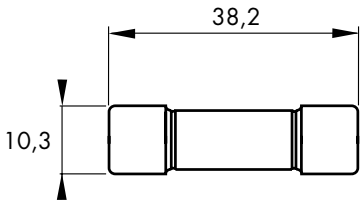
Semiconductor (AC) fuses

Voltage rating U_N(VAC)	Class	Current rating I_N(A)	Pre-arcing I^2t @ 1 ms I^2tp (A^2s)	Total clearing I^2t @ U_N I^2tt (A^2s)	Watts loss 0.8 I_N	Watts loss I_N	Tested breaking capacity
600 V without blown fuse indicator	URD **	100 mA 125 mA 160 mA 200 mA 250 mA 315 mA 400 mA 500 mA 630 mA 800 mA		$1.2\ 10^{-3}$ $2.3\ 10^{-3}$ $5.2\ 10^{-3}$ $8\ \ 10^{-3}$ $18\ \ 10^{-3}$ $33\ \ 10^{-3}$ $56\ \ 10^{-3}$ 0.100 0.18 0.44	0.23 0.25 0.28 0.34 0.35 0.42 0.46 0.46 0.52 0.58	0.4 0.44 0.48 0.58 0.60 0.73 0.80 0.80 0.90 1	200 kA @ 600 V
500 V with trip-indicator	URD	1 A 1.25 A 1.6 A 2 A 2.5 A 3.15 A 4 A 5 A	0.40 0.13 0.31 0.65 1.65 2.80 5.30 12.7	3.6 1.7 2.2 3.1 5.9 9 16 36	2.8 0.52 0.58 0.63 0.63 0.86 1.1 1.1	0.5 0.91 1 1.1 1.1 1.5 1.8 1.8	50 kA @ 500 V
	URD	6 A 8 A 10 A 12 A 16 A 20 A	1.3 2.3 3.6 5.25 9.30 16	47 80 110 150 200 290	0.73 0.,83 1 1.3 1.7 1.7	1.35 1.55 1.9 2.3 3.1 3.2	50 kA @ 500 V
	URL	25 A 30 A	37 58	580 900	2.9 3.5	4.25 5.1	50 kA @ 500 V

* minimum operating voltage for trip-indicator: 20 V
** higher ratings without blown fuse indicator see 10x38gRB - 690 VAC

10.3x38 - Without blown fuse indicator

Current Rating	Designation	Ref. Number	Catalog Number
100 mA	A 060 URD 0.100T13	H077632	A060UD0.100T13
125 mA	A 060 URD 0.125T13	J077633	A060UD0.125T13
160 mA	A 060 URD 0.160T13	K077634	A060UD0.160T13
200 mA	A 060 URD 0.200T13	L077635	A060UD0.200T13
250 mA	A 060 URD 0.250T13	M077636	A060UD0.250T13
315 mA	A 060 URD 0.315T13	N077637	A060UD0.315T13
400 mA	A 060 URD 0.400T13	P077638	A060UD0.400T13
500 mA	A 060 URD 0.500T13*	Q077639	A060UD0.500T13
630 mA	A 060 URD 0.630T13*	R077640	A060UD0.630T13
800 mA	A 060 URD 0.800T13*	S077641	A060UD0.800T13

