

# Protistor® size 2x122 aR

2000VDC

## 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  $I^2t$  to minimize damage to protected components on short circuits, lower watts loss and longer life.

### TECHNICAL DATA OVERVIEW

Voltage DC	2000 VDC
Ampere Range (A)	500 ... 800 A
Speed/Characteristic	aR
Product Size	2x122
Package	1
Weight	3.35 kg

### FEATURES & BENEFITS

- Extremely fast acting
- Extremely current limiting
- Very low  $I^2t$
- Worldwide acceptability
- Superior cycling ability

### APPLICATIONS

- Protection of inverters
- Protection of motor drives
- Protection of UPS systems
- Protection of similar 2000V or less equipments
- Railway power and auxiliary circuits

### STANDARDS

- IEC 60269-4 compliance

# Protistor® size 2x122 aR

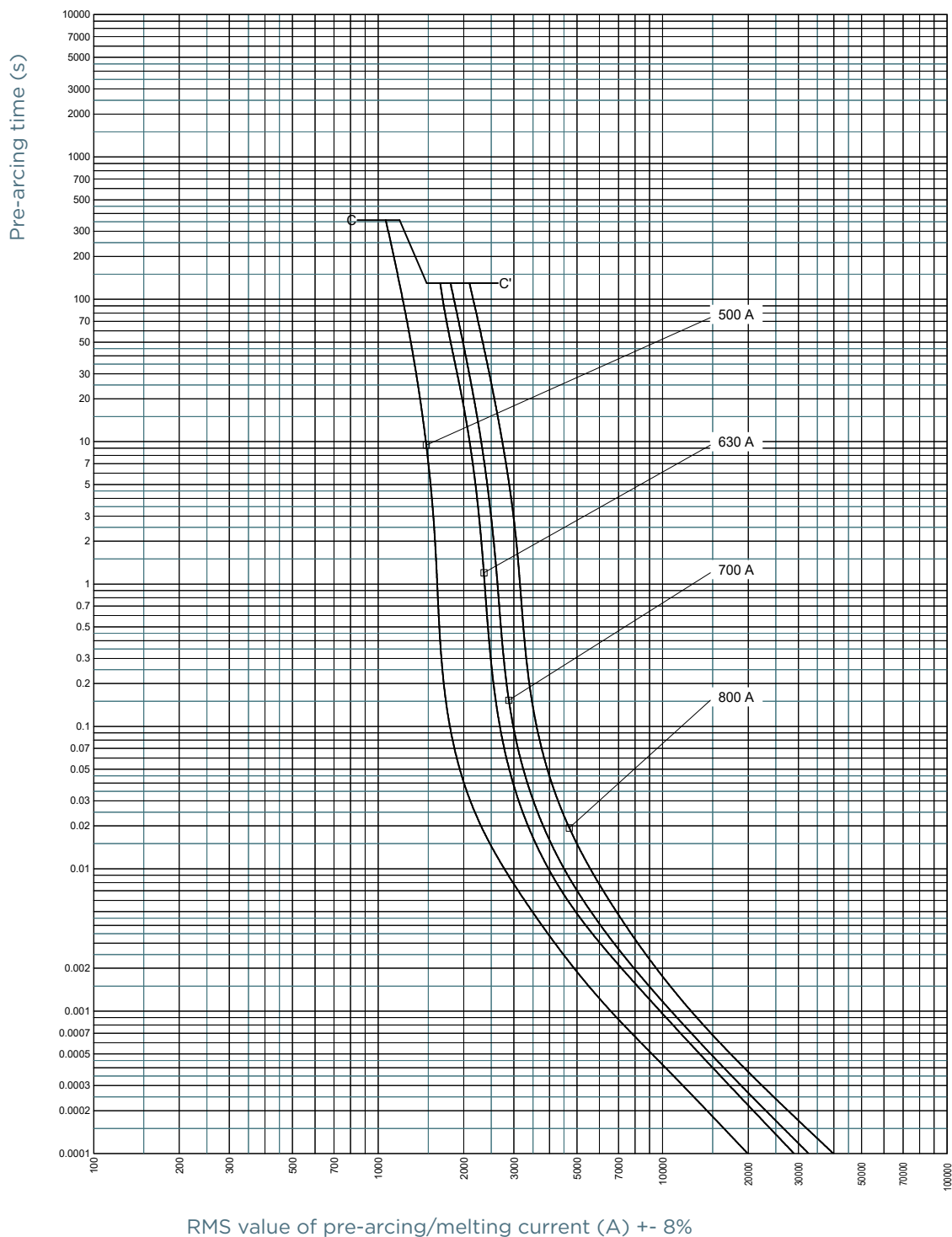
2000VDC

## PRODUCT RANGE

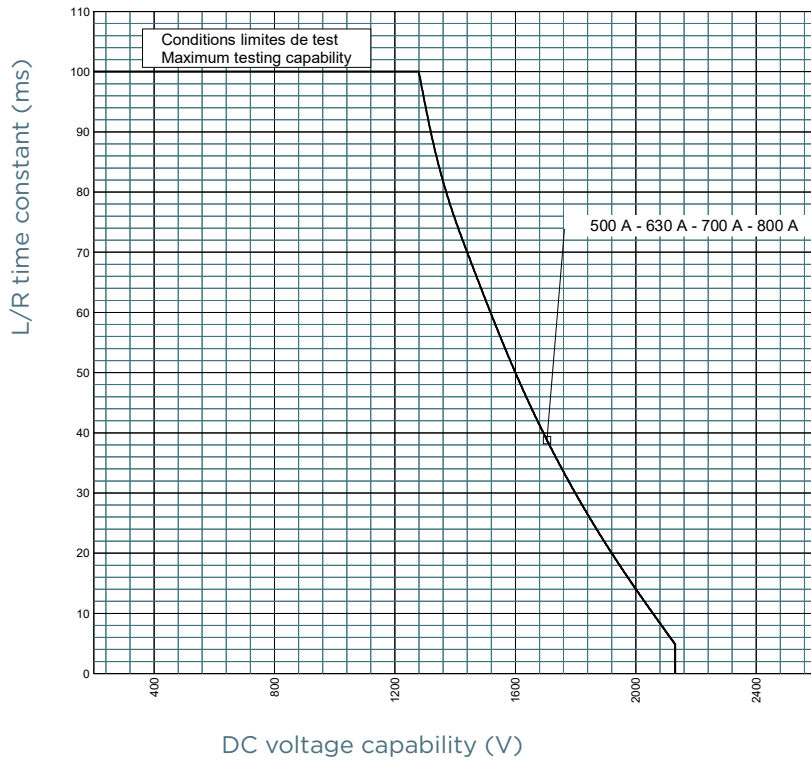
### Size 2x122 SR 2000VDC

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity DC	Max. total I <sup>2</sup> t @1600V for L/R=15ms	Max. total I <sup>2</sup> t @1600V for L/R=45ms	Power dissipation at I <sub>n</sub>	Power dissipation at 0.8 I <sub>n</sub>	Package	Weight
D2122SD20C500QF	E076640	2000 V	500 A	36127 A <sup>2</sup> s	100 kA	200000 A <sup>2</sup> s	348000 A <sup>2</sup> s	274 W	145 W	1	3.35 kg
D2122SD20C630QF	F076641	2000 V	630 A	83886 A <sup>2</sup> s	100 kA	468000 A <sup>2</sup> s	800000 A <sup>2</sup> s	314 W	155 W	1	3.35 kg
D2122SD20C700QF	P097970	2000 V	700 A	106168 A <sup>2</sup> s	100 kA	592000 A <sup>2</sup> s	1004000 A <sup>2</sup> s	332 W	161 W	1	3.35 kg
D2122SD20C800QF	V096066	2000 V	800 A	158597 A <sup>2</sup> s	100 kA	876000 A <sup>2</sup> s	1520000 A <sup>2</sup> s	367 W	182 W	1	3.35 kg

