D100A 1000VDC MAX.

1000VDC (IEC/UL), L/R ≤ 3MS, 100-600A

DC PROTECTION FUSES

ROUND BODY HIGH-SPEED FUSE-LINKS DC PROTECTION

The D100A line-up belongs to the new DC Over-Current protection (O.C.P.) range developed by Mersen to address the specific needs in DC protection for Battery and Charging Station safety. Along with the ability to withstand heavy duty cycling and low power losses improving system reliability and efficiency, it makes them ideal for charging systems, UPS, and DC power conversion equipment.

TECHNICAL DATA OVERVIEW

Rated Voltage DC (IEC/UL)	1000VDC L/R≤3ms
Ampere Range	150 – 600A
I.R. DC at rated voltage	100kA
MBC at rated voltage	3xIn
Fuse Class	aBat
Body Material	GMG
Contact Materials	Tin plated copper
Operating Temperature Range	-40°C to 125°C

FEATURES & BENEFITS

- Designed for DC applications
- Low watt losses
- High cycling performance
- Ultra compact size
- Low peak let-through current

APPLICATIONS

- EV Charging Stations
- DC Distribution Systems
- Power Conversion Systems
- Hybrid Inverter
- UPS
- Electrical Energy Storage (EES)
- Not intended for E-Mobility applications

APPROVALS

- IEC 60 269-7
- UL/cUL recognized component, UL file E523293

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PRODUCT RANGE

Catalog number	Rated voltage DC (IEC/UL)	Rated current I_n	Pre-arcing I^2t	Clearing I^2t at Rated Voltage	Power dissipation at $0.5I_n$	Min. breaking capacity (MBC) at rated voltage and L/R≤3ms	Weight
Ø30mm							
D100A150-30B	1000 V	150 A	4 500 A²s	17 400 A²s	5.1 W	450 A	118 g
D100A175-30B	1000 V	175 A	7 100 A²s	27 500 A²s	5.6 W	525 A	118 g
D100A200-30B	1000 V	200 A	10 600 A²s	41 200 A²s	6.3 W	600 A	118 g
Ø38mm							
D100A225-38B	1000 V	225 A	12 110 A²s	44 300 A²s	7.1 W	750 A	201 g
D100A250-38B	1000 V	250 A	15 300 A²s	56 100 A²s	7.8 W	750 A	201 g
D100A300-38B	1000 V	300 A	27 300 A²s	83 000 A²s	8.8 W	900 A	201 g
Ø50mm							
D100A350-50B	1000 V	350 A	34 500 A²s	106 kA²s	10.9 W	1050 A	354 g
D100A400-50B	1000 V	400 A	47 000 A²s	145 kA²s	12.2 W	1200 A	354 g
Ø60mm							
D100A450-60B	1000 V	450 A	58 000 A²s	224 kA²s	14.2 W	1350 A	505 g
D100A500-60B	1000 V	500 A	77 600 A²s	300 kA²s	15.1 W	1500 A	505 g
D100A550-60B	1000 V	550 A	95 800 A²s	370 kA²s	16.9 W	1650 A	505 g
D100A600-60B	1000 V	600 A	126.7 kA²s	490 kA²s	17.5 W	1800 A	505 g

