



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

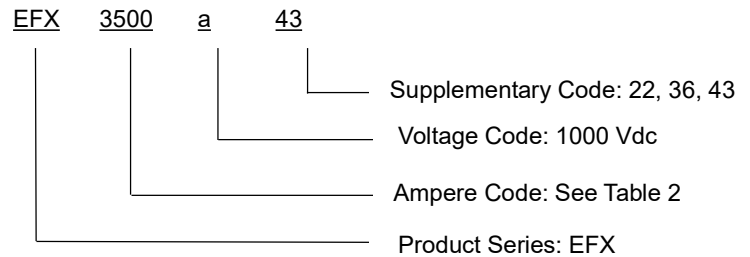
DESCRIPTION

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.

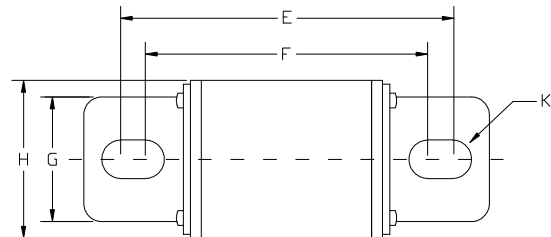
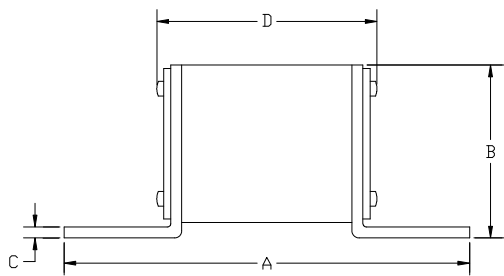
AGENCY INFORMATION

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

PART NUMBERING SYSTEM



DIMENSIONS (mm):



Part Number	A	B	C	D	E	F	G	H	K
EFXxxxxa22	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
EFXxxxxa36	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
EFXxxxxa43	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

