

# HIGH SPEED FUSES AND SYSTEM PROTECTION

For Automotive/ Electric Vehicles  
and EVSE/ Charging Equipment



2020 / 04 EV/ EVSE Portfolio

Ihr Rundumschutz für starke Ströme  
All-round protection for strong currents



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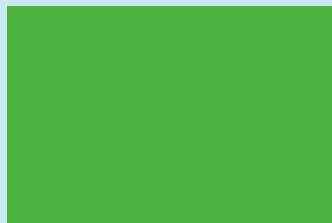
## General Automotive Fuse Links

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MINI Blade Fuse  
MIDI Blade Fuse  
Bolt-Down Fuse



High Speed Fuses  
And System Protection



## 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 are Designed for Following 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 1000VDC
- EV fuses for auxiliary protection for 500VDC and 800VDC 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 established, 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 expertise solutions, a high standard of professional services, availability of stock and "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:

- 📍 ADLER Elektrotechnik Leipzig GmbH (Headquarters)
- 📍 ADLER Regensburg (Engineering)
- 📍 ADLER Elektrotechnik Xi'an Co.,Ltd.(Manufacturing)
- 📍 ADLER Songshan Lake Dongguan (Testing center)





# 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

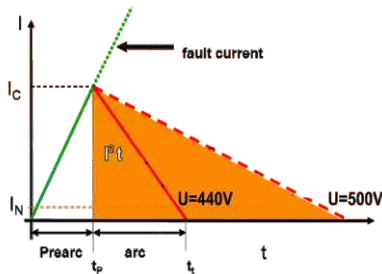
The following steps shall help you in selecting the correct EV fuse for automotive applications:

## Determine the following parameters:

- 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.
- 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.
- Dimensions:** Find the suitable dimensions and mounting method for the application. Mind automotive grade fuses must be securely fastened, usually bolt mounted.
- 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 $\geq$ max. continuous system voltage

If the rated voltage is exceeded and the arc not quenched fast enough, the Joule integral  $I^2t$  will become too large for the quartz sand to extinguish the arc. The fuse body can be damaged or destroyed as a result.



Formula for current rating of the fuse based on  $I_b$ :

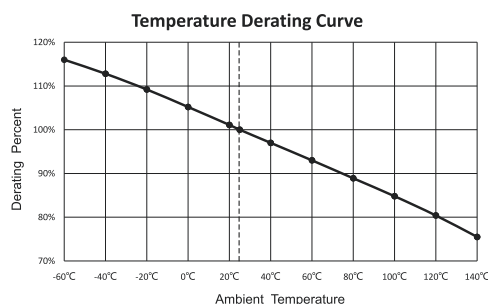
$$I_b = I_n \times K_T \times K_e \times K_v \times K_n \times K_c$$

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

$I_n$ : rated current of fuse

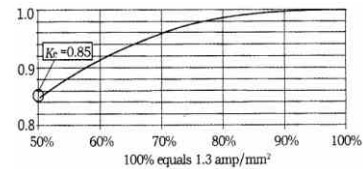
$I_b$ : the allowable maximum continuous load current in the circuit, determined by operation current of the application

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



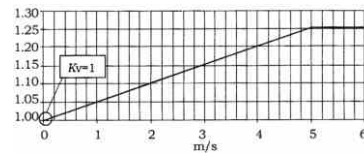
### $K_e$ : Heat transfer derating of the connection

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  $K_e$ . Generally, the fuse copper bar has a current density of 1-1.6 amp/mm<sup>2</sup>. If the rated current is too high, increase the cross section to decrease the current density. Factor  $K_e$  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  $K_n$  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  $\rightarrow$  select 700 VDC
  - Max. load current: 95 A
  - PDU box temperature: 40°C  $\rightarrow K_T = 0.9$
  - No cooling vents  $\rightarrow K_e = 1$
  - Cable is 130 mm<sup>2</sup>, 55% of IEC cable size  $\rightarrow K_v = 0.88$
  - $K_n = 0.8$  for usage in a PDU box
  - $K_c = 0.8$  for irregular cyclic loads
- $$I_n \geq 95 \text{ A} / (0.9 \times 1 \times 0.88 \times 0.8 \times 0.8)$$
- $$I_n \geq 187.4 \text{ A}$$

Select: AE7, 700 VDC, 200 A



# EV

## Electric Vehicle (EV) Protection





# AE4 EV Fuse



### FEATURES:

- 200 VDC automotive fuse
- Rated Current: 10-50 A
- Rated Breaking Capacity: 10 kA at 200 VDC
- Time Constant: 2-3 ms
- Size: 10x26 mm
- General purpose fuse for EV/HEV auxiliary protection
- Ref. to ISO 8820-8; GB/T 31465.6

### ELECTRICAL SPECIFICATIONS

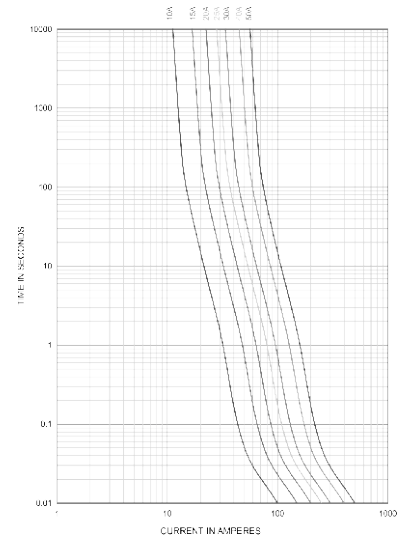
Part Number				Rated Current	Ampere Code	Rated Voltage	Breaking Capacity
Cartridge	Central Mount	PCB Mount	Level Mount				
AE42100600	AE42100601	AE42100603	AE42100605	10 A	2100	200 VDC	10 kA@200 VDC
AE42150600	AE42150601	AE42150603	AE42150605	15 A	2150		
AE42200600	AE42200601	AE42200603	AE42200605	20 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		

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

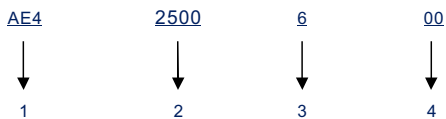
### TIME VS CURRENT CHARACTERISTIC

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



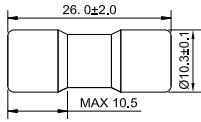
### PART NUMBER SYSTEM



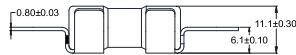
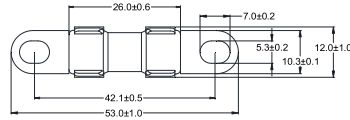
- 1..... Product Series ..... AE4
- 2..... Ampere Code ..... 50 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 6: 200 VDC
- 4..... Supplementary Code ..... 00: Cartridge; 01: Central Mount; 03: PCB Mount; 05: Level Mount

**DIMENSIONS (mm)**

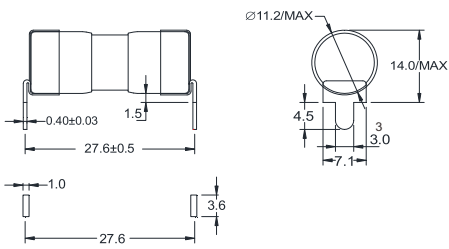
**AE4xxx600**



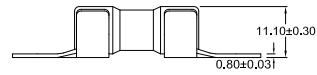
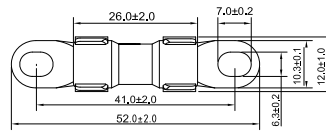
**AE4xxx601**



**AE4xxx603**



**AE4xxx605**



# AE2 EV Fuse



### FEATURES:

- 500 VDC automotive fuse
- Rated Current: 10-50 A
- Rated Breaking Capacity: 20 kA at 500 VDC
- Time Constant: 1-3 ms
- Size: 10x38 mm
- General purpose fuse for EV/HEV auxiliary protection
- Ref. to UL 248-20; ISO 8820-8; GB/T 31465.6
- Approvals: TUV and UR
- Recommended fuse holder: BH114

### ELECTRICAL SPECIFICATIONS

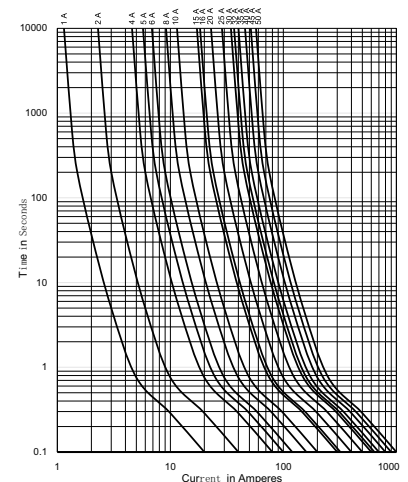
Part Number				Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications	
Cartridge	Central Mount	Level Mount	PCB Mount					TUV	UR
AE22100607	AE22100604	AE22100605	AE22100606	10 A	2100	500 VDC	20 kA@500 VDC	○	●
AE22150607	AE22150604	AE22150605	AE22150606	15 A	2150			●	●
AE22200607	AE22200604	AE22200605	AE22200606	20 A	2200			●	●
AE22250607	AE22250604	AE22250605	AE22250606	25 A	2250			●	●
AE22300607	AE22300604	AE22300605	AE22300606	30 A	2300			●	●
AE22350607	AE22350604	AE22350605	AE22350606	35 A	2350			●	●
AE22400607	AE22400604	AE22400605	AE22400606	40 A	2400			●	●
AE22450607	AE22450604	AE22450605	AE22450606	45 A	2450			●	●
AE22500607	AE22500604	AE22500605	AE22500606	50 A	2500			●	●