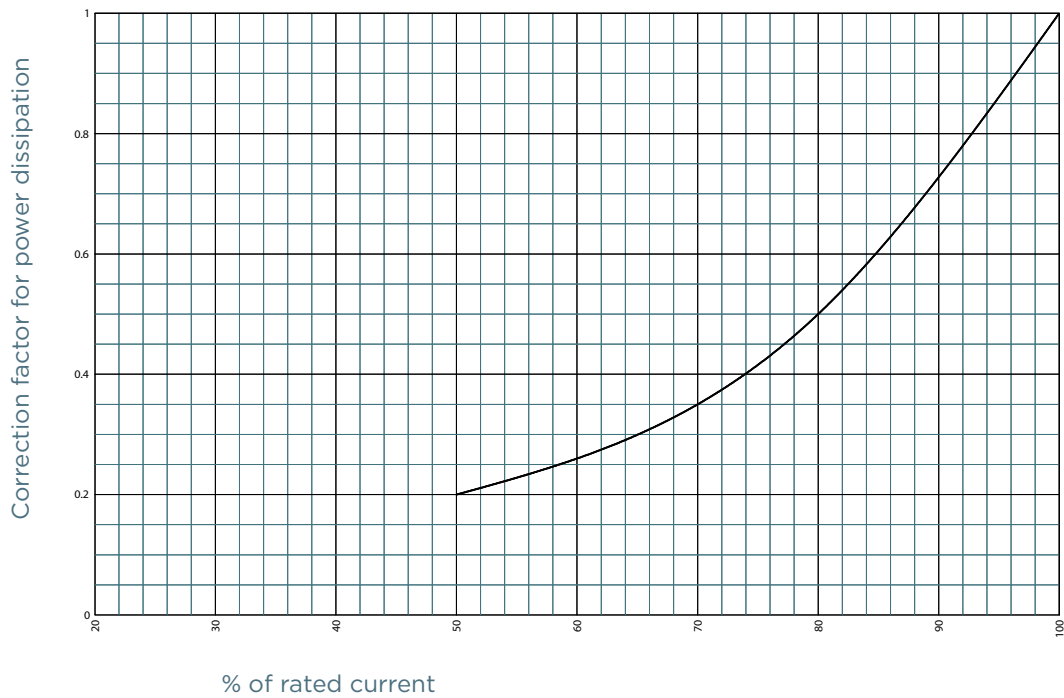
## TIME CURRENT CHARACTERISTIC CURVES



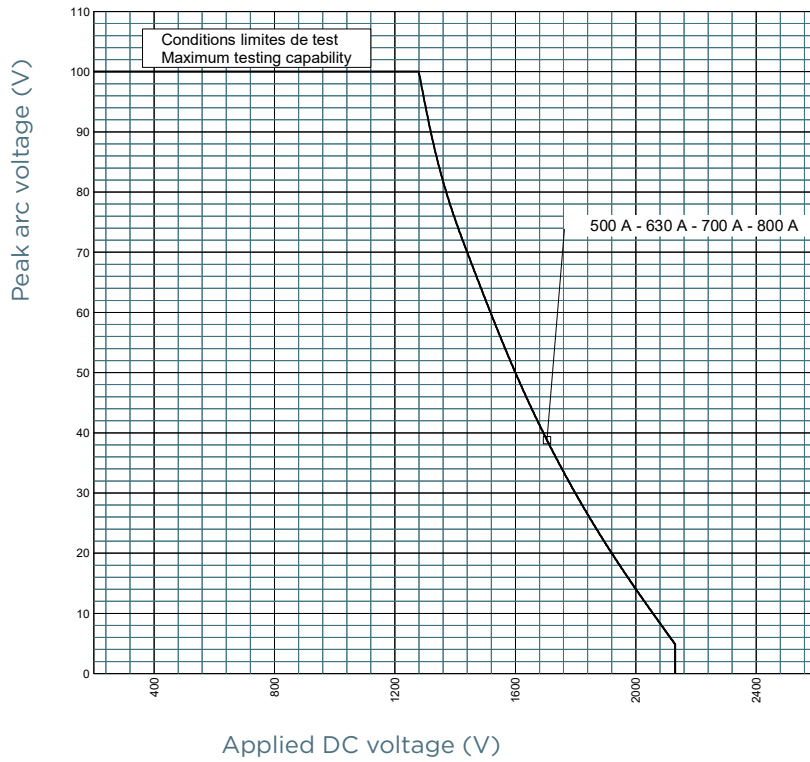
## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY



