

# Protistor® size 70 aR

1200VDC (IEC)

## 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<sup>2</sup>t to minimize damage to protected components on short circuits, lower watts loss and longer life.

#### TECHNICAL DATA OVERVIEW

Voltage DC	1200 VDC
Ampere Range (A)	20 ... 215 A
Speed/Characteristic	aR
Product Size	70
Package	1
Weight	0.68 kg

#### FEATURES & BENEFITS

- Extremely fast acting
- Excellent cycling capability
- Very low I<sup>2</sup>t
- Worldwide acceptability
- Current Limiting
- Superior Cycling Ability

#### APPLICATIONS

- Protection of inverters
- Protection of motor drives
- Protection of UPS systems
- Railway power and auxiliary circuits
- ESS Battery Rack protection up to 1500 VDC

#### STANDARDS

- IEC 60269-1 and IEC 60269-4 Compliance
- DC UL recognized component  
UL file E76491
  - 20A-215A, @1200VDC, L/R 10ms, 100KA
  - 20A-215A, @1500VDC, L/R 1-3ms, 100KA
- GB/T 13539.4-2016



# Protistor® size 70 aR

## 1200VDC (IEC)

### PRODUCT RANGE



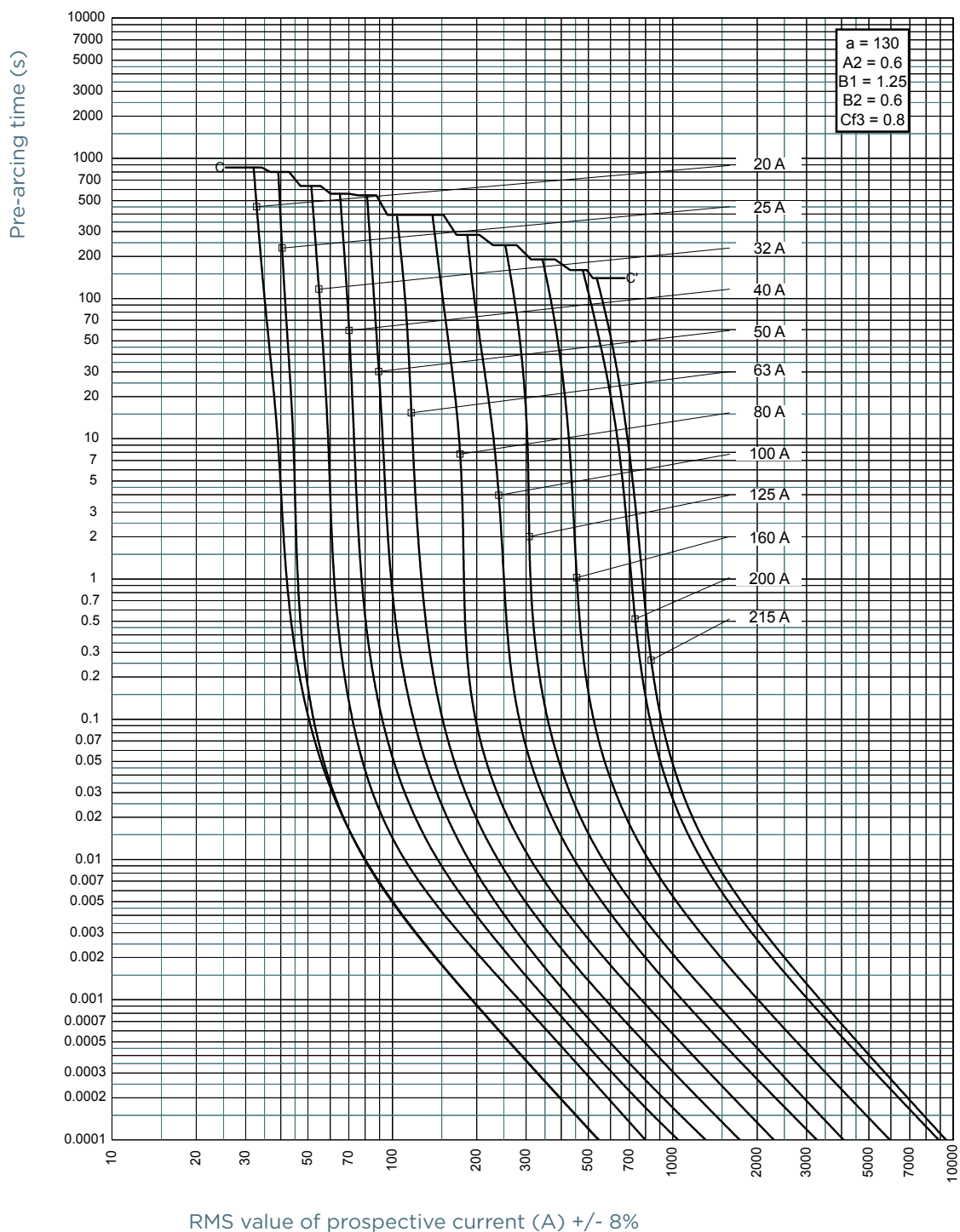
D70SF120V20QF

#### Size 70 aR 1200VDC(IEC), with striker

Catalog number	Item number	Rated voltage DC (IEC)	Rated current $I_n$	Rated breaking capacity DC	Max. total $I^2t$ @1000V for L/R=15ms	Max. total $I^2t$ @1000V for L/R=45ms	Power dissipation at $I_n$	Power dissipation at $0.8 I_n$
