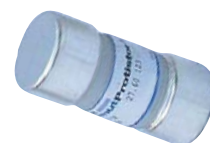


## Other Protistor® Fuses Ferrule Fuses 27x60 gRB - 800 VAC

800 VAC  
gRB from 8 to 110 A  
Size: 27 x 60

EXTREMELY HIGH BREAKING CAPACITY FUSES: PROTECTION OF POWER SEMICONDUCTORS  
COMPLYING WITH IEC STANDARDS 60269-1 AND 4

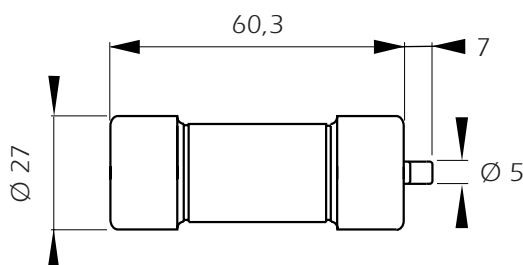
800 V VOLTAGE RATING ACCORDING TO IEC 33



- gR CLASS AS PER IEC 60269-4
- CLEARING ALL OVERLOADS
  - IMPROVED SAFETY AND PROTECTION
  - ENABLING SELECTIVE COORDINATION WITH OTHER FUSES

WITH TRIP INDICATOR

### Dimensions



Unit weight  
78 g

Trip indicator force: 4.5N at 0mm - 2.5N at 7mm

### Main Characteristics

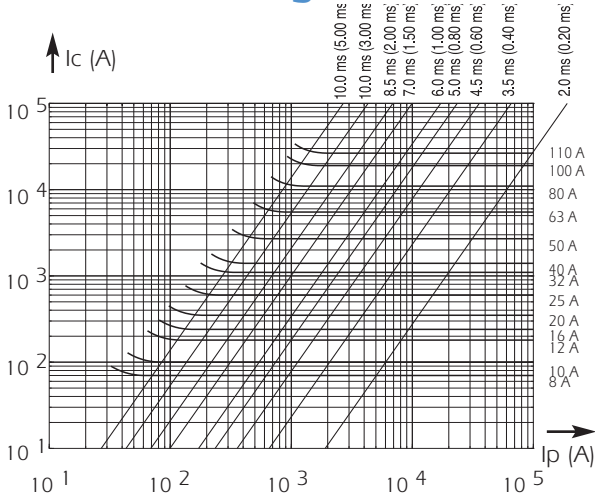
Voltage rating $U_N$ (V)	Class	Current rating $I_N$ (A)	Pre-arcing $I^2t @ 1 ms$ $I^2tp$ (A2s)	Total clearing $I^2t @ U_N$ $I^2tt$ (A2s)	Watts loss		Tested Breaking capacity	Designation	Ref. Number	Pack	Catalog Number		
					0.8 $I_N$	$I_N$							
800	gRB	8	4.25	70	1.2	2.0	175 kA @ 700V	821 CP GRB27.60 8	R221436	10	FR27GB80V 8T		
		10	8.0	100	1.3	2.3		821 CP GRB27.60 10	S221437	10	FR27GB80V 10T		
		12	17.0	180	1.4	2.5		821 CP GRB27.60 12	T221438	10	FR27GB80V 12T		
		16	26.5	250	1.9	3.5		821 CP GRB27.60 16	V221439	10	FR27GB80V 16T		
		20	38.5	350	2.4	4.0		821 CP GRB27.60 20	W221440	10	FR27GB80V 20T		
				25	73.0	600	2.8	5.0	90 kA @ 800V	821 CP GRB27.60 25	X221441	10	FR27GB80V 25T
				32	130	1000	3.5	6.0		821 CP GRB27.60 32	Y221442	10	FR27GB80V 32T
				40	195	1400	4.7	8.0		821 CP GRB27.60 40	Z221443	10	FR27GB80V 40T
				50	430	2700	4.8	8.5		821 CP GRB27.60 50	A221444	10	FR27GB80V 50T
				63	965	5500	5.6	10		821 CP GRB27.60 63	B221445	10	FR27GB80V 63T
				80	1890	11000	6.4	11.5		821 CP GRB27.60 80	C221446	10	FR27GB80V 80T
				100	3480	19000	7.4	13		821 CP GRB27.60 100	D221447	10	FR27GB80V 100T
				110	4670	27000	7.7	14		821 CP GRB27.60 110	E221448	10	FR27GB80V 110T

Minimum operating voltage for trip-indicator: 20 V

Fuseholder Solution: See Gears and Fuse gears section

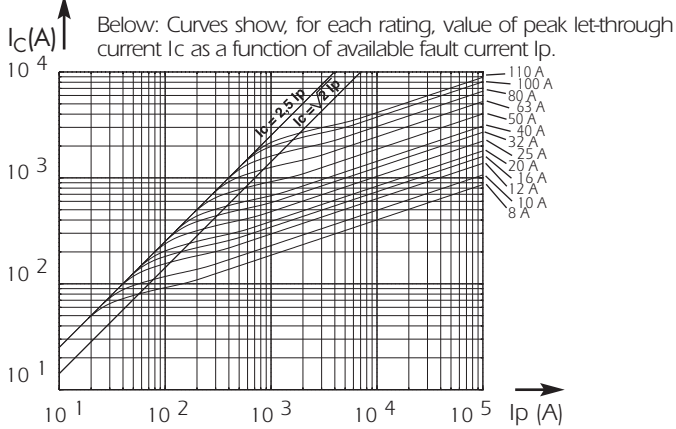
## Other Protistor® Fuses Ferrule Fuses 27x60 gRB - 800 VAC

