

Protistor® size 122 aR

2000VDC

SEMICONDUCTOR PROTECTION FUSES

SQUARE BODY HIGH-SPEED FUSE-LINKS DC PROTECTION



Mersen DC offers provide a very high performing protection for railway power 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 in extreme environment more than other fuse type, have lower I²t to minimize damage to protected components on short circuits, lower watts loss and longer life time.

TECHNICAL DATA OVERVIEW

Voltage DC	2000 VDC
Ampere Range (A)	160 ... 400 A
Speed/Characteristic	aR
Product Size	122
Weight	1.81 kg

FEATURES & BENEFITS

- Extremely fast acting
- Extremely current limiting
- Very low I²t
- 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

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PRODUCT RANGE



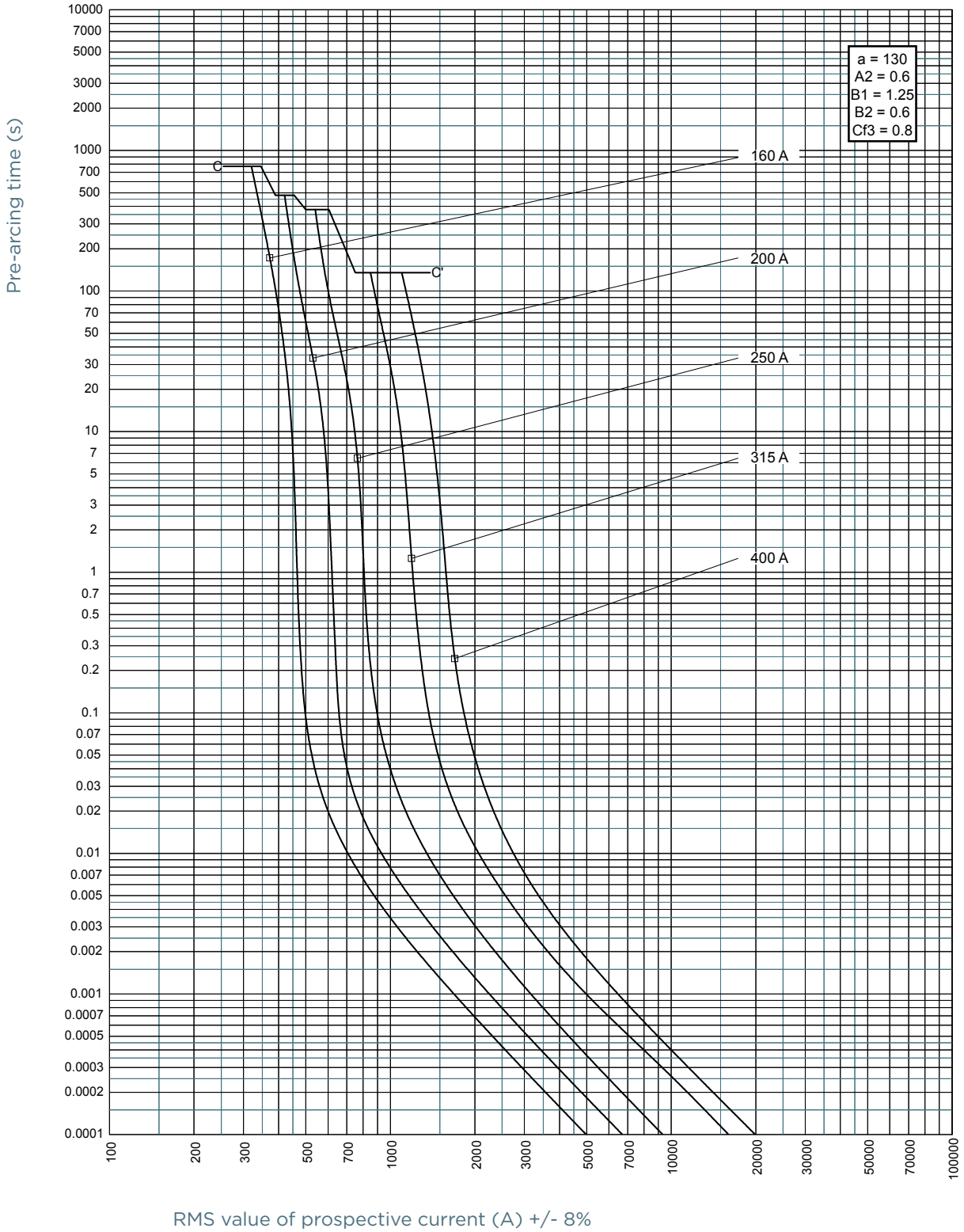
D122SD20C400QF

