EV Fuse 10 x 38 mm, up to 1000 VDC, up to 63 A

new



Bolt-on A & Z



Bolt-on B



PCB mounting

500/750/850/1000 VDC · EV Fuse

See below:
Approvals and Compliances

Description
- High breaking capacity of 20 kA @ 1000 VDC
- Bolt-on mounting and PCB / THT mounting for vehicle applications

Unique Selling Proposition
- Compact size
- High temperature resistance
- Mechanical vibration and shock resistance
- Chemical load resistance

Applications
- Battery Management System
- On-Board Battery Charger
- DC/DC Converters
- Air-Conditioning Compressor
- PTC Heater
- PDU: Motor Control Unit / Controller

Weblinks
pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product

Technical Data

Rated Voltage	500/750/850/1000 VDC
Rated current	15 - 63 A
Breaking Capacity	up to 20 kA
Characteristic	EV Fuse
Mounting	PCB/THT, Bolt-on
Admissible Ambient Temp.	-40 °C to 125 °C
Material: Terminals	Copper alloy, tin or nickel plated
Material: Tube	Ceramic
Material: Endcaps	Copper Alloy
Storage Conditions	-40 °C to 70 °C, max. 70% r.h.
Product Marking	S, Type, Rated current, Rated Voltage, Breaking Capacity, Approvals
Soldering Methods	Reflow, Wave, * Soldering profile available on request
Resistance to Vibration	acc. to IEC 60068-2-64, test Fc
Mechanical Shock	IEC 60068-2-27 Test Ea

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: ADO

Approval Logo	Certificates	Certification Body	Description
	UL Approvals	UL	UR File Number: E548130

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	UL 248-20	Low-Voltage Fuses - Part 20: Electric Vehicle (EV) Fuses
	Designed according to	ISO 8820-8	High-voltage fuses for vehicles - Part 8: Fuse-links with bolt-in contacts (Type H and J) with rated voltage of 450V
	Designed according to	GB/T31465.6	Road vehicles - Fuse-link - Part 6: Fuse-links with bolt-in contacts with high voltage
	Designed according to	JASO D622	Automotive parts - Bolt-in type high-voltage fuse-links

Compliances

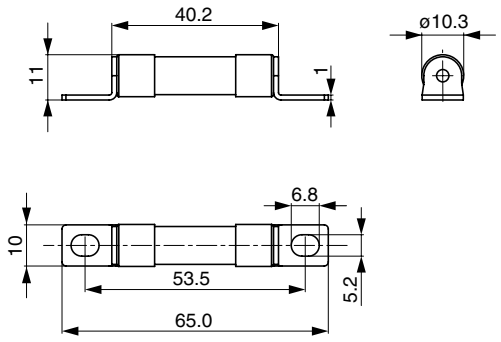
The product complies with following Guide Lines

Identification	Details	Initiator	Description
	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

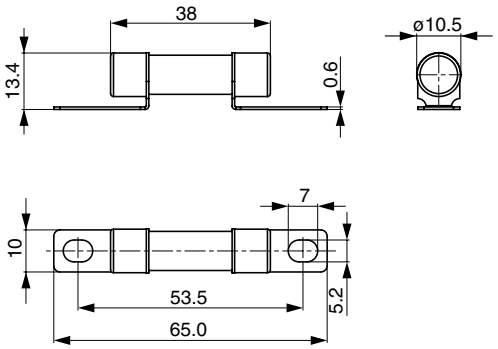
Dimension [mm]

