



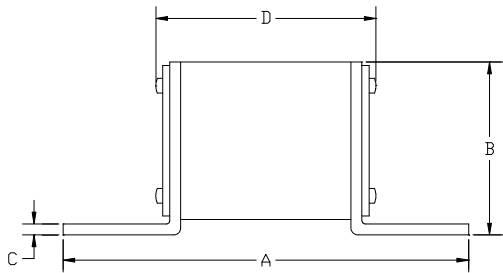
**EFX 1000 Vdc EV FUSE**



**FEATURES**

- Reliable clearing of DC fault currents
- High cycling performance
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 50kA
- QR code marks on each fuse for traceability

**DIMENSIONS (mm):**



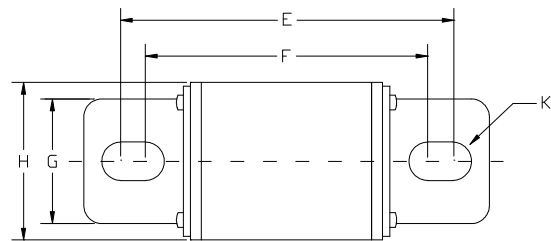
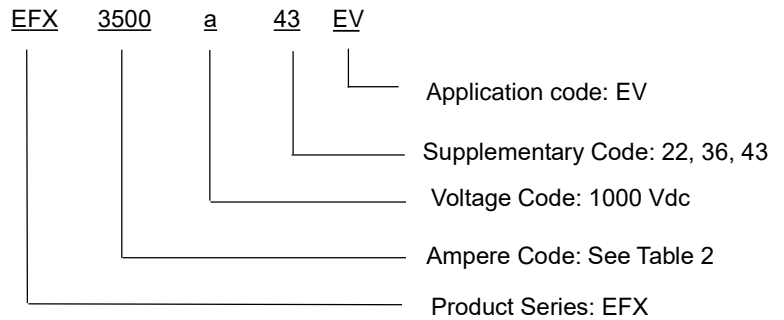
**DESCRIPTION**

Adler EFX series EV fuses are specially engineered and tested to provide best-in-class protection performance in protecting high power battery charging and managing systems of Electrical Vehicles and Hybrid Electrical Vehicles, up to 1000 Vdc in ratings from 63A to 500A.

**AGENCY INFORMATION**

- Designed to JASO D622, UL 248-20
- UL Recognized Component
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

**PART NUMBERING SYSTEM**



Part Number	A	B	C	D	E	F	G	H	K
EFXxxxxa22EV	115±1.5	25 +1.5/-0.5	2±0.1	74±1	100±1	87.5±1	20±0.5	22 +0.8/-0.5	φ 8.5±0.3
EFXxxxxa36EV	117±1.5	24±1	2±0.1	74±1.5	100.5±1	87.5±1	32.5±0.5	36.3+1.2/-0.5	φ 8.5±0.5
EFXxxxxa43EV	126.5±1.5	48±0.8	3±0.15	71.8±1.0	106±1.5	89±1.5	34.0±0.5	47.0±0.5	φ 10.5±0.3

Table 1



ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity		I <sup>2</sup> t (A <sup>2</sup> sec)		Watt Loss (W)
					UL**	Self-Certified	Pre-arcing	Total @ 1000 Vdc	0.5 I <sub>n</sub>
74x22	EFX2630a22EV	63 A	2630	1000Vdc	4In~50kA	-	720	4360	2.6
	EFX2800a22EV	80 A	2800	1000Vdc	4In~50kA	-	1050	6710	3.2
	EFX3100a22EV	100 A	3100	1000Vdc	4In~50kA	-	1560	10500	3.9
	EFX3125a22EV	125 A	3125	1000Vdc	4In~50kA	-	3200	22600	4.5
	EFX3160a22EV	160 A	3160	1000Vdc	4In~50kA	-	5400	43200	5.7
	EFX3175a22EV	175 A	3175	1000Vdc	4In~50kA	-	6250	50000	6.9
74x36	EFX3150a36EV	150 A	3150	1000Vdc	-	50kA	4630	23300	4.5
	EFX3200a36EV	200 A	3200	1000Vdc	-	50kA	8300	43900	6.6
	EFX3250a36EV	250 A	3250	1000Vdc	-	50kA	13300	75600	8.5
71x47	EFX3200a43EV	200 A	3200	1000Vdc	4In~50kA	-	5300	26800	7.9
	EFX3250a43EV	250 A	3250	1000Vdc	4In~50kA	-	9600	49980	10.3
	EFX3300a43EV	300 A	3300	1000Vdc	4In~50kA	-	13200	69300	12.7
	EFX3350a43EV	350 A	3350	1000Vdc	4In~50kA	-	21600	115000	14.5
	EFX3400a43EV	400 A	3400	1000Vdc	4In~50kA	-	28600	163000	17
	EFX3450a43EV	450 A	3450	1000Vdc	4In~50kA	-	38200	223000	19.5
	EFX3500a43EV	500 A	3500	1000Vdc	4In~50kA	-	49600	294000	21