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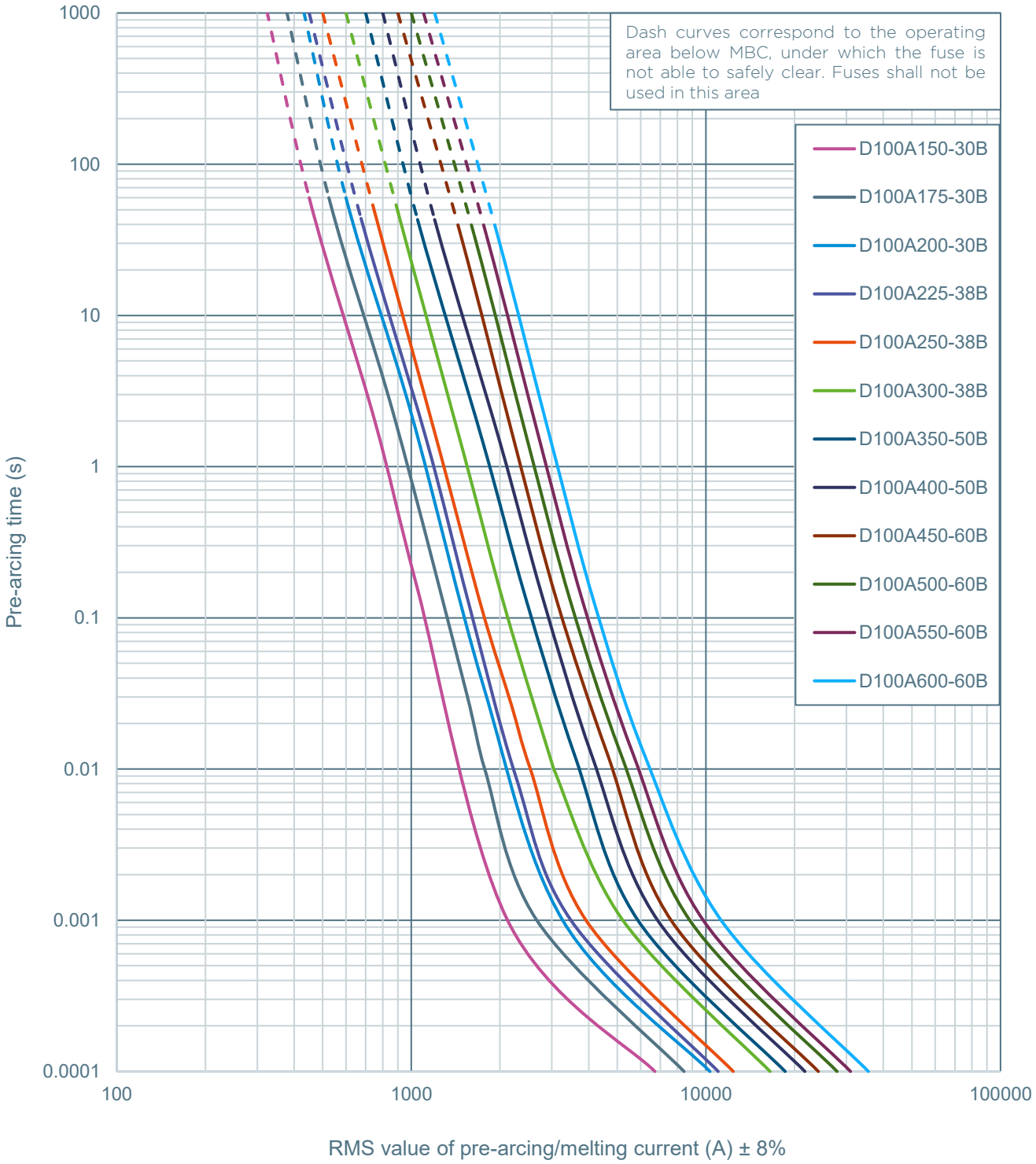
TIME CURRENT CHARACTERISTICS

D100A (150-600A)



