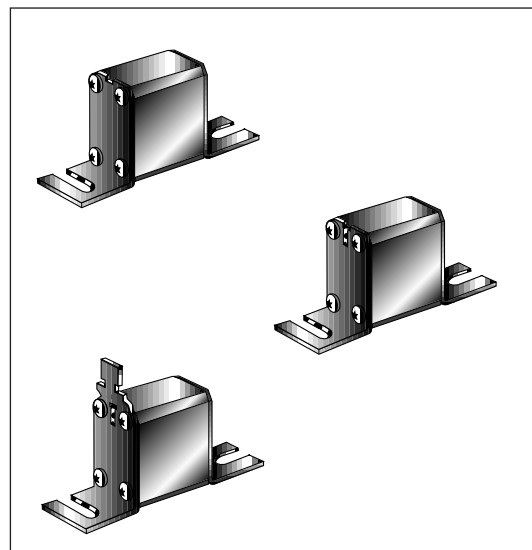




GERMAN STANDARD
500 - 660 V AC
gRB - URB from 20 to 400 A
Size : 000

- EXTREMELY HIGH INTERRUPTING RATING FUSES:
PROTECTION OF POWER SEMI-CONDUCTORS ACCORDING
TO 269.1 AND 4
- 500- 660 V VOLTAGE RATING (RATING 20 TO 400 A)
- gR CLASS (gRB RATINGS 20 TO 125 A) ACCORDING
TO VDE 636-23
 - ALL OVERLOADS CLEARING
 - IMPROVING SAFETY AND PROTECTION
 - ENABLING SELECTIVE COORDINATION WITH ALL THE FUSES
- aR CLASS (URB RATINGS 80 TO 400 A) ACCORDING TO VDE 636-23
AND IEC 269.4
- THREE MODELS ACCORDING TO DIN 43653-00C
WITH OR WITHOUT BLOWN FUSE INDICATION -
WITH TRIP INDICATOR



MAIN CHARACTERISTICS

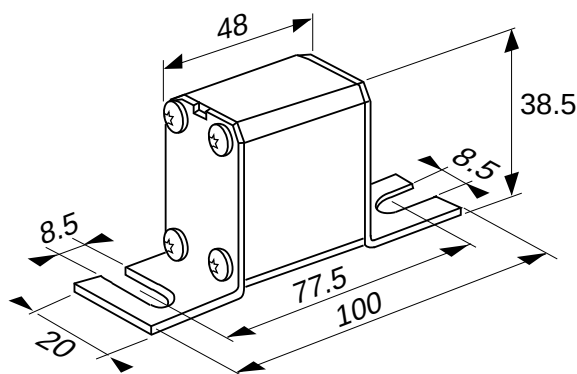
Voltage rating U_N (V)	Class	Current rating I_N (A)	pre-arcing I_{2t}^p @ 1 ms I_{2t}^p (A ² s)	Total clearing I_{2t}^c @ U_N I_{2t}^c (A ² s)	Watt losses		Tested interrupting rating	Estimated interrupting rating
					0.8 I_N	I_N		
660 690+6%	gRB	20	12	80	3.8	7	200 k A @ 660 V	300 k A @ 660 V
		25	20	150	5.0	9		
		32	39	270	5.5	10		
		40	70	460	6.6	12		
		50	102	730	7.7	14		
		63	210	1500	8.8	16		
		80	475	2900	9.9	18		
		100	970	6000	11	20		
		125	1900	11800	11.6	21		
660 690+6%	URB	80	390	2500	11.6	21	200 k A @ 660 V	300 k A @ 660 V
		100	690	4200	12.7	23		
		125	1300	8900	14.3	26		
		160	2700	16000	17.0	31		
		200	5250	31500	19.8	36		
		250	9900	52000	24.8	45		
		315	15500	82000	31.9	58		
500	URB	350	22400	110000	31.9	58	120 k A @ 500 V	
		400	33200	160000	36.3	66		

