VARISIL™ HE-S
Extra Strong Distribution
Surge Arresters

TRIDELTA Parafoudres S.A.
A member of the TRIDELTA group

With 50 years of experience in surge protection, TRIDELTA provides products suitable to the user's expectations.

Distribution VARISIL™ HE-S surge arresters are derived from VARISIL™ HE range with doubled cantilever strength.

Appropriate surge protection increases the quality of power supply and minimizes system outage costs.

THE RIGHT SURGE ARRESTER AT THE RIGHT PLACE !

Our VARISIL™ HE-S is of polymer housed gapless metal oxide type dedicated to overvoltage protection of Distribution networks especially where high mechanical strength is required (e.g. surge arrester used as post-insulator).

The metal oxide varistor blocks are manufactured by ourselves using our own formulas and processes.

These blocks are mechanically bounded in a fiberglass reinforced epoxy resin, encapsulated in a silicone rubber housing providing outstanding insulation performance and low losses.

VARISIL™ HE-S surge arrester fulfils all requirements of IEC 60099-4 (10kA / Line Discharge Class 1) and ANSI/IEEE C62.11 (Distribution Heavy Duty) latest editions.

Customer benefits :

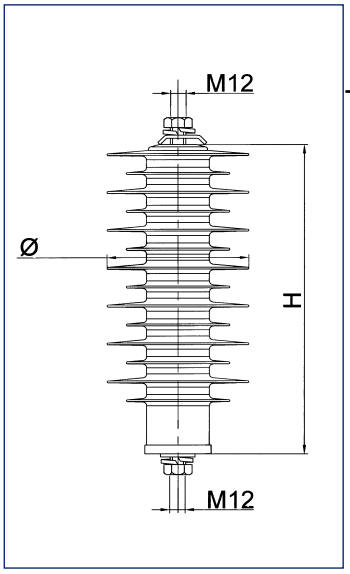
- Equipment and public safety
- Improved power quality
- Restrained residual voltage
- Superior mechanical withstand

VARISIL™ HE-S

STANDARD VERSION : NO OPTION

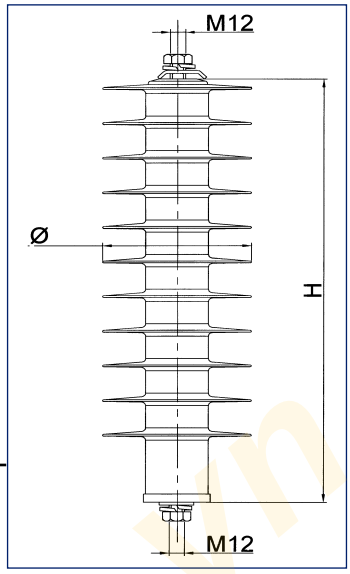
The surge arrester is supplied with bolts, washers and clamp for connection.

The VARISIL™ HE-S is also available with other options and/or accessories (ground lead disconnector, brackets, pedestals,...).



HE-S 05-36

Fig. 1



HE-S 39-42

Fig. 2

Rated Voltage (Ur)	5 to 42 kV rms
Nominal discharge current (In)	10 kA with 8/20 waveshape
Line discharge class	1 (*)
High current impulse withstand	100 kA with 4/10 waveshape
Long duration current impulse withstand	300 A with 2000µs waveshape
Energy absorption capability (with 4/10 waveshape)	4.8 kJ/kV of Uc
Maximum permissible static service load	20 daN.m
Short circuit current withstand	20 kA / 0.2s - 600 A / 1s

(*) : for higher line discharge classes, refer to our HI and HTS products

Model	Unit	HE-S 05	HE-S 06	HE-S 09	HE-S 10	HE-S 12	HE-S 15	HE-S 18	HE-S 21	HE-S 24	HE-S 27	HE-S 30	HE-S 33	HE-S 36	HE-S 39	HE-S 42
Rated voltage Ur	kV rms	5	6	9	10	12	15	18	21	24	27	30	33	36	39	42
Continuous operating voltage Uc	kV rms	4.25	5.1	7.65	8.4	10.2	12.7	15.3	17.5	20.0	22.5	25.0	27.5	30.0	32.5	35.0
Maximum residual voltage	kV peak															
- at 5kA 8/20		14.3	15.4	26.4	27.5	30.8	40.7	46.2	56.1	61.2	72.2	76.2	87.2	91.7	102.0	107.2
- at 10kA 8/20		15.2	16.4	28.1	29.3	32.8	43.3	49.1	59.7	65.1	76.8	81.1	92.8	97.5	108.5	114.0
- at 20kA 8/20		16.8	18.1	31.1	32.4	36.2	47.8	54.3	66.0	71.9	84.9	89.6	102.5	107.5	119.9	126.0
Switching residual voltage at 500A - 30/80	kV peak	12.1	13.0	22.3	23.3	26.1	34.4	39.0	47.5	51.8	61.1	64.5	73.8	77.5	86.3	90.6
Steep current impulse residual voltage at 10kA - 1/2.5	kV peak	16.4	17.7	30.3	31.6	35.4	46.8	53.0	64.5	70.3	82.9	87.6	100.2	105.3	117.2	123.1
Lightning impulse withstand level of housing	kV 1.2/50	95					110		125		170				200	
Creepage distance	mm	480					650		800		1200				1025	
Dimensions H	mm	165					205		245		325				365	
ø	mm	106					111				116				116	
Fig. No.		1													2	
Weight (NO option)	kg	1.0	1.0	1.2	1.2	1.3	1.6	1.7	2.0	2.1	2.5	2.6	2.8	2.9	3.3	3.4

TRIDELTA Parafoudres S.A.
Boulevard de l'Adour - 65202 BAGNERES DE BIGORRE - FRANCE
Tel : + 33 (0)5 62 95 84 50
www.tridelta.de