HIGH SPEED FUSES AND SYSTEM PROTECTION

For Automotive/ Electric Vehicles and EVSE/ Charging Equipment

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EVSE/ Charging Equipment

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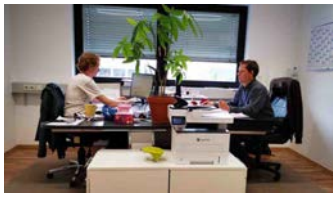
ADLER-Your All-round Protection for Strong Currents!



ADLER Elektrotechnik Leipzig GmbH has a professional team with wide knowledge, skill and experience to provide both best technical expertise and customer service at one stop. With know-how from a long-time history of fuse development and distribution we establish ourselves as your contact point for photovoltaic, industrial and electric vehicle fuses and accessories. Based on our strong foundations and innovative spirit we strive to achieve robust growth. Our diversified and dedicated team of sales people, product technicians and field application engineers supplies top quality products and superior customer support.

Our products and their applications

- Photovoltaic midget and medium fuse links (gPV)
- Photovoltaic NH fuses in various sizes (gPV)
- DIN-Rail mount fuse holder cartridges for cylindrical fuses and NH blade type fuse bases
- Photovoltaic system components, combiner boxes and Accessories
- Many types of DC Isolators Switches(up to 63A) & Circuit Breakers up to 630A
- Photovoltaic surge protection devices (SPD)
- Cylindrical fuse links for industrial applications (gG)
- All standard DIN-Rail NH blade fuses for general industrial application (gG)
- Fuse holders for cylindrical fuses, fuse mounts and NH blade type fuse bases
- HV fast acting semiconductor fuses
- Automotive grade EV main fuses for electric vehicles up to 1000 Vdc
- EV fuses for auxiliary protection for 500 Vdc and 800 Vdc up to 50A
- Bolt mounted type fuses & holders
- Automotive Mini and Midi blade fuses
- Special fuses for battery ESS protection

Across all of our product range, we are proud to offer well estabilized, certified products that have developed a reputation in the market for quality, reliability and innovation.
As a market leader and pioneer, Adler regularly extends and improves its product portfolio and informs about news on the company website.
We provide our customers with expert solutions, a high standard of professional services, an availability of stock and an "easy to deal with" experience.

Our Mission Statement

We add value to our customer's business by supplying sophisticated, high quality electrical products, solutions-focused expertise, personal service and genuine customer care at highest possible standards in our industry.

ADLER Global Network

Leipzig - Germany
(Headquarters)

Dongguan - China
(Manufacturing and Testing)

Xi'an - China
(Manufacturing)

Regensburg - Germany
(Engineering)

Product Selection Guide

EV – Fuse Selection Guide

Fuse products for EV/ HEV applications are relatively new in the industry, they could be regarded as a crossover product between low voltage fuse and automotive fuse.
For our ADLER's EV fuse designs we take references from following industry and quality management standards:

- UL 248-20
- ISO 8820-8; ISO 8820-1
- JASO D622
- GB/T 31465.6
- IATF 16949

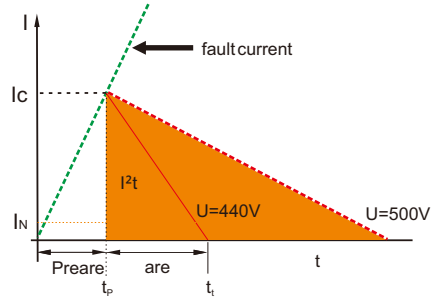
The following steps shall help you in selecting the correct EV fuse for automotive applications:

Determine the following parameters:

1. **Rated Voltage U_n:** The rated voltage of the fuse shall not be lower than the operation voltage of the system. For EV purposes and quick-charging stations DC fuses must be applied.
2. **Rated Current I_n:** Calculate the proper rating according to the maximum continuous load current of the system. Several specific factors are to be considered for the EV environment.
3. **Dimensions:** Find the suitable dimensions and mounting method for the application. Mind automotive grade fuses must be securely fastened, usually bolt mounted.
4. **Wiring, overload capacity:** Determine, if additional cable protection is required. It is recommended that the auxiliary protection matches the cable protection as far as possible.

Voltage rating of fuse ≥ max. continuous system voltage

If the rated voltage is exceeded and the arc not quenched fast enough, the Joule integral I²t will become too large for the quartz sand extinguish the arc. The fuse body can be damaged or destroyed as a result.



Formula for current rating of the fuse based on I_b:

$I_b = I_n \times K_T \times K_e \times K_v \times K_n \times K_c$

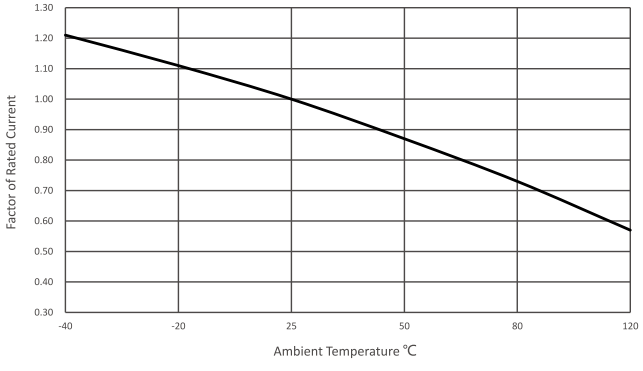
Converted to : $I_n \geq I_b / (K_T \times K_e \times K_v \times K_n \times K_c)$

I_n: rated current of fuse

I_b: the allowable maximum continuous load current in the circuit, determined by operation current of the application

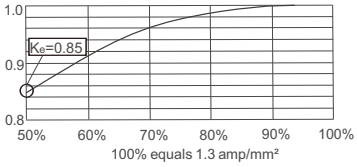
K_T: temperature derating factor, determined through measurement of the ambient temperature

De-rating Curve



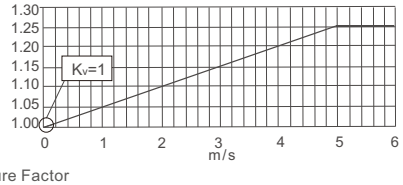
K_e: Heat transfer derating of the connection

The fuse is generally connected to cables through a copper bar. The heat transfer can be determined according to the current density in the connected copper bolt in the factor correction curve of connecting device heat transfer factor Ke.Generally, the fuse copper bar has a current density of 1-1.6 amp/mm². If the rated current is too high, increase the cross section to decrease the current density.
Factor Ke can be determined with the quotient of the used cross section to the IEC cross section and the following diagram:



K_v: Cooling Correction Factor

Additional cooling will affect K_T as well as the operation time of the fuse. Natural cooling is the most recommended for EV applications, in that case we apply a factor of K_v = 1. The current rating can be decreased by additional cooling according to the following diagram:



K_n: Enclosure Factor

Since automotive high power fuses are mostly operated in an enclosure, especially MSD fuses, they suffer from a weaker cooling than fuses operated in the open air.
To make up for the higher heat generation, a higher rated fuse shall be considered.

Experience showed that using a factor of K_n = 0.8 is sufficient for handling the heat generation in MSD enclosures as well as in PDU (Power Distribution Unit) enclosures.

Other EV applications, such as stationary charging equipment, provide better heat removal, so the influence can be neglected and the factor Kn can be attained with 1.

K_c: Cyclic Loading Factor

Cyclic Loading means that the load current varies over time, in regular or irregular cycles. Depending on the current, the material might be under the influence of relative high temperature changes in relative short time. This leads to material fatigue and faster aging.
To reduce these effects, a higher fuse rating shall be applied, leading to lower temperature changes.

Cyclic Loading Factors has been determined empirically. It has shown that for irregular load changes, which is typical for EVs, a factor of 0.8 is a good measure for compensating the above effects.

Based on the variables from the preliminary selection, we can now calculate the proper fuse rating:

$I_n \geq I_b / (K_T \times K_e \times K_v \times K_n \times K_c)$

Example:

- Operating DC Voltage: 530 V → select 800 Vdc
- Max. load current: 95 A
- PDU box temperature: 40°C → K_T = 0.9
- No cooling vents → K_v= 1
- Cable is 130 mm², 100% of IEC cable size → K_e = 0.88
- **K_n** = 0.8 for usage in a PDU box
- **K_c** = 0.8 for irregular cyclic loads

$I_n \geq 95\ A / (0.9 \times 1 \times 0.88 \times 0.8 \times 0.8)$

$I_n \geq 187.4\ A$

Select: AE7, 800 Vdc, 200 A

EV Electric Vehicle (EV) Protection

AE4 10x26 mm 200 Vdc EV Fuse

RoHS

DESCRIPTION

Adler AE4 series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 200 Vdc / 275 Vac in ratings from 10 - 50A. The AE4 was specifically built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 200Vdc / 275 Vac automotive fuse
- Rated Current: 10-50 A
- Rated Breaking Capacity: 10 kA@200 Vdc
- 20kA@275 Vac
- Time Constant: 2±0.5 ms
- Dimensions: 10x26 mm
- General purpose fuse for EV/HEV auxiliary protection

AGENCY INFORMATION

- Designed to UL248-20; ISO 8820-8; GB/T 31465.6
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBERING SYSTEM

AE4 2500 6 00

- 00: Body Size: 00:Cartridge, 01:Central Mount, 03:PCB Mount, 05:Level Mount
- 6: Voltage Code: 200 Vdc
- 2500: Ampere Code: See Table 1
- AE4: Product Series: AE4

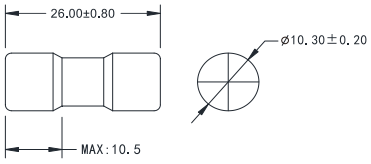
ELECTRICAL SPECIFICATIONS

Part Number				Rated Current	Ampere Code	Rated Voltage	Breaking Capacity
Cartridge	Central Mount	PCB Mount	Level Mount				
AE42100600	AE42100601	AE42100603	AE42100605	10 A	2100	200 Vdc 275 Vac	10 kA@200 Vdc 20 kA@275 Vac
AE42150600	AE42150601	AE42150603	AE42150605	15 A	2150		
AE42200600	AE42200601	AE42200603	AE42200605	20 A	2200		
AE42250600	AE42250601	AE42250603	AE42250605	25 A	2250		
AE42300600	AE42300601	AE42300603	AE42300605	30 A	2300		
AE42400600	AE42400601	AE42400603	AE42400605	40 A	2400		
AE42500600	AE42500601	AE42500603	AE42500605	50 A	2500		

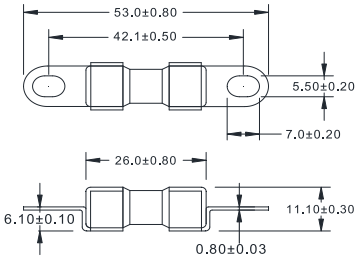
Table1 Note: (1) Temperature rise: <50 K.

DIMENSIONS (mm)

AE4xxxx600



AE4xxxx601



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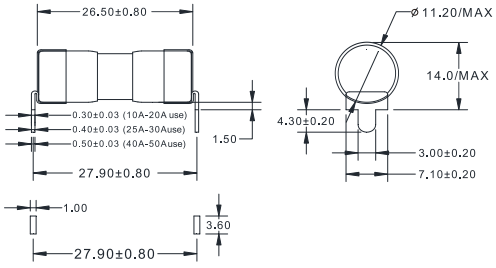
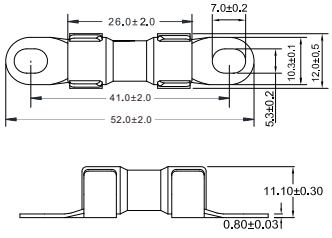


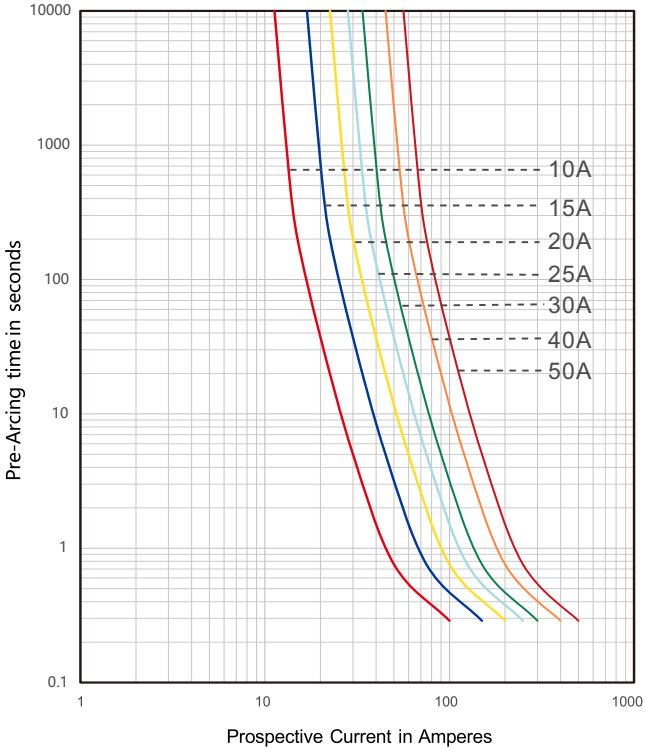
AE4xxxx605



TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	135 %	150 %	200 %	300 %	500 %
10-50 A	>4 h	<1 h	10-1000 s	0.5-100 s	0.1-15 s	0.05-1 s

TIME CURRENT CURVE



EF3 EV FUSE

DESCRIPTION

Adler EF3 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 315 Vdc in ratings from 150A to 700A.

FEATURES

- Reliable clearing of DC fault currents
- High cycling performance
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 50kA
- Operation as low as 410% I n overload protection
- QR code marks on each fuse for traceability

AGENCY INFORMATION

- Designed to UL 248-20, ISO 8820-8, GB/T 31465
- UL certified (150A~500A)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit

PART NUMBER SYSTEM

EF3 3250 22 0

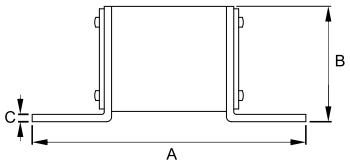
- 0 — Defaut:0
- 22 — Size:20
- 3250 — Ampere Code: See Table 1
- EF3 — Product Series: EF3

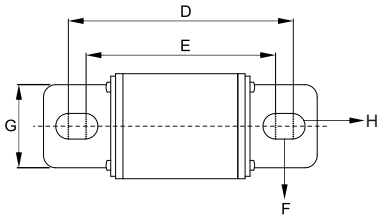
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity		Pre-arcing	Wait Loss(W)
					UL	Self-Certfied	A^2sec	1.0In
77X20	EF33150220	150A	3150	200Vdc 315Vdc	4.1In~50kA@200 Vdc	6kA@315 Vdc	4500	23.1
	Ef33175220	175A	3175	200Vdc 315Vdc	4.1In~50kA@200 Vdc	6kA@315 Vdc	6600	25.2
	EF33200220	200A	3200	200Vdc 315Vdc	4.1In~50kA@200 Vdc	6kA@315 Vdc	8500	27.5
	EF33250220	250A	3250	200Vdc 315Vdc	4.1In~50kA@200 Vdc	6kA@315 Vdc	16000	30.5
	EF33300220	300A	3300	200Vdc	4.1In~50kA@200 Vdc	-	29000	34.3
	EF33350220	350A	3350	200Vdc	○	50kA@200 Vdc	31500	37.5
79X32	EF33350370	350A	3350	250Vdc	4.1In~50kA@200 Vdc	-	28750	44.5
	EF33400370	400A	3400	250Vdc	4.1In~50kA@200 Vdc	-	43700	45.5
	EF33450370	450A	3450	250Vdc	4.1In~50kA@200 Vdc	-	56350	57.0
	EF33500370	500A	3500	250Vdc	4.1In~50kA@200 Vdc	-	67600	61.3
77X30	EF3360037A	600A	3600	150Vdc	○	50kA@200 Vdc	82000	66.0
	EF3370037A	700A	3700	150Vdc	○	50kA@200 Vdc	128000	75.0

Table1 1. ** --- UL File: E506668
2. ○ --- UL certification in process

DIMENSIONS (mm)



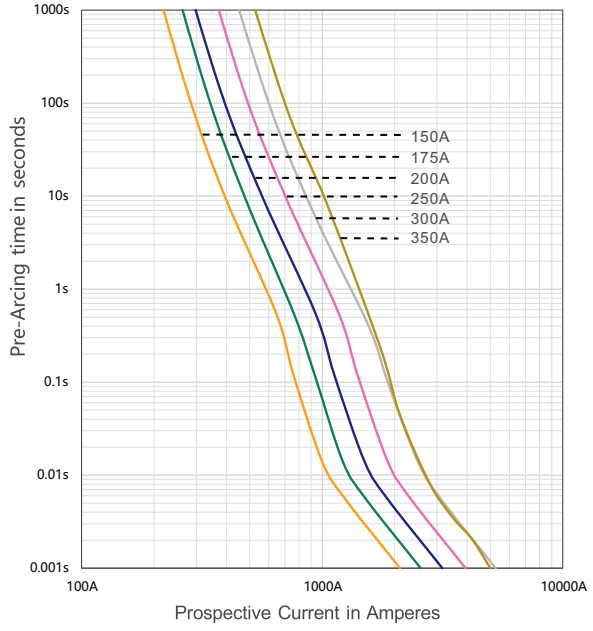


Fuse Size	A	B	C	D	E	F	G	H
77X20	77	25.0	2.0	61.5	50.0	5.75	20.0	Φ8.5
79X32	79	24.0	2.0	62.5	49.5	6.5	32.3	Φ8.5
77X30	77	31.8	2.0	59.0	51.0	4.0	30.0	Φ8.5

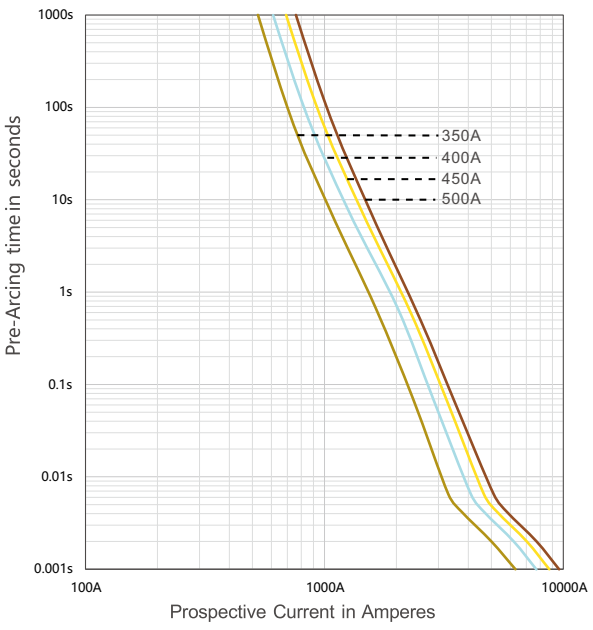
Table2

TIME CURRENT CURVE

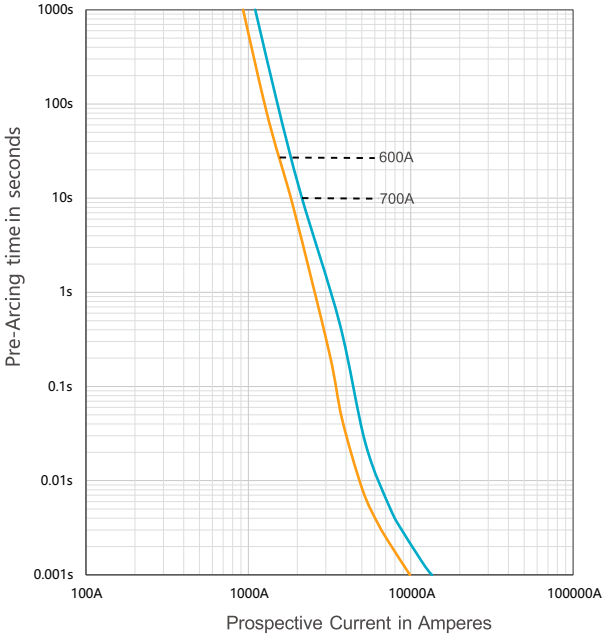
EF3xxxx220



EF3xxxx370



EF3xxxx37A



AE2 EV FUSE

DESCRIPTION

Adler AE2 series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 500 Vdc in ratings from 10 - 50A. The AE2 was specifically built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 500 Vdc automotive fuse
- Rated Current: 10-50 A
- Rated Breaking Capacity: 20 kA at 500 Vdc
- Time Constant: 2±0.5 ms
- Size: 10x38 mm
- General purpose fuse for EV/HEV auxiliary protection
- Recommended fuse holder: BH114

AGENCY INFORMATION

- Designed to UL 248-20; ISO 8820-8; GB/T 31465.6
- TUV certified (15 - 50A), UL certified
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit

PART NUMBERING SYSTEM

AE2 2500 6 07

- 07: Body Size: 04: Central Mount; 05: Level Mount; 06: PCB Mount; 07: Cartridge
- 6: Voltage Code: 500 Vdc
- 2500: Ampere Code: See Table 1
- AE2: Product Series: AE2

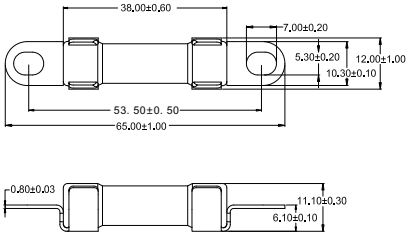
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number				Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	I²t (A²s)		Dissipation	Certifications	
	Cartridge	Central Mount	Level Mount	PCB Mount					Pre-arcing	Total	(1.0InW)	TUV	UL
10x38	AE22100607	AE22100604	AE22100605	AE22100606	10 A	2100	500 Vdc	20 kA@500 Vdc	160	255	3	○	●
	AE22150607	AE22150604	AE22150605	AE22150606	15 A	2150			370	620	2.5	●	●
	AE22200607	AE22200604	AE22200605	AE22200606	20 A	2200			820	1360	3.5	●	●
	AE22250607	AE22250604	AE22250605	AE22250606	25 A	2250			1060	1505	3.5	●	●
	AE22300607	AE22300604	AE22300605	AE22300606	30 A	2300			1270	2190	4.7	●	●
	AE22350607	AE22350604	AE22350605	AE22350606	35 A	2350			1745	2936	4.8	●	●
	AE22400607	AE22400604	AE22400605	AE22400606	40 A	2400			1980	3688	5.5	●	●
	AE22450607	AE22450604	AE22450605	AE22450606	45A	2450			2200	5219	5.8	●	●
	AE22500607	AE22500604	AE22500605	AE22500606	50 A	2500			3010	6750	6.8	●	●

Table 1 Note:1.●=Certification obtained. ○=No certification
UL File number:E506666

DIMENSIONS (mm)

AE2xxxx604



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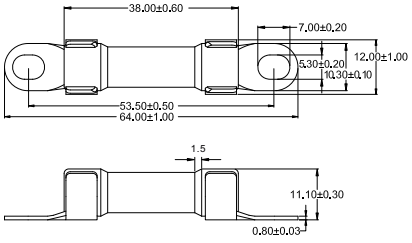

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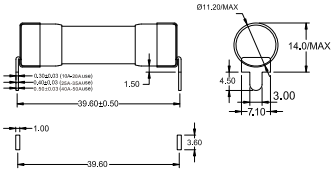

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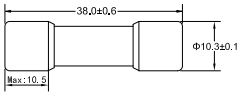
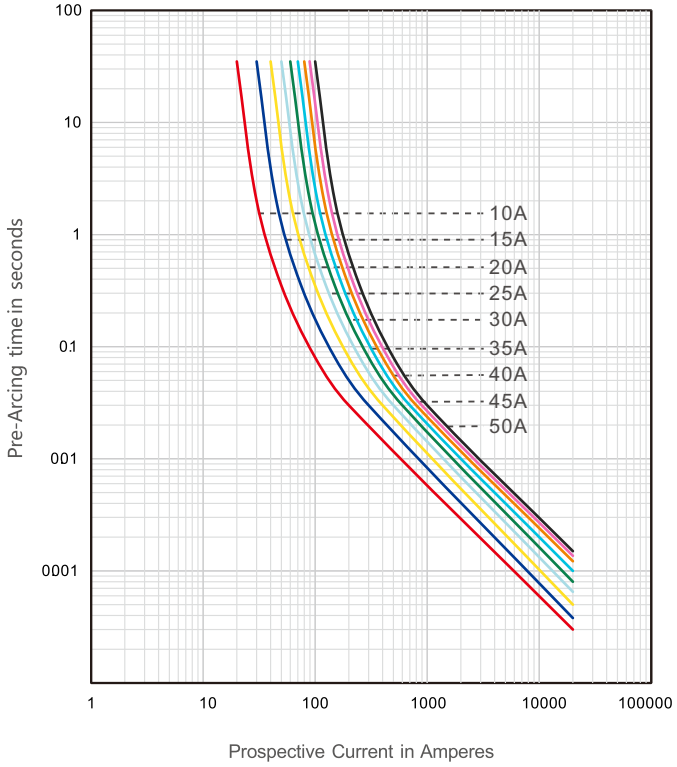


TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	135 %	150 %	200 %	300 %	500 %
10-50 A	>4 h	150s-1h	10-1000 s	0.5-100 s	0.1-15 s	0.05-1 s

TIME CURRENT CURVE



AE5 EV FUSE

RoHS

DESCRIPTION

Adler AE5 series EV fuses are specially engineered and tested to provide best-in-class PDU (power distribution unit) protection and battery high performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 500 Vdc in ratings from 50 – 700 A. The AE5 was specifically built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- Reliable clearing of DC fault currents
- High cycling performance
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 50kA
- Operation as low as 200% In overload protection
- Full coverage of battery module current
- QR code marks on each fuse for traceability

AGENCY INFORMATION

- Designed to JASO D622, ISO 8820-8, GB/T 31465
- TUV certified (50A~400A)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

