



About RSE Surge Protection

Raycap's RSE Series is comprised of three product lines, each designed and engineered to fit specific customer applications. Using Raycap's unique stacked MOV design, the RSE line offers a more robust Surge Protective Device (SPD), with lower let through voltages and higher surge current capacities in a smaller footprint. Available at three different levels, RSE protection is versatile and can be tailored to the needs of a specific installation. The series ranges from 25kA per mode up to 200kA per mode with 20kA I-nominals and 200kA Short Circuit Current Ratings (SCCRs). The products feature many options including on-board event counters with time & date stamps; full color LCD touch screen display with real time voltage/current power quality monitoring; event log with time & date stamp; user settable alarm thresholds; ability to check percent protection remaining and HTTP or SNMP communication links.

About Strikesorb®/ Rayvoss® Protection

Raycap's patented Strikesorb technology is integrated into the Rayvoss systems. 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 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. With Strikesorb components ranging in size from 40mm (140kA per mode) to 80mm (200kA per mode), Rayvoss systems provide the first line of defense in protecting any facility from the higher amplitude transients propagating from outside sources (i.e. lightning, utility, etc.).

Advanced Monitoring Benefits

Raycap's Advanced Monitoring option combines power quality monitoring and surge protection into a single package. The device can monitor voltage, current, frequency, power factor, kW, kVAR, and kVA. It also includes an event log with time & date stamp for power quality anomalies that are user settable with adjustable thresholds. The monitoring can communicate via http or SNMP.

SETUP Raycap	
Region:	Rest of world
Frequency:	50 Hz
CT ratio:	2500:1
Passcode:	1 2 3 4
1 2 3 4 5 6	

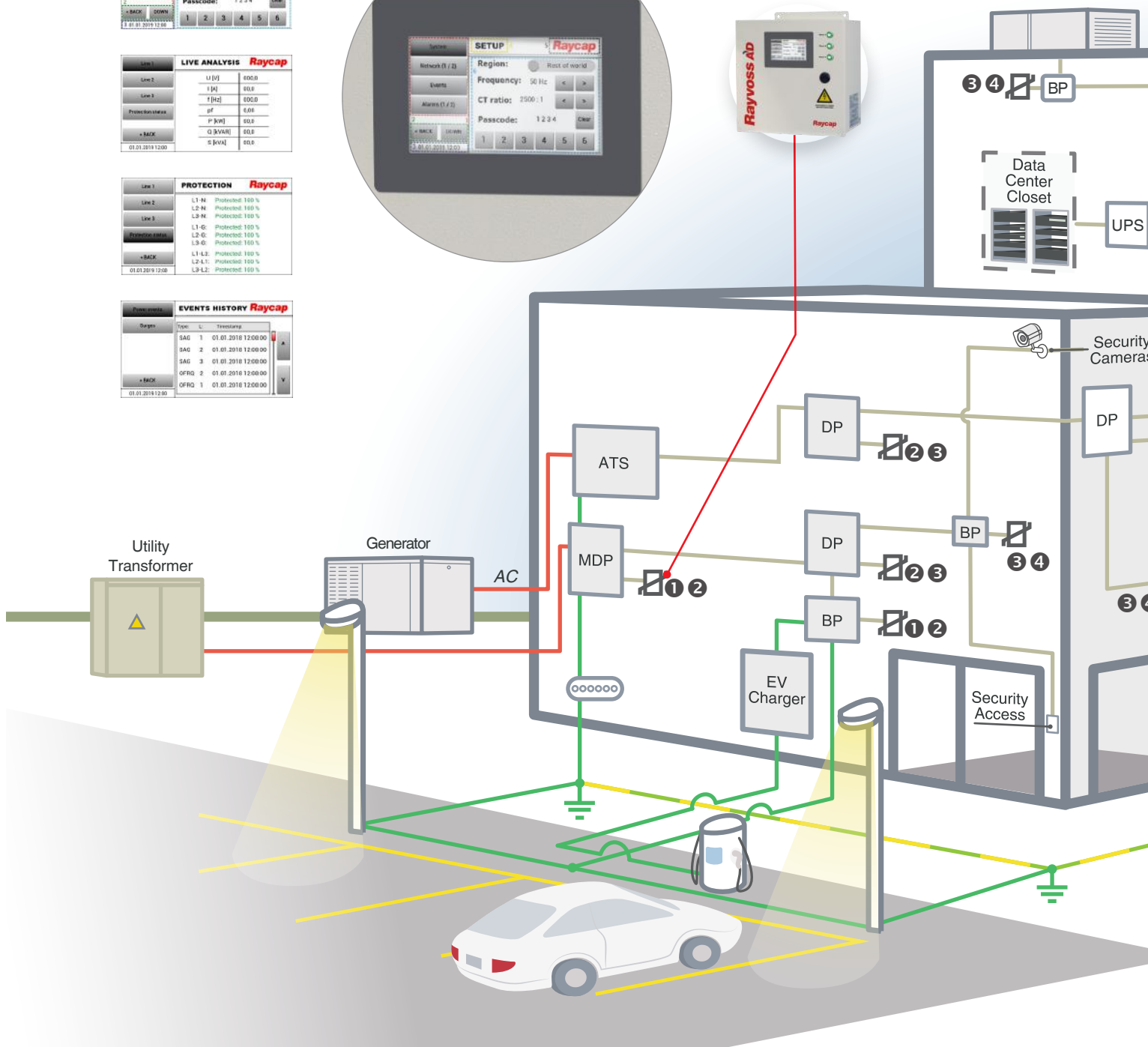
LIVE ANALYSIS Raycap	
Line 1	LI [V] 400.0
Line 2	I [A] 10.0
Line 3	f [Hz] 50.0
Protection status	pf 0.98
+BACK	P [kW] 100.0
	Q [kVAR] 50.0
	S [kVA] 110.0

