

SUPER

POWER EQUIPMENTS PVT. LTD.



**Distribution & Power Transformer [Oil/Dry Type]
Feeder Pillar, HT Panel Board, Meter Box,
Busbar Box, Compact Substation & Motor Winding**



**Authorised Stockist of
RING MAIN UNIT**



www.superpower.co.in

Introduction

Since we established in 1992 SUPER group of industries is fast growing in power sector. It has been committed to developing of quality products. Today it is eminence of being Mumbai's leading manufacturer of Power Equipments.

SUPER is manufacturing Transformer, Feeder Pillar, HT Panel, Panel Board, Meter Box, Busbar Box, Compact Substation. Also Fabrication Tank, Radiator, Panel, Lamination Cutting, Powder Coating facilities available.

The factory is situated at Navi Mumbai well connected with all parts of country by road, rail, air & sea for transport.

Distribution & Power Transformers :

Super is transformer manufacturing company. Well equipped with machineries, testing facilities & infrastructure required for manufacturing of transformer.

Super has been manufacturing & supplying distribution transformer of rating 63 KVA to 2500 KVA of various voltage class up to 33 KV to various electrical utilizes in India.

The transformer if manufactured as per IS 2026 for transformer, IS 335 for oil, IS 2099 for Bushing. Super manufacture & supplies the distribution transformers to exact customer specification and all the designs are tested at regular intervals. Several innovative technologies are used in reducing the lead time for manufacturing. The core is interleaved construction, low loss cold rolled grain oriented (CRGO) silicon steel sheet.

The coils are wound from electrolytic soft annealed copper of high grade with specific sections & winding configuration for low losses. Tapings are provided on the primary or secondary as per customer specification controlled either by means of an off circuits switch or an on load tap changer.

All Transformer are manufactured with best insulating material & Ovening (Drying of winding) prior to tanking & final testing. All transformers are tested throughly for all routine test. Transformer oil of EHV grade having low viscosity is used for cooling sheikh provides high dielectric strength & efficient cooling. Cooling is normally by means of tank mounted radiators, which can either in welded position for smaller ratings and of detachable type for medium ratings. Prior to dispatch to various utilities in the presence of customers representatives.



Specialist in VPI Dry Type Transformer :



DRY TYPE TRANSFORMER IS ASSEMBLED IN DUSTFREE WINDING SHOP :

The transformer coils are dried in a PCL controlled oven and then completely sealed with an insulating varnish.

The VPI process fully penetrates and seals the coils into a high strength composite unit for complete environment protection.

Coils are then cured to develop bonding.

SUPER Series Unitized Sub Station

PRODUCT OVERVIEW :

Unitized substation (USS) is a compact product comprising of various substation equipment housed inside a metal enclosure.

The USS comprises of -

HV compartment consisting of a Vacuum Circuit Breaker (VCB) / CROMPTON make SF6 Ring Main Unit (RMU) CROMPTON GREAVES make Super make Transformer (X'MER).

Low Voltage (LV) compartment consisting of LV distribution panel.

SALIENT FEATURES :

1. Protection from unauthorized access.
2. Protection from environmental hazards.
3. Compact design with enhanced safety aspects.
4. SCADA compatibility.
5. Ease of operation & maintenance.
6. Ready to charge.
7. Fully type tested as per IEC.





Testing & Inspection Facilities :

The units are provided with individual testing equipments such as :

- | | |
|-----------------------------------|-----------------------|
| 1. Resistance and Ratio Test | 5. Dyn11 Vector Group |
| 2. No Load and Short Circuit Test | 6. Magnetic Balance |
| 3. DVDF Test | 7. BDV Oil Test |
| 4. High Voltage Test | |

PANEL :

SUPER is a leading manufacturer of Feeder Pillar, Breaker Type Panel, Control Panel, Meter Boxes, Cable Boxes and Power Panel in bulk quantity.



4-WAY, 6-WAY, 8-WAY FEEDER PILLAR AND WITH BREAKER ARE OUR MAJOR PRODUCTION ITEM.

WE USE HIGH CURRENT CAPACITY FUSE BASE WITH RATING OF 400A AND 630A MADE OF CERAMIC.





HT FEEDER PILAR :

- HT Feeder Pillars are manufactured from finest quality of sheet steel of 3 mm thickness which is water proof and vermin proof.
- Main body frame made of 50 x 50 x 5 angle to give solid strength to feeder pillar.
- Frame base made of 65x65x5 angle.
- Seven tank processes for spray painting and oven baking are done.
- Heavy duty hinges with brass inserts for avoiding corrosion and giving smooth door operation.

- Inner side of body has 6 mm thick Bakelite sheet lining for protection from high current.
- Electrolytic grade copper bus bar of 50x6(double) is provided to take designed current inserted with heat shrinkable sleeves for safe operation.
- Detachable type bottom gland plate on door for safety purposes.
- Solid bushing: Epoxy type, as per IS-2099 of 1962 & IS-3347 (part III) and latest having creepage distance 225mm (min). Brass insert available for interconnection of XLPE cables and copper bus bar.