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

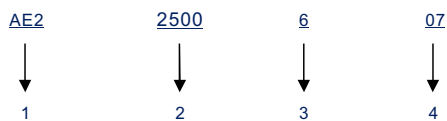
### TIME VS CURRENT CHARACTERISTIC

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



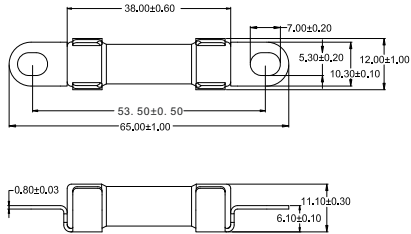
### PART NUMBER SYSTEM



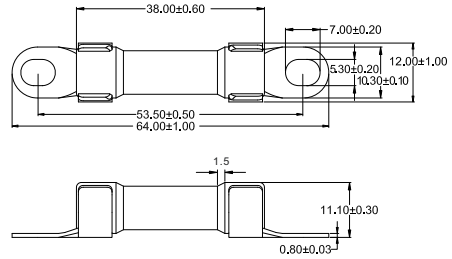
- 1..... Product Series ..... AE2
- 2..... Ampere Code ..... 50 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 6: 500 VDC
- 4..... Supplementary Code ..... 07: Cartridge; 04: Central Mount; 05: Level Mount; 06: PCB Mount

**DIMENSIONS (mm)**

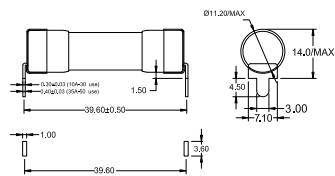
**AE2xxx604**



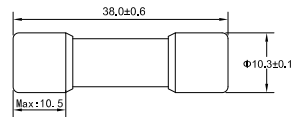
**AE2xxx605**



**AE2xxx606**



**AE2xxx607**



## AE5 EV Fuse



### FEATURES:

- 500 VDC EV high-speed power fuse
- Rated Current: 50-150 A (21x40)  
100-250 A (25x44)  
200-400 A (31x53)
- Rated Breaking Capacity: 30 kA at 500 VDC
- Time Constant: 2±0.5 ms
- Size: 21x40 mm, 25x44 mm, 31x53 mm
- Special purpose fuse for EV/HEV automotive use
- For high power EV PDU and battery protection
- Ref. to ISO 8820-8; UL 248-20
- Approvals: TUV (File: J50437773; J50437772; J50433104)

### ELECTRICAL SPECIFICATIONS

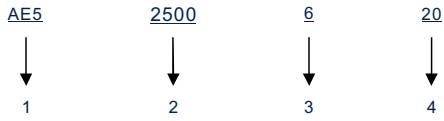
Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Melting I <sup>2</sup> t (A <sup>2</sup> s)	Clearing I <sup>2</sup> t (A <sup>2</sup> s)	Dissipation (W) 0.5 In	Certifications TUV
21x40	AE52500620	50 A	2500	500 VDC	30 kA@500 VDC	350	1000	1.21	●
	AE52600620	60 A	2600			640	1800	1.45	●
	AE52700620	70 A	2700			810	2200	1.72	●
	AE52800620	80 A	2800			1180	3200	1.95	●
	AE53100620	100 A	3100			1851	5000	2.35	●
	AE53125620	125 A	3125			2450	6500	3.2	●
	AE53150620	150 A	3150			3800	10000	3.75	●
25x44	AE53100625	100 A	3100	500 VDC	30 kA@500 VDC	1400	4457	3.1	●
	AE53125625	125 A	3125			2100	5571	3.85	●
	AE53150625	150 A	3150			3360	8914	4.35	●
	AE53175625	175 A	3175			4900	13000	5.3	●
	AE53200625	200 A	3200			6100	16000	6	●
	AE53225625	225 A	3225			9800	25600	7	●
	AE53250625	250 A	3250			13700	35800	7.8	●
31x53	AE53200631	200 A	3200	500 VDC	30 kA@500 VDC	5787	14480	6.8	●
	AE53225631	225 A	3225			8138	24435	7.61	●
	AE53250631	250 A	3250			10850	31675	8.5	●
	AE53300631	300 A	3300			21700	54300	10.22	●
	AE53350631	350 A	3350			30600	76500	11.9	●
	AE53400631	400 A	3400			41000	102600	13.6	●

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

### TIME VS CURRENT CHARACTERISTIC

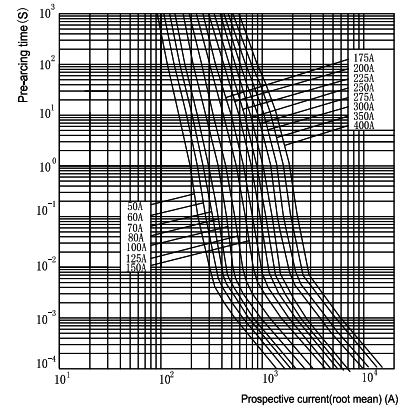
Rated Current	110 %	200 %	300 %	500 %
50-400 A	>4 h	1-300 s	0.2-30 s	0.1-10 s

**PART NUMBER SYSTEM**

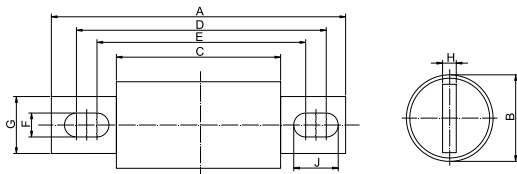


- 1..... Product Series ..... AE5
- 2..... Ampere Code ..... 50 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 6: 500 VDC
- 4..... Supplementary Code ..... 20, 25, 31: default

**TIME CURRENT CURVE**



**DIMENSIONS (mm)**



Size	A	B	C	D	E	F	G	H	J
21x40	81±0.8	21±0.5	40±0.8	66±0.8	57±0.8	8.5±0.5	15±0.5	3.2±0.1	13±0.5
25x44	89±0.8	25±0.5	44±0.8	73±0.8	71±0.8	9.0±0.5	18±0.5	3.2±0.1	10±0.5
31x53	92±0.8	31±0.5	53±0.8	76±0.8	69±0.8	8.5±0.5	22±0.5	4.8±0.1	12±0.5

## AEE EV Fuse



### FEATURES:

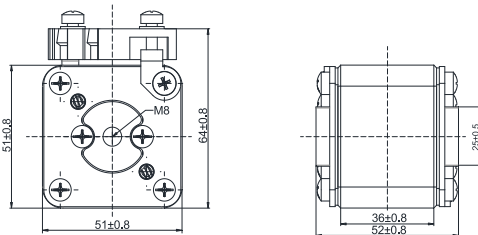
- 690 VAC automotive grade EV fuse
- Rated Current: 200-630 A
- Rated Breaking Capacity: 50 kA at 690 VAC
- Fast Acting fuse for EV/HEV, HV Connectors, Manual Service Disconnects (MSD)
- Ref. to IEC 60269-4

### ELECTRICAL SPECIFICATIONS

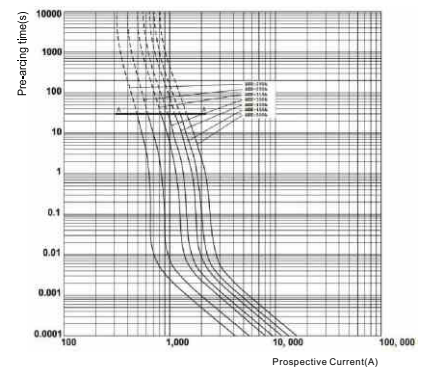
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	0.5 In Dissipation (W)
AEE3200d00	200 A	3200	690 VAC	50 kA@690 VAC	5.4
AEE3250d00	250 A	3250			7.0
AEE3315d00	315 A	3315			8.6
AEE3350d00	350 A	3350			9.7
AEE3400d00	400 A	3400			10.5
AEE3450d00	450 A	3450			11.0
AEE3500d00	500 A	3500			12.0
AEE3630d00	630 A	3630			14.5

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

### DIMENSIONS (mm)



### TIME CURRENT CURVE



### PART NUMBER SYSTEM

AEE	3630	d	00
↓	↓	↓	↓
1	2	3	4
1..... Product Series .....	AEE	3..... Rated Voltage .....	d: 690 VAC
2..... Ampere Code .....	630 A (see Ampere code column of electrical specifications)	4..... Supplementary Code .....	00: default

## AE7 EV Fuse



### 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 at 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
- Ref. to IEC 60269-4; UL248-20

### ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Melting I <sup>2</sup> t (A <sup>2</sup> s)	Clearing I <sup>2</sup> t (A <sup>2</sup> s)	Dissipation (W) 0.5 In
25x66	AE72600i25	60 A	2600	800 VDC	50 kA@800 VDC	5880	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

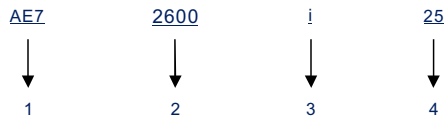
Note: (1) Temperature rise: <50 K.

