

SURGE PROTECTION FOR A.C. ROTATING MACHINES

THREE POLE SURGE CAPACITOR UP TO 13800 VOLTS

APPLICATION NOTE: 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.

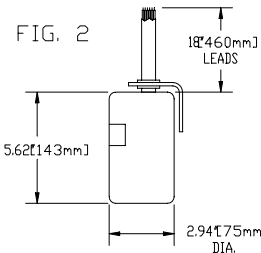
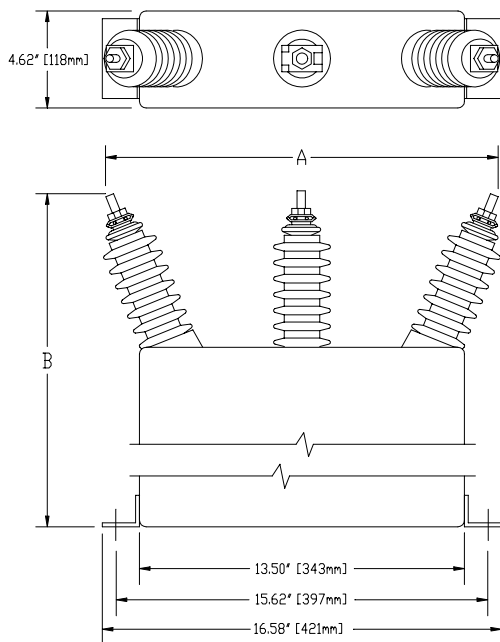
The machine neutral is considered grounded as far as effects on the reflected voltage are concerned, if the impedance between neutral and ground does not exceed 50 ohms of resistance, or 0.2 ohms of 60 Hz. reactance per 100 ohms of winding surge impedance. This grounding is from the standpoint of surge 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).

FIG. 1



120 AND 650 VOLTS
1 OR 3 PHASE SURGE CAPACITOR

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

STANDARD TO
BE APPLIED



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