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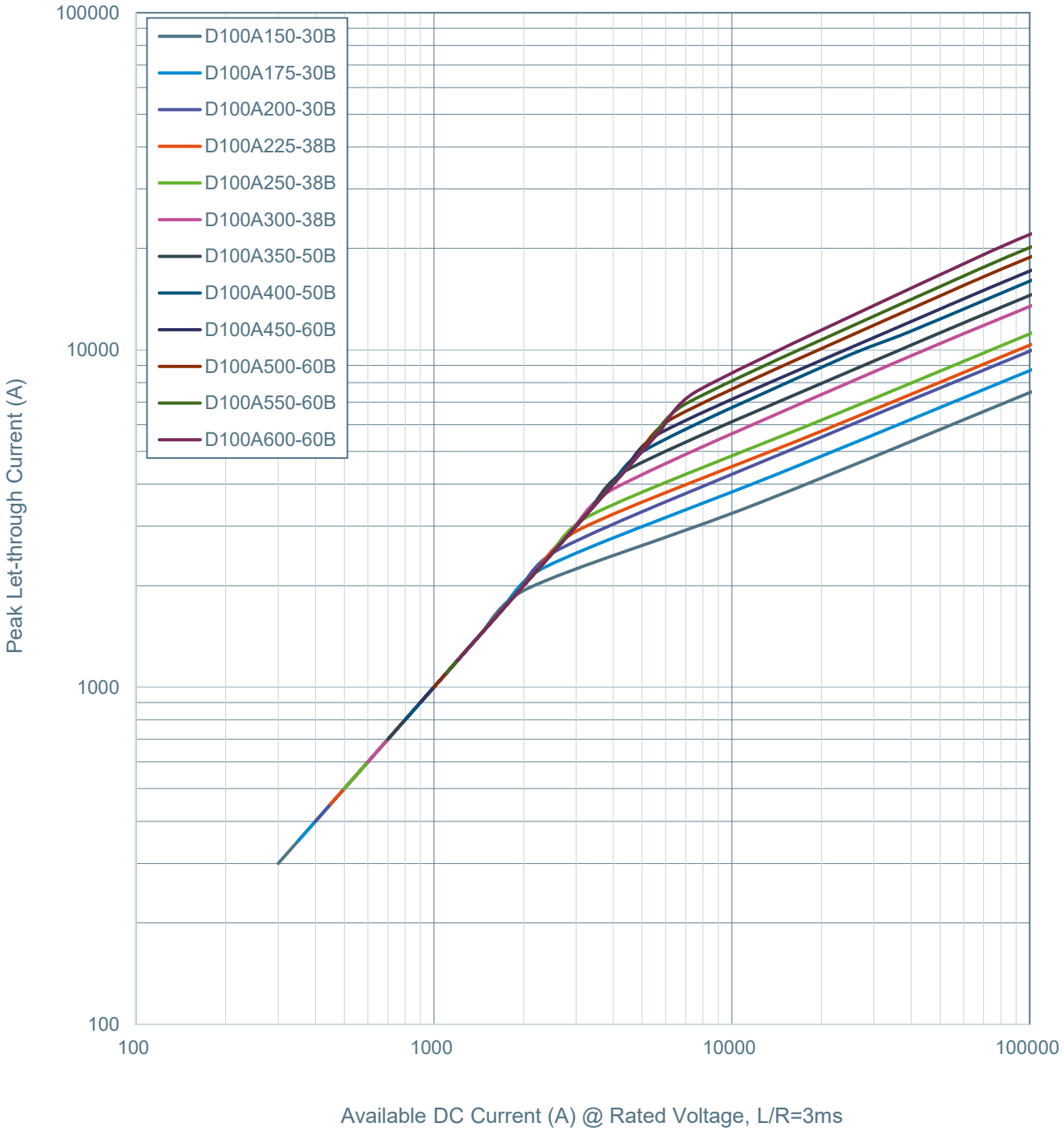
CUT-OFF CURRENT CHARACTERISTIC

D100A (150-600A)



