

TOSHIBA

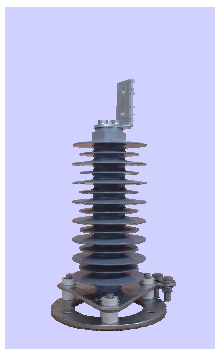
Leading Innovation >>>

POLYMER SURGE ARRESTERS

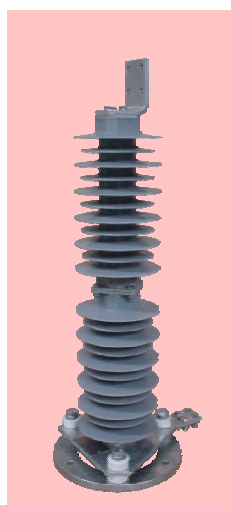
TOSHIBA for more than 80 years has offered surge arresters with continuously improved quality standards and technologies ahead of prevalent times. With improved manufacturing technology and strict quality control systems certified under ISO-9001, TOSHIBA developed Polymer Surge Arresters which are widely used for their reliable performance.

- Features -

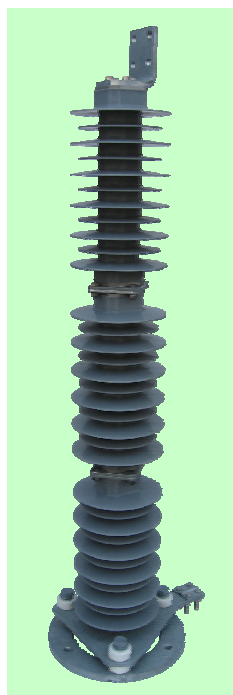
- Compact and Lightweight
- Extremely Safe Pressure Relief Performance
- Superior Performance against Environmental Contamination
- **Directly Molded** Structure / ZnO Elements with **Lead Free** Glass
- Compliance with International Standards
(IEC60099-4, IEEE Std. C62.11)
- High Seismic Qualification Level specified in **IEEE693**
- Simple Support Structure
- Manufactured at Advanced **ISO-9001** certified facilities



~ 36kV



~ 72.5kV



~ 145kV



~ 170kV



~ 245kV

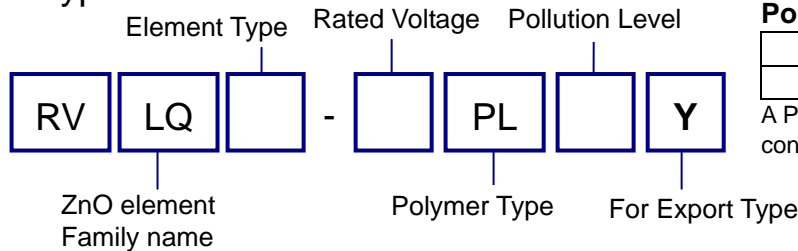
Maximum System Voltage

Standard Ratings

IEC Line Discharge Class		Class 2		Class 3
Type		RVLQD	RVLQC	RVLQC
Maximum System Voltage	(kVrms)	3.6 - 170	3.6 - 245	3.6 - 170
Rated Voltage (Ur)	(kVrms)	3 - 150	3 - 210	3 - 150
Nominal Discharge Current	(kAcrest)	10		
High Current Impulse Capability	(kAcrest)	100		
Short-circuit Capability	(kArms)	65		
Discharge Voltage Ratio	(V10kA/Ur)	2.60	2.45	2.45
Energy Absorption Capability *	(kJ/kV-Ur)	4.5	6.0	8.5

*) Energy absorption capability means the total dissipated energy per two shots of switching surge that the surge arrester can thermally withstand.

- Type Form -



Pollution Level

V	Very Heavy	31 mm/kV
H	Heavy	25 mm/kV

A Pollution Level greater than 31mm/kV is considerable upon the customer's request.

- Evaluation on Type Test -

TOSHIBA Polymer Surge Arresters have been fully type tested and proved its excellent performances on the following items.

- Safety Pressure Relief
- High Pollution Level
- Excellent Water Resistance
- Long Term Operation Reliability

Test Examples



Short-circuit Test



Water Immersion Test
(Boiling in Salt Water)



Heat Cycle Test
(Freezing)

Accessories

Surge counters (SDC-N4 = Non ammeter type/ SDC-N4A = Ammeter attached type) can be supplied upon the customer's request.

Type	SDC-N4	SDC-N4A
Indication of Counter	6 digit cyclometer at least 5 counts/sec.	
Minimum Operating Current	30 A (8/20μs)	
Maximum High Current Withstand Capability	100 kA (4/10μs)	
Residual Voltage at 100kA(4/10μs)	5kV peak and below	
Switching Impulse Current Withstand	4000A X 2ms	
Ammeter Scale	--	0 - 5 mArms (linear scale)



SDC-N4



SDC-N4A

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The data in this leaflet is effective as of Aug. 2006 and subject to change without notice. (AH-G1801-06P)