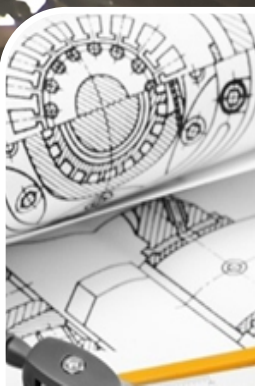
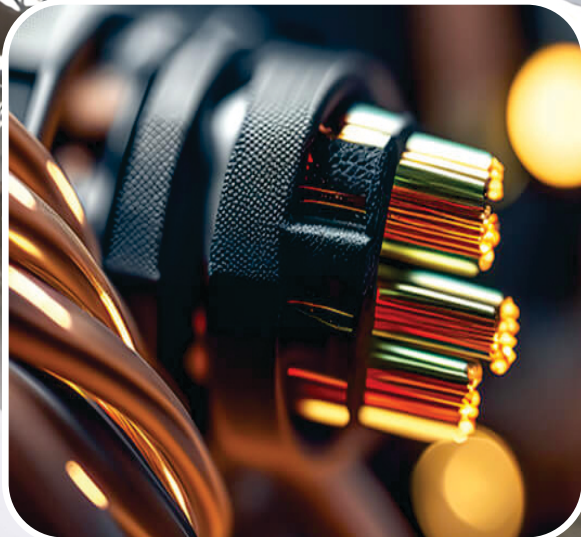




AKR ENG & PROJECTS

TECHNOLOGY OF TOMORROW



COMPANY

PROFILE



AKR ENGG & PROJECTS

TECHNOLOGY OF TOMORROW

AKR Engg & Projects is a leading global EPC company, headquartered in Salem, Tamilnadu, India. We are a leading energy infrastructure building company with focus on sustainable development. Our wide range of products and services cater to the contemporary demands of the power generation, transmission and distribution industry.

Established in the year 2020 we provide diversified energy solutions and infrastructure expertise for Power Transmission, Distribution and Renewable Energies that cater to the energy sector. Our business model has two verticals - Electrical Systems & Equipment and Turnkey Engineering Projects.

Quality, Safety, Consistency & Environmental Consciousness is an intrinsic part of our business. Providing superior quality products and cost effective solutions is the top priority of AKREP.

OUR SCOPE OF WORKS AND SOLUTIONS



OUR SERVICES

UG CABLES

We understand that modern and urban landscapes demand innovative solutions. Our expertise in underground cabling ensures seamless transmission of power while maintaining the aesthetic integrity of urban spaces.

**Our underground cable laying services include
LV, MV / HV, EHV upto 500kV & UHV (HVDC)**

- System Survey
- Detail Projects Report (DPR)
- System Design & Layout
- Supply of Cables & Accessories Materials
- Civil Works
- Trenching and Trenchless method
- Duct Installation (OFC)
- Cable laying, jointing & termination
- Testing & Commissioning
- Operation & Maintenance (O&M)



OVERHEAD LINES TRANSMISSION

We provide solutions and execute laying of new overhead lines, relocation of transmission lines and maintain distribution transformers. Our work includes overseeing substation connectivity along the highways and residences to facilitate easy and seamless power supply in urban and rural India.

**We specialize in the installation of overhead lines, offering :
LV, MV / HV, EHV upto 765kV & UHV (HVDC)**

- System Survey
- Detail Projects Report (DPR)
- System & Material Design & Layout
- Supply of line & other materials
- Civil Works
- Erection of Tower
- Relocation of Lines
- Line Stringing & Charging
- SIT1 of OPGW
- Operation & Maintenance (O&M)



AKR ENG & PROJECTS
TECHNOLOGY OF TOMORROW

OUR SERVICES

SUB - STATION

Skilled in the complete lifecycle management of substations- from Survey to commissioning with operation and maintenance we ensure high performance in both primary & secondary transmission & distribution systems. Our comprehensive approach guarantees a secure and dependable conveyance of power from its source to the end user.