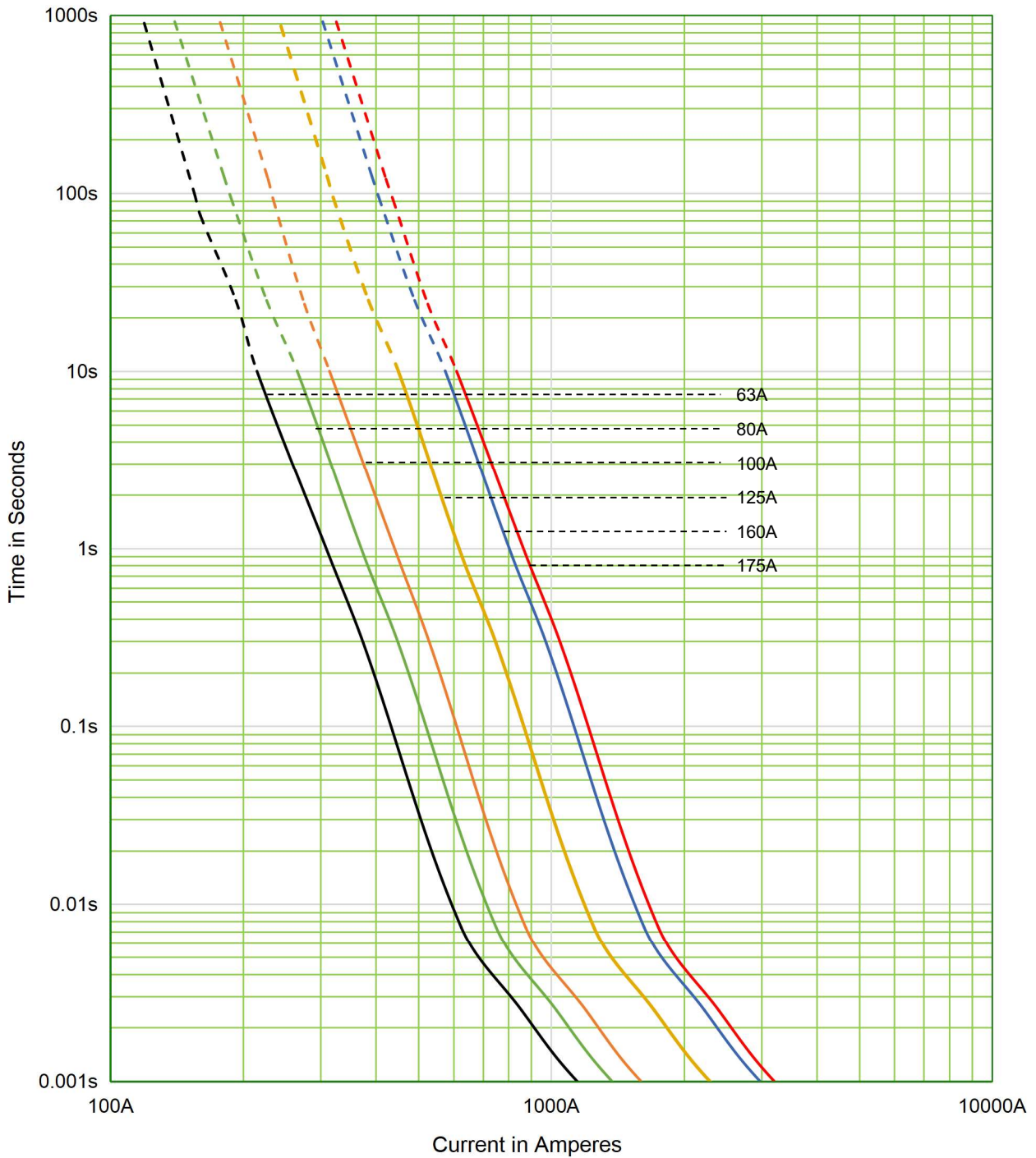
Table 2

1. \*\* --- UL File: E506668
2. EFXxxxxa22EV/EFXxxxxa43EV temperature rise: 0.5In < 50K.
3. EFXxxxxa22EV and EFXxxxxa36EV recommend mounting torque is 12+/-1.0Nm (M8);
4. EFXxxxxa43EV recommend mounting torque is 20+/-1Nm (M10).



