

# Pyro Fuse



# 1000 VDC

# See below:

# **Approvals and Compliances**

#### **Description**

- Safety device to be triggered by ECU/BMS
- To break down the main circuit via trigger device actively
- To disconnect the battery circuit in abnormal conditions such as short circuits or collisions

# **Unique Selling Proposition**

- High safety and reliability
- Mechanical vibration and shock resistance

#### **Applications**

- Electric Vehicles (EVs)
- Conventional Vehicle Electrical Systems
- Charging Infrastructure
- Photovoltaic (PV) & Energy Storage Systems (ESS)
- Household Energy
- Storage Electric Vessels
- Fuel Cell Technologies
- Aerospace (including eVTOL)

# Weblinks

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

# **Technical Data**

| 1000 VDC                              |
|---------------------------------------|
| 400 A                                 |
| 1000 VDC/16 kA/20 μH                  |
| ≤50 μΩ (before breaking)              |
| ≥10 MΩ (after disconnection)          |
| ≥1.7 Ω, ≤2.5 Ω                        |
| ≥1.75 A /0.5 ms or ≥1.2 A/2 ms        |
| ≤0.4 A /≤ 10 s or ≤5 A /≤0.5 µs       |
| < 100 mA                              |
| Bolt-on A                             |
| -40 °C to 105 °C                      |
| PA6                                   |
| Copper alloy, tin-plated              |
| < 300 g                               |
| -40 °C to 65 °C                       |
| max. 70% r.h. @ 40 °C                 |
| max. 80% r.h. @ 30 °C                 |
| max. 90% r.h. @ 20 °C                 |
| 5, Type Description, Type, Rated cur- |
| rent, Rated Voltage                   |
|                                       |

| Resistance to Vibration   | AK-LV 124                        |
|---------------------------|----------------------------------|
| Current Carrying Capacity | 400 A Continuous current @ 85 °C |
|                           | (Busbar size ≥120 mm²)           |
| Action Time               | <2 ms                            |
| Mechanical Shock          | AK-LV 124                        |
| Temperature Cycling       | AK-LV 124                        |
| Chemical resistance       | AK-LV 124                        |
| Installation              | M8 screw (Copper busbar)         |
|                           | ISO 19072 AKII (trigger)         |

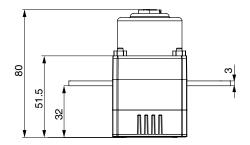
# **Approvals and Compliances**

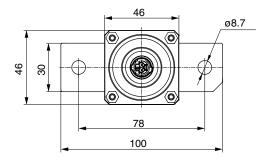
# Compliances

The product complies with following Guide Lines

| Identification | Details    | Initiator   | Description   |
|----------------|------------|-------------|---|
| RoHS           | RoHS       | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863  |
| <b>©</b>       | 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          | 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] **−** 46 mm

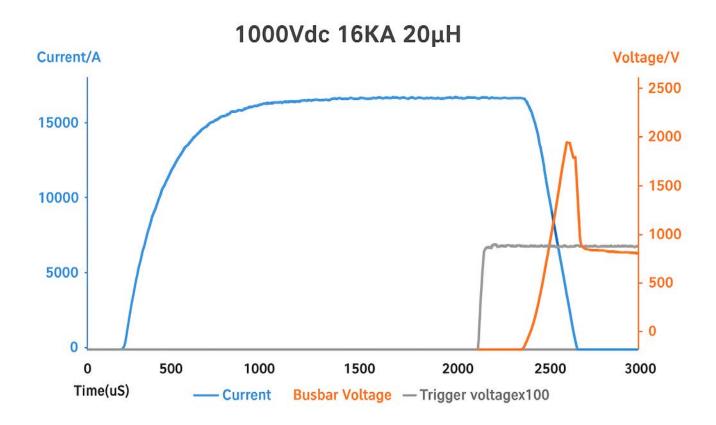




# Electric separation time

| Time summand               | Typical        | Maximum        |
|----------------------------|----------------|----------------|
| Ignition delay             | 0.3 ms @1.75 A | 0.5 ms @1.75 A |
| Mechanical separation time | 0.2 ms         | 0.5 ms         |
| Breaking time              | 0.5 ms         | 1.0 ms         |
| Total switching time       | 1.0 ms         | 2.0 ms         |

# **Breaking Behavior**



# **Variants**

| Rated current | Rated Voltage | Breaking Capacity    | Connector Type | Order Number |
|---------------|---------------|----------------------|----------------|--------------|
| [A]           | [VDC]         |                      |                |              |
| 400           | 1000          | 1000 VDC/16 kA/20 μH | AK-2 Code I    | 3-158-119    |

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

**Packaging Unit** 

Bulk 445 x 370 x 268 mm (18 pcs.)

# **Hazardous Materials Safety Instructions**

# **Short-Circuit Ring**

The connector has a shorting clip. If not fully inserted, it shorts the two pins to prevent accidental activation during transport, installation, or use.

# **Ground Isolation**

The low-voltage trigger signal must be isolated from the high-voltage system ground. A common ground or connection is prohibited.

#### **Breaking Capacity**

Do not use the fuse if the fault current exceeds its rated breaking capacity. Contact Schurter for applications with higher currents.

#### **Dropped Units**

Do not use a product that has been dropped. It must be inspected before any further use.

# **Physical Damage**

Do not use a unit with any damage to the body or components.

#### **Triggering Power Source**

Only use designated triggering equipment. Do not use lead-acid or dry-cell batteries.



#### **RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE**

- The product's side panels can become hot during operation. Allow the unit to cool completely before touching.
- Follow the mounting instructions carefully, ensuring all fastenings are tightened to the specified torque values.
- Do not allow liquids or foreign objects to enter the product.

Not following these instructions can cause serious injury or damage to equipment.



# HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power Failure to follow these instructions will result in death or severe injury.



Transportation Hazard Classification: UN2648, Class 9