

ENGINEERED POWER & CONTROL SOLUTIONS

2026

ELECTRICAL PANEL ENGINEERING & MANUFACTURING SOLUTIONS

Project-based electrical systems engineered, coordinated and supplied from Türkiye for international projects.

ENGINEERING / MANUFACTURING / TESTING / GLOBAL DELIVERY

PROJECT-SPECIFIC PORTFOLIO



01

DESIGN

SLD, layout & BOM

02

PRODUCTION

Metalwork & assembly

03

ASSURANCE

Inspection & FAT

04

DELIVERY

Export & support

TÜRKIYE-BASED EXPORT ENGINEERING

ONE PARTNER. COMPLETE PROJECT CONTROL.

A2Z Energy connects international power projects with specialized engineering, manufacturing and export coordination under one accountable commercial structure.

**PROJECT GOVERNANCE****OUR ROLE**

We coordinate technical requirements, drawings, manufacturing, inspections, documentation, export preparation and after-sales communication - so the customer works through one responsive project channel.

Engineering capability. Export discipline. Long-term support.

01**TECHNICAL CLARITY**

Approved scope, drawings and component architecture before production.

02**MANUFACTURING CONTROL**

Production follow-up, inspection visibility and disciplined change management.

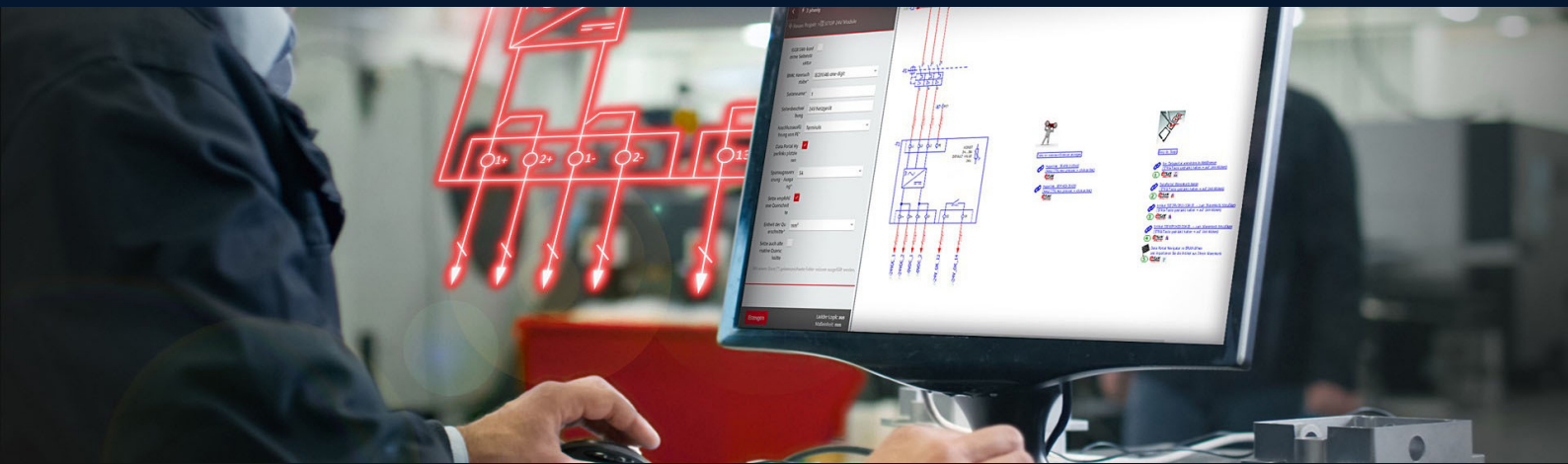
03**EXPORT READINESS**

Commercial documents, packing, loading coordination and global delivery support.

FROM CONCEPT TO ENERGIZATION

A CONTROLLED PATH FROM REQUIREMENT TO SITE.

Every project is translated into a clear sequence of technical approvals, controlled manufacturing and documented handover.