38 mm

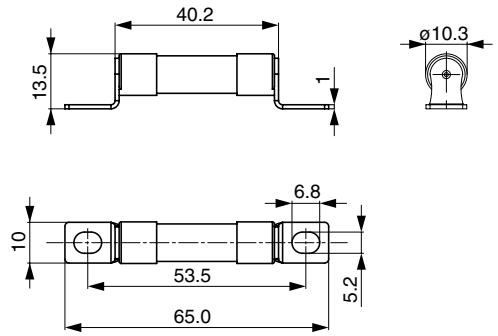
Bolt-on A



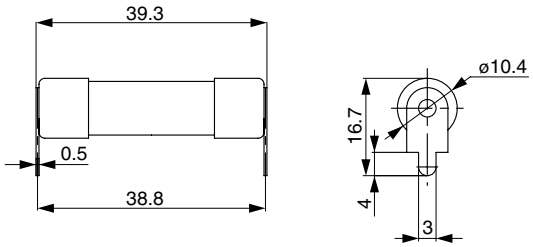
Bolt-on B



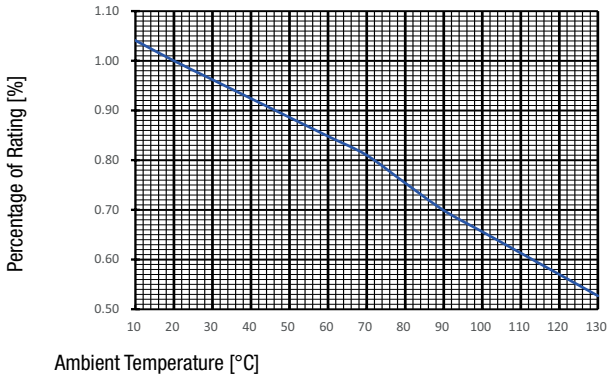
Bolt-on Z



PCB version



Derating Curves

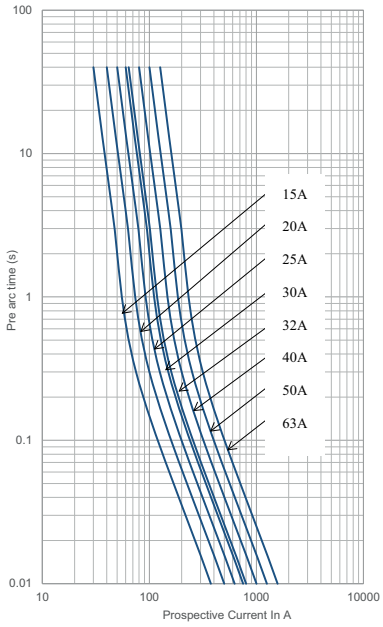


Pre-Arcing Time

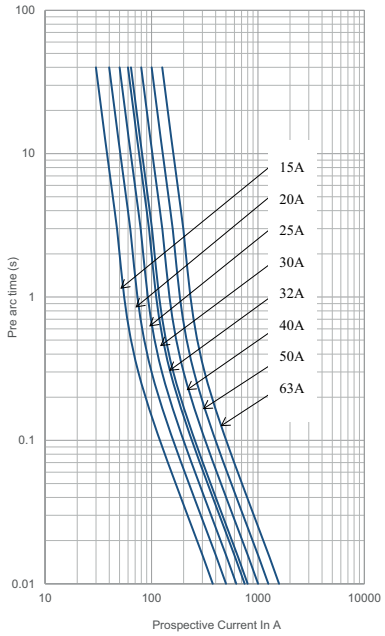
Rated Current In	1.1 x In min.	2.0 x In min.	2.0 x In max.	3.0 x In min.	3.0 x In max.	5.0 x In min.	5.0 x In max.
15 A - 63 A	4 h	0.5 s	100 s	100 ms	15 s	50 ms	1 s

