SINGLE & THREE PHASE LOW VOLTAGE POWER CAPACITORS, SGKJ SERIES

TU BU HA THE 1P & 3P, MODEL SGKJ

General information

capaSINO low voltage power capacitors are used for static compensation of variety transformers and motors. Metallized polypropylene firm capacitor is very good characteristics of self — healing dielectric that makes reliable long lime its performances. capaSINO capacitors have been design with easy mounting technic. They offer an ideal solution to filter for low power converters and low voltage PFC. With light weight, small dimension, They could be parallel connected in banks for some applications such as power factor correction equipments. capaSINO capacitor was designed with outside discharge device and double overpressure safety system. /f is defined self — healing and able fo insulate by itself any point of breakdown in the dielectric. By means of vaporisation of ihe meiallization around the ooint of breakdown.

Giéi thiéu chung

Tu bu ha thé capaSINO disc st dungdébu congsuat phân khang cho rat nhié u thiét bi dién nhe motor, may bién ap, dén chiéu sang, hé thong lanh... Cong nghé polypropylene film Uu dié m trong viéc to han lai nhL/ng phong dién cuc bo, kéo dai tuoi tho van hanh. capaSINO duoc thiét ké toi uu, kich thudc gon, nhe va de lap dât. Chung co thé dé dang dâu song song thanh cac câp lcm hOn cho cac td bu cong suât ldn. **capaSINO** ap dung hai cap bao vé chong no va dié n try xâ an toan trong van hanh, sha chñа.

Product Specifications

Frequency	SOH z
Voltage range	230V - 690V
Capacitance tolerance	-5/+10%
Dielectric	polypropylene film
3 Phase connection	delta
Impregnant	dry, non toxic, non PCB
Casing	aluminium
Fixing stud	M12
Installation	Internal
Safety device	overpressure disconnector
Mounting	any position
Temperature category	-25/D (max 55°C)
Testing voltage	2,15Un in 2Sec (between term inal)
	3 kV in 1Min (between terminals/case)
Dielectric losses	0,2W/Kvar
Max permissible voltage	1,1Un in 8 hours/day
1,15Un in 30min/day	
	1,2Un in 5min/200 times
	1,3Un in 1min/200 times
Inrush current	max 100ln
Discharge resistor	50V/1 min
Alt1ude	s 2000m above sea level
Relative humidity	98%
Protection degree IP20	
Expected life	> 100,000 hours
Standard	IEC 60831-1/2 96,CEI EN 60831
	UL 810 — 1998.

Dac tfnh ky thuat

Tan so lâm viec	50Hz
Oién âp	230V— 690V
Sai sd dung lu?ng	-5/+10%
Oién mdi	polypropylene film
So do dâu noi I? 3 pha	Tarn giâc
Chat thâm	khé, khéng doc, khong PCB
V6 ty	Nhom
Oc c8 dinh ty	M12
V! ! Fi lap dat	Trong nha
Tfnh nâng an toàn	Ngât khi qua âp suât
Oâu ndi	nhiéu vi trf
Nhiet do lam viec	-25/D (max 55°C)
Dién âp thLf	2,15Un trong 2 giây (girla 2 ctJci)
	3kV 1phiit (gifia ct/c vâ v6)
Suât ton hao	0,2W/Kvar
Oién âo toi da cho phép	1,1Un 8 oio/ngav
1,15Un 30 phut/ngây	
	1,2Un 5 phdt/200 lân
Ddng t6i da cho phép	1,3In
Dong xung	Ttii da 100ln
Dim trd xâ	50V/1 phdt
Do cao lap dât	s 2000m so mr/c nrfdc bien
Bo km	98%
Cap bâo vé	IP20
Tuoi thg lâm viéc	> 100,000 gio
Tiéu chuan	IEC 60831-1/2 96, CEI EN 60831
	UL 810 - 1998

Single phase - 3 phase capacitors : 250/400/415/440/525/690V, 50Hz, IP 20, MKP technology, dry type.
Tu hfii IP - 3P: 250/400/415/440/525/690V. 50Hz. IP 20. câno nohé MKP. loai khâ.

