Fuse Datasheet

RoHS



Description

Bolt-down 30EV fuses designed for circuit protection in high-voltage, high-current automotive systems. These fuses make particularly good choices for ensuring overcurrent protection to branch circuits in EVs and hybrid passenger vehicles.

Features & Benefits

- High-contrast ampere labels on bodies aid identification
- Industry-standard footprints
- Applications
- EVs

Hybrid passenger vehicles

M8 and M6 versions

Refers to ISO 8820-8

available

See Disclaimer Notice

Additional Information





Resources

Samples

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
Recommended Mounting Torque M6:	6 ±1 Nm (Max. allowed 10 Nm)
Net Weight per Fuse:	100 g ±10% g
Refers To:	ISO 8820-8

Ordering Information

Part Number	Current Rating (A)	Termination	Package Size
30EVxxx.ZXBDM	150 A - 300 A	M8 Bolt Down	72
30Evxxx.ZXBDM-M6	150 A - 300 A	M6 Bolt Down	72



Fuse Datasheet

Ratings

Part Number	Current Rating (A)	Test Cable Size (mm²)	Typ. Voltage Drop (mV)	Max. Voltage Drop Spec at 100% IR (mV)	Typ. Cold Resistance (mΩ)	Typical Melting I²t (A²s)
30EV150.ZXBDM	150	20	160	180	0.54	15 000
30EV175.ZXBDM	175	20	160	180	0.46	22 000
30EV200.ZXBDM	200	30	160	180	0.41	32 000
30EV225.ZXBDM	225	40	160	180	0.36	41 000
30EV250.ZXBDM	250	40	160	180	0.32	52 000
30EV300.ZXBDM	300	50	160	180	0.27	101 000

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.

M8 Version







M6 Version



Fuse Datasheet

30EV Series High Voltage Fuses – Rated 500 V DC

Time-Current Characteristic



% of Rating	Opening Time Min. / Max. (s)
110	14 400 /-
200	1 / 300
300	0.2 / 30
500	0.05 / 1
150 A	

150 A 175 A 200 A 225 A 250 A 300 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 Rerating Curves

Temperature security margin is 20%.

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



Max. allowed current load (A) at ambient temperature based on typical derating					
C O°C	25 °C	65 °C	85 °C	110 °C	125 °C
120	120	115	113	110	107
140	140	134	132	127	124
160	160	152	149	145	142
180	180	173	168	162	159
200	200	191	188	182	178
240	240	227	221	214	209
	C 0 °C 120 140 160 180 200 240	Information Dissect 0 °C 25 °C 120 120 140 140 160 160 180 180 200 200 240 240	C 0 °C 25 °C 65 °C 120 120 115 140 140 134 160 160 152 180 180 173 200 200 191 240 240 227	C 0 °C 25 °C 65 °C 85 °C 120 120 115 113 140 140 134 132 160 160 152 149 180 180 173 168 200 200 191 188 240 240 227 221	C 0 °C 25 °C 65 °C 85 °C 110 °C 120 120 115 113 110 140 140 134 132 127 160 160 152 149 145 180 180 173 168 162 200 200 191 188 182

150 A 175 A 200 A 225 A 250 A 300 A

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

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