

THE ULTIMATE OVERVOLTAGE PROTECTION

**Rayvoss®**



**Raycap**

**Modern electronics and semiconductor integrated circuits have contributed significantly to the development of our society and have stimulated a tremendous technological evolution.**

**Our society, relying on sophisticated electronics, has become dependant on the uninterrupted supply of electricity – downtime is no longer an option. Natural phenomena like lightning as well as power irregularities delivered from the power utilities are responsible for power failures and severe damages to sensitive electronic equipment connected to the power grid.**

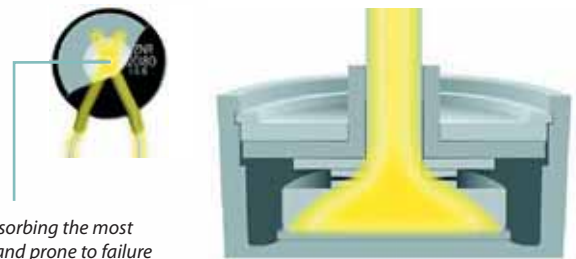
**Damages may be caused by single events, resulting in an immediate failure, or may be the result of the cumulative effect of several smaller scale events, which will eventually wear equipment out.**



# Rayvoss®

Over the years, several techniques were developed in an attempt to alleviate these problems but none were completely successful. A few years ago, an innovative concept was materialized into a new surge suppression module, **Strikesorb**. It proved to be able to withstand large amounts of surge energy while preserving its performance characteristics for several years and after multiple lightning and power surge events. Its design offers unique features including superior thermal management, resulting in the efficient deceleration of the ageing process of the distribution grade Metal Oxide Varistors it incorporates.

Strikesorb uses a compressed distribution grade Metal Oxide Varistor (MOV). The innovative deployment of field proven, large diameter MOVs, allows Strikesorb modules to provide premium performance under extreme conditions. Independent test data confirm that a 40mm Strikesorb module can withstand 100 kA strikes with 0% change in clamping voltage. The 80mm Strikesorb module can withstand strikes up to 200 kA thus, safeguarding critical electronic infrastructure against any potential threat.



Area absorbing the most energy and prone to failure

Comparison of energy dissipation methods between traditional MOVs and Strikesorb engines.



**T H E U L T I M A T E**

# Strikesorb®

Strikesorb is integrated into **Rayvoss** Transient Voltage Surge Suppression (TVSS) systems, which come in different configurations to offer unparalleled overvoltage protection in every possible electrical low voltage installation.

Strikesorb modules and Rayvoss TVSS systems are manufactured in Raycap Corporation's total quality control (ISO 9001) manufacturing facilities. Individual qualification testing and an automatically monitored tracking procedure ensure the highest quality for the Strikesorb modules and Rayvoss systems, delivered to customers worldwide. Raycap's TVSS systems have been installed in some of the most harsh environments around the globe and offer superior protection to customers' sites in the telecommunications, industrial, medical, residential and governmental sectors. Strikesorb technology has been proved effective in providing premium performance under extreme operating conditions, where other conventional suppression technologies have failed.

## Enhanced Safety and maintenance-free operation

Due to the fact that Strikesorb modules are designed to operate without fuses, parallel small diameter MOVs and diodes, they offer a lifetime of maintenance-free performance, resulting in significant operational cost savings to the customers.

Strikesorb is the only UL 1449 (2nd ed) overvoltage protection module, recognized to operate without an

internal fuse or thermal disconnection mechanism. Due to its "in-line" installation capability, whatever the line condition – from long duration surges, low current faults to high intensity lightning strikes – Strikesorb and Rayvoss TVSS will never leave the load unprotected, even under catastrophic conditions.

## Rayvoss versatility

Rayvoss TVSS systems deploy Strikesorb suppression modules in a variety of configurations and operating voltages to provide the electrical protection required, whatever the type of the installation may be:

- Single Phase, Split Phase, Three Phase Wye and Delta configurations
- 120, 240, 120/208Y, 220/380Y, 277/480Y, 347/600Y, 240D, 480D operating voltages
- Integration inside larger systems as well as power panels

## Well justified investment

Electronic infrastructure represents a sizeable investment that can be instantly destroyed without the proper surge protection, resulting in lost revenue or loss of critical functionality. Investing in Rayvoss TVSS solutions, featuring Strikesorb technology, allows customers to recognize huge returns coming from uninterrupted load operation under a wide variety of adverse conditions.



**O V E R V O L T A G E P R O T E C T I O N**



## Wide range of applications

- Cellular network radio base stations
- Microwave radio relay stations
- Telecommunication central offices
- Street cabinets housing telecommunications equipment
- Wireless rural telephony networks
- CATV networks
- Industrial controls and automations
- Mines
- Hospitals
- Defense installations
- Airports, radars and air traffic control and aviation communication systems
- High end residences
- Variable speed drives
- Railways and transportation applications
- Power plants and wind mill generators
- Broadcasting stations
- Data centers
- Semiconductor plants
- Office buildings



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