

/idhyut Control

An ISO-9001: 2008 Company



The Reliable Partner In Your Growth





- Power control centres
- Motor control centres
- Power distribution boards
- W D.G. Synchronizing and A.M.F. panels
- Power factor control panels
 Control and Relay panels
- Control desks
- W Bus ducts and bus trunking
- W ATS / Slipring Starters
- W PLC and AC/DC drive panels
- W Stainless Steel Pcc / Mcc Panels for Highly Corrosive Industries
- W Draw out Panels

Our Few Valuable Customers

IT Companies Anergizer I-Energizer **HUGHES** Hughes Software moserbaer Moser Baer Stellar Stellar IT Parks **Paper Mills** RAINBOW Rainbow Papers Ltd. Kalpataru Paper Ltd. ORIENT PAPER & INDUSTRIES LTD. Ruby Macons Ltd. @(R) B Bindal Paper Ltd. (D) Dev Priya Industries Ltd. Khatema Fibres Paper Ltd. Shree Bhawani Paper Mills Ltd. MPA Nikita paper Ltd. Bal Krishna Paper Mills Centuary Paper Mills Anand Duplex @ ANAND Steel Unit 南 Rathi Steels Ltd. Kalpataru Alloys Ltd. Jindal Steel & -7 Power Ltd. (Bhushan Steel Ltd. AMBA Amba Steels Ltd Maithan ISPAT Ltd. M M Monnet ISPAT Ltd. **Automobiles Sectors** Toyota Ltd. TOYOTA Honda Motorcycle & Scooters India (P) Ltd. Mª SUZUKI Maruti Suzuki Ltd. 1 Tata Motors Ltd. Bharat Gears Ltd. Hi-Tech Gears Ltd. 1 Hero Ltd. Honda Siel Ltd. India Yamaha **Q УАМАНА** Motor (P).Ltd Rico Auto RICO Industries Ltd. Shri Ram Pistons

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Galio

A

& Rings Ltd

Galio India

Maruti Udyog Ltd.

Amtek Diamond





Blue Star Ltd.

Orient Ceramic Ltd.

Ambuja Cement Ltd.

Jay Pee Group

BLUE STAR

Fall-H

Ceramics Industries

Cement Plants

JAYPEE



KRBL Limit

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DEV

KRBL Ltd.

REI Agro Ltd.

Dev Priya Group

The Reliable Partner In Your Growth



BRIEF ABOUT VIDHYUT

Vidhyut, established in 1995, is a pioneer and accredited with numerous FIRSTS among leading panels builders in the NCR like:-

- FIRST in folded enclosure construction with variable height, to suit varied requirement of customers.
- FIRST in **ERP** implementation (since 1999)
- FIRST in ISO-9000 accreditation (since 1999)
- FIRST in using pneumatic tooling
- FIRST in using NINE TANK pre-treatment system with DIESEL heating

Owing to continuous UPGRADE QUALITY, ASSURED AFTER SALES SERVICES AND ON TIME DELIVERY TRACK RECORD, the company has its 80% business share Contributed by repeat orders. Most of the leading industrial houses entrusted us to distribute the electrical power through Vidhyut Switch boards.

Vidhyut's commitment towards the finest quality and adherence to international standards, has yielded its name in the international market through export to countries like Mexico, Jordan, Bangladesh, Sri Lanka, Guatemala, Nepal, Nigeria, Ghana, Philippines, Zimbabwe and Rwanda.











QUALITY ASSURANCE SYSTEM

VIDHYUT 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° C over ambient.
- Ingress protection-IP-43, IP-55, IP-65
- 4000 AMP a panel with interleaving, interposing & two tier type, bus bar arrangement.

IN-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 isocynate in a particular ratio. Polyurethane act as a softener and isocynate 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.

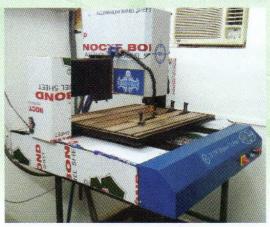
ROUTER MACHINE

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

Vidhyut uses an 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.

Traditional electrical heating system has the drawback of depending on electrical supply, which is not consistently available in the present scenario of power shortage; also STEADY LOAD ON DG SET is not in usual practice.

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

Vidhyut 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 EC91E ELECTROLYTIC GRADE Is procured from **HINDALCO** and cross sectional area is chosen on basis of bus bar calculation considering derating factors.

- Bus bars are braced rigidly to withstand short circuit fault with Polyimide / FRP supports and proper bracing housed in electroplated "u" shaped channels.
- All bus bars are insulated with PVC heat shrinkable sleeves of relevant color / Powder Coating Black Matt Finished.
- 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.
- Vidhyut has one of the largest assembling area in NCR, equipped with pneumatic tooling and have facility of cranes throughout the 30,000 sq. ft. area.
- The area is air cooled and have positive air pressure to remove presence of dust particles in the floor.









