

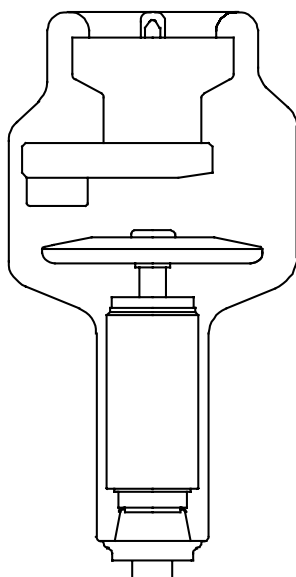


Documentazione Tubo a raggi X

Tube Documentation

Documentation du Tube

RTM 782 HS 0.3/0.6



Nr. di matricola
Tube No.
Nr de s rie

CE 0051

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 tre transmis l'utilisateur de la gaine quip e

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

Questo prodotto soddisfa i requisiti essenziali della direttiva 93/42/CEE
in accordo alle norme EN 60613 (IEC 613) e EN 60336 (IEC 336)

Declaration of conformity

This tube fulfils the essential requirements of the directive 93/42/EEC
according to standard EN 60613 (IEC 613) and EN 60336 (IEC 336).

Confirmation de conformit

Ce tube remplit les exigences essentielles de la directive 93/42/CEE en
accord avec les normes EN 60613 (IEC 613) et EN 60336 (IEC 336).



Caratteristiche - Specifications - Sp cifications

Macchie focali Focal spot Foyer	0.3 0.6	(IEC 336, EN 60336)
Velocità di rotazione dell'anodo Anode speed Vitesse de l'anode	3000 min ⁻¹ 10000 min ⁻¹	
Potenza anodica nominale Nominal anode input power Puissance anodique nominale	5 kW 14 kW 8 kW 24 kW	(IEC 613, EN 60613)
Diametro anodico Anode diameter Diamètre de l'anode	73 mm	
Materiale anodico Anode material Matériau de l'anode	RTM	
Angolo anodico Anode angle Pente de l'anode	12.5 °	
Campo di radiazione Radiation field Champ de rayonnement	a 70 cm 30 cm a 100 cm 43 cm	
Filtrazione inerente Inherent filtration Filtration inhérente	0.7 mm Al eq	(IEC 522)
Capacità termica anodica Maximum anode heat content Chaleur maximale accumulée dans l'anode	225 kJ 300 kJ	
Dissipazione termica continua Continuous heat dissipation Dissipation thermique continue	750 W	
Alta tensione nominale Nominal X-ray tube voltage Haute tension nominale	150 kV	
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 calculées pour:

Potenza anodica di equilibrio termico

Equivalent anode input power

Puissance anodique d'équilibre thermique

100 W =

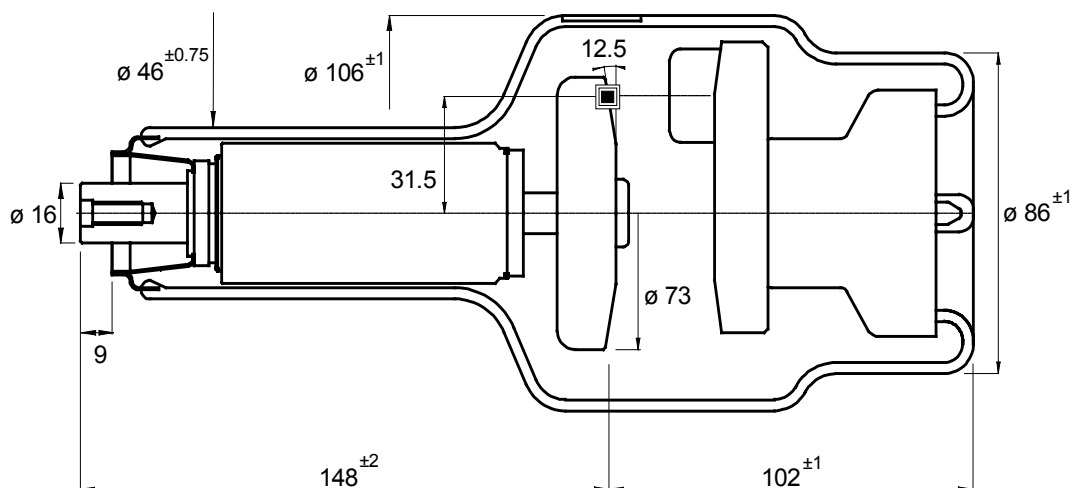
% della capacità termica anodica

% of maximum anode heat content

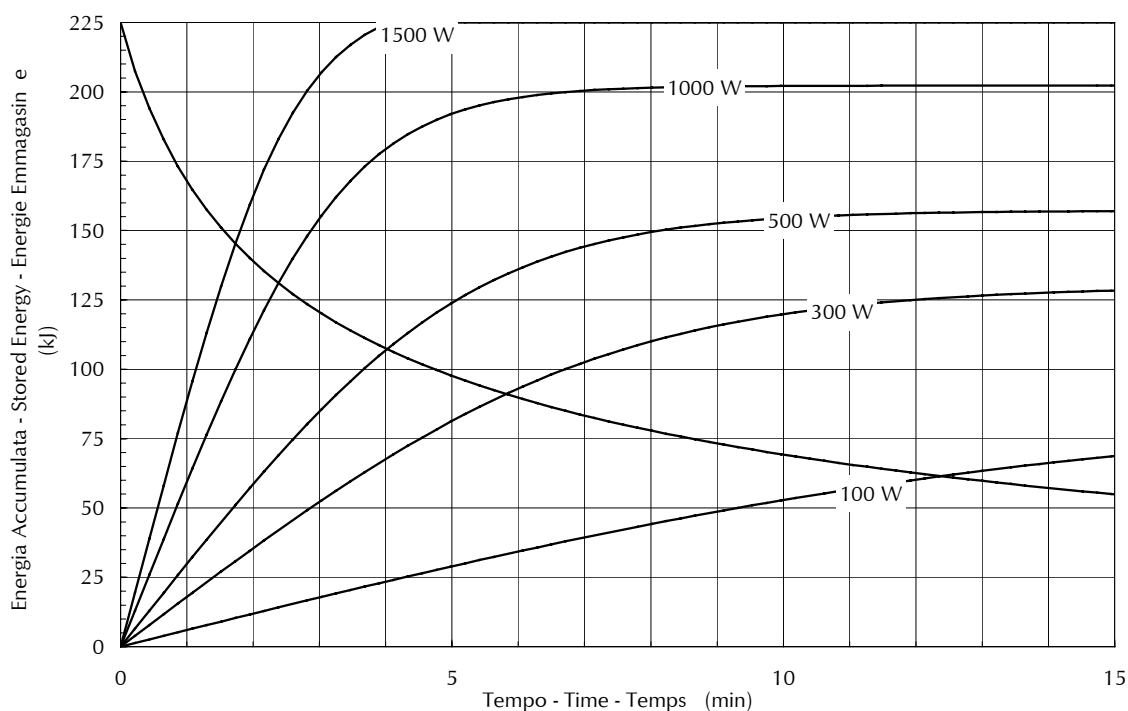
% de chaleur max. accumulée dans l'anode

38%

Dimensioni - Dimension - Dimensions

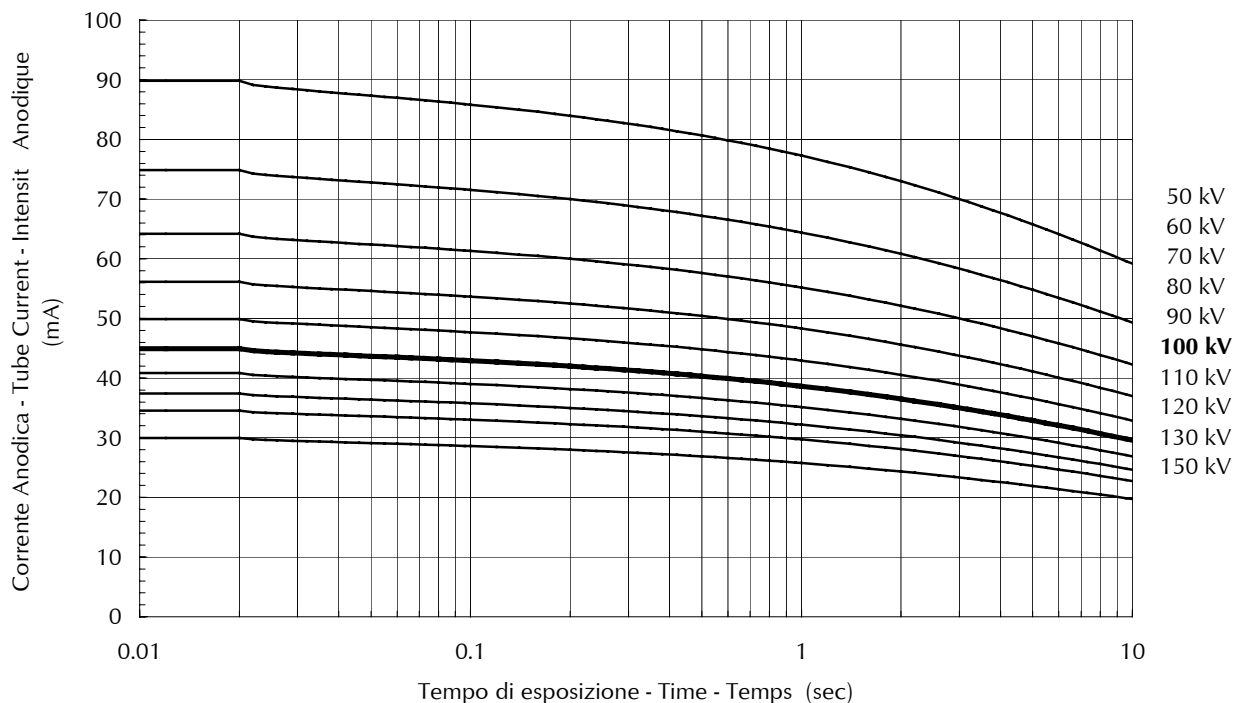


Curve di riscaldamento e raffreddamento dell'anodo Anode heating and cooling curves Courbes d' chauffage et de refroidissement de l'anode



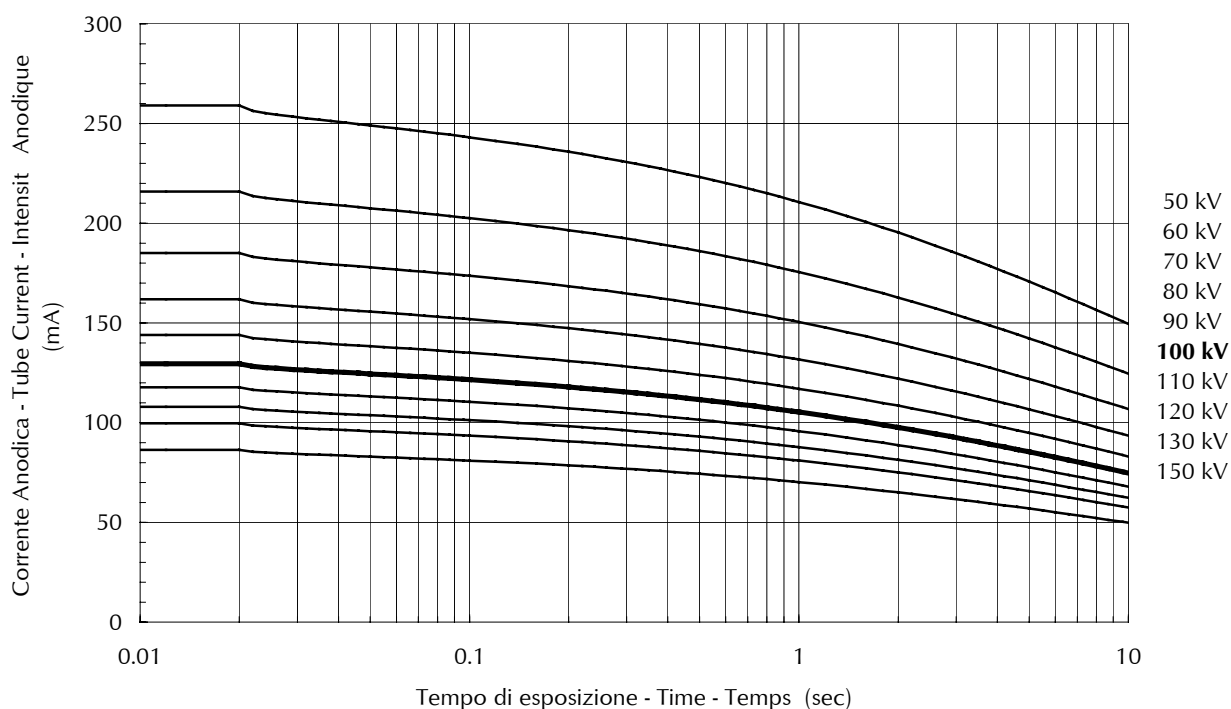
CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