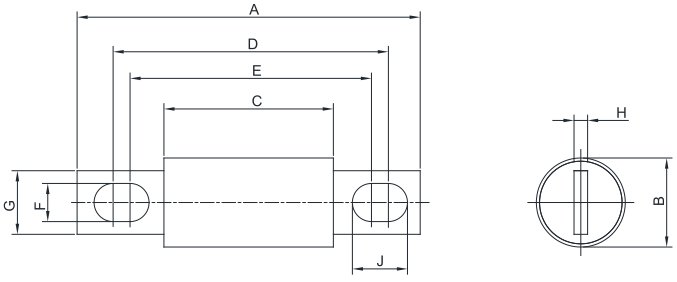
- Power Converters (Inverters, Rectifiers)
- Power Supplies
- UPS
- Variable Speed Drives
- Control Circuits
- Soft Starters

PART NUMBERING SYSTEM

AE5 3100 6 25

- 25 — Body Size: 20, 25, 31, 38, 51
- 6 — Voltage Code: 500 Vdc
- 3100 — Ampere Code: See Table 2
- AE5 — Product Series: AE5

DIMENSIONS:(mm)



Fuse Size	A ± 0.8	B ± 0.5	C ± 0.8	D ± 0.8	E ± 0.8	F ± 0.5	G ± 0.5	H ± 0.1	J ± 0.5
Φ21 x40	81	21	40	66	57	8.5	15	3.2	13
Φ25 x44	89	25	44	73	71	9	18	3.2	10
Φ31 x53	92	31	53	76	69	8.5	22	5	12
Φ38 x53	110	38	53	88	70	10.5	24.8	6	19.5
Φ51 x53	110	51	53	90	71	10.5	38	6	20

Table1

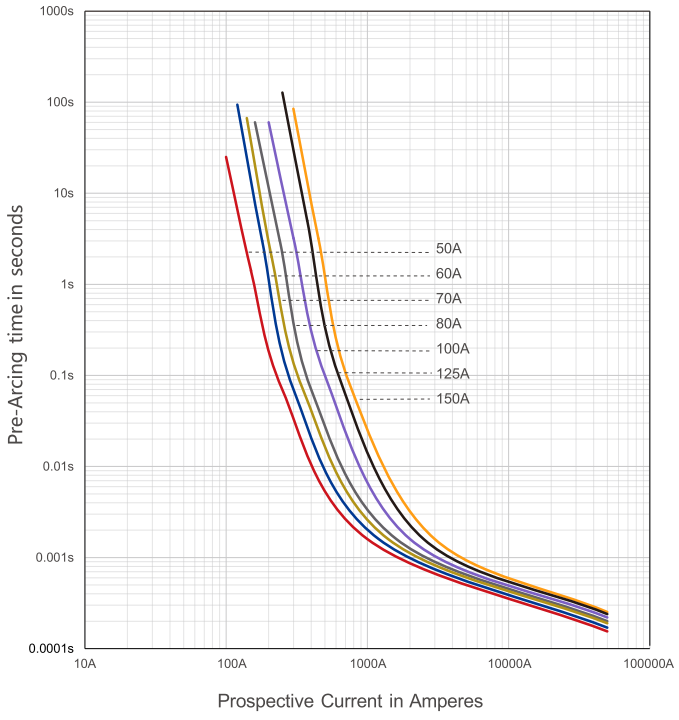
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity		Melting I^2t	Clearing I^2t	Watt Loss(W)
					TUV**	Self- Certified	(A^2 s)	(A^2 s)	0.5 I_n
21x40	AE52500620	50A	2500	500Vdc	30kA	50kA	201	1510	1.4
	AE52600620	60A	2600	500Vdc	30kA	50kA	274	2164	1.5
	AE52700620	70A	2700	500Vdc	30kA	50kA	345	2933	1.8
	AE52800620	80A	2800	500Vdc	30kA	50kA	392	3565	2.1
	AE53100620	100A	3100	500Vdc	30kA	50kA	639	6826	2.4
	AE53125620	125A	3125	500Vdc	30kA	50kA	930	11396	2.9
	AE53150620	150A	3150	500Vdc	30kA	50kA	1062	14680	3.6
25 x44	AE53100625	100A	3100	500Vdc	30kA	50kA	806	7258	2.4
	AE53125625	125A	3125	500Vdc	30kA	50kA	1260	11340	3.1
	AE53150625	150A	3150	500Vdc	30kA	50kA	1814	16330	3.8
	AE53175625	175A	3175	500Vdc	30kA	50kA	2474	22755	4.2
	AE53200625	200A	3200	500Vdc	30kA	50kA	3455	31097	4.9
	AE53225625	225A	3225	500Vdc	30kA	50kA	5040	40320	5.3
	AE53250625	250A	3250	500Vdc	30kA	50kA	6870	46500	5.9
31x53	AE53200631	200A	3200	500Vdc	30kA	50kA	4907	45631	5.2
	AE53225631	225A	3225	500Vdc	30kA	50kA	6192	55109	5.6
	AE53250631	250A	3250	500Vdc	30kA	50kA	7677	65256	6.1
	AE53300631	300A	3300	500Vdc	30kA	50kA	12700	102871	6.9
	AE53350631	350A	3350	500Vdc	30kA	50kA	15142	116596	8.3
	AE53400631	400A	3400	500Vdc	30kA	50kA	18620	139400	9.0
38x53	AE53400638	400A	3400	500Vdc	○	50kA	30897	185382	9.0
	AE53500638	500A	3500	500Vdc	○	50kA	59600	274000	11.6
51x53	AE53500651	500A	3500	500Vdc	○	50kA	50454	252272	11.3
	AE53600651	600A	3600	500Vdc	○	50kA	71269	313583	14.2
	AE53700651	700A	3700	500Vdc	○	50kA	103000	449000	15.5

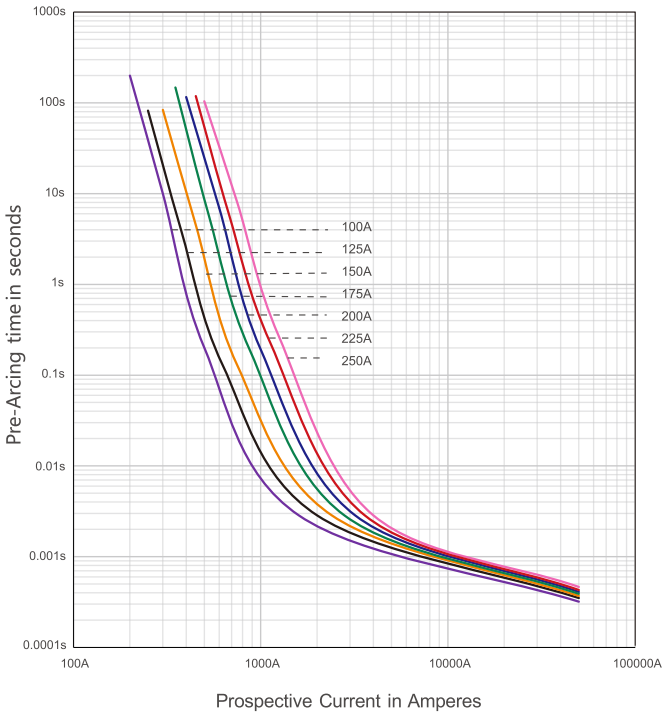
Table 2 1.** --- TUV File: J50437773; J50437772; J50433104
2.○ --- TUV certification in process
3.Time constant: 2 ± 0.5ms

TIME CURRENT CURVE

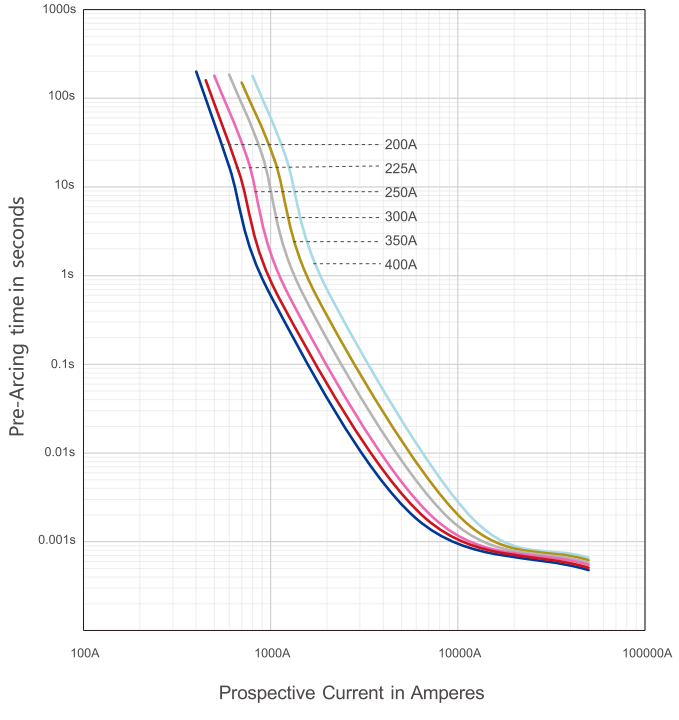
AE5xxxx620 50A – 150A



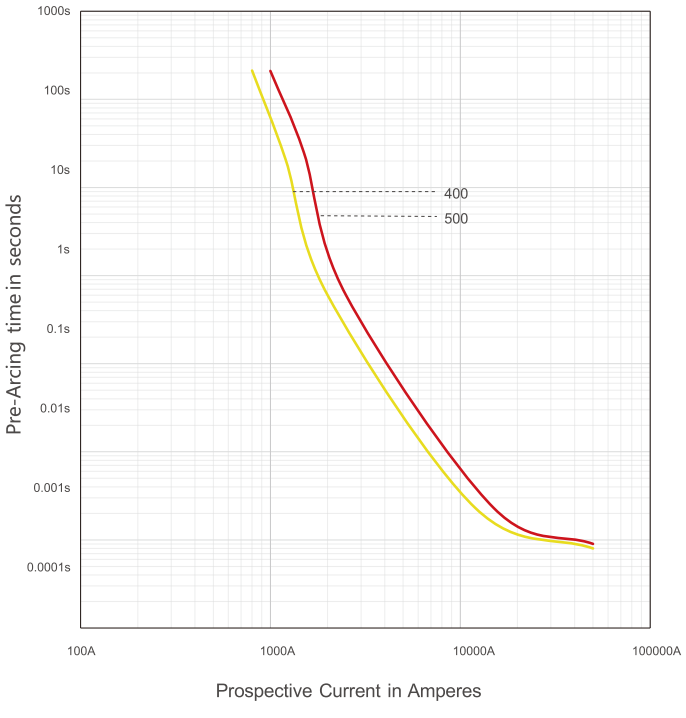
AE5XXXX625 100A – 250A



AE5XXXX631 200A – 400A

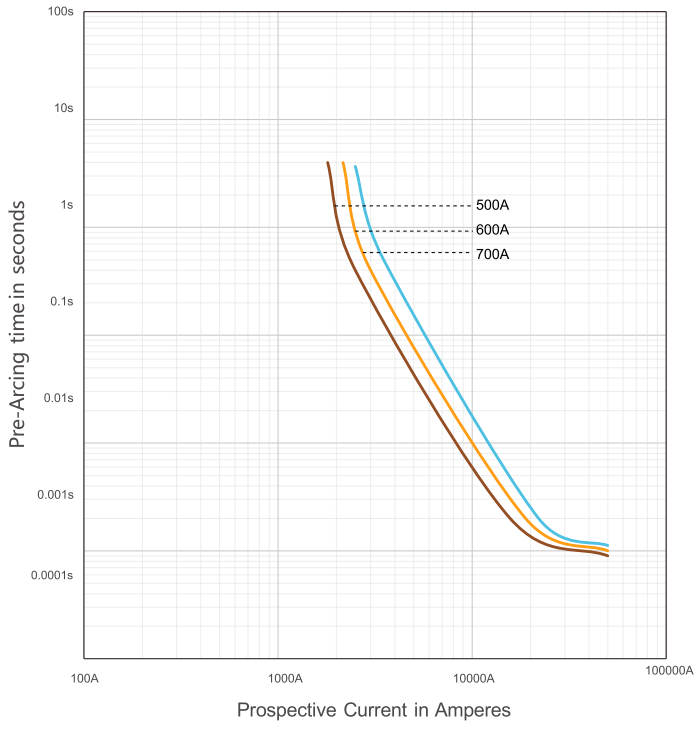


AE5XXXX638 400A – 500A



TIME CURRENT CURVE

AE5XXXX651 500A – 700A



EF5 EV FUSE

DESCRIPTION

Adler EF5 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 500 Vdc in ratings from 100A to 400A.

FEATURES

- Reliable clearing of DC fault currents
- High cycling performance
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 50kA
- Operation as low as 410% In overload protection
- QR code marks on each fuse for traceability

AGENCY INFORMATION

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

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit

PART NUMBERING SYSTEM

EF5 3200 22 0

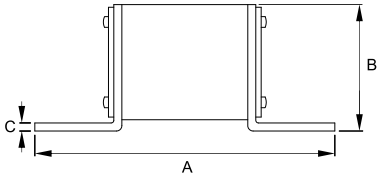
- 0 — Default: 0
- 22 — Width: 22mm
- 3200 — Ampere Code: See Table 1
- EF5 — Product Series: EF5

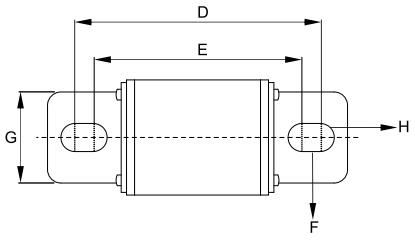
ELECTRICAL SPECIFICATIONS

Size(mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity (UL**)	I²T(A²sec)		Watt Loss(W)
						Pre-arcing	Total @ 500Vdc	1.0 In
49x22	EF53100220	100 A	3100	500 Vdc	5.1In~50 kA	1770	7020	14.9
	EF53125220	125A	3125			2850	11500	19.3
	EF53150220	150 A	3150			4150	15770	23.1
	EF53175220	175 A	3175			5970	22850	27.5
	EF53200220	200 A	3200			9350	36500	30.8
	EF53250220	250 A	3250			16600	67800	35.2
49x36	EF53300370	300 A	3300	500 Vdc	5.1In~50 kA	20500	67500	7.1
	EF53350370	350 A	3350			32600	107580	7.85
	EF53400370	400 A	3400			42250	148000	9.8

Table1 1. ** --- UL File: E506668
2. Recommend mounting torque is 12+/-1.0Nm (M8)

DIMENSIONS (mm)

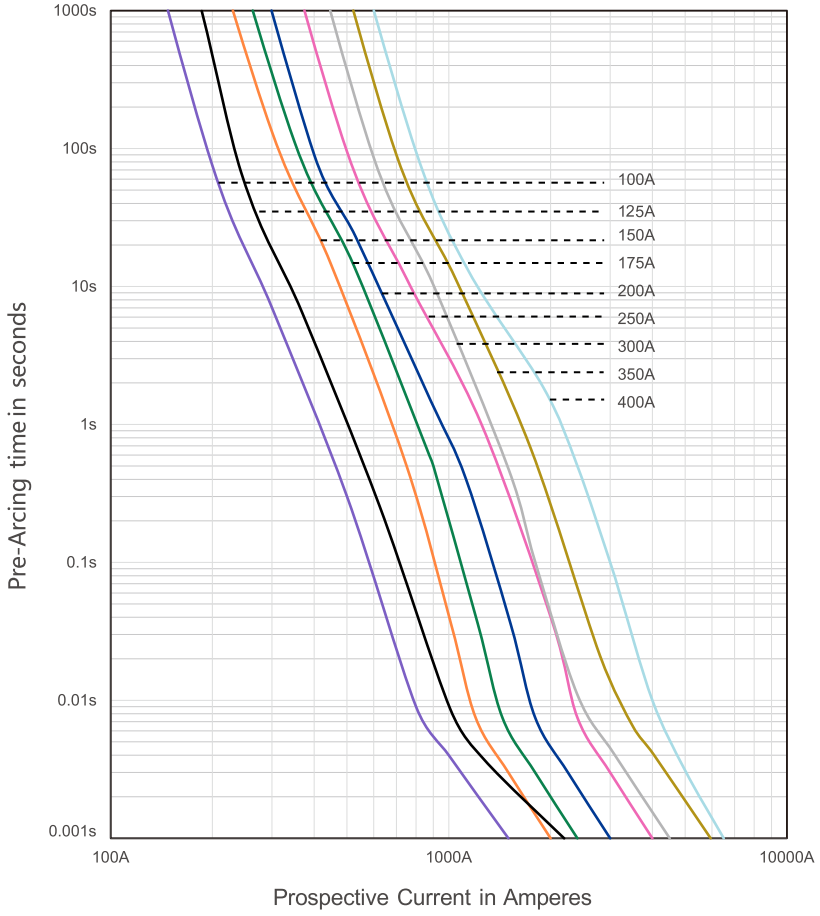




Size	A	B	C	D	E	F	G	H
49x22	90	25	2	74.5	63	8.5	20	Φ 8.5
49x36	92	24	2	75	63	8.5	32.5	Φ 8.5

Table2

TIME CURRENT CURVE



F19 EV FUSE

DESCRIPTION

The Adler F19 500Vdc SMD fuse series is specially engineered and tested to provide best-in-class protection performance in Electrical Vehicles and Hybrid Electrical Vehicles, up to 500 Vdc in ratings from 1 A to 5 A.

FEATURES

- 500Vdc automotive fuse
- Rated currents from 1 A to 5 A
- Compact size and power density

AGENCY INFORMATION

- Manufactured in accordance with AEC-Q-200
- Approvals: UL file: E499007.

APPLICATIONS

- BDU Protection
- Drive Train Protection
- EV/HEV Power Management and Protection

PART NUMBERING SYSTEM

F19 1500 0 00

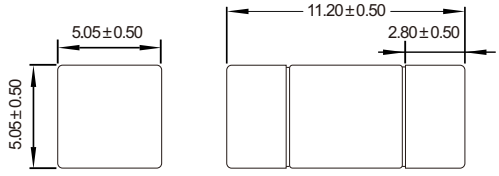
- 00 — Supplementary Code:00: default
- 0 — Voltage Code: 500 Vdc
- 1500 — Ampere Code: See Table 1
- F19 — Product Series: F19

ELECTRICAL SPECIFICATIONS

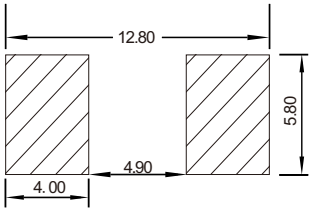
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Typical Cold. Resistance (mΩ)	Voltage Drop (mV)	Alpha Mark	I²t(A²S) Pre-Arcing	Certifications UL
F191100000	1.00 A	1100	500 Vdc 350 Vdc 350 Vac	100A@500 Vdc 1.5kA@350 Vdc 100A@350 Vac	153	220	1	0.5	●
F191125000	1.25A	1125			117	210	1.25	0.95	●
F191160000	1.60A	1160			74	190	1.6	2.3	●
F191200000	2.00 A	1200			58	185	2	4.1	●
F191250000	2.50A	1250			33	120	2.5	2.6	●
F191315000	3.15A	1315			27	140	3.15	3.3	●
F191400000	4.00 A	1400	450 Vdc 125 Vdc 350 Vac	100A@450 Vdc 1.5kA@125 Vdc 100A@350 Vac	21	140	4	5.5	●
F191500000	5.00A	1500			14	130	5	11.5	●

Table1 Note: 1.●=Certification obtained. UL File number:E4990077
2.Pre-arcing I²t values are typicalandtested at 10*Incurrent.
3.DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25℃.

DIMENSIONS (mm)



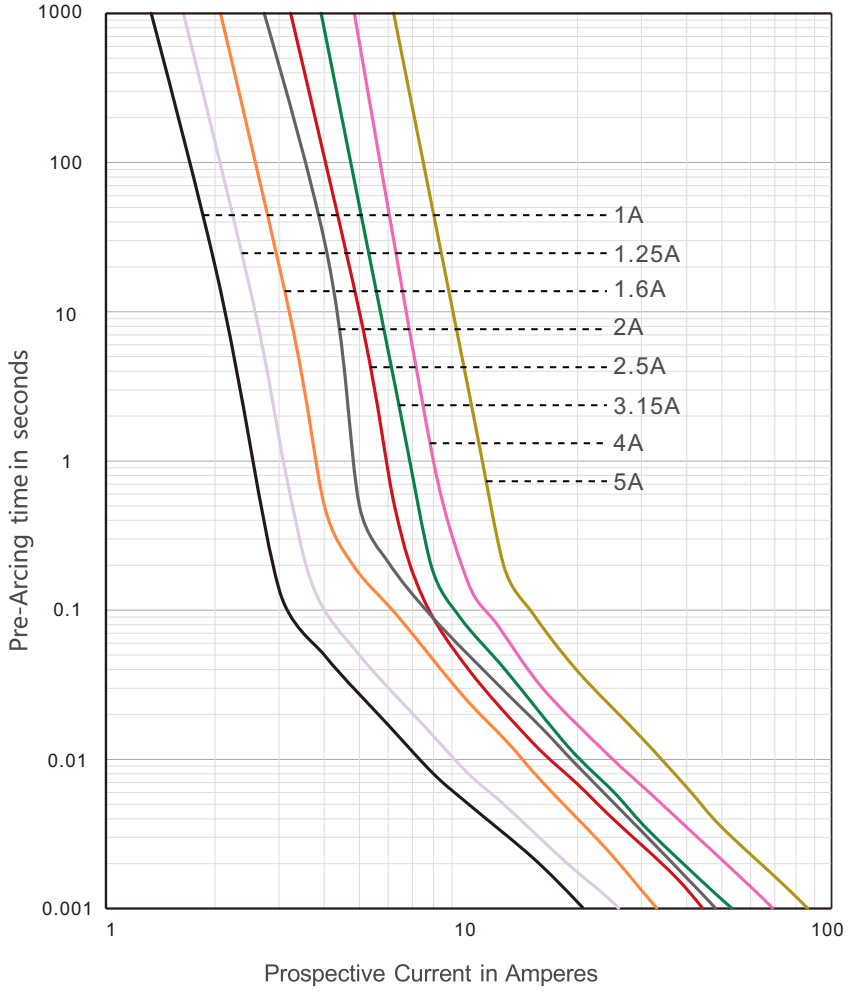
RECOMMENDED PAD LAYOUT(mm)



TIME VS CURRENT CHARACTERISTIC

Rated Current	125 %	200 %	1000 %
1-5 A	>1 h	<120s	<1 s

TIME CURRENT CURVE



AEM EV FUSE

DESCRIPTION

Adler AEM EV fuses series are specially engineered and tested to provide best-in-class automotive charger systems protection for Electrical and Hybrid Electrical Vehicles, up to 750 Vdc in ratings from 200 – 500 A and 20 kA at 750 Vdc breaking capacity. This unique design to optimize space practicality and high-grade ceramic and silver materials is a favorite among customers. The AEM fuse series was specially built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 750 Vdc EV Fuse
- Rated Current: 200-500 A
- Breaking Capacity: 20 kA at 750 Vdc
- For EV/HEV applications

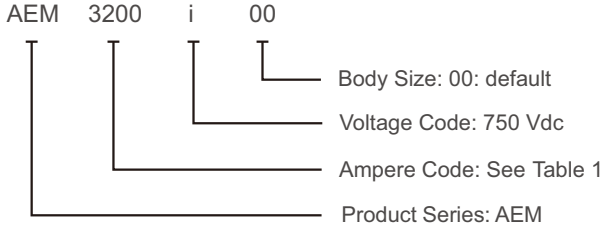
AGENCY INFORMATION

- Designed to UL 248
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBERING SYSTEM

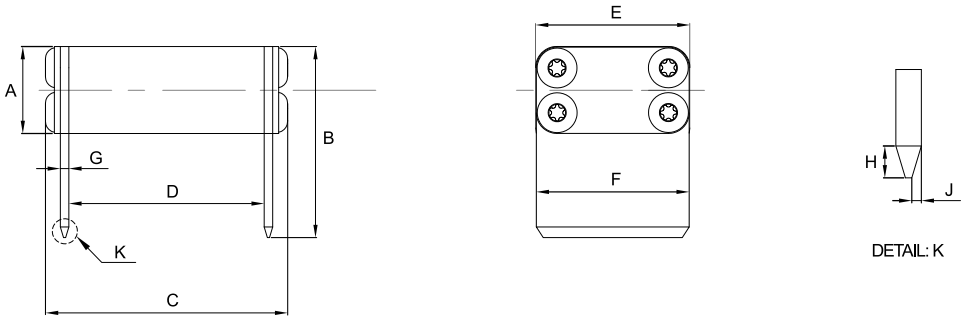


ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Typical Cold Resistance(mΩ)	1.0 In Dissipation (W)
AEM3200i00	200 A	3200	750 Vdc	20 kA@750 Vdc	0.497	9
AEM3250i00	250 A	3250			0.385	11.3
AEM3315i00	315 A	3315			0.321	14.2
AEM3350i00	350 A	3350			0.264	15.8
AEM3400i00	400 A	3400			0.235	18
AEM3450i00	450 A	3450			0.205	21
AEM3500i00	500 A	3500			0.180	23

Table1 Note: 1. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25℃.