POWER CONTROL CENTER / MAIN LT DISTRIBUTION BOARDS

INTRODUCTION

Vidhyut 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, up to 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 6 Rated operator voltage 4

660 Volts 415 V±10%

RATED IMPULSE

Withstand voltage

8-KV

Rated current

1000,1250A,1600A

1000,1230A,1600/

2000A,2500A,3000A

4000A,5000A,6300A

fault level

100KA for 1sec

50KA for 1 sec

42KA for 1sec

35KA for 1 sec

Ambient Temp

50°C

Temp. rise

35°C over ambient

Bus bar support

SMC/FRP/POLYMIDE

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 interchangability of feeder if required as width and depth is fixed. The height use 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 bus bar connection.
- Mimic diagram is provided.
- Tool box is provided.
- Perforated sheet shroud to main horizontal bus bars 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 bus bar (as an option).
- Dish type extensible door is provided.



MOTOR CONTROL CENTRES

INTRODUCTION

Vidhyut offers VC-6100 SERIES MCC a unique combination of innovative accessories, perfect workmanship and the highest available standard components resulting in SUPERIOR AESTHETIC LOOK, trouble free maintenance easy motor control centres, which are made in friendly accordance with international standards including IEC 60934, EN 60437, IS: 8623

CONSTRUCTION TYPE

VC-6101-single front, rear dead (front access only)

VC-6102-single front, rear access

VC-6021-double front

FOR CONTROL WIRING

Nylon terminals are used with suitable accessories like TERMINALS HEADERS, MARKERS STOPPER, CT SHORTING TERMINALS etc.

Wiring bunch is laid down in PVC DUCTS and arranged to give double safety by using SPIRAL/FLEXIBLE CONDUCT.

All components are marked with INTERNAL LEGENDS; legends are made out of trifoliate sheet to depict feeder designation even in rear cable chamber also. Control circuit is powered by DRAW TYPE FUSE or MCB.

Every incomer panel is provided with drawing pocket for ready reference of control schemes.

TECHNICAL SPECIFICATION

Rated insulator voltage 660 Volts
Rated operator voltage 415 V±10%

RATED IMPULSE

Withstand voltage 8-KV

Rated current 400A, 630A, 800A,

1000A,1250A, 1600A

2000A, 3000A

fault level 50KA for 1sec

42KA for 1sec

35KA for 1 sec

Ambient Temp 50°C

Temp. rise 35°C over ambient

Bus bar supports SMC / FRP / POLYMIDE

Degree of protection IP-54/55

Dimension (mm) H=1875/2175/2400

D=500(single front)

=800(double front) W=multiple of 500+300mm

OUTGOING CABLE TERMINATION

Power and control wiring bunches are carried in vertical cable alley. DIN CHANNEL is provided to accommodate NYLON COLOURED POWER TERMINAL AND CONTROL TERMINALS, represented by markers and headers. Transparent shrouds are provided in incoming side to avoid accidental contact in case door is opened.

SALIENT FEATURES

- Spacious arrangement is made for cable termination ensuring comfortable operation and easy maintenance.
- Panels are very sleek and aesthetics is excellent
- Bolted modular construction facilities modification, retrofitting, extensibility in minimum possible time.
- 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.
- Each panel is provided with plastic drawing pocket to house relevant drawings.
- Metallic/transparent barriers are provided, within the cubicle for prevention of human contact with live part accidentally
- All covers, doors inter panel jointing are provided with neoprene gasket for perfect dust protection.
- A perfect compartmentalized construction.
- High quality epoxy powder coated switch boards to withstand corrosive environment and long lasting elegant door.
- Specially designed concealed profile of neoprene is used for gasketing to ensure dust protection.



VIDHYUT'S APPROVAL FROM:

- AARGEE CONSULTANT
- ABETT CONSULTANT
- ACE DESIGN FACILITES
- AJAY KUMAR & ASSOCIATES
- AVANTE GARDE ENGINEERS
- AECOM CONSULTANTS
- ARCHOHM CONSULTANTS
- ARCHETYPE GROUP
- AURORA CONSULTING ENGINEERS
- · ABL HOSPITECH PVT. LTD.
- APPROVA PARIKH ASSOCIATES
- BECON ENGINERRS
- C.P. KUKREJA & ASSOCIATES
- . CEBECO (I) PVT LTD
- CONSULTANCY DEVELOPMENT CENTER
- CONSULTING ENGINEERS
- CONSUMMATE ENGINEERING SERVICES PVT. LTD. (CESPL)
- CGMP PHARMA N PLAN
- C2C SERVICES CONSULTANTS PVT. LTD.
- . CUSHMAN & WAKEFIELD (C & W)
- DARSHIKA CONSULTANTS
- DESINE ENGINEERS I LTD
- DEVELOPMENT CONSULTANTS PVT LTD
- DR HUTAREW
- DSCL ENERGY
- DESIGN CENTRE CONSULTING ENGINEERS
- ELECTRICAL CONSULTING ENGR.
- ELECTRO CONSULTANT
- ENERSAVE CONSULTANT
- ENGEERING PROJECT (I) LTD
- ENGINEERING CONSULTANCY
- ENGINEERS INDIA LTD
- ERCON ENG. PVT. LTD.
- ESCON CONSULTANT

