



INDIA'S NO.1
TRANSFORMER, PANEL &
SERVO STABILIZERS
MANUFACTURER



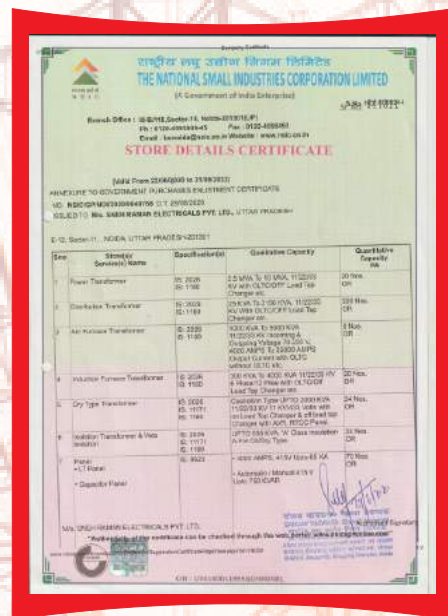
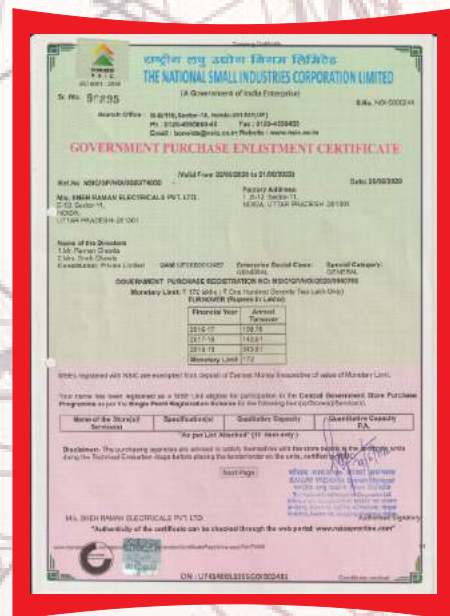
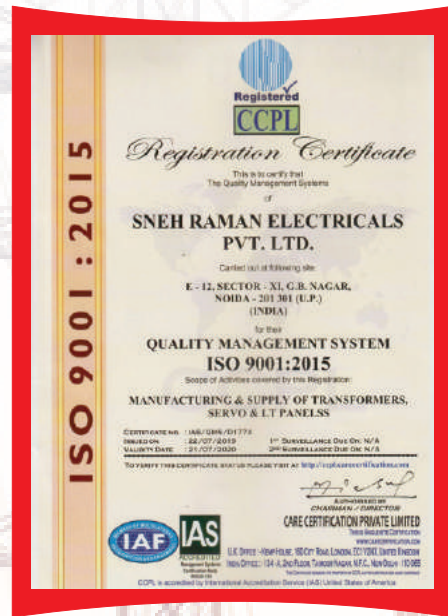
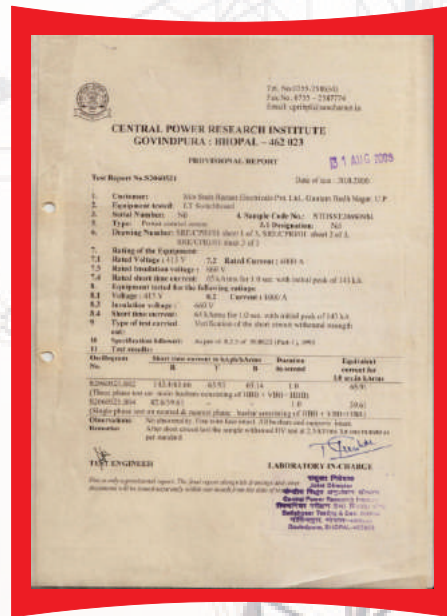
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CERTIFICATE