▣ 0.3 - 1 ~ - 3000 min⁻¹



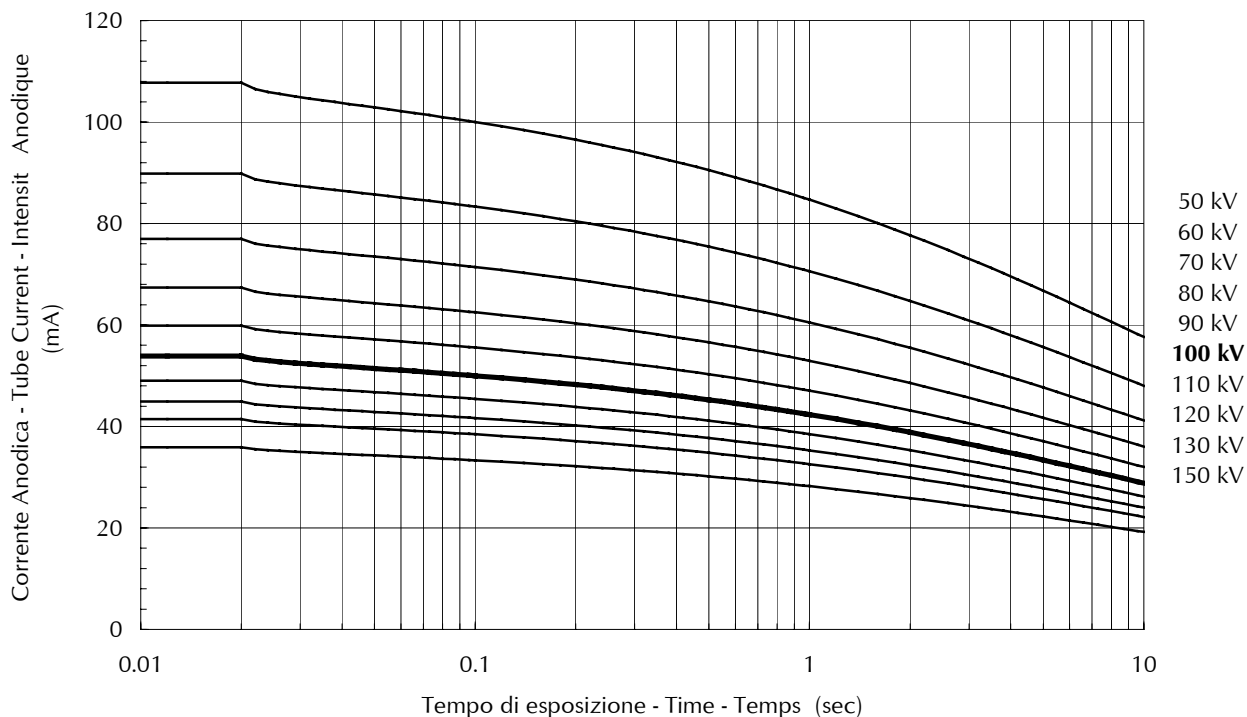
CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

■ 0.6 - 1 ~ - 3000 min⁻¹



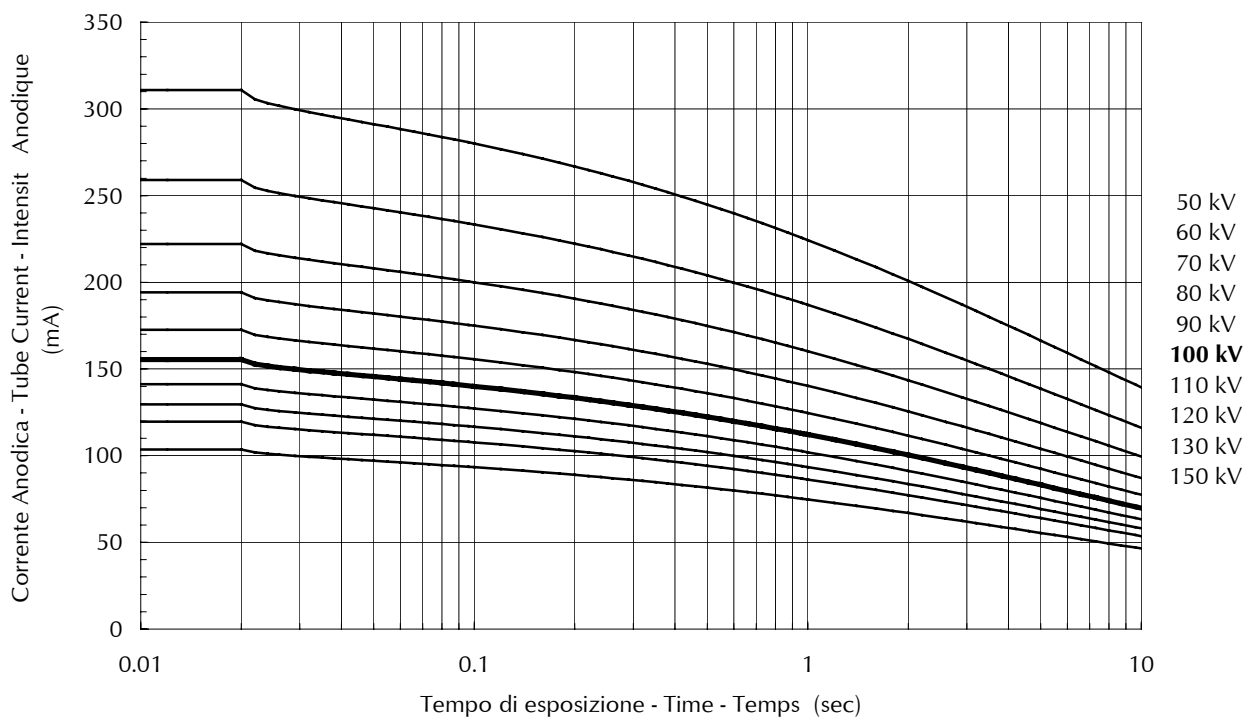
CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

▣ 0.3 - 3 ~ - 3000 min⁻¹



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

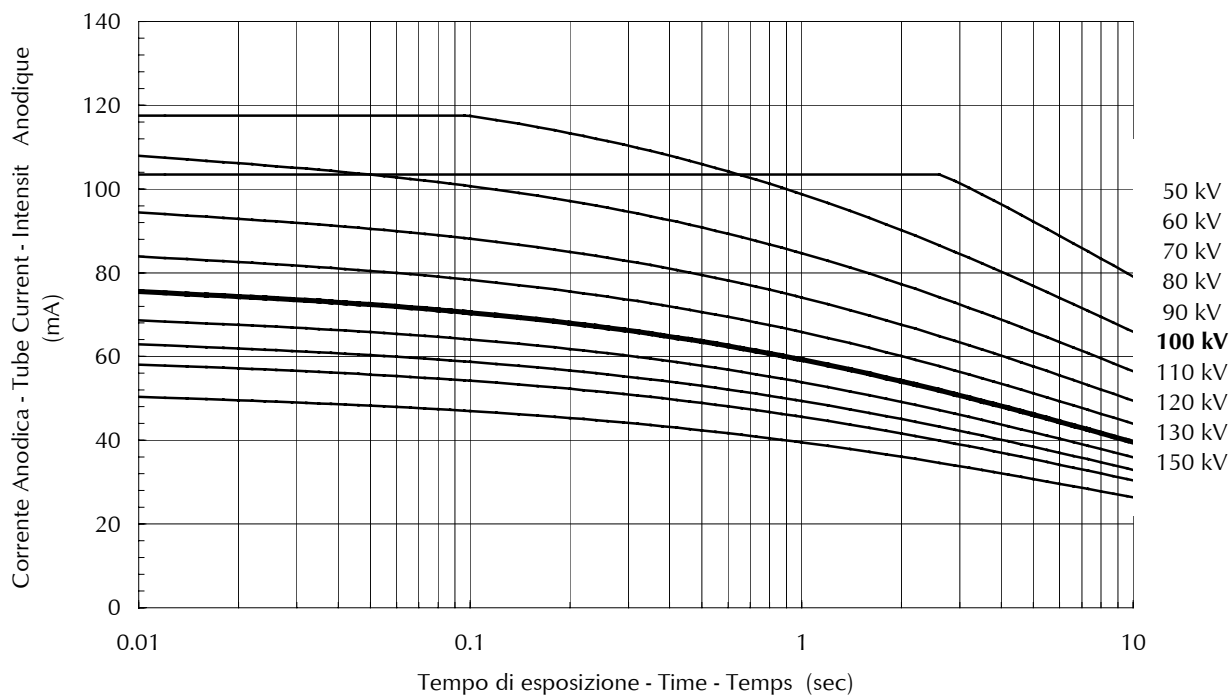
■ 0.6 - 3 ~ - 3000 min⁻¹





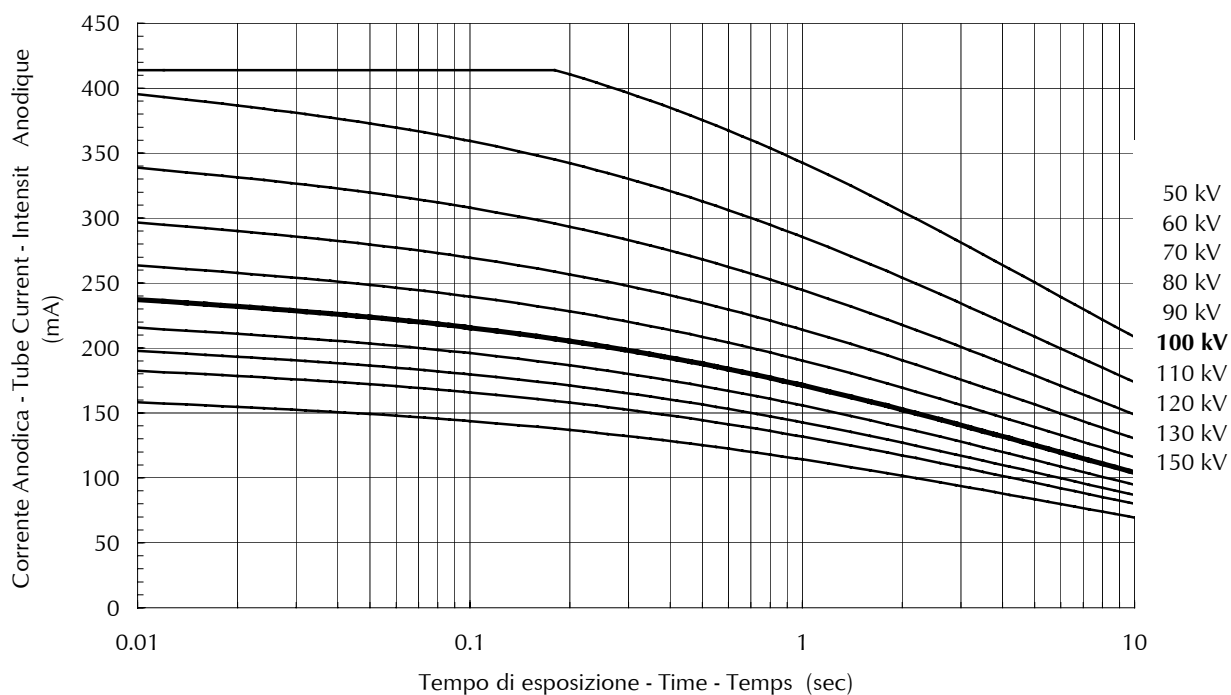
CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