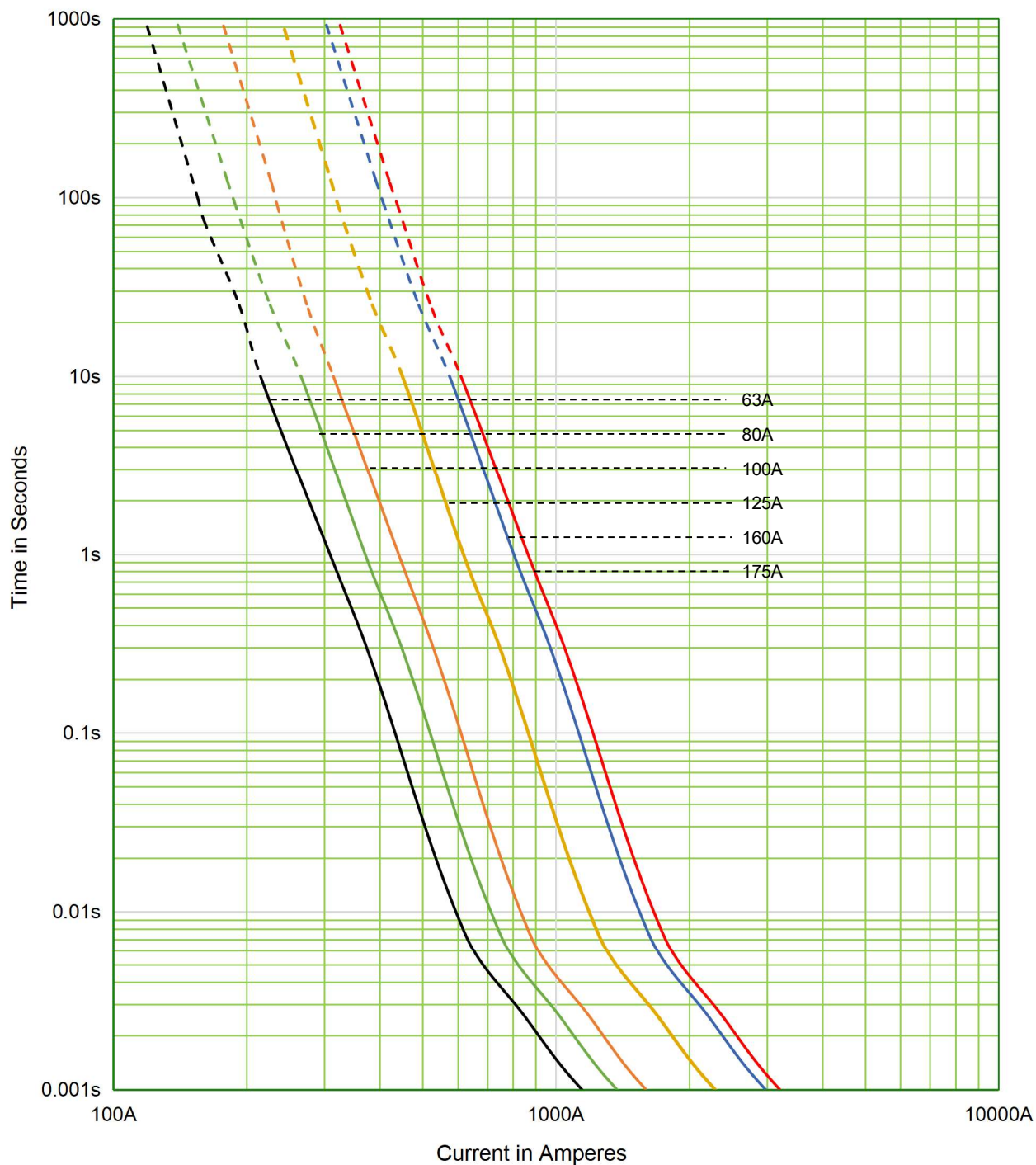
Size	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity		I ² t (A ² sec)		Watt Loss (W)
(mm)					UL**	Self-Certified	Pre-arcing	Total @ 1000 Vdc	0.5 I _n
74x22	EFX2630a22	63 A	2630	1000Vdc	4In~50kA	-	720	4360	2.6
	EFX2800a22	80 A	2800	1000Vdc	4In~50kA	-	1050	6710	3.2
	EFX3100a22	100 A	3100	1000Vdc	4In~50kA	-	1560	10500	3.9
	EFX3125a22	125 A	3125	1000Vdc	4In~50kA	-	3200	22600	4.5
	EFX3160a22	160 A	3160	1000Vdc	4In~50kA	-	5400	43200	5.7
	EFX3175a22	175 A	3175	1000Vdc	4In~50kA	-	6250	50000	6.9
74x36	EFX3150a36	150 A	3150	1000Vdc	-	50kA	4630	23300	4.5
	EFX3200a36	200 A	3200	1000Vdc	-	50kA	8300	43900	6.6
	EFX3250a36	250 A	3250	1000Vdc	-	50kA	13300	75600	8.5
71x47	EFX3200a43	200 A	3200	1000Vdc	4In~50kA	-	5300	26800	7.9
	EFX3250a43	250 A	3250	1000Vdc	4In~50kA	-	9600	49980	10.3
	EFX3300a43	300 A	3300	1000Vdc	4In~50kA	-	13200	69300	12.7
	EFX3350a43	350 A	3350	1000Vdc	4In~50kA	-	21600	115000	14.5
	EFX3400a43	400 A	3400	1000Vdc	4In~50kA	-	28600	163000	17
	EFX3450a43	450 A	3450	1000Vdc	4In~50kA	-	38200	223000	19.5
	EFX3500a43	500 A	3500	1000Vdc	4In~50kA	-	49600	294000	21