01 REQUIREMENT

Specifications, load list and destination standards

02 SURVEY

Site data, interfaces and installation conditions

03 ENGINEERING

SLD, electrical design, 3D layout and BOM

04 APPROVAL

Technical review, revisions and design freeze

05 PRODUCTION

Fabrication, coating, assembly and wiring

06 TESTING

Inspection plan, functional tests and FAT scope

07 DELIVERY

Packing, export documentation and logistics

08 SUPPORT

Installation, commissioning, service and spares

PRECISION BEFORE PRODUCTION

ENGINEERING & 3D DESIGN

Technical analysis and visual validation reduce uncertainty before material is released to the shop floor.



• 3D CABINET DESIGN



• ELECTRICAL PROJECT OFFICE

TECHNICAL ANALYSIS

Functional requirements, operating conditions, protection philosophy and project interfaces are reviewed as one system.

CUSTOM CONFIGURATION

Cabinet dimensions, internal layout, material selection and component architecture are developed around the approved specification.

3D VISUALIZATION

Mechanical arrangement is modelled before production to confirm clearances, accessibility, ventilation and assembly logic.

REVISION CONTROL

Customer feedback is captured against drawings so every approved change is reflected in the manufacturing package.

DOCUMENTATION THAT DRIVES PRODUCTION

PROJECT ENGINEERING

Each cabinet begins with a controlled technical package aligned with the customer's specification, field data and single-line philosophy.

ENGINEERING OUTPUTS

- Single-line and control schematics
- Mechanical arrangement and enclosure drawings
- Bill of materials and component schedule
- Terminal, cable and device identification
- Revision, approval and as-built documentation



1 NEEDS ANALYSIS

Technical requirements, budget and schedule are consolidated.

2 FIELD ALIGNMENT

Existing systems, interfaces and installation constraints are reviewed.

3 DETAILED DESIGN

Electrical and mechanical design is developed from the approved concept.

4 PRODUCTION PLANNING

Materials, operations and inspection points are defined before release.

5 UPDATE AND RETROFIT

Existing customer projects can be revised, updated or redesigned.

6 HANDOVER PACKAGE

Test records and final documentation support installation and maintenance.



DISCIPLINED PRODUCTION. VISIBLE QUALITY.

MANUFACTURING CAPABILITY

Integrated metalwork, surface treatment, assembly, wiring and testing support
a controlled path from approved drawings to packed equipment.

CNC METALWORK

WELDING

POWDER COATING

LIQUID GASKET

BUSBAR

ASSEMBLY

FUNCTION TEST

CNC-CONTROLLED FABRICATION

CUTTING, PUNCHING & PRECISION BENDING

Repeatable sheet-metal operations create accurate parts and enclosure geometry before welding and coating.



• CNC PUNCHING & CUTTING



• PRESS BRAKE BENDING

FABRICATION RANGE

- CNC-controlled cutting, punching and bending for enclosure components
- Sheet thickness range: 1.2 mm to 4.0 mm
- Material options: carbon steel, stainless steel, galvanized steel and aluminum
- Hole patterns, doors, gland plates, ventilation and mounting details produced to approved drawings
- Dimensional checks before parts move to welding, coating and assembly

1.2-4.0 MM

SHEET RANGE

4 MATERIALS

STEEL / SS / GI / AL

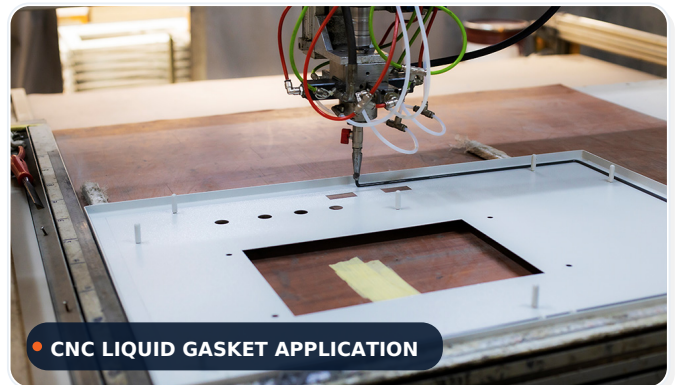
CNC CONTROLLED

REPEATABLE OUTPUT

BUILT FOR SERVICE LIFE

WELDING, COATING & SEALING

Structural integrity, surface protection and enclosure sealing are treated as one manufacturing discipline.