Minimum operating voltage for blown fuse indicator: 20 V

Minimum operating voltage for trip-indicator: 20 V

REFERENCES

GERMAN STANDARD WITHOUT BLOWN FUSE INDICATOR

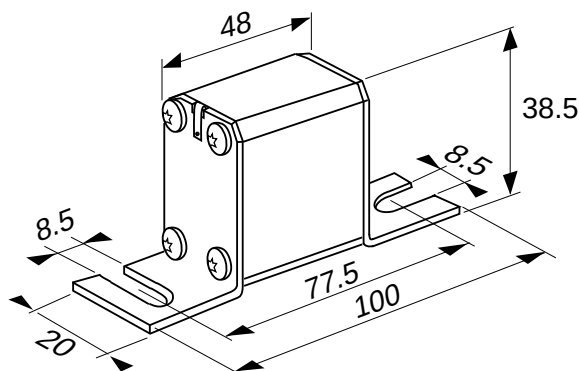


Weight : 110 g
Packaging : 6 pieces

* Fuse base : SI 000 DIN 80 Part # : C 220710

Current rating	Code	Part #	* I/IN Fuse-base
20	6,6 gRB 000 DO8/020	D 330030	1
25	6,6 gRB 000 DO8/025	E 330031	1
32	6,6 gRB 000 DO8/032	F 330032	1
40	6,6 gRB 000 DO8/040	G 330033	1
50	6,6 gRB 000 DO8/050	H 330034	1
63	6,6 gRB 000 DO8/063	J 330035	1
80	6,6 gRB 000 DO8/080	A 330073	1
100	6,6 gRB 000 DO8/100	S 330112	1
125	6,6 gRB 000 DO8/125	T 330113	0,9
80	6,6 URB 000 DO8/080	K 330036	1
100	6,6 URB 000 DO8/100	L 330037	1
125	6,6 URB 000 DO8/125	M 330038	0,9
160	6,6 URB 000 DO8/160	N 330039	0,85
200	6,6 URB 000 DO8/200	P 330040	0,85
250	6,6 URB 000 DO8/250	Q 330041	0,8
315	6,6 URB 000 DO8/315	R 330042	0,7
350	5 URB 000 DO8/350	V 330114	0,7
400	5 URB 000 DO8/400	D 330191	0,65