### TIME VS CURRENT CHARACTERISTIC

Rated Current	110 %	200 %	300 %	500 %
60-600 A	>4 h	1-300 s	0.2-30 s	0.1-10 s

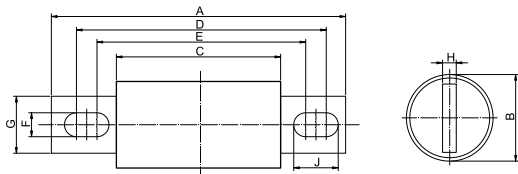


**PART NUMBER SYSTEM**



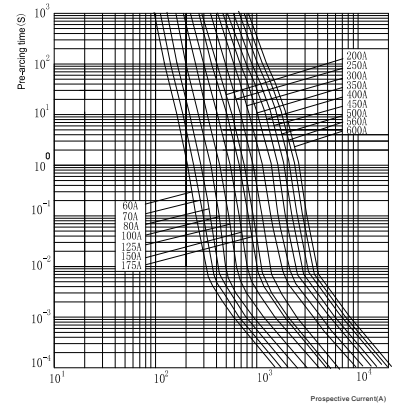
- 1..... Product Series ..... AE7
- 2..... Ampere Code ..... 60 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... i: 800 VDC
- 4..... Supplementary Code ..... 25, 38, 51: default

**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±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

**TIME CURRENT CURVE**



## AEM EV Fuse



### FEATURES:

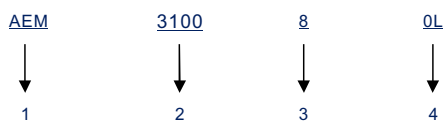
- Max. Voltage: 800 VDC
- Rated Current: 100 A, 150 A, 200 A (AEMxxx80L)  
250-400 A (AEMxxx81L)  
560 A (AEMxxx82L)
- Breaking Capacity: 20 kA at 800 VDC
- Ref. to UL 248-1; UL 248-20
- L-Bolt mount
- Fast acting fuse for DC applications

### ELECTRICAL SPECIFICATIONS

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	1.0 In Dissipation (W)
AEM310080L	100 A	3100	800 VDC	20 kA@800 VDC	6.0
AEM315080L	150 A	3150			7.0
AEM320080L	200 A	3200			7.5
AEM325081L	250 A	3250	800 VDC	20 kA@800 VDC	9.5
AEM331581L	315 A	3315			11.3
AEM3335081L	350 A	3350			15.1
AEM340081L	400 A	3400			17.4
AEM356082L	560 A	3560	800 VDC	20 kA@800 VDC	19.0

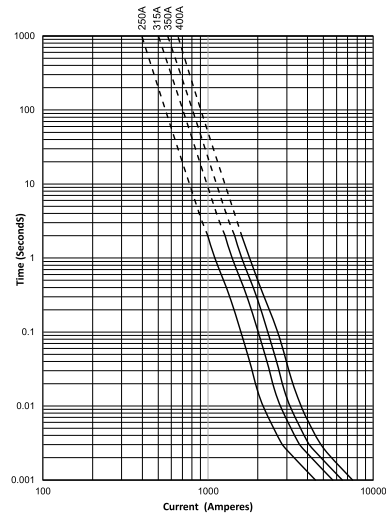
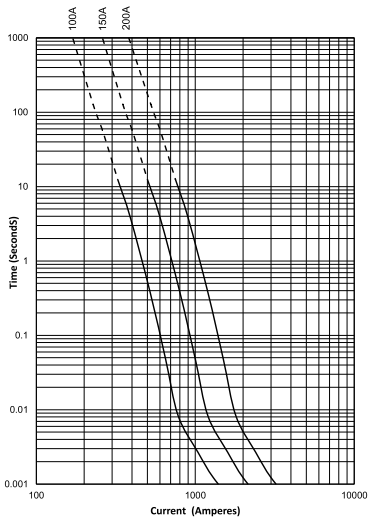
Note: (1) Temperature rise: <50 K.

### PART NUMBER SYSTEM

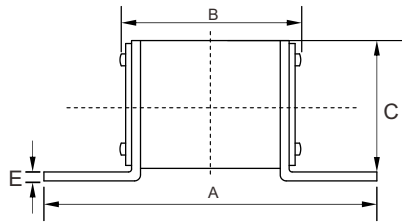
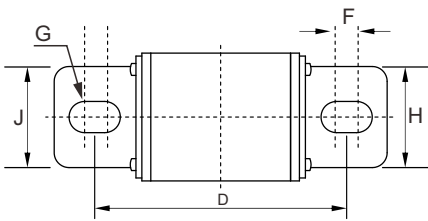


- 1 ..... Product Series ..... AEM
- 2 ..... Ampere Code ..... 100 A (see Ampere code column of electrical specifications)
- 3 ..... Rated Voltage ..... 8: 800 VDC
- 4 ..... Supplementary Code ..... 0L, 1L, 2L: default

### TIME CURRENT CURVE



### DIMENSIONS (mm)



	A	B	C	D	E	F	G	H	J
AEMxxx80L	98.0±1.5	57.0±1.0	25±1.0	76.7±1	2.0±0.2	6.5±0.5	8.5±0.5	22.0±0.8	20.0±0.5
AEMxxx81L	100.0±1.0	55.3±1.0	24.0±1.0	77.0±1.0	2.0±0.2	6.0±0.5	8.5±0.3	36.3±0.5	32.5±0.5
AEMxxx82L	112.0±1.0	60.8±1.0	47.2±1.0	85.5±1.0	3.0±0.2	6.5±0.5	10.3±0.3	43.0±1.0	26.0±0.5

# AE3 EV Fuse



### FEATURES:

- 850 VDC automotive fuse
- Rated Current: 8-50 A
- Rated Breaking Capacity: 20 kA at 850 VDC
- Time Constant: 1-3 ms
- Size: 10x38 mm
- General purpose fuse for EV/HEV auxiliary protection
- Ref. to UL 248-20; JASO D622; ISO 8820-8; GB/T 31465.6
- Recommended fuse holder: BH114

### ELECTRICAL SPECIFICATIONS

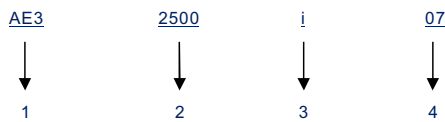
Cartridge	Part Number			Rated Current	Ampere Code	Rated Voltage	Breaking Capacity
	Central Mount	Level Mount	PCB Mount				
AE31800i07	AE31800i04	AE31800i05	AE31800i06	8 A	1800	850 VDC	20 kA@850 VDC
AE32100i07	AE32100i04	AE32100i05	AE32100i06	10 A	2100		
AE32150i07	AE32150i04	AE32150i05	AE32150i06	15 A	2150		
AE32200i07	AE32200i04	AE32200i05	AE32200i06	20 A	2200		
AE32250i07	AE32250i04	AE32250i05	AE32250i06	25 A	2250		
AE32300i07	AE32300i04	AE32300i05	AE32300i06	30 A	2300		
AE32350i07	AE32350i04	AE32350i05	AE32350i06	35 A	2350		
AE32400i07	AE32400i04	AE32400i05	AE32400i06	40 A	2400		
AE32450i07	AE32450i04	AE32450i05	AE32450i06	45 A	2450		
AE32500i07	AE32500i04	AE32500i05	AE32500i06	50 A	2500		

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

### TIME VS CURRENT CHARACTERISTIC

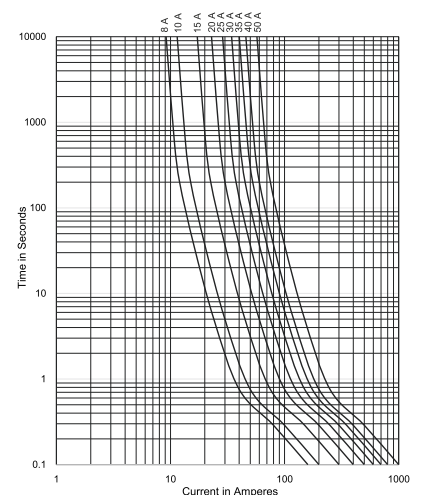
Rated Current	110 %	135 %	150 %	200 %	300 %	500 %
8-50 A	>4 h	<1 h	10-1000 s	0.5-100 s	0.1-15 s	0.05-1 s

### PART NUMBER SYSTEM



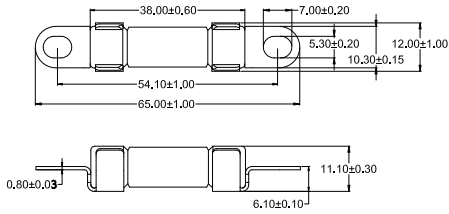
- 1..... Product Series ..... AE3
- 2..... Ampere Code ..... 50 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... i: 850 VDC
- 4..... Supplementary Code ..... 07: Cartridge; 04: Central Mount; 05: Level Mount; 06: PCB Mount