D70SF120V20QF	C076638	1200 V	20 A	100 kA	0.18 kA <sup>2</sup> s	0.31 kA <sup>2</sup> s	10 W	4.5 W
D70SF120V25QF	S079435	1200 V	25 A	100 kA	0.18 kA <sup>2</sup> s	0.31 kA <sup>2</sup> s	15.5 W	7 W
D70SF120V32QF	T079436	1200 V	32 A	100 kA	0.35 kA <sup>2</sup> s	0.61 kA <sup>2</sup> s	18.5 W	8.5 W
D70SF120V40QF	V079437	1200 V	40 A	100 kA	0.58 kA <sup>2</sup> s	1 kA <sup>2</sup> s	22 W	10 W
D70SF120V50QF	W079438	1200 V	50 A	100 kA	1.03 kA <sup>2</sup> s	1.8 kA <sup>2</sup> s	26 W	12 W
D70SF120V63QF	X079439	1200 V	63 A	100 kA	1.6 kA <sup>2</sup> s	2.8 kA <sup>2</sup> s	33 W	15 W
D70SF120V80QF	Y079440	1200 V	80 A	100 kA	3.1 kA <sup>2</sup> s	5.4 kA <sup>2</sup> s	37.5 W	18.5 W
D70SF120V100QF	Z079441	1200 V	100 A	100 kA	5.8 kA <sup>2</sup> s	10 kA <sup>2</sup> s	44.5 W	21.5 W
D70SF120V125QF	A079442	1200 V	125 A	100 kA	9.2 kA <sup>2</sup> s	16 kA <sup>2</sup> s	54 W	28 W
D70SF120V160QF	B079443	1200 V	160 A	100 kA	19.2 kA <sup>2</sup> s	33.2 kA <sup>2</sup> s	64 W	34 W
D70SF120V200QF	C079444	1200 V	200 A	100 kA	45 kA <sup>2</sup> s	78.5 kA <sup>2</sup> s	65.5 W	35 W
D70SF120V215QF	D079445	1200 V	215 A	100 kA	55 kA <sup>2</sup> s	95 kA <sup>2</sup> s	89 W	46 W

