

# 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

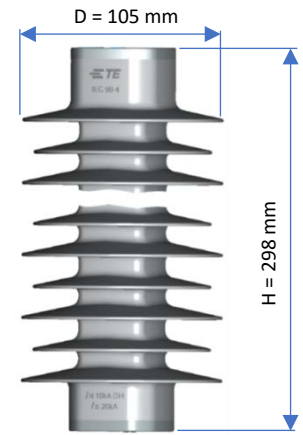
### Product naming convention

**DOV** - **27**<sup>1</sup> **D2** - **LL**<sup>3</sup> **EE**<sup>4</sup> **MM**<sup>5</sup> - **P6** - **MOD**<sup>7</sup>

- <sup>1</sup> Rated Voltage - U<sub>R</sub>
- <sup>2</sup> Housing creepage code
- <sup>3</sup> Line lead accessory
- <sup>4</sup> Earth lead accessories
- <sup>5</sup> Mounting accessories
- <sup>6</sup> Packaging option
- <sup>7</sup> Modification code (optional)

Rated voltage U<sub>R</sub>                                **27 kV**  
Continuous Operating Voltage U<sub>C</sub>    **21.6 kV**

For accessory (<sup>3</sup>, <sup>4</sup>, <sup>5</sup>) and packaging (<sup>6</sup>) options please refer to brochure EPP-3144

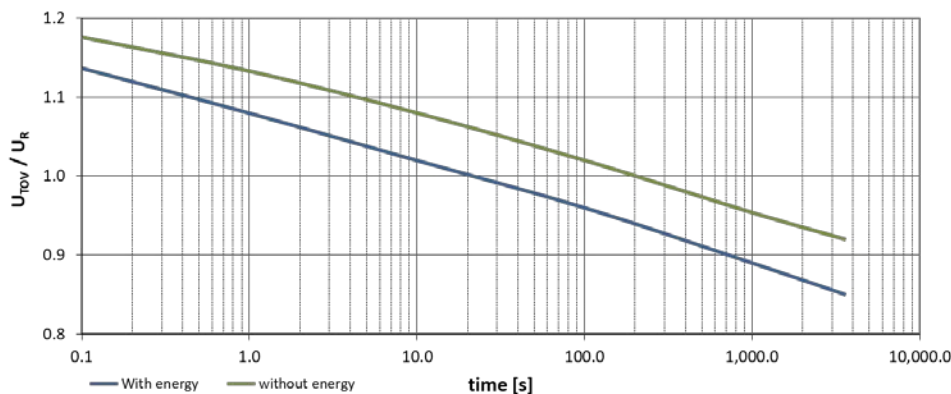


Main features		Arrester housing - D *		Unit	
Housing	Silicone	Impulse voltage 1.2/50 μs		kV	230
Nominal discharge current - I <sub>n</sub>	10 kA (8/20 μs)	Power frequency voltage - wet		kV	98
Class – Distribution High	DH	Overall length (H) / Diameter (D)		mm	298 / 105
High current impulse	100 kA (4/10 μs)	Flashover distance		mm	304
Energy absorption capability		Creepage length		mm	945
Repetitive charge transfer rating Q <sub>rs</sub>	0.4 C	Approx. body weight		kg	2.3
Thermal charge transfer rating Q <sub>th</sub>	1.1 C	No of sheds			15
Short circuit rating (pre-failing method)		Cantilever strength SSL / SLL		Nm	225 / 175
Rated short-circuit I <sub>s</sub> 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"> <li>▪ Safe non-shattering design</li> <li>▪ Suitable for installation in polluted environments</li> <li>▪ Silicone directly moulded to ZnO varistors</li> </ul>		* Other housing sizes available – Please contact TE Connectivity. 100% Routine tested: Residual voltage, reference voltage, internal partial discharge tests.			

Residual voltage U <sub>RES</sub> (kV <sub>peak</sub> ) – 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
74.5	81.0	91.5	104.0	89.1	57.6	61.6

### Power frequency voltage versus time curve (TOV)

1 s TOV without prior energy: 30.7 kV  
10 s TOV without prior energy: 30.2 kV



### Product marking

TE logo  
Bowthorpe EMP  
  
DOV-27  
U<sub>C</sub>: 21.6 kV  
U<sub>R</sub>: 27 kV  
IEC 60099-4  
I<sub>s</sub> 20 kA  
I<sub>n</sub> 10 kA  
DH  
Manufacturing year

MVSA-884-11/2018-N-0

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