We provide comprehensive substation solutions :

- Survey & Detailed project report
- Design of AIS & GIS Substation Layouts
- Supply of line and other materials
- Civil Works
- Erection of LV/MV/HV/EHV Towers
- Substation Automation System (SAS)
- Integration of OPGW & Other
- Testing & Commissioning of Substations
- Integration of SCADA, SAS & DAS
- Operation & Maintenance (O&M)



RAILWAYS & METRO RAIL PROJECTS



In the realm of public transport, we contribute to the development of sustainable urban mobility solutions to Metro Rail, MRTS, RRTS & Railway Electrifications Projects. By powering MRTS & RRTS we contribute to a congestion free traffic system & pollution free cities.

We specialize in the installation of overhead lines, offering:

- Survey & Detailed Project Report
- Design of TSS, ASS, Traction & Signalling's
- Supply of Switchgears, OH Conductors
- Civil Works
- Erection of OHE Lines
- Track Laying, Signalling & Communications
- Integration of OPGW & Other
- Testing & Commissioning of OHE & PSI
- Rolling stock procurement
- Operation & Maintenance (O&M)



AKR ENG & PROJECTS
TECHNOLOGY OF TOMORROW

OUR SERVICES

TELECOM PROJECTS

Our Telecom Projects division is dedicated to providing cutting edge solutions that enable seamless communication across the globe. We also provide optical and digital solutions through advanced offerings to build 5G & 6G, FTTX enterprise and Data Centre Networks.

Our telecom services include :

- Survey & Detailed Project Report
- Optic Fiber Cables & Accessories
- Routers, Managed Switches & NMS
- Optical Splitters & Cabinet Assemblies
- 5G & 6G Products
- Solutions for Defence & Railways
- Turnkey & Partial Turnkey Projects.
- Public Telecommunications Network
- 5G Systems & VOIP Integrations
- Operation & Maintenance (O&M)



SMART METERS

The Indian power generation industry is gearing up for a digital transformation to meet the high demand for green & clean energy targets set by the government of India. The Digitization of the Primary & Secondary transmission systems, particularly in the primary & secondary distribution sectors with AMI systems will strengthen & speed up the transformation of the power sector leading to a future ready Distribution Automation System (DAS) thereby making it powerful, sustainable, resilient and flexible.

Key Features of Smart Meters

- Survey & detailed Project Report
- Design of Head End Systems (HES)
- Supply of Smart Meters with HES
- Smart Grids for distributed energies
- Smart Grid for Substations
- Substation & SCADA Integrations
- SCADA for Renewable Energies
- Integration of Smart Meters with HES
- Installation & Integration of FRTU's & RTU's
- Operation & Maintenance (O&M)



AKR ENGG & PROJECTS
TECHNOLOGY OF TOMORROW

SOLUTIONS FOR WIND ENERGIES

AKREP is one of the India's largest Independent wind energy turnkey solution provider, providing renewable energy solutions focusing on Clean Energy for India to meet the Power Demands. Our EPC solutions are designed and executed by teams of highly skilled engineers with more than 20 years of experiences in the renewable energy sectors. Our scope spans across the value chain - from survey of land to charging of the wind farm. We have executed many turnkey projects with Renew, JSW and Universal Cable.



JSW S-1 55MW



JSW S-2 100MW



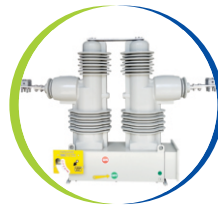
JSW S-3 158 MW



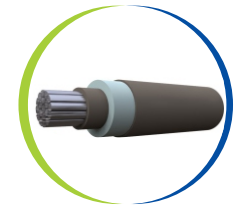
RENEW POWER VCB CAPACITOR SWITCHES



Switchgear for 11kV, 22kV & 33kV Wind Farms



Capacitor Switches 11kV, 22kV & 33kV



680V/1100V EPR Cables



SURVEY

Location & Plot Identifying
Land acquisition
HT Line Assessment
Site Assessment
Wind Speed Measurement
Soil Testing
Power Evacuation

DPR

Site Location
Layout briefing right of way
Technical Analysis
Project Finance
Banking loan Arrangements
Land Acquisition



DESIGN

Preliminary Layout
Plant Design
Windmill Design, Cable Design
Foundation Design
Transformer Design
Switchgears Design
Fencing Arrangements



