



Documentazione Tubo a raggi X

Tube Documentation

Documentation du Tube

X50 H 1.2/2.0



Nr. di matricola
Tube No.
Nr de série

Questa documentazione deve essere fornita all'utilizzatore del complesso tubo-guaina
The contents of this documentation must be transmitted to the user of the tube-assembly
Le contenu de cette documentation doit être transmis à l'utilisateur de la gaine équipée

Documentazione N° Documentation N° N° de Documentation	Revisione Edition Version	Data di edizione Date of release Date de l'édition	Testo originale Original text Texte original
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Dichiarazione di conformità

Questo prodotto soddisfa i requisiti essenziali della direttiva 93/42/CEE in accordo alle norme IEC 60613, IEC 60336, IEC 60522, IEC 60601-1, IEC 60601-1-3, IEC 60601-2-28.

Declaration of conformity

This tube fulfils the essential requirements of the directive 93/42/EEC according to standard IEC 60613, IEC 60336, IEC 60522, IEC 60601-1, IEC 60601-1-3, IEC 60601-2-28.

Confirmation de conformité

Ce tube remplit les exigences essentielles de la directive 93/42/CEE en accord avec les normes IEC 60613, IEC 60336, IEC 60522, IEC 60601-1, IEC 60601-1-3, IEC 60601-2-28.



Caratteristiche - Specifications - Spécifications

Macchie focali Focal spot Foyer	☐ 1.2 ■ 2.0		IEC 60336
Velocità di rotazione dell'anodo Anode speed Vitesse de l'anode		50 / 60 Hz 2450 / 2850 min ⁻¹	
Potenza anodica nominale Nominal anode input power Puissance anodique nominale	☐ 30 kW ■ 50 kW		IEC 60613 (1989)
Potenza anodica nominale in radiografia Nominal radiographic anode input power Puissance anodique radiographique nominale	☐ 31.5 kW ■ 51.0 kW		IEC 60613 (2010)
Diametro anodico Anode diameter Diamètre de l'anode		90 mm	
Materiale anodico Anode material Matériau de l'anode	T	Tungsteno Tungsten Tungstène	
Angolo anodico Anode angle Pente de l'anode		16 °	
Campo di radiazione Radiation field Champ de rayonnement		a 70 cm 38 cm a 100 cm 55 cm	
Filtrazione permanente Permanent filtration Filtration permanent		0.7 mm Al / 75 kV	IEC 60522
Capacità termica anodica Maximum anode heat content Chaleur maximale accumulée dans l'anode		105 kJ 140 kHU	IEC 60613 (1989)
Dissipazione termica continua Continuous heat dissipation Dissipation thermique continue		440 W 35 200 HU/min	
Dissipazione termica massima Maximum heat dissipation Dissipation thermique maximale		800 W 64 000 HU/min	
Alta tensione nominale Nominal X-ray tube voltage Haute tension nominale		150 kV	IEC 60613 (2010)
Massima corrente di filamento Max. filament current Courant dans le filament max.		5.4 A	

I dati forniti nella presente documentazione si intendono riferiti a:

The data indicated in this documentation refer to:

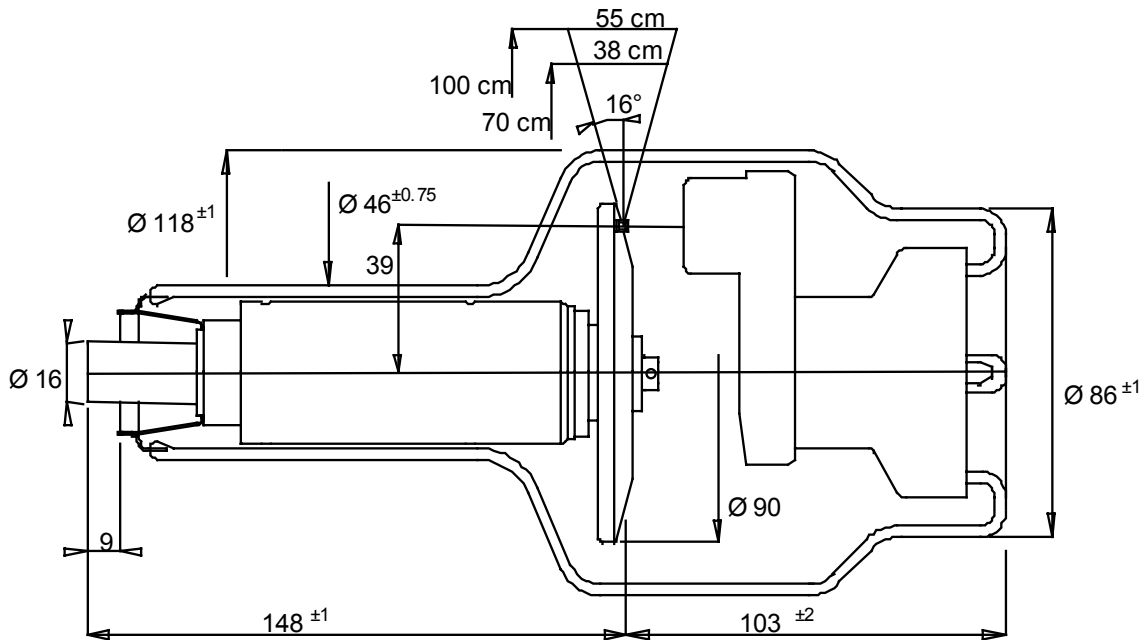
Les données indiquées dans cette documentation sont calculés pour:

