# 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 AC | 1000 ... 1500 VAC |
| Ampere Range (A) | 6 ... 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 Recognized component
- UL file No. E76491
- IEC 60269-4 Compliance

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## PRODUCT RANGE

### Size 20x127 gR 1000VDC with striker

| Catalog number | Item number | Rated voltage DC (IEC) | Rated current $I_n$ | Rated breaking capacity DC | Power dissipation at $I_n$ | 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 $I_n$ | Rated breaking capacity DC | Power dissipation at $I_n$ | 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 $I_n$ | Rated breaking capacity DC | Power dissipation at $I_n$ | Design | Package | Weight |
|---|---|---|---|---|---|---|---|---|
| FD20GB150V0,8T | E075743 | 1500 V | 0.8 A | 30 kA | 0.9 W | gRB | 10 | 97 g |
| 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 |
| FD20GB150V1T | F075744 | 1500 V | 1 A | 30 kA | 0.9 W | gRB | 10 | 97 g |
| FD20GB150V5T | C088368 | 1500 V | 5 A | 30 kA | 2.3 W | gRB | 10 | 97 g |

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## PRODUCT RANGE



FD20G-B150V0,8

### Size 20x127 gR 1500VDC without indicator

| Catalog number | Item number | Rated voltage DC (IEC) | Rated current $I_n$ | Rated breaking capacity DC | Power dissipation at $I_n$ | Design | Package | Weight |
|---|---|---|---|---|---|---|---|---|
| FD20GB150V0,8 | J081842 | 1500 V | 0.8 A | 30 kA | 0.9 W | gRB | 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 |
| FD20GB150V1 | R079894 | 1500 V | 1 A | 30 kA | 0.9 W | gRB | 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 |
| 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 |

RMS value of pre-arcing/melting current (A) +- 10%

## TIME CURRENT CHARACTERISTIC CURVES

Pre-arcing time (s)

50 Hz RMS symmetrical prospective current Ip (A)

## CUT-OFF CURRENT CHARACTERISTIC

Maximum peak let thru current Ic (A)

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## $I^2T$ MULTIPLIER COEFFICIENT

## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

## PEAK ARC VOLTAGE

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