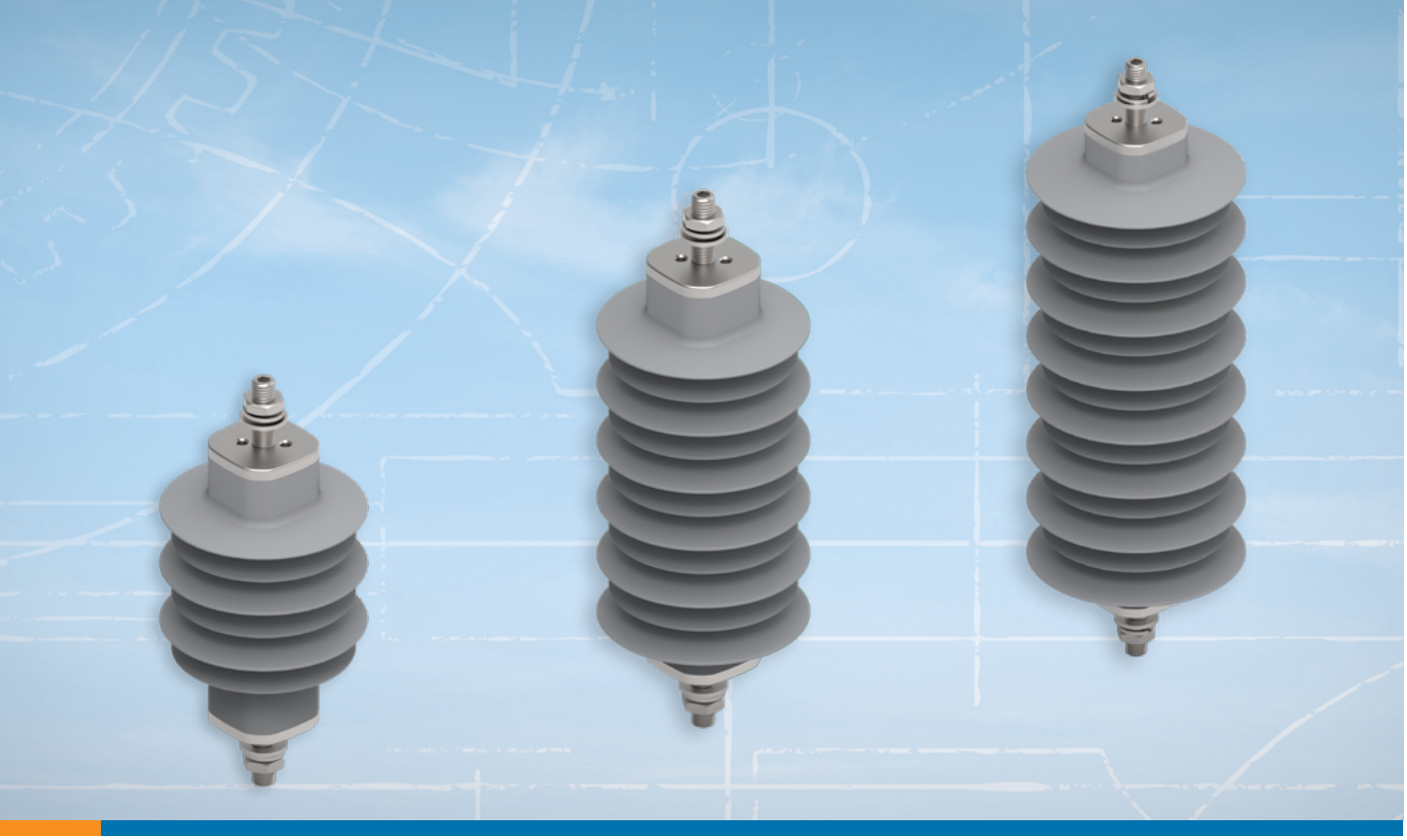


DOV MEDIUM VOLTAGE SURGE ARRESTERS

3 - 36 kV RATED VOLTAGE, DH CLASSIFICATION

KEY FEATURES

- Directly molded housing prevents moisture ingress
- Safe non-shattering short circuit behavior to higher current levels
- Cage design
- Type tests are independently verified in accordance with IEC60099-4, Ed 3.0 (2014)
- Alternating sheds for best pollution flash over resistance
- Hydrophobic silicone housing for outdoor use
- Excellent operating performance & long service life

TE Connectivity's (TE) Bowthorpe EMP pioneered the development of polymeric composite housed surge arresters in the early 1980's and since then has a proven service experience across the globe operating in very tough environments. The Distribution Over Voltage (DOV) surge arresters have been designed and tested to meet our customers tough environmental conditions.

TE's Bowthorpe EMP DOV surge arresters tests were carried out under the supervision of independent and accredited european test laboratories to meet the requirements of the latest edition of the IEC 60099-4 standard. These products are the latest gapless, zinc oxide surge arresters family from TE's Bowthorpe EMP range. The DOV arresters are manufactured using high quality ZnO varistors, which display excellent thermal and current handling characteristics due to the guaranteed homogeneity of the varistor volume.