PROJECT-BASED FINISH

Color, coating system, sealing method and enclosure protection are selected according to installation environment and approved project requirements.

THE LAST METER MATTERS

ASSEMBLY, BUSBAR & FUNCTIONAL TEST

Experienced mechanical and electrical teams complete the cabinet, verify its functions and prepare it for documented handover.



• ELECTRICAL ASSEMBLY



• BUSBAR PROCESSING



• FUNCTIONAL TEST

1 MECHANICAL ASSEMBLY

Doors, plates, rails and components are fitted to the approved layout.

2 ELECTRICAL WIRING

Power and control wiring is routed, terminated and identified.

3 BUSBAR INTEGRATION

Copper architecture is processed and assembled for the project current path.

4 INSPECTION & TEST

Continuity, operation, interlocks and documented functions are verified.

POWER & CONTROL PORTFOLIO

Page 10 of 10

ENGINEERED TO SPECIFICATION

TRANSFORMER CONTROL SYSTEMS

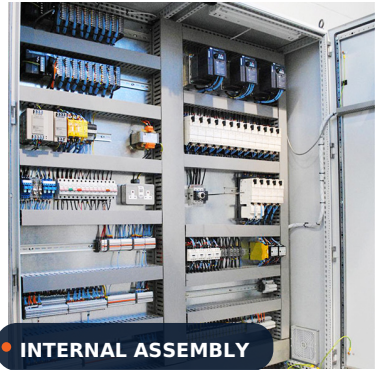
Control, monitoring and protection cabinets designed around transformer operating philosophy and site interfaces.



CONTROL CABINET



MULTI-BAY SYSTEM



INTERNAL ASSEMBLY

SOLUTION SCOPE

- 01 Transformer local fan control cabinets
- 02 Control and protection cabinet architecture
- 03 Remote tap changer control and automatic voltage regulation (RTCC-AVR)
- 04 Parallel operation and remote operator control interfaces
- 05 Alarm, indication, metering and field signal integration
- 06 Project-specific terminal, cable and communication organization

TYPICAL APPLICATIONS

- ✓ Power and distribution transformers
- ✓ Transformer manufacturing facilities
- ✓ Utilities and substations
- ✓ Industrial power systems

PROJECT BASIS

Final ratings, components, dimensions, color and labelling follow the approved project specification.

PROJECT CONFIGURATION

01 ELECTRICAL DATA

Ratings / protection

02 CONTROL LOGIC

Signals / communication

03 ENCLOSURE BASIS

Environment / access

ENGINEERED TO SPECIFICATION

LV POWER DISTRIBUTION & MAIN SWITCHBOARDS

Reliable low-voltage distribution architecture for controlled power flow, protection and operational access.



• LV DISTRIBUTION



• MAIN SWITCHBOARD



• BUSBAR ASSEMBLY

SOLUTION SCOPE

- 01 Main low-voltage distribution boards
- 02 Power control and sub-distribution panels
- 03 Busbar-based high-current cabinet arrangements
- 04 Circuit protection, isolation, metering and indication
- 05 Lighting, auxiliary and field distribution panels
- 06 Internal segregation and access arranged to the approved design

TYPICAL APPLICATIONS

- ✓ Industrial plants
- ✓ Commercial and public buildings
- ✓ Energy distribution points
- ✓ Infrastructure and utility projects

PROJECT BASIS

Final ratings, components, dimensions, color and labelling follow the approved project specification.

PROJECT CONFIGURATION

01 ELECTRICAL DATA

Ratings / protection

02 CONTROL LOGIC

Signals / communication

03 ENCLOSURE BASIS

Environment / access

ENGINEERED TO SPECIFICATION

MCC, PLC, SCADA & AUTOMATION PANELS

Integrated control platforms for motors, machines and plant processes - from field signals to operator visibility.



• AUTOMATION PANEL



• MCC SYSTEM



• CONTROL LINEUP

SOLUTION SCOPE

- | | |
|---|--|
| <p>01 Motor Control Center (MCC) panel engineering</p> | <p>02 PLC and remote terminal unit (RTU) cabinet integration</p> |
| <p>03 Power and process SCADA panel architecture</p> | <p>04 Contactors, breakers, protection relays and control devices</p> |
| <p>05 Machine automation and factory process panels</p> | <p>06 Signal, communication and interface planning to project requirements</p> |

TYPICAL APPLICATIONS

- ✓ Manufacturing lines
- ✓ Water and wastewater systems
- ✓ Petrochemical and process plants
- ✓ Pumps, motors and machine systems

PROJECT BASIS

Final ratings, components, dimensions, color and labelling follow the approved project specification.

