Turnkey Electrical and Automation Solutions

Manufacturing & Commissioning of:

Power Control Center | Motor Control Center | Power Distribution Boards VCB Panels | Control & Relay Panels | Control Desks | Bus Ducts & Bus Trucking PLC & AC/DC Drive Panels | Auto Synchronization Panel | Servo Voltage Stabilizer Distribution Transformer & Chemical Earthing









ELAN AUTOMATION is incorporated in July 19th, 2016. We have over five years of experience in engineering and manufacturing of low voltage switchboard assemblies, distribution panels, starter panels. We offer products and services to support a wide range of commercial facilities and construction projects including hotels, office buildings, entertainment and retailers of all size.

ELAN AUTOMATION has a reputation for producing quality products at a competitive price. We manufacture a wide range of products including all types of Switchboards, Feeder Pillars, MCC Panels, PLC Control Panels, Distribution Boards and PLC Cubicles.

WHY US?

We use right blend of automated and manual processes to achieve the desired scalability, quality and cost efficiency. This allows us to deliver "value for money" to our customers. Four pillars of our business philosophy are:

- Achievement of high reliability and consistency in manufacturing
- Providing prompt and efficient service to ensure total Customer Satisfaction
- Developing a highly motivated workforce through Total Employee Involvement
- Continuous Improvement in our design and processes through innovation

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Turnkey Electrical and Automation Solutions

MANUFACTURING & COMMISSIONING OF

- Power Control Center (PCC)
- Motor Control Center (MCC)
- Intelligent Motor Control Center (IMCC)
 AMF Panel
- Power Distribution Board (PDB)
- Control Desk Panels

- PLC & AC/DC Drive Panel
- Auto Synchronization Panel
- APFC Panel
- RTPFC

- Bus Ducts & Bus Trunking
- Servo Voltage Stabilizer
- VCB Panel
- Distribution Transformer
- Chemical Earthing

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QUALITY POLICY

- We are committed to manufacture, service and timely supply of Power Control Center, Distribution and Special type of all Electrical Control Panel to the specification as per the client requirement.
- Our supplier chain is well assessed as per our QAP which serves as a solid foundation for us to put up the best quality product in the market.
- Close inspection of incoming materials, controlling in-process parameters, timely assessment, upgradation of supplier chain with thorough inspection and testing of our Electrical Control Panel to ensure consistent high quality standards.
- We are committed to continuous improvement in performance through effective implementation of quality management system.

Automatic Power Factor Correction (APFC) †

Automatic Power Factor Correction (APFC) Panels are designed to provide unmatched performance, reliability and versatility for critical Power Network applications. All the controllers offer rock-solid control & monitoring, front panel status reporting and control operation combined with Superior design and robust construction. We follow 100% testing that includes the following (Visual and dimensional check. Mechanical operation check, Applied voltage test to earth on power circuits: 3kV for 1 minute, Electrical and functional operational check) after passing a Routine Factory Test (RFT) Certificate is issued with every panel manufactured.



CORE FEATURES:

- Integration with Smart Grids
- Advanced Control Algorithms
- Distributed APFC Systems
- Energy Efficiency Regulations



Power Control Center (PCC) Panel



Power Control Center used for distribution and control of various source used in industry. Normally Power Control Center is installed near power source hence fault level is high. Busbar system in Power Control Center are designed to suit the fault level as well as temperature rise to 40t above ambient. Ample space is provided for cable termination. Various protections viz short circuit, overload, earth fault under voltage etc. are provided to protect source and equipment.

- Modularity and Scalability
- Advanced Visualization and Analytics
- Cybersecurity Enhancements
- Smart Grid Integration

Programmable Logic Controller (PLC) Panel



Programmable Logic Controller (PLC) control panels or also known as PLC Automation are one of the most important and efficient kinds of control panels. Which are generally used in variety of electronic and electrical circuit fittings. PLC Control Panels we manufacture are highly capable of giving higher output at less power consumption, integrated with solid PLC Logic and flawless PLC hardware programming. We are engaged in designing and manufacturing of PLC & Automation Panels that is widely appreciated for longer service life and high efficiency. All these panels are hard wired, PLC based and electrically controlled and is used for various machines.



CORE FEATURES:

- Integration with Industrial
- **Edge Computing Capabilities**
- Advanced Data Analytics
- Cloud Integration

CORE FEATURES:

Intelligent Motor Control Center (IMCC) Panel



An Intelligent Motor Control Center (IMCC) is a modular assembly designed for motor control applications. It combines traditional motor control equipment with intelligent devices, allowing for enhanced communication, monitoring, and control functionalities. Unlike traditional MCCs, IMCC leverage digital technology to provide real-time data, diagnostics, and control, resulting in improved efficiency, safety, and productivity.