### TIME CURRENT CURVE

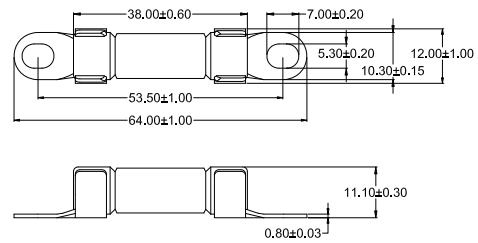


**DIMENSIONS (mm)**

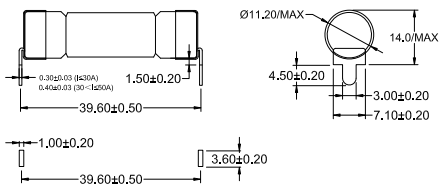
**AE3xxxxi04**



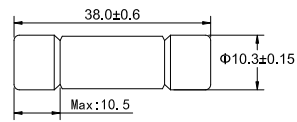
**AE3xxxxi05**



**AE3xxxxi06**



**AE3xxxxi07**



## AEX EV Fuse



### FEATURES:

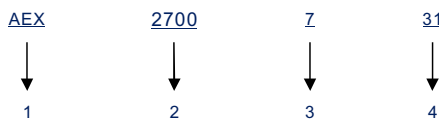
- 1000 VDC EV high speed power fuse
- Rated Current: 70-100 A (31x86)  
125-200 A (38x83)  
250-400 A (51x89)
- Rated Breaking Capacity: 30 kA at 1000 VDC
- Time Constant: 2±0.5 ms
- Size: 31x86 mm, 38x83 mm, 51x89 mm
- Special purpose fuse for EV/HEV automotive use
- For high power EV PDU and battery protection
- Ref. to IEC 60269-4; UL248-20

### ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Melting I <sup>2</sup> t (A <sup>2</sup> s)	Clearing I <sup>2</sup> t (A <sup>2</sup> s)	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

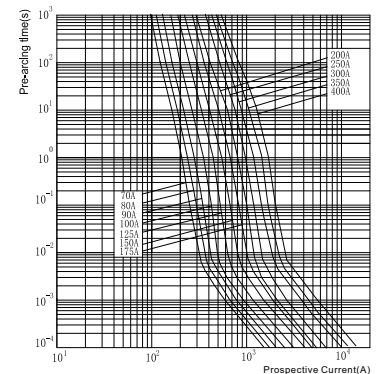
Note: (1) Temperature rise: <50 K.

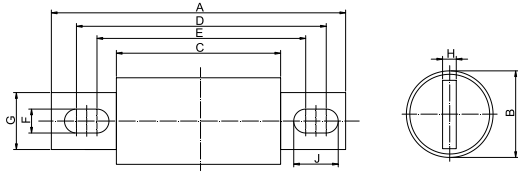
### PART NUMBER SYSTEM



- 1..... Product Series ..... AEX
- 2..... Ampere Code ..... 70 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 7: 1000 VDC
- 4..... Supplementary Code ..... 31, 38, 51: default

### TIME CURRENT CURVE



**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

## AE6 EV Fuse



### FEATURES:

- 1000 VDC automotive fuse
- Rated Current: 5-15 A (10x38)  
20 A, 25 A, 30 A (14x51)  
35-60 A (14x65)
- Rated Breaking Capacity: 20 kA at 1000 VDC
- Time Constant: 1-3 ms
- Size: 10x38 mm, 14x51 mm, 14x65 mm
- Ref. to ISO 8820-8; GB/T 31465.6; UL 248-20; JASO D622

### ELECTRICAL SPECIFICATIONS

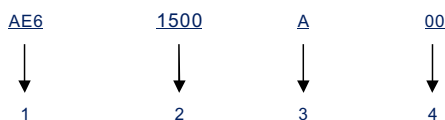
Size (mm)	Part Number				Rated Current	Ampere Code	Rated Voltage	Breaking Capacity
	Cartridge	Central Mount	Level Mount	PCB Mount				
10x38	AE61500A00	AE61500A01	AE61500A02	AE61500A03	5 A	1500	1000 VDC	20 kA@1000 VDC
	AE61600A00	AE61600A01	AE61600A02	AE61600A03	6 A	1600		
	AE61800A00	AE61800A01	AE61800A02	AE61800A03	8 A	1800		
	AE62100A00	AE62100A01	AE62100A02	AE62100A03	10 A	2100		
	AE62120A00	AE62120A01	AE62120A02	AE62120A03	12 A	2120		
	AE62150A00	AE62150A01	AE62150A02	AE62150A03	15 A	2150		
14x51	AE62200B00	-	AE62200B02	AE62200B03	20 A	2200	1000 VDC	20 kA@1000 VDC
	AE62250B00	-	AE62250B02	AE62250B03	25 A	2250		
	AE62300B00	-	AE62300B02	AE62300B03	30 A	2300		
14x65	AE62350C00	-	AE62350C02	-	35 A	2350	1000 VDC	20 kA@1000 VDC
	AE62400C00	-	AE62400C02	-	40 A	2400		
	AE62450C00	-	AE62450C02	-	45 A	2450		
	AE62500C00	-	AE62500C02	-	50 A	2500		
	AE62600C00	-	AE62600C02	-	60 A	2600		

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

### TIME VS CURRENT CHARACTERISTIC

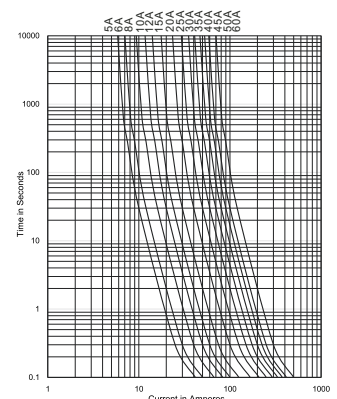
Rated Current	110 %	135 %	150 %	200 %	300 %	500 %
5-60 A	>4 h	<1 h	10-1000 s	0.5-100 s	0.1-15 s	0.05-1 s

### PART NUMBER SYSTEM



- 1..... Product Series ..... AE6
- 2..... Ampere Code ..... 5 A (see Ampere code column of electrical specifications)
- 3..... Size ..... A: 10x38 mm; B: 14x51 mm; C: 14x65 mm
- 4..... Supplementary Code ..... 00: Cartridge; 01: Central Mount; 02: Level Mount; 03: PCB Mount

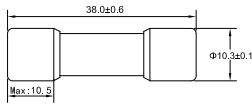
### TIME CURRENT CURVE



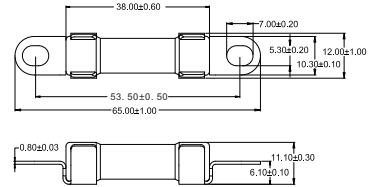


**DIMENSIONS (mm): 10x38**

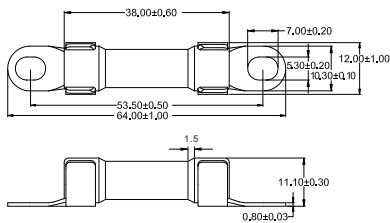
**AE6xxxxA00**



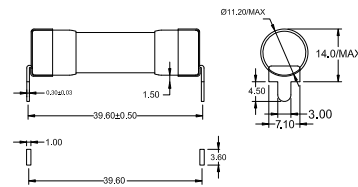
**AE6xxxxA01**



**AE6xxxxA02**

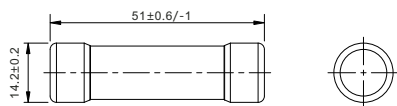


**AE6xxxxA03**

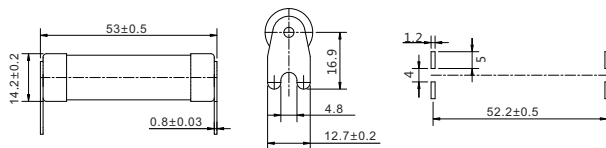


**DIMENSIONS (mm): 14x51**

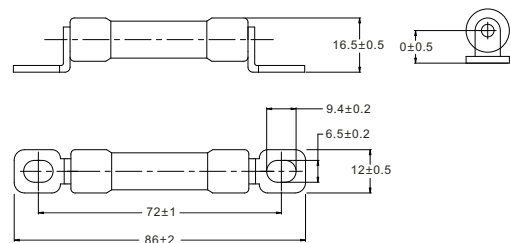
**AE6xxxxB00**



**AE6xxxxB03**

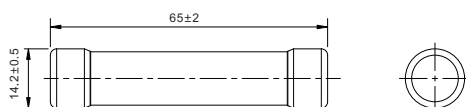


**AE6xxxxB02**

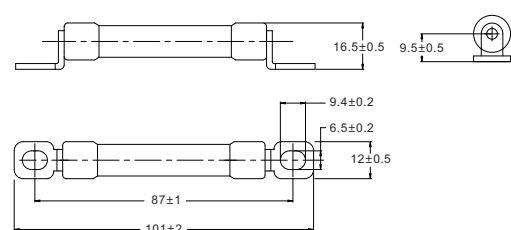


**DIMENSIONS (mm): 14x65**

**AE6xxxxC00**



**AE6xxxxC02**



# EV

## EV/ EVSE Charging Protection



# AT1 EVSE Fuse



### FEATURES:

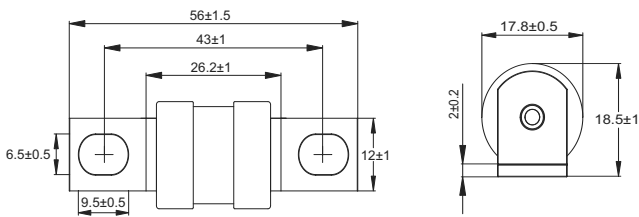
- 150 VDC EVSE fuse
- Rated Current: 20-200 A
- Rated Breaking Capacity: 20 kA at 150 VDC
- Size: 18x25 mm
- General purpose fuse for EV charging equipment
- Ref. to UL 248-13; JASO D622
- Approvals: UL (File: E485737)

