

AE5 EV FUSE



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

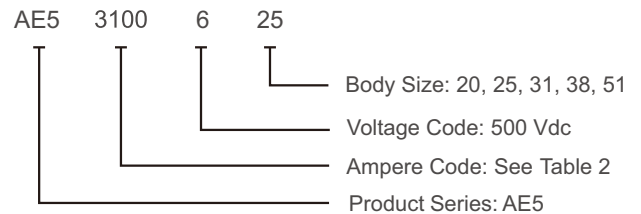
APPLICATIONS

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

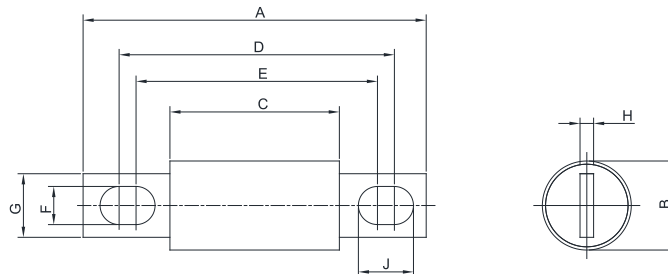
AGENCY INFORMATION

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

PART NUMBERING SYSTEM



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
Φ 21 x 40	81	21	40	66	57	8.5	15	3.2	13
Φ 25 x 44	89	25	44	73	71	9	18	3.2	10
Φ 31 x 53	92	31	53	76	69	8.5	22	5	12
Φ 38 x 53	110	38	53	88	70	10.5	24.8	6	19.5
Φ 51 x 53	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 ² t (A ² s)	Clearing I ² t (A ² s)	Watt Loss(W) 0.5 I _n
					TUV**	Self-Certified			
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

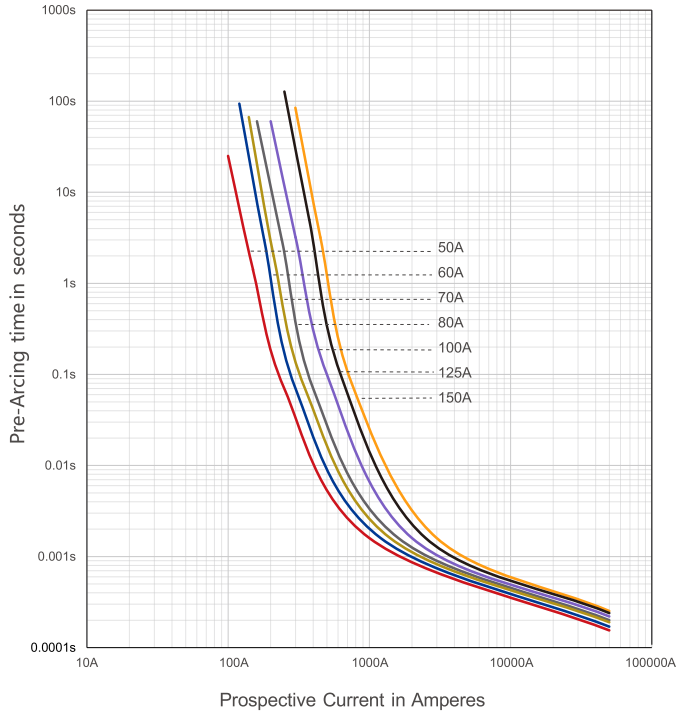
Table 2 1.** --- TUV File: J50437773; J50437772; J50433104

