



**PRODUCT APPLICATION NOTE**

**Retail Electrical Protection**

**Implementing Reliable Surge Protection in Supermarkets**

*Ensure unparalleled reliability and availability of your electrical equipment and operational infrastructures with Strikesorb® Surge Protective Devices, a protection technology field proven and customized for retail installations worldwide.*



SPAR supermarkets are well known throughout Africa. In fact they are one of the largest supermarket chains on the continent. With hundreds of thousands of dollars invested in electrical equipment, cold rooms, blast freezers, bakeries, deli fridge counters, lighting,

electronic cash registers, security systems and more, the supermarket chain was looking for ways to help reduce the risk to their capital investments by protecting them from lightning and irregular power surges, common throughout Africa.

**The Challenge**

Faced with continuing problems and high maintenance costs due to frequent downtime caused by consistent power irregularities, SPAR corporate executives met with Raycap to learn more about their line of industrial surge protection solutions. Understanding the challenges of SPAR, Raycap tailored and installed a specific solution with Strikesorb modules. The difference that this solution made was so great that shortly thereafter SPAR began recommending the installation of Raycap surge protection solutions to other SPAR outlets.

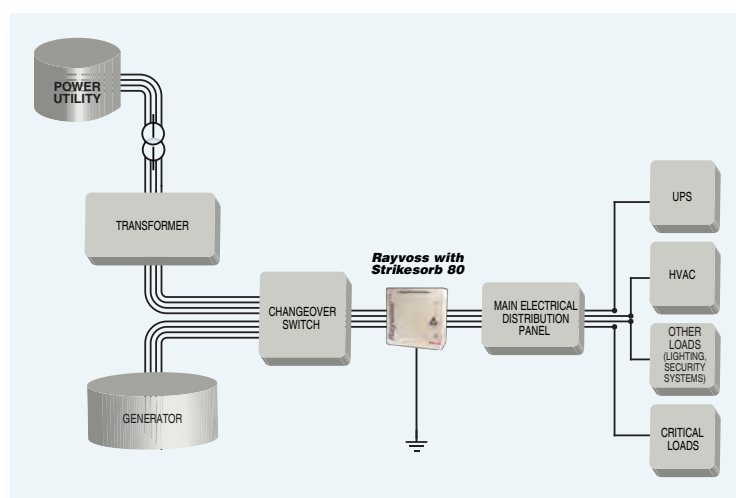


Figure 1: Recommended scheme for protection of critical systems



## Solution

Rayvoss® Surge Protective Devices (SPDs) are now installed inside a number of SPAR supermarkets on the main incoming AC power supply (Figure 1). The solution keeps the power steady by eliminating electrical transients which had caused continual damage amounting to hundreds of

thousands of dollars annually, from down time, maintenance, appliance replacement and loss of stock.

Thus far, the installation of these SPD solutions has proven to be a huge benefit to the supermarket chain by reducing operating expenses and improving the overall customer experience.

## Conclusion

Raycap solutions, featuring Strikesorb SPDs, are the ideal way to protect critical equipment from catastrophic failure and ensure the reliability and availability of all commercial retail functions.



Figure 3: SPAR interior installation of the Rayvoss system.



“ Prior to the installation of Raycap’s surge protection solution our supermarket was plagued with surges from our erratic utility supply and constant lightning storms. We needed reliable heavy-duty surge protection and have been more happy with the Rayvoss solution. ”

Marios Pavlou  
Managing Director  
Spar Supermarket Zimbabwe

Figure 2: A Rayvoss “A” system, that included Strikesorb 80s, a light-emitting diode (LED) indicator and surge counter was installed, after the generator changeover switch to regulate both utility surges and surges coming from the generator.



### Strikesorb Benefits

- Maintenance-free operation
- Safe operation: No smoke, fire or explosion
- Unique capability to withstand multiple high-energy transients
- Low let-through voltage, therefore providing excellent protection compared with competitive SPD products
- Class I/Class II compliant SPD per IEC 61643-11
- Global standards compliance: UL 1449 5<sup>th</sup> Edition, IEC, IEEE, NEMA
- 10 year global product warranty



**Raycap is a trusted partner, providing maintenance-free electrical protection solutions for mission-critical applications in hundreds of thousand installations worldwide. For a detailed presentation on how Raycap’s Strikesorb-based solutions can protect your retail operations, contact us today!**

# Raycap

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