Time-Current-Curves

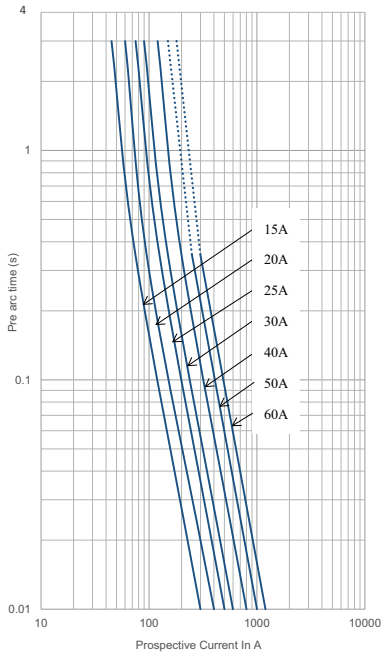
ADO11 Bolt-on Z, 500 VDC



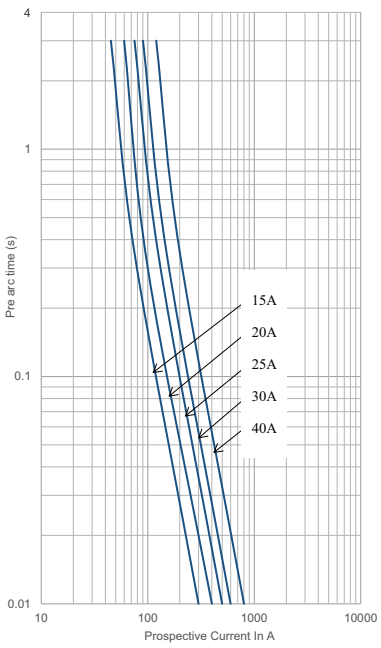
ADO12 Bolt-on B, 500 VDC



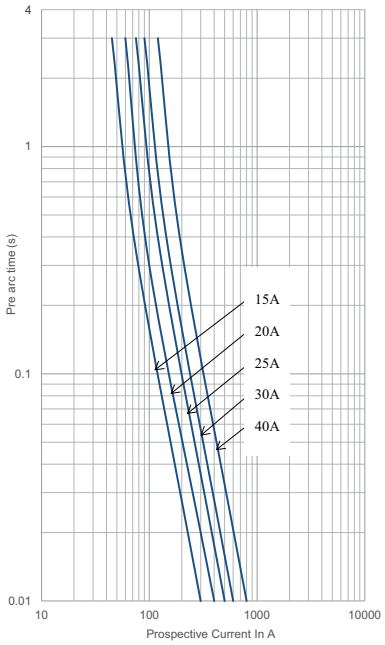
ADO13 Bolt-on A, 750 VDC



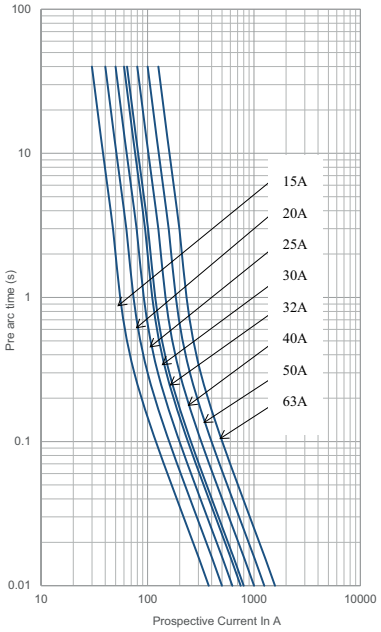
ADO14 Bolt-on Z, 1000 VDC



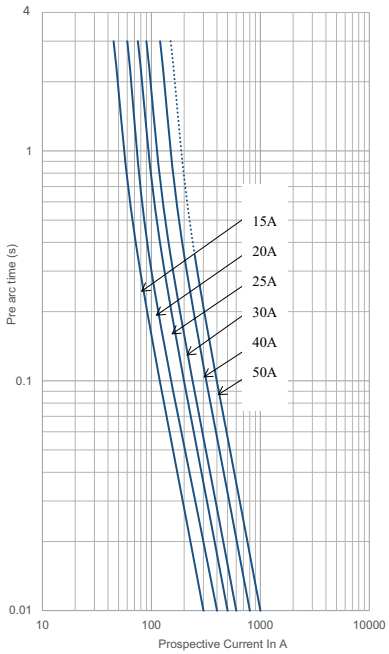
ADO15 Bolt-on A, 1000 VDC



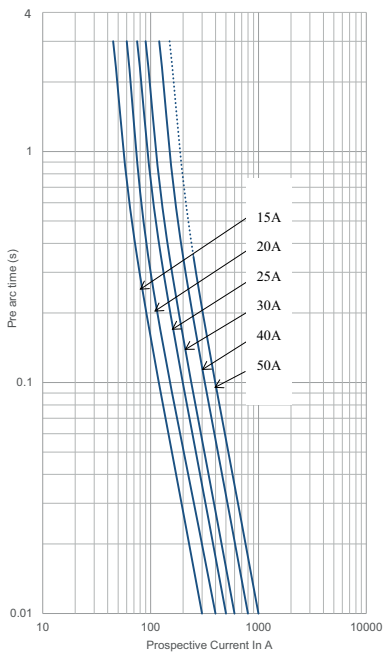
ADO16 PCB version, 500 VDC



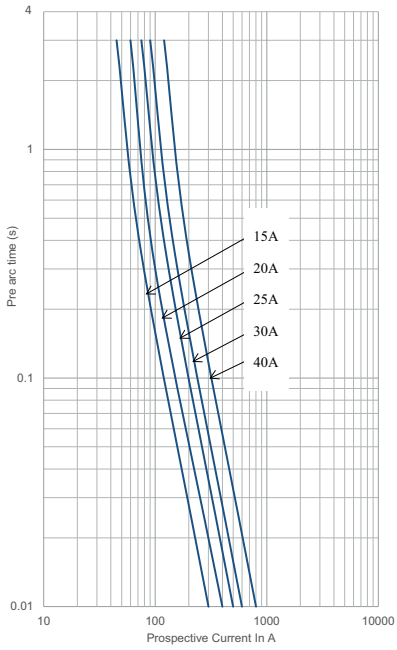
AD017 PCB version, 750 VDC



AD018 PCB version, 850 VDC



AD019 PCB version, 1000 VDC



Variants

Product Series	Rated Current [A]	Rated Voltage [VDC]	Mounting	Terminal Plating	Breaking Capacity	Pre-arcing I²t typ. k[A²s]	Melting I²t typ. k[A²s]	Power Dissipation 1.0 I_n typ. [W]	®	Order Number
AD011	15	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.02	0.04	2.5	●	3-156-012
AD011	20	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.03	0.05	3.9	●	3-156-013
AD011	25	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.045	0.08	5.1	●	3-156-014
AD011	30	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.095	0.16	5.8	●	3-156-015
AD011	32	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.125	0.24	6		3-156-016
AD011	40	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.18	0.32	7.8	●	3-156-017
AD011	50	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.34	0.54	8.7	●	3-156-018
AD011	63	500	Bolt-on Z	Copper alloy, tin-plated	1)	0.45	1.69	14	●	3-156-019
AD012	15	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.02	0.04	2.5	●	3-156-021
AD012	20	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.025	0.07	3.9	●	3-156-022
AD012	25	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.04	0.12	5.1	●	3-156-023
AD012	30	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.053	0.16	5.8	●	3-156-024
AD012	32	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.07	0.21	6		3-156-025
AD012	40	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.16	0.32	7.8	●	3-156-026
AD012	50	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.222	0.65	8.7	●	3-156-027
AD012	63	500	Bolt-on B	Copper alloy, nickel-plated	1)	0.431	1.26	14	●	3-156-028
AD013	15	750	Bolt-on A	Copper alloy, tin-plated	2)	0.012	0.033	2.5		3-156-030
AD013	20	750	Bolt-on A	Copper alloy, tin-plated	2)	0.016	0.054	3.9		3-156-031
AD013	25	750	Bolt-on A	Copper alloy, tin-plated	2)	0.041	0.144	5.1		3-156-032
AD013	30	750	Bolt-on A	Copper alloy, tin-plated	2)	0.069	0.248	5.8		3-156-033