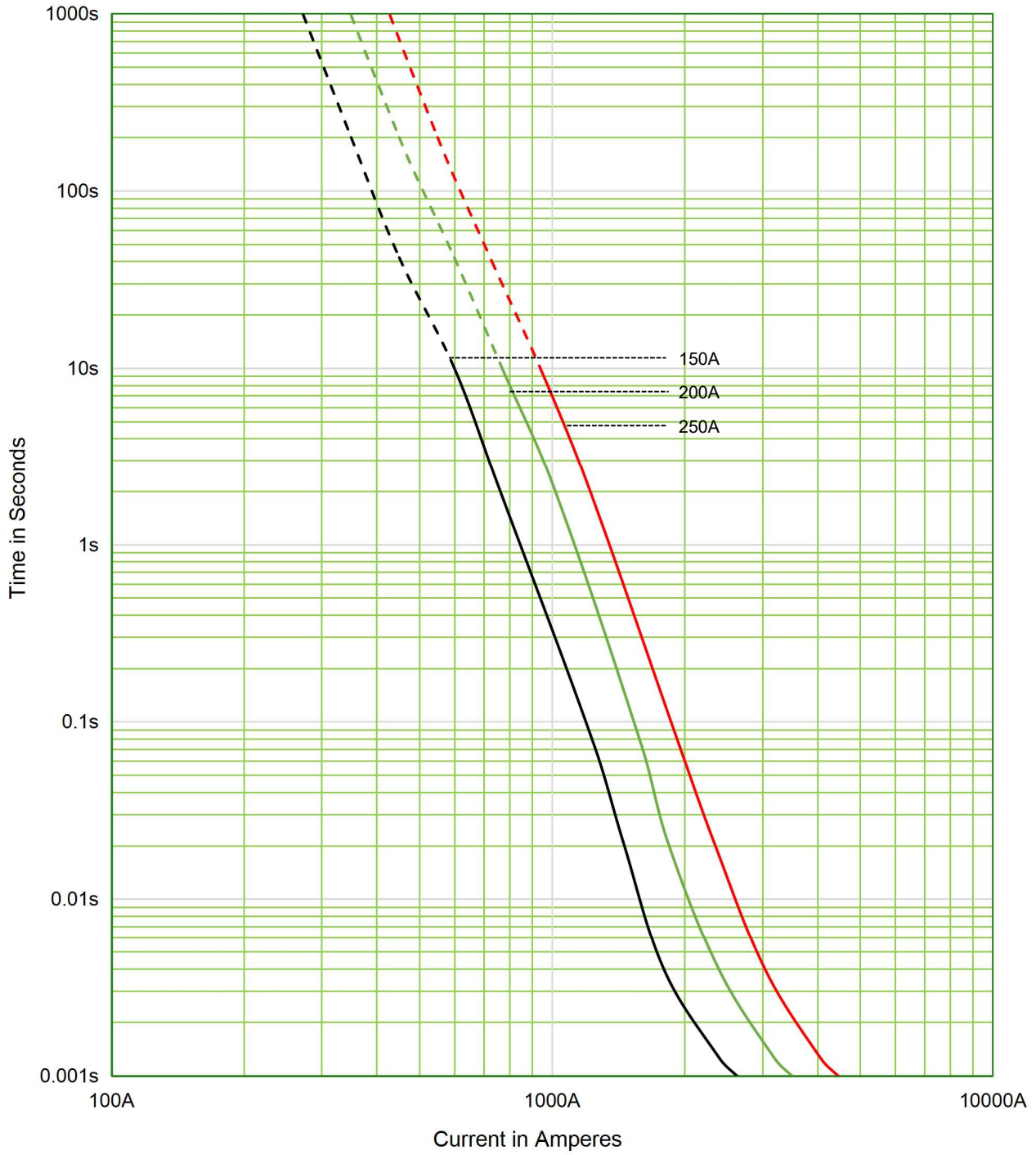
TIME CURRENT CURVE

EFXxxxxa22EV 63A - 175A



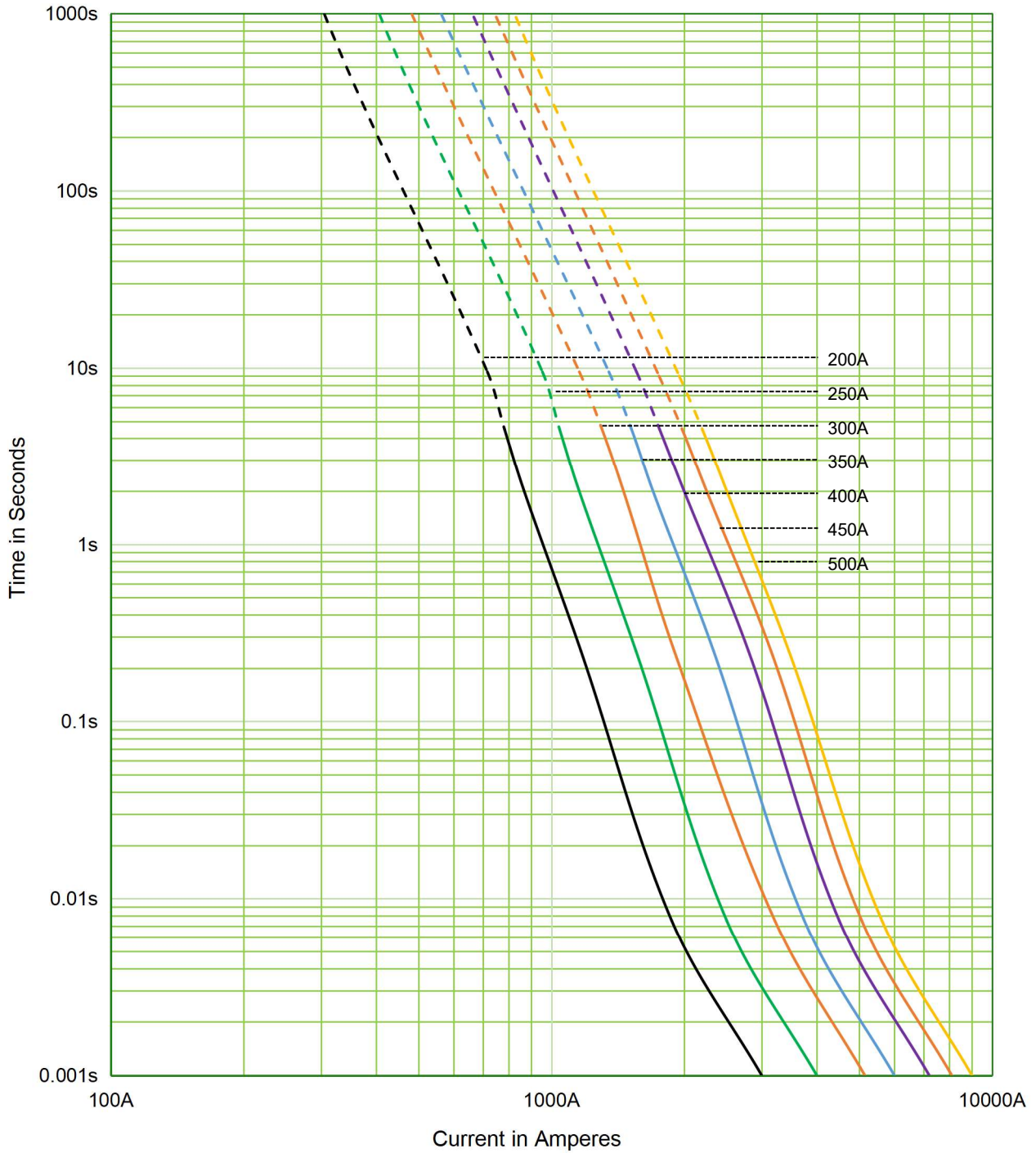


EFXxxxxa36EV 150A - 250A





