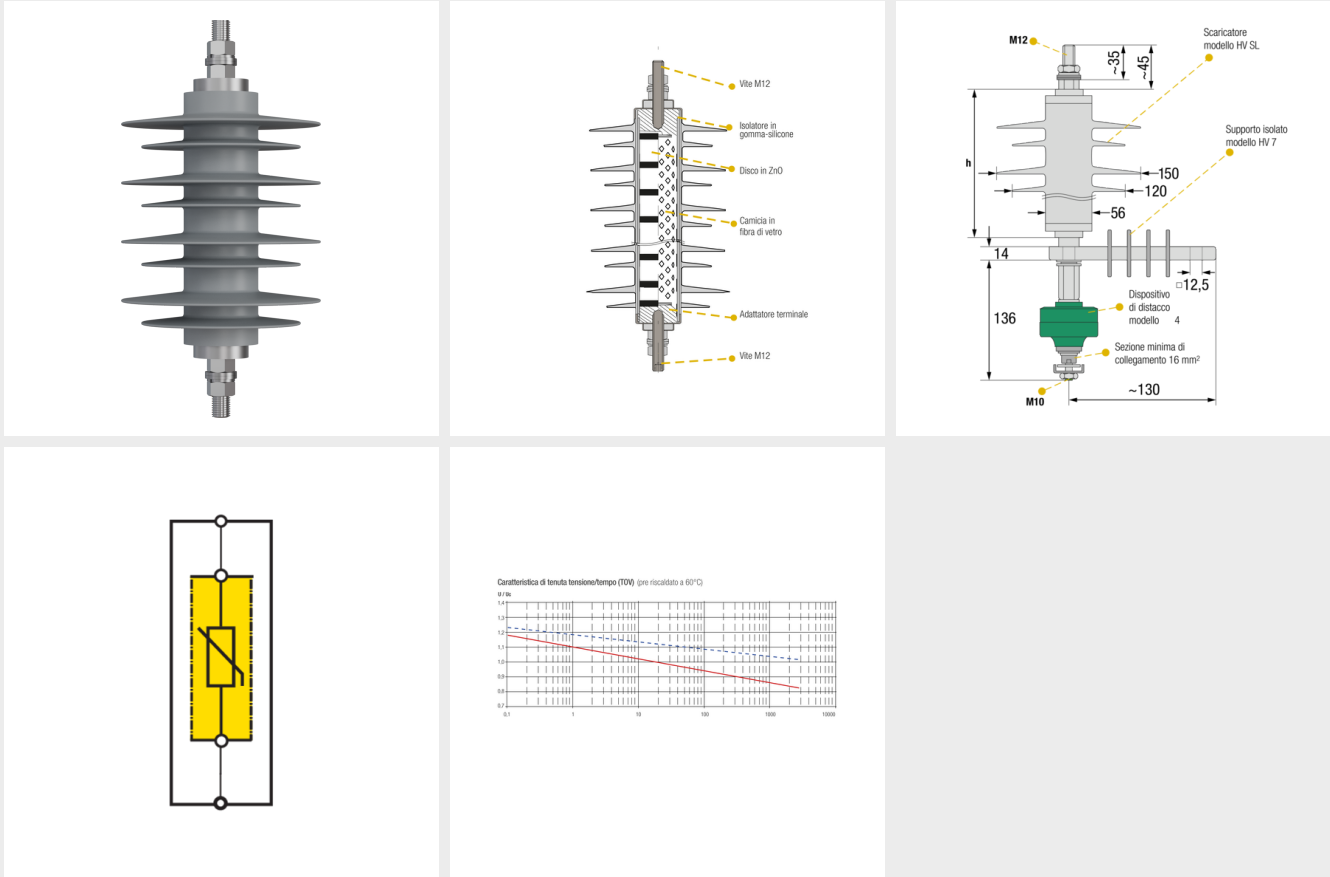


SURGE ARRESTERS FOR HIGH VOLTAGE SYSTEM (HV) ZOTUPHV | HV SL 18



Technical Data

HV SL 18 is a High Voltage surge arrester for the protection of transformers, metalclad switchgears and transmission lines from atmospheric and switching overvoltages, ideal for indoor or outdoor applications and where high levels of pollution is expected.

