Protistor® size 120 aR

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.

To complete these fuse-links Mersen recommende to use the standard microswitch (ref. G310023, MCR3E1-5N).

TECHNICAL DATA OVERVIEW

Voltage DC	2000 VDC
Tollago D o	2000 120
Ampere Range (A)	20 215 A
Speed/Characteristic	aR
Product Size	120
Package	1 unit

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
- EES Battery Rack protection

STANDARDS

• IEC 60269-4 compliance





Protistor® size 120 aR

PRODUCT RANGE



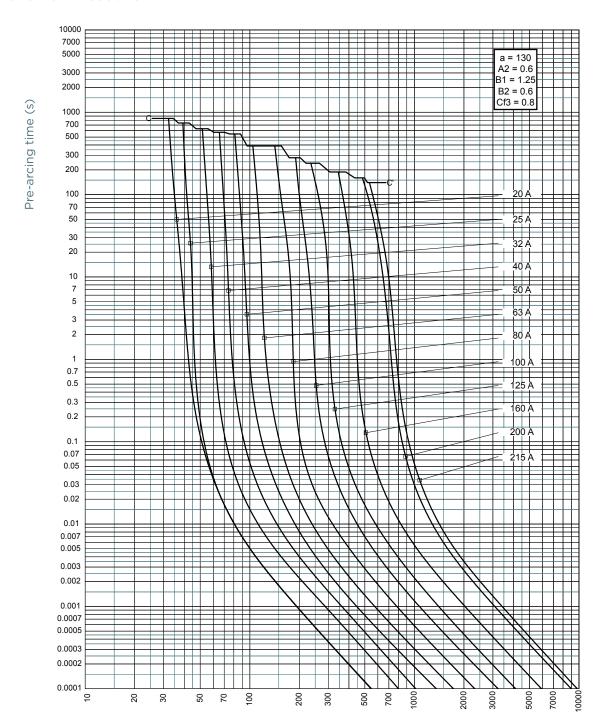
D120SC20C20QF

Size 120 SR 2000VDC

Catalog number	Item number	Rated voltage DC (IEC)	Rated current In	Rated breaking capacity DC	Max. total I ² t @1000V for L/R=15ms	Max. total I ² t @1000V for L/R=45ms	Power dissipation	Power dissipation at 0.8 In	Weight
D120SC20C20QF	J079450	2000 V	20 A	100 kA	180 A²s	310 A²s	16 W	8 W	0.9 kg
D120SC20C25QF	K079451	2000 V	25 A	100 kA	180 A²s	310 A²s	25 W	12.5 W	0.9 kg
D120SC20C32QF	L079452	2000 V	32 A	100 kA	350 A²s	610 A²s	29.5 W	14.5 W	0.9 kg
D120SC20C40QF	M079453	2000 V	40 A	100 kA	580 A²s	1000 A²s	36 W	17.5 W	0.9 kg
D120SC20C50QF	N079454	2000 V	50 A	100 kA	1030 A²s	1800 A²s	42 W	20.5 W	0.9 kg
D120SC20C63QF	P079455	2000 V	63 A	100 kA	1600 A²s	2800 A²s	53.5 W	26 W	0.9 kg
D120SC20C80QF	Q079456	2000 V	80 A	100 kA	3100 A²s	5400 A²s	61.5 W	30 W	0.9 kg
D120SC20C100QF	R079457	2000 V	100 A	100 kA	5800 A²s	10000 A²s	70.5 W	35 W	0.9 kg
D120SC20C125QF	S079458	2000 V	125 A	100 kA	9200 A²s	16000 A²s	87.5 W	43 W	0.9 kg
D120SC20C160QF	T079459	2000 V	160 A	100 kA	19200 A²s	33200 A²s	99 W	49 W	0.9 kg
D120SC20C200QF	V079460	2000 V	200 A	100 kA	45000 A²s	78500 A²s	101 W	49.5 W	0.9 kg
D120SC20C215QF	W079461	2000 V	215 A	100 kA	55000 A ² s	95000 A²s	106 W	52 W	0.9 kg

