

MDC07A - DC Distribution Fuse

700VDC 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 | 700VDC/600VAC |
| Amps | 35A-175A |
| IR | 20kA @ 700VDC, 200kA @ 600VAC |
| DC MBC | See Table |

FEATURES/BENEFITS

- Designed for DC applications
- Low watt losses
- High cycling performance
- Ultra compact size

APPLICATIONS

- DC Auxiliary Circuits
- Electrical Energy Storage
- EV Charging
- Critical Power
- UPS Protection

APPROVALS/STANDARDS

- UL Recognized Component File E60314



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**SPECIAL
PURPOSE**

CATALOG NUMBERS

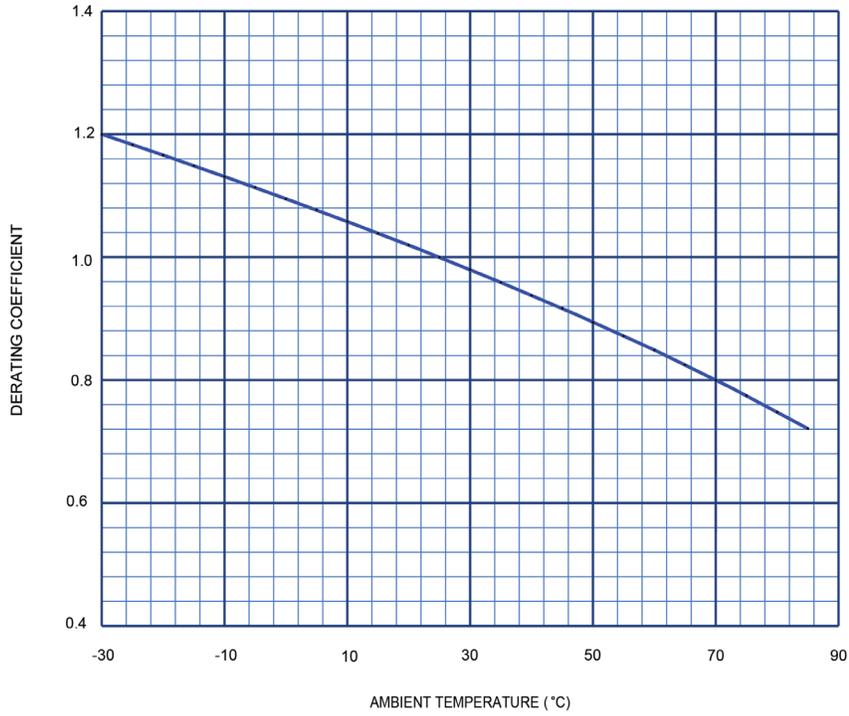
| Surface Mount | | | | | | |
|--|---------------------|---------------------|---|----------------------------------|---------------------------------|---------------------------|
|   | | |   | | | |
| MDC07A35S | | | MDC07A175S | | | |
