heat Exchanger	12.2 ±0.25 kg (26.9 ±0.55 lbs)
IEC Classification	Class 1
Safety Devices	
Housing - Thermal Switch	
Normally Closed Contacts	Opens at 80°C ±3°C Closes at 69°C 3°C
Heat Exchanger	
Pressure Switch	Closes at 5 psi ±1 rising Opens at 4 psi ±1 falling
Pressure Relief Valve	Opens at 30 psi ±5%
Filament Frequency Limits	50 HZ - 40 KHZ
Power Supply	DC

Tension maximale	140 kV
Tension Anode - Terre	0 kV
Tension Cathode - Terre	140 kV
Capacité Thermique Maximale de L'Ensemble Tube/Gaine	1,0 MJ (1,4 MUC)
Continue nominale Puissance d'entree	2,0 kW (2,8 kUC/sec) CEI 60613:2010
Température maximale de la gaine	80°C
Position du foyer (rayon central) à 1mm près (Coordonnées X, Y par rapport au centre du port de rayonnement.)	
Ensemble Radiogène	
Filtre non amovible	1,1 mm Al @ 140 kV CEI 60522
Facteur de Charge Poru Rayonnement de fuite	140 kV, 14 mA
Embouts de Cables	Spécial
Température Ambiante Pendant L'usage	5°C à 40°C
Limites de Température Pour le Transport et Pour L'Emmasinage	-20°C à +75°C
Humidité	+10% à +90%
Limites de pression atmosphérique	70 kPa à 106 kPa
Poids - Gaine	46,22 ±0,25 kg (101,9 ±0,55 lbs)
Échangeur de Chaleur	12,2 ±0,25 kg (26,9 ±0,55 lbs)
Classification CEI	Classe 1
Dispositifs de Sécurité	
Gaine - Switch Thermique	
Normalement Fermé	S'ouvre à 80°C ±3°C Fermé à 69°C ±3°C
Échangeur de Chaleur	
Pression de Interrupteur	Fermé à 5 psi ±1 d'augmentation S'ouvre 4 psi ±1 chute
Valve de décompression	S'ouvre à 30 psi ±5%
Limites de Fréquence des Filaments	50 HZ - 40 KHZ
Alimentation Demandée	Courant Continu