- Advanced Monitoring and Diagnostics
- Seamless Communication
- **Enhanced Control Capabilities**
- Modular Design
- Improved Safety

Synchronization Switchgear Panel

AUTOMATION
— Quality is not an act, it is a habit —

Synchronization Switchgear Panel also referred to as Paralleling Switchgear provides a means to synchronize and parallel multiple generators of same or different sizes make on a common bus. Reliability, Redundancy, Flexibility, Maintainability, Economy are some of the advantages of Synchronization Switchgear. In our Synchronization Switchgear System, each Generator has its own control panel with all required control devices, which works in conjunction with System Master Controls to perform the overall operation of synchronization switchgear system. PLC based controls in conjunction with synchronizer / load sharing control devices makes the system work with no operator intervention. Manual operation — synchronization, speed / voltage control and circuit breaker control are available as option. Analog instrumentation and visual annunciation is optional.



CORE FEATURES:

- Multi-Generator Synchronization Panel
- Automatic and Manual operation PLC based & Synchronization / Load Sharing by controller
- Employs random synchronization, KW / KVAR sharing
- Optimization based on Load vs. Capacity calculations
- Active Load Control Load Add / Load Shed (KW and Freq.)
- HMI for operator interface to monitor and control
- Multi-User Access multiple levels with password
- Test function No-Load, With-Load, Load Banking
- Monitoring DMM, Generator, Fuel System, ATS etc.
- Communication Modbus TCP for SCADA / BMS

Power Factor Relay



Power Factor Relay refer to the specific characteristics and parameters used to describe the performance and capabilities of electrical components, devices, and systems. These ratings are crucial for ensuring compatibility, safety, and reliable operation in electrical installations. Here are some common electrical ratings and their significance:

- Rating: 100,150, KVAR (other ratings are available on request)
- Heavy Duty Capacitors Rated 415V, 460V, 480 VAC for extra protection against over voltage
- Self-Healing MKP Dielectric
- Over Pressure Device for the capacitor
- Standard IEC 831-1/2 and IEC 439-1
- Relay current input signal: from CT online
- IP 54 indoor (outdoor ratings also available)

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Automatic Mains Failure (AMF) Panel

An Automatic Mains Failure (AMF) panel is an essential component in backup power systems, ensuring seamless switchover from mains power to back up power in the event of a utility power failure. Here's a look at the current state and potential future developments of AMF panels AMF panels typically incorporate an ATS to automatically transfer electrical loads from the utility mains to a backup power source, such as a generator or uninterruptible power supply (UPS), upon detection of mains power failure. This ensures uninterrupted power supply to critical loads during outages.



- Integration with Energy Storage
- **Smart Grid Integration**
- Predictive Maintenance
- Grid-Forming Capability
- Cybersecurity and Resilience





Motor Control Center Panel (MCC)



CORE FEATURES:

- Safety and Compliance
- Advanced Diagnostics & Predictive Maintenance
- Modular Design & Scalability
- Smart Motor Control

A Motor Control Center (MCC) is an assembly of one or more enclosed sections having a common power bus and principally containing motor control units. Motor control centers are in modern practice a factory assembly of several motor starter. A motor control center include variable frequency drives, programmable controller, and metering and may also to be electrical service entrance for the building. Motor Control Center have been used by the automobile manufacturing industry which used large number of electric motor. Where very dustry or corrosive processes are used. the motor control center may be installed in a separate air-conditioned room, but often and MCC will be on the factory floor adjacent to the machinery controlled.

AC/DC Drive Panel

An AC/DC Drive Panel, also known as a Variable Frequency Drive (VFD) or Variable Speed Drive (VSD) panel, is a crucial component in industrial automation systems used to control the speed, torque, and direction of AC or DC motors. These panels convert incoming electrical power to the required frequency and voltage to efficiently regulate motor speed and torque. Let's explore the current state and potential future developments of AC/DC Drive Panels.

CORE FEATURES:

- Advanced Control Algorithms
- Energy Storage Integration
- Modular and Scalable Design
- Energy Management and Optimization







Vacuum Circuit Breaker (VCB) Panel

VCB Panel is recognized as the most usable & reliable current interruption technology System for high & medium voltage switchgear. It offers exceptional performance during the restriction of electrical Short Circuit. VCB Indoor panel is used for the protection of Transformer Motor, Capacitor Bank & Power Distribution System. These panels are also customized to suit client specification and requirement.