2.○ --- TUV certification in process

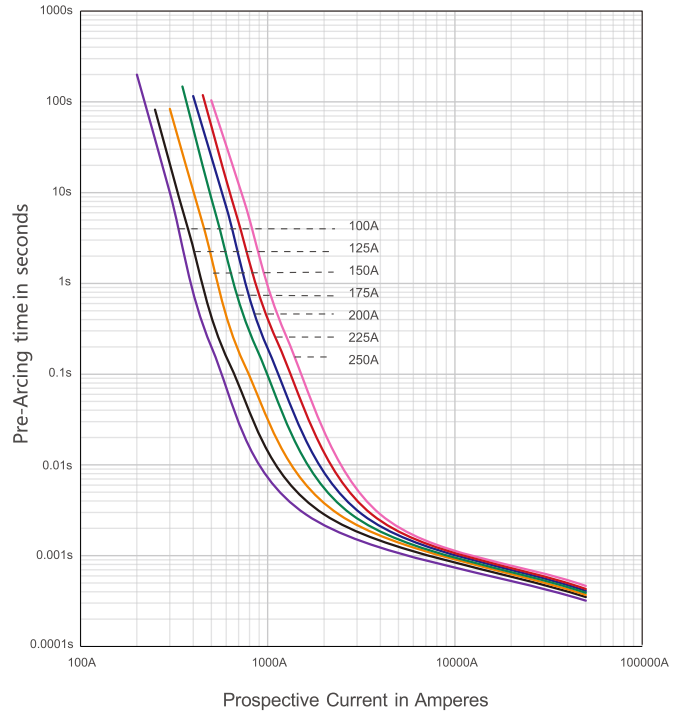
3. Time constant: 2 ± 0.5ms

TIME CURRENT CURVE

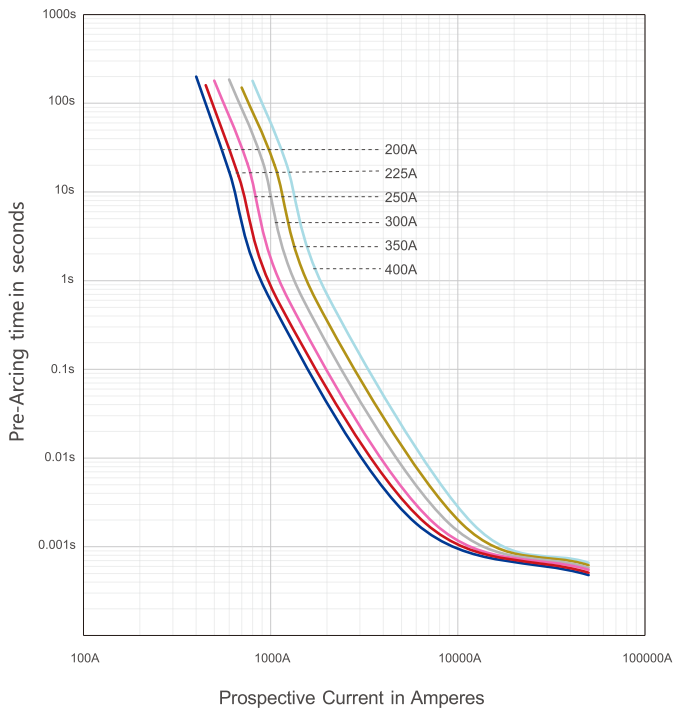
AE5xxx620 50A – 150A



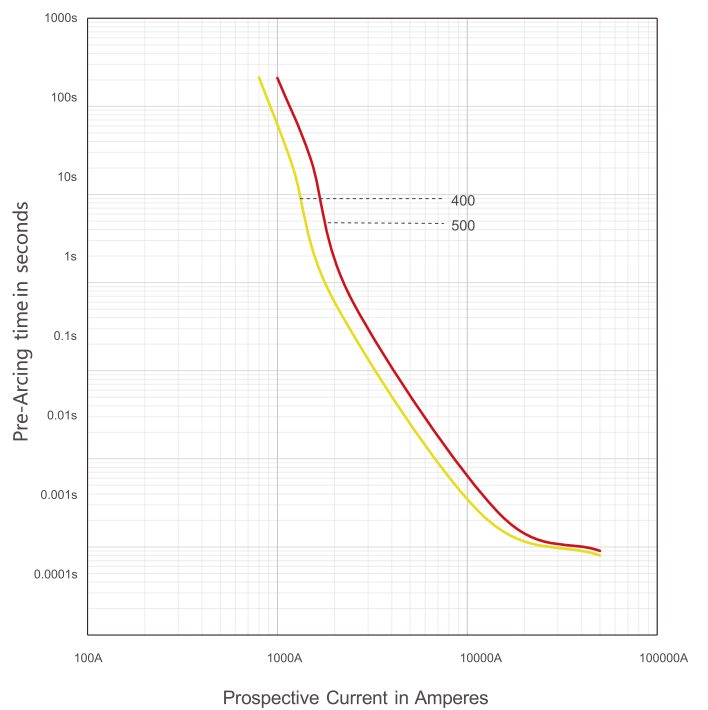
AE5XXX625 100A – 250A



AE5XXX631 200A – 400A



AE5XXX638 400A – 500A



TIME CURRENT CURVE

AE5XXXX651 500A – 700A

