

















- $\alpha$  **TESTING**
- $\alpha$  **COMMISSIONING**
- α MAINTENANCE OF ELECTRICAL SYSTEM
- *α* MATERIAL SUPPLY

### **ABOUT US**

We believe in sustainable development and to shift to sustainable energy has become imperative in wake of ever increasing global energy needs. To address this requirement, Alpha Engineers, established in 2012, has embarked on a strategic plan to build its business in Renewable energy.

#### **Main Activities:**

- On-site Testing and Commissioning of the Switchgear & complete substation and associated equipment.
- Complete Turnkey Contracting including Engineering, Procurement, Construction, Installation and Commissioning with special support of Operation and Maintenance for all kind of electrical and substation projects.
- Site Modification Works for the complete substation with high level of expertise in Switchgears and Protection modification including site visit and modification analysis, modification design, installation and testing.
- Supply of All type of Electrical goods like HT/LT Cables, Panel accessories, HT/LT Breaker Spares, Relay, Contactor, Transformer accessories

### **Fields of Operation:**

- Testing & Commissioning of Switchgears
- Solar Power Projects & Wind Power Projects.
- Electrical Transmission Substations and Distribution Substations.
- Oil and Gas, Chemical, Petrochemical, Manufacturing, Offshore,
  Power, Construction, Automotive& Food industry.
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# **OUR SERVICES**

# **Electrical Switchgear Testing-**

### **Relay Testing**



Electromagnetic Relay (Auxiliary Relay)



Electromechanical Relay



Static Relay (Numerical Relay)

### **Retro Fitting**

Successful replacement of old protective relays (Electromechanical, Numerical) with new microprocessor based relays (ABB make REF series) In various petrochemical plants.





### **OUR SERVICES**

#### **Transformer Testing**

- -Ten Delta
- -Magnetizing Current
- -Magnetic Balance
- -Vector Group
- -IR/PI
- -Ratio
- -Winding Resistance
- -CRM
- -REF Scheme
- -Differential Scheme

### **CT/PT Testing**

- -Ten Delta
- -Partial Discharge Test
- -Ratio/Polarity
- -Knee Point
- -IR/PI











### **Cable Testing**

#### -Cable HI Pot(HV Test)

# **Circuit Breaker Testing**

- -Manual 'ON' and 'OFF' operation
- -Contact Resistance
- -Insulation Resistance
- -Opening Time
- -Closing Time
- -Close to Open Time(HT Breaker)
- -Vacuum Bottle Level Check(HV Test)

### **Busbar Testing**

- -Insulation Resistance Test
- -Bus Bar Resistance(With Joint)
- -Bus Bar High Voltage

### **Servicing of HT/LT Panel**

- -HT Breaker Servicing
- -LT Breaker Servicing
- -Bus Bar Tightness
- -Transformer Maintenance
- -HT/LT Panel Wiring









### **OUR SERVICES**

#### **SOLAR & WIND POWER PLANT (RENEWABLE ENERGY)**

- -Site access.
- -Piling & Foundation.
- -Cable Laying, Termination & Glanding.
- -Module & Mounting frame installation.
- -Junction Box Mounting & Commissioning.
- -Inverter Room Construction.
- -Installation of Inverter, LT Panel, HT Panel, ACDB, DCDB, Aux Trafo, Battery Charger,
- Lightning Arrester, Lightning System, Transformer & Switchgears.
- -Substation construction.
- -Electrical site works.
- -Grid interconnection works.
- -Testing and Commissioning.
- -Operation & Maintenance of Solar Plant.
- -Customized AMC plans based on the customer's needs.

#### **MAINTENANCE AND REPAIR**

- -Emergency response repairs.
- -Electrical power generation, protection and distribution maintenance.
- -Maintenance & Servicing of Breakers & Motors.
- -Upgrading and modification of old substations.
- -Repair of Transformer oil leakages.