Our Few Valuable Customers





ABOUT

Sneh Raman Electricals Private Limited We, "Sneh Raman Electricals Private Limited" are a renowned enterprise that was established in the year 1984 at Gautam Budh Nagar, Uttar Pradesh (India). Our firm takes pride in introducing itself as a prominent manufacturer and supplier of a wide gamut of well developed power back-up systems. This comprehensive array comprises Furnace Transformer, Auto Transformer, Rectifier Transformer, Oil Filtration Transformer, Power Transformer, Induction Transformer, Dry Type Transformer, OLTC Transformer, Industrial Furnace Transformer, HT Panels, LT Panels, Metering Distribution Panel, Three Phase Transformers, Distribution Transformer etc. and many others. Further, we offer reliable Heavy Electrical Repair Service in the market. We are looking for the queries from Delhi/NCR. Over the years, our firm has successfully maintained perfect track records in the industry, by offering premier quality power back-up systems that are simply irresistible. Our adept personnel have developed these products from premier quality components, thus, making them highly efficient in functionality. In addition, we have gained a competitive edge in the market by offering prompt deliveries of our consignments in the market.

Managed under the proficient headship of our mentors, 'Mr. Raman Chawla' our firm has crossed milestones of success by attaining a good financial position in the industry. Further, by following the efficient business tactics given by our mentors, we have catered to the varied demands and requirements of our clients in an efficient manner.



PRODUCT PORTFOLIO

We bring forth an immaculate range of Power Back-Up Systems that are developed by adroit personnel using the latest fabrication techniques. Ensuring the highest level of efficiency, these systems are highly acclaimed by our clients. As these are fabricated using premier quality components, thus, these have a long service life.

The comprehensive array of our Power Back-Up Systems comprises:

- 3 Phase Transformer
- Furnace Transformer
- Auto Transformer
- Rectifier Transformer
- Distribution Transformer
- Distribution Transformer
- Oil Filtration Transformer
- Power Transformer
- Induction Transformer
- Dry Type Transformer
- OLTC Transformer
- HT Panels
- LT Panels
- Metering Distribution Panel
- Servo Voltage Stabilizer

Some of the salient features of our Power Back-Up Systems are:

- Optimal functionality
- Efficient performance
- Longer service life
- Easy to install
- Easy to operate

Apart from the specified products, we render efficient Heavy Electrical Repair Service in the market. Acknowledged due to their reliability, these Services are highly demanded in the industry. Further, these are availed by our clients at highly affordable rates in the market.

PRODUCT RANGE

Power Transformers are used in Transmission Network of higher voltages for step up and step down applications. SRE has a comprehensive range of Power Transformers that are designed to provide uninterrupted Power supply Standard: IEC / ANSI / BS / IS

Voltage Class: Up-to 132 kV Class
Capacity: Up-to 50 MVA

Power Transformer with OLTC (On Load Tap Changer)
ONAN/ONAF

Distribution Transformers

The final transformer in the Power distribution system that steps down the voltage to the voltage level usable at our homes / offices is called Distribution Transformer. These are designed to be robust and energy efficient.



Standard: IEC / ANSI / BS / IS / EN
Single Phase :Capacity: 16 kVA– 150 kVA
Voltage Class: Up-to 33 kV Class
Pole Mounted, Stack / Wound Core,
Conventional / CSP – Completely self
protected type

Three Phase Transformers:
Capacity: 25 kVA- 5 MVA(5000 kVA) | Voltage Class: Up-to 33 kV Class
Distribution Transformers with OLTC (On Load Tap
Changer), Conventional / Hermetically Sealed, (BIS approval up-to 2500
kVA, 33 kV Class, Energy Efficiency Level 3)

Amorphous Core Transformers

SRE focus on energy efficiency had enabled it to develop Amorphous Core Transformers which help in achieving very low no load losses. SRE has set up state of the art plant for manufacturing Amorphous Core transformers.

Single Phase:

Capacity: 16 kVA - 150kVA
Voltage Class: Up-to 33 kV Class

Three Phase:

Capacity: 25 kVA - 1000 kVA
Voltage Class: Up-to 33 kV Class



Dry Type Transformers

SRE Manufactures VPI (Vacuum Pressure Impregnated) transformers that have no flammable liquids and are maintenance free. These can be placed closer to the load and are easy to repair. These are specially designed to be placed in basements.