GERMAN STANDARD WITH BLOWN FUSE INDICATOR

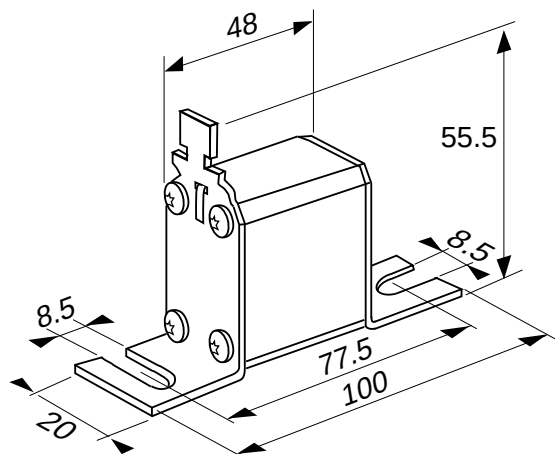


Weight : 110 g
Packaging : 6 pieces

* Fuse base : SI 000 DIN 80 Part # : C 220710

Current rating	Code	Part #	* I/IN Fuse-base
20	6,6 gRB 000 DO8V/020	P 330017	1
25	6,6 gRB 000 DO8V/025	Q 330018	1
32	6,6 gRB 000 DO8V/032	R 330019	1
40	6,6 gRB 000 DO8V/040	S 330020	1
50	6,6 gRB 000 DO8V/050	T 330021	1
63	6,6 gRB 000 DO8V/063	V 330022	1
80	6,6 gRB 000 DO8V/080	G 330102	1
100	6,6 gRB 000 DO8V/100	Q 330110	1
125	6,6 gRB 000 DO8V/125	R 330111	0,9
80	6,6 URB 000 DO8V/080	W 330023	1
100	6,6 URB 000 DO8V/100	X 330024	1
125	6,6 URB 000 DO8V/125	Y 330025	0,9
160	6,6 URB 000 DO8V/160	Z 330026	0,85
200	6,6 URB 000 DO8V/200	A 330027	0,85
250	6,6 URB 000 DO8V/250	B 330028	0,8
315	6,6 URB 000 DO8V/315	C 330029	0,7
350	5 URB 000 DO8V/350	W 330115	0,7
400	5 URB 000 DO8V/400	E 330192	0,65

GERMAN STANDARD WITH BLOWN FUSE TRIP- INDICATOR



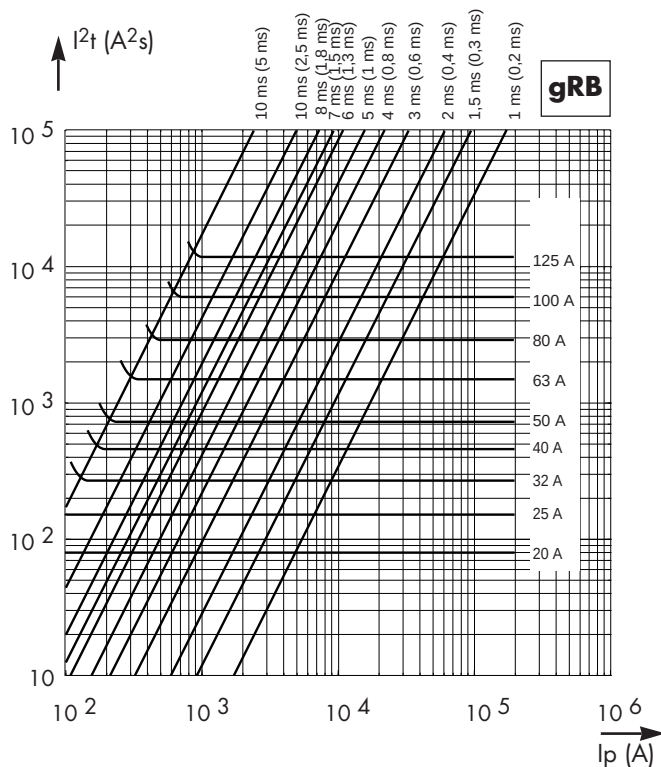
Microswitch
MC 4L 2-5 B6 Part # : L 076646
MC 4L 2-5 B2 Part # : G 076642