ERECTION & COMMISSIONING

Windmill Tower
Nacelle & Rotor Hub
Dry & Oil Type X'Mer Erection
Cable Laying, Switchgears Erection
RSJ Poles & Pole Items
HT & LT Item Erections



SCADA & O&M

Solar Data Management
Monthly Generation Reports
Plant Efficiency & Performance
Energy Yield reporting
Source Summary Reports
Remote Monitoring
Remote Controlling



SUPPLY

Windmill Towers
XLPE Cables, LT Switchgears
HT Switchgears, HT Isolators
Oil & Dry Type Transformers
Conductors & Insulators
RSJ Poles



SOLUTIONS FOR SOLAR ENERGIES

AKREP also specialises in providing Solar EPC solutions to support the project life cycle. We have executed partial & full Turnkey projects.

Our scope includes land acquisition to charging of the station and handing over the same to the customer.



Ground Mounted



Roof Top



11kV, 22kV & 33kV
Switchgears



DC Cables and AC Cables



SURVEY

- Location & Plot Identifying
- Land acquisition
- HT Line Assessment
- Site Assessment
- Color Directional Measurement
- Soil Testing
- Power Evacuation

DPR

- Site Location
- Layout briefing right of way
- Technical Analysis
- Project Finance
- Banking loan Arrangements
- Land Acquisition Process



DESIGN

- Preliminary Layout
- Plant Design, Cable Design
- Solar Panel Design
- Foundation Design
- Transformer Design
- Switchgears Design
- Fencing Arrangements



SUPPLY

- Solar Panels,
- XLPE Cables, LT Switchgears
- HT Switchgears, HT Isolators
- Oil & Dry Type Transformers
- Conductors & Insulators
- RSJ Poles

ERECTION & COMMISSIONING

- Solar Pannels Structure (Roof / Ground)
- Solar Pannels
- Dry & Oil Type X'Mer Erection
- Cable Laying, Switchgears Erection
- HT & LT Item Erections



SCADA & O&M

- Solar Data Management
- Monthly Generation Reports
- Plant Efficiency & Performance
- Energy Yield reporting
- Source Summary Reports
- Remote Monitoring
- Remote Controlling

OUR PRODUCT RANGE

ELECTRONIC DIGITAL SMART METERS

DLMS, PREPAID & POST PAID METERS

1 ϕ & 3 ϕ DLMS UNI & BI-DIRECTIONAL DIGITAL METERS

- Model : SM401,2,5 / ST401,2,5
- Class of Accuracy : 1 / 0.5 / 0.5S / 0.2 / 0.2S
- Nominal Voltage : 230V & 440V AC
- Nominal & Max Current : 5A to 60A
- Frequency : 50Hz
- Type of Communication : DLMS
- Physical Ports : RS232 / RS485 / OPTICAL
- IP Level : 54 & 55
- Applicable Standard : IS / IEC



1 ϕ & 3 ϕ DIGITAL AUTOMATIC SMART METERS

- Model : SM402D / ST402D
- Class of Accuracy : 1 / 0.5 / 0.5S / 0.2 / 0.2S
- Nominal Voltage : 230V & 440V AC
- Nominal & Max Current : 5A to 100A
- Frequency : 50Hz
- Type of Communication : DLMS / TCP / UDP
- Physical Ports : USB / OPTICAL
- IP Level : 54 & 55
- Applicable Standard : IS / IEC



1 ϕ & 3 ϕ DIGITAL AUTOMATIC SMART METER WITH CT PT OPERATED

- Model : SM402DCT / ST402DCT
- Class of Accuracy : 1 / 0.5 / 0.5S / 0.2 / 0.2S
- Nominal Voltage : 230V & 440V AC
- Nominal & Max Current : 5A to 100A
- Frequency : 50Hz
- Type of Communication : DLMS / TCP / UDP
- Physical Ports : USB / OPTICAL
- IP Level : 54 & 55
- Applicable Standard : IS / IEC