Capacity : 25 kVA– 2500 kVA
Voltage Class: Up-to 11 kV Class
Transformers with OLTC (On Load Tap Changer)



Servo Voltage Stabilizers

Low/ High Voltages and Fluctuations can cause damage to various electrical equipment. To provide fluctuation and spike free voltage SRE has a comprehensive range to Servo Voltage Stabilizers.

Capacity: 25 kVA – 3000 kVA
Type : Linear (Carbon Roller Type) / Dimmer Based (Carbon Brush Type)
Indoor / Outdoor Installation, Oil Cooled / Air Cooled | Protections : High / Low Voltage Cut off,
Single/ Reverse Phase Preventer, Short Circuit Protection.

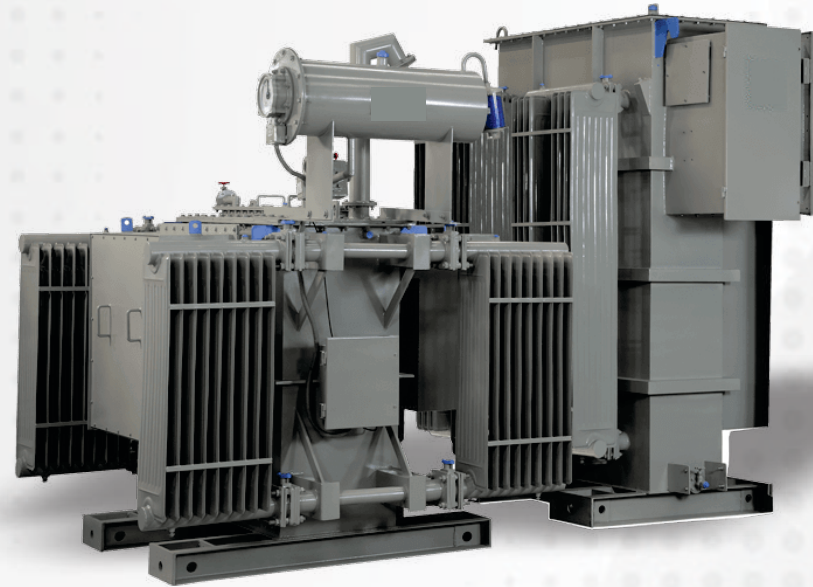


HT AVR / Built in AVR

To safe guard the critical machinery SRE make HT AVRs that regulates the voltage and delivers clean power. HT AVR operates On Load Directly on the HT line and provides stabilized HT output while Built in AVR operates on HT line and provides stabilized Ltoutput.

Capacity: 100 kVA–5000 kVA

Voltage Class: Up-to 33 kV Class



Special Purpose Transformers

SRE designs and manufactures custom designed special purpose transformers to suit your specific needs. With in house design team, we have immense technical capabilities to develop any customized transformer.

Few of them are listed below:

Dual Ratio Transformers | Furnace Transformers
Converter Duty Transformers for Solar Applications | Package
Sub Station Transformers | Isolation Transformers
Auto Transformers | Instrument | Transformers (CT/PT).



FITTING & ACCESSORIES

Standard fitting recommended in IS 2026- 1977 / 1180 are provided however following extra fitting can be provided as per specific requirement for the customer.

1. Buchholzrelay
2. Winding temperature indicator
3. Dial type thermometer
4. H.V & L.V Cable Boxes
7. OSR

TESTING FOR QUALITY ASSURANCE

Our works is equipped with all requisite testing facilities for quality assurances. Each transformer is tested for all tests conforming to IS: 1180 and IS: 2026 by qualified and experiences engineers with precision grade instruments. The tests involved are following:

1. Measurement of insulation resistance.
2. Measurement of voltage ratio.
3. Check up of vector group and polarity.
4. Induced over voltage test at double voltage and double frequency.
5. Separate source high voltage test of HV side and LV side.
6. Measurement of no load losses and magnetizing current.
8. Measurement of load losses and impedance voltage.
9. Measurement of zero sequence current.
10. Measurement of HVwinding and LV winding resistance.
11. Measurement of temperature rise of winding and oil of transformers at full rated load..
12. Pressure and vacuum testing of transformer for permanent deflection of body.
13. Check up of dielectric strength of transformer oil. (Test certificates are issued with each transformer.)
14. Tan Delta Test.
15. Measurement of PI.

