



AC7 EV Fuse

Preliminary



Description

Adler AC7 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 60A to 800A.

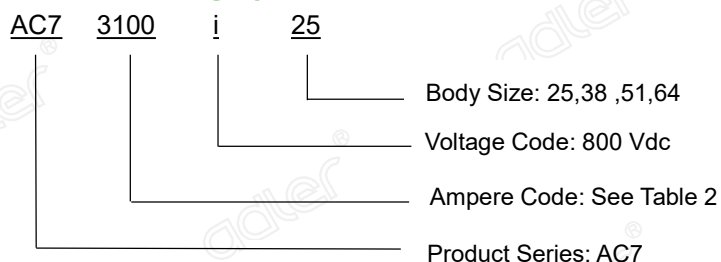
Agency Information

- Designed to JASO D622, ISO 8820-8, UL248-20
- Ref. To UL248-20; IEC 60269-4
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

Features

- 800 VDC EV high-speed power fuse
- Breaking Capacity: 25 kA
- Time Constant: $(L/R)2 \pm 1$ ms
- Special purpose fuse for EV/HEV automotive use
- For high power EV PDU and battery protection

Part Numbering System



Dimensions (mm):

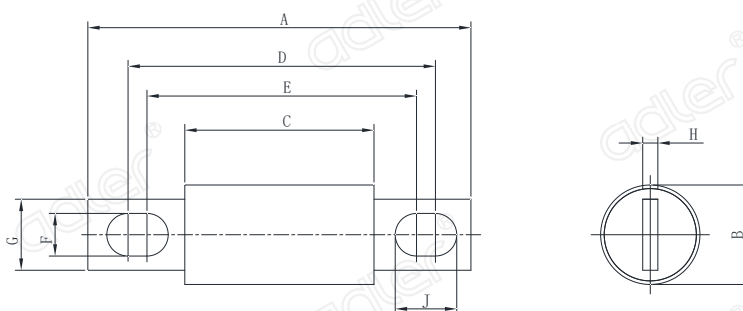


Table 1

Fuse Size	A ± 0.8mm	B ± 0.5mm	C ± 0.8mm	D ± 0.8mm	E ± 0.8mm	F ± 0.5mm	G ± 0.5mm	H ± 0.1mm	J ± 0.5mm
Φ25x66	111	25	66	95	93	9	18	3.2	10
Φ38x72	129	38	72	107	89	10.5	25	6	19.5
Φ51x72	129	51	72	109	90	10.5	38	6	20
Φ64x72	122	64	72	101.5	92.5	10.5	40	6	15

Electrical Specifications
Table 2

Size (mm)	Part Number	Rated Current	Ampere Code	Rated Voltage	Breaking Capacity	I ² t(A ² s)		Watt Loss(W)	
						Pre-Arcing	Total	0.5I _n	1.0I _n
25x66	AC72600i25	60A	2600	800Vdc	25kA	1923	4712	2	15
	AC72700i25	70A	2700			2422	5942	3	17
	AC72800i25	80A	2800			2959	7260	3	18
	AC73100i25	100A	3100			4136	10147	4	24
	AC73125i25	125A	3125			5781	14180	5	26
	AC73150i25	150A	3150			7599	18641	6	33
	AC73175i25	175A	3175			9576	23524	7	40
	AC73200i25	200A	3200			11700	28700	8	44
38×72	AC73250i38	250A	3250	800Vdc	25kA	24057	58551	9	58
	AC73300i38	300A	3300			32744	79694	11	78
	AC73350i38	350A	3350			59733	145382	12	80
	AC73400i38	400A	3400			75600	184000	14	91
51×72	AC73450i51	450A	3450	800Vdc	25kA	53419	166517	17	115
	AC73500i51	500A	3500			74158	231165	20	142
	AC73560i51	560A	3560			87900	274000	21	149
64×72	AC73600i64	600A	3600	800Vdc	25kA	183144	599174	22	156
	AC73700i64	700A	3700			230788	755046	24	174
	AC73800i64	800A	3800			281970	922490	27	217

Packing information
Table 3

Fuse Size	Box specifications (mm)	Packing quantity / per container	Weight / PCS (g)	Recommended Screw	Recommended tightening torque (N·m)
Φ25x66	410×215×160	84PCS	101±3%	M8	12±1
Φ38x72	410×215×160	33PCS	265±3%	M10	20±1
Φ51x72	410×215×160	14PCS	452±3%	M10	20±1
Φ64x72	410×215×160	18PCS	680±3%	M10	20±1

