



Engineering Product Specifications

Customer Name: _____

Customer NO. : _____

Model No. : _____

Product Description : PV Fuse

Product Series: A73

Remark: _____

Document Release		Date
Prepared by		
Checked by		
Approved by		

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1. INTRODUCTION

The A73 series fuse links are made according to specifications for use with rated working voltage of 1000V DC and rated working currents of 1~30A for overload or short circuit protection. The rated breaking capacity at 1000V DC is minimum 20KA and comply with IEC60269-1:2007+A1, IEC60269-6:2011; UL2579 standards.

The fuse body shape is a circular with a fuse element made of sterling silver, encapsulated in high temperature resistant, high strength ceramic tube and filling of high silicon quartz sand to act as arc medium.

This series fuse link is a DC Control circuits requiring fuses, it is designed in PV systems up to 1000Vdc, in particular against typical cyclical current flow current as found in photo-voltaic applicaitons, for instance combiner boxes string protection, it is also designed for protection of high-voltage accessory circuits in electric and hybrid electric vehicles for example, PDU, Battery protection etc..

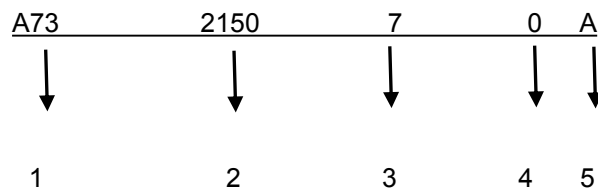
2. AGENCY APPROVALS

Agency	Agency File Number	Ampere/ Voltage Range
TÜV	R 50323561	2A~20A / 1000V DC
UL	E479303	3~20A / 1000V DC

3. PART NUMBERING SYSTEM

4.1 Part Number

Example: A73215070A



- | | | |
|---------|------------------------|-------------|
| 1 | Product Series | A73 |
| 2 | Ampere Rating | 15A |
| 3 | Voltage Rating | 1000VDC |
| 4 | Packaging Code | Standard |
| 5 | Mounting Options | A or B or C |

4. CHARACTERISTIC

4.1 Opening Time (temperature 25°C)

Rated Current	IEC		UL	
	113%	145%	135%	200%
1~30A	>1h	<1h	>1h	<4 minutes

4.2 Electrical Specifications

Part Number	Rated Current	Cold Resistance (mΩ)	I ² t (A ² s)		Dissipation (W)		Certifications	
			Pre-Arc	Total @ Rated Voltage	80% In	100% In	UL	TÜV
A73110070X	1	558.50	0.15	0.4	0.8	1.5	○	○
A73120070X	2	327.65	1.2	3.4	0.6	2.1	●	●
A73130070X	3	101.50	4	11	0.8	0.98	●	●
A73140070X	4	73.88	9.5	26	1.0	1.1	●	●
A73150070X	5	60.43	19	50	1.0	1.2	●	●
A73160070X	6	44.99	30	90	1.1	1.37	●	●
A73180070X	8	24.94	27.5	32	1.2	1.9	●	●
A73210070X	10	17.25	21.8	70	1.2	2.2	●	●
A73212070X	12	13.17	51.3	120	1.5	2.6	●	●
A73215070X	15	9.53	98.3	220	1.7	2.8	●	●
A73220070X	20	5.59	157.5	240	2.1	3.1	●	●
A73225070X	25	4.67	40	260	2.9	4.1	○	○
A73230070X	30	3.09	48	280	3.6	4.95	○	○