ADDITIONAL TESTING

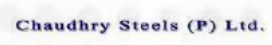
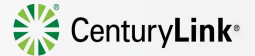
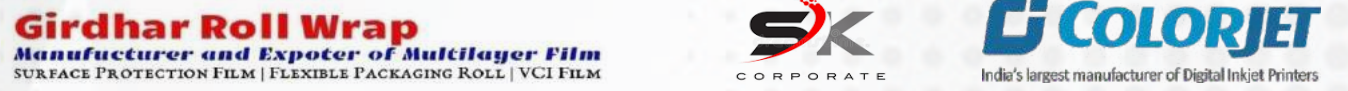
1. Short circuit with stand test. (These are the type tests and can be arranged at C.P.R.I. BHOPAL / BANGALORE and other recognized laboratories on payment if required by the customer.)

WARRANTY& AFTER SALES SERVICE

Our products are guaranteed against any manufacturing defect. Every transformer sold is backed by our excellent and prompt service network. We are always ready and available online to sort your issues as early as possible



ESTIMATED CLIENT



Quality Assurance System

Sneh Raman Electricals Private Limited has a unique quality system, committed by every team member and documented as per VC QSM. It has got a unique three-tier quality policy as follows:-

- All raw materials" including switchgear is subjected to rigorous testing.
- Stage inspection" is carried in four stages so that even small problems is eliminated and not carried further.
- Final testing" is carried out thoroughly with all calibrated instruments / gauges.
- The testing is done as per harmonized national and international standards including IEC 60439, IS: 8623.

TYPE TESTING

Panel designing has been verified by the following "CPRI" tests as per IS: 8623, IEC 60439, EN 60439

- Short circuit test 100 KA for 1 Sec.
- Temperature rise Test +35 Cover ambient.
- Ingress protection-IP-43, IP-55, IP-65
- 4000 AMP a panel with interleaving, interposing & two tier type, bus bar arrangement.

N-HOUSING TESTING

- Insulation with 1000V megger
- High voltage Test at 2.5 KV for 1 Sec (50Hz).
- Functional test.
- Powder coating quality (1000 hr and scratch etc.)
- Al and Cu Conductivity (%IACS).
- KWH calibration.
- Primary injection up to 6000 A.
- Secondary injection (Portable).
- Switch gear operational Tests.
- C.T. Polarity Test.

POLYURETHANE FOAM GASKET MACHINE

Dispense reliable joint less gasket for preventing dust. Gasket is formed by mixing polyurethane and isocyanate in a particular ratio. Polyurethane act as a softener and isocyanate act as a hardener. PU foam gasket has long life and more reliable compared to EPDM / Neoprene gasket. There will be no deformation in the gasket which provides consistent IP rating over a period of time.

ROUTER MACHINE

Router Machine is a reliable machine in cutting and engraving any material. This machine is able to make legend plate by engraving text on plate by using router machine quality of legend improves and provide legend an attractive and genuine look.

FABRICATION

Enclosures are fabricated with 14/16 swg smooth and wrinkle free, stress removed CRCA SHEETS from reputed manufacturer like TATA / BHUSHAN / ESSAR / SAIL by usage of extensive tooling in following in-house machineries:

- CNC EM series TURRET Amada Punch Machine having 500 hits/min.
- CNC Amada Break Press
- CNC BREAK PRESS (HH)
- CNC SHEARING MACHINE (HH)
- POWER PRESSES etc.



Salient features

- Enclosures are fabricated in modular construction.
- Each bay is identical and can be assembled or dismantled easily in shorter time which is not feasible in total welded bay.
- COMPONENTS TOO ARE FABRICATED IN FOLDED CONSTRUCTION. Results in minimum welding to avoid deformation of fabricated components beside STOCKING OF CRITICAL FABRICATION COMPONENTS TO EXPEDITE DELIVERY OF PANELS.
- The components are totally interchangeable and offer instant replacement if required.
- Electroplated slotted supports are provided in cable alleys for binding of cables.
- CONCEALED HINGES WITH PROJECTION WELDED BUSH ARE USED IN EACH DOOR.
- All door cut-outs are made at fabrication stage only resulting long life of paint.