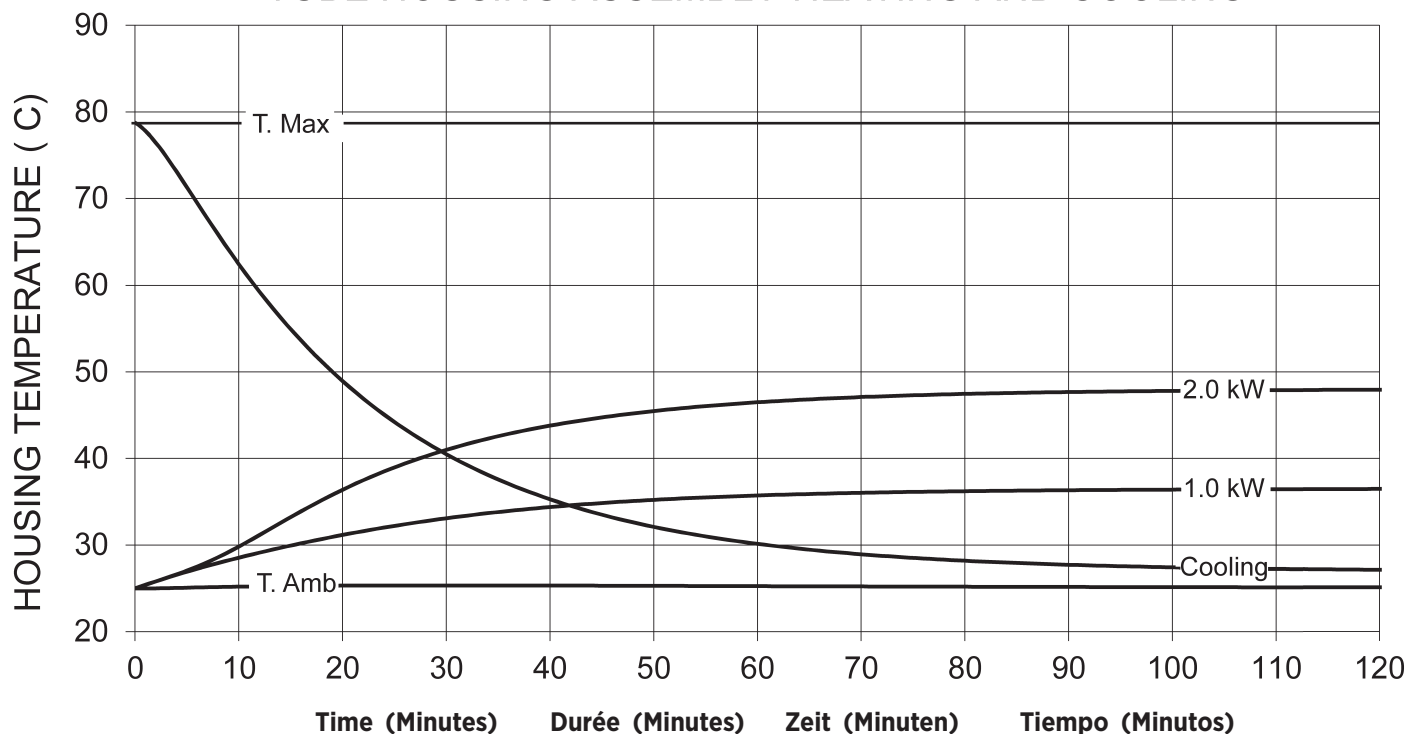
Maximale Spannungsfestigkeit	140 kV
Anode gegen Erde	0 kV
Kathode gegen Erde	140 kV
Maximale Wärmespeicherkapazität des Strahlergehäuses	1.0 MJ (1.4 MHU)
Kontinuierliche Eingangs-Nennleistung	2.0 kW (2.8 kHU/sek) IEC 60613:2010
Maximale Gehäusetemperatur	80°C
Brennfleckposition (Zentralstrahl) innerhalb 1mm. (X-, Y-Achse von der mitte des Strahlenaustrittsfensters)	
Röntgenstrahlers	
Eigenfilterwert	1.1 mm Al @ 140 kV IEC 60522
Ladefaktoren für Leckstrahlungsmessung	140 kV, 14 mA
Hochspannungsbuchsen	Besondere
Umgebungstemperaturgrenzen für den Betrieb	5°C bis 40°C
Temperaturgrenzen für Aufbewahrung und Transport	-20°C bis +75°C
Feuchtigkeit	+10% bis +90%
Luftdruck	70 kPa bis 106 kPa
Gewicht - Gehäuse	46.22 ±0.25 kg (101.9 ±0.55 lbs)
Wärmetauscher	12.2 ±0.25 kg (26.9 ±0.55 lbs)
IEC Klassifizierung	Klasse 1
Sicherheitseinrichtungen	
Gehäuse - Thermoschalter	
Normalerweise geschlossen Verbindung	Offen bei 80°C ±3°C Schließt bei 69°C ±3°C
Wärmetauscher	
Druckschalter	Schließt bei 5 psi ±1 steigend Offen bei 4 psi ±1 fallen
Druckablassventil	Offen bei 30 psi ±5%
Heizfaden - Frequenzgrenze	50 HZ - 40 KHZ
Netzanschluß	DC

Tensión Máxima	140 kV
Anodo a Tierra	0 kV
Catodo a Tierra	140 kV
Maximo Calor Contenido Ensamblaje del Tubo de Rayos X	1.0 MJ (1.4 MHU)
Potencia nominal de entrada continua	2.0 kW (2.8 kHU/seg) IEC 60613:2010
Temperatura máxima de la encaje	80°C
Posición de la marca focal (Rayo Central) Dentro de 1mm. (La Dirección axial X, Y se refiere del centro de la Radiación Portal.)	
Ensamblaje de Tubo de Rayos X	
Filtración Permanente	1.1 mm Al @ 140 kV IEC 60522
Especificaciones de Encaje para la fuga de Radiacion	140 kV, 14 mA
Cable de Receptaculos	Especial
Temperatura Limitada de Operación	5°C a 40°C
Temperatura Limitada de Almacen y Transporte	-20°C a +75°C
Humedad	+10% a +90%
Limites de la presión atmosférica	70 kPa a 106 kPa
Peso - Encaje	46.22 ±0.25 kg (101.9 ±0.55 lbs)
Radiador	12.2 ±0.25 kg (26.9 ±0.55 lbs)
IEC Clasificación	Clase 1
Aparatos de Seguridad	
Encaje - Interruptor Termal	
Normalmente Cerrado	Abre a 80°C ±3°C Cerrado a 69°C ±3°C
Radiador	
Interruptor de Presión	Cerrado a 5 psi 1± levantamiento Abre a 4 psi ±1 cayendo
Válvula de descarga de presión	Abre a 30 psi ±5%
Limites de la frecuencia del filamento	50 HZ - 40 KHZ
Suministrador-de-Poder	Corriente Directa