Weight : 120 g
Packaging : 6 pieces

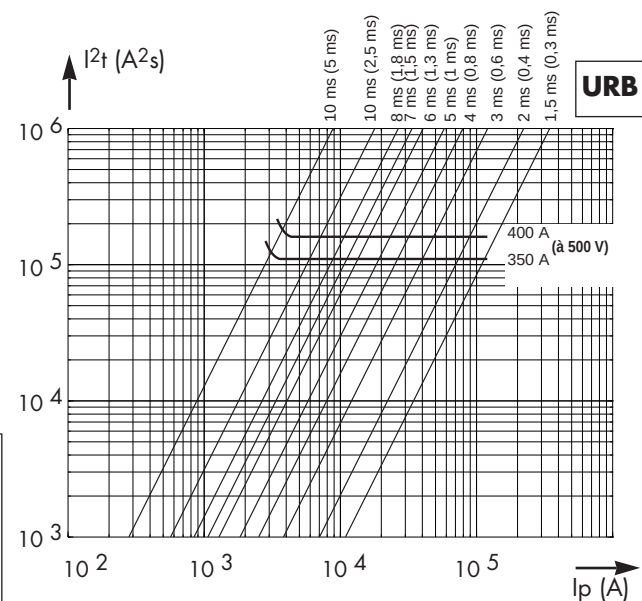
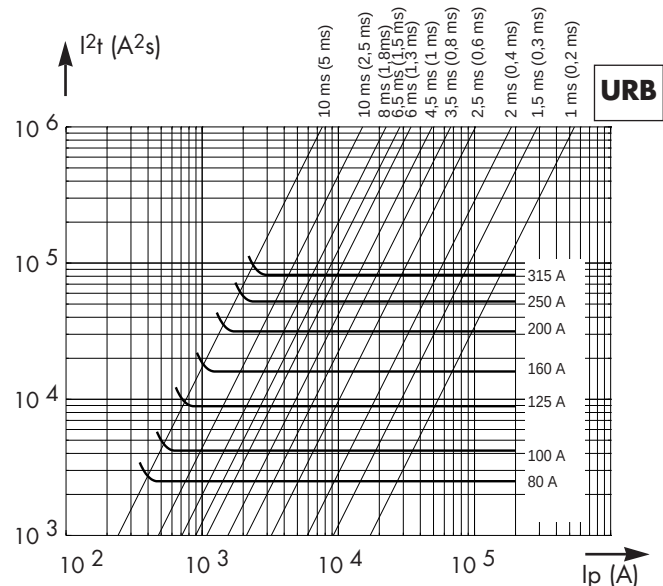
* Fuse base : SI 000 DIN 80 Part # : C 220710

Current rating	Code	Part #	* I/IN Fuse-base
20	6,6 gRB 000 DO8L/020	J 330173	1
25	6,6 gRB 000 DO8L/025	K 330174	1
32	6,6 gRB 000 DO8L/032	L 330175	1
40	6,6 gRB 000 DO8L/040	M 330176	1
50	6,6 gRB 000 DO8L/050	N 330177	1
63	6,6 gRB 000 DO8L/063	P 330178	1
80	6,6 gRB 000 DO8L/080	Q 330179	1
100	6,6 gRB 000 DO8L/100	R 330180	1
125	6,6 gRB 000 DO8L/125	S 330181	0,9
80	6,6 URB 000 DO8L/080	T 330182	1
100	6,6 URB 000 DO8L/100	V 330183	1
125	6,6 URB 000 DO8L/125	W 330184	0,9
160	6,6 URB 000 DO8L/160	X 330185	0,85
200	6,6 URB 000 DO8L/200	Y 330186	0,85
250	6,6 URB 000 DO8L/250	Z 330187	0,8
315	6,6 URB 000 DO8L/315	A 330188	0,7
350	5 URB 000 DO8L/350	B 330189	0,7
400	5 URB 000 DO8L/400	F 330193	0,65

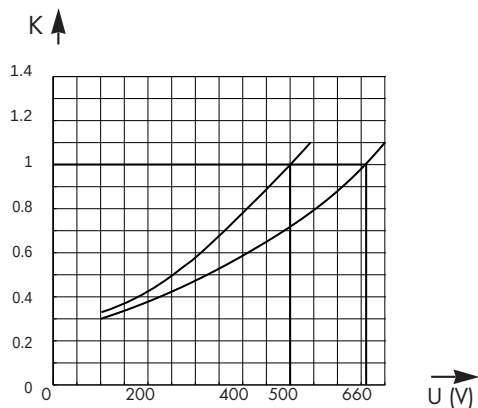
Total clearing I^2t



The flat curves show for each rated current the maximum values of total clearing I^2t (I^2t_t) as a function of a prospective current I_p . @ U_N with $\cos \phi = 0.15$. The crosswise lines indicate the total clearing duration T_t and the associated pre-arcing duration in brackets.