▣ 0.3 - 1 ~ - 10000 min⁻¹



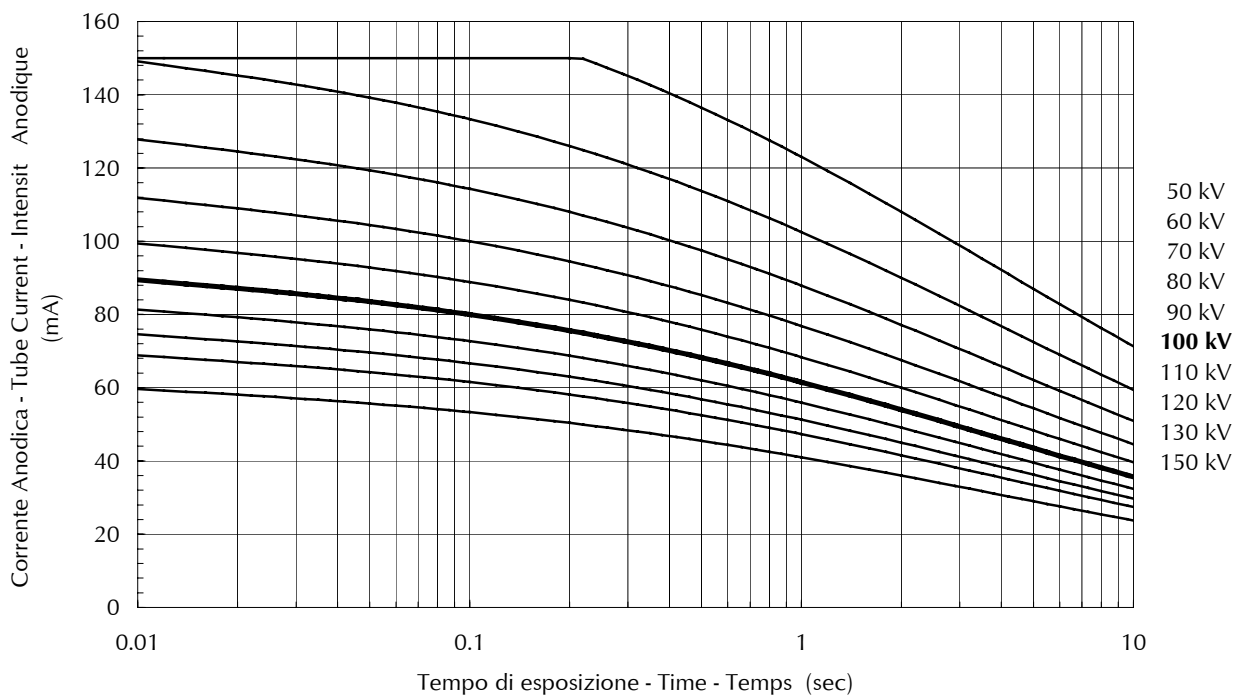
CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

■ 0.6 - 1 ~ - 10000 min⁻¹



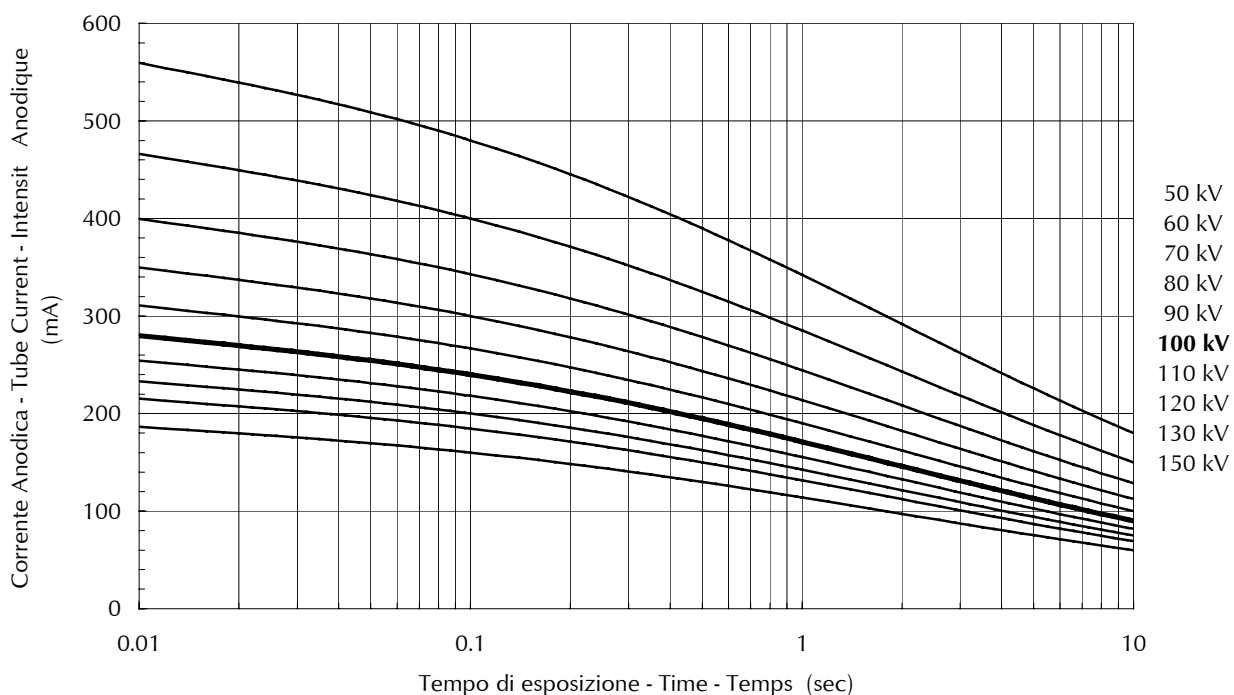
CURVE DI CARICO SINGOLO - SINGLE LOAD RATING - ABAQUE DE CHARGE UNIQUE

▣ 0.3 - 3 ~ - 10000 min⁻¹



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

■ 0.6 - 3 ~ - 10000 min⁻¹





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

■ 0.3 - 1 ~ - 3000 min⁻¹

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 admissible en fonction de n (N° d'exp. de la s ries), 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	3.6	3.6	3.5	3.5	3.5	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.2	3.2	5
2	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.0	
3	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.3	3.2	3.2	3.1	3.1	3.1	3.0	2.9	
4	3.5	3.5	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	2.9	2.9	
5	3.5	3.5	3.5	3.4	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.0	2.9	-	-	
10	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.1	-	-	-	-	-	-	-	
15	3.5	3.5	3.4	3.3	3.3	3.2	-	-	-	-	-	-	-	-	-	10
30	3.5	3.4	3.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.0	
2	3.5	3.5	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	2.9	2.9	
3	3.5	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.1	3.1	3.0	2.9	2.9	2.8	2.7	
4	3.5	3.5	3.4	3.4	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.9	2.8	2.7	2.6	
5	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.7	-	-	
10	3.5	3.4	3.4	3.3	3.2	3.2	3.0	2.9	-	-	-	-	-	-	-	15
15	3.5	3.4	3.3	3.2	3.2	3.1	-	-	-	-	-	-	-	-	-	
30	3.5	3.3	3.2	-	-	-	-	-	-	-	-	-	-	-	-	
1	3.5	3.5	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	2.9	2.9	20
2	3.5	3.5	3.4	3.4	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.8	2.8	2.7	2.6	
3	3.5	3.5	3.4	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5	
4	3.5	3.5	3.4	3.3	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	
5	3.5	3.4	3.4	3.3	3.2	3.2	3.0	2.9	2.8	2.7	2.6	2.5	2.5	-	-	
10	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.7	-	-	-	-	-	-	-	
15	3.5	3.3	3.2	3.1	3.0	2.9	-	-	-	-	-	-	-	-	-	30
30	3.4	3.2	3.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.1	3.1	3.0	2.9	2.8	2.8	2.7	2.6	40
2	3.5	3.5	3.4	3.3	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	
3	3.5	3.4	3.3	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	
4	3.5	3.4	3.3	3.2	3.1	3.1	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	
5	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.7	2.6	2.5	2.4	2.3	2.2	-	-	
10	3.4	3.3	3.2	3.0	2.9	2.8	2.6	2.5	-	-	-	-	-	-	-	
15	3.4	3.2	3.1	2.9	2.8	2.7	-	-	-	-	-	-	-	-	-	60
30	3.3	3.1	2.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	3.5	3.5	3.4	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5	80
2	3.5	3.4	3.3	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	
3	3.5	3.4	3.2	3.1	3.1	3.0	2.8	2.7	2.5	2.4	2.3	2.2	2.1	2.0	1.9	
4	3.5	3.4	3.2	3.1	3.0	2.9	2.7	2.6	2.4	2.3	2.2	2.1	2.0	-	-	
5	3.4	3.3	3.2	3.0	2.9	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	-	-	
10	3.4	3.2	3.0	2.9	2.7	2.6	2.4	2.2	-	-	-	-	-	-	-	
15	3.3	3.1	2.9	2.7	2.6	2.4	-	-	-	-	-	-	-	-	-	100
30	3.2	2.9	2.7	-	-	-	-	-	-	-	-	-	-	-	-	
1	3.5	3.4	3.4	3.3	3.2	3.2	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	2.3	150
2	3.5	3.4	3.3	3.2	3.1	3.1	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	
3	3.4	3.3	3.2	3.1	3.0	2.9	2.7	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.8	
4	3.4	3.3	3.2	3.0	2.9	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7	
5	3.4	3.3	3.1	3.0	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	1.8	-	-	
10	3.4	3.1	3.0	2.8	2.6	2.5	2.3	2.1	-	-	-	-	-	-	-	
15	3.3	3.1	2.8	2.7	2.5	2.3	-	-	-	-	-	-	-	-	-	300
30	3.1	2.7	2.5	-	-	-	-	-	-	-	-	-	-	-	-	
1	3.5	3.3	3.2	3.1	3.0	2.9	2.7	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.8	500
2	3.4	3.2	3.0	2.8	2.7	2.5	2.3	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	
3	3.3	3.1	2.9	2.7	2.6	2.4	2.2	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.2	
4	3.3	3.1	2.8	2.7	2.5	2.3	2.1	1.9	1.7	1.6	1.5	1.4	1.3	-	-	
5	3.2	2.9	2.6	2.4	2.2	2.0	1.8	1.6	-	-	-	-	-	-	-	
10	3.1	2.7	2.5	2.2	2.0	1.9	-	-	-	-	-	-	-	-	-	
15	3.0	2.5	2.2	-	-	-	-	-	-	-	-	-	-	-	-	1000
30	3.0	2.5	2.2	-	-	-	-	-	-	-	-	-	-	-	-	



