SEMICONDUCTOR PROTECTION FUSES

SQUARE BODY HIGH-SPEED FUSE-LINKS DC PROTECTION



Mersen DC offers provide a very high performant protection for railway power and auxiliary circuits. Mersen DC Semiconductor fuse-links were developed to provide improved performance required by today's new DC equipment. These fuse-links are typically operated at more elevated temperature than other fuse type, have lower I²t to minimize damage to protected components on short circuits, lower watts loss and longer life.

TECHNICAL DATA OVERVIEW

Rated Voltage DC (IEC)	750 VDC
Ampere Range (A)	500 1600 A
Speed/Characteristic	gR
I.R. AC (IEC)	100 kA

FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- Very low I²t
- Extremely fast acting
- Eliminate all overloads
- Excellent cycling capability

APPLICATIONS

- Protection of inverters
- Protection of motor drives
- Protection of UPS systems
- Railway power and auxiliary circuits
- Similar 750VDC or less equipments





PRODUCT RANGE



D2122GC75V500TF

Size 2x122 gR 750VDC

Catalog number	Item number	Rated voltage DC (IEC)	Rated current In	Rated breaking capacity DC	Power dissipation at In	Weight
D2122GC75V500TF	Q090473	750 V	500 A	100 kA	94 W	2.8 kg
D2122GC75V630TF	R090474	750 V	630 A	100 kA	116 W	2.8 kg
D2122GC75V800TF	S090475	750 V	800 A	100 kA	149 W	2.8 kg
D2122GD75V900TF	T220955	750 V	900 A	100 kA	180 W	2.8 kg
D2122GD75V10CTB	V220956	750 V	1000 A	100 kA	190 W	2.8 kg

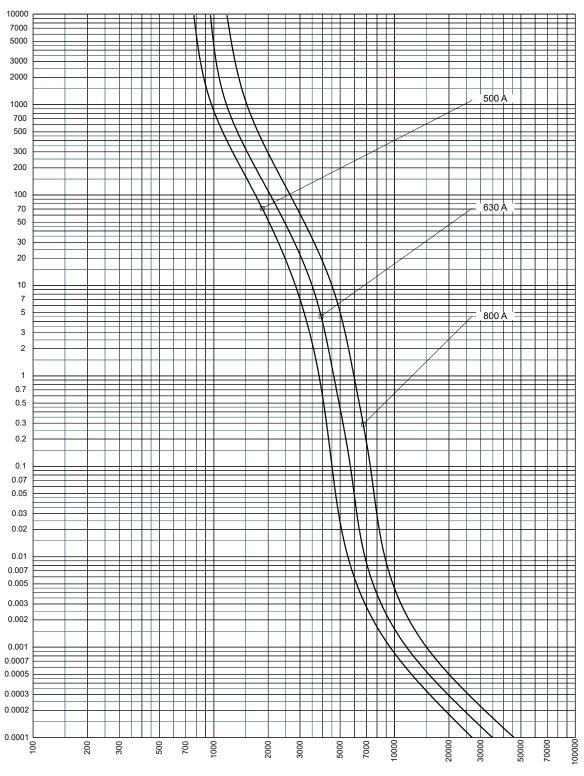
Size 2x123 gR 600 to 750VDC

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I _n	Rated breaking capacity DC	Power dissipation at I _n	Weight
D2123GC75V10CTF	Z090481	750 V	1000 A	100 kA	187 W	4.26 kg
D2123GB75V12CTF	D098558	750 V	1250 A	100 kA	-	4.26 kg
D2123GB75V14CTF	B090483	750 V	1400 A	100 kA	-	4.26 kg
D2123GD75V15CTF	K220947	750 V	1500 A	100 kA	-	4.26 kg
D2123GB66V16CTF	L220948	660 V	1600 A	100 kA	-	4.26 kg

TIME CURRENT CHARACTERISTIC CURVES

Size 2x122 gR 500A-800A

Pre-arcing time (s)