FABRICATION :

SUPER fabricated Panels, Transformer Tank, Radiator & Compact substation etc. Godrej and Simtools made cutting & shaping machines for large production. Copper or Alluminium busbar are used as per requirement. We use L & T, Simens, Schneider, & C & S make breaker & MCB, MCCB & ELCB etc. as per requirement. We use Anchor, Polycab & Avocab make wire, hyper make current transformer.



The process of manufacturing of MS tank, press steel and radiators are made out through a series of process by cutting HRC & CRC Sheet of various thickness. The tank is tested along with welded joints for radiators and valve by applying pressure.

These are passed through press machine to give it an appropriated shape further, each fin is assembled by spot welding machine and passed through seam welding machine. Each radiator is tested separately under pressure to ensure no leakage between welded joints. Completely Varnishing inside of radiators.



LAMINATION CUTTING FACILITY :



1. Prease cutting and log stacking system, for low core losses.
2. Easy material handling and core stacking.
3. Use of cold rolled grain oriented silicon steel sheet of various grade as per requirement.
4. We also cut CTPT lamination and assemble them.
5. Annealing process is available.

POWDER COATING FACILITY :

Powder coating process is better than painting as it makes job corrosion and dust free.



Each unit is well-equipped with independent manufacturing facilities for production of transformers and electrical apparatus. It's designed with high capacity Cranes.

MOTOR WINDING FACILITY :

We do motor winding of World leading company BHARAT BIJLEE LTD. We do the winding of any capacity of motors.





Smart solutions.
Strong relationships.

Ring Main Unit

SABRE Range - SF₆ Gas Insulated Vacuum RMU

Product Overview

The SABRE range of RMU combines the most advanced Vacuum & SF₆ technologies to meet the modern day requirements. It is fully extensible and highly flexible unit used in a wide range of applications including distribution switchboards, transformer substations, ring distribution networks and HV Connections to industrial & commercial sites. The units are developed to suit customer requirements for connection, supply, protection and sectionalising with remote operation.

The SABRE RMU's ensure protection in the form of a circuit breaker being monitored & controlled by a self powered numerical relay. The sectionalising is enabled through ring switches.

Salient Features

- ▶ Stainless steel enclosure fabricated by automatic robotic welding.
- ▶ Isolation in clean SF₆ gas for Ring switch & in vacuum for CB.
- ▶ Suitable for Indoor & Outdoor application.
- ▶ Common Switching chamber with Vacuum Tee off circuit breaker.
- ▶ Enhanced duty in excess of IEC requirement.
- ▶ All switch positions have pad-locking & Castell interlocking facilities.
- ▶ Internal arc protection including cable boxes.
- ▶ Extensible from both the sides.
- ▶ Fully SCADA compatible unit with remote switching.

Circuit Breaker

The CB comprises of 3 vacuum interrupters, which have a fault-make, fault-break rating. Earthing of the outgoing cable is achieved by the use of CB in series with the off-load disconnector / selector switch. This will enhance the making capacity of the Earth switch.

Ring Switch

These are fault-make load break switches utilising a single break 3 position switches viz., 'ON', 'OFF' & 'Earth' functions.

Operation & Safety

All operating positions and instructions are indicated on the main panel at the front of the unit. Both manual & automated versions are available in SABRE range.

Live Parts are contained within an earthed stainless steel enclosure with positive safety interlocks on all switch / selector positions ensure operator safety & prevent incorrect operation. The system is fully internal arc tested as per IEC requirement.

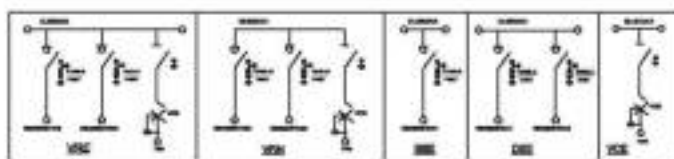
With the most advanced vacuum switching technology in an SF₆ gas filled enclosure, the units are compact and are easy to install & operate. Characterized by their reliability and operational safety, they are fully weatherproof with virtually zero maintenance.

Product Variants

Code	Product Description
VRN	Vacuum Ring Main Unit - Non Extensible
VRE	Vacuum Ring Main Unit - Extensible
VCE	Vacuum Circuit Breaker - Extensible
SSE	Single Switch - Extensible
DSE	Double Switch - Extensible

Technical Data

Characteristics	SABRE - VRE	VRNa	SABRE
Rated Voltage kV	12 / 15.5		24
Rated Current A	630		630 for Ring Switch & 400 for CB
Symmetrical Breaking Capacity kA / sec	21 / 3		16 / 3
Making Current kAp	52.5		40
Impulse Withstand kVp	75 / 110 (optional)		125
Min Gas Pressure Bar	0		
Filling Pressure Bar	0.4		0.5
Index of protection	IP 54		
Cable termination			
Incoming	Side Bottom		Side Bottom
Tee off	Rear Bottom		Rear Bottom
Cable Tests	Bottom	Bottom	Bottom
Dimensions			
Width	935	948	935
Depth	1030	1085	1078
Height	1333	1750	1470
Weight kg	410	350	450



Optional Accessories

- ▶ Earth Fault indicators / Fault passage indicators
- ▶ Metering module
- ▶ Motorized kit for automation.



4 PANEL RMU WITH PT PANEL



VRE



VCE



SSE



UNIT 1



UNIT 2

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