### ELECTRICAL SPECIFICATIONS

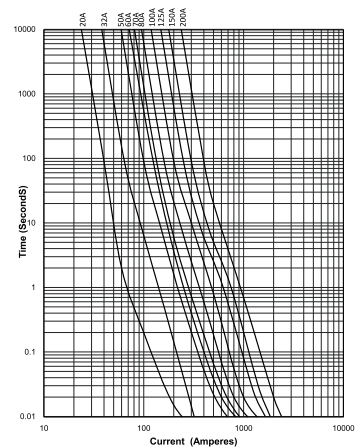
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	1.0 In Dissipation (W)	Certifications UL
AT12200105	20 A	2200	150 VDC	20 kA@150 VDC	1.8	•
AT12320105	32 A	2320			3.5	•
AT12500105	50 A	2500			6.0	•
AT12600105	60 A	2600			7.5	•
AT12700105	70 A	2700			8.6	•
AT12800105	80 A	2800			9.0	•
AT13100105	100 A	3100			11.0	•
AT13125105	125 A	3125			12.8	•
AT13150105	150 A	3150			16.2	•
AT13200105	200 A	3200			18.5	•

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

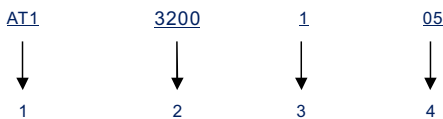
### DIMENSIONS (mm)



### TIME CURRENT CURVE



### PART NUMBER SYSTEM



- 1..... Product Series ..... AT1
- 2..... Ampere Code ..... 200 A (see Ampere code column of electrical specifications)
- 3..... Size ..... 1: 18x25 mm
- 4..... Supplementary Code ..... 05: default

## AT2 EVSE Fuse



### FEATURES:

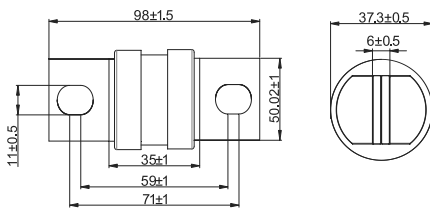
- 250 VDC EVSE fuse
- Rated Current: 200-500 A
- Max. Breaking Capacity: 10 kA at 250 VDC
- Size: 38x35 mm
- General purpose fuse for EV charging equipment
- Ref. to UL 248-1
- Approvals: UL (File: E485737)

### ELECTRICAL SPECIFICATIONS

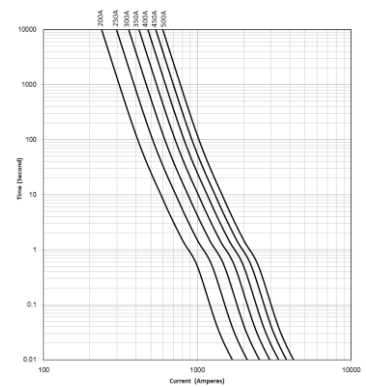
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications UL
AT23200E00	200 A	3200	250 VDC	10 kA@250 VDC	●
AT23250E00	250 A	3250			●
AT23300E00	300 A	3300			●
AT23350E00	350 A	3350			●
AT23400E00	400 A	3400			●
AT23450E00	450 A	3450			●
AT23500E00	500 A	3500			●

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

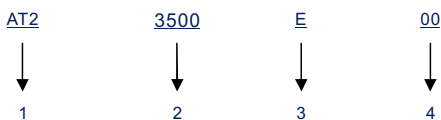
### DIMENSIONS (mm)



### TIME CURRENT CURVE



### PART NUMBER SYSTEM



- 1 ..... Product Series ..... AT2  
 2 ..... Ampere Code ..... 500 A (see Ampere code column of electrical specifications)  
 3 ..... Size ..... E: 38x35 mm  
 4 ..... Supplementary Code ..... 00: default

## AT5 EVSE Fuse



### 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
- Ref. to UL 248-13
- Approvals: UL (File: E485737)

### ELECTRICAL SPECIFICATIONS

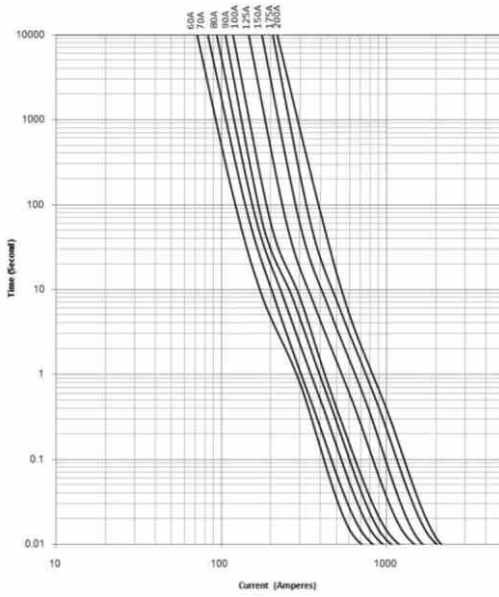
Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications UL
30x50	AT52600604	60 A	2600	500 VDC	20 kA@500 VDC	•
	AT52700604	70 A	2700			•
	AT52800604	80 A	2800			•
	AT52900604	90 A	2900			•
	AT53100604	100 A	3100			•
	AT53125604	125 A	3125			•
	AT53150604	150 A	3150			•
	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			•

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

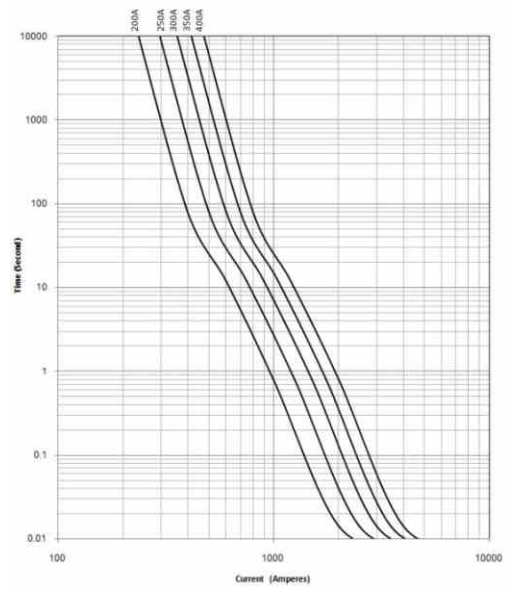
### PART NUMBER SYSTEM

AT5	2600	6	04
↓	↓	↓	↓
1	2	3	4
1.....	Product Series .....	AT5	
2.....	Ampere Code .....	60 A (see Ampere code column of electrical specifications)	
3.....	Size .....	6: 30x50 mm; B: 38x50 mm	
4.....	Supplementary Code .....	04: default	

**TIME CURRENT CURVE (30x50)**

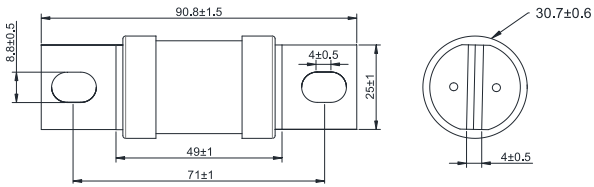


**TIME CURRENT CURVE (38x50)**

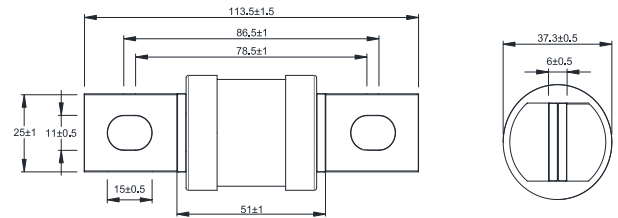


**DIMENSIONS (mm)**

AT5xxxx604



AT5xxxxB04



# AT7 EVSE Fuse



### FEATURES:

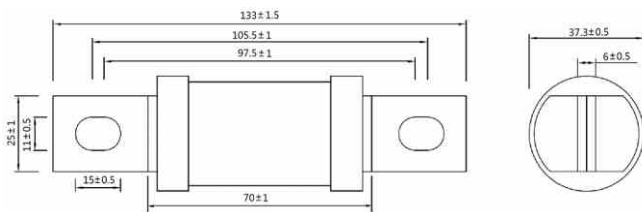
- 800 VDC EVSE fuse
- Rated Current: 125-400 A
- Rated Breaking Capacity: 20 kA at 800 VDC
- Size: 38x70 mm
- General purpose fuse for EV charging equipment
- Ref. to UL 248-13

### ELECTRICAL SPECIFICATIONS

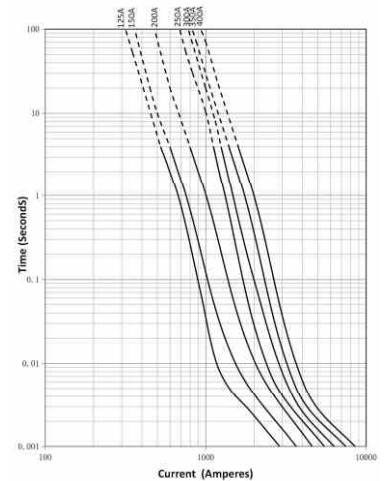
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Dissipation (W)
					1.0 I <sub>n</sub>
AT73125C03	125 A	3125	800 VDC	20 kA@800 VDC	23
AT73150C03	150 A	3150			32
AT73200C03	200 A	3200			42
AT73250C03	250 A	3250			45
AT73300C03	300 A	3300			50
AT73350C03	350 A	3350			65
AT73400C03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

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

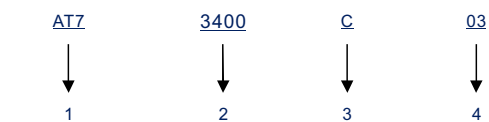
### DIMENSIONS (mm)



