

TE Connectivity's Bowthorpe EMP Medium Voltage (MV) Surge Arrester

DOV Series

MV surge arrester tested to IEC 60099-4: 2014 (Ed. 3.0) standard
DOV series rated voltage range: 3 – 36 kV

Product naming convention

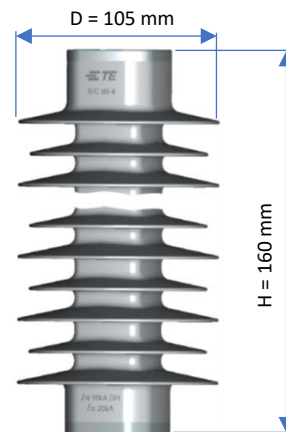
DOV - **12**¹ **A**² - **LL**³ **EE**⁴ **MM**⁵ - **P**⁶ - **MOD**⁷

- ¹ Rated Voltage - U_R
- ² Housing creepage code
- ³ Line lead accessory
- ⁴ Earth lead accessories
- ⁵ Mounting accessories
- ⁶ Packaging option
- ⁷ Modification code (optional)

Rated voltage U_R **12 kV**

Continuous Operating Voltage U_C **9.6 kV**

For accessory (^{3,4,5}) and packaging (⁶) options please refer to brochure EPP-3144



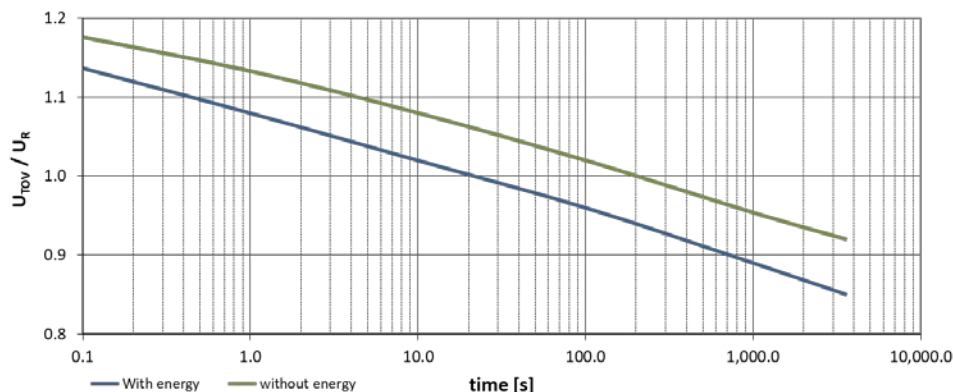
Main features		Arrester housing - A *		Unit	
Housing	Silicone	Impulse voltage 1.2/50 μs	kV	174	
Nominal discharge current - I _n	10 kA (8/20 μs)	Power frequency voltage - wet	kV	46	
Class – Distribution High	DH	Overall length (H) / Diameter (D)	mm	160 / 105	
High current impulse	100 kA (4/10 μs)	Flashover distance	mm	162	
Energy absorption capability		Creepage length	mm	405	
Repetitive charge transfer rating Q _{rs}	0.4 C	Approx. body weight	kg	1.3	
Thermal charge transfer rating Q _{th}	1.1 C	No of sheds		6	
Short circuit rating (pre-failing method)		Cantilever strength SSL / SLL	Nm	225 / 175	
Rated short-circuit I _s 0.2s	20 kA	Tensile strength	N	1000	
Low short-circuit current	600 A	Max. torque M12	Nm	40	
<ul style="list-style-type: none"> ▪ Safe non-shattering design ▪ Suitable for installation in polluted environments ▪ Silicone directly moulded to ZnO varistors 		* Other housing sizes available – Please contact TE Connectivity. 100% Routine tested: Residual voltage, reference voltage, internal partial discharge tests.			

Residual voltage U_{RES} (kV_{peak}) – maximum values

At lightning current impulse (8/20 μs)				At steep lightning current impulse (1/20 μs)	At switching current impulse (30/60 μs)	
5 kA	10 kA	20 kA	40 kA	10 kA	125 A	500 A
33.7	36.6	41.4	47.0	40.3	26.0	27.8

Power frequency voltage versus time curve (TOV)

1 s TOV without prior energy: 13.6 kV
10 s TOV without prior energy: 13.4 kV



Product marking

TE logo
Bowthorpe EMP

DOV-12
U_C: 9.6 kV
U_R: 12 kV
IEC 60099-4
I_s 20 kA
I_n 10 kA
DH
Manufacturing year

MVSA-867-11/2018-N-0

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