



**THE DATASHEET OF
8020.5021.PT**



Axial Lead Fuse, 6.3x32 mm, 500 VAC, 400 VDC, 1-10 A, High Breaking Capacity up to 3500 A

new



UL 248-14 · 500 VAC · Time-Lag T

See below:

[Approvals and Compliances](#)

Description

- 6.3 x 32 mm fuses for primary protection
- Also available as cartridge fuse

Unique Selling Proposition

- High rated voltages up to 500 VAC / 400 VDC
- High breaking capacity up to 3500 A
- Suitable for pulse-shaped continuous currents
- Useable for commercial cooking appliances according UL 197

Applications

- 3-phase applications
- DC applications
- Photovoltaic
- Frequency converter
- Power electronics
- Commercial cooking appliances


References

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

[Application Note Primary Protection in Equipment](#) with further information on increased [Pulse Strength](#) and their test conditions according to international standards see [Impulse Withstand Voltage](#)

Technical Data

| | | | |
|--------------------------|--|------------------------------|---|
| Rated Voltage | 500VAC, 63 - 400 VDC | Solderability | 245 °C / 3 sec acc. to IEC 60068-2-58, Test Td |
| Rated current | 1 - 10A | Resistance to Soldering Heat | 260 °C / 10 sec acc. to IEC 60068-2-58, Test Td |
| Breaking Capacity | 3500A - 20kA | | |
| Characteristic | Time-Lag T | | |
| Mounting | Solder, THT | | |
| Admissible Ambient Temp. | -40 °C to 85 °C | | |
| Climatic Category | 40/085/21 acc. to IEC 60068-1 | | |
| Material: Tube | Ceramics | | |
| Material: Endcaps | Nickel-Plated Copper Alloy | | |
| Material: Axial Leads | Tin-Plated Copper | | |
| Unit Weight | 3.54 g | | |
| Storage Conditions | 0 °C to 60 °C, max. 70% r.h. | | |
| Product Marking |  Type, Rated current, Rated Voltage, Characteristic, Breaking capacity, Approvals | | |

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: SHT 6.3x32 Pigtail

| Approval Logo | Certificates | Certification Body | Description |
|---|------------------------------|--------------------|------------------------|
|  | UL Approvals | UL | UR File Number: E41599 |


Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|--|-----------------------|--------------------|---|
|  | Designed according to | UL 248-14 | Low voltage fuses - Part 14: Supplemental fuses |
|  | Designed according to | CSA22.2 No. 248.14 | Low-Voltage Fuses - Part 14: Supplemental Fuses |






Application standards

Application standards where the product can be used


| Organization | Design | Standard | Description |
|--|--------------------------------|----------------|---|
|  | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

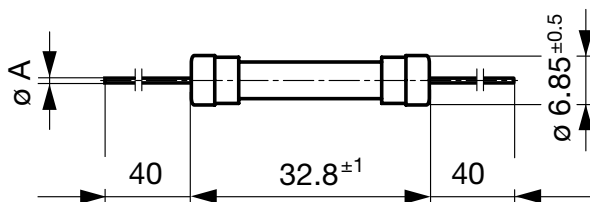
Compliances

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. |
|  | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 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]