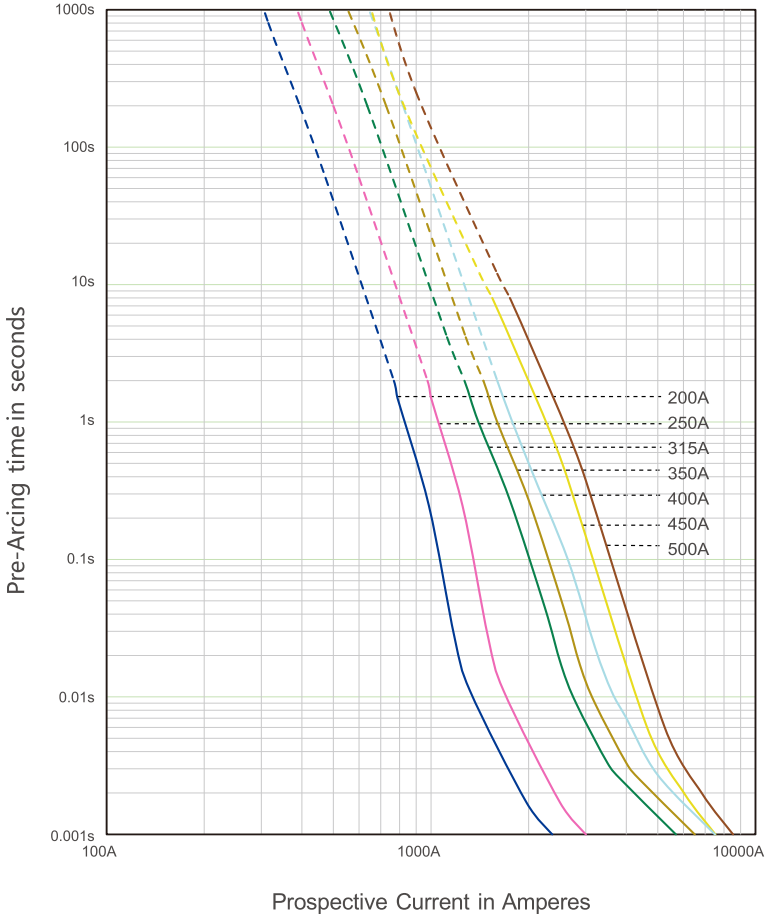
DIMENSIONS (mm)



Rated Current	A ±0.5	B	C	D ±0.25	E ±0.5	F ±0.2	G ±0.03	H	J
200-400 A	20.5	45±0.3	57.1	46	36.3	36	2	2.5	0.75
450 A, 500 A	28	51	57.5	46	36.3	36	2	2.5	0.75

Table2

TIME CURRENT CURVE



EF8 EV FUSE

DESCRIPTION

Adler EF8 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 800 Vdc in ratings from 100A to 400A.

FEATURES

- Reliable clearing of DC fault currents
- High cycling performance
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 20kA
- QR code marks on each fuse for traceability

AGENCY INFORMATION

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

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit

PART NUMBERING SYSTEM

EF8 3400 8 1L

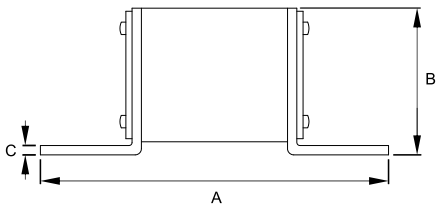
- 1L — Supplementary Code: 0L,1L
- 8 — Voltage Code: 800 Vdc
- 3400 — Ampere Code: See Table 1
- EF8 — Product Series: EF8

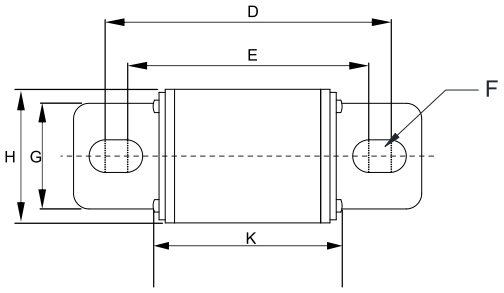
ELECTRICAL SPECIFICATIONS

Size(mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity(UL**)	$I^2T(A^2sec)$		Watt Loss(W)	
						Pre-arcing	Total @ 800Vdc	0.5 In	1.0 In
98x22	EF8310080L	100 A	3100	800 Vdc	6In~20 kA	990	5120	6	21
	EF8312580L	125A	3125			1650	8910	4	23
	EF8315080L	150A	3150			2750	16500	7	25
	EF8316080L	160 A	3160			11000	-	5.1	29.5
	EF8320080L	200 A	3200			6200	41500	7.5	30
	EF8325080L	250 A	3250			11000	75000	-	37
100x36	EF8325081L	250 A	3250	800 Vdc	6In~20 kA	8900	50700	9.5	48
	EF8331581L	315 A	3315			12500	73000	11.3	60
	EF8335081L	350 A	3500			18500	115000	15.1	65
	EF8340081L	400 A	3400			26500	172000	17.4	72

Table1 1. ** --- UL File: E506668
2. Recommend mounting torque is 12+/-1.0Nm (M8)

DIMENSIONS (mm)



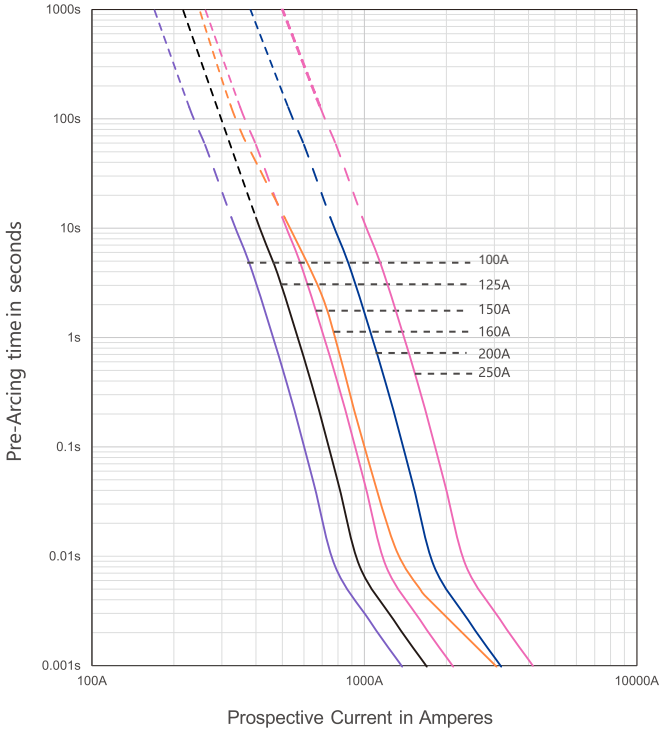


Part Number	A±1	B±1	C mm	D±1	E±1	F	G±0.5	H	K±3
EF8xxxx80L	98	25.0	2±0. 2	83	70.5	Φ8.5	20.0	22±0. 8	57
EF8xxxx81L	100	24.0	2±0.1	83	71	Φ10.5	32.5	36.3+1.2/-0.5	57

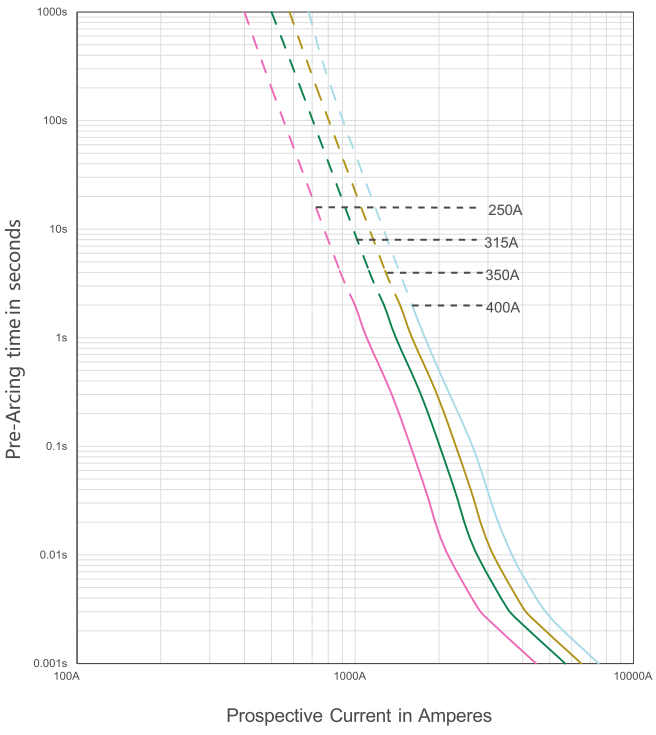
Table2

TIME CURRENT CURVE

EF8xxxx80L 100A – 200A



EF8xxxx81L 250A – 400A



AE7 EV Fuse

DESCRIPTION

Adler AE7 series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 800 Vdc in ratings from 60 – 600 A. The AE7 fuse was specially built to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 800 Vdc EV high-speed power fuse
- Rated Current: 60-150 A (25x66)
  175-400 A (38x72)
  450-600 A (51x72)
- Breaking Capacity: 50 kA @ 800 VDC
- Time Constant: 2±0.5 ms
- Size: 25x66 mm, 38x72 mm, 51x72 mm
- Special purpose fuse for EV/HEV automotive use
- For high power EV PDU and battery protection
- Recommended fuse holder: BFR094-35-M8, BFR099-70-M10

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

AGENCY INFORMATION

- Designed to UL248-20; IEC 60269-4
- UL certified (E506666)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

PART NUMBER SYSTEM

AE7 2600 i 25

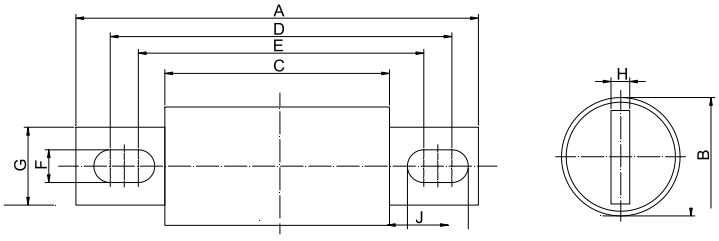
- 25 — Supplementary Code: 25.38.51: default
- i — Voltage Code: 800 Vdc
- 2600 — Ampere Code: See Table 1
- AE7 — Product Series: AE7

ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Melting I^2t (A^2s)	Clearing I^2t (A^2s)	Dissipation (W) 0.5 In	Certifications UL
25x66	AE72600I25	60 A	2600	800 Vdc	50 kA@800 Vdc	5800	15373	3.00	●
	AE72700I25	70 A	2700			6860	17935	3.50	●
	AE72800I25	80 A	2800			8960	23425	4.00	●
	AE73100I25	100 A	3100			14000	36601	5.00	●
	AE73125I25	125 A	3125			23000	60131	5.50	●
	AE73150I25	150 A	3150			31000	81046	6.00	●
38x72	AE73175i38	175 A	3175	800 Vdc	50 kA@800 Vdc	40000	104575	6.56	●
	AE73200i38	200 A	3200			52000	135948	7.50	●
	AE73250i38	250 A	3250			57937	138468	9.38	●
	AE73300i38	300 A	3300			69524	181762	11.25	●
	AE73350i38	350 A	3350			81111	212055	13.13	●
	AE73400i38	400 A	3400			92698	242349	15.00	●
51x72	AE73450i51	450 A	3450	800 Vdc	50 kA@800 Vdc	104285	272643	15.00	●
	AE73500I51	500 A	3500			115873	302936	16.67	●
	AE73560I51	560 A	3560			129777	339289	18.67	●
	AE73600I51	600 A	3600			139047	363524	20.00	●

Table1 Note:1.●=Certification obtained. UL File number:E506666

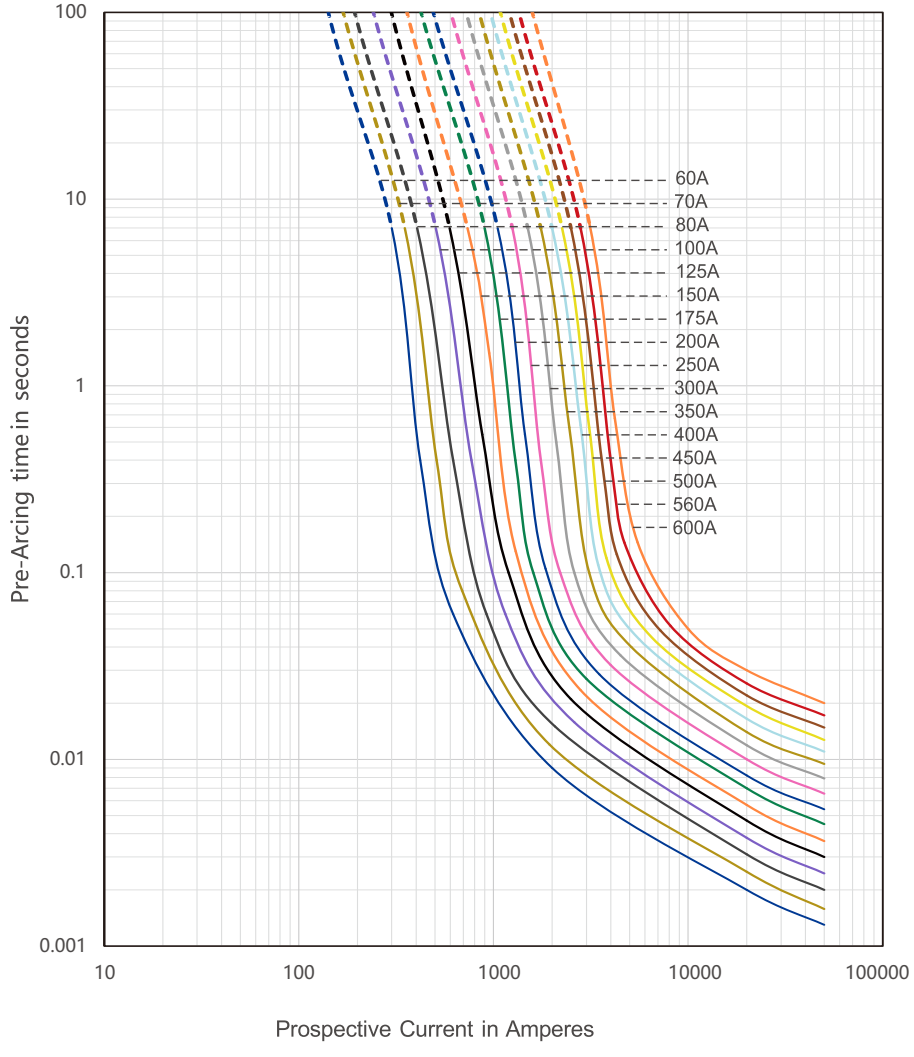
DIMENSIONS (mm)



Size	A	B	C	D	E	F	G	H	J
25x66	111±0.8	25±0.5	66±0.8	95±0.8	93±0.8	9.0±0.5	18±0.5	3.2±0.1	10.0±0.5
38x72	129±0.8	38±0.5	72±0.8	107±0.8	89±0.8	10.5±0.5	25±0.5	6±0.1	19.5±0.5
51x72	129±0.8	51±0.5	72±0.8	109±0.8	90±0.8	10.5±0.5	38±0.5	6±0.1	20.0±0.5

Table2

TIME CURRENT CURVE



AE3 EV Fuse

DESCRIPTION

Adler AE3 series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 850 Vdc with current ratings from 5 - 50A. The AE3 was specially built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- Rated Current: 5-50A
- Max. BC: 20 kA@850 VDC
- Min. BC: 2In@850 VDC
- Time Constant: 2±0.5ms
- Size: 10x38mm
- General purpose fuse for EV/HEV auxiliary protection
- Recommended fuse holder: BH114

AGENCY INFORMATION

- Designed to UL248-20; ISO 8820-8; JASO D622; GB/T 31465.6
- UL certified (E506666)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit

PART NUMBER SYSTEM

AE3 2500 i 07

- 07: Supplementary Code: 07: Cartridge; 04: Central Mount; 05: Level Mount; 06: PCB 2P 08: PCB 4P
- i: Voltage Code: 850 Vdc
- 2500: Ampere Code: See Table 1
- AE3: Product Series: AE3

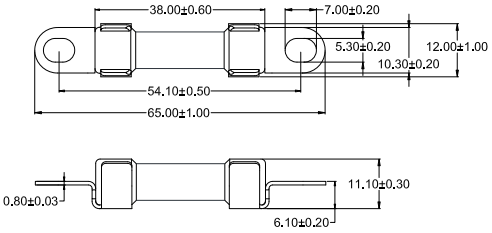
ELECTRICAL SPECIFICATIONS

Part Number					Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	$I^2t(A^2s)$		Dissipation (1.0InW)	Certifications
Cartridge	Central Mount	Level Mount	PCB 2P	PCB 4P					Pre-Arcing	Total		UL
AE31500i07	AE31500i04	AE31500i05	AE31500i06	AE31500i08	5A	1500	850 Vdc	20 kA @850 Vdc	105	182	2.2	●
AE31800i07	AE31800i04	AE31800i05	AE31800i06	AE31800i08	8 A	1800			135	220	2.5	●
AE32100i07	AE32100i04	AE32100i05	AE32100i06	AE32100i08	10 A	2100			160	255	3	●
AE32150i07	AE32150i04	AE32150i05	AE32150i06	AE32150i08	15 A	2150			370	620	2.5	●
AE32200i07	AE32200i04	AE32200i05	AE32200i06	AE32200i08	20 A	2200			820	1360	3.5	●
AE32250i07	AE32250i04	AE32250i05	AE32250i06	AE32250i08	25 A	2250			1060	1505	3.5	●
AE32300i07	AE32300i04	AE32300i05	AE32300i06	AE32300i08	30 A	2300			1270	2190	4.7	●
AE32350i07	AE32350i04	AE32350i05	AE32350i06	AE32350i08	35 A	2350			1745	2936	4.8	●
AE32400i07	AE32400i04	AE32400i05	AE32400i06	AE32400i08	40 A	2400			1980	3688	5.5	●
AE32450i07	AE32450i04	AE32450i05	AE32450i06	AE32450i08	45 A	2450			2200	5219	5.8	●
AE32500i07	AE32500i04	AE32500i05	AE32500i06	AE32500i08	50 A	2500			3010	6750	6.8	●

Table1 Note:1.●=Certification obtained. UL File number:E506666
2. Operational Temperature Range:-40°C to 125°C

DIMENSIONS (mm)

AE3xxxxi04



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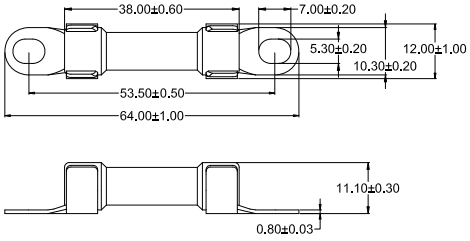

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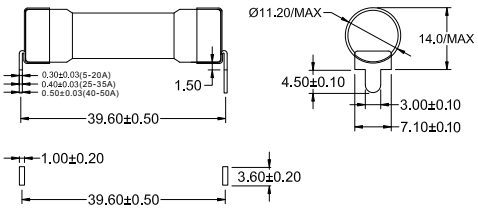

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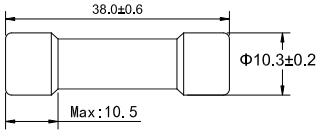

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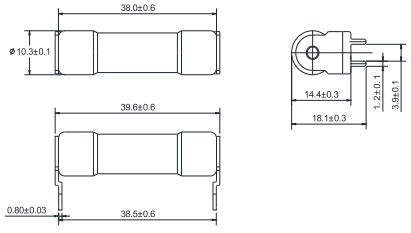
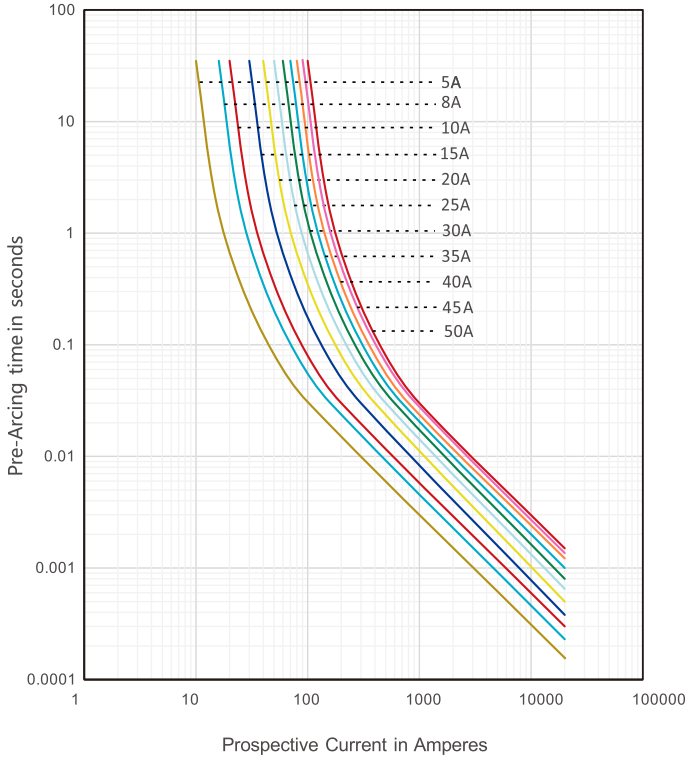


TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	135 %	150 %	200 %	300 %	500 %
5-50 A	>4 h	150s-1h	10-1000 s	0.5-100 s	0.1-15 s	0.05-1 s

TIME CURRENT CURVE



F20 EV Fuse

DESCRIPTION

The Adler F20 1000 Vdc SMD fuse series is specially engineered and tested to provide best-in-class protection performance in Electrical Vehicles and Hybrid Electrical Vehicles, up to 1000 Vdc in ratings from 0.8 A to 3 A.

FEATURES

- 1000Vdc automotive fuse
- Rated currents from 0.8 A to 3 A
- Compact size and power density
- 10 kA breaking capacity

AGENCY INFORMATION

- Manufactured in accordance with AEC-Q-200 qualification standards
- Approvals: UL file: E499007.

APPLICATIONS

- Power supply protection
- BMS protection

PART NUMBER SYSTEM

F20 1300 0 00

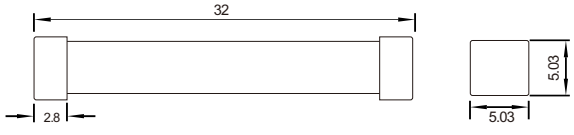
- 00: Supplementary Code: 00: default
- 0: Voltage Code: 1000 Vdc
- 1300: Ampere Code:See Table 1
- F20: Product Series: F20

ELECTRICAL SPECIFICATIONS

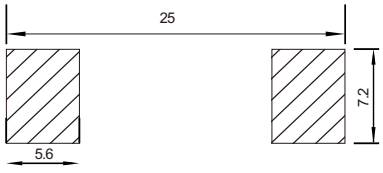
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Lower Cold. Resistance (mΩ)	Upper Cold Resistance (mΩ)	Voltage Drop (mV)	I²t(A²S) Pre-Arcing	Certifications UL
F200200000	0.80 A	0800	1000 Vdc	10kA@1000 Vdc	460	630	500	0.65	●
F201100000	1.00A	1100			370	505	480	1.3	●
F201200000	2.00A	1200			115	165	415	1.5	●
F201250000	2.50A	1250			85	130	385	2.5	●
F201300000	3.00A	1300			70	115	390	4.0	●

Table1 Note: 1.●=Certification obtained. UL File number:E4990077
2. Pre-arcing I²t values are typical and tested at 10*In current.

DIMENSIONS (mm)



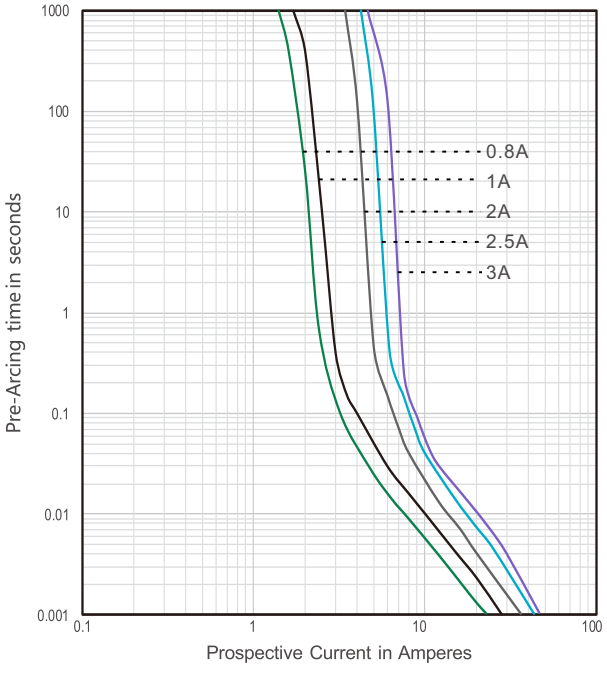
RECOMMENDED PAD LAYOUT(mm)



TIME VS CURRENT CHARACTERISTIC

Rated Current	100 %	250 %
0.8-3 A	>4 h	<120S

TIME CURRENT CURVE



AEX EV Fuse

RoHS CE

DESCRIPTION

Adler AEX series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 1000 Vdc in ratings from 70 – 600 A and a rated breaking capacity of 30 kA at 1000 Vdc. The AEX was specifically built from the ground up to meet the stringent requirements and standards of the electric vehicle industry. Useful in EV Motor and Control Unit Battery Packs.

FEATURES

- 1000 Vdc EV high speed power fuse
- Rated Current: 70-100 A (31x86)
  125-200 A (38x83)
  250-500 A (51x89)
  600A(64x88)
- Rated Breaking Capacity: 50 kA at 1000 Vdc
- Time Constant: 2±0.5 ms
- Size: 31x86 mm, 38x83 mm, 51x89 mm,64x88mm
- Special purpose fuse for EV/HEV automotive use
- For high power EV PDU and battery protection

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

AGENCY INFORMATION

- Designed to UL248-20, IEC 60269-4
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

PART NUMBER SYSTEM

AEX 3600 7 31

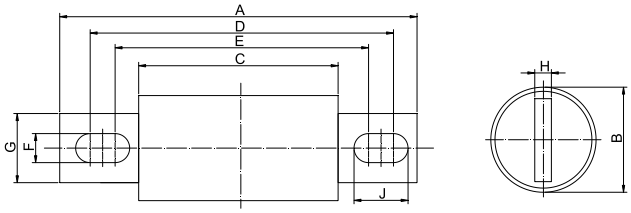
- 31 — Supplementary Code: 31,38,51,64: default
- 7 — Voltage Code: 1000 Vdc
- 3600 — Ampere Code: 600A(See Table 1)
- AEX — Product Series: AEX

ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Melting I^2t (A^2s)	Clearing I^2t (A^2s)	Dissipation (W) 0.5 In
31x86	AEX2700731	70 A	2700	1000 VDC	30 kA@1000 VDC	1847	3879	3.63
	AEX2800731	80 A	2800			2886	6061	3.80
	AEX2900731	90 A	2900			4156	8728	4.00
	AEX3100731	100 A	3100			5657	11880	4.24
38x83	AEX3125738	125 A	3125	1000 VDC	30 kA@1000 VDC	7389	15517	5.58
	AEX3150738	150 A	3150			11545	24245	6.43
	AEX3175738	175 A	3175			17680	37129	7.07
	AEX3200738	200 A	3200			29556	62068	7.14
51x89	AEX3250751	250 A	3250	1000 VDC	30 kA@1000 VDC	41678	87525	9.71
	AEX3300751	300 A	3300			66501	139653	11.07
	AEX3350751	350 A	3350			90515	190083	12.91
	AEX3400751	400 A	3400			133464	280275	13.50
	AEX3500751	500A	3500			133000	320000	15.73
64x88	AEX3600764	600A	3600	1000 VDC	30 kA@1000 VDC	221000	386000	20.3

Table1 Note: (1) Temperature rise: <50 K.