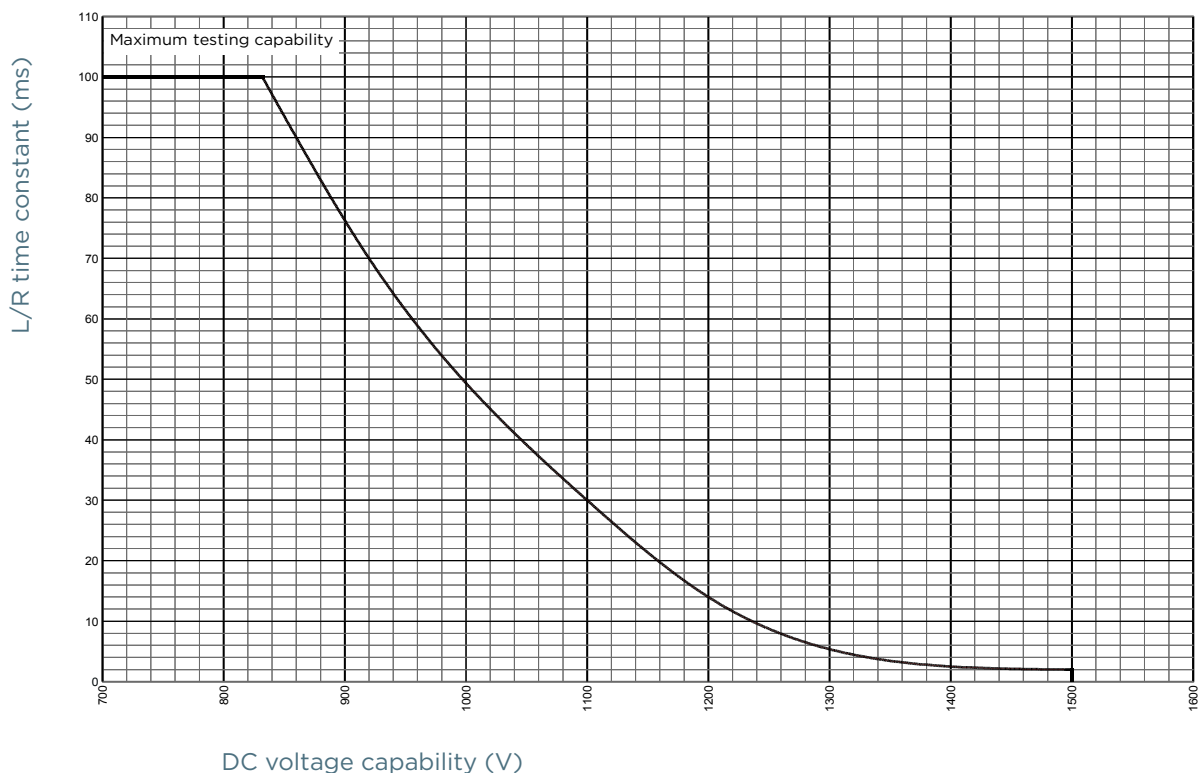
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TIME CURRENT CHARACTERISTIC CURVES