### TIME CURRENT CURVE



### PART NUMBER SYSTEM



- 1 ..... Product Series ..... AT7
- 2 ..... Ampere Code ..... 400 A (see Ampere code column of electrical specifications)
- 3 ..... Size ..... C: 38x70 mm
- 4 ..... Supplementary Code ..... 03: default

## AT8 EVSE Fuse



### FEATURES:

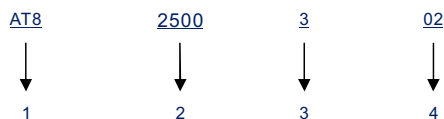
- 800 VDC EVSE fuse
- Rated Current: 50-100 A (18x68)  
125 A, 150 A (30x65)
- Rated Breaking Capacity: 20 kA at 800 VDC
- Size: 18x68 mm, 30x65 mm
- General purpose fuse for EV charging equipment
- Ref. to UL 248-13
- Approvals: UL (File: E485737)

### ELECTRICAL SPECIFICATIONS

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications
						UL
18x68	AT82500302	50 A	2500	800 VDC	20 kA@800 VDC	•
	AT82600302	60 A	2600			•
	AT82800302	80 A	2800			•
	AT83100302	100 A	3100			•
30x65	AT83125702	125 A	3125	800 VDC	20 kA@800 VDC	•
	AT83150702	150 A	3150			•

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

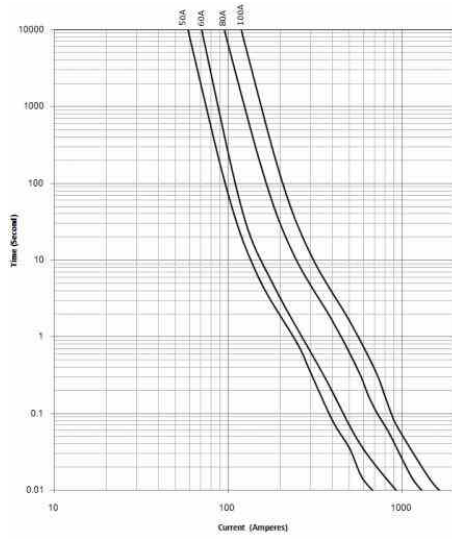
### PART NUMBER SYSTEM



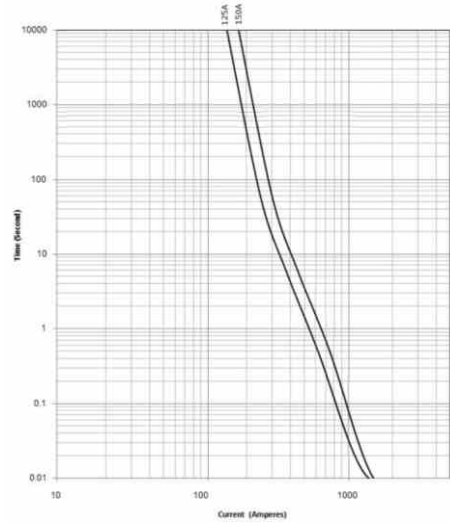
- 1..... Product Series ..... AT8
- 2..... Ampere Code ..... 50 A (see Ampere code column of electrical specifications)
- 3..... Size ..... 3: 18x68 mm; 7: 30x65 mm
- 4..... Supplementary Code ..... 02: default



### TIME CURRENT CURVE (18x68)

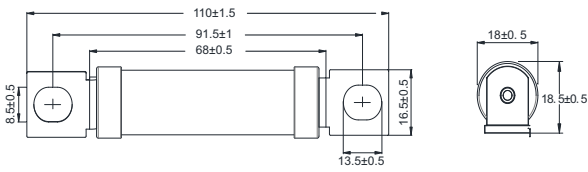


### TIME CURRENT CURVE (30x65)

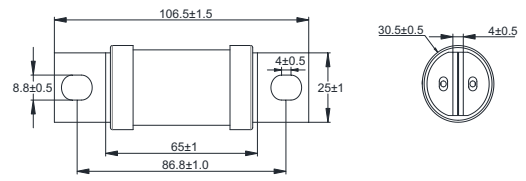


### DIMENSIONS (mm)

AT8xxx302



AT8xxx702



# ATX EVSE Fuse



### FEATURES:

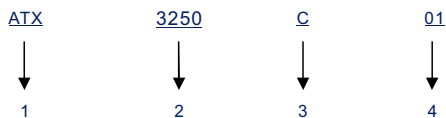
- 1000 VDC EVSE fuse
- Rated Current: 250 A, 315 A, 350 A (Single)  
400 A, 500 A, 600 A (Twins)
- Rated Breaking Capacity: 50 kA at 1000 VDC
- Size: 38x70 mm
- General purpose fuse for EV charging equipment
- Ref. to UL 248-13; JASO D622

### ELECTRICAL SPECIFICATIONS

Type	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Dissipation (W)	
						0.5 In	0.8 In
Single	ATX3250C01	250 A	3250	1000 VDC	50 kA@1000 VDC	9	33
	ATX3315C01	315 A	3315			12	36
	ATX3350C01	350 A	3350			14	45
Twins	ATX3400C01	400 A	3400	1000 VDC	50 kA@1000 VDC	15	48
	ATX3500C01	500 A	3500			17	60
	ATX3600C01	600 A	3600			21	68

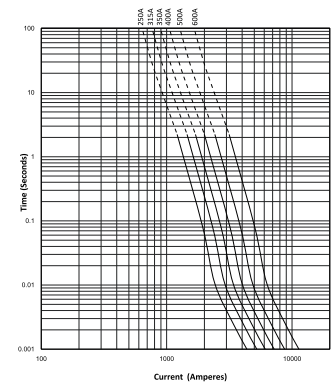
Note: (1) Temperature rise: <50 K.

### PART NUMBER SYSTEM



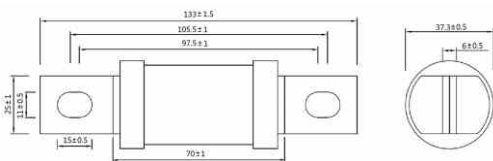
- 1 ..... Product Series ..... ATX
- 2 ..... Ampere Code ..... 250 A (see Ampere code column of electrical specifications)
- 3 ..... Size ..... C: 38x70 mm
- 4 ..... Supplementary Code ..... 01: default

### TIME CURRENT CURVE

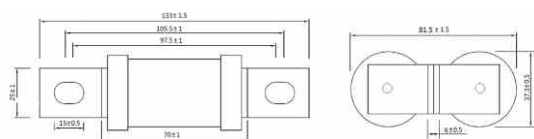


### DIMENSIONS (mm)

ATXxxxxC01: Single



ATXxxxxC01: Twins



## BH114 Series 10x38 mm Fuse Holder



### 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

### DESCRIPTION:

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

### 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 mm<sup>2</sup>)
- 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

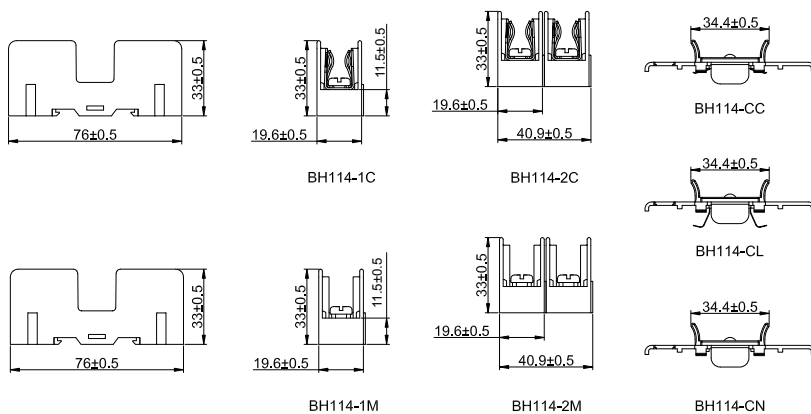
### BASE PART NUMBER

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	Indicator	Matching Base Holder
BH114-CC	Yes	Clip Mount
BH114-CL	Yes	Bolt Mount
BH114-CN	No	Clip Mount, Bolt Mount

### DIMENSIONS (mm)



## BH214 Series 14x51 mm Fuse Holder



### DESCRIPTION:

The BH214 holder made of thermoplastic is designed for 14x51 mm cylindrical fuses or bolt fuses.

This holder can be mounted on DIN Rail constructions.