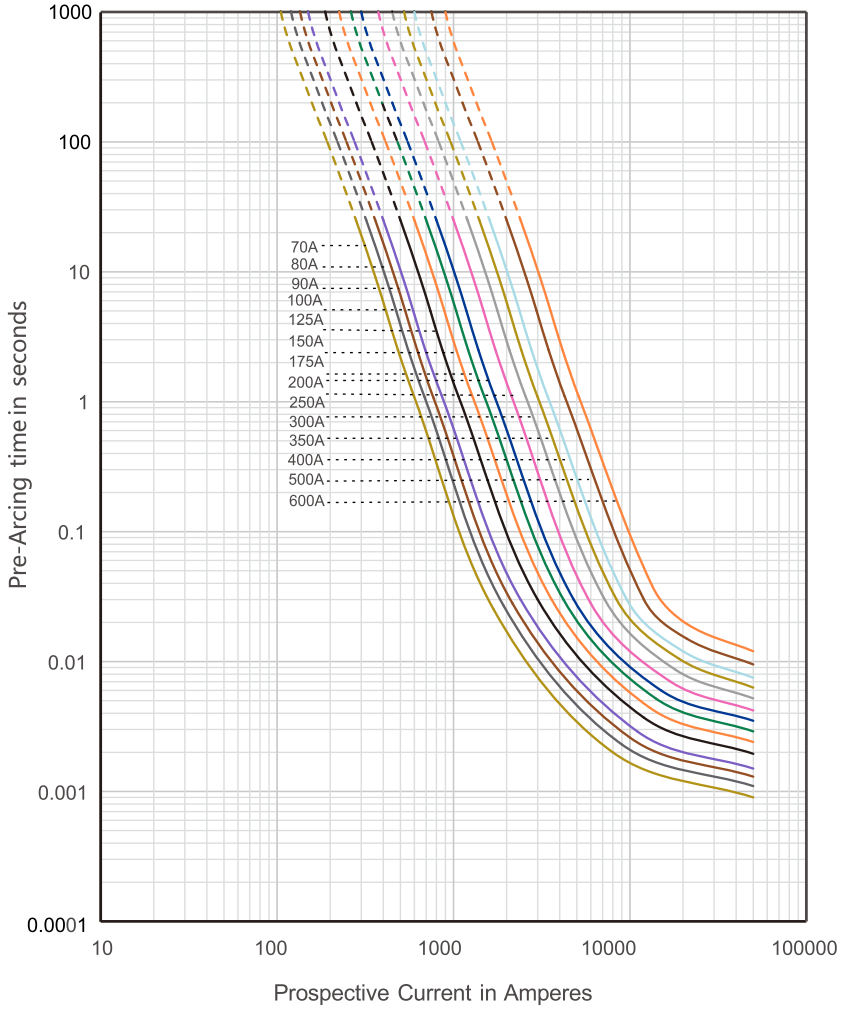
DIMENSIONS (mm)



Size	A	B	C	D	E	F	G	H	J
31x86	125±1.2	31±0.5	86±0.8	109±0.8	102±0.8	8.5±0.5	22±0.5	5±0.1	12.0±0.5
38x83	140±1.2	38±0.5	83±0.8	118±0.8	100±0.8	10.5±0.5	25±0.5	6±0.1	19.5±0.5
51x89	146±1.2	51±0.5	89±0.8	126±0.8	107±0.8	10.5±0.5	38±0.5	6±0.1	20.0±0.5
64x88	196±1.2	64±0.5	88±0.8	162±1.2	122±1.2	13.0±0.2	50±0.5	10±0.1	33.0±0.5

Table2

TIME CURRENT CURVE



AE6 EV Fuse

RoHS

DESCRIPTION

Adler AE6 EV fuses series are specially engineered and tested to provide best-in-class auxiliary and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles. With up to 1000 Vdc in ratings from 5 - 60A. The AE6 was specially built meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 1000 Vdc automotive fuse
- Rated Current: 5-15 A (10x38 mm)
  20-30 A (14x51 mm)
  35-60 A (14x65 mm)
- Max. BC: 20 kA@1000 Vdc
- Min. BC: 2In@1000 Vdc
- Time Constant: 2±0.5ms
- Size: 10x38 mm, 14x51 mm, 14x65 mm

AGENCY INFORMATION

- Designed to ISO 8820-8; GB/T 31465.6;UL 248-20; JASO D622
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse

PART NUMBER SYSTEM

AE6 1500 A 00

- 00 — Supplementary Code: 00: Cartridge; 01: Central Mount; 02: Level Mount; 03: PCB Mount
- A — Size: A: 10x38 mm; B: 14x51 mm; C: 14x65 mm
- 1500 — Ampere Code: See Table 1
- AE6 — Product Series: AE6

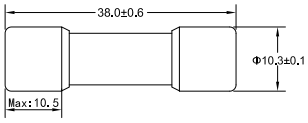
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number				Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	I^2t(A^2s)		Dissipation(W)	
	Cartridge	Central Mount	Level Mount	PCB Mount					Pre-Arcing	Total	0.7In	1.0In
10x38	AE61500A00	AE61500A01	AE61500A02	AE61500A03	5 A	1500	1000 Vdc	20 kA@ 1000 Vdc	105	182	1.5	2.2
	AE61600A00	AE61600A01	AE61600A02	AE61600A03	6 A	1600			115	196	1.6	2.3
	AE61800A00	AE61800A01	AE61800A02	AE61800A03	8 A	1800			135	220	1.7	2.5
	AE62100A00	AE62100A01	AE62100A02	AE62100A03	10 A	2100			160	255	2	3
	AE62120A00	AE62120A01	AE62120A02	AE62120A03	12 A	2120			255	410	1.6	2.4
	AE62150A00	AE62150A01	AE62150A02	AE62150A03	15 A	2150			370	620	1.7	2.5
14x51	AE62200B00	-	AE62200B02	AE62200B03	20 A	2200	1000 Vdc	20 kA@ 1000 Vdc	975	2150	2.2	3.8
	AE62250B00	-	AE62250B02	AE62250B03	25 A	2250			1240	3150	2.4	4.4
	AE62300B00	-	AE62300B02	AE62300B03	30 A	2300			1.70K	4.45K	2.8	5.2
14x65	AE62350C00	-	AE62350C02	AE62350C03	35 A	2350	1000 Vdc	20 kA@ 1000 Vdc	2.90K	8.15K	2.5	6.4
	AE62400C00	-	AE62400C02	AE62400C03	40 A	2400			5.27K	12.0K	2.7	7.7
	AE62450C00	-	AE62450C02	AE62450C03	45 A	2450			7.45K	13.9K	2.8	7.8
	AE62500C00	-	AE62500C02	AE62500C03	50 A	2500			9.30K	16.0K	2.9	7.9
	AE62600C00	-	AE62600C02	AE62600C03	60 A	2600			12.5K	19.6K	3	9

Table1 Note: (1) Temperature rise: <50 K.

DIMENSIONS (mm): 10x38

AE6xxxxA00



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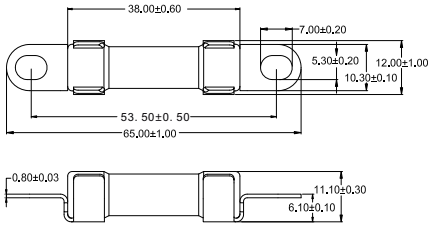

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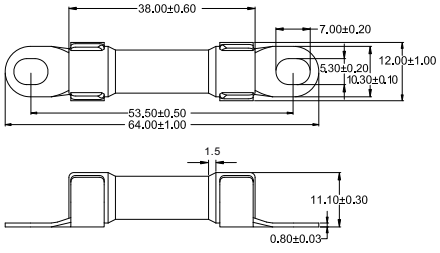

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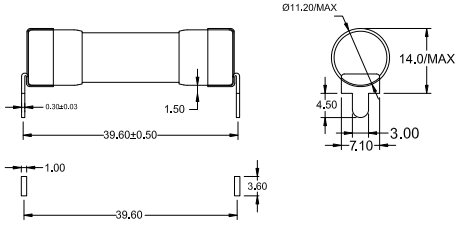

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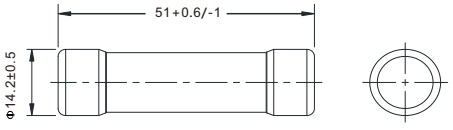

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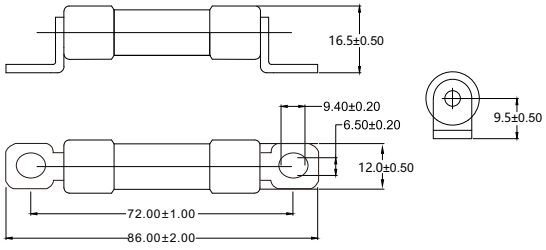

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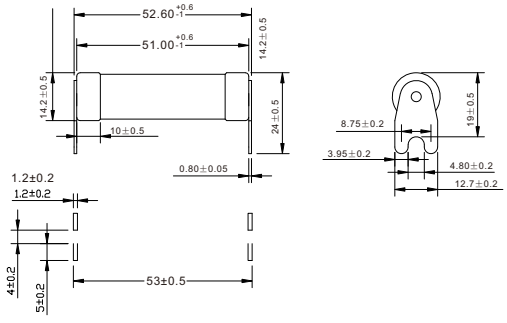

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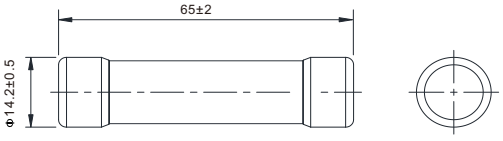

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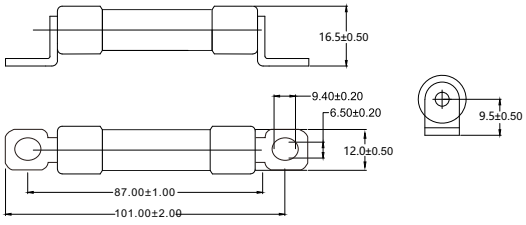

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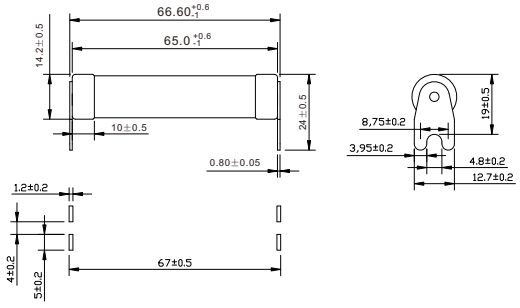
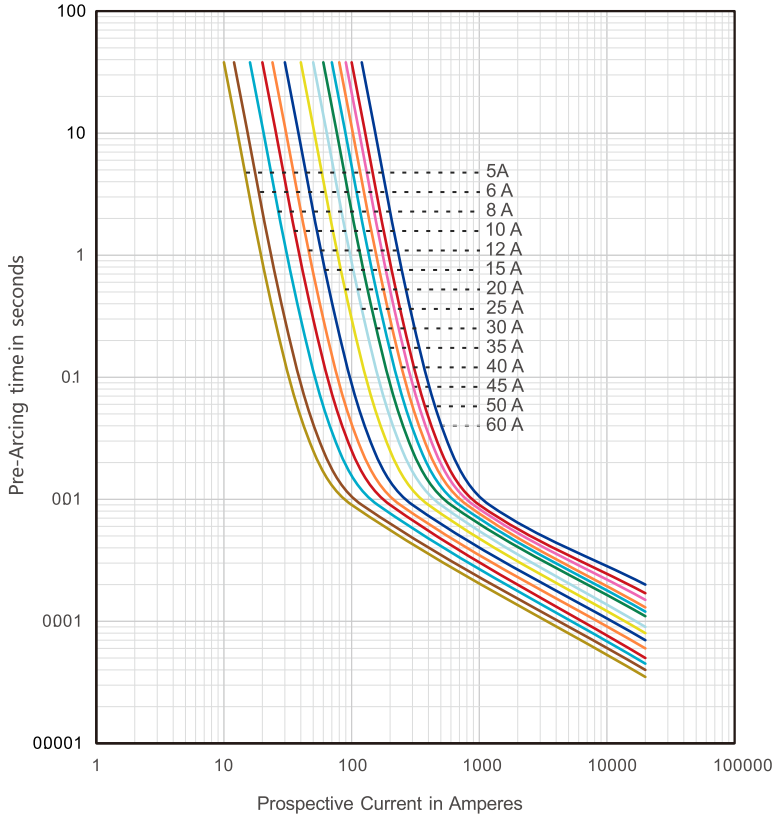


TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	135 %	150 %	200 %	300 %	500 %
5-60 A	>4 h	<1 h	10-1000 s	0.5-100 s	0.1-15 s	0.05-1 s

TIME CURRENT CURVE



AE6-V EV Fuse

RoHS

DESCRIPTION

Adler AE6-V series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles. With up to 1000 Vdc in ratings from 10 - 60A the AE6-V series was specially built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 1000 Vdc automotive fuse
- Rated Current: 10-60 A
- Max. BC: 50 kA@1000 Vdc
- Min. BC: 2In@1000 Vdc
- Time Constant: 2 ± 0.5 ms
- Size: 22x65 mm

AGENCY INFORMATION

- Designed to UL248-20, ISO 8820-8
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit

PART NUMBER SYSTEM

AE6 2100 V 00

- 00: Supplementary Code: 00: Cartridge; 01: Level Mount; 02: Central Mount
- V: Breaking capacity: 50kA
- 2100: Ampere Code: See Table 1
- AE6: Product Series: AE6-V

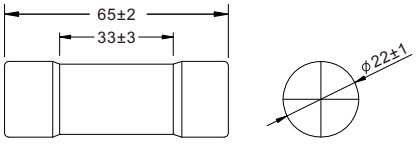
ELECTRICAL SPECIFICATIONS

Part Number			Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	I^2t (A^2s)		Dissipation (W)	
Cartridge	Level Mount	Central Mount					Pre-Arcing	Total	0.7 In	1 In
AE62100V00	AE62100V01	AE62100V02	10A	2100	1000 Vdc	50kA@ 1000 Vdc	280	750	1.5	3.5
AE62120V00	AE62120V01	AE62120V02	12A	2120			430	870	1.6	3.6
AE62150V00	AE62150V01	AE62150V02	15A	2150			560	1080	1.7	3.7
AE62200V00	AE62200V01	AE62200V02	20A	2200			990	2270	2	4.3
AE62250V00	AE62250V01	AE62250V02	25A	2250			1250	3160	2.1	4.5
AE62300V00	AE62300V01	AE62300V02	30A	2300			1710	4450	2.4	5.3
AE62350V00	AE62350V01	AE62350V02	35A	2350			3210	8360	2.6	5.9
AE62400V00	AE62400V01	AE62400V02	40A	2400			5360	12. 2K	2.1	6.5
AE62450V00	AE62450V01	AE62450V02	45A	2450			7650	14. 1K	2.6	8.3
AE62500V00	AE62500V01	AE62500V02	50A	2500			9530	16. 5K	2.7	8.5
AE62600V00	AE62600V01	AE62600V02	60A	2600			13. 0K	20. 8K	2	9

Table1 Note: (1) Temperature rise: <50 K.

DIMENSIONS (mm):

AE6xxxxV00



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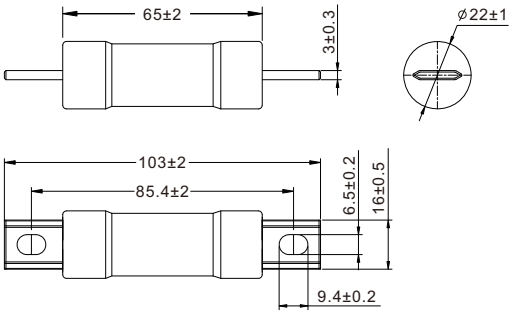
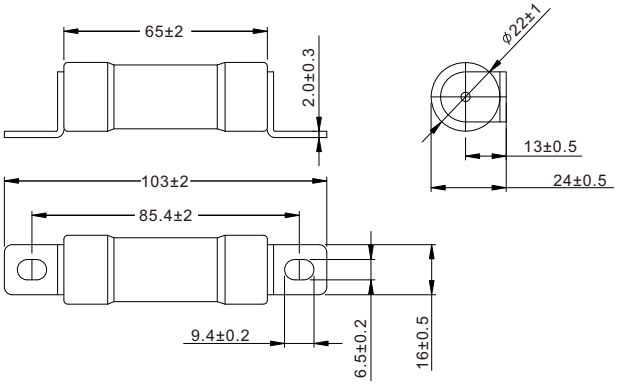


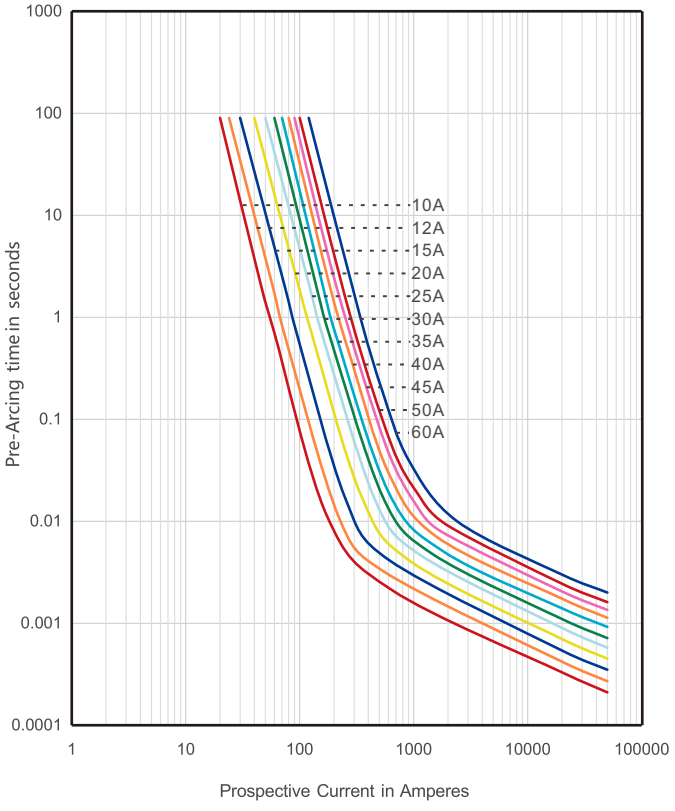
AE6xxxxV01



TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	135 %	150 %	200 %	300 %	500 %
10-60 A	>4 h	<1 h	10-1000 s	0.5-100 s	0.1-15 s	0.05-1 s

TIME CURRENT CURVE



EFX EV Fuse

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 125A to 500A.

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

AGENCY INFORMATION

- Manufactured in accordance with UL 248-20, JASO D6822
- Approvals: UL (pending).

APPLICATIONS

- BDU Protection
- Drive Train Protection
- EV/HEV Power Management and Protection

PART NUMBER SYSTEM

EFX 3500 a 43

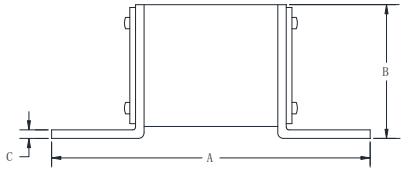
- 43 — Supplementary Code: 22, 36, 43
- a — Voltage Code: 1000 Vdc
- 3500 — Ampere Code: See Table 1
- EFX — Product Series: EFX

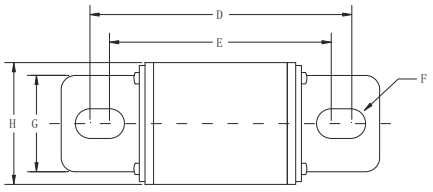
ELECTRICAL SPECIFICATIONS

Size(mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity		I^2t (A^2sec)		Watt Loss (W)
					UL**	Self -Certified	Pre-arcing	Total@1000Vdc	0.5In
57x22	EFX3125a22	125A	3125	1000 Vdc	4In~50kA	-	3200	22600	4.5
	EFX3160a22	160A	3160	1000 Vdc	4In~50kA	-	5400	43200	5.7
74x36	EFX3150a36	150A	3150	1000 Vdc	-	4In~50kA	-	-	4.5
	EFX3200a36	200A	3200	1000 Vdc	-	4In~50kA	-	-	6.6
	EFX3250a36	250A	3250	1000 Vdc	4In~50kA	-	-	-	8.5
71x47	EFX3200a43	200A	3200	1000 Vdc	4In~50kA	-	5300	26800	7. 9
	EFX3250a43	250A	3250	1000 Vdc	4In~50kA	-	9600	49980	10. 3
	EFX3300a43	300A	3300	1000 Vdc	4In~50kA	-	13200	69300	12. 7
	EFX3350a43	350A	3350	1000 Vdc	4In~50kA	-	21600	115000	14. 5
	EFX3400a43	400A	3400	1000 Vdc	4In~50kA	-	28600	163000	17. 0
	EFX3450a43	450A	3450	1000 Vdc	4In~50kA	-	38200	223000	19. 5
	EFX3500a43	500A	3500	1000 Vdc	-	4In~50kA	49600	294000	21. 0

Table1 Note: 1. ** --- UL File: E506668
2. EFXxxxxa22, EFXxxxxa43 temperature rise: 0.5In < 50K.
3. EFXxxxxa22 and EFXxxxxa36 recommended mounting torque is 12+/-1.0Nm (M8);
4. EFXxxxxa43 recommended mounting torque is 20+/-1Nm (M10).

DIMENSIONS(mm):



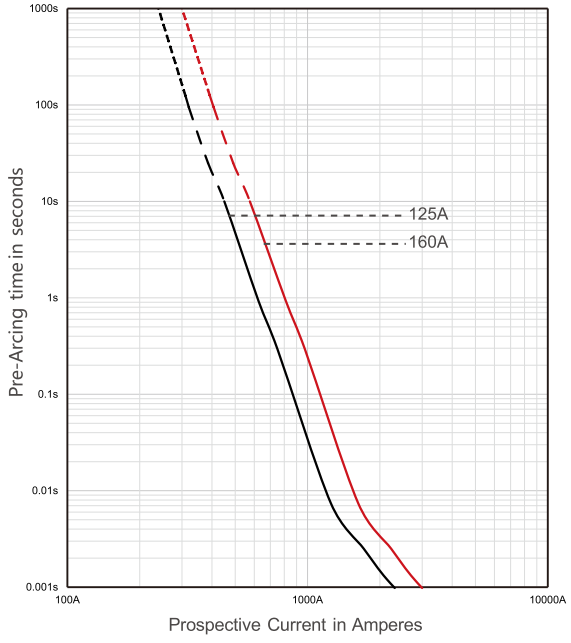


Part Number	A	B	C	D	E	F	G	H
EFXxxxxa22	115	25.5	2	99	88	Φ8.5	20	22.5
EFXxxxxa36	117	24	2	100	88	Φ8.5	32.5	36.3
EFXxxxxa43	126.5	48	3	106	89	Φ10.5	34.0	47.0

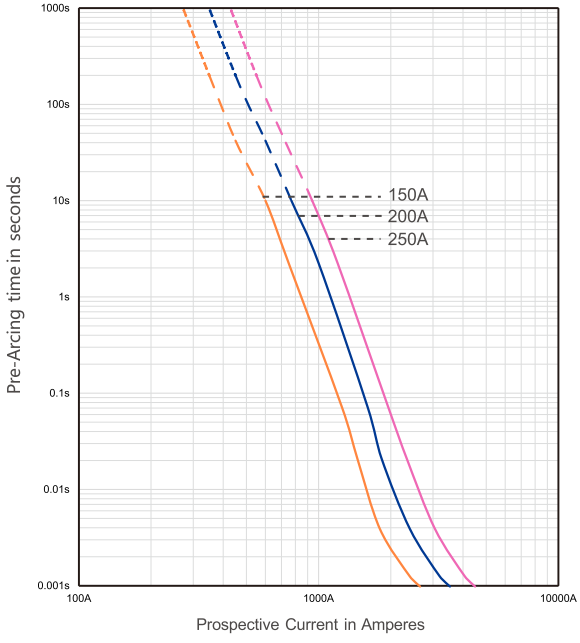
Table2

TIME CURRENT CURVE

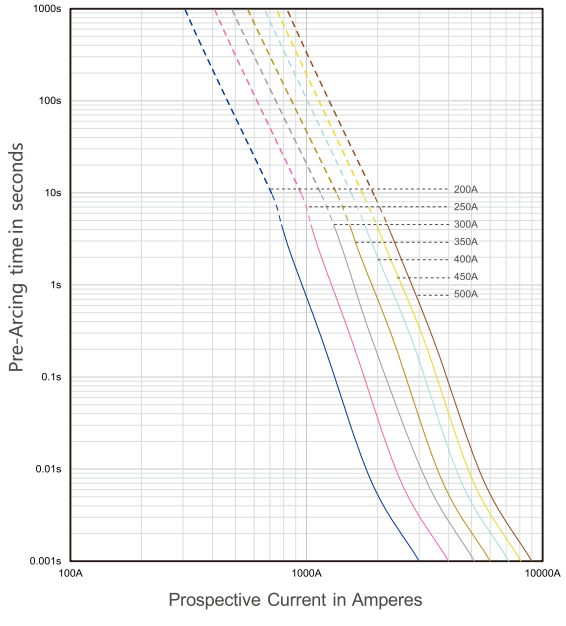
EFXxxxxa22 125A – 160A



EFXxxxxa36 150A-250A



EFXxxxxa43 200A-500A



EFX EV Fuse

RoHS

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 550A to 800A.