## POWER DISSIPATION

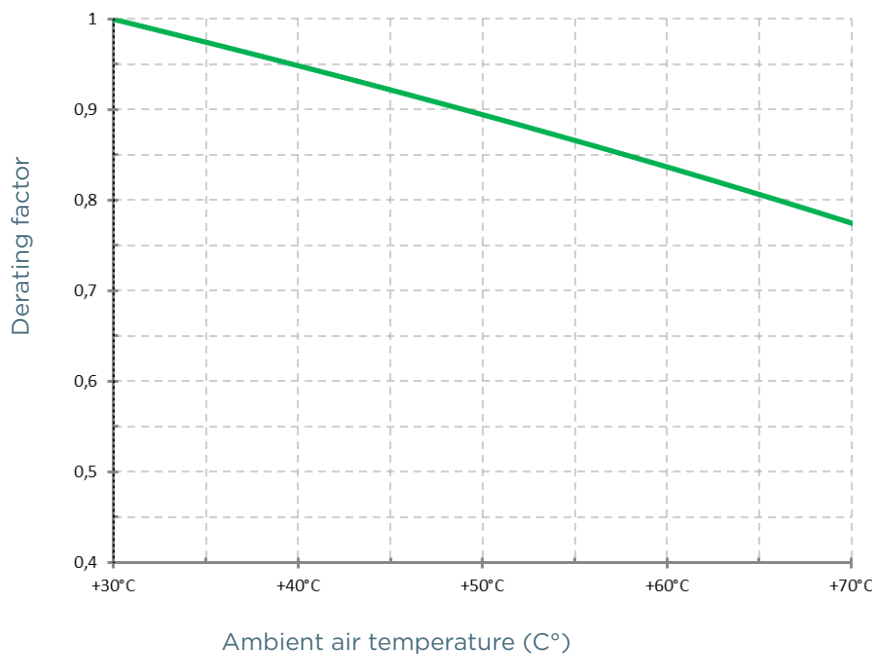


## PEAK ARC VOLTAGE



## TEMPERATURE DERATING

Derating factor of rated current according to ambient air temperature (C°)