Potenza anodica di equilibrio termico		% della capacità termica anodica	
Equivalent anode input power	100 W =	% of maximum anode heat content	47%
Puissance anodique d'équilibre thermique		% de chaleur max. accumulée dans l'anode	

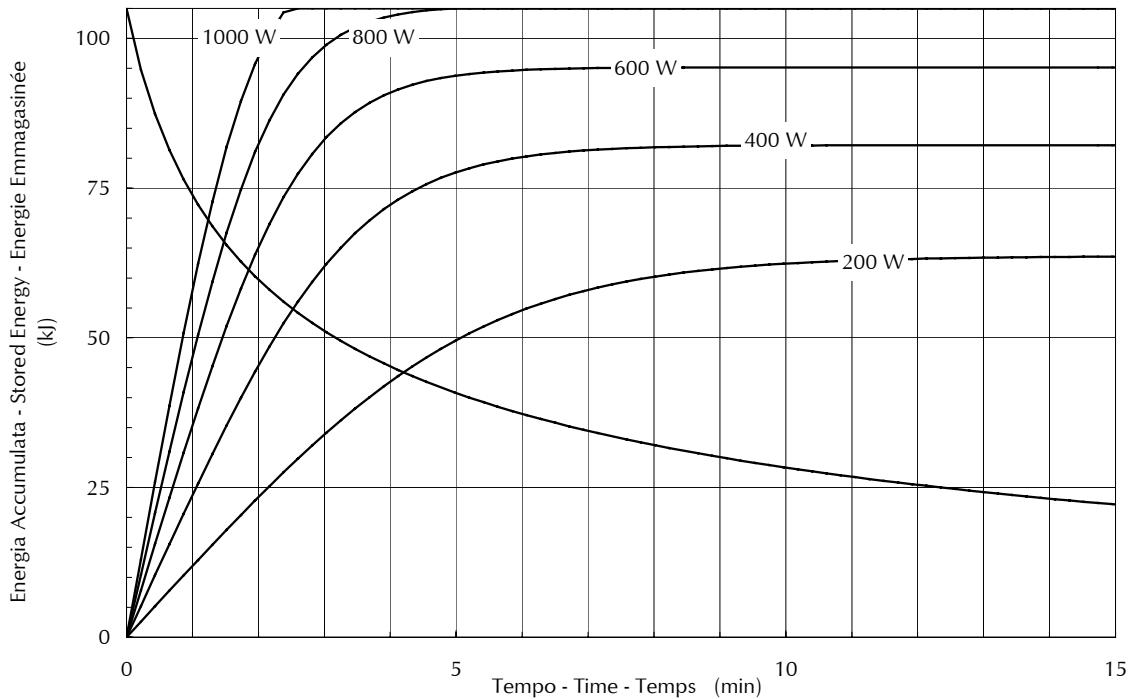


	trasporto e stoccaggio transportation and storage transport et stockage	funzionamento operation opération	
Limiti di temperatura Temperature limits Limites de température	-10°C ÷ +80°C	+10°C ÷ +40°C	
Limiti di umidità Humidity limits Limites d'humidité	max. 80%	max. 75%	
Limiti di pressione Pressure limits Limites de pression	500 ÷ 1060 hPa	700 ÷ 1060 hPa	

