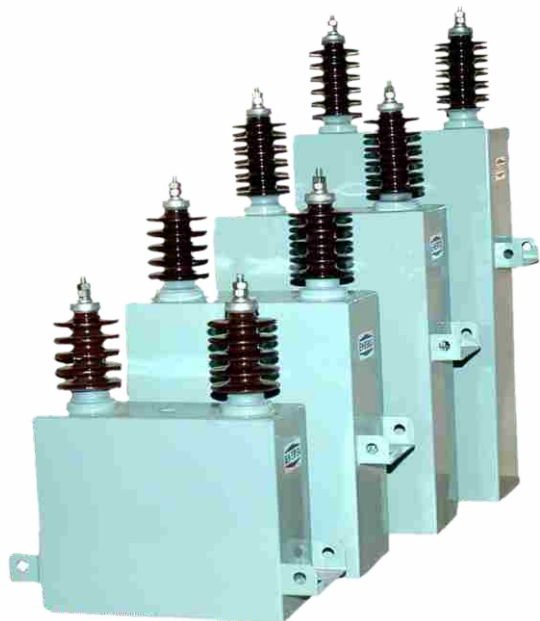




H.V. POWER CAPACITORS



ENERGI

INTRODUCTION

NIFA ELECTRONICS Began outlining sound company framework, built on professional lines way back in 1991. NIFA ELECTRONICS has grown by leaps and bounds in exponential manner to become one of the major player in the field of POWER CONDITIONING, POWER MANAGEMENT & Allied Technical Services..

BRIEF ABOUT POWER CAPACITORS

Generating reactive power at the point of consumption helps energy production and thus saves energy. It frees power plant capacity for the production of active power and reduces losses in transmission and distribution systems. At the same time, there is a higher capacity available for the transmission of active power.

To generate reactive power at the power plant is uneconomical, producing losses in the electricity network. This leads to increased use of primary energy. In transmission and distribution systems, reactive power requires as much capacity as active power.

To increase the efficiency of their performance, electricity suppliers and the owners of transmission and distribution networks have adopted a "reactive power tariff", which encourages consumers to produce locally the reactive power they need, for example with the help of compensation capacitors.

In boosting the production and distribution of electricity, reactive power compensation reduces the need for oversized power plants and distribution networks.

BRIEF ABOUT NITEL - ENERGI HV POWER CAPACITOR

The elements connected in parallel are formed in series group to meet the voltage requirement. The complete element assembly is insulated with insulating material to get the desired insulation level and inserted in CRCA container. The capacitors are dried under vacuum and impregnated by synthetic liquid under accurately controlled condition. Solder – sealing of metallic bushing to the capacitor container ensures hermetic sealing.

ENERGI brand HT capacitors are manufactured with internal element fuses.

Every individual capacitor element is protected by a fuse. In case of element failure during abnormal condition, only one element is disconnected. After disconnection of the faulty element, the capacitor unit restores the normal operation within milliseconds with a slightly reduced output. With internal fuse there will be no continual arcing in the capacitor unit and thus risk of case bursting is considerably reduced.

FEATURES

- Conforming to IS 13925 and IEC specification.
- Designed with 3 layer film + foil construction.
- Extended foil design
- High Dielectric strength.
- Very low power losses(Less than 0.15 watts per kvar.)
- Longer life and high reliability.
- Suitable for the most arduous system condition.

CERTIFICATION AND DESIGN

ENERGE CAPACITORS PVT LTD has been accredited with ISO 9001 certification by International Certification Services (Asia) Pvt. Ltd. Our products are periodically type tested at government approved laboratories like CPRI and ERDA.

HT capacitors are manufactured in proven and established 3 layer film + foil design. Our capacitor are designed to withstand the most arduous system conditions that are generally prevalent in complex industrial loads like steel, chemical and textile industries.

ENERGE has supplied capacitors for 110 kV capacitor bank in south India and it is in continuous operation since 2001. we have also manufactured and supplied Medium frequency water cooled capacitor for induction furnace with one single unit of 2500 A rated current. Ours is a unique company in India to have achieved feats both in voltage as well as current.

TECHNICAL SPECIFICATION

Make and type	: ENERGE make, Outdoor/ Indoor type
Reference Standard	: IS : 13925-1998 with its latest amendments, IEC
Rated Capacitor unit	: Upto 1000 KVar
Normal System Voltage	: 1.1, 3.3, 6.6, 11, 22, 33, 66, 110KV
Rated Frequency	: 50 Hz
Rated current of each capacitor unit	: As per requirement
No. of phases	: 1 or 3 phase
No. of terminals in each unit	: 2 or 3 terminals
No. of bushings	: Two or Three
Type of Bushing Terminals	: Porcelain
Connection of capacitor units	: Series-Parallel connections of capacitor unit/phase
Maximum permissible over voltage	: 110% of rated voltage
Maximum permissible current	: 130% of rated current
Residual voltage	: 50 volts or less within 5 minutes.
Discharge time	: Less than 5 minutes
Maximum time interval required between de-energisation and re-energisation of the bank	: 5 minutes
Limiting ambient temperature	: 50 degree C as per IS
Voltage withstand test (Capacitor units)	:
Terminal to terminal, 10 Secs	: 4.3 times rated Dc voltage
Terminal to case 50 c/s, 1min	: As per IS
Impulse withstand voltage	: As per IS
Type of container	: Hermetically sealed, material CRCA
Thickness of container	: 16 or 14 SWG
Details of discharge device	: Internally fitted discharge resistors
Surface treatment & painting	: Light phosphating + Prime coating + epoxy grey paint finish (Special coats and shades on request)

PRODUCT RANGE

Online UPS

- HT & LT Industrial AVR
- Servo Stabiliser
- Ultra Isolation Transformer
- Automatic Power Factor Control Panel
- Maximum Demand Control Panel
- Special Control Panels

SERVICES

- Power Quality Management
- Energy Audit Study

CUSTOMER SUPPORT

Centrally located in Ahmedabad, the customer support division remains consistent in progressively adding to its well-deserved reputation, spurred by a scientific spirit, entire team of engineers & technicians involved in the maintenance operations, meticulously work to keep customer demands satisfied. Our commitment to the customer goes beyond executing the best possible equipment. To help assure the perfect match of product & application, we offer and extensive direct support at all levels.

**We reserve the rights to change product specification without prior notice.*



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