Dimensions are for reference only  
 Les dimensions sont pour la référence seulement  
 Maße sind als nur Referenz  
 Las dimensiones están para la referencia solamente



## TUBE HOUSING ASSEMBLY HEATING AND COOLING


**Note:**

1. Heat input into housing includes all power sources; tube, filament, stator and circulating pump.

2. Heating curves based on no restrictions to air flow through heat exchanger, or natural convection around tube housing assembly.

3. Heating and cooling curves reflect maximum tube performance. Tube operation is ultimately limited by system software control.

**Remarque:**

1. L'entrée de chaleur dans la gaine comprend toutes les sources de puissance; tube, filament, stator et pompe circulante.

2. Courbes de chauffage basées sur l'absence de restrictions à la circulation de l'air par l'échangeur de chaleur, ou convection naturelle autour de l'assemblage de boîtiers de tubes.

3. Les abaques d'échauffement et de refroidissement représentent des valeurs maximales. L'utilisation du tube est finalement limitée par le logiciel du système.

**Anmerkungen:**

1. Die Wärmeingangsleistung des Strahlenschutzgehäuse umfasst alle Energiequellen, wie: Strahler, Heizfäden, Stator und Umwälzpumpe.

2. Die Heizkurven basieren auf keinerlei Einschränkung durch den Wärmetauscher, oder der natürlichen Konvektion um das Strahlenschutzgehäuse.

3. Die Angaben stellen die höchstzulässigen Betriebswerte dar. Der technische Betrieb muß im Rahmen der Belastungs- und Abkühlkennlinien erfolgen.

**Nota:**

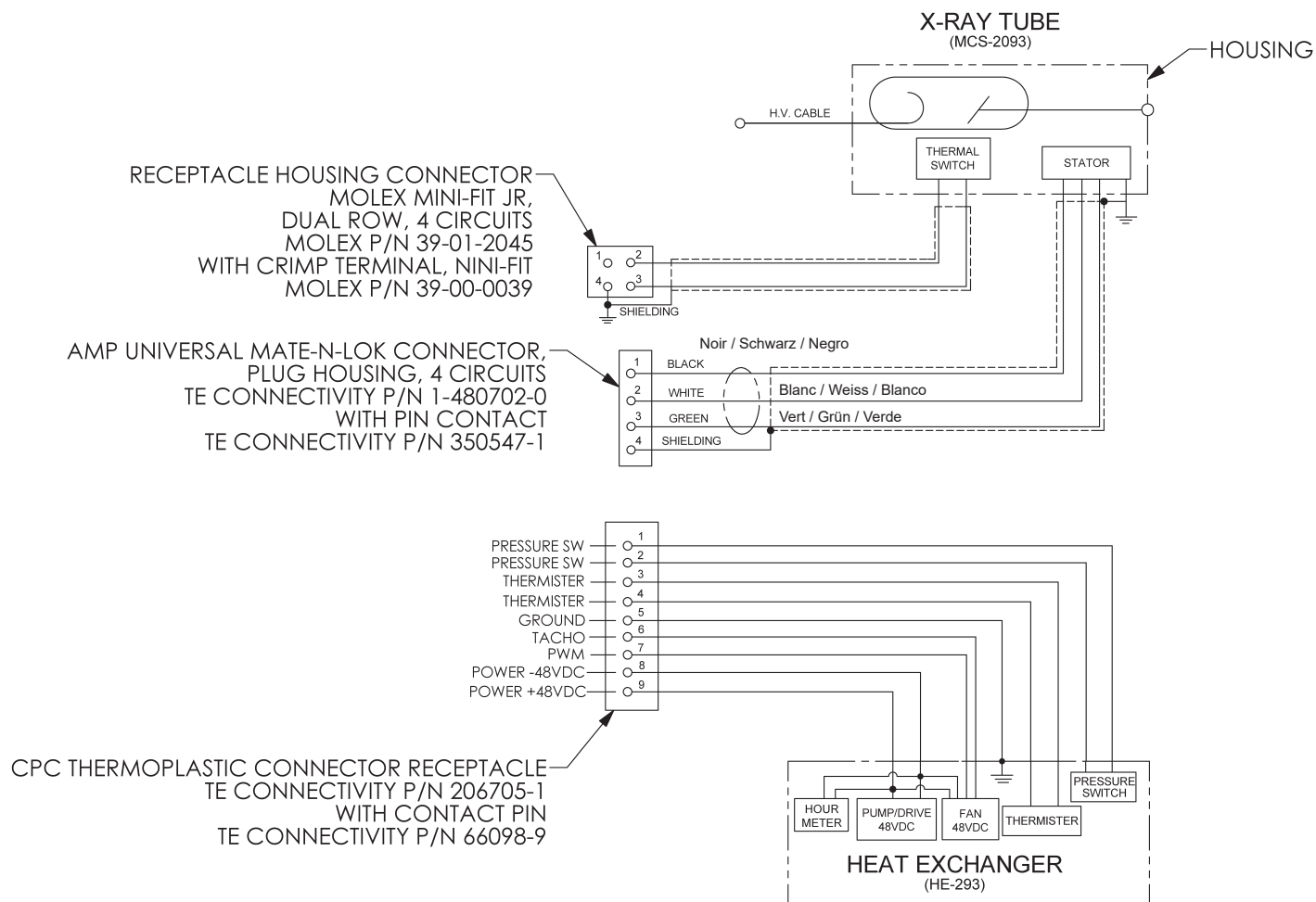
1. La entrada de calor en el encaje incluye todas las fuentes de alimentación; tubo, filamento, estator y bomba de circulación.

