QuickSafe® next-generation surge protection device
Hidden hero for electrical systems

Surge protection devices (SPDs)

SPDs are designed to protect electrical systems and equipment against transitory surges in the electrical grid. They work mainly against direct and indirect lightning strikes in buildings and incoming lines.

SPDs prevent device failure and loss of productivity in residential, industrial and commercial applications. They provide:

- extremely good protection levels
- preventive maintenance, and are simple to install

Why it is important

In all sectors that rely on computer systems

Businesses like:
- data centers
- hospitals
- banks

Transient surges can have catastrophic consequences, like loss of:

- operation
- service & data
- productivity
The following are typical sources of surges:

- Switching of equipment and inductive loads within a facility.
- Utility switching, including capacitor turning off and on.
- Lightning, which can impact a surrounding area of up to 5 km.

The probability of your facility experiencing a power surge is nearly 100%.

How standard SPDs work:

- Surge exceeds the maximum capacity of the device.
- Nothing can stop the impulse current.
- The power surge damages the device.
- The over-voltage is limited to acceptable level.
- SPD limits the power surge.
- The device is protected and the damage is prevented.
QuickSafe with safety reserve system

With QuickSafe ABB brings unprecedented safety to mission critical electrical equipment.

The new and unique device can have an optional safety reserve system, which prevents unplanned or unforeseen outages.

In this way, the quality of service and equipment life span is increased.

The safety reserve system provides a unique preventive maintenance feature for SPDs.

Unprecedented technology: 2 components per device

1. a mechanical indication shows that the component needs replacing
2. the second varistor (MOV)
   - easy identification and safe replacement
   - protects the equipment with reserve system

QuickSafe vs standard SPD

<table>
<thead>
<tr>
<th>Protection</th>
<th>Availability of the electrical system</th>
<th>End-of-life indicator: standard SPD</th>
<th>End-of-life indicator: with safety reserve system</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>0%</td>
<td>you have to switch off the electrical system to replace the SPD</td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td>100%</td>
<td>you keep the electrical system running but it is not protected anymore</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
<td>new QuickSafe technology with safety reserve system</td>
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</tbody>
</table>

Power and productivity for a better world™
SPDs have a limited life span, which decreases with every surge. That makes the protection time variable and unpredictable.

When the standard SPD’s life span is over the equipment is left unprotected.

**QuickSafe**

All systems are kept running.

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**Smart solution**

A computer outage lasting more than 10 days may cause a business to never fully recover financially.

50% of these companies will be out of business within 5 years.

With several benefits, ABB’s innovative QuickSafe range is a small investment for a huge gain.

It costs little more than the standard solution.

www.abb.com/lowvoltage