| Catalog Number | Rated Voltage (VAC) | Rated Voltage (VDC) | Rated Current (A) | DC Min. Breaking Capacity (MBC)* | DC Max Interrupting Rating (kA) | DC Time Constant L/R (ms) |
| MDC07A35S | 600 | 700 | 35 | 123 | 20 | ≤1 |
| MDC07A40S | 600 | 700 | 40 | 148 | 20 | ≤1 |
| MDC07A50S | 600 | 700 | 50 | 175 | 20 | ≤1 |
| MDC07A60S | 600 | 700 | 60 | 198 | 20 | ≤1 |
| MDC07A70S | 600 | 700 | 70 | 196 | 20 | ≤1 |
| MDC07A80S | 600 | 700 | 80 | 264 | 20 | ≤1 |
| MDC07A100S | 600 | 700 | 100 | 330 | 20 | ≤1 |
| MDC07A125S | 600 | 700 | 125 | 1500 | 20 | ≤1 |
| MDC07A150S | 600 | 700 | 150 | 1500 | 20 | ≤1 |
| MDC07A160S | 600 | 700 | 160 | 1488 | 20 | ≤1 |
| MDC07A175S | 600 | 700 | 175 | 1488 | 20 | ≤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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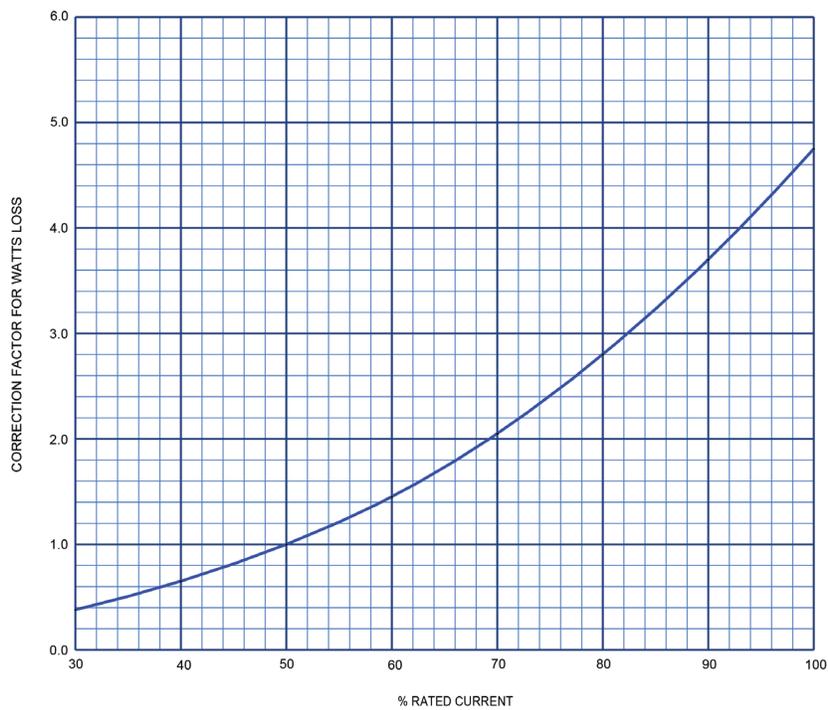
AMPERE RATING VS AMBIENT TEMPERATURE