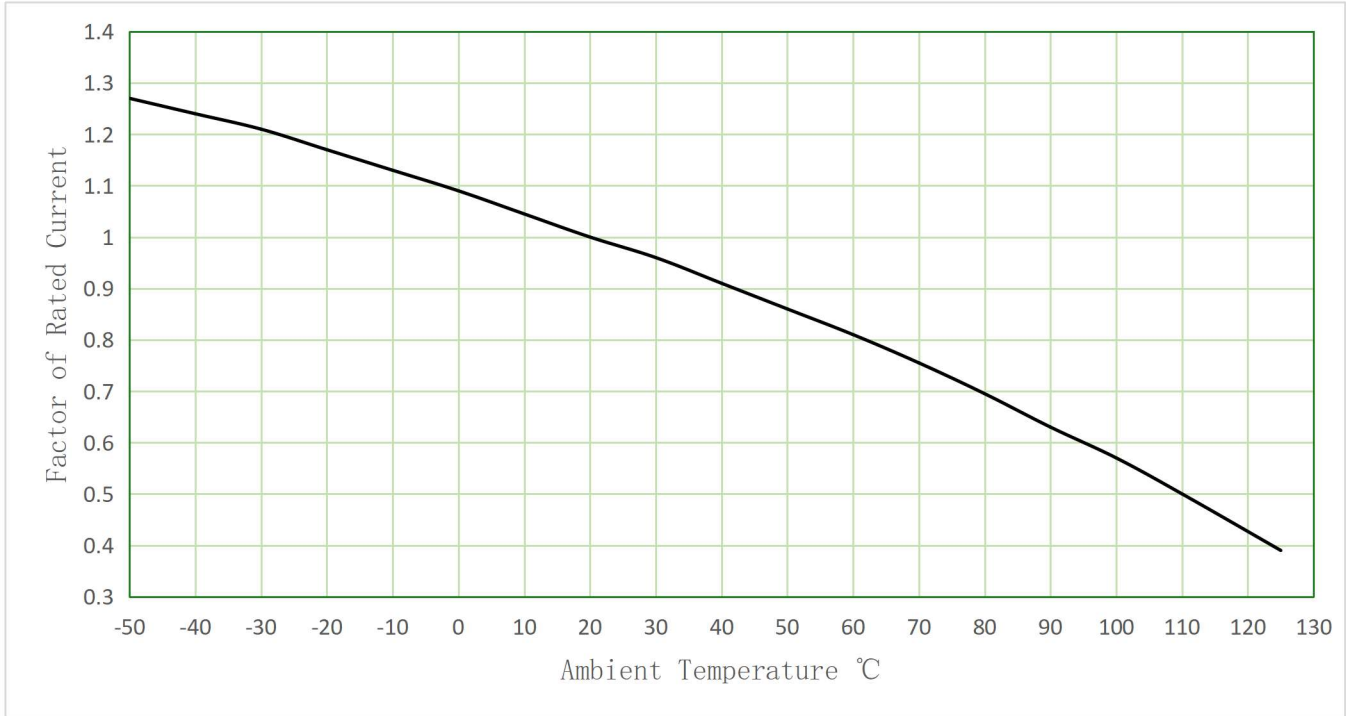
EFXxxxxa43EV 200 - 500A



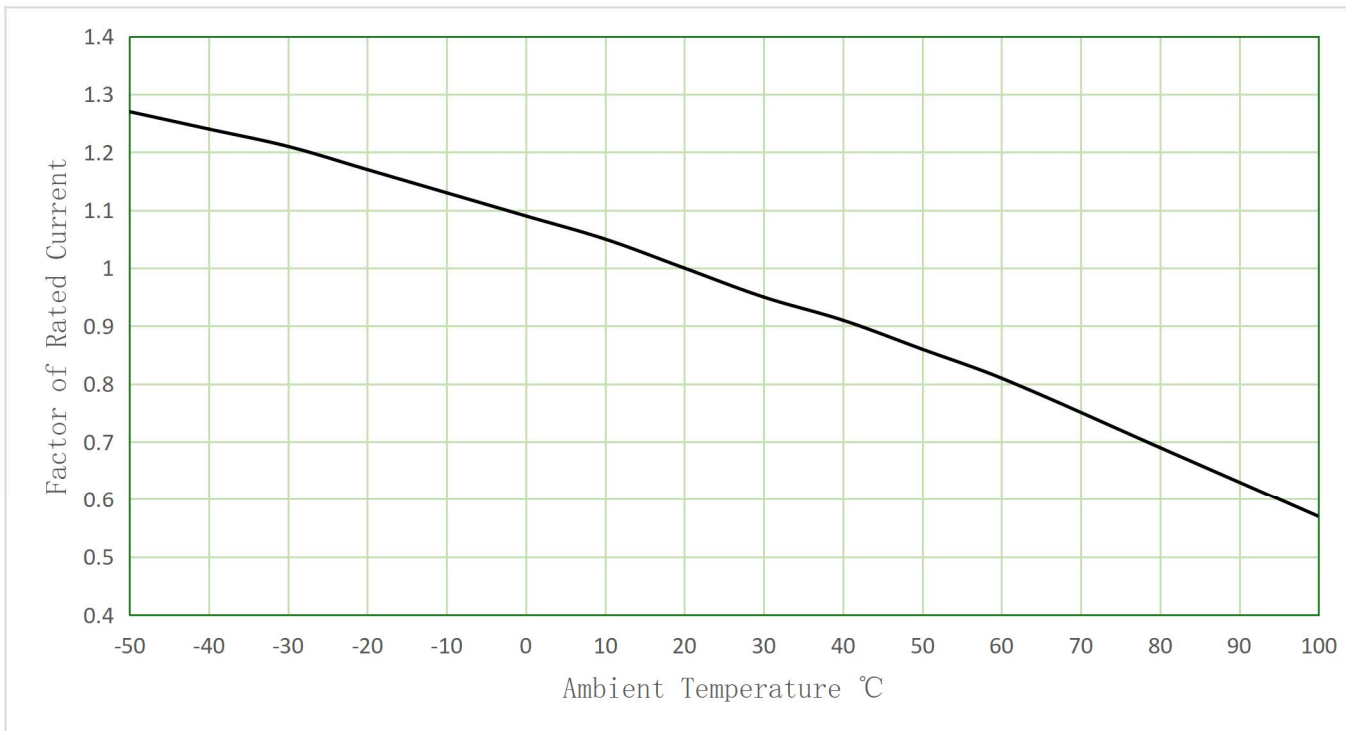


### TEMPERATURE DERATING CURVE

EFXxxxxa22EV



EFXxxxxa36EV and EFXxxxxa43EV





**TRANSPORTATION and STORAGE**

- During transportation and storage, customer should avoid water seepage and mechanical damage.

**CONDITIONS for OPERATION in SERVICE**

Where the following conditions apply, fuses complying with this standard are deemed capable of operating satisfactorily without further qualification.