Table 2

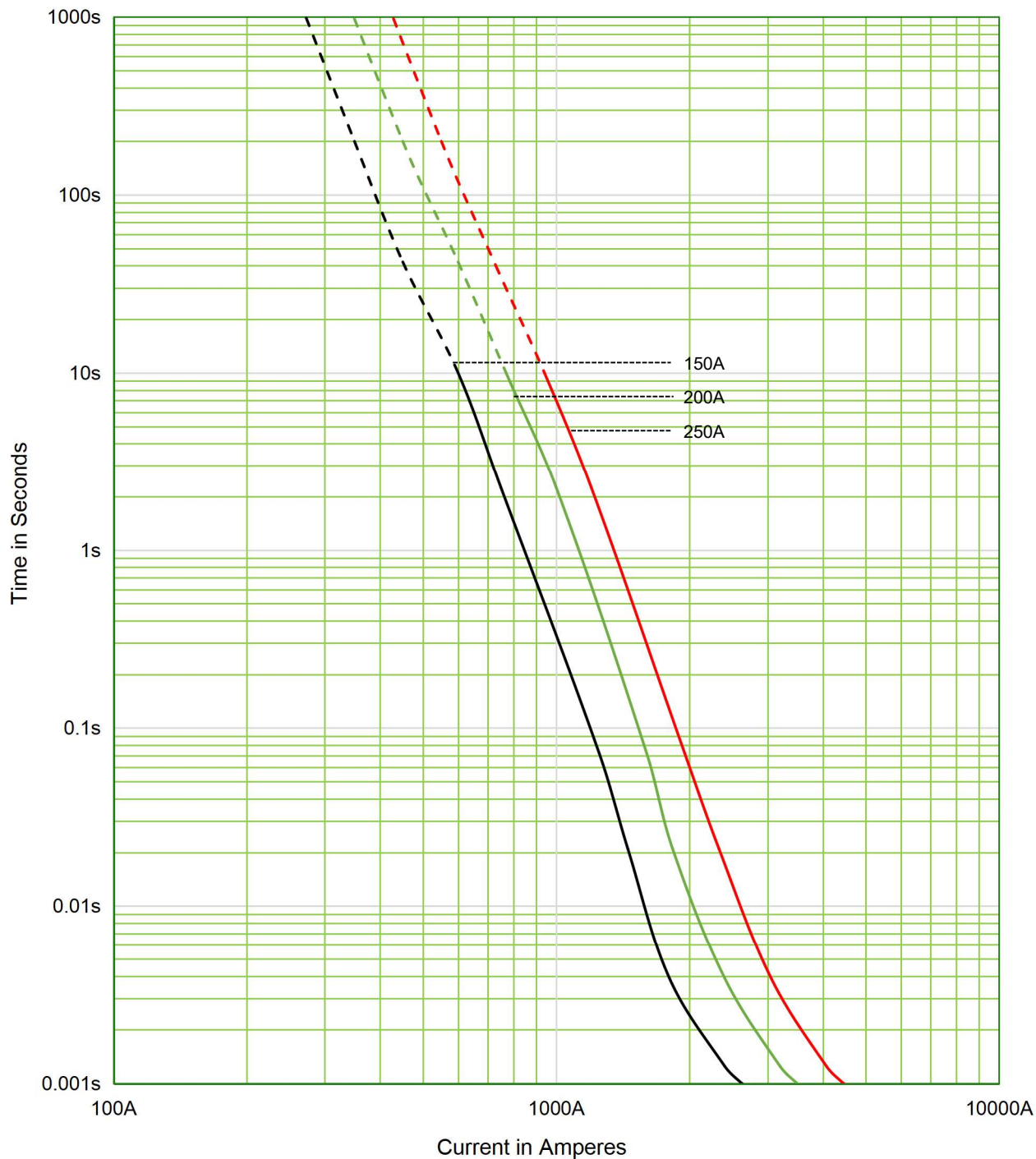
1. ** --- UL File: E506668
2. EFXxxxxa22/EFXxxxxa43 temperature rise: 0.5In < 50K.
3. EFXxxxxa22 and EFXxxxxa36 recommend mounting torque is 12+/-1.0Nm (M8);
EFXxxxxa43 recommend mounting torque is 20+/-1Nm (M10).

