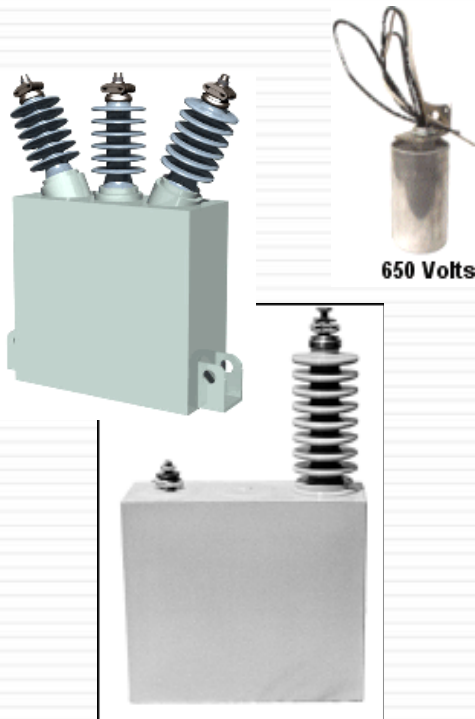


SC1000 series Surge Capacitors units



SURGE CAPACITOR FOR AC ROTATING MACHINE PROTECTION



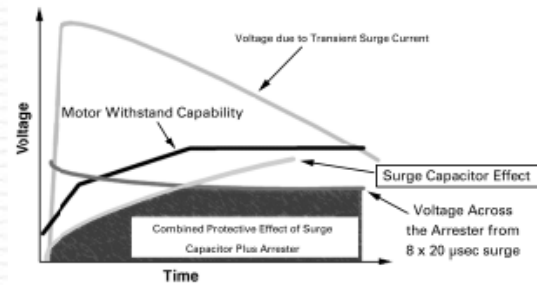
STANDARD FEATURES

- All-film low loss dielectric
- Non-PCB insulating fluid
- Indoor or outdoor mounting
- Mount in any position: upright, side, or inverted
- Internal discharge resistors
- Hermetically sealed unit

SPECIFICATIONS

- Low-loss polypropylene film and aluminum foil _ Non-PCB dielectric fluid—
- Discharge resistors to reduce the residual voltage to less than 50 V in 5 minutes of de-energization
- Designed for indoor/outdoor use with an ambient temperature range of -40°C to +50°C
- Stainless steel case
- ANSI 70 light gray paint

Protection of AC Rotating Machines



Application :

SC1000 Protective Capacitors for AC Rotating Machines Surge Protection for AC Generators, Synchronous Condensers and Large Motors.

SC1000 Surge capacitors are designed to modify the steep fronted waves and prevent damage to the turn-tot Turn insulation of rotating machines and transformers.

It is advisable to use surge arresters together with the surge capacitor units to form a comprehensive protective package (please contact your Gentec sales representative for further information). Standard ratings and dimensions are shown here; however, special requirements can be accommodated on an extended lead-time.

The SC1000 capacitors are built for the most demanding conditions and offer:

- High transient voltage withstand
- Long life design
- Low loss dielectric

TECHNICAL DATA - SC1000 series

● Rated Voltage / Phase	0 to 24 000 Volts
● Rated Frequency	50 - 60 Hz
● Rated Value	0.125 to 1 uFard
● Insulation level	20 kV to 125 kV BIL
● Power losses	Low losses
● Continuous over-voltage	110 % from the rated value
● Mounting type	Floor mounting
● Enclosure type	Indoor , outdoor
● Temperature class	-40 °C to 55° C
○ Average 24h :	+ 45° C
● Color	ASA 61 (light grey)
● Construction Standard	CSA - UL

The SC1000 indoor or outdoor- for rotating AC machines such as motors, generators, and synchronous condensers: install as close as possible to machine terminals.

Select capacitor according to the normal phase-to-phase (L/L) voltage rating of the rotating AC machines, regardless of whether the circuit has an effectively grounded or ungrounded neutral.

