

# MDC15A - DC Distribution Fuse

1500VDC 10x85mm Auxiliary Fuse

SPECIAL PURPOSE

FOR DC DISTRIBUTION



**MDC**  
DC Distribution Series

With the evolution of DC distribution and new technologies on the horizon, Mersen's MDC DC Distribution Series is the product line to help customers achieve ultimate protection for today and tomorrow. The product portfolio allows system integrators and OEM manufacturers to select fuses easily for the protection of DC distribution in a variety of applications.

The MDC Series incorporates proven fuse technologies which provide optimal current limitation while achieving maximum performance. The MDC portfolio is designed to easily allow customers to choose fuses where coordination with other DC components is critical, eliminating unnecessary downtime.

Technical Data Overview	
Volts	1500VDC
Amps	4A-32A
IR	50kA @ 1500VDC
DC MBC	2.0 x In @ Rated Voltage L/R ≤1ms

## FEATURES/BENEFITS

- Designed for DC applications
- Low watt losses
- High cycling performance
- Low & high current interrupting capability
- Ultra compact size

## APPLICATIONS

- DC Distribution
- DC Cabling and Bus
- DC Auxiliary Circuits
- Electrical Energy Storage
- EV Charging
- Critical Power
- UPS Protection

## APPROVALS/STANDARDS

- UL Listed File E333668



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## CATALOG NUMBERS

Ferrule					Surface Mount				
 <b>MDC15A32</b> 32 Amp <b>MDC</b>					 <b>MDC15A32S</b> 32 Amp <b>MDC</b>				
 <b>MDC15A32</b>					 <b>MDC15A32S</b>				
<b>MDC15A32</b>									
Catalog Number		Rated Voltage (VDC)	Rated Current (A)	DC Min. Breaking Capacity (MBC)*	DC Max Interrupting Rating (kA)	Melting I <sup>2</sup> t (A <sup>2</sup> s)	clearing I <sup>2</sup> t at 1000VDC, 10kA, L/R = 1ms	DC Time Constant L/R (ms)	
MDC15A4	MDC15A4S	1500	4	8	50	10	30	≤1	
MDC15A5	MDC15A5S	1500	5	10	50	34	56	≤1	
MDC15A6	MDC15A6S	1500	6	12	50	52	79	≤1	
MDC15A7	MDC15A7S	1500	7	14	50	86	16	≤1	
MDC15A8	MDC15A8S	1500	8	16	50	134	241	≤1	
MDC15A10	MDC15A10S	1500	10	20	50	240	702	≤1	
MDC15A12	MDC15A12S	1500	12	24	50	26	216	≤1	
MDC1515A	MDC1515AS	1500	15	30	50	69	478	≤1	
MDC15A20	MDC15A20S	1500	20	40	50	118	868	≤1	
MDC15A25	MDC15A25S	1500	25	50	50	197	1371	≤1	
MDC15A30	MDC15A30S	1500	30	60	50	320	1942	≤1	
MDC15A32	MDC15A32S	1500	32	64	50			≤1	

\*Fuse Minimum Breaking Capacity (MBC): the smallest current the fuse has been tested to safely clear at a given voltage and time constant

