

# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

## SEMICONDUCTOR PROTECTION FUSES

## IEC HIGH-SPEED CYLINDRICAL FUSE-LINKS DC PROTECTION



Specially developed for DC applications, 20x127 gR cylindrical is a fast acting, full range fuse used in the protection of auxiliaries, control circuit and other measuring and monitoring devices.

### TECHNICAL DATA OVERVIEW

Voltage Range DC	1000 ... 1500 VDC
Ampere Range (A)	1.5 ... 63 A
Speed/Characteristic	gR
Product Size	20x127 mm

### FEATURES & BENEFITS

- International 20x127mm (13/16" x 5") for worldwide acceptance
- gR Class according to VDE 636-23 and IEC 60269-4
- Low  $I^2t$  for improved semiconductor protection
- Eliminate all overloads
- Extremely fast acting
- Current limiting
- Excellent cycling capability

### APPLICATIONS

- DC control circuit, measuring & monitoring auxiliaries circuit

### STANDARDS

- UL 248-1 Compliance: see "UL Recognized" status given in product range table
- IEC 60269-4 Compliance



# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

## PRODUCT RANGE



FD20GB100V6T

### Size 20x127 gR 1000VDC with striker

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Rated breaking capacity DC	Power dissipation at I <sub>n</sub>	UL recognized	Package	Weight
FD20GB100V6T	Z088020	1000 V	6 A	100 kA	3.5 W	✓	10	97 g
FD20GB100V8T	T088774	1000 V	8 A	100 kA	3.8 W	✓	10	97 g
FD20GB100V10T	A089493	1000 V	10 A	100 kA	4.2 W	✓	10	97 g
FD20GB100V12T	B089494	1000 V	12 A	100 kA	5.3 W	✓	10	97 g
FD20GB100V16T	C089495	1000 V	16 A	100 kA	6.6 W	✓	10	97 g
FD20GB100V20T	D089496	1000 V	20 A	100 kA	7.7 W	✓	10	97 g
FD20GB100V25T	E089497	1000 V	25 A	100 kA	9 W	✓	10	97 g
FD20GB100V32T	F089498	1000 V	32 A	100 kA	10.5 W	✓	10	97 g
FD20GC100V40T	S086795	1000 V	40 A	100 kA	13.2 W	✓	10	97 g
FD20GC100V50T	F086186	1000 V	50 A	100 kA	15.5 W	✓	10	97 g
FD20GC100V63T	F083656	1000 V	63 A	100 kA	17.4 W	✓	10	97 g

### Size 20x127 gR 1000VDC without striker

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Rated breaking capacity DC	Power dissipation at I <sub>n</sub>	UL recognized	Package	Weight
FD20GB100V6	N089482	1000 V	6 A	100 kA	3.5 W	✓	10	0.1 kg
FD20GB100V8	P089483	1000 V	8 A	100 kA	3.8 W	✓	10	0.1 kg
FD20GB100V10	Q089484	1000 V	10 A	100 kA	4.2 W	✓	10	0.1 kg
FD20GB100V12	R089485	1000 V	12 A	100 kA	5.3 W	✓	10	0.1 kg
FD20GB100V16	S089486	1000 V	16 A	100 kA	6.6 W	✓	10	0.1 kg
FD20GB100V20	T089487	1000 V	20 A	100 kA	7.7 W	✓	10	0.1 kg
FD20GB100V25	V089488	1000 V	25 A	100 kA	9 W	✓	10	0.1 kg
FD20GB100V32	W089489	1000 V	32 A	100 kA	10.5 W	✓	10	0.1 kg
FD20GC100V40	Z087054	1000 V	40 A	100 kA	13.2 W	✓	10	0.1 kg
FD20GC100V50	K083660	1000 V	50 A	100 kA	15.5 W	✓	10	0.1 kg
FD20GC100V63	J083659	1000 V	63 A	100 kA	17.4 W	✓	10	0.1 kg