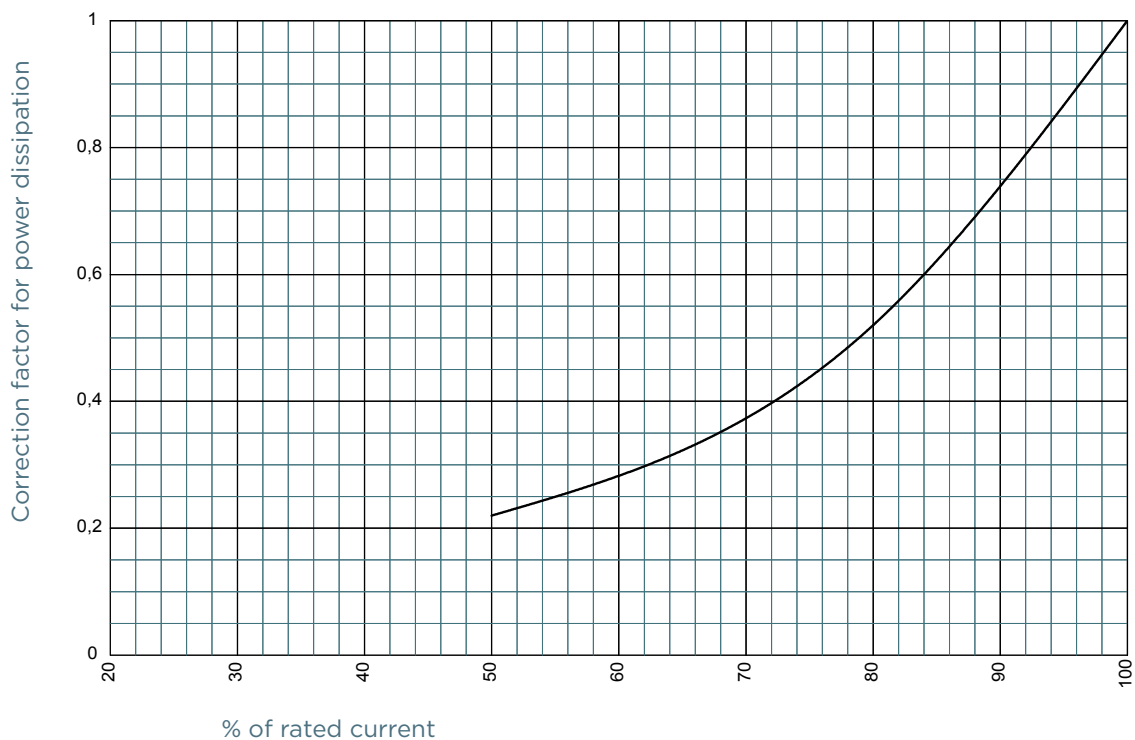


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## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY