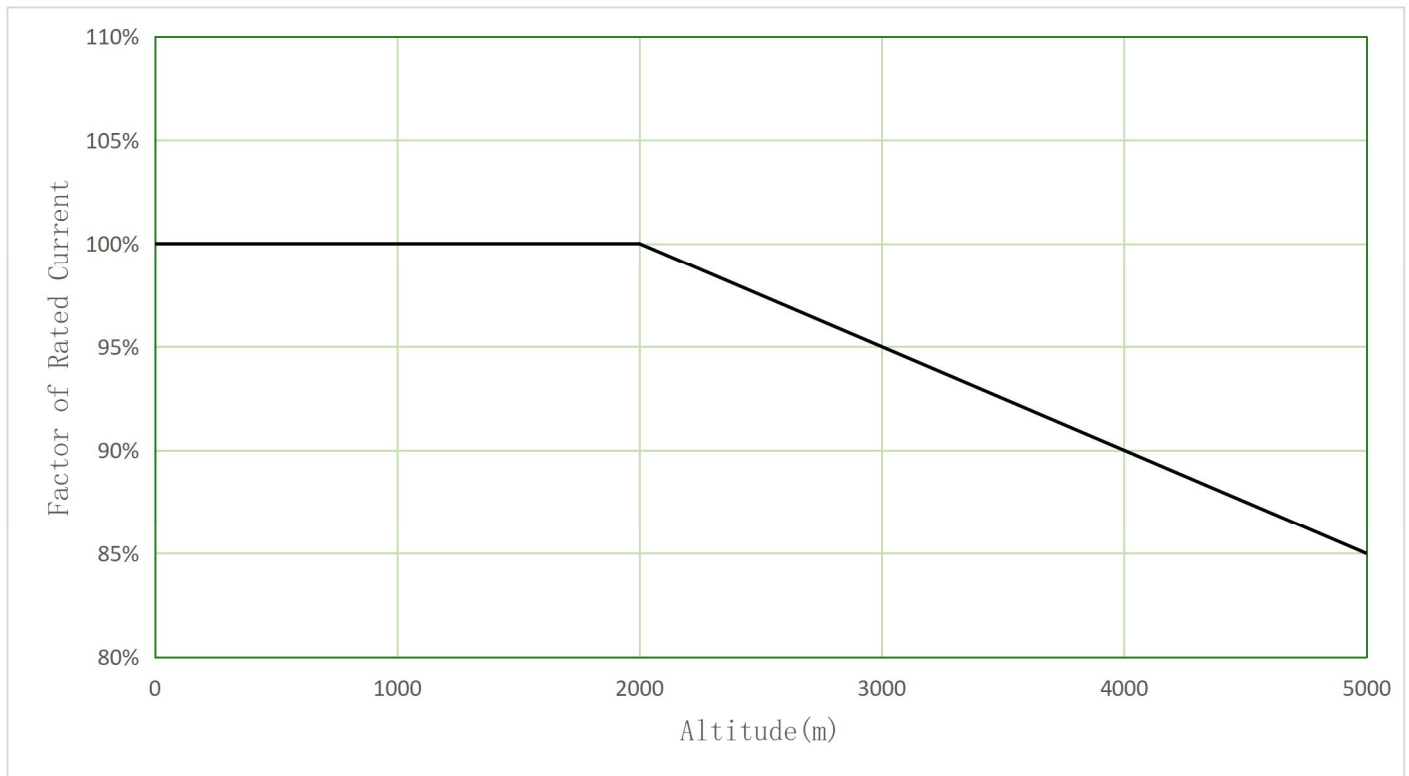
- Normal temperature: -5°C to 40°C;
- The altitude of the site of installation of the fuses should not exceed 2000 m above sea level;
- The air should be clean and its relative humidity does not exceed 50% at a maximum temperature of 40°C;
- Higher relative humidities are permitted at lower temperatures, e.g., 90 % at 20°C;
- Under these conditions, moderate condensation may occasionally occur due to variation in temperature.
- For operating conditions other than above, please contact the manufacturer.

**VIBRATION**

Meets UL248-20 Section 8.6.2.3 Vibration Test C requirement, can be used for Electrical Vehicle application.

**Re-rating with HIGH ALTITUDE**

The formula for calculating current load at high altitude:  $I = I_n * (1 - (h-2000)/100*(0.5/100))$  h is altitude, less than 5000m.



**PACKAGING INFORMATION**

Part No	Inner box				Outer box					
	L (mm)	W (mm)	H (mm)	Qty (pcs)	Qty boxes / outer box	Net Weight (kg)	Gross Weight (kg)	L (mm)	W (mm)	H (mm)
EFXxxxxa22EV	127	96	49	8	18	18.000	19.275	330	310	200
EFXxxxxa36EV	132	96	49	4	18	14.184	15.084	320	320	200
EFXxxxxa43EV	127	96	49	2	18	16.452	17.298	330	310	200