- EDIFICE CONSULTANTS
- EIGEN TECHNOLOGIES
- ENGINEERING DESIGN & CONSULTING ORGANISATION
- ENGINEERING CONSULTANCY MANAGEMENT SERVICES (ECMS)
- ES ELECSERVE CONSULTANTS
- ENVIRONS BUILDING SERVICES CONSULTANTS
- ENVIROTECH DESIGN PVT. LTD.
- FAIRWOOD CONSULTANT
- FLOUR DANIEL
- FAIRWOOD DESIGN PVT. LTD.
- · G.D. TECHNO
- GAUTAM GAURAV & ASSOCIATES
- GENERAL CONSULTANT FOR DMRC
- GHERZI EASTERN LTD.
- GIAN CONSULTANCY
- HOLTEK CONSULTANTS
- HOSPITAL SERVICES CONSULTANCY CORP
- . HOWE INDIA PVT. LTD.
- HOSPITAL SERVICES CONSULTANCY SERVICES (HSCC) INDIA LTD.
- INDO CANDIAN
- . INDO MAG STEEL TECH. PVT. LTD.
- ICT SD ENGINEERING CONSULTANT
- INTEGRAL DESIGN
- JACOB H & G
- JAISWAL & ASSOCIATES
- JAYANT GANDHI ASSOCIATES
- KANWAR KISHAN & ASSOCIATES
- KAUSHAL TECHNICAL SERVICES
- LAHMEYER INTERNATIONAL
- LIRIO LOPEZ DESIGN CONSULTANTS
- LURGI CONSULTANT
- MECON CONSULTANT

- MOT MACDONALD
- MEINHARDT INDIA
- M. J. CONSULTANTS
- NIRMAN CONSULTANTS
- NELSON
- · PDIL
- PGCIL CONSULTANT
- PRATAP PARIKH & ASSOCIATES
- R SINGH & ASSOCIATES
- . R. S. CONSULTANTS
- S.N. CONSULTANT
- SANELAC CONSULTANT
- SEMEC CONSULTANT
- SN PINGLE CONSULTANT
- . S.S. CONSULTANT
- SPACE COMBINE
- SPAN CONSULTANT
- SPECTRAL ENGINEER CONSULTANTS
- SUNIL NAYYAR & ASSOCIATES
- STUP CONSULTANTS
- STAM D PROJECTS PVT. LTD.
- . T.S. SETHI & ASSOCIATES
- TATA CONSULTANCY ENGINEERS
- TATA CONSULTANCY SERVICES
- TCG DEVELOPMENT
- TECHNIP INDIA
- . THE GUILD OF ARCHITECTS
- TRIUNE CONSULTANT
- V. S. KUKREJA ASSOCIATES PVT. LTD.
- WATER & POWER CONSULTANCY SERVICES
- WSP CONSULTANTS
- WBG CONSULTING ENGINEERS

PROMPT AFTER SALES ASSISTANCE

Our satisfied esteemed clients have affirmed our after sales 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

• J&K

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

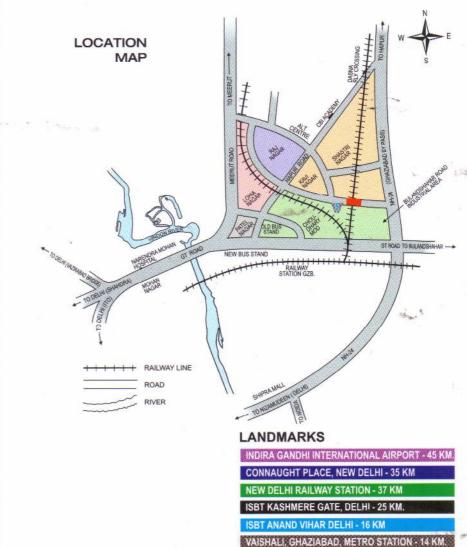
IS: 6005 Code of practice for phosphating of iron and steel

IS: 613 Copper rods and bars for electrical purpose

IS: 513 Specification for cold rolled carbon steel sheet

IS: 5082 Wrought aluminum IS:375 Marketing and arrangement for switchgear bus bar

IS: 694 PVC insulated cables for voltages up to 1100V.





DILSHAD GARDEN METRO, DELHI - 14 KM

OLD GHAZIABAD BUS STAND - 3.5 KM

ALT GHAZIABAD BUS STAND - 1.5 KM

VIDHYUT CONTROL (I) PVT. LTD



India Pvt.Ltd. An ISO-9001: 2008 Company

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