TIME CURRENT CURVE

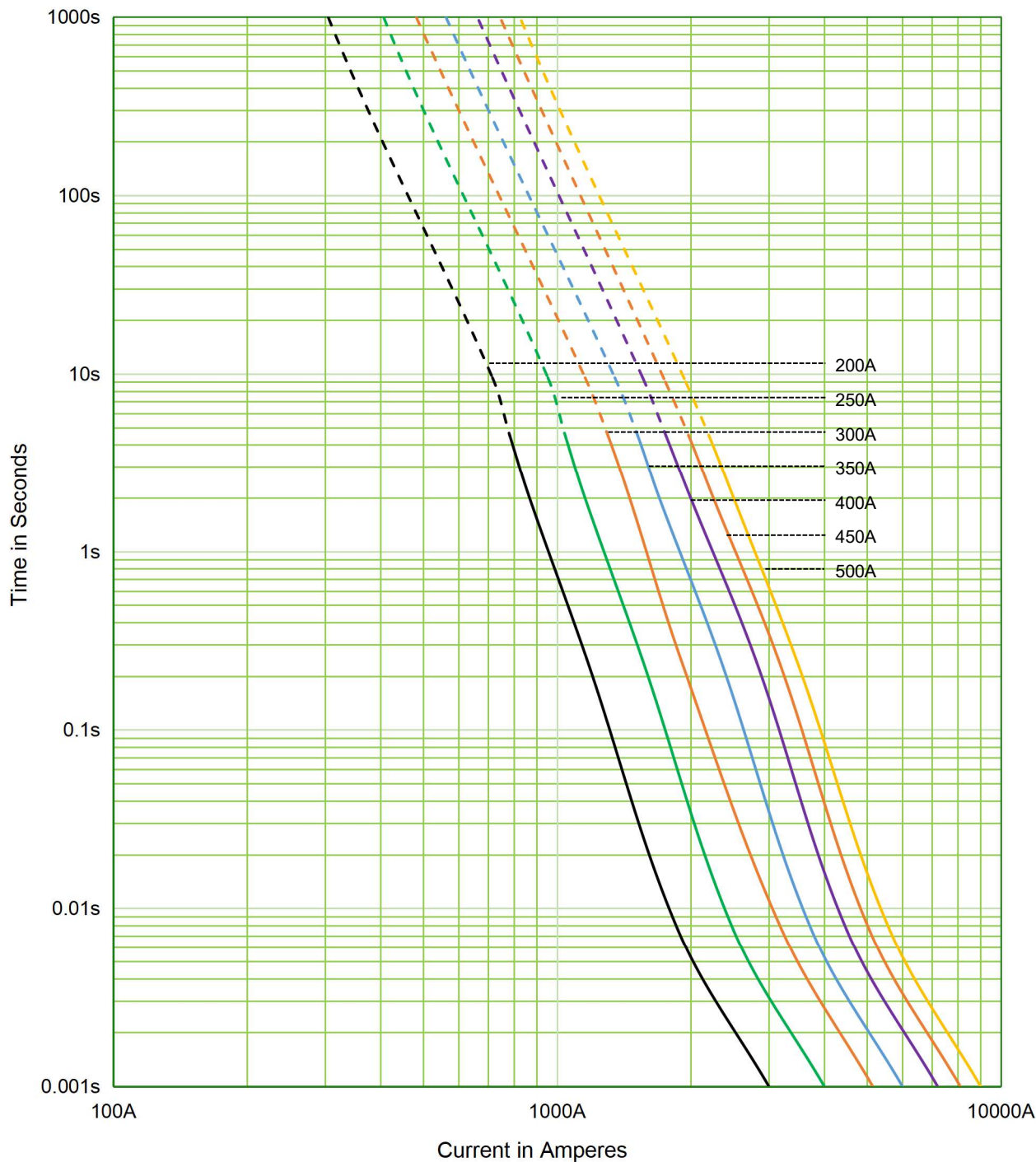
EFXxxxxa22 63A - 175A



EFXxxxxa36 150A - 250A

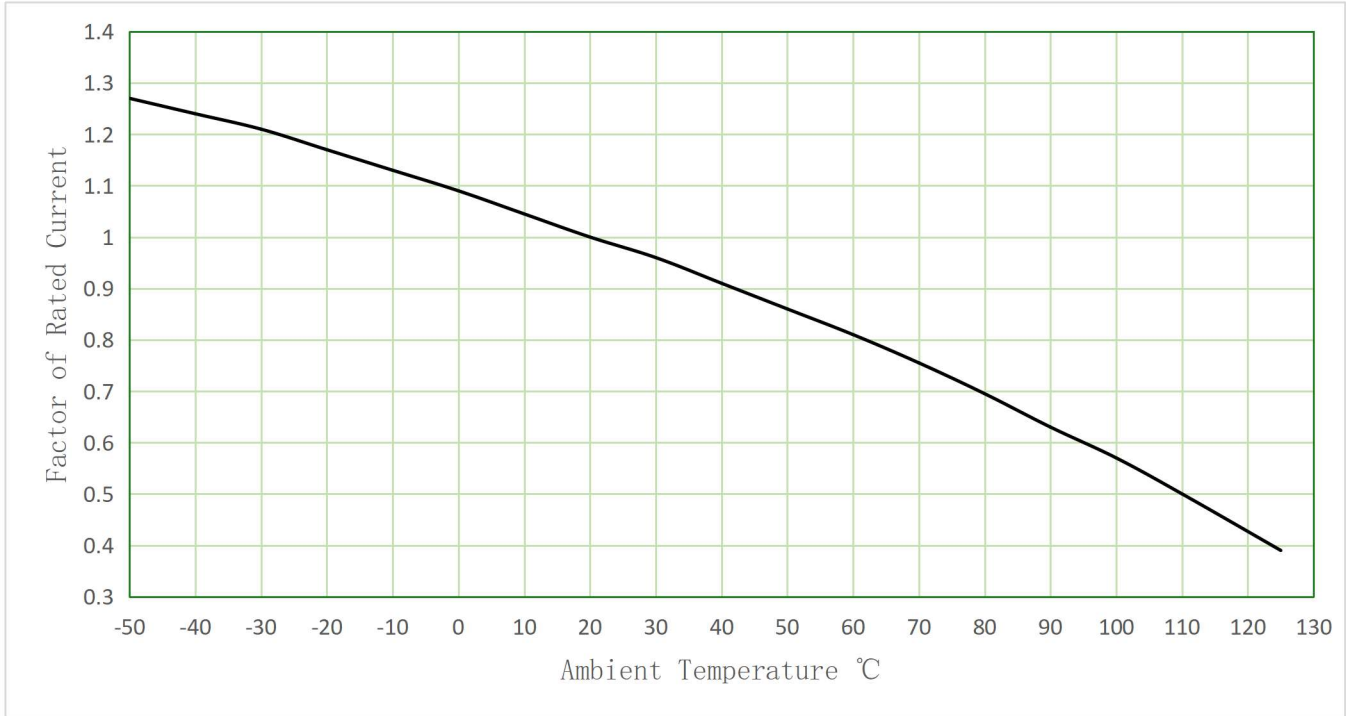


EFXxxxxa43 200 - 500A