2. Curvas de calentamiento sin ninguna restricción al flujo de aire a través del intercambiador de calor, o convección natural alrededor del conjunto de la coraza del tubo de rayos-x.

3. El máximo poder del tubo es reflectada en el diagrama de enfriamiento y calentamiento del tubo es ultimamente limitada por el control del sistema programado.

Terminal / Wire Color Chart  
 Termiaux / Code Couleu  
 Klemmen / Kabelfarbtabelle  
 Maja Del Alambre de Color Impulado / Terminal

Stator Ratings and Characteristics  
 Spécificités et Caractéristiques du Stator  
 Statornennleistungen und Merkmale  
 Características y Clarificación de la Bovina



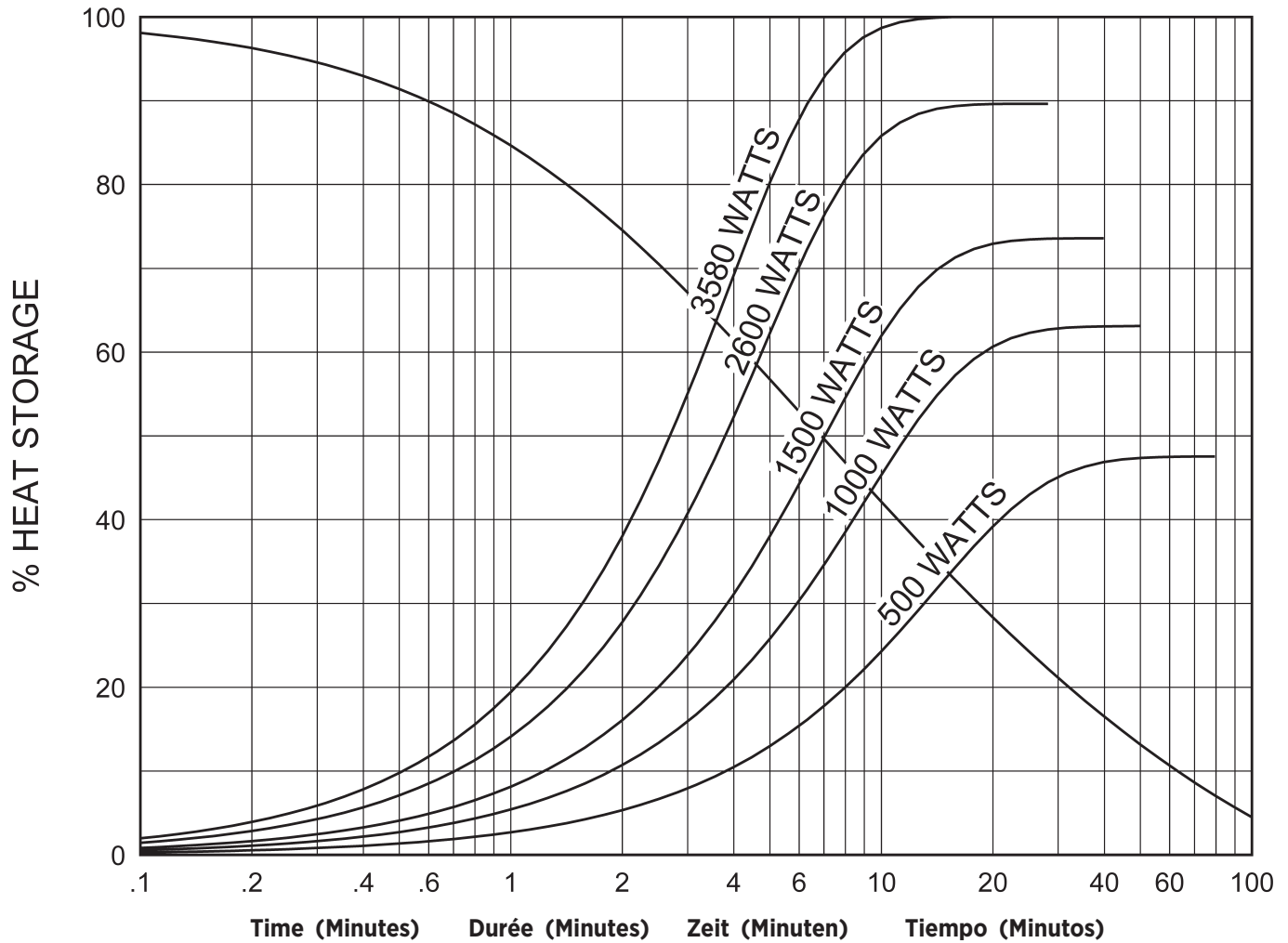
<b>Stator Type: "3 Ø"</b>		
<b>Stator Coil Resistance:</b> 6.1 Ohms ± 3.0%		
<b>Starter Voltage:</b>		
	<b>Start</b>	<b>Run</b>
130 Hz	180 VAC	100 VAC
		<b>Brake</b>
		50 VAC
<b>Time to Full Speed:</b>		
130 Hz	30 Sec.	
<b>X-Ray Tube Assembly:</b>		
MCS-2093/B-693H	IEC 60601-2-28	