### Size 20x127 gR 1500VDC with striker

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Rated breaking capacity DC	Power dissipation at I <sub>n</sub>	Design	UL recognized	Package	Weight
FD20GB150V1,5T	G075745	1500 V	1.5 A	30 kA	1.4 W	gRB	✓	10	97 g
FD20GB150V2T	B088367	1500 V	2 A	30 kA	1.6 W	gRB	✓	10	97 g
FD20GB150V3,15T	H075746	1500 V	3.15 A	30 kA	2.1 W	gRB	✓	10	97 g
FD20GB150V4T	J075747	1500 V	4 A	30 kA	2.1 W	gRB	✓	10	97 g
FD20GB150V5T	C088368	1500 V	5 A	30 kA	2.3 W	gRB	✓	10	97 g

# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

## PRODUCT RANGE

### Size 20x127 gR 1500VDC without indicator

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Rated breaking capacity DC	Power dissipation at I <sub>n</sub>	Design	UL recognized	Package	Weight
FD20GB150V1,5	K081843	1500 V	1.5 A	30 kA	1.4 W	gRB	✓	10	97 g
FD20GB150V2	Y099243	1500 V	2 A	30 kA	1.6 W	gRB	✓	10	97 g
FD20GB150V3,15	L081844	1500 V	3.15 A	30 kA	2.1 W	gRB	✓	10	97 g
FD20GB150V4	Z099244	1500 V	4 A	30 kA	2.1 W	gRB	✓	10	97 g
FD20GB150V5	A099245	1500 V	5 A	30 kA	2.3 W	gRB	✓	10	97 g
FD20GD150V6	E082804	1500 V	6 A	30 kA	6.3 W	gRD	✓	10	97 g
FD20GD150V8	Z080867	1500 V	8 A	30 kA	6 W	gRD	✓	10	97 g
FD20GD150V10	F081655	1500 V	10 A	30 kA	6.1 W	gRD	✓	10	97 g
FD20GD150V12	B080593	1500 V	12 A	30 kA	6.8 W	gRD	✓	10	97 g
FD20GD150V16	Q081457	1500 V	16 A	30 kA	8.9 W	gRD	✓	10	97 g
FD20GD150V20	D082803	1500 V	20 A	30 kA	9.6 W	gRD	✓	10	97 g
FD20GD150V25	A080431	1500 V	25 A	30 kA	12 W	gRD	✓	10	97 g

