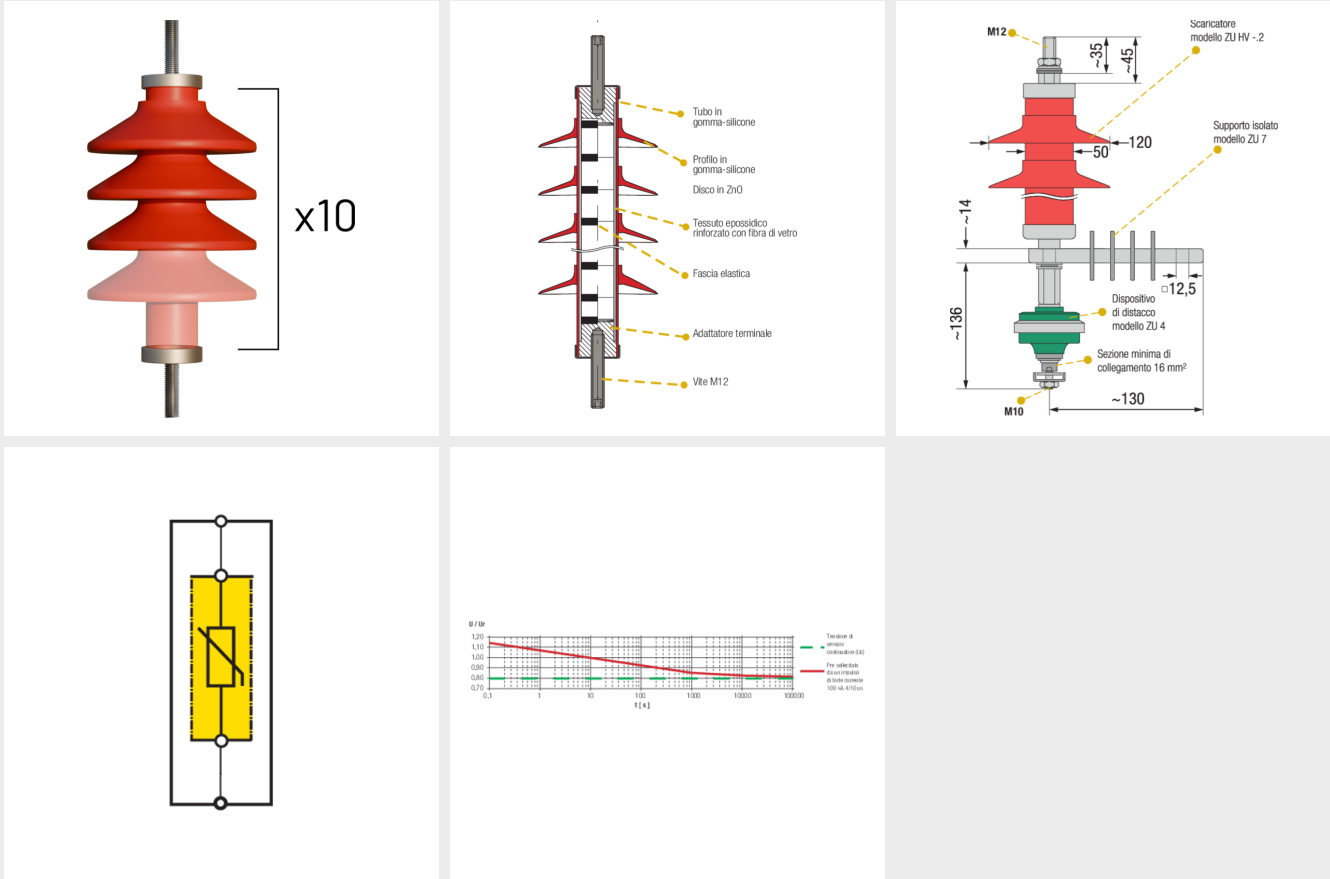


SURGE ARRESTERS FOR HIGH VOLTAGE SYSTEM (HV)

ZOTUPHV | HV 45,2



Technical Data

HV 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, with the following features and benefits:

Features and benefits

- Installation of these surge arresters on the HV -side simplifies the selection of the surge protective devices on the low voltage side (in TN or TT systems) which are intended to protect against transient phenomena coming from the line;
- Compliant with IEC/EN 60099-4;
- State of the art metal oxide surge arresters without a spark gap and with silicon rubber housing;
- Size and volume of the surge arresters based on the practical minimum for each nominal voltage;
- The isolator of the surge arrester is characterized by the absence of junction lines;
- The construction and manufacturing process prevent partial discharges;
- Sealed with aluminium fittings and terminead with stainless steel clamps, screws and washers.

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Code		120 445
Nominal voltage	Un	45 kV
Continuous service voltage		36,0 kV
Class (IEC 60099-4 Ed. 3.0; 2014-06)		distribution DH high
Line discharge class (IEC 60099-4 ed. 2.2; 2009-02)		2
Max. thermal energy absorption capability (IEC 60099-4 ed. 3.0; 2014-06)		4,5 kJ/kV a Ur
Repetitive charge transfer rating	Qrs	0,4 C
Thermal charge transfer rating	Qth	1,1 C
High current impulse		100 kA 4/10 µs
Long duration impulse current		500 A / 2000 µs
Nominal discharge current (8/20 µs)	In	10 kA
Temporary overvoltage TOV 1 sec.	U1s	51,8 kV
Temporary overvoltage TOV 10 sec.		49,1 kV
Max. residual voltage / Protection level: 10 kA (1/2 µs) STIPL	Upl	128,4 kV
Max. residual voltage / Protection level: 20 kA (1/2 µs) STIPL	Upl	142,5 kV
Max. residual voltage / Protection level: 5 kA (8/20 µs) LIPL	Upl	111,6 kV
Max. residual voltage / Protection level: 10 kA (8/20 µs) LIPL	Upl	120 kV
Max. residual voltage / Protection level: 20 kA (8/20 µs) LIPL	Upl	133,2 kV
Max. residual voltage / Protection level: 40 kA (8/20 µs) LIPL	Upl	150 kV
Switching impulse residual voltage 125 A (40/100 µs) Spil	Ups	87,6 kV
Switching impulse residual voltage 500 A (40/100 µs) Spil	Ups	93,6 kV
Surge arrester insulation - Withstand volatge (dry)		152 kV
Surge arrester insulation - Withstand volatge (wet)		100 kV
Surge arrester insulation - Lightning wet impulse withstand		222 kV
Short circuit current performance		20 kA
Operating temperature range / Humidity		-40 ... +55 °C
Creepage distance total		1215 mm
Surge arrester distance - Phase/Phase LL		440 mm
Surge arrester distance - Phase/Ground LE		370 mm
Torsional resistance		80 Nm
Bending resistance		250 Nm
Tensile strength		1400 N
Nominal frequency		from 16 Hz to 62 Hz
Altitude		up to 1000 m a.s.l.
Approximate weight		3,6 kg
Dimension: height		414 mm