Dimensioni - Dimension - Dimensions



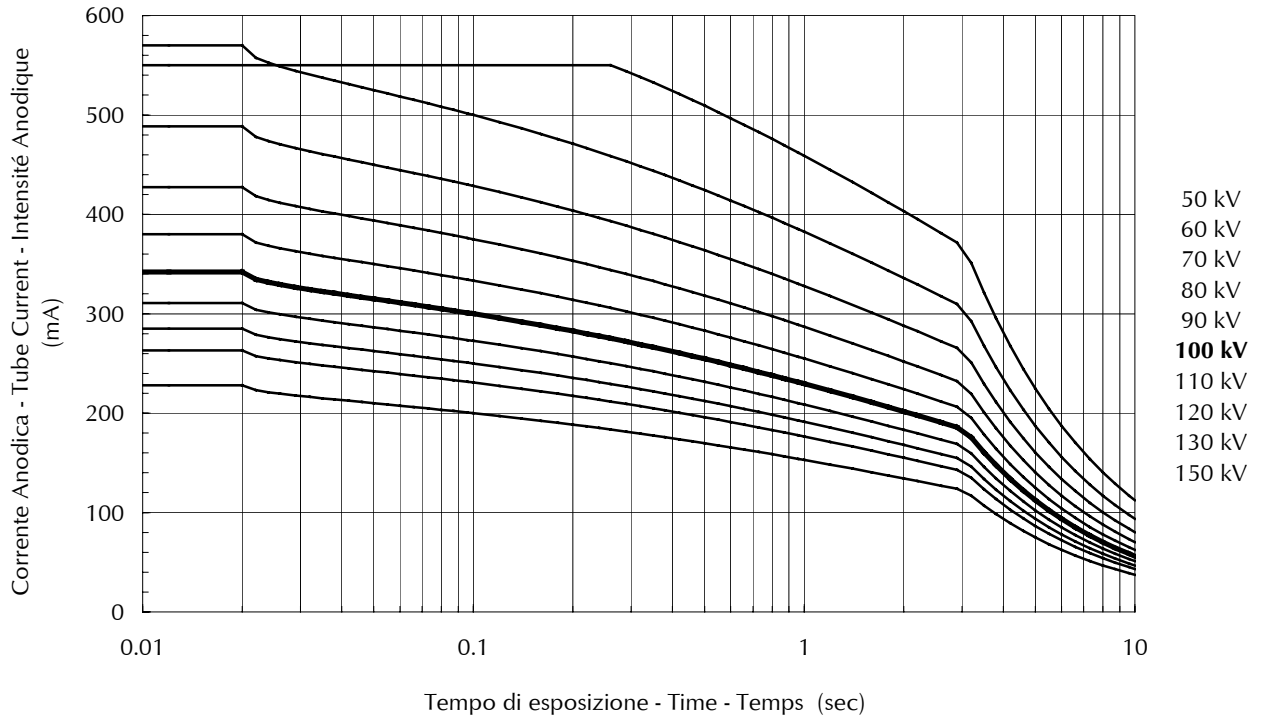
Curve di riscaldamento e raffreddamento dell'anodo
Anode heating and cooling curves
Courbes d'échauffement et de refroidissement de l'anode
IEC 60613 (1989)





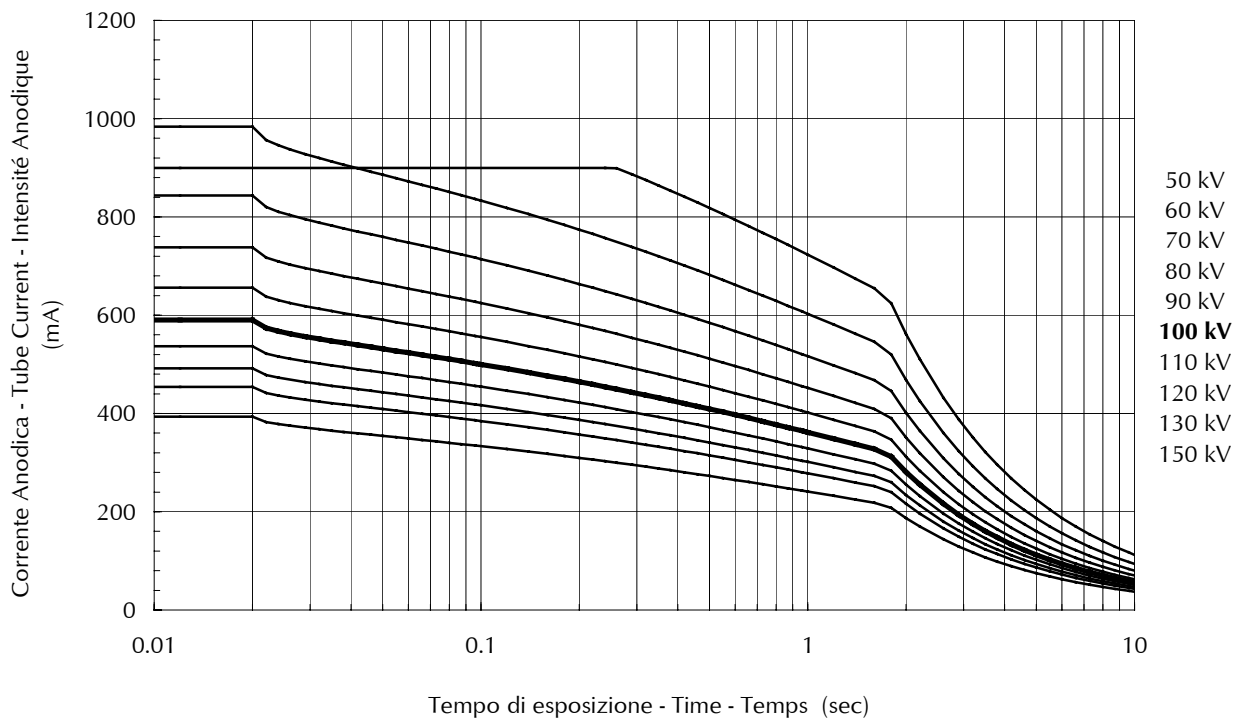
CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