## TECHNICAL DATA

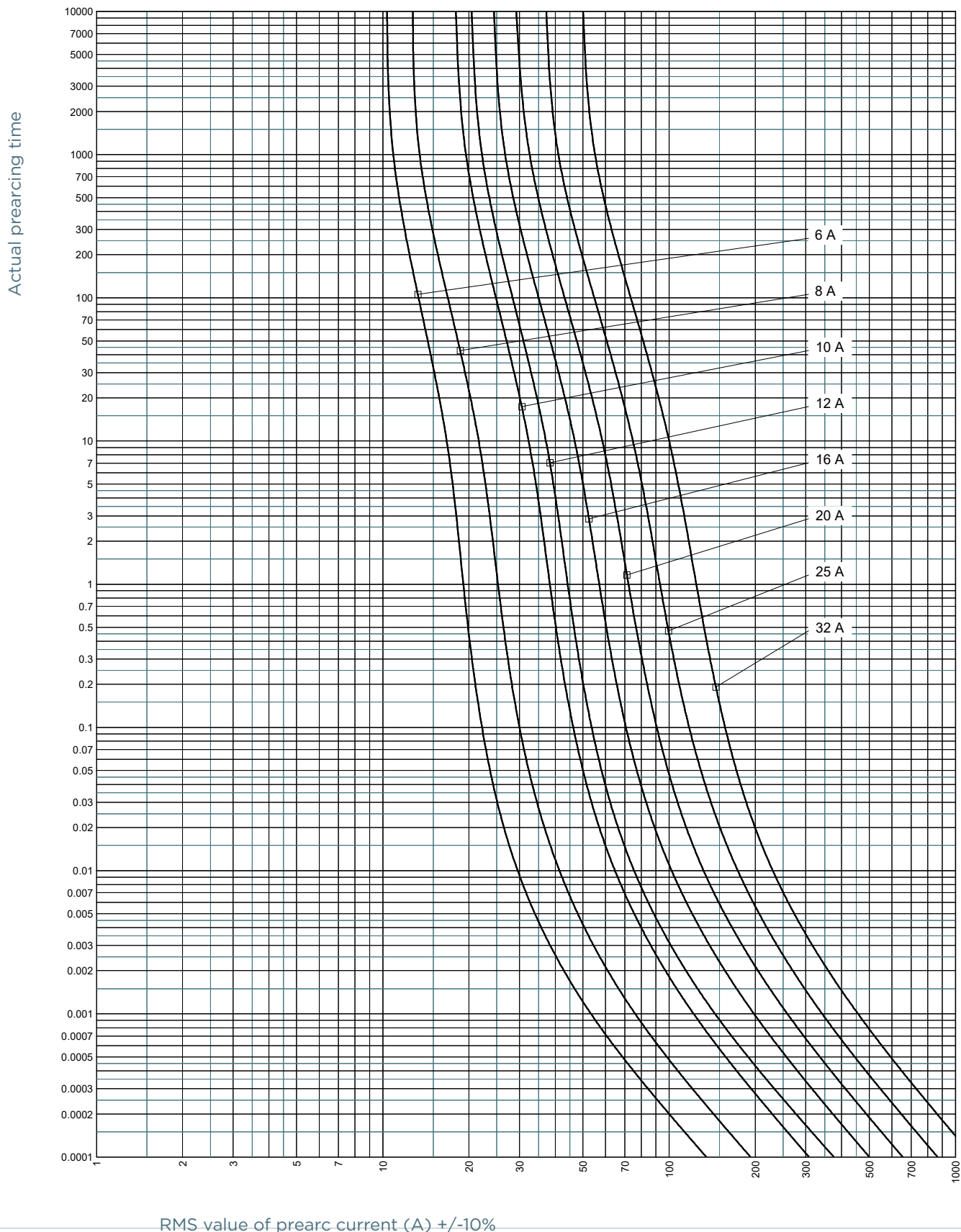
	Size 20x127 gR 1000VDC with striker	Size 20x127 gR 1000VDC without striker	Size 20x127 gR 1500VDC with striker	Size 20x127 gR 1500VDC without indicator
Ampere Range (A)	6 ... 63 A	6 ... 63 A	1.5 ... 5 A	1.5 ... 25 A

# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

## TIME CURRENT CHARACTERISTIC CURVES

Size 20x127 gR 1000VDC 6A to 32A



RMS value of prearc current (A) +/- 10%

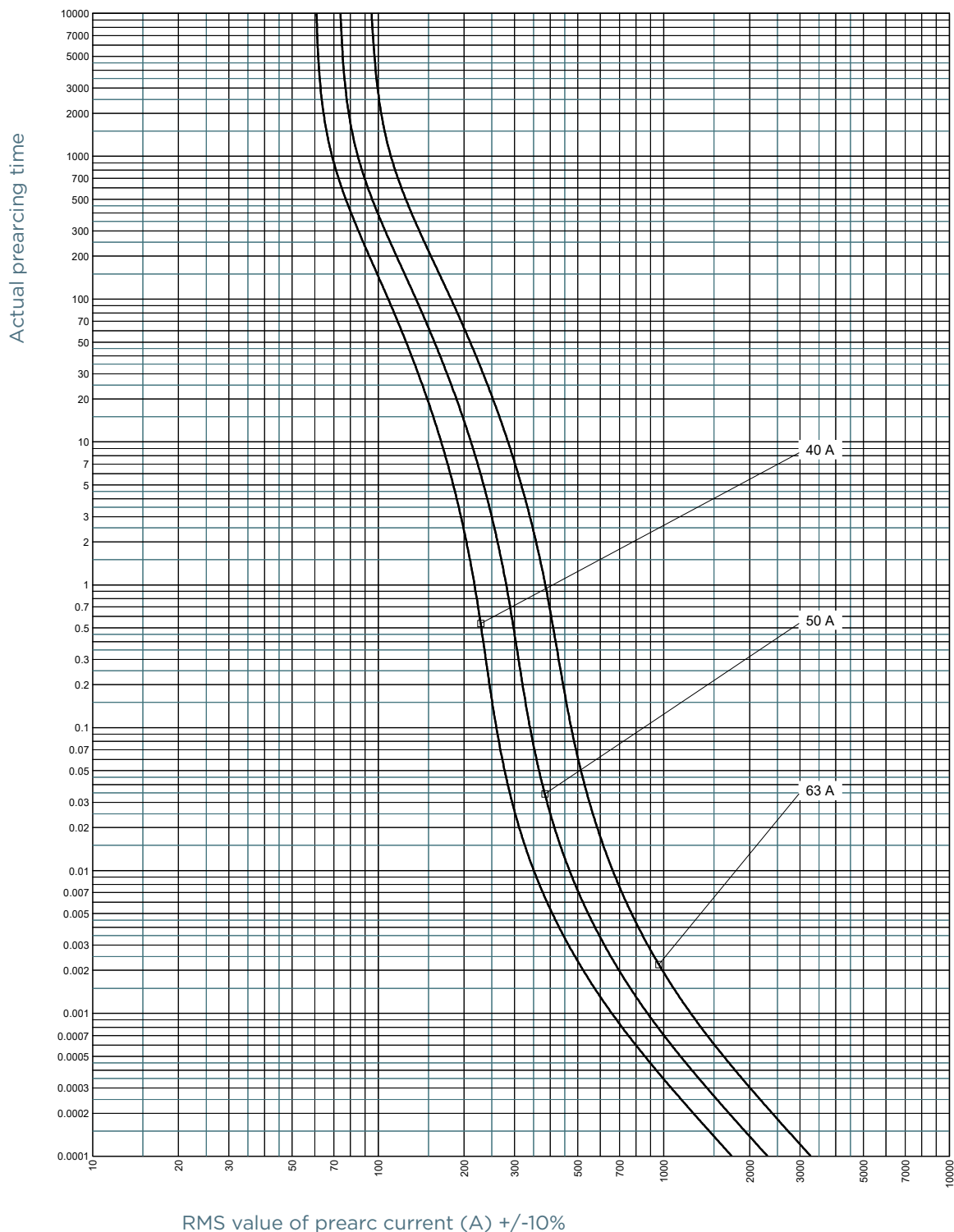
Semiconductor Protection Fuses / DS-PFCY20GR-07-0525-EN

# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

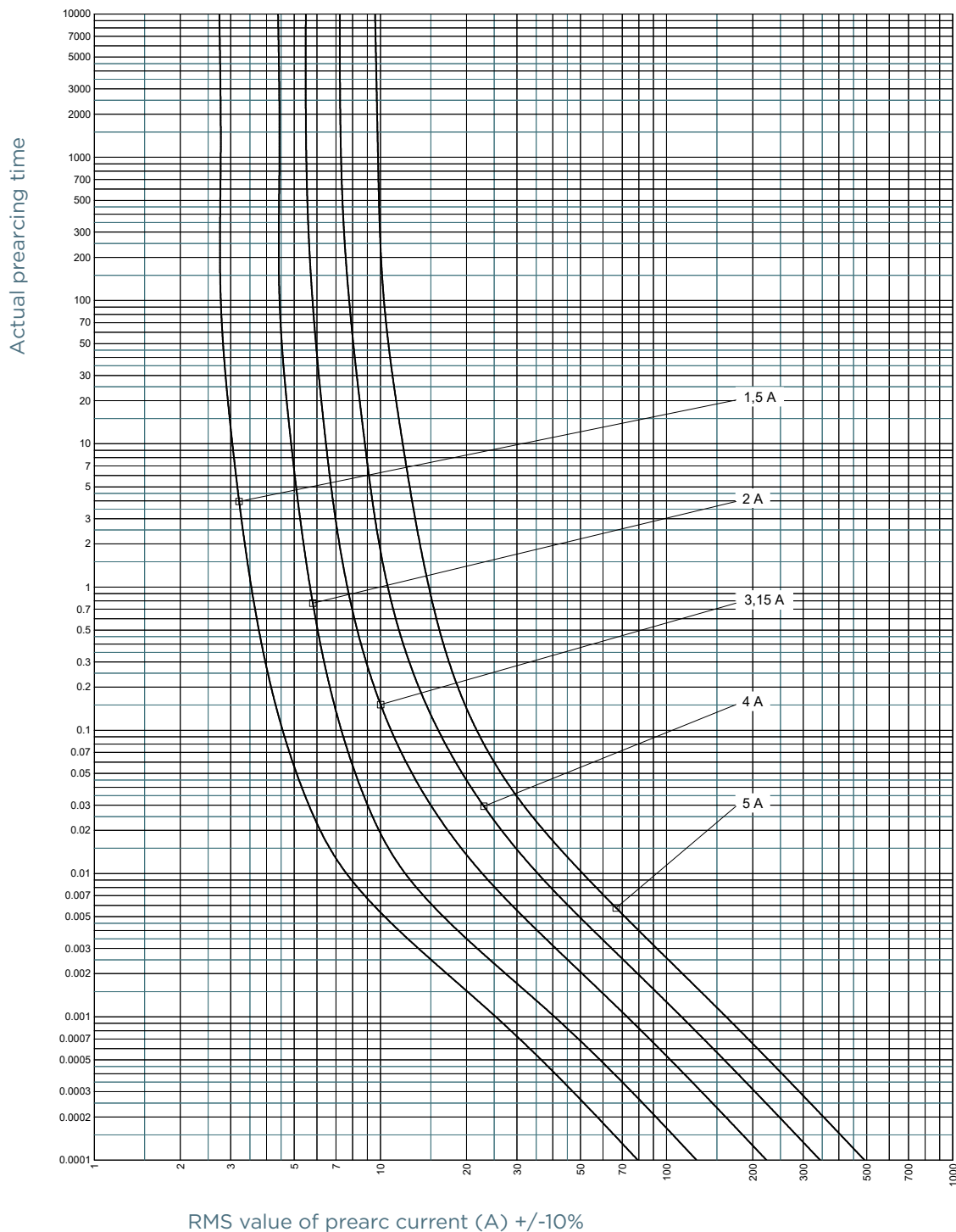
## TIME CURRENT CHARACTERISTIC CURVES

Size 20x127 gR 1000VDC 40A to 63A



## TIME CURRENT CHARACTERISTIC CURVES

Size 20x127 1500VSC 1,5A to 5A with or without striker