### 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

### FEATURES:

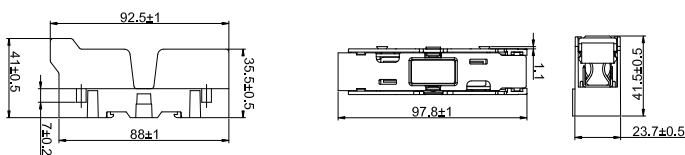
- Flexible rail mounting, easy to install with screws or bolts
- For multiple pole applications, holders can be combined in series through simple slide-on design
- Designed for general purpose fuse links

### PART NUMBER

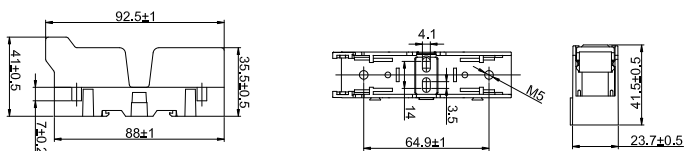
Clip Mount		Bolt Mount		Pole
With Cover	Without Cover	With Cover	Without Cover	
BH214-1CC	BH214-1CN	BH214-1MC	BH214-1MN	1
BH214-2CC	BH214-2CN	BH214-2MC	BH214-2MN	2
BH214-3CC	BH214-3CN	BH214-3MC	BH214-3MN	3

### DIMENSIONS (mm)

#### BH214-1CC



#### BH214-1MC



## BHR Series Fuse Holder



### DESCRIPTION:

The BHR series fuse holder is specially designed for use with DC fuse 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:

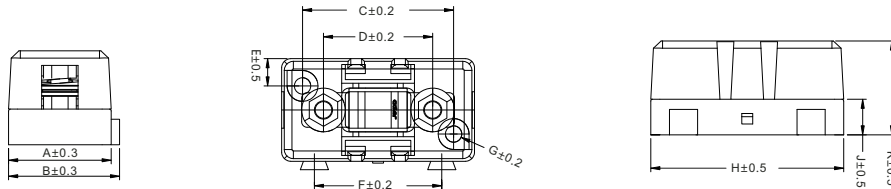
- Operation Temperature: -40 °C to +125 °C
- Base Material: PA+GF V0
- Bolt Material: stainless steel

### 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: 60 VDC	Max. Voltage: 100 VDC	Max. Voltage: 120 VDC
	Max. Current: 100 A	Max. Current: 500 A	Max. Current: 200 A
	Max. Torque: 6 N.m	Max. Torque: 12 N.m	Max. Torque: 14.3 N.m
	Bolt Size: M5	Bolt Size: M8	Bolt Size: M10

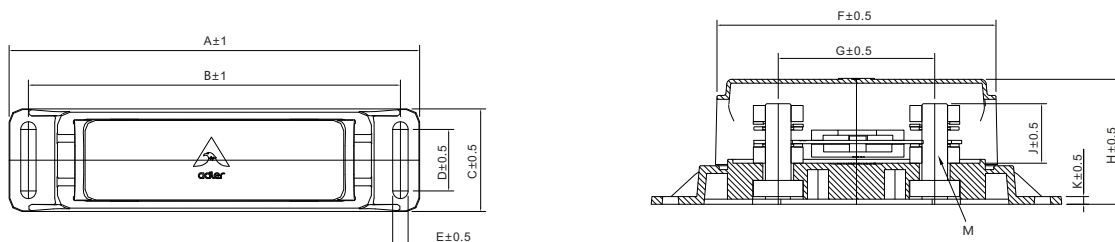
### DIMENSIONS (mm)

#### BHR030-15-M5



Part Number	A	B	C	D	E	F	G	H	J	K
BHR030-15-M5	28.2	30.5	41.5	30	7.5	35	4.5	53	9.8	25.8

#### BHR059-25-M8, BHR061-25-M10



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

# BF2 MINI Blade Fuse



### FEATURES:

- 32 VDC blade fuse
- Rated Current: 3-30 A
- Breaking Capacity: 1 kA at 32 VDC
- Standards: UL 275A
- Approvals: UL (File: E499007)
- Tolerance: ref. to UL 275A; ISO 8820-3

### ELECTRICAL SPECIFICATIONS

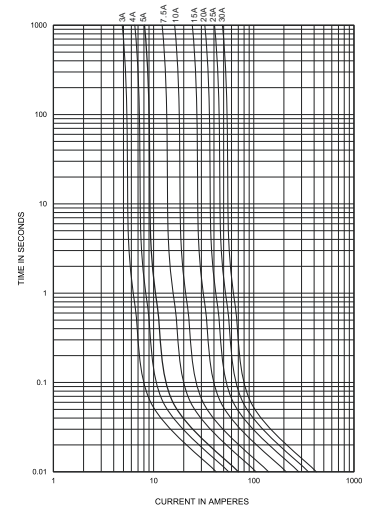
Part Number	Rated Current	Ampere Code	Housing Color	Rated Voltage	Breaking Capacity	I <sup>2</sup> t (A <sup>2</sup> s)	Certifications cURus
BF21300300	3 A	1300	Violet	32 VDC	1 kA@32 VDC	9.5	●
BF21400300	4 A	1400	Pink			17.5	●
BF21500300	5 A	1500	Tan			25.5	●
BF21750300	7.5 A	1750	Brown			68.8	●
BF22100300	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	●

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

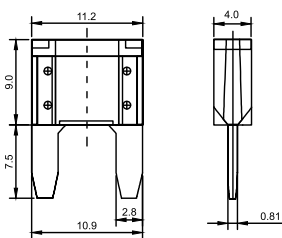
### TIME VS CURRENT CHARACTERISTIC

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

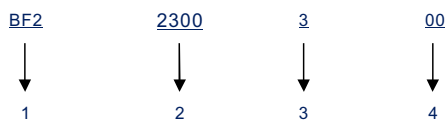
### TIME CURRENT CURVE



### DIMENSIONS (mm)



### PART NUMBER SYSTEM



- 1 ..... Product Series ..... BF2
- 2 ..... Ampere Code ..... 30 A (see Ampere code column of electrical specifications)
- 3 ..... Rated Voltage ..... 3: 32 VDC
- 4 ..... Supplementary Code ..... 00: default

# BF4 MIDI Blade Fuse



### FEATURES:

- 32 VDC blade fuse
- Rated Current: 2-40 A
- Breaking Capacity: 1 kA at 32 VDC
- Standards: UL 275A
- Approvals: UL (File: E499007)
- Tolerance: ref. to UL 275A; ISO 8820-3

### ELECTRICAL SPECIFICATIONS

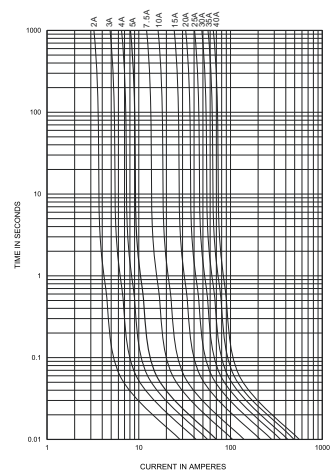
Part Number	Rated Current	Ampere Code	Housing Color	Rated Voltage	Breaking Capacity	I <sup>2</sup> t (A <sup>2</sup> s)	Certifications cURus
BF41200300	2 A	1200	Grey	32 VDC	1 kA@32 VDC	1.6	●
BF41300300	3 A	1300	Violet			7.4	●
BF41400300	4 A	1400	Pink			14	●
BF41500300	5 A	1500	Tan			26	●
BF41750300	7.5 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	●

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

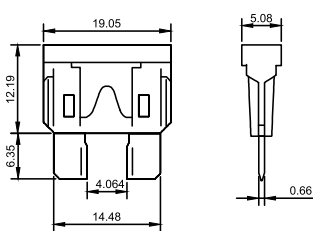
### TIME VS CURRENT CHARACTERISTIC

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

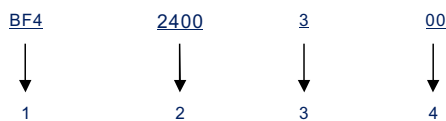
### TIME CURRENT CURVE



### DIMENSIONS (mm)



### PART NUMBER SYSTEM



- 1..... Product Series ..... BF4
- 2..... Ampere Code ..... 40 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 3: 32 VDC
- 4..... Supplementary Code ..... 00: default

# AEL High Speed Fuse

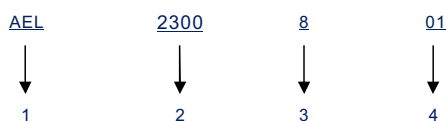

**FEATURES:**

- 80 VDC EV high speed fuse
- Rated Current: 30-800 A
- Rated Breaking Capacity: 2.5 kA at 80 VDC
- Ref. to: UL 248; DIN 43560
- Recommended fuse holder: BHR061-25-M10

**ELECTRICAL SPECIFICATIONS**

Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity
AEL2300801	30 A	2300	80 VDC	2.5 kA@80 VDC
AEL2400801	40 A	2400		
AEL2500801	50 A	2500		
AEL2600801	60 A	2600		
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	2.5 kA@80 VDC
AEL3400802	400 A	3400		
AEL3500802	500 A	3500		
AEL3600802	600 A	3600		
AEL3675803	675 A	3675	80 VDC	2.5 kA@80 VDC
AEL3750803	750 A	3750		
AEL3800803	800 A	3800		

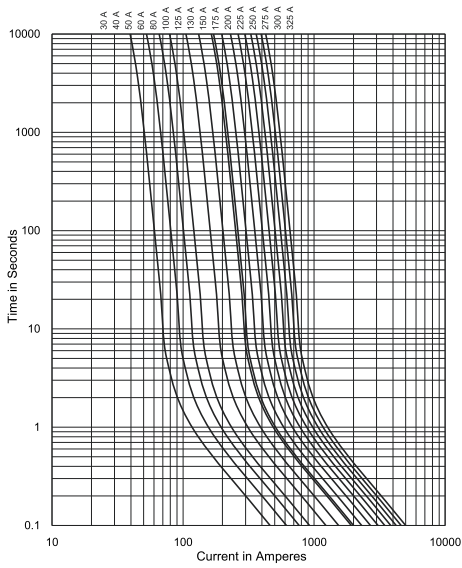
Note: (1) Temperature rise: <50 K.