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

■ 0.6 - 1 ~ - 3000 min⁻¹

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 s ries), 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	10.2	10.2	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.2	9.1	8.9	8.8	5
2	10.2	10.2	10.0	9.9	9.8	9.7	9.6	9.4	9.2	9.1	8.9	8.8	8.6	8.5	8.3	
3	10.1	10.1	10.0	9.9	9.8	9.6	9.4	9.2	9.0	8.8	8.6	8.5	8.3	8.1	7.9	
4	10.1	10.1	9.9	9.8	9.7	9.5	9.3	9.1	8.8	8.6	8.4	8.2	8.0	7.9	7.6	
5	10.0	10.0	9.9	9.7	9.6	9.5	9.2	8.9	8.7	8.5	8.2	8.0	7.8	-	-	
10	10.0	9.9	9.7	9.5	9.3	9.1	8.8	8.5	-	-	-	-	-	-	-	
15	10.0	9.8	9.6	9.3	9.1	8.9	-	-	-	-	-	-	-	-	-	
30	10.0	9.6	9.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	10.2	10.2	10.0	9.9	9.8	9.7	9.6	9.4	9.2	9.1	8.9	8.7	8.6	8.5	8.2	10
2	10.1	10.1	9.9	9.8	9.7	9.5	9.3	9.1	8.8	8.6	8.4	8.2	8.0	7.9	7.6	
3	10.0	10.0	9.8	9.7	9.5	9.4	9.1	8.8	8.5	8.3	8.1	7.9	7.7	7.5	7.2	
4	10.0	10.0	9.8	9.6	9.4	9.2	8.9	8.6	8.3	8.1	7.8	7.6	7.4	7.1	6.9	
5	10.0	9.9	9.7	9.5	9.3	9.1	8.8	8.4	8.1	7.9	7.6	7.3	7.1	-	-	
10	10.0	9.7	9.5	9.2	8.9	8.7	8.2	7.8	-	-	-	-	-	-	-	
15	10.0	9.6	9.3	9.0	8.7	8.4	-	-	-	-	-	-	-	-	-	
30	9.8	9.3	8.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	10.1	10.1	9.9	9.8	9.7	9.5	9.3	9.0	8.8	8.6	8.4	8.2	8.0	7.9	7.6	20
2	10.0	10.0	9.8	9.6	9.4	9.2	8.9	8.6	8.3	8.1	7.8	7.6	7.3	7.1	6.9	
3	10.0	9.9	9.6	9.4	9.2	9.0	8.6	8.3	8.0	7.7	7.4	7.1	6.9	6.7	6.4	
4	10.0	9.8	9.5	9.3	9.1	8.8	8.4	8.0	7.7	7.4	7.1	6.8	6.6	6.3	6.0	
5	10.0	9.7	9.4	9.2	8.9	8.7	8.2	7.8	7.5	7.1	6.8	6.5	6.3	-	-	
10	9.9	9.5	9.1	8.8	8.4	8.1	7.6	7.1	-	-	-	-	-	-	-	
15	9.8	9.3	8.9	8.5	8.1	7.8	-	-	-	-	-	-	-	-	-	
30	9.6	9.0	8.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	10.0	10.0	9.8	9.6	9.4	9.2	8.9	8.6	8.3	8.0	7.8	7.6	7.3	7.1	6.8	40
2	10.0	9.8	9.5	9.3	9.0	8.8	8.4	8.0	7.7	7.4	7.1	6.8	6.6	6.3	6.0	
3	10.0	9.7	9.4	9.1	8.8	8.5	8.1	7.6	7.3	6.9	6.6	6.3	6.1	5.8	5.5	
4	10.0	9.6	9.2	8.9	8.6	8.3	7.8	7.3	6.9	6.6	6.3	6.0	5.7	5.4	5.1	
5	9.9	9.5	9.1	8.8	8.4	8.1	7.6	7.1	6.7	6.3	6.0	5.7	5.4	-	-	
10	9.7	9.2	8.7	8.2	7.8	7.5	6.8	6.3	-	-	-	-	-	-	-	
15	9.6	8.9	8.4	7.9	7.4	7.0	-	-	-	-	-	-	-	-	-	
30	9.3	8.5	7.8	-	-	-	-	-	-	-	-	-	-	-	-	
1	10.0	9.9	9.6	9.4	9.2	9.0	8.6	8.3	8.0	7.7	7.4	7.1	6.9	6.7	6.4	60
2	10.0	9.7	9.4	9.1	8.8	8.5	8.1	7.6	7.3	6.9	6.6	6.3	6.1	5.8	5.5	
3	9.9	9.5	9.2	8.8	8.5	8.2	7.7	7.2	6.8	6.4	6.1	5.8	5.5	5.3	5.0	
4	9.9	9.4	9.0	8.6	8.3	8.0	7.4	6.9	6.5	6.1	5.7	5.4	5.2	4.9	4.6	
5	9.8	9.3	8.9	8.5	8.1	7.8	7.1	6.6	6.2	5.8	5.5	5.2	4.9	-	-	
10	9.6	8.9	8.4	7.9	7.4	7.0	6.3	5.8	-	-	-	-	-	-	-	
15	9.4	8.7	8.0	7.5	7.0	6.5	-	-	-	-	-	-	-	-	-	
30	9.1	8.1	7.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	10.0	9.8	9.5	9.3	9.0	8.8	8.4	8.0	7.7	7.4	7.1	6.8	6.6	6.3	6.0	80
2	10.0	9.6	9.2	8.9	8.6	8.3	7.8	7.3	6.9	6.6	6.3	6.0	5.7	5.4	5.1	
3	9.9	9.4	9.0	8.6	8.3	8.0	7.4	6.9	6.5	6.1	5.7	5.4	5.2	4.9	4.6	
4	9.8	9.3	8.8	8.4	8.0	7.7	7.1	6.6	6.1	5.7	5.4	5.1	4.8	4.6	4.2	
5	9.7	9.2	8.7	8.2	7.8	7.5	6.8	6.3	5.8	5.4	5.1	4.8	4.5	-	-	
10	9.5	8.8	8.1	7.6	7.1	6.7	6.0	5.4	-	-	-	-	-	-	-	
15	9.3	8.5	7.8	7.2	6.6	6.2	-	-	-	-	-	-	-	-	-	
30	8.9	7.9	7.0	-	-	-	-	-	-	-	-	-	-	-	-	
1	10.0	9.7	9.4	9.2	8.9	8.7	8.2	7.8	7.5	7.1	6.8	6.5	6.3	6.0	5.7	100
2	9.9	9.5	9.1	8.8	8.4	8.1	7.6	7.1	6.7	6.3	6.0	5.7	5.4	5.2	4.8	
3	9.8	9.3	8.9	8.5	8.1	7.7	7.1	6.6	6.2	5.8	5.5	5.2	4.9	4.6	4.3	
4	9.7	9.2	8.7	8.2	7.8	7.5	6.8	6.3	5.8	5.4	5.1	4.8	4.5	4.3	4.0	
5	9.7	9.0	8.5	8.0	7.6	7.2	6.6	6.0	5.5	5.1	4.8	4.5	4.2	-	-	
10	9.4	8.6	7.9	7.3	6.9	6.4	5.7	5.1	-	-	-	-	-	-	-	
15	9.2	8.3	7.5	6.9	6.4	5.9	-	-	-	-	-	-	-	-	-	
30	8.8	7.7	6.8	-	-	-	-	-	-	-	-	-	-	-	-	
1	10.0	9.6	9.3	8.9	8.6	8.4	7.9	7.4	7.0	6.7	6.3	6.0	5.8	5.4	4.7	150
2	9.8	9.3	8.9	8.5	8.1	7.7	7.1	6.6	6.2	5.8	5.5	5.2	4.8	4.4	3.9	
3	9.7	9.1	8.6	8.1	7.7	7.3	6.7	6.1	5.7	5.3	4.9	4.6	4.4	4.1	3.6	
4	9.6	8.9	8.4	7.9	7.4	7.0	6.3	5.8	5.3	4.9	4.6	4.3	4.0	3.8	3.4	
5	9.5	8.8	8.2	7.6	7.2	6.8	6.1	5.5	5.0	4.6	4.3	4.0	3.7	-	-	
10	9.2	8.3	7.5	6.9	6.4	5.9	5.2	4.6	-	-	-	-	-	-	-	
15	9.0	7.9	7.1	6.4	5.9	5.4	-	-	-	-	-	-	-	-	-	
30	8.5	7.2	6.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	9.8	9.3	8.9	8.5	8.1	7.7	7.1	6.6	6.2	5.8	5.1	4.5	4.1	3.7	3.2	300
2	9.6	8.9	8.4	7.9	7.4	7.0	6.3	5.8	4.9	4.2	3.7	3.3	3.0	2.7	2.4	
3	9.4	8.7	8.0	7.5	7.0	6.5	5.8	5.2	4.3	3.7	3.2	2.9	2.6	2.4	2.1	
4	9.3	8.5	7.7	7.1	6.6	6.2	5.5	4.8	4.0	3.5	3.0	2.7	2.4	2.2	1.9	
5	9.2	8.3	7.5	6.9	6.4	5.9	5.2	4.6	3.8	3.3	2.9	2.6	2.3	-	-	
10	8.8	7.6	6.8	6.1	5.5	5.0	4.3	3.7	-	-	-	-	-	-	-	
15	8.5	7.2	6.3	5.5	5.0	4.5	-	-	-	-	-	-	-	-	-	
30	7.9	6.4	5.4	-	-	-	-	-	-	-	-	-	-	-	-	

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

■ 0.3 - 3 ~ - 3000 min⁻¹

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 s ries), 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	4.3	4.3	4.2	4.1	4.1	4.1	4.0	4.0	4.0	3.9	3.9	3.9	3.8	3.8	3.7	5
2	4.2	4.2	4.2	4.1	4.1	4.1	4.0	4.0	3.9	3.8	3.8	3.7	3.7	3.6	3.5	
3	4.2	4.2	4.2	4.1	4.1	4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.6	3.5	3.4	
4	4.2	4.2	4.2	4.1	4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.5	3.5	3.4	3.3	
5	4.2	4.2	4.1	4.1	4.0	4.0	3.9	3.8	3.7	3.6	3.5	3.5	3.4	-	-	
10	4.2	4.2	4.1	4.0	3.9	3.9	3.7	3.6	-	-	-	-	-	-	-	
15	4.2	4.1	4.0	3.9	3.9	3.8	-	-	-	-	-	-	-	-	-	10
30	4.2	4.1	3.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	4.2	4.2	4.2	4.1	4.1	4.1	4.0	4.0	3.9	3.8	3.8	3.7	3.7	3.6	3.5	
2	4.2	4.2	4.2	4.1	4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.5	3.5	3.4	3.3	
3	4.2	4.2	4.1	4.1	4.0	4.0	3.8	3.7	3.7	3.6	3.5	3.4	3.3	3.2	3.1	
4	4.2	4.2	4.1	4.0	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	
5	4.2	4.2	4.1	4.0	3.9	3.9	3.7	3.6	3.5	3.4	3.3	3.2	3.1	-	-	
10	4.2	4.1	4.0	3.9	3.8	3.7	3.5	3.4	-	-	-	-	-	-	-	20
15	4.2	4.0	3.9	3.8	3.7	3.6	-	-	-	-	-	-	-	-	-	
30	4.1	3.9	3.8	-	-	-	-	-	-	-	-	-	-	-	-	
1	4.2	4.2	4.2	4.1	4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.5	3.5	3.4	3.3	
2	4.2	4.2	4.1	4.0	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	
3	4.2	4.1	4.1	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.9	2.8	
4	4.2	4.1	4.0	3.9	3.8	3.8	3.6	3.5	3.3	3.2	3.1	3.0	2.9	2.8	2.7	
5	4.2	4.1	4.0	3.9	3.8	3.7	3.5	3.4	3.2	3.1	3.0	2.9	2.8	-	-	
10	4.2	4.0	3.9	3.7	3.6	3.5	3.3	3.1	-	-	-	-	-	-	-	40
15	4.1	3.9	3.8	3.6	3.5	3.4	-	-	-	-	-	-	-	-	-	
30	4.0	3.8	3.6	-	-	-	-	-	-	-	-	-	-	-	-	
1	4.2	4.2	4.1	4.0	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	
2	4.2	4.1	4.0	3.9	3.8	3.8	3.6	3.5	3.3	3.2	3.1	3.0	2.9	2.8	2.7	
3	4.2	4.1	4.0	3.8	3.7	3.7	3.5	3.3	3.2	3.0	2.9	2.8	2.7	2.6	2.5	
4	4.2	4.0	3.9	3.8	3.7	3.6	3.4	3.2	3.0	2.9	2.8	2.7	2.5	2.4	2.3	60
5	4.2	4.0	3.9	3.7	3.6	3.5	3.3	3.1	2.9	2.8	2.7	2.5	2.4	-	-	
10	4.1	3.9	3.7	3.5	3.4	3.2	3.0	2.8	-	-	-	-	-	-	-	
15	4.0	3.8	3.6	3.4	3.2	3.1	-	-	-	-	-	-	-	-	-	
30	3.9	3.6	3.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	4.2	4.1	4.1	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.9	2.8	80
2	4.2	4.1	4.0	3.8	3.7	3.7	3.5	3.3	3.2	3.0	2.9	2.8	2.7	2.6	2.5	
3	4.2	4.0	3.9	3.8	3.6	3.5	3.3	3.1	3.0	2.8	2.7	2.6	2.5	2.4	2.2	
4	4.1	4.0	3.8	3.7	3.6	3.4	3.2	3.0	2.9	2.7	2.6	2.4	2.3	2.2	2.1	
5	4.1	3.9	3.8	3.6	3.5	3.4	3.1	2.9	2.7	2.6	2.4	2.3	2.2	-	-	
10	4.0	3.8	3.6	3.4	3.2	3.1	2.8	2.6	-	-	-	-	-	-	-	
15	4.0	3.7	3.5	3.2	3.1	2.9	-	-	-	-	-	-	-	-	-	100
30	3.9	3.5	3.2	-	-	-	-	-	-	-	-	-	-	-	-	
1	4.2	4.1	4.0	3.9	3.8	3.7	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.6	
2	4.1	4.0	3.9	3.7	3.6	3.5	3.3	3.1	2.9	2.8	2.7	2.5	2.4	2.3	2.2	
3	4.1	3.9	3.8	3.6	3.5	3.4	3.1	2.9	2.7	2.6	2.4	2.3	2.2	2.1	2.0	
4	4.1	3.9	3.7	3.5	3.4	3.2	3.0	2.8	2.6	2.4	2.3	2.2	2.1	2.0	1.8	
5	4.1	3.8	3.6	3.5	3.3	3.1	2.9	2.7	2.5	2.3	2.2	2.0	1.9	-	-	150
10	4.0	3.7	3.4	3.2	3.0	2.8	2.5	2.3	-	-	-	-	-	-	-	
15	3.9	3.6	3.3	3.0	2.8	2.6	-	-	-	-	-	-	-	-	-	
30	3.7	3.3	3.0	-	-	-	-	-	-	-	-	-	-	-	-	
1	4.2	4.0	3.9	3.8	3.7	3.6	3.4	3.2	3.1	2.9	2.8	2.7	2.6	2.5	2.3	
2	4.1	3.9	3.8	3.6	3.5	3.4	3.1	2.9	2.7	2.6	2.4	2.3	2.2	2.1	2.0	300
3	4.1	3.9	3.7	3.5	3.3	3.2	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	1.8	
4	4.0	3.8	3.6	3.4	3.2	3.1	2.8	2.6	2.4	2.2	2.1	1.9	1.8	1.7	1.6	
5	4.0	3.7	3.5	3.3	3.1	3.0	2.7	2.5	2.3	2.1	2.0	1.8	1.7	-	-	
10	3.9	3.6	3.3	3.0	2.8	2.6	2.3	2.1	-	-	-	-	-	-	-	
15	3.8	3.4	3.1	2.8	2.6	2.4	-	-	-	-	-	-	-	-	-	
30	3.6	3.2	2.8	-	-	-	-	-	-	-	-	-	-	-	-	300
1	4.1	3.9	3.8	3.6	3.5	3.4	3.1	2.9	2.7	2.6	2.4	2.3	2.2	2.1	2.0	
2	4.0	3.8	3.6	3.4	3.2	3.1	2.8	2.6	2.4	2.2	2.1	1.9	1.8	1.7	1.6	
3	4.0	3.7	3.5	3.2	3.1	2.9	2.6	2.4	2.2	2.0	1.9	1.7	1.6	1.5	1.4	
4	3.9	3.6	3.4	3.1	2.9	2.7	2.4	2.2	2.0	1.8	1.7	1.6	1.5	1.4	1.3	
5	3.9	3.6	3.3	3.0	2.8	2.6	2.3	2.1	1.9	1.7	1.6	1.5	1.4	-	-	
10	3.7	3.3	3.0	2.7	2.5	2.3	2.0	1.7	-	-	-	-	-	-	-	
15	3.6	3.1	2.8	2.5	2.2	2.0	-	-	-	-	-	-	-	-	-	300
30	3.4	2.8	2.4	-	-	-	-	-	-	-	-	-	-	-	-	