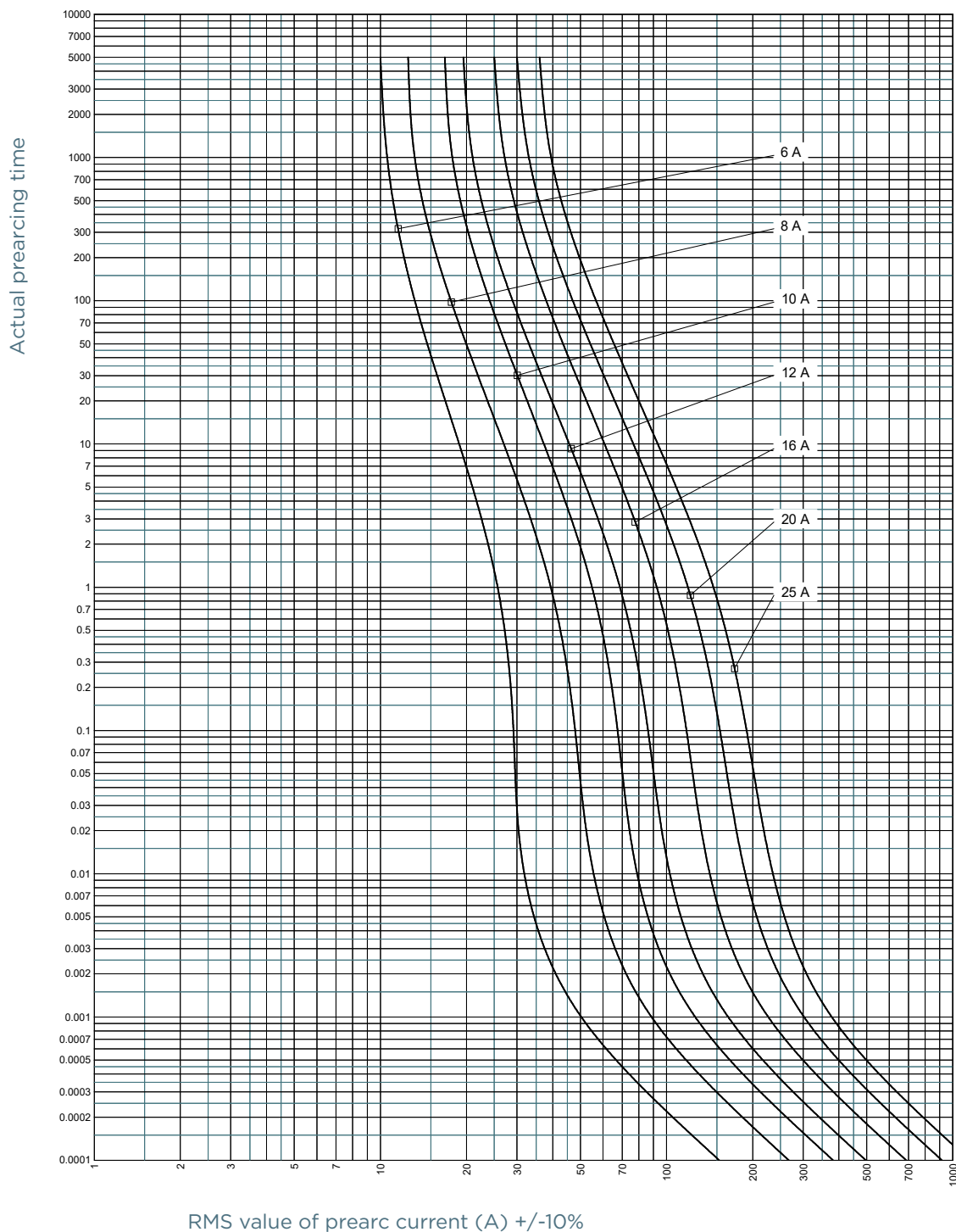


# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

## TIME CURRENT CHARACTERISTIC CURVES

Size 20x127 1500VDC 6A to 25A without striker

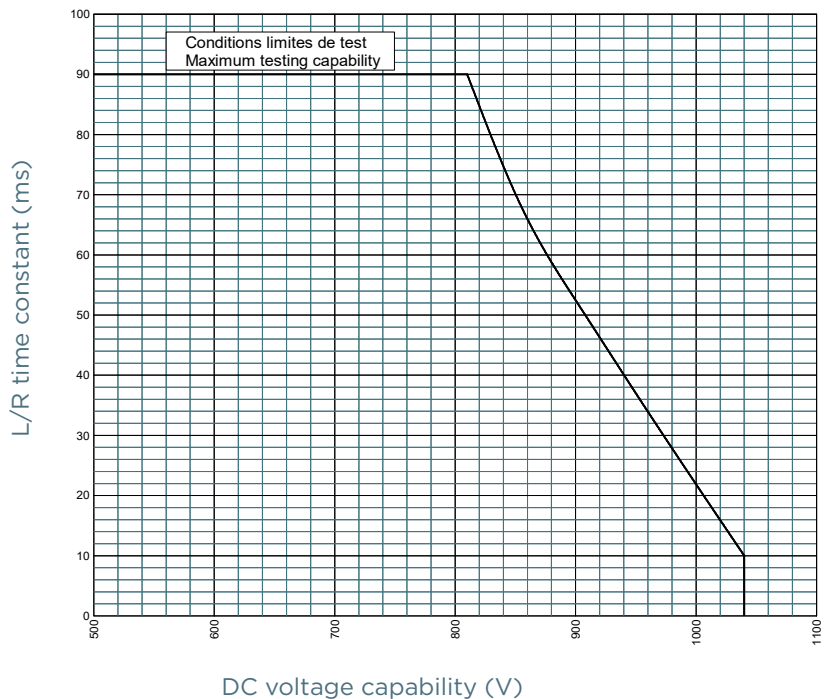


# Protistor® size 20x127 gR (GRB/C/D)

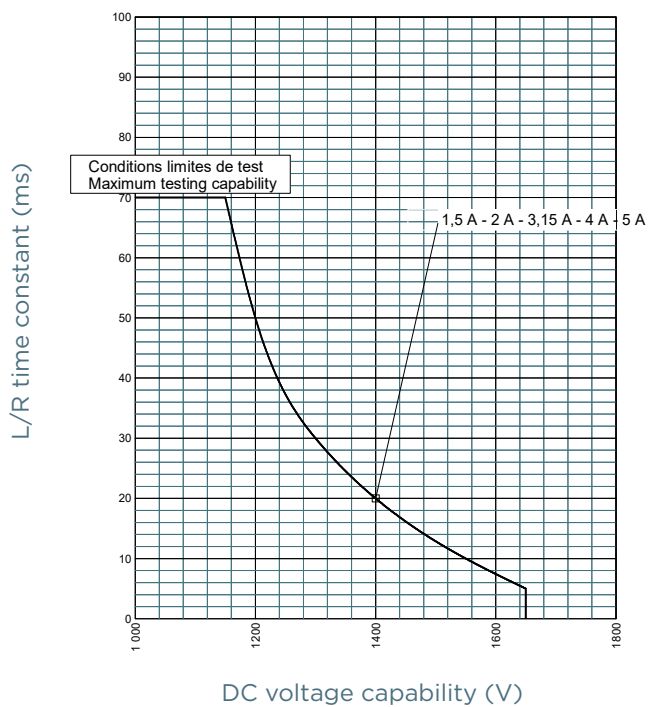
