

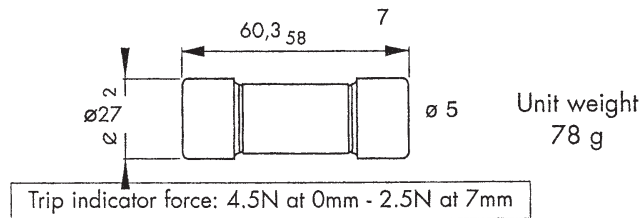


**800V AC**  
**gRB from 8 to 110A**  
**SIZES: 27 X 60**

### Features/Benefits

- **Extremely high Interrupting rating Fuses:**  
Protection of power Semiconductors complying with IEC standards 269-1 and 4
- **800V Voltage Rating** according to IEC 33
- **gR Class** as per IEC 269-4
  - Full range protection
  - Improved safety and protection
  - Allows selective coordination
- With built in Trip Indicator

### Dimensions



### APPLICATIONS DATA

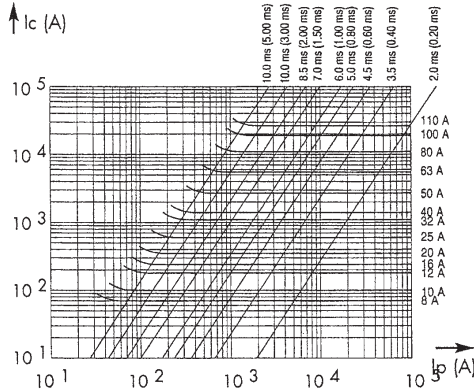
Voltage rating $U_N$ (V)	Class	Current rating $I_N$ (A)	pre-arcing $I^2t @ 1 \text{ ms}$ $I^2t_p$ (A <sup>2</sup> s)	Total clearing $I^2t @ U_N$ $I^2t_t$ (A <sup>2</sup> s)	Watt losses		Tested interrupting rating	CATALOG NO.	REF	PACK
					0.8 $I_N$	$I_N$				
800	gRB	8	4.25	70	1.2	2.0	175 kA @ 700 V	821 CP GRB27.60 8	R221436	10
		10	8.0	100	1.3	2.3		821 CP GRB27.60 10	S221437	10
		12	17.0	180	1.4	2.5		821 CP GRB27.60 12	T221438	10
		16	26.5	250	1.9	3.5		821 CP GRB27.60 16	V221439	10
		20	38.5	350	2.4	4.0		821 CP GRB27.60 20	W221440	10
		25	73.0	600	2.8	5.0		821 CP GRB27.60 25	X221441	10
		32	130	1000	3.5	6.0	90 kA @ 800 V	821 CP GRB27.60 32	Y221442	10
		40	195	1400	4.7	8.0		821 CP GRB27.60 40	Z221443	10
		50	430	2700	4.8	8.5		821 CP GRB27.60 50	A221444	10
		63	965	5500	5.6	10		821 CP GRB27.60 63	B221445	10
		80	1890	11000	6.4	11.5		821 CP GRB27.60 80	C221446	10
		100	3480	19000	7.4	13		821 CP GRB27.60 100	D221447	10
		110	4670	27000	7.7	14		821 CP GRB27.60 110	E221448	10

Minimum operating voltage for trip-indicator: 20 V  
 See Fuse Blocks and Fuse Holders section

# FRENCH CYLINDRICAL 821cp gRB

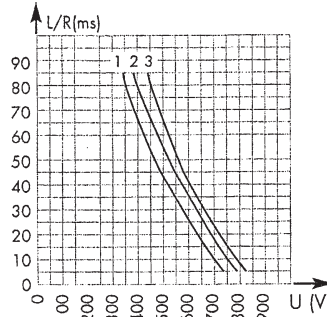
## SEMICONDUCTOR PROTECTION FUSES

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



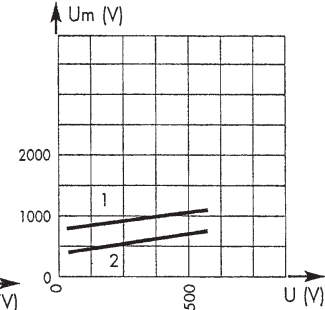
Above: Horizontal curves show maximum values of total clearing  $I^2t$  ( $I^2t_{max}$ ) as function of prospective current  $I_p$ . @  $U_N$  with  $\cos\phi = 0.15$  Oblique lines indicate total clearing duration  $T_t$  and associated pre-arcing duration in brackets.