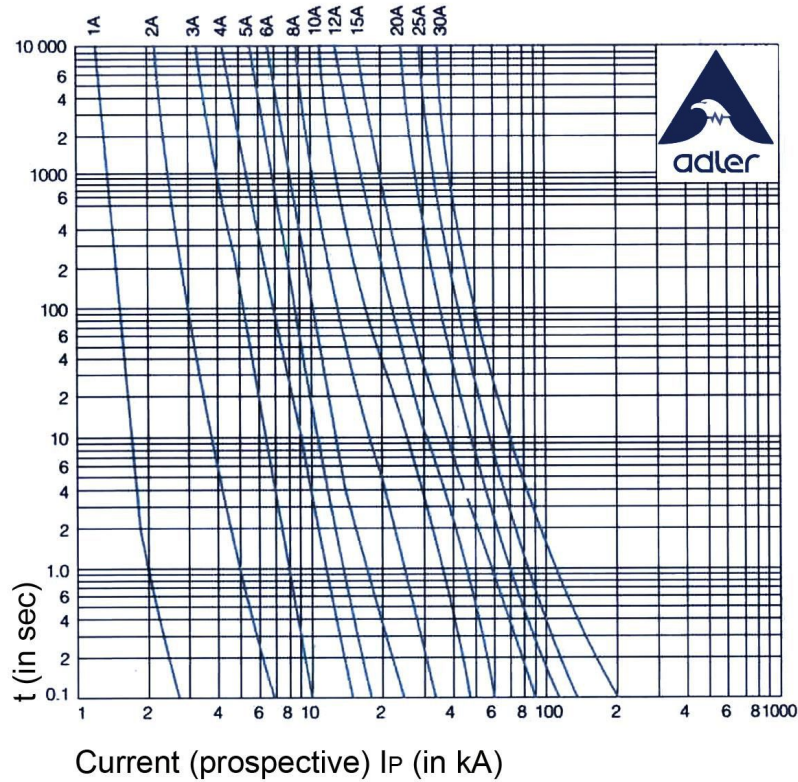
4.3 Electrical Parameters

Parameter	Value	Test Standard/Method
Rated voltage	1000V DC	Special intelligent digital fuse melting characteristics Test bench
Rated current	1A, 2A, 3A, 4A, 5A, 6A,8A, 10A,12A, 15A, 20A, 25A, 30A	Special intelligent digital fuse melting characteristics Test bench
Power dissipation of a fuse-link	2.4W at 0.7In, 4.5W at In	Special intelligent digital fuse melting characteristics Test bench
Breaking capacity of a fuse-link	1000VDC/20KA(TUV) or 40KA(UL)	Special intelligent digital fuse melting characteristics Test bench
Utilization category	gPV	IEC60269-1:2007+A1, IEC60269-6:2011; UL2579
Installation method	Holder for rail mount, fuse clips, PCB mount	