Documentazione Tubo a raggi X
Tube Documentation
Documentation du Tube

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

■ 0.6 - 3 ~ - 3000 min⁻¹

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 s ries), 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	12.2	12.2	12.0	11.8	11.6	11.5	11.4	11.2	11.1	11.0	10.9	10.8	10.6	10.4	10.2	5
2	12.1	12.1	12.0	11.8	11.6	11.5	11.3	11.1	10.8	10.6	10.4	10.2	10.0	9.8	9.5	
3	12.1	12.1	11.9	11.7	11.6	11.4	11.1	10.8	10.5	10.3	10.0	9.8	9.6	9.4	9.0	
4	12.0	12.0	11.8	11.6	11.4	11.3	10.9	10.6	10.3	10.0	9.7	9.5	9.2	9.0	8.7	
5	12.0	12.0	11.8	11.5	11.3	11.1	10.8	10.4	10.1	9.8	9.5	9.2	9.0	-	-	
10	12.0	11.8	11.5	11.2	11.0	10.7	10.2	9.8	-	-	-	-	-	-	-	
15	12.0	11.7	11.3	11.0	10.7	10.4	-	-	-	-	-	-	-	-	-	30
30	11.9	11.4	11.0	-	-	-	-	-	-	-	-	-	-	-	-	
1	12.1	12.1	12.0	11.8	11.6	11.5	11.3	11.1	10.8	10.6	10.4	10.2	10.0	9.8	9.5	10
2	12.0	12.0	11.8	11.6	11.4	11.3	10.9	10.6	10.3	10.0	9.7	9.5	9.2	9.0	8.7	
3	12.0	11.9	11.7	11.5	11.2	11.0	10.6	10.3	9.9	9.6	9.3	9.0	8.7	8.5	8.1	
4	12.0	11.9	11.6	11.3	11.1	10.8	10.4	10.0	9.6	9.3	8.9	8.6	8.3	8.1	7.7	
5	12.0	11.8	11.5	11.2	10.9	10.7	10.2	9.8	9.4	9.0	8.6	8.3	8.0	-	-	
10	12.0	11.5	11.1	10.8	10.4	10.1	9.5	9.0	-	-	-	-	-	-	-	
15	11.9	11.4	10.9	10.5	10.1	9.7	-	-	-	-	-	-	-	-	-	30
30	11.7	11.0	10.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	12.0	12.0	11.8	11.6	11.4	11.3	10.9	10.6	10.3	10.0	9.7	9.5	9.2	9.0	8.7	20
2	12.0	11.9	11.6	11.3	11.1	10.8	10.4	10.0	9.6	9.2	8.9	8.6	8.3	8.1	7.7	
3	12.0	11.7	11.4	11.1	10.8	10.5	10.0	9.6	9.1	8.7	8.4	8.1	7.8	7.5	7.1	
4	12.0	11.6	11.3	10.9	10.6	10.3	9.7	9.2	8.8	8.4	8.0	7.6	7.3	7.0	6.7	
5	12.0	11.5	11.1	10.8	10.4	10.1	9.5	9.0	8.5	8.1	7.7	7.3	7.0	-	-	
10	11.8	11.2	10.7	10.2	9.8	9.4	8.6	8.0	-	-	-	-	-	-	-	
15	11.7	11.0	10.4	9.8	9.3	8.9	-	-	-	-	-	-	-	-	-	30
30	11.4	10.5	9.7	-	-	-	-	-	-	-	-	-	-	-	-	
1	12.0	11.8	11.6	11.3	11.1	10.8	10.4	10.0	9.6	9.2	8.9	8.6	8.3	8.1	7.7	40
2	12.0	11.6	11.3	10.9	10.6	10.3	9.7	9.2	8.8	8.4	8.0	7.6	7.3	7.0	6.6	
3	11.9	11.5	11.0	10.6	10.2	9.9	9.3	8.7	8.2	7.8	7.4	7.0	6.7	6.4	6.0	
4	11.9	11.3	10.8	10.4	10.0	9.6	8.9	8.3	7.8	7.4	7.0	6.6	6.3	6.0	5.6	
5	11.8	11.2	10.7	10.2	9.8	9.3	8.6	8.0	7.5	7.0	6.6	6.2	5.9	-	-	
10	11.5	10.8	10.1	9.5	9.0	8.5	7.7	7.0	-	-	-	-	-	-	-	
15	11.4	10.4	9.7	9.0	8.4	7.9	-	-	-	-	-	-	-	-	-	30
30	11.0	9.8	8.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	12.0	11.7	11.4	11.1	10.8	10.5	10.0	9.6	9.1	8.7	8.4	8.1	7.8	7.5	7.1	60
2	11.9	11.5	11.0	10.6	10.2	9.9	9.3	8.7	8.2	7.8	7.4	7.0	6.7	6.4	6.0	
3	11.8	11.3	10.7	10.3	9.9	9.5	8.8	8.2	7.6	7.2	6.8	6.4	6.1	5.8	5.4	
4	11.7	11.1	10.5	10.0	9.6	9.1	8.4	7.8	7.2	6.7	6.3	6.0	5.6	5.3	5.0	
5	11.6	11.0	10.3	9.8	9.3	8.9	8.1	7.4	6.9	6.4	6.0	5.6	5.3	-	-	
10	11.4	10.4	9.7	9.0	8.4	7.9	7.1	6.4	-	-	-	-	-	-	-	
15	11.1	10.1	9.2	8.5	7.9	7.3	-	-	-	-	-	-	-	-	-	30
30	10.7	9.4	8.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	12.0	11.6	11.3	10.9	10.6	10.3	9.7	9.2	8.8	8.4	8.0	7.6	7.3	7.0	6.6	80
2	11.8	11.3	10.8	10.4	10.0	9.6	8.9	8.3	7.8	7.4	7.0	6.6	6.3	6.0	5.6	
3	11.7	11.1	10.5	10.0	9.6	9.1	8.4	7.8	7.2	6.7	6.3	6.0	5.6	5.3	5.0	
4	11.6	10.9	10.3	9.7	9.2	8.8	8.0	7.3	6.8	6.3	5.9	5.5	5.2	4.9	4.5	
5	11.5	10.8	10.1	9.5	9.0	8.5	7.7	7.0	6.4	6.0	5.5	5.2	4.9	-	-	
10	11.2	10.2	9.3	8.6	8.0	7.5	6.6	5.9	-	-	-	-	-	-	-	
15	11.0	9.8	8.9	8.1	7.4	6.9	-	-	-	-	-	-	-	-	-	30
30	10.4	9.0	7.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	12.0	11.5	11.1	10.8	10.4	10.1	9.5	8.9	8.5	8.0	7.7	7.3	7.0	6.7	6.2	100
2	11.8	11.2	10.7	10.2	9.7	9.3	8.6	8.0	7.5	7.0	6.6	6.2	5.9	5.6	5.2	
3	11.6	11.0	10.3	9.8	9.3	8.9	8.1	7.4	6.9	6.4	6.0	5.6	5.3	5.0	4.6	
4	11.5	10.8	10.1	9.5	9.0	8.5	7.7	7.0	6.4	5.9	5.5	5.2	4.9	4.6	4.2	
5	11.4	10.6	9.9	9.2	8.7	8.2	7.3	6.6	6.1	5.6	5.2	4.8	4.5	-	-	
10	11.1	10.0	9.1	8.3	7.7	7.2	6.3	5.6	-	-	-	-	-	-	-	
15	10.8	9.6	8.6	7.8	7.1	6.5	-	-	-	-	-	-	-	-	-	30
30	10.3	8.7	7.6	-	-	-	-	-	-	-	-	-	-	-	-	
1	11.9	11.4	10.9	10.4	10.0	9.7	9.0	8.4	7.9	7.5	7.1	6.6	5.9	5.4	4.7	150
2	11.6	11.0	10.3	9.8	9.3	8.9	8.1	7.4	6.9	6.4	6.0	5.4	4.8	4.4	3.9	
3	11.5	10.7	10.0	9.3	8.8	8.3	7.5	6.8	6.2	5.8	5.4	5.0	4.5	4.1	3.6	
4	11.4	10.4	9.7	9.0	8.4	7.9	7.1	6.4	5.8	5.3	4.9	4.6	4.3	3.9	3.4	
5	11.2	10.2	9.4	8.7	8.1	7.6	6.7	6.0	5.5	5.0	4.6	4.3	4.0	-	-	
10	10.8	9.6	8.6	7.8	7.1	6.5	5.6	5.0	-	-	-	-	-	-	-	
15	10.5	9.1	8.0	7.2	6.5	5.9	-	-	-	-	-	-	-	-	-	30
30	9.9	8.2	7.0	-	-	-	-	-	-	-	-	-	-	-	-	
1	11.6	11.0	10.3	9.8	9.3	8.9	8.1	7.4	6.8	5.8	5.1	4.5	4.1	3.7	3.2	300
2	11.4	10.4	9.7	9.0	8.4	7.9	7.1	5.9	4.9	4.2	3.7	3.3	3.0	2.7	2.4	
3	11.1	10.1	9.2	8.5	7.8	7.3	6.4	5.2	4.3	3.7	3.2	2.9	2.6	2.4	2.1	
4	11.0	9.8	8.9	8.1	7.4	6.9	6.0	4.8	4.0	3.5	3.0	2.7	2.4	2.2	1.9	
5	10.8	9.6	8.6	7.8	7.1	6.5	5.6	4.6	3.8	3.3	2.9	2.6	2.3	-	-	
10	10.2	8.7	7.6	6.7	6.0	5.5	4.6	4.0	-	-	-	-	-	-	-	
15	9.9	8.2	7.0	6.1	5.4	4.8	-	-	-	-	-	-	-	-	-	30
30	9.1	7.2	5.9	-	-	-	-	-	-	-	-	-	-	-	-	