PROJECT CONFIGURATION

01 ELECTRICAL DATA

Ratings / protection

02 CONTROL LOGIC

Signals / communication

03 ENCLOSURE BASIS

Environment / access

ENGINEERED TO SPECIFICATION

METERING, MONITORING & COMPENSATION

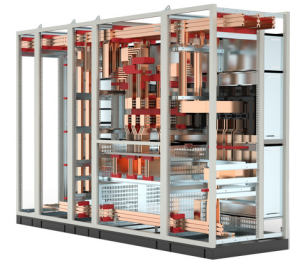
Visibility and reactive power management solutions that support stable, measurable and efficient electrical operation.



• MONITORING CABINET



• METERING & DISTRIBUTION



• POWER QUALITY SYSTEM

SOLUTION SCOPE

- | | |
|--|--|
| <p>01 Meter boards and centralized energy measurement</p> | <p>02 Power and energy monitoring cabinets</p> |
| <p>03 Reactive power compensation panels</p> | <p>04 Power factor control and staged capacitor architecture</p> |
| <p>05 Alarm, indication and communication interfaces</p> | <p>06 System layout coordinated with the facility load profile and approved study</p> |

TYPICAL APPLICATIONS

- ✓ Industrial facilities
- ✓ Large commercial buildings
- ✓ Energy distribution centers
- ✓ Sites with significant motor loads

PROJECT BASIS

Final ratings, components, dimensions, color and labelling follow the approved project specification.

PROJECT CONFIGURATION

01 ELECTRICAL DATA

Ratings / protection

02 CONTROL LOGIC

Signals / communication

03 ENCLOSURE BASIS

Environment / access

ENGINEERED TO SPECIFICATION

TRANSFORMER CELLS & DRY-TYPE ENCLOSURES

Protective and serviceable enclosures for transformer and auxiliary equipment installations.



• TRANSFORMER CELL



• VENTILATED ENCLOSURE



• DRY-TYPE HOUSING

SOLUTION SCOPE

- 01 Transformer cells and protective enclosure systems
- 02 Dry-type transformer shelters and cabinets
- 03 Ventilation, fan and access provisions coordinated with the equipment
- 04 Cable entry, grounding and connection planning
- 05 Indoor or project-specific environmental protection options
- 06 Mechanical configuration developed around transformer dimensions and service clearances

TYPICAL APPLICATIONS

- ✓ Transformer rooms
- ✓ Industrial facilities
- ✓ Commercial buildings
- ✓ Utility and infrastructure projects

PROJECT BASIS

Final ratings, components, dimensions, color and labelling follow the approved project specification.

PROJECT CONFIGURATION

01 ELECTRICAL DATA

Ratings / protection

02 CONTROL LOGIC

Signals / communication

03 ENCLOSURE BASIS

Environment / access

ENGINEERED TO SPECIFICATION

TELECOM POWER & DC DISTRIBUTION

Structured AC/DC power and battery support solutions for communication networks and continuity-critical sites.



TELECOM CABINET



DC DISTRIBUTION



SERVICE PANEL

SOLUTION SCOPE

- | | |
|--|--|
| <p>01 Telecom AC/DC service cabinets</p> | <p>02 DC power distribution panels</p> |
| <p>03 Battery cabinets and battery rack solutions</p> | <p>04 SDP and EDP panel configurations</p> |
| <p>05 Alarm, monitoring and auxiliary supply interfaces</p> | <p>06 Cabinet layout designed around service access and site continuity needs</p> |

TYPICAL APPLICATIONS

- ✓ Telecommunication centers
- ✓ Data and network facilities
- ✓ Broadcasting sites
- ✓ Emergency communication systems

PROJECT BASIS

Final ratings, components, dimensions, color and labelling follow the approved project specification.