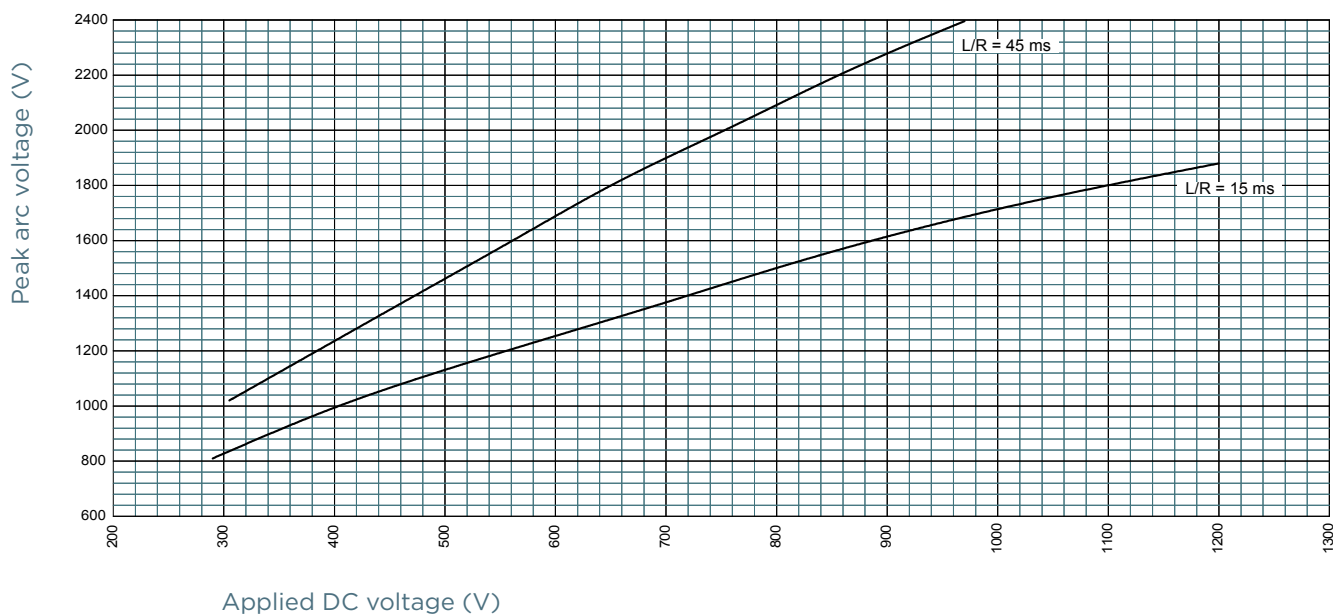
## POWER DISSIPATION



# Protistor® size 70 aR

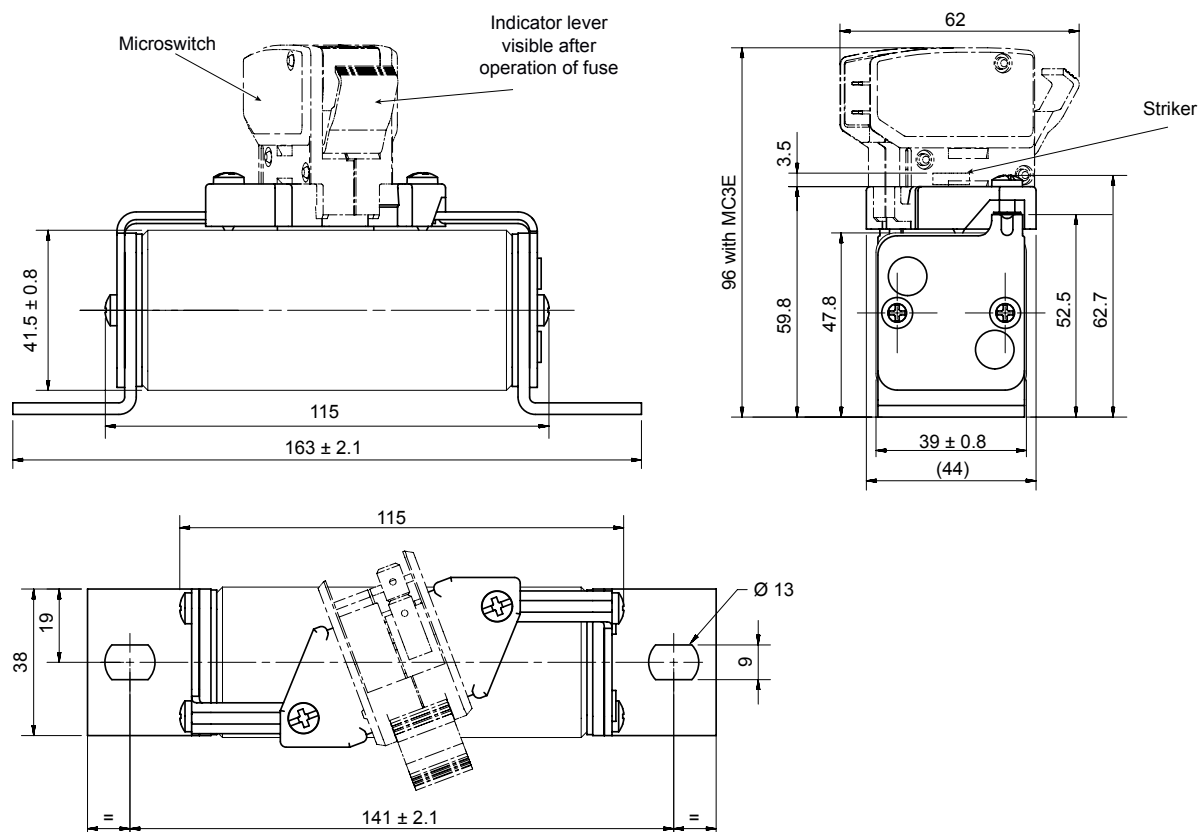
1200VDC (IEC)

## PEAK ARC VOLTAGE



## DIMENSIONS

### Size 70 aR 1200VDC(IEC)/1500VDC (UL)



Dimensions in mm