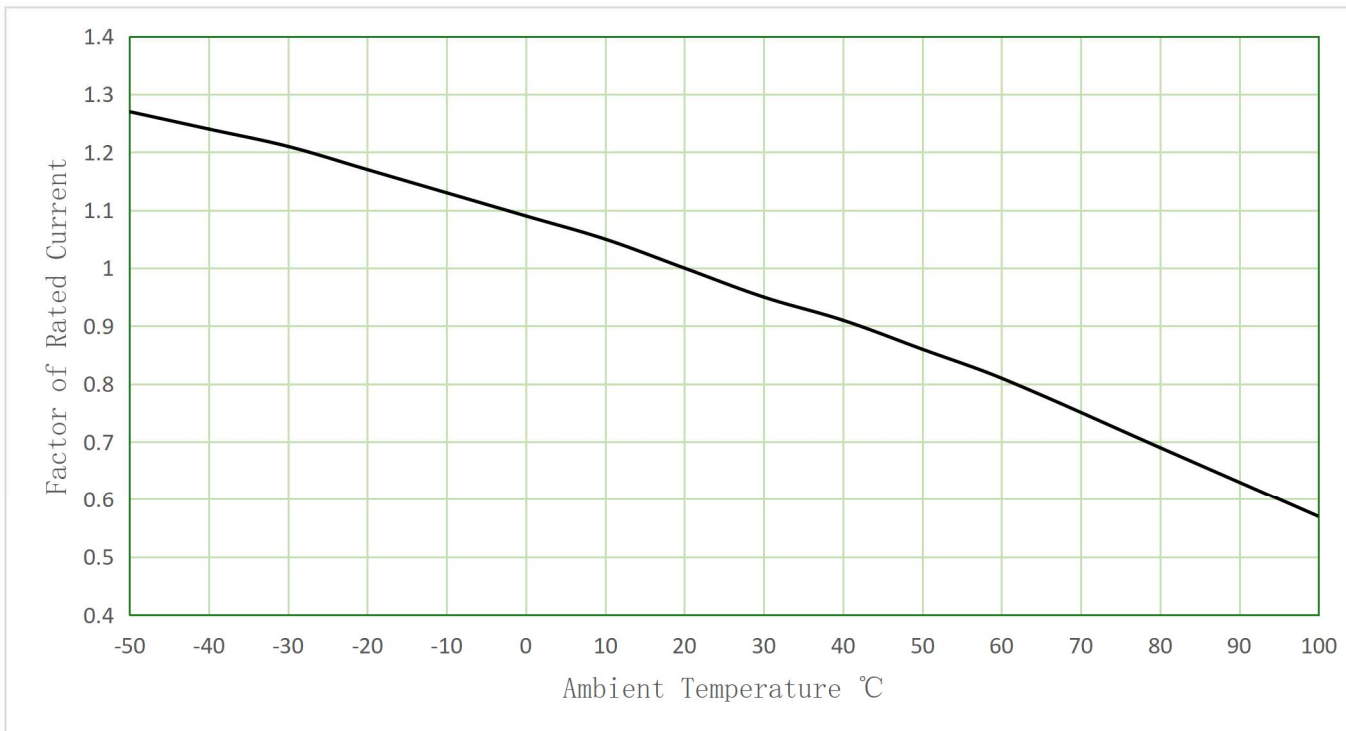


TEMPERATURE DERATING CURVE

EFXxxxxa22



EFXxxxxa36 and EFXxxxxa43



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.