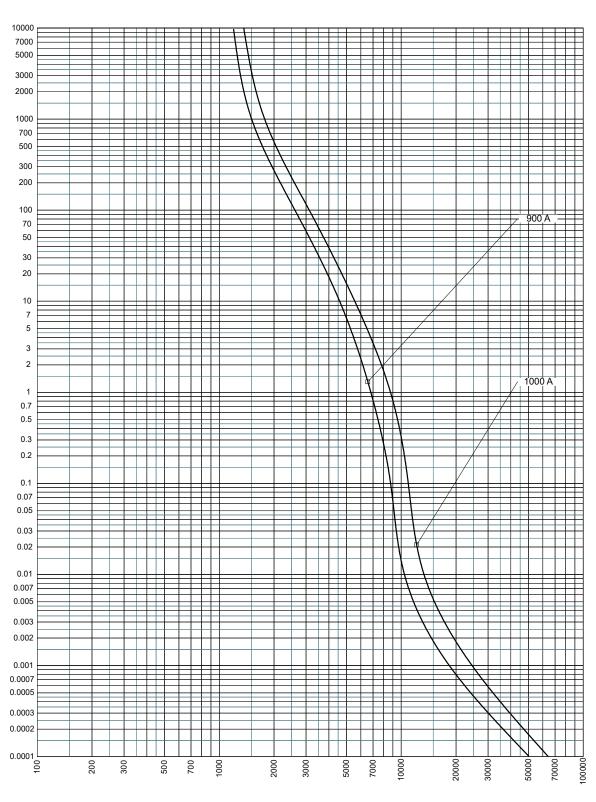


RMS value of pre-arcing/melting current (A) +-8%

TIME CURRENT CHARACTERISTIC CURVES

Size 2x122 gR 900A-1000A

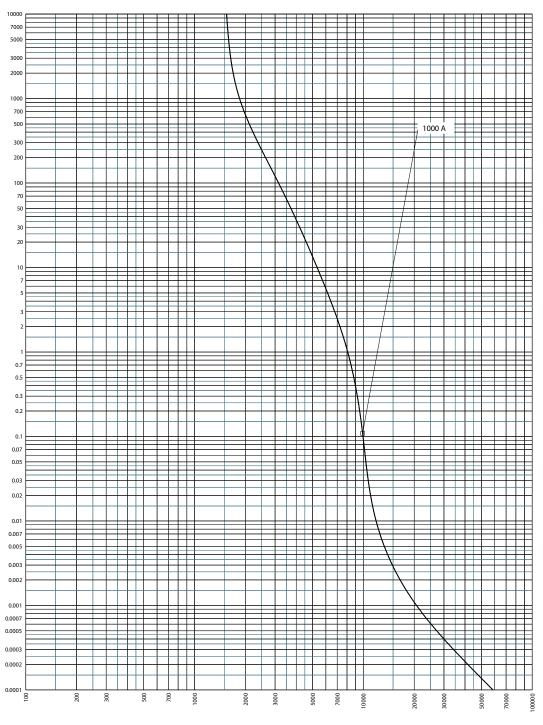
Pre-arcing time (s)



RMS value of pre-arcing/melting current (A) +-8%

Size 2x123 gR 1000A

Pre-arcing time (s)



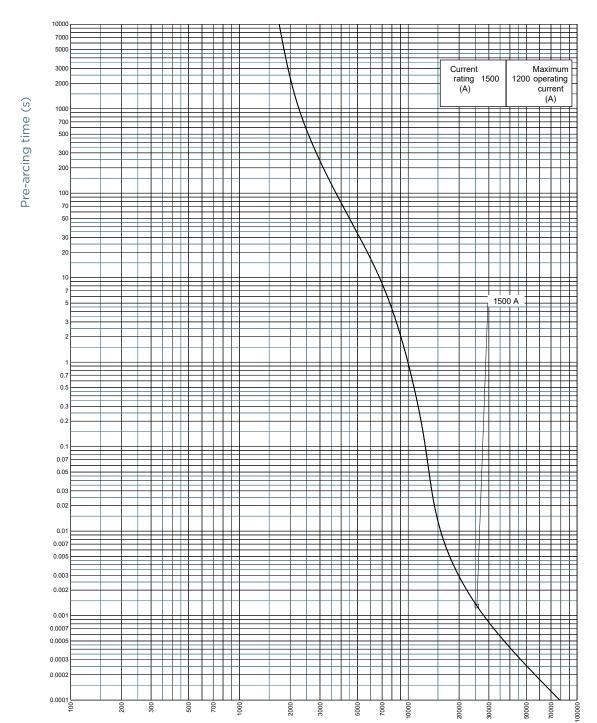
RMS value of pre-arcing/melting current (A) +-8%