OPERATING CONDITIONS

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

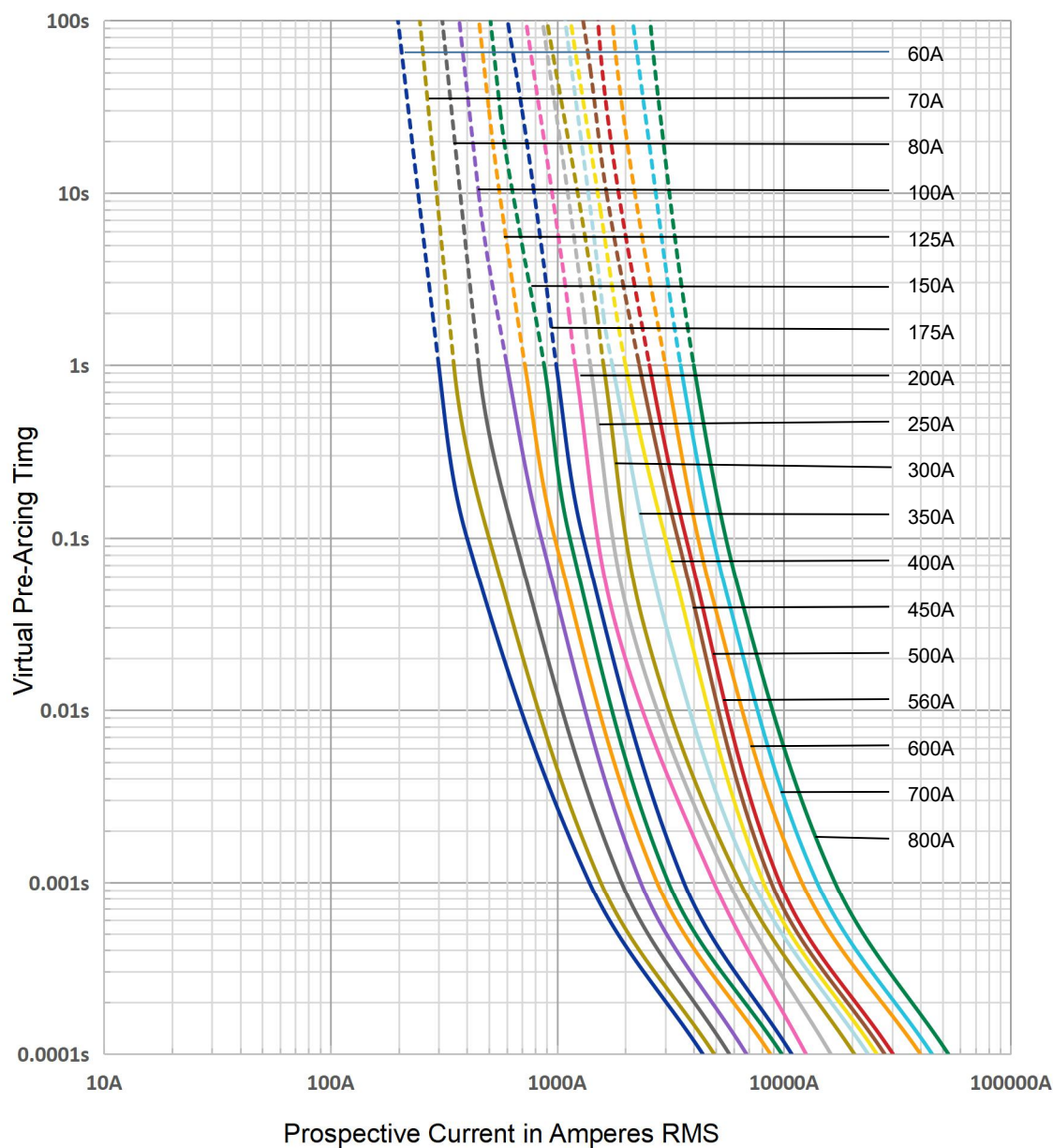
- Normal temperature: -5°C - 40°C , permissible operating temperature: -40°C - 120°C ;
- The altitude of the normal site of installation of the fuses does not exceed 2000m above sea level and permissible altitude site of installation does not exceed 5000m;
- The air is clean and its relative humidity does not exceed 50 % at the maximum temperature of 40°C ;
- Higher relative humidity is permitted at lower temperatures, e.g., 90 % at 20°C ;
- Pollution grade III
- Under these conditions, moderate condensation may occasionally occur due to variation in temperature.
- For operating conditions other than above, please contact manufacturer.

STORAGE

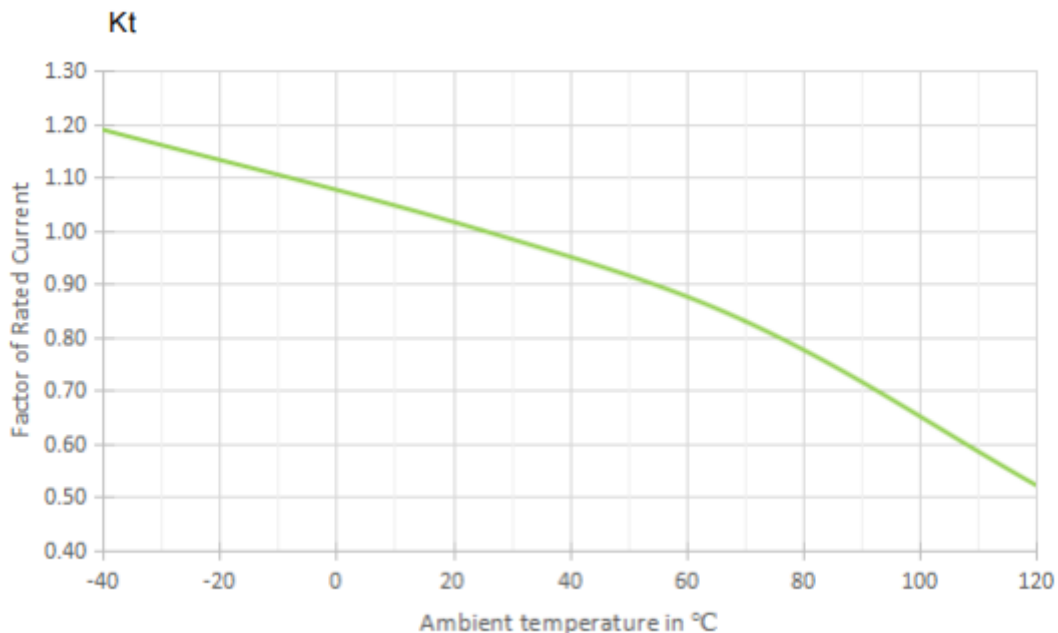
During transportation and storage, avoid water seepage and mechanical damage.

TIME CURRENT CURVE

T-C CURVE



Temperature derating curve



Web Resources

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