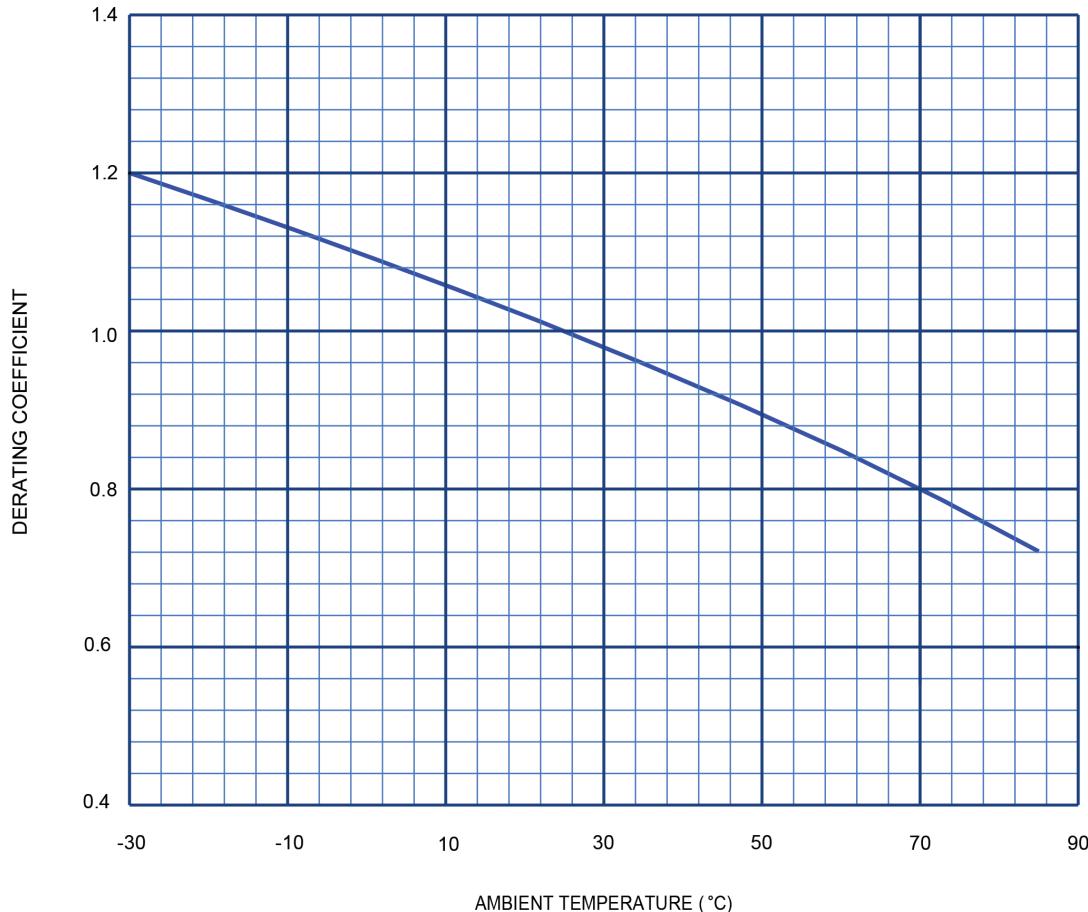
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## AMPERE RATING VS AMBIENT TEMPERATURE