Size 2x123 gR 1250-1400A

7000 5000 3000 rating 1250 (A) 1400 1100 operating 2000 Pre-arcing time (s) 1000 500 300 200 100 70 1250 A 1400 A 0.7 0.3 0.2 0.1 0.07 0.05 0.03 0.02 0.01 0.007 0.005 0.003 0.0007 0.0005 0.0003 0.0002 0.0001 9

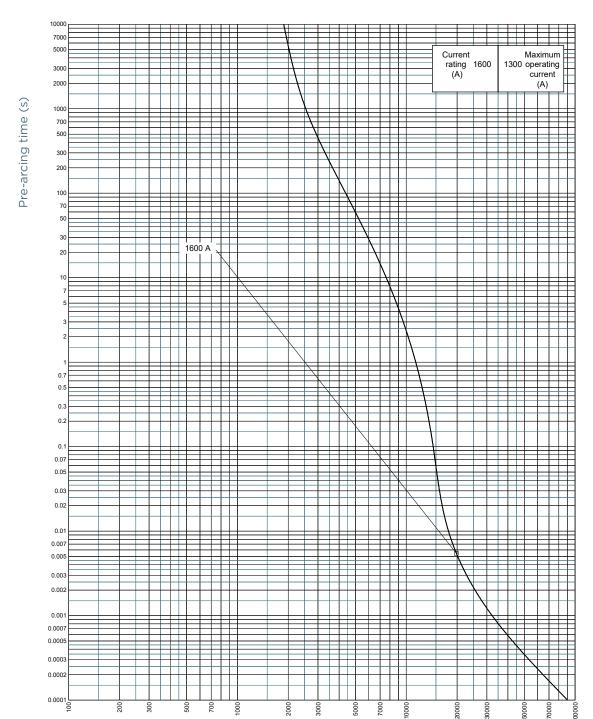
RMS value of pre-arcing/melting current (A) +-8%

Size 2x123 gR 1500A



RMS value of pre-arcing/melting current (A) +-8%

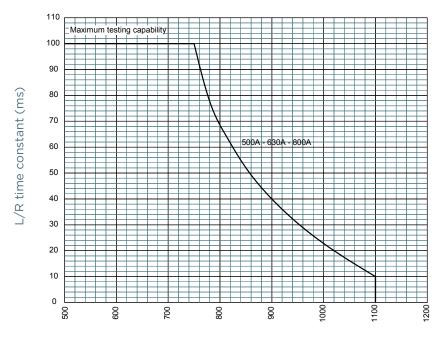
Size 2x123 gR 1600A



RMS value of pre-arcing/melting current (A) +-8%

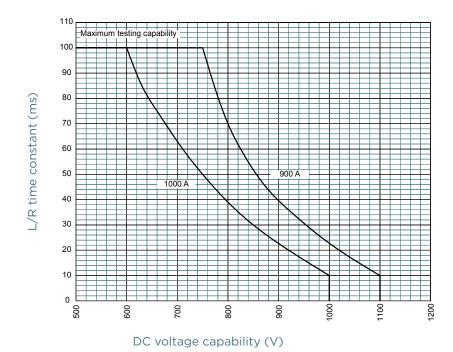
L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 2x122 gR 500A-800A



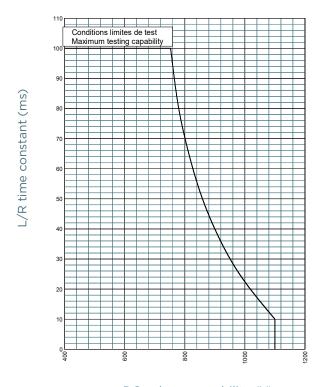
DC voltage capability (V)