### Total clearing I<sup>2</sup>t



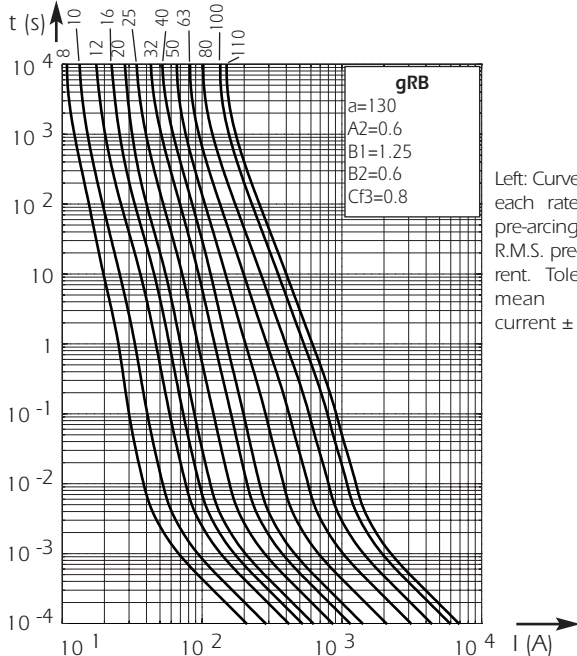
Above: Horizontal curves show maximum values of total clearing  $I^2t$  ( $I^2t_t$ ) as function of prospective current  $I_p$ . @  $U_N$  with  $\cos\phi = 0.15$ . Oblique lines indicate total clearing duration  $T_t$  and associated pre-arcing duration in brackets.

### Current limitation curves



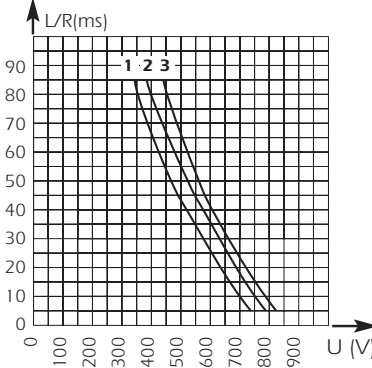
Below: Curves show, for each rating, value of peak let-through current  $I_c$  as a function of available fault current  $I_p$ .

### Time vs current characteristics

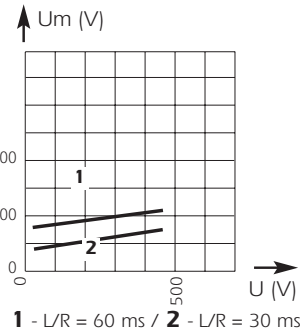


Left: Curves show, for each rated current, pre-arcing time vs. R.M.S. pre-arcing current. Tolerance for mean pre-arcing current  $\pm 8\%$ .

### DC Application data

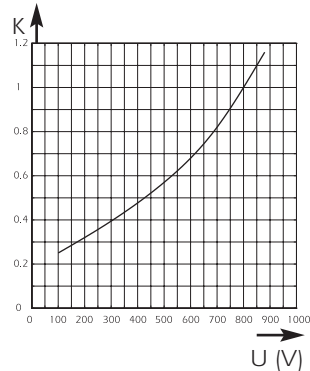


Above: Curves indicate permissible value of time constant  $L/R$  as a function of DC working voltage.  
1 -  $I_N$  from 80 to 110 A / 2 -  $I_N$  from 25 to 63 A  
3 -  $I_N$  from 8 to 12 A



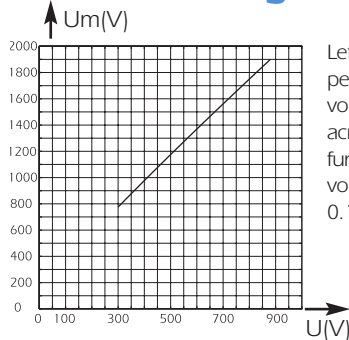
Above: Curve indicates peak arc voltage  $U_m$  which may appear across fuse terminals at working voltage  $U$ , for different values of time constant  $L/R$  of the fault circuit.  
1 -  $L/R = 60$  ms / 2 -  $L/R = 30$  ms

### I<sup>2</sup>t corrective factor



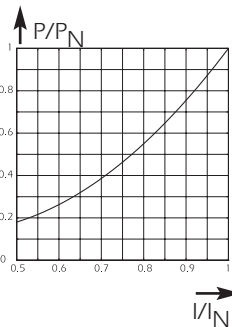
Left: Mean curve shows variation of total clearing time ( $I^2t_t$ ) and total clearing duration  $T_t$  as a function of operating voltage  $U$ .

### Peak arc voltage



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

### Watts loss



Left: Curve enables computation of power losses  $P$  for a  $I_N$ -rated fuse as a function of the R.M.S. current  $I$  (as a multiple of  $I_N$  for steady state operation)