Diesel Heating System

SRE uses a unique method for an ideal pretreatment. It has got BURNER CONTROLLED NINE HEATING TANKS, at the bottom the water is subjected to stir and does not allow the chemical to deposit at the bottom in addition to give the desired temperature.

Air Agitator System

- Does not allow sediments to deposit at the bottom.
- Online monitoring of critical parameters for chemicals.

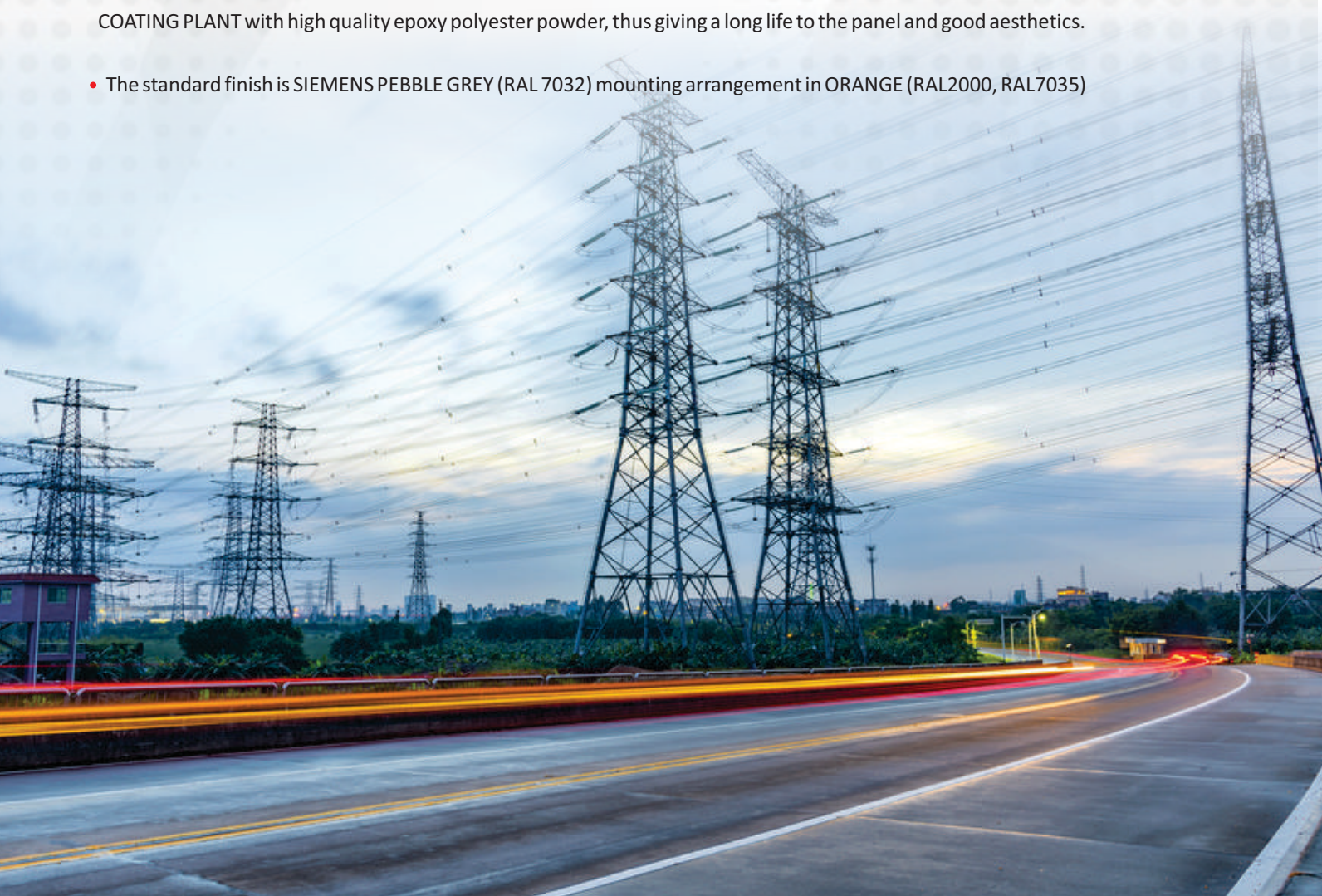
Nine Tank

- A chemical pre-treatment system proves to be one of the best treatments. It provides a continuous layer of phosphate, which is very essential to achieve a perfect and durable paint layer.
- ETP plant for disposal to ensure clean environment
- Ensure clean environment.