▣ 1.2 - 3 Ø - 50 / 60 Hz - IEC 60613 (1989) (2010)



CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

■ 2.0 - 3 Ø - 50 / 60 Hz - IEC 60613 (1989) (2010)





Abaco per carichi in serie - Serial load rating - Abaque de charges successives

▣ **1.2 - 3 Ø - 50 / 60 Hz**

Potenza ammessa sul tubo in kW, per serie di n esposizioni, con frequenza z e durata di ogni esposizione in sec Anode input power as a function of n (N° of exposures in series), z (exp. rate per sec), the exposure time (sec) Puissance anodique en fonction de n (N° d'exp. de la série), z (cadence d'exp. par sec), temps d'exposition (sec)																
z	0.010	0.020	0.030	0.040	0.050	0.060	0.080	0.100	0.120	0.140	0.160	0.180	0.200	0.220	0.250	n
1	26.8	26.8	26.1	25.6	25.2	24.9	24.4	24.0	23.7	23.4	23.1	22.8	22.4	22.0	21.4	5
2	26.5	26.5	26.1	25.6	25.2	24.9	24.3	23.7	23.0	22.5	21.9	21.4	20.9	20.4	19.7	
3	26.4	26.4	25.9	25.4	25.0	24.6	23.7	23.0	22.3	21.6	21.0	20.4	19.8	19.3	18.5	
4	26.2	26.2	25.7	25.2	24.7	24.2	23.3	22.4	21.7	20.9	20.2	19.6	19.0	18.4	17.7	
5	26.1	26.1	25.5	24.9	24.4	23.9	22.9	22.0	21.1	20.4	19.7	19.0	18.4	-	-	
10	26.1	25.6	24.8	24.1	23.4	22.7	21.5	20.4	-	-	-	-	-	-	-	
15	26.1	25.3	24.3	23.5	22.7	21.9	-	-	-	-	-	-	-	-	-	
30	25.9	24.6	23.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	26.5	26.5	26.1	25.6	25.2	24.9	24.3	23.7	23.0	22.4	21.9	21.4	20.8	20.4	19.1	10
2	26.2	26.2	25.7	25.1	24.6	24.2	23.3	22.4	21.6	20.9	20.2	19.6	19.0	18.4	17.6	
3	26.1	26.0	25.3	24.7	24.1	23.5	22.5	21.5	20.7	19.8	19.1	18.4	17.8	17.2	16.3	
4	26.1	25.8	25.0	24.3	23.7	23.0	21.9	20.9	19.9	19.0	18.3	17.5	16.9	16.2	15.4	
5	26.1	25.6	24.8	24.0	23.3	22.6	21.4	20.3	19.3	18.4	17.6	16.8	16.1	-	-	
10	26.1	24.9	23.9	22.9	22.0	21.1	19.7	18.4	-	-	-	-	-	-	-	
15	25.8	24.4	23.2	22.1	21.1	20.1	-	-	-	-	-	-	-	-	-	
30	25.3	23.5	21.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	26.2	26.2	25.7	25.1	24.6	24.2	23.2	22.4	21.1	18.1	15.9	14.1	12.7	11.5	10.2	20
2	26.1	25.7	25.0	24.3	23.7	23.0	21.9	20.8	19.9	17.1	15.0	13.3	12.0	10.9	9.6	
3	26.1	25.4	24.5	23.7	23.0	22.2	20.9	19.8	18.7	16.7	14.6	13.0	11.7	10.7	9.4	
4	26.1	25.1	24.2	23.3	22.4	21.6	20.2	19.0	17.9	16.6	14.5	12.9	11.6	10.5	9.3	
5	26.1	24.9	23.8	22.8	21.9	21.1	19.6	18.3	17.2	16.2	14.4	12.8	11.5	-	-	
10	25.6	24.0	22.6	21.4	20.3	19.3	17.6	16.1	-	-	-	-	-	-	-	
15	25.2	23.4	21.8	20.4	19.2	18.1	-	-	-	-	-	-	-	-	-	
30	24.4	22.1	20.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	26.1	25.7	25.0	24.3	23.7	23.0	17.7	14.1	11.8	10.1	8.8	7.9	7.1	6.4	5.7	40
2	26.1	25.1	24.2	23.2	22.4	21.1	15.9	12.7	10.6	9.1	7.9	7.0	6.3	5.8	5.1	
3	26.0	24.7	23.5	22.5	21.5	20.3	15.3	12.2	10.2	8.7	7.6	6.8	6.1	5.5	4.9	
4	25.7	24.3	23.0	21.9	20.8	19.9	15.0	12.0	10.0	8.5	7.5	6.6	6.0	5.4	4.8	