AD013	40	750	Bolt-on A	Copper alloy, tin-plated	2)	0.123	0.449	7.8		3-156-034
AD013	50	750	Bolt-on A	Copper alloy, tin-plated	2)	0.224	0.828	11		3-156-035
AD013	60	750	Bolt-on A	Copper alloy, tin-plated	2)	0.288	1.08	14		3-156-036
AD014	15	1000	Bolt-on Z	Copper alloy, tin-plated	4)	0.09	0.29	2.6		3-156-038
AD014	20	1000	Bolt-on Z	Copper alloy, tin-plated	4)	0.12	0.39	3.5		3-156-039
AD014	25	1000	Bolt-on Z	Copper alloy, tin-plated	4)	0.15	0.49	4.1		3-156-040
AD014	30	1000	Bolt-on Z	Copper alloy, tin-plated	4)	0.21	0.68	4.8		3-156-041
AD014	40	1000	Bolt-on Z	Copper alloy, tin-plated	4)	0.31	1.01	6.5		3-156-042
AD015	15	1000	Bolt-on A	Copper alloy, tin-plated	4)	0.09	0.29	2.6		3-156-045
AD015	20	1000	Bolt-on A	Copper alloy, tin-plated	4)	0.12	0.39	3.5		3-156-046
AD015	25	1000	Bolt-on A	Copper alloy, tin-plated	4)	0.15	0.49	4.1		3-156-047
AD015	30	1000	Bolt-on A	Copper alloy, tin-plated	4)	0.21	0.68	4.8		3-156-048
AD015	40	1000	Bolt-on A	Copper alloy, tin-plated	4)	0.31	1.01	6.5		3-156-049
AD016	15	500	PCB	Copper alloy, tin-plated	1)	0.02	0.04	2.5		3-156-052
AD016	20	500	PCB	Copper alloy, tin-plated	1)	0.025	0.07	3.9		3-156-053
AD016	25	500	PCB	Copper alloy, tin-plated	1)	0.04	0.12	5.1		3-156-054
AD016	30	500	PCB	Copper alloy, tin-plated	1)	0.053	0.16	5.8		3-156-055
AD016	32	500	PCB	Copper alloy, tin-plated	1)	0.07	0.21	6		3-156-056
AD016	40	500	PCB	Copper alloy, tin-plated	1)	0.16	0.32	7.8		3-156-057
AD016	50	500	PCB	Copper alloy, tin-plated	1)	0.222	0.65	8.7		3-156-058
AD016	63	500	PCB	Copper alloy, tin-plated	1)	0.431	1.26	14		3-156-059
AD017	15	750	PCB	Copper alloy, tin-plated	2)	0.012	0.033	2.5		3-156-061
AD017	20	750	PCB	Copper alloy, tin-plated	2)	0.016	0.054	3.9		3-156-062
AD017	25	750	PCB	Copper alloy, tin-plated	2)	0.041	0.144	5.1		3-156-063
AD017	30	750	PCB	Copper alloy, tin-plated	2)	0.069	0.248	5.8		3-156-064
AD017	40	750	PCB	Copper alloy, tin-plated	2)	0.123	0.449	7.8		3-156-065
AD017	50	750	PCB	Copper alloy, tin-plated	2)	0.224	0.828	14		3-156-066
AD018	15	850	PCB	Copper alloy, tin-plated	3)	0.09	0.29	2.6		3-156-068
AD018	20	850	PCB	Copper alloy, tin-plated	3)	0.12	0.39	3.5		3-156-069
AD018	25	850	PCB	Copper alloy, tin-plated	3)	0.15	0.49	4.1		3-156-070
AD018	30	850	PCB	Copper alloy, tin-plated	3)	0.21	0.68	4.8		3-156-071
AD018	40	850	PCB	Copper alloy, tin-plated	3)	0.31	1.01	6.5		3-156-072
AD018	50	850	PCB	Copper alloy, tin-plated	3)	0.45	1.47	7.2		3-156-073