1000 to 1500VDC

## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

### Size 20x127 gR 1000VDC



### Size 20x127 gR 1500VDC 1,5A to 5A



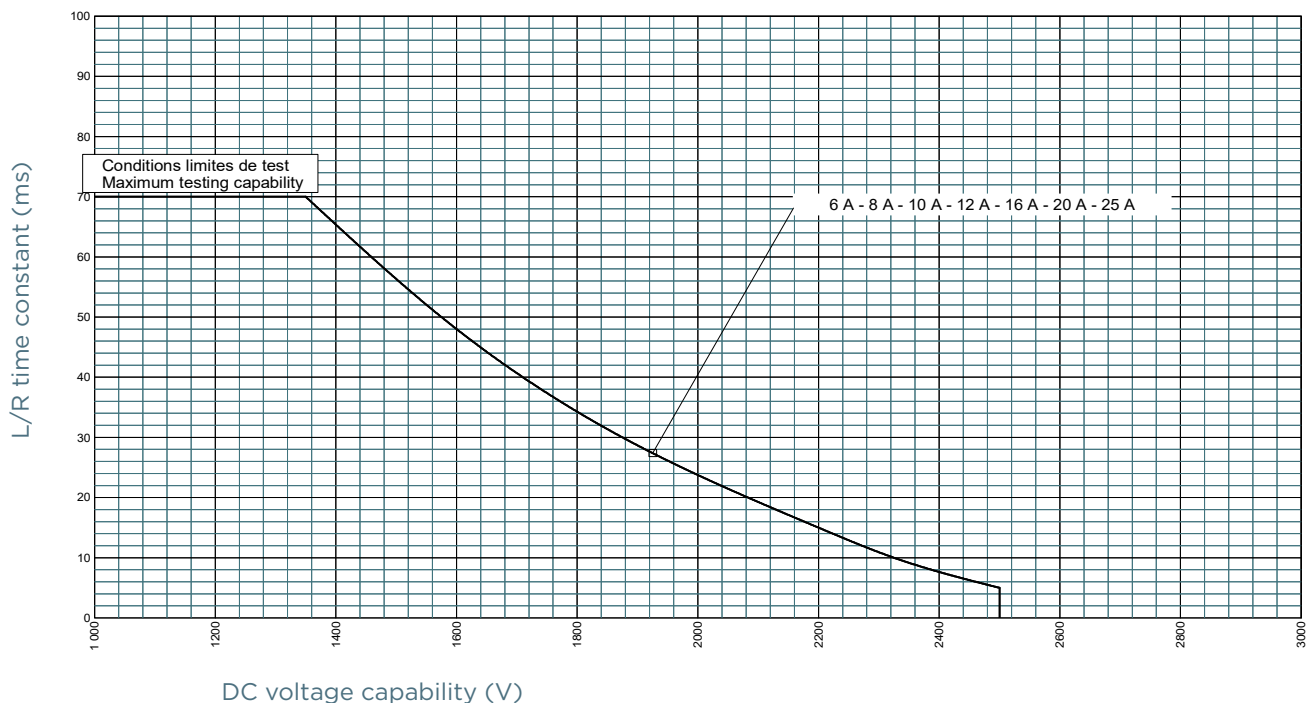


# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 20x127 gR 1500VDC 6A to 25A