Size 2x122 gR 900A-1000A



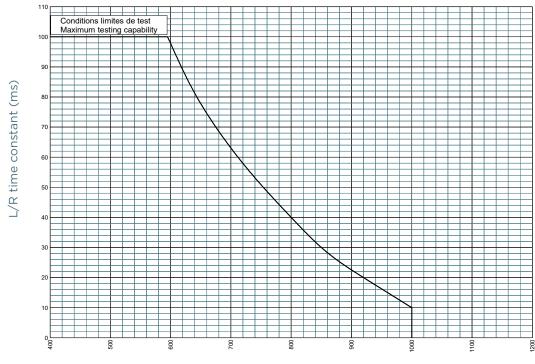
L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 2x123 gR 1000A



DC voltage capability (V)

Size 2x123 gR 1250-1400A

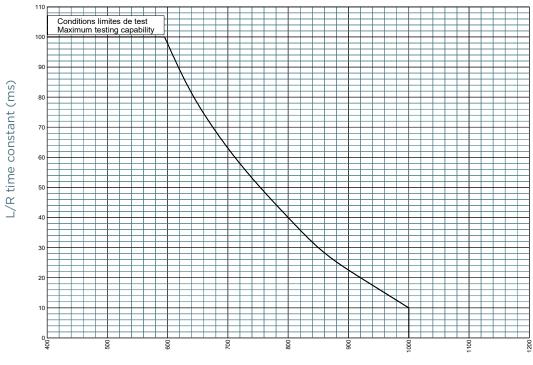


DC voltage capability (V)



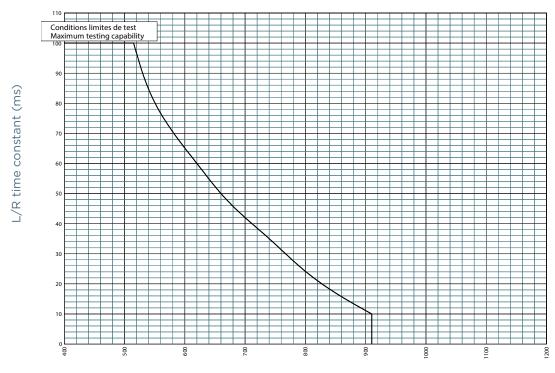
L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 2x123 gR 1500A



DC voltage capability (V)

Size 2x123 gR 1600A

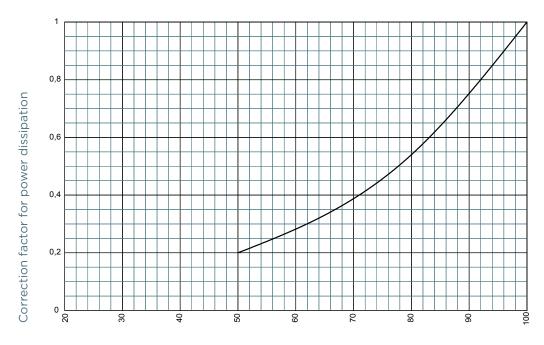


DC voltage capability (V)