ONU/ONT, OLT, GPON, XPON & EPON

WIRELESS GIGABIT VOIP XPON ROUTER

- **Interface** : 1SC/UPC XPON Port, 2 x GE LAN Ports, 1xFXS(Voice) Port
- **Antenna** : Strong 2x5dBi Fixed External Dual Band Antennas
- **Band** : 867 Mbps on 5 GHz, 300 Mbps on 2.4 GHz
- **VoIP Features** : 1xRJ11 FXS Port for connecting Analog Phones. Call Forwarding, Call Waiting, Call Block, 3 Way Conference etc
- **VLAN** : 802.1Q Tag VLAN, VLAN Transparent Mode / Translation Mode / Trunk Mode
- **QoS** : WMM, Bandwidth Control
- **Easy Management** : Supports TRO69 + Local + Remote Management
- **Connectivity** : AP / Repeater Mode, Mesh Supported
- **Internet Protocol** : Supports IPv4 and IPv6
- **Other Features** : Supports all BSNL essential features



1 - PORT GIGABIT XPON TERMINAL

- **Interface** : 1xSC/UPC XPON Port, 1 x GE LAN Ports,
- **Chipset** : Based on Industry Leading RTL Chipset
- **FLASH / RAM** : 16MB Flash & 32 MB RAM for Better Performance
- **VLAN** : 802.1Q Tag VLAN, VLAN Transparent Mode / Translation Mode / Trunk Mode
- **QoS** : WMM, Bandwidth Control
- **Port Forwarding** : L2/L3 forwarding, L3 NAT
- **Easy Management** : Supports TRO69 + Local Management + Remote Management
- **Other Features** : Supports all BSNL essential features

WIRELESS GIGABIT XPON ROUTER

- **Interface** : 1SC/UPC XPON Port, 2 x GE LAN Ports,
- **Antenna** : 2x5dBi Fixed External Dual Band Antennas
- **Band** : SFDB 867 Mbps on 5 GHz, 300 Mbps on 2.4 GHz
- **VLAN** : 802.1Q Tag VLAN, VLAN Transparent Mode / Translation Mode / Trunk Mode
- **QoS** : WMM, Bandwidth Control
- **Easy Management** : Supports TRO69 + Local + Remote Management
- **Connectivity** : Seamless AP / Repeater Mode, Mesh Supported
- **Protocol** : Supports IPv4 and IPv6
- **Other Features** : Supports all BSNL essential features



ONU/ONT, OLT, GPON, XPON & EPON

WIRELESS GIGABIT VOIP GPON ROUTER

- **Interface** : 1SC/APC GPON Port, 1 x GE WAN / LAN Ports, 3xGE Lan Ports, 1xFXS (Voice) Port
- **Antenna** : Strong 4x5dBi Fixed External Antennas
- **Band** : Super - fast Dual 2402 Mbps on 5 GHz, 574 Mbps on 2.4 GHz
- **Processor** : Quad-Core for Faster Processing
- **OFDMA** : OFDMA uses your time and frequency more efficiently
- **VoIP Features** : 1xRJ11 FXS Port for connecting Analog Phones. Call Forwarding, Call Waiting, Call Block, 3 Way Conference etc
- **Easy Management** : Supports TRO69 + Local Management + Remote Management
- **Seamless Connectivity** : Router / AP / Repeater Mode, Mesh Supported
- **Other Features** : Supports all BSNL essential features



WIRELESS GIGABIT VOIP XPON ROUTER

- **Interface** : 1xSC/UPC XPON Port, 1 x GE & 1 x FE LAN Ports, 1xFXS(Voice) Port
- **Antenna** : Strong 2x2.4 GHz 5dBi Fixed External Antennas
- **Band** : Stable Single Band 300 Mbps at 2.4 GHz Wireless
- **VLAN** : 802.1Q Tag VLAN, VLAN Transparent Mode / Translation Mode / Trunk Mode
- **QoS** : WMM, Bandwidth Control
- **VoIP Features** : 1xRJ11 FXS Port for connecting Analog Phones. Call Forwarding, Call Waiting, Call Block, 3 Way Conference etc
- **Easy Management** : Supports TRO69 + Local Management + Remote Management
- **Connectivity** : Seamless AP / Repeater Mode, Mesh Supported
- **Internet Protocol** : Supports IPv4 and IPv6
- **Other Features** : Supports all BSNL essential features