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

■ 0.3 - 1 ~ - 10000 min⁻¹

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 s ries), 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	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.5	5.4	5.3	5.3	5.2	5.2	5.1	5.0	5
2	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.6	
3	6.0	5.9	5.8	5.7	5.7	5.6	5.4	5.3	5.2	5.0	4.9	4.8	4.6	4.5	4.4	
4	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.2	5.0	4.9	4.7	4.6	4.5	4.4	4.2	
5	6.0	5.9	5.8	5.7	5.6	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.3	-	-	
10	6.0	5.8	5.7	5.5	5.4	5.2	5.0	4.8	-	-	-	-	-	-	-	
15	5.9	5.7	5.6	5.4	5.2	5.1	-	-	-	-	-	-	-	-	-	10
30	5.9	5.6	5.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.6	10
2	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.2	5.0	4.9	4.7	4.6	4.5	4.4	4.2	
3	6.0	5.9	5.8	5.6	5.5	5.4	5.2	5.0	4.8	4.7	4.5	4.4	4.2	4.1	3.9	
4	6.0	5.8	5.7	5.6	5.4	5.3	5.1	4.9	4.7	4.5	4.3	4.2	4.0	3.9	3.7	
5	6.0	5.8	5.7	5.5	5.4	5.2	5.0	4.8	4.5	4.4	4.2	4.0	3.9	-	-	
10	5.9	5.7	5.5	5.3	5.1	4.9	4.6	4.3	-	-	-	-	-	-	-	
15	5.9	5.6	5.3	5.1	4.9	4.7	-	-	-	-	-	-	-	-	-	20
30	5.7	5.4	5.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.2	5.0	4.9	4.7	4.6	4.5	4.4	4.2	20
2	6.0	5.8	5.7	5.6	5.4	5.3	5.1	4.9	4.7	4.5	4.3	4.2	4.0	3.9	3.7	
3	6.0	5.8	5.6	5.4	5.3	5.2	4.9	4.6	4.4	4.2	4.1	3.9	3.7	3.6	3.4	
4	5.9	5.7	5.5	5.4	5.2	5.0	4.7	4.5	4.2	4.0	3.8	3.7	3.5	3.4	3.2	
5	5.9	5.7	5.5	5.3	5.1	4.9	4.6	4.3	4.1	3.9	3.7	3.5	3.4	-	-	
10	5.8	5.5	5.2	5.0	4.8	4.5	4.2	3.9	-	-	-	-	-	-	-	
15	5.7	5.4	5.1	4.8	4.5	4.3	-	-	-	-	-	-	-	-	-	40
30	5.6	5.1	4.7	-	-	-	-	-	-	-	-	-	-	-	-	
1	6.0	5.8	5.7	5.6	5.4	5.3	5.1	4.9	4.7	4.5	4.3	4.2	4.0	3.9	3.7	40
2	5.9	5.7	5.5	5.4	5.2	5.0	4.7	4.5	4.2	4.0	3.8	3.7	3.5	3.4	3.2	
3	5.9	5.6	5.4	5.2	5.0	4.8	4.5	4.2	4.0	3.7	3.5	3.4	3.2	3.1	2.9	
4	5.8	5.6	5.3	5.1	4.9	4.7	4.3	4.0	3.8	3.5	3.3	3.2	3.0	2.8	2.6	
5	5.8	5.5	5.2	5.0	4.7	4.5	4.2	3.9	3.6	3.4	3.2	3.0	2.8	-	-	
10	5.7	5.3	4.9	4.6	4.3	4.1	3.7	3.4	-	-	-	-	-	-	-	
15	5.6	5.1	4.7	4.4	4.1	3.8	-	-	-	-	-	-	-	-	-	60
30	5.4	4.8	4.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	6.0	5.8	5.6	5.4	5.3	5.2	4.9	4.6	4.4	4.2	4.1	3.9	3.7	3.6	3.4	60
2	5.9	5.6	5.4	5.2	5.0	4.8	4.5	4.2	4.0	3.7	3.5	3.4	3.2	3.1	2.9	
3	5.8	5.5	5.3	5.0	4.8	4.6	4.2	3.9	3.7	3.4	3.2	3.1	2.9	2.8	2.6	
4	5.8	5.4	5.2	4.9	4.6	4.4	4.1	3.7	3.5	3.2	3.0	2.8	2.7	2.5	2.3	
5	5.7	5.4	5.1	4.8	4.5	4.3	3.9	3.6	3.3	3.1	2.8	2.7	2.5	-	-	
10	5.6	5.1	4.7	4.4	4.1	3.8	3.4	3.0	-	-	-	-	-	-	-	
15	5.5	4.9	4.5	4.1	3.8	3.5	-	-	-	-	-	-	-	-	-	80
30	5.2	4.5	4.0	-	-	-	-	-	-	-	-	-	-	-	-	
1	5.9	5.7	5.5	5.4	5.2	5.0	4.7	4.5	4.2	4.0	3.8	3.7	3.5	3.4	3.2	80
2	5.8	5.6	5.3	5.1	4.9	4.7	4.3	4.0	3.8	3.5	3.3	3.2	3.0	2.8	2.6	
3	5.8	5.4	5.2	4.9	4.6	4.4	4.1	3.7	3.5	3.2	3.0	2.8	2.7	2.5	2.3	
4	5.7	5.4	5.0	4.7	4.5	4.2	3.8	3.5	3.2	3.0	2.8	2.6	2.5	2.3	2.1	
5	5.7	5.3	4.9	4.6	4.3	4.1	3.7	3.3	3.1	2.8	2.6	2.5	2.3	-	-	
10	5.5	5.0	4.5	4.2	3.9	3.6	3.2	2.8	-	-	-	-	-	-	-	
15	5.4	4.8	4.3	3.9	3.6	3.3	-	-	-	-	-	-	-	-	-	100
30	5.1	4.4	3.8	-	-	-	-	-	-	-	-	-	-	-	-	
1	5.9	5.7	5.5	5.3	5.1	4.9	4.6	4.3	4.1	3.9	3.7	3.5	3.3	3.2	3.0	100
2	5.8	5.5	5.2	5.0	4.7	4.5	4.2	3.9	3.6	3.4	3.2	3.0	2.8	2.7	2.5	
3	5.7	5.4	5.1	4.8	4.5	4.3	3.9	3.6	3.3	3.1	2.8	2.7	2.5	2.4	2.2	
4	5.7	5.3	4.9	4.6	4.3	4.1	3.7	3.3	3.1	2.8	2.6	2.5	2.3	2.2	2.0	
5	5.6	5.2	4.8	4.5	4.2	3.9	3.5	3.2	2.9	2.7	2.5	2.3	2.1	-	-	
10	5.4	4.9	4.4	4.0	3.7	3.4	3.0	2.6	-	-	-	-	-	-	-	
15	5.3	4.6	4.1	3.7	3.4	3.1	-	-	-	-	-	-	-	-	-	150
30	5.0	4.2	3.6	-	-	-	-	-	-	-	-	-	-	-	-	
1	5.9	5.6	5.3	5.1	4.9	4.7	4.4	4.1	3.8	3.6	3.4	3.2	3.0	2.9	2.7	150
2	5.7	5.4	5.1	4.8	4.5	4.3	3.9	3.6	3.3	3.1	2.8	2.7	2.5	2.4	2.2	
3	5.7	5.2	4.9	4.5	4.3	4.0	3.6	3.3	3.0	2.7	2.5	2.4	2.2	2.1	1.9	
4	5.6	5.1	4.7	4.4	4.1	3.8	3.4	3.0	2.8	2.5	2.3	2.2	2.0	1.9	1.7	
5	5.5	5.0	4.6	4.2	3.9	3.6	3.2	2.9	2.6	2.4	2.2	2.0	1.9	-	-	
10	5.3	4.6	4.1	3.7	3.4	3.1	2.7	2.3	-	-	-	-	-	-	-	
15	5.1	4.4	3.9	3.4	3.1	2.8	-	-	-	-	-	-	-	-	-	300
30	4.8	3.9	3.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	5.7	5.4	5.1	4.8	4.5	4.3	3.9	3.6	3.3	3.1	2.8	2.7	2.5	2.4	2.2	300
2	5.6	5.1	4.7	4.4	4.1	3.8	3.4	3.0	2.8	2.5	2.3	2.2	2.0	1.9	1.7	
3	5.5	4.9	4.5	4.1	3.8	3.5	3.1	2.7	2.5	2.2	2.0	1.9	1.8	1.6	1.5	
4	5.4	4.8	4.3	3.9	3.6	3.3	2.8	2.5	2.2	2.0	1.9	1.7	1.6	1.5	1.3	
5	5.3	4.6	4.1	3.7	3.4	3.1	2.7	2.3	2.1	1.9	1.7	1.6	1.5	-	-	
10	5.0	4.2	3.6	3.2	2.9	2.6	2.2	1.9	-	-	-	-	-	-	-	
15	4.8	3.9	3.3	2.9	2.6	2.3	-	-	-	-	-	-	-	-	-	300
30	4.4	3.4	2.8	-	-	-	-	-	-	-	-	-	-	-	-	



Documentazione Tubo a raggi X
Tube Documentation
Documentation du Tube

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

■ 0.6 - 1 ~ - 10000 min⁻¹

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 s ries), z (cadence d'exp. par sec), temps d'exposition (sec)																n
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	
1	18.8	18.2	17.8	17.6	17.3	17.1	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.1	14.6	5
2	18.8	18.2	17.8	17.6	17.3	17.1	16.8	16.4	15.9	15.4	15.0	14.6	14.2	13.8	13.3	
3	18.8	18.2	17.8	17.6	17.3	17.1	16.5	15.9	15.3	14.8	14.3	13.8	13.4	13.0	12.4	
4	18.8	18.2	17.8	17.6	17.2	16.8	16.1	15.4	14.8	14.2	13.7	13.2	12.7	12.3	11.7	
5	18.8	18.2	17.8	17.4	17.0	16.6	15.8	15.0	14.4	13.8	13.2	12.7	12.3	-	-	
10	18.7	18.0	17.3	16.7	16.1	15.6	14.6	13.8	-	-	-	-	-	-	-	
15	18.5	17.7	16.9	16.2	15.5	14.9	-	-	-	-	-	-	-	-	-	10
30	18.2	17.1	16.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	18.8	18.2	17.8	17.6	17.3	17.1	16.8	16.4	15.9	15.4	15.0	14.6	14.2	13.8	13.3	
2	18.8	18.2	17.8	17.6	17.2	16.8	16.1	15.4	14.8	14.2	13.7	13.2	12.7	12.3	11.7	
3	18.8	18.2	17.8	17.3	16.8	16.3	15.5	14.7	14.0	13.4	12.8	12.3	11.8	11.4	10.8	
4	18.8	18.1	17.5	16.9	16.4	15.9	15.0	14.2	13.4	12.8	12.2	11.6	11.1	10.7	10.1	
5	18.7	18.0	17.3	16.7	16.1	15.6	14.6	13.7	13.0	12.3	11.7	11.1	10.6	-	-	20
10	18.4	17.4	16.6	15.8	15.0	14.4	13.2	12.3	-	-	-	-	-	-	-	
15	18.2	17.0	16.0	15.1	14.3	13.6	-	-	-	-	-	-	-	-	-	
30	17.7	16.2	14.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	18.8	18.2	17.8	17.6	17.2	16.8	16.1	15.4	14.8	14.2	13.7	13.2	12.7	12.3	11.7	
2	18.8	18.1	17.5	16.9	16.4	15.9	15.0	14.2	13.4	12.8	12.2	11.6	11.1	10.7	10.1	
3	18.6	17.8	17.1	16.5	15.9	15.3	14.3	13.4	12.6	11.9	11.2	10.7	10.2	9.7	9.1	40
4	18.5	17.6	16.8	16.1	15.4	14.8	13.7	12.7	11.9	11.2	10.5	10.0	9.5	9.0	8.4	
5	18.4	17.4	16.5	15.8	15.0	14.4	13.2	12.2	11.4	10.7	10.0	9.4	8.9	-	-	
10	18.0	16.7	15.6	14.6	13.7	13.0	11.7	10.6	-	-	-	-	-	-	-	
15	17.7	16.2	14.9	13.8	12.9	12.1	-	-	-	-	-	-	-	-	-	
30	17.0	15.1	13.6	-	-	-	-	-	-	-	-	-	-	-	-	
1	18.8	18.1	17.5	16.9	16.4	15.9	15.0	14.2	13.4	12.8	12.2	11.6	11.1	10.7	10.1	60
2	18.5	17.6	16.8	16.1	15.4	14.8	13.7	12.7	11.9	11.2	10.5	10.0	9.5	9.0	8.4	
3	18.3	17.2	16.3	15.5	14.7	14.0	12.8	11.8	11.0	10.2	9.6	9.0	8.5	8.0	7.4	
4	18.1	16.9	15.9	15.0	14.2	13.4	12.2	11.1	10.3	9.5	8.9	8.3	7.8	7.4	6.8	
5	18.0	16.7	15.6	14.6	13.7	13.0	11.7	10.6	9.7	9.0	8.3	7.8	7.3	-	-	
10	17.4	15.8	14.4	13.2	12.2	11.4	10.0	8.9	-	-	-	-	-	-	-	
15	17.0	15.1	13.6	12.3	11.3	10.4	-	-	-	-	-	-	-	-	-	80
30	16.2	13.8	12.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	18.6	17.8	17.1	16.5	15.9	15.3	14.3	13.4	12.6	11.9	11.2	10.7	10.2	9.7	9.1	
2	18.3	17.2	16.3	15.5	14.7	14.0	12.8	11.8	11.0	10.2	9.6	9.0	8.5	8.0	7.4	
3	18.1	16.8	15.7	14.8	13.9	13.2	11.9	10.9	10.0	9.2	8.6	8.0	7.5	7.1	6.5	
4	17.8	16.5	15.3	14.3	13.4	12.6	11.2	10.2	9.3	8.5	7.9	7.3	6.9	6.5	5.9	
5	17.7	16.2	14.9	13.8	12.9	12.1	10.7	9.6	8.7	8.0	7.4	6.8	6.4	-	-	100
10	17.0	15.1	13.6	12.3	11.3	10.4	9.0	8.0	-	-	-	-	-	-	-	
15	16.5	14.4	12.7	11.4	10.3	9.4	-	-	-	-	-	-	-	-	-	
30	15.6	13.0	11.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	18.5	17.6	16.8	16.1	15.4	14.8	13.7	12.7	11.9	11.2	10.5	10.0	9.2	8.4	7.4	
2	18.1	16.9	15.9	15.0	14.2	13.4	12.2	11.1	10.3	9.5	8.9	8.3	7.8	7.4	6.5	
3	17.8	16.5	15.3	14.3	13.4	12.6	11.2	10.2	9.3	8.5	7.9	7.3	6.9	6.5	5.9	150
4	17.6	16.1	14.8	13.7	12.7	11.9	10.5	9.5	8.6	7.8	7.2	6.7	6.2	5.9	5.3	
5	17.4	15.8	14.4	13.2	12.2	11.4	10.0	8.9	8.0	7.3	6.7	6.2	5.8	-	-	
10	16.7	14.6	13.0	11.7	10.6	9.7	8.3	7.3	-	-	-	-	-	-	-	
15	16.2	13.8	12.1	10.7	9.6	8.7	-	-	-	-	-	-	-	-	-	
30	15.1	12.3	10.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	18.4	17.4	16.5	15.8	15.0	14.4	13.2	12.2	11.4	10.7	9.7	8.7	7.8	7.1	6.2	300
2	18.0	16.7	15.6	14.6	13.7	13.0	11.7	10.6	9.7	9.0	8.3	7.5	6.7	6.1	5.4	
3	17.7	16.2	14.9	13.8	12.9	12.1	10.7	9.6	8.7	8.0	7.4	6.8	6.3	5.8	5.1	
4	17.4	15.8	14.4	13.2	12.2	11.4	10.0	8.9	8.0	7.3	6.7	6.2	5.8	5.4	4.9	
5	17.2	15.4	13.9	12.7	11.7	10.9	9.5	8.4	7.5	6.8	6.2	5.8	5.3	-	-	
10	16.4	14.2	12.5	11.1	10.1	9.2	7.8	6.8	-	-	-	-	-	-	-	
15	15.9	13.4	11.5	10.2	9.1	8.2	-	-	-	-	-	-	-	-	-	150
30	14.7	11.8	9.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	18.2	17.0	16.0	15.1	14.3	13.6	12.3	11.3	9.9	8.5	7.4	6.6	5.9	5.4	4.7	
2	17.7	16.2	14.9	13.8	12.9	12.1	10.7	9.6	8.1	6.9	6.0	5.4	4.8	4.4	3.9	
3	17.3	15.6	14.2	13.0	12.0	11.1	9.7	8.6	7.5	6.4	5.6	5.0	4.5	4.1	3.6	
4	17.0	15.1	13.6	12.3	11.3	10.4	9.0	8.0	7.1	6.1	5.4	4.8	4.3	3.9	3.4	300
5	16.8	14.7	13.1	11.8	10.8	9.9	8.5	7.4	6.6	6.0	5.2	4.6	4.2	-	-	
10	15.9	13.4	11.5	10.2	9.1	8.2	6.9	5.9	-	-	-	-	-	-	-	
15	15.2	12.5	10.6	9.2	8.1	7.3	-	-	-	-	-	-	-	-	-	
30	13.9	10.9	8.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	17.7	16.2	14.9	13.8	12.9	12.1	10.1	8.1	6.8	5.8	5.1	4.5	4.1	3.7	3.2	300
2	17.0	15.1	13.6	12.3	11.3	9.9	7.4	5.9	4.9	4.2	3.7	3.3	3.0	2.7	2.4	
3	16.5	14.4	12.7	11.4	10.3	8.7	6.5	5.2	4.3	3.7	3.2	2.9	2.6	2.4	2.1	
4	16.2	13.8	12.1	10.7	9.6	8.1	6.0	4.8	4.0	3.5	3.0	2.7	2.4	2.2	1.9	
5	15.9	13.4	11.5	10.2	9.1	7.7	5.8	4.6	3.8	3.3	2.9	2.6	2.3	-	-	
10	14.7	11.8	9.9	8.5	7.4	6.6	5.2	4.2	-	-	-	-	-	-	-	
15	13.9	10.9	8.9	7.5	6.5	5.8	-	-	-	-	-	-	-	-	-	300
30	12.5	9.2	7.3	-	-	-	-	-	-	-	-	-	-	-	-	



