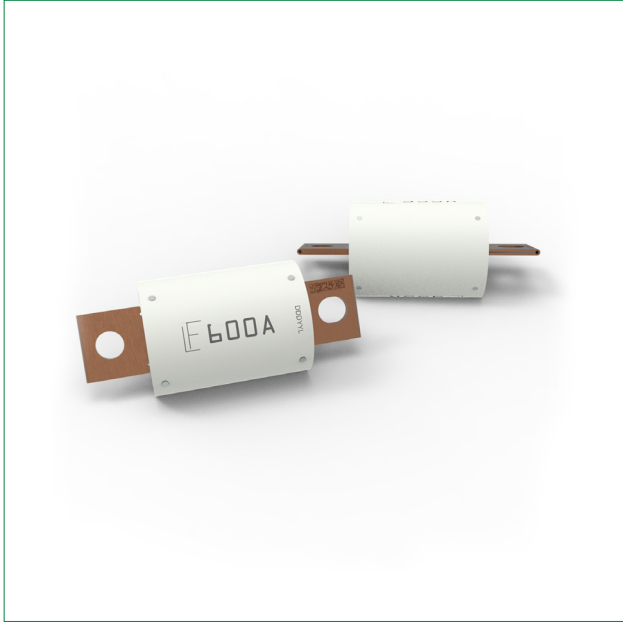


38EV Series

High Voltage Fuses – Rated 500 V DC

RoHS



Description

The 38EV fuse is designed for protection of high voltage accessory circuits in electric and hybrid electric vehicles.

Features & Benefits

- High-contrast ampere marking on bodies aid identification
- Refer to ISO 8820-8
- Industry-standard footprint

Applications

- EVs
- Hybrid passenger vehicles

Additional Information



Resources



Samples

[See Disclaimer Notice](#)

Specifications

Voltage Rating:	500 V DC
Interrupting Rating:	30 kA @ 500 V DC
Recommended Environmental Temperature:	–40 °C to +125 °C
Terminals Material:	Copper / Copper Alloy
Housing Material:	Melamine (U.L. 94 Flammability rating – V0)
End caps Material:	Zinc Alloy
Recommended Mounting Torque M8:	12 ±1 Nm
Typical weight:	180 g
Refers To:	ISO 8820-8

Ordering Information

Part Number	Current Rating (A)	Termination	Package Size
38EVxxx.ZXBDM	300 A - 600 A	M8 Bolt Down	48

38EV Series

High Voltage Fuses – Rated 500 V DC

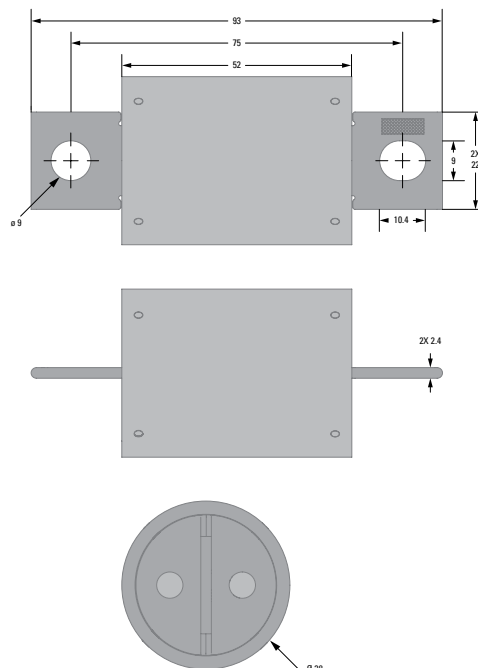
Ratings

Part Number	Current Rating (A)	Test Cable Size (mm ²)	Typ. Cold Resistance (mΩ)	Typ. I ² t (A ² s)
38EV300.ZXBDM	300	50	0.27	23 930
38EV350.ZXBDM	350	70	0.25	26 954
38EV400.ZXBDM	400	70	0.21	36 409
38EV450.ZXBDM	450	95	0.18	72 140
38EV500.ZXBDM	500	150	0.16	89 060
38EV600.ZXBDM	600	200	0.14	133 331

Note 1: The typical I²t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

Dimensions

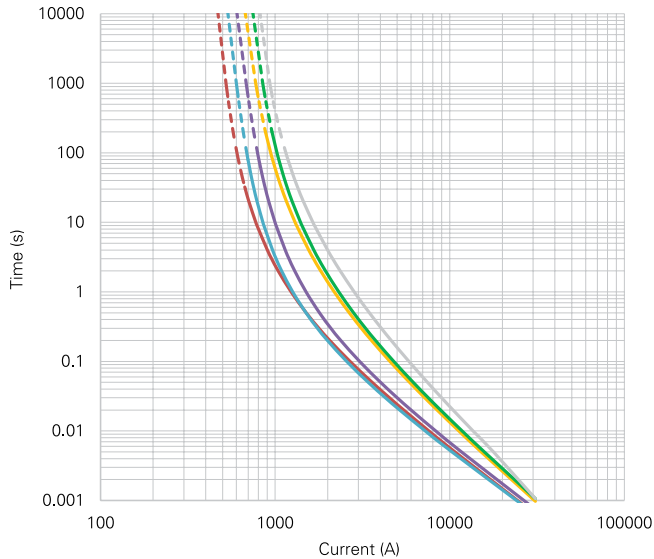
Dimensions in mm. Please refer to the outline drawing for dimensions and tolerances.



38EV Series

High Voltage Fuses – Rated 500 V DC

Time-Current Characteristic



% of Rating	Opening Time Min. / Max. (s)
100	14 400 / -
200	1 / 300
300	0.2 / 30
500	0.05 / 1

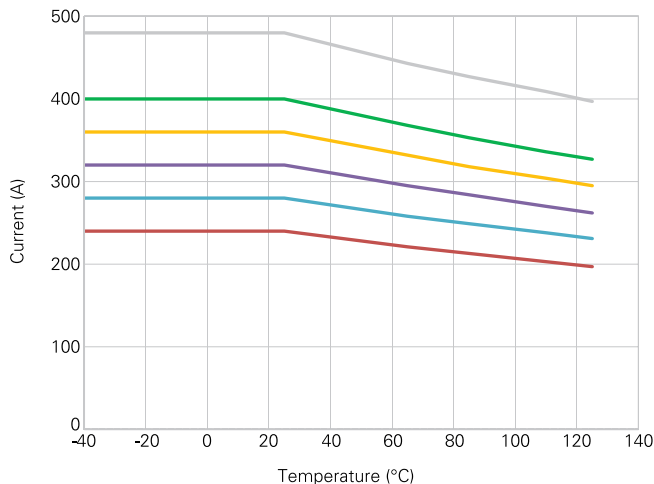
— 300 A
 — 350 A
 — 400 A
 — 450 A
 — 500 A
 — 600 A

Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

Typical Derating Curves

Temperature security margin is 20%.

Please contact Littelfuse® for Details Regarding Derating Test Set Up.



	Max. allowed current load (A) at ambient temperature based on typical derating (°C)							
	-40	-20	0	25	65	85	110	125
300 A	240	240	240	240	221	213	203	197
350 A	280	280	280	280	258	249	238	231
400 A	320	320	320	320	295	284	270	262
450 A	360	360	360	360	332	318	304	295
500 A	400	400	400	400	368	353	336	327
600 A	480	480	480	480	443	427	409	397

— 300 A
 — 350 A
 — 400 A
 — 450 A
 — 500 A
 — 600 A

Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

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