Protection for substation application requirements

Eaton's Cooper Power series VariSTAR station-class surge arresters

Eaton has set a new standard of excellence for UltraSIL silicone rubber-housed station-class surge arresters. Eaton's Cooper Power series VariSTAR station-class arresters provide the perfect solution for your substation applications.

Eaton's Cooper Power™ series VariSTAR™ station-class arresters have been tested to meet and exceed the demanding requirements of IEEE Std C62.11™-2020. In addition, they have been tested to meet IEEE Std 693 high seismic zone construction requirements.

The superior performance of the UltraSIL™ silicone rubber housing is field-proven under the most demanding conditions. The unique high creep alternating shed profile has been designed to withstand the most extreme environmental conditions.

VariSTAR station-class arresters have been designed with advanced features to meet the demands of substation applications.

Powering Business Worldwide

Energy ratings

VariSTAR station-class arresters come in multiple models:

- **UIAA** model Class C rated disks (6 kJ/kV) of MCOV up to a 108 kV arrester
- **USAA** model Class C and E rated disks (6 kJ/KV and 9 kJ/kV) of MCOV up to a 240 kV arrester
- **UHAA** model Class E and G rated disks (9 kJ/kV and 13 kJ/kV) of MCOV up to a 240 kV arrester
- **UXAA** model Class G rated disks (13 kJ/kV) of MCOV up to a 108 kV arrester
- **UXL** model Class H rated disks (15 kJ/kV) of MCOV up to a 360 kV arrester

Arrester characteristic rating	UIAA	USAA	UHAA	UXAA	UXL
Arrester voltage ratings (kV)	3-108	3-240	3-240	3-108	3-360
Energy classification	C	C/E	E/G	G	H
Single Impulse Withstand (C)	1.2	1.2/1.6	1.6/3.6	3.6	6
Switching surge energy rating* (kJ/kV)	6	6/9	9/13	13	15
System frequency (Hz)	50/60	50/60	50/60	50/60	50/60
Pressure relief rating (kA rms sym.)	40	63	63	63	63
Cantilever strength (in-lbs)					
Ultimate cantilever strength (in - lbs)	10,000	15,000/20,000	20,000/35,000	35,000	80,000/92,000
Static cantilever strength** (in - lbs)	4,000	6,000/8,000	8,000/14,000	14,000	32,000/36,800

* Energy levels per IEEE Std C62.11™-2020 standard

** Maximum design cantilever load — static or maximum working load is 40% of the ultimate.

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