FEATURES

- Reliable clearing of DC fault currents
- High cycling performance
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 50kA
- Strong ability to withstand high current pulse
- Full coverage of battery module current
- QR code marks on each fuse for traceability

AGENCY INFORMATION

- Designed to UL248-20, VW80000
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- BDU Protection
- Drive Train Protection
- EV/HEV Power Management and Protection

PART NUMBER SYSTEM

EF X 3800 UB 43

- 43 — Body Size: 2
- UB — Structure Type: UB, without microswitch
- 3800 — Ampere Code: See Table 1
- X — Voltage Code: 1000Vdc
- EF — Product Series: EF

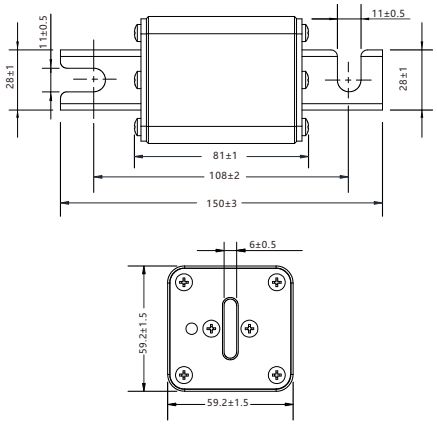
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number			Rated Current	Ampere Code	Rated Voltage	Breaking Capacity		Pre-arcing I²t	Clearing I²t	Watt Loss (W)
	Din	Bolted	Flush				TUV	Self -Certified	(A²s)	(A²s)	0.5In
59x59 x70	EFX3550DB2	EFX3550UB2	EFX3550FB2	550A	3550	1000Vdc	-	50kA	93500	454000	18
	EFX3630DB2	EFX3630UB2	EFX3630FB2	630A	3630	1000Vdc	-	50kA	133000	652000	20
	EFX3700DB2	EFX3700UB2	EFX3700FB2	700A	3700	1000Vdc	-	50kA	169000	838000	23
	EFX3800DB2	EFX3800UB2	EFX3800FB2	800A	3800	1000Vdc	-	50kA	232000	1159000	25

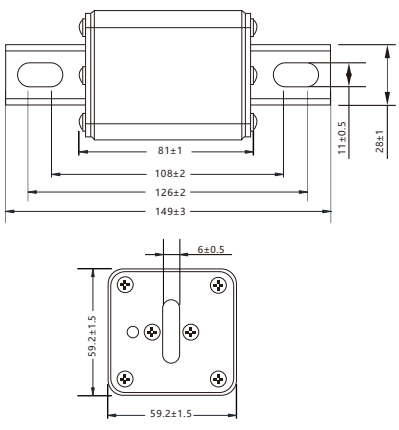
Table1 Note: Time constant: 2 ± 0.5ms

DIMENSIONS (mm):

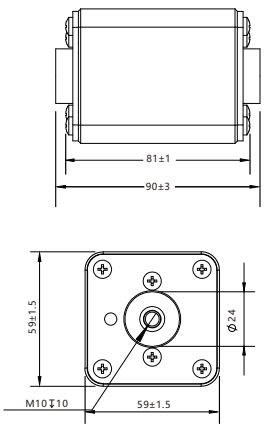
EFXxxxxDB2



EFXxxxxUB2



EFXxxxxFB2



EFZ EV Fuse

RoHS

DESCRIPTION

The Adler EFZ 1500 Vdc automotive fuse series is 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 1500 Vdc in ratings from 100 A to 300 A.

FEATURES

- 1500 Vdc automotive and charging fuse
- Rated currents from 160 A – 300 A
- Braking Capacity of 30 kA
- Fast acting fuse for EV/HEV applications

AGENCY INFORMATION

- Manufactured in accordance with UL 248-20, JASO D6822
- Approvals: UL (pending).

APPLICATIONS

- BDU Protection
- Drive Train Protection
- EV/HEV Power Management and Protection

PART NUMBER SYSTEM

EFZ 3300 43 0

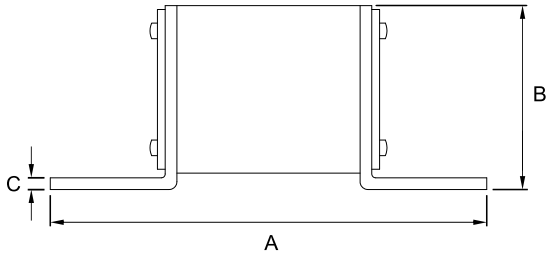
- 0: Supplementary Code: 0: default
- 43: Width: 43mm
- 3300: Ampere Code: See Table 1
- EFZ: Product Series: EFZ

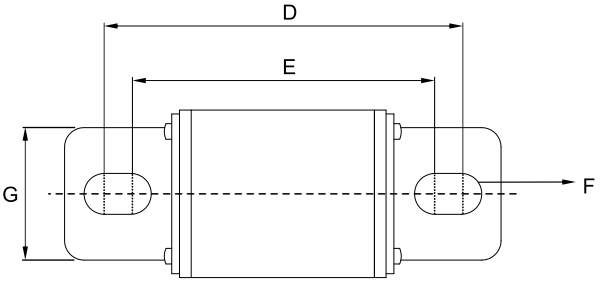
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	I²t (A²sec)		1.0 In Dissipation (W)
					Self-test	Pre-arcing	Total @ 1500Vdc	
84x43	EFZ3100430	100A	3100	1500 Vdc	30 kA	1680	10700	32
	EFZ3160430	160 A	3160			4500	29000	45
	EFZ3200430	200 A	3200			75300	51000	53
	EFZ3250430	250 A	3250			12400	86800	62
	EFZ3300430	300 A	3300			18810	137500	72

Table1 Note: 1. Temperature rise: 0.5In<50 K.
2. Recommended mounting torque is 12+/-1.0Nm (M8)

DIMENSIONS (mm):

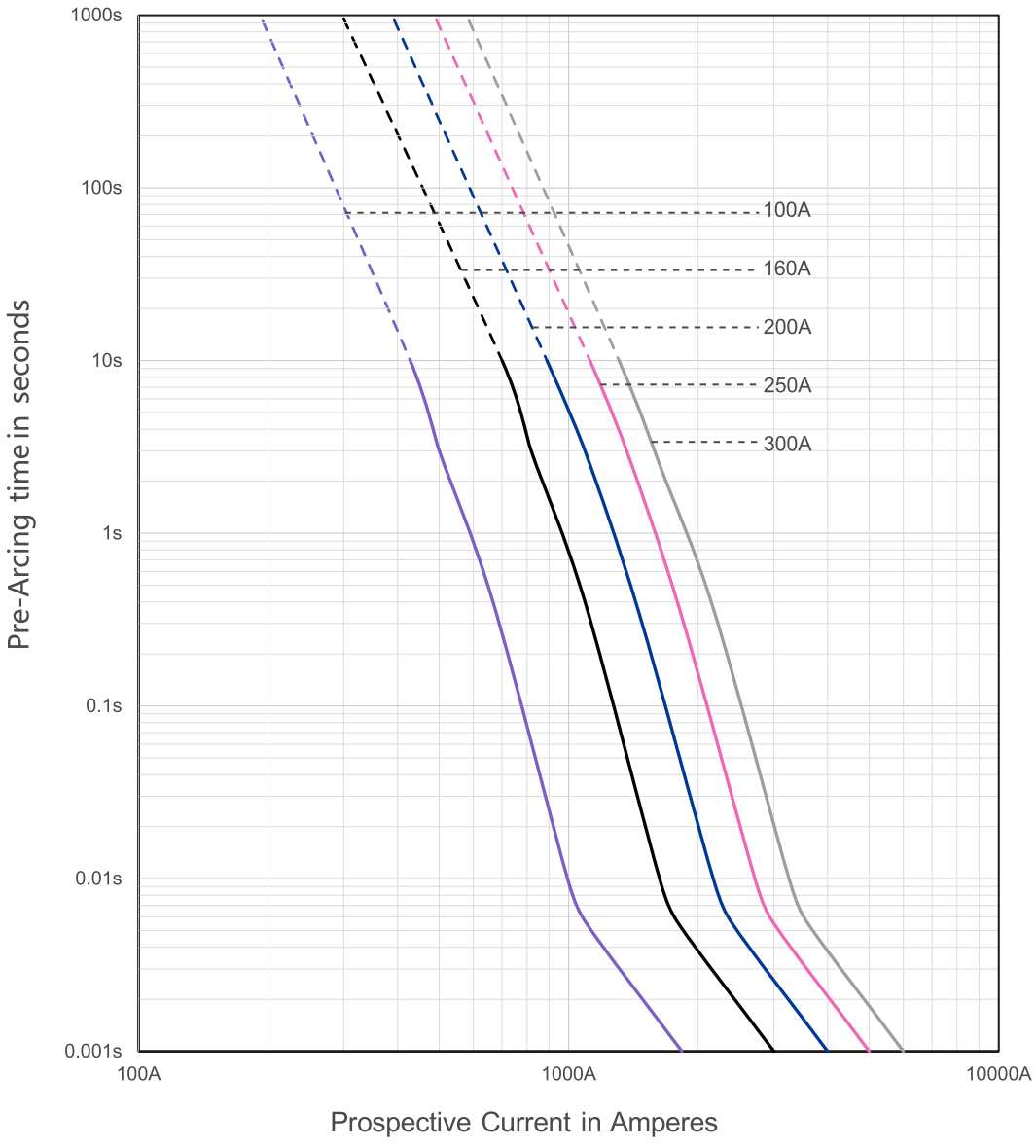




Part Number	A	B	C	D	E	F	G
EFZxxxx430	136	47.2	3	116	103	ϕ10.3	26

Table2

TIME CURRENT CURVE



BF2 MINI Blade Fuse

RoHS

DESCRIPTION

Adler's BF2 mini blade fuses are specially designed for EV applications. Capable of handling rated currents of 3-30 A with a breaking capacity of 1kA at 32 Vdc. Made to UL standard 275A with reference to tollerances detailed in UL 275A and ISO 8820-3.

FEATURES

- 32 Vdc blade fuse
- Rated Current: 3-30 A
- Breaking Capacity: 1 kA at 32 VDC
- Standards: UL 275A

AGENCY INFORMATION

- Approvals: UL (File: E499007)
- Design: ref. to UL 275A; ISO 8820-3

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

BF2 2300 3 00

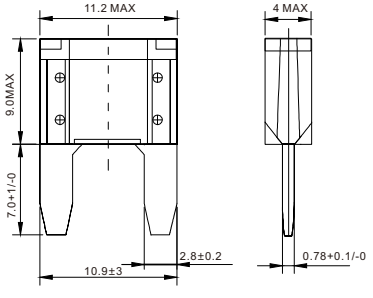
- 00: Supplementary Code: 00: Default
- 3: Rated Voltage:32Vdc
- 2300: Ampere Code: See Table 1
- BF2: Product Series: BF2

ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Housing Color	Rated Voltage	aking Capacity	I²t (A²s)	Certifications UL
BF21300300	3 A	1300	Violet	32 Vdc	1 kA@32 Vdc	9.5	●
BF21400300	4 A	1400	Pink			17.5	●
BF21500300	5 A	1500	Tan			25.5	●
BF21750300	7.5 A	1750	Brown			68.8	●
BF22100300	10 A	2100	Red			93.2	●
BF22150300	15 A	2150	Blue			270.2	●
BF22200300	20 A	2200	Yellow			380.8	●
BF22250300	25 A	2250	Natural			625.5	●
BF22300300	30 A	2300	Green			1130.1	●

Table1 Note:1.●=Certification obtained. UL File number:E4990077
2.Temperature rise: <50 K.

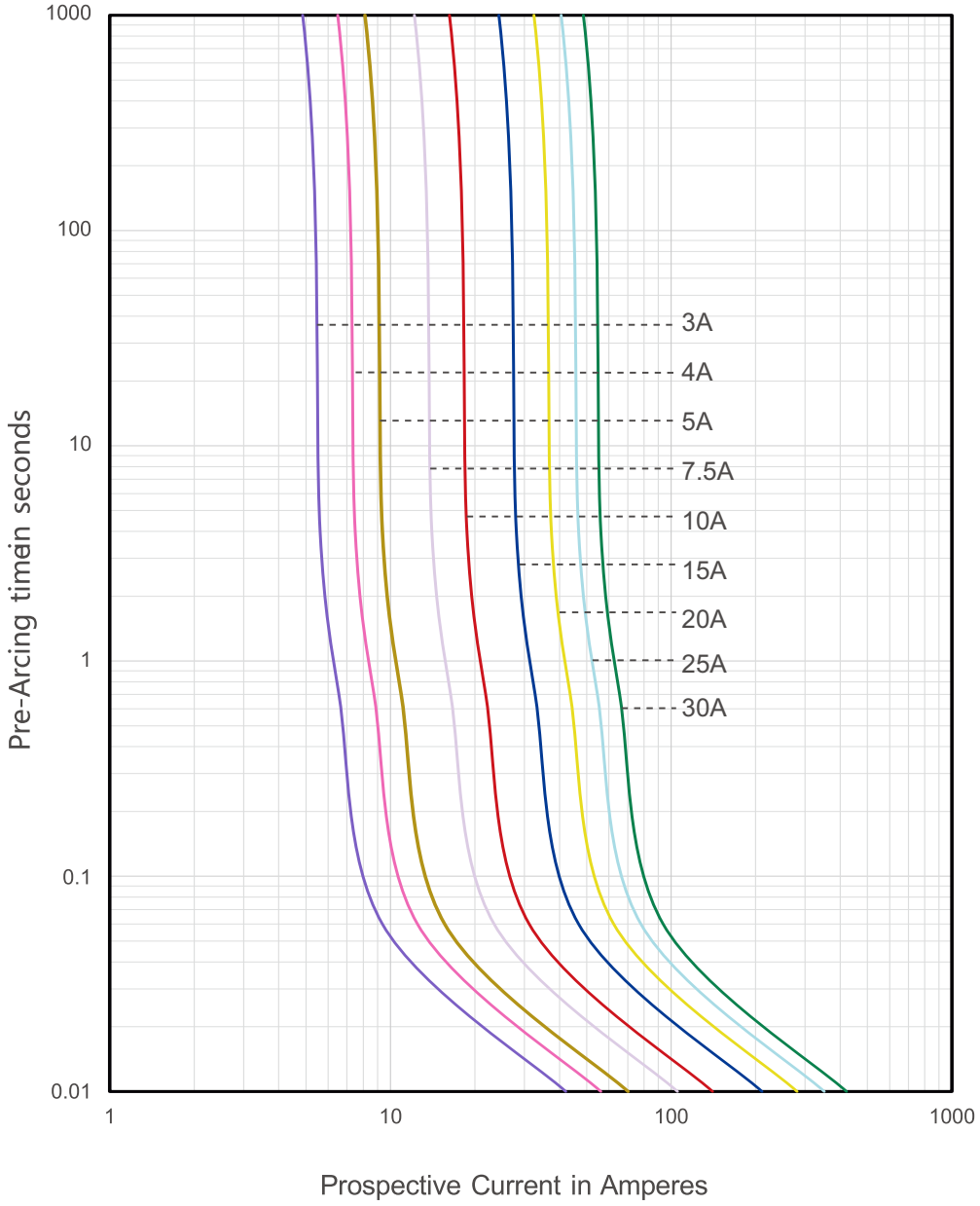
DIMENSIONS (mm)



TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	135 %	200 %	350 %	600 %
3-30 A	>100 h	0.75-1800 s	0.15-5 s	40-500 ms	20-100 ms

TIME CURRENT CURVE



BF4 MIDI Blade Fuse

RoHS

DESCRIPTION

Adler's BF4 midi blade fuses are specially designed for EV applications. Capable of handling rated currents of 2-40 A with a breaking capacity of 1kA at 32 Vdc. Made to UL standard 275A with reference to tollerances detailed in UL 275A and ISO 8820-3.

FEATURES

- 32 Vdc blade fuse
- Rated Current: 2-40 A
- Breaking Capacity: 1 kA at 32 VDC
- Standards: UL 275A

AGENCY INFORMATION

- Approvals: UL (File: E499007)
- Design: ref. to UL 275A; ISO 8820-3

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

BF4 2400 3 00

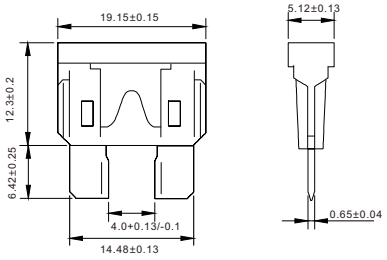
- 00 — Supplementary Code: 00: Default
- 3 — Rated Voltage 32Vdc
- 2400 — Ampere Code: 40A(See Table 1)
- BF4 — Product Series: BF4

ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Housing Color	Rated Voltage	Breaking Capacity	I²t (A²s)	Certifications UL
BF41200300	2 A	1200	Grey	32 Vdc	1 kA@32 Vdc	1.6	•
BF41300300	3 A	1300	Violet			7.4	•
BF41400300	4 A	1400	Pink			14	•
BF41500300	5 A	1500	Tan			26	•
BF41750300	7.5 A	1750	Brown			61	•
BF42100300	10 A	2100	Red			115	•
BF42150300	15 A	2150	Blue			340	•
BF42200300	20 A	2200	Yellow			520	•
BF42250300	25 A	2250	Natural			1080	•
BF42300300	30 A	2300	Green			1508	•
BF42350300	35 A	2350	Blue green			2280	•
BF42400300	40 A	2400	Orange			3320	•

Table1 Note:1.●=Certification obtained. UL File number:E4990077
2.Temperature rise: <50 K.

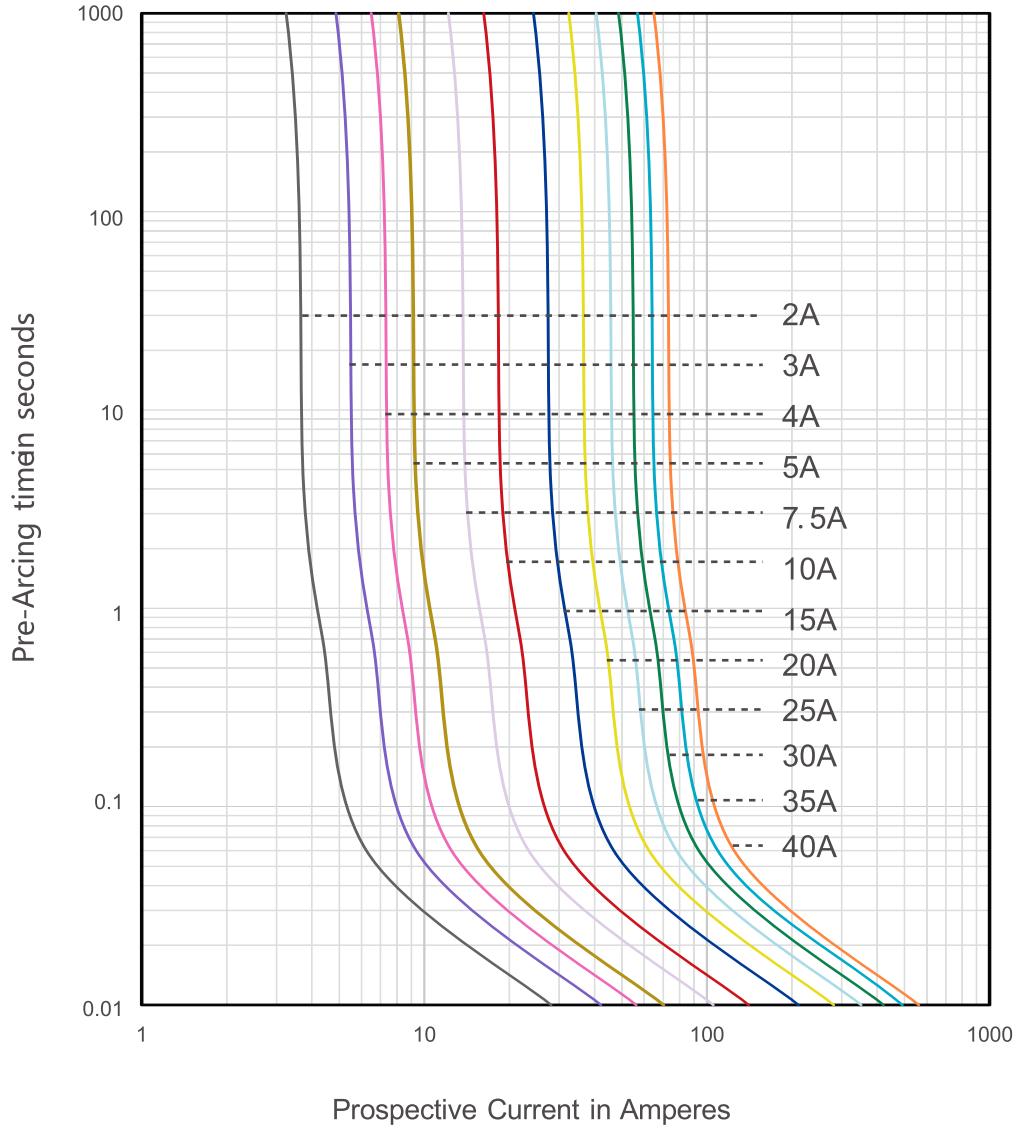
DIMENSIONS (mm)



TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	135 %	200 %	350 %	600 %
2-40 A	>100 h	0.75-1800 s	0.15-5 s	40-500 ms	20-100 ms

TIME CURRENT CURVE



BF6 MIDI Blade Fuse

RoHS

DESCRIPTION

Adler's BF6 blade fuses are specially designed for EV applications. Capable of handling rated currents of 30-80 A with a breaking capacity of 1.5kA at 58 Vdc.

FEATURES

- 58 Vdc blade fuse
- Rated Current: 30-80 A
- Rated Voltage: 58 V dc
- Breaking Capacity: 1.5 kA@58 V dc
- Operating Temperature Range:-40℃ - 105℃
- QR Code for traceability

AGENCY INFORMATION

- Design: ref. to ISO 8820-3

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

BF6 2800 8 00

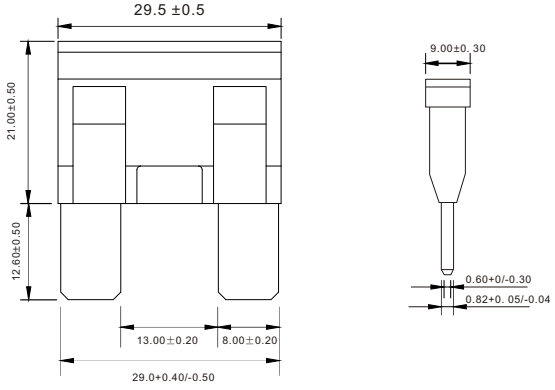
- 00 — Supplementary Code: 00: Default
- 8 — Rated Voltage 58Vdc
- 2800 — Ampere Code: See Table 1
- BF6 — Product Series: BF6

ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Housing Color	Rated Voltage	Breaking Capacity
Bf62300500	30 A	2300	Green	58 Vdc	1.5 kA@58 Vdc
Bf62400300	40 A	2400	Orange		
Bf62500300	50 A	2500	Red		
BF62600300	60 A	2600	Blue		
Bf62800300	80 A	2800	White		

Table1

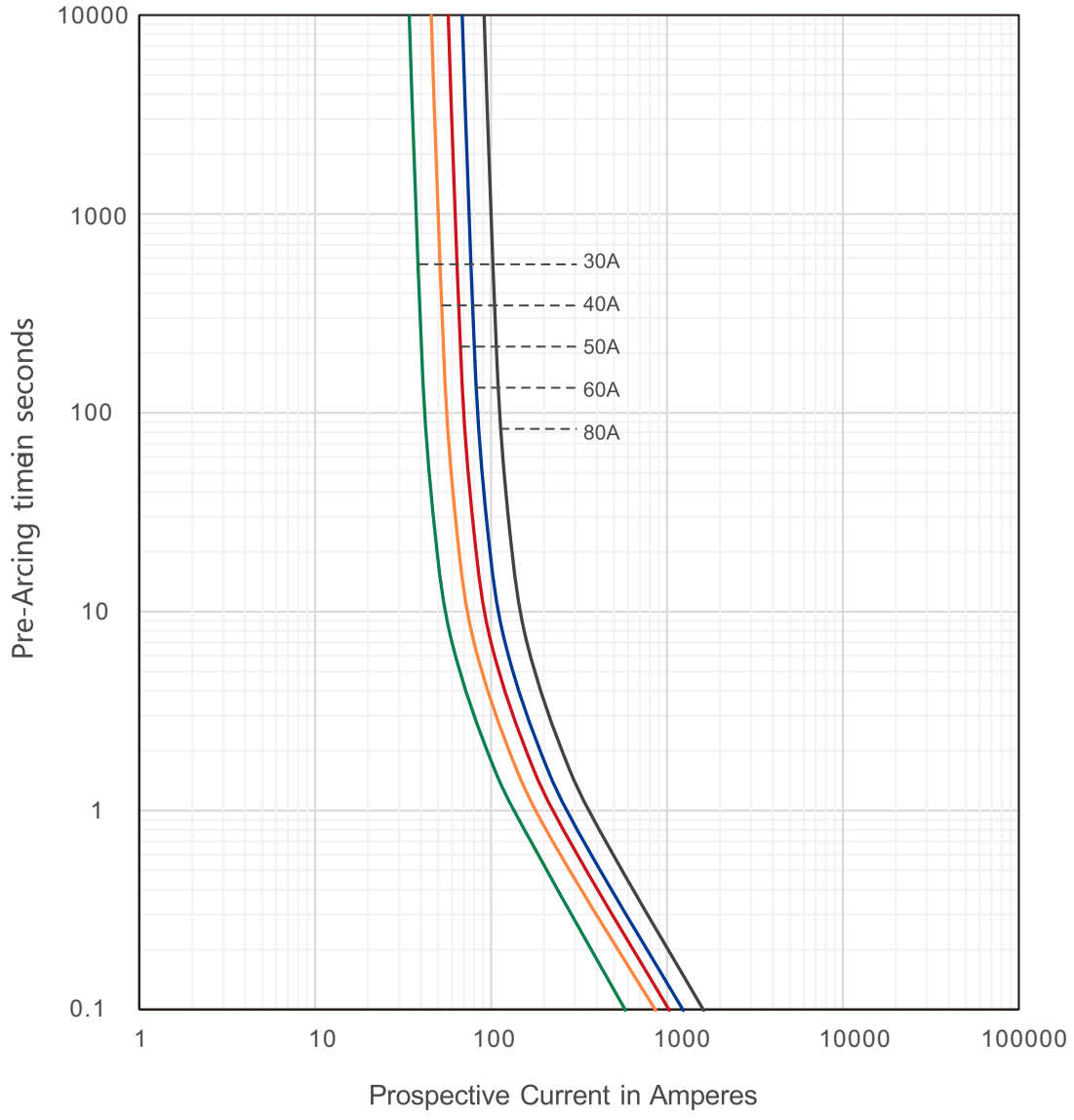
DIMENSIONS (mm)