Capacitors of 0.5 microfarads per pole are used for 2400 to 7200 volt machines whether the machine neutral is ungrounded or adequately grounded.

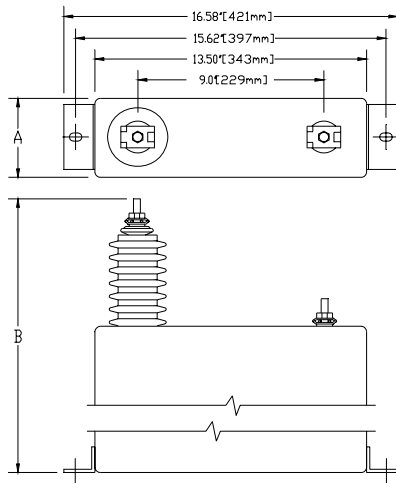
For 11.5 kV or 13.8 kV machine, whose neutral is adequately grounded, capacitors of 0.25 microfarads per pole are applied at or near the machine terminals.

The machine neutral is considered grounded as far as effects on the reflected voltage are concerned, if the

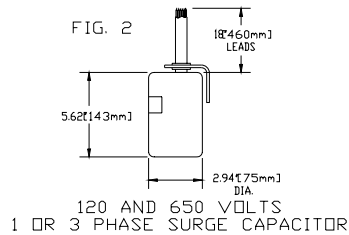
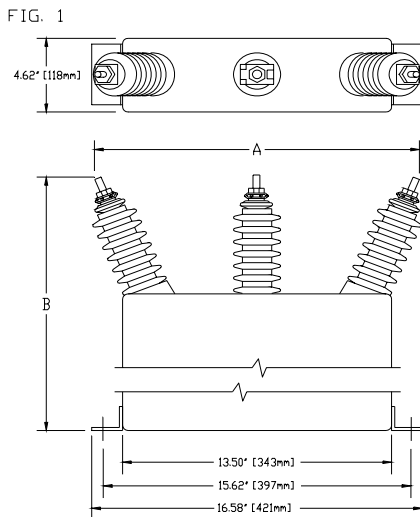
impedance between neutral and ground does not exceed 50 ohms of resistance, or 0.2 ohms of 60 Hz. reactance per 100 ohms of winding surge impedance. This grounding is from the standpoint of surge reflexion only, and does not necessarily determine whether the system is or is not effectively grounded for the purpose of selecting a voltage rating for the arrester.

The capacitors are suitable for continuous operation at a maximum permissible operating voltage of 110 percent of the rating (RMS including harmonics), and may be applied on 25, 40, 50 or 60 Hz. The line terminal will take #8 to #1 standard AWG cable. The terminal connector is cast bronze, tin plated.

NOTE: Any individual style number single pole surge capacitor may be applied on any voltage system up to and including the voltage shown as maximum phase to phase (L/L) voltage (110% of RMS voltage).



SINGLE PHASE "SURGE CAPACITOR" 1 BUSHING, INDOOR OR OUTDOOR							
MFD PER POLE	VOLTAGE CLASS (L/L)	WEIGHT		DIMENSIONS			
		LBS	KG	A		B	
				INCHES	MM	INCHES	MM
0.50	6900V	29	13.1	4.62	118	16.82	430
0.25	13800V	33	14.9	4.62	118	17.82	450
0.125	24000V	57	25.9	4.88	124	27.75	705



THREE PHASE "SURGE CAPACITOR" 3 BUSHINGS, INDOOR OR OUTDOOR							
MFD PER POLE	VOLTAGE CLASS (L/L)	WEIGHT		DIMENSIONS (FIG. 1)			
		LBS	KG	A		B	
				INCHES	MM	INCHES	MM
0.50	2400V	36	16.4	16.40	418	16.31	414
0.50	4160V	36	16.4	16.40	418	16.31	414
0.50	7200V	35	15.8	16.40	418	20.56	522
0.25	13800V	66	29.7	16.40	418	25.06	637