



MEDIUM VOLTAGE SURGE ARRESTER SPA SERIES - INDOOR

KEY FEATURES

- Maintenance free
- Superior TOV performance
- High energy handling capability
- Tested in accordance with IEC60099-4
- Superior protection margins
- Excellent cantilever and tensile performance
- Excellent mechanical, vibration and impact withstand capability

TE Connectivity's (TE) Raychem pioneered the development of the compact SPA arrester. It has high mechanical strength, is fully track resistant, and can provide flashover resistance in damp indoor conditions.

The SPA type arrester is also available with a thick-wall insulated integrated line lead, which allows for a considerable reduction in the clearances between the arresters and to the earth. This line lead is available in lengths of 250 mm, 500 mm and 750 mm.

This SPA-I type arrester is the ideal solution when retrofitting compact switchgears with arresters.

With over 40 years proven global core of the SPA arrester uses an improved ZnO varistor disk, which has superior thermal and electrical characteristics and stability.

TE's Raychem SPA surge arresters have been designed and tested to meet IEC60099-4 international standards. This new varistor and design combination results in superior energy handling and TOV performance. The wrapped structural construction offers a light weight product with high mechanical strength.

Applications for the SPA include protection of air-spaced insulated medium voltage switchgear networks and equipment from lightning and switching surge related over-voltages in areas with relatively high iso-keraunic levels.

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

Medium Voltage Surge Arrester - SPA Series



High quality design and manufacturing.
ISO 9001 and 14001 compliant.

TABLE 1: TECHNICAL DATA

Rated discharge current (8/20 μ s)	10 kA
Line discharge class 1 according to	IEC 60099-4, class 1
Operating duty impulse withstand current (4/10 μ s)	100 kA
Long duration current impulse (2000 μ s)	400 A
10 second TOV, (U_{TOV}/U_c)	1,3
High current short circuit: (pre-failing method) (Safe non-shattering failure mode)	16 kA
Energy	line discharge impulse high current impulse
	2.0 kJ/kV U_c 3.2 kJ/kV U_c
Cantilever	200 Nm
Tensile	1000 N
Torque	58 Nm



TABLE 2: PRODUCT SELECTION INFORMATION

Description	Height (mm)	U_c kV	U_r kV	Residual Voltage - kV (Using IEC Standard Impulses)				
				Lighting - [8/20 μ s]			Steep Lighting - [1/20 μ s]	Switching - [30/60 μ s]
				at 10 kA	at 20 kA	at 40 kA	at 10 kA	at 500 A
SPA-06	137,5	6	7,5	19,9	21,9	24,9	21,3	15,6
SPA-09	166,5	9	11,25	29,9	32,8	37,4	32,0	23,4
SPA-12	198,5	12	15	39,8	43,7	49,9	42,7	31,2
SPA-15	299,5	15	18,75	49,8	54,6	62,4	53,4	39,0
SPA-18	329,5	18	22,5	59,8	65,5	74,9	64,1	46,8
SPA-21	359,5	21	26,25	69,7	76,4	87,4	74,8	54,6
SPA-24	392,5	24	30	79,7	87,4	99,8	85,4	62,4
SPA-30	520,5	30	37,5	99,6	109,2	124,8	106,8	78,0
SPA-33	619	33	41,25	109,6	120,1	137,3	117,5	85,8
SPA-36	581	36	45	119,5	131,0	149,8	128,2	93,6
SPA-40	591	40	50	132,8	145,6	166,4	142,4	104,0

U_c = Continuous operating voltage

U_r = Rated voltage

ORDERING INFORMATION

For accessory range and ordering information please refer to brochure EPP-2131 or e-mail us at surgearresters@te.com.

Example of a complete part description: SPA-12

te.com/energy

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