## POWER DISSIPATION

Size 20x127 gR 1000VDC

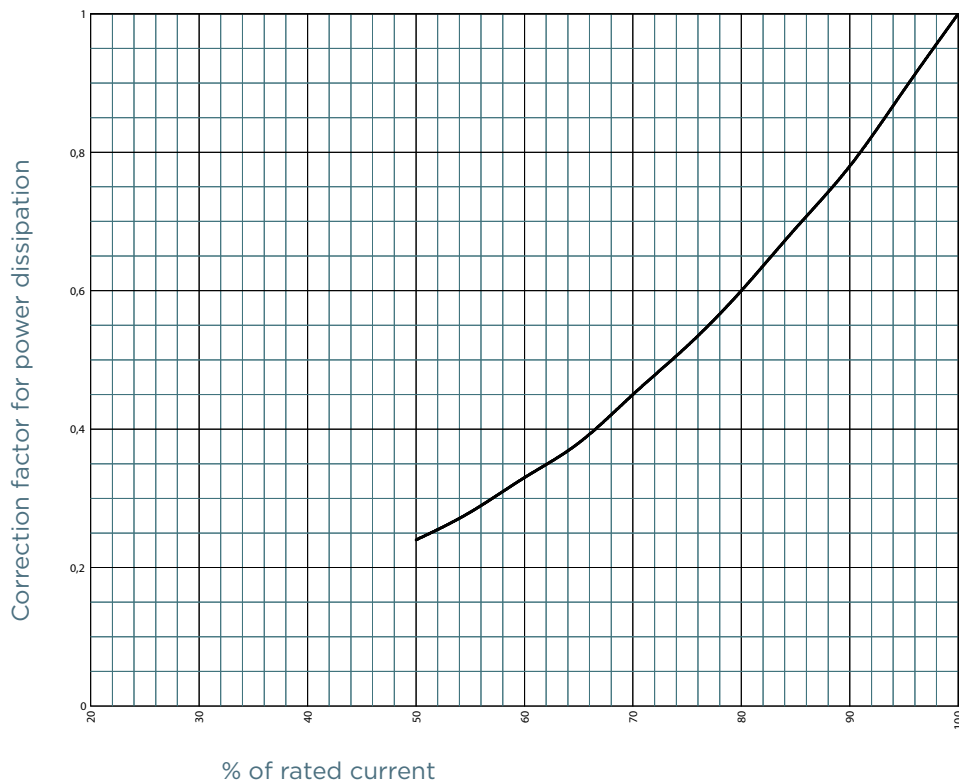


# Protistor® size 20x127 gR (GRB/C/D)

1000 to 1500VDC

## POWER DISSIPATION

### Size 20x127 gR 1500VDC 1,5A to 5A



### Size 20x127 gR 1500VDC 6A to 25A