Features and benefits

- Surge arresters with thermal energy dissipation performance greater than 4.5 kJ/kV are available on request.
- Surge arrester with silicone rubber insulator and increased creepage distance to cover all possible applications: indoor, outdoor, in high contamination environments, and in case of short circuit.
- Surge limiter available with disconnecter device activated by internal pressure increase in case of short circuit, with long-term stable mechanical operation and characteristics.
- Optional impulse counters and impulse counters with milliammeter for indicating total leakage current (internal and surface leakage).
- The installation of these arresters on the medium/high voltage side simplifies the selection of SPDs on the low voltage side required for LV equipment protection;
- Compliant with IEC/EN 60099-4 Ed. 3.0 (2014-06);
- They represent the state of the art in zinc oxide arresters without spark gaps and with silicone rubber insulators;
- Very high short-circuit current withstand capability;
- Particularly reduced overall height of the arrester;
- High tightening torque of line terminals;

- The construction and manufacturing process prevent partial discharges;
- Sealed with aluminum caps and finished with stainless steel clamps, screws, and washers.

ZOTUPHV | HV SL 18

Code		130 418
Nominal voltage	Un	18 kV
Continuous service voltage		14,4 kV
Class (IEC 60099-4 Ed. 3.0; 2014-06)		Station Low SL
Thermal energy rating kJ/kV of Ur (IEC 60099-4 Ed. 3.0; 2014)		4,5 kJ/kV a Ur
Repetitive charge transfer rating	Qrs	1,2 C
Thermal charge transfer rating	Qth	1,1 C
Nominal discharge current (8/20 µs)	In	10 kA
Rated frequency		from 48 Hz up to 62 Hz
High current impulse		100 kA 4/10 µs
Short-circuit current capability		63 kA
Long duration impulse current		500 A / 2000 µs
Temporary overvoltage TOV 1 sec.	U1s	19,8 kV
Temporary overvoltage TOV 10 sec.		18,4 kV
Max. residual voltage / Protection level: 10 kA (1/2 µs) STIPL	Upl	51,9 kV
Max. residual voltage / Protection level: 5 kA (8/20 µs) LIPL	Upl	44,1 kV
Max. residual voltage / Protection level: 10 kA (8/20 µs) LIPL	Upl	47,9 kV
Max. residual voltage / Protection level: 20 kA (8/20 µs) LIPL	Upl	52,8 kV
Max. residual voltage / Protection level: 40 kA (8/20 µs) LIPL	Upl	60,8 kV
Switching impulse residual voltage 500 A (30/70 µs) Spil	Ups	36,6 kV
Switching impulse residual voltage 500 A (30/70 µs) Spil	Ups	37,9 kV
Switching impulse residual voltage 2000 A (30/70 µs) Spil	Ups	39,7 kV
Switching impulse residual voltage 3000 A (30/70 µs) Spil	Ups	41,0 kV
Surge arrester insulation - Withstand volatge (dry)		64 kV
Surge arrester insulation - Withstand volatge (wet)		42 kV
Surge arrester insulation - Lightning impulse withstand		92 kV
Creepage distance total		762 mm
Surge arrester distance - Phase/Phase LL		246 mm
Surge arrester distance - Phase/Ground LE		203 mm
Ambient temperature range		-60 ... +60 °C
Altitude		up to 1000 m a.s.l.
Torsional strength		100 Nm
Specified short-time tensile strength		500 Nm
Specified long-term tensile strength		350 N
Tensile strength		1400 N
Approximate weight		2 kg
Isolator		Rubber - HTV silicone
Dimension: height		208 mm
Insulator color		Gray RAL 7040