TIME VS CURRENT CHARACTERISTIC

Rated Current	100 %	135 %	160 %	200 %	350 %	600 %
30-80 A	>100 h	60-1800 s	10-200 s	2-60 s	0.2-7 s	0.04-1 s

TIME CURRENT CURVE



AEL High Speed Fuse

DESCRIPTION

Adler AEL series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 80 Vdc in ratings from 30 - 800A. The AEL was specially built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 80 VDC EV high speed fuse
- Rated Current: 30-800 A
- Rated Breaking Capacity: 3 kA at 80 Vdc
- Bolt Size: M10
- Torque: M10:19 N·m ;
- Recommended fuse holder:
  BHR061-25-M10(with cover):30-200A;
  BHR061-25-M10-S(No cover):30-800A;

AGENCY INFORMATION

- Designed to UL 248; DIN 43560
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

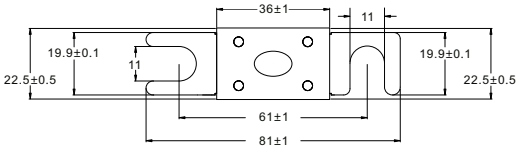
- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

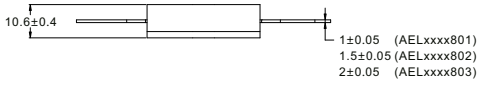
PART NUMBER SYSTEM

AEL 2300 8 01

- 01 — Supplementary Code: 01,02,03: Default
- 8 — Rated Voltage 80Vdc
- 2300 — Ampere Code: 30A(See Table 1)
- AEL — Product Series: AEL

DIMENSIONS (mm)





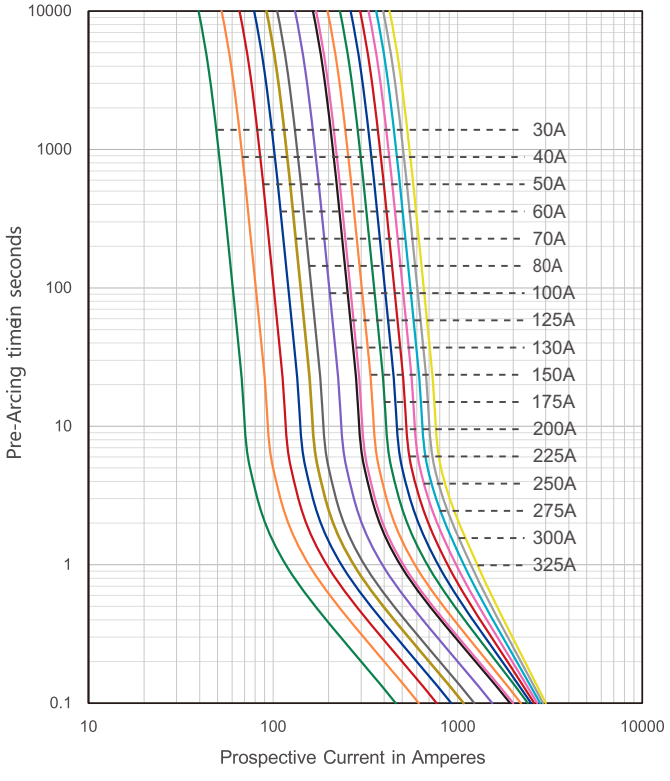
ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications	
					UL	TUV
AEL2300801	30 A	2300	80 Vdc	3kA@80 Vdc	●	●
AEL2400801	40 A	2400			●	●
AEL2500801	50 A	2500			●	●
AEL2600801	60 A	2600			●	●
AEL2700801	70A	2700			●	●
AEL2800801	80 A	2800			●	●
AEL3100801	100 A	3100			●	●
AEL3125801	125 A	3125			●	●
AEL3130801	130 A	3130			●	●
AEL3150801	150 A	3150			●	●
AEL3175801	175 A	3175			●	●
AEL3200801	200 A	3200			●	●
AEL3225801	225 A	3225			●	●
AEL3250801	250 A	3250			●	●
AEL3275801	275 A	3275			●	●
AEL3300801	300 A	3300			●	●
AEL3325801	325 A	3325			●	●
AEL3350802	350 A	3350	80 Vdc	3kA@80 Vdc	●	●
AEL3400802	400 A	3400			●	●
AEL3500802	500 A	3500			●	●
AEL3600802	600 A	3600			●	●
AEL3675803	675 A	3675	80 Vdc	3kA@80 Vdc	●	●
AEL3700803	700A	3700			●	●
AEL3750803	750 A	3750			●	●
AEL3800803	800 A	3800			●	●

Table1 Note:1. ●=Certification obtained. UL File number:xxxxxx
2. Temperature rise: <50 K.

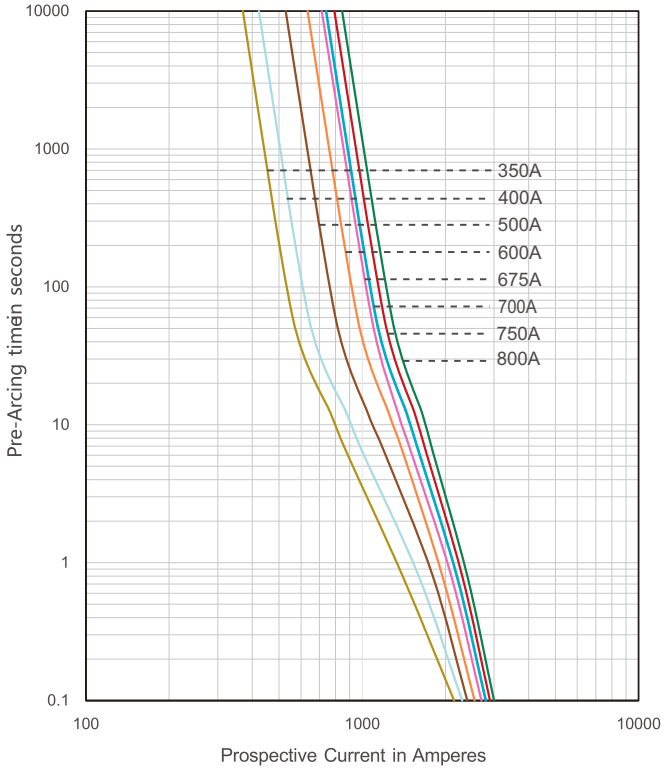
TIME CURRENT CURVE

AELxxxx801



TIME CURRENT CURVE

AELxxxx802/AELxxxx803



AEY EV Fuse

DESCRIPTION

Adler AEY EV fuses series are specially engineered and tested to provide best-in-class bolt down auxiliary fuse protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 70 Vdc in ratings from 40 – 500A and an operating temperature from -40 to 125°C degrees. The AEY fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection. Suitable for vehicles with high torque requirements in commercial EV industry.

FEATURES

- 70 Vdc automotive fuse
- Rated Current: 40-500 A
- Operating Temperature: -40 to 125℃ degrees
- Rated Breaking Capacity: 2.5 kA at 70 Vdc
- Bolt Size: M8
- Torque: M8:12N·m ;
- Recommended fuse holder: BHR059-25-M8

AGENCY INFORMATION

- Designed to UL248-20, ISO 8820-5,ISO20934
- UL certified (E485737)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

AEY 3500 9 00

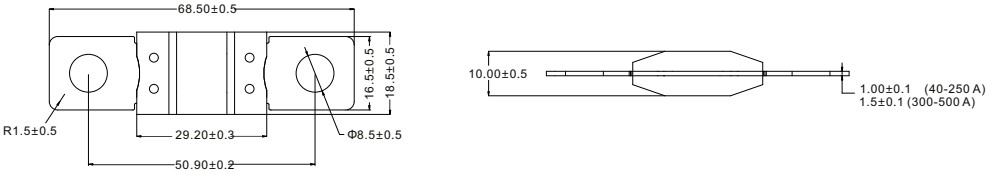
- 00 — Supplementary Code: 00:M8 bolt
- 9 — Rated Voltage 70Vdc
- 3500 — Ampere Code: See Table 1
- AEY — Product Series: AEY

ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications	
					UL	TUV
AEY2400900	40 A	2400	70 Vdc	2.5 kA@70 Vdc	•	•
AEY2500900	50 A	2500			•	•
AEY2600900	60 A	2600			•	•
AEY2700900	70 A	2700			•	•
AEY2800900	80 A	2800			•	•
AEY3100900	100 A	3100			•	•
AEY3125900	125 A	3125			•	•
AEY3150900	150 A	3150			•	•
AEY3175900	175 A	3175			•	•
AEY3200900	200 A	3200			•	•
AEY3250900	250 A	3250			•	•
AEY3300900	300 A	3300			•	•
AEY3350900	350 A	3350			•	•
AEY3400900	400 A	3400			•	•
AEY3450900	450 A	3450			•	•
AEY3500900	500 A	3500			•	•

Table1 Note:1. ●=Certification obtained. UL File number:E485737

DIMENSIONS (mm)

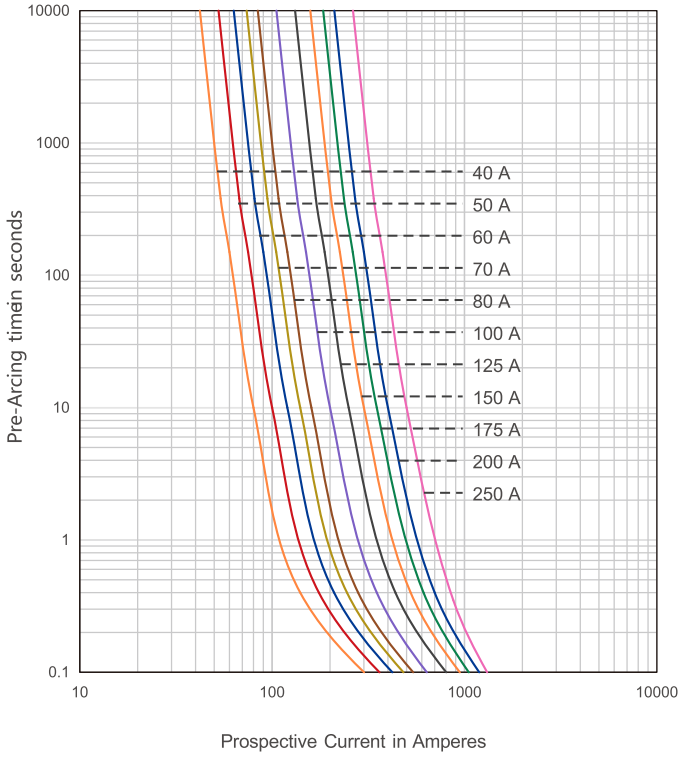


TIME VS CURRENT CHARACTERISTIC

Rated Current	75 %	100 %	135 %	200 %	350 %	600 %
40-250 A	-	>4 h	2-30 min	1-15 s	0.3-5 s	0.1-1 s
300-500 A	>4 h	-	-	1-15 s	0.3-5 s	0.1-1 s

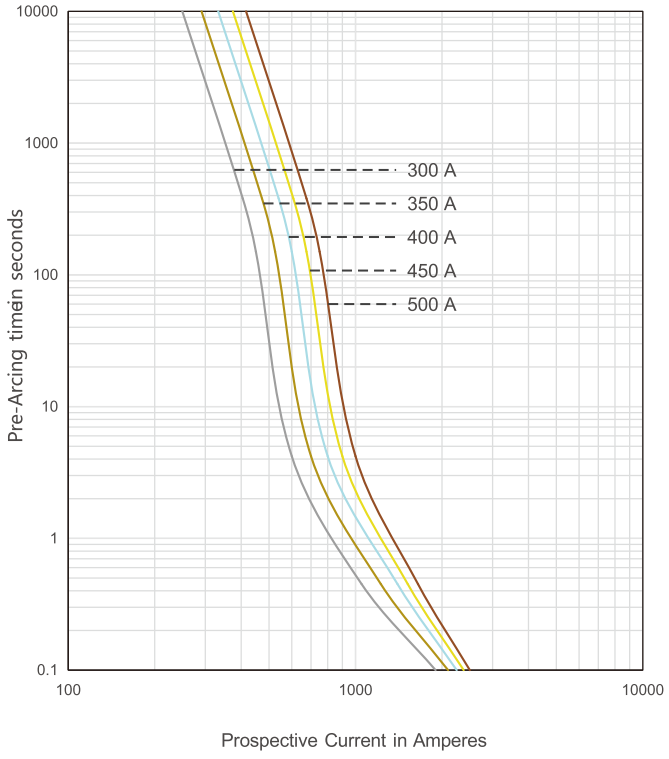
TIME CURRENT CURVE

40A~250A

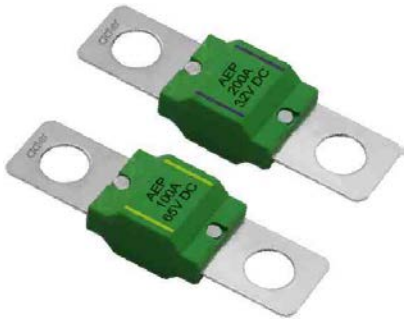


TIME CURRENT CURVE

300A~500A



AEP EV Fuse



DESCRIPTION

Adler AEP series EV fuses are specially engineered and tested to provide best-in-class auxiliary protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles with up to 32 / 65 Vdc in ratings from 20 – 200 A. The AEP was specially built from the ground up to meet the stringent requirements and standards of the electric vehicle industry.

FEATURES

- 65 Vdc / 32 Vdc automotive fuse
- Rated Current: 20-200 A
- Operating Temperature: -40 to 125 degrees C
- Breaking Capacity: 1.0 kA at 65 Vdc (20-125A)
  1.5 kA at 32 Vdc (20-200A)
- Installation Method: M5/M6 bolt installation
- Torque: M5:2.5±0.5N·m ; M6: 2.5±0.5N·m
- Recommended fuse holder: BHR030-15-M5

AGENCY INFORMATION

- Designed to ISO 8820-5; UL 248
- TUV certified (20 A ~ 200 A), UL certified
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

AEP 2200 3 01

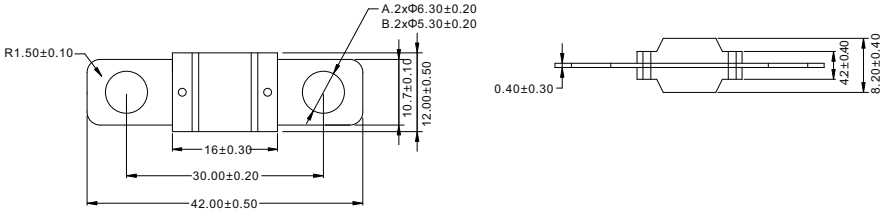
- 01: Supplementary Code: 00: M5 Bolt ; 01: M6 Bolt
- 3: Rated Voltage:65Vdc/32Vdc
- 2200: Ampere Code: 20A(See Table 1)
- AEP: Product Series: AEP

ELECTRICAL SPECIFICATIONS

Part Number		Rated Current	Ampere Code		eaking Capacity	Certifications	
						TÜV	UL
AEP2200300	AEP2200301	20 A	2200	32/65 Vdc	1 kA@65 Vdc 1.5 kA@32 Vdc	•	•
AEP2300300	AEP2300301	30 A	2300			•	•
AEP2400300	AEP2400301	40 A	2400			•	•
AEP2500300	AEP2500301	50 A	2500			•	•
AEP2600300	AEP2600301	60 A	2600			•	•
AEP2700300	AEP2700301	70 A	2700			•	•
AEP2800300	AEP2800301	80 A	2800			•	•
AEP3100300	AEP3100301	100 A	3100			•	•
AEP3125300	AEP3125301	125 A	3125			•	•
-	AEP3150301	150 A	3150	32 Vdc	1.5 kA@32 Vdc	•	•
-	AEP3175301	175 A	3175			•	•
-	AEP3200301	200 A	3200			•	•

Table1 Note: 1.●=Certification obtained. UL File number:E585737
2.Temperature rise: <50 K.

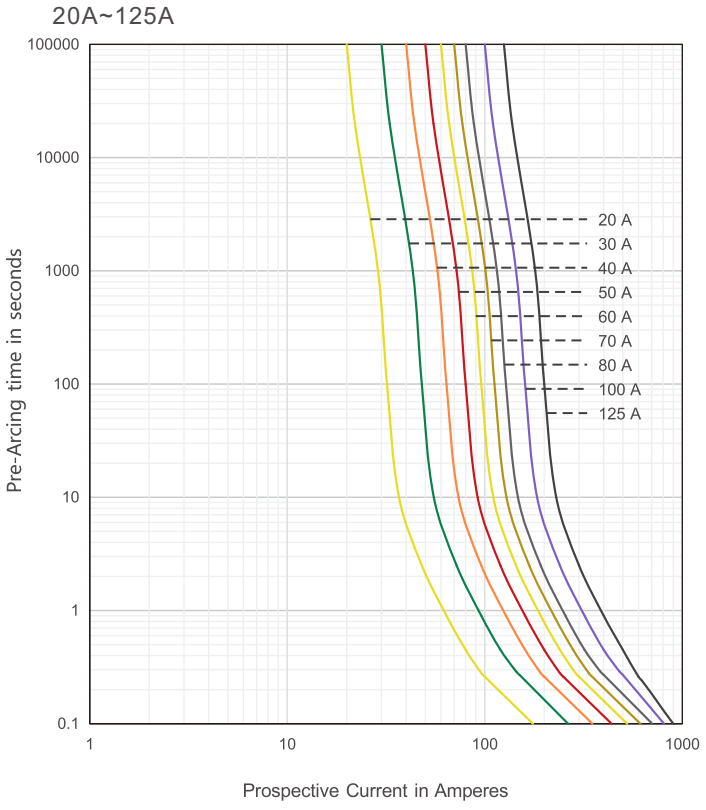
DIMENSIONS (mm)



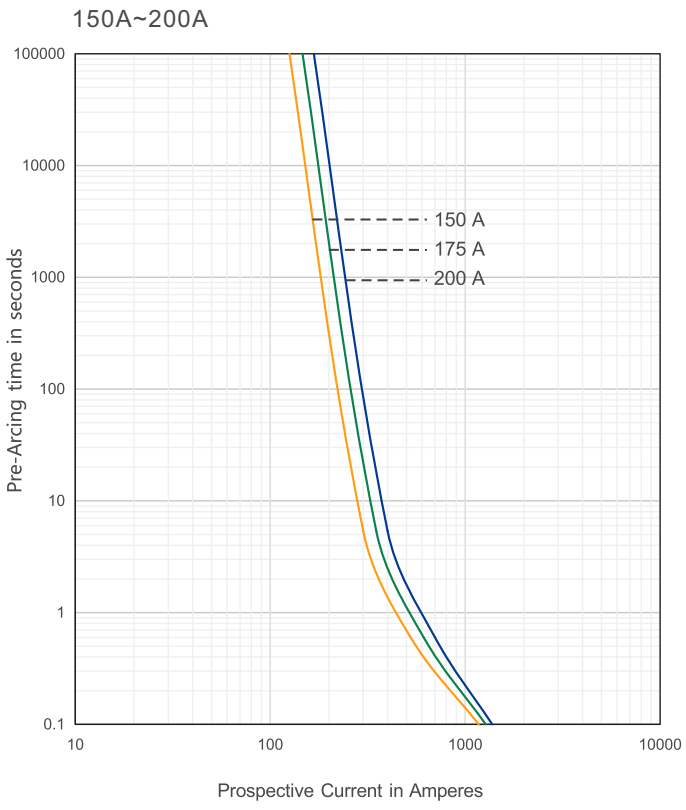
TIME VS CURRENT CHARACTERISTIC

Rated Current	75 %	100 %	110 %	150 %	200 %	300 %	350 %	500 %	600 %
20-125 A	-	>100 h	>4 h	90-3600 s	3-100 s	0.3-3 s	-	0.1-1 s	-
150 A-200 A	>100 h	-	-	-	1-15 s	-	0.3-5 s	-	0.1-1 s

TIME CURRENT CURVE



TIME CURRENT CURVE



EFP EV Fuse

RoHS

DESCRIPTION

Adler EFP 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 125 Vdc in ratings from 50A to 350A.

FEATURES

- For short circuit protection
- Main Body:Ceramic
- Rated Voltage 63/100/125 Vdc
- Rate Current 50-350 A

  Rate Breaking Capacity: 3 In~ 3-8 k A
- Dimensions: 48 x12 mm
- Recommend Torque M6: 5-5.5 N.m; M5: 3.5-4 N.m

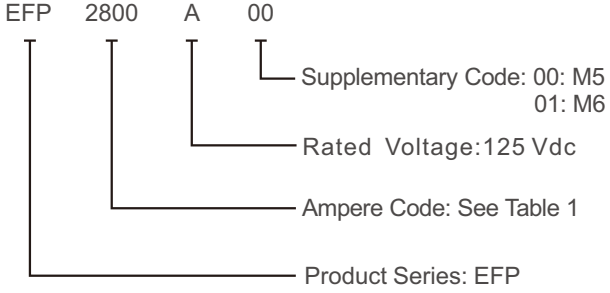
AGENCY INFORMATION

- Designed to UL 248-13 ;ISO 20934 2019(Type Sf36)
- Approval: (Pending)

APPLICATIONS

- Portable energy storage
- HEV
- Electric motorcycle
- E-bike
- Industrial Machinery(Forklift/Excavator/Bulldozer)
- Garden tools

PART NUMBER SYSTEM

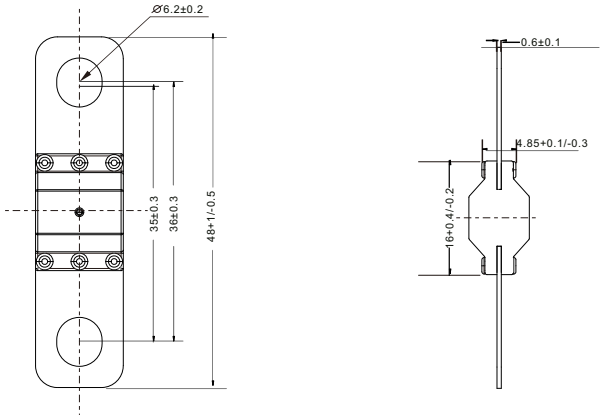


ELECTRICAL SPECIFICATIONS

Part Number		Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Nom Cold Resistance(mΩ)	Pre-Arcing I^2t (A^2s)
M5 Bolt	M6 Bolt						
EFP2500A00	EFP2500A01	50 A	2500	63Vdc 100Vdc 125Vdc	3In-8kA@63Vdc 3In-6kA@100Vdc 3In-3kA@125Vdc	0.92	1250
EFP2600A00	EFP2600A01	60 A	2600			0.73	2230
EFP2800A00	EFP2800A01	80 A	2800			0.52	5400
EFP3100A00	EFP3100A01	100 A	3100			0.43	9600
EFP3150A00	EFP3150A01	150 A	3150			0.33	21800
EFP3200A00	EFP3200A01	200 A	3200			0.24	38500
EFP3250A00	EFP3250A01	250 A	3250			0.19	60500
EFP3300A00	EFP3300A01	300 A	3300			0.16	102000
EFP3350A00	EFP3350A01	350 A	3350	125 Vdc	3In-3kA@125 Vdc	0.13	98000

Table1 Note: 1.Self-certified for 63Vdc/8kA and 100Vdc/6kA Breaking Capacity.
2.Pre-arcing I^2t values are typical and tested at 10*In current.

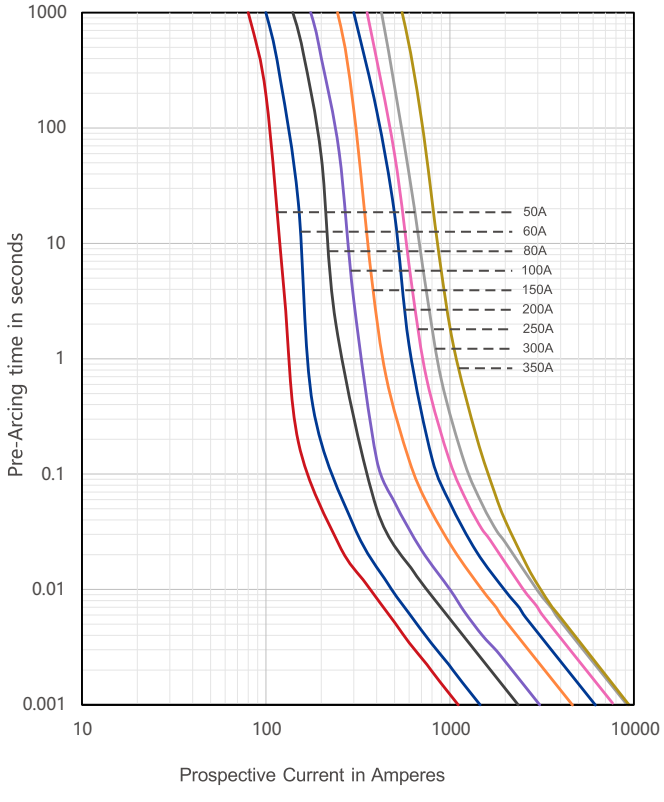
DIMENSIONS (mm)



TIME VS CURRENT CHARACTERISTIC

Rated Current	100 %	300 %
50-350 A	>4h	<10s

TIME CURRENT CURVE



EFT EV Fuse

RoHS

DESCRIPTION

Adler EFT 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 200 Vdc in ratings from 100A to 500A.