PROJECT CONFIGURATION

01 ELECTRICAL DATA

Ratings / protection

02 CONTROL LOGIC

Signals / communication

03 ENCLOSURE BASIS

Environment / access

ENGINEERED TO SPECIFICATION

GENERATOR, UPS & AUXILIARY PANELS

Control and distribution cabinets supporting standby power, auxiliary loads and facility continuity.



• GENERATOR CONTROL



• AUXILIARY DISTRIBUTION



• OUTDOOR CABINET

SOLUTION SCOPE

- 01 Generator control cabinets and equipment enclosures
- 02 UPS cabinets and associated distribution panels
- 03 Switch, control and auxiliary power panels
- 04 Lighting and service distribution boards
- 05 Alarm, indication and external interface coordination
- 06 Mechanical and electrical configuration tailored to the selected equipment

TYPICAL APPLICATIONS

- ✓ Standby power installations
- ✓ Industrial and commercial facilities
- ✓ Critical infrastructure
- ✓ Remote and outdoor sites

PROJECT BASIS

Final ratings, components, dimensions, color and labelling follow the approved project specification.

PROJECT CONFIGURATION

01 ELECTRICAL DATA

Ratings / protection

02 CONTROL LOGIC

Signals / communication

03 ENCLOSURE BASIS

Environment / access

PRACTICAL CONTROL AT THE POINT OF WORK

FACTORY MAINTENANCE & MOBILE SERVICE PANELS

Dedicated maintenance panels help organize service power, equipment checks and local control around production operations.



• SERVICE UNIT



• MOBILE PANEL



• CONTROL STATION



• MAINTENANCE PANEL

SOLUTION SCOPE

- Factory maintenance and local service panels
- Portable or wheeled configurations for defined site use
- Local isolation, socket, indication and control organization
- Alarm and maintenance interface functions
- Application-specific cable, plug and connection arrangements

APPLICATIONS

- Production facilities
- Automotive and metal plants
- Machine service areas
- Energy maintenance teams

01

PORTABLE

02

WHEELED

03

LOCAL CONTROL

04

CUSTOM INTERFACES

ENGINEERED FOR DEMANDING ENVIRONMENTS

CRITICAL INFRASTRUCTURE & OUTDOOR SOLUTIONS

Project-specific control and distribution cabinets for sites where continuity, access control and environmental protection are essential.



• CRITICAL CONTROL



• SECURE DISTRIBUTION



• OUTDOOR ENCLOSURE

1 CRITICAL FACILITIES

Control and distribution architectures for defense, communications and strategic infrastructure.

2 FIELD DISTRIBUTION

Cabinets and connection points configured for remote or distributed site layouts.

3 ENVIRONMENTAL PROTECTION

Ingress, thermal and corrosion requirements are defined for the installation conditions.

4 SERVICE CONTINUITY

Access, indication, alarms and maintenance interfaces are coordinated with site operations.

EVIDENCE BEFORE SHIPMENT

QUALITY ASSURANCE & TESTING

Inspection and test points are aligned with the project scope so the delivered cabinet can be verified against approved requirements.

01**INCOMING CHECK**

Materials and selected components are checked against the approved bill of materials.

02**MECHANICAL INSPECTION**

Dimensions, doors, plates, clearances, coating and assembly are reviewed.

03**WIRING VERIFICATION**

Identification, terminals, cable routing and workmanship are inspected.

04**ELECTRICAL CHECKS**

Continuity, insulation-related checks and connection integrity are completed as specified.

05**FUNCTIONAL TEST**

Controls, indications, alarms and interlocks are verified against the test scope.

06**DOCUMENTATION**

Test records, drawings and release documents are prepared for handover.

PROJECT-SPECIFIC CONFORMITY

Applicable standards, certificates, inspection plan, FAT/SAT scope and destination marking are confirmed in the technical and commercial offer.

ONE PLATFORM, MULTIPLE SECTORS

WHERE OUR SOLUTIONS WORK

The portfolio is configured around the electrical architecture, operating environment and continuity expectations of each application.