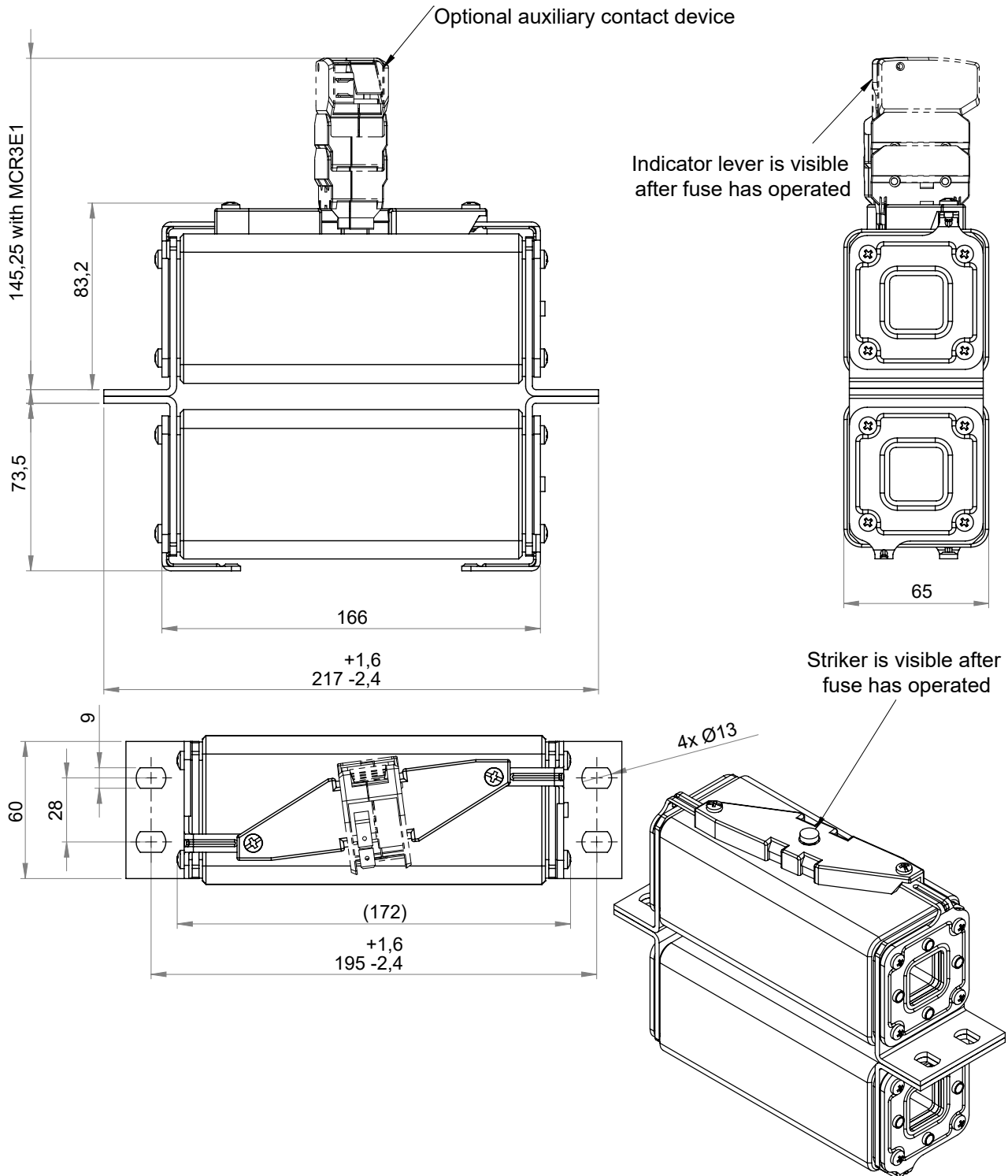


# Protistor® size 2x122 aR

2000VDC

## DIMENSIONS

### Size 2x122aR 2000VDC



These fuses are double bodies fuses. They are delivered by pair, connected by a plastic clip: the 2 fuses are matched in resistance. Plastic clip can be removed but :

- rated current, 500A to 800A, is ensured by these two fuses in parallel,
- do not mix bodies with other ones from other pair of fuses.

Dimensions in mm

Semiconductor Protection Fuses / DS-PFS312SD22-06-0924-EN

EP.MERSEN.COM

© 2024 Mersen products have been designed by Mersen for a range of specific applications to be operated depending on particular specification and conditions. Mersen makes no representation or/and warranty, and waives any liability, either express or implied for products' reliability and life time or technical performance in case Mersen has not been provided with customer's specifications or if the products are not purchased directly from Mersen or its distributors and/or agents.

**MERSEN**  
Expertise, our source of energy