5	25.6	24.0	22.6	21.4	20.3	19.3	14.8	11.8	9.8	8.4	7.4	6.6	5.9	-	-	
10	24.9	22.8	21.1	19.6	18.3	17.2	14.4	11.5	-	-	-	-	-	-	-	
15	24.4	22.0	20.1	18.4	17.1	15.9	-	-	-	-	-	-	-	-	-	
30	23.4	20.4	18.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	26.1	25.4	24.5	23.7	20.8	17.3	13.0	10.4	8.7	7.4	6.5	5.8	5.2	4.7	4.2	60
2	26.0	24.7	23.5	22.4	17.9	14.9	11.2	8.9	7.5	6.4	5.6	5.0	4.5	4.1	3.6	
3	25.7	24.2	22.8	21.1	16.9	14.1	10.6	8.5	7.0	6.0	5.3	4.7	4.2	3.8	3.4	
4	25.4	23.7	22.2	20.5	16.4	13.7	10.3	8.2	6.8	5.9	5.1	4.6	4.1	3.7	3.3	
5	25.2	23.4	21.8	20.2	16.1	13.5	10.1	8.1	6.7	5.8	5.0	4.5	4.0	-	-	
10	24.4	22.0	20.1	18.4	15.6	13.0	9.7	7.8	-	-	-	-	-	-	-	
15	23.8	21.1	18.9	17.2	15.4	12.8	-	-	-	-	-	-	-	-	-	
30	22.6	19.3	16.8	-	-	-	-	-	-	-	-	-	-	-	-	
1	26.1	25.1	24.2	21.3	17.1	14.2	10.7	8.5	7.1	6.1	5.3	4.7	4.3	3.9	3.4	80
2	25.7	24.3	23.0	17.7	14.1	11.8	8.8	7.1	5.9	5.1	4.4	3.9	3.5	3.2	2.8	
3	25.4	23.7	22.0	16.5	13.2	11.0	8.2	6.6	5.5	4.7	4.1	3.7	3.3	3.0	2.6	
4	25.1	23.2	21.1	15.9	12.7	10.6	7.9	6.3	5.3	4.5	4.0	3.5	3.2	2.9	2.5	
5	24.9	22.8	20.7	15.5	12.4	10.3	7.7	6.2	5.2	4.4	3.9	3.4	3.1	-	-	
10	24.0	21.4	19.3	14.8	11.8	9.8	7.4	5.9	-	-	-	-	-	-	-	
15	23.4	20.4	18.1	14.5	11.6	9.7	-	-	-	-	-	-	-	-	-	
30	22.0	18.4	15.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	26.1	24.9	23.8	18.5	14.8	12.3	9.3	7.4	6.2	5.3	4.6	4.1	3.7	3.4	3.0	100
2	25.6	24.0	19.8	14.9	11.9	9.9	7.4	5.9	5.0	4.2	3.7	3.3	3.0	2.7	2.4	
3	25.2	23.4	18.2	13.7	10.9	9.1	6.8	5.5	4.6	3.9	3.4	3.0	2.7	2.5	2.2	
4	24.9	22.8	17.4	13.1	10.4	8.7	6.5	5.2	4.4	3.7	3.3	2.9	2.6	2.4	2.1	
5	24.6	22.4	16.9	12.7	10.2	8.5	6.3	5.1	4.2	3.6	3.2	2.8	2.5	-	-	
10	23.7	20.8	15.9	12.0	9.6	8.0	6.0	4.8	-	-	-	-	-	-	-	
15	23.0	19.8	15.6	11.7	9.4	7.8	-	-	-	-	-	-	-	-	-	
30	21.5	17.8	15.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	25.8	24.4	19.7	14.8	11.8	9.8	7.4	5.9	4.9	4.2	3.7	3.3	3.0	2.7	2.4	150
2	22.2	22.2	14.8	11.1	8.9	7.4	5.6	4.4	3.7	3.2	2.8	2.5	2.2	2.0	1.8	
3	19.8	19.8	13.2	9.9	7.9	6.6	5.0	4.0	3.3	2.8	2.5	2.2	2.0	1.8	1.6	
4	18.6	18.6	12.4	9.3	7.4	6.2	4.7	3.7	3.1	2.7	2.3	2.1	1.9	1.7	1.5	
5	17.9	17.9	11.9	8.9	7.2	6.0	4.5	3.6	3.0	2.6	2.2	2.0	1.8	-	-	
10	16.4	16.4	11.0	8.2	6.6	5.5	4.1	3.3	-	-	-	-	-	-	-	
15	15.9	15.9	10.6	8.0	6.4	5.3	-	-	-	-	-	-	-	-	-	
30	15.5	15.5	10.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	22.0	22.0	14.7	11.0	8.8	7.3	5.5	4.4	3.7	3.1	2.8	2.4	2.2	2.0	1.8	300
2	14.8	14.8	9.8	7.4	5.9	4.9	3.7	3.0	2.5	2.1	1.8	1.6	1.5	1.3	1.2	
3	12.3	12.3	8.2	6.2	4.9	4.1	3.1	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.0	
4	11.1	11.1	7.4	5.6	4.4	3.7	2.8	2.2	1.9	1.6	1.4	1.2	1.1	1.0	0.9	
5	10.4	10.4	6.9	5.2	4.2	3.5	2.6	2.1	1.7	1.5	1.3	1.2	1.0	-	-	
10	8.9	8.9	6.0	4.5	3.6	3.0	2.2	1.8	-	-	-	-	-	-	-	
15	8.5	8.5	5.6	4.2	3.4	2.8	-	-	-	-	-	-	-	-	-	
30	8.0	8.0	5.3	-	-	-	-	-	-	-	-	-	-	-	-	