01 POWER GENERATION

Auxiliary, control and distribution systems

02 TRANSMISSION & DISTRIBUTION

Transformer and substation applications

03 TRANSFORMER MANUFACTURING

Control, test and enclosure solutions

04 INDUSTRIAL PRODUCTION

MCC, automation and maintenance panels

05 PETROCHEMICAL & PROCESS

Motor and process control architectures

06 WATER & WASTEWATER

Pump, motor and field control systems

07 TELECOM & DATA

AC/DC power and continuity support

08 COMMERCIAL & PUBLIC

LV distribution and energy management

09 DEFENSE & CRITICAL

Controlled, project-specific infrastructure

10 GENERATOR & UPS

Standby and auxiliary power cabinets

11 RENEWABLE ENERGY

Project-based distribution and monitoring

12 REMOTE INFRASTRUCTURE

Outdoor and field distribution solutions

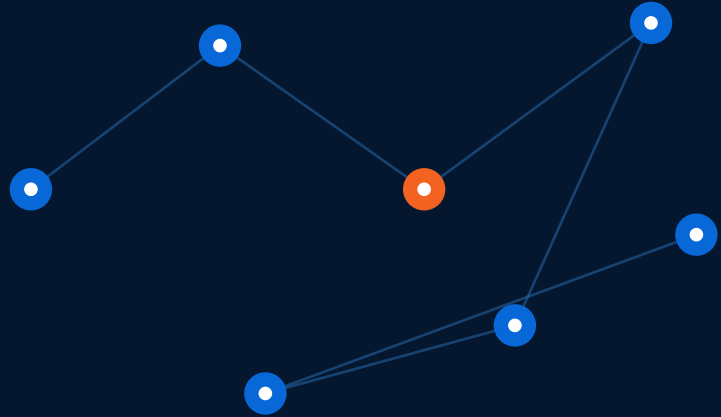
ENGINEERING MEETS EXPORT EXECUTION

GLOBAL DELIVERY WITH ONE RESPONSIVE TEAM

A technically sound panel must also arrive with the right documents, packing, communication and after-sales structure.

TÜRKİYE-BASED COORDINATION

A2ZEXIMCO aligns the customer, engineering team, manufacturing operation and logistics chain through one export-focused workflow.



1 TECHNICAL COORDINATION

Specification review, clarification and drawing approvals

2 MANUFACTURING FOLLOW-UP

Production visibility, inspections and loading evidence

3 EXPORT DOCUMENTATION

Commercial, packing and shipment document coordination

4 PACKING & LOGISTICS

Project-suitable preparation for international delivery

5 AFTER-SALES SUPPORT

Responsive technical communication and spare parts follow-up

6 LONG-TERM PARTNERSHIP

Consistent service for importers, contractors and project firms

FASTER ENGINEERING STARTS WITH COMPLETE INPUTS

INFORMATION REQUIRED BEFORE QUOTATION

Share the available project data below. Missing items can be clarified during technical review.

ELECTRICAL & MECHANICAL

- 01 Single-line diagram, load list and functional description
- 02 System voltage, phase, frequency and control voltage
- 03 Rated current and available short-circuit information
- 04 Incoming, outgoing and feeder details
- 05 Installation: indoor/outdoor, ambient, altitude and site conditions
- 06 Required enclosure protection, dimensions and cable entry

COMMERCIAL & COMPLIANCE

- 01 Preferred component brands or approved vendor list
- 02 Metering, communication, PLC/SCADA and protocol requirements
- 03 Applicable standards, certification and destination marking
- 04 Labelling language, documentation and drawing format
- 05 FAT/SAT, witness inspection and test record expectations
- 06 Quantity, delivery destination, target schedule and packing needs

SEND YOUR PROJECT FILES TO energy@a2zeximco.com

Our team will review the scope and return with technical clarifications before final quotation.



LET'S ENGINEER THE RIGHT SOLUTION

YOUR PROJECT. ONE RESPONSIVE TEAM.

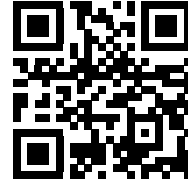
Share your specification, single-line diagram or project concept. A2Z Energy will coordinate the technical review and supply path from Türkiye to your destination.

EMAIL energy@a2zeximco.com

PHONE [+90 553 002 19 52](tel:+905530021952)

WEB www.a2zeximco.com

LOCATION [Ankara / Türkiye](#)



Technical configurations and availability are confirmed per project quotation.

Explore A2Z Energy