MDC07A



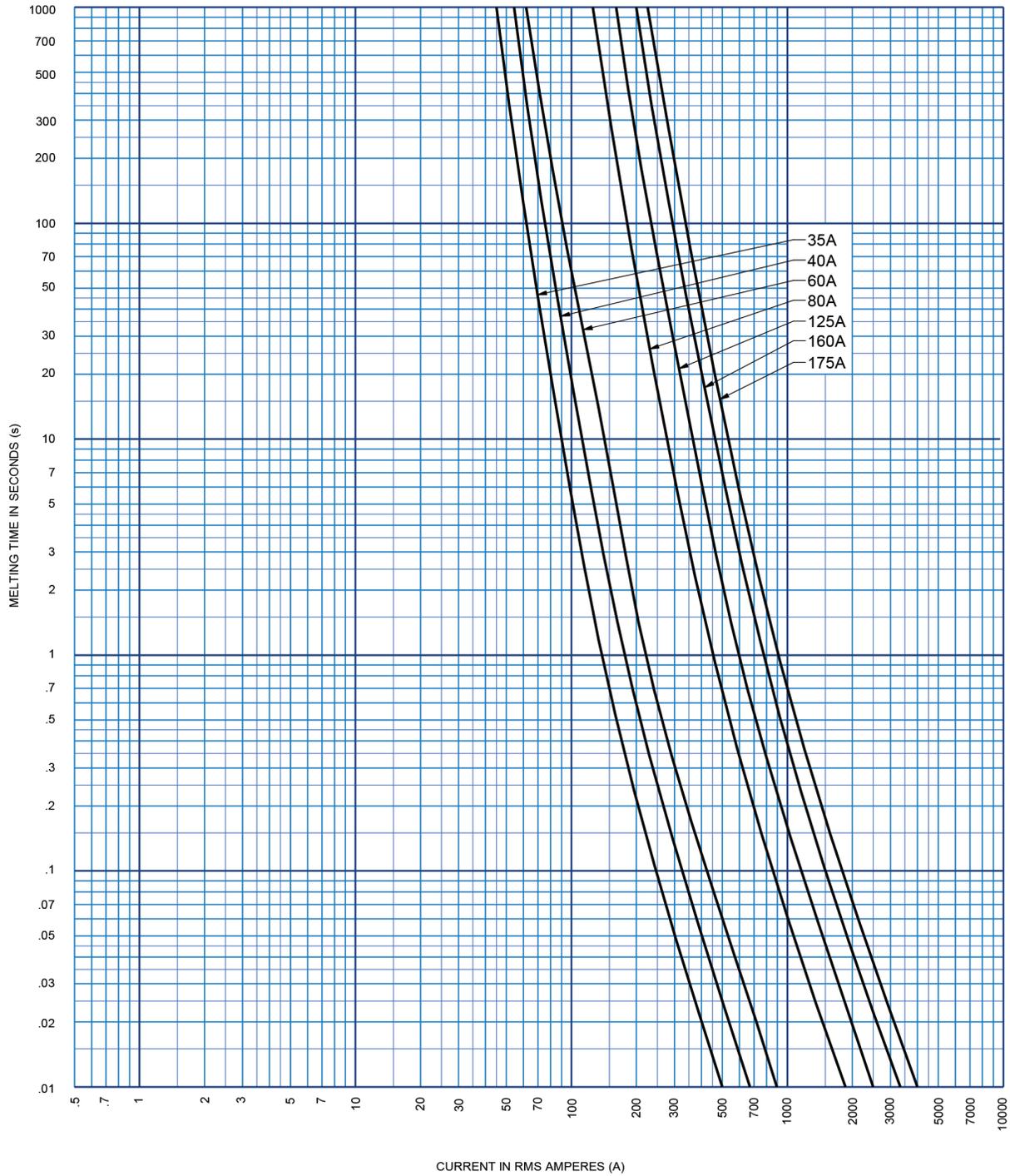
WATTS LOSS VS % RATED CURRENT

MDC07A



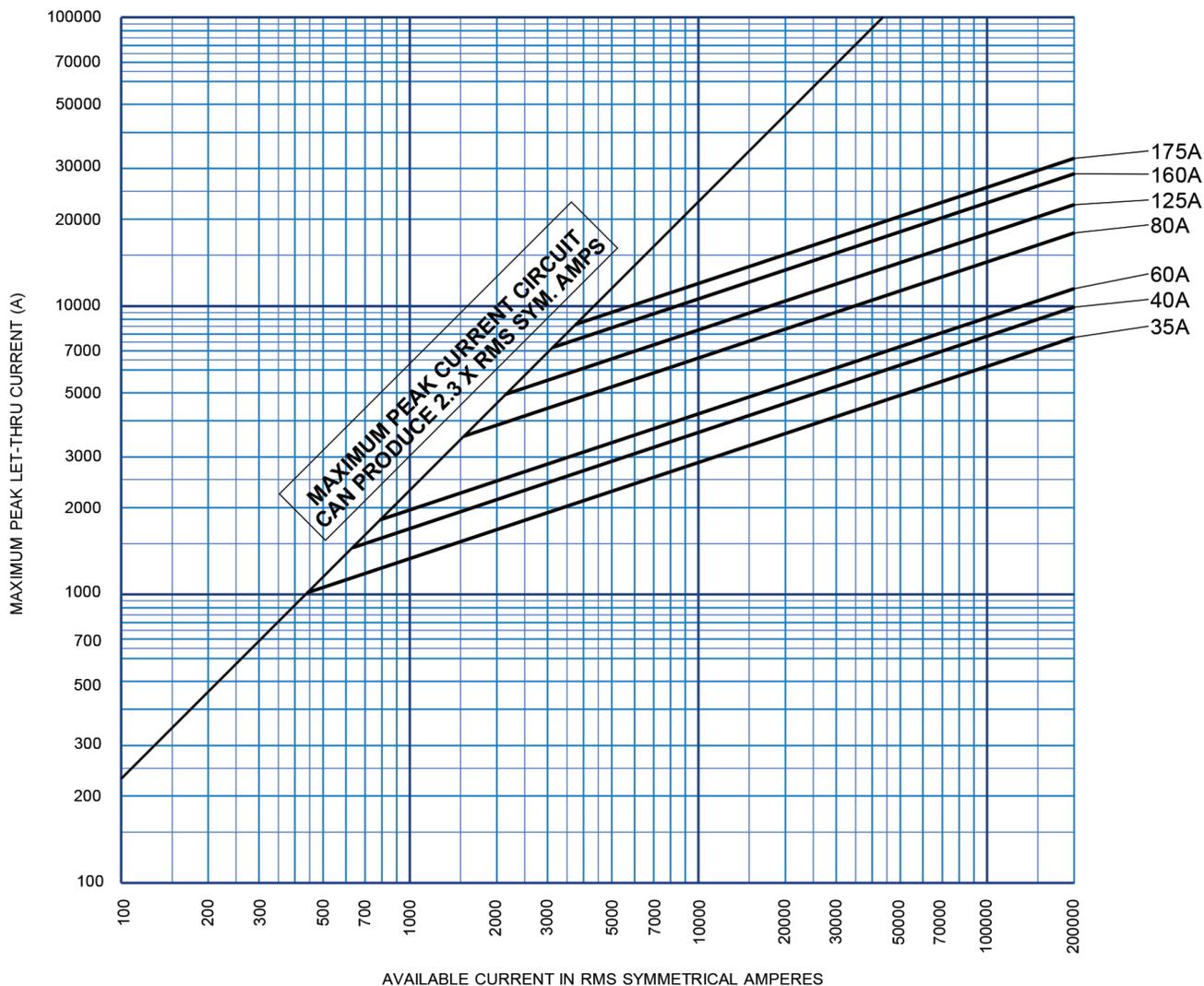
MELTING TIME CURRENT DATA

MDC07A



PEAK LET-THRU CURRENT DATA

MDC07A



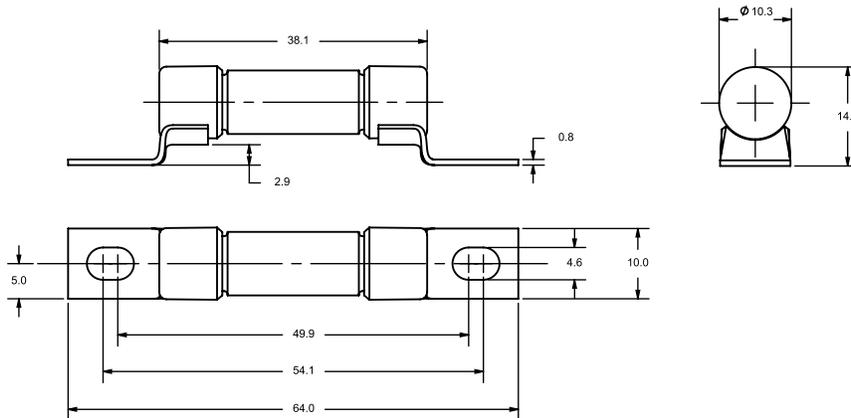
Recommended Mounting Torque and Bolt Size

| Fuse Type | Mounting Style | Fuse Rating | Thread Size | Tightening Torque | |
|-----------|--------------------|-------------|-------------|-------------------|--------|
| | | | | N-m | In-lbs |
| MDC07A | Surface Mount (-S) | 35-175A | 1/4-20 | 4 | 50 |

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DIMENSIONS:

MDC07A(35-60A)S Surface Mount Fuse



Dimensions in mm

MDC07A(70-175A)S Surface Mount Fuse