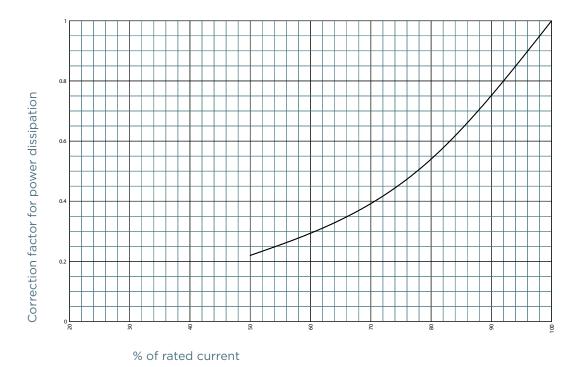
POWER DISSIPATION

Size 2x122 gR



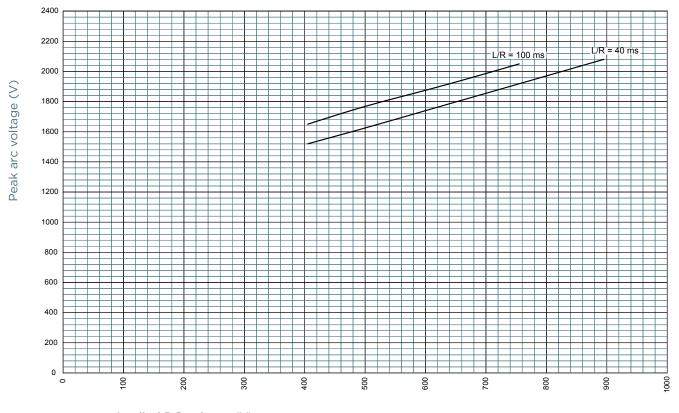
% of rated current

Size 2x123 gR



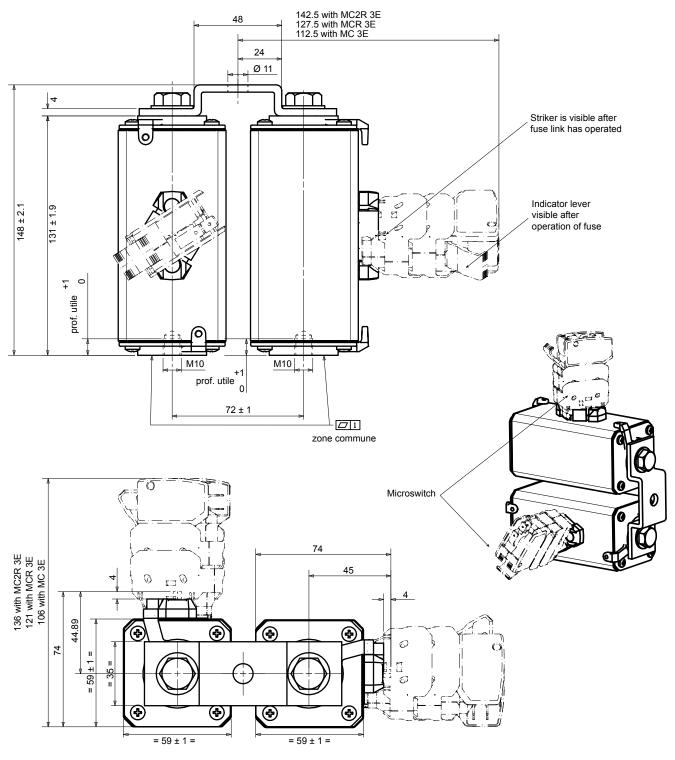
PEAK ARC VOLTAGE

Size 2x122 & 2x123 gR



DIMENSIONS

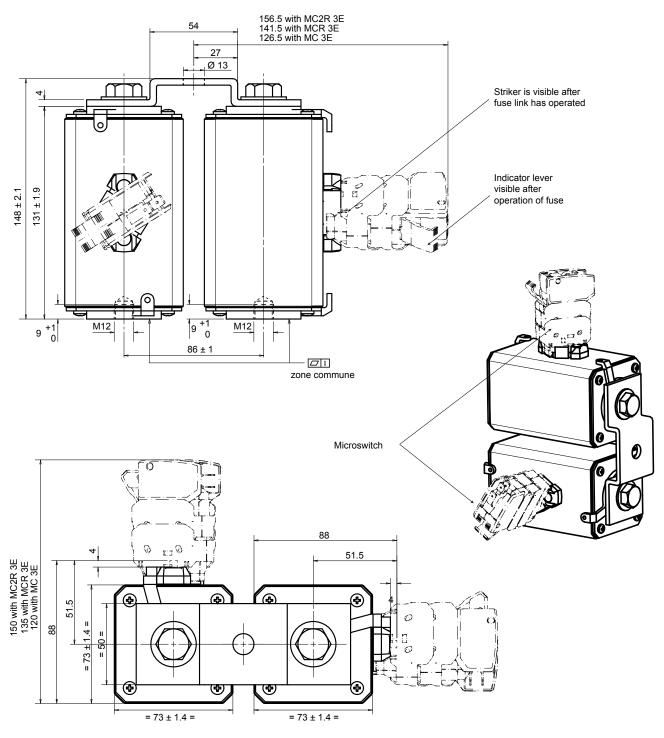
Size 2x122 threads terminals (TTF)



Dimensions in mm

DIMENSIONS

Size 2x123 threads terminals (TTF)



Dimensions in mm