<b>Genre Stator: "3 Ø"</b>		
<b>Résistance de la bobine du stator:</b> (résistance ohmique) 6.1 Ohms ± 3.0%		
<b>Tension de démarrage:</b>		
130 Hz	180 alternatif au démarrage	
	100 alternatif en maintien	
	50 alternatif au frein	
<b>Temps our atteindre la vitesse maximum:</b>		
130 Hz	30 Sec.	
<b>Ensemble radiogène:</b>		
MCS-2093/B-693H	CEI 60601-2-28	

<b>Statortyp: "3 Ø"</b>		
<b>Stator - Spulenwiderstand</b>		
6.1 Ohms ± 3.0%		
<b>Spannungen:</b>		
	<b>Anlauf</b>	<b>Weiterlauf</b>
130 Hz	180 VAC	100 VAC
		<b>Bremse</b>
		50 VAC
<b>Hochlaufzeit:</b>		
130 Hz	30 Sec.	
<b>Röntgenstrahler:</b>		
MCS-2093/B-693H	IEC 60601-2-28	

<b>Tipo de la Bovina: "3 Ø"</b>		
<b>Resistencia del Rollo de la Bovina:</b>		
6.1 Ohms ± 3.0%		
<b>Voltage de la Obtenida:</b>		
	<b>Empezar</b>	<b>Funcionar</b>
130 Hz	180 VAC	100 VAC
		<b>Freno</b>
		50 VAC
<b>Tiempo Para la Velocidad Maxima:</b>		
130 Hz	30 Segundo	
<b>Ensamblaje de Tubo de Rayos X:</b>		
MCS-2093/B-693H	IEC 60601-2-28	

## ANODE HEATING AND COOLING CURVES


**Note:**

Heating and cooling curves reflect maximum tube performance. Tube operation is ultimately limited by system software control.

**Remarque:**

Les abaques d'échauffement et de refroidissement représentent des valeurs maximales. L'utilisation du tube est finalement limitée par le logiciel du système.

**Anmerkungen:**

Die Angaben stellen die höchstzulässigen Betriebswerte dar. Der technische Betrieb muß im Rahmen der Belastungs- und Abkühlkennlinien erfolgen.

**Nota:**

El máximo poder del tubo es reflectada en el diagrama de enfriamiento y calentamiento del encaje ensamblado. La operación del tubo es ultimamente limitada por el control del sistema programado.



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