

Ultra Rapid Semiconductor Protection Fuse European Square Body Fuses - 690V

German Standard Din 80
Voltage Rating - 690V
Current Ratings from 16A to 160A
gRB Characteristics
Size 00



Key Features:

- ❖ Extremely high breaking capacity fuses for the protection of power semiconductors as per IEC Standard 60269.1 and 4.
- ❖ 690V voltage rating complying with IEC 33
- ❖ Non Magnetic construction
- ❖ gRB Characteristics with ratings from 16 to 125A in accordance with VDE 636-23
 - Clearing all overloads
 - Improving safety and protection
 - Enabling selective co-ordination with all fuses
- ❖ All models available with or without integrated trip indicator
- ❖ Microswitch MS 4L 2-5 B
- ❖ Fuse holder SI 00 DIN80

Main Characteristics:

Size	Voltage U _N (V)	Ref:	Micro Switch		Current rating I _N (A)	Pre-arcing I ² t @ 1 ms I ² t _p (A ² s)	Total Clearing I ² t @ U _N (A ² s)	Power Losses		Tested Interrupting rating
								0.8I _N	I _N	
00	690	069GSDA0016F	Y		16	8	61	2.7	5	200kA @ 690V
		069GSDA0020F	Y		20	12	86	3.3	6	
		069GSDA0025F	Y		25	18	140	4.4	8	
		069GSDA0032F	Y		32	39	250	6	11	
		069GSDA0040F	Y		40	68	450	7.1	13	
		069GSDA0050F	Y		50	116	750	8.8	16	
		069GSDA0063F	Y		63	210	1400	9.9	18	
		069GSDA0080F	Y		80	525	3000	10.5	19	
		069GSDA0100F	Y		100	970	5400	10.7	19.5	
		069GSDA0125F	Y		125	1710	9600	13.2	24	
		069GSDA0160F	Y		160	4270	22400	13.7	25	

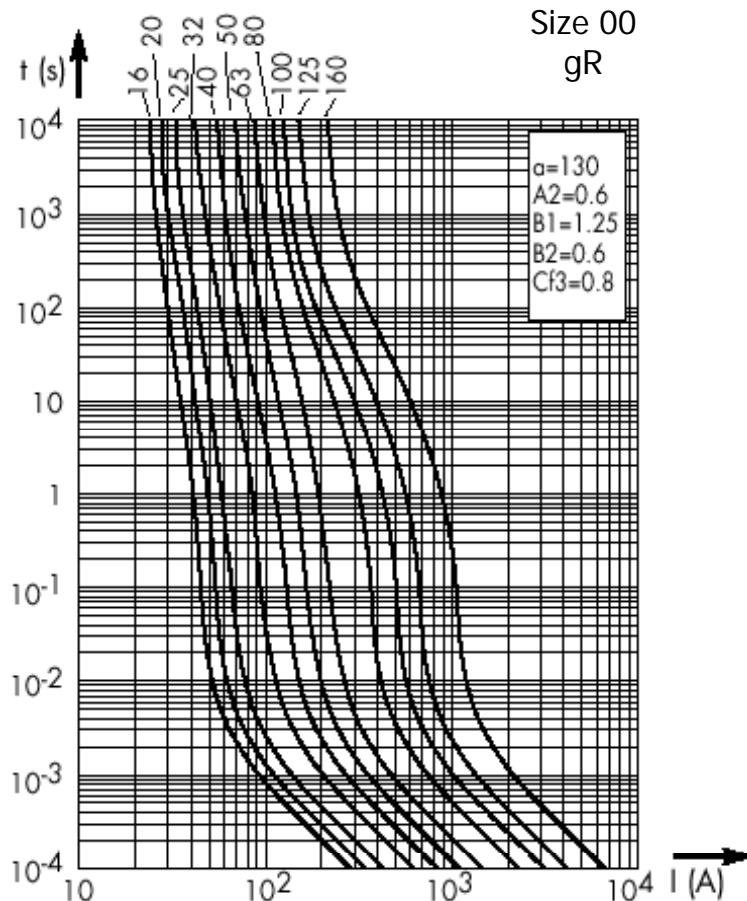
Notes: Minimum operating voltage for integrated trip indicator = 20V

Micro switch reference: MS 4L 2-5 B6

Electrical Characteristics:

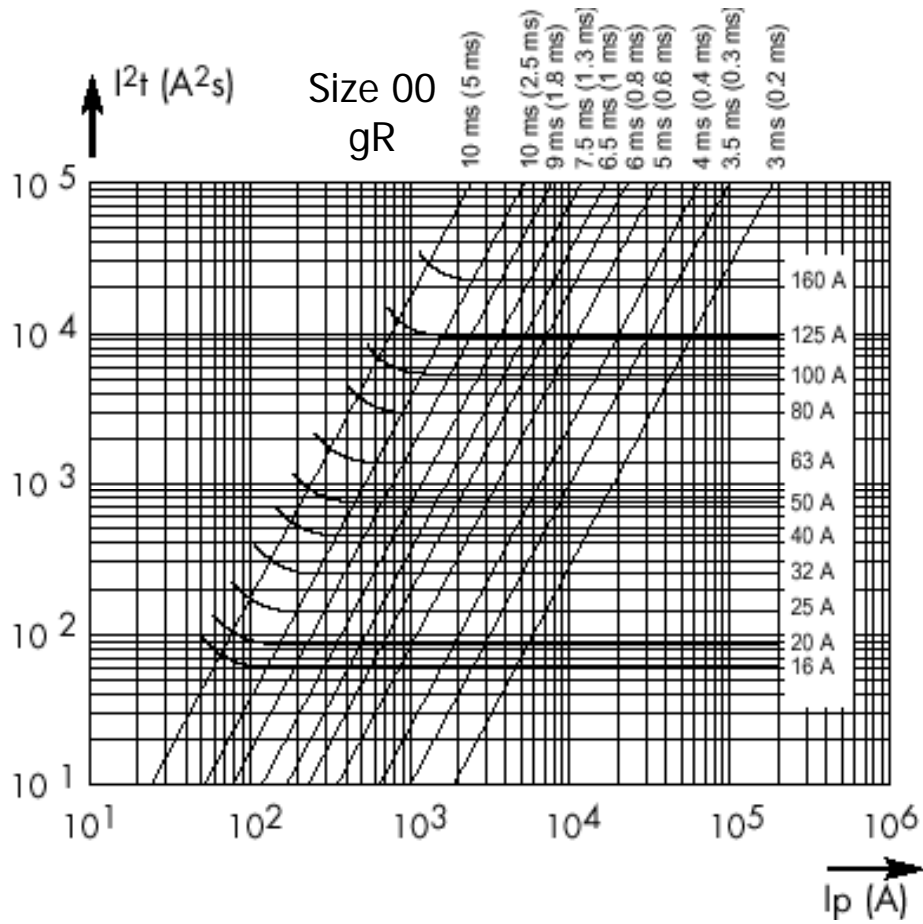
Times vs Current Characteristics:

These curves indicate, for each rated current, the pre-arcing time vs. the RMS pre-arcing current. Tolerance for the mean pre-arcing current ± 8%

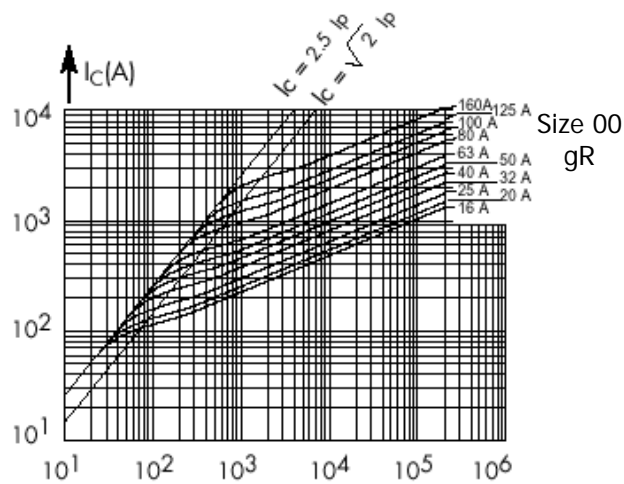


Total Clearing I^2t :

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

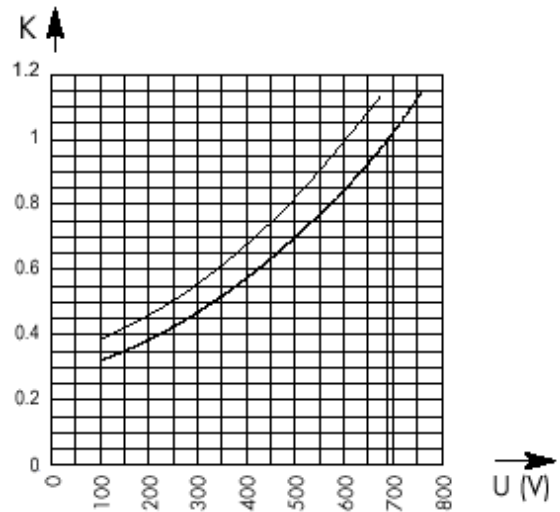


Cut off Characteristics:



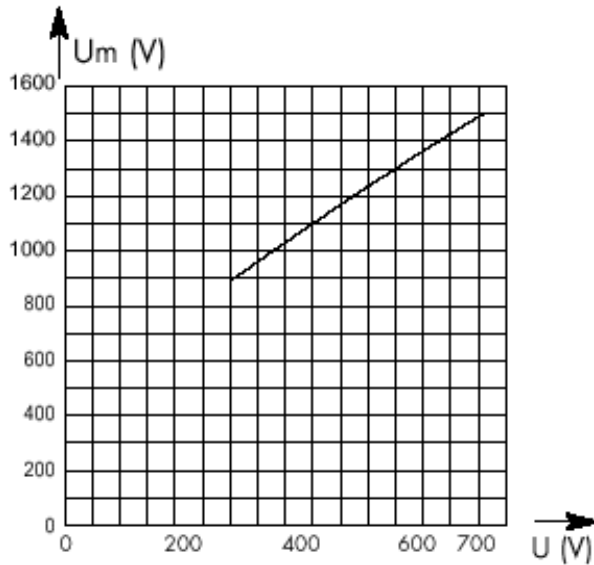
Curves show for each current rating value of peak let-through current I_c as a function of available fault current I_p .

Corrective Factor:



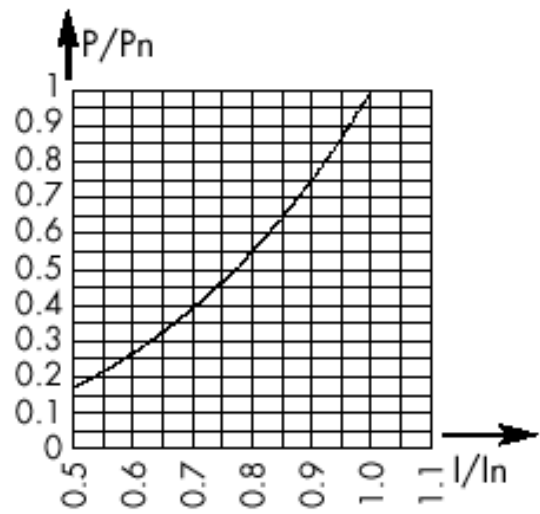
Mean curves show variation of total clearing time (I^2t_t) and total clearing duration T_t as a function of operating voltage U .

Peak Arc Voltage:



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

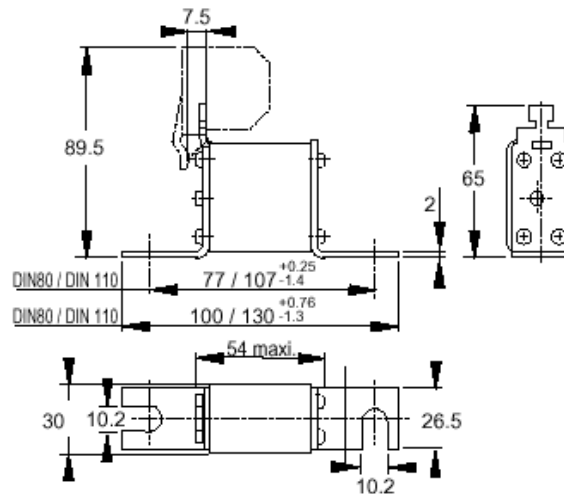
Dissipated Power:



Curve enables computation of power losses P for a I_N -rated fuse as a function of RMS current I (as a multiple of I_N for steady state operation).

Outline Drawing & Ordering Information:

DIN 80 = GSDAxxxxN without trip indicator (140g)
 GSDAxxxxF with trip indicator (190g)



ORDERING INFORMATION

(Please quote code as below)

Voltage Rating (V)	Type	Size	Fixing	Current Rating (A)	Trip Indicator
690	GS	D	A	16 to 160	F

Order code: e.g. **690GSDA0063F** = 690V, German Standard Square Body, Size 00, 80mm, 63amp fuse with trip indicator switch

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