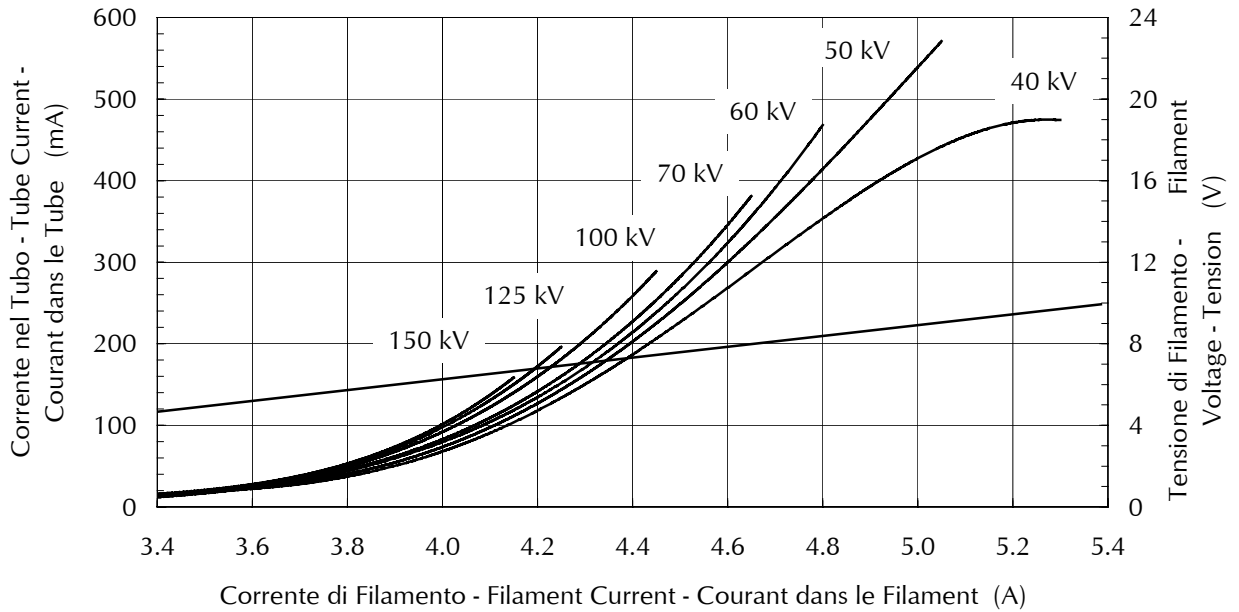


Abaco per carichi in serie - Serial load rating - Abaque de charges successives
■ **2.0 - 3 Ø - 50 / 60 Hz**