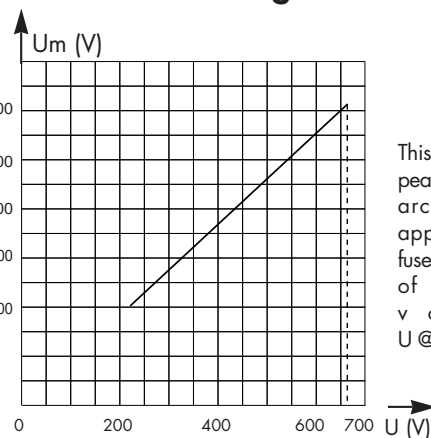


I^2t corrective factor



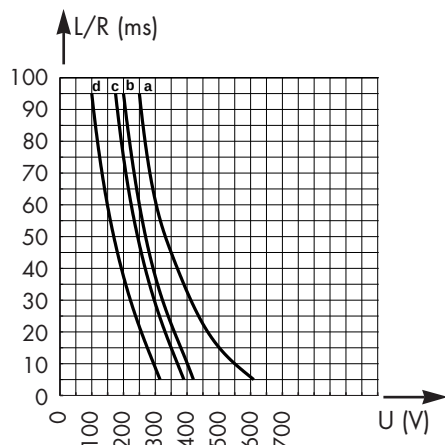
The mean curves show the variation of the total clearing time (I^2t_t) and the total clearing duration T_t as a function of operating voltage U .

Peak arc voltage

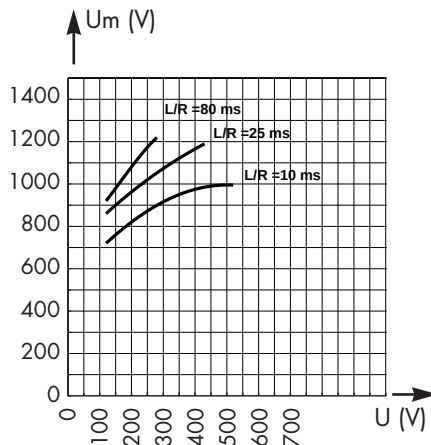


This curve shows the peak value U_m of the arc voltage which appears across the fuse link as a function of the operating voltage U @ $\cos \phi = 0.15$.

D.C. Applications data



These curves indicate the permissible value of time constant L/R as a function of the D.C. working voltage. Curve a: for ratings from 20 to 160 A. Curve b: for 200 A rating. Curve c: for ratings from 250 to 315 A. Curve d: for ratings from 350 to 400 A.

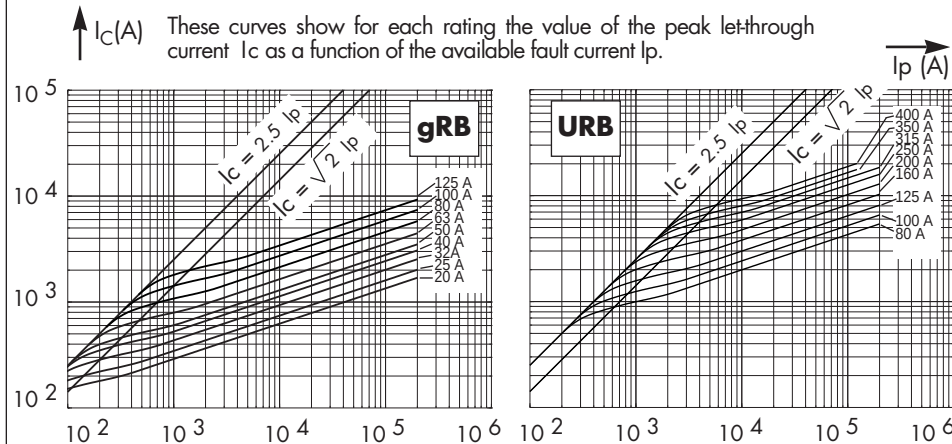


This curve indicates the peak arc voltage U_m which may appear across the fuse terminals at working voltage U .

