

# Strikesorb™

## The next generation surge suppression module

The Strikesorb surge suppression module is used either as a stand alone protection element integrated inside larger systems or within Rayvoss Transient Voltage Surge Suppressors. It incorporates a single, heavy duty, distribution grade Metal Oxide Varistor (MOV) disk, assembled under pressure in an environmentally sealed aluminum casing.

Strikesorb's unique design provides very low internal contact resistance, excellent thermal management of the MOV 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 voltages. Strikesorb's patented design minimizes the effects of ageing and completely eliminates the risk of catastrophic failure, explosion or fire, which are common in conventional surge protection devices.

Strikesorb incorporates state of the art MOV technology developments providing superior protection characteristics, which remain unchanged throughout its long service life. The module has been designed in order to withstand repeated surges providing a cost-effective and maintenance free operation in harsh environments.

Strikesorb is the only UL 1449 recognized surge protection module in the industry rated for safe operation without the use of additional internal fuses. This unique feature combined with its capability to be directly connected to the power lines or bus bars (in-line connection), makes it the most reliable surge protection device known and insures that critical electronic equipment will remain protected at all times.

Strikesorb is manufactured by Raycap Corporation in its ISO 9001 certified industrial facilities.

For more information on Strikesorb and Rayvoss TVSS solutions please visit our website:

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



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Strikesorb technology is protected by US and international patents held by Raycap Corporation.



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P R O D U C T I N F O R M A T I O N



**Raycap**

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## PRODUCT INFORMATION

	Strikesorb 40				Strikesorb 80			
Electrical Characteristics	Strikesorb 40-120	Strikesorb 40-240	Strikesorb 40-277	Strikesorb 40-380	Strikesorb 80-120	Strikesorb 80-240	Strikesorb 80-277	Strikesorb 80-380
Nominal Operating Voltage, Vn	120V	240V	277V	380V	120V	240V	277V	380V
Maximum Continuous Operating Voltage	150V	300V	350V	480V	150V	300V	350V	480V
Vref (peak) @ 5mAmp AC (peak)	263V	526V	607V	833V	263V	526V	607V	833V
Vref @ 5mAmp DC	252V	506V	587V	812V	250V	504V	582V	802V
Operating Frequency Range	25...500 Hz	25...500 Hz	25...500 Hz	25...500 Hz	25...500 Hz	25...500 Hz	25...500 Hz	25...500 Hz
Leakage Current at Vn	0.30mA	0.35mA	0.40mA	0.45mA	0.80mA	0.85mA	0.90mA	0.95mA
<b>Surge Protection Levels</b>								
Surge Voltage Rating (SVR)	400V	800V	900V	1500V	330V	700V	900V	1200V
Response Time	<1ns	<1ns	<1ns	<1ns	<1ns	<1ns	<1ns	<1ns
<i>Maximum Surge Current</i>								
Maximum Surge Current, I <sub>max</sub> (8/20) NEMA LS-1	100kA	100kA	100kA	100kA	200kA	200kA	200kA	200kA
Maximum Lightning Current, I <sub>imp</sub> (10/350) IEC 61643-1					25kA	25kA	25kA	25kA
<i>Let Through Voltage Level</i>								
for surge current 10kA* (8/20) (IEEE C62.41-1)	435V	895V	1025V	1355V	405V	800V	930V	1260V
<i>Long Duration Surge Performance</i>								
1kA square waveform 2msec (IEEE C62.11)					250hits	250hits	250hits	250hits
500A square waveform 2msec (IEEE C62.11)	250 hits	250hits	250 hits	250hits				
<b>Direct (in-line) Installation Guidelines</b>								
	Strikesorb 40 modules have been tested for safe installation behind: <ul style="list-style-type: none"> <li>• 600A time delay fuse at available fault current 100kA</li> <li>• 200A breaker at available fault current 100kA</li> <li>• 400A breaker at available fault current 38kA</li> </ul> Strikesorb 40-380 has been tested behind a 800A breaker at available fault current 65kA				Strikesorb 80 modules have been tested for safe installation behind: <ul style="list-style-type: none"> <li>• 1600A time delay fuse at available fault current 200kA</li> <li>• 200A breaker at available fault current 100kA</li> <li>• 400A breaker at available fault current 38kA</li> </ul> Strikesorb 80-380 has been tested behind a 800A breaker at available fault current 65kA			
<b>Environmental Properties</b>								
Operating Temperature (°C)	-40...+85	-40...+85	-40...+85	-40...+85	-40...+85	-40...+85	-40...+85	-40...+85
Environmental Protection	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
<b>Mechanical Properties</b>								
Diameter in (cm)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)	4 (10.16)	4 (10.16)	4 (10.16)	4 (10.16)
Height in (cm)	3.72 (9.45)	3.72 (9.45)	3.72 (9.45)	3.72 (9.45)	3.68 (9.35)	3.68 (9.35)	3.68 (9.35)	3.68 (9.35)
Weight lb (gr)	0.80 (363)	0.80 (363)	0.81 (367)	0.82 (372)	1.98 (898)	1.98 (898)	2.03 (921)	2.07 (939)
<b>Standards Compliance</b>								
	IEEE C62.41, IEEE C62.45, IEEE C62.11, NEMA LS-1							
	IEC 61643-1, IEC 61643-12							
<b>Listings</b>								
	UL 1449 2nd ed.							
	CE							

\*Actual surge current through Strikesorb