PAINTING

After perfect chemical pretreatment as per IS-6005, the fabricated components are painted in a CONVEYRISED POWDER COATING PLANT with high quality epoxy polyester powder, thus giving a long life to the panel and good aesthetics.

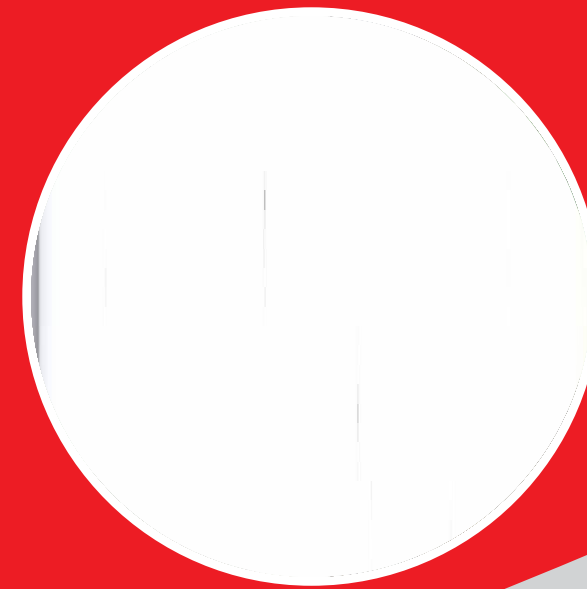
- The standard finish is SIEMENS PEBBLE GREY (RAL 7032) mounting arrangement in ORANGE (RAL2000, RAL7035)



WIRING

SRE has developed a modern pneumatic wiring shop with highly skilled wire-men and precision tools. Safe wiring is laid down by using plastic grommet and flexible conduits.

Excellent dressing with proper printed ferrule. Wiring is bunched nicely with the PVC duct, also loose wiring in plastic spiral.



BUS BARING

Copper/Aluminum bus bar of EC91 E ELECTROLYTIC GRADE Is procured from HINDALCO and cross sectional area is chosen on basis of bus bar calculation considering derating factors.

1. Bus bars are braced rigidly to withstand short circuit fault with Polyimide / FRP supports and proper bracing housed in electroplated "u-shaped channels.
2. All bus bars are insulated with PVC heat shrinkable sleeves of relevant color / Powder Coating Black Matt Finished.
3. Earth bus bar size is determined with earth fault calculation and run throughout the panel and connected with every door / clamp of metallic switch gear body mounted.

ASSEMBLING

Our plant layout is prepared in genuinely natural way of flow which helps us in speedy assembling. SRE has one of the largest assembling area in NCR, equipped with pneumatic tooling and have facility of cranes throughout the 30,000sq. ft. area.



POWER CONTROL CENTER / MAIN LT DISTRIBUTION BOARDS

INTRODUCTION

SRE offers state of the art VC-5100 series PCC panels, manufactured by employing modern engineering practices with consideration of SAFETY and RELIABILITY main aspects of this series. It has got numerous added features which were incorporated with the help of inhouse product analysis and continuous field feedback. VC-5100 PCCs are manufactured as per latest international standards like IEC 60439, EN 60934, IS: 8623 etc.

CONSTRUCTION

Incomer ACB is assembled in a single tier. However, upto 1600A OUTGOING ACBs can be assembled in TWO TIER arrangement.

Similarly, 630A MCCB/FSU is accommodated in 3 compartments per bay, 250/400A feeders in 4 compartments/bays.

In TWO TIER ACB FEEDER, the outgoing ACB links are made of different in length for easy cable termination, depending on cable incoming. Also for bottom ACB, vertical dropper is taken for ACB bus bar I/c connection.