#### **AMC SERVICES: Breakdown Maintenance Services**

- Preventive Maintenance Services.
- Maintenance Services of Motors, Compressors, Indoor & Outdoor.
- Sub station on, Solar Plants, Lightning System, HT Panel, LT Panel, Circuit Breakers, Transformers & all Switchgears.
- Solar Panel Cleaning services.
- Other Customized Maintenance Services.
- DC Cable fault finding and rectification.
- Oil Testing & Filtration.
- Manpower Supply.
- Cable supply, Installation, Termination and Testing.
- Electrical power systems, protection panels and distribution switchgears.
- Control system installations.
- Power Transformer installation and testing including oil fil-tration and treatment.
- Consultancy Services related to Relay Coordination.





Electrical & Automation is a major business portfolio of Larsen & Toubro. The business basket of Electrical & Automation (E&A) contains low and medium voltage switchgear products, electrical systems, energy meters and automation solutions. Its products and L&T Switchgear solutions cater to industry, utility, building & home, infrastructure and agriculture segments.

- OMEGA Air Circuit breakers

- C-Power Air Circuit breakers
- C-line Manual Changeover Switch
- C-line Motorised Changeover Switch
- Power Contactors
- Control Contactors
- Special Purpose Contactor
- MCB, RCCB
- HRC Fuse Link
- Motor Protection Circuit Breakers

- Moulded Case Circuit Breakers
- LED Indicators. Push Button Actuators & Stations
- Rotary & Load Break Switches
- Timers, Time Switches, Supply Monitors & Counters
- Starters & Submersible Controllers
- Switch-Disconnector
- Switch-Disconnector-Fuse
- -Thermal Overload Relays































# **Finolex**

Finolex Cables Ltd is India's largest and leading manufacturer of electrical and tele-communication cables with a turnover in excess of ₹26 Billion (about US\$ 400 million) Besides a wide variety of Wires & Cables, the

Company is also manufacturing lighting products, electrical accessories, switchgear, fans and water heaters.

- Wires and Cables
- Switches
- Finolex LED Lights
- Fans
- SnappTrip Miniature Circuit Breaker (MCB)
- Water Heater
- CCTV Cables
- Solar Cables

- Speaker Cables
- HT Cables (up to 33KV)
- EHVC Cables
- Electrical Switches & Compact Fluorescent Lamps (CFLs)
- Telephone Cables
- Co-axial Cables
- KV PVC insulated power & control cables
- Jelly-fitted Telephone Cables





























**3M** Heat Shrink low voltage joints are available for armoured/unarmoured low voltage single core and multi core power cables.

- 3M Heat Shrink medium voltage joints are available for tape/wire shielded, armoured/ unarmoured medium voltage single core and three core polymeric cables.
- Cold Shrink Termination Kit is designed for Cables up to 72.5kV (Umax) Voltage class, single core polymeric power cable systems.

#### **Heat Shrink Solutions (3.3kV to 36kV)**

- -Heat shrink splice/ Cable Jointing Kit
- -Heat Shrink Termination Kit
- -Stress Control Mastic
- -Dual Wall Tube
- -Anti-Tracking Tube
- -Insulating Tube
- -26/35kv Cable Termination for GIS Equipment
- -11/22/33kv Medium Voltage (MV) Termination
- -11/22/33kv Medium Voltage (MV) Splice
- -66kv/72.5kv Termination
- -66kv/72.5kv Splice
- -110kv(123kv)/132kv(145kv) Termination
- -110kv(123kv)/132kv(145kv) Splice
- -Heat Shrink Termination Kit













**Eaton** is a leading diversified power management company that offers a wide array of electrical products and services that allow you to take a strategic, holistic, life-cycle-oriented approach to power management.

### Bussmann

- -SAMI Fuse Covers, Indicating and Non-Indicating
- -Fuse Blocks
- -Global Modular Fuse Holders
- -Disconnect switches
- -Rotary Disconnect Switches
- -Fuses Electric Vehicle
- -Fuses electronic PCB and small dimension

- -Fuses high speed
- -Dual Element, Time-Delay Fuses
- -Solar PV fuses
- -Terminal blocks and connectors
- -Surge protective devices
- -DC and PVGard molded case circuit breakers
- -DC Safety Switch































Pioneers In Solderless Terminals, Crimping 1001s & Cable Glands. At **Dowell's**, quality is always on highest priority. We're commencing the process of getting ISO 9000

certification. We've invested in the NISA software for the purpose of R&D, and our QC-lab is equipped to check quality right from raw materials to finished product.