ENERGY CABLES

LV, MV, HV & EHV POWER CABLES

LOW VOLTAGE POWER CABLES (110V to 3.6kV)

- Minimum Voltage Range : 110V (0.11kV)
- Maximum Voltage Range : 3600V (3.6kV)
- Current Rating : Up to 400A
- Available Cores : 1C / 2C / 3C / 3.5C / 4C / 5C
- Type of Insulation : PVC / EPR / XLPE / XLPO
- Type of Conductors : Copper / Aluminium
- Type of Protection : Armoured / Unarmoured
- Standards : IS or IEC



MEDIUM VOLTAGE POWER CABLES (3.6kV to 36kV)

- Minimum Voltage Range : 3,600 Volts (3.6kV)
- Maximum Voltage Range : 36,000 Volts (36kV)
- Available Cores : 1C / 3C / 3.5C / 4C
- Type of Insulation : EPR / XLPE
- Type of Conductors : Copper / Aluminium
- Type of Protection : Armoured / Unarmoured
- Type of System : Earthed & Unearthed
- Standards : IS or IEC

HIGH & EXTRA HIGH VOLTAGE POWER CABLES (66 kV to 765kV)

- Minimum Voltage Range : 66,000 Volts (66kV)
- Maximum Voltage Range : 4,00,000 Volts (400kV)
- Available Cores : 1C
- Type of Insulation : XLPE / PILC / MI-PPL
- Type of Conductors : Copper / Aluminium
- Type of Protection : Armoured / Unarmoured
- Type of System : Earthed
- Standards : IS or IEC



SPECIAL & COMMUNICATION CABLES

RAILWAYS, SWITCHGEARS & FIRE & HEAT RESISTANT CABLES

RAILWAY CABLES & CONDUCTORS (12V to 30kV)

- Minimum Voltage Range : 12V Volts
- Maximum Voltage Range : 30,000 Volts
- Current Rating : Up to 2000A
- Available Cores : 1C / 2C / 3C / 3.5C / 4C / 5C
- Type of Insulation : PVC / EPR / XLPE
- Type of Conductors : Copper / Aluminium
- Type of Protection : Armoured / Un Armoured
- Standards : IS or IEC



SWITCHGEAR PANEL CONTROL CABLES (12V to 1.1kV)

- Minimum Voltage Range : 12 Volts
- Maximum Voltage Range : 1100 Volts
- Available Cores : 1C/3C/4C/12C/24C/38C
- Type of Insulation : PVC / XLPE
- Type of Conductors : Copper / Aluminium
- Type of Protection : Armoured / Shielded
- Standards : IS / IEC

COMMUNICATION & FIBER OPTIC CABLES

- Fibre Counts : up to 576 F
- Temperature Range : -50° to +90° C
- Fibre Mode : Single / Multi Modes
- Construction type : LTU/LTT/LTW/MTU/MTW
- Type of Tube : Normal / Gel Filled
- Outer Sheath : LSZH & LSZH - FR
- Type of Armour : CST / SWA
- Standards : IEC



MEDIUM / HIGH VOLTAGE SWITCHGEARS

3.6 KV TO 40 KV MV / HT SWITCHGEARS

METAL CLAD LOAD BREAK SWITCH PANELS (MCLBS)

- Highest System Voltage : 12kV / 24kV / 36kV
- Rated Current : up to 630A
- Rated Frequency : 50Hz
- Short Time Withstand Current : 18kA / 26.3kA 1 Sec
- Rated Short Circuit Making : 65.75kAp
- Auxiliary Contacts : 2 N.O.+ 2 N.C.
- Degree of Protection : IP 4X / 54
- Applicable Standard : IS / IEC 62271 - 102 / 103 / 200



METAL CLAD INDOOR VACUUM CIRCUIT BREAKER (MVCB)

- Highest System Voltage : 12kV / 24kV / 36kV
- Rated Current : up to 3150A
- Rated Frequency : 50 / 60 Hz
- Short Time Withstand Current : 40kA / 3 Sec
- Rated Operating Sequences : 0-300ms-CO-3min-CO
- Auxiliary Contacts : 6 N.O. +6 N.C.
- Mechanical & Electrical Life : 10,000/20,000 Oper.
- Degree of Protection : IP 4X
- Applicable Standard : IEC/IS 62271-100/200