**PART NUMBER SYSTEM**


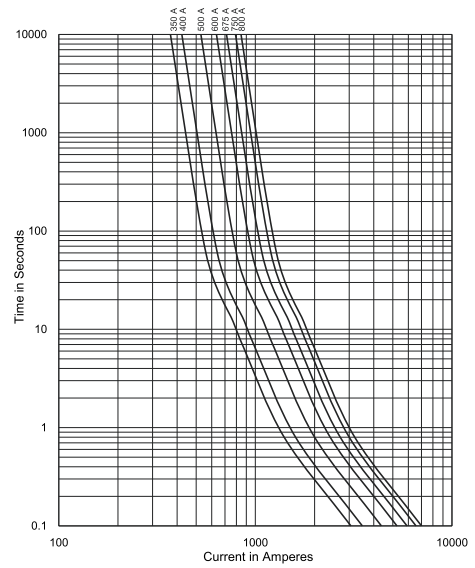
- 1..... Product Series ..... AEL
- 2..... Ampere Code ..... 30 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 8: 80 VDC
- 4..... Supplementary Code ..... 01, 02, 03: default



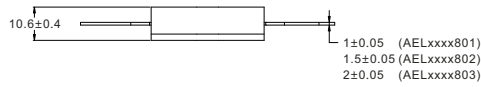
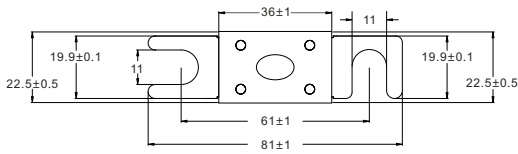
### TIME CURRENT CURVE: 30-325 A



### TIME CURRENT CURVE: 350-800 A



### DIMENSIONS (mm)



# AEY EV Fuse



### FEATURES:

- 70 VDC automotive fuse
- Rated Current: 40-500 A
- Rated Breaking Capacity: 2.5 kA at 70 VDC
- Ref. to ISO 8820-5
- Approvals: UL (File: E485737)
- Bolt Size: M8
- Recommended fuse holder: BHR059-25-M8

### ELECTRICAL SPECIFICATIONS

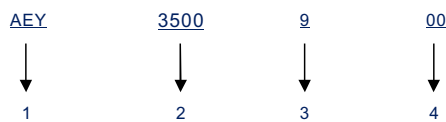
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	Certifications cURus
AEY2400900	40 A	2400	70 VDC	2.5 kA@70 VDC	•
AEY2500900	50 A	2500			•
AEY2600900	60 A	2600			•
AEY2700900	70 A	2700			•
AEY2800900	80 A	2800			•
AEY3100900	100 A	3100			•
AEY3125900	125 A	3125			•
AEY3150900	150 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			•

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

### TIME VS CURRENT CHARACTERISTIC

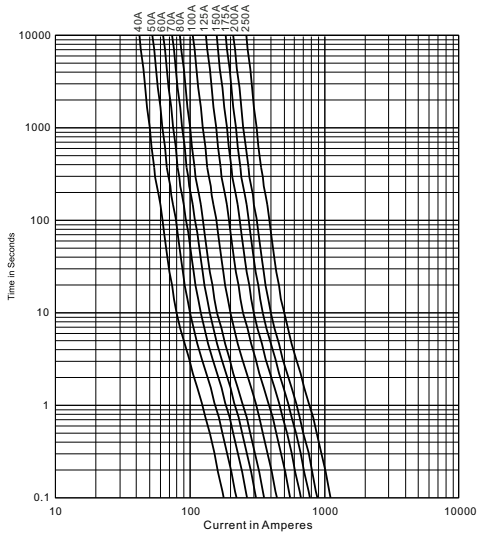
Rated Current	75 %	100 %	135 %	200 %	350 %	600 %
40-250 A	-	>4 h	2-30 min	1-15 s	0.3-5 s	0.1-1 s
300-500 A	>4 h	-	-	1-15 s	0.3-5 s	0.1-1 s

### PART NUMBER SYSTEM

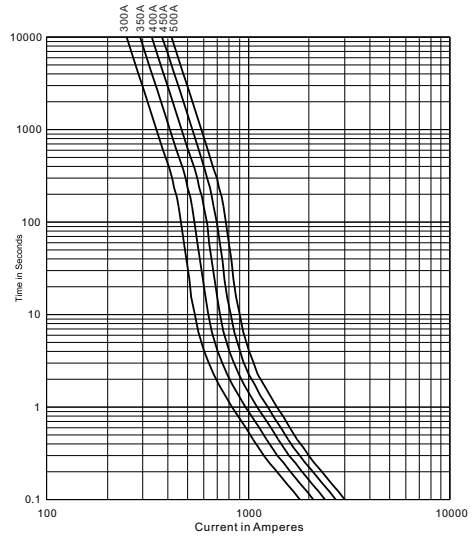


- 1..... Product Series ..... AEY
- 2..... Ampere Code ..... 500 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 9: 70 VDC
- 4..... Supplementary Code ..... 00: M8 bolt

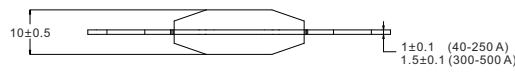
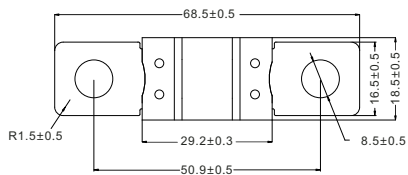
**TIME CURRENT CURVE: 40-250 A**



**TIME CURRENT CURVE: 300-500 A**



**DIMENSIONS (mm)**



## AEP EV Fuse



### FEATURES:

- 65 VDC / 32 VDC automotive fuse
- Rated Current: 20-125 A (65 VDC / 32 VDC)  
150 A, 175 A, 200 A (32 VDC)
- Breaking Capacity: 1 kA at 65 VDC, 1.5 kA at 32 VDC
- Ref. to ISO 8820-5
- Bolt Size: M6
- Recommended fuse holder: BHR030-15-M5

### ELECTRICAL SPECIFICATIONS

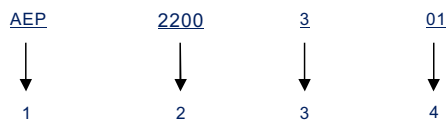
Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity
AEP2200301	20 A	2200	32/65 VDC	1 kA@65 VDC/1.5 kA@32 VDC
AEP2300301	30 A	2300		
AEP2400301	40 A	2400		
AEP2500301	50 A	2500		
AEP2600301	60 A	2600		
AEP2700301	70 A	2700		
AEP2800301	80 A	2800		
AEP3100301	100 A	3100		
AEP3125301	125 A	3125		
AEP3150301	150 A	3150		
AEP3175301	175 A	3175		
AEP3200301	200 A	3200		

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

### TIME VS CURRENT CHARACTERISTIC

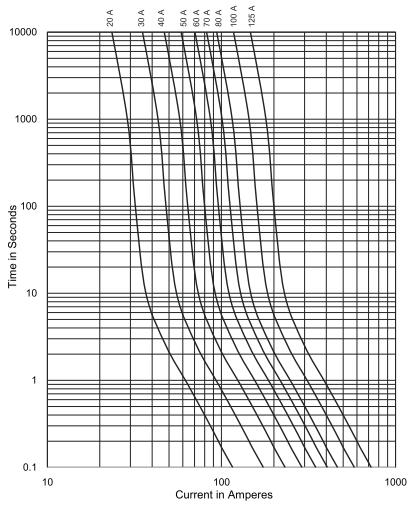
Rated Current	75 %	100 %	110 %	150 %	200 %	300 %	350 %	500 %	600 %
20-125 A	-	>100 h	>4 h	90-3600 s	3-100 s	0.3-3 s	-	0.1-1 s	-
150 A, 175 A, 200 A	>100 h	-	-	-	1-15 s	-	0.3-5 s	-	0.1-1 s

### PART NUMBER SYSTEM

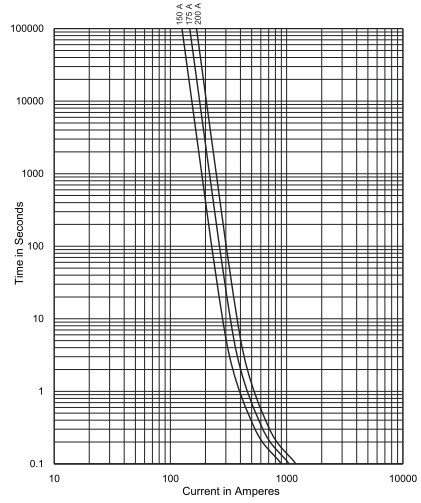


- 1..... Product Series ..... AEP
- 2..... Ampere Code ..... 20 A (see Ampere code column of electrical specifications)
- 3..... Rated Voltage ..... 3: 65 VDC / 32 VDC
- 4..... Supplementary Code ..... 01: M6 bolt

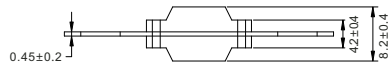
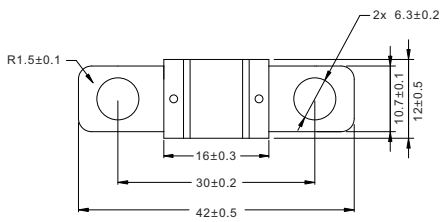
**TIME CURRENT CURVE: 20-125 A**



**TIME CURRENT CURVE: 150 A, 175 A, 200 A**



**DIMENSIONS (mm)**





HIGH SPEED FUSES  
AND SYSTEM PROTECTION



IATF 16949  
ISO 9001-2015

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