Type *Loại*	Power *Công suất* Qn(Kvar)	Current *Dâztg Qnfi m 'c* In(AJ	Capacitance £¥$n dung CnfuD	Dimension *Kích thước* Dximm)	Fixing **stud** *Ty ốc* c#BnA
SGKJ-0.25-2-1	2.0	7.9	1x\01.9	76175	
SGKJ-0.25-5-1	5.0	19.9	1x254.8	Mx175	
SGKJ-0.25-10-1	10.0	39.8	\x513.6	9dx2‹o	
SGKJ-0.25-3-3	3.0	7.5	3xé0.3	76x210	
SGKJ-0.25-5-3	5.0	12,5		76x210	
SGKJ-0.25-7.5-3	7.5	18.8	3x100.3	7bx240	
SGKJ-0.25-10-3	10.0	25.1	3x2fXI.6	8bx2a	
SGKJ-0.2612-3	12.0	30.1	3x240.0	86x240	
SGKJ-0.4-5-3	5.0	7.2	3x31.7	d5x2l0	
SGKJ-0.4-7.5-3	7.5	10.8	3x49.7	d5x2l0	
SGKJ-0.4-1&3	10.0	14.4	3xbb.3	76x240	
SGKJ-0.4-12-3	12.0	17.3	3x79.3	76x240	
SGKJ-0.4-15-3	15.0	21.d	3x99.3	8bx240	
SGKJ-0.4-20-3	20.0	28.8	3x132.7	96x240	
SGKJ-0.4-25-3	25.0	3d.0	3x\b5.7	10bx2d0	
SGKJ-0.d-30-3	30.0	43.3	3x190.0	10bx28S	
SGKJ-0.415-5-3	5.0	6.9	3x30.7	b5x2l0	
SGKJ-0.415-7.5-3	7.5	10.4	3x4b.0	d5x210	
SGKJ-0.415-10-3	10.0	13.9	3xdl .7	76x240	
SGKJ-0.4J5-12-3	12.0	1d.7	3x74.0	76x2d0	MJ2 stud
SGKJ-0.US-15-3	15.0	20.8	3x92.3	8bx2a	
SGKJ-0.415-2&3	20.0	27.8	3xT23.0	96x240	
SGKJ-0.415-25-3	25.0	34.7	3x154.0	10bx240	
SGKJ-0.415-30-3	30.0	41.7	3x\84.7	10bx285	
SGKJ-0.4d-5-3	5.0	6.6	3x27.4	d5x210	
SGKJ-0.44-7.5-3	7.5	9.8	3x411	d5x210	
SGKJ-0.d4-1&3	10.0	13.1	3x54.8	76x240	
SGKJ-0.d4-12-3	12.0	15.7	3xb5.8	76x240	
SGKJ-0.44-15-3	15.0	19.7	3x82.2	8dx240	
SGKJ-0.44-20-3	20.0	2d.2	3x1£P.&	96x240	
SGKJ-0.44-25-3	25.0	32.8	3x137.0	106x240	
SGKJ-0.d4-30-3	30.0	39.4	3x1d4.5	106x285	
SGKJ-0.525-5-3	5.0	5.5	3x19.2	dbx210	
SGKJ-0.525-7.5-3	7.5	8.2	3x28.9	dbx210	
SGKJ-0.525-10-3	10.0	11.0	3x38.5	76x240	
SGKJ-0.525-12-3	12.0	13.2	3xdb.2	76x240	
SGKJ-0.525-15-3	15.0	1d.5	3x57.7	8bx240	
SGKJ-0.525-20-3	20.0	22.0	3x77.0	96x2d0	
SGKJ-0.d9-5-3	5.0	4.2	3x11.1	6dx210	
SGKJ-0.69-7.M	7.5	6.3	3x16.6	dbx210	
SGKJ-0.d9-10-3	10.0	8.4	3x22.3	76x240	
SGKJ-0.d9-12-3	12.0	10.0	3x26.6	76x240	
SGKJ-0.69-15-3	15.0	12.d	3x33.3	8bx240	
SGKJ-0.69-2&3	20.0	1d.7	3x44.3	96x240	

Notes : capaSINO's always pay attention to environmental protection. The selection of materials is always done in this concern in order to avoid environmental pollution. All materials utilized are non toxic and free from : PCB, , Mercury, Cadmium, Chrome and compounds, CFC , HCFC, Bromide and Chlorine Dioxine Bromurate, Asbestos..

Ghi chd : Thudng hiGu capaSINO ludn chti trgng van d0 m6i trJdng. Nguyén vgt li4u duqc sU dVng khdng chña nhBng chat gay hpi m6i trrfdng nhu : PCB. Thuv na8n. Catmi, CFC. HCFC. Bromua. soi ami8no-