METAL CLAD OUTDOOR VACUUM CIRCUIT BREAKER (MVCB)

- Highest System Voltage : 12kV / 24kV / 36kV
- Rated Current : up to 3150A
- Rated Frequency : 50 / 60 Hz
- Short Time Withstand Current : 40kA / 3 Sec
- Rated Operating Sequences : 0-300ms-CO-3min-CO
- Auxiliary Contacts : 6 N.O. +6 N.C.
- Mechanical & Electrical Life : 10,000/ 20,000 Oper.
- Degree of Protection : IP 55
- Applicable Standard : IEC / IS 62271-100/200



MEDIUM / HIGH VOLTAGE SWITCHGEARS

3.6 KV TO 40 KV MV / HT SWITCHGEARS

PERMANENT MAGNETIC ACTUATOR OPERATED VCB

- Maximum Voltage Rating : 12kV / 24kV / 36kV
- Rated Current : up to 1600A
- Rated Frequency : 50 / 60 Hz
- Short Time Withstand Current : 26.3kA / 3 Sec
- Rated making capacity : 65.75kAp
- Auxiliary Contacts : 4 N.O. + 4 N.C.
- Ingress Protection (SU) : IP 65
- Ingress Protection (CU) : IP 65
- Applicable Standard : IS / IEC 62271-1 / 100

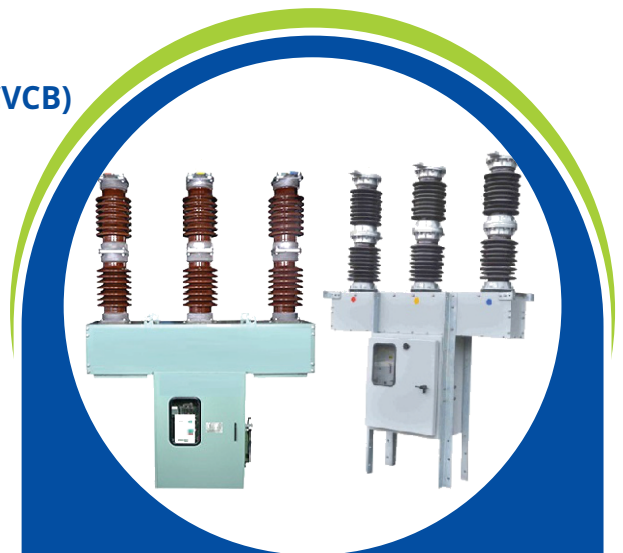


AUTO RECLOSERS & POLE MOUNTED VACUUM CIRCUIT BREAKERS

- Maximum Voltage Rating : 12kV / 24kV / 36kV
- Rated Current : 800A / 1250A
- Rated Frequency : 50 / 60 Hz
- Short Time Withstand Current : 20 kA / 3 Sec
- Rated making capacity : 50 kA
- Rated Operating Sequence : 0-500ms-CO-2s-CO-5s-CO
- Auxiliary Contacts : 4 N.O. + 4 N.C.
- Ingress Protection (SU) : IP 65
- Ingress Protection (CU) : IP 65
- Applicable Standard : IS / IEC 62271-111

4000A PORCELAIN CLAD VACUUM CIRCUIT BREAKER (PCVCB)

- Voltage Rating : 12kV / 24kV / 36kV
- Current Rating : up to 4000A
- Frequency : 50 / 60 Hz
- Short Time Withstand Current : 26.3kA / 1 Sec
- Short Circuit Making Capacity : 65.75kAp
- Auxiliary Contacts : 2 N.O.+ 2 N.C
- Type Tested : Yes
- Applicable Standard : IS / IEC 62271-100



MEDIUM / HIGH VOLTAGE SWITCHGEARS

3.6 KV TO 40 KV MV / HT SWITCHGEARS

VACUUM BREAKER CONTACTORS (INDOOR / OUTDOOR)

