AC Surge Protective Device

Bremas Ersce S.p.A.
Via Castellazzo 9 – 20040 Cambiago (MI)
Tel: +39 02 95651611 Fax: +39 02 95651639
www.bremas.it info@bremas.it
ISO 9001 Certified Quality System

SA40T121N032 - SA40T121N032R

CE UKCA

				SA40T121N032	SA40T121N032R
Standards					
Applicable Standards				IEC EN 61643-11	
Technical data					
Nominal AC Voltage (50/60 Hz)		U_n	V_{AC}	230	
Maximum continuous operating voltage	L-N	U_c	V_{AC}	320	
	N-PE	U_c	V_{AC}	255	
Nominal discharge current (8/20 µs)	L-N	I_n	kA	20	
	N-PE	I_n	kA	25	
Maximum discharge current (8/20 µs)	L-N	I_{max}	kA	50	
	N-PE	I_{max}	kA	50	
Impulse discharge Current (10/350 µs)	L-N	I_{imp}	kA	12,5	
	N-PE	I_{imp}	kA	25	
Specific energy	L-N	W/R	kJ / Ω	36	
	N-PE	W/R	kJ / Ω	156	
Charge	L-N	Q	A_s	6,25	
	N-PE	Q	A_s	12,5	
Voltage protection level	L-N	U_p	kV	1,6	
	N-PE	U_p	kV	1,5	
Follow current Interrupt Rating	N-PE	I_{fi}	A_{rms}	100	
Response time	L-N	t_A	ns	< 25	
	N-PE	t_A	ns	< 100	
Back-up fuse (max)	gL / gG		A	160	
Short-circuit current rating	L-N	I_{sccr}	kA	25 / 50	
TOV withstand 5s	L-N	U_t	V	335	
TOV 120min	L-N	U_t	V	440	
		mode		Safe fail	
TOV withstand 200ms	N-PE	U_t	V	1200	
Number of ports		Nr		1	
Functional data					
IEC/EN category	Type / Class			1+2 / I+II	
Protective elements				High energy MOV and GDT	
Protection mode				L-N / N-PE	
Mechanical characteristics					
Terminal screw torque		M_{max}	Nm	4,5	
Conductor cross section (max)		Solid, Stranded	mm^2	35	
			AWG	2	
		Flexible	mm^2	25	
			AWG	4	
Mounting				35 mm DIN rail, EN 60715	
Degree of protection				IP20 (built-in)	
Housing material				Thermoplastic Extinguishing Degree UL 94 V-0	
Thermal Protection				Yes	
Operating State / Fault Indication				Green ok / Red defect	
Remote Contact	Switching capacity	AC	V	-	250 / 125
			A	-	0,5 / 0,2
		DC	V	-	250 / 75
			A	-	0,1 / 0,5
	Conductor cross section (max)		mm^2	-	1,5
			AWG	-	16
Dimensions (W-D-H)			mm	36 x 81 x 90	36 x 81 x 96
Weight			g	25,25	25,8
Ambient conditions					
Permissible operating humidity			%HR	5 ÷ 95	
Operating temperature		T_a	°C	-40 ÷ +70	
Atmospheric pressure and altitude			k Pa	80 ÷ 106	
			m	-500 / 2000	
Installation				Indoor	

Description

Surge Protective Device (SPD) for AC applications, engineered to protect low-voltage distribution boards against atmospheric surges. Certified as Type 1+2 / Class I+II according to IEC 61643-31 standards, it combines Metal Oxide Varistors (MOV) with Gas Discharge Tubes (GDT) to ensure superior surge discharge performance.

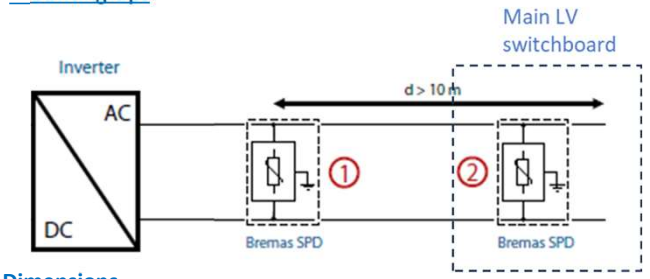
Characteristics

- It allows replacement of plugs with the system powered on.
- Local indicator of the operating status conditions.
- Remote signaling of the operating conditions (optional).
- Internal switch to disconnect the SDP at the end of its lifetime.
- Fixing on DIN rail.

Application

Ideal for protection against induced and conducted surges. Recommended for installation inside string boxes, combiner boxes, and inverter AC distribution panels for photovoltaic and general low-voltage applications.

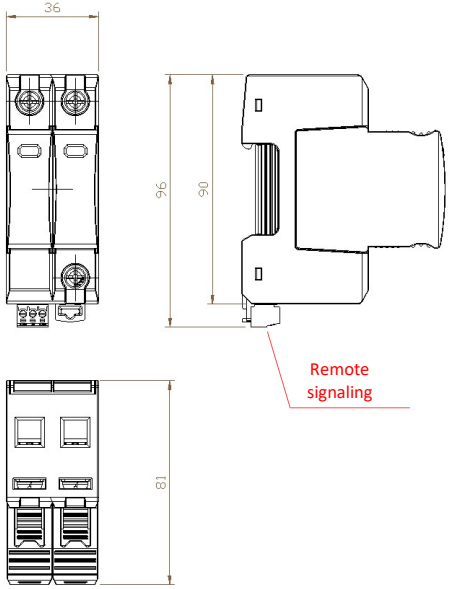
Mounting tips



If d < 10 m, the Bremas SPD ② is not necessary

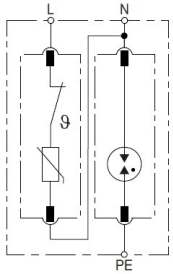
Dimensions

Dimensions in mm



Electrical circuit

SA40T121N032



SA40T121N032R