Potenza ammessa sul tubo in kW, per serie di n esposizioni, con frequenza z e durata di ogni esposizione in sec Anode input power as a function of n (N° of exposures in series), z (exp. rate per sec), the exposure time (sec) Puissance anodique en fonction de n (N° d'exp. de la série), z (cadence d'exp. par sec), temps d'exposition (sec)																
z	0.010	0.020	0.030	0.040	0.050	0.060	0.080	0.100	0.120	0.140	0.160	0.180	0.200	0.220	0.250	n
1	45.9	45.9	44.4	43.3	42.5	41.9	40.8	40.0	39.3	38.7	38.1	37.6	36.7	36.0	34.8	5
2	45.4	45.4	44.4	43.3	42.5	41.9	40.7	39.3	38.0	36.8	35.7	34.7	33.7	32.7	31.4	
3	45.0	45.0	44.0	43.0	42.1	41.2	39.5	37.9	36.5	35.1	33.9	32.7	31.7	30.6	29.2	
4	44.7	44.7	43.5	42.4	41.4	40.4	38.5	36.8	35.2	33.8	32.5	31.3	30.1	29.1	27.6	
5	44.4	44.4	43.1	41.9	40.8	39.7	37.7	35.9	34.2	32.7	31.4	30.1	28.9	-	-	
10	44.4	43.4	41.7	40.1	38.7	37.3	34.9	32.7	-	-	-	-	-	-	-	
15	44.4	42.7	40.7	38.9	37.2	35.7	-	-	-	-	-	-	-	-	-	
30	44.0	41.2	38.7	-	-	-	-	-	-	-	-	-	-	-	-	
1	45.4	45.4	44.4	43.3	42.5	41.9	40.7	39.3	38.0	34.2	29.9	26.6	23.9	21.7	19.1	10
2	44.7	44.7	43.5	42.4	41.3	40.3	38.5	36.7	35.2	33.1	29.0	25.8	23.2	21.1	18.6	
3	44.4	44.1	42.8	41.4	40.2	39.1	36.9	35.0	33.3	31.7	28.7	25.5	23.0	20.9	18.4	
4	44.4	43.7	42.1	40.7	39.3	38.0	35.7	33.7	31.8	30.2	28.5	25.4	22.8	20.8	18.3	
5	44.4	43.3	41.6	40.0	38.6	37.2	34.7	32.6	30.7	29.0	27.5	25.3	22.8	-	-	
10	44.4	41.9	39.7	37.7	35.9	34.2	31.4	28.9	-	-	-	-	-	-	-	
15	43.8	40.9	38.4	36.1	34.1	32.3	-	-	-	-	-	-	-	-	-	
30	42.7	38.9	35.7	-	-	-	-	-	-	-	-	-	-	-	-	
1	44.7	44.7	43.5	42.4	41.3	40.3	31.7	25.4	21.1	18.1	15.9	14.1	12.7	11.5	10.2	20
2	44.4	43.7	42.1	40.7	39.3	38.0	29.9	23.9	19.9	17.1	15.0	13.3	12.0	10.9	9.6	
3	44.4	43.0	41.1	39.4	37.9	36.4	29.3	23.4	19.5	16.7	14.6	13.0	11.7	10.7	9.4	
4	44.4	42.4	40.3	38.5	36.7	35.2	29.0	23.2	19.3	16.6	14.5	12.9	11.6	10.5	9.3	
5	44.4	41.9	39.6	37.6	35.8	34.2	28.8	23.0	19.2	16.5	14.4	12.8	11.5	-	-	
10	43.3	40.0	37.2	34.7	32.6	30.7	27.5	22.8	-	-	-	-	-	-	-	
15	42.6	38.7	35.5	32.8	30.5	28.5	-	-	-	-	-	-	-	-	-	
30	40.9	36.1	32.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	44.4	43.7	42.1	35.4	28.3	23.6	17.7	14.1	11.8	10.1	8.8	7.9	7.1	6.4	5.7	40
2	44.4	42.4	40.3	31.7	25.4	21.1	15.9	12.7	10.6	9.1	7.9	7.0	6.3	5.8	5.1	
3	44.1	41.4	39.0	30.5	24.4	20.3	15.3	12.2	10.2	8.7	7.6	6.8	6.1	5.5	4.9	
4	43.7	40.7	38.0	29.9	23.9	19.9	15.0	12.0	10.0	8.5	7.5	6.6	6.0	5.4	4.8	
5	43.3	40.0	37.2	29.5	23.6	19.7	14.8	11.8	9.8	8.4	7.4	6.6	5.9	-	-	
10	41.9	37.6	34.2	28.8	23.0	19.2	14.4	11.5	-	-	-	-	-	-	-	
15	40.9	36.0	32.2	28.6	22.9	19.0	-	-	-	-	-	-	-	-	-	
30	38.7	32.8	28.5	-	-	-	-	-	-	-	-	-	-	-	-	
1	44.4	43.0	34.7	26.0	20.8	17.3	13.0	10.4	8.7	7.4	6.5	5.8	5.2	4.7	4.2	60
2	44.1	41.4	29.8	22.4	17.9	14.9	11.2	8.9	7.5	6.4	5.6	5.0	4.5	4.1	3.6	
