

Why choose ZOTUP?



















330
Laboratory Tests

5 International Patents

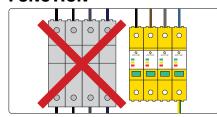
KEMA-KEUR
Safety and Quality
Mark

IEC e EN
Compliance
Standards

20TUP brings to the market a new technology developed over 4 years of intense R&D activity supported by over **330 laboratory tests** and **protected by 4 international patents**. It effectively represents the new state-of-the-art in low-voltage power circuit surge protection, making **20TUP SPDs** the technological benchmark in the electrical market: **safety**, **high performance**, **ease of installation**, and **reliability** within a single product. **20TUP** performance excels across various surge arrester test classes, but its highly innovative features are what truly stands out of this surge arresters family.

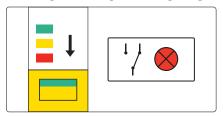
Our unique features

INTEGRATED FUSE FUNCTION



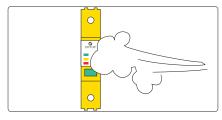
The Integrated Fuse Function (ff) ensures that, in the event of the surge protector reaching its end of life, **it fails in an open circuit mode without the need for series-connected backup fuses**. By eliminating fuses with MCB \leq 160 A and their respective fuse connection cables, **it improves the overall level of protection** and **reduces the foot print requirements within the panel**. The internal disconnector, a patented element of ZOTUP, not only disconnects the two end-of-life processes (slow and instantaneous, as defined by the IEC 61643-1 standard) but also provides an Integrated Fuse Function (ff). This allows the SPD to maintain its full discharge capacity and reduces the overall voltage drop (Upf) across the protection circuit.

PROGRESSIVE PERFORMANCE INDICATOR



The progressive performance indicator allows the monitoring of the SPD degradation level locally, through the progressive performance status indicator, and remotely, via a remote signaling contact (whether available) that activates when the minimum performance is reached. The level of degradation is displayed through color changes (green-yellow-red) in the status display window. The transition from the initial green color (full performance) to completely yellow (minimum performance) occurs progressively. This shift provides advanced information about the end of life of the SPD, enabling timely maintenance and replacement.

POLLUTION DEGREE 3



Thanks to intensive research in materials and a specifically oriented design, ZOTUP SPDs achieve and satisfy Pollution Degree 3 requirements, with voltages up to 500 V AC and an extended temperature range (-40°C to +80°C). ZOTUP SPDs can be used even in particularly harsh environments with conductive pollution such as dust, salt spray, humidity, and condensation. In the presence of conductive pollution, SPDs can suffer severe damage, even without surges. This feature not only ensures greater reliability but also undeniable suitability for applications that cannot be satisfied with lower Pollution Degrees or normal temperature ranges.

HIGH WITHSTANDING CAPACITY AGAINST TEMPORARY SURGES



A surge protection device is designed to shield against high-frequency events lasting microseconds (kHz-MHz). Often underestimated, the faults that occur at 50 Hz, commonly referred to as Temporary Overvoltages or Industrial Frequency Overvoltages (f = 50 Hz), are particulary dangerous, they have a relatively long duration and are non-impulsive in nature. The SPD is a device that has to assure the **Withstand Mode (W)**, being able to withstand TOVs without being damaged. Some SPDs are also characterized by **Safe Failure Mode (S)**: the SPD fails but does so safely (without catching fire and maintaining its IP rating). The latter is the minimum accepted condition.



How to choose the right SPD?

Use our configurator

- Online
- Free
- Simple