- Highest Voltage Rating : 3.6kV / 7.2kV / 15kV
- Rated Operational Current : up to 400A
- Rated Frequency : 50 / 60 Hz
- Short Time Withstand Current : 6kA / 1 Sec
- Rated making capacity : 4000A
- Rated breaking capacity : 3200A
- Mechanical & Electrical Life : 3,00,000 & 2,00,000
- Aux Contacts : 2 N.O.+ 2 N.C.
- Applicable Standard : IEC 62271 - 106



3 ϕ to 2 ϕ / 1 ϕ GANG OPERATED VACUUM CB SELECTOR

- Highest Voltage Rating : 12kV / 24kV
- Rated Current : up to 1250A
- Rated Frequency : 50 / 60 Hz
- Short Time Withstand Current : 26.3kA / 3 Secs
- Rated making capacity : 65.75 kAp
- Auxiliary Contacts : 4 N.O. + 4 N.C.
- Ingress Protection (SU) : IP 65
- Ingress Protection (CU) : IP 65
- Applicable Standard : IS / IEC 62271-100

COMPACT SUBSTATION (CSS) / UNITISED SUBSTATION (USS)

- Voltage Range : 3.6kV to 36kV
- Frequency : 50Hz
- Primary Voltage : 12kV / 24kV / 36kV
- Secondary Voltage : 433V
- Transformer Capacity : upto 5MVA
- Transformer Type : Dry Type
- Vector Group : Dyn 11
- LT Switchgear : Air Circuit Breaker
- HT Switchgear : ICOG VCB's or SF6 RMU
- Remote Communications : SCADA or SAS Compatible



MEDIUM / HIGH VOLTAGE SWITCHGEARS

30 KV TRACTION SWITCHGEARS

OUTDOOR SINGLE TRACTION VCB / VI

- Rated Voltage : 27.5kV
- Rated Frequency : 50Hz
- Rated 1 Min Power Frequency : 95kV
- Rated Lightning Impulse withstand : 250kV
- Rated Current : 2000A
- Rated Symmetrical Breaking Current : 20kA
- Rated Short Circuit Making Current : 50kA
- Rated Short Time withstand Current : 20kA / 3sec
- Terminals suitable for ACSR Conductor: Yes
- Degree of Protection : IP 54



OUTDOOR DOUBLE POLE TRACTION VCB / VI

- Rated Voltage : 2x27.5kV
- Rated Frequency : 50Hz
- Rated 1 Min Power Frequency : 95kV
- Rated Lightning Impulse withstand : 250kV
- Rated Current : 2000A
- Rated Symmetrical Breaking Current : 20kA
- Rated Short Circuit Making Current : 50kA
- Rated Short Time withstand Current : 20kA / 3sec
- Terminals suitable for ACSR Conductor: Yes
- Degree of Protection : IP 54



INDOOR SINGLE POLE RAILWAY / TRACTION VCB's

- Rated Voltage : 27.5kV
- Rated Frequency : 50Hz
- Rated 1 Min Power Frequency : 95kV
- Rated Lightning Impulse withstand : 250kV
- Rated Current : 1250A/2000A
- Rated Symmetrical Breaking Current : 20kA
- Rated Short Circuit Making Current : 50kA
- Rated Short Time withstand Current : 20kA / 3sec
- Terminals suitable for ACSR Conductor: Yes
- Degree of Protection : IP 54



MEDIUM / HIGH VOLTAGE SWITCHGEARS

3.6 KV TO 36 KV MV / HT SWITCHGEARS

VERTICAL & HORIZONTAL AB SWITCHES

- Minimum System Voltage : 12kV / 24kV / 36kV
- No. of Phase : 1 / 3 Phase
- Rated Current : Up to 1200A
- Rated Frequency : 50Hz
- Short Time withstand Current : 40kA / 1Sec
- Insulator Type & Material : Post Type & Polymer
- No. of Insulators : 3 Nos / Phase
- Operation Mechanism : Manual
- HG Fuse Structure : with & without
- HG Fuse Insulator Materials : Polymer
- Applicable Standard : IEC 62271 - 102 / 103