TIME CURRENT CHARACTERISTIC CURVES

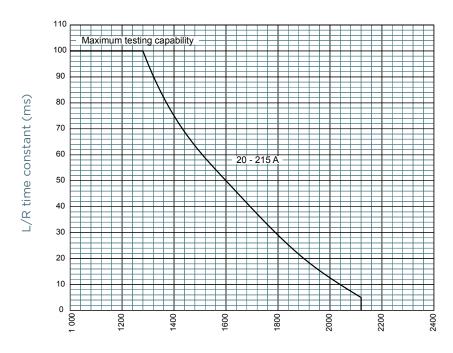
Size 120 aR 2000VDC



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

L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

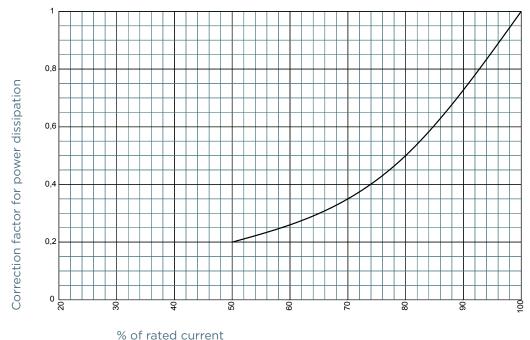
Size 120 aR 2000VDC



DC voltage capability (V)

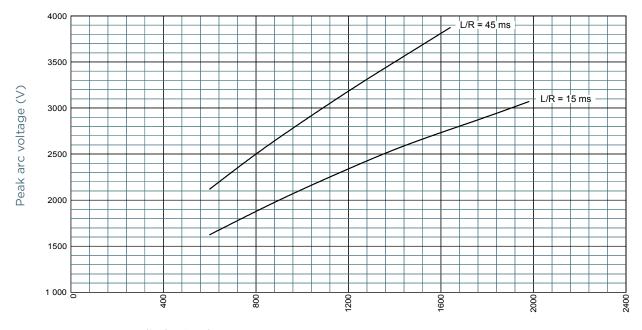
POWER DISSIPATION

Size 120 aR 2000VDC



PEAK ARC VOLTAGE

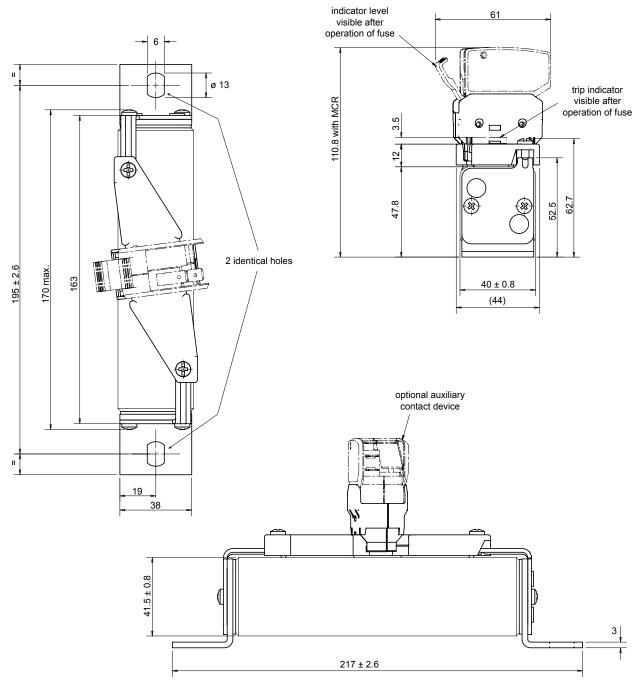
Size 120 aR 2000VDC



Applied DC voltage (V)

DIMENSIONS

Size 120aR 2000VDC



Dimensions in mm