		FACTCFI K																			
y		0.80	0.81	0.BZ	0.83	0.84	0.85	0.86	0.87	0.88	0.69	0.90	0.91	0.92	0.93	0.94	D.95	0.9°I	0.97	0.M	0.99	J.CO
1.44	0.57	0.682	0.7J6	0.744	0.770	0.796	0.0ZZ	0.84B	0.875	0.W	0.	0.eE8	0.W	1.016	\.047	1.078	1.110	1.150	1.191	1.2S9	1.299	1.442
1.41	0.GB	0.655	0.681	0.707	0.73	0.759	0.785	0.812	0.BAB	0.Bb5	0.883	0.021	0.949	0.979	\.010	1.042	1.076	1.113	1.154	J.202	1.262	1.400
1.37	0.59	0.619	0.645	0.671	0.6g7	0.723	0.749	0.770	0.0 Z	0.B29	0.857	0.005	0913	0.943	0.974	1.Q@	1.0'I0	1.077	1.118	1.1B5	1.2Z0	1.W
1.33	0.00	0.588	0.60g	0.635	0.061	0.f¥I7	0.713	0.740	0.7€B	0.793	0.BZ1	0.B46	0877	0.	0.S3B	0.970	1.004	1.04J	1.@t2	1.IN	1.fS€I	1.388
1.30	0.61	0.540	0.575	0.601	0.6Z7	0.653	0.679	0.705	0.7ZZ	0.759	0.787	0.BSS	0.843	0.B73	0.504	0.9D3	0.970	1.007	1.048	1.DC-i	1.156	1.29B
1.27	0.62	0.516	0.542	0.588	0.594	0.620	0.646	0.673	0.699	0.726	0.754	0.782	0.810	0.840	0.871	0.	0.907	0.974	1.015	1.QE	1.123	1.2£6
1.23	0.63	0.483	0.509	0.535	0.561	0.587	0.613	0.640	0.668	0693	0.721	0.740	0.777	0.807	0.838		0.904	0.041	0.982	1.00H	1.0€	1.233
1.20	0.64	0.451	0.477	0.503	0.S20	0.555	0.581	0.6£B	0.634	0.66J	0.688	0.717	074S	0.775	0.806	0.87NI	0.872	0.59	0.950	0.SUB	1.058	1.201
1.17	0.65	0.419	0.445	0.471	0.497	0.M3	0.S49	0.576	0.6£0	0.629	0.627	0.685	0.713	0.743	0.774	0.B£i	D.840	0.877	0.918	0.906	1.026	1.1£B
1.J4	0.06	0.388	0.414	0.440	0.4£6	0.492	0.518	0.545	0.571	0598	0.626	0.654	0682	0.7t:2	0.743	0.775	0J3QI	0.846	0.887	0.935	0.995	1.J33
1.11	0.67	0.35B	0.38d	0.410	0.W	0.462	0.488	0.515	0.541	0560	0.5M	0.624	0.652	0.6B2	0.713	0.745	0.779	0.816	0.857	0.905	0.565	1.11
1.00	0T0	0.328	0.354	0.3£0	0.4£B	0.4M	0.458	0.485	0.511	0.538	0.5iB	0.594	0.0ZZ	0.652	0.083	0.715	0.749	0.7£g	0.827	0.675	0.955	1.078
1.05	0.65	0.Z99	0.3Z5	0.351	0.3z7	0.403	0.4Z9	0.456	0.48Z	0.500	0.557	0.565	0593	0.6Z3	0.654	0.6£	0.720	0.757	0.738	0.804	0.9€	1.048
J.02	0.70	0.Z70	0.296	0.322	0.348	0.374	0.4£0	0.427	0.4M	0.480	0.5£B	0.W	0.564	0.504	0.625	0.657	0.691	0.728	0.7IB	0.817	0.877	J.020
0.90	0.71	0.242	0.208	0.20'I	0.320	0.346	0.372	0.390	0.425	0,452	0.480	0.5£B	0536	0.5€i	0.597	0.0N0	0.663	0.TC0'	0.741	0.7W	0.849	0.902
0.90	0.72	0.214	0.240	O.265	0.Z8Z	0.31B	0.344	0.W	0.397	0 4Z4	0.4 Z	0.W	0 SOB	0.53B	0.569	0.11	D.035	0.6T2	0.713	0.701	0.821	0.90g
0.94	0.73	II. I IfI	0.242	0.23â	0.2 4	OF	0.348	0.W	0.W	0.396	0.4f4	0.W	0.480	0.51f1	0.344	0.W	0.BOX	0.844	0. fi	0.7H	0.T93	0.W
0.91	0.74	0.IN	0.185	0.211	0.Z57	02 d	0.ZB0	0.316	0.342	03B9	0.397	0.425	0453	0.48Z	0.514	0.546	D.SBM	0.617	0.658	0.7I	0.7X'I	0.PSI
0.89	0.75	0.1&	0.158	0.104	0.2J0	0.238	0.262	0.289	0.315	0342	0.370	0.398	0420	0.4 ¥	0.487	0.519	0.	0.590	0.631	0.879	0.730	0.08Z