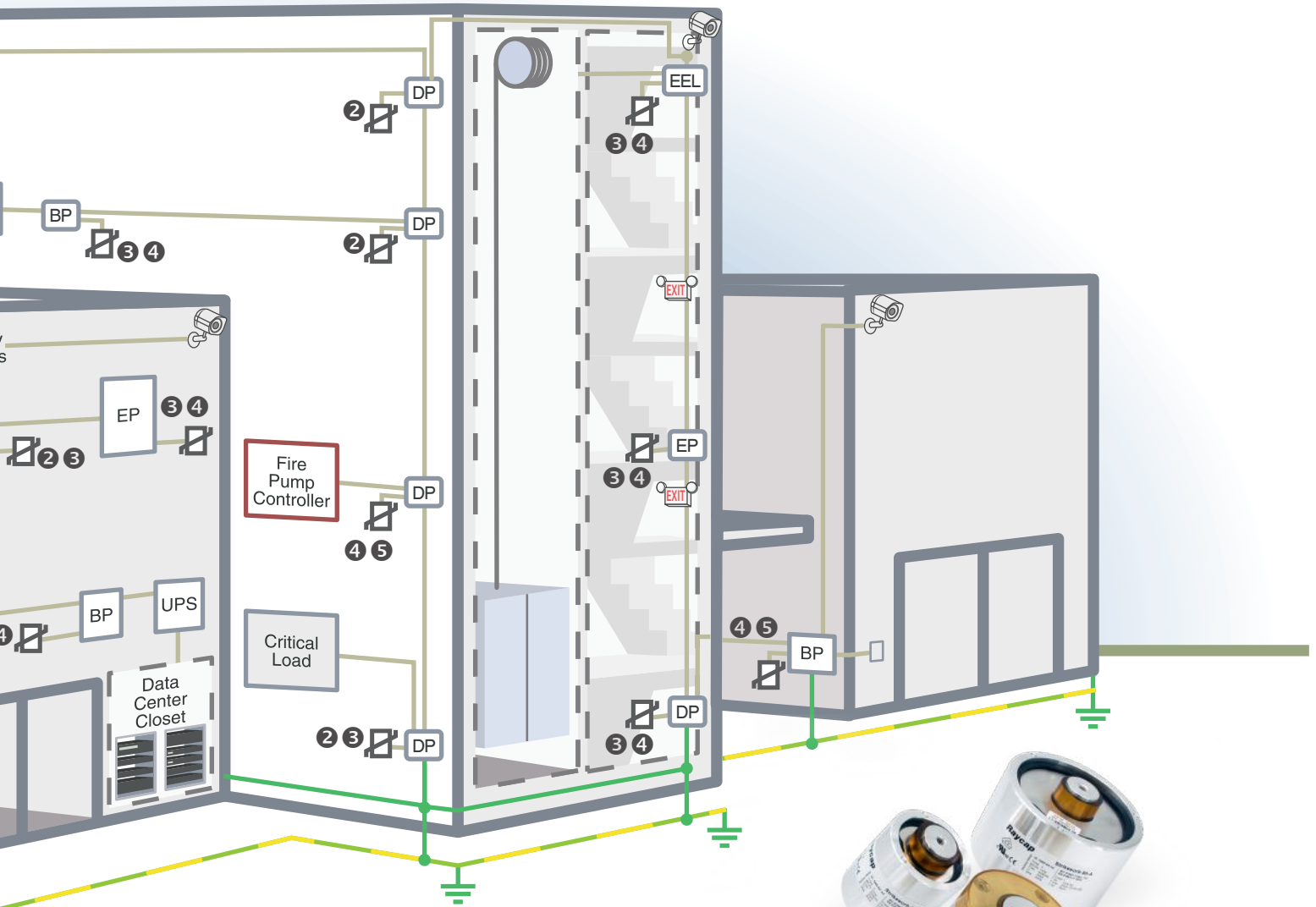
PROTECTION Raycap	
Line 1	L1-N Protected: 100%
Line 2	L2-N Protected: 100%
Line 3	L3-N Protected: 100%
Protection status	L1-G Protected: 100%
	L2-G Protected: 100%
	L3-G Protected: 100%
	L1-L3 Protected: 100%
	L2-L1 Protected: 100%
	L3-L2 Protected: 100%