 6.3 mm

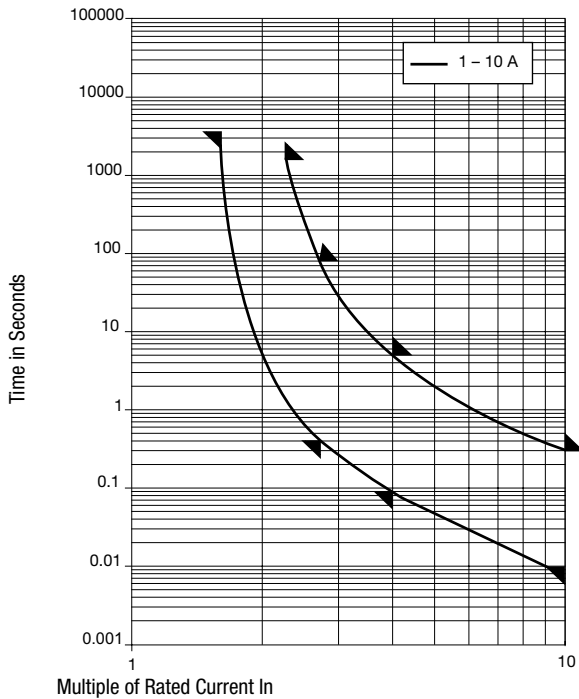


ØA = 0.8 mm

Pre-Arcing Time

| Rated Current In | 1.5 x In min. | 2.1 x In max. | 2.75 x In min. | 2.75 x In max. | 4.0 x In min. | 4.0 x In max. | 10.0 x In min. | 10.0 x In max. |
|------------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|----------------|
| 1 A - 10 A | 60 min | 30 min | 400 ms | 80 s | 95 ms | 5 s | 10 ms | 300 ms |

Time-Current-Curves



All Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 I _n max. [mV] | Power Dissipation 1.5 I _n max. [mW] | Melting I ² t 10.0 I _n typ. [A ² s] | Order Number |
|-------------------|---------------------|---------------------|-------------------|---|--|--|----------------|
| 10 | 500 | 400 | 3) | 100 | 3000 | 700 | ● 8020.5021.PT |
| 1 | 500 | 400 | 1) | 350 | 900 | 1.55 | ● 8020.5011.PT |
| 1.25 | 500 | 400 | 1) | 300 | 1000 | 3.15 | ● 8020.5012.PT |
| 1.6 | 500 | 400 | 1) | 200 | 1100 | 5.4 | ● 8020.5013.PT |
| 2 | 500 | 400 | 1) | 180 | 1200 | 10.5 | ● 8020.5014.PT |
| 2.5 | 500 | 400 | 1) | 160 | 1300 | 20 | ● 8020.5015.PT |
| 3.15 | 500 | 400 | 1) | 150 | 1400 | 39 | ● 8020.5016.PT |
| 4 | 500 | 400 | 1) | 140 | 1500 | 71.4 | ● 8020.5017.PT |
| 5 | 500 | 400 | 2) | 135 | 2200 | 271 | ● 8020.5018.PT |
| 6.3 | 500 | 400 | 2) | 110 | 2200 | 225 | ● 8020.5019.PT |
| 8 | 500 | 400 | 2) | 110 | 2600 | 285 | ● 8020.5020.PT |



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

- 1) 1500 A @ 500 VAC, cos φ = 0.99 - 1
 1500 A @ 250 VAC, cos φ = 0.7 - 0.8
 10 kA @ 125 VAC, cos φ = 0.7 - 0.8
 1500 A @ 400 VDC
 20 kA @ 63 VDC
- 2) 1500 A @ 500 VAC, cos φ = 0.99 - 1
 3500 A @ 250 VAC, cos φ = 0.7 - 0.8
 10 kA @ 125 VAC, cos φ = 0.7 - 0.8
 1000 A @ 400 VDC
 20 kA @ 63 VDC
- 3) 1500 A @ 500 VAC, cos φ = 0.99 - 1
 1500 A @ 250 VAC, cos φ = 0.7 - 0.8

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 I _n max. [mV] | Power Dissipation 1.5 I _n max. [mW] | Melting Pt 10.0 I _n typ. [A ² s] | Order Number |
|------------------------------------|---------------------|---------------------|-------------------|---|--|--|--------------|
| 10 kA @ 125 VAC, cos φ = 0.7 - 0.8 | | | | | | | |
| 1000 A @ 400 VDC | | | | | | | |
| 20 kA @ 63 VDC | | | | | | | |
| Packaging Unit | | Bulk (100 pcs.) | | | | | |

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View 8020.5021.PT on WIN SOURCE](#)
-  [Schurter Inc. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management