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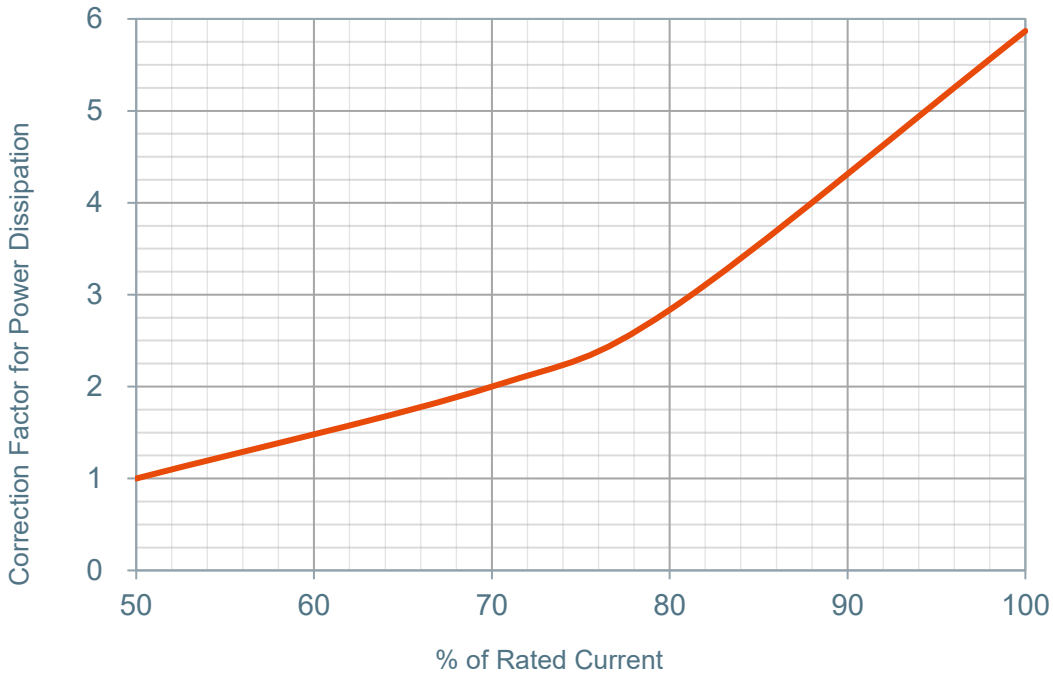
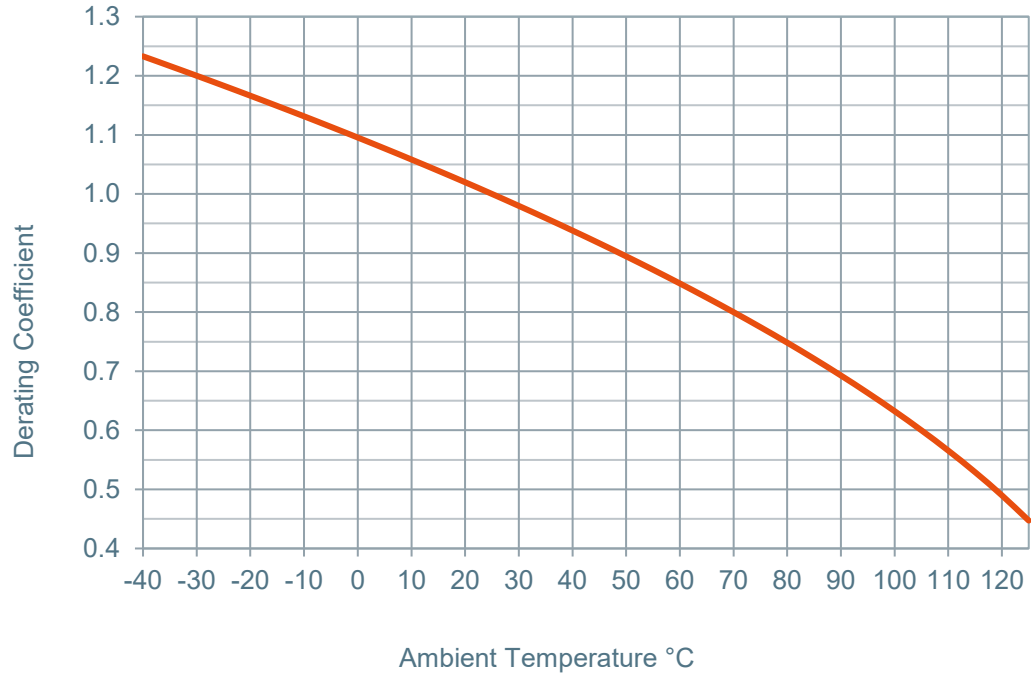
POWER DISSIPATION