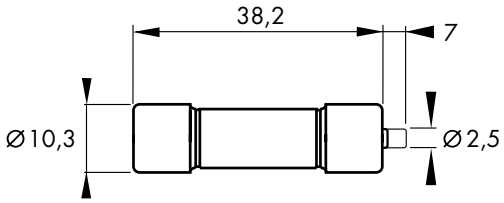


*** UL Recognized**

Fuses mounted in clips or fuse disconnectors

10.3x38 - With trip-indicator

Current Rating	Designation	Ref. Number	Catalog Number
1 A	A 050 URD 001 T13 I	P076925	A050URD1T13I
1.25 A	A 050 URD 001.2 T13 I	H076597	A050URD1.2T13I
1.6 A	A 050 URD 001.6 T13 I	G076596	A050URD1.6T13I
2 A	A 050 URD 002 T13 I	Q076926	A050URD2T13I
2.5 A	A 050 URD 002.5 T13 I	F076595	A050URD2.5T13I
3.15 A	A 050 URD 003 T13 I	R076927	A050URD3T13I
4 A	A 050 URD 004 T13 I	S076928	A050URD4T13I
5 A	A 050 URD 005 T13 I	T076929	A050URD5T13I
6 A	A 050 URB 006 T13 I	V076930	A050URB6T13I
8 A	A 050 URB 008 T13 I	W076931	A050URB8T13I
10 A	A 050 URB 010 T13 I	X076932	A050URB10T13I
12 A	A 050 URB 012 T13 I	Y076933	A050URB12T13I
16 A	A 050 URB 016 T13 I	Z076934	A050URB16T13I
20 A	A 050 URB 020 T13 I	A076935	A050URB20T13I
25 A	A 050 URL 025 T13 I	B076936	A050URL25T13I
30 A	A 050 URL 030 T13 I	C076937	A050URL30T13I