Product Series	Rated Current [A]	Rated Voltage [VDC]	Mounting	Terminal Plating	Breaking Capacity	Pre-arcing I^2t typ. k[A^2s]	Melting I^2t typ. k[A^2s]	Power Dissipation 1.0 I_n typ. [W]	Order Number
AD019	15	1000	PCB	Copper alloy, tin-plated	4)	0.09	0.29	2.6	3-156-075
AD019	20	1000	PCB	Copper alloy, tin-plated	4)	0.12	0.39	3.5	3-156-076
AD019	25	1000	PCB	Copper alloy, tin-plated	4)	0.15	0.49	4.1	3-156-077
AD019	30	1000	PCB	Copper alloy, tin-plated	4)	0.21	0.68	4.8	3-156-078
AD019	40	1000	PCB	Copper alloy, tin-plated	4)	0.31	1.01	6.5	3-156-079

Availability for all products can be searched real-time: https://www.schurter.com/en/info-center/support-tools/stock-check-distributors

Breaking Capacity

1) 20 kA @ 500 VDC, L/R 2 ms

2) 20 kA @ 750 VDC, L/R 2 ms

3) 20 kA @ 850 VDC, L/R 2 ms

4) 20 kA @ 1000 VDC, L/R 1 ms

Measurement Parameters: Pre-Arcing and Melting

500 VDC: I^2t [kA^2s] @20 kA

750 VDC: I^2t [kA^2s] @20 kA

850 VDC: I^2t [kA^2s] @20 kA

1000 VDC: I^2t [kA^2s] @20 kA

Packaging Unit	Bulk (60 pcs.)

25.08.2026

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.