3	43.5	40.3	28.2	21.1	16.9	14.1	10.6	8.5	7.0	6.0	5.3	4.7	4.2	3.8	3.4	
4	43.0	39.4	27.4	20.5	16.4	13.7	10.3	8.2	6.8	5.9	5.1	4.6	4.1	3.7	3.3	
5	42.5	38.7	26.9	20.2	16.1	13.5	10.1	8.1	6.7	5.8	5.0	4.5	4.0	-	-	
10	40.8	36.0	25.9	19.5	15.6	13.0	9.7	7.8	-	-	-	-	-	-	-	
15	39.6	34.2	25.6	19.2	15.4	12.8	-	-	-	-	-	-	-	-	-	
30	37.2	30.7	25.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	44.4	42.4	28.4	21.3	17.1	14.2	10.7	8.5	7.1	6.1	5.3	4.7	4.3	3.9	3.4	80
2	43.7	35.4	23.6	17.7	14.1	11.8	8.8	7.1	5.9	5.1	4.4	3.9	3.5	3.2	2.8	
3	43.0	32.9	22.0	16.5	13.2	11.0	8.2	6.6	5.5	4.7	4.1	3.7	3.3	3.0	2.6	
4	42.4	31.7	21.1	15.9	12.7	10.6	7.9	6.3	5.3	4.5	4.0	3.5	3.2	2.9	2.5	
5	41.9	31.0	20.7	15.5	12.4	10.3	7.7	6.2	5.2	4.4	3.9	3.4	3.1	-	-	
10	40.0	29.5	19.7	14.8	11.8	9.8	7.4	5.9	-	-	-	-	-	-	-	
15	38.7	29.1	19.4	14.5	11.6	9.7	-	-	-	-	-	-	-	-	-	
30	36.0	28.6	19.0	-	-	-	-	-	-	-	-	-	-	-	-	
1	44.4	37.0	24.7	18.5	14.8	12.3	9.3	7.4	6.2	5.3	4.6	4.1	3.7	3.4	3.0	100
2	43.3	29.7	19.8	14.9	11.9	9.9	7.4	5.9	5.0	4.2	3.7	3.3	3.0	2.7	2.4	
3	42.5	27.3	18.2	13.7	10.9	9.1	6.8	5.5	4.6	3.9	3.4	3.0	2.7	2.5	2.2	
4	41.9	26.1	17.4	13.1	10.4	8.7	6.5	5.2	4.4	3.7	3.3	2.9	2.6	2.4	2.1	
5	41.3	25.4	16.9	12.7	10.2	8.5	6.3	5.1	4.2	3.6	3.2	2.8	2.5	-	-	
10	39.3	23.9	15.9	12.0	9.6	8.0	6.0	4.8	-	-	-	-	-	-	-	
15	37.9	23.4	15.6	11.7	9.4	7.8	-	-	-	-	-	-	-	-	-	
30	35.0	23.0	15.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	43.8	29.5	19.7	14.8	11.8	9.8	7.4	5.9	4.9	4.2	3.7	3.3	3.0	2.7	2.4	150
2	42.5	22.2	14.8	11.1	8.9	7.4	5.6	4.4	3.7	3.2	2.8	2.5	2.2	2.0	1.8	
3	39.7	19.8	13.2	9.9	7.9	6.6	5.0	4.0	3.3	2.8	2.5	2.2	2.0	1.8	1.6	
4	37.2	18.6	12.4	9.3	7.4	6.2	4.7	3.7	3.1	2.7	2.3	2.1	1.9	1.7	1.5	
5	35.8	17.9	11.9	8.9	7.2	6.0	4.5	3.6	3.0	2.6	2.2	2.0	1.8	-	-	
10	32.9	16.4	11.0	8.2	6.6	5.5	4.1	3.3	-	-	-	-	-	-	-	
15	31.9	15.9	10.6	8.0	6.4	5.3	-	-	-	-	-	-	-	-	-	
30	30.9	15.5	10.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	42.5	22.0	14.7	11.0	8.8	7.3	5.5	4.4	3.7	3.1	2.8	2.4	2.2	2.0	1.8	300
2	29.5	14.8	9.8	7.4	5.9	4.9	3.7	3.0	2.5	2.1	1.8	1.6	1.5	1.3	1.2	
3	24.7	12.3	8.2	6.2	4.9	4.1	3.1	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.0	
4	22.2	11.1	7.4	5.6	4.4	3.7	2.8	2.2	1.9	1.6	1.4	1.2	1.1	1.0	0.9	
5	20.8	10.4	6.9	5.2	4.2	3.5	2.6	2.1	1.7	1.5	1.3	1.2	1.0	-	-	
10	17.9	8.9	6.0	4.5	3.6	3.0	2.2	1.8	-	-	-	-	-	-	-	
15	16.9	8.5	5.6	4.2	3.4	2.8	-	-	-	-	-	-	-	-	-	
30	15.9	8.0	5.3	-	-	-	-	-	-	-	-	-	-	-	-	

Caratteristica di emissione del catodo
Cathode emission characteristic
Caractéristique d'émission de la cathode

■ **1.2 - 3 Ø - (± 0.2 A) - IEC 60613 (1989) (2010)**



Caratteristica di emissione del catodo
Cathode emission characteristic
Caractéristique d'émission de la cathode

■ **2.0 - 3 Ø - (± 0.2 A) - IEC 60613 (1989) (2010)**