### DC Voltage Capabilities vs. Time Constant



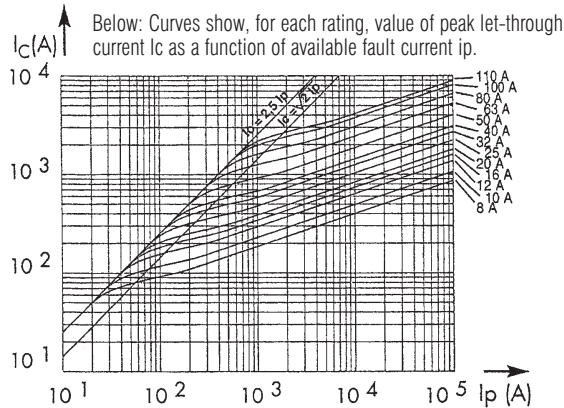
Provides the DC voltage capability of a fuse as a function of the circuit time constant.

### DC Peak Arc Voltage



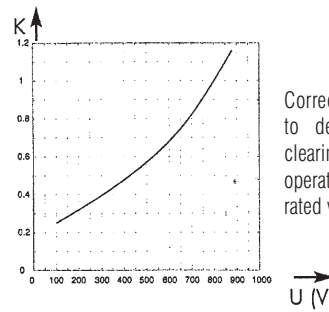
1 -  $L/R = 60 \text{ ms} / 2$  -  $L/R = 30 \text{ ms}$   
Above: Curves indicate peak arc voltage  $U_m$  which may appear across fuse terminals of working voltage  $U$ , for different values of time constant  $L/R$  of the fault circuit.

### Peak let-thru Data



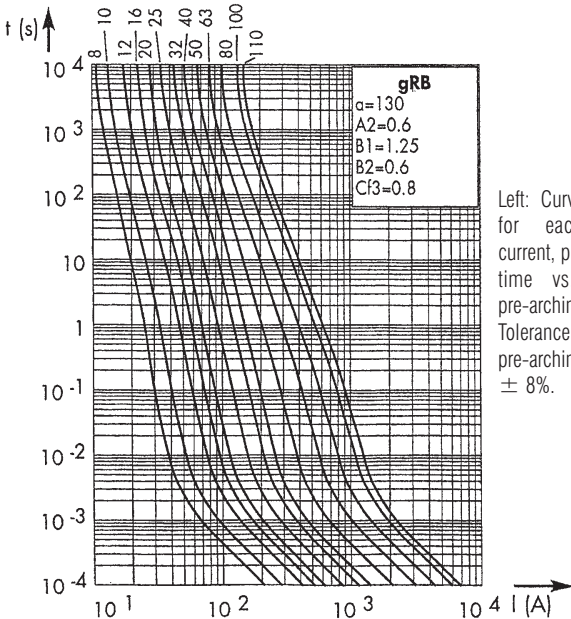
Below: Curves show, for each rating, value of peak let-through current  $I_c$  as a function of available fault current  $I_p$ .

### Clearing i<sup>2</sup>t vs. Operating Voltage



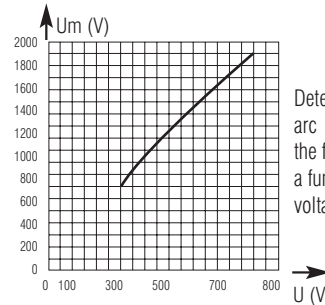
Correction Factor to determine the clearing  $I^2t$  of a fuse operating below its rated voltage

### Melting Time Current Data



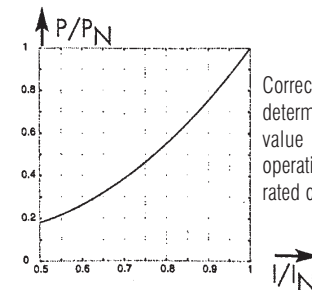
Left: Curves show, for each rated current, pre-arcing time vs. R.M.S. pre-arcing current. Tolerance for mean pre-arcing current  $\pm 8\%$ .

### Peak arc voltage



Determines the peak arc voltage across the fuse terminals as a function of applied voltage.

### Watts loss Correction



Correction factor to determine watts loss value of a fuse operating below its rated current.