The DOV surge arrestor's crimped structural construction ensures lightweight product with optimal mechanical strength. The manufacturing process ensures void free construction and optimum interface sealing. This is achieved by bonding the silicone housing directly to the ZnO discs and aluminium end fittings using a special bonding solution.

Applications include protection of medium voltage networks and equipment from switching and lightning surge related over-voltages in areas with relatively high iso-keraunic levels. Suitable for both outdoor and indoor use to protect transformers and cable terminations.

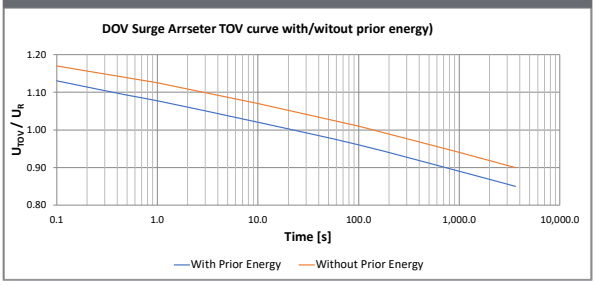
Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

DOV Medium Voltage Surge Arresters

High quality design and manufacturing to International Standards.
ISO 9001 and 14001 compliant.

Table 1: Technical data	
Commercial Designation	DOV
DOV Series - Rated Voltage Range (Ur)	3 - 36 kV
Creepage	405 - 1128 mm
Rated Discharge Current (8/20 µs)	10 kA
Energy Classification According to IEC 60099-4 (Ed. 3.0)	DH
Repetitive Charge Transfer Rating (Qrs)	0.4 C
Thermal Charge Transfer Rating (Qth)	1.1 C
High Current Short Circuit: (pre-failing method)	20 kA
SSL	225 Nm
SLL	175 Nm

TEMPORARY OVERVOLTAGE WITHSTAND CURVE



U_{TOV} = Temporary Overvoltage Withstand

TABLE 2: PRODUCT SELECTION INFORMATION

Description	U_R	U_C	Residual Voltage - kV				Extended Housing
			Lightning - [8/20 µs]		Steep Lightning - [1/20 µs]	Switching - [30/60 µs]	
	kV	kV	at 5 kA	at 10 kA	at 10 kA	at 500 A	
DOV-03A	4.5	2.4	12.6	13.7	15.1	10.4	B, C, D or E
DOV-04A	4.5	3.2	12.6	13.7	15.1	10.4	B, C, D or E
DOV-05A	6	4	16.8	18.3	20.1	13.9	B, C, D or E
DOV-06A	6	4.8	16.8	18.3	20.1	13.9	B, C, D or E
DOV-09A	9	7.2	25.2	27.4	30.1	20.8	B, C, D or E
DOV-10A	10.5	8.4	29.4	32.0	35.2	24.3	B, C, D or E
DOV-12A	12	9.6	33.7	36.6	40.3	27.8	B, C, D or E
DOV-13B	13.5	10.4	37.3	40.5	44.6	30.8	C, D or E
DOV-15B	15	12	41.4	45.0	49.5	34.2	C, D or E
DOV-16B	16.5	12.8	45.5	49.5	54.5	37.6	C, D or E
DOV-18B	18	14.4	49.7	54.0	59.4	41.0	C, D or E
DOV-19B	19.5	15.2	53.8	58.5	64.4	44.5	C, D or E
DOV-21B	21	16.8	58.0	63.0	69.3	47.9	C, D or E
DOV-22B	22.5	17.6	62.1	67.5	74.3	51.3	C, D or E
DOV-24C	24	19.2	66.2	72.0	79.2	54.7	D or E
DOV-27D	27	21.6	74.5	81.0	89.1	61.6	E
DOV-28D	28.5	22.4	78.7	85.5	94.1	65.0	E
DOV-30D	30	24	82.8	90.0	99.0	68.4	E
DOV-31E	31.5	24.8	86.9	94.5	104.0	71.8	-
DOV-33E	33	26.4	91.1	99.0	108.9	75.2	-
DOV-36E	36	28.8	99.4	108.0	118.8	82.1	-

U_C = Continuous operating voltage, U_R = Rated voltage,

TABLE 3: PRODUCT HOUSING PARAMETERS

Maximum Rating (Ur - kV)	No. of Sheds	Flashover Distance (mm)	Creepage Length (mm)	Arrester (body) Height (mm)
Housing 'A' ≤ 12 kV	6	162	405	160
Housing 'B' ≤ 22 kV	11	234	697	229
Housing 'C' ≤ 24 kV	13	266	817	258
Housing 'D' ≤ 30 kV	15	304	945	298
Housing 'E' ≤ 36 kV	15	318	1128	298

Typical product description: DOV-24C-F0F0N0-S

ORDERING INFORMATION

For accessories, other surge arrester product information and/or ordering information please refer to brochure EPP-3144-6/18 or e-mail us at surgearresters@te.com.

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