D100A (150-600A)



TEMPERATURE DERATING

D100A (150-600A)



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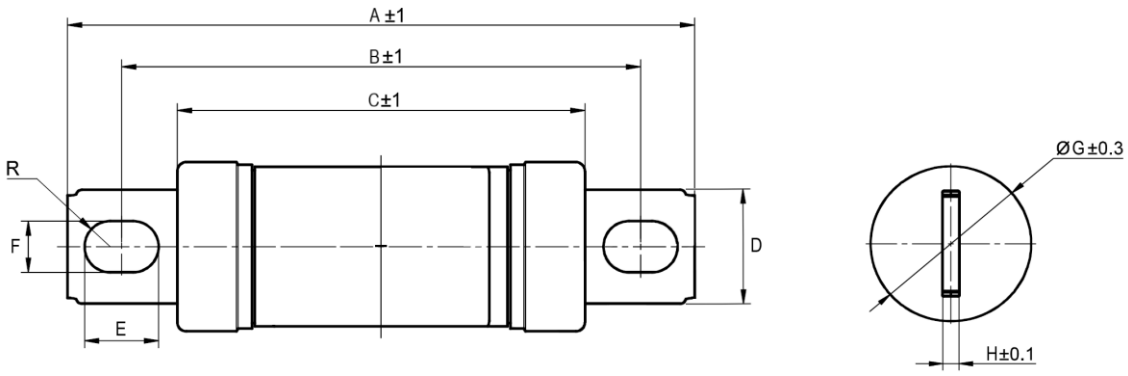
DIMENSIONS

D100A (150-600A)



Size / Ratings	A	B	C	D	E	F	G	H
Ø30mm – 150 to 200A	111	92	72.4	20	13	9	29.8	3
Ø38mm – 250 to 300A	122	98	72	30	14.5	11	37.8	3
Ø50mm – 350 to 400A	122	100	72	30	13	11	49.8	5
Ø60mm – 450 to 600A	122	100	72.4	30	13	11	60.1	5

Dimensions in mm

ACCESSORIES

Modular Fuse blocks

1SCM8

Catalog number	Maximum Voltage Rating (V)	Maximum Current (A)	Connector Type	Contact Materials	Tightening torque (max.) (N-m)	Weight (g)	Figure
1SCM8	1500	400	M8 Stud	Zinc-Plated Steel	6.8	68	1
1SCM10	1500	800	M10 Stud	Zinc-Plated Steel	6.9	68	2

Sold in pairs

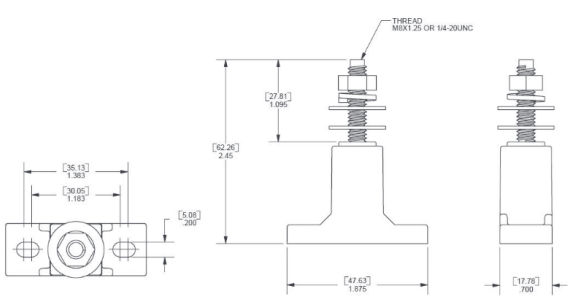


Figure 1

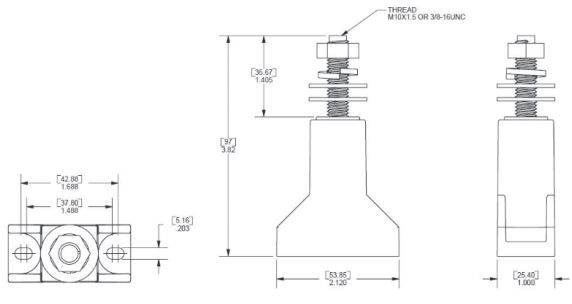


Figure 2

Dimensions in inches [mm]

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