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Catalog number	Item number	Rated current I_n	Rated breaking capacity DC	Power dissipation at $0.8 I_n$	Power dissipation at I_n	Max. total I^2t @1600V for L/R=15ms	Max. total I^2t @1600V for L/R=45ms	Package	Weight
D122SD20C160QF	D076639	160 A	100 kA	52.5 W	100 W	15000 A ² s	25000 A ² s	1	1.81 kg
D122SD20C200QF	X079462	200 A	100 kA	61.5 W	118 W	26000 A ² s	44000 A ² s	1	1.81 kg
D122SD20C250QF	Y079463	250 A	100 kA	69 W	131 W	50000 A ² s	87000 A ² s	1	1.81 kg
D122SD20C315QF	Z079464	315 A	100 kA	74 W	150 W	117000 A ² s	200000 A ² s	1	1.81 kg
D122SD20C400QF	A079465	400 A	100 kA	87 W	175 W	219000 A ² s	380000 A ² s	1	1.81 kg

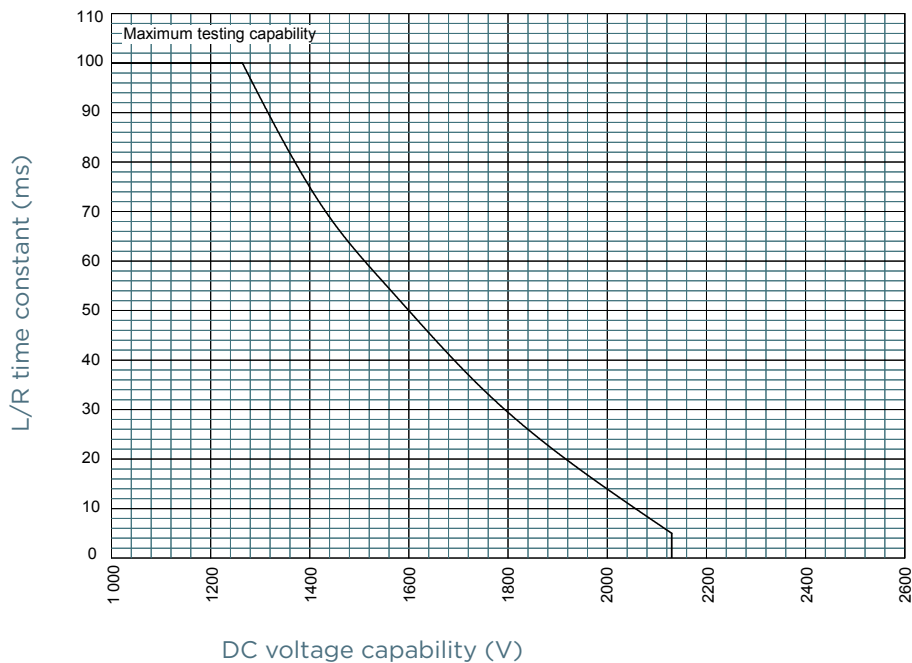
TIME CURRENT CHARACTERISTIC CURVES

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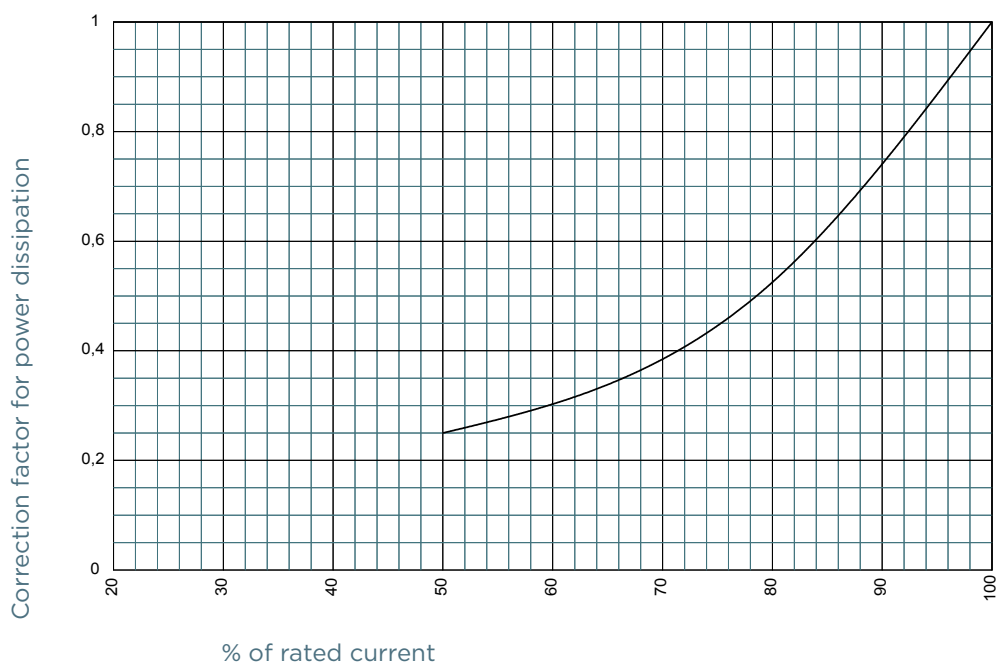
L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