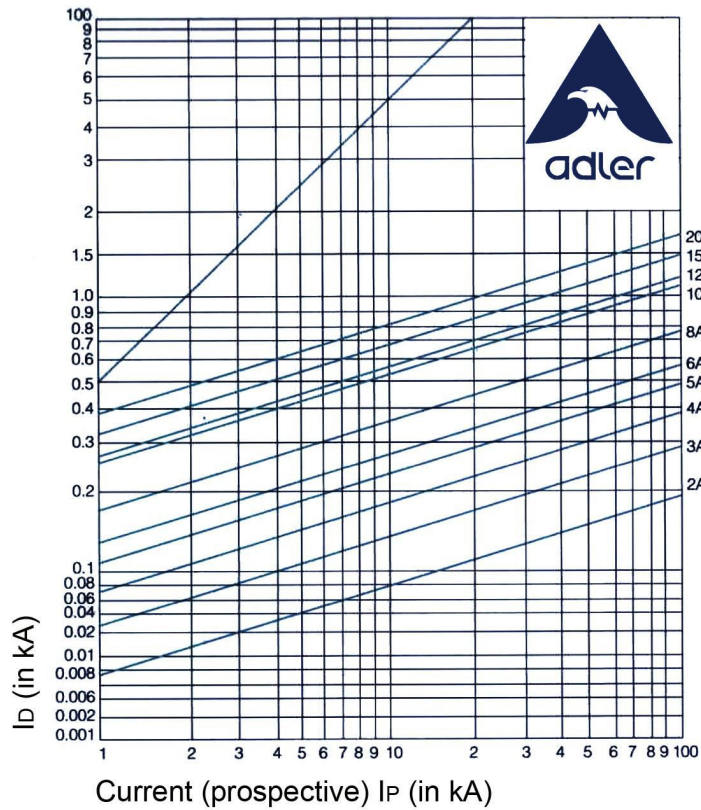


A73 / PV Fuse

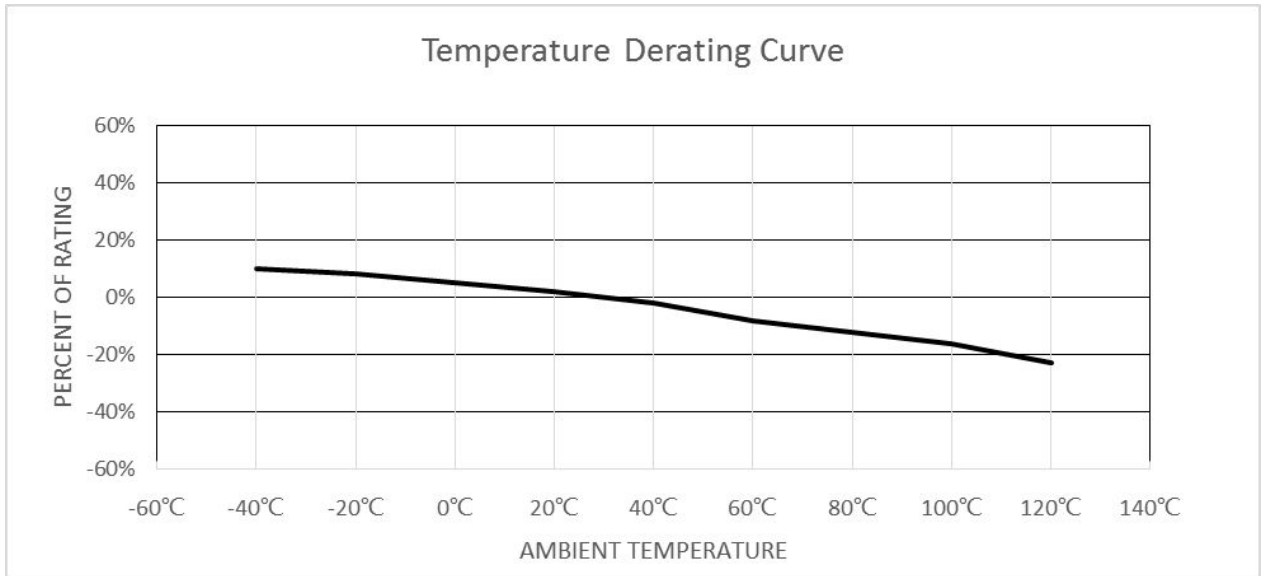
4.4 Time-Current Characteristic



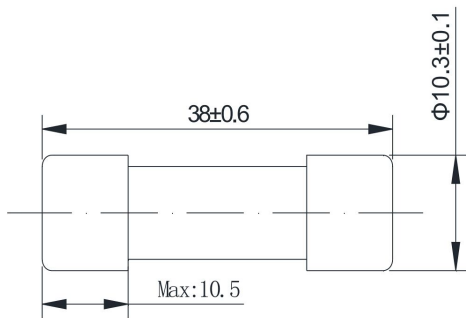
4.4 Current Limiting-Current Characteristic



4.5 Temperature Derating Curve

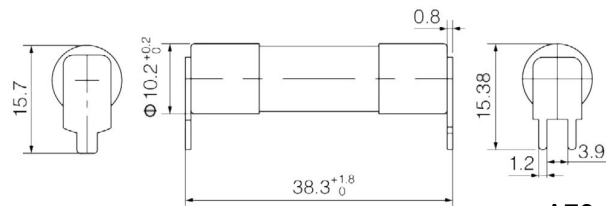


5. DIMENSIONS

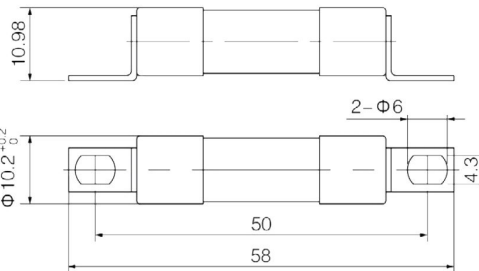


A73xxx70A

unit: mm



A73xxx70B



A73xxx70C

6. STRUCTURE



A73.PV Series 38x10mm Photovoltaic Fuse

7. MATERIAL

- 7.1 The contacts of the inner caps are made of copper, the fuse element is made of high precision sterling silver. The ferrule tube of 95% Al₂O₃ treated ceramic, as arc quenching medium high silica sand is used.
- 7.2 The terminal contact surface is silver plated.

8. ENVIRONMENTAL PARAMETERS

7.1 Working Environment

- Operating temperature: -40°C~+90°C
- Optimum elevation: 2000m.

7.2 Storage Environment

- Storage temperature: -40°C~+70°C
- Storage humidity: ≤90%
- No harmful gases and flammable and explosive materials and corrosive items in the warehouse, and should not have received strong mechanical vibration, shock and strong magnetic field effect.

9. PACKING

9.1 Package

The small box is 10 pcs.



10. APPENDIX



ONLINE CERTIFICATIONS DIRECTORY

JFGA.E479303
Fuses for Photovoltaic Systems

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Fuses for Photovoltaic Systems

See General Information for Fuses for Photovoltaic Systems

ADLER ELEKTROTECHNIK LEIPZIG GMBH
ZSCHUCHERSCHER STR.91
D-04229 LEIPZIG, GERMANY

E479303

Table with columns: Cat. No., Interrupting Capacity (Volts, Amps), Rating (Volts, Amps). Row for A73 shows 1000V DC, 40K Amps, 1000V DC, 3-20 Amps.

Last Updated on 2015-09-29

Questions?

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Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50323561

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Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum	<i>Date of Issue</i> (day/mo/yr)
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Zschochersche Str. 91
04229 Leipzig
Germany

Fertigungsstätte *Manufacturing Plant*
01-KSH-15043932 001

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*
EN 60269-1:2007+A1
EN 60269-6:2011

**Zertifiziertes Produkt (Geräteidentifikation)
*Certified Product (Product Identification)***

**Lizenzentgelte - Einheit
*License Fee - Unit***

Fuse Link (Low-voltage Fuse for PV System)

Fuse-link
Type Designation : A73 (adler) 5
Rated Voltage : DC 1000V
Rated Current : 2A; 3A; 4A; 5A; 6A; 10A; 12A; 15A and 20A
Rated Breaking Capacity: 20kA
Breaking Range : gPV
Rated Power Dissipation: no more than 2,4W at 0,7In
no more than 4,5W at In
Size : 10mm*38mm
Arc Voltage Limits : 3500V (peak value)

The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.

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*Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.*

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