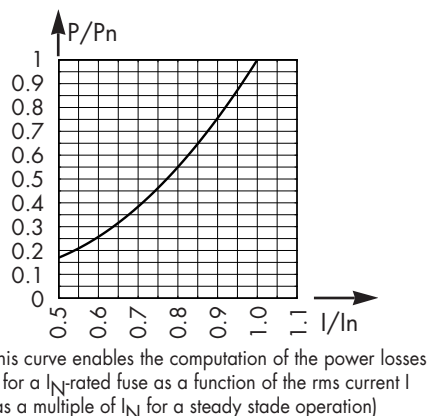
Rated current	Curve	I _{pm} (A)
20	a	60
25	a	65
32	a	90
40	a	120
50	a	150
63	a	200
80	a	270
100	a	370
125	a	500
160	a	700
200	b	1200
250	c	1800
315	c	2200
350	d	2600
400	d	3100

The I_{pm} values give the minimum DC interrupting current in amps.

Current limitation curves

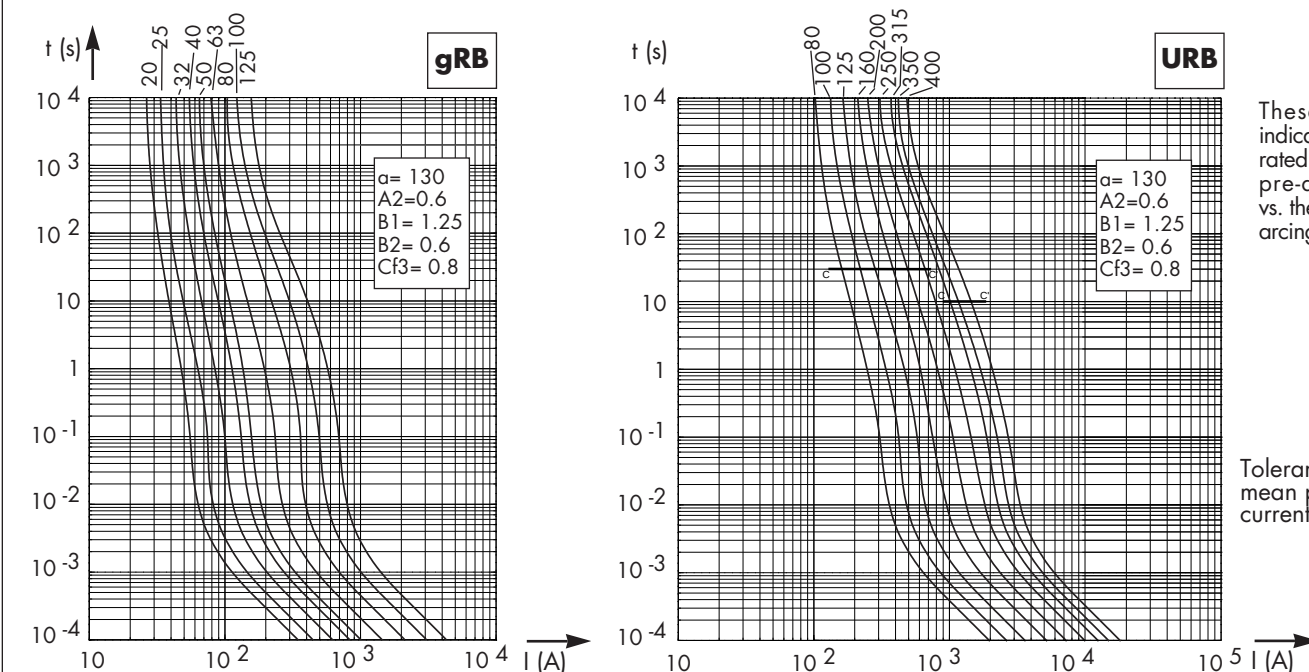


Watt losses



This curve enables the computation of the power losses P for a I_N -rated fuse as a function of the rms current I (as a multiple of I_N for a steady state operation).

Time vs current characteristics



These curves indicate, for each rated current, the pre-arcing time vs. the R.M.S. pre-arcing current.

Tolerance for the mean pre-arcing current $\pm 8\%$.

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Publication: G600398-10/96
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