

VARISIL™ HE

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.

Overvoltage protection is of key importance for utilities to improve their networks' quality and reliability

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 is of polymer housed gapless metal oxide type dedicated to overvoltage protection of Distribution networks.

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.

Our VARISIL™ HE surge arrester fulfils all requirements of IEC 60099-4 (10kA / Line Discharge Class 1).

Customer benefits :

- Continuity of service
- Equipment and public safety
- Improved power quality
- Maintenance-free
- Increased lifetime
- Restrained residual voltage



VARISIL™ HE

The VARISIL™ HE is available with different options and accessories.

NO OPTION

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

S3D2 OPTION

The surge arrester is supplied with a ground lead disconnecter and an insulating bracket. This option is recommended for improved continuity of service.

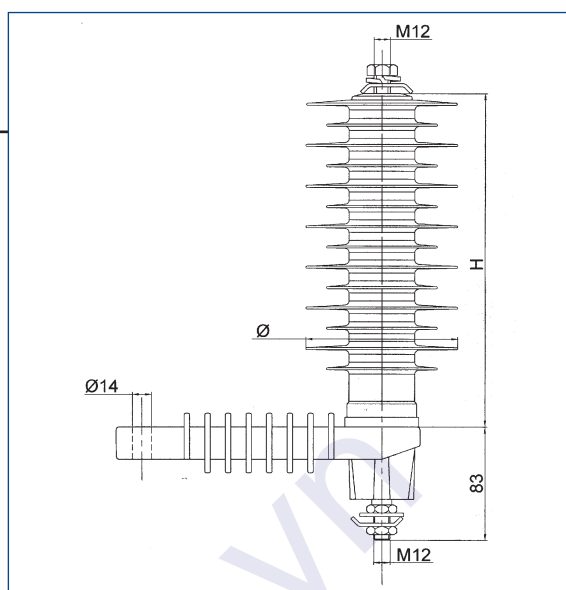
IF OPTION

The surge arrester is supplied with an electronic fault indicator using a red flag for easy visualization.

ACCESSORIES

- Metal bracket for horizontal or vertical mounting,
- Ground lead,
- Pedestal (insulated or not).

S3D2 option



(*) : for higher mechanical performance, refer to our HE-S or HI products

| | |
|--|-----------------------------|
| Rated Voltage (Ur) | 5 to 36 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 | 10 daN.m (*) |
| Short circuit current withstand | 20 kA / 0.2s - 600A / 1s |

| Model | Unité | HE 05 | HE 06 | HE 09 | HE 10 | HE 12 | HE 15 | HE18/R | HE-S 21 | HE-S 24 | HE-S 27 | HE-S 30 | HE-S33 | HE-S42 |
|--|---------|-------|-------|-------|-------|-------|-------|--------|---------|---------|---------|---------|--------|--------|
| Rated voltage Ur | kV rms | 5 | 6 | 9 | 10 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | | | 104 | | | 109 | | | | | 114 | | 116 |
| Weight (S3D2 option) | kg | 1.3 | 1.3 | 1.5 | 1.5 | 1.6 | 2.0 | 2.1 | 2.5 | 2.6 | 3.1 | 3.2 | 3.4 | 3.5 |

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