FEATURES

- Main Body: Ceramic
- Reliable clearing of DC fault currents
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 20kA
- For Short Circuit Protection

AGENCY INFORMATION

- Designed to UL 248-13, ISO 20934-2019
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Portable energy storage
- HEV
- Electric motorcycle
- E-bike
- Industrial Machinery(Forklift/Excavator/Bulldozer)
- Garden tools

PART NUMBER SYSTEM

EFT 3350 A 02

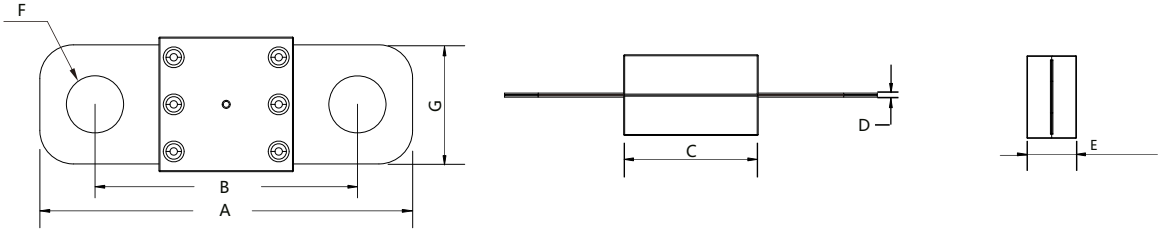
- 02 — Supplementary Code: 85Vdc
- A — Size: A:20x20 mm, B:29x25mm
- 3350 — Ampere Code: See Table 1
- EFT — Product Series: EFT

ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Pre-Arcing I²t (A²s)
EFT3100AA0	100 A	3100	150Vdc	3In-20kA	7200
EFT3150AA0	150 A	3150			16000
EFT3200AA0	200 A	3200			28500
EFT3250AA0	250A	3250			65400
EFT3300AA0	300A	3300			89300
EFT3350AA0	350A	3350			122500
EFT3400AA0	400 A	3400	125Vdc	3In-20kA	192000
EFT3500AA0	500 A	3500			276000
EFT3350A02	350 A	3350	85Vdc	3In-20kA	122500
EFT3400A02	400 A	3400			192000
EFT3500A02	500 A	3500			276000
EFT3350A05	350A	3350	63Vdc	3In-20kA	122000
EFT3400A05	400A	3400			191000
EFT3500A05	500A	3500			275500
EFT3350B01	350A	3350	200Vdc	3In-20kA	-
EFT3350B01	400A	3400			-

Table1 Note: 1.Pre-arcing I²t values are typical and tested at 10*In current.
2. * Self certified for Breaking Capacity 20kA

DIMENSIONS (mm)



Size	A	B	C	D	E	F	G
20x20	55.4+1/-0.5	39±0.3	20+0.5/-0.1	0.6+0.1/-0.05	12+0.5/-0.2	Φ8.5±0.3	17±0.5
29x25	78±1	56±0.5	29+0.6/-0.2	0.9±0.1	16+0.6/-0.2	Φ8.2±0.2	22.7±0.5

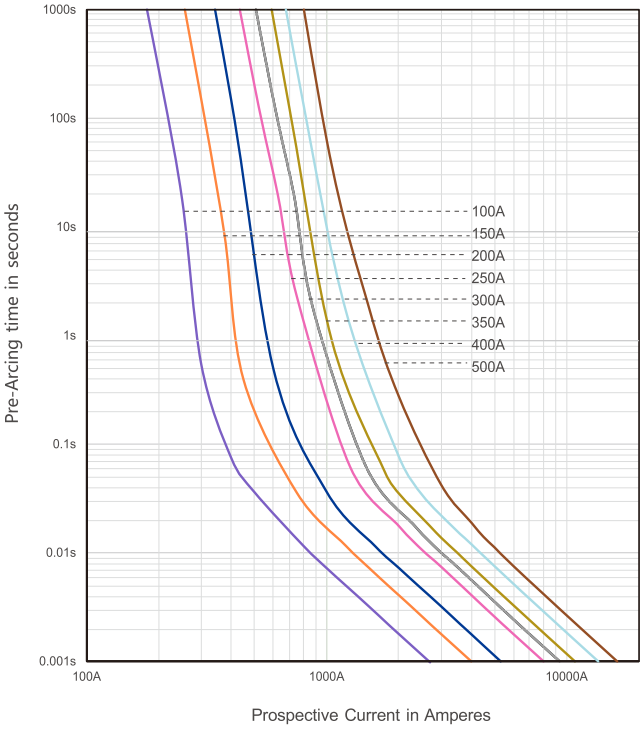
Table1

TIME VS CURRENT CHARACTERISTIC

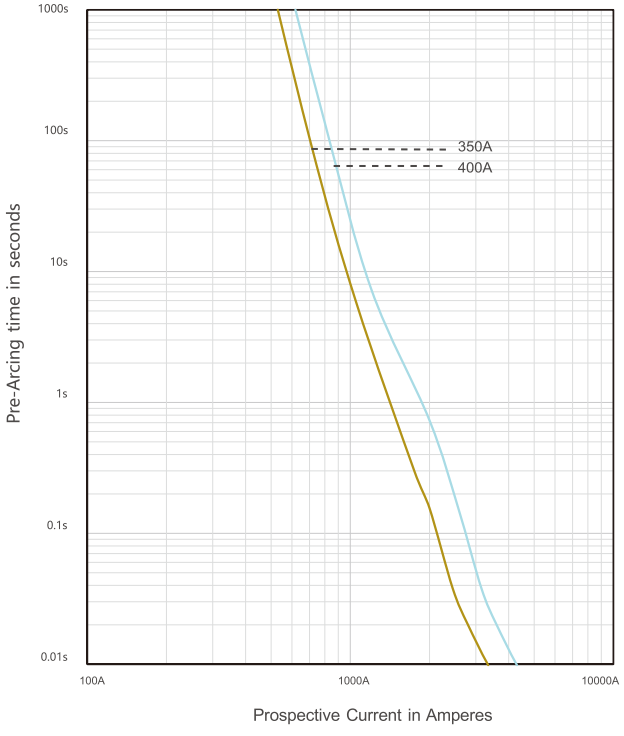
Part Number	Rated Current	100 %	300 %
EFTxxxxAxx	100-500 A	>4h	<10s

TIME CURRENT CURVE

EFTxxxxAxx 100A-500A



EFTxxxxBxx 350A-400A



EV

EV/ EVSE
Charging Protection

AT1 EVSE Fuse

RoHS

DESCRIPTION

Adler AT1 EVSE fuses series are specially engineered and tested to provide best-in-class bolt down auxiliary fuse protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 150 Vdc in ratings from 20 – 200A with a max breaking capacity of 20kA at 150Vdc. The AT1 fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

FEATURES

- 150 Vdc automotive fuse
- Rated Current: 10-200 A
- Rated Breaking Capacity: 20 kA @ 150 Vdc
- General purpose fuse for EV/HEV auxiliary protection

AGENCY INFORMATION

- Designed to UL 248-13, UL 248-20, JASO D622
- UL certified (E485737)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Traction inverter protection
- Energy storage
- Power conversion
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

AT1 3200 1 05

- 05: Supplementary Code: 05: Default
- 1: Size:18x25mm
- 3200: Ampere Code: See Table 1
- AT1: Product Series: AT1

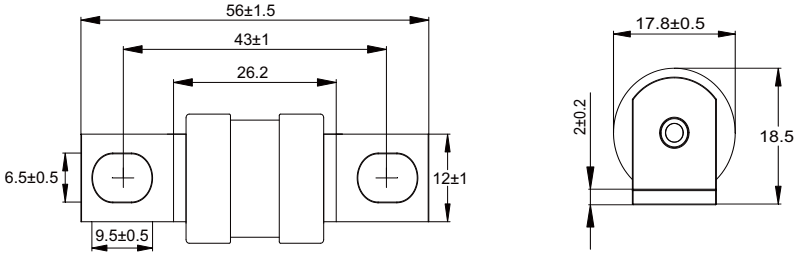
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	1.0 In Dissipation (W)	Certifications UL
25x18	At12200105	20 A	2200	150 Vdc	20 kA@150 Vdc	1.8	•
	AT12320105	32 A	2320			3.5	•
	AT12500105	50 A	2500			6.0	•
	AT12600105	60 A	2600			7.5	•
	AT12700105	70 A	2700			8.6	•
	AT12800105	80 A	2800			9.0	•
	AT13100105	100 A	3100			11.0	•
	AT13125105	125 A	3125			12.8	•
	AT13150105	150 A	3150			16.2	•
	At13200105	200 A	3200			18.5	•

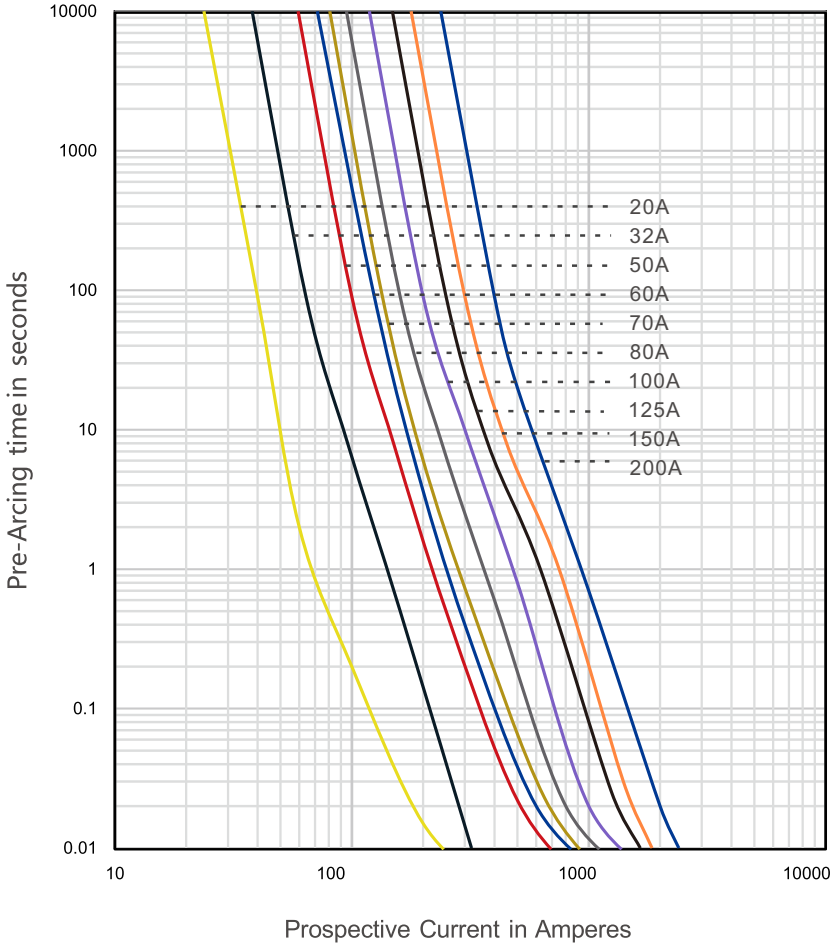
Table1 Nete:1.●=Certification obtained. UL File number:E485737
2. Temperature Rise:≤45K with 0.6In of rated current

DIMENSIONS (mm)

AT1XXXX105



TIME CURRENT CURVE



AT2 EVSE FUSE

RoHS

DESCRIPTION

Adler AT2 EVSE fuses series are specially engineered and tested to provide best-in-class bolt down auxiliary fuse protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 250 Vdc in ratings from 200 – 500A with a max breaking capacity of 10kA at 250 Vdc. The AT2 fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

FEATURES

- 250 Vdc EVSE fuse
- Rated Current: 200-500 A
- Max. Breaking Capacity: 10 kA at 250 Vdc
- Size: 38x35 mm
- General purpose fuse for EV charging equipment

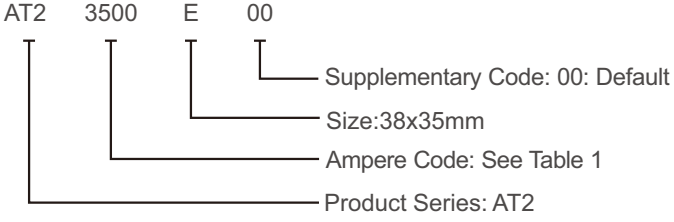
AGENCY INFORMATION

- Designed to UL 248-13, UL 248-20, JASO D622
- UL certified (E485737)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM



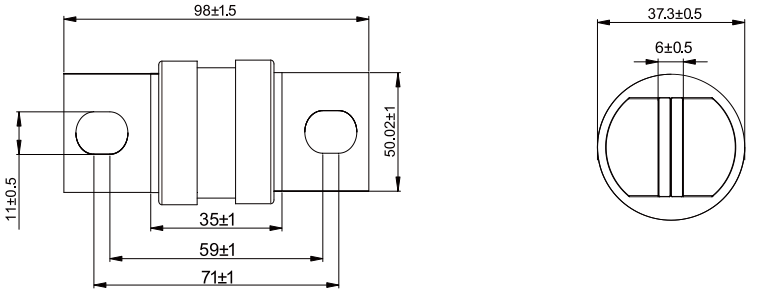
ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	1.0 In Dissipation (W)
AT23200E00	200 A	3200	250 Vdc	10 kA@250 Vdc	<35
AT23250E00	250 A	3250			<37
AT23300E00	300 A	3300			<40
AT23350E00	350 A	3350			<45
AT23400E00	400 A	3400			<49
AT23450E00	450 A	3450			<67
AT23500E00	500 A	3500			<75

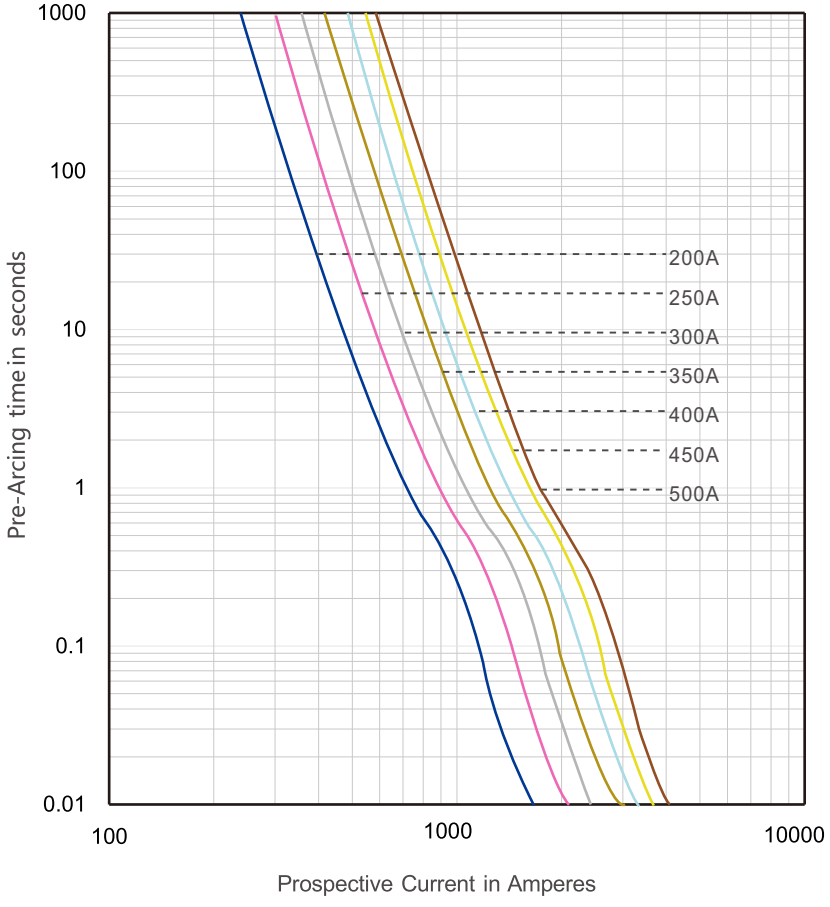
Table1 Note: (1) Temperature rise: <50 K.

DIMENSIONS (mm)

AT2XXXXE00



TIME CURRENT CURVE



AT5 EVSE Fuse

DESCRIPTION

Adler AT5 EVSE fuses series are specially engineered and tested to provide best-in-class bolt down auxiliary fuse protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 500 Vdc in ratings from 60 – 400A with a max breaking capacity of 20kA at 500Vdc. The AT5 fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

FEATURES

- 500 Vdc EVSE fuse
- Rated Current: 60-200 A (30x50)
  200-400 A (38x50)
- Rated Breaking Capacity: 20 kA at 500 Vdc
- Size: 30x50 mm, 38x50 mm
- General purpose fuse for EV charging equipment

AGENCY INFORMATION

- Designed to UL 248-13, UL 248-20, JASO D622
- UL certified (E485737)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

AT5 2600 6 04

- 04: Supplementary Code: 04: Default
- 6: Size:6:30x50mm;B:38x50mm
- 2600: Ampere Code: See Table 1
- AT5: Product Series: AT5

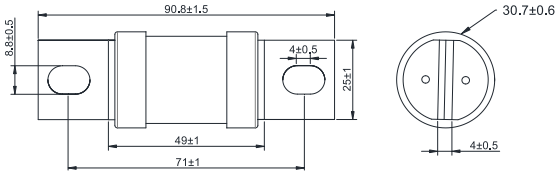
ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications UL
30x50	AT52600604	60 A	2600	500 Vdc	20 kA@500 Vdc	•
	AT52700604	70 A	2700			•
	AT52800604	80 A	2800			•
	AT52900604	90 A	2900			•
	AT53100604	100 A	3100			•
	AT53125604	125 A	3125			•
	AT53150604	150 A	3150			•
	AT53175604	175 A	3175			•
	AT53200604	200 A	3200			•
38x50	AT53200B04	200 A	3200	500 Vdc	20 kA@500 Vdc	•
	AT53250B04	250 A	3250			•
	AT53300B04	300 A	3300			•
	AT53350B04	350 A	3350			•
	AT53400B04	400 A	3400			•

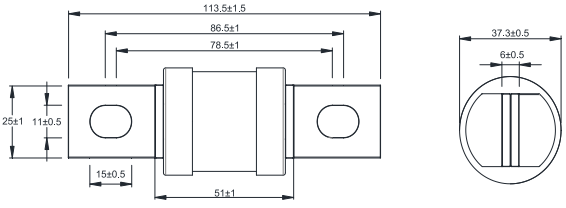
Table1 Note: 1.●=Certification obtained. UL File number:E485737
2. Temperature rise: <50 K.

DIMENSIONS (mm)

AT5xxxx604

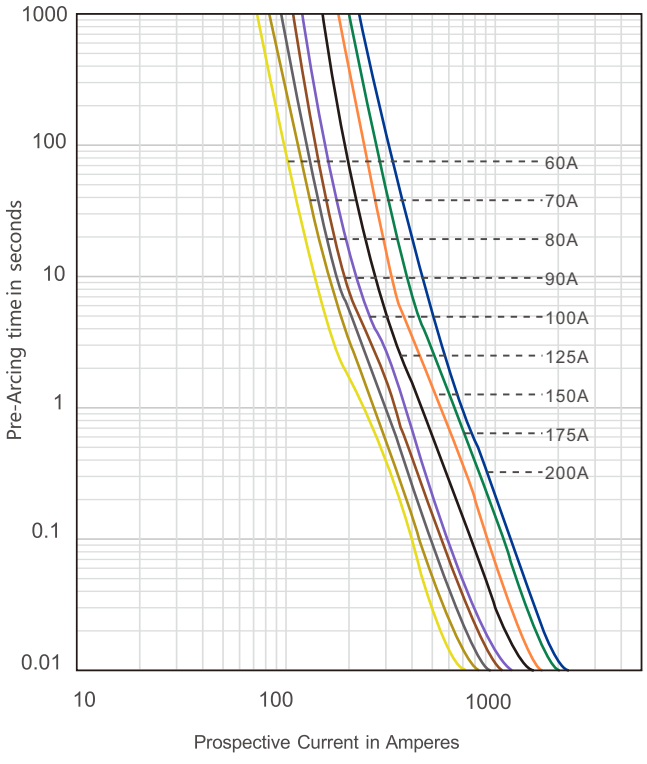


AT5xxxxB04



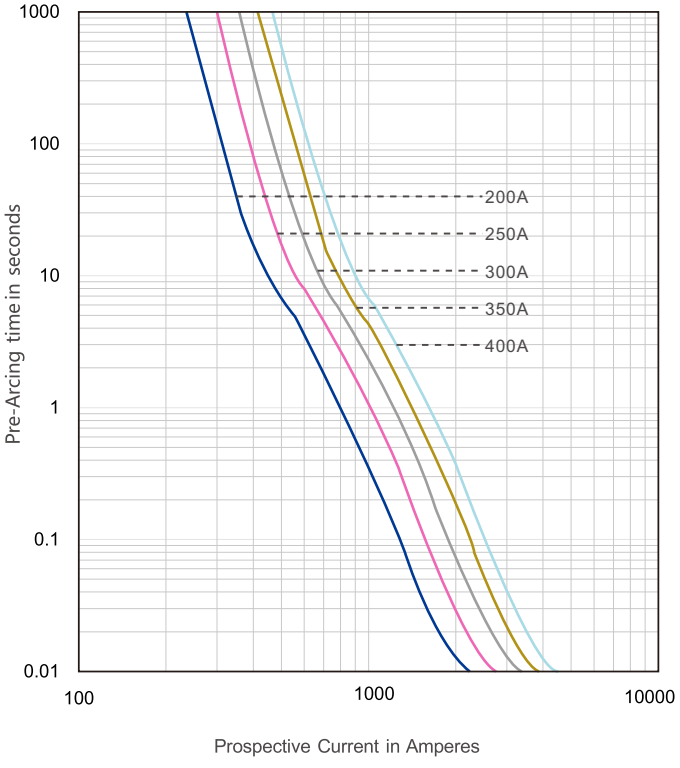
TIME CURRENT CURVE

AT5xxxx604



TIME CURRENT CURVE

AT5xxxxB04



AT7 EVSE Fuse

RoHS

DESCRIPTION

Adler AT7 EVSE fuses series are specially engineered and tested to provide best-in-class bolt down auxiliary fuse protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 800 Vdc in ratings from 125 – 400A with a max breaking capacity of 20kA at 800 Vdc. The AT7 fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

FEATURES

- 800 Vdc EVSE fuse
- Rated Current: 125-400 A
- Rated Breaking Capacity: 20 kA at 800 Vdc
- Size: 38x70 mm
- General purpose fuse for EV charging equipment

AGENCY INFORMATION

- Designed to UL 248-13, UL 248-20, JASO D622
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

AT7 3400 C 03

- 03: Supplementary Code: 03: Default
- C: Size:38x70mm
- 3400: Ampere Code: See Table 1
- AT7: Product Series: AT7

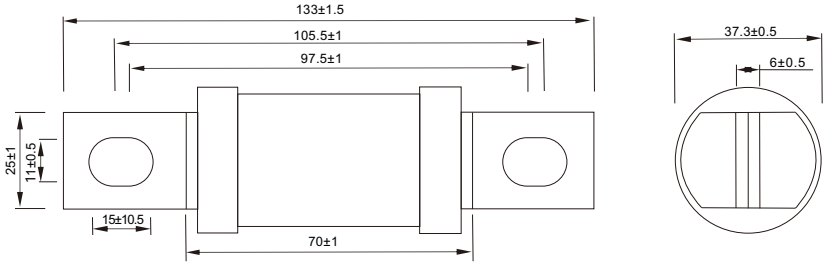
ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Dissipation (W) 1.0 In
AT73125C03	125 A	3125	800 Vdc	20 kA@800 Vdc	23
AT73150C03	150 A	3150			32
AT73200C03	200 A	3200			42
AT73250C03	250 A	3250			45
AT73300C03	300 A	3300			50
AT73350C03	350 A	3350			65
AT73400C03	400 A	3400			71

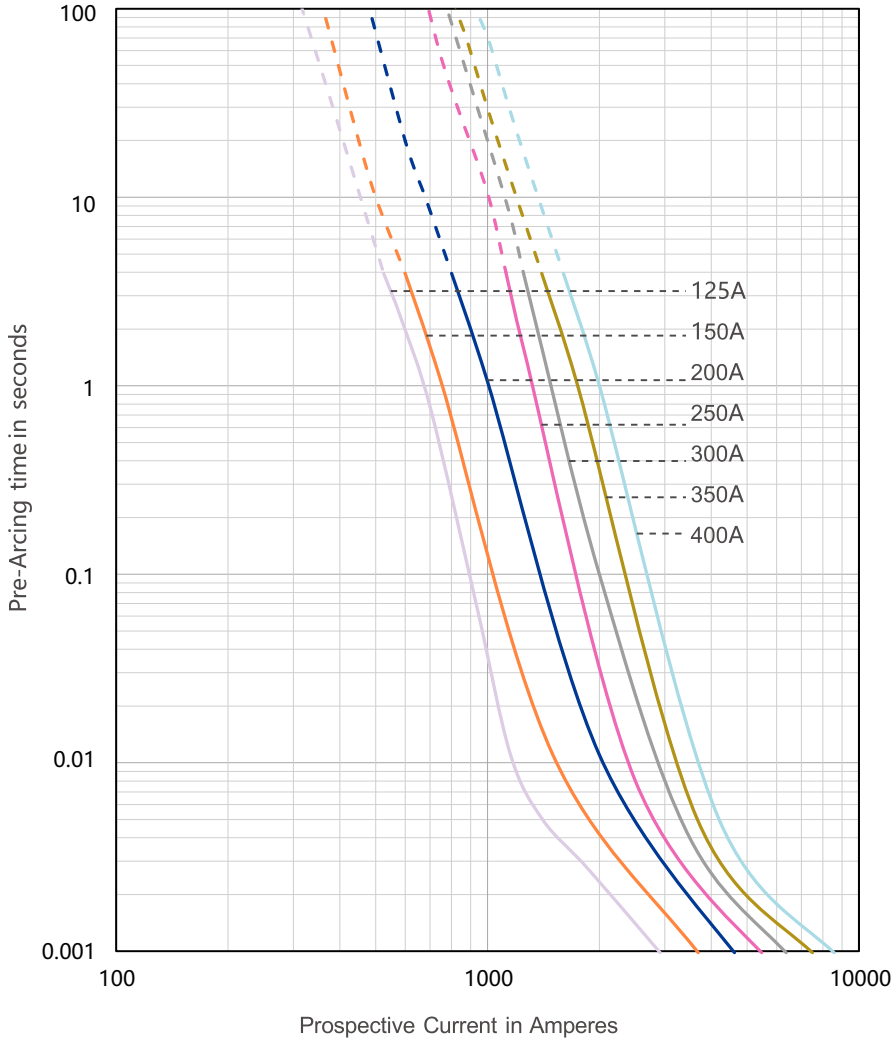
Table1 Note: 1 .Temperature rise: 0.5In<45K.
2. Recommend tightening torque is 20±1.0Nm (M10).