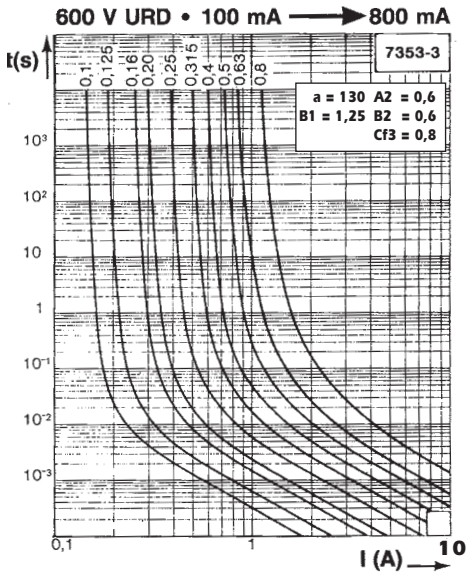


Fuses with trip indicator mounted in clips

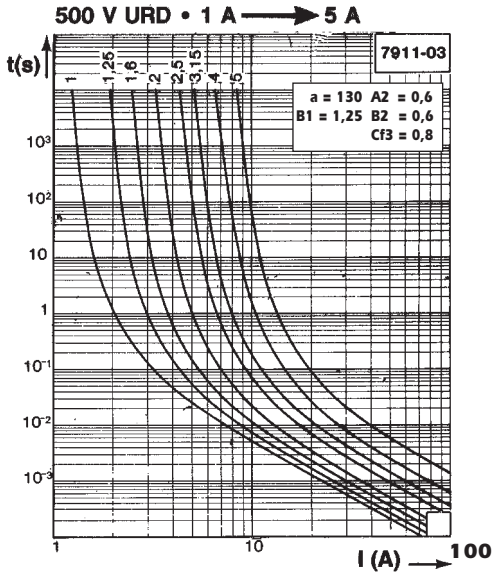
Electrical characteristics

Time vs current characteristics

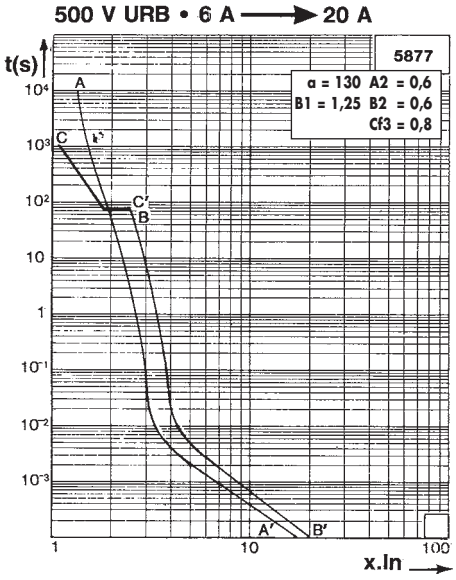
WITHOUT BLOWN FUSE INDICATOR



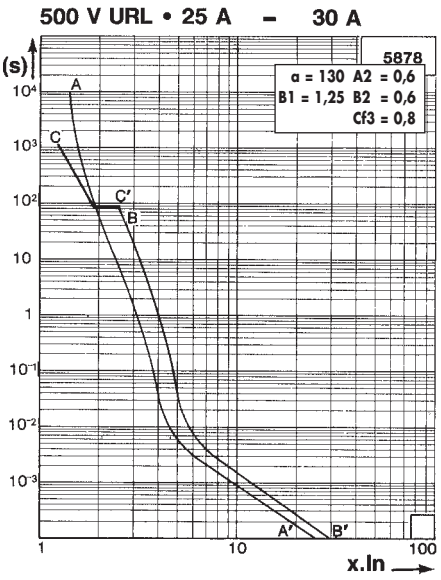
WITH TRIP INDICATOR



WITH TRIP INDICATOR

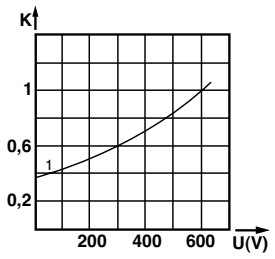


WITH TRIP INDICATOR



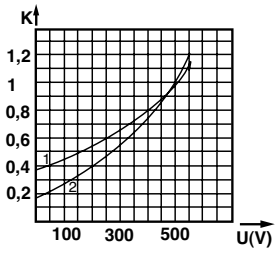
Corrective factor - Peak arc voltage

Corrective factor



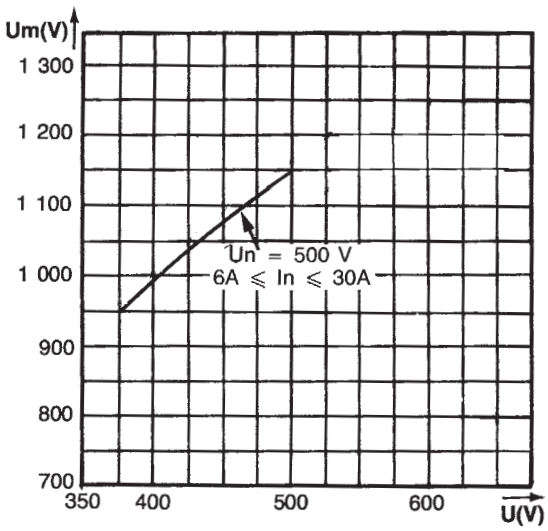
600 V UR
1 : 0.1 up to 0.8 A

These mean curves show the variation of the total clearing time (I^2t_t) and the total clearing duration t_t as a function of operating voltage U.



500 V UR
1 : 1 up to 5 A
2 : 6 up to 30 A

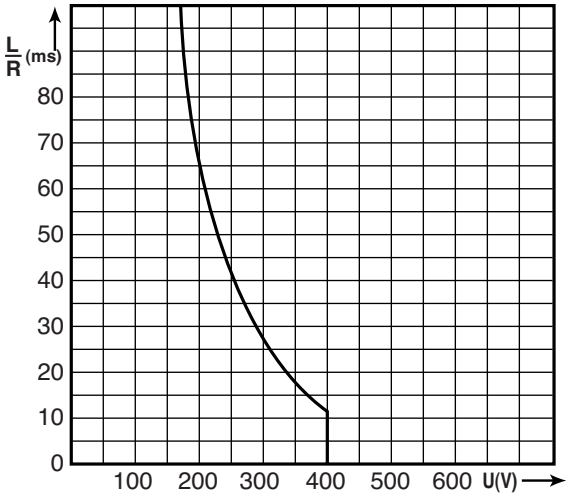
Peak arc voltage



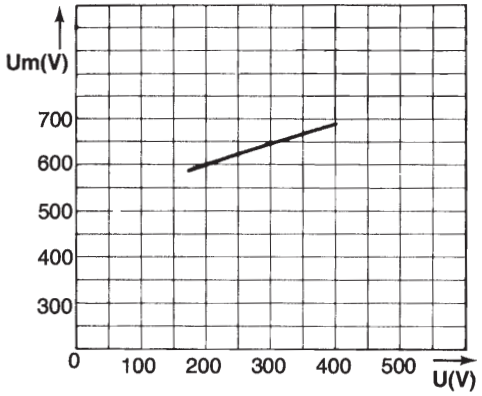
This curve shows the peak value Um of the arc voltage which appears across the fuse link as a function of the operating voltage U @ cos φ = 0.15.

D.C. Application data for fuses with trip indicator

500 V URD IN ≥ 6A



500 V URD IN ≥ 6A



This curve shows the peak value Um of the arc voltage which appears across the fuse link as a function of the operating voltage U.