MDC15A



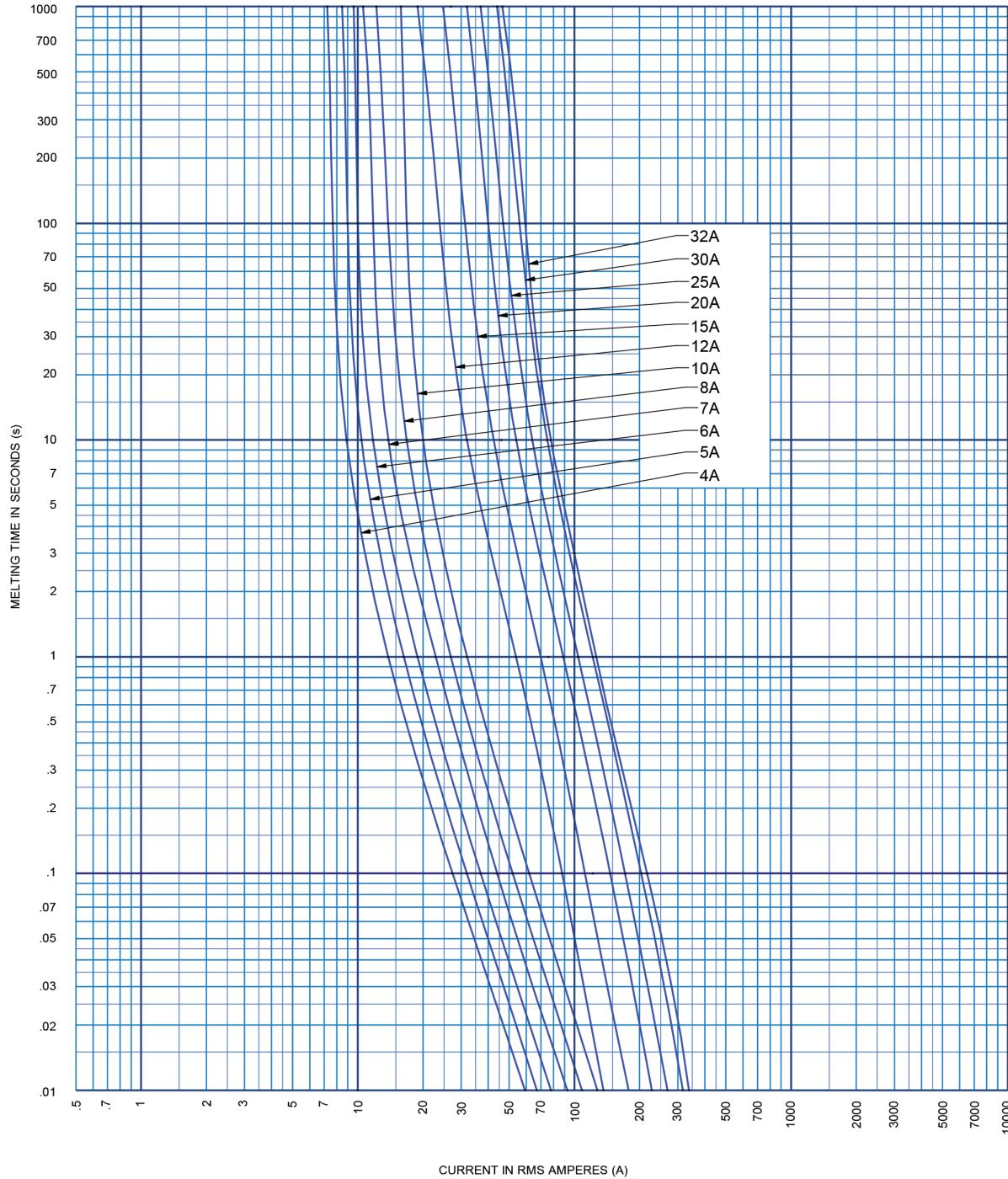
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## AVERAGE MELTING TIME CURRENT CURVE

MDC15A



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## I<sup>2</sup>t DATA @ 1500VDC

### MDC15A

Ampere Rating	Melting I <sup>2</sup> t [A <sup>2</sup> s] (calculated)	Clearing I <sup>2</sup> t [A <sup>2</sup> s]
4	10	30
5	34	56
6	52	79
7	86	160
8	134	241
10	240	702
12	26	216
15	69	478
20	118	868
25	197	1371
30/32	320	1942

## WATTS LOSS DATA

### MDC15A 12-32A

Catalog Number	70% Amp Rating [W]	80% Amp Rating [W]	100% Amp Rating [W]
12	1.30	1.79	3.08
15	1.30	1.76	2.95
20	1.77	2.36	4.27
25	2.21	3.07	5.54
30	2.63	3.62	6.42
32	3.18	4.22	7.14

## Recommended Mounting Torque and Bolt Size

Fuse Type	Mounting Style	Fuse Rating	Thread Size	Tightening Torque	
				N-m	In-lbs
MDC015A	Surface Mount (-S)	130A	1/4-20	5.5	50

## RECOMMENDED FUSE CLIPS



### CO8919P

- Fuse Clips 30A - 13/32" mounting hole: .196" dia. - #10



### CO8915P

- Fuse Clips 30A - 13/32" mounting hole: .172" dia. - #8



### SDC7

- PC Mount Fuse Clips 30A max - 13/32"

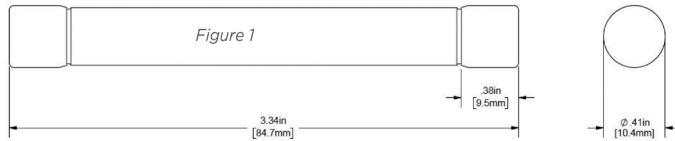
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## DIMENSIONS

### MDC15A(4-32A)



### MDC15A(4-32A)S

