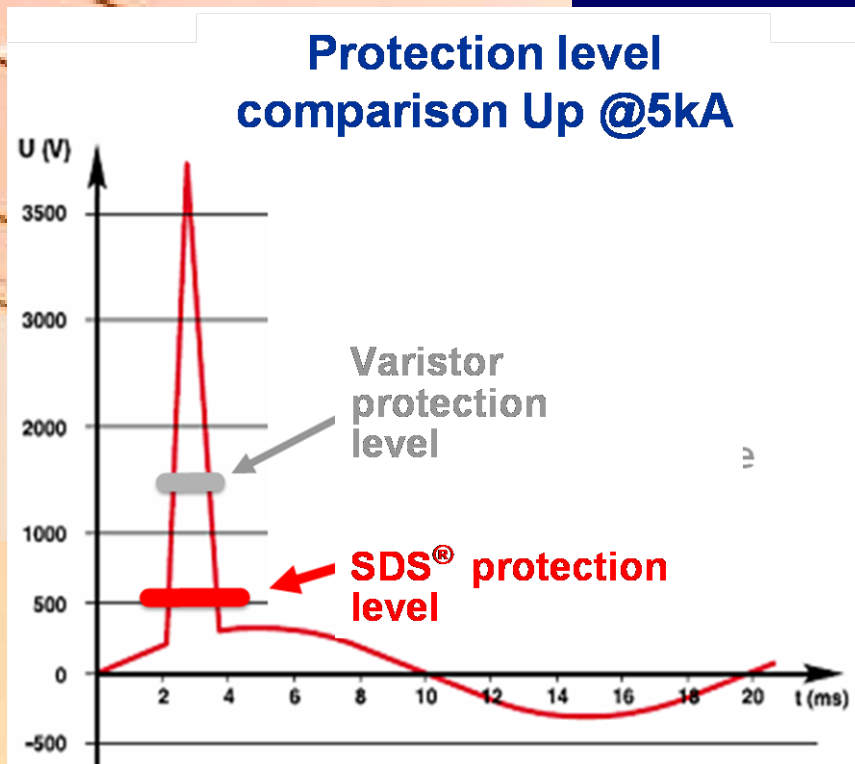


SDS[®] Surge Defence System

innovative electronic
surge protection



Costruzioni Elettromeccaniche P. Torresan
<http://www.torresansrl.it/>

- Unmatched Protection Levels compare to varistor technology
 - SDS is the only one in the market with a diagnostic system which can detect the operating status and faults of short-circuit and/or open circuit
 - Bi-directional protection, fundamental for electromagnetic coupling and data communication
- **No maintenance.** The replacement frequency is cut down drastically due to the strong reduction of leakage currents that instead trigger overheating and the aging of the varistor
- Programmable trip threshold on request
 - Diagnostic device and network quality (optional)
- LED display for proper operation, thermal fault, open circuit failure, degree of aging
 - SPDT contacts for remote information

A new
thechnology:
**SDS Surge
Defence
System[®]**



Surge and fulminations



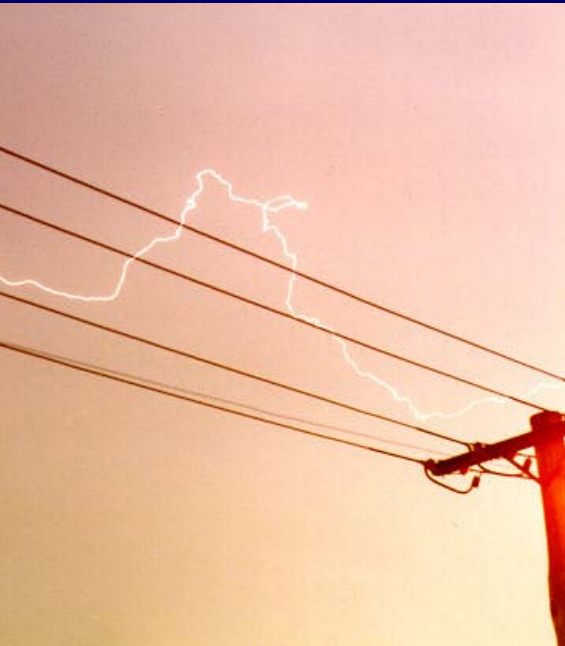
Surges are made from voltage spikes propagate on the supply lines (single / three phase) or data / voice lines, these spikes have a durations of less than 1 ms but a spread that reach more than 20 times the nominal supply voltage.

Without surge protection this spike goes directly to the connected device, triggering electric stress causing device malfunction or a lifetime reduction.

Today's system are still based on the varistor technology, a resistance that stops the contact by melting temperature, but varistor tolerances is too large for current electronic systems and it's impossible to have a real monitoring of functionality status.

The new technology SDS Surge Defence System[®]

- The onset of lightning or surge voltage, a detector circuit activates that closes an high-energy switch non-linear load can withstand high energies. **The values of capacity and parasitic inductance resonant in the circuit helping off-line and recovering this energy.**
- SDS[®] protection can be used to protect all types of lines: from energy to broadcasting. The lowest insertion loss (*a few microamps of current internal dissipation against varistors calculable in milliamps*) SDS[®] can be used also to the midrange, with a protection far higher than the devices currently used
- Ability to monitor the operation and life cycle (remotely or visually led) to make a reasonable maintenance.
- Monitoring of interventions with transient measurement of network quality