Documentazione Tubo a raggi X
Tube Documentation
Documentation du Tube

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

0.3 - 3 ~ - 10000 min⁻¹

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 s ries), 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	7.2	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.2	6.1	6.0	5.9	5.8	5
2	7.2	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.2	6.0	5.9	5.7	5.6	5.5	5.3	
3	7.2	7.0	6.9	6.8	6.7	6.6	6.4	6.2	6.0	5.8	5.6	5.5	5.3	5.2	5.0	
4	7.2	7.0	6.9	6.8	6.6	6.5	6.3	6.0	5.8	5.6	5.4	5.3	5.1	4.9	4.7	
5	7.2	7.0	6.9	6.7	6.6	6.4	6.2	5.9	5.7	5.5	5.3	5.1	4.9	-	-	
10	7.1	6.9	6.7	6.5	6.3	6.1	5.8	5.5	-	-	-	-	-	-	-	
15	7.1	6.8	6.5	6.3	6.1	5.9	-	-	-	-	-	-	-	-	-	
30	7.0	6.6	6.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	7.2	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.2	6.0	5.9	5.7	5.6	5.5	5.3	10
2	7.2	7.0	6.9	6.8	6.6	6.5	6.3	6.0	5.8	5.6	5.4	5.3	5.1	4.9	4.7	
3	7.2	7.0	6.8	6.7	6.5	6.3	6.1	5.8	5.6	5.3	5.1	4.9	4.8	4.6	4.4	
4	7.2	6.9	6.7	6.6	6.4	6.2	5.9	5.6	5.3	5.1	4.9	4.7	4.5	4.3	4.1	
5	7.1	6.9	6.7	6.5	6.3	6.1	5.8	5.5	5.2	4.9	4.7	4.5	4.3	-	-	
10	7.0	6.7	6.4	6.2	5.9	5.7	5.3	4.9	-	-	-	-	-	-	-	
15	7.0	6.6	6.2	5.9	5.7	5.4	-	-	-	-	-	-	-	-	-	
30	6.8	6.3	5.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	7.2	7.0	6.9	6.8	6.6	6.5	6.3	6.0	5.8	5.6	5.4	5.3	5.1	4.9	4.7	20
2	7.2	6.9	6.7	6.6	6.4	6.2	5.9	5.6	5.3	5.1	4.9	4.7	4.5	4.3	4.1	
3	7.1	6.9	6.6	6.4	6.2	6.0	5.6	5.3	5.0	4.8	4.6	4.3	4.2	4.0	3.7	
4	7.1	6.8	6.5	6.3	6.0	5.8	5.4	5.1	4.8	4.5	4.3	4.1	3.9	3.7	3.5	
5	7.0	6.7	6.4	6.2	5.9	5.7	5.3	4.9	4.6	4.3	4.1	3.9	3.7	-	-	
10	6.9	6.5	6.1	5.8	5.5	5.2	4.7	4.3	-	-	-	-	-	-	-	
15	6.8	6.3	5.9	5.5	5.1	4.9	-	-	-	-	-	-	-	-	-	
30	6.6	5.9	5.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	7.2	6.9	6.7	6.6	6.4	6.2	5.9	5.6	5.3	5.1	4.9	4.7	4.5	4.3	4.1	40
2	7.1	6.8	6.5	6.3	6.0	5.8	5.4	5.1	4.8	4.5	4.3	4.1	3.9	3.7	3.5	
3	7.0	6.7	6.3	6.1	5.8	5.6	5.1	4.8	4.4	4.2	3.9	3.7	3.5	3.3	3.1	
4	6.9	6.6	6.2	5.9	5.6	5.3	4.9	4.5	4.2	3.9	3.7	3.4	3.3	3.1	2.9	
5	6.9	6.5	6.1	5.8	5.5	5.2	4.7	4.3	4.0	3.7	3.5	3.2	3.1	-	-	
10	6.7	6.2	5.7	5.3	4.9	4.6	4.1	3.7	-	-	-	-	-	-	-	
15	6.6	5.9	5.4	5.0	4.6	4.3	-	-	-	-	-	-	-	-	-	
30	6.3	5.5	4.9	-	-	-	-	-	-	-	-	-	-	-	-	
1	7.1	6.9	6.6	6.4	6.2	6.0	5.6	5.3	5.0	4.8	4.6	4.3	4.2	4.0	3.7	60
2	7.0	6.7	6.3	6.1	5.8	5.6	5.1	4.8	4.4	4.2	3.9	3.7	3.5	3.3	3.1	
3	6.9	6.5	6.1	5.8	5.5	5.3	4.8	4.4	4.1	3.8	3.6	3.3	3.1	3.0	2.8	
4	6.9	6.4	6.0	5.6	5.3	5.0	4.6	4.2	3.8	3.5	3.3	3.1	2.9	2.7	2.5	
5	6.8	6.3	5.9	5.5	5.1	4.9	4.4	3.9	3.6	3.3	3.1	2.9	2.7	-	-	
10	6.6	5.9	5.4	4.9	4.6	4.2	3.7	3.3	-	-	-	-	-	-	-	
15	6.4	5.7	5.1	4.6	4.2	3.9	-	-	-	-	-	-	-	-	-	
30	6.1	5.2	4.5	-	-	-	-	-	-	-	-	-	-	-	-	
1	7.1	6.8	6.5	6.3	6.0	5.8	5.4	5.1	4.8	4.5	4.3	4.1	3.9	3.7	3.5	80
2	6.9	6.6	6.2	5.9	5.6	5.3	4.9	4.5	4.2	3.9	3.7	3.4	3.3	3.1	2.9	
3	6.9	6.4	6.0	5.6	5.3	5.0	4.6	4.2	3.8	3.5	3.3	3.1	2.9	2.7	2.5	
4	6.8	6.3	5.8	5.4	5.1	4.8	4.3	3.9	3.6	3.3	3.0	2.8	2.6	2.5	2.3	
5	6.7	6.2	5.7	5.3	4.9	4.6	4.1	3.7	3.3	3.1	2.8	2.6	2.5	-	-	
10	6.5	5.8	5.2	4.7	4.3	4.0	3.5	3.1	-	-	-	-	-	-	-	
15	6.3	5.5	4.9	4.4	3.9	3.6	-	-	-	-	-	-	-	-	-	
30	5.9	5.0	4.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	7.0	6.7	6.4	6.1	5.9	5.7	5.3	4.9	4.6	4.3	4.1	3.9	3.7	3.5	3.3	100
2	6.9	6.5	6.1	5.8	5.4	5.2	4.7	4.3	4.0	3.7	3.5	3.2	3.1	2.9	2.7	
3	6.8	6.3	5.9	5.5	5.1	4.9	4.4	3.9	3.6	3.3	3.1	2.9	2.7	2.5	2.3	
4	6.7	6.1	5.7	5.3	4.9	4.6	4.1	3.7	3.3	3.1	2.8	2.6	2.5	2.3	2.1	
5	6.6	6.0	5.5	5.1	4.7	4.4	3.9	3.5	3.1	2.9	2.6	2.4	2.3	-	-	
10	6.4	5.6	5.0	4.5	4.1	3.8	3.3	2.9	-	-	-	-	-	-	-	
15	6.2	5.3	4.7	4.2	3.7	3.4	-	-	-	-	-	-	-	-	-	
30	5.8	4.8	4.0	-	-	-	-	-	-	-	-	-	-	-	-	
1	7.0	6.6	6.2	5.9	5.6	5.4	4.9	4.6	4.2	4.0	3.7	3.5	3.3	3.1	2.9	150
2	6.8	6.3	5.9	5.5	5.1	4.9	4.4	3.9	3.6	3.3	3.1	2.9	2.7	2.5	2.3	
3	6.7	6.1	5.6	5.2	4.8	4.5	4.0	3.6	3.2	3.0	2.7	2.5	2.4	2.2	2.0	
4	6.6	5.9	5.4	4.9	4.6	4.2	3.7	3.3	3.0	2.7	2.5	2.3	2.1	2.0	1.8	
5	6.5	5.8	5.2	4.8	4.4	4.0	3.5	3.1	2.8	2.5	2.3	2.1	2.0	-	-	
10	6.2	5.3	4.7	4.2	3.7	3.4	2.9	2.5	-	-	-	-	-	-	-	
15	6.0	5.0	4.3	3.8	3.4	3.0	-	-	-	-	-	-	-	-	-	
30	5.5	4.4	3.7	-	-	-	-	-	-	-	-	-	-	-	-	
1	6.8	6.3	5.9	5.5	5.1	4.9	4.4	3.9	3.6	3.3	3.1	2.9	2.7	2.5	2.3	300
2	6.6	5.9	5.4	4.9	4.6	4.2	3.7	3.3	3.0	2.7	2.5	2.3	2.1	2.0	1.8	
3	6.4	5.7	5.1	4.6	4.2	3.9	3.3	2.9	2.6	2.4	2.2	2.0	1.8	1.7	1.5	
4	6.3	5.5	4.9	4.4	3.9	3.6	3.1	2.7	2.4	2.1	2.0	1.8	1.6	1.5	1.4	
5	6.2	5.3	4.7	4.2	3.7	3.4	2.9	2.5	2.2	2.0	1.8	1.6	1.5	-	-	
10	5.8	4.8	4.0	3.5	3.1	2.8	2.3	2.0	-	-	-	-	-	-	-	
15	5.5	4.4	3.7	3.1	2.8	2.4	-	-	-	-	-	-	-	-	-	
30	5.0	3.8	3.0	-	-	-	-	-	-	-	-	-	-	-	-	



