

## DC Surge Protection Solutions

# Strikesorb® 35 Module Series

Strikesorb 35-D-HV • Strikesorb 35-E-HV  
Strikesorb 35-F-HV • Strikesorb 35-G-HV

Raycap's innovative Strikesorb® 35 surge protective device is designed specifically for DC applications operating at voltage up to 1500V and is compliant with the UL 1449 5<sup>th</sup> Edition, IEC 61643-31, EN 61643-31 and IEC 61643-41 standards. Offering maintenance-free operation, it mitigates the risk of damage due to lightning and provides high levels of availability and reliability to DC power installations for example: photovoltaic, power semiconductor, and other applications.

### Strikesorb®



Strikesorb incorporates a single, heavy duty, distribution grade Metal Oxide Varistor (MOV) disk, assembled under pressure in an environmentally sealed aluminum casing. This unique design provides very low internal contact resistance, excellent thermal management and uniform distribution of the surge current over the total area of the protection element, thus resulting in an extremely high energy handling capability combined with very low let-through voltage. Strikesorb's design minimizes the effects of ageing and completely eliminates the risk of catastrophic failure, explosion or fire, which are common in conventional surge protective devices relying on the use of internal fuses and thermal disconnectors.

Strikesorb has been designed to withstand repeated surges providing a cost-effective and maintenance-free operation in harsh environments.

### Features

- Strikesorb 35 Surge Protective Device (SPD) is specifically designed for use in DC systems of operating voltage up to 1500V
- Strikesorb 35 is a Class I+II SPD per the IEC 61643-31, T1 + T2 SPD per IEC 61643-41 and a Type 2 Component Assembly SPD per UL 1449 5<sup>th</sup> Edition.
- Its unique design provides uninterrupted protection from damage caused by lightning. Strikesorb 35 is able to withstand direct lightning currents up to 12.5kA (10/350µs)
- Provides very low let-through voltage, unique for a Class I+II product, as it does not employ spark gaps or other switching elements
- Maintenance-free

## SPECIFICATIONS

# DC Surge Protection Solutions Strikesorb® 35 Module Series

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**Strikesorb®**

### Electrical

| Strikesorb 35 Models                                                    | D-HV<br>D-HV-M<br>D-HV-M10 | E-HV<br>E-HV-M<br>E-HV-M10   | F-HV<br>F-HV-M<br>F-HV-M10   | G-HV<br>G-HV-M<br>G-HV-M10   |
|-------------------------------------------------------------------------|----------------------------|------------------------------|------------------------------|------------------------------|
| Surge Protective Device (SPD) per UL 1449 5 <sup>th</sup> Edition       | N/A                        | Type 2<br>component assembly | Type 2<br>component assembly | Type 2<br>component assembly |
| Surge Protective Device (SPD) Class per IEC 61643-31                    | Class I+II                 | Class I+II                   | Class I+II                   | Class I+II                   |
| Maximum Continuous Operating DC Voltage [ $U_{cpv}$ ]                   | 650V                       | 800V                         | 1100V*                       | 1500V                        |
| Response Time [ $t_A$ ]                                                 | <1 ns                      | <1 ns                        | <1 ns                        | <1 ns                        |
| Nominal Discharge Current [ $I_n$ ] per UL 1449 5 <sup>th</sup> Edition | N/A                        | 20 kA 8/20 $\mu$ s           | 20 kA 8/20 $\mu$ s           | 20 kA 8/20 $\mu$ s           |
| Nominal Discharge Current [ $I_n$ ] per IEC 61643-31                    | 12.5 kA 8/20 $\mu$ s       | 12.5 kA 8/20 $\mu$ s         | 12.5 kA 8/20 $\mu$ s         | 12.5 kA 8/20 $\mu$ s         |
| Impulse Discharge Current [ $I_{imp}$ ] per IEC 61643-31                | 12.5 kA 10/350 $\mu$ s     | 12.5 kA 10/350 $\mu$ s       | 12.5 kA 10/350 $\mu$ s       | 12.5 kA 10/350 $\mu$ s       |
| Voltage Protection Rating (VPR) per UL 1449 5 <sup>th</sup> Edition     | N/A                        | 2000V                        | 2500V                        | 4000V                        |
| Voltage Protection Level [ $U_p$ ] per IEC 61643-31                     | 1800V                      | 2300V                        | 2800V                        | 4500V                        |

### Mechanical

|                                              |                  |                  |                  |                   |
|----------------------------------------------|------------------|------------------|------------------|-------------------|
| Environmental Ingress Protection (IP) Rating | IP 65            | IP 65            | IP 65            | IP 65             |
| Operating Temperature (°C)                   | -40 °C to +85 °C | -40 °C to +85 °C | -40 °C to +85 °C | -40 °C to +85 °C  |
| Dimensions                                   | Diameter         | 3.11" [79 mm]    | 3.11" [79 mm]    | 3.11" [79 mm]     |
|                                              | Height           | 3.43" [87 mm]    | 3.43" [87 mm]    | 3.43" [87 mm]     |
| Weight                                       | 2.12 lbs [964 g] | 2.14 lbs [972 g] | 2.16 lbs [980 g] | 2.27 lbs [1030 g] |

### Standards Compliance & Certifications

|                |                                                                                            |
|----------------|--------------------------------------------------------------------------------------------|
| Standards      | UL 1449 5 <sup>th</sup> Edition, IEC 61643-31: 2018, EN 61643-31: 2019, IEC 61643-41: 2025 |
| Certifications | UL, VDE (IEC 61643-31, EN 61643-31), CE                                                    |

\*1000V per UL 1449

-M: Strikesorb Metric Model Thread: M12  
-M10: Strikesorb Metric Model Thread: M10



**Raycap**

[www.raycap.com](http://www.raycap.com)