- Powerful switching and maintenance-free care using Elan Automation internationally recognized vacuum interrupter
- Proven APG encapsulation process ensuring stable operation in harsh environments
- Complete compatibility with the mainstream domestic medium voltage distribution panel KYN28, lowering costs for Chinese users
- Guaranteed interchangeability and universality with all products being subjected to pre-engineering tests for standard panels
- Stable performance proven over hundreds of mechanical operation running-in tests on all products before they are delivered
- Proven spring mechanism for stable operation, strong protection against corrosion and a long service life
- Class E2 electrical endurance, class M2 mechanical endurance and class C2 breaking capacitive current as per GB 1984-2003

Perforated Type Cable Tray

We manufacture the race way for the control cables. The race way cables are covered so that the dust will not deposit on the cable. These covered race ways cables are used in those industry where more dust or other micro particles are present e.g. power plant where coal is pulverise, cement factory etc. Our cable raceway is available in many different materials and installation is simple.

We manufacture different Perforated Cable tray: Aluminium Cable Tray, Hot Dip Galvanized Cable Tray, Painted cable tray, Powder Coated Cable tray, Galvanized perforated cable Tray, Stainless steel Cable tray

Ladder Type Cable Tray

We offer high strength ladder type cable trays that are perfect for heavy-duty power distribution in industries. Ladder cable tray use for the power cables and controls cable in various places in the industries. We offers ladder cable tray with complete accessories for smooth and fast installation. There are two type of ladder cable tray available one is nut bolted type and other is fixed type, we offer both type ladder cable tray. We manufacture ladder cable tray in different material as required by the customer.

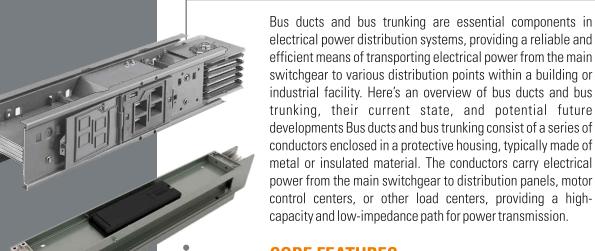
We manufacture different material ladder cable tray

Hot Dip Galvanized Ladder Cable Tray, Painted ladder cable tray, Powder Coated Ladder Cable tray, Pre Galvanised sheet Ladder cable Tray





Bus Ducts & Bus Trunking



- **Smart Grid Integration**
- **Energy Storage Integration**
- Modular and Scalable Design
- Cybersecurity and Resilience

Compact Substation

The Sub Distribution Panel or Board consists of a basic frame with all the necessary electrical components such as main isolating switches, emergency shut-down mechanism. RCD's, line circuit breakers, controls and contractors for individual workgroups. The distributor can supply multiple workgroups with electrical power independently. We design and manufacture the Sub Distribution Panel according to the Customers need through reliability. Selectivity, durability and time of taking action to Product Quality which comply with cost effective, long life and application-wise.

CORE FEATURES:

- Adaptability and Resilience
- Efficiency and Environmental Sustainability
- Digitalization and Remote Monitoring
- Modular and Space-Saving Design





Smart Earthing System & Solution



A Smart Earthing System enhances electrical safety by continuously monitoring grounding systems through IoT sensors and data analytics. It detects faults early, preventing hazards like electric shocks and equipment failure, while optimizing maintenance to reduce costs and downtime, making it ideal for high-demand facilities like industrial plants.

- Uses IoT sensors for data collection.
- Tracks and manages earthing/grounding systems continuously.
- Improves maintenance scheduling, reducing downtime and operational costs.
- Analyzes data on ground resistance, soil conditions, and fault currents.
- Minimizes risks like electric shocks, equipment failure & fire.
- Suited for industrial plants, data centers, and other high-demand electrical setups.

Distribution Transformer

We are customer-centric organization, therefore offer our clients with excellent quality Distribution Transformer and Servo Voltage Stabilizer that is used to provide safety to electrical equipments during power fluctuation. This transformer and stabilizer are manufactured using quality tested components and progressive techniques under the experts's supervision.

Capacity: 25 KVA to 5000KVA

CORE FEATURES:

- Compact and Lightweight Design
- Integration of Renewable Energy
- Energy Efficiency Standards
- Resilience and Reliability





Automatic Servo † Voltage (ASV)



An Automatic Servo Voltage(ASV) is a device used to automatically control the position, speed, or torque of a servo motor in various industrial, robotic, and automation applications. It continuously monitors feedback signals from sensors and adjusts the output signals to the servo motor to maintain precise control over its motion. Here's an overview of ASV and its potential future developments.

Capacity: 30 KVA to 4000KVA

- Cybersecurity and Safety
- Energy Efficiency and Sustainability
- Real-Time Adaptive Control
- Networked and Distributed Control



Distribution & Authorize Deals With













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