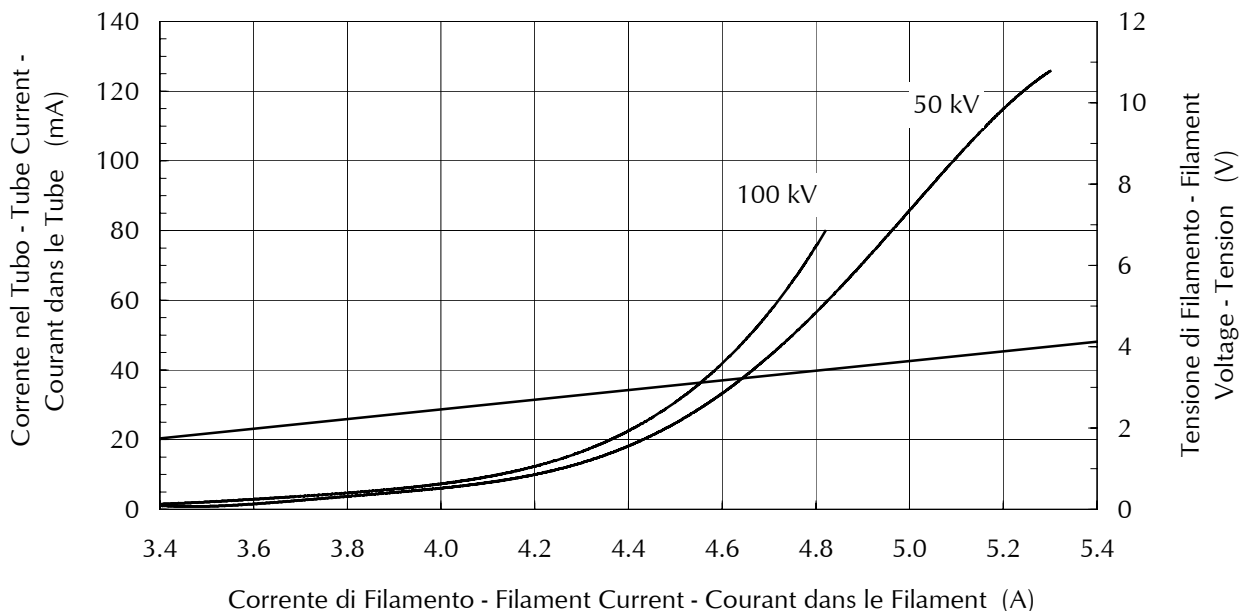
Documentazione Tubo a raggi X
Tube Documentation
Documentation du Tube

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

■ 0.6 - 3 ~ - 10000 min⁻¹

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 s ries), 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	22.4	21.6	21.1	20.7	20.4	20.1	19.6	19.2	18.9	18.6	18.3	18.0	17.7	17.3	16.7	5
2	22.4	21.6	21.1	20.7	20.4	20.1	19.6	19.1	18.4	17.8	17.2	16.7	16.1	15.7	15.0	
3	22.4	21.6	21.1	20.7	20.4	20.1	19.2	18.3	17.6	16.9	16.2	15.6	15.1	14.6	13.9	
4	22.4	21.6	21.1	20.7	20.2	19.6	18.7	17.8	16.9	16.2	15.5	14.9	14.3	13.8	13.0	
5	22.4	21.6	21.1	20.5	19.9	19.3	18.2	17.3	16.4	15.6	14.9	14.3	13.7	-	-	
10	22.3	21.3	20.3	19.5	18.7	18.0	16.7	15.6	-	-	-	-	-	-	-	
15	22.0	20.8	19.8	18.8	17.9	17.1	-	-	-	-	-	-	-	-	-	10
30	21.5	20.0	18.6	-	-	-	-	-	-	-	-	-	-	-	-	
1	22.4	21.6	21.1	20.7	20.4	20.1	19.6	19.1	18.4	17.8	17.2	16.6	16.1	15.6	15.0	
2	22.4	21.6	21.1	20.7	20.2	19.6	18.6	17.7	16.9	16.2	15.5	14.9	14.3	13.8	13.0	
3	22.4	21.6	20.9	20.2	19.6	19.0	17.8	16.8	15.9	15.1	14.4	13.8	13.2	12.6	11.9	
4	22.4	21.5	20.6	19.8	19.1	18.4	17.2	16.1	15.2	14.4	13.6	12.9	12.3	11.8	11.0	
5	22.3	21.3	20.3	19.5	18.7	18.0	16.7	15.6	14.6	13.7	13.0	12.3	11.7	-	-	
10	21.8	20.5	19.3	18.2	17.3	16.4	14.9	13.7	-	-	-	-	-	-	-	20
15	21.5	19.9	18.6	17.4	16.3	15.4	-	-	-	-	-	-	-	-	-	
30	20.8	18.8	17.1	-	-	-	-	-	-	-	-	-	-	-	-	
1	22.4	21.6	21.1	20.7	20.2	19.6	18.6	17.7	16.9	16.2	15.5	14.9	14.3	13.8	13.0	
2	22.4	21.5	20.6	19.8	19.1	18.4	17.2	16.1	15.2	14.4	13.6	12.9	12.3	11.8	11.0	
3	22.2	21.1	20.1	19.2	18.3	17.6	16.2	15.1	14.1	13.2	12.4	11.7	11.1	10.6	9.8	
4	22.0	20.7	19.6	18.6	17.7	16.9	15.5	14.3	13.3	12.4	11.6	10.9	10.3	9.8	9.0	40
5	21.8	20.5	19.3	18.2	17.3	16.4	14.9	13.7	12.6	11.7	10.9	10.3	9.7	-	-	
10	21.3	19.5	18.0	16.7	15.6	14.6	13.0	11.7	-	-	-	-	-	-	-	
15	20.8	18.8	17.1	15.7	14.5	13.5	-	-	-	-	-	-	-	-	-	
30	19.9	17.4	15.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	22.4	21.5	20.6	19.8	19.1	18.4	17.2	16.1	15.2	14.4	13.6	12.9	12.3	11.8	11.0	
2	22.0	20.7	19.6	18.6	17.7	16.9	15.5	14.3	13.3	12.4	11.6	10.9	10.3	9.7	9.0	60
3	21.7	20.2	19.0	17.8	16.8	15.9	14.4	13.1	12.1	11.2	10.4	9.7	9.1	8.6	7.9	
4	21.5	19.8	18.4	17.2	16.1	15.2	13.6	12.3	11.2	10.4	9.6	8.9	8.4	7.9	7.2	
5	21.2	19.5	18.0	16.7	15.6	14.6	13.0	11.7	10.6	9.7	9.0	8.3	7.8	-	-	
10	20.5	18.2	16.4	14.9	13.7	12.6	10.9	9.7	-	-	-	-	-	-	-	
15	19.9	17.3	15.4	13.8	12.5	11.4	-	-	-	-	-	-	-	-	-	
30	18.8	15.7	13.5	-	-	-	-	-	-	-	-	-	-	-	-	80
1	22.2	21.1	20.1	19.2	18.3	17.6	16.2	15.1	14.1	13.2	12.4	11.7	11.1	10.5	9.2	
2	21.7	20.2	19.0	17.8	16.8	15.9	14.4	13.1	12.1	11.2	10.4	9.7	9.1	8.6	7.9	
3	21.3	19.6	18.2	16.9	15.8	14.9	13.3	12.0	10.9	10.0	9.3	8.6	8.0	7.5	6.9	
4	21.1	19.2	17.6	16.2	15.1	14.1	12.4	11.1	10.1	9.2	8.5	7.8	7.3	6.8	6.2	
5	20.8	18.8	17.1	15.7	14.5	13.5	11.8	10.5	9.4	8.6	7.9	7.3	6.8	-	-	
10	19.9	17.3	15.4	13.8	12.5	11.4	9.8	8.5	-	-	-	-	-	-	-	100
15	19.3	16.4	14.3	12.6	11.3	10.3	-	-	-	-	-	-	-	-	-	
30	18.0	14.6	12.3	-	-	-	-	-	-	-	-	-	-	-	-	
1	22.0	20.7	19.6	18.6	17.7	16.9	15.5	14.3	13.3	12.4	11.5	10.2	9.2	8.4	7.4	
2	21.5	19.8	18.4	17.2	16.1	15.2	13.6	12.3	11.2	10.4	9.6	8.9	8.1	7.4	6.5	
3	21.1	19.2	17.6	16.2	15.1	14.1	12.4	11.1	10.1	9.2	8.5	7.8	7.3	6.8	6.2	150
4	20.7	18.6	16.9	15.5	14.3	13.3	11.6	10.3	9.3	8.4	7.7	7.1	6.6	6.2	5.6	
5	20.5	18.2	16.4	14.9	13.7	12.6	10.9	9.7	8.6	7.8	7.1	6.6	6.1	-	-	
10	19.5	16.7	14.6	13.0	11.7	10.6	9.0	7.8	-	-	-	-	-	-	-	
15	18.8	15.7	13.5	11.8	10.5	9.4	-	-	-	-	-	-	-	-	-	
30	17.3	13.8	11.4	-	-	-	-	-	-	-	-	-	-	-	-	
1	21.8	20.5	19.3	18.2	17.3	16.4	14.9	13.7	12.6	11.1	9.7	8.7	7.8	7.1	6.2	300
2	21.2	19.5	18.0	16.7	15.6	14.6	13.0	11.7	10.6	9.6	8.4	7.5	6.7	6.1	5.4	
3	20.8	18.8	17.1	15.7	14.5	13.4	11.8	10.5	9.4	8.6	7.9	7.0	6.3	5.8	5.1	
4	20.5	18.2	16.4	14.9	13.7	12.6	10.9	9.7	8.6	7.8	7.1	6.6	6.1	5.6	4.9	
5	20.2	17.7	15.8	14.3	13.0	12.0	10.3	9.0	8.0	7.3	6.6	6.1	5.6	-	-	
10	19.1	16.1	14.0	12.3	11.0	10.0	8.4	7.2	-	-	-	-	-	-	-	
15	18.3	15.1	12.8	11.1	9.8	8.8	-	-	-	-	-	-	-	-	-	300
30	16.8	13.2	10.8	-	-	-	-	-	-	-	-	-	-	-	-	
1	21.5	19.9	18.5	17.3	16.3	15.4	13.8	11.8	9.9	8.5	7.4	6.6	5.9	5.4	4.7	
2	20.8	18.8	17.1	15.7	14.5	13.4	11.8	9.7	8.1	6.9	6.0	5.4	4.8	4.4	3.9	
3	20.3	18.0	16.1	14.6	13.3	12.3	10.6	8.9	7.5	6.4	5.6	5.0	4.5	4.1	3.6	
4	19.9	17.3	15.4	13.8	12.5	11.4	9.8	8.5	7.1	6.1	5.4	4.8	4.3	3.9	3.4	300
5	19.6	16.8	14.8	13.1	11.9	10.8	9.1	7.9	7.0	6.0	5.2	4.6	4.2	-	-	
10	18.3	15.1	12.8	11.1	9.8	8.8	7.3	6.2	-	-	-	-	-	-	-	
15	17.5	14.0	11.6	10.0	8.7	7.7	-	-	-	-	-	-	-	-	-	
30	15.8	12.0	9.6	-	-	-	-	-	-	-	-	-	-	-	-	
1	20.8	18.8	17.1	15.7	14.5	13.4	10.1	8.1	6.8	5.8	5.1	4.5	4.1	3.7	3.2	300
2	19.9	17.3	15.4	13.8	11.8	9.9	7.4	5.9	4.9	4.2	3.7	3.3	3.0	2.7	2.4	
3	19.3	16.4	14.3	12.6	10.4	8.7	6.5	5.2	4.3	3.7	3.2	2.9	2.6	2.4	2.1	
4	18.8	15.7	13.4	11.8	9.7	8.1	6.0	4.8	4.0	3.5	3.0	2.7	2.4	2.2	1.9	
5	18.3	15.1	12.8	11.1	9.2	7.7	5.8	4.6	3.8	3.3	2.9	2.6	2.3	-	-	
10	16.8	13.1	10.8	9.1	7.9	7.0	5.2	4.2	-	-	-	-	-	-	-	
15	15.8	12.0	9.6	8.0	6.9	6.1	-	-	-	-	-	-	-	-	-	300
30	14.0	10.0	7.7	-	-	-	-	-	-	-	-	-	-	-	-	

Caratteristica di emissione del catodo
Cathode emission characteristic
Caractéristique d’émission de la cathode
■ 0.3 - 3 ~ - (± 0.2 A)



Caratteristica di emissione del catodo
Cathode emission characteristic
Caractéristique d’émission de la cathode
■ 0.6 - 3 ~ - (± 0.2 A)