0.86	0.76	0.16	0.131	0.157	0.183	0.209	0.Z35	0.262	0.Z¥8	0.315	0.343	0.37\	0.39S	0.429	0.460	0.492	D.526	0.563	0.604	0.652	0.712	0.856
0.86	0.77	0.079	0.106	0.131	0.157	0.183	0.200	0.2@	0.2€P	0289	0.317	0.345	0373	0.4£€	0.434	0.4€6	D.	0.537	0.578	0.626	0.68€l	0.820
0.80	0.78	0.052	0.076	0.10'I	0.1&	0.156	0.182	0.W	0.23B	OW	0.W	0.318	0346	0.376	0.407	0.420	D.473	0.510	0.PSI	0.5 g	0.659	0.80z
0.78	0.79	0.026	0.052	0.078	0.104	0.130	0.156	0.103	0.ZEt	0Z36	0.Z64	0.Z9Z	0320	0.350	0,@1	0.413	D,447	0.484	0.525	0.573	0.633	0.W6
0.75	0.£ i	0.QKI	0.026	0.05Z	0.07B	0.104	0.130	0.157	0.UB	0210	0.Z3B	OF	0284	0.3Z	0.355	0.W	D.421	0.45B	0.4W	0.547	0.609	0.7t@
0.72	0.81		0.Q@	0.GB	0.052	0.07B	0.104	0.131	0.157	0.1B4	0.212	0.240	020B	OF	0.B2S	0.1\	0.39	0.48Z	0.472	0.521	0.5B1	0.7Z'I
070	0.K			0.0tXi	0.026	0.052	0.078	0.105	0.131	0158	0.UB	0J2t4	0.242	072	0.303	0.335	0.3BI	0.406	0.447	0.495	0.555	0.W
0.67	08D			0.0¥I	0.026	0.052	0.019	0.105	0.132	0.160	0.1BB	0216	0J46	0.277	0.W	0.343	0.3IB	0.421	0.4IB	0.529	0.61
0.65	0.M				0.Q I	0.026	0.0M	0.079	0.106	0.134	0.1€2	0.190	0.220	0.251	0.283	0.317	0.354	0.595	0.443	0.SOA	0.646
0.62	0.M					0.000	0.037	0.053	0030	0.UB	0.1:Hi	0.164	0.194	0.225	0JZ57	0.291	0.328	0.3€0	0.417	0.477	0.620
0.59	0.M						0.QA	0.026	0053	0.081	0.1LB	0.137	0.167	0.198	0.	0.Z64	0.DU	0.342	0.38	0.450	0.598
0.S7	0.87							0.0N0	0.0Z7	0.056	0.088	0.111	0.141	0.172	0.204	0.Z¥I	0.275	0.316	0.364	0.424	0.567
0W	0.88								0.000	0.028	0.056	0.QI4	0.II	0.145	0.117	0.211	0.248	0.285	0.331	0.391	0.540
0.S1	0.89									0.0£0	0.066	0.DYE	0.146	0.183	0.121	0.261	0.3QI	0.369	0.512
0.46	0.90										0.QX)	00Z8	0.058	0.009	D.155	0.192	0.234	0.281	0.341	0.481
0.45	0.91											0000	0.QXI	0.11	0.093	0.127	0.164	0.205	0.253	0.313	0.456
0.42	0.6												0.	0.0g1	0.ISO	0.007	0.134	0.175	0.	0.263	0.428
0.38	0.83													0.000	0.022	0.036	0.103	0.144	0.102	0.252	0.305
0.36	0.94														0.OF	0.034	0.071	0.112	0.1lâ0	0.2'0	0.363
0.33	0.95															D.Q@	0.037	0.07B	0.1Z6	0.180	0.W
0.20	0.B6																0.0N0	0.041	0.0£D	0.140	0.202
0.25	0.9T																	0.	0.048	0.1I¥I	0.251
020	0.98																		0.QQ	0.060	0.203
0.t4	0.W																			0.HD	0.J43
																					0.OOH

Cosy is the initia! power factor.

Cosy is the power factor achievable by power factor correction.

The reactive power needed for power factor correction:

$Q(Kvar) = P(Kw) \times 1actor\ K$; Factor $K = $ i c i $/ c$ •   i

CoS@ la 9i !^! hp so Cdng suât kh‹ chua. bd.

Casq1 la giâ ^{t}^! h§ so Cdng suAt du' dinh sau khi bd.

Cdng sugt Q(Kvar) c6n bd :

$Q(Kvar) = P(Kw) \times Jactor\ K$; FaCtof $K = $ | s , —I