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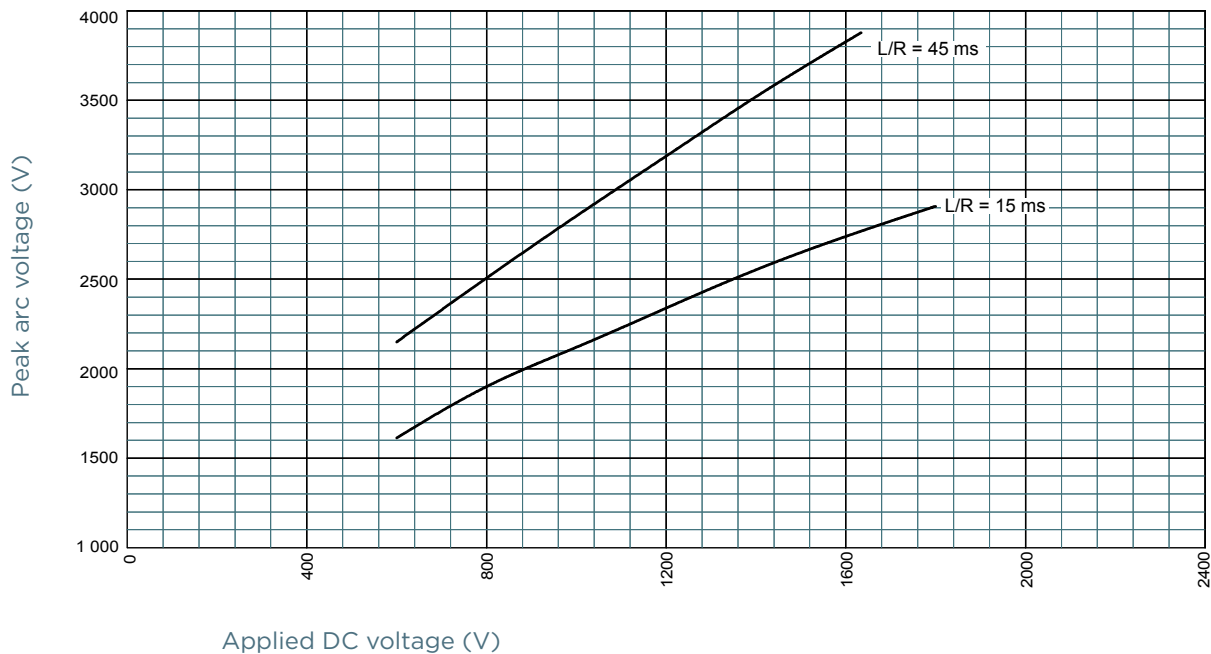
POWER DISSIPATION

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PEAK ARC VOLTAGE

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DIMENSIONS

Size 122aR 2000VDC

Dimensions in mm

ACCESSORIES

Microswitches

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage DC (IEC)	Rated current I _n	AC voltage withstand test ¹	Impulse withstand voltage U _{imp} 1.2/50µs ²	Rated impulse withstand voltage U _{imp}	Indication System	Breaking capacity, Non inductive circuit, 30V / 110V / 250V	Breaking capacity, Inductive circuit: L/R=25ms, 30V / 110V / 250V	Pack-age	Weight
Insulation Voltage 2200VAC/VDC												
MCR3E1-5N	G310023	2200 V	2200 V	5 A	20 kV	30 kV	30 kV	Standard	5A / 0,5A / -	- / 1,6A / 0,3A	1	60 g
MCR3E1-5N	G310023	2200 V	2200 V	5 A	20 kV	30 kV	30 kV	Standard	5A / 0,5A / -	- / 1,6A / 0,3A	1	60 g

¹ Between power circuit and microswitch terminals as per IEC 60 and 694 and NFC 64010 (50/60 Hz 1 min duration in dry air)

² Between power circuit and microswitch terminals U_{imp}: impulse voltage as per IEC 60947-1