Rear side of the panel is divided into two sections, first to accommodate vertical bus bar dropper with a hinged door fabricated with perforated CRCA SHEET in between for a perfect combination of shrouding with the facility of heat dissipation and visibility. Alternatively, for single tier ACB feeder HINGED ACRYLIC DOOR is provided.



TECHNICAL SPECIFICATION

Rated insulator voltage	660 Volts
Rated operator voltage	415 V+10%
RATED IMPULSE	
Withstand voltage	8-KV
Rated current	1000, 1250A, 1600A 2000A, 2500A, 3000A
fault level	4000A, 5000A, 6300A 100KA for 1sec 50KA for 1sec 42KA for 1sec 35KA for 1sec
Ambient Temp	50°C
Temp. rise	35°C over ambient
Bus bar support	SMC/FRP/POLYIMIDE
Degree of protection	IP-54/IP-55
Dimension (mm)	H=2400 D=1000/1200/1400/1600 W=600, 800, 1100 (multiple)

CABLING WIRE AND TERMINATION

Power wiring is done with colored flexible, copper multistranded wires from leading manufacturers.

FEEDER SIZES

VC 5100 series is totally front and rear access. Sizes are standardized for interchangeability of feeder if required as width and depth is fixed. The height used to vary in multiple of 225/300/450/600/900/1200 etc.

SALIENT FEATURES

- A perfect compartmentalized construction where the partition sheet goes till EXTREME END OF REAR PANEL.
- Spacious arrangement is made for cable termination ensuring comfortable operation and easy maintenance. Metallic/transparent barriers are provided, within the cubicle for prevention of human contact with live part accidentally.
- Provision of double door at rear of the panel.
- Panels are very sleek and aesthetics are excellent.
- Each panel is provided with plastic drawing pocket to house relevant drawings.
- Bolted modular construction facilities modification, retrofitting, extensibility in minimum possible time.
- Provision of additional door flap over steel lock causing further barrier to unauthorized operation and excellent aesthetics.
- Specially designed concealed profile of neoprene is used for gasketing to ensure dust protection.
- Use of quarter turnkey flush type steel door locks for convenient operation.
- HIGH TENSILE BOLT & CONICAL WASHERS for busbar connection.
- Mimic diagram is provided.
- Tool box is provided.
- Perforated sheet shroud to main horizontal bus bar chamber.
- Phase sequence meter is provided, if required
- Every bay is provided space heater, thermostat and backup protection for anti condensation.
- Cubicles having controls are equipped with lamp and socket.
- Two nos. of power socket including MCB / fuses are provided to avoid undesired unsafe wire tapping from busbar (as an option).
- Dish type extensible door is provided.



PROMPT AFTER LOCATION SALES ASSISTANCE

PROMPT AFTER LOCATION SALES ASSISTANCE MAP Our satisfied esteemed clients have affirmed our aftersales services by awarding their repeated orders. Despite of perfect product, our after sale services during commissioning and afterwards has no limitation of distance. Our esteemed clients are based through out the country including :-

Andhra Pradesh	Madhya Pradesh
Himachal Pradesh	Rajasthan
Maharashtra	UP
Gujarat	Orissa
Tamil Nadu	Punjab
Uttarakhand	JaK

STANDARDS APPLICABLE

- IS :13947 L.V. switchgear part 1,2,3,4,5.
- IS :8623 Factory built assemblies of switchgear and IEC-439 control gear.
- IS :13703 Low voltages fuses
- IS :2705 Current transformer
- IS :3156 Voltage transformer
- IS :3231 Electrical relays for power system protection.
- IS :3842 Application guide fro electrical relays for ac system (part-1&2)
- IS :13010 AC electromechanical meters
- IS :5-1978 Color for ready mixed paints and enamels
- IS :6005 Code of practice for phosphating of iron and steel
- IS:613 | Copper rods and bars for electrical purpose
- IS:513 Specification for cold rolled carbon steel sheet
- IS :5082 Wrought aluminum | S:375 Marketing and arrangement for switchgear bus bar
- IS:694 PVC insulated cables for voltages up to India Pvt.Ltd. 1100V

MAP & FACTORY