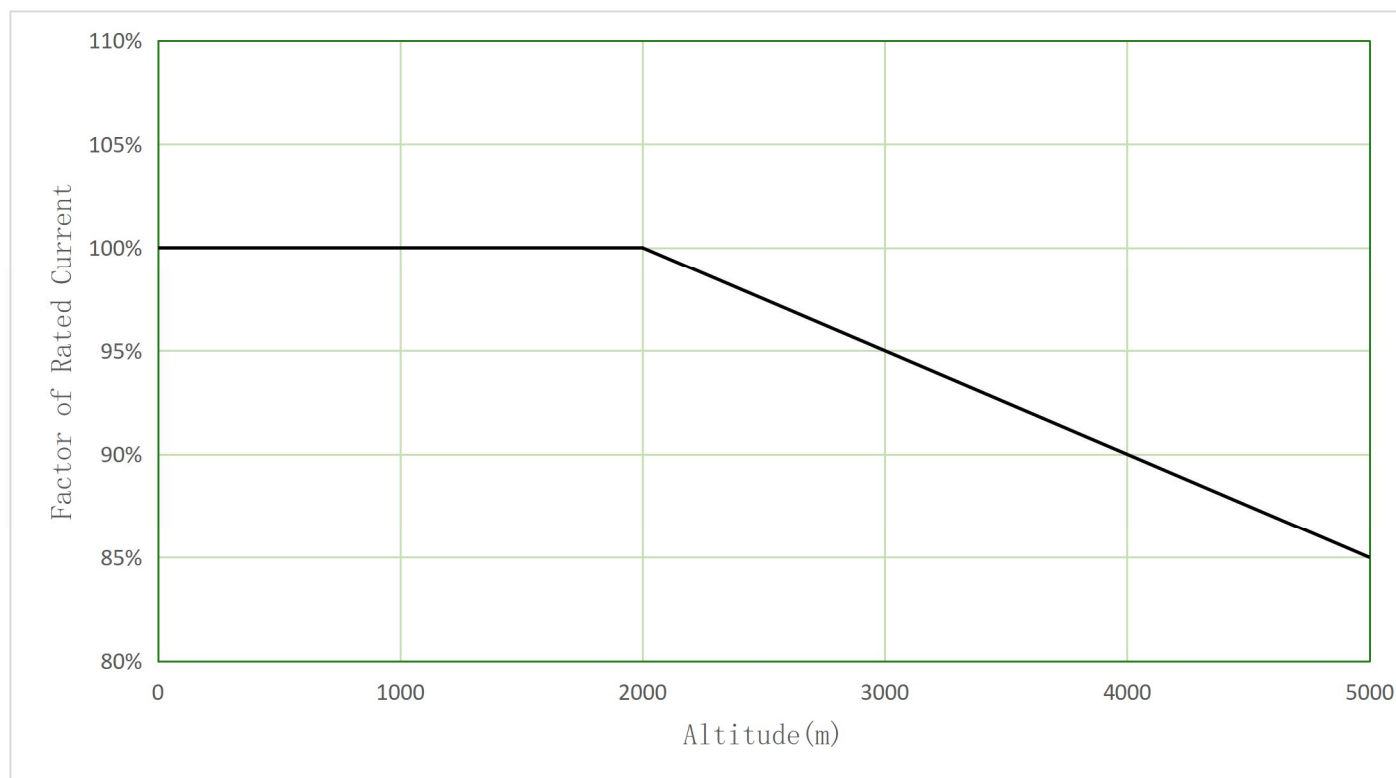
- Normal temperature: -5°C to 40°C;
- The altitude of the site of installation of the fuses should not exceed 2000 m above sea level;
- The air should be clean and its relative humidity does not exceed 50% at a maximum temperature of 40°C;
- Higher relative humidities are permitted at lower temperatures, 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)
EFXxxxxa22	127	96	49	8	18	18.000	19.275	330	310	200
EFXxxxxa36	132	96	49	4	18	14.184	15.084	320	320	200
EFXxxxxa43	127	96	49	2	18	16.452	17.298	330	310	200

WEB RESOURCES

Download the latest technical documents: www.adlerelectric.com. Specifications are subject to change without notice.