DIMENSIONS (mm)

AT7XXXXC03



TIME CURRENT CURVE



AT8 EVSE Fuse

RoHS

DESCRIPTION

Adler AT8 EVSE fuses series are specially engineered and tested to provide best-in-class bolt down auxiliary fuse protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 800 Vdc in ratings from 50 – 200A with a max breaking capacity of 10kA – 20kA. The AT8 fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

FEATURES

- 800 VDC EVSE fuse
- Rated Current: 50-100 A (18x68)
  125-200 A (30x65)
- Rated Breaking Capacity: 10 kA (18x68)
  20 kA (30x65)
- Size: 18x68 mm, 30x65 mm
- General purpose fuse for EV charging equipment

AGENCY INFORMATION

- Designed to UL 248-20
- UL certified (E485737)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

AT8 3500 3 02

- 02 — Supplementary Code: 02,03
- 3 — Size:3: 18x68 mm; 7: 30x65 mm
- 3500 — Ampere Code: See Table 1
- AT8 — Product Series: AT8

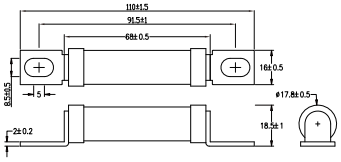
ELECTRICAL SPECIFICATIONS

Size(mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	I²t (A²sec)	Watt Loss(W) 1.0In	Certifications UL
18x68	AT82500302	50 A	2500	800 Vdc	10kA@800 Vdc	-	-	●
	AT82600302	60 A	2600			-	-	●
	AT82700302	70 A	2700			-	-	●
	AT82800302	80 A	2800			-	-	●
	AT83100302	100 A	3100			-	-	●
30x65	AT83125702	125 A	3125	800 Vdc	20kA@800 Vdc	5780	-	●
	AT83150702	150 A	3150			8850	-	●
	AT83175702	175 A	3175			12250	-	●
	AT83200702	200 A	3200			16000	-	●

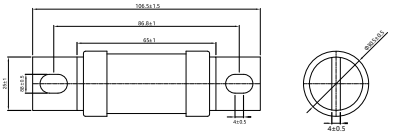
Table1 Note: ●=Certification obtained. UL File number:E485737

DIMENSIONS (mm)

AT8xxxx302

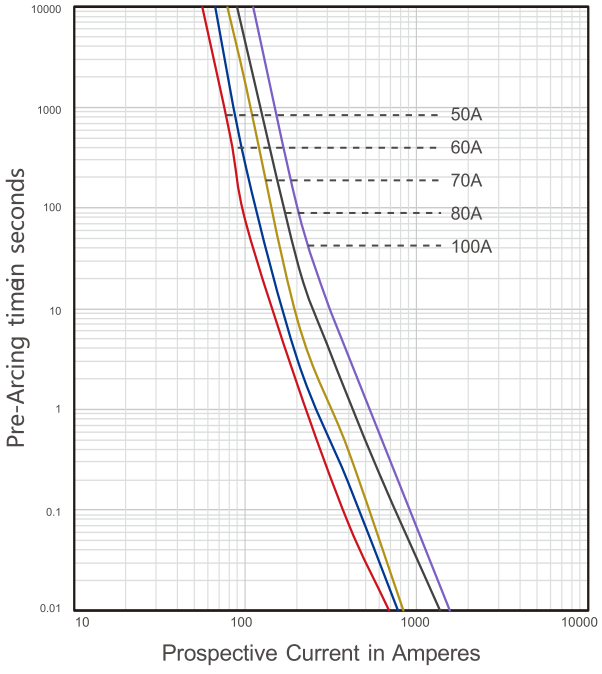


AT8xxxx702

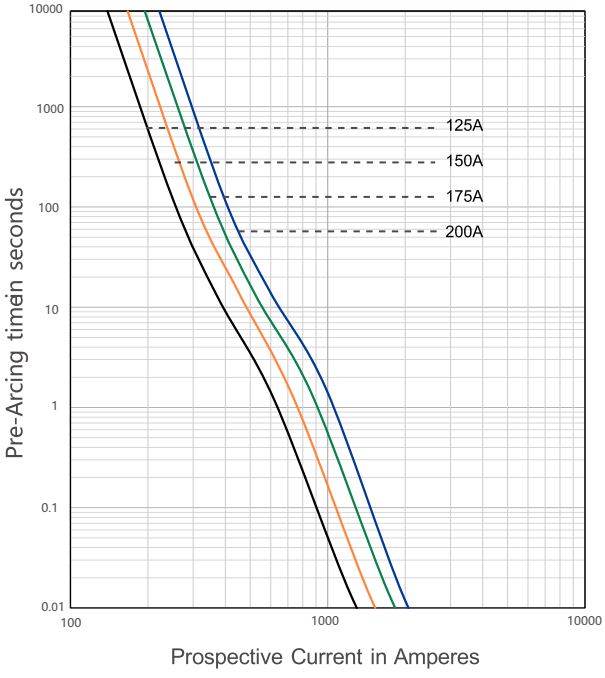


TIME CURRENT CURVE

AT8xxxx302



AT8xxxx702



ATX EVSE Fuse

RoHS

DESCRIPTION

Adler ATX EVSE fuses series are specially engineered and tested to provide best-in-class bolt down auxiliary fuse protection and high-performance protection in managing systems of Electrical and Hybrid Electrical Vehicles, up to 1000 Vdc in ratings from 250 – 350A (single) and 400 – 600A (twin) with a max breaking capacity of 50kA at 1000Vdc. The ATX fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

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

AGENCY INFORMATION

- Designed to UL 248-13, UL 248-20, JASO D622
- UL certified (E485737)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

APPLICATIONS

- Battery pack protection
- Traction inverter protection
- Energy storage
- Power conversion
- High voltage power distribution
- Battery disconnect unit
- Primary Fuse
- Charging Fuse
- Auxiliary Fuses

PART NUMBER SYSTEM

ATX 3600 C 01

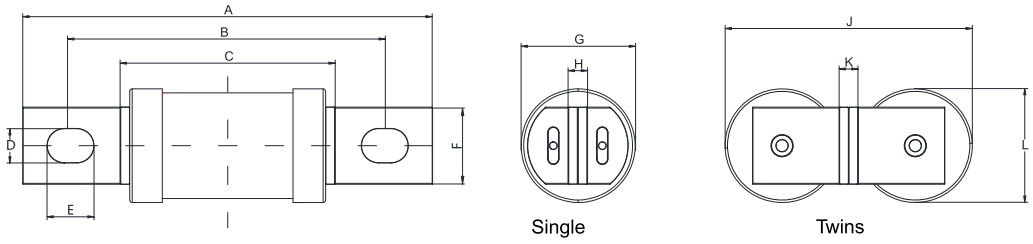
- 01 — Supplementary Code: 01
- C — Voltage Code: 1000 Vdc
- 3600 — Ampere Code: See Table 1
- ATX — Product Series: ATX

ELECTRICAL SPECIFICATIONS

Size	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Pre-Arcing I²t (A² S)	Melting I²t (A² S)	Watt Loss (W) 0.5 In	Watt Loss (W) 0.8 In	Certifications UL
133x37	ATX3250C01	250 A	3250	1000 Vdc	50 kA@ 1000 Vdc	16500	52000	9	33	•
	ATX3315C01	315 A	3315			24000	77000	12	36	•
	ATX3350C01	350 A	3350			32000	100000	14	45	•
133x81	ATX3400C01	400 A	3400	1000 Vdc	50 kA@ 1000 Vdc	55000	140000	15	48	•
	ATX3500C01	500 A	3500			75000	190000	17	60	•
	ATX3600C01	600 A	3600			130000	320000	21	68	•

Table1 Note:1. ●=Certification obtained. UL File: E485737
2. 0.5In Temperature rise: <50 K

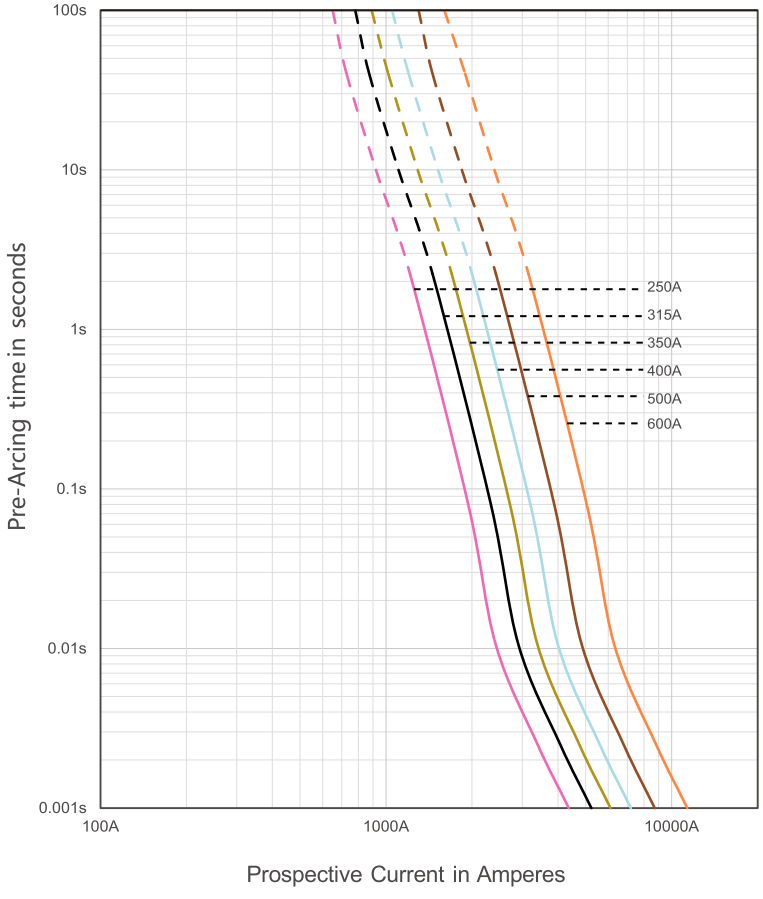
DIMENSIONS (mm):



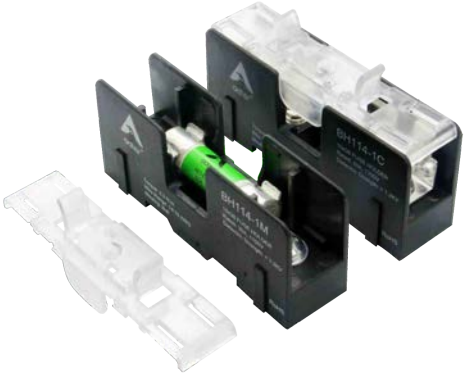
Part Number	A ±2	B ±1.5	C ±1	D ±0.5	E ±0.5	F ±1	G ±0.5	H ±0.5	J ±1.5	K ±0.5	L±0.5
ATXxxxxC01 single	133	101.5	70	11	15	25	37.3	6	-	-	-
ATXxxxxC01 twins	133	101.5	70	11	15	25	–	–	81.5	6	37.3

Table2

TIME CURRENT CURVE



BH114 Series 10x38 mm Fuse Holder



DESCRIPTION:

The BH114 fuse holder is made of themoplastic and is designed for 10x38 mm cylindrical fuses and allows for easy mounting on flat surfaces. This holder can be mounted on DIN Rail constructions.

FEATURES:

- Flexible rail mounting, easy to install with screws or bolts
- For multiple pole applications, holders can be combined in series through simple slide-on design
- Designed for general purpose fuse links

SPECIFICATIONS:

- Rated Voltage: 1100 Vdc
- Rated Current: 30 A (Clip); 50 A (Bolt)
- Dielectric Strength: >1200 V
- Wire Range: 14-7 AWG (1.6-8.4 mm²)
- Torque: 2.3 N.m (20 in-lbs)
- Clip/Terminals: Tin-plated copper alloy
- Screw and captive pressure plate: Zinc-plated steel
- Base: Thermoplastic
- Material Flammability: UL 94 V0
- Operational Temperature: -40 °C to 125 °C

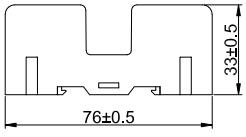
BASE PART NUMBER

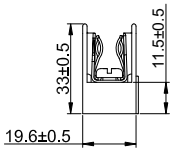
Clip Mount P/N	Bolt Mount P/N	Pole
BH114-1C	BH114-1M	1
BH114-2C	BH114-2M	2
BH114-3C	BH114-3M	3

COVER PART NUMBER

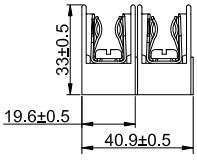
Cover P/N	Indicater	Matching Base Holder
BH114-CC	Yes	Clip Mount
BH114-CL	Yes	Bolt Mount
BH114-CN	No	Clip Mount, Bolt Mount

DIMENSIONS (mm)

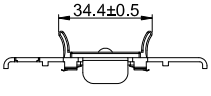




BH114-1C

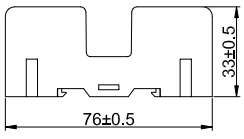


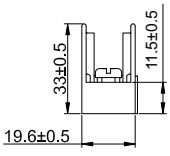
BH114-2C



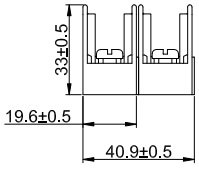
BH114-CC

BH114-CL

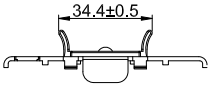




BH114-1M



BH114-2M



BH114-CN

BH214 Series 14x51 mm Fuse Holder

DESCRIPTION:

The BH214 fuse holder is made of themoplastic and is designed for 14x51 mm cylindrical fuses or bolt fuses and allows for easy mounting on flat surfaces. This holder can be mounted on DIN Rail constructions.

FEATURES:

- Flexible rail mounting, easy to install with screws or bolts
- For multiple pole applications, holders can be combined in series through simple slide-on design
- Designed for general purpose fuse links

SPECIFICATIONS:

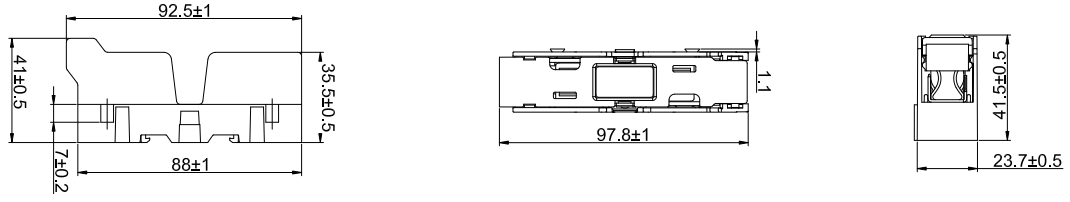
- Max. Voltage: 1000 Vdc
- Max. Current: 100 A
- Short-time Withstand Current: 200 kA/s
- Torque: 4 N.m
- Terminals: Tin-plated copper
- Base and Cover: Thermoplastic
- Base Material Flammability: UL 94 V0
- Cover Material Flammability: UL 94 HB
- Operational Temperature: -40 °C to 125 °C
- Ingress Protection (Cover): IP10

PART NUMBER

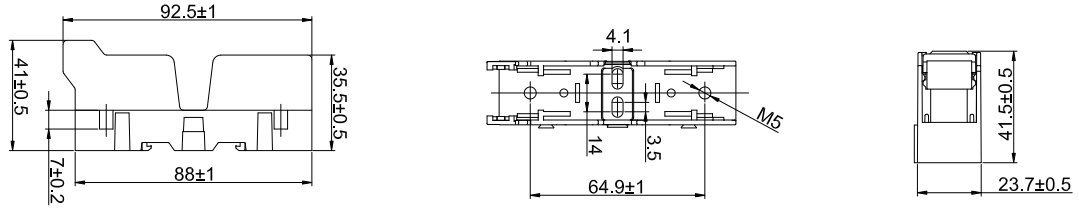
Clip Mount		Bolt Mount		Pole
With Cover	Without Cover	With Cover	Without Cover	
BH214-1CC	BH214-1CN	BH214-1MC	BH214-1MN	1
BH214-2CC	BH214-2CN	BH214-2MC	BH214-2MN	2
BH214-3CC	BH214-3CN	BH214-3MC	BH214-3MN	3

DIMENSIONS (mm)

BH214-1CC



BH214-1MC



BHR Series Fuse Holder

DESCRIPTION:

The BHR series fuses holder is specially designed for use with DC fuses in automotive equipment and road vehicles. It works with ADLER vehicle fuse links. The holder is built with special automotive grade materials to withstand high fault currents and temperatures.

FEATURES:

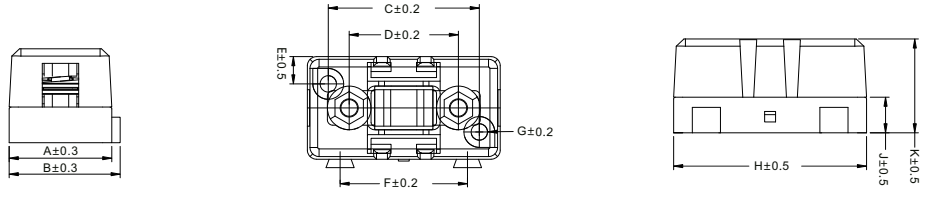
- Base Material: PA+GF UL94V0
- Operation Temperature: -40℃ to 125℃
- Bolt Material: Stainless Steel

PARAMETER

Part Number	BHR030-15-M5	BHR059-25-M8	BHR061-25-M10
Product Specifications	Applicable Product: AEP	Applicable Product: AEY	Applicable Product: AEL
	Max. Voltage: 65 Vdc	Max. Voltage: 100 Vdc	Max. Voltage: 120 Vdc
	Max. Current: 200 A	Max. Current: 500 A	Max. Current: 800 A
	Max. Torque: 3.5 N.m	Max. Torque: 12 N.m	Max. Torque: 19 N.m
	Bolt Size: M5	Bolt Size: M8	Bolt Size: M10

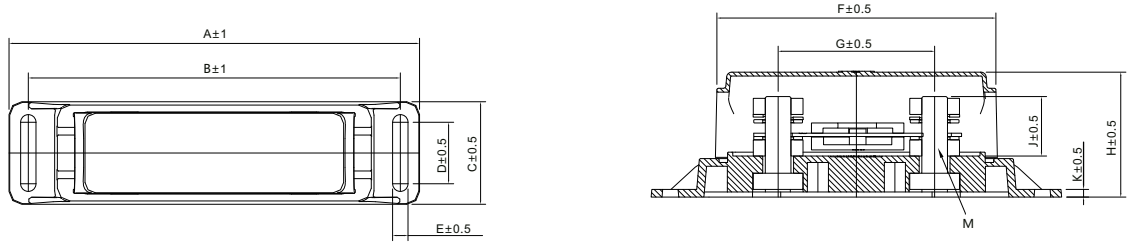
DIMENSIONS (mm)

BHR030-15-M5(AEP USE)



Part Number	A	B	C	D	E	F	G	H	J	K
BHR030-15-M5	28.2	30.5	41. 5	30	6.4	35	4. 5	53	9.8	25.8

BHR059-25-M8, BHR061-25-M10(AEY and AEL USE)



Part Number	A	B	C	D	E	F	G	H	J	K	M
BHR059-25-M8	160	145	40	24	6	108.7	50.9	48.7	25	3	M8
BHR061-25-M10	160	145	40	24	6	108.7	61.0	48.7	25	3	M10

BFR Series EV Fuse Holder

DESCRIPTION:

The BFR series EV fuse holder is suitable for use with automotive equipment and designed for ADLER EV fuse links.

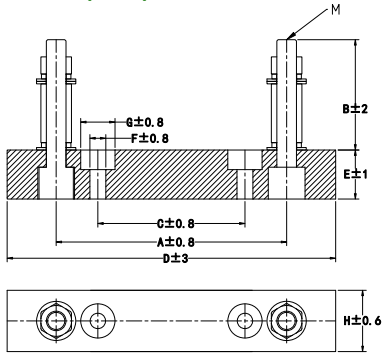
SPECIFICATIONS:

- Rated Voltage: 1000 Vac / dc
- Rated Current: ≤200A
- Operating temperature: -50°C to +180°C
- Max Voltage: 13-18 kV
- Insulation Board Material: FR4
- Insulation Resistance: 50, 000 MΩ
- Metal Material: stainless steel
- UL-94 Flame retardant grade: 94HB

FEATURES:

The ADLER BFR series EV fuse holder uses special materials to withstand highest fault currents and temperatures for automotive fuses and applications.

DIMENSIONS (mm)



EV HOLDER MATCHING FUSE

P/N	Matching Fuse
BFR063-38-M6-S	AE5xxxx620
BFR071-46-M8-S	AE5xxxx625, AE5xxxx631, AT5xxxx604
BFR094-45-M8-S	AE7xxxxi25
BFR099-70-M10-S	AE7xxxxi38, AE7xxxxi51
BFR106-46-M8-S	AEXxxxx731
BFR116-72-M10-S	AEXxxxx738, AEXxxxx751
BFR091-35-M8-S	AT8xxxx302
BFR101-45-M10-S	AT7xxxxC03, ATXxxxxC01
BFR086-45-M8-S	AT8xxxx702
BFR082-45-M10-S	AT5xxxxB04
BFR065-45-M10-S	AT2xxxxE00
BFR043-28-M6-S	AT1xxxx105
BFR050-28-M8-S	AEYxxxx900, AEYxxxx901

P/N	A	B	C	D	E	F	G	H	M
BFR063-38-M6	63	38	31	84	15	5.5	9	25	M6
BFR071-46-M8	71	46	25	96	15	8.5	14	30	M8
BFR094-45-M8	94	45	60	134	20	6.5	14	25	M8
BFR099-70-M10	99	70	60	146	20	6.5	14	42	M10
BFR106-46-M8	106	46	60	146	20	6.5	14	35	M8
BFR116-72-M10	116	72	60	146	20	6.5	14	42	M10
BFR091-35-M8	91.5	35	25	130	15	8.5	17	30	M8
BFR101-45-M10	101.5	45	40	150	25	8.5	17	48	M10
BFR086-45-M8	86.8	45	35	130	20	8.5	17	42	M8
BFR082-45-M10	82.5	45	40	130	25	8.5	17	48	M10
BFR065-45-M10	65	45	30	115	25	8.5	17	48	M10
BFR043-28-M6	43	28	15	70	15	5.5	9	25	M6
BFR050-28-M8	50.9	28	15	80	15	5.5	9	30	M8

BHL Series Fuse Holder

DESCRIPTION:

The ADLER BHL series fuse holders are designed to accomodate a range of semiconductor fuses with a max diameter of 3".

FEATURES:

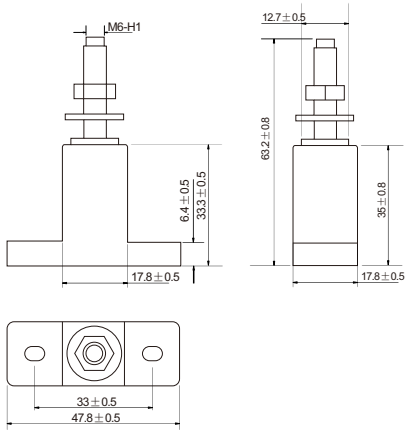
- Modular design reduces inventory requirements
- Sold in pairs for convenience
- Base Material: PF2A5-151J
- Operation Temperature: -40℃ to 150℃
- Bolt Material: 35# Steel Galvanized

PARAMETERS

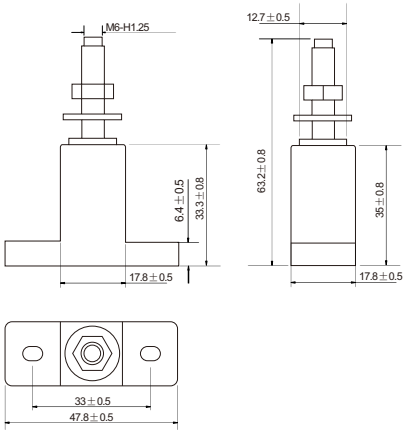
Part Number	BHL-M6	BHL-M8	BHL-3/8
Product Specifications	Max. Voltage: 1500 VDC	Max. Voltage: 1500 VDC	Max. Voltage: 1500 VDC
	Max. Current: 400A	Max. Current: 800A	Max. Current: 1200A
	Max. Torque: 6.0 N.m	Max. Torque: 13 N.m	Max. Torque: 20.0 N.m
	Bolt Size: M6	Bolt Size: M8	Bolt Size: 3/8"

DIMENSIONS (mm)

BHL-M6



BHL-M8



BHL-3/8