CENTER ROTATING AB SWITCH

- Minimum System Voltage : 12kV / 24kV / 36kV
- No. of Phase : 1 / 3 Phase
- Rated Current : Up to 1200A
- Rated Frequency : 50Hz
- Short Time withstand Current : 40kA / 1Sec
- Insulator Type & Material : Polymer & Porcelain
- No. of Insulators : 3 Nos / Phase
- Operation Mechanism : Manual
- Applicable Standard : IEC 62271 - 102 / 103



BUSBARS FOR SWITCHGEARS & SUBSTATIONS

- Voltage Range : 3.3kV to 66kV
- Maximum Current : 4000A
- Material : Copper / Aluminum
- Available Structures : Flat Bar / Tubular Rod
- Sizes : Available in all sizes
- Grade : EC Grade / SEC Grade
- Protections : PVC&Heat Shrinkable Sleeves
- Applications : Switchgears & Substations
- Applicable Standard : IS - 5082



TRANSMISSION & DISTRIBUTION OH LINE MATERIAL

LV MV & EHV OH LINE MATERIALS

POLYMER TYPE PIN INSULATORS

- Insulator Type : Pin / Disc / Post
- Insulator Materials : Composite Polymer
- Highest System Voltage : 12kV, 24kV, 36kV
- Visible discharge test voltage : 9kV
- Power frequency : 45kV
- Impulse withstand voltage : 70kV
- Minimum creepage distance : 320 (mm)
- Minimum failing load : 5 KN
- Dia. of FRP rod : 24 (mm), 33 (mm)



HORN GAP (HG) FUSES

- Highest System Voltage : 12kV / 24kV / 36kV
- Rated Current : 200A
- Type of Insulator Material : Porcelain & Polymer
- Temperature Rise : As Per IS / IEC
- Gap for FW : 200 mm
- Diameter of HG Rod : 8 mm
- Lighting Impulse withstand : 75kV (Peak)
- Power Frequency (Dry&Wet) : 28kV (Peak)
- Applicable Standards : IS – 1363/1367/4218

CLAMP AND CONNECTORS

- Items 1 : Bolted / Compression for Isolator / Braker
- Items 2 : Bolted / Compression for Instrument Trafos
- Items 3 : T- Connectors
- Items 4 : PI Supports Clamps
- Items 5 : Wedge / PG Connectors
- Items 6 : Outdoor Lug connectors
- From LT to EHT (Upto 132kV)

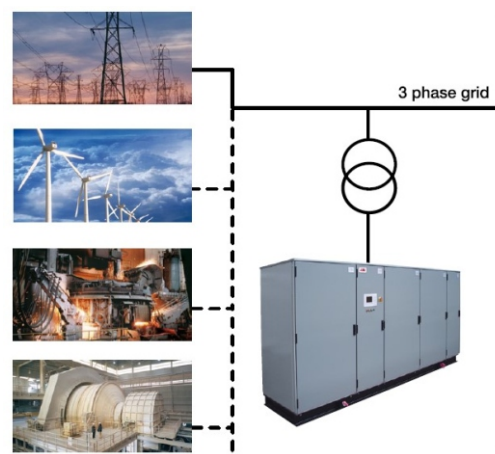


STATCOM

STATIC SYNCHRONOUS COMPENSATOR

3.3kV to 35kV ± 0.68 to ± 100 MVar

- Highest System Voltage : 3.3kV / 6kV / 10kV / 15kV / 22kV / 35kV
- Highest Operating Voltage : <120%
- Overload : 110% for Long time Oper., 120% for 1 Min
- Frequency : 50 Hz / 60Hz
- Efficiency : >0.99
- Power factor : >0.95 (Rated Power)



COMPENSATION EFFECTS

Control Functions	Constant Reactive Control / Power Factor Control / Voltage Control / Reactive Voltage Harmonic Comprehensive Control
Response Time	<5ms
Protection	Output Overcurrent / Grid Overvoltage / IGBT Drive Fault / PWM Pulse Abnormality / Power unit DC Side Overvoltage / Overheat / Communication Fault Etc.
Harmonics	Satisfy Electrical Energy Quality Public Grid Harmonic Standard GB/T 14549-93 (IEC61000-3-6)
Advanced Function	Negative Sequence Current Compensation / Voltage Unbalance Restraint / Flickering treatment & Harmonic Compensation



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