- -Copper Tube Terminals (medium Duty)
- -Long Barrel / heavy Duty Long Barrel / Heavy Duty -open At K
- -Copper Tubular Extended Palm / Dlw
- -Copper Reducer Terminals
- -Ring Non-insulated / Insulated / Pre-insulated
- -fork Non-insulated / Insulated / Pre-insulated
- -fork Hook Insulated / Pre-insulated
- -Pin Non-insulated / Insulated / Pre-insulated
- -Extended Palm
- -Railway Two Hole / Two Hole Flat Headed

- -Heavy Duty Als xl
- -two Hole
- -aluminium Long Barrel / Reducer Terminals
- -in-line Ctic-cb / Insulated / Long Barrel / End Seals
- -tubular In-line
- -battery Cell (lead Coated)
- -single Compression Cable Glands
- -double Compression (weatherproof Cable Glands /

Flameproof Cable Glands-i,iia,iib / Flameproof Cable

Glands-iic)





**ABB** provides a full range of medium voltage solutions for the utility customers with safe, reliable and smart technologies for the distribution of electricity.

VD4 contactor

Withdrawable truck

Vacuum pole

NEW VD4 shunt release NEW VD4 Opening solenoid





































**KEI** Industries Limited, known for its unique product range across the world is one of the leading wire and cable manufacturers in India. KEI manufactures high and low tension cables (EHV, HT & LT), control and instrumentation cables, house wires, power cables, stainless steel wires, and electrical cables. Its unique product range of wires and cables is known pan India and across the globe.

- EHV Cable
- HV Cables
- LT Power Cable
- Power and Control Cable for Machinery
- Instrumentation and Signal Cable
- Thermocouple Extension/Compensating Cable
- Silicon Rubber Flexible Cable
- Electrical Wire and Cable for Home and Residential
- PVC Submersible Winding Wires
- Stainless Steel Wires
- Solar Power Cable











LED lights have been gaining transaction due to their inherent ability to provide bright lighting, with less maintenance. They also popular, when it comes to durability and longevity, as it is a proven fact that they make for the ideal long lasting lighting equipment.

- -Surface/wall Mounted Luminaires
- -Suspended/pendent Fluorescent Luminaires
- -Cleanlux Fluorescent
- -Industrial General Purpose Ftl Luminaires
- -Bulk Head/low Bay Luminaires
- -Industrial Non Integral Wellglass Luminaires
- -Streetlight Luminaires

- -Cg-fael Luce Luminaires
- -Twin Hpsv/mh Lamps
- -Hid Lamps
- -Hpsv Lamps
- -Hpmv Lamps
- -Halogen Lamps
- -Flourescent Lamps
- -Copper Ballast
- -Electronic Ballasts
- -Electronic Ignitor





#### **All Type of Safety Products:**

Safety should be a priority for your place of business, no matter the industry. Shop based on your company's specific needs for full compliance with safety regulations. Find high-quality, dependable safety gear to keep employees and work sites safe and secure.



### **OUR CLIENTS**









































#### **OUR PHILOSOPHY...**

#### **Our Vision:**

To be one of the most recognized Electrical Contracting Company in India.

#### **Our Mission:**

To Integrate advanced solutions and provide Operational Services Contributing to the optimal performance of our clients.

#### **Our Values:**

Customer Focus, Honesty, Leadesrship, Growth & Development and Team Work. As we look back upon our history. We see an integrated story of how our core values have worked together and are a constant source of our continued Success.

### **Our People:**

We are blessed to have Smart and Self Driven people who care a lot about getting it done, and the relationships we build. Our people truly become a valuable extension of our client's teams.

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