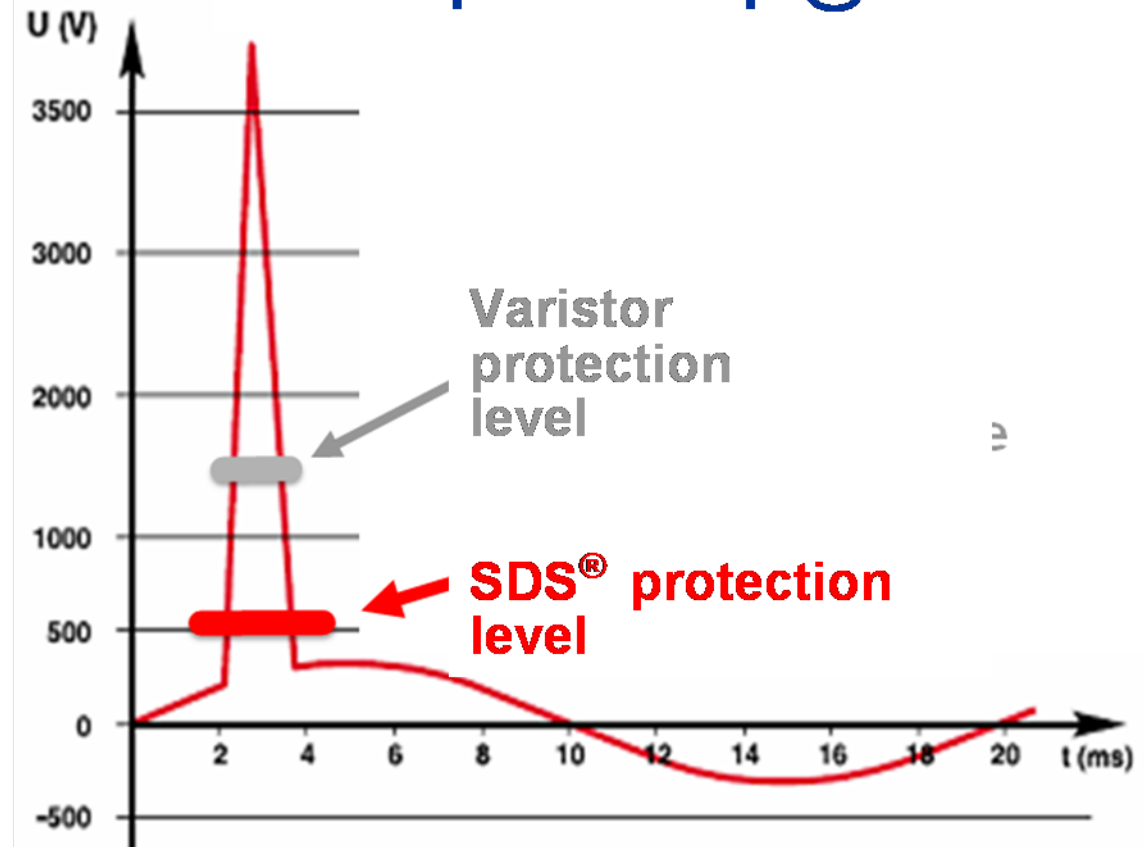


SDS[®] - Surge Defence System[®]

Today's systems are still based on the varistor technology, with highest protection tolerances and w/o diagnostic systems.

SDS[®] technology is able to offer a double protection levels compare to varistor one, with an integrate diagnostic system.

Protection level comparison Up @5kA



Data sheet sample

SPECIFICHE TECNICHE		500VDC	600VDC	1000VDC	1200VDC
1.	Tensione a vuoto PV	500	600	1000	1200
2.	Corrente nominale In 8/20us (L+ /L- - PE)	20KA	20KA	20KA	20KA
3.	Corrente massima impulsiva di scarica	40kA	40kA	40kA	40kA
4.	Livello di protezione Up @5KA (L+ - L-)	1,2KV	1,5KV	2KV	2,5KV
5.	Temperatura Operativa	-25 - 80°C	-25 - 80°C	-25 - 80°C	-25 - 80°C
6.	Temperatura Stoccaggio	-25 - 80°C	-25 - 80°C	-25 - 80°C	-25 - 80°C
7.	Umidità	95	95	95	95
8.	Dimensioni(W)	3M (54mm)	3M (54mm)	3M (54mm)	3M (54mm)
9.	Peso	TBD	TBD	TBD	TBD
10.	Contentitore UL94-V0	PC/ABS	PC/ABS	PC/ABS	PC/ABS
11.	Colore	7035	7035	7035	7035
12.	Materiale	PC/ABS	PC/ABS	PC/ABS	PC/ABS
13.	Grado di protezione	IP20	IP20	IP20	IP20
14.	Contatti remoti segnale	0,5mmq	0,5mmq	0,5mmq	0,5mmq
15.	Contatti di potenza	1,5 – 35mmq	1,5 – 35mmq	1,5 – 35mmq	1,5 – 35mmq
16.	Standard	EN61643-11	EN61643-11	EN61643-11	EN61643-11
17.	Classe d'impiego	II	II	II	II

A full range of products for each needs

Broadcasting
Industrial
PV
Rail
MIL



Costruzioni Elettro- meccaniche P. Torresan



Since 1955, flexibility and ability to innovate in the electromechanical and power electronics.

Production

Since 1955 we have been operating in the areas of protection and control, signal, industrial alarm and heaters manufacturing products and systems for installation in power plants, cabins, control panels in the energy, electricity and industry automation.

Engineering in power electronics

Experience of constant attention and advice to our customers' systems comes the division of research and development Tor Engineering: through international expertise of technological innovation and product and develop with a pool of young engineers we'll provide innovative solutions in power electronics

***Since 1955, flexibility and ability to innovate in
the electromechanical and power electronics***

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