EVENTS HISTORY Raycap		
Time	Type	Severity
01.01.2016 12:00	SAG	1
01.01.2016 12:00	SAG	2
01.01.2016 12:00	SAG	3
01.01.2016 12:00	DFREQ	2
01.01.2016 12:00	DFREQ	1



Rayvoss AD Protection Monitoring





protected by
Strikesorb®

Adding effective lightning or transient voltage surge protection to your operation is easy using Raycap's RSE or Rayvoss SPD products. Raycap's industrial surge protection lines and technologies provide solutions for all low voltage AC power protection challenges, and can meet the operational or ROI demands of any customer. Raycap's commitment to bringing advanced surge protection technologies is seen in the wide variety of high performance SPDs (Surge Protective Devices) they bring to market, including their unique patented Strikesorb technology

Industrial-grade surge SPDs from Raycap are your best defense against power surges of any type. These devices are appropriate for every low voltage commercial and industrial power application including building infrastructure, wind, solar, telecommunications, and transportation.



		Rayvoss 80mm	Rayvoss 40mm	RSE-3	RSE-2	RSE-1
Application of product on this guide		❶	❷	❸	❹	❺
IEC Class I Direct Lightning Strike (10/350µs)	25kA	✓				
Withstand	12.5kA	✓	✓			
Passed UL 3-Cycle Test		✓	✓			
IEEE C62.11 Life Expectancy Testing (250, 2ms Square-wave impulses)		✓	✓			
Solid Aluminum Bus Construction		✓	✓			
Repetative Impulse (life Cycle) Testing	600 direct lightning strikes (10/350µs)	✓	✓			
	5000 10kA 8/20µs	✓	✓	✓	✓	✓
TOV Ride-through (Double line overvoltage for 7,200 cycles)		✓	✓			
Strikesorb Technology		✓	✓			
MOV Pill Stack Technology				✓	✓	✓
EMI/RFI Filtering				Optional	Optional	
UL 1449 20kA I-nominal Rating		✓	✓	✓	✓	✓
UL 1449 Type Designation	Type 1			✓	✓	✓
	Type 2	✓	✓	✓	✓	
200kA UL Short Circuit Current Rating (SCCR)		✓ *	✓ *	✓	✓	✓
10 Year Warranty		✓	✓	✓	✓	✓
Connection Method	In Line (2-Port)	✓	✓			
	In Parrallel (1-Port)	✓	✓	✓	✓	✓
NEMA 4 Metal Enclosure		✓	✓	✓	✓	
Disconnect Switch		Breaker Fed	Breaker Fed	Optional		
Surge Current Rating (mode/phase)	Up to 200kA/400kA	✓		✓	✓	
	Up to 140kA/280kA		✓			
	Up to 50kA/100kA					✓
Real Time Voltage and Current Power Monitor		Optional	Optional	Optional		
Embedded Web Page or SNMP Communication		Optional	Optional	Optional		
User settable alarms and thresholds		Optional	Optional	Optional		
Event Counter with Time & Date Stamp		Optional	Optional	✓	Optional	
Surge Counter		Optional	Optional	✓	Optional	
Audible Alarms		Optional	Optional	✓	✓	Optional
Dry Contacts		✓	✓	✓	✓	Optional
LEDs		✓	✓	✓	✓	✓

*With an appropriately rated breaker